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Preliminary Hydrology Study

Tentative Tract Map No. 38927

JN: 10308
CLIENT: Raincross Development, LLC
DATE PREPARED
12/10/2025

PRELIMINARY HYDROLOGY STUDY

Tentative Tract Map No. 38927

Located in the County of Riverside, CA

Prepared by:

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Section 1 - Introduction

1. Introduction

This report provides a for an analysis of proposed storm water infrastructure, detention facilities and the development of Tentative Tract Map No. 38927. This report provides information on proposed and existing storm flows rates, storm volumes, existing facilities, recommended facilities, and the necessary basin storage and water quality sizing criteria associated with managing the projects storm water run-off while effectively treating the quality of the storm water.

Tentative Tract Map No. 38297 is located in the unincorporated area of Riverside County. The project is located on the north side of Lake Matthews, north of El Sobrante Road and East of McAllister Street. Figure 1.1 provides a location map for the project.

2. Land Use Plan

Tentative Tract Map No. 38927 encompasses a total of approximately 112.34 acres. Figure 1.2 provides the development plan for the project. The proposed project consists of the development of 206 detached single family dwelling units located within the unincorporated area of Riverside County known as the Lake Matthews Area. The Lake Mathew Area Plan was developed as part of the Riverside County General Plan, prepared in 2003 as part of the General Plan Update. The project is located with the El Sobrante Policy Area of the Lake Matthews Area, which encourages the clustering of parcel sizes to a minimum of 10,000 square feet for the purposes of conserving open space and sensitive habitat while not exceeding the underlying housing densities identified by the general plan's designation of LDR-Low Density Residential (2 units/acre) and VLDR-Very Low Density Residentials (1 unit/acre). As part of the clustering efforts the project will be proposing a zone change to incorporate development standards that are consistent with the reduced lot sizes. It should be noted that although the project is clustering the units to a smaller overall parcel size, the total number of units is consistent with the existing land use designation.

3. Purpose of Study

Hydrology and Hydraulics

The purpose of this study is to substantiate the hydrology and hydraulic design of the residential development known as Tentative Tract Map No. 38927. This study will analyze the pre-development and post-development storm water run-on and run-off values and propose storm water design recommendations to ensure the adequate size, volumes, and proper operation of drainage facilities for the proposed project while not adversely affecting downstream facilities and maintaining the conveyance of 100-year storm flows for on-site facilities. Along with the standard analysis of a typical report, this report outlines the specific analysis and back-up calculations necessary for determining the hydrology and hydraulics of the development such that the post-developed condition is equal to or improved when compared to pre-developed condition.

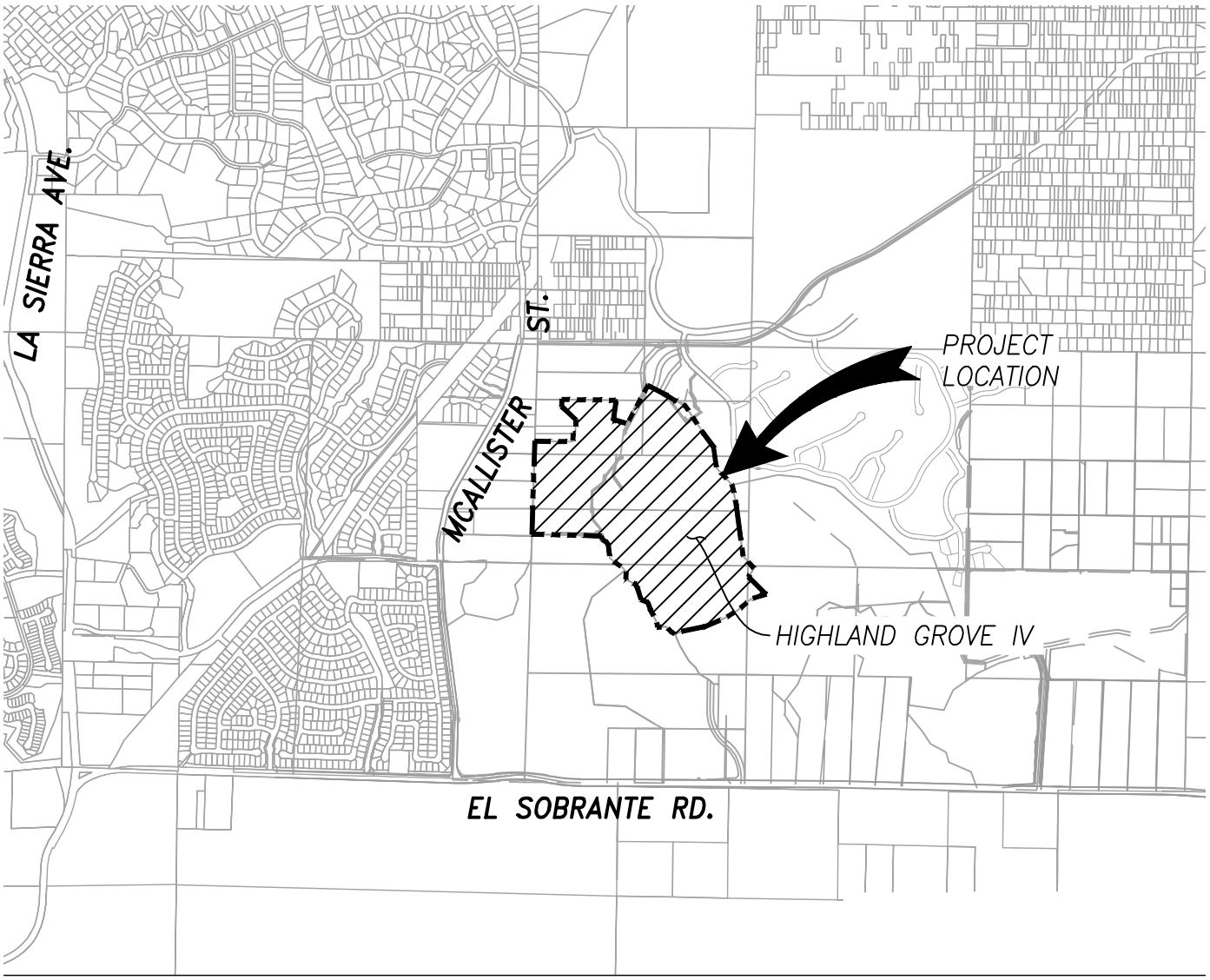
Flood Plain Analysis

The purpose of conducting a pre- and post-development floodplain analysis is to evaluate existing floodplain conditions, establish baseline hydraulic and hydrologic characteristics, and assess the potential impacts of proposed improvements. The pre-development analysis defines existing water surface elevations, flow rates, and floodplain limits, providing a benchmark for comparison. The post-development analysis demonstrates that the proposed project will not adversely affect downstream or adjacent properties, complies local floodplain management requirements, and incorporates appropriate mitigation measures such as stormwater detention or channel improvements. This process ensures that the project maintains public safety, protects property, and meets all regulatory standards for floodplain management.

As part of this project there are two distinct water courses that bisect the project site. These water course have been identified as “Reach 1” and “Reach 2” as shown within Figure 1.3. The project site is bisected by a ridgeline running from east to west close to the center of the property assemblage. The ridgeline can also be defined by an unpaved road seen within aerial imagery providing a means of maintenance access for an existing reservoir owned by Western Municipal Water District (WMWD) to the east of the Project site. From the ridge line the existing flows travel north and south into two natural drainage courses (Reach 1 and Reach 2) that bound the north and south edges of the project site. The northerly tributary (Reach 2) flows from east to west along the northerly project boundary, the southerly tributary (Reach 1) flows from east to west along the southerly project boundary and then bisects a small portion of the project site flowing from the south to the northeast corner of the site.

These two watercourse reaches were analyzed for the pre- and post-development conditions utilizing HEC-RAS. HEC-RAS is a computer program developed by the U.S. Army Corps of Engineers that models how water flows through rivers, channels, and floodplains to predict water surface elevations and evaluate flooding impacts. The results of these studies is included within a separate report prepared by Adkan Engineers, a reference copy is included within Appendix “G”.

4. Figure 1.1 Location Map - Tentative Tract No. 38927



LAKE MATHEWS

0 2000 6000

1000 4000 8000

SCALE: 1" = 2000'

PREPARATION DATE: JULY 2024

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FIGURE 1.1
VICINITY MAP

HIGHLAND GROVE IV
TTM 38927

U:\Projects\Pulte\10615 - HG4\water analysis\TTM 38927 VICINITY MAP FIGURE 1.1.dwg

5. Figure 1.2 Land Use Map - Tentative Tract No. 38927



0 600 1800

300 1200 2400

SCALE: 1" = 600'

PREPARATION DATE: JULY 2024

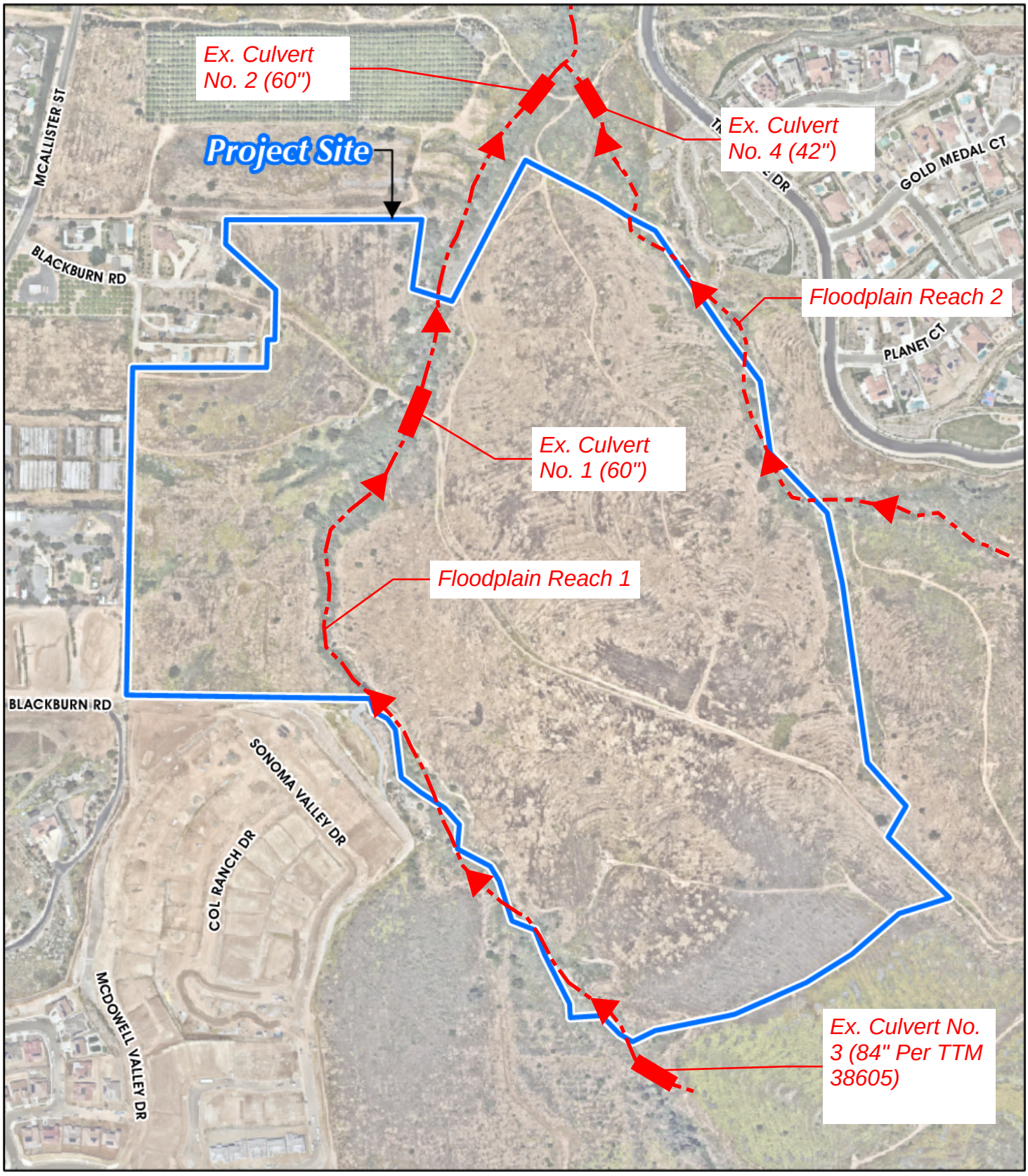
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FIGURE 1.2
LAND USE PLAN

HIGH GROVE IV
TTM 38927

U:\Projects\Pulte\10615 - HG4\water analysis\TTM 38927 LAND USE FIGURE 1.2.dwg

5. Figure 1.3 Flood Plain Location Map



Note: See TTM and HEC-RAS Study for existing culvert invert elevations.

Figure 1.3 - Floodplain Location Map

Section 2 – Synthetic Unit Method Hydrology Analysis

The synthetic unit method hydrology is a basic unit hydrograph theory for determining the rainfall-runoff relationship of a gauged drainage basin. The method allows the rainfall-runoff data from gauged basins to be transposed to ungauged basins based on the difference of physical basin characteristics. The synthetic method should be used to analyze for watersheds in excess of 300 to 500 acres. In general, the 3- and 6-hour durations storms will control peak discharge for the watersheds being analyzed, however where volume of runoff is being analyzed the 24-hour duration will typically control for the design of basins and/or reservoirs.

The synthetic unit method hydrology is also utilized to analyze the watershed of a proposed development that will be routed through a detention facility for mitigation of the post construction incremental increased runoff when compared to the existing condition. Storms to be studied will include the 1-hour, 3-hour, 6-hour and 24-hour duration for the 2-year, 5-year, and 10-year return frequencies. Detention basins and outlet sizing's will ensure that none of these storm events any increase in peak storm discharge of the post development condition than in the pre-development conditions. The peak flow storm mitigation typically would not be necessary beyond the 2-, 5-, and 10-year storm events, however given the added level of storm protection needed for the Harrison Dam, RCFC has required the proposed extended detention basins be designed with the capacity to mitigate the 100-year storm events.

The project is proposing the utilization of two extended detention basins for the mitigation of the post construction incremental increased runoff. There is one extended detention basin (Basin B) mitigating the drainage area of the project lying westerly of the existing tributary bisecting the project from the south to the north. There is another extended detention basin (Basin A) mitigating the project drainage area for the portion of the project lying easterly of the same bisecting tributary. The proposed extended basins effectively mitigate the post development flow rates ensuring none of the storm events will have any increase in peak storm discharge of the post development condition than in the pre-development conditions. Mitigated post development flow rates and basin routing information is shown within Section 3 of this report. Basin Locations are shown in Figure 2.1.

1. Existing Pre-Development Unit Synthetic Method Hydrology

The existing site is an irregular shaped property consisting of rolling hills previously utilized for the cultivation of citrus fruit. The existing citrus trees have since been removed leaving the remanent of citrus furrows and overgrown earthen irrigation trenches. The project site is bisected by a ridgeline running from east to west close to the center of the property assemblage. The ridgeline can also be defined by an unpaved road seen within aerial imagery providing a means of maintenance access for an existing reservoir owned by Western Municipal Water District (WMWD) to the east of the Project site. From the ridge line the existing flows travel north and south into two natural drainage courses that bound the north and south edges of the project site. The northerly tributary flows from east to west along the northerly project boundary, the southerly tributary flows from east to west along the westerly project boundary and then bisects a small portion of the project site flowing from the south to the northeast corner of the site. The existing drainage courses have been deeply incised and defined throughout time, and in many locations exhibit exposed bedrock limiting the potential for future erosion. Each of these two natural drainage courses ultimately convey flows northwesterly to a point of confluence at the most northwest

corner of the project site before being conveyed northerly beyond the project through a development to the north of the project site, known as Tramonte, and finally into the Harrison Dam facility.

The project site is tributary to the Harrison Dam, a RCFC owned and maintained facility. The Harrison Dam was constructed based on the future development of the upstream tributaries to protect the downstream properties located in the City of Riverside. The Dam was designed to detain the watershed of the proposed project, including the upstream properties. Based on the projects clustering efforts it was determined through discussion with RCFC that additional post development increased storm water runoff mitigation would be necessary beyond the normally required 2-, 5-, and 10-year storm events, and therefore detention basins are required for the project to be designed with the capacity to mitigate the 100-year storm events.

From the Harrison Dam facility existing storm flows are conveyed through the City of Riverside and ultimately into the Arlington Channel owned and maintained by RCFC. The Arlington Channel is part of a drainage system funded by Area Drainage Plan fees known at the Southwest Area Drainage Plan.

The results of the existing synthetic unit method hydrology at the confluence of the two drainage courses at the boundary outfall is shown in Table 2-1 below. The node locations within the analysis were placed in manner that direct compares to the proposed unit method hydrology. Existing synthetic unit method hydrology calculations can be found in Appendix "A" of this report.

Table 2-1
Tract 38927– Existing Synthetic Unit Method Flow Rates

Drainage Area	Node No.	100 Year 3 Hour Flow Rate	100-Year 6 Hour Flow Rate
Culvert 1	15	459.2 CFS	478.6 CFS
Culvert 2	16	590.7 CFS	632.5 CFS
Culvert 3	30	373.8 CFS	372.4 CFS
Boundary Outfall	31	1017.2 CFS	1079.5 CFS

2. Proposed Post-Development Unit Synthetic Method Hydrology

The proposed project consists of 206 single family detached single family residences. The project site has been designed in such a manner to respect the existing ridgeline that bisects the project from east to west. The existing ridgeline, also being an unpaved road as seen within aerial imagery, provides a means of maintenance access for an existing reservoir owned by WMWD and was avoided from disturbance and the grade respected. The project is divided into two distinct drainage tributaries separated into a westerly and easterly drainage area. The portion of the project lying westerly of the existing tributary bisecting the project from the south to the north is conveyed into one extended detention basin on the west side of the project which is then conveyed northerly to a point of confluence at the northwest corner of the project boundary. The portion of the project lying westerly of the same bisecting tributary is conveyed into another extended detention basin located at near the northeast corner of the project which is then conveyed northerly to a point of confluence at the northwest corner of the project boundary. This northwest location is the projects single point of flows leaving from the project site, noted as the boundary outfall.

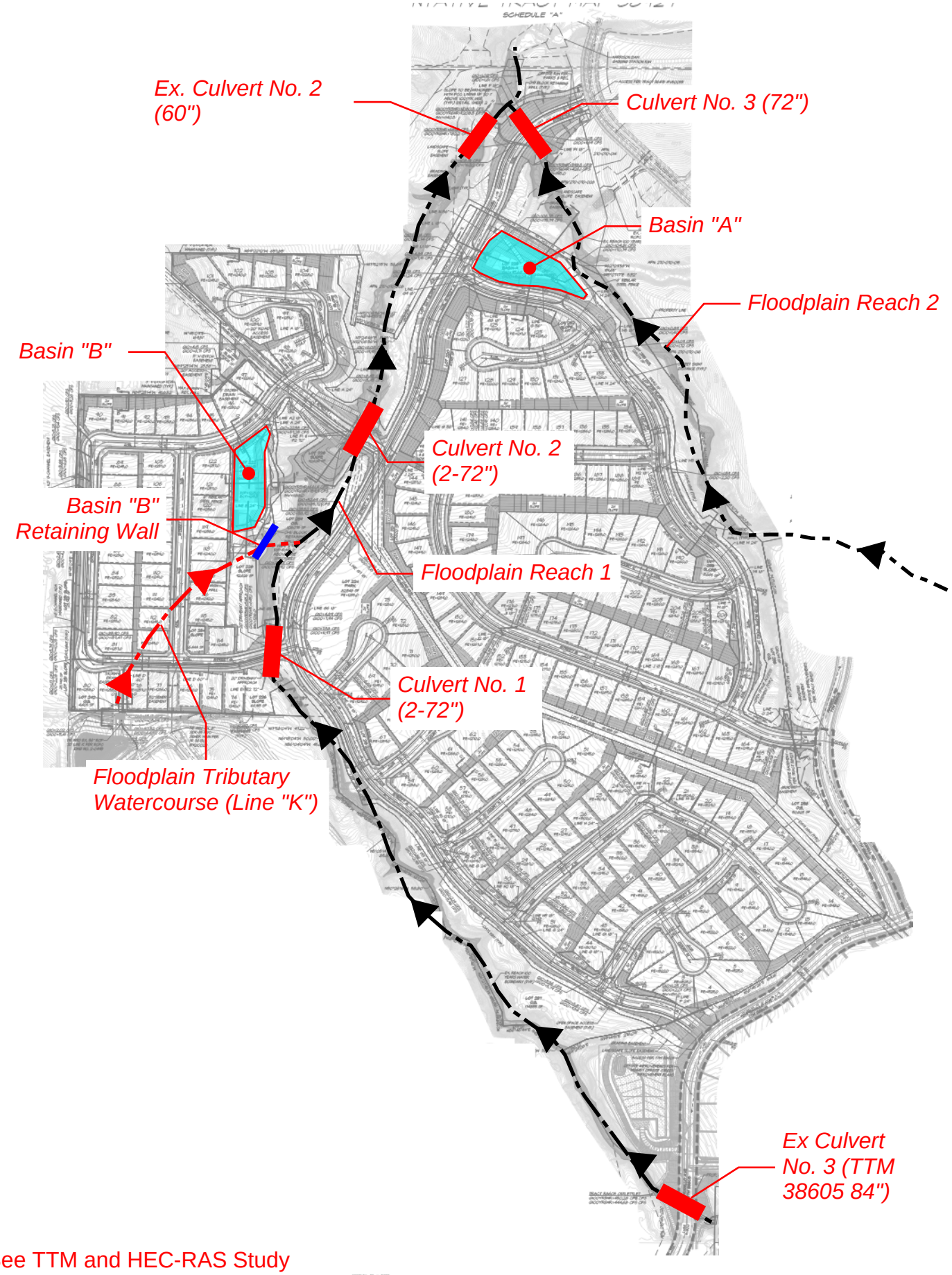
There are three culvert crossings being proposed as part of the project. One of these culvert crossings are located in the northerly existing drainage course and two of the culvert crossings are located where the southerly existing drainage bisects the westerly portion of the project site from south to north. The northerly water course crossing is proposed as a single 72" (Culvert 3) reinforced concrete pipe (RCP) culvert. The two other culvert crossing are proposed as dual 72" reinforced concrete pipe culverts (Culvert 1 and 2). Culvert Location are shown on Figure 2.1. These culvert crossing will allow the development to provide access and utilities over the existing drainage courses. The culverts have been designed in accordance with the California Department of Fish and Wildlife (CDFW) to have a minimum size of 72" for the purposes of providing a downstream and upstream connection for habitat and wildlife within the drainage corridor. This results in culverts larger than necessary to convey the actual flow experience by a 100-year storm event. The culverts also contain the necessary headwalls, cutoff walls, and rip-rap energy dissipaters to reduce the storm flow velocities to a non-erosive level protecting the downstream drainage courses.

The results of the proposed synthetic unit method hydrology for the north and south drainage courses, and the boundary outfall are shown in Table 2-2 below. Proposed synthetic unit method hydrology calculations can be found in Appendix "B" of this report. It should be noted the proposed synthetic method flow rates do not include the mitigation of the increased storm water provided by the on-site detention basins. The mitigation of increased storm water mitigation was analyzed in Section 3 at the proposed basin outlets.

Table 2-2 Tract 38927– Proposed Synthetic Unit Method Flow Rates

Drainage Area	Node No.	100-Year 3 Hour Flow Rate	100-Year 6 Hour Flow Rate
Culvert 1	13	793.3 CFS	757.7 CFS
Culvert 2	15	764.5 CFS	785.1 CFS
Culvert 3	30	446.0 CFS	444.1 CFS
Boundary Outfall	31	1227.6 CFS	1245.2 CFS

3. Figure 2.1 Culvert and Basin Location Map



Note: See TTM and HEC-RAS Study for existing culvert invert elevations.

Figure 2.1 - Proposed Culvert and Basin Locations

Section 3 - Extended Detention Basin Synthetic Unit Hydrology and Routing

As discussed within the synthetic unit method hydrology section, it was determined through discussions with RCFC that additional post development increased storm water runoff mitigation would be necessary beyond the 2-, 5-, and 10-year storm events, and therefore the extended detention basins are required for the project to be designed with the capacity to mitigate the 100-year storm events to the approximate equivalent of the pre-development flow rates at location of the Basin Outlets.

A summary of the extended detention basins existing, proposed, and routed peak flows for all storm events and frequencies are shown in Tables 3-1 and 3-2., below. Synthetic unit method hydrology calculations for Basin "A" and "B" can be found in Appendix C of this report. The basin locations are identified within Figure 2.1.

As part of the project grading for Basin "B", a retaining wall is proposed to be constructed at the southeast corner of the embankment, the location of the retaining wall is depicted within Figure 2.1. At this location the existing flows from Line "K" (Tract 36730) confluence with the Floodplain Reach No. 2. Line "K" is a run-on location where existing flows are conveyed into the project site as a result existing storm drain constructed as part of Tract 36730 (See Section 4 for further discussion on Line "K"). As part of the flood plain analysis, there were backwater effects observed from the existing location of the run-on tributary which resulted in the retaining wall being within the flood plain limits. The existing flows from Line "K" will be collected by the proposed project and diverted into Culvert No. 1, and there will no longer be flows tributary to floodplain Reach 1 at this location, however backwater effects will still occur. Therefore, the retaining wall was placed as far as possible from the effective flow area established for Flood Plain Reach No. 1 and a ten-foot-wide grouted quarter ton rip-rap berm has also been proposed at the base of the retaining wall to further protect the retaining wall from experiencing any erosive velocities during storm events. The extra width on the rip rap berm will also allow the rip-rap to launch should there be any additional scour experienced at this location. It was noted by the soils engineer that granitic bedrock was observed in a majority of the watercourses and was not susceptible to further erosion. The retaining wall will be maintained by a community facilities district through an access road and turn around per Riverside County Transportation Department Standards provided as part of the project.

1. Extended Detention Basin "A" Outflow Analysis

Table 3-1
Extended Detention Basin A Storm Event Summary

Storm Event	Existing		Proposed		Routed			Ex (cfs) +10% Difference Max
	Volume (ac.ft.)	cfs	Volume (ac.ft.)	cfs	Volume (ac.ft.)	cfs	Depth (ft)	
2yr1hr	1.673	68.2	2.115	52.2	2.101	1.3	6.24	-98.1%
2yr3hr	1.509	32.1	2.826	31.0	2.812	1.7	7.39	-94.7%
2yr6hr	1.612	26.7	3.692	27.3	3.686	2.0	8.62	-92.5%
2yr24hr	1.158	2.4	5.686	9.1	5.673	2.3	9.69	-4.2%
5yr1hr	2.785	100.7	3.140	76.4	3.127	1.9	8.04	-98.1%
5yr3hr	2.723	50.1	4.060	46.3	4.047	2.2	9.34	-95.6%
5yr6hr	3.193	44.8	5.513	43.7	5.500	2.6	11.10	-94.2%
5yr24hr	2.427	9.9	8.054	12.8	8.041	9.6	11.44	-3.0%
10yr1hr	4.496	135.2	3.970	95.0	3.957	2.2	9.32	-98.4%
10yr3hr	5.972	73.5	5.096	58.3	5.082	2.5	10.80	-96.6%
10yr6hr	7.537	68.6	5.513	43.7	7.037	48.1	11.65	-29.9%
10yr24hr	8.791	24.3	9.953	17.9	9.940	16.6	11.48	-31.7%
100yr1hr	7.470	217.1	6.914	157.4	6.900	50.3	11.66	-76.8%
100yr3hr	10.416	118.5	8.967	98.6	8.954	95.9	11.91	-19.1%
100yr6hr	14.554	114.6	12.673	99.3	12.660	94.5	11.90	-17.5%
100yr24hr	18.056	43.7	17.988	36.7	17.974	36.5	11.59	-16.5%

2. Extended Detention Basin "B" Outflow Analysis

Table 3-2
Extended Detention Basin B Storm Event Summary

Storm Event	Existing		Proposed		Routed			Ex (cfs) +10% Difference Max
	Volume (ac.ft.)	cfs	Volume (ac.ft.)	cfs	Volume (ac.ft.)	cfs	Depth (ft)	
2yr1hr	0.422	20.3	0.534	15.6	0.497	0.4	2.79	-98.0%
2yr3hr	0.381	9.3	0.713	8.5	0.677	0.5	3.19	-94.6%
2yr6hr	0.407	8.1	0.933	7.4	0.897	0.5	3.62	-93.8%
2yr24hr	0.292	0.6	1.434	2.3	1.398	0.6	3.97	0.0%
5yr1hr	0.703	29.7	0.792	22.7	0.757	0.5	3.46	-98.3%
5yr3hr	0.687	14.2	1.024	12.7	0.988	0.6	3.95	-95.8%
5yr6hr	0.805	13.4	1.390	11.8	1.354	0.6	4.64	-95.5%
5yr24hr	0.612	2.6	2.031	3.3	1.995	0.7	5.01	-73.1%
10yr1hr	1.134	39.3	1.002	28.2	0.966	0.6	3.97	-98.5%
10yr3hr	1.506	20.4	1.285	16.0	1.249	0.6	4.54	-97.1%
10yr6hr	1.901	19.8	1.778	15.2	1.742	0.7	5.41	-96.5%
10yr24hr	2.217	6.2	2.510	4.6	2.474	0.8	5.79	-87.1%
100yr1hr	1.885	62.9	1.744	46.4	1.709	0.7	5.58	-98.9%
100yr3hr	2.627	32.8	2.262	26.8	2.226	1.5	6.39	-95.4%
100yr6hr	3.671	32.9	3.196	26.5	3.160	2.4	7.69	-92.7%
100yr24hr	4.553	11.2	4.536	9.4	4.500	6.2	7.76	-44.6%

Section 4 –Rational Method Hydrology Analysis

The Rational Method is commonly used for determining park discharge from relatively small drainage areas. The rational method is based on the following equation Q = CIA, where Q is the peak discharge, C is the coefficient of runoff, I is the rainfall intensity, and A is the area of the watershed. Values of these variables necessary to calculate the park discharge are found utilizing the various plates located within the Riverside County Flood Control Hydrology Manual.

The Rational Method Hydrology is calculated for the 10-year and 100-year storm events. The criteria for the protection of storm flow are determined by containing the 10-year storm event with in the tops of street curbs, and the 100-year storm event within the public right of way. Storm drains and/or channels should be considered when either condition is exceeded.

1. Proposed Rational Method Hydrology

On-Site Proposed Rational Method Hydrology Analysis

The results of the Proposed Rational Method Hydrology for the significant tributaries analyzed. Proposed Rational Method Hydrology calculations can be found in Appendix "D" of this report. It should be noted the Existing Rational Method Hydrology was not analyzed as part of this report because the tributary size of the upstream offsite tributaries exceeded 300 acres. The rational method hydrology analysis established flow rates will be utilized to preliminarily determine the placement and size of catch basins, street capacities, and pipe sizes. These preliminary facilities are subject to change of location and size based on final engineering plans. The preliminary design are shown for approximate planning purposes, flows at locations of significance are highlighted in Table 4-1 shown below:

Table 4-1
Tract 38927– Proposed Rational Method Flow Rates

Drainage Area	Node No.	10-Year Flow Rate	100-Year Flow Rate
Proposed Tributary Basin "A" Outfall	312	106.78 CFS	173.79 CFS
Proposed Tributary Basin "B" Outfall	14	23.52 CFS	38.92 CFS
Westerly Offsite and Lake Ranch Run-On	431	40.26 CFS	64.32 CFS

Offsite Proposed Rational Method Hydrology Analysis

At the easterly boundary of the project site is a development known as Highland Grove 1 – Tract 36730. As part of the development of this project, storm drain was installed within the project to collect onsite flows. These flows were then conveyed to the northerly project boundary, also adjoining the south westerly boundary of the Tract 38927, to a detention basin. This basin was designed to attenuate storm flow from Highland Grove 1 prior to being release into Tract 38927. As part of the development of Tract 38927, these flows will be intercepted through the installation of a proposed storm drain Line "D" and conveyed to proposed culvert Line "E" (Culvert No. 1) where the flows will be ultimately released in the Flood Plan Reach No. 1. (See Figure 4.1)

As part of the Tract 38927 onsite rational analysis the offsite flow rates determined from the Tract 36730 Hydrology Analysis were utilized. The rational hydrology input data is shown for each run-on node within the rational hydrology map located in Appendix "D" and listed in Table 4-2 below.

Table 4-2
Tract 36730– Existing Highland Grove 1 Run-On Flows (Lake Ranch Hydrology Study)

Node No.	10-Year Flow Rate	100-Year Flow Rate
110-130	2.02 CFS	3.41 CFS
90	40.26 CFS	64.32 CFS

2. Figure 4.1 Tract 36760 Line "K" to Line"D" Connection

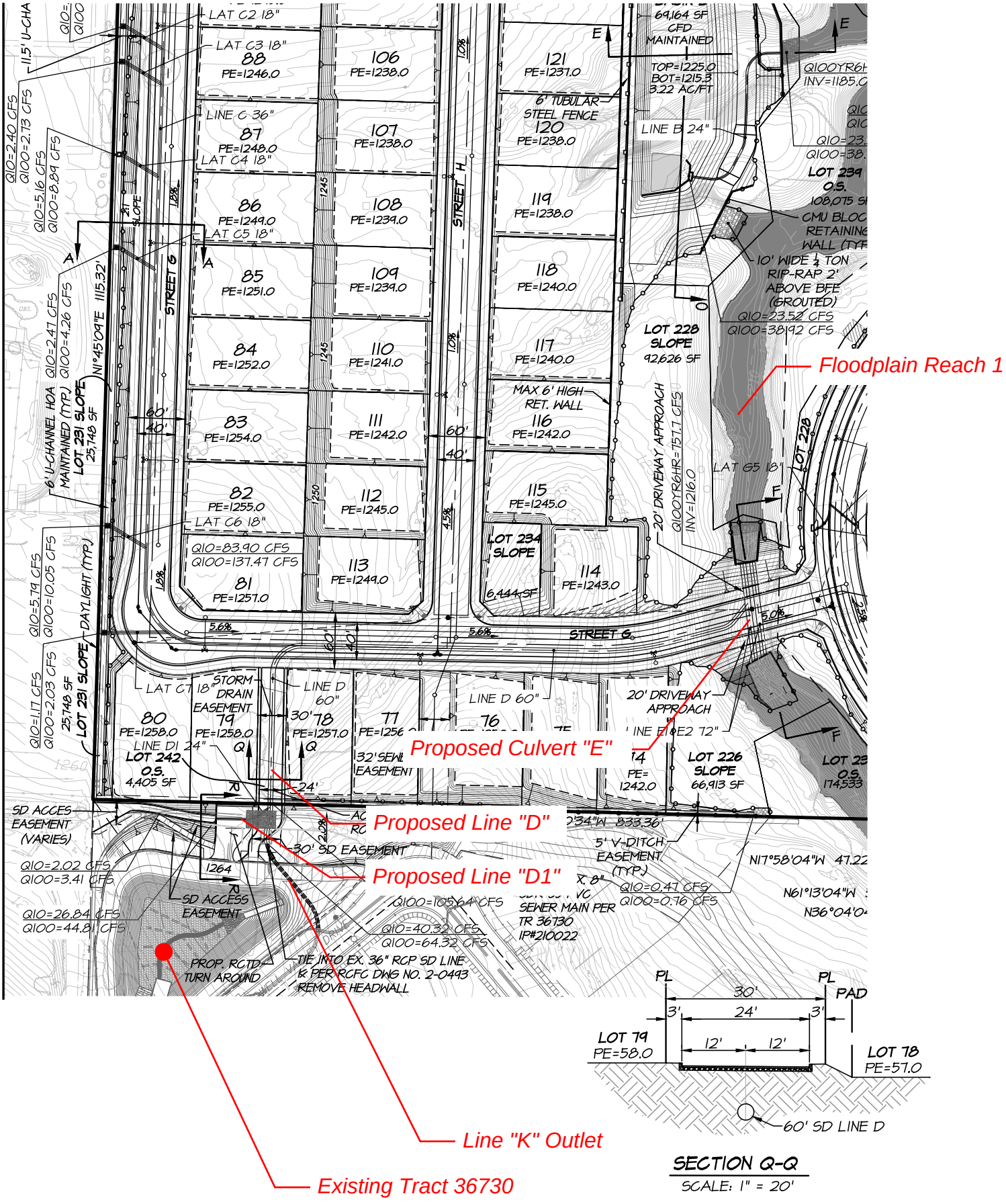


Figure 4.1 - Tract 36760 Line "K" to Line"D" Connection

Section 5 – Operation and Maintenacne

Proper maintenance and operations of storm drain and storm protection infrastructure are critical to safeguarding communities, preserving public health, and protecting the environment. These systems are designed to manage stormwater, reduce flood risks, and prevent pollutants from entering local waterways, but their effectiveness depends on consistent upkeep and monitoring. Without routine inspections, cleaning, and repairs, debris blockages, structural failures, and diminished capacity can lead to costly damage, service disruptions, and increased vulnerability during severe weather events. By prioritizing maintenance and operations, agencies and municipalities ensure the long-term reliability, efficiency, and resilience of stormwater infrastructure.

The storm drain infrastructure and maintenance entities being proposed as part of Tract 38927 is shown within Table 5-1 below, an exhibit depicting the facility locations and easements in include within Appendix H:

Table 5-1
Tract 38927 Storm Drain Facility Maintenance and Operations

Storm Drain Facility	Maintenance Entity	Facility Size
Storm Drain Line "A"	Riverside County Transportation Dept.	24”
Storm Drain Line "A1"	Riverside County Transportation Dept.	18”
Storm Drain Line "A2"	Riverside County Transportation Dept.	18”
Storm Drain Line "B"	Riverside County Transportation Dept.	24”
Storm Drain Line "C"	Riverside County Transportation Dept.	36”
Storm Drain Line "D"	Riverside County Flood Control	60”
Storm Drain Line "D1"	Riverside County Transportation Dept.	24”
Storm Culvert Line "E1"	Riverside County Transportation Dept.	72”
Storm Culvert Line "E2"	Riverside County Transportation Dept.	72”
Storm Culvert Line "F1"	Riverside County Transportation Dept.	72”
Storm Culvert Line "F2"	Riverside County Transportation Dept.	72”
Storm Drain Line "G"	Riverside County Transportation Dept.	36”
Storm Drain Line "G2"	Riverside County Transportation Dept.	18”
Storm Drain Line "G3"	Riverside County Transportation Dept.	18”
Storm Drain Line "G4"	Riverside County Transportation Dept.	18”
Storm Drain Line "G5"	Riverside County Transportation Dept.	18”
Storm Drain Line "G6"	Riverside County Transportation Dept.	18”

Table 5-1
Tract 38927 Storm Drain Facility Maintenance and Operations

Storm Drain Facility Name	Maintenance Entity	Facility Size
Storm Drain Line "G7"	Riverside County Transportation Dept.	18”
Storm Drain Line "G8"	Riverside County Transportation Dept.	18”
Storm Drain Line "G9"	Riverside County Transportation Dept.	18”
Storm Drain Line "H"	Riverside County Transportation Dept.	24”
Storm Drain Line "H1"	Riverside County Transportation Dept.	18”
Storm Drain Line "H2"	Riverside County Transportation Dept.	18”
Storm Drain Line "H3"	Riverside County Transportation Dept.	18”
Storm Culvert Line "I"	Riverside County Transportation Dept.	72”
Storm Drain Line "J"	Riverside County Transportation Dept.	24”
Storm Drain Line "J1"	Riverside County Transportation Dept.	18”
Storm Drain Line "J2"	Riverside County Transportation Dept.	18”
Storm Drain Line "K"	Riverside County Transportation Dept.	18”
Storm Drain Line "K1"	Riverside County Transportation Dept.	18”
Storm Drain Line "L"	Riverside County Transportation Dept.	18”
Storm Drain Line "L1"	Riverside County Transportation Dept.	18”
Storm Drain Line "M"	Riverside County Transportation Dept.	24”
Storm Drain Line "M1"	Riverside County Transportation Dept.	18”
Storm Drain Line "M2"	Riverside County Transportation Dept.	18”
Storm Drain Line "M3"	Riverside County Transportation Dept.	18”
Storm Drain Line "M4"	Riverside County Transportation Dept.	18”
Storm Drain Line "M5"	Riverside County Transportation Dept.	18”
Storm Drain Line "N”	Riverside County Transportation Dept.	36”
Storm Drain Line "O"	Riverside County Transportation Dept.	18”
Storm Drain Line "O1"	Riverside County Transportation Dept.	18”
Storm Drain Line "P"	Riverside County Transportation Dept.	24”

Table 5-1 Tract 38927 Storm Drain Facility Maintenance and Operations		
Storm Drain Facility	**Maintenance Entity**	**Facility Size**
Storm Drain Line "Q"	Riverside County Transportation Dept.	24”
Storm Drain Line "R"	Riverside County Transportation Dept.	18”
Storm Drain Line "R1"	Riverside County Transportation Dept.	18”
Storm Basin "A"	Community Facilities District	N/A
Storm Basin "B"	Community Facilities District	N/A
Retaining Wall Basin “B”	Community Facilities District	N/A

Maintenance of reinforced concrete storm drain systems and associated structures is essential to ensure proper hydraulic function and structural integrity. Reinforced concrete pipes should be inspected annually for cracks, joint separation, and sediment or debris buildup, with cleaning performed as needed to maintain capacity. Concrete headwalls, inlets, and outlets require semi-annual inspection to remove trash, vegetation, and accumulated sediment, as well as to check for erosion or undermining at discharge points. Open concrete channels should be inspected at least twice per year and after major storm events to clear obstructions, repair spalling or joint failures, and control vegetation growth that may impede flow. Detention basins require quarterly inspections to monitor inlet and outlet structures, remove sediment, trash, and invasive vegetation, and ensure proper function of low-flow orifice structures; dredging or sediment removal is typically required every 5–10 years depending on sediment load. Together, this regular maintenance schedule prevents blockages, preserves structural performance, and minimizes flood risks.

As part of the project, there will be proposed impacts to environmentally sensitive areas within the project limits. These areas were identified by a qualified biologist and placed within separate individual lots for conservation in perpetuity by either the Homeowners Association or a Conservation Authority. Environmental permits for the impacts associated with the defined jurisdictional waters will be obtained prior to ground disturbance through the local agencies (CDFW, ACOE, and SWRCB). All proposed storm drain facilities for Tract 38927 are located outside of the specified conservation lots and will be placed within easements corresponding to the defined maintenance entity. No storm drain facilities within the proposed project will be placed in lots that require mitigation by the regulatory agencies and will be permitted as permanent impacts, with the ability to be maintained in perpetuity for the life of the development.

Section 6 – Analytical Approach

The site hydrology was performed utilizing Riverside County Flood Control and Water Conversation District Hydrology Manual, from which pertinent soil and rainfall information was obtained. See Appendix F of this report for the referenced Plates within the Riverside County Flood Control Hydrology Manual.

Rational Method storm flow rates were analyzed by using the "RATIONAL METHOD HYDROLOGY COMPUTER PROGRAM", Riverside County Flood Control & Water Conservation District 1978 Hydrology Manual, produced by Bondamin Engineering.

Existing and Proposed detention basin flow rates were analyzed by utilizing the "SYNTHETIC UNIT HYDROLOGY METHOD COMPUTER PROGRAM", Riverside County Flood Control & Water Conservation District 1978 Hydrology Manual, produced by Bondamin Engineering.

Detention basin routing flow rates were analyzed by utilizing the "FLOOD HYDROGRAPH ROUTING PROGRAM", produced by CIVIL CADD/CIVIL DESIGN.

Basin Outflow Curves were calculated by utilizing a Microsoft Excel Spreadsheet developed by Adkan Engineers based on fundamental fluid mechanics by determining the pressure drop across the orifice allowing for a calculation of flow rate. The fundamental formula used for flow rate in an orifice flow scenario is shown below:

$$Q = C_d \times A \times 2gH$$

"Q" denotes the flow rate
"C_d" is the discharge coefficient
"A" is the Area of the orifice
"g" is the acceleration due to gravity
"H" is the height to the orifice centroid

Hydraulic computations for catch basin sizing, street flow capacities, and sharp/broad crested weir flow rates were performed utilizing software known as "FlowMaster" produced by Haestad Methods and/or "Hydraflow Express" produced by Autodesk Civil 3D. Project specific calculation can be found in Appendix "E" of this report.

Floodplain analysis was performed utilizing Hydrologic Engineering Center's River Analysis System (HEC-RAS) developed by the U.S. Army Corps of Engineers (USACE).

Section 7 – Conclusion

The hydrologic calculations provided within this report substantiate the preliminary hydrology and hydraulic design of the proposed project, Tentative Tract Map No. 38927, and indicate the following:

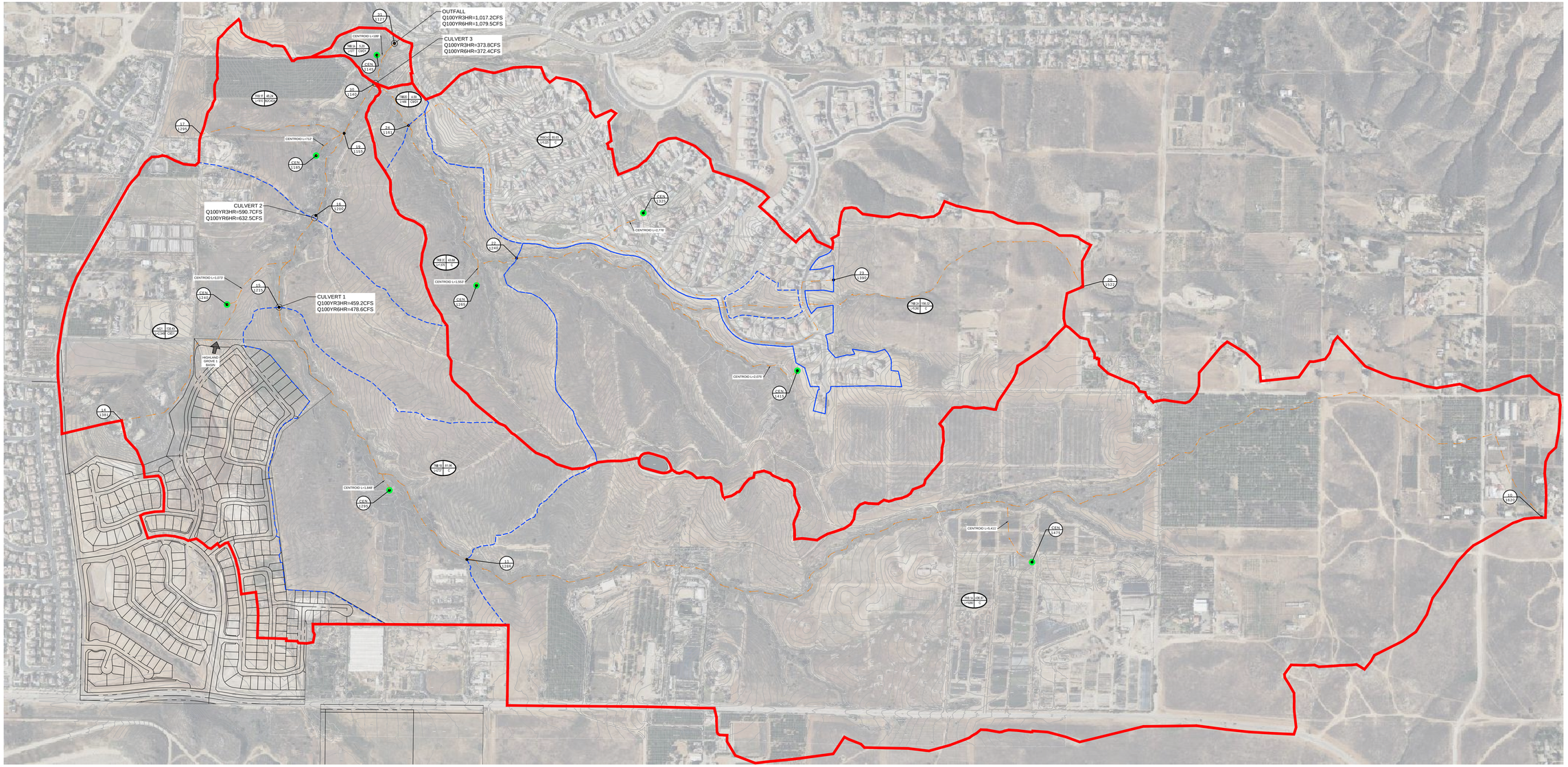
- The proposed storm drain facilities demonstrate the ability to convey the Rational Hydrology Method 10 and 100 year storm events as required by the Riverside County Flood Control Hydrology Manual.

- The proposed extended detention basins provide mitigation for post development peak storm discharge for the 1-hour, 3-hour, 6-hour and 24-hour duration for the 2-year, 5-year, 10-year, and 100-year return frequencies to the pre-development condition.

Therefore, it is our conclusion this project **does not** negatively impact the local community or watershed goals of the Santa Ana River and does not adversely affect downstream facilities while maintaining the adequate conveyance of storm flows for on-site facilities to the criteria for the protection of storm flow as determined by the Riverside County Flood Control Hydrology Manual.

Appendix A – Existing Synthetic Unit Hydrology Method

PRE DEVELOPMENT UNIT HYDROLOGY MAP



LEGEND

NODE ELEV

AREA ACRES
LENGTH SOIL

WATERSHED BOUNDARY
SUB WATERSHED BOUNDARY
FLOW PATH

0 150 300 600 900 1200
SCALE: 1" = 300'

PLANS PREPARED BY:
adkan ENGINEERS
Civil Engineering · Surveying · Planning
6878 Airport Drive, Riverside, CA 92504
Tel:(951) 688-0241 Fax:(951) 688-0599

Plot Date: 3/14/2025

FILE: Map: C:\Projects\Active\25021\Engineering\Hydrology\Drawings\25021_PRE_DEV_UNIT_HYDRO_MAP.dwg

PRECIPITATION VALUES

RETURN YR	1HR	3HR	6HR	24HR
2 YR	0.50	0.80	1.10	1.80
100 YR	1.30	2.00	3.00	5.00

EXISTING WATERSHED ANALYSIS (UNIT)

ID	AREA (AC)	US NODE		DS NODE		ELEV Δ (FT)	LENGTH (FT)	CENTROID			WEIGHTED COVER DATA			
		ID	ELEV	ID	ELEV			ELEV	Δ (FT)	L_C (FT)	COVER	IMP	SOIL	RI
STREAM 1														
TRIB 1A	436.97	10	1620	11	1286	334	10260	1471	185	5411	MIXED	8.9%	C	86
TRIB 1B	81.96	11	1286	15	1215	71	2737	1295	80	1848	NATURAL	0%	C	86
HG 1	138.49	14	1250	15	1215	35	2549	1240	25	1073	MIXED	20%	C	86
TRIB 1F	48.24	16	1200	30	1140	60	1610	1212	72	712	NATURAL	0%	B/C/D	86
STORE HYD		30		30										
STREAM 2														
TRIB 2A	156.32	20	1522	22	1240	282	5260	1415	175	2075	NATURAL	0%	C	86
TRIB 2C	46.38	22	1240	24	1161	79	1676	1265	104	1553	NATURAL	0%	C/D	86
TRIB CH 2	85.03	23	1390	24	1161	229	5225	1332	171	2874	DEV (1/4 AC)	50%	C	86
TRIB 2D	4.59	24	1161	30	1140	21	466	1150	10	233	NATURAL	0%	C/D	86
ADD HYD		**30**		**30**		**0**			**0**					
TRIB 3A	5.20	30	1140	31	1127	13	377	1145	18	189	NATURAL	0%	C/D	86

Pre-Development Sub-Area Unit Hydrographs

```
       U n i t   H y d r o g r a p h   A n a l y s i s

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              Study date  12/20/24 File: TRIB1A3100.out

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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978


Program License Serial Number 5006

------------------------------------------------------------------------
 English (in-lb) Input Units Used
 English Rainfall Data (Inches) Input Values Used

 English Units used in output format



------------------------------------------------------------------------
------------------------------------------------------------------------
Drainage Area =     436.97(Ac.)  =      0.683 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment =     436.97(Ac.)  =      0.683 Sq. Mi.
Length along longest watercourse =   10260.00(Ft.)
Length along longest watercourse measured to centroid =    5411.00(Ft.)
Length along longest watercourse =      1.943 Mi.
Length along longest watercourse measured to centroid =      1.025 Mi.
Difference in elevation =     334.00(Ft.)
Slope along watercourse =    171.8830 Ft./Mi.
Average Manning's 'N' = 0.040
Lag time =    0.469 Hr.
Lag time =    28.15 Min.
25% of lag time =     7.04 Min.
40% of lag time =    11.26 Min.
Unit time =     5.00 Min.
Duration of storm = 3 Hour(s)
User Entered Base Flow =     0.00(CFS)

2 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
      436.97           0.80                349.58

100 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
      436.97           2.00                873.94

STORM EVENT (YEAR) =  100.00
Area Averaged 2-Year Rainfall =    0.800(In)
Area Averaged 100-Year Rainfall =    2.000(In)

Point rain (area averaged) =    2.000(In)
Areal adjustment factor =   99.81 %
Adjusted average point rain =    1.996(In)

Sub-Area Data:
Area(Ac.)         Runoff Index   Impervious %
   436.970           86.00         0.089
 Total Area Entered =    436.97(Ac.)


RI    RI   Infil. Rate Impervious   Adj. Infil. Rate  Area%     F
AMC2 AMC-2     (In/Hr)    (Dec.%)     (In/Hr)      (Dec.)    (In/Hr)
```

EX Tributary 1 Area A 100 Year 3 Hour

```
86.0  86.0      0.176     0.089        0.162       1.000      0.162
                                                  Sum (F) =   0.162
Area averaged mean soil loss (F) (In/Hr) =  0.162
Minimum soil loss rate ((In/Hr)) =  0.081
(for 24 hour storm duration)
Soil low loss rate (decimal) =   0.900
```

U n i t H y d r o g r a p h
VALLEY S-Curve

Unit Hydrograph Data

Unit time period (hrs)		Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	17.765	1.554	6.843
2	0.167	35.530	4.217	18.569
3	0.250	53.295	7.212	31.760
4	0.333	71.059	10.298	45.353
5	0.417	88.824	12.286	54.105
6	0.500	106.589	12.546	55.249
7	0.583	124.354	9.748	42.931
8	0.667	142.119	6.767	29.802
9	0.750	159.884	4.968	21.878
10	0.833	177.649	3.613	15.910
11	0.917	195.414	2.798	12.321
12	1.000	213.178	2.492	10.976
13	1.083	230.943	2.128	9.373
14	1.167	248.708	1.855	8.170
15	1.250	266.473	1.685	7.420
16	1.333	284.238	1.525	6.718
17	1.417	302.003	1.310	5.771
18	1.500	319.768	1.150	5.064
19	1.583	337.533	1.066	4.694
20	1.667	355.297	1.053	4.638
21	1.750	373.062	0.852	3.751
22	1.833	390.827	0.782	3.442
23	1.917	408.592	0.757	3.332
24	2.000	426.357	0.597	2.629
25	2.083	444.122	0.568	2.503
26	2.167	461.887	0.561	2.468
27	2.250	479.652	0.535	2.356
28	2.333	497.416	0.533	2.347
29	2.417	515.181	0.481	2.118
30	2.500	532.946	0.392	1.728
31	2.583	550.711	0.391	1.721
32	2.667	568.476	0.353	1.552
33	2.750	586.241	0.320	1.408
34	2.833	604.006	0.318	1.400
35	2.917	621.771	0.270	1.189
36	3.000	639.535	0.249	1.095
37	3.083	657.300	0.243	1.069
38	3.167	675.065	0.190	0.837
39	3.250	692.830	0.178	0.782
40	3.333	710.595	0.178	0.782
41	3.417	728.360	0.178	0.782
42	3.500	746.125	0.178	0.782
43	3.583	763.890	0.178	0.782
44	3.667	781.654	0.178	0.782
45	3.750	799.419	0.178	0.782
46	3.833	817.184	0.095	0.417
			Sum = 100.000	Sum= 440.384

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr) Max	Low	Effective (In/Hr)

EX Tributary 1 Area A 100 Year 3 Hour

1	0.08	1.30	0.311	0.162	(0.280)	0.150	
2	0.17	1.30	0.311	0.162	(0.280)	0.150	
3	0.25	1.10	0.263	0.162	(0.237)	0.102	
4	0.33	1.50	0.359	0.162	(0.323)	0.198	
5	0.42	1.50	0.359	0.162	(0.323)	0.198	
6	0.50	1.80	0.431	0.162	(0.388)	0.270	
7	0.58	1.50	0.359	0.162	(0.323)	0.198	
8	0.67	1.80	0.431	0.162	(0.388)	0.270	
9	0.75	1.80	0.431	0.162	(0.388)	0.270	
10	0.83	1.50	0.359	0.162	(0.323)	0.198	
11	0.92	1.60	0.383	0.162	(0.345)	0.222	
12	1.00	1.80	0.431	0.162	(0.388)	0.270	
13	1.08	2.20	0.527	0.162	(0.474)	0.365	
14	1.17	2.20	0.527	0.162	(0.474)	0.365	
15	1.25	2.20	0.527	0.162	(0.474)	0.365	
16	1.33	2.00	0.479	0.162	(0.431)	0.318	
17	1.42	2.60	0.623	0.162	(0.561)	0.461	
18	1.50	2.70	0.647	0.162	(0.582)	0.485	
19	1.58	2.40	0.575	0.162	(0.517)	0.413	
20	1.67	2.70	0.647	0.162	(0.582)	0.485	
21	1.75	3.30	0.790	0.162	(0.711)	0.629	
22	1.83	3.10	0.743	0.162	(0.668)	0.581	
23	1.92	2.90	0.695	0.162	(0.625)	0.533	
24	2.00	3.00	0.719	0.162	(0.647)	0.557	
25	2.08	3.10	0.743	0.162	(0.668)	0.581	
26	2.17	4.20	1.006	0.162	(0.905)	0.845	
27	2.25	5.00	1.198	0.162	(1.078)	1.036	
28	2.33	3.50	0.838	0.162	(0.755)	0.677	
29	2.42	6.80	1.629	0.162	(1.466)	1.467	
30	2.50	7.30	1.749	0.162	(1.574)	1.587	
31	2.58	8.20	1.964	0.162	(1.768)	1.803	
32	2.67	5.90	1.413	0.162	(1.272)	1.252	
33	2.75	2.00	0.479	0.162	(0.431)	0.318	
34	2.83	1.80	0.431	0.162	(0.388)	0.270	
35	2.92	1.80	0.431	0.162	(0.388)	0.270	
36	3.00	0.60	0.144	(0.162)	0.129	0.014	

(Loss Rate Not Used)

Sum = 100.0 Sum = 18.2

Flood volume = Effective rainfall 1.51(In)
times area 437.0(Ac.)/[(In)/(Ft.)] = 55.1(Ac.Ft)
Total soil loss = 0.48(In)
Total soil loss = 17.549(Ac.Ft)
Total rainfall = 2.00(In)
Flood volume = 2401913.0 Cubic Feet
Total soil loss = 764424.4 Cubic Feet

Peak flow rate of this hydrograph = 430.279(CFS)

++

3 - H O U R S T O R M
R u n o f f H y d r o g r a p h

Hydrograph in 5 Minute intervals ((CFS))

Time(h+m)	Volume Ac.Ft	Q(CFS)	0	125.0	250.0	375.0	500.0
0+ 5	0.0071	1.03	Q	|	|	|	|
0+10	0.0333	3.81	Q	|	|	|	|
0+15	0.0901	8.24	Q	|	|	|	|
0+20	0.1921	14.81	VQ	|	|	|	|
0+25	0.3518	23.18	VQ	|	|	|	|
0+30	0.5779	32.83	V Q	|	|	|	|
0+35	0.8662	41.86	V Q	|	|	|	|
0+40	1.2127	50.31	V Q	|	|	|	|
0+45	1.6200	59.14	|V Q	|	|	|	|
0+50	2.0789	66.64	|V Q	|	|	|	|
0+55	2.5780	72.46	|V Q	|	|	|	|
1+ 0	3.1079	76.94	| V Q	|	|	|	|
1+ 5	3.6682	81.35	| V Q	|	|	|	|
1+10	4.2622	86.25	| V Q	|	|	|	|

EX Tributary 1 Area A 100 Year 3 Hour

1+15	4.8973	92.22	V Q				
1+20	5.5854	99.90	V Q				
1+25	6.3365	109.06	V Q				
1+30	7.1545	118.78	V Q				
1+35	8.0349	127.83	V Q				
1+40	8.9764	136.70	V Q				
1+45	9.9866	146.68	V Q				
1+50	11.0757	158.15	V Q				
1+55	12.2429	169.48	V Q				
2+ 0	13.4831	180.07	V Q				
2+ 5	14.7961	190.64	V Q				
2+10	16.1853	201.72	V Q				
2+15	17.6626	214.50	V Q				
2+20	19.2413	229.23	V Q				
2+25	20.9699	250.99	V Q				
2+30	22.9155	282.49	V Q				
2+35	25.1454	323.79	V Q				
2+40	27.6907	369.57	V Q				
2+45	30.4942	407.07	V Q				
2+50	33.4575	430.28	V Q				
2+55	36.3968	426.78	V Q				
3+ 0	39.0990	392.36	V Q				
3+ 5	41.4107	335.67	V Q				
3+10	43.2885	272.66	V Q				
3+15	44.7991	219.33	V Q				
3+20	46.0250	178.00	V Q				
3+25	47.0252	145.24	V Q				
3+30	47.8652	121.96	V Q				
3+35	48.5907	105.34	V Q				
3+40	49.2267	92.35	V Q				
3+45	49.7939	82.35	V Q				
3+50	50.3030	73.92	V Q				
3+55	50.7585	66.14	V Q				
4+ 0	51.1715	59.97	V Q				
4+ 5	51.5464	54.44	V Q				
4+10	51.8870	49.45	V Q				
4+15	52.1964	44.92	V Q				
4+20	52.4756	40.54	V Q				
4+25	52.7313	37.13	V Q				
4+30	52.9651	33.94	V Q				
4+35	53.1785	30.99	V Q				
4+40	53.3783	29.00	V Q				
4+45	53.5651	27.13	V Q				
4+50	53.7365	24.89	V Q				
4+55	53.8938	22.83	V Q				
5+ 0	54.0367	20.75	V Q				
5+ 5	54.1669	18.91	V Q				
5+10	54.2870	17.44	V Q				
5+15	54.3958	15.79	V Q				
5+20	54.4943	14.30	V Q				
5+25	54.5842	13.06	V Q				
5+30	54.6647	11.69	V Q				
5+35	54.7369	10.49	V Q				
5+40	54.8018	9.42	V Q				
5+45	54.8604	8.51	V Q				
5+50	54.9148	7.89	V Q				
5+55	54.9647	7.25	V Q				
6+ 0	55.0091	6.44	V Q				
6+ 5	55.0487	5.75	V Q				
6+10	55.0826	4.93	V Q				
6+15	55.1083	3.73	V Q				
6+20	55.1249	2.41	V Q				
6+25	55.1332	1.20	V Q				
6+30	55.1371	0.57	V Q				
6+35	55.1394	0.33	V Q				
6+40	55.1403	0.12	V Q				
6+45	55.1403	0.01	V Q				

EX Tributary 1 Area A 100 Year 3 Hour

```
       U n i t   H y d r o g r a p h   A n a l y s i s

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              Study date  12/20/24 File: TRIB1A6100.out

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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978


Program License Serial Number 5006

------------------------------------------------------------------------
 English (in-lb) Input Units Used
 English Rainfall Data (Inches) Input Values Used

 English Units used in output format



------------------------------------------------------------------------
------------------------------------------------------------------------
Drainage Area =     436.97(Ac.)  =      0.683 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment =     436.97(Ac.)  =      0.683 Sq. Mi.
Length along longest watercourse =   10260.00(Ft.)
Length along longest watercourse measured to centroid =    5411.00(Ft.)
Length along longest watercourse =      1.943 Mi.
Length along longest watercourse measured to centroid =      1.025 Mi.
Difference in elevation =     334.00(Ft.)
Slope along watercourse =    171.8830 Ft./Mi.
Average Manning's 'N' = 0.040
Lag time =    0.469 Hr.
Lag time =    28.15 Min.
25% of lag time =     7.04 Min.
40% of lag time =    11.26 Min.
Unit time =     5.00 Min.
Duration of storm = 6 Hour(s)
User Entered Base Flow =     0.00(CFS)

2 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
      436.97           1.10                480.67

100 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
      436.97           3.00               1310.91

STORM EVENT (YEAR) =  100.00
Area Averaged 2-Year Rainfall =    1.100(In)
Area Averaged 100-Year Rainfall =    3.000(In)

Point rain (area averaged) =    3.000(In)
Areal adjustment factor =   99.85 %
Adjusted average point rain =    2.995(In)

Sub-Area Data:
Area(Ac.)         Runoff Index   Impervious %
   436.970           86.00         0.089
 Total Area Entered =    436.97(Ac.)


RI    RI   Infil. Rate Impervious   Adj. Infil. Rate  Area%     F
AMC2 AMC-2     (In/Hr)    (Dec.%)     (In/Hr)      (Dec.)    (In/Hr)
```

EX Tributary 1 Area A 100 Year 6 Hour

```
86.0  86.0      0.176     0.089        0.162       1.000      0.162
                                                  Sum (F) =   0.162
Area averaged mean soil loss (F) (In/Hr) =  0.162
Minimum soil loss rate ((In/Hr)) =  0.081
(for 24 hour storm duration)
Soil low loss rate (decimal) =   0.900
```

U n i t H y d r o g r a p h
VALLEY S-Curve

Unit Hydrograph Data

Unit time period (hrs)		Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	17.765	1.554	6.843
2	0.167	35.530	4.217	18.569
3	0.250	53.295	7.212	31.760
4	0.333	71.059	10.298	45.353
5	0.417	88.824	12.286	54.105
6	0.500	106.589	12.546	55.249
7	0.583	124.354	9.748	42.931
8	0.667	142.119	6.767	29.802
9	0.750	159.884	4.968	21.878
10	0.833	177.649	3.613	15.910
11	0.917	195.414	2.798	12.321
12	1.000	213.178	2.492	10.976
13	1.083	230.943	2.128	9.373
14	1.167	248.708	1.855	8.170
15	1.250	266.473	1.685	7.420
16	1.333	284.238	1.525	6.718
17	1.417	302.003	1.310	5.771
18	1.500	319.768	1.150	5.064
19	1.583	337.533	1.066	4.694
20	1.667	355.297	1.053	4.638
21	1.750	373.062	0.852	3.751
22	1.833	390.827	0.782	3.442
23	1.917	408.592	0.757	3.332
24	2.000	426.357	0.597	2.629
25	2.083	444.122	0.568	2.503
26	2.167	461.887	0.561	2.468
27	2.250	479.652	0.535	2.356
28	2.333	497.416	0.533	2.347
29	2.417	515.181	0.481	2.118
30	2.500	532.946	0.392	1.728
31	2.583	550.711	0.391	1.721
32	2.667	568.476	0.353	1.552
33	2.750	586.241	0.320	1.408
34	2.833	604.006	0.318	1.400
35	2.917	621.771	0.270	1.189
36	3.000	639.535	0.249	1.095
37	3.083	657.300	0.243	1.069
38	3.167	675.065	0.190	0.837
39	3.250	692.830	0.178	0.782
40	3.333	710.595	0.178	0.782
41	3.417	728.360	0.178	0.782
42	3.500	746.125	0.178	0.782
43	3.583	763.890	0.178	0.782
44	3.667	781.654	0.178	0.782
45	3.750	799.419	0.178	0.782
46	3.833	817.184	0.095	0.417
			Sum = 100.000	Sum= 440.384

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr) Max	Low	Effective (In/Hr)

EX Tributary 1 Area A 100 Year 6 Hour

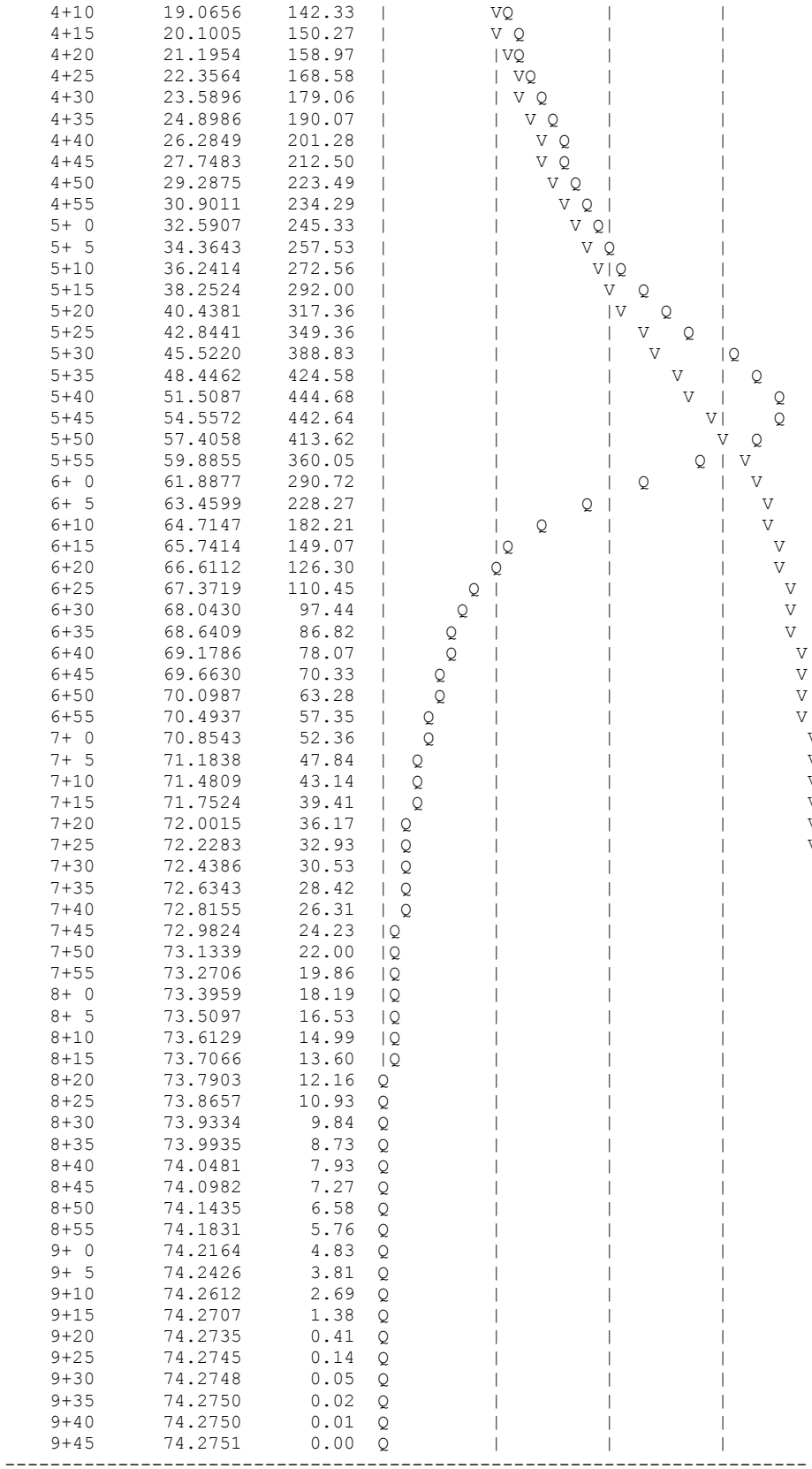
1	0.08	0.50	0.180	0.162	(0.162)	0.018
2	0.17	0.60	0.216	0.162	(0.194)	0.054
3	0.25	0.60	0.216	0.162	(0.194)	0.054
4	0.33	0.60	0.216	0.162	(0.194)	0.054
5	0.42	0.60	0.216	0.162	(0.194)	0.054
6	0.50	0.70	0.252	0.162	(0.226)	0.090
7	0.58	0.70	0.252	0.162	(0.226)	0.090
8	0.67	0.70	0.252	0.162	(0.226)	0.090
9	0.75	0.70	0.252	0.162	(0.226)	0.090
10	0.83	0.70	0.252	0.162	(0.226)	0.090
11	0.92	0.70	0.252	0.162	(0.226)	0.090
12	1.00	0.80	0.288	0.162	(0.259)	0.126
13	1.08	0.80	0.288	0.162	(0.259)	0.126
14	1.17	0.80	0.288	0.162	(0.259)	0.126
15	1.25	0.80	0.288	0.162	(0.259)	0.126
16	1.33	0.80	0.288	0.162	(0.259)	0.126
17	1.42	0.80	0.288	0.162	(0.259)	0.126
18	1.50	0.80	0.288	0.162	(0.259)	0.126
19	1.58	0.80	0.288	0.162	(0.259)	0.126
20	1.67	0.80	0.288	0.162	(0.259)	0.126
21	1.75	0.80	0.288	0.162	(0.259)	0.126
22	1.83	0.80	0.288	0.162	(0.259)	0.126
23	1.92	0.80	0.288	0.162	(0.259)	0.126
24	2.00	0.90	0.324	0.162	(0.291)	0.162
25	2.08	0.80	0.288	0.162	(0.259)	0.126
26	2.17	0.90	0.324	0.162	(0.291)	0.162
27	2.25	0.90	0.324	0.162	(0.291)	0.162
28	2.33	0.90	0.324	0.162	(0.291)	0.162
29	2.42	0.90	0.324	0.162	(0.291)	0.162
30	2.50	0.90	0.324	0.162	(0.291)	0.162
31	2.58	0.90	0.324	0.162	(0.291)	0.162
32	2.67	0.90	0.324	0.162	(0.291)	0.162
33	2.75	1.00	0.359	0.162	(0.324)	0.198
34	2.83	1.00	0.359	0.162	(0.324)	0.198
35	2.92	1.00	0.359	0.162	(0.324)	0.198
36	3.00	1.00	0.359	0.162	(0.324)	0.198
37	3.08	1.00	0.359	0.162	(0.324)	0.198
38	3.17	1.10	0.395	0.162	(0.356)	0.234
39	3.25	1.10	0.395	0.162	(0.356)	0.234
40	3.33	1.10	0.395	0.162	(0.356)	0.234
41	3.42	1.20	0.431	0.162	(0.388)	0.270
42	3.50	1.30	0.467	0.162	(0.421)	0.306
43	3.58	1.40	0.503	0.162	(0.453)	0.342
44	3.67	1.40	0.503	0.162	(0.453)	0.342
45	3.75	1.50	0.539	0.162	(0.485)	0.378
46	3.83	1.50	0.539	0.162	(0.485)	0.378
47	3.92	1.60	0.575	0.162	(0.518)	0.414
48	4.00	1.60	0.575	0.162	(0.518)	0.414
49	4.08	1.70	0.611	0.162	(0.550)	0.450
50	4.17	1.80	0.647	0.162	(0.582)	0.485
51	4.25	1.90	0.683	0.162	(0.615)	0.521
52	4.33	2.00	0.719	0.162	(0.647)	0.557
53	4.42	2.10	0.755	0.162	(0.679)	0.593
54	4.50	2.10	0.755	0.162	(0.679)	0.593
55	4.58	2.20	0.791	0.162	(0.712)	0.629
56	4.67	2.30	0.827	0.162	(0.744)	0.665
57	4.75	2.40	0.863	0.162	(0.776)	0.701
58	4.83	2.40	0.863	0.162	(0.776)	0.701
59	4.92	2.50	0.899	0.162	(0.809)	0.737
60	5.00	2.60	0.935	0.162	(0.841)	0.773
61	5.08	3.10	1.114	0.162	(1.003)	0.953
62	5.17	3.60	1.294	0.162	(1.165)	1.133
63	5.25	3.90	1.402	0.162	(1.262)	1.240
64	5.33	4.20	1.510	0.162	(1.359)	1.348
65	5.42	4.70	1.689	0.162	(1.521)	1.528
66	5.50	5.60	2.013	0.162	(1.812)	1.851
67	5.58	1.90	0.683	0.162	(0.615)	0.521
68	5.67	0.90	0.324	0.162	(0.291)	0.162
69	5.75	0.60	0.216	0.162	(0.194)	0.054
70	5.83	0.50	0.180	0.162	(0.162)	0.018
71	5.92	0.30	0.108	(0.162)	0.097	0.011

EX Tributary 1 Area A 100 Year 6 Hour

```
72   6.00     0.20      0.072       (  0.162)       0.065        0.007
             (Loss Rate Not Used)
   Sum =     100.0                                    Sum =    24.5
      Flood volume = Effective rainfall      2.04(In)
       times area     437.0(Ac.)/[(In)/(Ft.)] =      74.3(Ac.Ft)
      Total soil loss =      0.96(In)
      Total soil loss =    34.803(Ac.Ft)
      Total rainfall =      3.00(In)
      Flood volume =     3235421.6 Cubic Feet
      Total soil loss =     1516033.8 Cubic Feet
      ---------------------------------------------------------------------
       Peak flow rate of this hydrograph =    444.683(CFS)
      ---------------------------------------------------------------------
      +++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                          6 - H O U R    S T O R M
                     R u n o f f      H y d r o g r a p h
      ---------------------------------------------------------------------
                  Hydrograph in   5   Minute intervals ((CFS))

      ---------------------------------------------------------------------
Time(h+m) Volume Ac.Ft   Q(CFS)  0      125.0     250.0     375.0     500.0
-------------------------------------------------------------------------
  0+ 5       0.0009      0.12  Q         |         |         |         |
  0+10       0.0057      0.71  Q         |         |         |         |
  0+15       0.0192      1.95  Q         |         |         |         |
  0+20       0.0462      3.92  Q         |         |         |         |
  0+25       0.0912      6.54  Q         |         |         |         |
  0+30       0.1583      9.74  Q         |         |         |         |
  0+35       0.2490     13.17  VQ        |         |         |         |
  0+40       0.3620     16.40  VQ        |         |         |         |
  0+45       0.4963     19.50  VQ        |         |         |         |
  0+50       0.6514     22.53  VQ        |         |         |         |
  0+55       0.8257     25.31  V Q       |         |         |         |
  1+ 0       1.0168     27.74  V Q       |         |         |         |
  1+ 5       1.2237     30.05  V Q       |         |         |         |
  1+10       1.4473     32.46  V Q       |         |         |         |
  1+15       1.6890     35.09  V Q       |         |         |         |
  1+20       1.9498     37.87  |V Q       |         |         |         |
  1+25       2.2294     40.60  |V Q       |         |         |         |
  1+30       2.5241     42.78  |V Q       |         |         |         |
  1+35       2.8299     44.41  |V Q       |         |         |         |
  1+40       3.1448     45.72  |V Q       |         |         |         |
  1+45       3.4669     46.77  |V Q       |         |         |         |
  1+50       3.7949     47.62  | VQ       |         |         |         |
  1+55       4.1281     48.38  | VQ       |         |         |         |
  2+ 0       4.4676     49.30  | VQ       |         |         |         |
  2+ 5       4.8142     50.32  | V Q      |         |         |         |
  2+10       5.1694     51.58  | V Q      |         |         |         |
  2+15       5.5360     53.23  | V Q      |         |         |         |
  2+20       5.9158     55.14  |  VQ      |         |         |         |
  2+25       6.3099     57.22  |  VQ      |         |         |         |
  2+30       6.7168     59.09  |  VQ      |         |         |         |
  2+35       7.1365     60.95  |  VQ      |         |         |         |
  2+40       7.5671     62.52  |   VQ     |         |         |         |
  2+45       8.0073     63.91  |   VQ     |         |         |         |
  2+50       8.4584     65.51  |   VQ     |         |         |         |
  2+55       8.9227     67.40  |   VQ     |         |         |         |
  3+ 0       9.4022     69.64  |    Q     |         |         |         |
  3+ 5       9.8990     72.14  |    Q     |         |         |         |
  3+10      10.4147     74.87  |    Q     |         |         |         |
  3+15      10.9486     77.53  |    VQ    |         |         |         |
  3+20      11.5005     80.14  |     Q    |         |         |         |
  3+25      12.0732     83.16  |     Q    |         |         |         |
  3+30      12.6719     86.93  |     Q    |         |         |         |
  3+35      13.3036     91.72  |      Q   |         |         |         |
  3+40      13.9742     97.36  |      Q   |         |         |         |
  3+45      14.6905    104.01  |      VQ  |         |         |         |
  3+50      15.4588    111.56  |       Q  |         |         |         |
  3+55      16.2815    119.45  |       VQ |         |         |         |
  4+ 0      17.1576    127.22  |        VQ|         |         |         |
  4+ 5      18.0853    134.71  |        VQ|         |         |         |
```

EX Tributary 1 Area A 100 Year 6 Hour



4+10	19.0656	142.33	
4+15	20.1005	150.27	
4+20	21.1954	158.97	
4+25	22.3564	168.58	
4+30	23.5896	179.06	
4+35	24.8986	190.07	
4+40	26.2849	201.28	
4+45	27.7483	212.50	
4+50	29.2875	223.49	
4+55	30.9011	234.29	
5+ 0	32.5907	245.33	
5+ 5	34.3643	257.53	
5+10	36.2414	272.56	
5+15	38.2524	292.00	
5+20	40.4381	317.36	
5+25	42.8441	349.36	
5+30	45.5220	388.83	
5+35	48.4462	424.58	
5+40	51.5087	444.68	
5+45	54.5572	442.64	
5+50	57.4058	413.62	
5+55	59.8855	360.05	
6+ 0	61.8877	290.72	
6+ 5	63.4599	228.27	
6+10	64.7147	182.21	
6+15	65.7414	149.07	
6+20	66.6112	126.30	
6+25	67.3719	110.45	
6+30	68.0430	97.44	
6+35	68.6409	86.82	
6+40	69.1786	78.07	
6+45	69.6630	70.33	
6+50	70.0987	63.28	
6+55	70.4937	57.35	
7+ 0	70.8543	52.36	
7+ 5	71.1838	47.84	
7+10	71.4809	43.14	
7+15	71.7524	39.41	
7+20	72.0015	36.17	
7+25	72.2283	32.93	
7+30	72.4386	30.53	
7+35	72.6343	28.42	
7+40	72.8155	26.31	
7+45	72.9824	24.23	
7+50	73.1339	22.00	
7+55	73.2706	19.86	
8+ 0	73.3959	18.19	
8+ 5	73.5097	16.53	
8+10	73.6129	14.99	
8+15	73.7066	13.60	
8+20	73.7903	12.16	
8+25	73.8657	10.93	
8+30	73.9334	9.84	
8+35	73.9935	8.73	
8+40	74.0481	7.93	
8+45	74.0982	7.27	
8+50	74.1435	6.58	
8+55	74.1831	5.76	
9+ 0	74.2164	4.83	
9+ 5	74.2426	3.81	
9+10	74.2612	2.69	
9+15	74.2707	1.38	
9+20	74.2735	0.41	
9+25	74.2745	0.14	
9+30	74.2748	0.05	
9+35	74.2750	0.02	
9+40	74.2750	0.01	
9+45	74.2751	0.00	

EX Tributary 1 Area A 100 Year 6 Hour

EX Tributary 1 Area A 100 Year 6 Hour

```
       U n i t   H y d r o g r a p h   A n a l y s i s

       Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2008, Version 8.1
              Study date  03/11/25 File: TRIB1B3100.out

++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
------------------------------------------------------------------------------

Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978


Program License Serial Number 5006

------------------------------------------------------------------------
 English (in-lb) Input Units Used
 English Rainfall Data (Inches) Input Values Used

 English Units used in output format



------------------------------------------------------------------------
------------------------------------------------------------------------
Drainage Area =      43.68(Ac.)  =      0.068 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment =      43.68(Ac.)  =      0.068 Sq. Mi.
Length along longest watercourse =    2737.00(Ft.)
Length along longest watercourse measured to centroid =    1848.00(Ft.)
Length along longest watercourse =      0.518 Mi.
Length along longest watercourse measured to centroid =      0.350 Mi.
Difference in elevation =      71.00(Ft.)
Slope along watercourse =    136.9675 Ft./Mi.
Average Manning's 'N' = 0.040
Lag time =    0.197 Hr.
Lag time =    11.82 Min.
25% of lag time =     2.96 Min.
40% of lag time =     4.73 Min.
Unit time =     5.00 Min.
Duration of storm = 3 Hour(s)
User Entered Base Flow =     0.00(CFS)

2 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
       43.68           0.80                 34.94

100 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
       43.68           2.00                 87.36

STORM EVENT (YEAR) =  100.00
Area Averaged 2-Year Rainfall =    0.800(In)
Area Averaged 100-Year Rainfall =    2.000(In)

Point rain (area averaged) =    2.000(In)
Areal adjustment factor =   99.98 %
Adjusted average point rain =    2.000(In)

Sub-Area Data:
Area(Ac.)         Runoff Index   Impervious %
    43.680           86.00         0.000
 Total Area Entered =     43.68(Ac.)


RI    RI   Infil. Rate Impervious   Adj. Infil. Rate  Area%     F
AMC2 AMC-2     (In/Hr)    (Dec.%)     (In/Hr)      (Dec.)    (In/Hr)
```

EX Tributary 1 Area B 100 Year 3 Hour

86.0 86.0 0.176 0.000 0.176 1.000 0.176
Sum (F) = 0.176

Area averaged mean soil loss (F) (In/Hr) = 0.176
Minimum soil loss rate ((In/Hr)) = 0.088
(for 24 hour storm duration)
Soil low loss rate (decimal) = 0.900

U n i t H y d r o g r a p h
VALLEY S-Curve

Unit Hydrograph Data

Unit time period (hrs)	Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	42.286	4.738	2.086
2	0.167	84.572	19.712	8.678
3	0.250	126.858	27.817	12.246
4	0.333	169.144	16.308	7.179
5	0.417	211.429	7.934	3.493
6	0.500	253.715	5.201	2.290
7	0.583	296.001	3.892	1.713
8	0.667	338.287	2.922	1.286
9	0.750	380.573	2.363	1.040
10	0.833	422.859	1.812	0.798
11	0.917	465.145	1.401	0.617
12	1.000	507.431	1.281	0.564
13	1.083	549.717	1.045	0.460
14	1.167	592.002	0.847	0.373
15	1.250	634.288	0.706	0.311
16	1.333	676.574	0.562	0.247
17	1.417	718.860	0.435	0.191
18	1.500	761.146	0.423	0.186
19	1.583	803.432	0.600	0.264
		Sum = 100.000	Sum=	44.021

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr) Max	Low	Effective (In/Hr)
1	0.08	1.30	0.312	0.176	(0.281)	0.136
2	0.17	1.30	0.312	0.176	(0.281)	0.136
3	0.25	1.10	0.264	0.176	(0.238)	0.088
4	0.33	1.50	0.360	0.176	(0.324)	0.184
5	0.42	1.50	0.360	0.176	(0.324)	0.184
6	0.50	1.80	0.432	0.176	(0.389)	0.256
7	0.58	1.50	0.360	0.176	(0.324)	0.184
8	0.67	1.80	0.432	0.176	(0.389)	0.256
9	0.75	1.80	0.432	0.176	(0.389)	0.256
10	0.83	1.50	0.360	0.176	(0.324)	0.184
11	0.92	1.60	0.384	0.176	(0.346)	0.208
12	1.00	1.80	0.432	0.176	(0.389)	0.256
13	1.08	2.20	0.528	0.176	(0.475)	0.352
14	1.17	2.20	0.528	0.176	(0.475)	0.352
15	1.25	2.20	0.528	0.176	(0.475)	0.352
16	1.33	2.00	0.480	0.176	(0.432)	0.304
17	1.42	2.60	0.624	0.176	(0.561)	0.448
18	1.50	2.70	0.648	0.176	(0.583)	0.472
19	1.58	2.40	0.576	0.176	(0.518)	0.400
20	1.67	2.70	0.648	0.176	(0.583)	0.472
21	1.75	3.30	0.792	0.176	(0.713)	0.616
22	1.83	3.10	0.744	0.176	(0.669)	0.568
23	1.92	2.90	0.696	0.176	(0.626)	0.520
24	2.00	3.00	0.720	0.176	(0.648)	0.544
25	2.08	3.10	0.744	0.176	(0.669)	0.568
26	2.17	4.20	1.008	0.176	(0.907)	0.832
27	2.25	5.00	1.200	0.176	(1.080)	1.024

EX Tributary 1 Area B 100 Year 3 Hour

```
28   2.33     3.50      0.840          0.176    (  0.756)        0.664
29   2.42     6.80      1.632          0.176    (  1.469)        1.456
30   2.50     7.30      1.752          0.176    (  1.576)        1.576
31   2.58     8.20      1.968          0.176    (  1.771)        1.792
32   2.67     5.90      1.416          0.176    (  1.274)        1.240
33   2.75     2.00      0.480          0.176    (  0.432)        0.304
34   2.83     1.80      0.432          0.176    (  0.389)        0.256
35   2.92     1.80      0.432          0.176    (  0.389)        0.256
36   3.00     0.60      0.144       (  0.176)       0.130        0.014
            (Loss Rate Not Used)
   Sum =     100.0                                    Sum =    17.7
      Flood volume = Effective rainfall      1.48(In)
       times area      43.7(Ac.)/[(In)/(Ft.)] =       5.4(Ac.Ft)
      Total soil loss =      0.52(In)
      Total soil loss =     1.904(Ac.Ft)
      Total rainfall =      2.00(In)
      Flood volume =      234135.8 Cubic Feet
      Total soil loss =       82920.4 Cubic Feet
      ---------------------------------------------------------------------
       Peak flow rate of this hydrograph =     57.262(CFS)
      ---------------------------------------------------------------------
      +++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                          3 - H O U R    S T O R M
                     R u n o f f     H y d r o g r a p h
      ---------------------------------------------------------------------
                   Hydrograph in   5   Minute intervals ((CFS))

      ---------------------------------------------------------------------
Time(h+m) Volume Ac.Ft   Q(CFS)  0       15.0      30.0      45.0      60.0
-------------------------------------------------------------------------
  0+ 5       0.0020      0.28  Q         |         |         |         |
  0+10       0.0121      1.47  Q         |         |         |         |
  0+15       0.0330      3.04  V Q       |         |         |         |
  0+20       0.0592      3.80  V Q       |         |         |         |
  0+25       0.0903      4.52  V  Q      |         |         |         |
  0+30       0.1304      5.82  V  Q      |         |         |         |
  0+35       0.1789      7.05  |V  Q     |         |         |         |
  0+40       0.2330      7.86  |V   Q    |         |         |         |
  0+45       0.2908      8.40  | V  Q    |         |         |         |
  0+50       0.3533      9.07  | V   Q   |         |         |         |
  0+55       0.4159      9.09  |  V  Q   |         |         |         |
  1+ 0       0.4769      8.86  |  V Q    |         |         |         |
  1+ 5       0.5424      9.50  |   V Q   |         |         |         |
  1+10       0.6183     11.03  |   V  Q  |         |         |         |
  1+15       0.7052     12.62  |    V  Q |         |         |         |
  1+20       0.7977     13.43  |    V  Q |         |         |         |
  1+25       0.8928     13.81  |     V  Q|         |         |         |
  1+30       0.9951     14.86  |      V Q|         |         |         |
  1+35       1.1096     16.61  |       V |Q        |         |         |
  1+40       1.2300     17.49  |        V|Q        |         |         |
  1+45       1.3556     18.24  |         V Q       |         |         |
  1+50       1.4948     20.21  |         |V Q      |         |         |
  1+55       1.6466     22.05  |         | V Q     |         |         |
  2+ 0       1.8014     22.48  |         |  VQ     |         |         |
  2+ 5       1.9567     22.54  |         |   VQ    |         |         |
  2+10       2.1193     23.61  |         |    Q    |         |         |
  2+15       2.3043     26.87  |         |      Q  |         |         |
  2+20       2.5204     31.38  |         |       V Q         |         |
  2+25       2.7573     34.41  |         |         V Q       |         |
  2+30       3.0301     39.61  |         |         | V   Q   |         |
  2+35       3.3720     49.64  |         |         |    V    |  Q      |
  2+40       3.7663     57.26  |         |         |       V |       Q |
  2+45       4.1570     56.72  |         |         |         V      Q  |
  2+50       4.4702     45.48  |         |         |         Q  V      |
  2+55       4.6909     32.05  |         |         |Q        |   V     |
  3+ 0       4.8563     24.00  |         |     Q   |         |     V   |
  3+ 5       4.9825     18.34  |         | Q       |         |      V  |
  3+10       5.0726     13.07  |       Q |         |         |      V  |
  3+15       5.1384      9.56  |     Q   |         |         |       V |
  3+20       5.1896      7.42  |   Q     |         |         |       V |
  3+25       5.2301      5.89  |  Q      |         |         |       V |
```

EX Tributary 1 Area B 100 Year 3 Hour

```
    3+30       5.2630      4.78  |  Q      |         |         |        V|
    3+35       5.2900      3.91  | Q       |         |         |        V|
    3+40       5.3118      3.18  | Q       |         |         |        V|
    3+45       5.3293      2.54  |Q        |         |         |        V|
    3+50       5.3428      1.96  |Q        |         |         |        V|
    3+55       5.3541      1.64  |Q        |         |         |        V|
    4+ 0       5.3627      1.24  Q         |         |         |        V|
    4+ 5       5.3690      0.91  Q         |         |         |        V|
    4+10       5.3724      0.50  Q         |         |         |        V|
    4+15       5.3737      0.18  Q         |         |         |        V|
    4+20       5.3745      0.12  Q         |         |         |        V|
    4+25       5.3750      0.07  Q         |         |         |        V|
    4+30       5.3750      0.00  Q         |         |         |         V
-------------------------------------------------------------------------
```

EX Tributary 1 Area B 100 Year 3 Hour

```
       U n i t   H y d r o g r a p h   A n a l y s i s

       Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2008, Version 8.1
              Study date  03/11/25 File: TRIB1B6100.out

++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
------------------------------------------------------------------------------

Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978


Program License Serial Number 5006

------------------------------------------------------------------------
 English (in-lb) Input Units Used
 English Rainfall Data (Inches) Input Values Used

 English Units used in output format



------------------------------------------------------------------------
------------------------------------------------------------------------
Drainage Area =      43.68(Ac.)  =      0.068 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment =      43.68(Ac.)  =      0.068 Sq. Mi.
Length along longest watercourse =    2737.00(Ft.)
Length along longest watercourse measured to centroid =    1848.00(Ft.)
Length along longest watercourse =      0.518 Mi.
Length along longest watercourse measured to centroid =      0.350 Mi.
Difference in elevation =      71.00(Ft.)
Slope along watercourse =    136.9675 Ft./Mi.
Average Manning's 'N' = 0.040
Lag time =    0.197 Hr.
Lag time =    11.82 Min.
25% of lag time =     2.96 Min.
40% of lag time =     4.73 Min.
Unit time =     5.00 Min.
Duration of storm = 6 Hour(s)
User Entered Base Flow =     0.00(CFS)

2 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
       43.68           1.10                 48.05

100 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
       43.68           3.00                131.04

STORM EVENT (YEAR) =  100.00
Area Averaged 2-Year Rainfall =    1.100(In)
Area Averaged 100-Year Rainfall =    3.000(In)

Point rain (area averaged) =    3.000(In)
Areal adjustment factor =   99.98 %
Adjusted average point rain =    3.000(In)

Sub-Area Data:
Area(Ac.)         Runoff Index   Impervious %
    43.680           86.00         0.000
 Total Area Entered =     43.68(Ac.)


RI    RI   Infil. Rate Impervious   Adj. Infil. Rate  Area%     F
AMC2 AMC-2     (In/Hr)    (Dec.%)     (In/Hr)      (Dec.)    (In/Hr)
```

EX Tributary 1 Area B 100 Year 6 Hour

```
86.0  86.0      0.176     0.000        0.176       1.000      0.176
                                                  Sum (F) =   0.176
Area averaged mean soil loss (F) (In/Hr) =  0.176
Minimum soil loss rate ((In/Hr)) =  0.088
(for 24 hour storm duration)
Soil low loss rate (decimal) =   0.900
------------------------------------------------------------------------

               U n i t  H y d r o g r a p h
                      VALLEY S-Curve
------------------------------------------------------------------------
               Unit Hydrograph Data
------------------------------------------------------------------------
Unit time period   Time % of lag   Distribution   Unit Hydrograph
    (hrs)                          Graph %           (CFS)
------------------------------------------------------------------------
    1   0.083         42.286          4.738             2.086
    2   0.167         84.572         19.712             8.678
    3   0.250        126.858         27.817            12.246
    4   0.333        169.144         16.308             7.179
    5   0.417        211.429          7.934             3.493
    6   0.500        253.715          5.201             2.290
    7   0.583        296.001          3.892             1.713
    8   0.667        338.287          2.922             1.286
    9   0.750        380.573          2.363             1.040
   10   0.833        422.859          1.812             0.798
   11   0.917        465.145          1.401             0.617
   12   1.000        507.431          1.281             0.564
   13   1.083        549.717          1.045             0.460
   14   1.167        592.002          0.847             0.373
   15   1.250        634.288          0.706             0.311
   16   1.333        676.574          0.562             0.247
   17   1.417        718.860          0.435             0.191
   18   1.500        761.146          0.423             0.186
   19   1.583        803.432          0.600             0.264
                                Sum = 100.000   Sum=      44.021
------------------------------------------------------------------------

 The following loss rate calculations reflect use of the minimum calculated loss
 rate subtracted from the Storm Rain to produce the maximum Effective Rain value

  Unit Time   Pattern   Storm Rain     Loss rate(In./Hr)      Effective
       (Hr.)  Percent   (In/Hr)         Max    |   Low          (In/Hr)
    1   0.08     0.50      0.180       (  0.176)       0.162         0.018
    2   0.17     0.60      0.216          0.176    (  0.194)         0.040
    3   0.25     0.60      0.216          0.176    (  0.194)         0.040
    4   0.33     0.60      0.216          0.176    (  0.194)         0.040
    5   0.42     0.60      0.216          0.176    (  0.194)         0.040
    6   0.50     0.70      0.252          0.176    (  0.227)         0.076
    7   0.58     0.70      0.252          0.176    (  0.227)         0.076
    8   0.67     0.70      0.252          0.176    (  0.227)         0.076
    9   0.75     0.70      0.252          0.176    (  0.227)         0.076
   10   0.83     0.70      0.252          0.176    (  0.227)         0.076
   11   0.92     0.70      0.252          0.176    (  0.227)         0.076
   12   1.00     0.80      0.288          0.176    (  0.259)         0.112
   13   1.08     0.80      0.288          0.176    (  0.259)         0.112
   14   1.17     0.80      0.288          0.176    (  0.259)         0.112
   15   1.25     0.80      0.288          0.176    (  0.259)         0.112
   16   1.33     0.80      0.288          0.176    (  0.259)         0.112
   17   1.42     0.80      0.288          0.176    (  0.259)         0.112
   18   1.50     0.80      0.288          0.176    (  0.259)         0.112
   19   1.58     0.80      0.288          0.176    (  0.259)         0.112
   20   1.67     0.80      0.288          0.176    (  0.259)         0.112
   21   1.75     0.80      0.288          0.176    (  0.259)         0.112
   22   1.83     0.80      0.288          0.176    (  0.259)         0.112
   23   1.92     0.80      0.288          0.176    (  0.259)         0.112
   24   2.00     0.90      0.324          0.176    (  0.292)         0.148
   25   2.08     0.80      0.288          0.176    (  0.259)         0.112
   26   2.17     0.90      0.324          0.176    (  0.292)         0.148
   27   2.25     0.90      0.324          0.176    (  0.292)         0.148
```

EX Tributary 1 Area B 100 Year 6 Hour

```
28   2.33     0.90      0.324          0.176    (  0.292)        0.148
29   2.42     0.90      0.324          0.176    (  0.292)        0.148
30   2.50     0.90      0.324          0.176    (  0.292)        0.148
31   2.58     0.90      0.324          0.176    (  0.292)        0.148
32   2.67     0.90      0.324          0.176    (  0.292)        0.148
33   2.75     1.00      0.360          0.176    (  0.324)        0.184
34   2.83     1.00      0.360          0.176    (  0.324)        0.184
35   2.92     1.00      0.360          0.176    (  0.324)        0.184
36   3.00     1.00      0.360          0.176    (  0.324)        0.184
37   3.08     1.00      0.360          0.176    (  0.324)        0.184
38   3.17     1.10      0.396          0.176    (  0.356)        0.220
39   3.25     1.10      0.396          0.176    (  0.356)        0.220
40   3.33     1.10      0.396          0.176    (  0.356)        0.220
41   3.42     1.20      0.432          0.176    (  0.389)        0.256
42   3.50     1.30      0.468          0.176    (  0.421)        0.292
43   3.58     1.40      0.504          0.176    (  0.454)        0.328
44   3.67     1.40      0.504          0.176    (  0.454)        0.328
45   3.75     1.50      0.540          0.176    (  0.486)        0.364
46   3.83     1.50      0.540          0.176    (  0.486)        0.364
47   3.92     1.60      0.576          0.176    (  0.518)        0.400
48   4.00     1.60      0.576          0.176    (  0.518)        0.400
49   4.08     1.70      0.612          0.176    (  0.551)        0.436
50   4.17     1.80      0.648          0.176    (  0.583)        0.472
51   4.25     1.90      0.684          0.176    (  0.616)        0.508
52   4.33     2.00      0.720          0.176    (  0.648)        0.544
53   4.42     2.10      0.756          0.176    (  0.680)        0.580
54   4.50     2.10      0.756          0.176    (  0.680)        0.580
55   4.58     2.20      0.792          0.176    (  0.713)        0.616
56   4.67     2.30      0.828          0.176    (  0.745)        0.652
57   4.75     2.40      0.864          0.176    (  0.777)        0.688
58   4.83     2.40      0.864          0.176    (  0.777)        0.688
59   4.92     2.50      0.900          0.176    (  0.810)        0.724
60   5.00     2.60      0.936          0.176    (  0.842)        0.760
61   5.08     3.10      1.116          0.176    (  1.004)        0.940
62   5.17     3.60      1.296          0.176    (  1.166)        1.120
63   5.25     3.90      1.404          0.176    (  1.263)        1.228
64   5.33     4.20      1.512          0.176    (  1.361)        1.336
65   5.42     4.70      1.692          0.176    (  1.523)        1.516
66   5.50     5.60      2.016          0.176    (  1.814)        1.840
67   5.58     1.90      0.684          0.176    (  0.616)        0.508
68   5.67     0.90      0.324          0.176    (  0.292)        0.148
69   5.75     0.60      0.216          0.176    (  0.194)        0.040
70   5.83     0.50      0.180       (  0.176)       0.162        0.018
71   5.92     0.30      0.108       (  0.176)       0.097        0.011
72   6.00     0.20      0.072       (  0.176)       0.065        0.007
              (Loss Rate Not Used)
   Sum =     100.0                                    Sum =    23.6
      Flood volume = Effective rainfall      1.96(In)
       times area      43.7(Ac.)/[(In)/(Ft.)] =       7.1(Ac.Ft)
      Total soil loss =      1.04(In)
      Total soil loss =     3.769(Ac.Ft)
      Total rainfall =      3.00(In)
      Flood volume =      311406.9 Cubic Feet
      Total soil loss =      164196.8 Cubic Feet
      ---------------------------------------------------------------------
       Peak flow rate of this hydrograph =     57.870(CFS)
      ---------------------------------------------------------------------
      +++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                          6 - H O U R    S T O R M
                     R u n o f f      H y d r o g r a p h
      ---------------------------------------------------------------------
                  Hydrograph in   5   Minute intervals ((CFS))

      ---------------------------------------------------------------------
Time(h+m) Volume Ac.Ft   Q(CFS)  0       15.0      30.0      45.0      60.0
-------------------------------------------------------------------------
  0+ 5       0.0003      0.04  Q         |         |         |         |
  0+10       0.0019      0.24  Q         |         |         |         |
  0+15       0.0064      0.66  Q         |         |         |         |
  0+20       0.0137      1.06  Q         |         |         |         |
  0+25       0.0225      1.28  Q         |         |         |         |
```

EX Tributary 1 Area B 100 Year 6 Hour

```
0+30      0.0327     1.48  Q          |          |          |          |
0+35      0.0456     1.87  VQ         |          |          |          |
0+40      0.0620     2.37  VQ         |          |          |          |
0+45      0.0804     2.68  VQ         |          |          |          |
0+50      0.1000     2.84  VQ         |          |          |          |
0+55      0.1203     2.95  VQ         |          |          |          |
1+ 0      0.1418     3.12  V Q        |          |          |          |
1+ 5      0.1659     3.50  V Q        |          |          |          |
1+10      0.1934     3.99  |VQ        |          |          |          |
1+15      0.2229     4.29  |VQ        |          |          |          |
1+20      0.2536     4.45  |VQ        |          |          |          |
1+25      0.2850     4.56  |V Q       |          |          |          |
1+30      0.3170     4.65  |V Q       |          |          |          |
1+35      0.3495     4.72  |V Q       |          |          |          |
1+40      0.3824     4.77  | VQ       |          |          |          |
1+45      0.4155     4.81  | VQ       |          |          |          |
1+50      0.4488     4.84  | VQ       |          |          |          |
1+55      0.4823     4.87  | VQ       |          |          |          |
2+ 0      0.5165     4.97  | VQ       |          |          |          |
2+ 5      0.5525     5.22  |  Q       |          |          |          |
2+10      0.5899     5.43  |  Q       |          |          |          |
2+15      0.6283     5.57  |  Q       |          |          |          |
2+20      0.6688     5.89  |  Q       |          |          |          |
2+25      0.7109     6.11  |  VQ      |          |          |          |
2+30      0.7537     6.22  |   Q      |          |          |          |
2+35      0.7971     6.29  |   Q      |          |          |          |
2+40      0.8407     6.34  |   Q      |          |          |          |
2+45      0.8852     6.46  |   Q      |          |          |          |
2+50      0.9320     6.80  |   QV     |          |          |          |
2+55      0.9821     7.27  |   QV     |          |          |          |
3+ 0      1.0340     7.54  |    Q     |          |          |          |
3+ 5      1.0870     7.69  |    QV    |          |          |          |
3+10      1.1411     7.86  |    QV    |          |          |          |
3+15      1.1979     8.24  |    QV    |          |          |          |
3+20      1.2581     8.74  |    Q V   |          |          |          |
3+25      1.3209     9.12  |     QV   |          |          |          |
3+30      1.3875     9.67  |     QV   |          |          |          |
3+35      1.4605    10.60  |      QV  |          |          |          |
3+40      1.5412    11.71  |      QV  |          |          |          |
3+45      1.6284    12.67  |       QV |          |          |          |
3+50      1.7214    13.50  |        Q |          |          |          |
3+55      1.8201    14.33  |        QV          |          |          |
4+ 0      1.9242    15.12  |         Q          |          |          |
4+ 5      2.0339    15.93  |         QV         |          |          |
4+10      2.1496    16.80  |         |QV        |          |          |
4+15      2.2731    17.93  |         |QV        |          |          |
4+20      2.4055    19.22  |         | QV      |          |          |
4+25      2.5474    20.60  |         |  QV     |          |          |
4+30      2.6986    21.96  |         |   QV    |          |          |
4+35      2.8577    23.11  |         |    Q    |          |          |
4+40      3.0241    24.16  |         |     Q   |          |          |
4+45      3.1992    25.41  |         |     QV  |          |          |
4+50      3.3833    26.74  |         |      QV |          |          |
4+55      3.5753    27.88  |         |       Q V          |          |
5+ 0      3.7746    28.93  |         |        Q|V         |          |
5+ 5      3.9845    30.48  |         |         Q V        |          |
5+10      4.2147    33.43  |         |         | QV       |          |
5+15      4.4768    38.05  |         |         |    Q     |          |
5+20      4.7737    43.11  |         |         |     V Q  |          |
5+25      5.1041    47.97  |         |         |       V  |Q         |
5+30      5.4730    53.57  |         |         |          V    Q    |
5+35      5.8716    57.87  |         |         |          | V     Q |
5+40      6.2306    52.13  |         |         |          |   Q      |
5+45      6.4812    36.39  |         |         |   Q      |     V    |
5+50      6.6445    23.72  |         |    Q    |          |      V   |
5+55      6.7587    16.58  |         |Q        |          |      V   |
6+ 0      6.8441    12.40  |       Q |         |          |       V  |
6+ 5      6.9102     9.61  |     Q   |         |          |       V  |
6+10      6.9625     7.59  |    Q    |         |          |       V  |
6+15      7.0037     5.99  |  Q      |         |          |        V |
6+20      7.0368     4.80  |  Q      |         |          |        V |
```

EX Tributary 1 Area B 100 Year 6 Hour

```
    6+25       7.0639      3.94  | Q       |         |         |        V|
    6+30       7.0858      3.18  | Q       |         |         |        V|
    6+35       7.1034      2.56  |Q        |         |         |        V|
    6+40       7.1174      2.04  |Q        |         |         |        V|
    6+45       7.1283      1.57  |Q        |         |         |        V|
    6+50       7.1365      1.19  Q         |         |         |        V|
    6+55       7.1427      0.91  Q         |         |         |        V|
    7+ 0       7.1471      0.63  Q         |         |         |        V|
    7+ 5       7.1483      0.18  Q         |         |         |        V|
    7+10       7.1487      0.06  Q         |         |         |        V|
    7+15       7.1488      0.02  Q         |         |         |        V|
    7+20       7.1489      0.01  Q         |         |         |        V|
    7+25       7.1489      0.00  Q         |         |         |        V|
    7+30       7.1489      0.00  Q         |         |         |        V|
-------------------------------------------------------------------------
```

EX Tributary 1 Area B 100 Year 6 Hour

```
       U n i t   H y d r o g r a p h   A n a l y s i s

       Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2008, Version 8.1
              Study date  03/11/25 File: TRIB1F3100.out

++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
------------------------------------------------------------------------------

Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978


Program License Serial Number 5006

------------------------------------------------------------------------
 English (in-lb) Input Units Used
 English Rainfall Data (Inches) Input Values Used

 English Units used in output format



------------------------------------------------------------------------
------------------------------------------------------------------------
Drainage Area =      48.24(Ac.)  =      0.075 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment =      48.24(Ac.)  =      0.075 Sq. Mi.
Length along longest watercourse =    1610.00(Ft.)
Length along longest watercourse measured to centroid =     712.00(Ft.)
Length along longest watercourse =      0.305 Mi.
Length along longest watercourse measured to centroid =      0.135 Mi.
Difference in elevation =      60.00(Ft.)
Slope along watercourse =    196.7702 Ft./Mi.
Average Manning's 'N' = 0.040
Lag time =    0.105 Hr.
Lag time =     6.28 Min.
25% of lag time =     1.57 Min.
40% of lag time =     2.51 Min.
Unit time =     5.00 Min.
Duration of storm = 3 Hour(s)
User Entered Base Flow =     0.00(CFS)

2 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
       48.24           0.80                 38.59

100 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
       48.24           2.00                 96.48

STORM EVENT (YEAR) =  100.00
Area Averaged 2-Year Rainfall =    0.800(In)
Area Averaged 100-Year Rainfall =    2.000(In)

Point rain (area averaged) =    2.000(In)
Areal adjustment factor =   99.98 %
Adjusted average point rain =    2.000(In)

Sub-Area Data:
Area(Ac.)         Runoff Index   Impervious %
    48.240           86.00         0.000
 Total Area Entered =     48.24(Ac.)


RI    RI   Infil. Rate Impervious   Adj. Infil. Rate  Area%     F
AMC2 AMC-2     (In/Hr)    (Dec.%)     (In/Hr)      (Dec.)    (In/Hr)
```

EX Tributary 1 Area F 100 Year 3 Hour

```
      86.0  86.0      0.176     0.000        0.176       1.000      0.176
                                                        Sum (F) =   0.176
      Area averaged mean soil loss (F) (In/Hr) =  0.176
      Minimum soil loss rate ((In/Hr)) =  0.088
      (for 24 hour storm duration)
      Soil low loss rate (decimal) =   0.900
      ------------------------------------------------------------------------

                  U n i t  H y d r o g r a p h
                         VALLEY S-Curve
      ------------------------------------------------------------------------
                  Unit Hydrograph Data
      ------------------------------------------------------------------------
      Unit time period   Time % of lag   Distribution   Unit Hydrograph
          (hrs)                          Graph %           (CFS)
      ------------------------------------------------------------------------
          1   0.083         79.628         13.196             6.416
          2   0.167        159.256         44.291            21.533
          3   0.250        238.884         20.043             9.744
          4   0.333        318.512          8.270             4.020
          5   0.417        398.140          4.967             2.415
          6   0.500        477.767          3.138             1.526
          7   0.583        557.395          2.256             1.097
          8   0.667        637.023          1.555             0.756
          9   0.750        716.651          1.049             0.510
         10   0.833        796.279          0.801             0.389
         11   0.917        875.907          0.435             0.212
                                    Sum = 100.000   Sum=      48.617
------------------------------------------------------------------------

 The following loss rate calculations reflect use of the minimum calculated loss
 rate subtracted from the Storm Rain to produce the maximum Effective Rain value

  Unit Time   Pattern   Storm Rain     Loss rate(In./Hr)     Effective
       (Hr.)  Percent   (In/Hr)         Max   |   Low         (In/Hr)
   1   0.08     1.30      0.312          0.176    (  0.281)        0.136
   2   0.17     1.30      0.312          0.176    (  0.281)        0.136
   3   0.25     1.10      0.264          0.176    (  0.238)        0.088
   4   0.33     1.50      0.360          0.176    (  0.324)        0.184
   5   0.42     1.50      0.360          0.176    (  0.324)        0.184
   6   0.50     1.80      0.432          0.176    (  0.389)        0.256
   7   0.58     1.50      0.360          0.176    (  0.324)        0.184
   8   0.67     1.80      0.432          0.176    (  0.389)        0.256
   9   0.75     1.80      0.432          0.176    (  0.389)        0.256
  10   0.83     1.50      0.360          0.176    (  0.324)        0.184
  11   0.92     1.60      0.384          0.176    (  0.346)        0.208
  12   1.00     1.80      0.432          0.176    (  0.389)        0.256
  13   1.08     2.20      0.528          0.176    (  0.475)        0.352
  14   1.17     2.20      0.528          0.176    (  0.475)        0.352
  15   1.25     2.20      0.528          0.176    (  0.475)        0.352
  16   1.33     2.00      0.480          0.176    (  0.432)        0.304
  17   1.42     2.60      0.624          0.176    (  0.561)        0.448
  18   1.50     2.70      0.648          0.176    (  0.583)        0.472
  19   1.58     2.40      0.576          0.176    (  0.518)        0.400
  20   1.67     2.70      0.648          0.176    (  0.583)        0.472
  21   1.75     3.30      0.792          0.176    (  0.713)        0.616
  22   1.83     3.10      0.744          0.176    (  0.669)        0.568
  23   1.92     2.90      0.696          0.176    (  0.626)        0.520
  24   2.00     3.00      0.720          0.176    (  0.648)        0.544
  25   2.08     3.10      0.744          0.176    (  0.669)        0.568
  26   2.17     4.20      1.008          0.176    (  0.907)        0.832
  27   2.25     5.00      1.200          0.176    (  1.080)        1.024
  28   2.33     3.50      0.840          0.176    (  0.756)        0.664
  29   2.42     6.80      1.632          0.176    (  1.468)        1.456
  30   2.50     7.30      1.752          0.176    (  1.576)        1.576
  31   2.58     8.20      1.968          0.176    (  1.771)        1.792
  32   2.67     5.90      1.416          0.176    (  1.274)        1.240
  33   2.75     2.00      0.480          0.176    (  0.432)        0.304
  34   2.83     1.80      0.432          0.176    (  0.389)        0.256
  35   2.92     1.80      0.432          0.176    (  0.389)        0.256
```

EX Tributary 1 Area F 100 Year 3 Hour

```
36   3.00     0.60      0.144       (  0.176)       0.130        0.014
             (Loss Rate Not Used)
   Sum =     100.0                                    Sum =    17.7
      Flood volume = Effective rainfall      1.48(In)
       times area      48.2(Ac.)/[(In)/(Ft.)] =       5.9(Ac.Ft)
      Total soil loss =      0.52(In)
      Total soil loss =     2.102(Ac.Ft)
      Total rainfall =      2.00(In)
      Flood volume =      258571.6 Cubic Feet
      Total soil loss =       91576.9 Cubic Feet
      ---------------------------------------------------------------------
       Peak flow rate of this hydrograph =     72.900(CFS)
      ---------------------------------------------------------------------
      +++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                          3 - H O U R    S T O R M
                     R u n o f f      H y d r o g r a p h
      ---------------------------------------------------------------------
                  Hydrograph in   5   Minute intervals ((CFS))

      ---------------------------------------------------------------------
Time(h+m) Volume Ac.Ft   Q(CFS)  0       20.0      40.0      60.0      80.0
---------------------------------------------------------------------------
  0+ 5       0.0060      0.88  Q         |         |         |         |
  0+10       0.0323      3.81  VQ        |         |         |         |
  0+15       0.0656      4.83  V Q       |         |         |         |
  0+20       0.0998      4.96  V Q       |         |         |         |
  0+25       0.1472      6.89  V  Q      |         |         |         |
  0+30       0.2044      8.31  |V  Q     |         |         |         |
  0+35       0.2720      9.81  |V  Q     |         |         |         |
  0+40       0.3388      9.69  | V Q     |         |         |         |
  0+45       0.4145     10.99  | V  Q    |         |         |         |
  0+50       0.4919     11.24  |  V Q    |         |         |         |
  0+55       0.5617     10.14  |  V Q    |         |         |         |
  1+ 0       0.6336     10.44  |   VQ    |         |         |         |
  1+ 5       0.7173     12.15  |   V Q   |         |         |         |
  1+10       0.8184     14.69  |    V Q  |         |         |         |
  1+15       0.9273     15.81  |     VQ  |         |         |         |
  1+20       1.0374     15.98  |     VQ  |         |         |         |
  1+25       1.1487     16.16  |      VQ |         |         |         |
  1+30       1.2806     19.15  |       VQ|         |         |         |
  1+35       1.4220     20.54  |        VQ         |         |         |
  1+40       1.5614     20.24  |         Q         |         |         |
  1+45       1.7161     22.46  |         |Q        |         |         |
  1+50       1.8947     25.93  |         | Q       |         |         |
  1+55       2.0758     26.29  |         |  Q      |         |         |
  2+ 0       2.2527     25.70  |         | Q  V    |         |         |
  2+ 5       2.4329     26.16  |         |  Q  V   |         |         |
  2+10       2.6299     28.60  |         |   Q  V  |         |         |
  2+15       2.8769     35.87  |         |      Q V|         |         |
  2+20       3.1553     40.42  |         |         QV        |         |
  2+25       3.4361     40.78  |         |         Q  V      |         |
  2+30       3.8258     56.58  |         |         |    V  Q |         |
  2+35       4.2922     67.72  |         |         |       V |  Q      |
  2+40       4.7943     72.90  |         |         |         | V   Q   |
  2+45       5.2032     59.38  |         |         |        Q|    V    |
  2+50       5.4497     35.79  |         |      Q  |         |     V   |
  2+55       5.6214     24.92  |         | Q       |         |      V  |
  3+ 0       5.7509     18.81  |        Q|         |         |       V |
  3+ 5       5.8256     10.84  |    Q    |         |         |        V|
  3+10       5.8703      6.48  |  Q      |         |         |        V|
  3+15       5.8990      4.18  | Q       |         |         |        V|
  3+20       5.9169      2.60  |Q        |         |         |        V|
  3+25       5.9274      1.51  Q         |         |         |        V|
  3+30       5.9323      0.72  Q         |         |         |        V|
  3+35       5.9344      0.31  Q         |         |         |        V|
  3+40       5.9356      0.16  Q         |         |         |        V|
  3+45       5.9360      0.06  Q         |         |         |        V|
  3+50       5.9360      0.00  Q         |         |         |        V|
---------------------------------------------------------------------------
```

EX Tributary 1 Area F 100 Year 3 Hour

EX Tributary 1 Area F 100 Year 3 Hour

```
       U n i t   H y d r o g r a p h   A n a l y s i s

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              Study date  03/11/25 File: TRIB1F6100.out

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------------------------------------------------------------------------------

Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978


Program License Serial Number 5006

------------------------------------------------------------------------
 English (in-lb) Input Units Used
 English Rainfall Data (Inches) Input Values Used

 English Units used in output format



------------------------------------------------------------------------
------------------------------------------------------------------------
Drainage Area =      48.24(Ac.)  =      0.075 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment =      48.24(Ac.)  =      0.075 Sq. Mi.
Length along longest watercourse =    1610.00(Ft.)
Length along longest watercourse measured to centroid =     712.00(Ft.)
Length along longest watercourse =      0.305 Mi.
Length along longest watercourse measured to centroid =      0.135 Mi.
Difference in elevation =      60.00(Ft.)
Slope along watercourse =    196.7702 Ft./Mi.
Average Manning's 'N' = 0.040
Lag time =    0.105 Hr.
Lag time =     6.28 Min.
25% of lag time =     1.57 Min.
40% of lag time =     2.51 Min.
Unit time =     5.00 Min.
Duration of storm = 6 Hour(s)
User Entered Base Flow =     0.00(CFS)

2 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
       48.24           1.10                 53.06

100 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
       48.24           3.00                144.72

STORM EVENT (YEAR) =  100.00
Area Averaged 2-Year Rainfall =    1.100(In)
Area Averaged 100-Year Rainfall =    3.000(In)

Point rain (area averaged) =    3.000(In)
Areal adjustment factor =   99.98 %
Adjusted average point rain =    3.000(In)

Sub-Area Data:
Area(Ac.)         Runoff Index   Impervious %
    48.240           86.00         0.000
 Total Area Entered =     48.24(Ac.)


RI    RI   Infil. Rate Impervious   Adj. Infil. Rate  Area%     F
AMC2 AMC-2     (In/Hr)    (Dec.%)     (In/Hr)      (Dec.)    (In/Hr)
```

EX Tributary 1 Area F 100 Year 6 Hour

```
86.0  86.0      0.176     0.000        0.176       1.000      0.176
                                                  Sum (F) =   0.176
Area averaged mean soil loss (F) (In/Hr) =  0.176
Minimum soil loss rate ((In/Hr)) =  0.088
(for 24 hour storm duration)
Soil low loss rate (decimal) =   0.900
------------------------------------------------------------------------

               U n i t  H y d r o g r a p h
                      VALLEY S-Curve
------------------------------------------------------------------------
               Unit Hydrograph Data
------------------------------------------------------------------------
Unit time period   Time % of lag   Distribution   Unit Hydrograph
    (hrs)                          Graph %           (CFS)
------------------------------------------------------------------------
     1   0.083         79.628         13.196             6.416
     2   0.167        159.256         44.291            21.533
     3   0.250        238.884         20.043             9.744
     4   0.333        318.512          8.270             4.020
     5   0.417        398.140          4.967             2.415
     6   0.500        477.767          3.138             1.526
     7   0.583        557.395          2.256             1.097
     8   0.667        637.023          1.555             0.756
     9   0.750        716.651          1.049             0.510
    10   0.833        796.279          0.801             0.389
    11   0.917        875.907          0.435             0.212
                                 Sum = 100.000   Sum=      48.617
------------------------------------------------------------------------
```

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr) Max	Low	Effective (In/Hr)
1	0.08	0.50	0.180	(0.176)	0.162	0.018
2	0.17	0.60	0.216	0.176	(0.194)	0.040
3	0.25	0.60	0.216	0.176	(0.194)	0.040
4	0.33	0.60	0.216	0.176	(0.194)	0.040
5	0.42	0.60	0.216	0.176	(0.194)	0.040
6	0.50	0.70	0.252	0.176	(0.227)	0.076
7	0.58	0.70	0.252	0.176	(0.227)	0.076
8	0.67	0.70	0.252	0.176	(0.227)	0.076
9	0.75	0.70	0.252	0.176	(0.227)	0.076
10	0.83	0.70	0.252	0.176	(0.227)	0.076
11	0.92	0.70	0.252	0.176	(0.227)	0.076
12	1.00	0.80	0.288	0.176	(0.259)	0.112
13	1.08	0.80	0.288	0.176	(0.259)	0.112
14	1.17	0.80	0.288	0.176	(0.259)	0.112
15	1.25	0.80	0.288	0.176	(0.259)	0.112
16	1.33	0.80	0.288	0.176	(0.259)	0.112
17	1.42	0.80	0.288	0.176	(0.259)	0.112
18	1.50	0.80	0.288	0.176	(0.259)	0.112
19	1.58	0.80	0.288	0.176	(0.259)	0.112
20	1.67	0.80	0.288	0.176	(0.259)	0.112
21	1.75	0.80	0.288	0.176	(0.259)	0.112
22	1.83	0.80	0.288	0.176	(0.259)	0.112
23	1.92	0.80	0.288	0.176	(0.259)	0.112
24	2.00	0.90	0.324	0.176	(0.292)	0.148
25	2.08	0.80	0.288	0.176	(0.259)	0.112
26	2.17	0.90	0.324	0.176	(0.292)	0.148
27	2.25	0.90	0.324	0.176	(0.292)	0.148
28	2.33	0.90	0.324	0.176	(0.292)	0.148
29	2.42	0.90	0.324	0.176	(0.292)	0.148
30	2.50	0.90	0.324	0.176	(0.292)	0.148
31	2.58	0.90	0.324	0.176	(0.292)	0.148
32	2.67	0.90	0.324	0.176	(0.292)	0.148
33	2.75	1.00	0.360	0.176	(0.324)	0.184
34	2.83	1.00	0.360	0.176	(0.324)	0.184
35	2.92	1.00	0.360	0.176	(0.324)	0.184

EX Tributary 1 Area F 100 Year 6 Hour

```
36   3.00     1.00      0.360          0.176    (  0.324)        0.184
37   3.08     1.00      0.360          0.176    (  0.324)        0.184
38   3.17     1.10      0.396          0.176    (  0.356)        0.220
39   3.25     1.10      0.396          0.176    (  0.356)        0.220
40   3.33     1.10      0.396          0.176    (  0.356)        0.220
41   3.42     1.20      0.432          0.176    (  0.389)        0.256
42   3.50     1.30      0.468          0.176    (  0.421)        0.292
43   3.58     1.40      0.504          0.176    (  0.454)        0.328
44   3.67     1.40      0.504          0.176    (  0.454)        0.328
45   3.75     1.50      0.540          0.176    (  0.486)        0.364
46   3.83     1.50      0.540          0.176    (  0.486)        0.364
47   3.92     1.60      0.576          0.176    (  0.518)        0.400
48   4.00     1.60      0.576          0.176    (  0.518)        0.400
49   4.08     1.70      0.612          0.176    (  0.551)        0.436
50   4.17     1.80      0.648          0.176    (  0.583)        0.472
51   4.25     1.90      0.684          0.176    (  0.615)        0.508
52   4.33     2.00      0.720          0.176    (  0.648)        0.544
53   4.42     2.10      0.756          0.176    (  0.680)        0.580
54   4.50     2.10      0.756          0.176    (  0.680)        0.580
55   4.58     2.20      0.792          0.176    (  0.713)        0.616
56   4.67     2.30      0.828          0.176    (  0.745)        0.652
57   4.75     2.40      0.864          0.176    (  0.777)        0.688
58   4.83     2.40      0.864          0.176    (  0.777)        0.688
59   4.92     2.50      0.900          0.176    (  0.810)        0.724
60   5.00     2.60      0.936          0.176    (  0.842)        0.760
61   5.08     3.10      1.116          0.176    (  1.004)        0.940
62   5.17     3.60      1.296          0.176    (  1.166)        1.120
63   5.25     3.90      1.404          0.176    (  1.263)        1.228
64   5.33     4.20      1.512          0.176    (  1.361)        1.336
65   5.42     4.70      1.692          0.176    (  1.523)        1.516
66   5.50     5.60      2.016          0.176    (  1.814)        1.840
67   5.58     1.90      0.684          0.176    (  0.615)        0.508
68   5.67     0.90      0.324          0.176    (  0.292)        0.148
69   5.75     0.60      0.216          0.176    (  0.194)        0.040
70   5.83     0.50      0.180       (  0.176)       0.162        0.018
71   5.92     0.30      0.108       (  0.176)       0.097        0.011
72   6.00     0.20      0.072       (  0.176)       0.065        0.007
               (Loss Rate Not Used)
   Sum =     100.0                                    Sum =    23.6
      Flood volume = Effective rainfall      1.96(In)
       times area      48.2(Ac.)/[(In)/(Ft.)] =       7.9(Ac.Ft)
      Total soil loss =      1.04(In)
      Total soil loss =     4.163(Ac.Ft)
      Total rainfall =      3.00(In)
      Flood volume =      343908.3 Cubic Feet
      Total soil loss =      181338.1 Cubic Feet
      ---------------------------------------------------------------------
       Peak flow rate of this hydrograph =     70.128(CFS)
      ---------------------------------------------------------------------
      +++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                          6 - H O U R    S T O R M
                     R u n o f f      H y d r o g r a p h
      ---------------------------------------------------------------------
                  Hydrograph in   5   Minute intervals ((CFS))

      ---------------------------------------------------------------------
Time(h+m) Volume Ac.Ft   Q(CFS)  0       20.0      40.0      60.0      80.0
-------------------------------------------------------------------------
  0+ 5       0.0008      0.12  Q         |         |         |         |
  0+10       0.0053      0.65  Q         |         |         |         |
  0+15       0.0142      1.30  Q         |         |         |         |
  0+20       0.0252      1.59  Q         |         |         |         |
  0+25       0.0371      1.73  Q         |         |         |         |
  0+30       0.0512      2.04  VQ        |         |         |         |
  0+35       0.0709      2.87  VQ        |         |         |         |
  0+40       0.0934      3.26  VQ        |         |         |         |
  0+45       0.1170      3.43  VQ        |         |         |         |
  0+50       0.1414      3.54  VQ        |         |         |         |
  0+55       0.1662      3.60  VQ        |         |         |         |
  1+ 0       0.1929      3.88  VQ        |         |         |         |
  1+ 5       0.2251      4.68  |VQ       |         |         |         |
```

EX Tributary 1 Area F 100 Year 6 Hour

```
   1+10       0.2599      5.05  |VQ       |         |         |         |
   1+15       0.2958      5.21  |VQ       |         |         |         |
   1+20       0.3323      5.30  |VQ       |         |         |         |
   1+25       0.3692      5.36  |VQ       |         |         |         |
   1+30       0.4064      5.40  | Q       |         |         |         |
   1+35       0.4437      5.43  | Q       |         |         |         |
   1+40       0.4812      5.44  | Q       |         |         |         |
   1+45       0.5188      5.46  | Q       |         |         |         |
   1+50       0.5564      5.47  | Q       |         |         |         |
   1+55       0.5941      5.47  | QV      |         |         |         |
   2+ 0       0.6333      5.70  | QV      |         |         |         |
   2+ 5       0.6763      6.24  |  Q      |         |         |         |
   2+10       0.7179      6.05  |  Q      |         |         |         |
   2+15       0.7635      6.62  |  Q      |         |         |         |
   2+20       0.8111      6.91  |  QV     |         |         |         |
   2+25       0.8594      7.02  |  QV     |         |         |         |
   2+30       0.9083      7.09  |  QV     |         |         |         |
   2+35       0.9574      7.14  |  QV     |         |         |         |
   2+40       1.0068      7.17  |  Q V    |         |         |         |
   2+45       1.0579      7.42  |  Q V    |         |         |         |
   2+50       1.1144      8.21  |   QV    |         |         |         |
   2+55       1.1734      8.57  |   QV    |         |         |         |
   3+ 0       1.2335      8.72  |   Q V   |         |         |         |
   3+ 5       1.2941      8.81  |   Q V   |         |         |         |
   3+10       1.3567      9.09  |   Q V   |         |         |         |
   3+15       1.4250      9.91  |   Q  V  |         |         |         |
   3+20       1.4958     10.28  |    Q V  |         |         |         |
   3+25       1.5693     10.68  |    Q V  |         |         |         |
   3+30       1.6505     11.79  |    Q  V |         |         |         |
   3+35       1.7414     13.21  |     Q V |         |         |         |
   3+40       1.8414     14.52  |      Q V|         |         |         |
   3+45       1.9472     15.36  |      Q V|         |         |         |
   3+50       2.0604     16.44  |       Q V         |         |         |
   3+55       2.1790     17.22  |       Q |V        |         |         |
   4+ 0       2.3047     18.26  |        Q|V        |         |         |
   4+ 5       2.4357     19.02  |        Q| V       |         |         |
   4+10       2.5754     20.28  |         Q  V      |         |         |
   4+15       2.7256     21.81  |         Q  V      |         |         |
   4+20       2.8869     23.41  |         |Q  V     |         |         |
   4+25       3.0595     25.07  |         | Q  V    |         |         |
   4+30       3.2422     26.52  |         |  Q  V   |         |         |
   4+35       3.4313     27.46  |         |  Q   V  |         |         |
   4+40       3.6299     28.83  |         |   Q   V |         |         |
   4+45       3.8394     30.42  |         |    Q   V|         |         |
   4+50       4.0587     31.85  |         |    Q    V         |         |
   4+55       4.2844     32.77  |         |     Q   |V        |         |
   5+ 0       4.5195     34.13  |         |      Q  | V       |         |
   5+ 5       4.7718     36.63  |         |       Q |   V     |         |
   5+10       5.0631     42.30  |         |         |Q   V    |         |
   5+15       5.4003     48.95  |         |         |   Q  V  |         |
   5+20       5.7767     54.65  |         |         |      Q V|         |
   5+25       6.1932     60.48  |         |         |         QV        |
   5+30       6.6665     68.72  |         |         |          |  VQ    |
   5+35       7.1494     70.13  |         |         |          |    QV  |
   5+40       7.4511     43.80  |         |         |Q         |      V |
   5+45       7.6208     24.64  |         | Q       |          |       V|
   5+50       7.7222     14.73  |      Q  |         |          |        V|
   5+55       7.7871      9.42  |   Q     |         |          |        V|
   6+ 0       7.8306      6.31  |  Q      |         |          |        V|
   6+ 5       7.8592      4.16  | Q       |         |          |        V|
   6+10       7.8770      2.58  |Q        |         |          |        V|
   6+15       7.8876      1.54  Q         |         |          |        V|
   6+20       7.8927      0.75  Q         |         |          |        V|
   6+25       7.8942      0.22  Q         |         |          |        V|
   6+30       7.8947      0.07  Q         |         |          |        V|
   6+35       7.8949      0.03  Q         |         |          |        V|
   6+40       7.8950      0.01  Q         |         |          |        V|
   6+45       7.8950      0.01  Q         |         |          |        V|
   6+50       7.8950      0.00  Q         |         |          |         V
--------------------------------------------------------------------------
```

EX Tributary 1 Area F 100 Year 6 Hour

EX Tributary 1 Area F 100 Year 6 Hour

```
       U n i t   H y d r o g r a p h   A n a l y s i s

       Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2008, Version 8.1
              Study date  03/11/25 File: TRIB2A3100.out

++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
------------------------------------------------------------------------------

Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978


Program License Serial Number 5006

------------------------------------------------------------------------
 English (in-lb) Input Units Used
 English Rainfall Data (Inches) Input Values Used

 English Units used in output format



------------------------------------------------------------------------
------------------------------------------------------------------------
Drainage Area =     156.32(Ac.)  =      0.244 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment =     156.32(Ac.)  =      0.244 Sq. Mi.
Length along longest watercourse =    5260.00(Ft.)
Length along longest watercourse measured to centroid =    2839.00(Ft.)
Length along longest watercourse =      0.996 Mi.
Length along longest watercourse measured to centroid =      0.538 Mi.
Difference in elevation =     380.00(Ft.)
Slope along watercourse =    381.4449 Ft./Mi.
Average Manning's 'N' = 0.040
Lag time =    0.245 Hr.
Lag time =    14.69 Min.
25% of lag time =     3.67 Min.
40% of lag time =     5.87 Min.
Unit time =     5.00 Min.
Duration of storm = 3 Hour(s)
User Entered Base Flow =     0.00(CFS)

2 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
      156.32           0.80                125.06

100 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
      156.32           2.00                312.64

STORM EVENT (YEAR) =  100.00
Area Averaged 2-Year Rainfall =    0.800(In)
Area Averaged 100-Year Rainfall =    2.000(In)

Point rain (area averaged) =    2.000(In)
Areal adjustment factor =   99.93 %
Adjusted average point rain =    1.999(In)

Sub-Area Data:
Area(Ac.)         Runoff Index   Impervious %
   156.320           86.00         0.000
 Total Area Entered =    156.32(Ac.)


RI    RI   Infil. Rate Impervious   Adj. Infil. Rate  Area%     F
AMC2 AMC-2     (In/Hr)    (Dec.%)     (In/Hr)      (Dec.)    (In/Hr)
```

EX Tributary 2 Area A 100 Year 3 Hour

```
86.0  86.0      0.176     0.000        0.176       1.000      0.176
                                                  Sum (F) =   0.176
Area averaged mean soil loss (F) (In/Hr) =  0.176
Minimum soil loss rate ((In/Hr)) =  0.088
(for 24 hour storm duration)
Soil low loss rate (decimal) =   0.900
```

U n i t H y d r o g r a p h
VALLEY S-Curve

Unit Hydrograph Data

Unit time period (hrs)		Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	34.044	3.450	5.435
2	0.167	68.089	13.384	21.086
3	0.250	102.133	22.447	35.363
4	0.333	136.177	19.874	31.310
5	0.417	170.221	10.803	17.020
6	0.500	204.266	6.139	9.672
7	0.583	238.310	4.405	6.940
8	0.667	272.354	3.443	5.424
9	0.750	306.398	2.781	4.381
10	0.833	340.443	2.179	3.433
11	0.917	374.487	1.902	2.996
12	1.000	408.531	1.507	2.373
13	1.083	442.575	1.204	1.897
14	1.167	476.620	1.069	1.683
15	1.250	510.664	1.010	1.591
16	1.333	544.708	0.813	1.281
17	1.417	578.752	0.700	1.103
18	1.500	612.797	0.605	0.953
19	1.583	646.841	0.503	0.793
20	1.667	680.885	0.421	0.663
21	1.750	714.929	0.341	0.537
22	1.833	748.974	0.340	0.536
23	1.917	783.018	0.340	0.536
24	2.000	817.062	0.340	0.536
			Sum = 100.000	Sum= 157.541

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr) Max	Low	Effective (In/Hr)
1	0.08	1.30	0.312	0.176	(0.281)	0.136
2	0.17	1.30	0.312	0.176	(0.281)	0.136
3	0.25	1.10	0.264	0.176	(0.237)	0.088
4	0.33	1.50	0.360	0.176	(0.324)	0.184
5	0.42	1.50	0.360	0.176	(0.324)	0.184
6	0.50	1.80	0.432	0.176	(0.389)	0.256
7	0.58	1.50	0.360	0.176	(0.324)	0.184
8	0.67	1.80	0.432	0.176	(0.389)	0.256
9	0.75	1.80	0.432	0.176	(0.389)	0.256
10	0.83	1.50	0.360	0.176	(0.324)	0.184
11	0.92	1.60	0.384	0.176	(0.345)	0.208
12	1.00	1.80	0.432	0.176	(0.389)	0.256
13	1.08	2.20	0.528	0.176	(0.475)	0.352
14	1.17	2.20	0.528	0.176	(0.475)	0.352
15	1.25	2.20	0.528	0.176	(0.475)	0.352
16	1.33	2.00	0.480	0.176	(0.432)	0.304
17	1.42	2.60	0.624	0.176	(0.561)	0.448
18	1.50	2.70	0.648	0.176	(0.583)	0.472
19	1.58	2.40	0.576	0.176	(0.518)	0.400
20	1.67	2.70	0.648	0.176	(0.583)	0.472
21	1.75	3.30	0.791	0.176	(0.712)	0.616
22	1.83	3.10	0.743	0.176	(0.669)	0.568

EX Tributary 2 Area A 100 Year 3 Hour

```
23   1.92     2.90      0.696          0.176    (  0.626)        0.520
24   2.00     3.00      0.720          0.176    (  0.648)        0.544
25   2.08     3.10      0.743          0.176    (  0.669)        0.568
26   2.17     4.20      1.007          0.176    (  0.907)        0.832
27   2.25     5.00      1.199          0.176    (  1.079)        1.024
28   2.33     3.50      0.839          0.176    (  0.755)        0.664
29   2.42     6.80      1.631          0.176    (  1.468)        1.455
30   2.50     7.30      1.751          0.176    (  1.576)        1.575
31   2.58     8.20      1.967          0.176    (  1.770)        1.791
32   2.67     5.90      1.415          0.176    (  1.274)        1.239
33   2.75     2.00      0.480          0.176    (  0.432)        0.304
34   2.83     1.80      0.432          0.176    (  0.389)        0.256
35   2.92     1.80      0.432          0.176    (  0.389)        0.256
36   3.00     0.60      0.144       (  0.176)       0.130        0.014
              (Loss Rate Not Used)
   Sum =     100.0                                    Sum =    17.7
      Flood volume = Effective rainfall      1.48(In)
       times area     156.3(Ac.)/[(In)/(Ft.)] =      19.2(Ac.Ft)
      Total soil loss =      0.52(In)
      Total soil loss =     6.812(Ac.Ft)
      Total rainfall =      2.00(In)
      Flood volume =      837358.2 Cubic Feet
      Total soil loss =      296748.9 Cubic Feet
      ---------------------------------------------------------------------
       Peak flow rate of this hydrograph =    195.645(CFS)
      ---------------------------------------------------------------------
      +++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                          3 - H O U R    S T O R M
                     R u n o f f     H y d r o g r a p h
      ---------------------------------------------------------------------
                  Hydrograph in   5   Minute intervals ((CFS))

      ---------------------------------------------------------------------
Time(h+m) Volume Ac.Ft   Q(CFS)  0       50.0     100.0     150.0     200.0
-------------------------------------------------------------------------
  0+ 5       0.0051      0.74  Q         |         |         |         |
  0+10       0.0300      3.61  Q         |         |         |         |
  0+15       0.0863      8.17  VQ        |         |         |         |
  0+20       0.1685     11.95  V Q       |         |         |         |
  0+25       0.2690     14.59  V Q       |         |         |         |
  0+30       0.3943     18.19  V  Q      |         |         |         |
  0+35       0.5490     22.45  |V  Q     |         |         |         |
  0+40       0.7266     25.78  |V   Q    |         |         |         |
  0+45       0.9208     28.20  |V   Q    |         |         |         |
  0+50       1.1288     30.20  | V   Q   |         |         |         |
  0+55       1.3440     31.26  | V   Q   |         |         |         |
  1+ 0       1.5581     31.08  |  V  Q   |         |         |         |
  1+ 5       1.7802     32.24  |  V  Q   |         |         |         |
  1+10       2.0303     36.32  |   V  Q  |         |         |         |
  1+15       2.3168     41.60  |   V   Q |         |         |         |
  1+20       2.6299     45.46  |    V   Q|         |         |         |
  1+25       2.9573     47.54  |     V  Q|         |         |         |
  1+30       3.3050     50.49  |     V   Q         |         |         |
  1+35       3.6859     55.31  |      V  |Q        |         |         |
  1+40       4.0964     59.60  |       V |Q        |         |         |
  1+45       4.5289     62.80  |        V| Q       |         |         |
  1+50       4.9969     67.95  |         V  Q      |         |         |
  1+55       5.5085     74.29  |         |V  Q     |         |         |
  2+ 0       6.0449     77.89  |         | V  Q    |         |         |
  2+ 5       6.5881     78.87  |         |  V Q    |         |         |
  2+10       7.1498     81.56  |         |   V Q   |         |         |
  2+15       7.7712     90.23  |         |     V Q |         |         |
  2+20       8.4831    103.37  |         |      V  Q         |         |
  2+25       9.2838    116.26  |         |        V|  Q      |         |
  2+30      10.1941    132.17  |         |         |V    Q   |         |
  2+35      11.2901    159.14  |         |         |  V      |Q        |
  2+40      12.5835    187.81  |         |         |     V   |      Q  |
  2+45      13.9309    195.64  |         |         |       V |        Q|
  2+50      15.1205    172.73  |         |         |         |V  Q     |
  2+55      16.0286    131.85  |         |         |     Q   |  V      |
  3+ 0      16.7001     97.51  |         |        Q|         |   V     |
```

EX Tributary 2 Area A 100 Year 3 Hour

```
    3+ 5      17.2190     75.34  |          |    Q     |          |    V     |
    3+10      17.6133     57.25  |          |Q         |          |     V    |
    3+15      17.9098     43.06  |        Q |          |          |      V   |
    3+20      18.1431     33.87  |      Q   |          |          |      V   |
    3+25      18.3329     27.57  |    Q     |          |          |       V  |
    3+30      18.4898     22.77  |   Q      |          |          |       V  |
    3+35      18.6210     19.06  |  Q       |          |          |       V  |
    3+40      18.7321     16.12  |  Q       |          |          |       V  |
    3+45      18.8267     13.74  | Q        |          |          |        V |
    3+50      18.9064     11.57  | Q        |          |          |        V |
    3+55      18.9731      9.69  |Q         |          |          |        V |
    4+ 0      19.0296      8.20  |Q         |          |          |        V |
    4+ 5      19.0770      6.88  |Q         |          |          |        V |
    4+10      19.1157      5.63  |Q         |          |          |        V |
    4+15      19.1471      4.55  Q          |          |          |        V |
    4+20      19.1741      3.92  Q          |          |          |        V |
    4+25      19.1949      3.02  Q          |          |          |        V |
    4+30      19.2094      2.11  Q          |          |          |        V |
    4+35      19.2170      1.11  Q          |          |          |        V |
    4+40      19.2201      0.45  Q          |          |          |        V |
    4+45      19.2220      0.28  Q          |          |          |        V |
    4+50      19.2230      0.14  Q          |          |          |        V |
    4+55      19.2231      0.01  Q          |          |          |         V
-------------------------------------------------------------------------
```

EX Tributary 2 Area A 100 Year 3 Hour

```
           U n i t   H y d r o g r a p h   A n a l y s i s

           Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2008, Version 8.1
                Study date  03/11/25 File: TRIB2A6100.out

      ++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
+++++
      ----------------------------------------------------------------------
-----

      Riverside County Synthetic Unit Hydrology Method
      RCFC & WCD Manual date - April 1978


      Program License Serial Number 5006

      ----------------------------------------------------------------------
--
       English (in-lb) Input Units Used
       English Rainfall Data (Inches) Input Values Used

       English Units used in output format



      ----------------------------------------------------------------------
--
      ----------------------------------------------------------------------
-
      Drainage Area =     156.32(Ac.)  =      0.244 Sq. Mi.
      Drainage Area for Depth-Area Areal Adjustment =     156.32(Ac.)  =
0.244 Sq. Mi.
      Length along longest watercourse =    5260.00(Ft.)
      Length along longest watercourse measured to centroid =
2839.00(Ft.)
      Length along longest watercourse =      0.996 Mi.
      Length along longest watercourse measured to centroid =      0.538
Mi.
      Difference in elevation =     380.00(Ft.)
      Slope along watercourse =    381.4449 Ft./Mi.
      Average Manning's 'N' = 0.040
      Lag time =    0.245 Hr.
      Lag time =    14.69 Min.
      25% of lag time =     3.67 Min.
      40% of lag time =     5.87 Min.
      Unit time =     5.00 Min.
      Duration of storm = 6 Hour(s)
      User Entered Base Flow =     0.00(CFS)

      2 YEAR Area rainfall data:
```

```
      Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
            156.32              1.10                171.95

      100 YEAR Area rainfall data:


      Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
            156.32              3.00                468.96

      STORM EVENT (YEAR) =  100.00
      Area Averaged 2-Year Rainfall =    1.100(In)
      Area Averaged 100-Year Rainfall =    3.000(In)

      Point rain (area averaged) =    3.000(In)
      Areal adjustment factor =   99.95 %
      Adjusted average point rain =    2.998(In)

      Sub-Area Data:
      Area(Ac.)         Runoff Index   Impervious %
         156.320           86.00         0.000
       Total Area Entered =    156.32(Ac.)


      RI    RI   Infil. Rate Impervious   Adj. Infil. Rate  Area%     F
      AMC2 AMC-2     (In/Hr)    (Dec.%)     (In/Hr)      (Dec.)
(In/Hr)
      86.0  86.0      0.176     0.000        0.176       1.000      0.176
                                                          Sum (F) =
0.176
      Area averaged mean soil loss (F) (In/Hr) =  0.176
      Minimum soil loss rate ((In/Hr)) =  0.088
      (for 24 hour storm duration)
      Soil low loss rate (decimal) =   0.900
      ------------------------------------------------------------------
--

                  U n i t  H y d r o g r a p h
                        VALLEY S-Curve
      ------------------------------------------------------------------
-
                  Unit Hydrograph Data
      ------------------------------------------------------------------
--
      Unit time period   Time % of lag   Distribution   Unit Hydrograph
          (hrs)                           Graph %           (CFS)
      ------------------------------------------------------------------
--
           1   0.083         34.044          3.450             5.435
           2   0.167         68.089         13.384            21.086
           3   0.250        102.133         22.447            35.363
           4   0.333        136.177         19.874            31.310
           5   0.417        170.221         10.803            17.020
           6   0.500        204.266          6.139             9.672
           7   0.583        238.310          4.405             6.940
```

EX Tributary 2 Area A 100 Year 6 Hour

8	0.667	272.354	3.443	5.424
9	0.750	306.398	2.781	4.381
10	0.833	340.443	2.179	3.433
11	0.917	374.487	1.902	2.996
12	1.000	408.531	1.507	2.373
13	1.083	442.575	1.204	1.897
14	1.167	476.620	1.069	1.683
15	1.250	510.664	1.010	1.591
16	1.333	544.708	0.813	1.281
17	1.417	578.752	0.700	1.103
18	1.500	612.797	0.605	0.953
19	1.583	646.841	0.503	0.793
20	1.667	680.885	0.421	0.663
21	1.750	714.929	0.341	0.537
22	1.833	748.974	0.340	0.536
23	1.917	783.018	0.340	0.536
24	2.000	817.062	0.340	0.536
		Sum = 100.000	Sum=	157.541

The following loss rate calculations reflect use of the minimum calculated loss
rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr) Max	Low	Effective (In/Hr)
1	0.08	0.50	0.180	(0.176)	0.162	0.018
2	0.17	0.60	0.216	0.176	(0.194)	0.040
3	0.25	0.60	0.216	0.176	(0.194)	0.040
4	0.33	0.60	0.216	0.176	(0.194)	0.040
5	0.42	0.60	0.216	0.176	(0.194)	0.040
6	0.50	0.70	0.252	0.176	(0.227)	0.076
7	0.58	0.70	0.252	0.176	(0.227)	0.076
8	0.67	0.70	0.252	0.176	(0.227)	0.076
9	0.75	0.70	0.252	0.176	(0.227)	0.076
10	0.83	0.70	0.252	0.176	(0.227)	0.076
11	0.92	0.70	0.252	0.176	(0.227)	0.076
12	1.00	0.80	0.288	0.176	(0.259)	0.112
13	1.08	0.80	0.288	0.176	(0.259)	0.112
14	1.17	0.80	0.288	0.176	(0.259)	0.112
15	1.25	0.80	0.288	0.176	(0.259)	0.112
16	1.33	0.80	0.288	0.176	(0.259)	0.112
17	1.42	0.80	0.288	0.176	(0.259)	0.112
18	1.50	0.80	0.288	0.176	(0.259)	0.112
19	1.58	0.80	0.288	0.176	(0.259)	0.112
20	1.67	0.80	0.288	0.176	(0.259)	0.112
21	1.75	0.80	0.288	0.176	(0.259)	0.112
22	1.83	0.80	0.288	0.176	(0.259)	0.112
23	1.92	0.80	0.288	0.176	(0.259)	0.112
24	2.00	0.90	0.324	0.176	(0.291)	0.148
25	2.08	0.80	0.288	0.176	(0.259)	0.112
26	2.17	0.90	0.324	0.176	(0.291)	0.148

27	2.25	0.90	0.324		0.176	(0.291)	0.148
28	2.33	0.90	0.324		0.176	(0.291)	0.148
29	2.42	0.90	0.324		0.176	(0.291)	0.148
30	2.50	0.90	0.324		0.176	(0.291)	0.148
31	2.58	0.90	0.324		0.176	(0.291)	0.148
32	2.67	0.90	0.324		0.176	(0.291)	0.148
33	2.75	1.00	0.360		0.176	(0.324)	0.184
34	2.83	1.00	0.360		0.176	(0.324)	0.184
35	2.92	1.00	0.360		0.176	(0.324)	0.184
36	3.00	1.00	0.360		0.176	(0.324)	0.184
37	3.08	1.00	0.360		0.176	(0.324)	0.184
38	3.17	1.10	0.396		0.176	(0.356)	0.220
39	3.25	1.10	0.396		0.176	(0.356)	0.220
40	3.33	1.10	0.396		0.176	(0.356)	0.220
41	3.42	1.20	0.432		0.176	(0.389)	0.256
42	3.50	1.30	0.468		0.176	(0.421)	0.292
43	3.58	1.40	0.504		0.176	(0.453)	0.328
44	3.67	1.40	0.504		0.176	(0.453)	0.328
45	3.75	1.50	0.540		0.176	(0.486)	0.364
46	3.83	1.50	0.540		0.176	(0.486)	0.364
47	3.92	1.60	0.576		0.176	(0.518)	0.400
48	4.00	1.60	0.576		0.176	(0.518)	0.400
49	4.08	1.70	0.612		0.176	(0.551)	0.436
50	4.17	1.80	0.648		0.176	(0.583)	0.472
51	4.25	1.90	0.684		0.176	(0.615)	0.508
52	4.33	2.00	0.720		0.176	(0.648)	0.544
53	4.42	2.10	0.756		0.176	(0.680)	0.580
54	4.50	2.10	0.756		0.176	(0.680)	0.580
55	4.58	2.20	0.792		0.176	(0.712)	0.616
56	4.67	2.30	0.828		0.176	(0.745)	0.652
57	4.75	2.40	0.864		0.176	(0.777)	0.688
58	4.83	2.40	0.864		0.176	(0.777)	0.688
59	4.92	2.50	0.900		0.176	(0.810)	0.724
60	5.00	2.60	0.935		0.176	(0.842)	0.760
61	5.08	3.10	1.115		0.176	(1.004)	0.940
62	5.17	3.60	1.295		0.176	(1.166)	1.120
63	5.25	3.90	1.403		0.176	(1.263)	1.228
64	5.33	4.20	1.511		0.176	(1.360)	1.336
65	5.42	4.70	1.691		0.176	(1.522)	1.515
66	5.50	5.60	2.015		0.176	(1.813)	1.839
67	5.58	1.90	0.684		0.176	(0.615)	0.508
68	5.67	0.90	0.324		0.176	(0.291)	0.148
69	5.75	0.60	0.216		0.176	(0.194)	0.040
70	5.83	0.50	0.180	(	0.176)	0.162	0.018
71	5.92	0.30	0.108	(	0.176)	0.097	0.011
72	6.00	0.20	0.072	(	0.176)	0.065	0.007

(Loss Rate Not Used)

Sum = 100.0 Sum = 23.6

Flood volume = Effective rainfall 1.96(In)
times area 156.3(Ac.)/[(In)/(Ft.)] = 25.6(Ac.Ft)
Total soil loss = 1.04(In)
Total soil loss = 13.490(Ac.Ft)
Total rainfall = 3.00(In)
Flood volume = 1113798.8 Cubic Feet

EX Tributary 2 Area A 100 Year 6 Hour

```
      Total soil loss =      587611.3 Cubic Feet
      ------------------------------------------------------------------
-
       Peak flow rate of this hydrograph =    194.730(CFS)
      ------------------------------------------------------------------
-
      ++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
+
                          6 - H O U R    S T O R M
                     R u n o f f      H y d r o g r a p h
      ------------------------------------------------------------------
-
                    Hydrograph in   5   Minute intervals ((CFS))

      ------------------------------------------------------------------
-
  Time(h+m) Volume Ac.Ft   Q(CFS)  0       50.0     100.0     150.0
200.0
  ----------------------------------------------------------------------
    0+ 5       0.0007      0.10  Q         |         |         |
|
    0+10       0.0048      0.60  Q         |         |         |
|
    0+15       0.0165      1.71  Q         |         |         |
|
    0+20       0.0376      3.06  Q         |         |         |
|
    0+25       0.0656      4.06  Q         |         |         |
|
    0+30       0.0987      4.81  Q         |         |         |
|
    0+35       0.1394      5.91  VQ        |         |         |
|
    0+40       0.1907      7.44  VQ        |         |         |
|
    0+45       0.2510      8.76  VQ        |         |         |
|
    0+50       0.3167      9.54  VQ        |         |         |
|
    0+55       0.3857     10.01  V Q       |         |         |
|
    1+ 0       0.4585     10.57  V Q       |         |         |
|
    1+ 5       0.5384     11.61  V Q       |         |         |
|
    1+10       0.6287     13.11  V Q       |         |         |
|
    1+15       0.7281     14.43  |VQ       |         |         |
|
    1+20       0.8329     15.21  |V Q      |         |         |
|
    1+25       0.9410     15.69  |V Q      |         |         |
|
```

EX Tributary 2 Area A 100 Year 6 Hour

1+30	1.0515	16.05	V Q			
1+35	1.1641	16.34	V Q			
1+40	1.2783	16.59	V Q			
1+45	1.3939	16.78	VQ			
1+50	1.5107	16.95	VQ			
1+55	1.6284	17.09	VQ			
2+ 0	1.7483	17.41	VQ			
2+ 5	1.8727	18.07	VQ			
2+10	2.0025	18.85	Q			
2+15	2.1371	19.53	Q			
2+20	2.2772	20.35	VQ			
2+25	2.4237	21.27	VQ			
2+30	2.5739	21.81	Q			
2+35	2.7263	22.13	Q			
2+40	2.8802	22.36	Q			
2+45	3.0368	22.73	Q			
2+50	3.1997	23.65	QV			
2+55	3.3722	25.05	Q			
3+ 0	3.5531	26.27	Q			
3+ 5	3.7388	26.96	Q			
3+10	3.9286	27.56	QV			
3+15	4.1257	28.62	QV			
3+20	4.3333	30.14	Q			
3+25	4.5514	31.66	QV			
3+30	4.7813	33.39	QV			
3+35	5.0300	36.10	Q			
3+40	5.3028	39.62	QV			

EX Tributary 2 Area A 100 Year 6 Hour

3+45	5.5998	43.12	|	Q |	|	|	|
3+50	5.9180	46.20	|	Q|	|	|	|
3+55	6.2560	49.08	|	Q|	|	|	|
4+ 0	6.6135	51.91	|	Q	|	|	|
4+ 5	6.9905	54.74	|	Q	|	|	|
4+10	7.3883	57.75	|	|Q	|	|	|
4+15	7.8106	61.32	|	| Q	|	|	|
4+20	8.2625	65.62	|	| VQ	|	|	|
4+25	8.7468	70.32	|	| VQ	|	|	|
4+30	9.2635	75.03	|	| VQ	|	|	|
4+35	9.8100	79.34	|	| Q	|	|	|
4+40	10.3833	83.25	|	| Q	|	|	|
4+45	10.9852	87.39	|	| Q	|	|	|
4+50	11.6181	91.91	|	| Q |	|	|	|
4+55	12.2806	96.20	|	| Q|	|	|	|
5+ 0	12.9702	100.12	|	| Q	|	|	|
5+ 5	13.6938	105.07	|	| |Q	|	|	|
5+10	14.4764	113.63	|	| | Q	|	|	|
5+15	15.3526	127.22	|	| | VQ	|	|	|
5+20	16.3440	143.96	|	| | V Q |	|	|	|
5+25	17.4534	161.08	|	| | V | Q	|	|	|
5+30	18.6910	179.70	|	| | V| Q	|	|	|
5+35	20.0321	194.73	|	| | |V Q	|	|	|
5+40	21.3241	187.60	|	| | | V Q	|	|	|
5+45	22.3549	149.66	|	| | Q| V	|	|	|
5+50	23.0665	103.33	|	| Q	|	|	| V	|
5+55	23.5628	72.07	|	| Q	|	|	| V	|

EX Tributary 2 Area A 100 Year 6 Hour

```
    6+ 0      23.9354     54.10  |          Q          |          |       V
|
    6+ 5      24.2301     42.78  |        Q |          |          |       V
|
    6+10      24.4686     34.64  |      Q   |          |          |        V
|
    6+15      24.6634     28.29  |    Q     |          |          |        V
|
    6+20      24.8253     23.50  |   Q      |          |          |        V
|
    6+25      24.9595     19.49  |  Q       |          |          |
V|
    6+30      25.0721     16.35  |  Q       |          |          |
V|
    6+35      25.1682     13.96  | Q        |          |          |
V|
    6+40      25.2503     11.92  | Q        |          |          |
V|
    6+45      25.3186      9.92  |Q         |          |          |
V|
    6+50      25.3757      8.29  |Q         |          |          |
V|
    6+55      25.4232      6.90  |Q         |          |          |
V|
    7+ 0      25.4625      5.70  |Q         |          |          |
V|
    7+ 5      25.4945      4.65  Q          |          |          |
V|
    7+10      25.5201      3.71  Q          |          |          |
V|
    7+15      25.5405      2.96  Q          |          |          |
V|
    7+20      25.5557      2.21  Q          |          |          |
V|
    7+25      25.5652      1.39  Q          |          |          |
V|
    7+30      25.5680      0.40  Q          |          |          |
V|
    7+35      25.5688      0.12  Q          |          |          |
V|
    7+40      25.5691      0.04  Q          |          |          |
V|
    7+45      25.5692      0.02  Q          |          |          |
V|
    7+50      25.5693      0.01  Q          |          |          |
V|
    7+55      25.5693      0.00  Q          |          |          |
V
------------------------------------------------------------------------
```

EX Tributary 2 Area A 100 Year 6 Hour

```
       U n i t   H y d r o g r a p h   A n a l y s i s

       Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2008, Version 8.1
              Study date  03/11/25 File: TRIB2C3100.out

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------------------------------------------------------------------------------

Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978


Program License Serial Number 5006

------------------------------------------------------------------------
 English (in-lb) Input Units Used
 English Rainfall Data (Inches) Input Values Used

 English Units used in output format



------------------------------------------------------------------------
------------------------------------------------------------------------
Drainage Area =      43.68(Ac.)  =      0.068 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment =      43.68(Ac.)  =      0.068 Sq. Mi.
Length along longest watercourse =    1676.00(Ft.)
Length along longest watercourse measured to centroid =    1553.00(Ft.)
Length along longest watercourse =      0.317 Mi.
Length along longest watercourse measured to centroid =      0.294 Mi.
Difference in elevation =      79.00(Ft.)
Slope along watercourse =    248.8783 Ft./Mi.
Average Manning's 'N' = 0.040
Lag time =    0.137 Hr.
Lag time =     8.20 Min.
25% of lag time =     2.05 Min.
40% of lag time =     3.28 Min.
Unit time =     5.00 Min.
Duration of storm = 3 Hour(s)
User Entered Base Flow =     0.00(CFS)

2 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
       43.68           0.80                 34.94

100 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
       43.68           2.00                 87.36

STORM EVENT (YEAR) =  100.00
Area Averaged 2-Year Rainfall =    0.800(In)
Area Averaged 100-Year Rainfall =    2.000(In)

Point rain (area averaged) =    2.000(In)
Areal adjustment factor =   99.98 %
Adjusted average point rain =    2.000(In)

Sub-Area Data:
Area(Ac.)         Runoff Index   Impervious %
    43.680           86.00         0.000
 Total Area Entered =     43.68(Ac.)


RI    RI   Infil. Rate Impervious   Adj. Infil. Rate  Area%     F
AMC2 AMC-2     (In/Hr)    (Dec.%)     (In/Hr)      (Dec.)    (In/Hr)
```

EX Tributary 2 Area C 100 Year 3 Hour

```
86.0  86.0      0.176     0.000        0.176       1.000      0.176
                                                  Sum (F) =   0.176
Area averaged mean soil loss (F) (In/Hr) =  0.176
Minimum soil loss rate ((In/Hr)) =  0.088
(for 24 hour storm duration)
Soil low loss rate (decimal) =   0.900
------------------------------------------------------------------------

               U n i t  H y d r o g r a p h
                      VALLEY S-Curve
------------------------------------------------------------------------
               Unit Hydrograph Data
------------------------------------------------------------------------
Unit time period   Time % of lag   Distribution   Unit Hydrograph
    (hrs)                          Graph %           (CFS)
------------------------------------------------------------------------
     1   0.083         60.970          8.437             3.714
     2   0.167        121.940         34.643            15.250
     3   0.250        182.911         26.264            11.562
     4   0.333        243.881         10.138             4.463
     5   0.417        304.851          6.039             2.659
     6   0.500        365.821          4.066             1.790
     7   0.583        426.791          2.880             1.268
     8   0.667        487.762          2.043             0.899
     9   0.750        548.732          1.682             0.740
    10   0.833        609.702          1.231             0.542
    11   0.917        670.672          0.926             0.408
    12   1.000        731.642          0.663             0.292
    13   1.083        792.612          0.610             0.268
    14   1.167        853.583          0.379             0.167
                                Sum = 100.000   Sum=      44.021
------------------------------------------------------------------------

 The following loss rate calculations reflect use of the minimum calculated loss
 rate subtracted from the Storm Rain to produce the maximum Effective Rain value

  Unit Time   Pattern   Storm Rain    Loss rate(In./Hr)     Effective
       (Hr.)  Percent   (In/Hr)        Max    |   Low        (In/Hr)
   1   0.08     1.30      0.312         0.176    (  0.281)        0.136
   2   0.17     1.30      0.312         0.176    (  0.281)        0.136
   3   0.25     1.10      0.264         0.176    (  0.238)        0.088
   4   0.33     1.50      0.360         0.176    (  0.324)        0.184
   5   0.42     1.50      0.360         0.176    (  0.324)        0.184
   6   0.50     1.80      0.432         0.176    (  0.389)        0.256
   7   0.58     1.50      0.360         0.176    (  0.324)        0.184
   8   0.67     1.80      0.432         0.176    (  0.389)        0.256
   9   0.75     1.80      0.432         0.176    (  0.389)        0.256
  10   0.83     1.50      0.360         0.176    (  0.324)        0.184
  11   0.92     1.60      0.384         0.176    (  0.346)        0.208
  12   1.00     1.80      0.432         0.176    (  0.389)        0.256
  13   1.08     2.20      0.528         0.176    (  0.475)        0.352
  14   1.17     2.20      0.528         0.176    (  0.475)        0.352
  15   1.25     2.20      0.528         0.176    (  0.475)        0.352
  16   1.33     2.00      0.480         0.176    (  0.432)        0.304
  17   1.42     2.60      0.624         0.176    (  0.561)        0.448
  18   1.50     2.70      0.648         0.176    (  0.583)        0.472
  19   1.58     2.40      0.576         0.176    (  0.518)        0.400
  20   1.67     2.70      0.648         0.176    (  0.583)        0.472
  21   1.75     3.30      0.792         0.176    (  0.713)        0.616
  22   1.83     3.10      0.744         0.176    (  0.669)        0.568
  23   1.92     2.90      0.696         0.176    (  0.626)        0.520
  24   2.00     3.00      0.720         0.176    (  0.648)        0.544
  25   2.08     3.10      0.744         0.176    (  0.669)        0.568
  26   2.17     4.20      1.008         0.176    (  0.907)        0.832
  27   2.25     5.00      1.200         0.176    (  1.080)        1.024
  28   2.33     3.50      0.840         0.176    (  0.756)        0.664
  29   2.42     6.80      1.632         0.176    (  1.469)        1.456
  30   2.50     7.30      1.752         0.176    (  1.576)        1.576
  31   2.58     8.20      1.968         0.176    (  1.771)        1.792
  32   2.67     5.90      1.416         0.176    (  1.274)        1.240
```

EX Tributary 2 Area C 100 Year 3 Hour

```
33   2.75     2.00      0.480          0.176    (  0.432)        0.304
34   2.83     1.80      0.432          0.176    (  0.389)        0.256
35   2.92     1.80      0.432          0.176    (  0.389)        0.256
36   3.00     0.60      0.144       (  0.176)       0.130        0.014
              (Loss Rate Not Used)
   Sum =     100.0                                    Sum =    17.7
      Flood volume = Effective rainfall      1.48(In)
       times area      43.7(Ac.)/[(In)/(Ft.)] =       5.4(Ac.Ft)
      Total soil loss =      0.52(In)
      Total soil loss =     1.904(Ac.Ft)
      Total rainfall =      2.00(In)
      Flood volume =      234135.8 Cubic Feet
      Total soil loss =       82920.4 Cubic Feet
      ---------------------------------------------------------------------
       Peak flow rate of this hydrograph =     63.143(CFS)
      ---------------------------------------------------------------------
      +++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                          3 - H O U R    S T O R M
                     R u n o f f     H y d r o g r a p h
      ---------------------------------------------------------------------
                  Hydrograph in   5   Minute intervals ((CFS))

      ---------------------------------------------------------------------
Time(h+m) Volume Ac.Ft   Q(CFS)  0       17.5      35.0      52.5      70.0
----------------------------------------------------------------------------
  0+ 5       0.0035      0.51  Q         |         |         |         |
  0+10       0.0213      2.59  VQ        |         |         |         |
  0+15       0.0488      3.99  V Q       |         |         |         |
  0+20       0.0778      4.22  V Q       |         |         |         |
  0+25       0.1156      5.49  V  Q      |         |         |         |
  0+30       0.1631      6.90  |V Q      |         |         |         |
  0+35       0.2196      8.20  |V  Q     |         |         |         |
  0+40       0.2782      8.50  | V Q     |         |         |         |
  0+45       0.3422      9.30  | V  Q    |         |         |         |
  0+50       0.4103      9.88  |  V Q    |         |         |         |
  0+55       0.4739      9.24  |  V Q    |         |         |         |
  1+ 0       0.5372      9.19  |  V Q    |         |         |         |
  1+ 5       0.6089     10.41  |   VQ    |         |         |         |
  1+10       0.6947     12.47  |    V Q  |         |         |         |
  1+15       0.7898     13.80  |    V Q  |         |         |         |
  1+20       0.8875     14.19  |     V Q |         |         |         |
  1+25       0.9862     14.34  |      VQ |         |         |         |
  1+30       1.0985     16.30  |       VQ|         |         |         |
  1+35       1.2225     18.01  |        VQ         |         |         |
  1+40       1.3471     18.08  |         Q         |         |         |
  1+45       1.4806     19.39  |         |Q        |         |         |
  1+50       1.6337     22.24  |         | Q       |         |         |
  1+55       1.7946     23.35  |         |  Q      |         |         |
  2+ 0       1.9532     23.03  |         |  QV     |         |         |
  2+ 5       2.1134     23.27  |         |  Q V    |         |         |
  2+10       2.2851     24.93  |         |   Q  V  |         |         |
  2+15       2.4924     30.09  |         |      QV |         |         |
  2+20       2.7330     34.94  |         |        QV         |         |
  2+25       2.9806     35.95  |         |         Q V       |         |
  2+30       3.2973     45.99  |         |         |   V Q   |         |
  2+35       3.6914     57.21  |         |         |      V  | Q       |
  2+40       4.1262     63.14  |         |         |         V     Q   |
  2+45       4.5138     56.27  |         |         |         | QV      |
  2+50       4.7759     38.06  |         |         |Q        |    V    |
  2+55       4.9535     25.79  |         |   Q     |         |     V   |
  3+ 0       5.0905     19.89  |         |Q        |         |      V  |
  3+ 5       5.1827     13.39  |      Q  |         |         |       V |
  3+10       5.2417      8.57  |   Q     |         |         |        V|
  3+15       5.2837      6.09  |  Q      |         |         |        V|
  3+20       5.3140      4.40  | Q       |         |         |        V|
  3+25       5.3359      3.17  |Q        |         |         |        V|
  3+30       5.3517      2.30  |Q        |         |         |        V|
  3+35       5.3625      1.57  Q         |         |         |        V|
  3+40       5.3692      0.97  Q         |         |         |        V|
  3+45       5.3725      0.48  Q         |         |         |        V|
  3+50       5.3739      0.20  Q         |         |         |        V|
```

EX Tributary 2 Area C 100 Year 3 Hour

```
    3+55       5.3747      0.12  Q         |         |         |        V|
    4+ 0       5.3750      0.05  Q         |         |         |        V|
    4+ 5       5.3750      0.00  Q         |         |         |        V|
-------------------------------------------------------------------------
```

EX Tributary 2 Area C 100 Year 3 Hour

```
           U n i t   H y d r o g r a p h   A n a l y s i s

           Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2008, Version 8.1
                Study date  03/11/25 File: TRIB2C6100.out

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+++++
      ----------------------------------------------------------------------
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      Riverside County Synthetic Unit Hydrology Method
      RCFC & WCD Manual date - April 1978


      Program License Serial Number 5006

      ----------------------------------------------------------------------
--
       English (in-lb) Input Units Used
       English Rainfall Data (Inches) Input Values Used

       English Units used in output format



      ----------------------------------------------------------------------
--
      ----------------------------------------------------------------------
-
      Drainage Area =      43.68(Ac.)  =      0.068 Sq. Mi.
      Drainage Area for Depth-Area Areal Adjustment =      43.68(Ac.)  =
0.068 Sq. Mi.
      Length along longest watercourse =    1676.00(Ft.)
      Length along longest watercourse measured to centroid =
1553.00(Ft.)
      Length along longest watercourse =      0.317 Mi.
      Length along longest watercourse measured to centroid =      0.294
Mi.
      Difference in elevation =      79.00(Ft.)
      Slope along watercourse =    248.8783 Ft./Mi.
      Average Manning's 'N' = 0.040
      Lag time =    0.137 Hr.
      Lag time =     8.20 Min.
      25% of lag time =     2.05 Min.
      40% of lag time =     3.28 Min.
      Unit time =     5.00 Min.
      Duration of storm = 6 Hour(s)
      User Entered Base Flow =     0.00(CFS)

      2 YEAR Area rainfall data:
```

```
      Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
             43.68              1.10                 48.05

      100 YEAR Area rainfall data:


      Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
             43.68              3.00                131.04

      STORM EVENT (YEAR) =  100.00
      Area Averaged 2-Year Rainfall =    1.100(In)
      Area Averaged 100-Year Rainfall =    3.000(In)

      Point rain (area averaged) =    3.000(In)
      Areal adjustment factor =   99.98 %
      Adjusted average point rain =    3.000(In)

      Sub-Area Data:
      Area(Ac.)         Runoff Index   Impervious %
          43.680           86.00         0.000
       Total Area Entered =     43.68(Ac.)


      RI    RI   Infil. Rate Impervious   Adj. Infil. Rate  Area%     F
      AMC2 AMC-2     (In/Hr)    (Dec.%)     (In/Hr)      (Dec.)
(In/Hr)
      86.0  86.0      0.176     0.000        0.176       1.000      0.176
                                                          Sum (F) =
0.176
      Area averaged mean soil loss (F) (In/Hr) =  0.176
      Minimum soil loss rate ((In/Hr)) =  0.088
      (for 24 hour storm duration)
      Soil low loss rate (decimal) =   0.900
      ------------------------------------------------------------------
--

                  U n i t  H y d r o g r a p h
                        VALLEY S-Curve
      ------------------------------------------------------------------
-
                  Unit Hydrograph Data
      ------------------------------------------------------------------
--
      Unit time period   Time % of lag   Distribution   Unit Hydrograph
          (hrs)                           Graph %           (CFS)
      ------------------------------------------------------------------
--
          1   0.083         60.970          8.437             3.714
          2   0.167        121.940         34.643            15.250
          3   0.250        182.911         26.264            11.562
          4   0.333        243.881         10.138             4.463
          5   0.417        304.851          6.039             2.659
          6   0.500        365.821          4.066             1.790
          7   0.583        426.791          2.880             1.268
```

EX Tributary 2 Area C 100 Year 6 Hour

8	0.667	487.762	2.043	0.899
9	0.750	548.732	1.682	0.740
10	0.833	609.702	1.231	0.542
11	0.917	670.672	0.926	0.408
12	1.000	731.642	0.663	0.292
13	1.083	792.612	0.610	0.268
14	1.167	853.583	0.379	0.167
			Sum = 100.000	Sum= 44.021

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr) Max	Low	Effective (In/Hr)
1	0.08	0.50	0.180	(0.176)	0.162	0.018
2	0.17	0.60	0.216	0.176	(0.194)	0.040
3	0.25	0.60	0.216	0.176	(0.194)	0.040
4	0.33	0.60	0.216	0.176	(0.194)	0.040
5	0.42	0.60	0.216	0.176	(0.194)	0.040
6	0.50	0.70	0.252	0.176	(0.227)	0.076
7	0.58	0.70	0.252	0.176	(0.227)	0.076
8	0.67	0.70	0.252	0.176	(0.227)	0.076
9	0.75	0.70	0.252	0.176	(0.227)	0.076
10	0.83	0.70	0.252	0.176	(0.227)	0.076
11	0.92	0.70	0.252	0.176	(0.227)	0.076
12	1.00	0.80	0.288	0.176	(0.259)	0.112
13	1.08	0.80	0.288	0.176	(0.259)	0.112
14	1.17	0.80	0.288	0.176	(0.259)	0.112
15	1.25	0.80	0.288	0.176	(0.259)	0.112
16	1.33	0.80	0.288	0.176	(0.259)	0.112
17	1.42	0.80	0.288	0.176	(0.259)	0.112
18	1.50	0.80	0.288	0.176	(0.259)	0.112
19	1.58	0.80	0.288	0.176	(0.259)	0.112
20	1.67	0.80	0.288	0.176	(0.259)	0.112
21	1.75	0.80	0.288	0.176	(0.259)	0.112
22	1.83	0.80	0.288	0.176	(0.259)	0.112
23	1.92	0.80	0.288	0.176	(0.259)	0.112
24	2.00	0.90	0.324	0.176	(0.292)	0.148
25	2.08	0.80	0.288	0.176	(0.259)	0.112
26	2.17	0.90	0.324	0.176	(0.292)	0.148
27	2.25	0.90	0.324	0.176	(0.292)	0.148
28	2.33	0.90	0.324	0.176	(0.292)	0.148
29	2.42	0.90	0.324	0.176	(0.292)	0.148
30	2.50	0.90	0.324	0.176	(0.292)	0.148
31	2.58	0.90	0.324	0.176	(0.292)	0.148
32	2.67	0.90	0.324	0.176	(0.292)	0.148
33	2.75	1.00	0.360	0.176	(0.324)	0.184
34	2.83	1.00	0.360	0.176	(0.324)	0.184
35	2.92	1.00	0.360	0.176	(0.324)	0.184
36	3.00	1.00	0.360	0.176	(0.324)	0.184

```
  37   3.08     1.00      0.360          0.176    (  0.324)         0.184
  38   3.17     1.10      0.396          0.176    (  0.356)         0.220
  39   3.25     1.10      0.396          0.176    (  0.356)         0.220
  40   3.33     1.10      0.396          0.176    (  0.356)         0.220
  41   3.42     1.20      0.432          0.176    (  0.389)         0.256
  42   3.50     1.30      0.468          0.176    (  0.421)         0.292
  43   3.58     1.40      0.504          0.176    (  0.454)         0.328
  44   3.67     1.40      0.504          0.176    (  0.454)         0.328
  45   3.75     1.50      0.540          0.176    (  0.486)         0.364
  46   3.83     1.50      0.540          0.176    (  0.486)         0.364
  47   3.92     1.60      0.576          0.176    (  0.518)         0.400
  48   4.00     1.60      0.576          0.176    (  0.518)         0.400
  49   4.08     1.70      0.612          0.176    (  0.551)         0.436
  50   4.17     1.80      0.648          0.176    (  0.583)         0.472
  51   4.25     1.90      0.684          0.176    (  0.616)         0.508
  52   4.33     2.00      0.720          0.176    (  0.648)         0.544
  53   4.42     2.10      0.756          0.176    (  0.680)         0.580
  54   4.50     2.10      0.756          0.176    (  0.680)         0.580
  55   4.58     2.20      0.792          0.176    (  0.713)         0.616
  56   4.67     2.30      0.828          0.176    (  0.745)         0.652
  57   4.75     2.40      0.864          0.176    (  0.777)         0.688
  58   4.83     2.40      0.864          0.176    (  0.777)         0.688
  59   4.92     2.50      0.900          0.176    (  0.810)         0.724
  60   5.00     2.60      0.936          0.176    (  0.842)         0.760
  61   5.08     3.10      1.116          0.176    (  1.004)         0.940
  62   5.17     3.60      1.296          0.176    (  1.166)         1.120
  63   5.25     3.90      1.404          0.176    (  1.263)         1.228
  64   5.33     4.20      1.512          0.176    (  1.361)         1.336
  65   5.42     4.70      1.692          0.176    (  1.523)         1.516
  66   5.50     5.60      2.016          0.176    (  1.814)         1.840
  67   5.58     1.90      0.684          0.176    (  0.616)         0.508
  68   5.67     0.90      0.324          0.176    (  0.292)         0.148
  69   5.75     0.60      0.216          0.176    (  0.194)         0.040
  70   5.83     0.50      0.180       (  0.176)       0.162         0.018
  71   5.92     0.30      0.108       (  0.176)       0.097         0.011
  72   6.00     0.20      0.072       (  0.176)       0.065         0.007
            (Loss Rate Not Used)
     Sum =     100.0                                    Sum =    23.6
      Flood volume = Effective rainfall      1.96(In)
       times area      43.7(Ac.)/[(In)/(Ft.)] =       7.1(Ac.Ft)
      Total soil loss =      1.04(In)
      Total soil loss =     3.769(Ac.Ft)
      Total rainfall =      3.00(In)
      Flood volume =      311406.9 Cubic Feet
      Total soil loss =      164196.8 Cubic Feet
      ---------------------------------------------------------------------
-
       Peak flow rate of this hydrograph =     62.263(CFS)
      ---------------------------------------------------------------------
-
      +++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
+
                          6 - H O U R    S T O R M
                      R u n o f f      H y d r o g r a p h
```

EX Tributary 2 Area C 100 Year 6 Hour

```
      ------------------------------------------------------------------
-
                  Hydrograph in   5   Minute intervals ((CFS))

      ------------------------------------------------------------------
-
  Time(h+m) Volume Ac.Ft   Q(CFS)  0       17.5      35.0      52.5
70.0
  ----------------------------------------------------------------------
    0+ 5       0.0005      0.07  Q         |         |         |
|
    0+10       0.0034      0.42  Q         |         |         |
|
    0+15       0.0101      0.97  Q         |         |         |
|
    0+20       0.0191      1.31  Q         |         |         |
|
    0+25       0.0292      1.46  Q         |         |         |
|
    0+30       0.0408      1.69  Q         |         |         |
|
    0+35       0.0566      2.30  VQ        |         |         |
|
    0+40       0.0757      2.76  VQ        |         |         |
|
    0+45       0.0960      2.95  VQ        |         |         |
|
    0+50       0.1172      3.08  VQ        |         |         |
|
    0+55       0.1389      3.16  VQ        |         |         |
|
    1+ 0       0.1620      3.35  VQ        |         |         |
|
    1+ 5       0.1892      3.95  |VQ       |         |         |
|
    1+10       0.2195      4.40  |VQ       |         |         |
|
    1+15       0.2511      4.58  |VQ       |         |         |
|
    1+20       0.2834      4.69  |VQ       |         |         |
|
    1+25       0.3162      4.77  |VQ       |         |         |
|
    1+30       0.3494      4.82  |VQ       |         |         |
|
    1+35       0.3829      4.86  | Q       |         |         |
|
    1+40       0.4166      4.89  | Q       |         |         |
|
    1+45       0.4504      4.91  | Q       |         |         |
|
    1+50       0.4843      4.92  | Q       |         |         |
|
```

EX Tributary 2 Area C 100 Year 6 Hour

1+55	0.5183	4.93	Q			
2+ 0	0.5532	5.08	QV			
2+ 5	0.5911	5.50	Q			
2+10	0.6290	5.50	Q			
2+15	0.6689	5.79	Q			
2+20	0.7112	6.14	Q			
2+25	0.7544	6.27	QV			
2+30	0.7981	6.35	QV			
2+35	0.8422	6.40	QV			
2+40	0.8865	6.44	QV			
2+45	0.9320	6.60	Q V			
2+50	0.9814	7.17	QV			
2+55	1.0338	7.60	QV			
3+ 0	1.0873	7.78	Q V			
3+ 5	1.1416	7.88	Q V			
3+10	1.1973	8.08	Q V			
3+15	1.2571	8.68	Q V			
3+20	1.3199	9.13	Q V			
3+25	1.3850	9.45	Q V			
3+30	1.4556	10.25	Q V			
3+35	1.5344	11.43	Q V			
3+40	1.6212	12.61	Q V			
3+45	1.7139	13.46	Q V			
3+50	1.8128	14.36	Q V			
3+55	1.9171	15.14	Q V			
4+ 0	2.0273	16.01	Q V			
4+ 5	2.1428	16.77	Q V			

EX Tributary 2 Area C 100 Year 6 Hour

```
    4+10       2.2652     17.76  |          Q V       |          |
|
    4+15       2.3965     19.07  |          Q  V      |          |
|
    4+20       2.5375     20.47  |          |Q  V     |          |
|
    4+25       2.6886     21.94  |          | Q  V    |          |
|
    4+30       2.8490     23.30  |          |  Q V    |          |
|
    4+35       3.0162     24.27  |          |  Q  V   |          |
|
    4+40       3.1911     25.39  |          |   Q  V  |          |
|
    4+45       3.3755     26.78  |          |    Q  V |          |
|
    4+50       3.5691     28.11  |          |     Q  V|          |
|
    4+55       3.7693     29.07  |          |     Q   |V         |
|
    5+ 0       3.9772     30.18  |          |      Q  | V        |
|
    5+ 5       4.1983     32.10  |          |       Q |  V       |
|
    5+10       4.4482     36.30  |          |         Q   V      |
|
    5+15       4.7370     41.93  |          |         |  Q  V    |
|
    5+20       5.0616     47.13  |          |         |     Q V  |
|
    5+25       5.4208     52.16  |          |         |        QV
|
    5+30       5.8256     58.77  |          |         |         | VQ
|
    5+35       6.2544     62.26  |          |         |         |   VQ
|
    5+40       6.5719     46.10  |          |         |     Q   |     V
|
    5+45       6.7606     27.40  |          |    Q    |         |      V
|
    5+50       6.8793     17.24  |        Q|          |         |       V
|
    5+55       6.9595     11.65  |     Q    |         |         |       V
|
    6+ 0       7.0167      8.29  |   Q      |         |         |
V|
    6+ 5       7.0583      6.04  |  Q       |         |         |
V|
    6+10       7.0889      4.44  | Q        |         |         |
V|
    6+15       7.1108      3.18  |Q         |         |         |
V|
    6+20       7.1262      2.24  |Q         |         |         |
V|
```

EX Tributary 2 Area C 100 Year 6 Hour

```
    6+25       7.1367      1.53  Q          |          |          |
V|
    6+30       7.1437      1.01  Q          |          |          |
V|
    6+35       7.1473      0.53  Q          |          |          |
V|
    6+40       7.1484      0.15  Q          |          |          |
V|
    6+45       7.1487      0.05  Q          |          |          |
V|
    6+50       7.1488      0.02  Q          |          |          |
V|
    6+55       7.1489      0.01  Q          |          |          |
V|
    7+ 0       7.1489      0.00  Q          |          |          |
V|
    7+ 5       7.1489      0.00  Q          |          |          |
V
--------------------------------------------------------------------------
```

```
       U n i t   H y d r o g r a p h   A n a l y s i s

       Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2008, Version 8.1
              Study date  03/11/25 File: TRIB2D3100.out

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------------------------------------------------------------------------------

Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978


Program License Serial Number 5006

------------------------------------------------------------------------
 English (in-lb) Input Units Used
 English Rainfall Data (Inches) Input Values Used

 English Units used in output format



------------------------------------------------------------------------
------------------------------------------------------------------------
Drainage Area =       4.59(Ac.)  =      0.007 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment =       4.59(Ac.)  =      0.007 Sq. Mi.
Length along longest watercourse =     466.00(Ft.)
Length along longest watercourse measured to centroid =     233.00(Ft.)
Length along longest watercourse =      0.088 Mi.
Length along longest watercourse measured to centroid =      0.044 Mi.
Difference in elevation =      21.00(Ft.)
Slope along watercourse =    237.9399 Ft./Mi.
Average Manning's 'N' = 0.040
Lag time =    0.041 Hr.
Lag time =     2.47 Min.
25% of lag time =     0.62 Min.
40% of lag time =     0.99 Min.
Unit time =     5.00 Min.
Duration of storm = 3 Hour(s)
User Entered Base Flow =     0.00(CFS)

2 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
        4.59           0.80                 3.67

100 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
        4.59           2.00                 9.18

STORM EVENT (YEAR) =  100.00
Area Averaged 2-Year Rainfall =    0.800(In)
Area Averaged 100-Year Rainfall =    2.000(In)

Point rain (area averaged) =    2.000(In)
Areal adjustment factor =  100.00 %
Adjusted average point rain =    2.000(In)

Sub-Area Data:
Area(Ac.)         Runoff Index   Impervious %
     4.590           86.00         0.000
 Total Area Entered =      4.59(Ac.)


RI    RI   Infil. Rate Impervious   Adj. Infil. Rate  Area%     F
AMC2 AMC-2     (In/Hr)    (Dec.%)     (In/Hr)      (Dec.)    (In/Hr)
```

EX Tributary 2 Area D 100 Year 3 Hour

```
      86.0  86.0      0.176     0.000        0.176       1.000      0.176
                                                        Sum (F) =   0.176
      Area averaged mean soil loss (F) (In/Hr) =  0.176
      Minimum soil loss rate ((In/Hr)) =  0.088
      (for 24 hour storm duration)
      Soil low loss rate (decimal) =   0.900
      ------------------------------------------------------------------------

                  U n i t  H y d r o g r a p h
                         VALLEY S-Curve
      ------------------------------------------------------------------------
                  Unit Hydrograph Data
      ------------------------------------------------------------------------
      Unit time period   Time % of lag   Distribution   Unit Hydrograph
          (hrs)                          Graph %           (CFS)
      ------------------------------------------------------------------------
          1   0.083        202.160         43.772             2.025
          2   0.167        404.321         43.217             1.999
          3   0.250        606.481          8.706             0.403
          4   0.333        808.642          4.305             0.199
                                    Sum = 100.000   Sum=       4.626
------------------------------------------------------------------------

 The following loss rate calculations reflect use of the minimum calculated loss
 rate subtracted from the Storm Rain to produce the maximum Effective Rain value

  Unit Time   Pattern   Storm Rain     Loss rate(In./Hr)      Effective
       (Hr.)  Percent   (In/Hr)         Max   |   Low          (In/Hr)
   1   0.08     1.30      0.312          0.176    (  0.281)        0.136
   2   0.17     1.30      0.312          0.176    (  0.281)        0.136
   3   0.25     1.10      0.264          0.176    (  0.238)        0.088
   4   0.33     1.50      0.360          0.176    (  0.324)        0.184
   5   0.42     1.50      0.360          0.176    (  0.324)        0.184
   6   0.50     1.80      0.432          0.176    (  0.389)        0.256
   7   0.58     1.50      0.360          0.176    (  0.324)        0.184
   8   0.67     1.80      0.432          0.176    (  0.389)        0.256
   9   0.75     1.80      0.432          0.176    (  0.389)        0.256
  10   0.83     1.50      0.360          0.176    (  0.324)        0.184
  11   0.92     1.60      0.384          0.176    (  0.346)        0.208
  12   1.00     1.80      0.432          0.176    (  0.389)        0.256
  13   1.08     2.20      0.528          0.176    (  0.475)        0.352
  14   1.17     2.20      0.528          0.176    (  0.475)        0.352
  15   1.25     2.20      0.528          0.176    (  0.475)        0.352
  16   1.33     2.00      0.480          0.176    (  0.432)        0.304
  17   1.42     2.60      0.624          0.176    (  0.562)        0.448
  18   1.50     2.70      0.648          0.176    (  0.583)        0.472
  19   1.58     2.40      0.576          0.176    (  0.518)        0.400
  20   1.67     2.70      0.648          0.176    (  0.583)        0.472
  21   1.75     3.30      0.792          0.176    (  0.713)        0.616
  22   1.83     3.10      0.744          0.176    (  0.670)        0.568
  23   1.92     2.90      0.696          0.176    (  0.626)        0.520
  24   2.00     3.00      0.720          0.176    (  0.648)        0.544
  25   2.08     3.10      0.744          0.176    (  0.670)        0.568
  26   2.17     4.20      1.008          0.176    (  0.907)        0.832
  27   2.25     5.00      1.200          0.176    (  1.080)        1.024
  28   2.33     3.50      0.840          0.176    (  0.756)        0.664
  29   2.42     6.80      1.632          0.176    (  1.469)        1.456
  30   2.50     7.30      1.752          0.176    (  1.577)        1.576
  31   2.58     8.20      1.968          0.176    (  1.771)        1.792
  32   2.67     5.90      1.416          0.176    (  1.274)        1.240
  33   2.75     2.00      0.480          0.176    (  0.432)        0.304
  34   2.83     1.80      0.432          0.176    (  0.389)        0.256
  35   2.92     1.80      0.432          0.176    (  0.389)        0.256
  36   3.00     0.60      0.144       (  0.176)       0.130        0.014
                (Loss Rate Not Used)
     Sum =     100.0                                   Sum =    17.7
       Flood volume = Effective rainfall      1.48(In)
        times area       4.6(Ac.)/[(In)/(Ft.)] =       0.6(Ac.Ft)
       Total soil loss =      0.52(In)
       Total soil loss =     0.200(Ac.Ft)
```

EX Tributary 2 Area D 100 Year 3 Hour

```
      Total rainfall =      2.00(In)
      Flood volume =       24609.2 Cubic Feet
      Total soil loss =        8713.5 Cubic Feet
      ---------------------------------------------------------------------
       Peak flow rate of this hydrograph =      7.503(CFS)
      ---------------------------------------------------------------------
      +++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                         3 - H O U R    S T O R M
                    R u n o f f     H y d r o g r a p h
      ---------------------------------------------------------------------
                  Hydrograph in   5   Minute intervals ((CFS))

      ---------------------------------------------------------------------
 Time(h+m) Volume Ac.Ft   Q(CFS)  0        2.5       5.0       7.5      10.0
 ---------------------------------------------------------------------------
   0+ 5       0.0019      0.28  VQ        |         |         |         |
   0+10       0.0057      0.55  V Q       |         |         |         |
   0+15       0.0092      0.51  V Q       |         |         |         |
   0+20       0.0135      0.63  V Q       |         |         |         |
   0+25       0.0191      0.81  |V Q      |         |         |         |
   0+30       0.0258      0.98  |V Q      |         |         |         |
   0+35       0.0327      1.00  | VQ      |         |         |         |
   0+40       0.0398      1.03  | V Q     |         |         |         |
   0+45       0.0478      1.16  |  VQ     |         |         |         |
   0+50       0.0548      1.03  |  VQ     |         |         |         |
   0+55       0.0613      0.95  |  QV     |         |         |         |
   1+ 0       0.0686      1.06  |   Q     |         |         |         |
   1+ 5       0.0779      1.35  |    Q    |         |         |         |
   1+10       0.0887      1.56  |     Q   |         |         |         |
   1+15       0.0998      1.61  |     QV  |         |         |         |
   1+20       0.1104      1.53  |     QV  |         |         |         |
   1+25       0.1223      1.73  |     Q V |         |         |         |
   1+30       0.1364      2.05  |       QV|         |         |         |
   1+35       0.1501      2.00  |      Q  V         |         |         |
   1+40       0.1641      2.04  |       Q |V        |         |         |
   1+45       0.1810      2.45  |        Q| V       |         |         |
   1+50       0.1993      2.65  |         Q   V     |         |         |
   1+55       0.2167      2.53  |         Q    V    |         |         |
   2+ 0       0.2339      2.50  |        Q|     V   |         |         |
   2+ 5       0.2516      2.56  |         Q      V  |         |         |
   2+10       0.2733      3.15  |         | Q      V|         |         |
   2+15       0.3013      4.08  |         |     Q   |V        |         |
   2+20       0.3278      3.84  |         |    Q    |  V      |         |
   2+25       0.3613      4.86  |         |        Q|    V    |         |
   2+30       0.4066      6.58  |         |         |     Q V |         |
   2+35       0.4582      7.50  |         |         |         Q V       |
   2+40       0.5066      7.02  |         |         |       Q |    V    |
   2+45       0.5351      4.13  |         |     Q   |         |      V  |
   2+50       0.5488      1.99  |      Q  |         |         |       V |
   2+55       0.5584      1.40  |    Q    |         |         |        V|
   3+ 0       0.5633      0.71  | Q       |         |         |        V|
   3+ 5       0.5645      0.18  Q         |         |         |        V|
   3+10       0.5649      0.06  Q         |         |         |        V|
   3+15       0.5649      0.00  Q         |         |         |        V|
---------------------------------------------------------------------------
```

EX Tributary 2 Area D 100 Year 3 Hour

```
       U n i t   H y d r o g r a p h   A n a l y s i s

       Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2008, Version 8.1
              Study date  03/11/25 File: TRIB2D6100.out

++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
------------------------------------------------------------------------------

Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978


Program License Serial Number 5006

------------------------------------------------------------------------
 English (in-lb) Input Units Used
 English Rainfall Data (Inches) Input Values Used

 English Units used in output format



------------------------------------------------------------------------
------------------------------------------------------------------------
Drainage Area =       4.59(Ac.)  =      0.007 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment =       4.59(Ac.)  =      0.007 Sq. Mi.
Length along longest watercourse =     466.00(Ft.)
Length along longest watercourse measured to centroid =     233.00(Ft.)
Length along longest watercourse =      0.088 Mi.
Length along longest watercourse measured to centroid =      0.044 Mi.
Difference in elevation =      21.00(Ft.)
Slope along watercourse =    237.9399 Ft./Mi.
Average Manning's 'N' = 0.040
Lag time =    0.041 Hr.
Lag time =     2.47 Min.
25% of lag time =     0.62 Min.
40% of lag time =     0.99 Min.
Unit time =     5.00 Min.
Duration of storm = 6 Hour(s)
User Entered Base Flow =     0.00(CFS)

2 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
        4.59           1.10                 5.05

100 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
        4.59           3.00                13.77

STORM EVENT (YEAR) =  100.00
Area Averaged 2-Year Rainfall =    1.100(In)
Area Averaged 100-Year Rainfall =    3.000(In)

Point rain (area averaged) =    3.000(In)
Areal adjustment factor =  100.00 %
Adjusted average point rain =    3.000(In)

Sub-Area Data:
Area(Ac.)         Runoff Index   Impervious %
     4.590           86.00         0.000
 Total Area Entered =      4.59(Ac.)


RI    RI   Infil. Rate Impervious   Adj. Infil. Rate  Area%     F
AMC2 AMC-2     (In/Hr)    (Dec.%)     (In/Hr)      (Dec.)    (In/Hr)
```

EX Tributary 2 Area D 100 Year 6 Hour

```
      86.0  86.0      0.176     0.000        0.176       1.000      0.176
                                                        Sum (F) =   0.176
      Area averaged mean soil loss (F) (In/Hr) =  0.176
      Minimum soil loss rate ((In/Hr)) =  0.088
      (for 24 hour storm duration)
      Soil low loss rate (decimal) =   0.900
      ------------------------------------------------------------------------

                  U n i t  H y d r o g r a p h
                         VALLEY S-Curve
      ------------------------------------------------------------------------
                  Unit Hydrograph Data
      ------------------------------------------------------------------------
      Unit time period   Time % of lag   Distribution   Unit Hydrograph
          (hrs)                          Graph %           (CFS)
      ------------------------------------------------------------------------
          1   0.083        202.160         43.772             2.025
          2   0.167        404.321         43.217             1.999
          3   0.250        606.481          8.706             0.403
          4   0.333        808.642          4.305             0.199
                                    Sum = 100.000   Sum=       4.626
------------------------------------------------------------------------
```

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

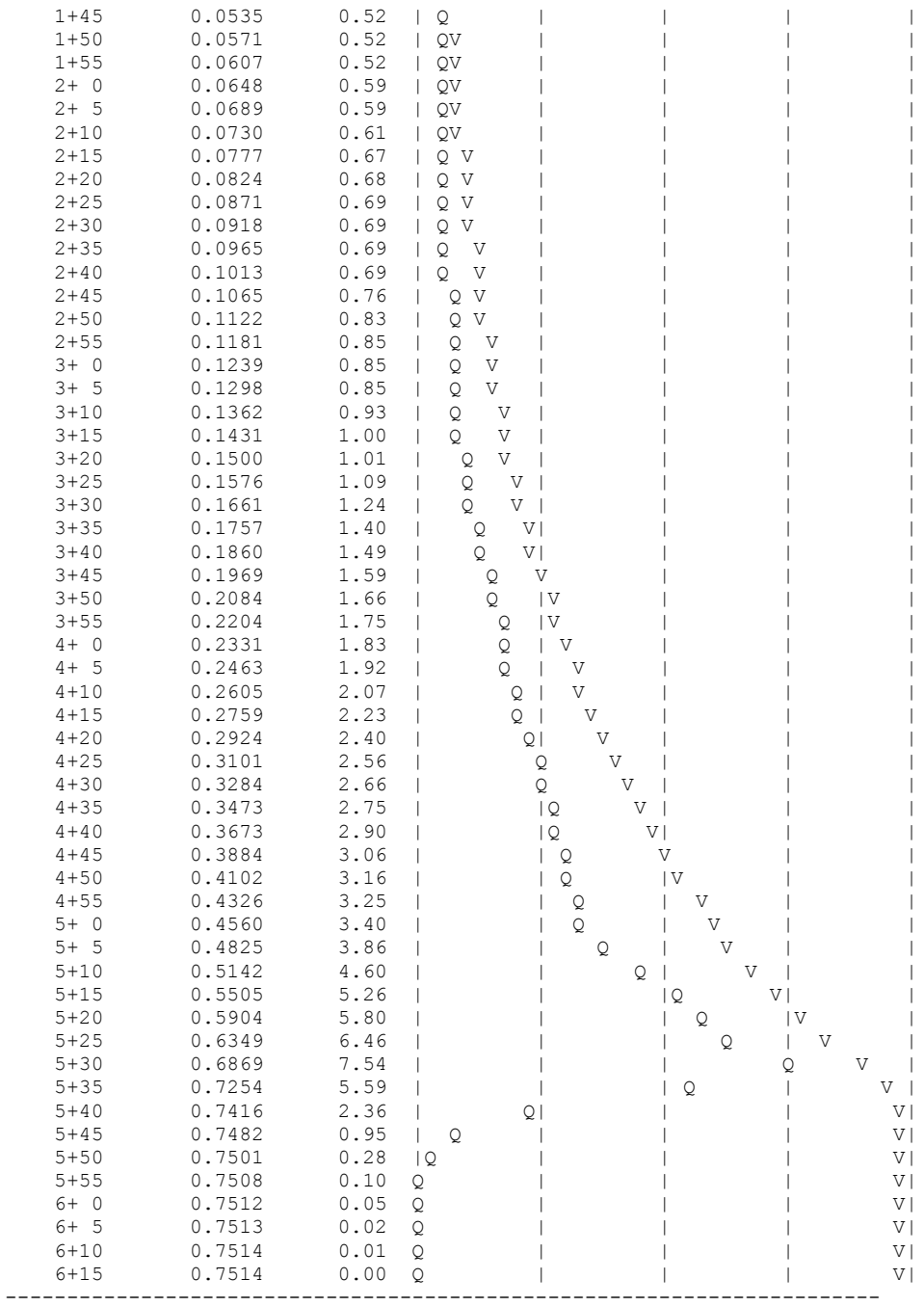
Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr) Max	Low	Effective (In/Hr)
1	0.08	0.50	0.180	(0.176)	0.162	0.018
2	0.17	0.60	0.216	0.176	(0.194)	0.040
3	0.25	0.60	0.216	0.176	(0.194)	0.040
4	0.33	0.60	0.216	0.176	(0.194)	0.040
5	0.42	0.60	0.216	0.176	(0.194)	0.040
6	0.50	0.70	0.252	0.176	(0.227)	0.076
7	0.58	0.70	0.252	0.176	(0.227)	0.076
8	0.67	0.70	0.252	0.176	(0.227)	0.076
9	0.75	0.70	0.252	0.176	(0.227)	0.076
10	0.83	0.70	0.252	0.176	(0.227)	0.076
11	0.92	0.70	0.252	0.176	(0.227)	0.076
12	1.00	0.80	0.288	0.176	(0.259)	0.112
13	1.08	0.80	0.288	0.176	(0.259)	0.112
14	1.17	0.80	0.288	0.176	(0.259)	0.112
15	1.25	0.80	0.288	0.176	(0.259)	0.112
16	1.33	0.80	0.288	0.176	(0.259)	0.112
17	1.42	0.80	0.288	0.176	(0.259)	0.112
18	1.50	0.80	0.288	0.176	(0.259)	0.112
19	1.58	0.80	0.288	0.176	(0.259)	0.112
20	1.67	0.80	0.288	0.176	(0.259)	0.112
21	1.75	0.80	0.288	0.176	(0.259)	0.112
22	1.83	0.80	0.288	0.176	(0.259)	0.112
23	1.92	0.80	0.288	0.176	(0.259)	0.112
24	2.00	0.90	0.324	0.176	(0.292)	0.148
25	2.08	0.80	0.288	0.176	(0.259)	0.112
26	2.17	0.90	0.324	0.176	(0.292)	0.148
27	2.25	0.90	0.324	0.176	(0.292)	0.148
28	2.33	0.90	0.324	0.176	(0.292)	0.148
29	2.42	0.90	0.324	0.176	(0.292)	0.148
30	2.50	0.90	0.324	0.176	(0.292)	0.148
31	2.58	0.90	0.324	0.176	(0.292)	0.148
32	2.67	0.90	0.324	0.176	(0.292)	0.148
33	2.75	1.00	0.360	0.176	(0.324)	0.184
34	2.83	1.00	0.360	0.176	(0.324)	0.184
35	2.92	1.00	0.360	0.176	(0.324)	0.184
36	3.00	1.00	0.360	0.176	(0.324)	0.184
37	3.08	1.00	0.360	0.176	(0.324)	0.184
38	3.17	1.10	0.396	0.176	(0.356)	0.220
39	3.25	1.10	0.396	0.176	(0.356)	0.220
40	3.33	1.10	0.396	0.176	(0.356)	0.220
41	3.42	1.20	0.432	0.176	(0.389)	0.256
42	3.50	1.30	0.468	0.176	(0.421)	0.292

EX Tributary 2 Area D 100 Year 6 Hour

```
43   3.58     1.40      0.504          0.176    (  0.454)        0.328
44   3.67     1.40      0.504          0.176    (  0.454)        0.328
45   3.75     1.50      0.540          0.176    (  0.486)        0.364
46   3.83     1.50      0.540          0.176    (  0.486)        0.364
47   3.92     1.60      0.576          0.176    (  0.518)        0.400
48   4.00     1.60      0.576          0.176    (  0.518)        0.400
49   4.08     1.70      0.612          0.176    (  0.551)        0.436
50   4.17     1.80      0.648          0.176    (  0.583)        0.472
51   4.25     1.90      0.684          0.176    (  0.616)        0.508
52   4.33     2.00      0.720          0.176    (  0.648)        0.544
53   4.42     2.10      0.756          0.176    (  0.680)        0.580
54   4.50     2.10      0.756          0.176    (  0.680)        0.580
55   4.58     2.20      0.792          0.176    (  0.713)        0.616
56   4.67     2.30      0.828          0.176    (  0.745)        0.652
57   4.75     2.40      0.864          0.176    (  0.778)        0.688
58   4.83     2.40      0.864          0.176    (  0.778)        0.688
59   4.92     2.50      0.900          0.176    (  0.810)        0.724
60   5.00     2.60      0.936          0.176    (  0.842)        0.760
61   5.08     3.10      1.116          0.176    (  1.004)        0.940
62   5.17     3.60      1.296          0.176    (  1.166)        1.120
63   5.25     3.90      1.404          0.176    (  1.264)        1.228
64   5.33     4.20      1.512          0.176    (  1.361)        1.336
65   5.42     4.70      1.692          0.176    (  1.523)        1.516
66   5.50     5.60      2.016          0.176    (  1.814)        1.840
67   5.58     1.90      0.684          0.176    (  0.616)        0.508
68   5.67     0.90      0.324          0.176    (  0.292)        0.148
69   5.75     0.60      0.216          0.176    (  0.194)        0.040
70   5.83     0.50      0.180       (  0.176)       0.162        0.018
71   5.92     0.30      0.108       (  0.176)       0.097        0.011
72   6.00     0.20      0.072       (  0.176)       0.065        0.007
              (Loss Rate Not Used)
   Sum =     100.0                                    Sum =    23.6
      Flood volume = Effective rainfall      1.96(In)
       times area       4.6(Ac.)/[(In)/(Ft.)] =       0.8(Ac.Ft)
      Total soil loss =      1.04(In)
      Total soil loss =     0.396(Ac.Ft)
      Total rainfall =      3.00(In)
      Flood volume =       32730.0 Cubic Feet
      Total soil loss =       17254.3 Cubic Feet
      ---------------------------------------------------------------------
       Peak flow rate of this hydrograph =      7.545(CFS)
      ---------------------------------------------------------------------
      +++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                          6 - H O U R    S T O R M
                     R u n o f f     H y d r o g r a p h
      ---------------------------------------------------------------------
                  Hydrograph in   5   Minute intervals ((CFS))

      ---------------------------------------------------------------------
Time(h+m) Volume Ac.Ft   Q(CFS)  0        2.5       5.0       7.5      10.0
---------------------------------------------------------------------------
  0+ 5       0.0003      0.04  Q         |         |         |         |
  0+10       0.0011      0.12  Q         |         |         |         |
  0+15       0.0022      0.17  Q         |         |         |         |
  0+20       0.0035      0.18  Q         |         |         |         |
  0+25       0.0048      0.19  Q         |         |         |         |
  0+30       0.0066      0.26  VQ        |         |         |         |
  0+35       0.0089      0.33  VQ        |         |         |         |
  0+40       0.0112      0.35  VQ        |         |         |         |
  0+45       0.0137      0.35  VQ        |         |         |         |
  0+50       0.0161      0.35  VQ        |         |         |         |
  0+55       0.0185      0.35  VQ        |         |         |         |
  1+ 0       0.0215      0.43  |Q        |         |         |         |
  1+ 5       0.0249      0.50  |Q        |         |         |         |
  1+10       0.0284      0.51  |VQ       |         |         |         |
  1+15       0.0320      0.52  |VQ       |         |         |         |
  1+20       0.0356      0.52  |VQ       |         |         |         |
  1+25       0.0392      0.52  | Q       |         |         |         |
  1+30       0.0428      0.52  | Q       |         |         |         |
  1+35       0.0464      0.52  | Q       |         |         |         |
  1+40       0.0499      0.52  | Q       |         |         |         |
```

EX Tributary 2 Area D 100 Year 6 Hour



EX Tributary 2 Area D 100 Year 6 Hour

```
       U n i t   H y d r o g r a p h   A n a l y s i s

       Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2008, Version 8.1
              Study date  03/11/25 File: TRIB3A3100.out

++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
------------------------------------------------------------------------------

Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978


Program License Serial Number 5006

------------------------------------------------------------------------
 English (in-lb) Input Units Used
 English Rainfall Data (Inches) Input Values Used

 English Units used in output format



------------------------------------------------------------------------
------------------------------------------------------------------------
Drainage Area =       5.20(Ac.)  =      0.008 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment =       5.20(Ac.)  =      0.008 Sq. Mi.
Length along longest watercourse =     377.00(Ft.)
Length along longest watercourse measured to centroid =     189.00(Ft.)
Length along longest watercourse =      0.071 Mi.
Length along longest watercourse measured to centroid =      0.036 Mi.
Difference in elevation =      13.00(Ft.)
Slope along watercourse =    182.0690 Ft./Mi.
Average Manning's 'N' = 0.040
Lag time =    0.037 Hr.
Lag time =     2.22 Min.
25% of lag time =     0.55 Min.
40% of lag time =     0.89 Min.
Unit time =     5.00 Min.
Duration of storm = 3 Hour(s)
User Entered Base Flow =     0.00(CFS)

2 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
        5.20           0.80                 4.16

100 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
        5.20           2.00                10.40

STORM EVENT (YEAR) =  100.00
Area Averaged 2-Year Rainfall =    0.800(In)
Area Averaged 100-Year Rainfall =    2.000(In)

Point rain (area averaged) =    2.000(In)
Areal adjustment factor =  100.00 %
Adjusted average point rain =    2.000(In)

Sub-Area Data:
Area(Ac.)         Runoff Index   Impervious %
     5.200           86.00         0.000
 Total Area Entered =      5.20(Ac.)


RI    RI   Infil. Rate Impervious   Adj. Infil. Rate  Area%     F
AMC2 AMC-2     (In/Hr)    (Dec.%)     (In/Hr)      (Dec.)    (In/Hr)
```

EX Tributary 3 Area A 100 Year 3 Hour

```
      86.0  86.0      0.176     0.000        0.176       1.000      0.176
                                                        Sum (F) =   0.176
      Area averaged mean soil loss (F) (In/Hr) =  0.176
      Minimum soil loss rate ((In/Hr)) =  0.088
      (for 24 hour storm duration)
      Soil low loss rate (decimal) =   0.900
      ------------------------------------------------------------------------

                  U n i t  H y d r o g r a p h
                         VALLEY S-Curve
      ------------------------------------------------------------------------
                  Unit Hydrograph Data
      ------------------------------------------------------------------------
      Unit time period   Time % of lag   Distribution   Unit Hydrograph
          (hrs)                          Graph %           (CFS)
      ------------------------------------------------------------------------
          1   0.083        225.491         47.485             2.489
          2   0.167        450.982         41.627             2.182
          3   0.250        676.473          7.847             0.411
          4   0.333        901.963          3.041             0.159
                                   Sum = 100.000   Sum=       5.241
------------------------------------------------------------------------

 The following loss rate calculations reflect use of the minimum calculated loss
 rate subtracted from the Storm Rain to produce the maximum Effective Rain value

  Unit Time   Pattern   Storm Rain     Loss rate(In./Hr)      Effective
       (Hr.)  Percent   (In/Hr)         Max   |   Low          (In/Hr)
   1   0.08     1.30      0.312          0.176    (  0.281)        0.136
   2   0.17     1.30      0.312          0.176    (  0.281)        0.136
   3   0.25     1.10      0.264          0.176    (  0.238)        0.088
   4   0.33     1.50      0.360          0.176    (  0.324)        0.184
   5   0.42     1.50      0.360          0.176    (  0.324)        0.184
   6   0.50     1.80      0.432          0.176    (  0.389)        0.256
   7   0.58     1.50      0.360          0.176    (  0.324)        0.184
   8   0.67     1.80      0.432          0.176    (  0.389)        0.256
   9   0.75     1.80      0.432          0.176    (  0.389)        0.256
  10   0.83     1.50      0.360          0.176    (  0.324)        0.184
  11   0.92     1.60      0.384          0.176    (  0.346)        0.208
  12   1.00     1.80      0.432          0.176    (  0.389)        0.256
  13   1.08     2.20      0.528          0.176    (  0.475)        0.352
  14   1.17     2.20      0.528          0.176    (  0.475)        0.352
  15   1.25     2.20      0.528          0.176    (  0.475)        0.352
  16   1.33     2.00      0.480          0.176    (  0.432)        0.304
  17   1.42     2.60      0.624          0.176    (  0.562)        0.448
  18   1.50     2.70      0.648          0.176    (  0.583)        0.472
  19   1.58     2.40      0.576          0.176    (  0.518)        0.400
  20   1.67     2.70      0.648          0.176    (  0.583)        0.472
  21   1.75     3.30      0.792          0.176    (  0.713)        0.616
  22   1.83     3.10      0.744          0.176    (  0.670)        0.568
  23   1.92     2.90      0.696          0.176    (  0.626)        0.520
  24   2.00     3.00      0.720          0.176    (  0.648)        0.544
  25   2.08     3.10      0.744          0.176    (  0.670)        0.568
  26   2.17     4.20      1.008          0.176    (  0.907)        0.832
  27   2.25     5.00      1.200          0.176    (  1.080)        1.024
  28   2.33     3.50      0.840          0.176    (  0.756)        0.664
  29   2.42     6.80      1.632          0.176    (  1.469)        1.456
  30   2.50     7.30      1.752          0.176    (  1.577)        1.576
  31   2.58     8.20      1.968          0.176    (  1.771)        1.792
  32   2.67     5.90      1.416          0.176    (  1.274)        1.240
  33   2.75     2.00      0.480          0.176    (  0.432)        0.304
  34   2.83     1.80      0.432          0.176    (  0.389)        0.256
  35   2.92     1.80      0.432          0.176    (  0.389)        0.256
  36   3.00     0.60      0.144       (  0.176)       0.130        0.014
                (Loss Rate Not Used)
     Sum =     100.0                                  Sum =    17.7
       Flood volume = Effective rainfall      1.48(In)
        times area       5.2(Ac.)/[(In)/(Ft.)] =       0.6(Ac.Ft)
       Total soil loss =      0.52(In)
       Total soil loss =     0.227(Ac.Ft)
```

EX Tributary 3 Area A 100 Year 3 Hour

```
      Total rainfall =      2.00(In)
      Flood volume =       27879.6 Cubic Feet
      Total soil loss =        9871.5 Cubic Feet
      ---------------------------------------------------------------------
       Peak flow rate of this hydrograph =      8.608(CFS)
      ---------------------------------------------------------------------
      +++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                         3 - H O U R    S T O R M
                    R u n o f f     H y d r o g r a p h
      ---------------------------------------------------------------------
                  Hydrograph in   5   Minute intervals ((CFS))

      ---------------------------------------------------------------------
 Time(h+m) Volume Ac.Ft   Q(CFS)  0        2.5       5.0       7.5      10.0
 ---------------------------------------------------------------------------
   0+ 5       0.0023      0.34  VQ        |         |         |         |
   0+10       0.0067      0.64  V Q       |         |         |         |
   0+15       0.0107      0.57  V Q       |         |         |         |
   0+20       0.0157      0.73  V Q       |         |         |         |
   0+25       0.0220      0.92  |V Q      |         |         |         |
   0+30       0.0298      1.13  |V  Q     |         |         |         |
   0+35       0.0376      1.12  | V Q     |         |         |         |
   0+40       0.0457      1.18  | V Q     |         |         |         |
   0+45       0.0547      1.31  |  V Q    |         |         |         |
   0+50       0.0627      1.15  |  VQ     |         |         |         |
   0+55       0.0700      1.07  |   Q     |         |         |         |
   1+ 0       0.0784      1.21  |   Q     |         |         |         |
   1+ 5       0.0890      1.55  |    VQ   |         |         |         |
   1+10       0.1013      1.79  |     VQ  |         |         |         |
   1+15       0.1140      1.83  |      Q  |         |         |         |
   1+20       0.1259      1.73  |     QV  |         |         |         |
   1+25       0.1395      1.98  |      QV |         |         |         |
   1+30       0.1556      2.34  |        Q|         |         |         |
   1+35       0.1712      2.26  |        QV         |         |         |
   1+40       0.1871      2.32  |        Q|V        |         |         |
   1+45       0.2064      2.81  |         |QV       |         |         |
   1+50       0.2272      3.02  |         | Q V     |         |         |
   1+55       0.2470      2.87  |         |Q   V    |         |         |
   2+ 0       0.2664      2.82  |         |Q    V   |         |         |
   2+ 5       0.2864      2.91  |         |Q     V  |         |         |
   2+10       0.3114      3.62  |         |   Q    V|         |         |
   2+15       0.3437      4.69  |         |       Q |V        |         |
   2+20       0.3734      4.32  |         |      Q  |  V      |         |
   2+25       0.4122      5.63  |         |         | Q  V    |         |
   2+30       0.4641      7.54  |         |         |       VQ         |
   2+35       0.5234      8.61  |         |         |         | V Q     |
   2+40       0.5777      7.88  |         |         |         |Q    V   |
   2+45       0.6084      4.45  |         |      Q  |         |       V |
   2+50       0.6228      2.10  |       Q |         |         |       V |
   2+55       0.6333      1.52  |     Q   |         |         |        V|
   3+ 0       0.6385      0.75  | Q       |         |         |        V|
   3+ 5       0.6397      0.18  Q         |         |         |        V|
   3+10       0.6400      0.05  Q         |         |         |        V|
   3+15       0.6400      0.00  Q         |         |         |        V|
---------------------------------------------------------------------------
```

EX Tributary 3 Area A 100 Year 3 Hour

```
       U n i t   H y d r o g r a p h   A n a l y s i s

       Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2008, Version 8.1
              Study date  03/11/25 File: TRIB3A6100.out

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------------------------------------------------------------------------------

Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978


Program License Serial Number 5006

------------------------------------------------------------------------
 English (in-lb) Input Units Used
 English Rainfall Data (Inches) Input Values Used

 English Units used in output format



------------------------------------------------------------------------
------------------------------------------------------------------------
Drainage Area =       5.20(Ac.)  =      0.008 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment =       5.20(Ac.)  =      0.008 Sq. Mi.
Length along longest watercourse =     377.00(Ft.)
Length along longest watercourse measured to centroid =     189.00(Ft.)
Length along longest watercourse =      0.071 Mi.
Length along longest watercourse measured to centroid =      0.036 Mi.
Difference in elevation =      13.00(Ft.)
Slope along watercourse =    182.0690 Ft./Mi.
Average Manning's 'N' = 0.040
Lag time =    0.037 Hr.
Lag time =     2.22 Min.
25% of lag time =     0.55 Min.
40% of lag time =     0.89 Min.
Unit time =     5.00 Min.
Duration of storm = 6 Hour(s)
User Entered Base Flow =     0.00(CFS)

2 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
        5.20           1.10                 5.72

100 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
        5.20           3.00                15.60

STORM EVENT (YEAR) =  100.00
Area Averaged 2-Year Rainfall =    1.100(In)
Area Averaged 100-Year Rainfall =    3.000(In)

Point rain (area averaged) =    3.000(In)
Areal adjustment factor =  100.00 %
Adjusted average point rain =    3.000(In)

Sub-Area Data:
Area(Ac.)         Runoff Index   Impervious %
     5.200           86.00         0.000
 Total Area Entered =      5.20(Ac.)


RI    RI   Infil. Rate Impervious   Adj. Infil. Rate  Area%     F
AMC2 AMC-2     (In/Hr)    (Dec.%)     (In/Hr)      (Dec.)    (In/Hr)
```

EX Tributary 3 Area A 100 Year 6 Hour

```
      86.0  86.0      0.176     0.000        0.176       1.000      0.176
                                                        Sum (F) =   0.176
      Area averaged mean soil loss (F) (In/Hr) =  0.176
      Minimum soil loss rate ((In/Hr)) =  0.088
      (for 24 hour storm duration)
      Soil low loss rate (decimal) =   0.900
      ------------------------------------------------------------------------

                  U n i t  H y d r o g r a p h
                         VALLEY S-Curve
      ------------------------------------------------------------------------
                  Unit Hydrograph Data
      ------------------------------------------------------------------------
      Unit time period   Time % of lag   Distribution   Unit Hydrograph
          (hrs)                          Graph %           (CFS)
      ------------------------------------------------------------------------
          1   0.083        225.491         47.485             2.489
          2   0.167        450.982         41.627             2.182
          3   0.250        676.473          7.847             0.411
          4   0.333        901.963          3.041             0.159
                                    Sum = 100.000   Sum=       5.241
------------------------------------------------------------------------
```

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr) Max	Low	Effective (In/Hr)
1	0.08	0.50	0.180	(0.176)	0.162	0.018
2	0.17	0.60	0.216	0.176	(0.194)	0.040
3	0.25	0.60	0.216	0.176	(0.194)	0.040
4	0.33	0.60	0.216	0.176	(0.194)	0.040
5	0.42	0.60	0.216	0.176	(0.194)	0.040
6	0.50	0.70	0.252	0.176	(0.227)	0.076
7	0.58	0.70	0.252	0.176	(0.227)	0.076
8	0.67	0.70	0.252	0.176	(0.227)	0.076
9	0.75	0.70	0.252	0.176	(0.227)	0.076
10	0.83	0.70	0.252	0.176	(0.227)	0.076
11	0.92	0.70	0.252	0.176	(0.227)	0.076
12	1.00	0.80	0.288	0.176	(0.259)	0.112
13	1.08	0.80	0.288	0.176	(0.259)	0.112
14	1.17	0.80	0.288	0.176	(0.259)	0.112
15	1.25	0.80	0.288	0.176	(0.259)	0.112
16	1.33	0.80	0.288	0.176	(0.259)	0.112
17	1.42	0.80	0.288	0.176	(0.259)	0.112
18	1.50	0.80	0.288	0.176	(0.259)	0.112
19	1.58	0.80	0.288	0.176	(0.259)	0.112
20	1.67	0.80	0.288	0.176	(0.259)	0.112
21	1.75	0.80	0.288	0.176	(0.259)	0.112
22	1.83	0.80	0.288	0.176	(0.259)	0.112
23	1.92	0.80	0.288	0.176	(0.259)	0.112
24	2.00	0.90	0.324	0.176	(0.292)	0.148
25	2.08	0.80	0.288	0.176	(0.259)	0.112
26	2.17	0.90	0.324	0.176	(0.292)	0.148
27	2.25	0.90	0.324	0.176	(0.292)	0.148
28	2.33	0.90	0.324	0.176	(0.292)	0.148
29	2.42	0.90	0.324	0.176	(0.292)	0.148
30	2.50	0.90	0.324	0.176	(0.292)	0.148
31	2.58	0.90	0.324	0.176	(0.292)	0.148
32	2.67	0.90	0.324	0.176	(0.292)	0.148
33	2.75	1.00	0.360	0.176	(0.324)	0.184
34	2.83	1.00	0.360	0.176	(0.324)	0.184
35	2.92	1.00	0.360	0.176	(0.324)	0.184
36	3.00	1.00	0.360	0.176	(0.324)	0.184
37	3.08	1.00	0.360	0.176	(0.324)	0.184
38	3.17	1.10	0.396	0.176	(0.356)	0.220
39	3.25	1.10	0.396	0.176	(0.356)	0.220
40	3.33	1.10	0.396	0.176	(0.356)	0.220
41	3.42	1.20	0.432	0.176	(0.389)	0.256
42	3.50	1.30	0.468	0.176	(0.421)	0.292

EX Tributary 3 Area A 100 Year 6 Hour

43	3.58	1.40	0.504	0.176	(0.454)	0.328	
44	3.67	1.40	0.504	0.176	(0.454)	0.328	
45	3.75	1.50	0.540	0.176	(0.486)	0.364	
46	3.83	1.50	0.540	0.176	(0.486)	0.364	
47	3.92	1.60	0.576	0.176	(0.518)	0.400	
48	4.00	1.60	0.576	0.176	(0.518)	0.400	
49	4.08	1.70	0.612	0.176	(0.551)	0.436	
50	4.17	1.80	0.648	0.176	(0.583)	0.472	
51	4.25	1.90	0.684	0.176	(0.616)	0.508	
52	4.33	2.00	0.720	0.176	(0.648)	0.544	
53	4.42	2.10	0.756	0.176	(0.680)	0.580	
54	4.50	2.10	0.756	0.176	(0.680)	0.580	
55	4.58	2.20	0.792	0.176	(0.713)	0.616	
56	4.67	2.30	0.828	0.176	(0.745)	0.652	
57	4.75	2.40	0.864	0.176	(0.778)	0.688	
58	4.83	2.40	0.864	0.176	(0.778)	0.688	
59	4.92	2.50	0.900	0.176	(0.810)	0.724	
60	5.00	2.60	0.936	0.176	(0.842)	0.760	
61	5.08	3.10	1.116	0.176	(1.004)	0.940	
62	5.17	3.60	1.296	0.176	(1.166)	1.120	
63	5.25	3.90	1.404	0.176	(1.264)	1.228	
64	5.33	4.20	1.512	0.176	(1.361)	1.336	
65	5.42	4.70	1.692	0.176	(1.523)	1.516	
66	5.50	5.60	2.016	0.176	(1.814)	1.840	
67	5.58	1.90	0.684	0.176	(0.616)	0.508	
68	5.67	0.90	0.324	0.176	(0.292)	0.148	
69	5.75	0.60	0.216	0.176	(0.194)	0.040	
70	5.83	0.50	0.180	(0.176)	0.162	0.018	
71	5.92	0.30	0.108	(0.176)	0.097	0.011	
72	6.00	0.20	0.072	(0.176)	0.065	0.007	

(Loss Rate Not Used)

Sum = 100.0 Sum = 23.6

Flood volume = Effective rainfall 1.96(In)
times area 5.2(Ac.)/[(In)/(Ft.)] = 0.9(Ac.Ft)
Total soil loss = 1.04(In)
Total soil loss = 0.449(Ac.Ft)
Total rainfall = 3.00(In)
Flood volume = 37079.6 Cubic Feet
Total soil loss = 19547.3 Cubic Feet

Peak flow rate of this hydrograph = 8.638(CFS)

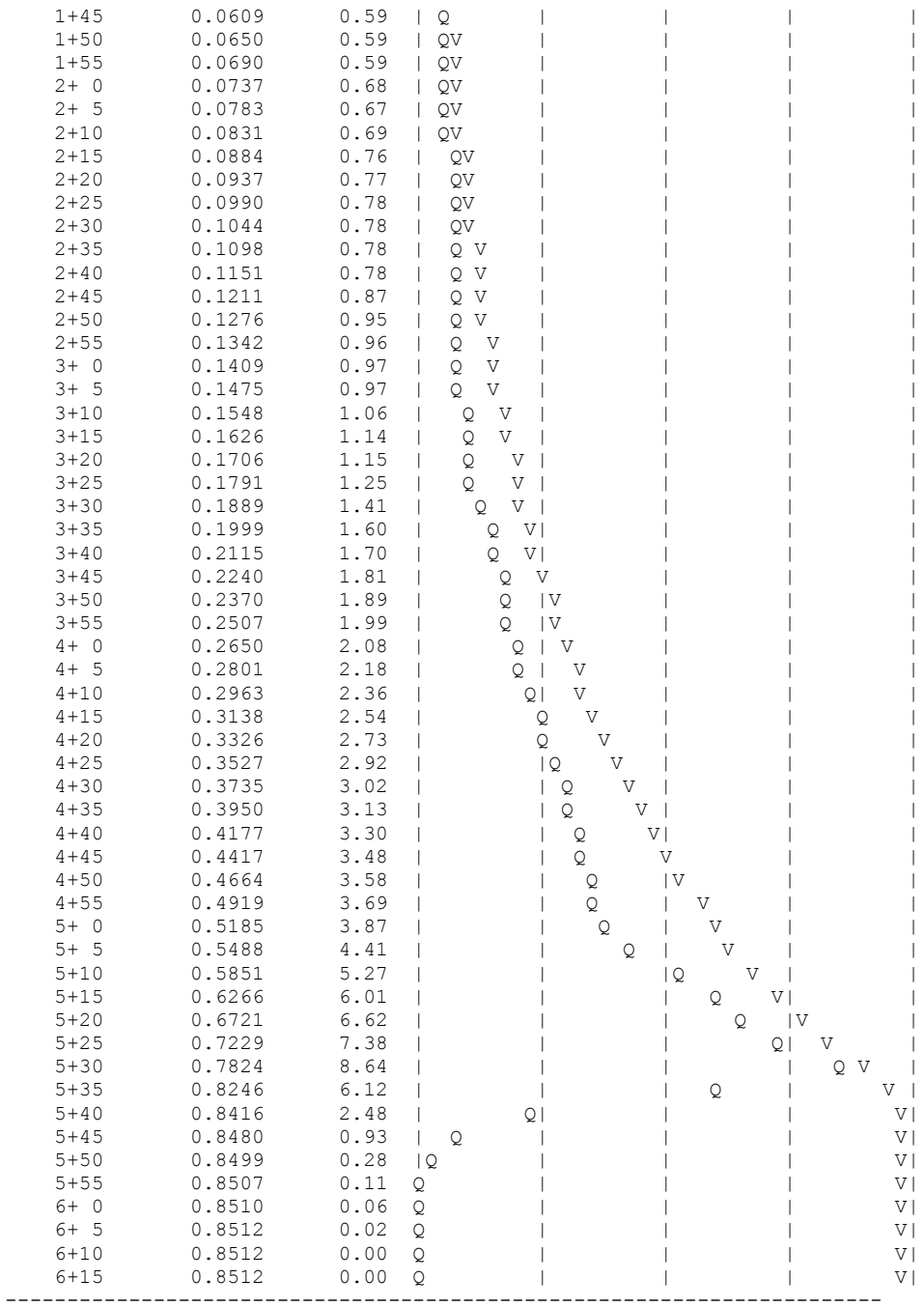
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6 - H O U R S T O R M
R u n o f f H y d r o g r a p h

Hydrograph in 5 Minute intervals ((CFS))

Time(h+m)	Volume Ac.Ft	Q(CFS)	0	2.5	5.0	7.5	10.0
0+ 5	0.0003	0.04	Q				
0+10	0.0013	0.14	Q				
0+15	0.0026	0.20	Q				
0+20	0.0041	0.21	Q				
0+25	0.0055	0.21	Q				
0+30	0.0076	0.30	VQ				
0+35	0.0102	0.38	VQ				
0+40	0.0129	0.39	VQ				
0+45	0.0157	0.40	VQ				
0+50	0.0184	0.40	VQ				
0+55	0.0212	0.40	VQ				
1+ 0	0.0246	0.49	|Q				
1+ 5	0.0285	0.57	|VQ				
1+10	0.0325	0.58	|VQ				
1+15	0.0366	0.59	|VQ				
1+20	0.0406	0.59	|VQ				
1+25	0.0447	0.59	| Q				
1+30	0.0488	0.59	| Q				
1+35	0.0528	0.59	| Q				
1+40	0.0569	0.59	| Q				

EX Tributary 3 Area A 100 Year 6 Hour



1+45	0.0609	0.59	Q
1+50	0.0650	0.59	QV
1+55	0.0690	0.59	QV
2+ 0	0.0737	0.68	QV
2+ 5	0.0783	0.67	QV
2+10	0.0831	0.69	QV
2+15	0.0884	0.76	QV
2+20	0.0937	0.77	QV
2+25	0.0990	0.78	QV
2+30	0.1044	0.78	QV
2+35	0.1098	0.78	Q V
2+40	0.1151	0.78	Q V
2+45	0.1211	0.87	Q V
2+50	0.1276	0.95	Q V
2+55	0.1342	0.96	Q V
3+ 0	0.1409	0.97	Q V
3+ 5	0.1475	0.97	Q V
3+10	0.1548	1.06	Q V
3+15	0.1626	1.14	Q V
3+20	0.1706	1.15	Q V
3+25	0.1791	1.25	Q V
3+30	0.1889	1.41	Q V
3+35	0.1999	1.60	Q V
3+40	0.2115	1.70	Q V
3+45	0.2240	1.81	Q V
3+50	0.2370	1.89	Q V
3+55	0.2507	1.99	Q V
4+ 0	0.2650	2.08	Q V
4+ 5	0.2801	2.18	Q V
4+10	0.2963	2.36	Q V
4+15	0.3138	2.54	Q V
4+20	0.3326	2.73	Q V
4+25	0.3527	2.92	Q V
4+30	0.3735	3.02	Q V
4+35	0.3950	3.13	Q V
4+40	0.4177	3.30	Q V
4+45	0.4417	3.48	Q V
4+50	0.4664	3.58	Q V
4+55	0.4919	3.69	Q V
5+ 0	0.5185	3.87	Q V
5+ 5	0.5488	4.41	Q V
5+10	0.5851	5.27	Q V
5+15	0.6266	6.01	Q V
5+20	0.6721	6.62	Q V
5+25	0.7229	7.38	Q V
5+30	0.7824	8.64	Q V
5+35	0.8246	6.12	Q V
5+40	0.8416	2.48	Q V
5+45	0.8480	0.93	Q V
5+50	0.8499	0.28	Q V
5+55	0.8507	0.11	Q V
6+ 0	0.8510	0.06	Q V
6+ 5	0.8512	0.02	Q V
6+10	0.8512	0.00	Q V
6+15	0.8512	0.00	Q V

EX Tributary 3 Area A 100 Year 6 Hour

```
       U n i t   H y d r o g r a p h   A n a l y s i s

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              Study date  01/13/25 File: tribch23100.out

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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978


Program License Serial Number 5006

------------------------------------------------------------------------
 English (in-lb) Input Units Used
 English Rainfall Data (Inches) Input Values Used

 English Units used in output format



------------------------------------------------------------------------
------------------------------------------------------------------------
Drainage Area =      85.03(Ac.)  =      0.133 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment =      85.03(Ac.)  =      0.133 Sq. Mi.
Length along longest watercourse =    5225.00(Ft.)
Length along longest watercourse measured to centroid =    2874.00(Ft.)
Length along longest watercourse =      0.990 Mi.
Length along longest watercourse measured to centroid =      0.544 Mi.
Difference in elevation =     229.00(Ft.)
Slope along watercourse =    231.4105 Ft./Mi.
Average Manning's 'N' = 0.015
Lag time =    0.101 Hr.
Lag time =     6.07 Min.
25% of lag time =     1.52 Min.
40% of lag time =     2.43 Min.
Unit time =     5.00 Min.
Duration of storm = 3 Hour(s)
User Entered Base Flow =     0.00(CFS)

2 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
       85.03           0.80                 68.02

100 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
       85.03           2.00                170.06

STORM EVENT (YEAR) =  100.00
Area Averaged 2-Year Rainfall =    0.800(In)
Area Averaged 100-Year Rainfall =    2.000(In)

Point rain (area averaged) =    2.000(In)
Areal adjustment factor =   99.96 %
Adjusted average point rain =    1.999(In)

Sub-Area Data:
Area(Ac.)         Runoff Index   Impervious %
    85.030           86.00         0.500
 Total Area Entered =     85.03(Ac.)


RI    RI   Infil. Rate Impervious   Adj. Infil. Rate  Area%     F
AMC2 AMC-2     (In/Hr)    (Dec.%)     (In/Hr)      (Dec.)    (In/Hr)
```

EX Tributary CH2 100 Year 3 Hour

```
      86.0  86.0      0.176     0.500         0.097        1.000       0.097
                                                          Sum (F) =    0.097
      Area averaged mean soil loss (F) (In/Hr) =  0.097
      Minimum soil loss rate ((In/Hr)) =  0.048
      (for 24 hour storm duration)
      Soil low loss rate (decimal) =   0.500
      ------------------------------------------------------------------------

                  U n i t  H y d r o g r a p h
                         VALLEY S-Curve
      ------------------------------------------------------------------------
                  Unit Hydrograph Data
      ------------------------------------------------------------------------
      Unit time period   Time % of lag   Distribution   Unit Hydrograph
          (hrs)                          Graph %            (CFS)
      ------------------------------------------------------------------------
          1   0.083         82.386         13.971             11.972
          2   0.167        164.772         45.195             38.730
          3   0.250        247.158         19.265             16.509
          4   0.333        329.544          8.091              6.933
          5   0.417        411.930          4.840              4.147
          6   0.500        494.316          3.015              2.583
          7   0.583        576.702          2.186              1.873
          8   0.667        659.087          1.473              1.262
          9   0.750        741.473          0.967              0.829
         10   0.833        823.859          0.997              0.855
                                   Sum = 100.000   Sum=       85.694
------------------------------------------------------------------------

 The following loss rate calculations reflect use of the minimum calculated loss
 rate subtracted from the Storm Rain to produce the maximum Effective Rain value

  Unit Time   Pattern   Storm Rain     Loss rate(In./Hr)     Effective
       (Hr.)  Percent   (In/Hr)         Max   |   Low         (In/Hr)
    1   0.08     1.30      0.312          0.097    (  0.156)        0.215
    2   0.17     1.30      0.312          0.097    (  0.156)        0.215
    3   0.25     1.10      0.264          0.097    (  0.132)        0.167
    4   0.33     1.50      0.360          0.097    (  0.180)        0.263
    5   0.42     1.50      0.360          0.097    (  0.180)        0.263
    6   0.50     1.80      0.432          0.097    (  0.216)        0.335
    7   0.58     1.50      0.360          0.097    (  0.180)        0.263
    8   0.67     1.80      0.432          0.097    (  0.216)        0.335
    9   0.75     1.80      0.432          0.097    (  0.216)        0.335
   10   0.83     1.50      0.360          0.097    (  0.180)        0.263
   11   0.92     1.60      0.384          0.097    (  0.192)        0.287
   12   1.00     1.80      0.432          0.097    (  0.216)        0.335
   13   1.08     2.20      0.528          0.097    (  0.264)        0.431
   14   1.17     2.20      0.528          0.097    (  0.264)        0.431
   15   1.25     2.20      0.528          0.097    (  0.264)        0.431
   16   1.33     2.00      0.480          0.097    (  0.240)        0.383
   17   1.42     2.60      0.624          0.097    (  0.312)        0.527
   18   1.50     2.70      0.648          0.097    (  0.324)        0.551
   19   1.58     2.40      0.576          0.097    (  0.288)        0.479
   20   1.67     2.70      0.648          0.097    (  0.324)        0.551
   21   1.75     3.30      0.792          0.097    (  0.396)        0.695
   22   1.83     3.10      0.744          0.097    (  0.372)        0.647
   23   1.92     2.90      0.696          0.097    (  0.348)        0.599
   24   2.00     3.00      0.720          0.097    (  0.360)        0.623
   25   2.08     3.10      0.744          0.097    (  0.372)        0.647
   26   2.17     4.20      1.008          0.097    (  0.504)        0.911
   27   2.25     5.00      1.200          0.097    (  0.600)        1.103
   28   2.33     3.50      0.840          0.097    (  0.420)        0.743
   29   2.42     6.80      1.631          0.097    (  0.816)        1.535
   30   2.50     7.30      1.751          0.097    (  0.876)        1.655
   31   2.58     8.20      1.967          0.097    (  0.984)        1.871
   32   2.67     5.90      1.415          0.097    (  0.708)        1.319
   33   2.75     2.00      0.480          0.097    (  0.240)        0.383
   34   2.83     1.80      0.432          0.097    (  0.216)        0.335
   35   2.92     1.80      0.432          0.097    (  0.216)        0.335
   36   3.00     0.60      0.144       (  0.097)       0.072        0.072
```

EX Tributary CH2 100 Year 3 Hour

```
            (Loss Rate Not Used)
    Sum =     100.0                                    Sum =    20.5
       Flood volume = Effective rainfall      1.71(In)
        times area      85.0(Ac.)/[(In)/(Ft.)] =      12.1(Ac.Ft)
       Total soil loss =      0.29(In)
       Total soil loss =     2.039(Ac.Ft)
       Total rainfall =      2.00(In)
       Flood volume =      528290.2 Cubic Feet
       Total soil loss =       88797.9 Cubic Feet
       ---------------------------------------------------------------------
        Peak flow rate of this hydrograph =    135.755(CFS)
       ---------------------------------------------------------------------
       +++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                          3 - H O U R    S T O R M
                     R u n o f f     H y d r o g r a p h
       ---------------------------------------------------------------------
                   Hydrograph in   5   Minute intervals ((CFS))

       ---------------------------------------------------------------------
  Time(h+m) Volume Ac.Ft   Q(CFS)  0       50.0     100.0     150.0     200.0
  ----------------------------------------------------------------------------
    0+ 5       0.0178      2.58  Q         |         |         |         |
    0+10       0.0930     10.92  V Q       |         |         |         |
    0+15       0.1887     13.90  V Q       |         |         |         |
    0+20       0.2899     14.69  V Q       |         |         |         |
    0+25       0.4173     18.51  |V Q      |         |         |         |
    0+30       0.5632     21.18  |V  Q     |         |         |         |
    0+35       0.7283     23.97  | V Q     |         |         |         |
    0+40       0.8921     23.78  | V Q     |         |         |         |
    0+45       1.0727     26.22  |  V Q    |         |         |         |
    0+50       1.2562     26.65  |   VQ    |         |         |         |
    0+55       1.4257     24.61  |   Q     |         |         |         |
    1+ 0       1.5994     25.22  |    Q    |         |         |         |
    1+ 5       1.7946     28.35  |    Q    |         |         |         |
    1+10       2.0207     32.83  |     Q   |         |         |         |
    1+15       2.2600     34.75  |     QV  |         |         |         |
    1+20       2.5009     34.97  |     Q V |         |         |         |
    1+25       2.7445     35.37  |      Q V|         |         |         |
    1+30       3.0251     40.75  |       QV|         |         |         |
    1+35       3.3217     43.06  |       Q V         |         |         |
    1+40       3.6145     42.51  |       Q |V        |         |         |
    1+45       3.9354     46.60  |        Q| V       |         |         |
    1+50       4.2988     52.76  |         Q   V     |         |         |
    1+55       4.6650     53.17  |         Q    V    |         |         |
    2+ 0       5.0238     52.10  |         Q     V   |         |         |
    2+ 5       5.3885     52.95  |         Q      V  |         |         |
    2+10       5.7843     57.47  |         |Q       V|         |         |
    2+15       6.2702     70.55  |         |   Q     V         |         |
    2+20       6.8092     78.27  |         |    Q    | V       |         |
    2+25       7.3533     79.00  |         |    Q    |   V     |         |
    2+30       8.0953    107.73  |         |         |Q    V   |         |
    2+35       8.9700    127.02  |         |         |    Q   V|         |
    2+40       9.9050    135.76  |         |         |      Q  | V       |
    2+45      10.6671    110.65  |         |         | Q       |    V    |
    2+50      11.1392     68.56  |         |  Q      |         |     V   |
    2+55      11.4838     50.03  |         Q         |         |      V  |
    3+ 0      11.7521     38.96  |      Q  |         |         |       V |
    3+ 5      11.9116     23.16  |   Q     |         |         |        V|
    3+10      12.0040     13.42  | Q       |         |         |        V|
    3+15      12.0598      8.11  |Q        |         |         |        V|
    3+20      12.0941      4.97  Q         |         |         |        V|
    3+25      12.1125      2.68  Q         |         |         |        V|
    3+30      12.1206      1.16  Q         |         |         |        V|
    3+35      12.1251      0.66  Q         |         |         |        V|
    3+40      12.1275      0.35  Q         |         |         |        V|
    3+45      12.1279      0.06  Q         |         |         |         V
  ----------------------------------------------------------------------------
```

EX Tributary CH2 100 Year 3 Hour

```
       U n i t   H y d r o g r a p h   A n a l y s i s

       Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2008, Version 8.1
              Study date  01/13/25 File: tribch26100.out

++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
------------------------------------------------------------------------------

Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978


Program License Serial Number 5006

------------------------------------------------------------------------
 English (in-lb) Input Units Used
 English Rainfall Data (Inches) Input Values Used

 English Units used in output format



------------------------------------------------------------------------
------------------------------------------------------------------------
Drainage Area =      85.03(Ac.)  =      0.133 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment =      85.03(Ac.)  =      0.133 Sq. Mi.
Length along longest watercourse =    5225.00(Ft.)
Length along longest watercourse measured to centroid =    2874.00(Ft.)
Length along longest watercourse =      0.990 Mi.
Length along longest watercourse measured to centroid =      0.544 Mi.
Difference in elevation =     229.00(Ft.)
Slope along watercourse =    231.4105 Ft./Mi.
Average Manning's 'N' = 0.015
Lag time =    0.101 Hr.
Lag time =     6.07 Min.
25% of lag time =     1.52 Min.
40% of lag time =     2.43 Min.
Unit time =     5.00 Min.
Duration of storm = 6 Hour(s)
User Entered Base Flow =     0.00(CFS)

2 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
       85.03           1.10                 93.53

100 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
       85.03           3.00                255.09

STORM EVENT (YEAR) =  100.00
Area Averaged 2-Year Rainfall =    1.100(In)
Area Averaged 100-Year Rainfall =    3.000(In)

Point rain (area averaged) =    3.000(In)
Areal adjustment factor =   99.97 %
Adjusted average point rain =    2.999(In)

Sub-Area Data:
Area(Ac.)         Runoff Index   Impervious %
    85.030           86.00         0.500
 Total Area Entered =     85.03(Ac.)


RI    RI   Infil. Rate Impervious   Adj. Infil. Rate  Area%     F
AMC2 AMC-2     (In/Hr)    (Dec.%)     (In/Hr)      (Dec.)    (In/Hr)
```

EX Tributary CH2 100 Year 6 Hour

```
      86.0  86.0      0.176     0.500         0.097        1.000       0.097
                                                          Sum (F) =    0.097
      Area averaged mean soil loss (F) (In/Hr) =  0.097
      Minimum soil loss rate ((In/Hr)) =  0.048
      (for 24 hour storm duration)
      Soil low loss rate (decimal) =   0.500
      ------------------------------------------------------------------------

                  U n i t  H y d r o g r a p h
                         VALLEY S-Curve
      ------------------------------------------------------------------------
                  Unit Hydrograph Data
      ------------------------------------------------------------------------
      Unit time period   Time % of lag   Distribution   Unit Hydrograph
          (hrs)                          Graph %            (CFS)
      ------------------------------------------------------------------------
          1   0.083         82.386         13.971             11.972
          2   0.167        164.772         45.195             38.730
          3   0.250        247.158         19.265             16.509
          4   0.333        329.544          8.091              6.933
          5   0.417        411.930          4.840              4.147
          6   0.500        494.316          3.015              2.583
          7   0.583        576.702          2.186              1.873
          8   0.667        659.087          1.473              1.262
          9   0.750        741.473          0.967              0.829
         10   0.833        823.859          0.997              0.855
                                   Sum = 100.000   Sum=       85.694
------------------------------------------------------------------------

 The following loss rate calculations reflect use of the minimum calculated loss
 rate subtracted from the Storm Rain to produce the maximum Effective Rain value

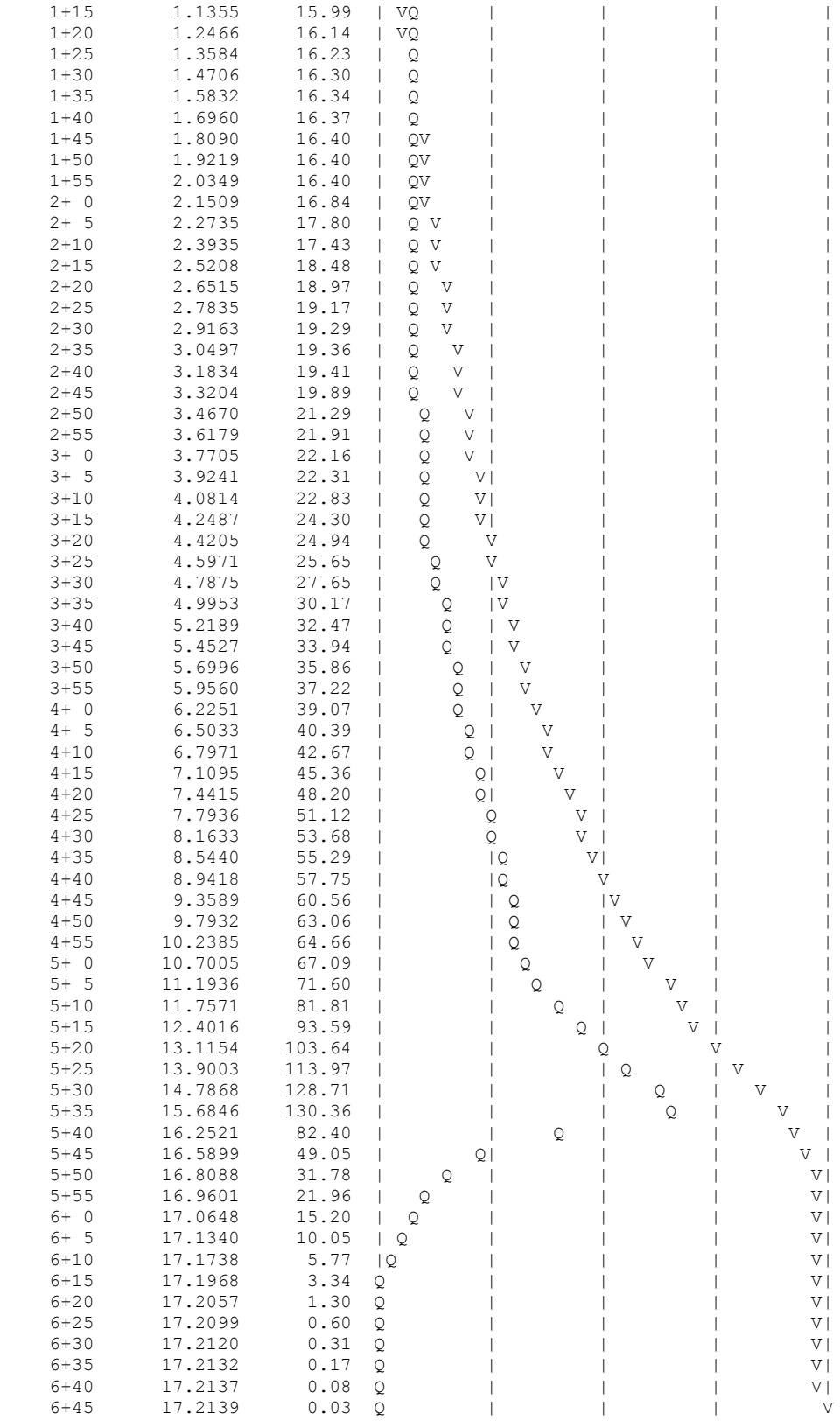
  Unit Time   Pattern   Storm Rain     Loss rate(In./Hr)     Effective
       (Hr.)  Percent   (In/Hr)         Max   |   Low         (In/Hr)
    1   0.08     0.50      0.180       (  0.097)       0.090        0.090
    2   0.17     0.60      0.216          0.097    (  0.108)        0.119
    3   0.25     0.60      0.216          0.097    (  0.108)        0.119
    4   0.33     0.60      0.216          0.097    (  0.108)        0.119
    5   0.42     0.60      0.216          0.097    (  0.108)        0.119
    6   0.50     0.70      0.252          0.097    (  0.126)        0.155
    7   0.58     0.70      0.252          0.097    (  0.126)        0.155
    8   0.67     0.70      0.252          0.097    (  0.126)        0.155
    9   0.75     0.70      0.252          0.097    (  0.126)        0.155
   10   0.83     0.70      0.252          0.097    (  0.126)        0.155
   11   0.92     0.70      0.252          0.097    (  0.126)        0.155
   12   1.00     0.80      0.288          0.097    (  0.144)        0.191
   13   1.08     0.80      0.288          0.097    (  0.144)        0.191
   14   1.17     0.80      0.288          0.097    (  0.144)        0.191
   15   1.25     0.80      0.288          0.097    (  0.144)        0.191
   16   1.33     0.80      0.288          0.097    (  0.144)        0.191
   17   1.42     0.80      0.288          0.097    (  0.144)        0.191
   18   1.50     0.80      0.288          0.097    (  0.144)        0.191
   19   1.58     0.80      0.288          0.097    (  0.144)        0.191
   20   1.67     0.80      0.288          0.097    (  0.144)        0.191
   21   1.75     0.80      0.288          0.097    (  0.144)        0.191
   22   1.83     0.80      0.288          0.097    (  0.144)        0.191
   23   1.92     0.80      0.288          0.097    (  0.144)        0.191
   24   2.00     0.90      0.324          0.097    (  0.162)        0.227
   25   2.08     0.80      0.288          0.097    (  0.144)        0.191
   26   2.17     0.90      0.324          0.097    (  0.162)        0.227
   27   2.25     0.90      0.324          0.097    (  0.162)        0.227
   28   2.33     0.90      0.324          0.097    (  0.162)        0.227
   29   2.42     0.90      0.324          0.097    (  0.162)        0.227
   30   2.50     0.90      0.324          0.097    (  0.162)        0.227
   31   2.58     0.90      0.324          0.097    (  0.162)        0.227
   32   2.67     0.90      0.324          0.097    (  0.162)        0.227
   33   2.75     1.00      0.360          0.097    (  0.180)        0.263
   34   2.83     1.00      0.360          0.097    (  0.180)        0.263
   35   2.92     1.00      0.360          0.097    (  0.180)        0.263
   36   3.00     1.00      0.360          0.097    (  0.180)        0.263
```

EX Tributary CH2 100 Year 6 Hour

```
37   3.08     1.00      0.360          0.097    (  0.180)        0.263
38   3.17     1.10      0.396          0.097    (  0.198)        0.299
39   3.25     1.10      0.396          0.097    (  0.198)        0.299
40   3.33     1.10      0.396          0.097    (  0.198)        0.299
41   3.42     1.20      0.432          0.097    (  0.216)        0.335
42   3.50     1.30      0.468          0.097    (  0.234)        0.371
43   3.58     1.40      0.504          0.097    (  0.252)        0.407
44   3.67     1.40      0.504          0.097    (  0.252)        0.407
45   3.75     1.50      0.540          0.097    (  0.270)        0.443
46   3.83     1.50      0.540          0.097    (  0.270)        0.443
47   3.92     1.60      0.576          0.097    (  0.288)        0.479
48   4.00     1.60      0.576          0.097    (  0.288)        0.479
49   4.08     1.70      0.612          0.097    (  0.306)        0.515
50   4.17     1.80      0.648          0.097    (  0.324)        0.551
51   4.25     1.90      0.684          0.097    (  0.342)        0.587
52   4.33     2.00      0.720          0.097    (  0.360)        0.623
53   4.42     2.10      0.756          0.097    (  0.378)        0.659
54   4.50     2.10      0.756          0.097    (  0.378)        0.659
55   4.58     2.20      0.792          0.097    (  0.396)        0.695
56   4.67     2.30      0.828          0.097    (  0.414)        0.731
57   4.75     2.40      0.864          0.097    (  0.432)        0.767
58   4.83     2.40      0.864          0.097    (  0.432)        0.767
59   4.92     2.50      0.900          0.097    (  0.450)        0.803
60   5.00     2.60      0.936          0.097    (  0.468)        0.839
61   5.08     3.10      1.116          0.097    (  0.558)        1.019
62   5.17     3.60      1.296          0.097    (  0.648)        1.199
63   5.25     3.90      1.404          0.097    (  0.702)        1.307
64   5.33     4.20      1.512          0.097    (  0.756)        1.415
65   5.42     4.70      1.692          0.097    (  0.846)        1.595
66   5.50     5.60      2.015          0.097    (  1.008)        1.919
67   5.58     1.90      0.684          0.097    (  0.342)        0.587
68   5.67     0.90      0.324          0.097    (  0.162)        0.227
69   5.75     0.60      0.216          0.097    (  0.108)        0.119
70   5.83     0.50      0.180       (  0.097)       0.090        0.090
71   5.92     0.30      0.108       (  0.097)       0.054        0.054
72   6.00     0.20      0.072       (  0.097)       0.036        0.036
              (Loss Rate Not Used)
   Sum =     100.0                                    Sum =    29.2
      Flood volume = Effective rainfall      2.43(In)
       times area      85.0(Ac.)/[(In)/(Ft.)] =      17.2(Ac.Ft)
      Total soil loss =      0.57(In)
      Total soil loss =     4.037(Ac.Ft)
      Total rainfall =      3.00(In)
      Flood volume =      749838.3 Cubic Feet
      Total soil loss =      175867.7 Cubic Feet
      ---------------------------------------------------------------------
       Peak flow rate of this hydrograph =    130.363(CFS)
      ---------------------------------------------------------------------
      +++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                          6 - H O U R    S T O R M
                     R u n o f f     H y d r o g r a p h
      ---------------------------------------------------------------------
                  Hydrograph in   5   Minute intervals ((CFS))

      ---------------------------------------------------------------------
Time(h+m) Volume Ac.Ft   Q(CFS)  0       50.0     100.0     150.0     200.0
-------------------------------------------------------------------------
  0+ 5       0.0074      1.08  Q         |         |         |         |
  0+10       0.0413      4.92  Q         |         |         |         |
  0+15       0.0932      7.54  VQ        |         |         |         |
  0+20       0.1528      8.65  VQ        |         |         |         |
  0+25       0.2163      9.23  VQ        |         |         |         |
  0+30       0.2853     10.01  V Q       |         |         |         |
  0+35       0.3656     11.65  V Q       |         |         |         |
  0+40       0.4511     12.42  |VQ       |         |         |         |
  0+45       0.5391     12.78  |VQ       |         |         |         |
  0+50       0.6288     13.03  |VQ       |         |         |         |
  0+55       0.7193     13.15  |VQ       |         |         |         |
  1+ 0       0.8133     13.64  |VQ       |         |         |         |
  1+ 5       0.9172     15.08  | VQ      |         |         |         |
  1+10       1.0253     15.71  | VQ      |         |         |         |
```

EX Tributary CH2 100 Year 6 Hour



EX Tributary CH2 100 Year 6 Hour

```
       U n i t   H y d r o g r a p h   A n a l y s i s

       Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2008, Version 8.1
              Study date  03/11/25 File: TRIBHG13100.out

++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
------------------------------------------------------------------------------

Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978


Program License Serial Number 5006

------------------------------------------------------------------------
 English (in-lb) Input Units Used
 English Rainfall Data (Inches) Input Values Used

 English Units used in output format



------------------------------------------------------------------------
------------------------------------------------------------------------
Drainage Area =     138.49(Ac.)  =      0.216 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment =     138.49(Ac.)  =      0.216 Sq. Mi.
Length along longest watercourse =    2549.00(Ft.)
Length along longest watercourse measured to centroid =    1073.00(Ft.)
Length along longest watercourse =      0.483 Mi.
Length along longest watercourse measured to centroid =      0.203 Mi.
Difference in elevation =     181.00(Ft.)
Slope along watercourse =    374.9235 Ft./Mi.
Average Manning's 'N' = 0.020
Lag time =    0.064 Hr.
Lag time =     3.87 Min.
25% of lag time =     0.97 Min.
40% of lag time =     1.55 Min.
Unit time =     5.00 Min.
Duration of storm = 3 Hour(s)
User Entered Base Flow =     0.00(CFS)

2 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
      138.49           0.80                110.79

100 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
      138.49           2.00                276.98

STORM EVENT (YEAR) =  100.00
Area Averaged 2-Year Rainfall =    0.800(In)
Area Averaged 100-Year Rainfall =    2.000(In)

Point rain (area averaged) =    2.000(In)
Areal adjustment factor =   99.94 %
Adjusted average point rain =    1.999(In)

Sub-Area Data:
Area(Ac.)         Runoff Index   Impervious %
   138.490           86.00         0.200
 Total Area Entered =    138.49(Ac.)


RI    RI   Infil. Rate Impervious   Adj. Infil. Rate  Area%     F
AMC2 AMC-2     (In/Hr)    (Dec.%)     (In/Hr)      (Dec.)    (In/Hr)
```

EX Tributary HG1 100 Year 3 Hour

86.0	86.0	0.176	0.200	0.144	1.000	0.144
					Sum (F) =	0.144

Area averaged mean soil loss (F) (In/Hr) = 0.144
Minimum soil loss rate ((In/Hr)) = 0.072
(for 24 hour storm duration)
Soil low loss rate (decimal) = 0.740

U n i t H y d r o g r a p h
VALLEY S-Curve

Unit Hydrograph Data

Unit time period (hrs)		Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	129.354	27.844	38.862
2	0.167	258.708	48.325	67.448
3	0.250	388.062	12.549	17.515
4	0.333	517.416	5.619	7.842
5	0.417	646.770	3.091	4.314
6	0.500	776.124	1.687	2.354
7	0.583	905.478	0.886	1.236
			Sum = 100.000	Sum= 139.572

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr) Max	Low	Effective (In/Hr)
1	0.08	1.30	0.312	0.144	(0.231)	0.168
2	0.17	1.30	0.312	0.144	(0.231)	0.168
3	0.25	1.10	0.264	0.144	(0.195)	0.120
4	0.33	1.50	0.360	0.144	(0.266)	0.216
5	0.42	1.50	0.360	0.144	(0.266)	0.216
6	0.50	1.80	0.432	0.144	(0.319)	0.288
7	0.58	1.50	0.360	0.144	(0.266)	0.216
8	0.67	1.80	0.432	0.144	(0.319)	0.288
9	0.75	1.80	0.432	0.144	(0.319)	0.288
10	0.83	1.50	0.360	0.144	(0.266)	0.216
11	0.92	1.60	0.384	0.144	(0.284)	0.240
12	1.00	1.80	0.432	0.144	(0.319)	0.288
13	1.08	2.20	0.528	0.144	(0.390)	0.384
14	1.17	2.20	0.528	0.144	(0.390)	0.384
15	1.25	2.20	0.528	0.144	(0.390)	0.384
16	1.33	2.00	0.480	0.144	(0.355)	0.336
17	1.42	2.60	0.624	0.144	(0.461)	0.480
18	1.50	2.70	0.648	0.144	(0.479)	0.504
19	1.58	2.40	0.576	0.144	(0.426)	0.432
20	1.67	2.70	0.648	0.144	(0.479)	0.504
21	1.75	3.30	0.792	0.144	(0.586)	0.648
22	1.83	3.10	0.744	0.144	(0.550)	0.600
23	1.92	2.90	0.696	0.144	(0.515)	0.552
24	2.00	3.00	0.720	0.144	(0.532)	0.576
25	2.08	3.10	0.744	0.144	(0.550)	0.600
26	2.17	4.20	1.007	0.144	(0.745)	0.863
27	2.25	5.00	1.199	0.144	(0.887)	1.055
28	2.33	3.50	0.839	0.144	(0.621)	0.695
29	2.42	6.80	1.631	0.144	(1.207)	1.487
30	2.50	7.30	1.751	0.144	(1.296)	1.607
31	2.58	8.20	1.967	0.144	(1.455)	1.823
32	2.67	5.90	1.415	0.144	(1.047)	1.271
33	2.75	2.00	0.480	0.144	(0.355)	0.336
34	2.83	1.80	0.432	0.144	(0.319)	0.288
35	2.92	1.80	0.432	0.144	(0.319)	0.288
36	3.00	0.60	0.144	(0.144)	0.106	0.037
		(Loss Rate Not Used)				
Sum =		100.0			Sum =	18.8

Flood volume = Effective rainfall 1.57(In)

EX Tributary HG1 100 Year 3 Hour

```
 times area     138.5(Ac.)/[(In)/(Ft.)] =      18.1(Ac.Ft)
Total soil loss =      0.43(In)
Total soil loss =     4.949(Ac.Ft)
Total rainfall =      2.00(In)
Flood volume =      789236.7 Cubic Feet
Total soil loss =      215591.6 Cubic Feet
---------------------------------------------------------------------------
 Peak flow rate of this hydrograph =    218.817(CFS)
---------------------------------------------------------------------------
+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                      3 - H O U R    S T O R M
                 R u n o f f     H y d r o g r a p h
---------------------------------------------------------------------------
             Hydrograph in   5   Minute intervals ((CFS))

---------------------------------------------------------------------------
```

Time(h+m)	Volume Ac.Ft	Q(CFS)	0	75.0	150.0	225.0	300.0
0+ 5	0.0449	6.53	Q	|	|	|	|
0+10	0.1679	17.85	V Q	|	|	|	|
0+15	0.2982	18.93	V Q	|	|	|	|
0+20	0.4410	20.74	V Q	|	|	|	|
0+25	0.6276	27.09	|V Q	|	|	|	|
0+30	0.8452	31.59	|V Q	|	|	|	|
0+35	1.0821	34.40	| V Q	|	|	|	|
0+40	1.3157	33.91	| V Q	|	|	|	|
0+45	1.5790	38.23	| V Q	|	|	|	|
0+50	1.8308	36.56	| Q	|	|	|	|
0+55	2.0585	33.06	| Q	|	|	|	|
1+ 0	2.3031	35.51	| QV	|	|	|	|
1+ 5	2.5952	42.42	| Q	|	|	|	|
1+10	2.9375	49.70	| Q	|	|	|	|
1+15	3.2935	51.69	| QV	|	|	|	|
1+20	3.6430	50.75	| Q V	|	|	|	|
1+25	4.0126	53.67	| QV	|	|	|	|
1+30	4.4517	63.76	| QV|	|	|	|	|
1+35	4.8983	64.84	| Q V	|	|	|	|
1+40	5.3400	64.13	| Q |V	|	|	|	|
1+45	5.8497	74.01	| Q| V	|	|	|	|
1+50	6.4209	82.94	| |Q V	|	|	|	|
1+55	6.9777	80.85	| Q V	|	|	|	|
2+ 0	7.5218	79.00	| Q V	|	|	|	|
2+ 5	8.0799	81.04	| Q V	|	|	|	|
2+10	8.7217	93.18	| | Q V|	|	|	|	|
2+15	9.5407	118.91	| | Q |V	|	|	|	|
2+20	10.3851	122.62	| | Q | V	|	|	|	|
2+25	11.3124	134.65	| | Q | V	|	|	|	|
2+30	12.6151	189.15	| | | Q V |	|	|	|	|
2+35	14.1176	218.16	| | | Q|V	|	|	|	|
2+40	15.6246	218.82	| | | Q| V	|	|	|	|
2+45	16.6766	152.75	| | Q |	|	|	| V	|
2+50	17.2394	81.72	| Q |	|	|	| V	|
2+55	17.6523	59.96	| Q |	|	|	| V	|
3+ 0	17.9300	40.32	| Q |	|	|	| V|	
3+ 5	18.0438	16.52	| Q |	|	|	| V|	
3+10	18.0887	6.52	Q |	|	|	| V|	
3+15	18.1068	2.63	Q |	|	|	| V|	
3+20	18.1150	1.20	Q |	|	|	| V|	
3+25	18.1181	0.44	Q |	|	|	| V|	
3+30	18.1184	0.05	Q |	|	|	| V|	

EX Tributary HG1 100 Year 3 Hour

```
       U n i t   H y d r o g r a p h   A n a l y s i s

       Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2008, Version 8.1
              Study date  03/11/25 File: TRIBHG16100.out

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------------------------------------------------------------------------------

Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978


Program License Serial Number 5006

------------------------------------------------------------------------
 English (in-lb) Input Units Used
 English Rainfall Data (Inches) Input Values Used

 English Units used in output format



------------------------------------------------------------------------
------------------------------------------------------------------------
Drainage Area =     138.49(Ac.)  =      0.216 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment =     138.49(Ac.)  =      0.216 Sq. Mi.
Length along longest watercourse =    2549.00(Ft.)
Length along longest watercourse measured to centroid =    1073.00(Ft.)
Length along longest watercourse =      0.483 Mi.
Length along longest watercourse measured to centroid =      0.203 Mi.
Difference in elevation =     181.00(Ft.)
Slope along watercourse =    374.9235 Ft./Mi.
Average Manning's 'N' = 0.020
Lag time =    0.064 Hr.
Lag time =     3.87 Min.
25% of lag time =     0.97 Min.
40% of lag time =     1.55 Min.
Unit time =     5.00 Min.
Duration of storm = 6 Hour(s)
User Entered Base Flow =     0.00(CFS)

2 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
      138.49           1.10                152.34

100 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
      138.49           3.00                415.47

STORM EVENT (YEAR) =  100.00
Area Averaged 2-Year Rainfall =    1.100(In)
Area Averaged 100-Year Rainfall =    3.000(In)

Point rain (area averaged) =    3.000(In)
Areal adjustment factor =   99.95 %
Adjusted average point rain =    2.999(In)

Sub-Area Data:
Area(Ac.)         Runoff Index   Impervious %
   138.490           86.00         0.200
 Total Area Entered =    138.49(Ac.)


RI    RI   Infil. Rate Impervious   Adj. Infil. Rate  Area%     F
AMC2 AMC-2     (In/Hr)    (Dec.%)     (In/Hr)      (Dec.)    (In/Hr)
```

EX Tributary HG1 100 Year 6 Hour

```
       86.0  86.0      0.176     0.200        0.144       1.000      0.144
                                                        Sum (F) =   0.144
       Area averaged mean soil loss (F) (In/Hr) =  0.144
       Minimum soil loss rate ((In/Hr)) =  0.072
       (for 24 hour storm duration)
       Soil low loss rate (decimal) =   0.740
       ------------------------------------------------------------------------

                    U n i t  H y d r o g r a p h
                           VALLEY S-Curve
       ------------------------------------------------------------------------
                    Unit Hydrograph Data
       ------------------------------------------------------------------------
       Unit time period   Time % of lag   Distribution   Unit Hydrograph
           (hrs)                           Graph %           (CFS)
       ------------------------------------------------------------------------
           1   0.083        129.354         27.844             38.862
           2   0.167        258.708         48.325             67.448
           3   0.250        388.062         12.549             17.515
           4   0.333        517.416          5.619              7.842
           5   0.417        646.770          3.091              4.314
           6   0.500        776.124          1.687              2.354
           7   0.583        905.478          0.886              1.236
                                    Sum = 100.000    Sum=     139.572
------------------------------------------------------------------------

 The following loss rate calculations reflect use of the minimum calculated loss
 rate subtracted from the Storm Rain to produce the maximum Effective Rain value

  Unit Time    Pattern    Storm Rain     Loss rate(In./Hr)     Effective
       (Hr.)   Percent    (In/Hr)          Max    |   Low         (In/Hr)
    1   0.08      0.50      0.180       (  0.144)       0.133         0.047
    2   0.17      0.60      0.216          0.144    (  0.160)         0.072
    3   0.25      0.60      0.216          0.144    (  0.160)         0.072
    4   0.33      0.60      0.216          0.144    (  0.160)         0.072
    5   0.42      0.60      0.216          0.144    (  0.160)         0.072
    6   0.50      0.70      0.252          0.144    (  0.186)         0.108
    7   0.58      0.70      0.252          0.144    (  0.186)         0.108
    8   0.67      0.70      0.252          0.144    (  0.186)         0.108
    9   0.75      0.70      0.252          0.144    (  0.186)         0.108
   10   0.83      0.70      0.252          0.144    (  0.186)         0.108
   11   0.92      0.70      0.252          0.144    (  0.186)         0.108
   12   1.00      0.80      0.288          0.144    (  0.213)         0.144
   13   1.08      0.80      0.288          0.144    (  0.213)         0.144
   14   1.17      0.80      0.288          0.144    (  0.213)         0.144
   15   1.25      0.80      0.288          0.144    (  0.213)         0.144
   16   1.33      0.80      0.288          0.144    (  0.213)         0.144
   17   1.42      0.80      0.288          0.144    (  0.213)         0.144
   18   1.50      0.80      0.288          0.144    (  0.213)         0.144
   19   1.58      0.80      0.288          0.144    (  0.213)         0.144
   20   1.67      0.80      0.288          0.144    (  0.213)         0.144
   21   1.75      0.80      0.288          0.144    (  0.213)         0.144
   22   1.83      0.80      0.288          0.144    (  0.213)         0.144
   23   1.92      0.80      0.288          0.144    (  0.213)         0.144
   24   2.00      0.90      0.324          0.144    (  0.240)         0.180
   25   2.08      0.80      0.288          0.144    (  0.213)         0.144
   26   2.17      0.90      0.324          0.144    (  0.240)         0.180
   27   2.25      0.90      0.324          0.144    (  0.240)         0.180
   28   2.33      0.90      0.324          0.144    (  0.240)         0.180
   29   2.42      0.90      0.324          0.144    (  0.240)         0.180
   30   2.50      0.90      0.324          0.144    (  0.240)         0.180
   31   2.58      0.90      0.324          0.144    (  0.240)         0.180
   32   2.67      0.90      0.324          0.144    (  0.240)         0.180
   33   2.75      1.00      0.360          0.144    (  0.266)         0.216
   34   2.83      1.00      0.360          0.144    (  0.266)         0.216
   35   2.92      1.00      0.360          0.144    (  0.266)         0.216
   36   3.00      1.00      0.360          0.144    (  0.266)         0.216
   37   3.08      1.00      0.360          0.144    (  0.266)         0.216
   38   3.17      1.10      0.396          0.144    (  0.293)         0.252
   39   3.25      1.10      0.396          0.144    (  0.293)         0.252
```

EX Tributary HG1 100 Year 6 Hour

40	3.33	1.10	0.396	0.144	(0.293)		0.252
41	3.42	1.20	0.432	0.144	(0.320)		0.288
42	3.50	1.30	0.468	0.144	(0.346)		0.324
43	3.58	1.40	0.504	0.144	(0.373)		0.360
44	3.67	1.40	0.504	0.144	(0.373)		0.360
45	3.75	1.50	0.540	0.144	(0.399)		0.396
46	3.83	1.50	0.540	0.144	(0.399)		0.396
47	3.92	1.60	0.576	0.144	(0.426)		0.432
48	4.00	1.60	0.576	0.144	(0.426)		0.432
49	4.08	1.70	0.612	0.144	(0.453)		0.468
50	4.17	1.80	0.648	0.144	(0.479)		0.504
51	4.25	1.90	0.684	0.144	(0.506)		0.540
52	4.33	2.00	0.720	0.144	(0.533)		0.576
53	4.42	2.10	0.756	0.144	(0.559)		0.612
54	4.50	2.10	0.756	0.144	(0.559)		0.612
55	4.58	2.20	0.792	0.144	(0.586)		0.648
56	4.67	2.30	0.828	0.144	(0.612)		0.684
57	4.75	2.40	0.864	0.144	(0.639)		0.720
58	4.83	2.40	0.864	0.144	(0.639)		0.720
59	4.92	2.50	0.900	0.144	(0.666)		0.756
60	5.00	2.60	0.936	0.144	(0.692)		0.792
61	5.08	3.10	1.115	0.144	(0.825)		0.971
62	5.17	3.60	1.295	0.144	(0.959)		1.151
63	5.25	3.90	1.403	0.144	(1.038)		1.259
64	5.33	4.20	1.511	0.144	(1.118)		1.367
65	5.42	4.70	1.691	0.144	(1.251)		1.547
66	5.50	5.60	2.015	0.144	(1.491)		1.871
67	5.58	1.90	0.684	0.144	(0.506)		0.540
68	5.67	0.90	0.324	0.144	(0.240)		0.180
69	5.75	0.60	0.216	0.144	(0.160)		0.072
70	5.83	0.50	0.180	(0.144)	0.133		0.047
71	5.92	0.30	0.108	(0.144)	0.080		0.028
72	6.00	0.20	0.072	(0.144)	0.053		0.019

(Loss Rate Not Used)

Sum = 100.0 Sum = 25.8

Flood volume = Effective rainfall 2.15(In)
times area 138.5(Ac.)/[(In)/(Ft.)] = 24.8(Ac.Ft)
Total soil loss = 0.85(In)
Total soil loss = 9.801(Ac.Ft)
Total rainfall = 3.00(In)
Flood volume = 1080509.9 Cubic Feet
Total soil loss = 426928.2 Cubic Feet

Peak flow rate of this hydrograph = 219.239(CFS)

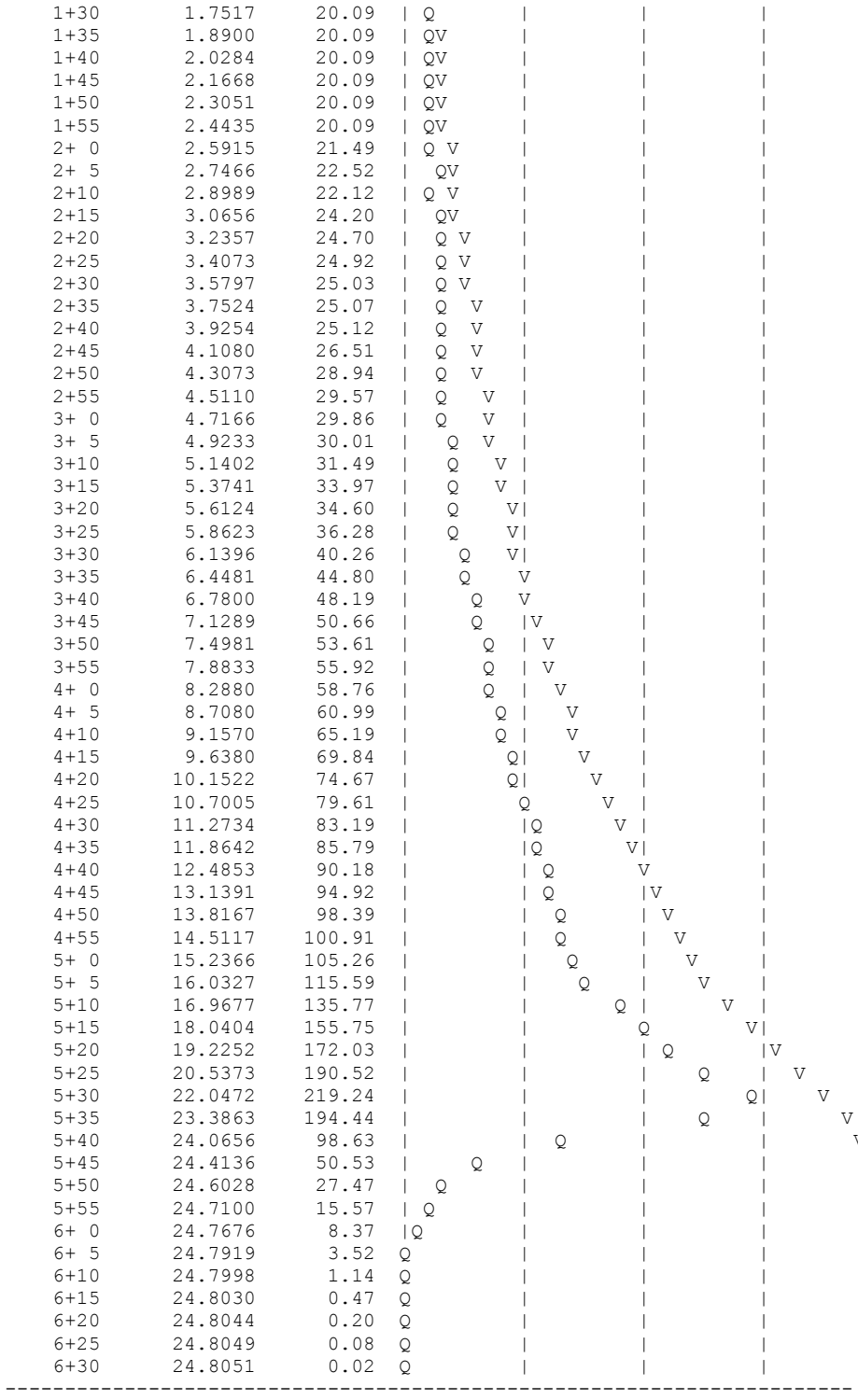
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6 - H O U R S T O R M
R u n o f f H y d r o g r a p h

Hydrograph in 5 Minute intervals ((CFS))

Time(h+m)	Volume Ac.Ft	Q(CFS)	0	75.0	150.0	225.0	300.0
0+ 5	0.0125	1.82	Q				
0+10	0.0535	5.95	Q				
0+15	0.1118	8.47	VQ				
0+20	0.1757	9.28	VQ				
0+25	0.2423	9.67	VQ				
0+30	0.3201	11.29	VQ				
0+35	0.4154	13.84	VQ				
0+40	0.5153	14.50	VQ				
0+45	0.6171	14.78	VQ				
0+50	0.7199	14.94	|Q				
0+55	0.8234	15.02	|VQ				
1+ 0	0.9368	16.47	|VQ				
1+ 5	1.0669	18.89	|VQ				
1+10	1.2014	19.52	|VQ				
1+15	1.3378	19.81	| Q				
1+20	1.4753	19.96	| Q				
1+25	1.6133	20.05	| Q				

EX Tributary HG1 100 Year 6 Hour



1+30	1.7517	20.09	Q				
1+35	1.8900	20.09	QV				
1+40	2.0284	20.09	QV				
1+45	2.1668	20.09	QV				
1+50	2.3051	20.09	QV				
1+55	2.4435	20.09	QV				
2+ 0	2.5915	21.49	Q V				
2+ 5	2.7466	22.52	QV				
2+10	2.8989	22.12	Q V				
2+15	3.0656	24.20	QV				
2+20	3.2357	24.70	Q V				
2+25	3.4073	24.92	Q V				
2+30	3.5797	25.03	Q V				
2+35	3.7524	25.07	Q V				
2+40	3.9254	25.12	Q V				
2+45	4.1080	26.51	Q V				
2+50	4.3073	28.94	Q V				
2+55	4.5110	29.57	Q V				
3+ 0	4.7166	29.86	Q V				
3+ 5	4.9233	30.01	Q V				
3+10	5.1402	31.49	Q V				
3+15	5.3741	33.97	Q V				
3+20	5.6124	34.60	Q V				
3+25	5.8623	36.28	Q V				
3+30	6.1396	40.26	Q V				
3+35	6.4481	44.80	Q V				
3+40	6.7800	48.19	Q V				
3+45	7.1289	50.66	Q V				
3+50	7.4981	53.61	Q V				
3+55	7.8833	55.92	Q V				
4+ 0	8.2880	58.76	Q V				
4+ 5	8.7080	60.99	Q V				
4+10	9.1570	65.19	Q V				
4+15	9.6380	69.84	Q V				
4+20	10.1522	74.67	Q V				
4+25	10.7005	79.61	Q V				
4+30	11.2734	83.19	Q V				
4+35	11.8642	85.79	Q V				
4+40	12.4853	90.18	Q V				
4+45	13.1391	94.92	Q V				
4+50	13.8167	98.39	Q V				
4+55	14.5117	100.91	Q V				
5+ 0	15.2366	105.26	Q V				
5+ 5	16.0327	115.59	Q V				
5+10	16.9677	135.77	Q V				
5+15	18.0404	155.75	Q V				
5+20	19.2252	172.03	Q V				
5+25	20.5373	190.52	Q V				
5+30	22.0472	219.24	Q V				
5+35	23.3863	194.44	Q V				
5+40	24.0656	98.63	Q V				
5+45	24.4136	50.53	Q V				
5+50	24.6028	27.47	Q V				
5+55	24.7100	15.57	Q V				
6+ 0	24.7676	8.37	Q V				
6+ 5	24.7919	3.52	Q V				
6+10	24.7998	1.14	Q V				
6+15	24.8030	0.47	Q V				
6+20	24.8044	0.20	Q V				
6+25	24.8049	0.08	Q V				
6+30	24.8051	0.02	Q V				

EX Tributary HG1 100 Year 6 Hour

Pre-Development Confluenced Unit Hydrographs

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                FLOOD HYDROGRAPH ROUTING PROGRAM
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                      Study date: 03/11/25

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Program License Serial Number 5006

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******************** HYDROGRAPH INFORMATION **********************

               From study/file name: trib1a3100.rte
****************************HYDROGRAPH DATA****************************
               Number of intervals =    81
               Time interval =    5.0 (Min.)
               Maximum/Peak flow rate =      430.279 (CFS)
               Total volume =      55.140 (Ac.Ft)
       Status of hydrographs being held in storage
                  Stream 1  Stream 2  Stream 3  Stream 4  Stream 5
       Peak (CFS)      0.000     0.000     0.000     0.000     0.000
       Vol (Ac.Ft)      0.000     0.000     0.000     0.000     0.000
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Process from Point/Station       11.000 to Point/Station       15.000
**** STREAM ROUTING SCS CONVEX METHOD ****
_____________________________________________________________________
HYDROGRAPH STREAM ROUTING DATA:
Length of stream =   2737.00 (Ft.)
Elevation difference =   71.00 (Ft.)
Slope of channel =  0.025941 (Vert/Horiz)
Channel type - Improved Channel


Channel length =  2737.00(Ft.)     Elevation difference =  71.00(Ft.)
Channel evaluation using mean flow rate of hydrograph
Channel base width  =    5.000(Ft.)
Slope or 'Z' of left channel bank =   1.000
Slope or 'Z' of right channel bank =   1.000
Manning's 'N'    = 0.045
Maximum depth of channel  =   20.000(Ft.)
Flow(q) thru subarea =    166.790(CFS)
Depth of flow =     2.818(Ft.)
Average velocity =     7.571(Ft/s)
Total flow rate =   166.790(CFS)
Channel flow top width =   10.636(Ft.)
Depth of flow in channel =   2.82(Ft.)
Total number of channels (same dimensions) = 1
Flow Velocity =    7.57(Ft/s)
Travel time  =    0.00 min.
Individual channel flow =  166.790(CFS)
Total capacity of improved channels =    166.790(CFS)
Critical Depth in Channel =    2.69(Ft.)


Channel evaluation using maximum flow rate of hydrograph
Flow(q) thru subarea =    430.279(CFS)
Depth of flow =     4.617(Ft.)
Average velocity =     9.689(Ft/s)
Total flow rate =   430.279(CFS)
Channel flow top width =   14.235(Ft.)
Depth of flow in channel =   4.62(Ft.)
Total number of channels (same dimensions) = 1
Flow Velocity =    9.69(Ft/s)
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EX HG UNIT – 100YR 3HR

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      Travel time  =    0.00 min.
      Individual channel flow =  430.279(CFS)
      Total capacity of improved channels =    430.279(CFS)
      Critical Depth in Channel =    4.53(Ft.)


      ********************** SCS CONVEX CHANNEL ROUTING ********************
      Convex method of stream routing  data items:
      Using equation: Outflow =
      O(t+dt) = (1-c*)O(t+dt-dt*) + Input(c*)
                where c* = 1 - (1-c)^e and dt = c(length)/velocity
                c(v/v+1.7) =   0.8507   Travel time =   4.71 (min.)
               dt*(unit time interval) =   5.00(min.),  e=   1.1656
               dt(routing time-step) =   4.01 (min.),   c* =   0.8911

      Output hydrograph delayed by 0  unit time increments


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                        P R I N T  O F  S T O R M
                     R u n o f f     H y d r o g r a p h
      ----------------------------------------------------------------------
                  Hydrograph in   5   Minute intervals (CFS)

      ----------------------------------------------------------------------
Time(h+m) Out = O(CFS) In = I  0      107.6     215.1     322.7     430.3
----------------------------------------------------------------------------
  0+ 5       0.1819      1.03  O         |         |         |         |
  0+10       1.4278      3.81  O         |         |         |         |
  0+15       4.3371      8.24  O         |         |         |         |
  0+20       8.9833     14.81  OI        |         |         |         |
  0+25      15.6604     23.18  |OI       |         |         |         |
  0+30      24.0729     32.83  | OI      |         |         |         |
  0+35      33.4771     41.86  |  O      |         |         |         |
  0+40      42.4481     50.31  |  OI     |         |         |         |
  0+45      51.0208     59.14  |   OI    |         |         |         |
  0+50      59.5871     66.64  |    OI   |         |         |         |
  0+55      66.9021     72.46  |     O   |         |         |         |
  1+ 0      72.6520     76.94  |     OI  |         |         |         |
  1+ 5      77.2549     81.35  |      O  |         |         |         |
  1+10      81.7757     86.25  |      OI |         |         |         |
  1+15      86.8219     92.22  |       O |         |         |         |
  1+20      92.9958     99.90  |       OI|         |         |         |
  1+25     100.7732    109.06  |        OI         |         |         |
  1+30     109.8797    118.78  |         OI        |         |         |
  1+35     119.4179    127.83  |         |O        |         |         |
  1+40     128.4860    136.70  |         |OI       |         |         |
  1+45     137.5769    146.68  |         | OI      |         |         |
  1+50     147.7232    158.15  |         |  OI     |         |         |
  1+55     159.0190    169.48  |         |   OI    |         |         |
  2+ 0     170.2153    180.07  |         |    OI   |         |         |
  2+ 5     180.8728    190.64  |         |     OI  |         |         |
  2+10     191.5399    201.72  |         |      OI |         |         |
  2+15     202.8745    214.50  |         |       OI|         |         |
  2+20     215.8485    229.23  |         |         OI        |         |
  2+25     231.6320    250.99  |         |         |O I      |         |
  2+30     254.4646    282.49  |         |         |  O  I   |         |
  2+35     286.7625    323.79  |         |         |     O   I         |
  2+40     327.8739    369.57  |         |         |         O   I     |
  2+45     371.6755    407.07  |         |         |         |   O  I  |
  2+50     407.3260    430.28  |         |         |         |      O  I
  2+55     427.1579    426.78  |         |         |         |        O|
  3+ 0     420.7176    392.36  |         |         |         |     I  O|
  3+ 5     385.3993    335.67  |         |         |         |I   O    |
  3+10     329.9163    272.66  |         |         |    I    O         |
  3+15     269.4410    219.33  |         |         I    O    |         |
  3+20     217.4618    178.00  |         |     I   O         |         |
  3+25     176.4886    145.24  |         |  I  O   |         |         |
  3+30     144.5159    121.96  |         |I O      |         |         |
  3+35     121.4742    105.34  |        I|O        |         |         |
  3+40     104.7975     92.35  |       IO|         |         |         |
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EX HG UNIT – 100YR 3HR

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   3+45      91.9341     82.35  |      IO |         |         |         |
   3+50      81.9028     73.92  |     IO  |         |         |         |
   3+55      73.4127     66.14  |     O   |         |         |         |
   4+ 0      65.8358     59.97  |    IO   |         |         |         |
   4+ 5      59.6275     54.44  |    O    |         |         |         |
   4+10      54.1208     49.45  |   IO    |         |         |         |
   4+15      49.1541     44.92  |   O     |         |         |         |
   4+20      44.6076     40.54  |  IO     |         |         |         |
   4+25      40.3807     37.13  |  O      |         |         |         |
   4+30      36.9223     33.94  |  O      |         |         |         |
   4+35      33.7436     30.99  | IO      |         |         |         |
   4+40      30.9381     29.00  | O       |         |         |         |
   4+45      28.8802     27.13  | O       |         |         |         |
   4+50      26.9228     24.89  | O       |         |         |         |
   4+55      24.7479     22.83  | O       |         |         |         |
   5+ 0      22.6723     20.75  |IO       |         |         |         |
   5+ 5      20.6304     18.91  |O        |         |         |         |
   5+10      18.8389     17.44  |O        |         |         |         |
   5+15      17.3003     15.79  |O        |         |         |         |
   5+20      15.6897     14.30  |O        |         |         |         |
   5+25      14.2307     13.06  |O        |         |         |         |
   5+30      12.9428     11.69  |O        |         |         |         |
   5+35      11.6101     10.49  IO        |         |         |         |
   5+40      10.4201      9.42  O         |         |         |         |
   5+45       9.3687      8.51  O         |         |         |         |
   5+50       8.4975      7.89  O         |         |         |         |
   5+55       7.8451      7.25  O         |         |         |         |
   6+ 0       7.1742      6.44  O         |         |         |         |
   6+ 5       6.4001      5.75  O         |         |         |         |
   6+10       5.6725      4.93  O         |         |         |         |
   6+15       4.7967      3.73  O         |         |         |         |
   6+20       3.6160      2.41  O         |         |         |         |
   6+25       2.3300      1.20  O         |         |         |         |
   6+30       1.2134      0.57  O         |         |         |         |
   6+35       0.5954      0.33  O         |         |         |         |
   6+40       0.3257      0.12  O         |         |         |         |
   6+45       0.1248      0.01  O         |         |         |         |
   6+50       0.0179      0.00  O         |         |         |         |
   6+55       0.0019      0.00  O         |         |         |         |
   7+ 0       0.0000      0.00  O         |         |         |         |
------------------------------------------------------------------------
      ****************************HYDROGRAPH DATA****************************
                  Number of intervals =    84
                  Time interval =    5.0 (Min.)
                  Maximum/Peak flow rate =      427.158 (CFS)
                  Total volume =      55.140 (Ac.Ft)
            Status of hydrographs being held in storage
                       Stream 1  Stream 2  Stream 3  Stream 4  Stream 5
            Peak (CFS)      0.000     0.000     0.000     0.000     0.000
            Vol (Ac.Ft)      0.000     0.000     0.000     0.000     0.000
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      Process from Point/Station       11.000 to Point/Station       15.000
      **** ADD/COMBINE/RECOVER HYDROGRAPHS ****
      ____________________________________________________________________
      ********************* HYDROGRAPH INFORMATION **********************

                  From study/file name: trib1b3100.rte
      ++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                     P R I N T  O F  S T O R M
                  R u n o f f     H y d r o g r a p h
      ------------------------------------------------------------------------
               Hydrograph in   5   Minute intervals (CFS)

      ------------------------------------------------------------------------
  Time(h+m) Add q(CFS)  Tot. Q   0      114.8     229.6     344.4     459.2
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EX HG UNIT – 100YR 3HR

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0+ 5       0.2845      0.47  Q         |         |         |         |
0+10       1.4682      2.90  Q         |         |         |         |
0+15       3.0385      7.38  Q         |         |         |         |
0+20       3.8015     12.78  qQ        |         |         |         |
0+25       4.5233     20.18  qQ        |         |         |         |
0+30       5.8171     29.89  q Q       |         |         |         |
0+35       7.0473     40.52  q  Q      |         |         |         |
0+40       7.8555     50.30  q   Q     |         |         |         |
0+45       8.3950     59.42  q    Q    |         |         |         |
0+50       9.0729     68.66  q    Q    |         |         |         |
0+55       9.0861     75.99  q     Q   |         |         |         |
1+ 0       8.8612     81.51  q      Q  |         |         |         |
1+ 5       9.4990     86.75  q      Q  |         |         |         |
1+10      11.0298     92.81  q       Q |         |         |         |
1+15      12.6190     99.44  |q      Q |         |         |         |
1+20      13.4294    106.43  |q       Q|         |         |         |
1+25      13.8077    114.58  |q       Q|         |         |         |
1+30      14.8582    124.74  |q        Q         |         |         |
1+35      16.6142    136.03  |q        |Q        |         |         |
1+40      17.4862    145.97  |q        | Q       |         |         |
1+45      18.2350    155.81  |q        |  Q      |         |         |
1+50      20.2115    167.93  |q        |   Q     |         |         |
1+55      22.0521    181.07  |q        |    Q    |         |         |
2+ 0       22.4770    192.69  |q        |     Q   |         |         |
2+ 5       22.5359    203.41  |q        |      Q  |         |         |
2+10       23.6094    215.15  | q       |       Q |         |         |
2+15       26.8687    229.74  | q       |        Q|         |         |
2+20       31.3771    247.23  | q       |         |Q        |         |
2+25       34.4058    266.04  | q       |         |  Q      |         |
2+30       39.6059    294.07  |  q      |         |    Q    |         |
2+35       49.6374    336.40  |   q     |         |      Q  |         |
2+40       57.2620    385.14  |   q     |         |         |  Q      |
2+45       56.7191    428.39  |   q     |         |         |    Q    |
2+50       45.4834    452.81  |  q      |         |         |      Q  |
2+55       32.0509    459.21  | q       |         |         |       Q |
3+ 0       24.0029    444.72  | q       |         |         |      Q  |
3+ 5       18.3371    403.74  |q        |         |         |    Q    |
3+10       13.0741    342.99  |q        |         |         |  Q      |
3+15        9.5617    279.00  q         |         |   Q     |         |
3+20        7.4218    224.88  q         |         |Q        |         |
3+25        5.8937    182.38  q         |    Q    |         |         |
3+30        4.7778    149.29  q         |  Q      |         |         |
3+35        3.9080    125.38  q         Q         |         |         |
3+40        3.1765    107.97  q        Q|         |         |         |
3+45        2.5367     94.47  q       Q |         |         |         |
3+50        1.9620     83.86  q      Q  |         |         |         |
3+55        1.6443     75.06  q     Q   |         |         |         |
4+ 0        1.2447     67.08  q    Q    |         |         |         |
4+ 5        0.9112     60.54  q    Q    |         |         |         |
4+10        0.5013     54.62  q   Q     |         |         |         |
4+15        0.1808     49.33  q   Q     |         |         |         |
4+20        0.1182     44.73  q  Q      |         |         |         |
4+25        0.0704     40.45  q  Q      |         |         |         |
4+30        0.0038     36.93  q  Q      |         |         |         |
4+35        0.0000     33.74  q Q       |         |         |         |
4+40        0.0000     30.94  q Q       |         |         |         |
4+45        0.0000     28.88  q Q       |         |         |         |
4+50        0.0000     26.92  q Q       |         |         |         |
4+55        0.0000     24.75  q Q       |         |         |         |
5+ 0        0.0000     22.67  qQ        |         |         |         |
5+ 5        0.0000     20.63  qQ        |         |         |         |
5+10        0.0000     18.84  qQ        |         |         |         |
5+15        0.0000     17.30  qQ        |         |         |         |
5+20        0.0000     15.69  qQ        |         |         |         |
5+25        0.0000     14.23  qQ        |         |         |         |
5+30        0.0000     12.94  qQ        |         |         |         |
5+35        0.0000     11.61  qQ        |         |         |         |
5+40        0.0000     10.42  Q         |         |         |         |
5+45        0.0000      9.37  Q         |         |         |         |
5+50        0.0000      8.50  Q         |         |         |         |
5+55        0.0000      7.85  Q         |         |         |         |
```

EX HG UNIT – 100YR 3HR

```
    6+ 0       0.0000      7.17  Q          |          |          |          |
    6+ 5       0.0000      6.40  Q          |          |          |          |
    6+10       0.0000      5.67  Q          |          |          |          |
    6+15       0.0000      4.80  Q          |          |          |          |
    6+20       0.0000      3.62  Q          |          |          |          |
    6+25       0.0000      2.33  Q          |          |          |          |
    6+30       0.0000      1.21  Q          |          |          |          |
    6+35       0.0000      0.60  Q          |          |          |          |
    6+40       0.0000      0.33  Q          |          |          |          |
    6+45       0.0000      0.12  Q          |          |          |          |
    6+50       0.0000      0.02  Q          |          |          |          |
    6+55       0.0000      0.00  Q          |          |          |          |
    7+ 0       0.0000      0.00  Q          |          |          |          |
--------------------------------------------------------------------------------
      ****************************HYDROGRAPH DATA****************************
                    Number of intervals =    84
                    Time interval =    5.0 (Min.)
                    Maximum/Peak flow rate =      459.209 (CFS)
                    Total volume =      60.515 (Ac.Ft)
             Status of hydrographs being held in storage
                       Stream 1  Stream 2  Stream 3  Stream 4  Stream 5
             Peak (CFS)      0.000     0.000     0.000     0.000     0.000
             Vol (Ac.Ft)      0.000     0.000     0.000     0.000     0.000
      ********************************************************************************

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      ++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
      Process from Point/Station       15.000 to Point/Station       16.000
      **** STREAM ROUTING SCS CONVEX METHOD ****
      ________________________________________________________________________________
      HYDROGRAPH STREAM ROUTING DATA:
      Length of stream =    825.00 (Ft.)
      Elevation difference =   15.00 (Ft.)
      Slope of channel =  0.018182 (Vert/Horiz)
      Channel type - Improved Channel


      Channel length =   825.00(Ft.)     Elevation difference =  15.00(Ft.)
      Channel evaluation using mean flow rate of hydrograph
      Channel base width  =    5.000(Ft.)
      Slope or 'Z' of left channel bank =   1.000
      Slope or 'Z' of right channel bank =   1.000
      Manning's 'N'    = 0.045
      Maximum depth of channel  =   20.000(Ft.)
      Flow(q) thru subarea =    180.572(CFS)
      Depth of flow =     3.232(Ft.)
      Average velocity =     6.786(Ft/s)
      Total flow rate =   180.572(CFS)
      Channel flow top width =   11.464(Ft.)
      Depth of flow in channel =   3.23(Ft.)
      Total number of channels (same dimensions) = 1
      Flow Velocity =    6.79(Ft/s)
      Travel time  =    0.00 min.
      Individual channel flow =  180.572(CFS)
      Total capacity of improved channels =    180.572(CFS)
      Critical Depth in Channel =    2.81(Ft.)


      Channel evaluation using maximum flow rate of hydrograph
      Flow(q) thru subarea =    459.209(CFS)
      Depth of flow =     5.213(Ft.)
      Average velocity =     8.626(Ft/s)
      Total flow rate =   459.209(CFS)
      Channel flow top width =   15.425(Ft.)
      Depth of flow in channel =   5.21(Ft.)
      Total number of channels (same dimensions) = 1
      Flow Velocity =    8.63(Ft/s)
      Travel time  =    0.00 min.
      Individual channel flow =  459.209(CFS)
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EX HG UNIT – 100YR 3HR

Total capacity of improved channels = 459.209(CFS)
Critical Depth in Channel = 4.69(Ft.)

********** SCS CONVEX CHANNEL ROUTING **********
Convex method of stream routing data items:
Using equation: Outflow =
O(t+dt) = (1-c*)O(t+dt-dt*) + Input(c*)
where c* = 1 - (1-c)^e and dt = c(length)/velocity
c(v/v+1.7) = 0.8354 Travel time = 1.59 (min.)
dt*(unit time interval) = 5.00(min.), e= 2.8366
dt(routing time-step) = 1.33 (min.), c* = 0.9940

Output hydrograph delayed by 0 unit time increments

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P R I N T O F S T O R M
R u n o f f H y d r o g r a p h

Hydrograph in 5 Minute intervals (CFS)

Time(h+m)	Out = O(CFS)	In = I	0	114.8	229.6	344.4	459.2
0+ 5	0.3402	0.47	O				
0+10	2.2376	2.90	O				
0+15	6.1590	7.38	O				
0+20	11.3131	12.78	OI				
0+25	18.1718	20.18	IO				
0+30	27.2503	29.89	I O				
0+35	37.6297	40.52	I O				
0+40	47.6388	50.30	I O				
0+45	56.9330	59.42	I OI				
0+50	66.1425	68.66	I O				
0+55	73.9893	75.99	I O				
1+ 0	80.0055	81.51	I OI				
1+ 5	85.3261	86.75	I O				
1+10	91.1586	92.81	I OI				
1+15	97.6347	99.44	I O				
1+20	104.5236	106.43	I O				
1+25	112.3616	114.58	I O				
1+30	121.9750	124.74	I O				
1+35	132.9581	136.03	I O				
1+40	143.2628	145.97	I O				
1+45	153.1319	155.81	I O				
1+50	164.6368	167.93	I O				
1+55	177.4951	181.07	I O				
2+ 0	189.5249	192.69	I O				
2+ 5	200.4886	203.41	I O				
2+10	211.9534	215.15	I O				
2+15	225.7733	229.74	I OI				
2+20	242.4691	247.23	I O				
2+25	260.9165	266.04	I OI				
2+30	286.4509	294.07	I OI				
2+35	324.8949	336.40	I OI				
2+40	371.8733	385.14	I OI				
2+45	416.6043	428.39	I OI				
2+50	446.1293	452.81	I OI				
2+55	457.4363	459.21	I OI				
3+ 0	448.6321	444.72	I IO				
3+ 5	414.8549	403.74	I IO				
3+10	359.5019	342.99	I IO				
3+15	296.4241	279.00	I IO				
3+20	239.6389	224.88	I IO				
3+25	193.9765	182.38	I IO				
3+30	158.3208	149.29	I O				
3+35	131.9095	125.38	I IO				
3+40	112.7257	107.97	I O				
3+45	98.1548	94.47	I O				
3+50	86.7581	83.86	I O				

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   3+55      77.4587     75.06  |     O   |         |         |         |
   4+ 0      69.2543     67.08  |    IO   |         |         |         |
   4+ 5      62.3227     60.54  |    O    |         |         |         |
   4+10      56.2345     54.62  |   O     |         |         |         |
   4+15      50.7759     49.33  |   O     |         |         |         |
   4+20      45.9822     44.73  |  IO     |         |         |         |
   4+25      41.6159     40.45  |  O      |         |         |         |
   4+30      37.8874     36.93  |  O      |         |         |         |
   4+35      34.6109     33.74  | IO      |         |         |         |
   4+40      31.7027     30.94  | O       |         |         |         |
   4+45      29.4419     28.88  | O       |         |         |         |
   4+50      27.4560     26.92  | O       |         |         |         |
   4+55      25.3399     24.75  | O       |         |         |         |
   5+ 0      23.2377     22.67  |IO       |         |         |         |
   5+ 5      21.1866     20.63  |O        |         |         |         |
   5+10      19.3272     18.84  |O        |         |         |         |
   5+15      17.7198     17.30  |O        |         |         |         |
   5+20      16.1282     15.69  |O        |         |         |         |
   5+25      14.6283     14.23  |O        |         |         |         |
   5+30      13.2938     12.94  |O        |         |         |         |
   5+35      11.9730     11.61  |O        |         |         |         |
   5+40      10.7444     10.42  O         |         |         |         |
   5+45       9.6552      9.37  O         |         |         |         |
   5+50       8.7350      8.50  O         |         |         |         |
   5+55       8.0231      7.85  O         |         |         |         |
   6+ 0       7.3569      7.17  O         |         |         |         |
   6+ 5       6.6107      6.40  O         |         |         |         |
   6+10       5.8707      5.67  O         |         |         |         |
   6+15       5.0350      4.80  O         |         |         |         |
   6+20       3.9371      3.62  O         |         |         |         |
   6+25       2.6800      2.33  O         |         |         |         |
   6+30       1.5178      1.21  O         |         |         |         |
   6+35       0.7645      0.60  O         |         |         |         |
   6+40       0.3997      0.33  O         |         |         |         |
   6+45       0.1797      0.12  O         |         |         |         |
   6+50       0.0472      0.02  O         |         |         |         |
   6+55       0.0064      0.00  O         |         |         |         |
   7+ 0       0.0006      0.00  O         |         |         |         |
   7+ 5       0.0000      0.00  O         |         |         |         |
-------------------------------------------------------------------------
      ****************************HYDROGRAPH DATA****************************
                  Number of intervals =    85
                  Time interval =    5.0 (Min.)
                  Maximum/Peak flow rate =      457.436 (CFS)
                  Total volume =      60.515 (Ac.Ft)
            Status of hydrographs being held in storage
                       Stream 1  Stream 2  Stream 3  Stream 4  Stream 5
            Peak (CFS)      0.000     0.000     0.000     0.000     0.000
            Vol (Ac.Ft)      0.000     0.000     0.000     0.000     0.000
      *************************************************************************

      ---------------------------------------------------------------------


      +++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
      Process from Point/Station       14.000 to Point/Station       16.000
      **** ADD/COMBINE/RECOVER HYDROGRAPHS ****
      _____________________________________________________________________
      ********************* HYDROGRAPH INFORMATION **********************

                  From study/file name: tribhg13100.rte
      ++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                     P R I N T  O F  S T O R M
                  R u n o f f     H y d r o g r a p h
      ---------------------------------------------------------------------
               Hydrograph in   5   Minute intervals (CFS)

      ---------------------------------------------------------------------
  Time(h+m) Add q(CFS)  Tot. Q   0      147.7     295.3     443.0     590.7
  ---------------------------------------------------------------------
    0+ 5       6.5252      6.87  Q         |         |         |         |
```

EX HG UNIT – 100YR 3HR

0+10	17.8501	20.09	|Q				
0+15	18.9258	25.08	|Q				
0+20	20.7357	32.05	|qQ				
0+25	27.0938	45.27	|q Q				
0+30	31.5919	58.84		qQ				
0+35	34.4031	72.03		q Q				
0+40	33.9073	81.55		q Q				
0+45	38.2333	95.17		q Q				
0+50	36.5612	102.70		q Q				
0+55	33.0615	107.05		q Q				
1+ 0	35.5144	115.52		q Q				
1+ 5	42.4183	127.74		q Q				
1+10	49.7000	140.86		q Q|			
1+15	51.6917	149.33		q Q				
1+20	50.7538	155.28		q Q				
1+25	53.6690	166.03		q |Q			
1+30	63.7579	185.73		q	Q			
1+35	64.8429	197.80		q	Q			
1+40	64.1274	207.39		q	Q			
1+45	74.0142	227.15		q	Q			
1+50	82.9402	247.58		q	Q			
1+55	80.8483	258.34		q	Q			
2+ 0	79.0029	268.53		q	Q			
2+ 5	81.0388	281.53		q	Q|		
2+10	93.1810	305.13		q	Q			
2+15	118.9130	344.69		q		Q		
2+20	122.6156	365.08		q		Q		
2+25	134.6463	395.56		q|	Q		
2+30	189.1487	475.60			q		Q	
2+35	218.1627	543.06			q		Q	
2+40	218.8172	590.69			q		Q	
2+45	152.7476	569.35		q			Q	
2+50	81.7202	527.85		q			Q	
2+55	59.9550	517.39		q			Q	
3+ 0	40.3173	488.95		q			Q	
3+ 5	16.5231	431.38	|q			Q|	
3+10	6.5183	366.02	q			Q		
3+15	2.6286	299.05	q			Q		
3+20	1.1952	240.83	q		Q			
3+25	0.4440	194.42	q		Q			
3+30	0.0463	158.37	q	Q				
3+35	0.0000	131.91	q	Q				
3+40	0.0000	112.73	q	Q				
3+45	0.0000	98.15	q	Q				
3+50	0.0000	86.76	q	Q				
3+55	0.0000	77.46	q	Q				
4+ 0	0.0000	69.25	q	Q				
4+ 5	0.0000	62.32	q	Q				
4+10	0.0000	56.23	q	Q				
4+15	0.0000	50.78	q	Q				
4+20	0.0000	45.98	q	Q				
4+25	0.0000	41.62	q Q					
4+30	0.0000	37.89	q Q					
4+35	0.0000	34.61	q Q					
4+40	0.0000	31.70	q Q					
4+45	0.0000	29.44	qQ					
4+50	0.0000	27.46	qQ					
4+55	0.0000	25.34	qQ					
5+ 0	0.0000	23.24	qQ					
5+ 5	0.0000	21.19	qQ					
5+10	0.0000	19.33	qQ					
5+15	0.0000	17.72	qQ					
5+20	0.0000	16.13	qQ					
5+25	0.0000	14.63	Q					
5+30	0.0000	13.29	Q					
5+35	0.0000	11.97	Q					
5+40	0.0000	10.74	Q					
5+45	0.0000	9.66	Q					
5+50	0.0000	8.74	Q					
5+55	0.0000	8.02	Q					
6+ 0	0.0000	7.36	Q					

EX HG UNIT – 100YR 3HR

```
    6+ 5       0.0000      6.61  Q          |          |          |          |
    6+10       0.0000      5.87  Q          |          |          |          |
    6+15       0.0000      5.04  Q          |          |          |          |
    6+20       0.0000      3.94  Q          |          |          |          |
    6+25       0.0000      2.68  Q          |          |          |          |
    6+30       0.0000      1.52  Q          |          |          |          |
    6+35       0.0000      0.76  Q          |          |          |          |
    6+40       0.0000      0.40  Q          |          |          |          |
    6+45       0.0000      0.18  Q          |          |          |          |
    6+50       0.0000      0.05  Q          |          |          |          |
    6+55       0.0000      0.01  Q          |          |          |          |
    7+ 0       0.0000      0.00  Q          |          |          |          |
    7+ 5       0.0000      0.00  Q          |          |          |          |
--------------------------------------------------------------------------------
      ****************************HYDROGRAPH DATA**************************
                  Number of intervals =    85
                  Time interval =    5.0 (Min.)
                  Maximum/Peak flow rate =      590.691 (CFS)
                  Total volume =      78.634 (Ac.Ft)
            Status of hydrographs being held in storage
                     Stream 1  Stream 2  Stream 3  Stream 4  Stream 5
            Peak (CFS)      0.000     0.000     0.000     0.000     0.000
            Vol (Ac.Ft)      0.000     0.000     0.000     0.000     0.000
      ********************************************************************************

      ------------------------------------------------------------------------


      ++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
      Process from Point/Station       16.000 to Point/Station       30.000
      **** STREAM ROUTING SCS CONVEX METHOD ****
      ____________________________________________________________________________
      HYDROGRAPH STREAM ROUTING DATA:
      Length of stream =   1610.00 (Ft.)
      Elevation difference =   60.00 (Ft.)
      Slope of channel =  0.037267 (Vert/Horiz)
      Channel type - Improved Channel


      Channel length =  1610.00(Ft.)     Elevation difference =  60.00(Ft.)
      Channel evaluation using mean flow rate of hydrograph
      Channel base width  =    5.000(Ft.)
      Slope or 'Z' of left channel bank =   1.000
      Slope or 'Z' of right channel bank =   1.000
      Manning's 'N'    = 0.045
      Maximum depth of channel  =   20.000(Ft.)
      Flow(q) thru subarea =    246.033(CFS)
      Depth of flow =     3.149(Ft.)
      Average velocity =     9.590(Ft/s)
      Total flow rate =   246.033(CFS)
      Channel flow top width =   11.297(Ft.)
      Depth of flow in channel =   3.15(Ft.)
      Total number of channels (same dimensions) = 1
      Flow Velocity =    9.59(Ft/s)
      Travel time  =    0.00 min.
      Individual channel flow =  246.033(CFS)
      Total capacity of improved channels =    246.033(CFS)
      Critical Depth in Channel =    3.34(Ft.)


      Channel evaluation using maximum flow rate of hydrograph
      Flow(q) thru subarea =    590.691(CFS)
      Depth of flow =     4.943(Ft.)
      Average velocity =    12.020(Ft/s)
      Total flow rate =   590.691(CFS)
      Channel flow top width =   14.885(Ft.)
      Depth of flow in channel =   4.94(Ft.)
      Total number of channels (same dimensions) = 1
      Flow Velocity =   12.02(Ft/s)
      Travel time  =    0.00 min.
      Individual channel flow =  590.691(CFS)
```

EX HG UNIT – 100YR 3HR

```
      Total capacity of improved channels =    590.691(CFS)
      Critical Depth in Channel =    5.38(Ft.)


      ********************** SCS CONVEX CHANNEL ROUTING ********************
      Convex method of stream routing  data items:
      Using equation: Outflow =
      O(t+dt) = (1-c*)O(t+dt-dt*) + Input(c*)
                where c* = 1 - (1-c)^e and dt = c(length)/velocity
                c(v/v+1.7) =   0.8761   Travel time =   2.23 (min.)
              dt*(unit time interval) =   5.00(min.),  e=   2.0377
              dt(routing time-step) =   1.96 (min.),   c* =   0.9858

      Output hydrograph delayed by 0  unit time increments


      ++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                        P R I N T  O F  S T O R M
                     R u n o f f     H y d r o g r a p h
      ----------------------------------------------------------------------
                  Hydrograph in   5   Minute intervals (CFS)

      ----------------------------------------------------------------------
Time(h+m) Out = O(CFS) In = I  0      147.7     295.3     443.0     590.7
----------------------------------------------------------------------------
  0+ 5       4.1207      6.87  O         |         |         |         |
  0+10      14.7625     20.09  OI        |         |         |         |
  0+15      23.0114     25.08  |O        |         |         |         |
  0+20      29.2353     32.05  |OI       |         |         |         |
  0+25      39.9418     45.27  | OI      |         |         |         |
  0+30      53.3389     58.84  |  O      |         |         |         |
  0+35      66.6812     72.03  |   O     |         |         |         |
  0+40      77.6668     81.55  |    O    |         |         |         |
  0+45      89.6660     95.17  |     O   |         |         |         |
  0+50      99.6123    102.70  |     O   |         |         |         |
  0+55     105.2689    107.05  |      O  |         |         |         |
  1+ 0     112.1087    115.52  |      O  |         |         |         |
  1+ 5     122.8087    127.74  |       O |         |         |         |
  1+10     135.5456    140.86  |        O|         |         |         |
  1+15     145.8656    149.33  |        OI         |         |         |
  1+20     152.8491    155.28  |         O         |         |         |
  1+25     161.6971    166.03  |         OI        |         |         |
  1+30     177.7946    185.73  |         | O       |         |         |
  1+35     192.8636    197.80  |         |  O      |         |         |
  1+40     203.4865    207.39  |         |  OI     |         |         |
  1+45     219.1925    227.15  |         |   OI    |         |         |
  1+50     239.2961    247.58  |         |     O   |         |         |
  1+55     253.9216    258.34  |         |      O  |         |         |
  2+ 0     264.3934    268.53  |         |      OI |         |         |
  2+ 5     276.2716    281.53  |         |       OI|         |         |
  2+10     295.6219    305.13  |         |         O         |         |
  2+15     328.7388    344.69  |         |         | OI      |         |
  2+20     356.7033    365.08  |         |         |   O     |         |
  2+25     383.2590    395.56  |         |         |    OI   |         |
  2+30     443.4269    475.60  |         |         |         O I       |
  2+35     515.6319    543.06  |         |         |         |   O I   |
  2+40     571.2581    590.69  |         |         |         |       O I
  2+45     577.6072    569.35  |         |         |         |       IO|
  2+50     544.5590    527.85  |         |         |         |    IO   |
  2+55     521.8095    517.39  |         |         |         |    O    |
  3+ 0     500.3830    488.95  |         |         |         |  O      |
  3+ 5     454.5568    431.38  |         |         |        IO         |
  3+10     392.4786    366.02  |         |         |   I O   |         |
  3+15     326.2012    299.05  |         |         I O       |         |
  3+20     264.4947    240.83  |         |     IO  |         |         |
  3+25     213.3121    194.42  |         |  IO     |         |         |
  3+30     173.0491    158.37  |         IO        |         |         |
  3+35     142.6954    131.91  |       IO|         |         |         |
  3+40     120.5483    112.73  |      IO |         |         |         |
  3+45     104.0911     98.15  |     IO  |         |         |         |
  3+50      91.3986     86.76  |    IO   |         |         |         |
```

EX HG UNIT – 100YR 3HR

```
   3+55      81.2424     77.46  |    O    |         |         |         |
   4+ 0      72.5881     69.25  |   O     |         |         |         |
   4+ 5      65.1412     62.32  |   O     |         |         |         |
   4+10      58.7085     56.23  |  O      |         |         |         |
   4+15      52.9933     50.78  |  O      |         |         |         |
   4+20      47.9301     45.98  |  O      |         |         |         |
   4+25      43.3892     41.62  | O       |         |         |         |
   4+30      39.4032     37.89  | O       |         |         |         |
   4+35      35.9423     34.61  | O       |         |         |         |
   4+40      32.8843     31.70  | O       |         |         |         |
   4+45      30.3625     29.44  |IO       |         |         |         |
   4+50      28.2630     27.46  |O        |         |         |         |
   4+55      26.1974     25.34  |O        |         |         |         |
   5+ 0      24.0903     23.24  |O        |         |         |         |
   5+ 5      22.0187     21.19  |O        |         |         |         |
   5+10      20.0824     19.33  |O        |         |         |         |
   5+15      18.3731     17.72  |O        |         |         |         |
   5+20      16.7738     16.13  |O        |         |         |         |
   5+25      15.2371     14.63  IO        |         |         |         |
   5+30      13.8360     13.29  O         |         |         |         |
   5+35      12.5087     11.97  O         |         |         |         |
   5+40      11.2432     10.74  O         |         |         |         |
   5+45      10.0978      9.66  O         |         |         |         |
   5+50       9.1092      8.74  O         |         |         |         |
   5+55       8.3131      8.02  O         |         |         |         |
   6+ 0       7.6274      7.36  O         |         |         |         |
   6+ 5       6.9129      6.61  O         |         |         |         |
   6+10       6.1709      5.87  O         |         |         |         |
   6+15       5.3734      5.04  O         |         |         |         |
   6+20       4.3808      3.94  O         |         |         |         |
   6+25       3.1889      2.68  O         |         |         |         |
   6+30       1.9897      1.52  O         |         |         |         |
   6+35       1.0724      0.76  O         |         |         |         |
   6+40       0.5499      0.40  O         |         |         |         |
   6+45       0.2698      0.18  O         |         |         |         |
   6+50       0.1014      0.05  O         |         |         |         |
   6+55       0.0235      0.01  O         |         |         |         |
   7+ 0       0.0031      0.00  O         |         |         |         |
   7+ 5       0.0003      0.00  O         |         |         |         |
   7+10       0.0000      0.00  O         |         |         |         |
--------------------------------------------------------------------------
      ****************************HYDROGRAPH DATA****************************
                  Number of intervals =    86
                  Time interval =    5.0 (Min.)
                  Maximum/Peak flow rate =      577.607 (CFS)
                  Total volume =      78.634 (Ac.Ft)
            Status of hydrographs being held in storage
                       Stream 1  Stream 2  Stream 3  Stream 4  Stream 5
            Peak (CFS)      0.000     0.000     0.000     0.000     0.000
            Vol (Ac.Ft)     0.000     0.000     0.000     0.000     0.000
      ************************************************************************

      ------------------------------------------------------------------------


      ++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
      Process from Point/Station       16.000 to Point/Station       30.000
      **** ADD/COMBINE/RECOVER HYDROGRAPHS ****
      ____________________________________________________________________
      ********************* HYDROGRAPH INFORMATION **********************

                  From study/file name: trib1f3100.rte
      ++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                     P R I N T  O F  S T O R M
                  R u n o f f     H y d r o g r a p h
      ------------------------------------------------------------------------
               Hydrograph in   5   Minute intervals (CFS)

      ------------------------------------------------------------------------
  Time(h+m) Add q(CFS)  Tot. Q   0      161.0     322.1     483.1     644.2
  ------------------------------------------------------------------------
```

EX HG UNIT – 100YR 3HR

```
0+ 5       0.8751      5.00  Q          |          |          |          |
0+10       3.8123     18.57  qQ         |          |          |          |
0+15       4.8334     27.84  qQ         |          |          |          |
0+20       4.9640     34.20  q Q        |          |          |          |
0+25       6.8933     46.84  q Q        |          |          |          |
0+30       8.3062     61.65  q  Q       |          |          |          |
0+35       9.8147     76.50  q   Q      |          |          |          |
0+40       9.6895     87.36  q    Q     |          |          |          |
0+45      10.9914    100.66  q     Q    |          |          |          |
0+50      11.2377    110.85  q     Q    |          |          |          |
0+55      10.1433    115.41  q      Q   |          |          |          |
1+ 0      10.4398    122.55  q      Q   |          |          |          |
1+ 5      12.1467    134.96  q       Q  |          |          |          |
1+10      14.6866    150.23  q        Q|          |          |          |
1+15      15.8092    161.67  q         Q          |          |          |
1+20      15.9848    168.83  q         Q          |          |          |
1+25      16.1648    177.86  |q         Q         |          |          |
1+30      19.1484    196.94  |q         | Q       |          |          |
1+35      20.5397    213.40  |q         |  Q      |          |          |
1+40      20.2393    223.73  |q         |  Q      |          |          |
1+45      22.4562    241.65  |q         |    Q    |          |          |
1+50      25.9347    265.23  |q         |     Q   |          |          |
1+55      26.2907    280.21  |q         |      Q  |          |          |
2+ 0      25.6968    290.09  |q         |       Q |          |          |
2+ 5      26.1585    302.43  |q         |       Q |          |          |
2+10      28.5971    324.22  |q         |        Q          |          |
2+15      35.8725    364.61  | q        |          | Q      |          |
2+20      40.4222    397.13  | q        |          |   Q    |          |
2+25      40.7759    424.03  | q        |          |     Q  |          |
2+30      56.5794    500.01  |  q       |          |       |Q         |
2+35      67.7209    583.35  |   q      |          |       |    Q     |
2+40      72.9004    644.16  |   q      |          |       |      Q   |
2+45      59.3771    636.98  |  q       |          |       |       Q  |
2+50      35.7940    580.35  | q        |          |       |    Q     |
2+55      24.9239    546.73  |q         |          |       |  Q       |
3+ 0      18.8128    519.20  |q         |          |       | Q        |
3+ 5      10.8447    465.40  q          |          |         Q|          |
3+10       6.4827    398.96  q          |          |   Q      |          |
3+15       4.1763    330.38  q          |          |Q         |          |
3+20       2.6015    267.10  q          |     Q    |          |          |
3+25       1.5147    214.83  q          |  Q       |          |          |
3+30       0.7215    173.77  q         Q|          |          |          |
3+35       0.3059    143.00  q       Q  |          |          |          |
3+40       0.1614    120.71  q       Q  |          |          |          |
3+45       0.0599    104.15  q      Q   |          |          |          |
3+50       0.0030     91.40  q    Q     |          |          |          |
3+55       0.0000     81.24  q    Q     |          |          |          |
4+ 0       0.0000     72.59  q   Q      |          |          |          |
4+ 5       0.0000     65.14  q   Q      |          |          |          |
4+10       0.0000     58.71  q  Q       |          |          |          |
4+15       0.0000     52.99  q  Q       |          |          |          |
4+20       0.0000     47.93  q Q        |          |          |          |
4+25       0.0000     43.39  q Q        |          |          |          |
4+30       0.0000     39.40  q Q        |          |          |          |
4+35       0.0000     35.94  q Q        |          |          |          |
4+40       0.0000     32.88  q Q        |          |          |          |
4+45       0.0000     30.36  qQ         |          |          |          |
4+50       0.0000     28.26  qQ         |          |          |          |
4+55       0.0000     26.20  qQ         |          |          |          |
5+ 0       0.0000     24.09  qQ         |          |          |          |
5+ 5       0.0000     22.02  qQ         |          |          |          |
5+10       0.0000     20.08  qQ         |          |          |          |
5+15       0.0000     18.37  qQ         |          |          |          |
5+20       0.0000     16.77  qQ         |          |          |          |
5+25       0.0000     15.24  Q          |          |          |          |
5+30       0.0000     13.84  Q          |          |          |          |
5+35       0.0000     12.51  Q          |          |          |          |
5+40       0.0000     11.24  Q          |          |          |          |
5+45       0.0000     10.10  Q          |          |          |          |
5+50       0.0000      9.11  Q          |          |          |          |
5+55       0.0000      8.31  Q          |          |          |          |
```

EX HG UNIT – 100YR 3HR

```
    6+ 0       0.0000      7.63  Q          |          |          |          |
    6+ 5       0.0000      6.91  Q          |          |          |          |
    6+10       0.0000      6.17  Q          |          |          |          |
    6+15       0.0000      5.37  Q          |          |          |          |
    6+20       0.0000      4.38  Q          |          |          |          |
    6+25       0.0000      3.19  Q          |          |          |          |
    6+30       0.0000      1.99  Q          |          |          |          |
    6+35       0.0000      1.07  Q          |          |          |          |
    6+40       0.0000      0.55  Q          |          |          |          |
    6+45       0.0000      0.27  Q          |          |          |          |
    6+50       0.0000      0.10  Q          |          |          |          |
    6+55       0.0000      0.02  Q          |          |          |          |
    7+ 0       0.0000      0.00  Q          |          |          |          |
    7+ 5       0.0000      0.00  Q          |          |          |          |
    7+10       0.0000      0.00  Q          |          |          |          |
--------------------------------------------------------------------------------
       ****************************HYDROGRAPH DATA****************************
                    Number of intervals =    86
                    Time interval =    5.0 (Min.)
                    Maximum/Peak flow rate =      644.158 (CFS)
                    Total volume =      84.570 (Ac.Ft)
             Status of hydrographs being held in storage
                       Stream 1  Stream 2  Stream 3  Stream 4  Stream 5
             Peak (CFS)      0.000     0.000     0.000     0.000     0.000
             Vol (Ac.Ft)      0.000     0.000     0.000     0.000     0.000
       ********************************************************************************

       ------------------------------------------------------------------------


       ++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
       Process from Point/Station       10.000 to Point/Station       30.000
       **** STORE OR DELETE CURRENT HYDROGRAPH ****
       ________________________________________________________________________
       Current stream hydrograph of   5.0 minute
       intervals has been stored as stream number 1 with
       a starting time of   0.00 hours and ending time of 333.00 hours
       With a total volume of      84.57(Ac.Ft)
       ****************************HYDROGRAPH DATA****************************
                    Number of intervals =     0
                    Time interval =    0.0 (Min.)
                    Maximum/Peak flow rate =        0.000 (CFS)
                    Total volume =       0.000 (Ac.Ft)
             Status of hydrographs being held in storage
                       Stream 1  Stream 2  Stream 3  Stream 4  Stream 5
             Peak (CFS)    644.158     0.000     0.000     0.000     0.000
             Vol (Ac.Ft)     84.570     0.000     0.000     0.000     0.000
       ********************************************************************************

       ------------------------------------------------------------------------


       ++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
       Process from Point/Station       20.000 to Point/Station       22.000
       **** ADD/COMBINE/RECOVER HYDROGRAPHS ****
       ________________________________________________________________________
       ********************** HYDROGRAPH INFORMATION **********************

                    From study/file name: trib2a3100.rte
       ++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                       P R I N T  O F  S T O R M
                    R u n o f f     H y d r o g r a p h
       ------------------------------------------------------------------------
                  Hydrograph in   5   Minute intervals (CFS)

       ------------------------------------------------------------------------
  Time(h+m) Add q(CFS)  Tot. Q   0       48.9      97.8     146.7     195.6
  ------------------------------------------------------------------------
    0+ 5       0.7405      0.74  Q          |          |          |          |
    0+10       3.6136      3.61  Q          |          |          |          |
    0+15       8.1712      8.17  |Q         |          |          |          |
```

EX HG UNIT – 100YR 3HR

```
    0+20      11.9471     11.95  | Q       |         |         |         |
    0+25      14.5929     14.59  | Q       |         |         |         |
    0+30      18.1936     18.19  |  Q      |         |         |         |
    0+35      22.4544     22.45  |   Q     |         |         |         |
    0+40      25.7818     25.78  |    Q    |         |         |         |
    0+45      28.2002     28.20  |    Q    |         |         |         |
    0+50      30.1996     30.20  |     Q   |         |         |         |
    0+55      31.2556     31.26  |     Q   |         |         |         |
    1+ 0      31.0845     31.08  |     Q   |         |         |         |
    1+ 5      32.2440     32.24  |     Q   |         |         |         |
    1+10      36.3187     36.32  |      Q  |         |         |         |
    1+15      41.6034     41.60  |       Q |         |         |         |
    1+20      45.4569     45.46  |        Q|         |         |         |
    1+25      47.5392     47.54  |        Q|         |         |         |
    1+30      50.4869     50.49  |         Q         |         |         |
    1+35      55.3083     55.31  |          |Q       |         |         |
    1+40      59.5991     59.60  |          | Q      |         |         |
    1+45      62.8033     62.80  |          | Q      |         |         |
    1+50      67.9506     67.95  |          |  Q     |         |         |
    1+55      74.2870     74.29  |          |    Q   |         |         |
    2+ 0      77.8938     77.89  |          |    Q   |         |         |
    2+ 5      78.8675     78.87  |          |     Q  |         |         |
    2+10      81.5575     81.56  |          |     Q  |         |         |
    2+15      90.2306     90.23  |          |       Q|         |         |
    2+20     103.3710    103.37  |          |          |Q      |         |
    2+25     116.2580    116.26  |          |          |  Q    |         |
    2+30     132.1673    132.17  |          |          |      Q|         |
    2+35     159.1399    159.14  |          |          |       | Q       |
    2+40     187.8097    187.81  |          |          |       |        Q|
    2+45     195.6448    195.64  |          |          |       |         Q
    2+50     172.7256    172.73  |          |          |       |    Q    |
    2+55     131.8477    131.85  |          |          |     Q |         |
    3+ 0      97.5117     97.51  |          |         Q|       |         |
    3+ 5      75.3369     75.34  |          |    Q     |       |         |
    3+10      57.2512     57.25  |         |Q         |       |         |
    3+15      43.0603     43.06  |       Q |          |       |         |
    3+20      33.8661     33.87  |     Q   |          |       |         |
    3+25      27.5681     27.57  |    Q    |          |       |         |
    3+30      22.7736     22.77  |   Q     |          |       |         |
    3+35      19.0560     19.06  |  Q      |          |       |         |
    3+40      16.1247     16.12  |  Q      |          |       |         |
    3+45      13.7424     13.74  | Q       |          |       |         |
    3+50      11.5714     11.57  | Q       |          |       |         |
    3+55       9.6902      9.69  |Q        |          |       |         |
    4+ 0       8.2026      8.20  |Q        |          |       |         |
    4+ 5       6.8756      6.88  |Q        |          |       |         |
    4+10       5.6266      5.63  |Q        |          |       |         |
    4+15       4.5529      4.55  Q         |          |       |         |
    4+20       3.9174      3.92  Q         |          |       |         |
    4+25       3.0205      3.02  Q         |          |       |         |
    4+30       2.1071      2.11  Q         |          |       |         |
    4+35       1.1121      1.11  Q         |          |       |         |
    4+40       0.4456      0.45  Q         |          |       |         |
    4+45       0.2824      0.28  Q         |          |       |         |
    4+50       0.1450      0.14  Q         |          |       |         |
    4+55       0.0077      0.01  Q         |          |       |         |
--------------------------------------------------------------------------
      ****************************HYDROGRAPH DATA****************************
                  Number of intervals =    59
                  Time interval =    5.0 (Min.)
                  Maximum/Peak flow rate =      195.645 (CFS)
                  Total volume =      19.223 (Ac.Ft)
            Status of hydrographs being held in storage
                       Stream 1  Stream 2  Stream 3  Stream 4  Stream 5
            Peak (CFS)    644.158     0.000     0.000     0.000     0.000
            Vol (Ac.Ft)     84.570     0.000     0.000     0.000     0.000
      ***************************************************************************

      ---------------------------------------------------------------------
```

EX HG UNIT – 100YR 3HR

```
++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       22.000 to Point/Station       24.000
**** STREAM ROUTING SCS CONVEX METHOD ****
________________________________________________________________________
HYDROGRAPH STREAM ROUTING DATA:
Length of stream =   1676.00 (Ft.)
Elevation difference =   79.00 (Ft.)
Slope of channel =  0.047136 (Vert/Horiz)
Channel type - Improved Channel


Channel length =  1676.00(Ft.)     Elevation difference =  79.00(Ft.)
Channel evaluation using mean flow rate of hydrograph
Channel base width  =    5.000(Ft.)
Slope or 'Z' of left channel bank =   1.000
Slope or 'Z' of right channel bank =   1.000
Manning's 'N'    = 0.045
Maximum depth of channel  =   20.000(Ft.)
Flow(q) thru subarea =     66.496(CFS)
Depth of flow =     1.428(Ft.)
Average velocity =     7.244(Ft/s)
Total flow rate =    66.496(CFS)
Channel flow top width =    7.856(Ft.)
Depth of flow in channel =   1.43(Ft.)
Total number of channels (same dimensions) = 1
Flow Velocity =    7.24(Ft/s)
Travel time  =    0.00 min.
Individual channel flow =   66.496(CFS)
Total capacity of improved channels =     66.496(CFS)
Critical Depth in Channel =    1.58(Ft.)


Channel evaluation using maximum flow rate of hydrograph
Flow(q) thru subarea =    195.645(CFS)
Depth of flow =     2.614(Ft.)
Average velocity =     9.831(Ft/s)
Total flow rate =   195.645(CFS)
Channel flow top width =   10.227(Ft.)
Depth of flow in channel =   2.61(Ft.)
Total number of channels (same dimensions) = 1
Flow Velocity =    9.83(Ft/s)
Travel time  =    0.00 min.
Individual channel flow =  195.645(CFS)
Total capacity of improved channels =    195.645(CFS)
Critical Depth in Channel =    2.94(Ft.)


********************** SCS CONVEX CHANNEL ROUTING *********************
Convex method of stream routing  data items:
Using equation: Outflow =
O(t+dt) = (1-c*)O(t+dt-dt*) + Input(c*)
          where c* = 1 - (1-c)^e and dt = c(length)/velocity
          c(v/v+1.7) =   0.8526   Travel time =   2.84 (min.)
        dt*(unit time interval) =   5.00(min.),  e=   1.7094
        dt(routing time-step) =   2.42 (min.),   c* =   0.9621

Output hydrograph delayed by 0  unit time increments


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                  P R I N T  O F  S T O R M
                R u n o f f     H y d r o g r a p h
------------------------------------------------------------------------
            Hydrograph in   5   Minute intervals (CFS)

------------------------------------------------------------------------
Time(h+m) Out = O(CFS) In = I  0       48.9      97.8     146.7     195.6
------------------------------------------------------------------------
  0+ 5       0.3673      0.74  O         |         |         |         |
  0+10       2.1514      3.61  O         |         |         |         |
  0+15       5.8187      8.17  |O        |         |         |         |
```

EX HG UNIT – 100YR 3HR

```
    0+20       9.9548     11.95  | O       |         |         |         |
    0+25      13.1838     14.59  | O       |         |         |         |
    0+30      16.3254     18.19  |  O      |         |         |         |
    0+35      20.2360     22.45  |   O     |         |         |         |
    0+40      24.0206     25.78  |   OI    |         |         |         |
    0+45      26.9145     28.20  |    O    |         |         |         |
    0+50      29.1431     30.20  |    OI   |         |         |         |
    0+55      30.6833     31.26  |     O   |         |         |         |
    1+ 0      31.1490     31.08  |     O   |         |         |         |
    1+ 5      31.6620     32.24  |     O   |         |         |         |
    1+10      34.2429     36.32  |      O  |         |         |         |
    1+15      38.8611     41.60  |      OI |         |         |         |
    1+20      43.4107     45.46  |       OI|         |         |         |
    1+25      46.4121     47.54  |        O|         |         |         |
    1+30      48.9585     50.49  |         O         |         |         |
    1+35      52.8203     55.31  |         OI        |         |         |
    1+40      57.3421     59.60  |         |OI       |         |         |
    1+45      61.1027     62.80  |         | O       |         |         |
    1+50      65.2918     67.95  |         |  O      |         |         |
    1+55      70.9925     74.29  |         |   OI    |         |         |
    2+ 0      75.9510     77.89  |         |    O    |         |         |
    2+ 5      78.3031     78.87  |         |     O   |         |         |
    2+10      80.1803     81.56  |         |     O   |         |         |
    2+15      85.8069     90.23  |         |      OI |         |         |
    2+20      96.5802    103.37  |         |        O|I        |         |
    2+25     109.5052    116.26  |         |         | OI      |         |
    2+30     123.8926    132.17  |         |         |    O I  |         |
    2+35     145.2314    159.14  |         |         |        O| I       |
    2+40     172.8322    187.81  |         |         |         |    O  I |
    2+45     191.1279    195.64  |         |         |         |       OI|
    2+50     184.1062    172.73  |         |         |         |    I O  |
    2+55     152.8826    131.85  |         |         |     I   |O        |
    3+ 0     115.6153     97.51  |         |        I|  O      |         |
    3+ 5      87.1999     75.34  |         |    I O  |         |         |
    3+10      66.8165     57.25  |         |I O      |         |         |
    3+15      50.5755     43.06  |       I O         |         |         |
    3+20      38.7851     33.87  |     IO  |         |         |         |
    3+25      30.9289     27.57  |    IO   |         |         |         |
    3+30      25.3175     22.77  |   IO    |         |         |         |
    3+35      21.0262     19.06  |  IO     |         |         |         |
    3+40      17.6768     16.12  |  O      |         |         |         |
    3+45      15.0020     13.74  | IO      |         |         |         |
    3+50      12.7134     11.57  | O       |         |         |         |
    3+55      10.6817      9.69  |IO       |         |         |         |
    4+ 0       8.9900      8.20  |O        |         |         |         |
    4+ 5       7.5743      6.88  |O        |         |         |         |
    4+10       6.2826      5.63  |O        |         |         |         |
    4+15       5.1189      4.55  IO        |         |         |         |
    4+20       4.2591      3.92  O         |         |         |         |
    4+25       3.4855      3.02  O         |         |         |         |
    4+30       2.5851      2.11  O         |         |         |         |
    4+35       1.6317      1.11  O         |         |         |         |
    4+40       0.8012      0.45  O         |         |         |         |
    4+45       0.3781      0.28  O         |         |         |         |
    4+50       0.2179      0.14  O         |         |         |         |
    4+55       0.0797      0.01  O         |         |         |         |
    5+ 0       0.0066      0.00  O         |         |         |         |
    5+ 5       0.0000      0.00  O         |         |         |         |
-------------------------------------------------------------------------
       ****************************HYDROGRAPH DATA****************************
                     Number of intervals =    61
                     Time interval =    5.0 (Min.)
                     Maximum/Peak flow rate =      191.128 (CFS)
                     Total volume =      19.223 (Ac.Ft)
              Status of hydrographs being held in storage
                        Stream 1  Stream 2  Stream 3  Stream 4  Stream 5
              Peak (CFS)    644.158     0.000     0.000     0.000     0.000
              Vol (Ac.Ft)     84.570     0.000     0.000     0.000     0.000
       *************************************************************************

       ---------------------------------------------------------------------
```

EX HG UNIT – 100YR 3HR

++
Process from Point/Station 22.000 to Point/Station 24.000
**** ADD/COMBINE/RECOVER HYDROGRAPHS ****

********** HYDROGRAPH INFORMATION **********

From study/file name: trib2c3100.rte

++

P R I N T O F S T O R M
R u n o f f H y d r o g r a p h

Hydrograph in 5 Minute intervals (CFS)

Time(h+m)	Add q(CFS)	Tot. Q	0	61.8	123.7	185.5	247.4
0+ 5	0.5066	0.87	Q				
0+10	2.5869	4.74	Q				
0+15	3.9858	9.80	qQ				
0+20	4.2190	14.17	q Q				
0+25	5.4910	18.67	q Q				
0+30	6.8986	23.22	q Q				
0+35	8.2033	28.44	q Q				
0+40	8.4972	32.52	q Q				
0+45	9.2963	36.21	q Q				
0+50	9.8841	39.03	q Q				
0+55	9.2401	39.92	q Q				
1+ 0	9.1906	40.34	q Q				
1+ 5	10.4072	42.07	q Q				
1+10	12.4702	46.71	q Q				
1+15	13.7953	52.66	q Q				
1+20	14.1863	57.60	q Q				
1+25	14.3427	60.75	q Q				
1+30	16.3021	65.26	q Q				
1+35	18.0092	70.83	q Q				
1+40	18.0840	75.43	q Q				
1+45	19.3867	80.49	q Q				
1+50	22.2365	87.53	q Q				
1+55	23.3513	94.34	q Q				
2+ 0	23.0279	98.98	q Q				
2+ 5	23.2703	101.57	q Q				
2+10	24.9295	105.11	q Q				
2+15	30.0931	115.90	q Q				
2+20	34.9448	131.53	q Q				
2+25	35.9514	145.46	q Q				
2+30	45.9864	169.88	q Q				
2+35	57.2105	202.44	q Q				
2+40	63.1427	235.97	q Q				
2+45	56.2688	247.40	q Q				
2+50	38.0606	222.17	q Q				
2+55	25.7896	178.67	q Q				
3+ 0	19.8907	135.51	q Q				
3+ 5	13.3932	100.59	q Q				
3+10	8.5682	75.38	q Q				
3+15	6.0906	56.67	q Q				
3+20	4.4038	43.19	q Q				
3+25	3.1721	34.10	q Q				
3+30	2.2989	27.62	q Q				
3+35	1.5722	22.60	q Q				
3+40	0.9750	18.65	q Q				
3+45	0.4758	15.48	q Q				
3+50	0.2003	12.91	q Q				
3+55	0.1158	10.80	qQ				
4+ 0	0.0466	9.04	qQ				
4+ 5	0.0024	7.58	qQ				
4+10	0.0000	6.28	qQ				
4+15	0.0000	5.12	Q				
4+20	0.0000	4.26	Q				
4+25	0.0000	3.49	Q				

```
    4+30       0.0000      2.59  Q          |          |          |          |
    4+35       0.0000      1.63  Q          |          |          |          |
    4+40       0.0000      0.80  Q          |          |          |          |
    4+45       0.0000      0.38  Q          |          |          |          |
    4+50       0.0000      0.22  Q          |          |          |          |
    4+55       0.0000      0.08  Q          |          |          |          |
    5+ 0       0.0000      0.01  Q          |          |          |          |
    5+ 5       0.0000      0.00  Q          |          |          |          |
--------------------------------------------------------------------------------
       ****************************HYDROGRAPH DATA****************************
                     Number of intervals =    61
                     Time interval =    5.0 (Min.)
                     Maximum/Peak flow rate =      247.397 (CFS)
                     Total volume =      24.598 (Ac.Ft)
              Status of hydrographs being held in storage
                         Stream 1  Stream 2  Stream 3  Stream 4  Stream 5
              Peak (CFS)    644.158     0.000     0.000     0.000     0.000
              Vol (Ac.Ft)     84.570     0.000     0.000     0.000     0.000
       ********************************************************************************

       ------------------------------------------------------------------------


       ++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
       Process from Point/Station       23.000 to Point/Station       24.000
       **** ADD/COMBINE/RECOVER HYDROGRAPHS ****

       ________________________________________________________________________
       ********************** HYDROGRAPH INFORMATION **********************

                     From study/file name: tribch23100.rte
       ++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                        P R I N T  O F  S T O R M
                     R u n o f f     H y d r o g r a p h
       ------------------------------------------------------------------------
                   Hydrograph in   5   Minute intervals (CFS)

       ------------------------------------------------------------------------
  Time(h+m) Add q(CFS)  Tot. Q   0       92.9     185.9     278.8     371.7
  --------------------------------------------------------------------------
    0+ 5       2.5790      3.45  Q          |          |          |          |
    0+10      10.9220     15.66  |Q         |          |          |          |
    0+15      13.9036     23.71  |qQ        |          |          |          |
    0+20      14.6872     28.86  |q Q       |          |          |          |
    0+25      18.5067     37.18  |q  Q      |          |          |          |
    0+30      21.1776     44.40  | q Q      |          |          |          |
    0+35      23.9746     52.41  | q  Q     |          |          |          |
    0+40      23.7826     56.30  | q   Q    |          |          |          |
    0+45      26.2187     62.43  | q   Q    |          |          |          |
    0+50      26.6482     65.68  | q    Q   |          |          |          |
    0+55      24.6146     64.54  | q   Q    |          |          |          |
    1+ 0      25.2163     65.56  | q    Q   |          |          |          |
    1+ 5      28.3462     70.42  |  q   Q   |          |          |          |
    1+10      32.8288     79.54  |  q    Q  |          |          |          |
    1+15      34.7530     87.41  |  q     Q|          |          |          |
    1+20      34.9683     92.57  |  q     Q|          |          |          |
    1+25      35.3711     96.13  |  q      Q          |          |          |
    1+30      40.7524    106.01  |   q     |Q         |          |          |
    1+35      43.0636    113.89  |   q     | Q        |          |          |
    1+40      42.5140    117.94  |   q     | Q        |          |          |
    1+45      46.5986    127.09  |    q    |  Q       |          |          |
    1+50      52.7551    140.28  |    q    |    Q     |          |          |
    1+55      53.1705    147.51  |    q    |    Q     |          |          |
    2+ 0      52.1041    151.08  |    q    |     Q    |          |          |
    2+ 5      52.9529    154.53  |    q    |     Q    |          |          |
    2+10      57.4670    162.58  |     q   |      Q   |          |          |
    2+15      70.5532    186.45  |      q  |         Q|          |          |
    2+20      78.2709    209.80  |       q |          | Q        |          |
    2+25      79.0022    224.46  |       q |          |   Q      |          |
    2+30     107.7294    277.61  |         |q         |        Q|          |
    2+35     127.0179    329.46  |         |  q       |         |    Q     |
    2+40     135.7551    371.73  |         |   q      |         |         Q|
```

EX HG UNIT – 100YR 3HR

```
    2+45     110.6526    358.05  |          |q         |          |       Q |
    2+50      68.5562    290.72  |       q  |          |          |Q        |
    2+55      50.0347    228.71  |     q    |          |    Q     |         |
    3+ 0      38.9570    174.46  |   q      |        Q |          |         |
    3+ 5      23.1563    123.75  | q        |  Q       |          |         |
    3+10      13.4158     88.80  |q        Q|          |          |         |
    3+15       8.1075     64.77  q      Q   |          |          |         |
    3+20       4.9711     48.16  q    Q     |          |          |         |
    3+25       2.6834     36.78  q  Q       |          |          |         |
    3+30       1.1641     28.78  q  Q       |          |          |         |
    3+35       0.6556     23.25  q Q        |          |          |         |
    3+40       0.3463     19.00  q Q        |          |          |         |
    3+45       0.0615     15.54  qQ         |          |          |         |
    3+50       0.0000     12.91  qQ         |          |          |         |
    3+55       0.0000     10.80  qQ         |          |          |         |
    4+ 0       0.0000      9.04  Q          |          |          |         |
    4+ 5       0.0000      7.58  Q          |          |          |         |
    4+10       0.0000      6.28  Q          |          |          |         |
    4+15       0.0000      5.12  Q          |          |          |         |
    4+20       0.0000      4.26  Q          |          |          |         |
    4+25       0.0000      3.49  Q          |          |          |         |
    4+30       0.0000      2.59  Q          |          |          |         |
    4+35       0.0000      1.63  Q          |          |          |         |
    4+40       0.0000      0.80  Q          |          |          |         |
    4+45       0.0000      0.38  Q          |          |          |         |
    4+50       0.0000      0.22  Q          |          |          |         |
    4+55       0.0000      0.08  Q          |          |          |         |
    5+ 0       0.0000      0.01  Q          |          |          |         |
    5+ 5       0.0000      0.00  Q          |          |          |         |
--------------------------------------------------------------------------------
      ****************************HYDROGRAPH DATA****************************
                  Number of intervals =    61
                  Time interval =    5.0 (Min.)
                  Maximum/Peak flow rate =      371.730 (CFS)
                  Total volume =      36.726 (Ac.Ft)
            Status of hydrographs being held in storage
                       Stream 1  Stream 2  Stream 3  Stream 4  Stream 5
            Peak (CFS)    644.158     0.000     0.000     0.000     0.000
            Vol (Ac.Ft)     84.570     0.000     0.000     0.000     0.000
      ********************************************************************************

      ------------------------------------------------------------------------


      ++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
      Process from Point/Station       24.000 to Point/Station       30.000
      **** STREAM ROUTING SCS CONVEX METHOD ****
      ________________________________________________________________________________
      HYDROGRAPH STREAM ROUTING DATA:
      Length of stream =    466.00 (Ft.)
      Elevation difference =   21.00 (Ft.)
      Slope of channel =  0.045064 (Vert/Horiz)
      Channel type - Improved Channel


      Channel length =   466.00(Ft.)     Elevation difference =  21.00(Ft.)
      Channel evaluation using mean flow rate of hydrograph
      Channel base width  =    5.000(Ft.)
      Slope or 'Z' of left channel bank =   1.000
      Slope or 'Z' of right channel bank =   1.000
      Manning's 'N'    = 0.045
      Maximum depth of channel  =   20.000(Ft.)
      Flow(q) thru subarea =    132.690(CFS)
      Depth of flow =     2.138(Ft.)
      Average velocity =     8.695(Ft/s)
      Total flow rate =   132.690(CFS)
      Channel flow top width =    9.276(Ft.)
      Depth of flow in channel =   2.14(Ft.)
      Total number of channels (same dimensions) = 1
      Flow Velocity =    8.70(Ft/s)
      Travel time  =    0.00 min.
```

EX HG UNIT – 100YR 3HR

```
Individual channel flow =  132.690(CFS)
Total capacity of improved channels =    132.690(CFS)
Critical Depth in Channel =    2.38(Ft.)


Channel evaluation using maximum flow rate of hydrograph
Flow(q) thru subarea =    371.730(CFS)
Depth of flow =     3.720(Ft.)
Average velocity =    11.459(Ft/s)
Total flow rate =   371.730(CFS)
Channel flow top width =   12.440(Ft.)
Depth of flow in channel =   3.72(Ft.)
Total number of channels (same dimensions) = 1
Flow Velocity =   11.46(Ft/s)
Travel time  =    0.00 min.
Individual channel flow =  371.730(CFS)
Total capacity of improved channels =    371.730(CFS)
Critical Depth in Channel =    4.19(Ft.)


********************** SCS CONVEX CHANNEL ROUTING *********************
Convex method of stream routing  data items:
Using equation: Outflow =
O(t+dt) = (1-c*)O(t+dt-dt*) + Input(c*)
          where c* = 1 - (1-c)^e and dt = c(length)/velocity
          c(v/v+1.7) =   0.8708   Travel time =   0.68 (min.)
        dt*(unit time interval) =   5.00(min.),  e=   5.9809
        dt(routing time-step) =   0.59 (min.),   c* =   1.0000

Output hydrograph delayed by 0  unit time increments


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                  P R I N T  O F  S T O R M
               R u n o f f     H y d r o g r a p h
----------------------------------------------------------------------
            Hydrograph in   5   Minute intervals (CFS)

----------------------------------------------------------------------
Time(h+m) Out = O(CFS) In = I  0       92.9     185.9     278.8     371.7
----------------------------------------------------------------------
  0+ 5       3.0453      3.45  O         |         |         |         |
  0+10      14.2192     15.66  |O        |         |         |         |
  0+15      22.7580     23.71  | O       |         |         |         |
  0+20      28.2527     28.86  |  O      |         |         |         |
  0+25      36.1992     37.18  |  OI     |         |         |         |
  0+30      43.5492     44.40  |   O     |         |         |         |
  0+35      51.4681     52.41  |    O    |         |         |         |
  0+40      55.8417     56.30  |     O   |         |         |         |
  0+45      61.7061     62.43  |     O   |         |         |         |
  0+50      65.2922     65.68  |      O  |         |         |         |
  0+55      64.6723     64.54  |     O   |         |         |         |
  1+ 0      65.4358     65.56  |      O  |         |         |         |
  1+ 5      69.8417     70.42  |      O  |         |         |         |
  1+10      78.4645     79.54  |       O |         |         |         |
  1+15      86.4807     87.41  |        O|         |         |         |
  1+20      91.9566     92.57  |        O|         |         |         |
  1+25      95.7055     96.13  |         O         |         |         |
  1+30     104.8458    106.01  |         |O        |         |         |
  1+35     112.9629    113.89  |         | O       |         |         |
  1+40     117.4624    117.94  |         | O       |         |         |
  1+45     126.0082    127.09  |         |  O      |         |         |
  1+50     138.7257    140.28  |         |   OI    |         |         |
  1+55     146.6608    147.51  |         |    O    |         |         |
  2+ 0     150.6617    151.08  |         |     O   |         |         |
  2+ 5     154.1198    154.53  |         |     O   |         |         |
  2+10     161.6264    162.58  |         |      O  |         |         |
  2+15     183.6346    186.45  |         |        OI         |         |
  2+20     207.0404    209.80  |         |         | O       |         |
  2+25     222.7278    224.46  |         |         |  OI     |         |
  2+30     271.3342    277.61  |         |         |        O|         |
```

EX HG UNIT – 100YR 3HR

```
   2+35     323.3388    329.46  |          |          |          |   OI     |
   2+40     366.7400    371.73  |          |          |          |        OI
   2+45     359.6643    358.05  |          |          |          |       O  |
   2+50     298.6708    290.72  |          |          |          |IO        |
   2+55     236.0279    228.71  |          |          |    IO    |          |
   3+ 0     180.8665    174.46  |          |          |IO        |          |
   3+ 5     129.7361    123.75  |          |  O       |          |          |
   3+10      92.9262     88.80  |          |O         |          |          |
   3+15      67.6099     64.77  |      IO  |          |          |          |
   3+20      50.1211     48.16  |    O     |          |          |          |
   3+25      38.1273     36.78  |  IO      |          |          |          |
   3+30      29.7253     28.78  |  O       |          |          |          |
   3+35      23.9064     23.25  | O        |          |          |          |
   3+40      19.5006     19.00  | O        |          |          |          |
   3+45      15.9476     15.54  |O         |          |          |          |
   3+50      13.2237     12.91  |O         |          |          |          |
   3+55      11.0473     10.80  |O         |          |          |          |
   4+ 0       9.2445      9.04  O          |          |          |          |
   4+ 5       7.7490      7.58  O          |          |          |          |
   4+10       6.4354      6.28  O          |          |          |          |
   4+15       5.2563      5.12  O          |          |          |          |
   4+20       4.3606      4.26  O          |          |          |          |
   4+25       3.5768      3.49  O          |          |          |          |
   4+30       2.6914      2.59  O          |          |          |          |
   4+35       1.7443      1.63  O          |          |          |          |
   4+40       0.8993      0.80  O          |          |          |          |
   4+45       0.4281      0.38  O          |          |          |          |
   4+50       0.2368      0.22  O          |          |          |          |
   4+55       0.0960      0.08  O          |          |          |          |
   5+ 0       0.0152      0.01  O          |          |          |          |
   5+ 5       0.0008      0.00  O          |          |          |          |
   5+10       0.0000      0.00  O          |          |          |          |
--------------------------------------------------------------------------
      ****************************HYDROGRAPH DATA****************************
                  Number of intervals =    62
                  Time interval =    5.0 (Min.)
                  Maximum/Peak flow rate =      366.740 (CFS)
                  Total volume =      36.726 (Ac.Ft)
            Status of hydrographs being held in storage
                     Stream 1  Stream 2  Stream 3  Stream 4  Stream 5
            Peak (CFS)    644.158     0.000     0.000     0.000     0.000
            Vol (Ac.Ft)     84.570     0.000     0.000     0.000     0.000
      ************************************************************************

      ------------------------------------------------------------------------


      ++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
      Process from Point/Station       24.000 to Point/Station       30.000
      **** ADD/COMBINE/RECOVER HYDROGRAPHS ****
      ____________________________________________________________________
      ********************* HYDROGRAPH INFORMATION **********************

                  From study/file name: trib2d3100.rte
      ++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                     P R I N T  O F  S T O R M
                  R u n o f f     H y d r o g r a p h
      ------------------------------------------------------------------------
               Hydrograph in   5   Minute intervals (CFS)

      ------------------------------------------------------------------------
 Time(h+m) Add q(CFS)  Tot. Q   0       93.4     186.9     280.3     373.8
 ------------------------------------------------------------------------
   0+ 5       0.2763      3.32  Q          |         |         |         |
   0+10       0.5491     14.77  qQ         |         |         |         |
   0+15       0.5068     23.26  q Q        |         |         |         |
   0+20       0.6325     28.89  q  Q       |         |         |         |
   0+25       0.8052     37.00  q  Q       |         |         |         |
   0+30       0.9802     44.53  q   Q      |         |         |         |
   0+35       0.9974     52.47  q    Q     |         |         |         |
   0+40       1.0283     56.87  q     Q    |         |         |         |
```

EX HG UNIT – 100YR 3HR

```
    0+45       1.1576     62.86  q     Q   |          |          |          |
    0+50       1.0264     66.32  q      Q  |          |          |          |
    0+55       0.9454     65.62  q      Q  |          |          |          |
    1+ 0       1.0616     66.50  q      Q  |          |          |          |
    1+ 5       1.3474     71.19  q      Q  |          |          |          |
    1+10       1.5636     80.03  q       Q |          |          |          |
    1+15       1.6118     88.09  q        Q|          |          |          |
    1+20       1.5337     93.49  q         Q          |          |          |
    1+25       1.7294     97.43  q         Q          |          |          |
    1+30       2.0467    106.89  q         |Q         |          |          |
    1+35       1.9973    114.96  q         | Q        |          |          |
    1+40       2.0375    119.50  q         | Q        |          |          |
    1+45       2.4490    128.46  q         |  Q       |          |          |
    1+50       2.6545    141.38  q         |    Q     |          |          |
    1+55       2.5336    149.19  q         |    Q     |          |          |
    2+ 0       2.4956    153.16  q         |     Q    |          |          |
    2+ 5       2.5633    156.68  q         |     Q    |          |          |
    2+10       3.1462    164.77  q         |      Q   |          |          |
    2+15       4.0777    187.71  q         |        Q |          |          |
    2+20       3.8436    210.88  q         |          | Q        |          |
    2+25       4.8579    227.59  q         |          |   Q      |          |
    2+30       6.5783    277.91  q         |          |        Q |          |
    2+35       7.5034    330.84  q         |          |          |    Q     |
    2+40       7.0232    373.76  q         |          |          |        Q |
    2+45       4.1339    363.80  q         |          |          |       Q  |
    2+50       1.9851    300.66  q         |          |          | Q        |
    2+55       1.4020    237.43  q         |          |    Q     |          |
    3+ 0       0.7060    181.57  q         |        Q |          |          |
    3+ 5       0.1832    129.92  q         |  Q       |          |          |
    3+10       0.0569     92.98  q        Q|          |          |          |
    3+15       0.0029     67.61  q       Q  |          |          |          |
    3+20       0.0000     50.12  q    Q     |          |          |          |
    3+25       0.0000     38.13  q   Q      |          |          |          |
    3+30       0.0000     29.73  q  Q       |          |          |          |
    3+35       0.0000     23.91  q Q        |          |          |          |
    3+40       0.0000     19.50  q Q        |          |          |          |
    3+45       0.0000     15.95  qQ         |          |          |          |
    3+50       0.0000     13.22  qQ         |          |          |          |
    3+55       0.0000     11.05  qQ         |          |          |          |
    4+ 0       0.0000      9.24  Q          |          |          |          |
    4+ 5       0.0000      7.75  Q          |          |          |          |
    4+10       0.0000      6.44  Q          |          |          |          |
    4+15       0.0000      5.26  Q          |          |          |          |
    4+20       0.0000      4.36  Q          |          |          |          |
    4+25       0.0000      3.58  Q          |          |          |          |
    4+30       0.0000      2.69  Q          |          |          |          |
    4+35       0.0000      1.74  Q          |          |          |          |
    4+40       0.0000      0.90  Q          |          |          |          |
    4+45       0.0000      0.43  Q          |          |          |          |
    4+50       0.0000      0.24  Q          |          |          |          |
    4+55       0.0000      0.10  Q          |          |          |          |
    5+ 0       0.0000      0.02  Q          |          |          |          |
    5+ 5       0.0000      0.00  Q          |          |          |          |
    5+10       0.0000      0.00  Q          |          |          |          |
--------------------------------------------------------------------------------
      ****************************HYDROGRAPH DATA****************************
                Number of intervals =    62
                Time interval =    5.0 (Min.)
                Maximum/Peak flow rate =      373.763 (CFS)
                Total volume =      37.291 (Ac.Ft)
          Status of hydrographs being held in storage
                     Stream 1  Stream 2  Stream 3  Stream 4  Stream 5
          Peak (CFS)    644.158     0.000     0.000     0.000     0.000
          Vol (Ac.Ft)     84.570     0.000     0.000     0.000     0.000
      ********************************************************************************

      --------------------------------------------------------------------------------


      ++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
      Process from Point/Station       30.000 to Point/Station       30.000
```

EX HG UNIT – 100YR 3HR

**** ADD/COMBINE/RECOVER HYDROGRAPHS ****

From stored stream number 1 the total
volume of 84.57 (Ac.Ft) is being added to the
current hydrograph at its original rate from user
with a delay time to start of addition of 0.00 hours.

++

P R I N T O F S T O R M
R u n o f f H y d r o g r a p h

Hydrograph in 5 Minute intervals (CFS)

Time(h+m)	Add q(CFS)	Tot. Q	0 254.5 509.0 763.4 1017.9
0+ 5	4.9958	8.32	Q
0+10	18.5748	33.34	qQ
0+15	27.8448	51.11	qQ
0+20	34.1993	63.08	qQ
0+25	46.8351	83.84	q Q
0+30	61.6451	106.17	q Q
0+35	76.4959	128.96	q Q
0+40	87.3563	144.23	q Q
0+45	100.6575	163.52	q Q
0+50	110.8499	177.17	q Q
0+55	115.4123	181.03	q Q
1+ 0	122.5485	189.05	q Q
1+ 5	134.9554	206.14	q Q
1+10	150.2322	230.26	q Q
1+15	161.6748	249.77	q Q
1+20	168.8339	262.32	q Q
1+25	177.8619	275.30	q Q
1+30	196.9430	303.84	q Q
1+35	213.4034	328.36	q Q
1+40	223.7257	343.23	q Q
1+45	241.6487	370.11	q Q
1+50	265.2308	406.61	q Q
1+55	280.2123	429.41	q Q
2+ 0	290.0902	443.25	q Q
2+ 5	302.4300	459.11	q Q
2+10	324.2190	488.99	q Q
2+15	364.6112	552.32	q Q
2+20	397.1255	608.01	q Q
2+25	424.0349	651.62	q Q
2+30	500.0063	777.92	q Q
2+35	583.3528	914.19	q Q
2+40	644.1585	1017.92	q Q
2+45	636.9842	1000.78	q Q
2+50	580.3530	881.01	q Q
2+55	546.7335	784.16	q Q
3+ 0	519.1958	700.77	q Q
3+ 5	465.4015	595.32	q Q
3+10	398.9614	491.94	q Q
3+15	330.3775	397.99	q Q
3+20	267.0962	317.22	q Q
3+25	214.8267	252.95	qQ
3+30	173.7706	203.50	qQ
3+35	143.0013	166.91	qQ
3+40	120.7097	140.21	qQ
3+45	104.1510	120.10	Q
3+50	91.4017	104.63	qQ
3+55	81.2424	92.29	Q
4+ 0	72.5881	81.83	qQ
4+ 5	65.1412	72.89	Q
4+10	58.7085	65.14	Q
4+15	52.9933	58.25	Q
4+20	47.9301	52.29	qQ
4+25	43.3892	46.97	Q
4+30	39.4032	42.09	Q
4+35	35.9423	37.69	Q
4+40	32.8843	33.78	Q

EX HG UNIT – 100YR 3HR

```
    4+45      30.3625     30.79  |Q        |         |         |         |
    4+50      28.2630     28.50  |Q        |         |         |         |
    4+55      26.1974     26.29  |Q        |         |         |         |
    5+ 0      24.0903     24.11  Q         |         |         |         |
    5+ 5      22.0187     22.02  Q         |         |         |         |
    5+10      20.0824     20.08  Q         |         |         |         |
    5+15      18.3731     18.37  Q         |         |         |         |
    5+20      16.7738     16.77  Q         |         |         |         |
    5+25      15.2371     15.24  Q         |         |         |         |
    5+30      13.8360     13.84  Q         |         |         |         |
    5+35      12.5087     12.51  Q         |         |         |         |
    5+40      11.2432     11.24  Q         |         |         |         |
    5+45      10.0978     10.10  Q         |         |         |         |
    5+50       9.1092      9.11  Q         |         |         |         |
    5+55       8.3131      8.31  Q         |         |         |         |
    6+ 0       7.6274      7.63  Q         |         |         |         |
    6+ 5       6.9129      6.91  Q         |         |         |         |
    6+10       6.1709      6.17  Q         |         |         |         |
    6+15       5.3734      5.37  Q         |         |         |         |
    6+20       4.3808      4.38  Q         |         |         |         |
    6+25       3.1889      3.19  Q         |         |         |         |
    6+30       1.9897      1.99  Q         |         |         |         |
    6+35       1.0724      1.07  Q         |         |         |         |
    6+40       0.5499      0.55  Q         |         |         |         |
    6+45       0.2698      0.27  Q         |         |         |         |
    6+50       0.1014      0.10  Q         |         |         |         |
    6+55       0.0235      0.02  Q         |         |         |         |
    7+ 0       0.0031      0.00  Q         |         |         |         |
    7+ 5       0.0003      0.00  Q         |         |         |         |
    7+10       0.0000      0.00  Q         |         |         |         |
    7+15       0.0000      0.00  Q         |         |         |         |
--------------------------------------------------------------------------
      ****************************HYDROGRAPH DATA****************************
                  Number of intervals =    87
                  Time interval =    5.0 (Min.)
                  Maximum/Peak flow rate =     1017.922 (CFS)
                  Total volume =     121.861 (Ac.Ft)
            Status of hydrographs being held in storage
                        Stream 1  Stream 2  Stream 3  Stream 4  Stream 5
            Peak (CFS)      0.000     0.000     0.000     0.000     0.000
            Vol (Ac.Ft)      0.000     0.000     0.000     0.000     0.000
      ****************************************************************************

      ----------------------------------------------------------------------


      ++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
      Process from Point/Station       30.000 to Point/Station       31.000
      **** STREAM ROUTING SCS CONVEX METHOD ****
      ____________________________________________________________________________
      HYDROGRAPH STREAM ROUTING DATA:
      Length of stream =    377.00 (Ft.)
      Elevation difference =   13.00 (Ft.)
      Slope of channel =  0.034483 (Vert/Horiz)
      Channel type - Improved Channel


      Channel length =   377.00(Ft.)     Elevation difference =  13.00(Ft.)
      Channel evaluation using mean flow rate of hydrograph
      Channel base width  =    5.000(Ft.)
      Slope or 'Z' of left channel bank =   1.000
      Slope or 'Z' of right channel bank =   1.000
      Manning's 'N'    = 0.045
      Maximum depth of channel  =   20.000(Ft.)
      Flow(q) thru subarea =    394.880(CFS)
      Depth of flow =     4.112(Ft.)
      Average velocity =    10.539(Ft/s)
      Total flow rate =   394.880(CFS)
      Channel flow top width =   13.224(Ft.)
      Depth of flow in channel =   4.11(Ft.)
      Total number of channels (same dimensions) = 1
```

EX HG UNIT – 100YR 3HR

```
Flow Velocity =   10.54(Ft/s)
Travel time  =    0.00 min.
Individual channel flow =  394.880(CFS)
Total capacity of improved channels =    394.880(CFS)
Critical Depth in Channel =    4.31(Ft.)


Channel evaluation using maximum flow rate of hydrograph
Flow(q) thru subarea =   1017.922(CFS)
Depth of flow =     6.572(Ft.)
Average velocity =    13.383(Ft/s)
Total flow rate =  1017.922(CFS)
Channel flow top width =   18.145(Ft.)
Depth of flow in channel =   6.57(Ft.)
Total number of channels (same dimensions) = 1
Flow Velocity =   13.38(Ft/s)
Travel time  =    0.00 min.
Individual channel flow = 1017.922(CFS)
Total capacity of improved channels =   1017.922(CFS)
Critical Depth in Channel =    7.06(Ft.)


********************** SCS CONVEX CHANNEL ROUTING ********************
Convex method of stream routing  data items:
Using equation: Outflow =
O(t+dt) = (1-c*)O(t+dt-dt*) + Input(c*)
          where c* = 1 - (1-c)^e and dt = c(length)/velocity
          c(v/v+1.7) =   0.8873   Travel time =   0.47 (min.)
        dt*(unit time interval) =   5.00(min.),  e=   8.3350
        dt(routing time-step) =   0.42 (min.),   c* =   1.0000

Output hydrograph delayed by 0  unit time increments


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                  P R I N T  O F  S T O R M
               R u n o f f     H y d r o g r a p h
----------------------------------------------------------------------
            Hydrograph in   5   Minute intervals (CFS)

     ----------------------------------------------------------------
Time(h+m) Out = O(CFS) In = I  0      254.5     509.0     763.4    1017.9
-----------------------------------------------------------------------
  0+ 5       7.6244      8.32  O         |         |         |         |
  0+10      31.2582     33.34  |O        |         |         |         |
  0+15      49.6294     51.11  |OI       |         |         |         |
  0+20      62.0868     63.08  | O       |         |         |         |
  0+25      82.1103     83.84  |  O      |         |         |         |
  0+30     104.3136    106.17  |   O     |         |         |         |
  0+35     127.0629    128.96  |   OI    |         |         |         |
  0+40     142.9545    144.23  |    O    |         |         |         |
  0+45     161.9136    163.52  |     O   |         |         |         |
  0+50     176.0316    177.17  |     O   |         |         |         |
  0+55     180.7083    181.03  |      O  |         |         |         |
  1+ 0     188.3780    189.05  |      O  |         |         |         |
  1+ 5     204.7200    206.14  |       O |         |         |         |
  1+10     228.2511    230.26  |       OI|         |         |         |
  1+15     248.1421    249.77  |        O|         |         |         |
  1+20     261.2780    262.32  |         O         |         |         |
  1+25     274.2160    275.30  |         O         |         |         |
  1+30     301.4578    303.84  |         |O        |         |         |
  1+35     326.3200    328.36  |         | O       |         |         |
  1+40     341.9874    343.23  |         |  O      |         |         |
  1+45     367.8664    370.11  |         |   O     |         |         |
  1+50     403.5696    406.61  |         |    O    |         |         |
  1+55     427.5075    429.41  |         |     O   |         |         |
  2+ 0     442.0944    443.25  |         |      O  |         |         |
  2+ 5     457.7912    459.11  |         |      OI |         |         |
  2+10     486.5023    488.99  |         |        O|         |         |
  2+15     547.0470    552.32  |         |         |O        |         |
  2+20     603.3699    608.01  |         |         |  O      |         |
```

EX HG UNIT – 100YR 3HR

```
    2+25     647.9871    651.62  |          |          |    O     |          |
    2+30     767.3963    777.92  |          |          |          O          |
    2+35     902.8410    914.19  |          |          |          |    O     |
    2+40    1009.2797   1017.92  |          |          |          |         OI
    2+45    1002.2104   1000.78  |          |          |          |         O|
    2+50     890.9879    881.01  |          |          |          |   IO     |
    2+55     792.2322    784.16  |          |          |          IO         |
    3+ 0     707.7163    700.77  |          |          |       O  |          |
    3+ 5     604.1061    595.32  |          |          |  O       |          |
    3+10     500.5573    491.94  |          |         O|          |          |
    3+15     405.8182    397.99  |          |    O     |          |          |
    3+20     323.9470    317.22  |          | O        |          |          |
    3+25     258.3082    252.95  |        IO           |          |          |
    3+30     207.6165    203.50  |      IO  |          |          |          |
    3+35     169.9561    166.91  |     O    |          |          |          |
    3+40     142.4346    140.21  |    O     |          |          |          |
    3+45     121.7742    120.10  |   O      |          |          |          |
    3+50     105.9145    104.63  |   O      |          |          |          |
    3+55      93.3174     92.29  |  O       |          |          |          |
    4+ 0      82.7038     81.83  |  O       |          |          |          |
    4+ 5      73.6353     72.89  | O        |          |          |          |
    4+10      65.7893     65.14  | O        |          |          |          |
    4+15      58.8240     58.25  | O        |          |          |          |
    4+20      52.7873     52.29  | O        |          |          |          |
    4+25      47.4096     46.97  |O         |          |          |          |
    4+30      42.5005     42.09  |O         |          |          |          |
    4+35      38.0539     37.69  |O         |          |          |          |
    4+40      34.1087     33.78  |O         |          |          |          |
    4+45      31.0400     30.79  |O         |          |          |          |
    4+50      28.6907     28.50  |O         |          |          |          |
    4+55      26.4772     26.29  |O         |          |          |          |
    5+ 0      24.2878     24.11  O          |          |          |          |
    5+ 5      22.1933     22.02  O          |          |          |          |
    5+10      20.2438     20.08  O          |          |          |          |
    5+15      18.5155     18.37  O          |          |          |          |
    5+20      16.9070     16.77  O          |          |          |          |
    5+25      15.3651     15.24  O          |          |          |          |
    5+30      13.9527     13.84  O          |          |          |          |
    5+35      12.6193     12.51  O          |          |          |          |
    5+40      11.3486     11.24  O          |          |          |          |
    5+45      10.1932     10.10  O          |          |          |          |
    5+50       9.1916      9.11  O          |          |          |          |
    5+55       8.3794      8.31  O          |          |          |          |
    6+ 0       7.6845      7.63  O          |          |          |          |
    6+ 5       6.9724      6.91  O          |          |          |          |
    6+10       6.2327      6.17  O          |          |          |          |
    6+15       5.4398      5.37  O          |          |          |          |
    6+20       4.4635      4.38  O          |          |          |          |
    6+25       3.2882      3.19  O          |          |          |          |
    6+30       2.0896      1.99  O          |          |          |          |
    6+35       1.1488      1.07  O          |          |          |          |
    6+40       0.5935      0.55  O          |          |          |          |
    6+45       0.2931      0.27  O          |          |          |          |
    6+50       0.1154      0.10  O          |          |          |          |
    6+55       0.0300      0.02  O          |          |          |          |
    7+ 0       0.0048      0.00  O          |          |          |          |
    7+ 5       0.0005      0.00  O          |          |          |          |
    7+10       0.0000      0.00  O          |          |          |          |
    7+15       0.0000      0.00  O          |          |          |          |
    7+20       0.0000      0.00  O          |          |          |          |
--------------------------------------------------------------------------
      ****************************HYDROGRAPH DATA****************************
                  Number of intervals =    88
                  Time interval =    5.0 (Min.)
                  Maximum/Peak flow rate =     1009.280 (CFS)
                  Total volume =     121.861 (Ac.Ft)
            Status of hydrographs being held in storage
                     Stream 1  Stream 2  Stream 3  Stream 4  Stream 5
            Peak (CFS)      0.000     0.000     0.000     0.000     0.000
            Vol (Ac.Ft)      0.000     0.000     0.000     0.000     0.000
      ***************************************************************************
```

EX HG UNIT – 100YR 3HR

```
--------------------------------------------------------------------------

++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       30.000 to Point/Station       31.000
**** ADD/COMBINE/RECOVER HYDROGRAPHS ****
____________________________________________________________________________
********************* HYDROGRAPH INFORMATION **********************

                From study/file name: trib3a3100.rte
++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                   P R I N T  O F  S T O R M
                 R u n o f f     H y d r o g r a p h
----------------------------------------------------------------------------
             Hydrograph in   5   Minute intervals (CFS)

     ---------------------------------------------------------------------
Time(h+m) Add q(CFS)  Tot. Q   0      254.3     508.6     762.9    1017.2
----------------------------------------------------------------------------
  0+ 5       0.3396      7.96  Q         |         |         |         |
  0+10       0.6373     31.90  qQ        |         |         |         |
  0+15       0.5739     50.20  qQ        |         |         |         |
  0+20       0.7299     62.82  q Q       |         |         |         |
  0+25       0.9197     83.03  q  Q      |         |         |         |
  0+30       1.1308    105.44  q   Q     |         |         |         |
  0+35       1.1240    128.19  q    Q    |         |         |         |
  0+40       1.1757    144.13  q    Q    |         |         |         |
  0+45       1.3147    163.23  q     Q   |         |         |         |
  0+50       1.1536    177.19  q     Q   |         |         |         |
  0+55       1.0677    181.78  q      Q  |         |         |         |
  1+ 0       1.2100    189.59  q      Q  |         |         |         |
  1+ 5       1.5521    206.27  q       Q |         |         |         |
  1+10       1.7852    230.04  q        Q|         |         |         |
  1+15       1.8324    249.97  q        Q|         |         |         |
  1+20       1.7282    263.01  q         Q         |         |         |
  1+25       1.9819    276.20  q         Q         |         |         |
  1+30       2.3362    303.79  q         |Q        |         |         |
  1+35       2.2610    328.58  q         | Q       |         |         |
  1+40       2.3159    344.30  q         |  Q      |         |         |
  1+45       2.8058    370.67  q         |   Q     |         |         |
  1+50       3.0187    406.59  q         |    Q    |         |         |
  1+55       2.8652    430.37  q         |     Q   |         |         |
  2+ 0       2.8234    444.92  q         |      Q  |         |         |
  2+ 5       2.9081    460.70  q         |       Q |         |         |
  2+10       3.6200    490.12  q         |        Q|         |         |
  2+15       4.6879    551.73  q         |         |Q        |         |
  2+20       4.3231    607.69  q         |         |  Q      |         |
  2+25       5.6304    653.62  q         |         |    Q    |         |
  2+30       7.5402    774.94  q         |         |       Q |         |
  2+35       8.6084    911.45  q         |         |         |    Q    |
  2+40       7.8811   1017.16  q         |         |         |        Q|
  2+45       4.4539   1006.66  q         |         |         |       Q|
  2+50       2.0988    893.09  q         |         |         |    Q    |
  2+55       1.5210    793.75  q         |         |         |Q        |
  3+ 0       0.7495    708.47  q         |         |      Q  |         |
  3+ 5       0.1778    604.28  q         |         |  Q      |         |
  3+10       0.0468    500.60  q         |        Q|         |         |
  3+15       0.0023    405.82  q         |    Q    |         |         |
  3+20       0.0000    323.95  q         | Q       |         |         |
  3+25       0.0000    258.31  q        Q|         |         |         |
  3+30       0.0000    207.62  q       Q |         |         |         |
  3+35       0.0000    169.96  q     Q   |         |         |         |
  3+40       0.0000    142.43  q    Q    |         |         |         |
  3+45       0.0000    121.77  q   Q     |         |         |         |
  3+50       0.0000    105.91  q   Q     |         |         |         |
  3+55       0.0000     93.32  q  Q      |         |         |         |
  4+ 0       0.0000     82.70  q  Q      |         |         |         |
  4+ 5       0.0000     73.64  q Q       |         |         |         |
  4+10       0.0000     65.79  q Q       |         |         |         |
  4+15       0.0000     58.82  q Q       |         |         |         |
```

EX HG UNIT – 100YR 3HR

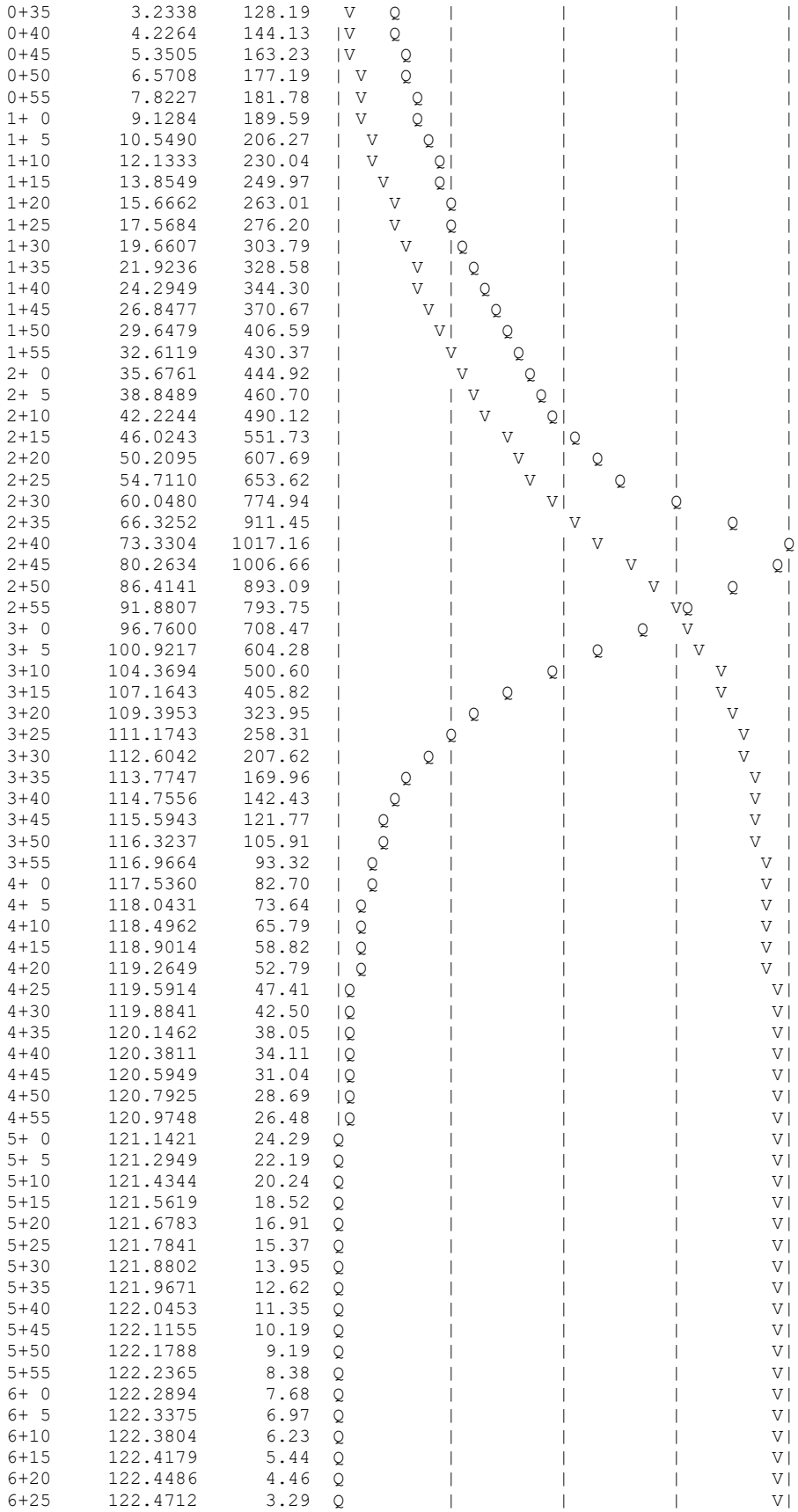
```
    4+20       0.0000     52.79  q Q       |         |         |         |
    4+25       0.0000     47.41  qQ        |         |         |         |
    4+30       0.0000     42.50  qQ        |         |         |         |
    4+35       0.0000     38.05  qQ        |         |         |         |
    4+40       0.0000     34.11  qQ        |         |         |         |
    4+45       0.0000     31.04  qQ        |         |         |         |
    4+50       0.0000     28.69  qQ        |         |         |         |
    4+55       0.0000     26.48  qQ        |         |         |         |
    5+ 0       0.0000     24.29  Q         |         |         |         |
    5+ 5       0.0000     22.19  Q         |         |         |         |
    5+10       0.0000     20.24  Q         |         |         |         |
    5+15       0.0000     18.52  Q         |         |         |         |
    5+20       0.0000     16.91  Q         |         |         |         |
    5+25       0.0000     15.37  Q         |         |         |         |
    5+30       0.0000     13.95  Q         |         |         |         |
    5+35       0.0000     12.62  Q         |         |         |         |
    5+40       0.0000     11.35  Q         |         |         |         |
    5+45       0.0000     10.19  Q         |         |         |         |
    5+50       0.0000      9.19  Q         |         |         |         |
    5+55       0.0000      8.38  Q         |         |         |         |
    6+ 0       0.0000      7.68  Q         |         |         |         |
    6+ 5       0.0000      6.97  Q         |         |         |         |
    6+10       0.0000      6.23  Q         |         |         |         |
    6+15       0.0000      5.44  Q         |         |         |         |
    6+20       0.0000      4.46  Q         |         |         |         |
    6+25       0.0000      3.29  Q         |         |         |         |
    6+30       0.0000      2.09  Q         |         |         |         |
    6+35       0.0000      1.15  Q         |         |         |         |
    6+40       0.0000      0.59  Q         |         |         |         |
    6+45       0.0000      0.29  Q         |         |         |         |
    6+50       0.0000      0.12  Q         |         |         |         |
    6+55       0.0000      0.03  Q         |         |         |         |
    7+ 0       0.0000      0.00  Q         |         |         |         |
    7+ 5       0.0000      0.00  Q         |         |         |         |
    7+10       0.0000      0.00  Q         |         |         |         |
    7+15       0.0000      0.00  Q         |         |         |         |
    7+20       0.0000      0.00  Q         |         |         |         |
-------------------------------------------------------------------------
       ****************************HYDROGRAPH DATA****************************
                     Number of intervals =    88
                     Time interval =    5.0 (Min.)
                     Maximum/Peak flow rate =     1017.161 (CFS)
                     Total volume =     122.501 (Ac.Ft)
              Status of hydrographs being held in storage
                        Stream 1  Stream 2  Stream 3  Stream 4  Stream 5
              Peak (CFS)      0.000     0.000     0.000     0.000     0.000
              Vol (Ac.Ft)      0.000     0.000     0.000     0.000     0.000
       ************************************************************************

       ------------------------------------------------------------------------


       ++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
       Process from Point/Station       30.000 to Point/Station       31.000
       **** PRINT CURRENT HYDROGRAPH ****
       ________________________________________________________________________
       ++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                        P R I N T   O F   S T O R M
                     R u n o f f     H y d r o g r a p h
       ------------------------------------------------------------------------
                  Hydrograph in   5   Minute intervals (CFS)

       ------------------------------------------------------------------------
  Time(h+m) Volume(Ac.Ft)   Q(CFS)  0      254.3     508.6     762.9    1017.2
  ------------------------------------------------------------------------
    0+ 5       0.0548      7.96  Q         |         |         |         |
    0+10       0.2745     31.90  VQ        |         |         |         |
    0+15       0.6203     50.20  VQ        |         |         |         |
    0+20       1.0529     62.82  V Q       |         |         |         |
    0+25       1.6247     83.03  V  Q      |         |         |         |
    0+30       2.3509    105.44  V   Q     |         |         |         |
```

EX HG UNIT – 100YR 3HR



EX HG UNIT – 100YR 3HR

```
    6+30     122.4856      2.09  Q         |         |         |        V|
    6+35     122.4935      1.15  Q         |         |         |        V|
    6+40     122.4976      0.59  Q         |         |         |        V|
    6+45     122.4996      0.29  Q         |         |         |        V|
    6+50     122.5004      0.12  Q         |         |         |        V|
    6+55     122.5006      0.03  Q         |         |         |        V|
    7+ 0     122.5007      0.00  Q         |         |         |        V|
    7+ 5     122.5007      0.00  Q         |         |         |        V|
    7+10     122.5007      0.00  Q         |         |         |        V|
    7+15     122.5007      0.00  Q         |         |         |        V|
    7+20     122.5007      0.00  Q         |         |         |        V|
-------------------------------------------------------------------------
       ****************************HYDROGRAPH DATA****************************
                    Number of intervals =    88
                    Time interval =    5.0 (Min.)
                    Maximum/Peak flow rate =     1017.161 (CFS)
                    Total volume =     122.501 (Ac.Ft)
              Status of hydrographs being held in storage
                         Stream 1  Stream 2  Stream 3  Stream 4  Stream 5
              Peak (CFS)      0.000     0.000     0.000     0.000     0.000
              Vol (Ac.Ft)      0.000     0.000     0.000     0.000     0.000
       *************************************************************************

       -------------------------------------------------------------------------
```

FLOOD HYDROGRAPH ROUTING PROGRAM
Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2005
Study date: 03/11/25

Program License Serial Number 5006

********** HYDROGRAPH INFORMATION **********

From study/file name: trib1a6100.rte
**********HYDROGRAPH DATA**********
Number of intervals = 117
Time interval = 5.0 (Min.)
Maximum/Peak flow rate = 444.683 (CFS)
Total volume = 74.275 (Ac.Ft)
Status of hydrographs being held in storage

	Stream 1	Stream 2	Stream 3	Stream 4	Stream 5
Peak (CFS)	0.000	0.000	0.000	0.000	0.000
Vol (Ac.Ft)	0.000	0.000	0.000	0.000	0.000

****

++
Process from Point/Station 11.000 to Point/Station 15.000
**** STREAM ROUTING SCS CONVEX METHOD ****
_____
HYDROGRAPH STREAM ROUTING DATA:
Length of stream = 2737.00 (Ft.)
Elevation difference = 71.00 (Ft.)
Slope of channel = 0.025941 (Vert/Horiz)
Channel type - Improved Channel

Channel length = 2737.00(Ft.) Elevation difference = 71.00(Ft.)
Channel evaluation using mean flow rate of hydrograph
Channel base width = 5.000(Ft.)
Slope or 'Z' of left channel bank = 1.000
Slope or 'Z' of right channel bank = 1.000
Manning's 'N' = 0.045
Maximum depth of channel = 20.000(Ft.)
Flow(q) thru subarea = 126.224(CFS)
Depth of flow = 2.422(Ft.)
Average velocity = 7.022(Ft/s)
Total flow rate = 126.224(CFS)
Channel flow top width = 9.844(Ft.)
Depth of flow in channel = 2.42(Ft.)
Total number of channels (same dimensions) = 1
Flow Velocity = 7.02(Ft/s)
Travel time = 0.00 min.
Individual channel flow = 126.224(CFS)
Total capacity of improved channels = 126.224(CFS)
Critical Depth in Channel = 2.31(Ft.)

Channel evaluation using maximum flow rate of hydrograph
Flow(q) thru subarea = 444.683(CFS)
Depth of flow = 4.695(Ft.)
Average velocity = 9.771(Ft/s)
Total flow rate = 444.683(CFS)
Channel flow top width = 14.389(Ft.)
Depth of flow in channel = 4.69(Ft.)
Total number of channels (same dimensions) = 1
Flow Velocity = 9.77(Ft/s)

```
      Travel time  =    0.00 min.
      Individual channel flow =  444.683(CFS)
      Total capacity of improved channels =    444.683(CFS)
      Critical Depth in Channel =    4.63(Ft.)


      ********************** SCS CONVEX CHANNEL ROUTING *********************
      Convex method of stream routing  data items:
      Using equation: Outflow =
      O(t+dt) = (1-c*)O(t+dt-dt*) + Input(c*)
                where c* = 1 - (1-c)^e and dt = c(length)/velocity
                c(v/v+1.7) =   0.8518   Travel time =   4.67 (min.)
               dt*(unit time interval) =   5.00(min.),  e=   1.1715
               dt(routing time-step) =   3.98 (min.),   c* =   0.8932

      Output hydrograph delayed by 0  unit time increments


      ++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                        P R I N T  O F  S T O R M
                     R u n o f f     H y d r o g r a p h
      ----------------------------------------------------------------------
                  Hydrograph in   5   Minute intervals (CFS)

      ----------------------------------------------------------------------
Time(h+m) Out = O(CFS) In = I  0      111.2     222.3     333.5     444.7
----------------------------------------------------------------------------
  0+ 5       0.0228      0.12  O         |         |         |         |
  0+10       0.2205      0.71  O         |         |         |         |
  0+15       0.8843      1.95  O         |         |         |         |
  0+20       2.2001      3.92  O         |         |         |         |
  0+25       4.2168      6.54  O         |         |         |         |
  0+30       6.8752      9.74  O         |         |         |         |
  0+35      10.0589     13.17  OI        |         |         |         |
  0+40      13.4304     16.40  |O        |         |         |         |
  0+45      16.6511     19.50  |O        |         |         |         |
  0+50      19.7506     22.53  |OI       |         |         |         |
  0+55      22.7375     25.31  | O       |         |         |         |
  1+ 0      25.4787     27.74  | O       |         |         |         |
  1+ 5      27.9212     30.05  | O       |         |         |         |
  1+10      30.2610     32.46  | O       |         |         |         |
  1+15      32.7076     35.09  | OI      |         |         |         |
  1+20      35.3466     37.87  |  O      |         |         |         |
  1+25      38.1008     40.60  |  O      |         |         |         |
  1+30      40.7319     42.78  |  O      |         |         |         |
  1+35      42.8607     44.41  |  O      |         |         |         |
  1+40      44.4872     45.72  |   O     |         |         |         |
  1+45      45.7811     46.77  |   O     |         |         |         |
  1+50      46.8195     47.62  |   O     |         |         |         |
  1+55      47.6721     48.38  |   O     |         |         |         |
  2+ 0      48.4721     49.30  |   O     |         |         |         |
  2+ 5      49.3979     50.32  |   O     |         |         |         |
  2+10      50.4529     51.58  |   O     |         |         |         |
  2+15      51.7610     53.23  |   O     |         |         |         |
  2+20      53.4250     55.14  |   O     |         |         |         |
  2+25      55.3397     57.22  |   OI    |         |         |         |
  2+30      57.3577     59.09  |    O    |         |         |         |
  2+35      59.2419     60.95  |    O    |         |         |         |
  2+40      61.0540     62.52  |    O    |         |         |         |
  2+45      62.6167     63.91  |    O    |         |         |         |
  2+50      64.0652     65.51  |    O    |         |         |         |
  2+55      65.7013     67.40  |    OI   |         |         |         |
  3+ 0      67.6299     69.64  |     O   |         |         |         |
  3+ 5      69.8780     72.14  |     O   |         |         |         |
  3+10      72.3942     74.87  |     O   |         |         |         |
  3+15      75.0901     77.53  |     O   |         |         |         |
  3+20      77.7441     80.14  |     OI  |         |         |         |
  3+25      80.4332     83.16  |      O  |         |         |         |
  3+30      83.5576     86.93  |      O  |         |         |         |
  3+35      87.4452     91.72  |      OI |         |         |         |
  3+40      92.2972     97.36  |       O |         |         |         |
```

EX HG UNIT – 100YR 6HR

3+45	98.0363	104.01	OI
3+50	104.7541	111.56	OI
3+55	112.2765	119.45	O
4+ 0	120.1016	127.22	OI
4+ 5	127.8253	134.71	OI
4+10	135.3653	142.33	O
4+15	143.0387	150.27	OI
4+20	151.0899	158.97	OI
4+25	159.8836	168.58	OI
4+30	169.5681	179.06	OI
4+35	180.0594	190.07	OI
4+40	191.0509	201.28	OI
4+45	202.2393	212.50	OI
4+50	213.4105	223.49	OI
4+55	224.3850	234.29	OI
5+ 0	235.2494	245.33	OI
5+ 5	246.4864	257.53	OI
5+10	259.0986	272.56	OI
5+15	274.6726	292.00	O I
5+20	294.7819	317.36	O I
5+25	320.7956	349.36	O I
5+30	353.5203	388.83	O I
5+35	391.5940	424.58	O I
5+40	424.7337	444.68	O I
5+45	442.1779	442.64	O
5+50	437.2838	413.62	I O
5+55	406.3572	360.05	I O
6+ 0	352.3273	290.72	I O
6+ 5	285.8895	228.27	I O
6+10	226.0065	182.21	I O
6+15	180.8286	149.07	I O
6+20	148.2981	126.30	I O
6+25	125.7526	110.45	I O
6+30	109.7095	97.44	IO
6+35	96.8123	86.82	IO
6+40	86.2872	78.07	O
6+45	77.5336	70.33	O
6+50	69.8092	63.28	IO
6+55	62.8913	57.35	O
7+ 0	57.0314	52.36	IO
7+ 5	52.0321	47.84	O
7+10	47.4292	43.14	IO
7+15	42.9164	39.41	O
7+20	39.1949	36.17	O
7+25	35.9031	32.93	IO
7+30	32.8130	30.53	O
7+35	30.3901	28.42	O
7+40	28.2414	26.31	O
7+45	26.1348	24.23	O
7+50	24.0273	22.00	IO
7+55	21.8248	19.86	O
8+ 0	19.7620	18.19	O
8+ 5	18.0514	16.53	O
8+10	16.4091	14.99	O
8+15	14.8869	13.60	O
8+20	13.4745	12.16	O
8+25	12.0766	10.93	IO
8+30	10.8555	9.84	O
8+35	9.7423	8.73	O
8+40	8.6922	7.93	O
8+45	7.8922	7.27	O
8+50	7.2097	6.58	O
8+55	6.4931	5.76	O
9+ 0	5.6644	4.83	O
9+ 5	4.7304	3.81	O
9+10	3.7063	2.69	O
9+15	2.5600	1.38	O
9+20	1.3279	0.41	O
9+25	0.4619	0.14	O
9+30	0.1568	0.05	O
9+35	0.0569	0.02	O

EX HG UNIT – 100YR 6HR

```
    9+40       0.0233      0.01  O         |         |         |         |
    9+45       0.0102      0.00  O         |         |         |         |
    9+50       0.0032      0.00  O         |         |         |         |
    9+55       0.0000      0.00  O         |         |         |         |
-------------------------------------------------------------------------
       ****************************HYDROGRAPH DATA****************************
                     Number of intervals =   119
                     Time interval =    5.0 (Min.)
                     Maximum/Peak flow rate =      442.178 (CFS)
                     Total volume =      74.275 (Ac.Ft)
              Status of hydrographs being held in storage
                         Stream 1  Stream 2  Stream 3  Stream 4  Stream 5
              Peak (CFS)      0.000     0.000     0.000     0.000     0.000
              Vol (Ac.Ft)     0.000     0.000     0.000     0.000     0.000
       *************************************************************************

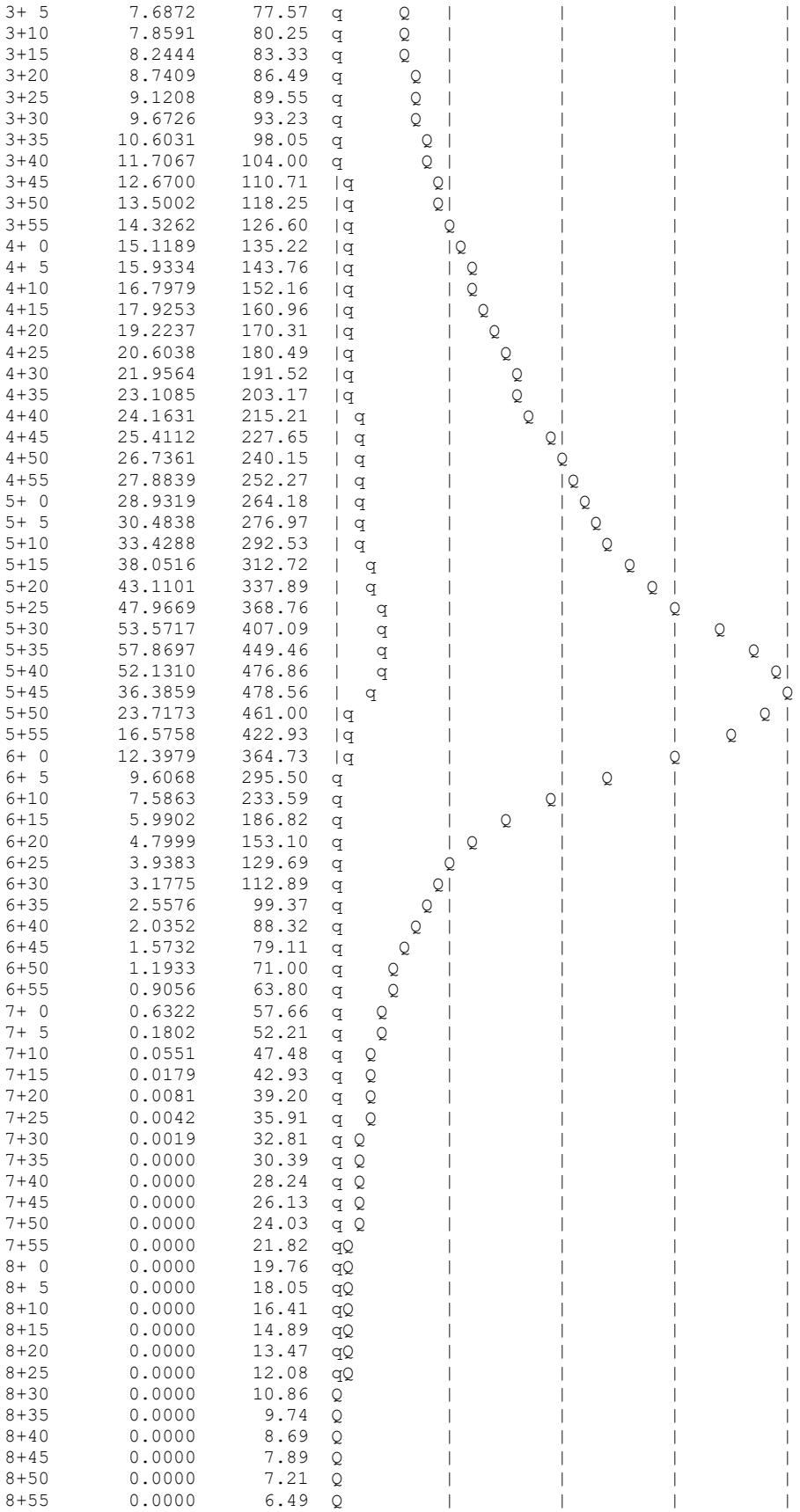
       ---------------------------------------------------------------------


       +++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
       Process from Point/Station       11.000 to Point/Station       15.000
       **** ADD/COMBINE/RECOVER HYDROGRAPHS ****
       _____________________________________________________________________
       ********************* HYDROGRAPH INFORMATION **********************

                     From study/file name: trib1b6100.rte
       +++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                        P R I N T  O F  S T O R M
                     R u n o f f     H y d r o g r a p h
       ---------------------------------------------------------------------
                  Hydrograph in   5   Minute intervals (CFS)

       ---------------------------------------------------------------------
  Time(h+m) Add q(CFS)  Tot. Q   0      119.6     239.3     358.9     478.6
  ---------------------------------------------------------------------
    0+ 5       0.0376      0.06  Q         |         |         |         |
    0+10       0.2405      0.46  Q         |         |         |         |
    0+15       0.6552      1.54  Q         |         |         |         |
    0+20       1.0586      3.26  Q         |         |         |         |
    0+25       1.2821      5.50  Q         |         |         |         |
    0+30       1.4767      8.35  Q         |         |         |         |
    0+35       1.8713     11.93  Q         |         |         |         |
    0+40       2.3738     15.80  qQ        |         |         |         |
    0+45       2.6799     19.33  qQ        |         |         |         |
    0+50       2.8433     22.59  qQ        |         |         |         |
    0+55       2.9547     25.69  q Q       |         |         |         |
    1+ 0       3.1155     28.59  q Q       |         |         |         |
    1+ 5       3.4952     31.42  q Q       |         |         |         |
    1+10       3.9907     34.25  q Q       |         |         |         |
    1+15       4.2919     37.00  q  Q      |         |         |         |
    1+20       4.4513     39.80  q  Q      |         |         |         |
    1+25       4.5631     42.66  q  Q      |         |         |         |
    1+30       4.6490     45.38  q  Q      |         |         |         |
    1+35       4.7176     47.58  q  Q      |         |         |         |
    1+40       4.7722     49.26  q   Q     |         |         |         |
    1+45       4.8098     50.59  q   Q     |         |         |         |
    1+50       4.8389     51.66  q   Q     |         |         |         |
    1+55       4.8659     52.54  q   Q     |         |         |         |
    2+ 0       4.9671     53.44  q   Q     |         |         |         |
    2+ 5       5.2180     54.62  q   Q     |         |         |         |
    2+10       5.4328     55.89  q   Q     |         |         |         |
    2+15       5.5717     57.33  q   Q     |         |         |         |
    2+20       5.8868     59.31  q   Q     |         |         |         |
    2+25       6.1088     61.45  q    Q    |         |         |         |
    2+30       6.2233     63.58  q    Q    |         |         |         |
    2+35       6.2904     65.53  q    Q    |         |         |         |
    2+40       6.3432     67.40  q    Q    |         |         |         |
    2+45       6.4559     69.07  q    Q    |         |         |         |
    2+50       6.7994     70.86  q    Q    |         |         |         |
    2+55       7.2672     72.97  q     Q   |         |         |         |
    3+ 0       7.5442     75.17  q     Q   |         |         |         |
```

EX HG UNIT – 100YR 6HR



EX HG UNIT – 100YR 6HR

```
    9+ 0       0.0000      5.66  Q         |         |         |         |
    9+ 5       0.0000      4.73  Q         |         |         |         |
    9+10       0.0000      3.71  Q         |         |         |         |
    9+15       0.0000      2.56  Q         |         |         |         |
    9+20       0.0000      1.33  Q         |         |         |         |
    9+25       0.0000      0.46  Q         |         |         |         |
    9+30       0.0000      0.16  Q         |         |         |         |
    9+35       0.0000      0.06  Q         |         |         |         |
    9+40       0.0000      0.02  Q         |         |         |         |
    9+45       0.0000      0.01  Q         |         |         |         |
    9+50       0.0000      0.00  Q         |         |         |         |
    9+55       0.0000      0.00  Q         |         |         |         |
--------------------------------------------------------------------------
       ****************************HYDROGRAPH DATA****************************
                    Number of intervals =   119
                    Time interval =    5.0 (Min.)
                    Maximum/Peak flow rate =      478.564 (CFS)
                    Total volume =      81.424 (Ac.Ft)
              Status of hydrographs being held in storage
                         Stream 1  Stream 2  Stream 3  Stream 4  Stream 5
              Peak (CFS)      0.000     0.000     0.000     0.000     0.000
              Vol (Ac.Ft)      0.000     0.000     0.000     0.000     0.000
       ****************************************************************************

       ----------------------------------------------------------------------


       ++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
       Process from Point/Station       15.000 to Point/Station       16.000
       **** STREAM ROUTING SCS CONVEX METHOD ****
       ____________________________________________________________________________
       HYDROGRAPH STREAM ROUTING DATA:
       Length of stream =    825.00 (Ft.)
       Elevation difference =   15.00 (Ft.)
       Slope of channel =  0.018182 (Vert/Horiz)
       Channel type - Improved Channel


       Channel length =   825.00(Ft.)     Elevation difference =  15.00(Ft.)
       Channel evaluation using mean flow rate of hydrograph
       Channel base width  =    5.000(Ft.)
       Slope or 'Z' of left channel bank =   1.000
       Slope or 'Z' of right channel bank =   1.000
       Manning's 'N'    = 0.045
       Maximum depth of channel  =   20.000(Ft.)
       Flow(q) thru subarea =    137.014(CFS)
       Depth of flow =     2.789(Ft.)
       Average velocity =     6.307(Ft/s)
       Total flow rate =   137.014(CFS)
       Channel flow top width =   10.578(Ft.)
       Depth of flow in channel =   2.79(Ft.)
       Total number of channels (same dimensions) = 1
       Flow Velocity =    6.31(Ft/s)
       Travel time  =    0.00 min.
       Individual channel flow =  137.014(CFS)
       Total capacity of improved channels =    137.014(CFS)
       Critical Depth in Channel =    2.41(Ft.)


       Channel evaluation using maximum flow rate of hydrograph
       Flow(q) thru subarea =    478.564(CFS)
       Depth of flow =     5.320(Ft.)
       Average velocity =     8.716(Ft/s)
       Total flow rate =   478.564(CFS)
       Channel flow top width =   15.640(Ft.)
       Depth of flow in channel =   5.32(Ft.)
       Total number of channels (same dimensions) = 1
       Flow Velocity =    8.72(Ft/s)
       Travel time  =    0.00 min.
       Individual channel flow =  478.564(CFS)
       Total capacity of improved channels =    478.564(CFS)
```

EX HG UNIT – 100YR 6HR

Critical Depth in Channel = 4.81(Ft.)

********** SCS CONVEX CHANNEL ROUTING **********
Convex method of stream routing data items:
Using equation: Outflow =
O(t+dt) = (1-c*)O(t+dt-dt*) + Input(c*)
where c* = 1 - (1-c)^e and dt = c(length)/velocity
c(v/v+1.7) = 0.8368 Travel time = 1.58 (min.)
dt*(unit time interval) = 5.00(min.), e= 2.8585
dt(routing time-step) = 1.32 (min.), c* = 0.9944

Output hydrograph delayed by 0 unit time increments

++
P R I N T O F S T O R M
R u n o f f H y d r o g r a p h

Hydrograph in 5 Minute intervals (CFS)

Time(h+m)	Out = O(CFS)	In = I	0	119.6	239.3	358.9	478.6
0+ 5	0.0442	0.06	O				
0+10	0.3535	0.46	O				
0+15	1.2497	1.54	O				
0+20	2.7961	3.26	O				
0+25	4.8956	5.50	O				
0+30	7.5834	8.35	O				
0+35	10.9664	11.93	O				
0+40	14.7600	15.80	|O				
0+45	18.3794	19.33	|O				
0+50	21.7136	22.59	|O				
0+55	24.8564	25.69	| O				
1+ 0	27.8113	28.59	| O				
1+ 5	30.6552	31.42	| O				
1+10	33.4871	34.25	| O				
1+15	36.2584	37.00	| O				
1+20	39.0434	39.80	| O				
1+25	41.8911	42.66	| O				
1+30	44.6479	45.38	| O				
1+35	46.9849	47.58	| O				
1+40	48.8053	49.26	| O				
1+45	50.2313	50.59	| O				
1+50	51.3701	51.66	| O				
1+55	52.3005	52.54	| O				
2+ 0	53.1963	53.44	| O				
2+ 5	54.2990	54.62	| O				
2+10	55.5434	55.89	| O				
2+15	56.9428	57.33	| O				
2+20	58.7790	59.31	| O				
2+25	60.8725	61.45	| O				
2+30	63.0059	63.58	| O				
2+35	65.0058	65.53	| O				
2+40	66.8942	67.40	| O				
2+45	68.6205	69.07	| O				
2+50	70.3815	70.86	| O				
2+55	72.4016	72.97	| O				
3+ 0	74.5795	75.17	| O				
3+ 5	76.9207	77.57	| O				
3+10	79.5288	80.25	| O				
3+15	82.5042	83.33	| O				
3+20	85.6355	86.49	| O				
3+25	88.7262	89.55	| O				
3+30	92.2398	93.23	| O				
3+35	96.7508	98.05	| O				
3+40	102.3996	104.00	| O				
3+45	108.9001	110.71	| O				
3+50	116.2202	118.25	| O				
3+55	124.3527	126.60	| O				

4+ 0	132.8970	135.22	|O | | |
4+ 5	141.4562	143.76	|OI | | |
4+10	149.8966	152.16	| O | | |
4+15	158.5914	160.96	| O | | |
4+20	167.7932	170.31	| O | | |
4+25	177.7452	180.49	| OI | | |
4+30	188.5495	191.52	| OI | | |
4+35	200.0291	203.17	| O | | |
4+40	211.9662	215.21	| O | | |
4+45	224.2974	227.65	| OI| | |
4+50	236.7770	240.15	| OI | |
4+55	248.9994	252.27	| OI | |
5+ 0	260.9686	264.18	| OI | |
5+ 5	273.5228	276.97	| OI | |
5+10	288.3364	292.53	| O | |
5+15	307.2850	312.72	| OI | |
5+20	331.1127	337.89	| OI | |
5+25	360.4465	368.76	| O | |
5+30	396.7673	407.09	| | OI | |
5+35	438.0438	449.46	| | OI | |
5+40	469.4530	476.86	| | O| |
5+45	478.0666	478.56	| | OI | |
5+50	465.7077	461.00	| | O | |
5+55	433.1674	422.93	| | IO | |
6+ 0	380.3911	364.73	| | IO | |
6+ 5	314.1480	295.50	| | I O | |
6+10	250.2969	233.59	| IO | | |
6+15	199.4550	186.82	| IO | | |
6+20	162.2112	153.10	| IO | | |
6+25	136.0187	129.69	| IO | | |
6+30	117.4285	112.89	| O| | |
6+35	103.0200	99.37	| O | | |
6+40	91.3053	88.32	| O | | |
6+45	81.5947	79.11	| O | | |
6+50	73.1897	71.00	| IO | | |
6+55	65.7414	63.80	| O | | |
7+ 0	59.3192	57.66	| O | | |
7+ 5	53.6834	52.21	| O | | |
7+10	48.7604	47.48	| IO | | |
7+15	44.1615	42.93	| O | | |
7+20	40.2105	39.20	| O | | |
7+25	36.7967	35.91	| O | | |
7+30	33.6492	32.81	| O | | |
7+35	31.0450	30.39	| O | | |
7+40	28.8212	28.24	| O | | |
7+45	26.7029	26.13	| O | | |
7+50	24.5956	24.03	| O | | |
7+55	22.4186	21.82	|O | | |
8+ 0	20.3184	19.76	|O | | |
8+ 5	18.5132	18.05	|O | | |
8+10	16.8521	16.41	|O | | |
8+15	15.2976	14.89	|O | | |
8+20	13.8556	13.47	|O | | |
8+25	12.4536	12.08	|O | | |
8+30	11.1851	10.86	O | | |
8+35	10.0426	9.74	O | | |
8+40	8.9755	8.69	O | | |
8+45	8.1083	7.89	O | | |
8+50	7.3940	7.21	O | | |
8+55	6.6863	6.49	O | | |
9+ 0	5.8877	5.66	O | | |
9+ 5	4.9821	4.73	O | | |
9+10	3.9823	3.71	O | | |
9+15	2.8690	2.56	O | | |
9+20	1.6601	1.33	O | | |
9+25	0.6960	0.46	O | | |
9+30	0.2399	0.16	O | | |
9+35	0.0841	0.06	O | | |
9+40	0.0325	0.02	O | | |
9+45	0.0138	0.01	O | | |
9+50	0.0051	0.00	O | | |

EX HG UNIT – 100YR 6HR

```
    9+55       0.0009      0.00  O         |         |         |         |
   10+ 0       0.0000      0.00  O         |         |         |         |
--------------------------------------------------------------------------
      ****************************HYDROGRAPH DATA**************************
                  Number of intervals =   120
                  Time interval =    5.0 (Min.)
                  Maximum/Peak flow rate =      478.067 (CFS)
                  Total volume =      81.424 (Ac.Ft)
            Status of hydrographs being held in storage
                        Stream 1  Stream 2  Stream 3  Stream 4  Stream 5
            Peak (CFS)      0.000     0.000     0.000     0.000     0.000
            Vol (Ac.Ft)      0.000     0.000     0.000     0.000     0.000
      ***************************************************************************

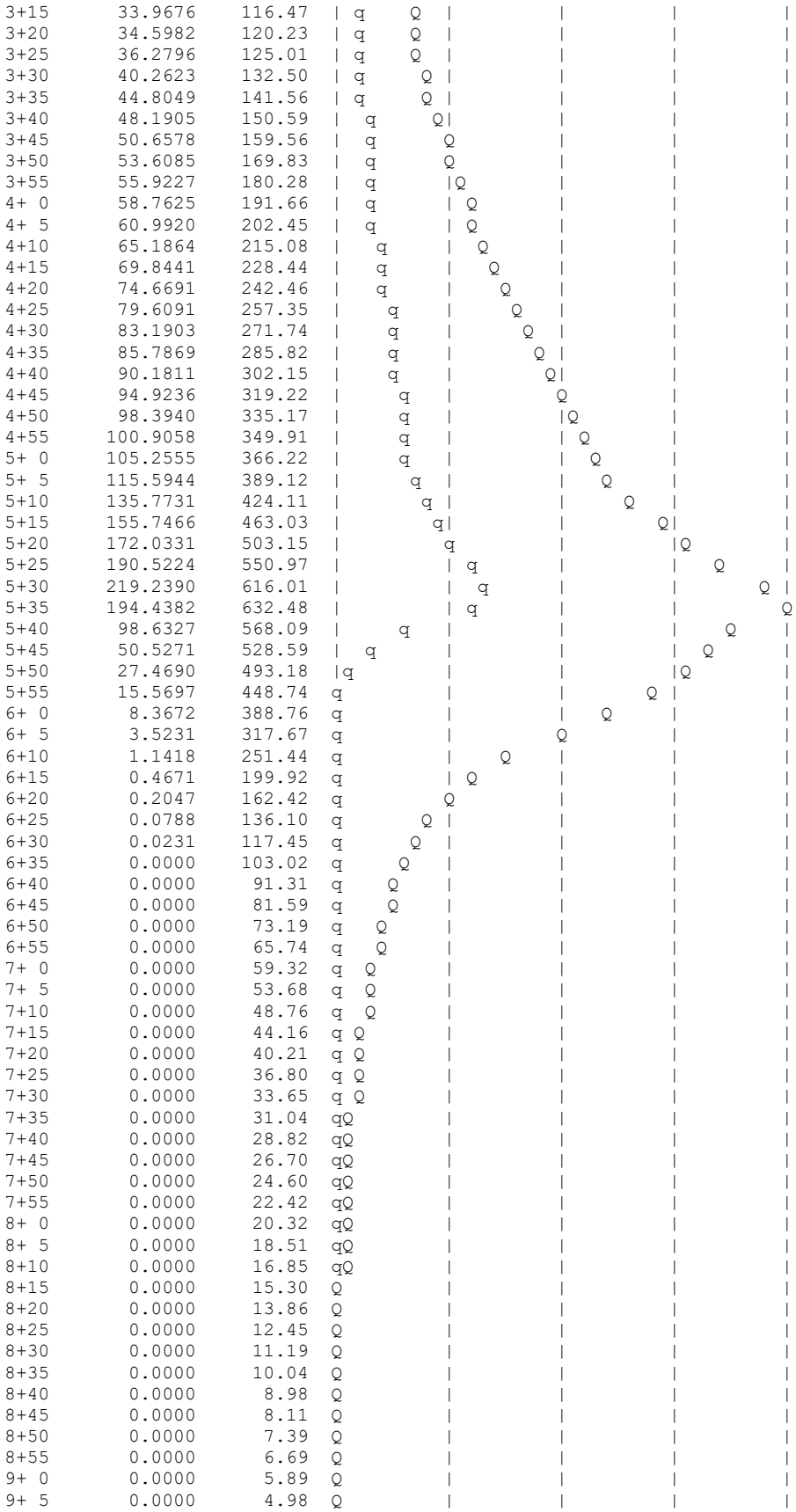
      ---------------------------------------------------------------------


      +++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
      Process from Point/Station       14.000 to Point/Station       16.000
      **** ADD/COMBINE/RECOVER HYDROGRAPHS ****
      _____________________________________________________________________
      ********************* HYDROGRAPH INFORMATION **********************

                  From study/file name: tribhg16100.rte
      +++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                     P R I N T  O F  S T O R M
                  R u n o f f     H y d r o g r a p h
      ---------------------------------------------------------------------
                Hydrograph in   5   Minute intervals (CFS)

      ---------------------------------------------------------------------
 Time(h+m) Add q(CFS)  Tot. Q   0      158.1     316.2     474.4     632.5
 ---------------------------------------------------------------------------
   0+ 5       1.8188      1.86  Q         |         |         |         |
   0+10       5.9525      6.31  Q         |         |         |         |
   0+15       8.4679      9.72  Q         |         |         |         |
   0+20       9.2753     12.07  Q         |         |         |         |
   0+25       9.6744     14.57  Q         |         |         |         |
   0+30      11.2921     18.88  qQ        |         |         |         |
   0+35      13.8374     24.80  qQ        |         |         |         |
   0+40      14.4990     29.26  qQ        |         |         |         |
   0+45      14.7813     33.16  q Q       |         |         |         |
   0+50      14.9367     36.65  q Q       |         |         |         |
   0+55      15.0214     39.88  q Q       |         |         |         |
   1+ 0      16.4650     44.28  |qQ       |         |         |         |
   1+ 5      18.8932     49.55  |q Q      |         |         |         |
   1+10      19.5238     53.01  |q Q      |         |         |         |
   1+15      19.8061     56.06  |q Q      |         |         |         |
   1+20      19.9615     59.00  |q Q      |         |         |         |
   1+25      20.0462     61.94  |q Q      |         |         |         |
   1+30      20.0907     64.74  |q  Q     |         |         |         |
   1+35      20.0907     67.08  |q  Q     |         |         |         |
   1+40      20.0907     68.90  |q  Q     |         |         |         |
   1+45      20.0907     70.32  |q  Q     |         |         |         |
   1+50      20.0907     71.46  |q  Q     |         |         |         |
   1+55      20.0907     72.39  |q  Q     |         |         |         |
   2+ 0      21.4898     74.69  |q  Q     |         |         |         |
   2+ 5      22.5189     76.82  |q  Q     |         |         |         |
   2+10      22.1204     77.66  |q  Q     |         |         |         |
   2+15      24.2004     81.14  |q   Q    |         |         |         |
   2+20      24.7039     83.48  |q   Q    |         |         |         |
   2+25      24.9157     85.79  |q   Q    |         |         |         |
   2+30      25.0308     88.04  |q   Q    |         |         |         |
   2+35      25.0710     90.08  |q   Q    |         |         |         |
   2+40      25.1155     92.01  |q   Q    |         |         |         |
   2+45      26.5146     95.14  |q    Q   |         |         |         |
   2+50      28.9428     99.32  |q    Q   |         |         |         |
   2+55      29.5734    101.98  |q    Q   |         |         |         |
   3+ 0      29.8557    104.44  |q    Q   |         |         |         |
   3+ 5      30.0110    106.93  |q    Q   |         |         |         |
   3+10      31.4949    111.02  |q     Q  |         |         |         |
```

EX HG UNIT – 100YR 6HR



3+15	33.9676	116.47	
3+20	34.5982	120.23	
3+25	36.2796	125.01	
3+30	40.2623	132.50	
3+35	44.8049	141.56	
3+40	48.1905	150.59	
3+45	50.6578	159.56	
3+50	53.6085	169.83	
3+55	55.9227	180.28	
4+ 0	58.7625	191.66	
4+ 5	60.9920	202.45	
4+10	65.1864	215.08	
4+15	69.8441	228.44	
4+20	74.6691	242.46	
4+25	79.6091	257.35	
4+30	83.1903	271.74	
4+35	85.7869	285.82	
4+40	90.1811	302.15	
4+45	94.9236	319.22	
4+50	98.3940	335.17	
4+55	100.9058	349.91	
5+ 0	105.2555	366.22	
5+ 5	115.5944	389.12	
5+10	135.7731	424.11	
5+15	155.7466	463.03	
5+20	172.0331	503.15	
5+25	190.5224	550.97	
5+30	219.2390	616.01	
5+35	194.4382	632.48	
5+40	98.6327	568.09	
5+45	50.5271	528.59	
5+50	27.4690	493.18	
5+55	15.5697	448.74	
6+ 0	8.3672	388.76	
6+ 5	3.5231	317.67	
6+10	1.1418	251.44	
6+15	0.4671	199.92	
6+20	0.2047	162.42	
6+25	0.0788	136.10	
6+30	0.0231	117.45	
6+35	0.0000	103.02	
6+40	0.0000	91.31	
6+45	0.0000	81.59	
6+50	0.0000	73.19	
6+55	0.0000	65.74	
7+ 0	0.0000	59.32	
7+ 5	0.0000	53.68	
7+10	0.0000	48.76	
7+15	0.0000	44.16	
7+20	0.0000	40.21	
7+25	0.0000	36.80	
7+30	0.0000	33.65	
7+35	0.0000	31.04	
7+40	0.0000	28.82	
7+45	0.0000	26.70	
7+50	0.0000	24.60	
7+55	0.0000	22.42	
8+ 0	0.0000	20.32	
8+ 5	0.0000	18.51	
8+10	0.0000	16.85	
8+15	0.0000	15.30	
8+20	0.0000	13.86	
8+25	0.0000	12.45	
8+30	0.0000	11.19	
8+35	0.0000	10.04	
8+40	0.0000	8.98	
8+45	0.0000	8.11	
8+50	0.0000	7.39	
8+55	0.0000	6.69	
9+ 0	0.0000	5.89	
9+ 5	0.0000	4.98	

EX HG UNIT – 100YR 6HR

```
    9+10       0.0000      3.98  Q         |         |         |         |
    9+15       0.0000      2.87  Q         |         |         |         |
    9+20       0.0000      1.66  Q         |         |         |         |
    9+25       0.0000      0.70  Q         |         |         |         |
    9+30       0.0000      0.24  Q         |         |         |         |
    9+35       0.0000      0.08  Q         |         |         |         |
    9+40       0.0000      0.03  Q         |         |         |         |
    9+45       0.0000      0.01  Q         |         |         |         |
    9+50       0.0000      0.01  Q         |         |         |         |
    9+55       0.0000      0.00  Q         |         |         |         |
   10+ 0       0.0000      0.00  Q         |         |         |         |
--------------------------------------------------------------------------
       ****************************HYDROGRAPH DATA****************************
                    Number of intervals =   120
                    Time interval =    5.0 (Min.)
                    Maximum/Peak flow rate =      632.482 (CFS)
                    Total volume =     106.229 (Ac.Ft)
              Status of hydrographs being held in storage
                         Stream 1  Stream 2  Stream 3  Stream 4  Stream 5
              Peak (CFS)      0.000     0.000     0.000     0.000     0.000
              Vol (Ac.Ft)      0.000     0.000     0.000     0.000     0.000
       ***********************************************************************

       ---------------------------------------------------------------------


       +++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
       Process from Point/Station       16.000 to Point/Station       30.000
       **** STREAM ROUTING SCS CONVEX METHOD ****
       _____________________________________________________________________
       HYDROGRAPH STREAM ROUTING DATA:
       Length of stream =   1610.00 (Ft.)
       Elevation difference =   60.00 (Ft.)
       Slope of channel =  0.037267 (Vert/Horiz)
       Channel type - Improved Channel


       Channel length =  1610.00(Ft.)     Elevation difference =  60.00(Ft.)
       Channel evaluation using mean flow rate of hydrograph
       Channel base width  =    5.000(Ft.)
       Slope or 'Z' of left channel bank =   1.000
       Slope or 'Z' of right channel bank =   1.000
       Manning's 'N'    = 0.045
       Maximum depth of channel  =   20.000(Ft.)
       Flow(q) thru subarea =    185.233(CFS)
       Depth of flow =     2.704(Ft.)
       Average velocity =     8.891(Ft/s)
       Total flow rate =   185.233(CFS)
       Channel flow top width =   10.408(Ft.)
       Depth of flow in channel =   2.70(Ft.)
       Total number of channels (same dimensions) = 1
       Flow Velocity =    8.89(Ft/s)
       Travel time  =    0.00 min.
       Individual channel flow =  185.233(CFS)
       Total capacity of improved channels =    185.233(CFS)
       Critical Depth in Channel =    2.88(Ft.)


       Channel evaluation using maximum flow rate of hydrograph
       Flow(q) thru subarea =    632.482(CFS)
       Depth of flow =     5.114(Ft.)
       Average velocity =    12.230(Ft/s)
       Total flow rate =   632.482(CFS)
       Channel flow top width =   15.227(Ft.)
       Depth of flow in channel =   5.11(Ft.)
       Total number of channels (same dimensions) = 1
       Flow Velocity =   12.23(Ft/s)
       Travel time  =    0.00 min.
       Individual channel flow =  632.482(CFS)
       Total capacity of improved channels =    632.482(CFS)
       Critical Depth in Channel =    5.56(Ft.)
```

EX HG UNIT – 100YR 6HR

********** SCS CONVEX CHANNEL ROUTING **********
Convex method of stream routing data items:
Using equation: Outflow =
O(t+dt) = (1-c*)O(t+dt-dt*) + Input(c*)
where c* = 1 - (1-c)^e and dt = c(length)/velocity
c(v/v+1.7) = 0.8780 Travel time = 2.19 (min.)
dt*(unit time interval) = 5.00(min.), e= 2.0637
dt(routing time-step) = 1.93 (min.), c* = 0.9870

Output hydrograph delayed by 0 unit time increments

++
P R I N T O F S T O R M
R u n o f f H y d r o g r a p h

Hydrograph in 5 Minute intervals (CFS)

Time(h+m)	Out = O(CFS)	In = I	0 158.1 316.2 474.4 632.5
0+ 5	1.1303	1.86	O | | | |
0+10	4.5491	6.31	O | | | |
0+15	8.3531	9.72	O | | | |
0+20	11.1280	12.07	O | | | |
0+25	13.5751	14.57	O | | | |
0+30	17.1693	18.88	|O | | | |
0+35	22.4501	24.80	|O | | | |
0+40	27.4762	29.26	|O | | | |
0+45	31.6030	33.16	|OI | | | |
0+50	35.2576	36.65	| O | | | |
0+55	38.5904	39.88	| O | | | |
1+ 0	42.5297	44.28	| O | | | |
1+ 5	47.4523	49.55	| O | | | |
1+10	51.6219	53.01	| O | | | |
1+15	54.8455	56.06	| O | | | |
1+20	57.8326	59.00	| O | | | |
1+25	60.7688	61.94	| O | | | |
1+30	63.6217	64.74	| O | | | |
1+35	66.1420	67.08	| O | | | |
1+40	68.1679	68.90	| O | | | |
1+45	69.7517	70.32	| O | | | |
1+50	71.0055	71.46	| O | | | |
1+55	72.0194	72.39	| O | | | |
2+ 0	73.7787	74.69	| O | | | |
2+ 5	75.9677	76.82	| O | | | |
2+10	77.3200	77.66	| O | | | |
2+15	79.7703	81.14	| O | | | |
2+20	82.5448	83.48	| O | | | |
2+25	84.8694	85.79	| O | | | |
2+30	87.1404	88.04	| O | | | |
2+35	89.2628	90.08	| O | | | |
2+40	91.2390	92.01	| O | | | |
2+45	93.8960	95.14	| OI | | | |
2+50	97.6607	99.32	| O | | | |
2+55	100.9109	101.98	| O | | | |
3+ 0	103.4538	104.44	| O | | | |
3+ 5	105.9371	106.93	| O | | | |
3+10	109.4015	111.02	| OI | | | |
3+15	114.3081	116.47	| O | | | |
3+20	118.7261	120.23	| O | | | |
3+25	123.1094	125.01	| O | | | |
3+30	129.5293	132.50	| O | | | |
3+35	137.9564	141.56	| O | | | |
3+40	146.9902	150.59	| O| | | |
3+45	155.9842	159.56	| OI | | |
3+50	165.7428	169.83	| O | | |
3+55	176.1137	180.28	| |O | | |
4+ 0	187.1282	191.66	| |OI | | |

EX HG UNIT – 100YR 6HR

```
4+ 5     198.1462    202.45  |         | O       |         |         |
4+10     210.0580    215.08  |         |  O      |         |         |
4+15     223.1188    228.44  |         |   O     |         |         |
4+20     236.8766    242.46  |         |   OI    |         |         |
4+25     251.4249    257.35  |         |    OI   |         |         |
4+30     266.0051    271.74  |         |     OI  |         |         |
4+35     280.2054    285.82  |         |      OI |         |         |
4+40     295.6515    302.15  |         |       OI|         |         |
4+45     312.4217    319.22  |         |        OI         |         |
4+50     328.8096    335.17  |         |         OI        |         |
4+55     344.0276    349.91  |         |         |OI       |         |
5+ 0     359.7296    366.22  |         |         | OI      |         |
5+ 5     380.0292    389.12  |         |         |   O     |         |
5+10     410.2294    424.11  |         |         |    OI   |         |
5+15     447.5435    463.03  |         |         |       OI|         |
5+20     487.1679    503.15  |         |         |         OI        |
5+25     531.9530    550.97  |         |         |         |  OI     |
5+30     590.1808    616.01  |         |         |         |     OI  |
5+35     625.6661    632.48  |         |         |         |       OI
5+40     593.3226    568.09  |         |         |         |    I O  |
5+45     544.4537    528.59  |         |         |         |  IO     |
5+50     507.3120    493.18  |         |         |         |IO       |
5+55     466.3983    448.74  |         |         |       IO|         |
6+ 0     412.5767    388.76  |         |         |   I O   |         |
6+ 5     345.9384    317.67  |         |         IO        |         |
6+10     277.8547    251.44  |         |    I O  |         |         |
6+15     220.5266    199.92  |         | IO      |         |         |
6+20     177.4347    162.42  |         IO        |         |         |
6+25     146.6436    136.10  |       IO|         |         |         |
6+30     124.9220    117.45  |      O  |         |         |         |
6+35     108.7930    103.02  |     O   |         |         |         |
6+40      95.9876     91.31  |    IO   |         |         |         |
6+45      85.4747     81.59  |    O    |         |         |         |
6+50      76.5457     73.19  |   O     |         |         |         |
6+55      68.7144     65.74  |   O     |         |         |         |
7+ 0      61.8837     59.32  |  O      |         |         |         |
7+ 5      55.9332     53.68  |  O      |         |         |         |
7+10      50.7258     48.76  |  O      |         |         |         |
7+15      45.9957     44.16  | O       |         |         |         |
7+20      41.7882     40.21  | O       |         |         |         |
7+25      38.1598     36.80  | O       |         |         |         |
7+30      34.9048     33.65  | O       |         |         |         |
7+35      32.0855     31.04  |IO       |         |         |         |
7+40      29.7093     28.82  |O        |         |         |         |
7+45      27.5476     26.70  |O        |         |         |         |
7+50      25.4354     24.60  |O        |         |         |         |
7+55      23.2857     22.42  |O        |         |         |         |
8+ 0      21.1557     20.32  |O        |         |         |         |
8+ 5      19.2341     18.51  |O        |         |         |         |
8+10      17.5148     16.85  |O        |         |         |         |
8+15      15.9176     15.30  IO        |         |         |         |
8+20      14.4308     13.86  O         |         |         |         |
8+25      13.0124     12.45  O         |         |         |         |
8+30      11.6912     11.19  O         |         |         |         |
8+35      10.4985     10.04  O         |         |         |         |
8+40       9.4011      8.98  O         |         |         |         |
8+45       8.4549      8.11  O         |         |         |         |
8+50       7.6794      7.39  O         |         |         |         |
8+55       6.9683      6.69  O         |         |         |         |
9+ 0       6.2054      5.89  O         |         |         |         |
9+ 5       5.3424      4.98  O         |         |         |         |
9+10       4.3802      3.98  O         |         |         |         |
9+15       3.3120      2.87  O         |         |         |         |
9+20       2.1413      1.66  O         |         |         |         |
9+25       1.0814      0.70  O         |         |         |         |
9+30       0.4243      0.24  O         |         |         |         |
9+35       0.1478      0.08  O         |         |         |         |
9+40       0.0536      0.03  O         |         |         |         |
9+45       0.0214      0.01  O         |         |         |         |
9+50       0.0086      0.01  O         |         |         |         |
9+55       0.0026      0.00  O         |         |         |         |
```

EX HG UNIT – 100YR 6HR

```
  10+ 0       0.0004      0.00  O         |         |         |         |
  10+ 5       0.0000      0.00  O         |         |         |         |
-------------------------------------------------------------------------
      ****************************HYDROGRAPH DATA**************************
                  Number of intervals =   121
                  Time interval =    5.0 (Min.)
                  Maximum/Peak flow rate =      625.666 (CFS)
                  Total volume =     106.229 (Ac.Ft)
            Status of hydrographs being held in storage
                     Stream 1  Stream 2  Stream 3  Stream 4  Stream 5
            Peak (CFS)      0.000     0.000     0.000     0.000     0.000
            Vol (Ac.Ft)      0.000     0.000     0.000     0.000     0.000
      *************************************************************************

      ------------------------------------------------------------------------


      ++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
      Process from Point/Station       16.000 to Point/Station       30.000
      **** ADD/COMBINE/RECOVER HYDROGRAPHS ****
      ________________________________________________________________________
      ********************* HYDROGRAPH INFORMATION **********************

                  From study/file name: trib1f6100.rte
      ++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                     P R I N T  O F  S T O R M
                  R u n o f f     H y d r o g r a p h
      ------------------------------------------------------------------------
                Hydrograph in   5   Minute intervals (CFS)

      ------------------------------------------------------------------------
  Time(h+m) Add q(CFS)  Tot. Q   0      173.9     347.9     521.8     695.8
  ------------------------------------------------------------------------
    0+ 5       0.1155      1.25  Q         |         |         |         |
    0+10       0.6468      5.20  Q         |         |         |         |
    0+15       1.3042      9.66  Q         |         |         |         |
    0+20       1.5946     12.72  Q         |         |         |         |
    0+25       1.7281     15.30  Q         |         |         |         |
    0+30       2.0406     19.21  qQ        |         |         |         |
    0+35       2.8700     25.32  qQ        |         |         |         |
    0+40       3.2590     30.74  qQ        |         |         |         |
    0+45       3.4299     35.03  q Q       |         |         |         |
    0+50       3.5353     38.79  q Q       |         |         |         |
    0+55       3.6028     42.19  q Q       |         |         |         |
    1+ 0       3.8780     46.41  q Q       |         |         |         |
    1+ 5       4.6807     52.13  q Q       |         |         |         |
    1+10       5.0500     56.67  q  Q      |         |         |         |
    1+15       5.2088     60.05  q  Q      |         |         |         |
    1+20       5.3034     63.14  q  Q      |         |         |         |
    1+25       5.3583     66.13  q  Q      |         |         |         |
    1+30       5.3978     69.02  q  Q      |         |         |         |
    1+35       5.4250     71.57  q   Q     |         |         |         |
    1+40       5.4434     73.61  q   Q     |         |         |         |
    1+45       5.4574     75.21  q   Q     |         |         |         |
    1+50       5.4650     76.47  q   Q     |         |         |         |
    1+55       5.4650     77.48  q   Q     |         |         |         |
    2+ 0       5.6961     79.47  q   Q     |         |         |         |
    2+ 5       6.2405     82.21  q   Q     |         |         |         |
    2+10       6.0470     83.37  q   Q     |         |         |         |
    2+15       6.6163     86.39  q   Q     |         |         |         |
    2+20       6.9094     89.45  q    Q    |         |         |         |
    2+25       7.0222     91.89  q    Q    |         |         |         |
    2+30       7.0937     94.23  q    Q    |         |         |         |
    2+35       7.1364     96.40  q    Q    |         |         |         |
    2+40       7.1670     98.41  q    Q    |         |         |         |
    2+45       7.4209    101.32  q    Q    |         |         |         |
    2+50       8.2083    105.87  q     Q   |         |         |         |
    2+55       8.5657    109.48  q     Q   |         |         |         |
    3+ 0       8.7181    112.17  q     Q   |         |         |         |
    3+ 5       8.8050    114.74  q     Q   |         |         |         |
    3+10       9.0910    118.49  q     Q   |         |         |         |
```

EX HG UNIT – 100YR 6HR

3+15	9.9060	124.21	q Q | | | |
3+20	10.2841	129.01	q Q | | | |
3+25	10.6783	133.79	q Q | | | |
3+30	11.7858	141.32	q Q | | | |
3+35	13.2057	151.16	q Q | | | |
3+40	14.5164	161.51	q Q| | | |
3+45	15.3573	171.34	q Q| | | |
3+50	16.4378	182.18	q Q | | | |
3+55	17.2152	193.33	q |Q | | |
4+ 0	18.2647	205.39	|q |Q | | |
4+ 5	19.0187	217.16	|q | Q | | |
4+10	20.2846	230.34	|q | Q | | |
4+15	21.8084	244.93	|q | Q | | |
4+20	23.4144	260.29	|q | Q | | |
4+25	25.0691	276.49	|q | Q | | |
4+30	26.5234	292.53	|q | Q | | |
4+35	27.4575	307.66	|q | Q | | |
4+40	28.8314	324.48	|q | Q | | |
4+45	30.4234	342.85	|q | Q| | |
4+50	31.8486	360.66	|q | Q | |
4+55	32.7691	376.80	|q | |Q | |
5+ 0	34.1295	393.86	|q | | Q | |
5+ 5	36.6325	416.66	| q | | Q | |
5+10	42.3040	452.53	| q | | | Q | |
5+15	48.9534	496.50	| q | | | Q | |
5+20	54.6529	541.82	| q | | | |Q |
5+25	60.4805	592.43	| q | | | | Q |
5+30	68.7221	658.90	| q | | | | | Q |
5+35	70.1277	695.79	| q | | | | | | Q
5+40	43.7994	637.12	| q | | | | | Q |
5+45	24.6384	569.09	|q | | | | | Q | |
5+50	14.7291	522.04	q | | | | Q | |
5+55	9.4198	475.82	q | | | | Q | |
6+ 0	6.3138	418.89	q | | | Q | | |
6+ 5	4.1599	350.10	q | | | Q | | |
6+10	2.5779	280.43	q | | Q | | | |
6+15	1.5359	222.06	q | Q | | | | |
6+20	0.7474	178.18	q | Q | | | | |
6+25	0.2224	146.87	q | Q | | | | |
6+30	0.0724	124.99	q | Q | | | | |
6+35	0.0265	108.82	q | Q | | | | |
6+40	0.0117	96.00	q | Q | | | | |
6+45	0.0051	85.48	q | Q | | | | |
6+50	0.0015	76.55	q | Q | | | | |
6+55	0.0000	68.71	q | Q | | | | |
7+ 0	0.0000	61.88	q | Q | | | | |
7+ 5	0.0000	55.93	q | Q | | | | |
7+10	0.0000	50.73	q Q | | | | |
7+15	0.0000	46.00	q Q | | | | |
7+20	0.0000	41.79	q Q | | | | |
7+25	0.0000	38.16	q Q | | | | |
7+30	0.0000	34.90	q Q | | | | |
7+35	0.0000	32.09	qQ | | | | |
7+40	0.0000	29.71	qQ | | | | |
7+45	0.0000	27.55	qQ | | | | |
7+50	0.0000	25.44	qQ | | | | |
7+55	0.0000	23.29	qQ | | | | |
8+ 0	0.0000	21.16	qQ | | | | |
8+ 5	0.0000	19.23	qQ | | | | |
8+10	0.0000	17.51	qQ | | | | |
8+15	0.0000	15.92	Q | | | | |
8+20	0.0000	14.43	Q | | | | |
8+25	0.0000	13.01	Q | | | | |
8+30	0.0000	11.69	Q | | | | |
8+35	0.0000	10.50	Q | | | | |
8+40	0.0000	9.40	Q | | | | |
8+45	0.0000	8.45	Q | | | | |
8+50	0.0000	7.68	Q | | | | |
8+55	0.0000	6.97	Q | | | | |
9+ 0	0.0000	6.21	Q | | | | |
9+ 5	0.0000	5.34	Q | | | | |

EX HG UNIT – 100YR 6HR

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    9+10       0.0000      4.38  Q         |         |         |         |
    9+15       0.0000      3.31  Q         |         |         |         |
    9+20       0.0000      2.14  Q         |         |         |         |
    9+25       0.0000      1.08  Q         |         |         |         |
    9+30       0.0000      0.42  Q         |         |         |         |
    9+35       0.0000      0.15  Q         |         |         |         |
    9+40       0.0000      0.05  Q         |         |         |         |
    9+45       0.0000      0.02  Q         |         |         |         |
    9+50       0.0000      0.01  Q         |         |         |         |
    9+55       0.0000      0.00  Q         |         |         |         |
   10+ 0       0.0000      0.00  Q         |         |         |         |
   10+ 5       0.0000      0.00  Q         |         |         |         |
-------------------------------------------------------------------------
       ****************************HYDROGRAPH DATA****************************
                    Number of intervals =   121
                    Time interval =    5.0 (Min.)
                    Maximum/Peak flow rate =      695.794 (CFS)
                    Total volume =     114.124 (Ac.Ft)
              Status of hydrographs being held in storage
                         Stream 1  Stream 2  Stream 3  Stream 4  Stream 5
              Peak (CFS)      0.000     0.000     0.000     0.000     0.000
              Vol (Ac.Ft)      0.000     0.000     0.000     0.000     0.000
       *************************************************************************

       ------------------------------------------------------------------


       +++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
       Process from Point/Station       10.000 to Point/Station       30.000
       **** STORE OR DELETE CURRENT HYDROGRAPH ****
       _________________________________________________________________________
       Current stream hydrograph of   5.0 minute
       intervals has been stored as stream number 1 with
       a starting time of   0.00 hours and ending time of 333.00 hours
       With a total volume of     114.12(Ac.Ft)
       ****************************HYDROGRAPH DATA****************************
                    Number of intervals =     0
                    Time interval =    0.0 (Min.)
                    Maximum/Peak flow rate =        0.000 (CFS)
                    Total volume =       0.000 (Ac.Ft)
              Status of hydrographs being held in storage
                         Stream 1  Stream 2  Stream 3  Stream 4  Stream 5
              Peak (CFS)    695.794     0.000     0.000     0.000     0.000
              Vol (Ac.Ft)    114.124     0.000     0.000     0.000     0.000
       *************************************************************************

       ------------------------------------------------------------------


       +++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
       Process from Point/Station       20.000 to Point/Station       22.000
       **** ADD/COMBINE/RECOVER HYDROGRAPHS ****
       _________________________________________________________________________
       ********************* HYDROGRAPH INFORMATION **********************

                    From study/file name: trib2a6100.rte
       +++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                       P R I N T   O F   S T O R M
                    R u n o f f     H y d r o g r a p h
       ------------------------------------------------------------------------
                  Hydrograph in   5   Minute intervals (CFS)

       ------------------------------------------------------------------------
  Time(h+m) Add q(CFS)  Tot. Q   0       48.7      97.4     146.0     194.7
  ------------------------------------------------------------------------
    0+ 5       0.0978      0.10  Q         |         |         |         |
    0+10       0.5986      0.60  Q         |         |         |         |
    0+15       1.7054      1.71  Q         |         |         |         |
    0+20       3.0578      3.06  Q         |         |         |         |
    0+25       4.0625      4.06  Q         |         |         |         |
    0+30       4.8118      4.81  Q         |         |         |         |
```

EX HG UNIT – 100YR 6HR

0+35	5.9116	5.91	Q
0+40	7.4370	7.44	Q
0+45	8.7640	8.76	Q
0+50	9.5362	9.54	Q
0+55	10.0149	10.01	Q
1+ 0	10.5699	10.57	Q
1+ 5	11.6113	11.61	Q
1+10	13.1147	13.11	Q
1+15	14.4316	14.43	Q
1+20	15.2106	15.21	Q
1+25	15.6927	15.69	Q
1+30	16.0526	16.05	Q
1+35	16.3440	16.34	Q
1+40	16.5886	16.59	Q
1+45	16.7827	16.78	Q
1+50	16.9519	16.95	Q
1+55	17.0933	17.09	Q
2+ 0	17.4074	17.41	Q
2+ 5	18.0672	18.07	Q
2+10	18.8534	18.85	Q
2+15	19.5320	19.53	Q
2+20	20.3496	20.35	Q
2+25	21.2658	21.27	Q
2+30	21.8087	21.81	Q
2+35	22.1261	22.13	Q
2+40	22.3578	22.36	Q
2+45	22.7339	22.73	Q
2+50	23.6543	23.65	Q
2+55	25.0477	25.05	Q
3+ 0	26.2656	26.27	Q
3+ 5	26.9560	26.96	Q
3+10	27.5648	27.56	Q
3+15	28.6232	28.62	Q
3+20	30.1423	30.14	Q
3+25	31.6635	31.66	Q
3+30	33.3885	33.39	Q
3+35	36.1019	36.10	Q
3+40	39.6204	39.62	Q
3+45	43.1163	43.12	Q
3+50	46.2010	46.20	Q
3+55	49.0805	49.08	Q
4+ 0	51.9140	51.91	Q
4+ 5	54.7426	54.74	Q
4+10	57.7518	57.75	Q
4+15	61.3204	61.32	Q
4+20	65.6167	65.62	Q
4+25	70.3189	70.32	Q
4+30	75.0311	75.03	Q
4+35	79.3430	79.34	Q
4+40	83.2516	83.25	Q
4+45	87.3862	87.39	Q
4+50	91.9055	91.91	Q
4+55	96.1957	96.20	Q
5+ 0	100.1210	100.12	Q
5+ 5	105.0729	105.07	Q
5+10	113.6287	113.63	Q
5+15	127.2244	127.22	Q
5+20	143.9606	143.96	Q
5+25	161.0799	161.08	Q
5+30	179.7033	179.70	Q
5+35	194.7298	194.73	Q
5+40	187.5952	187.60	Q
5+45	149.6645	149.66	Q
5+50	103.3310	103.33	Q
5+55	72.0675	72.07	Q
6+ 0	54.1019	54.10	Q
6+ 5	42.7764	42.78	Q
6+10	34.6351	34.64	Q
6+15	28.2898	28.29	Q
6+20	23.5005	23.50	Q
6+25	19.4866	19.49	Q

EX HG UNIT – 100YR 6HR

```
    6+30      16.3527     16.35  |  Q      |         |         |         |
    6+35      13.9556     13.96  | Q       |         |         |         |
    6+40      11.9154     11.92  | Q       |         |         |         |
    6+45       9.9244      9.92  | Q       |         |         |         |
    6+50       8.2867      8.29  |Q        |         |         |         |
    6+55       6.8960      6.90  |Q        |         |         |         |
    7+ 0       5.7047      5.70  |Q        |         |         |         |
    7+ 5       4.6506      4.65  Q         |         |         |         |
    7+10       3.7145      3.71  Q         |         |         |         |
    7+15       2.9577      2.96  Q         |         |         |         |
    7+20       2.2108      2.21  Q         |         |         |         |
    7+25       1.3870      1.39  Q         |         |         |         |
    7+30       0.3960      0.40  Q         |         |         |         |
    7+35       0.1213      0.12  Q         |         |         |         |
    7+40       0.0409      0.04  Q         |         |         |         |
    7+45       0.0193      0.02  Q         |         |         |         |
    7+50       0.0096      0.01  Q         |         |         |         |
    7+55       0.0039      0.00  Q         |         |         |         |
--------------------------------------------------------------------------
      ****************************HYDROGRAPH DATA****************************
                  Number of intervals =    95
                  Time interval =    5.0 (Min.)
                  Maximum/Peak flow rate =      194.730 (CFS)
                  Total volume =      25.569 (Ac.Ft)
            Status of hydrographs being held in storage
                        Stream 1  Stream 2  Stream 3  Stream 4  Stream 5
            Peak (CFS)    695.794     0.000     0.000     0.000     0.000
            Vol (Ac.Ft)    114.124     0.000     0.000     0.000     0.000
      ************************************************************************

      ------------------------------------------------------------------------


      ++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
      Process from Point/Station       22.000 to Point/Station       24.000
      **** STREAM ROUTING SCS CONVEX METHOD ****
      ________________________________________________________________________
      HYDROGRAPH STREAM ROUTING DATA:
      Length of stream =   1676.00 (Ft.)
      Elevation difference =   79.00 (Ft.)
      Slope of channel =  0.047136 (Vert/Horiz)
      Channel type - Improved Channel


      Channel length =  1676.00(Ft.)     Elevation difference =  79.00(Ft.)
      Channel evaluation using mean flow rate of hydrograph
      Channel base width  =    5.000(Ft.)
      Slope or 'Z' of left channel bank =   1.000
      Slope or 'Z' of right channel bank =   1.000
      Manning's 'N'    = 0.045
      Maximum depth of channel  =   20.000(Ft.)
      Flow(q) thru subarea =     47.847(CFS)
      Depth of flow =     1.180(Ft.)
      Average velocity =     6.558(Ft/s)
      Total flow rate =    47.847(CFS)
      Channel flow top width =    7.361(Ft.)
      Depth of flow in channel =   1.18(Ft.)
      Total number of channels (same dimensions) = 1
      Flow Velocity =    6.56(Ft/s)
      Travel time  =    0.00 min.
      Individual channel flow =   47.847(CFS)
      Total capacity of improved channels =     47.847(CFS)
      Critical Depth in Channel =    1.30(Ft.)


      Channel evaluation using maximum flow rate of hydrograph
      Flow(q) thru subarea =    194.730(CFS)
      Depth of flow =     2.607(Ft.)
      Average velocity =     9.819(Ft/s)
      Total flow rate =   194.730(CFS)
      Channel flow top width =   10.214(Ft.)
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EX HG UNIT – 100YR 6HR

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      Depth of flow in channel =   2.61(Ft.)
      Total number of channels (same dimensions) = 1
      Flow Velocity =    9.82(Ft/s)
      Travel time  =    0.00 min.
      Individual channel flow =  194.730(CFS)
      Total capacity of improved channels =    194.730(CFS)
      Critical Depth in Channel =    2.94(Ft.)


      ********************** SCS CONVEX CHANNEL ROUTING *********************
      Convex method of stream routing  data items:
      Using equation: Outflow =
      O(t+dt) = (1-c*)O(t+dt-dt*) + Input(c*)
                where c* = 1 - (1-c)^e and dt = c(length)/velocity
                c(v/v+1.7) =   0.8524   Travel time =   2.84 (min.)
               dt*(unit time interval) =   5.00(min.),  e=   1.7079
               dt(routing time-step) =   2.43 (min.),   c* =   0.9619

      Output hydrograph delayed by 0  unit time increments


      ++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                        P R I N T  O F  S T O R M
                     R u n o f f     H y d r o g r a p h
      ----------------------------------------------------------------------
                  Hydrograph in   5   Minute intervals (CFS)

      ----------------------------------------------------------------------
Time(h+m) Out = O(CFS) In = I  0       48.7      97.4     146.0     194.7
----------------------------------------------------------------------------
  0+ 5       0.0485      0.10  O         |         |         |         |
  0+10       0.3440      0.60  O         |         |         |         |
  0+15       1.1372      1.71  O         |         |         |         |
  0+20       2.3537      3.06  O         |         |         |         |
  0+25       3.5287      4.06  O         |         |         |         |
  0+30       4.4134      4.81  O         |         |         |         |
  0+35       5.3414      5.91  |O        |         |         |         |
  0+40       6.6455      7.44  |O        |         |         |         |
  0+45       8.0642      8.76  |O        |         |         |         |
  0+50       9.1199      9.54  |O        |         |         |         |
  0+55       9.7575     10.01  | O       |         |         |         |
  1+ 0      10.2800     10.57  | O       |         |         |         |
  1+ 5      11.0748     11.61  | O       |         |         |         |
  1+10      12.3356     13.11  | O       |         |         |         |
  1+15      13.7374     14.43  | O       |         |         |         |
  1+20      14.7911     15.21  |  O      |         |         |         |
  1+25      15.4335     15.69  |  O      |         |         |         |
  1+30      15.8611     16.05  |  O      |         |         |         |
  1+35      16.1896     16.34  |  O      |         |         |         |
  1+40      16.4593     16.59  |  O      |         |         |         |
  1+45      16.6798     16.78  |  O      |         |         |         |
  1+50      16.8626     16.95  |  O      |         |         |         |
  1+55      17.0185     17.09  |  O      |         |         |         |
  2+ 0      17.2460     17.41  |  O      |         |         |         |
  2+ 5      17.7281     18.07  |  O      |         |         |         |
  2+10      18.4438     18.85  |  O      |         |         |         |
  2+15      19.1740     19.53  |  OI     |         |         |         |
  2+20      19.9234     20.35  |   O     |         |         |         |
  2+25      20.7873     21.27  |   O     |         |         |         |
  2+30      21.5165     21.81  |   O     |         |         |         |
  2+35      21.9548     22.13  |   O     |         |         |         |
  2+40      22.2344     22.36  |   O     |         |         |         |
  2+45      22.5394     22.73  |   O     |         |         |         |
  2+50      23.1824     23.65  |   O     |         |         |         |
  2+55      24.3266     25.05  |   OI    |         |         |         |
  3+ 0      25.6236     26.27  |    O    |         |         |         |
  3+ 5      26.5831     26.96  |    O    |         |         |         |
  3+10      27.2434     27.56  |    O    |         |         |         |
  3+15      28.0768     28.62  |    O    |         |         |         |
  3+20      29.3549     30.14  |     O   |         |         |         |
  3+25      30.8659     31.66  |     O   |         |         |         |
```

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    3+30      32.4876     33.39  |     O   |         |         |         |
    3+35      34.6983     36.10  |      O  |         |         |         |
    3+40      37.7914     39.62  |      OI |         |         |         |
    3+45      41.2825     43.12  |       O |         |         |         |
    3+50      44.5745     46.20  |        O|         |         |         |
    3+55      47.5655     49.08  |        OI         |         |         |
    4+ 0      50.4264     51.91  |         O         |         |         |
    4+ 5      53.2586     54.74  |         OI        |         |         |
    4+10      56.1768     57.75  |         |O        |         |         |
    4+15      59.4596     61.32  |         | O       |         |         |
    4+20      63.3778     65.62  |         |  O      |         |         |
    4+25      67.8608     70.32  |         |  OI     |         |         |
    4+30      72.5596     75.03  |         |   OI    |         |         |
    4+35      77.0730     79.34  |         |    OI   |         |         |
    4+40      81.1928     83.25  |         |     OI  |         |         |
    4+45      85.2214     87.39  |         |      O  |         |         |
    4+50      89.5425     91.91  |         |       O |         |         |
    4+55      93.9408     96.20  |         |        O|         |         |
    5+ 0      98.0543    100.12  |         |         O         |         |
    5+ 5     102.4953    105.07  |         |         |O        |         |
    5+10     109.2131    113.63  |         |         | OI      |         |
    5+15     120.1956    127.22  |         |         |   O I   |         |
    5+20     135.2475    143.96  |         |         |      O I|         |
    5+25     152.1093    161.08  |         |         |         |O I      |
    5+30     169.9639    179.70  |         |         |         |   O I   |
    5+35     186.7762    194.73  |         |         |         |       O I
    5+40     190.8925    187.60  |         |         |         |       IO|
    5+45     168.9306    149.66  |         |         |         I   O     |
    5+50     127.4456    103.33  |         |         |I    O   |         |
    5+55      88.7622     72.07  |         |   I   O |         |         |
    6+ 0      63.8036     54.10  |         |I O      |         |         |
    6+ 5      48.8610     42.78  |       I O         |         |         |
    6+10      38.9751     34.64  |      IO |         |         |         |
    6+15      31.6570     28.29  |    IO   |         |         |         |
    6+20      26.0455     23.50  |   IO    |         |         |         |
    6+25      21.6091     19.49  |   O     |         |         |         |
    6+30      18.0150     16.35  |  O      |         |         |         |
    6+35      15.2285     13.96  | IO      |         |         |         |
    6+40      12.9934     11.92  | O       |         |         |         |
    6+45      10.9702      9.92  | O       |         |         |         |
    6+50       9.1529      8.29  |O        |         |         |         |
    6+55       7.6307      6.90  |O        |         |         |         |
    7+ 0       6.3338      5.70  |O        |         |         |         |
    7+ 5       5.2065      4.65  IO        |         |         |         |
    7+10       4.2081      3.71  O         |         |         |         |
    7+15       3.3584      2.96  O         |         |         |         |
    7+20       2.6029      2.21  O         |         |         |         |
    7+25       1.8176      1.39  O         |         |         |         |
    7+30       0.9125      0.40  O         |         |         |         |
    7+35       0.2796      0.12  O         |         |         |         |
    7+40       0.0875      0.04  O         |         |         |         |
    7+45       0.0320      0.02  O         |         |         |         |
    7+50       0.0150      0.01  O         |         |         |         |
    7+55       0.0070      0.00  O         |         |         |         |
    8+ 0       0.0021      0.00  O         |         |         |         |
    8+ 5       0.0000      0.00  O         |         |         |         |
--------------------------------------------------------------------------
       ****************************HYDROGRAPH DATA****************************
                     Number of intervals =    97
                     Time interval =    5.0 (Min.)
                     Maximum/Peak flow rate =      190.893 (CFS)
                     Total volume =      25.569 (Ac.Ft)
              Status of hydrographs being held in storage
                         Stream 1  Stream 2  Stream 3  Stream 4  Stream 5
              Peak (CFS)    695.794     0.000     0.000     0.000     0.000
              Vol (Ac.Ft)    114.124     0.000     0.000     0.000     0.000
       ***************************************************************************

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EX HG UNIT – 100YR 6HR

++
Process from Point/Station 22.000 to Point/Station 24.000
**** ADD/COMBINE/RECOVER HYDROGRAPHS ****

********** HYDROGRAPH INFORMATION **********

From study/file name: trib2c6100.rte

++
P R I N T O F S T O R M
R u n o f f H y d r o g r a p h

Hydrograph in 5 Minute intervals (CFS)

Time(h+m)	Add q(CFS)	Tot. Q	0	62.3	124.5	186.8	249.0
0+ 5	0.0669	0.12	Q				
0+10	0.4246	0.77	Q				
0+15	0.9741	2.11	Q				
0+20	1.3133	3.67	Q				
0+25	1.4610	4.99	Q				
0+30	1.6865	6.10	Q				
0+35	2.2986	7.64	qQ				
0+40	2.7595	9.41	qQ				
0+45	2.9537	11.02	qQ				
0+50	3.0758	12.20	qQ				
0+55	3.1597	12.92	q Q				
1+ 0	3.3535	13.63	q Q				
1+ 5	3.9465	15.02	q Q				
1+10	4.3985	16.73	q Q				
1+15	4.5825	18.32	q Q				
1+20	4.6929	19.48	q Q				
1+25	4.7679	20.20	q Q				
1+30	4.8232	20.68	q Q				
1+35	4.8616	21.05	q Q				
1+40	4.8883	21.35	q Q				
1+45	4.9078	21.59	q Q				
1+50	4.9225	21.79	q Q				
1+55	4.9330	21.95	q Q				
2+ 0	5.0764	22.32	q Q				
2+ 5	5.4978	23.23	q Q				
2+10	5.4988	23.94	q Q				
2+15	5.7923	24.97	q Q				
2+20	6.1437	26.07	q Q				
2+25	6.2732	27.06	|q Q				
2+30	6.3501	27.87	|q Q				
2+35	6.4013	28.36	|q Q				
2+40	6.4412	28.68	|q Q				
2+45	6.6002	29.14	|q Q				
2+50	7.1713	30.35	|q Q				
2+55	7.6030	31.93	|q Q				
3+ 0	7.7775	33.40	|q Q				
3+ 5	7.8801	34.46	|q Q				
3+10	8.0820	35.33	|q Q				
3+15	8.6829	36.76	|q Q				
3+20	9.1316	38.49	|q Q				
3+25	9.4528	40.32	|q Q				
3+30	10.2510	42.74	|q Q				
3+35	11.4295	46.13	|q Q				
3+40	12.6119	50.40	| q Q				
3+45	13.4606	54.74	| q Q				
3+50	14.3634	58.94	| q Q				
3+55	15.1389	62.70	| q Q				
4+ 0	16.0060	66.43	| q Q				
4+ 5	16.7671	70.03	| q |Q				
4+10	17.7635	73.94	| q |Q				
4+15	19.0711	78.53	| q | Q				
4+20	20.4727	83.85	| q | Q				
4+25	21.9357	89.80	| q | Q				
4+30	23.3003	95.86	| q | Q				
4+35	24.2740	101.35	| q | Q				

EX HG UNIT – 100YR 6HR

```
    4+40      25.3920    106.58  |   q     |      Q  |         |         |
    4+45      26.7805    112.00  |   q     |      Q  |         |         |
    4+50      28.1121    117.65  |   q     |       Q |         |         |
    4+55      29.0672    123.01  |   q     |        Q|         |         |
    5+ 0      30.1809    128.24  |   q     |         Q         |         |
    5+ 5      32.1021    134.60  |    q    |         |Q        |         |
    5+10      36.2969    145.51  |    q    |         |  Q      |         |
    5+15      41.9281    162.12  |     q   |         |     Q   |         |
    5+20      47.1275    182.37  |      q  |         |        Q|         |
    5+25      52.1620    204.27  |       q |         |         | Q       |
    5+30      58.7729    228.74  |        q|         |         |     Q   |
    5+35      62.2626    249.04  |         q         |         |        Q|
    5+40      46.0986    236.99  |      q  |         |         |       Q |
    5+45      27.3999    196.33  |   q     |         |         |Q        |
    5+50      17.2388    144.68  | q       |         |  Q      |         |
    5+55      11.6485    100.41  |q        |     Q   |         |         |
    6+ 0       8.2948     72.10  |q        |Q        |         |         |
    6+ 5       6.0433     54.90  q       Q |         |         |         |
    6+10       4.4437     43.42  q     Q   |         |         |         |
    6+15       3.1772     34.83  q    Q    |         |         |         |
    6+20       2.2399     28.29  q   Q     |         |         |         |
    6+25       1.5277     23.14  q  Q      |         |         |         |
    6+30       1.0100     19.03  q  Q      |         |         |         |
    6+35       0.5275     15.76  q Q       |         |         |         |
    6+40       0.1549     13.15  q Q       |         |         |         |
    6+45       0.0491     11.02  qQ        |         |         |         |
    6+50       0.0177      9.17  qQ        |         |         |         |
    6+55       0.0080      7.64  qQ        |         |         |         |
    7+ 0       0.0037      6.34  qQ        |         |         |         |
    7+ 5       0.0012      5.21  Q         |         |         |         |
    7+10       0.0000      4.21  Q         |         |         |         |
    7+15       0.0000      3.36  Q         |         |         |         |
    7+20       0.0000      2.60  Q         |         |         |         |
    7+25       0.0000      1.82  Q         |         |         |         |
    7+30       0.0000      0.91  Q         |         |         |         |
    7+35       0.0000      0.28  Q         |         |         |         |
    7+40       0.0000      0.09  Q         |         |         |         |
    7+45       0.0000      0.03  Q         |         |         |         |
    7+50       0.0000      0.01  Q         |         |         |         |
    7+55       0.0000      0.01  Q         |         |         |         |
    8+ 0       0.0000      0.00  Q         |         |         |         |
    8+ 5       0.0000      0.00  Q         |         |         |         |
--------------------------------------------------------------------------
      ****************************HYDROGRAPH DATA**************************
                  Number of intervals =    97
                  Time interval =    5.0 (Min.)
                  Maximum/Peak flow rate =      249.039 (CFS)
                  Total volume =      32.718 (Ac.Ft)
            Status of hydrographs being held in storage
                     Stream 1  Stream 2  Stream 3  Stream 4  Stream 5
            Peak (CFS)    695.794     0.000     0.000     0.000     0.000
            Vol (Ac.Ft)    114.124     0.000     0.000     0.000     0.000
      ***************************************************************************

      ---------------------------------------------------------------------------


      +++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
      Process from Point/Station       23.000 to Point/Station       24.000
      **** ADD/COMBINE/RECOVER HYDROGRAPHS ****
      _____________________________________________________________________________
      ********************* HYDROGRAPH INFORMATION **********************

                  From study/file name: tribch26100.rte
      +++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                     P R I N T  O F  S T O R M
                  R u n o f f     H y d r o g r a p h
      ---------------------------------------------------------------------------
               Hydrograph in   5   Minute intervals (CFS)

      ---------------------------------------------------------------------------
```

EX HG UNIT – 100YR 6HR

Time(h+m)	Add q(CFS)	Tot. Q	0	94.9	189.7	284.6	379.4
0+ 5	1.0777	1.19	Q				
0+10	4.9162	5.68	Q				
0+15	7.5409	9.65	qQ				
0+20	8.6504	12.32	qQ				
0+25	9.2275	14.22	qQ				
0+30	10.0131	16.11	|Q				
0+35	11.6523	19.29	|qQ				
0+40	12.4155	21.82	|qQ				
0+45	12.7769	23.79	|qQ				
0+50	13.0275	25.22	|qQ				
0+55	13.1456	26.06	|qQ				
1+ 0	13.6442	27.28	|qQ				
1+ 5	15.0842	30.11	|q Q				
1+10	15.7085	32.44	|q Q				
1+15	15.9890	34.31	|q Q				
1+20	16.1383	35.62	|q Q				
1+25	16.2313	36.43	|q Q				
1+30	16.2988	36.98	|q Q				
1+35	16.3442	37.40	|q Q				
1+40	16.3741	37.72	|q Q				
1+45	16.4049	37.99	|q Q				
1+50	16.4049	38.19	|q Q				
1+55	16.4049	38.36	|q Q				
2+ 0	16.8360	39.16	|q Q				
2+ 5	17.7995	41.03	|q Q				
2+10	17.4304	41.37	|q Q				
2+15	18.4802	43.45	|q Q				
2+20	18.9743	45.04	| q Q				
2+25	19.1677	46.23	| q Q				
2+30	19.2914	47.16	| q Q				
2+35	19.3625	47.72	| q Q				
2+40	19.4143	48.09	| q Q				
2+45	19.8918	49.03	| q Q				
2+50	21.2855	51.64	| q Q				
2+55	21.9107	53.84	| q Q				
3+ 0	22.1603	55.56	| q Q				
3+ 5	22.3097	56.77	| q Q				
3+10	22.8338	58.16	| q Q				
3+15	24.2958	61.06	| q Q				
3+20	24.9358	63.42	| q Q				
3+25	25.6463	65.97	| q Q				
3+30	27.6521	70.39	| q Q				
3+35	30.1653	76.29	| q Q				
3+40	32.4715	82.87	| q Q				
3+45	33.9415	88.68	| q Q				
3+50	35.8579	94.80	| q Q				
3+55	37.2240	99.93	| q Q				
4+ 0	39.0742	105.51	| q |Q				
4+ 5	40.3919	110.42	| q |Q				
4+10	42.6663	116.61	| q | Q				
4+15	45.3639	123.89	| q | Q				
4+20	48.2029	132.05	| q | Q				
4+25	51.1193	140.92	| q | Q				
4+30	53.6766	149.54	| q | Q				
4+35	55.2915	156.64	| q | Q				
4+40	57.7529	164.34	| q | Q				
4+45	60.5581	172.56	| q | Q				
4+50	63.0634	180.72	| q | Q				
4+55	64.6615	187.67	| q | Q				
5+ 0	67.0852	195.32	| q | Q				
5+ 5	71.6002	206.20	| q | |Q				
5+10	81.8094	227.32	| q | | Q				
5+15	93.5897	255.71	| q| | Q				
5+20	103.6357	286.01	| q	| Q				
5+25	113.9744	318.25	| | q	| | Q				
5+30	128.7150	357.45	| | q	| | Q				
5+35	130.3628	379.40	| | q	| | Q				
5+40	82.4028	319.39	| q | | | Q				
5+45	49.0507	245.38	| q | | Q | |				

EX HG UNIT – 100YR 6HR

```
    5+50      31.7844    176.47  |  q       |       Q |          |          |
    5+55      21.9637    122.37  |  q       | Q       |          |          |
    6+ 0      15.2004     87.30  |q       Q|         |          |          |
    6+ 5      10.0501     64.95  |q    Q   |         |          |          |
    6+10       5.7738     49.19  q    Q    |         |          |          |
    6+15       3.3447     38.18  q   Q     |         |          |          |
    6+20       1.2989     29.58  q  Q      |         |          |          |
    6+25       0.6012     23.74  q Q       |         |          |          |
    6+30       0.3123     19.34  q Q       |         |          |          |
    6+35       0.1672     15.92  qQ        |         |          |          |
    6+40       0.0760     13.22  qQ        |         |          |          |
    6+45       0.0308     11.05  qQ        |         |          |          |
    6+50       0.0000      9.17  Q         |         |          |          |
    6+55       0.0000      7.64  Q         |         |          |          |
    7+ 0       0.0000      6.34  Q         |         |          |          |
    7+ 5       0.0000      5.21  Q         |         |          |          |
    7+10       0.0000      4.21  Q         |         |          |          |
    7+15       0.0000      3.36  Q         |         |          |          |
    7+20       0.0000      2.60  Q         |         |          |          |
    7+25       0.0000      1.82  Q         |         |          |          |
    7+30       0.0000      0.91  Q         |         |          |          |
    7+35       0.0000      0.28  Q         |         |          |          |
    7+40       0.0000      0.09  Q         |         |          |          |
    7+45       0.0000      0.03  Q         |         |          |          |
    7+50       0.0000      0.01  Q         |         |          |          |
    7+55       0.0000      0.01  Q         |         |          |          |
    8+ 0       0.0000      0.00  Q         |         |          |          |
    8+ 5       0.0000      0.00  Q         |         |          |          |
--------------------------------------------------------------------------------
      ****************************HYDROGRAPH DATA****************************
                  Number of intervals =    97
                  Time interval =    5.0 (Min.)
                  Maximum/Peak flow rate =      379.402 (CFS)
                  Total volume =      49.932 (Ac.Ft)
           Status of hydrographs being held in storage
                     Stream 1  Stream 2  Stream 3  Stream 4  Stream 5
           Peak (CFS)    695.794     0.000     0.000     0.000     0.000
           Vol (Ac.Ft)    114.124     0.000     0.000     0.000     0.000
      ********************************************************************************

      ------------------------------------------------------------------------


      ++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
      Process from Point/Station       24.000 to Point/Station       30.000
      **** STREAM ROUTING SCS CONVEX METHOD ****
      ____________________________________________________________________________
      HYDROGRAPH STREAM ROUTING DATA:
      Length of stream =    466.00 (Ft.)
      Elevation difference =   21.00 (Ft.)
      Slope of channel =  0.045064 (Vert/Horiz)
      Channel type - Improved Channel


      Channel length =   466.00(Ft.)     Elevation difference =  21.00(Ft.)
      Channel evaluation using mean flow rate of hydrograph
      Channel base width  =    5.000(Ft.)
      Slope or 'Z' of left channel bank =   1.000
      Slope or 'Z' of right channel bank =   1.000
      Manning's 'N'    = 0.045
      Maximum depth of channel  =   20.000(Ft.)
      Flow(q) thru subarea =     95.031(CFS)
      Depth of flow =     1.773(Ft.)
      Average velocity =     7.912(Ft/s)
      Total flow rate =    95.031(CFS)
      Channel flow top width =    8.546(Ft.)
      Depth of flow in channel =   1.77(Ft.)
      Total number of channels (same dimensions) = 1
      Flow Velocity =    7.91(Ft/s)
      Travel time  =    0.00 min.
      Individual channel flow =   95.031(CFS)
```

EX HG UNIT – 100YR 6HR

```
      Total capacity of improved channels =     95.031(CFS)
      Critical Depth in Channel =    1.95(Ft.)


      Channel evaluation using maximum flow rate of hydrograph
      Flow(q) thru subarea =    379.402(CFS)
      Depth of flow =     3.760(Ft.)
      Average velocity =    11.520(Ft/s)
      Total flow rate =   379.402(CFS)
      Channel flow top width =   12.520(Ft.)
      Depth of flow in channel =   3.76(Ft.)
      Total number of channels (same dimensions) = 1
      Flow Velocity =   11.52(Ft/s)
      Travel time  =    0.00 min.
      Individual channel flow =  379.402(CFS)
      Total capacity of improved channels =    379.402(CFS)
      Critical Depth in Channel =    4.25(Ft.)


      ********************** SCS CONVEX CHANNEL ROUTING *********************
      Convex method of stream routing  data items:
      Using equation: Outflow =
      O(t+dt) = (1-c*)O(t+dt-dt*) + Input(c*)
                where c* = 1 - (1-c)^e and dt = c(length)/velocity
                c(v/v+1.7) =   0.8714   Travel time =   0.67 (min.)
               dt*(unit time interval) =   5.00(min.),  e=   6.0070
               dt(routing time-step) =   0.59 (min.),   c* =   1.0000

      Output hydrograph delayed by 0  unit time increments


      ++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                        P R I N T  O F  S T O R M
                     R u n o f f     H y d r o g r a p h
      ----------------------------------------------------------------------
                  Hydrograph in   5   Minute intervals (CFS)

      ----------------------------------------------------------------------
Time(h+m) Out = O(CFS) In = I  0       94.9     189.7     284.6     379.4
----------------------------------------------------------------------------
  0+ 5       1.0529      1.19  O         |         |         |         |
  0+10       5.1570      5.68  O         |         |         |         |
  0+15       9.1860      9.65  OI        |         |         |         |
  0+20      12.0042     12.32  |O        |         |         |         |
  0+25      13.9940     14.22  |O        |         |         |         |
  0+30      15.8902     16.11  |O        |         |         |         |
  0+35      18.9187     19.29  |OI       |         |         |         |
  0+40      21.5235     21.82  | O       |         |         |         |
  0+45      23.5628     23.79  | O       |         |         |         |
  0+50      25.0553     25.22  | O       |         |         |         |
  0+55      25.9642     26.06  | O       |         |         |         |
  1+ 0      27.1350     27.28  | O       |         |         |         |
  1+ 5      29.7732     30.11  |  O      |         |         |         |
  1+10      32.1681     32.44  |  O      |         |         |         |
  1+15      34.0895     34.31  |  O      |         |         |         |
  1+20      35.4679     35.62  |  O      |         |         |         |
  1+25      36.3375     36.43  |  O      |         |         |         |
  1+30      36.9184     36.98  |  O      |         |         |         |
  1+35      37.3470     37.40  |  O      |         |         |         |
  1+40      37.6833     37.72  |  O      |         |         |         |
  1+45      37.9606     37.99  |   O     |         |         |         |
  1+50      38.1667     38.19  |   O     |         |         |         |
  1+55      38.3368     38.36  |   O     |         |         |         |
  2+ 0      39.0641     39.16  |   O     |         |         |         |
  2+ 5      40.8060     41.03  |   O     |         |         |         |
  2+10      41.3321     41.37  |   O     |         |         |         |
  2+15      43.2028     43.45  |   O     |         |         |         |
  2+20      44.8540     45.04  |   O     |         |         |         |
  2+25      46.0887     46.23  |   O     |         |         |         |
  2+30      47.0488     47.16  |   O     |         |         |         |
  2+35      47.6527     47.72  |    O    |         |         |         |
```

EX HG UNIT – 100YR 6HR

```
    2+40      48.0463     48.09  |    O    |         |         |         |
    2+45      48.9208     49.03  |    O    |         |         |         |
    2+50      51.3327     51.64  |    O    |         |         |         |
    2+55      53.5816     53.84  |    O    |         |         |         |
    3+ 0      55.3592     55.56  |    O    |         |         |         |
    3+ 5      56.6306     56.77  |    O    |         |         |         |
    3+10      57.9963     58.16  |     O   |         |         |         |
    3+15      60.7152     61.06  |     O   |         |         |         |
    3+20      63.1442     63.42  |     O   |         |         |         |
    3+25      65.6662     65.97  |     O   |         |         |         |
    3+30      69.8707     70.39  |      O  |         |         |         |
    3+35      75.5995     76.29  |      OI |         |         |         |
    3+40      82.1014     82.87  |       O |         |         |         |
    3+45      88.0019     88.68  |        O|         |         |         |
    3+50      94.0777     94.80  |        O|         |         |         |
    3+55      99.3254     99.93  |         O         |         |         |
    4+ 0     104.8512    105.51  |         |O        |         |         |
    4+ 5     109.8405    110.42  |         |O        |         |         |
    4+10     115.8793    116.61  |         | O       |         |         |
    4+15     123.0382    123.89  |         | OI      |         |         |
    4+20     131.0947    132.05  |         |  O      |         |         |
    4+25     139.8744    140.92  |         |   O     |         |         |
    4+30     148.5235    149.54  |         |    O    |         |         |
    4+35     155.8040    156.64  |         |     O   |         |         |
    4+40     163.4329    164.34  |         |      O  |         |         |
    4+45     171.5939    172.56  |         |       O |         |         |
    4+50     179.7594    180.72  |         |       OI|         |         |
    4+55     186.8526    187.67  |         |        O|         |         |
    5+ 0     194.4214    195.32  |         |         O         |         |
    5+ 5     204.9195    206.20  |         |         |O        |         |
    5+10     224.8375    227.32  |         |         |  O      |         |
    5+15     252.3769    255.71  |         |         |     O   |         |
    5+20     282.4506    286.01  |         |         |        OI         |
    5+25     314.4578    318.25  |         |         |         |  O      |
    5+30     352.8448    357.45  |         |         |         |      O  |
    5+35     376.8224    379.40  |         |         |         |        OI
    5+40     326.4451    319.39  |         |         |         |  IO     |
    5+45     254.0781    245.38  |         |         |    IO   |         |
    5+50     184.5664    176.47  |         |       IO|         |         |
    5+55     128.7308    122.37  |         | IO      |         |         |
    6+ 0      91.4204     87.30  |        O|         |         |         |
    6+ 5      67.5801     64.95  |     IO  |         |         |         |
    6+10      51.0447     49.19  |    O    |         |         |         |
    6+15      39.4731     38.18  |   O     |         |         |         |
    6+20      30.5943     29.58  |  O      |         |         |         |
    6+25      24.4250     23.74  | O       |         |         |         |
    6+30      19.8544     19.34  | O       |         |         |         |
    6+35      16.3243     15.92  |O        |         |         |         |
    6+40      13.5415     13.22  |O        |         |         |         |
    6+45      11.3056     11.05  |O        |         |         |         |
    6+50       9.3914      9.17  O         |         |         |         |
    6+55       7.8187      7.64  O         |         |         |         |
    7+ 0       6.4905      6.34  O         |         |         |         |
    7+ 5       5.3405      5.21  O         |         |         |         |
    7+10       4.3255      4.21  O         |         |         |         |
    7+15       3.4582      3.36  O         |         |         |         |
    7+20       2.6917      2.60  O         |         |         |         |
    7+25       1.9099      1.82  O         |         |         |         |
    7+30       1.0188      0.91  O         |         |         |         |
    7+35       0.3539      0.28  O         |         |         |         |
    7+40       0.1101      0.09  O         |         |         |         |
    7+45       0.0385      0.03  O         |         |         |         |
    7+50       0.0170      0.01  O         |         |         |         |
    7+55       0.0079      0.01  O         |         |         |         |
    8+ 0       0.0026      0.00  O         |         |         |         |
    8+ 5       0.0002      0.00  O         |         |         |         |
    8+10       0.0000      0.00  O         |         |         |         |
-------------------------------------------------------------------------
      ****************************HYDROGRAPH DATA****************************
                  Number of intervals =    98
                  Time interval =    5.0 (Min.)
```

EX HG UNIT – 100YR 6HR

```
                Maximum/Peak flow rate =      376.822 (CFS)
                Total volume =       49.932 (Ac.Ft)
          Status of hydrographs being held in storage
                    Stream 1  Stream 2  Stream 3  Stream 4  Stream 5
          Peak (CFS)    695.794     0.000     0.000     0.000     0.000
          Vol (Ac.Ft)    114.124     0.000     0.000     0.000     0.000
     ****************************************************************************

     ----------------------------------------------------------------------


     ++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
     Process from Point/Station       24.000 to Point/Station       30.000
     **** ADD/COMBINE/RECOVER HYDROGRAPHS ****
     ________________________________________________________________________
     ********************* HYDROGRAPH INFORMATION **********************

                  From study/file name: trib2d6100.rte
     ++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                     P R I N T  O F  S T O R M
                  R u n o f f     H y d r o g r a p h
     ----------------------------------------------------------------------
               Hydrograph in   5   Minute intervals (CFS)

     ----------------------------------------------------------------------
Time(h+m) Add q(CFS)  Tot. Q   0       95.6     191.2     286.8     382.4
----------------------------------------------------------------------------
  0+ 5       0.0365      1.09  Q         |         |         |         |
  0+10       0.1178      5.27  Q         |         |         |         |
  0+15       0.1699      9.36  Q         |         |         |         |
  0+20       0.1825     12.19  qQ        |         |         |         |
  0+25       0.1870     14.18  qQ        |         |         |         |
  0+30       0.2599     16.15  qQ        |         |         |         |
  0+35       0.3319     19.25  q Q       |         |         |         |
  0+40       0.3464     21.87  q Q       |         |         |         |
  0+45       0.3536     23.92  q Q       |         |         |         |
  0+50       0.3536     25.41  q Q       |         |         |         |
  0+55       0.3536     26.32  q Q       |         |         |         |
  1+ 0       0.4265     27.56  q Q       |         |         |         |
  1+ 5       0.4985     30.27  q  Q      |         |         |         |
  1+10       0.5130     32.68  q  Q      |         |         |         |
  1+15       0.5202     34.61  q  Q      |         |         |         |
  1+20       0.5202     35.99  q  Q      |         |         |         |
  1+25       0.5202     36.86  q  Q      |         |         |         |
  1+30       0.5202     37.44  q  Q      |         |         |         |
  1+35       0.5202     37.87  q  Q      |         |         |         |
  1+40       0.5202     38.20  q  Q      |         |         |         |
  1+45       0.5202     38.48  q   Q     |         |         |         |
  1+50       0.5202     38.69  q   Q     |         |         |         |
  1+55       0.5202     38.86  q   Q     |         |         |         |
  2+ 0       0.5931     39.66  q   Q     |         |         |         |
  2+ 5       0.5922     41.40  q   Q     |         |         |         |
  2+10       0.6076     41.94  q   Q     |         |         |         |
  2+15       0.6723     43.88  q   Q     |         |         |         |
  2+20       0.6796     45.53  q   Q     |         |         |         |
  2+25       0.6868     46.78  q   Q     |         |         |         |
  2+30       0.6868     47.74  q   Q     |         |         |         |
  2+35       0.6868     48.34  q    Q    |         |         |         |
  2+40       0.6868     48.73  q    Q    |         |         |         |
  2+45       0.7597     49.68  q    Q    |         |         |         |
  2+50       0.8317     52.16  q    Q    |         |         |         |
  2+55       0.8463     54.43  q    Q    |         |         |         |
  3+ 0       0.8534     56.21  q    Q    |         |         |         |
  3+ 5       0.8534     57.48  q     Q   |         |         |         |
  3+10       0.9264     58.92  q     Q   |         |         |         |
  3+15       0.9984     61.71  q     Q   |         |         |         |
  3+20       1.0129     64.16  q     Q   |         |         |         |
  3+25       1.0930     66.76  q     Q   |         |         |         |
  3+30       1.2379     71.11  q      Q  |         |         |         |
  3+35       1.3973     77.00  q       Q |         |         |         |
  3+40       1.4910     83.59  q       Q |         |         |         |
```

EX HG UNIT – 100YR 6HR

```
    3+45       1.5856     89.59  q         Q|          |          |          |
    3+50       1.6648     95.74  q          Q          |          |          |
    3+55       1.7523    101.08  q          Q          |          |          |
    4+ 0       1.8314    106.68  q          |Q         |          |          |
    4+ 5       1.9189    111.76  q          |Q         |          |          |
    4+10       2.0710    117.95  q          | Q        |          |          |
    4+15       2.2304    125.27  q          |  Q       |          |          |
    4+20       2.3970    133.49  q          |  Q       |          |          |
    4+25       2.5636    142.44  q          |   Q      |          |          |
    4+30       2.6573    151.18  q          |    Q     |          |          |
    4+35       2.7519    158.56  q          |     Q    |          |          |
    4+40       2.9040    166.34  q          |      Q   |          |          |
    4+45       3.0635    174.66  q          |       Q  |          |          |
    4+50       3.1572    182.92  q          |        Q|          |          |
    4+55       3.2518    190.10  q          |        Q|          |          |
    5+ 0       3.4039    197.83  q          |         Q          |          |
    5+ 5       3.8551    208.77  q          |          |Q        |          |
    5+10       4.6014    229.44  q          |          |  Q      |          |
    5+15       5.2599    257.64  q          |          |    Q    |          |
    5+20       5.8031    288.25  q          |          |      Q  |          |
    5+25       6.4632    320.92  q          |          |        | Q        |
    5+30       7.5446    360.39  q          |          |        |    Q     |
    5+35       5.5883    382.41  q          |          |        |       Q  |
    5+40       2.3612    328.81  q          |          |        |  Q       |
    5+45       0.9502    255.03  q          |          |    Q   |          |
    5+50       0.2783    184.84  q          |         Q|        |          |
    5+55       0.1037    128.83  q          |  Q       |        |          |
    6+ 0       0.0515     91.47  q        Q|          |        |          |
    6+ 5       0.0223     67.60  q       Q |          |        |          |
    6+10       0.0051     51.05  q     Q   |          |        |          |
    6+15       0.0014     39.47  q   Q     |          |        |          |
    6+20       0.0000     30.59  q  Q      |          |        |          |
    6+25       0.0000     24.42  q Q       |          |        |          |
    6+30       0.0000     19.85  q Q       |          |        |          |
    6+35       0.0000     16.32  qQ        |          |        |          |
    6+40       0.0000     13.54  qQ        |          |        |          |
    6+45       0.0000     11.31  qQ        |          |        |          |
    6+50       0.0000      9.39  Q         |          |        |          |
    6+55       0.0000      7.82  Q         |          |        |          |
    7+ 0       0.0000      6.49  Q         |          |        |          |
    7+ 5       0.0000      5.34  Q         |          |        |          |
    7+10       0.0000      4.33  Q         |          |        |          |
    7+15       0.0000      3.46  Q         |          |        |          |
    7+20       0.0000      2.69  Q         |          |        |          |
    7+25       0.0000      1.91  Q         |          |        |          |
    7+30       0.0000      1.02  Q         |          |        |          |
    7+35       0.0000      0.35  Q         |          |        |          |
    7+40       0.0000      0.11  Q         |          |        |          |
    7+45       0.0000      0.04  Q         |          |        |          |
    7+50       0.0000      0.02  Q         |          |        |          |
    7+55       0.0000      0.01  Q         |          |        |          |
    8+ 0       0.0000      0.00  Q         |          |        |          |
    8+ 5       0.0000      0.00  Q         |          |        |          |
    8+10       0.0000      0.00  Q         |          |        |          |
--------------------------------------------------------------------------
      ****************************HYDROGRAPH DATA****************************
                Number of intervals =    98
                Time interval =    5.0 (Min.)
                Maximum/Peak flow rate =      382.411 (CFS)
                Total volume =      50.684 (Ac.Ft)
          Status of hydrographs being held in storage
                     Stream 1  Stream 2  Stream 3  Stream 4  Stream 5
          Peak (CFS)    695.794     0.000     0.000     0.000     0.000
          Vol (Ac.Ft)    114.124     0.000     0.000     0.000     0.000
      ***************************************************************************

      ---------------------------------------------------------------------------


      +++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
      Process from Point/Station       30.000 to Point/Station       30.000
```

EX HG UNIT – 100YR 6HR

**** ADD/COMBINE/RECOVER HYDROGRAPHS ****

From stored stream number 1 the total
volume of 114.12 (Ac.Ft) is being added to the
current hydrograph at its original rate from user
with a delay time to start of addition of 0.00 hours.

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P R I N T O F S T O R M
R u n o f f H y d r o g r a p h

Hydrograph in 5 Minute intervals (CFS)

Time(h+m)	Add q(CFS)	Tot. Q	0 269.6 539.1 808.7 1078.2
0+ 5	1.2458	2.34	Q
0+10	5.1959	10.47	Q
0+15	9.6572	19.01	Q
0+20	12.7226	24.91	Q
0+25	15.3031	29.48	qQ
0+30	19.2099	35.36	qQ
0+35	25.3200	44.57	qQ
0+40	30.7352	52.61	|Q
0+45	35.0329	58.95	|qQ
0+50	38.7929	64.20	|qQ
0+55	42.1931	68.51	|qQ
1+ 0	46.4078	73.97	|qQ
1+ 5	52.1330	82.40	|q Q
1+10	56.6719	89.35	| qQ
1+15	60.0543	94.66	| qQ
1+20	63.1360	99.12	| qQ
1+25	66.1271	102.98	| qQ
1+30	69.0195	106.46	| qQ
1+35	71.5671	109.43	| q Q
1+40	73.6113	111.81	| q Q
1+45	75.2091	113.69	| q Q
1+50	76.4706	115.16	| q Q
1+55	77.4844	116.34	| q Q
2+ 0	79.4748	119.13	| q Q
2+ 5	82.2082	123.61	| qQ
2+10	83.3670	125.31	| qQ
2+15	86.3866	130.26	| qQ
2+20	89.4542	134.99	| q Q
2+25	91.8915	138.67	| q Q
2+30	94.2341	141.97	| q Q
2+35	96.3992	144.74	| q Q
2+40	98.4060	147.14	| q Q
2+45	101.3169	151.00	| q Q
2+50	105.8690	158.03	| q Q
2+55	109.4766	163.90	| q Q
3+ 0	112.1719	168.38	| q Q
3+ 5	114.7422	172.23	| q Q
3+10	118.4925	177.42	| q Q
3+15	124.2140	185.93	| q Q
3+20	129.0102	193.17	| q Q
3+25	133.7877	200.55	| q Q
3+30	141.3150	212.42	| q Q
3+35	151.1621	228.16	| q Q
3+40	161.5066	245.10	| q Q|
3+45	171.3415	260.93	| q Q|
3+50	182.1807	277.92	| q Q
3+55	193.3289	294.41	| q Q
4+ 0	205.3929	312.08	| q |Q
4+ 5	217.1649	328.92	| q | Q
4+10	230.3425	348.29	| q | Q
4+15	244.9272	370.20	| q| Q
4+20	260.2910	393.78	| q| Q
4+25	276.4939	418.93	| q Q
4+30	292.5285	443.71	| q Q
4+35	307.6629	466.22	| |q Q
4+40	324.4829	490.82	| | q Q |

EX HG UNIT – 100YR 6HR

```
   4+45     342.8451    517.50  |          | q      Q|          |          |
   4+50     360.6582    543.57  |          |  q      Q          |          |
   4+55     376.7967    566.90  |          |  q      |Q         |          |
   5+ 0     393.8591    591.68  |          |   q     |Q         |          |
   5+ 5     416.6617    625.44  |          |    q    |  Q       |          |
   5+10     452.5334    681.97  |          |     q   |    Q     |          |
   5+15     496.4970    754.13  |          |       q |      Q   |          |
   5+20     541.8209    830.07  |          |         q         Q          |
   5+25     592.4334    913.35  |          |         |q        |  Q       |
   5+30     658.9029   1019.29  |          |         |   q     |      Q   |
   5+35     695.7937   1078.20  |          |         |    q    |         Q|
   5+40     637.1220    965.93  |          |         |  q      |    Q     |
   5+45     569.0921    824.12  |          |         |q        Q          |
   5+50     522.0411    706.89  |          |        q|      Q   |          |
   5+55     475.8182    604.65  |          |      q  | Q        |          |
   6+ 0     418.8905    510.36  |          |    q  Q |          |          |
   6+ 5     350.0982    417.70  |          | q  Q    |          |          |
   6+10     280.4326    331.48  |          |q Q      |          |          |
   6+15     222.0624    261.54  |        qQ|         |          |          |
   6+20     178.1821    208.78  |     qQ   |         |          |          |
   6+25     146.8661    171.29  |    qQ    |         |          |          |
   6+30     124.9944    144.85  |   qQ     |         |          |          |
   6+35     108.8195    125.14  |   Q      |         |          |          |
   6+40      95.9993    109.54  |  qQ      |         |          |          |
   6+45      85.4797     96.79  |  Q       |         |          |          |
   6+50      76.5473     85.94  | qQ       |         |          |          |
   6+55      68.7144     76.53  | Q        |         |          |          |
   7+ 0      61.8837     68.37  | Q        |         |          |          |
   7+ 5      55.9332     61.27  | Q        |         |          |          |
   7+10      50.7258     55.05  |qQ        |         |          |          |
   7+15      45.9957     49.45  |Q         |         |          |          |
   7+20      41.7882     44.48  |Q         |         |          |          |
   7+25      38.1598     40.07  |Q         |         |          |          |
   7+30      34.9048     35.92  |Q         |         |          |          |
   7+35      32.0855     32.44  |Q         |         |          |          |
   7+40      29.7093     29.82  |Q         |         |          |          |
   7+45      27.5476     27.59  |Q         |         |          |          |
   7+50      25.4354     25.45  Q          |         |          |          |
   7+55      23.2857     23.29  Q          |         |          |          |
   8+ 0      21.1557     21.16  Q          |         |          |          |
   8+ 5      19.2341     19.23  Q          |         |          |          |
   8+10      17.5148     17.51  Q          |         |          |          |
   8+15      15.9176     15.92  Q          |         |          |          |
   8+20      14.4308     14.43  Q          |         |          |          |
   8+25      13.0124     13.01  Q          |         |          |          |
   8+30      11.6912     11.69  Q          |         |          |          |
   8+35      10.4985     10.50  Q          |         |          |          |
   8+40       9.4011      9.40  Q          |         |          |          |
   8+45       8.4549      8.45  Q          |         |          |          |
   8+50       7.6794      7.68  Q          |         |          |          |
   8+55       6.9683      6.97  Q          |         |          |          |
   9+ 0       6.2054      6.21  Q          |         |          |          |
   9+ 5       5.3424      5.34  Q          |         |          |          |
   9+10       4.3802      4.38  Q          |         |          |          |
   9+15       3.3120      3.31  Q          |         |          |          |
   9+20       2.1413      2.14  Q          |         |          |          |
   9+25       1.0814      1.08  Q          |         |          |          |
   9+30       0.4243      0.42  Q          |         |          |          |
   9+35       0.1478      0.15  Q          |         |          |          |
   9+40       0.0536      0.05  Q          |         |          |          |
   9+45       0.0214      0.02  Q          |         |          |          |
   9+50       0.0086      0.01  Q          |         |          |          |
   9+55       0.0026      0.00  Q          |         |          |          |
  10+ 0       0.0004      0.00  Q          |         |          |          |
  10+ 5       0.0000      0.00  Q          |         |          |          |
  10+10       0.0000      0.00  Q          |         |          |          |
--------------------------------------------------------------------------
      ****************************HYDROGRAPH DATA****************************
                    Number of intervals =   122
                    Time interval =    5.0 (Min.)
                    Maximum/Peak flow rate =     1078.204 (CFS)
```

EX HG UNIT – 100YR 6HR

```
              Total volume =     164.808 (Ac.Ft)
       Status of hydrographs being held in storage
                  Stream 1  Stream 2  Stream 3  Stream 4  Stream 5
       Peak (CFS)      0.000     0.000     0.000     0.000     0.000
       Vol (Ac.Ft)     0.000     0.000     0.000     0.000     0.000
**************************************************************************

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Process from Point/Station       30.000 to Point/Station       31.000
**** STREAM ROUTING SCS CONVEX METHOD ****
__________________________________________________________________________
HYDROGRAPH STREAM ROUTING DATA:
Length of stream =    377.00 (Ft.)
Elevation difference =   13.00 (Ft.)
Slope of channel =  0.034483 (Vert/Horiz)
Channel type - Improved Channel


Channel length =   377.00(Ft.)     Elevation difference =  13.00(Ft.)
Channel evaluation using mean flow rate of hydrograph
Channel base width  =    5.000(Ft.)
Slope or 'Z' of left channel bank =   1.000
Slope or 'Z' of right channel bank =   1.000
Manning's 'N'    = 0.045
Maximum depth of channel  =   20.000(Ft.)
Flow(q) thru subarea =    291.800(CFS)
Depth of flow =     3.516(Ft.)
Average velocity =     9.745(Ft/s)
Total flow rate =   291.800(CFS)
Channel flow top width =   12.032(Ft.)
Depth of flow in channel =   3.52(Ft.)
Total number of channels (same dimensions) = 1
Flow Velocity =    9.75(Ft/s)
Travel time  =    0.00 min.
Individual channel flow =  291.800(CFS)
Total capacity of improved channels =    291.800(CFS)
Critical Depth in Channel =    3.69(Ft.)


Channel evaluation using maximum flow rate of hydrograph
Flow(q) thru subarea =   1078.204(CFS)
Depth of flow =     6.756(Ft.)
Average velocity =    13.576(Ft/s)
Total flow rate =  1078.204(CFS)
Channel flow top width =   18.511(Ft.)
Depth of flow in channel =   6.76(Ft.)
Total number of channels (same dimensions) = 1
Flow Velocity =   13.58(Ft/s)
Travel time  =    0.00 min.
Individual channel flow = 1078.204(CFS)
Total capacity of improved channels =   1078.204(CFS)
Critical Depth in Channel =    7.25(Ft.)


********************** SCS CONVEX CHANNEL ROUTING ********************
Convex method of stream routing  data items:
Using equation: Outflow =
O(t+dt) = (1-c*)O(t+dt-dt*) + Input(c*)
          where c* = 1 - (1-c)^e and dt = c(length)/velocity
          c(v/v+1.7) =   0.8887   Travel time =   0.46 (min.)
        dt*(unit time interval) =   5.00(min.),  e=   8.4374
        dt(routing time-step) =   0.41 (min.),   c* =   1.0000

Output hydrograph delayed by 0  unit time increments


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                  P R I N T  O F  S T O R M
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EX HG UNIT – 100YR 6HR

R u n o f f H y d r o g r a p h

Hydrograph in 5 Minute intervals (CFS)

Time(h+m)	Out = O(CFS)	In = I	0 269.6 539.1 808.7 1078.2
0+ 5	2.1431	2.34	O
0+10	9.8015	10.47	O
0+15	18.3104	19.01	O
0+20	24.4242	24.91	O
0+25	29.1077	29.48	|O
0+30	34.8767	35.36	|O
0+35	43.8130	44.57	|O
0+40	51.9442	52.61	|O
0+45	58.4274	58.95	| O
0+50	63.7697	64.20	| O
0+55	68.1564	68.51	| O
1+ 0	73.5202	73.97	| O
1+ 5	81.7108	82.40	| O
1+10	88.7814	89.35	| O
1+15	94.2272	94.66	| O
1+20	98.7572	99.12	| O
1+25	102.6671	102.98	| O
1+30	106.1724	106.46	| O
1+35	109.1894	109.43	| O
1+40	111.6190	111.81	| O
1+45	113.5357	113.69	| O
1+50	115.0368	115.16	| O
1+55	116.2441	116.34	| O
2+ 0	118.9025	119.13	| O
2+ 5	123.2383	123.61	| O
2+10	125.1669	125.31	| O
2+15	129.8541	130.26	| O
2+20	134.5991	134.99	| OI
2+25	138.3644	138.67	| O
2+30	141.6980	141.97	| O
2+35	144.5109	144.74	| O
2+40	146.9416	147.14	| O
2+45	150.6800	151.00	| O
2+50	157.4547	158.03	| O
2+55	163.4215	163.90	| O
3+ 0	168.0160	168.38	| O
3+ 5	171.9101	172.23	| O
3+10	176.9883	177.42	| O
3+15	185.2273	185.93	| O
3+20	192.5717	193.17	| O
3+25	199.9399	200.55	| O
3+30	211.4466	212.42	| O
3+35	226.8646	228.16	| O
3+40	243.7056	245.10	| O
3+45	259.6269	260.93	| O
3+50	276.5252	277.92	| O
3+55	293.0505	294.41	| O
4+ 0	310.6220	312.08	| O
4+ 5	327.5383	328.92	| O
4+10	346.6995	348.29	| O
4+15	368.3940	370.20	| O
4+20	391.8424	393.78	| O
4+25	416.8631	418.93	| O
4+30	441.6711	443.71	| O
4+35	464.3672	466.22	| O
4+40	488.7961	490.82	| O
4+45	515.3075	517.50	| O
4+50	541.4300	543.57	| O
4+55	564.9822	566.90	| OI
5+ 0	589.6456	591.68	| O
5+ 5	622.6598	625.44	| O
5+10	677.3215	681.97	| O
5+15	748.1976	754.13	| O
5+20	823.8275	830.07	| O

EX HG UNIT – 100YR 6HR

```
   5+25     906.5036    913.35  |          |          |          |  O       |
   5+30    1010.5776   1019.29  |          |          |          |      O   |
   5+35    1073.3582   1078.20  |          |          |          |        OI
   5+40     975.1644    965.93  |          |          |          |    IO    |
   5+45     835.7859    824.12  |          |          |          IO          |
   5+50     716.5299    706.89  |          |          |     O    |          |
   5+55     613.0627    604.65  |          |          | O        |          |
   6+ 0     518.1189    510.36  |          |        IO|          |          |
   6+ 5     425.3232    417.70  |          |    O     |          |          |
   6+10     338.5749    331.48  |          | O        |          |          |
   6+15     267.2909    261.54  |        O |          |          |          |
   6+20     213.1166    208.78  |      O   |          |          |          |
   6+25     174.3747    171.29  |     O    |          |          |          |
   6+30     147.0241    144.85  |    O     |          |          |          |
   6+35     126.7648    125.14  |   O      |          |          |          |
   6+40     110.8243    109.54  |   O      |          |          |          |
   6+45      97.8346     96.79  |  O       |          |          |          |
   6+50      86.8310     85.94  |  O       |          |          |          |
   6+55      77.3069     76.53  | O        |          |          |          |
   7+ 0      69.0453     68.37  | O        |          |          |          |
   7+ 5      61.8578     61.27  | O        |          |          |          |
   7+10      55.5632     55.05  | O        |          |          |          |
   7+15      49.9144     49.45  |O         |          |          |          |
   7+20      44.8891     44.48  |O         |          |          |          |
   7+25      40.4325     40.07  |O         |          |          |          |
   7+30      36.2647     35.92  |O         |          |          |          |
   7+35      32.7261     32.44  |O         |          |          |          |
   7+40      30.0349     29.82  |O         |          |          |          |
   7+45      27.7698     27.59  |O         |          |          |          |
   7+50      25.6279     25.45  O          |          |          |          |
   7+55      23.4712     23.29  O          |          |          |          |
   8+ 0      21.3340     21.16  O          |          |          |          |
   8+ 5      19.3926     19.23  O          |          |          |          |
   8+10      17.6562     17.51  O          |          |          |          |
   8+15      16.0490     15.92  O          |          |          |          |
   8+20      14.5531     14.43  O          |          |          |          |
   8+25      13.1291     13.01  O          |          |          |          |
   8+30      11.7999     11.69  O          |          |          |          |
   8+35      10.5966     10.50  O          |          |          |          |
   8+40       9.4914      9.40  O          |          |          |          |
   8+45       8.5328      8.45  O          |          |          |          |
   8+50       7.7432      7.68  O          |          |          |          |
   8+55       7.0268      6.97  O          |          |          |          |
   9+ 0       6.2682      6.21  O          |          |          |          |
   9+ 5       5.4134      5.34  O          |          |          |          |
   9+10       4.4594      4.38  O          |          |          |          |
   9+15       3.3999      3.31  O          |          |          |          |
   9+20       2.2376      2.14  O          |          |          |          |
   9+25       1.1686      1.08  O          |          |          |          |
   9+30       0.4784      0.42  O          |          |          |          |
   9+35       0.1706      0.15  O          |          |          |          |
   9+40       0.0614      0.05  O          |          |          |          |
   9+45       0.0241      0.02  O          |          |          |          |
   9+50       0.0097      0.01  O          |          |          |          |
   9+55       0.0031      0.00  O          |          |          |          |
  10+ 0       0.0005      0.00  O          |          |          |          |
  10+ 5       0.0000      0.00  O          |          |          |          |
  10+10       0.0000      0.00  O          |          |          |          |
  10+15       0.0000      0.00  O          |          |          |          |
--------------------------------------------------------------------------------
      ****************************HYDROGRAPH DATA****************************
                  Number of intervals =   123
                  Time interval =    5.0 (Min.)
                  Maximum/Peak flow rate =     1073.358 (CFS)
                  Total volume =     164.808 (Ac.Ft)
            Status of hydrographs being held in storage
                      Stream 1  Stream 2  Stream 3  Stream 4  Stream 5
            Peak (CFS)      0.000     0.000     0.000     0.000     0.000
            Vol (Ac.Ft)      0.000     0.000     0.000     0.000     0.000
      ********************************************************************************
```

EX HG UNIT – 100YR 6HR

```
------------------------------------------------------------------------


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       30.000 to Point/Station       31.000
**** ADD/COMBINE/RECOVER HYDROGRAPHS ****
________________________________________________________________________
********************* HYDROGRAPH INFORMATION **********************

                From study/file name: trib3a6100.rte
++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                   P R I N T  O F  S T O R M
                 R u n o f f     H y d r o g r a p h
------------------------------------------------------------------------
              Hydrograph in   5   Minute intervals (CFS)

      ------------------------------------------------------------------
Time(h+m) Add q(CFS)  Tot. Q   0      269.9     539.7     809.6    1079.5
-----------------------------------------------------------------------
  0+ 5       0.0448      2.19  Q          |         |         |         |
  0+10       0.1399      9.94  Q          |         |         |         |
  0+15       0.1962     18.51  Q          |         |         |         |
  0+20       0.2082     24.63  Q          |         |         |         |
  0+25       0.2118     29.32  qQ         |         |         |         |
  0+30       0.3014     35.18  qQ         |         |         |         |
  0+35       0.3800     44.19  qQ         |         |         |         |
  0+40       0.3948     52.34  qQ         |         |         |         |
  0+45       0.4006     58.83  q Q        |         |         |         |
  0+50       0.4006     64.17  q Q        |         |         |         |
  0+55       0.4006     68.56  q Q        |         |         |         |
  1+ 0       0.4902     74.01  q Q        |         |         |         |
  1+ 5       0.5688     82.28  q  Q       |         |         |         |
  1+10       0.5836     89.37  q  Q       |         |         |         |
  1+15       0.5893     94.82  q  Q       |         |         |         |
  1+20       0.5893     99.35  q  Q       |         |         |         |
  1+25       0.5893    103.26  q  Q       |         |         |         |
  1+30       0.5893    106.76  q  Q       |         |         |         |
  1+35       0.5893    109.78  q   Q      |         |         |         |
  1+40       0.5893    112.21  q   Q      |         |         |         |
  1+45       0.5893    114.13  q   Q      |         |         |         |
  1+50       0.5893    115.63  q   Q      |         |         |         |
  1+55       0.5893    116.83  q   Q      |         |         |         |
  2+ 0       0.6790    119.58  q   Q      |         |         |         |
  2+ 5       0.6679    123.91  q   Q      |         |         |         |
  2+10       0.6938    125.86  q   Q      |         |         |         |
  2+15       0.7633    130.62  q   Q      |         |         |         |
  2+20       0.7723    135.37  q    Q     |         |         |         |
  2+25       0.7781    139.14  q    Q     |         |         |         |
  2+30       0.7781    142.48  q    Q     |         |         |         |
  2+35       0.7781    145.29  q    Q     |         |         |         |
  2+40       0.7781    147.72  q    Q     |         |         |         |
  2+45       0.8677    151.55  q    Q     |         |         |         |
  2+50       0.9463    158.40  q    Q     |         |         |         |
  2+55       0.9611    164.38  q     Q    |         |         |         |
  3+ 0       0.9668    168.98  q     Q    |         |         |         |
  3+ 5       0.9668    172.88  q     Q    |         |         |         |
  3+10       1.0565    178.04  q     Q    |         |         |         |
  3+15       1.1350    186.36  q     Q    |         |         |         |
  3+20       1.1499    193.72  q      Q   |         |         |         |
  3+25       1.2452    201.19  q      Q   |         |         |         |
  3+30       1.4134    212.86  q      Q   |         |         |         |
  3+35       1.5964    228.46  q       Q  |         |         |         |
  3+40       1.6956    245.40  q        Q |         |         |         |
  3+45       1.8058    261.43  q        Q |         |         |         |
  3+50       1.8901    278.42  q         Q|         |         |         |
  3+55       1.9945    295.05  q         Q|         |         |         |
  4+ 0       2.0788    312.70  q         |Q        |         |         |
  4+ 5       2.1833    329.72  q         | Q       |         |         |
  4+10       2.3572    349.06  q         | Q       |         |         |
  4+15       2.5402    370.93  q         |  Q      |         |         |
  4+20       2.7290    394.57  q         |   Q     |         |         |
```

EX HG UNIT – 100YR 6HR

4+25	2.9177	419.78	q		Q		
4+30	3.0169	444.69	q		Q		
4+35	3.1271	467.49	q		Q		
4+40	3.3010	492.10	q		Q		
4+45	3.4840	518.79	q		Q		
4+50	3.5831	545.01	q		Q		
4+55	3.6933	568.68	q		Q		
5+ 0	3.8673	593.51	q		Q		
5+ 5	4.4088	627.07	q		Q		
5+10	5.2704	682.59	q		Q		
5+15	6.0120	754.21	q		Q		
5+20	6.6193	830.45	q		Q		
5+25	7.3763	913.88	q		Q		
5+30	8.6375	1019.22	q		Q		
5+35	6.1196	1079.48	q		Q		
5+40	2.4781	977.64	q		Q		
5+45	0.9270	836.71	q		Q		
5+50	0.2751	716.80	q		Q		
5+55	0.1065	613.17	q		Q		
6+ 0	0.0553	518.17	q		Q		
6+ 5	0.0230	425.35	q		Q		
6+10	0.0047	338.58	q	Q			
6+15	0.0011	267.29	q	Q			
6+20	0.0000	213.12	q	Q			
6+25	0.0000	174.37	q	Q			
6+30	0.0000	147.02	q	Q			
6+35	0.0000	126.76	q	Q			
6+40	0.0000	110.82	q	Q			
6+45	0.0000	97.83	q	Q			
6+50	0.0000	86.83	q	Q			
6+55	0.0000	77.31	q	Q			
7+ 0	0.0000	69.05	q	Q			
7+ 5	0.0000	61.86	q	Q			
7+10	0.0000	55.56	q	Q			
7+15	0.0000	49.91	q	Q			
7+20	0.0000	44.89	q	Q			
7+25	0.0000	40.43	q	Q			
7+30	0.0000	36.26	q	Q			
7+35	0.0000	32.73	q	Q			
7+40	0.0000	30.03	q	Q			
7+45	0.0000	27.77	q	Q			
7+50	0.0000	25.63	Q				
7+55	0.0000	23.47	Q				
8+ 0	0.0000	21.33	Q				
8+ 5	0.0000	19.39	Q				
8+10	0.0000	17.66	Q				
8+15	0.0000	16.05	Q				
8+20	0.0000	14.55	Q				
8+25	0.0000	13.13	Q				
8+30	0.0000	11.80	Q				
8+35	0.0000	10.60	Q				
8+40	0.0000	9.49	Q				
8+45	0.0000	8.53	Q				
8+50	0.0000	7.74	Q				
8+55	0.0000	7.03	Q				
9+ 0	0.0000	6.27	Q				
9+ 5	0.0000	5.41	Q				
9+10	0.0000	4.46	Q				
9+15	0.0000	3.40	Q				
9+20	0.0000	2.24	Q				
9+25	0.0000	1.17	Q				
9+30	0.0000	0.48	Q				
9+35	0.0000	0.17	Q				
9+40	0.0000	0.06	Q				
9+45	0.0000	0.02	Q				
9+50	0.0000	0.01	Q				
9+55	0.0000	0.00	Q				
10+ 0	0.0000	0.00	Q				
10+ 5	0.0000	0.00	Q				
10+10	0.0000	0.00	Q				
10+15	0.0000	0.00	Q				

EX HG UNIT – 100YR 6HR

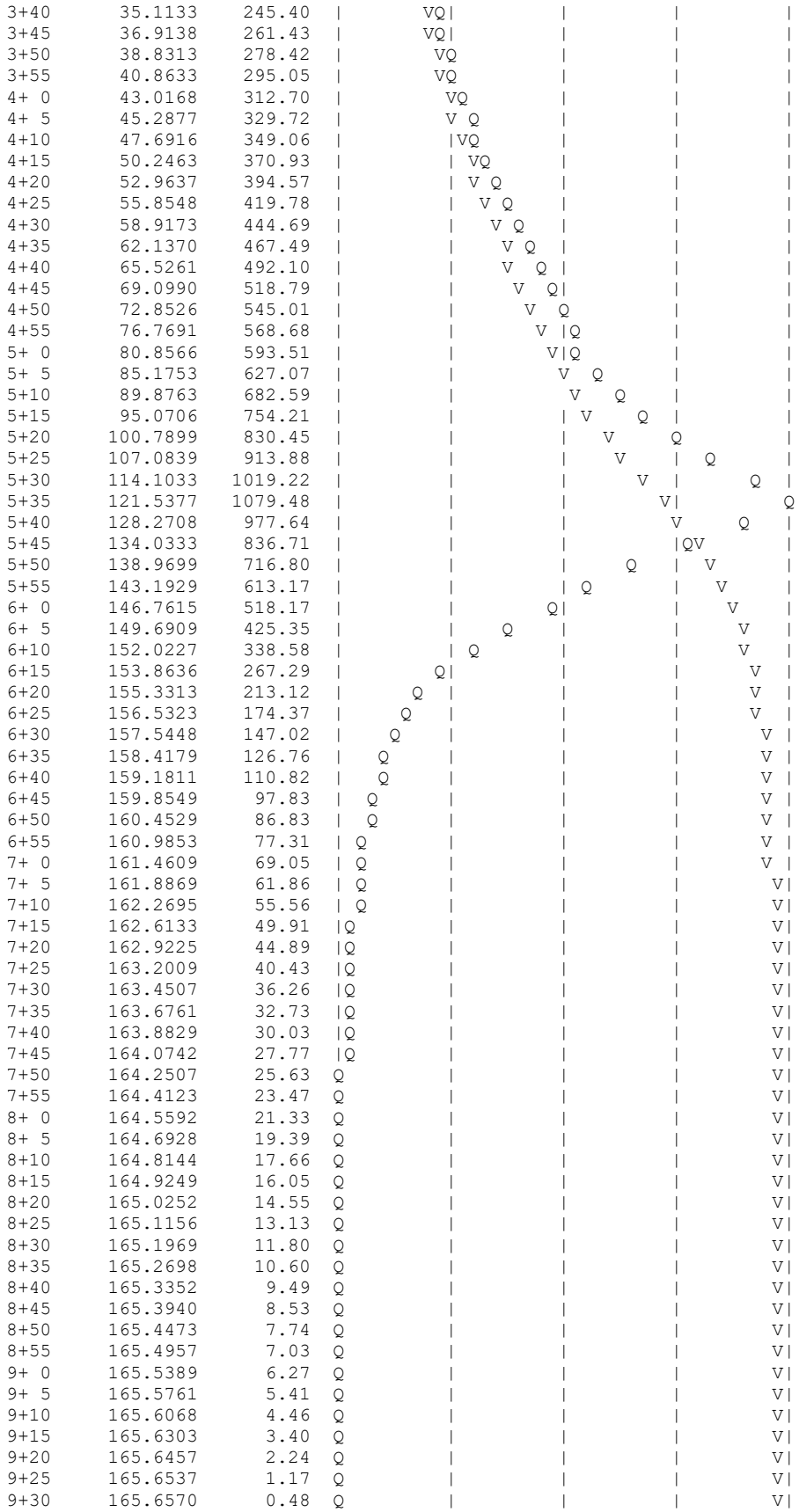
```
----------------------------------------------------------------------------
       ****************************HYDROGRAPH DATA****************************
                    Number of intervals =   123
                    Time interval =    5.0 (Min.)
                    Maximum/Peak flow rate =     1079.478 (CFS)
                    Total volume =     165.659 (Ac.Ft)
              Status of hydrographs being held in storage
                         Stream 1  Stream 2  Stream 3  Stream 4  Stream 5
              Peak (CFS)      0.000     0.000     0.000     0.000     0.000
              Vol (Ac.Ft)     0.000     0.000     0.000     0.000     0.000
       ****************************************************************************

       ----------------------------------------------------------------------

       ++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
       Process from Point/Station       30.000 to Point/Station       31.000
       **** PRINT CURRENT HYDROGRAPH ****
       ________________________________________________________________________
       ++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                         P R I N T  O F  S T O R M
                       R u n o f f     H y d r o g r a p h
       ----------------------------------------------------------------------
                   Hydrograph in   5   Minute intervals (CFS)

       ----------------------------------------------------------------------
 Time(h+m) Volume(Ac.Ft)    Q(CFS)  0      269.9     539.7     809.6    1079.5
 ------------------------------------------------------------------------
   0+ 5       0.0151      2.19  Q         |         |         |         |
   0+10       0.0835      9.94  Q         |         |         |         |
   0+15       0.2110     18.51  Q         |         |         |         |
   0+20       0.3806     24.63  Q         |         |         |         |
   0+25       0.5826     29.32  VQ        |         |         |         |
   0+30       0.8248     35.18  VQ        |         |         |         |
   0+35       1.1292     44.19  VQ        |         |         |         |
   0+40       1.4897     52.34  VQ        |         |         |         |
   0+45       1.8948     58.83  V Q       |         |         |         |
   0+50       2.3368     64.17  V Q       |         |         |         |
   0+55       2.8089     68.56  V Q       |         |         |         |
   1+ 0       3.3186     74.01  V Q       |         |         |         |
   1+ 5       3.8853     82.28  V  Q      |         |         |         |
   1+10       4.5007     89.37   V Q      |         |         |         |
   1+15       5.1538     94.82  |V Q      |         |         |         |
   1+20       5.8380     99.35  |V Q      |         |         |         |
   1+25       6.5491    103.26  |V Q      |         |         |         |
   1+30       7.2844    106.76  |V Q      |         |         |         |
   1+35       8.0404    109.78  |V  Q     |         |         |         |
   1+40       8.8132    112.21  | V Q     |         |         |         |
   1+45       9.5992    114.13  | V Q     |         |         |         |
   1+50      10.3955    115.63  | V Q     |         |         |         |
   1+55      11.2001    116.83  | V Q     |         |         |         |
   2+ 0      12.0237    119.58  | V Q     |         |         |         |
   2+ 5      12.8771    123.91  |  VQ     |         |         |         |
   2+10      13.7439    125.86  |  VQ     |         |         |         |
   2+15      14.6434    130.62  |  VQ     |         |         |         |
   2+20      15.5757    135.37  |  V Q    |         |         |         |
   2+25      16.5340    139.14  |  V Q    |         |         |         |
   2+30      17.5153    142.48  |   VQ    |         |         |         |
   2+35      18.5159    145.29  |   VQ    |         |         |         |
   2+40      19.5332    147.72  |   VQ    |         |         |         |
   2+45      20.5770    151.55  |   VQ    |         |         |         |
   2+50      21.6679    158.40  |    Q    |         |         |         |
   2+55      22.8000    164.38  |    VQ   |         |         |         |
   3+ 0      23.9638    168.98  |    VQ   |         |         |         |
   3+ 5      25.1544    172.88  |     Q   |         |         |         |
   3+10      26.3806    178.04  |     Q   |         |         |         |
   3+15      27.6641    186.36  |     Q   |         |         |         |
   3+20      28.9982    193.72  |      Q  |         |         |         |
   3+25      30.3838    201.19  |      Q  |         |         |         |
   3+30      31.8498    212.86  |      Q  |         |         |         |
   3+35      33.4232    228.46  |       Q |         |         |         |
```

EX HG UNIT – 100YR 6HR



3+40	35.1133	245.40	VQ
3+45	36.9138	261.43	VQ
3+50	38.8313	278.42	VQ
3+55	40.8633	295.05	VQ
4+ 0	43.0168	312.70	VQ
4+ 5	45.2877	329.72	V Q
4+10	47.6916	349.06	VQ
4+15	50.2463	370.93	VQ
4+20	52.9637	394.57	V Q
4+25	55.8548	419.78	V Q
4+30	58.9173	444.69	V Q
4+35	62.1370	467.49	V Q
4+40	65.5261	492.10	V Q
4+45	69.0990	518.79	V Q
4+50	72.8526	545.01	V Q
4+55	76.7691	568.68	V Q
5+ 0	80.8566	593.51	V Q
5+ 5	85.1753	627.07	V Q
5+10	89.8763	682.59	V Q
5+15	95.0706	754.21	V Q
5+20	100.7899	830.45	V Q
5+25	107.0839	913.88	V Q
5+30	114.1033	1019.22	V Q
5+35	121.5377	1079.48	V Q
5+40	128.2708	977.64	V Q
5+45	134.0333	836.71	QV
5+50	138.9699	716.80	Q V
5+55	143.1929	613.17	Q V
6+ 0	146.7615	518.17	Q V
6+ 5	149.6909	425.35	Q V
6+10	152.0227	338.58	Q V
6+15	153.8636	267.29	Q V
6+20	155.3313	213.12	Q V
6+25	156.5323	174.37	Q V
6+30	157.5448	147.02	Q V
6+35	158.4179	126.76	Q V
6+40	159.1811	110.82	Q V
6+45	159.8549	97.83	Q V
6+50	160.4529	86.83	Q V
6+55	160.9853	77.31	Q V
7+ 0	161.4609	69.05	Q V
7+ 5	161.8869	61.86	Q V
7+10	162.2695	55.56	Q V
7+15	162.6133	49.91	Q V
7+20	162.9225	44.89	Q V
7+25	163.2009	40.43	Q V
7+30	163.4507	36.26	Q V
7+35	163.6761	32.73	Q V
7+40	163.8829	30.03	Q V
7+45	164.0742	27.77	Q V
7+50	164.2507	25.63	Q V
7+55	164.4123	23.47	Q V
8+ 0	164.5592	21.33	Q V
8+ 5	164.6928	19.39	Q V
8+10	164.8144	17.66	Q V
8+15	164.9249	16.05	Q V
8+20	165.0252	14.55	Q V
8+25	165.1156	13.13	Q V
8+30	165.1969	11.80	Q V
8+35	165.2698	10.60	Q V
8+40	165.3352	9.49	Q V
8+45	165.3940	8.53	Q V
8+50	165.4473	7.74	Q V
8+55	165.4957	7.03	Q V
9+ 0	165.5389	6.27	Q V
9+ 5	165.5761	5.41	Q V
9+10	165.6068	4.46	Q V
9+15	165.6303	3.40	Q V
9+20	165.6457	2.24	Q V
9+25	165.6537	1.17	Q V
9+30	165.6570	0.48	Q V

EX HG UNIT – 100YR 6HR

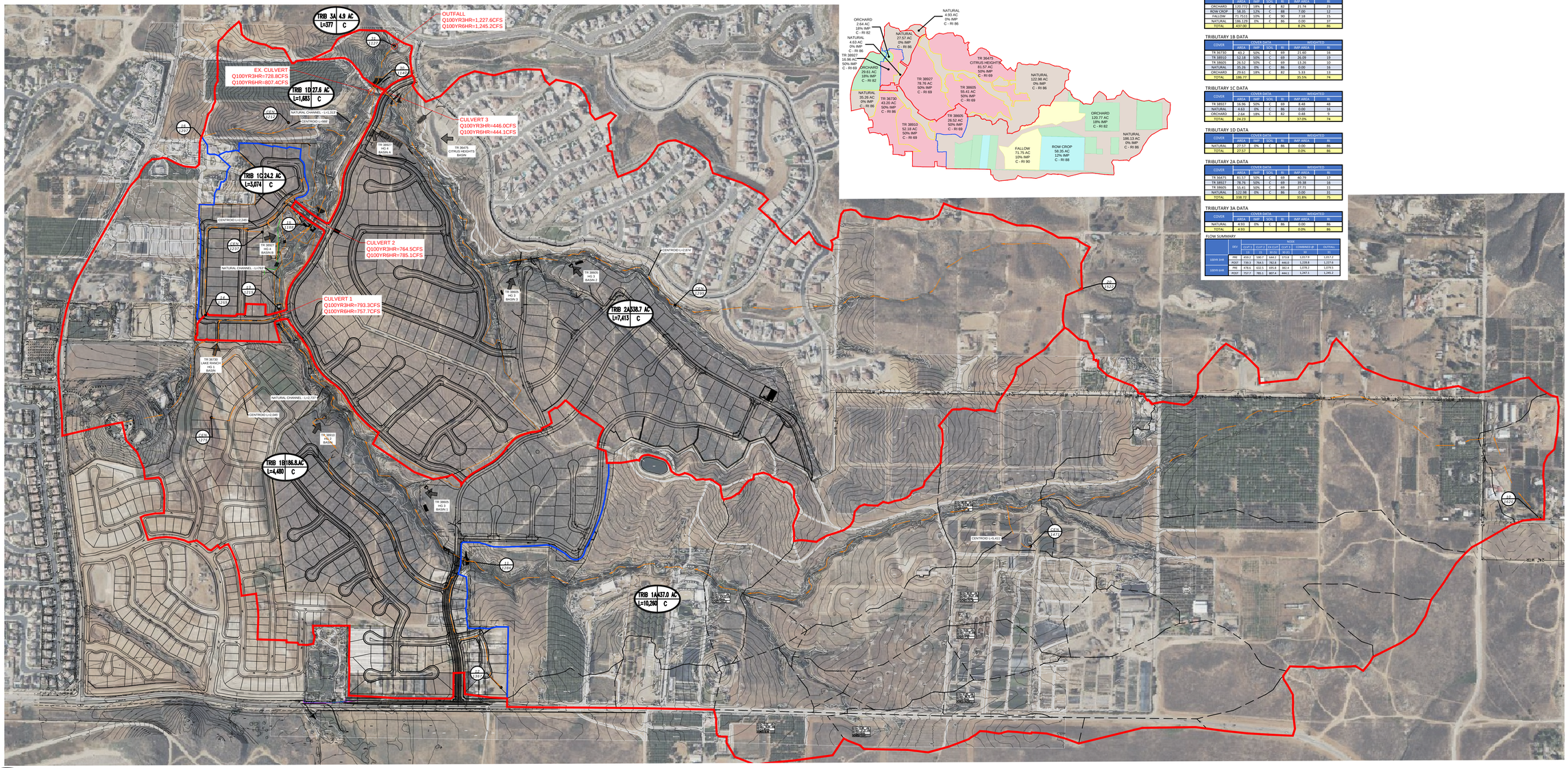
```
    9+35     165.6582      0.17  Q         |         |         |        V|
    9+40     165.6586      0.06  Q         |         |         |        V|
    9+45     165.6588      0.02  Q         |         |         |        V|
    9+50     165.6588      0.01  Q         |         |         |        V|
    9+55     165.6589      0.00  Q         |         |         |        V|
   10+ 0     165.6589      0.00  Q         |         |         |        V|
   10+ 5     165.6589      0.00  Q         |         |         |        V|
   10+10     165.6589      0.00  Q         |         |         |        V|
   10+15     165.6589      0.00  Q         |         |         |        V|
--------------------------------------------------------------------------
       ****************************HYDROGRAPH DATA****************************
                    Number of intervals =   123
                    Time interval =    5.0 (Min.)
                    Maximum/Peak flow rate =     1079.478 (CFS)
                    Total volume =     165.659 (Ac.Ft)
              Status of hydrographs being held in storage
                         Stream 1  Stream 2  Stream 3  Stream 4  Stream 5
              Peak (CFS)      0.000     0.000     0.000     0.000     0.000
              Vol (Ac.Ft)      0.000     0.000     0.000     0.000     0.000
       ************************************************************************

       ------------------------------------------------------------------------
```

EX HG UNIT – 100YR 6HR

Appendix B –Proposed Synthetic Unit Hydrograph Method

POST DEVELOPMENT UNIT HYDROLOGY MAP



TRIBUTARY 1A DATA

COVER	COVER DATA				WEIGHTED	
	AREA	IMP	SOIL	RI	IMP AREA	RI
ORCHARD	120.77	18%	C	82	21.74	23
ROW CROP	58.35	12%	C	88	7.00	12
FALLOW	71.7511	10%	C	90	7.18	13
NATURAL	186.129	0%	C	86	0.00	37
TOTAL	437.00				8.2%	86

TRIBUTARY 1B DATA

COVER	COVER DATA				WEIGHTED	
	AREA	IMP	SOIL	RI	IMP AREA	RI
TR 38730	43.2	50%	C	69	21.60	16
TR 38910	52.18	50%	C	69	26.09	19
TR 38805	26.52	50%	C	69	13.26	10
NATURAL	35.26	0%	C	86	0.00	16
ORCHARD	29.61	18%	C	82	5.33	13
TOTAL	186.77				35.5%	74

TRIBUTARY 1C DATA

COVER	COVER DATA				WEIGHTED	
	AREA	IMP	SOIL	RI	IMP AREA	RI
TR 38927	15.56	50%	C	69	8.48	48
NATURAL	4.63	0%	C	86	0.00	16
ORCHARD	2.64	18%	C	82	0.48	9
TOTAL	24.23				17.0%	74

TRIBUTARY 1D DATA

COVER	COVER DATA				WEIGHTED	
	AREA	IMP	SOIL	RI	IMP AREA	RI
NATURAL	27.57	0%	C	86	0.00	86
TOTAL	27.57				0.0%	86

TRIBUTARY 2A DATA

COVER	COVER DATA				WEIGHTED	
	AREA	IMP	SOIL	RI	IMP AREA	RI
TR 38475	81.57	50%	C	69	40.79	17
TR 38927	78.76	50%	C	69	39.38	16
TR 38805	55.41	50%	C	69	27.71	11
NATURAL	122.98	0%	C	86	0.00	31
TOTAL	338.72				11.8%	75

TRIBUTARY 3A DATA

COVER	COVER DATA				WEIGHTED	
	AREA	IMP	SOIL	RI	IMP AREA	RI
NATURAL	4.93	0%	C	86	0.00	86
TOTAL	4.93				0.0%	86

FLOW SUMMARY

		NODE					
	DEV.	CUT 1 (1)	CUT 2	CU CUT (2)	CUT 3 (3)	COMBINED @	OUTFALL
100YR 3HR	PRE	659.2	580	644.2	373.8	1,057.3	1,057.2
	POST	739.3	764.5	782.8	446.0	1,228.8	1,227.6
100YR 6HR	PRE	478.6	633.1	691.8	382.4	1,078.2	1,079.1
	POST	717.7	785.1	807.4	444.1	1,247.1	1,245.2

LEGEND

NODE / ELEV — AREA | ACRES — LENGTH | SOIL

WATERSHED BOUNDARY

FLOW PATH

0 300 900

150 600 1200

SCALE: 1" = 300'

PLANS PREPARED BY:
adkan ENGINEERS
Civil Engineering · Surveying · Planning
6879 Airport Drive, Riverside, CA. 92504
Tel:(951) 688-9241 Fax:(951) 688-0599

Plot Date: 9/3/2025

PRECIPITATION VALUES

RETURN YR	1HR	3HR	6HR	24HR
2 YR	0.50	0.80	1.10	1.80
100 YR	1.30	2.00	3.00	5.00

PROPOSEDWATERSHED ANALYSIS (UNIT)

ID	AREA	US NODE		DS NODE		ELEV Δ	LENGTH	CENTROID			WEIGHTED COVER DATA				NOTES
	(AC)	ID	ELEV	ID	ELEV	(FT)	(FT)	ELEV	Δ (FT)	L_C (FT)	COVER	IMP	SOIL	RI	
STREAM 1															**BEGIN STREAM 1**
TRIB 1A	437.00	10	1620	11	1286	334	10260	1471	185	5411	MIXED	8.2%	C	86	NATURAL AND AGRICULTURAL EASTERLY OFFSITE TRIBUTARY
TRIB 1B	186.77	12	1367	13	1215	152	1911	1275	60	2045	MIXED	35.5%	C	74	NATURAL CHANNEL + ORCHARD + TR 38605, 38910, 36730
TRIB 1C	24.23	14	1255	15	1188	67	3074	1237	49	2245	MIXED	37.0%	C	74	NATURAL CHANNEL + ORCHARD + TR 38927
TRIB 1D	27.57	16	1297	30	1140	157	1683	1212	72	988	NATURAL	0.0%	C	86	NATURAL CHANNEL
STORE HYD		30													STORE STREAM 1
STREAM 2															**BEGIN STREAM 2**
TRIB 2A	338.72	10	1522	30	1140	382	7413	1295	155	3649	MIXED	31.8%	c	75	NATURAL CHANNEL + TR 38605, 38927, 36475
ADD HYD															**COMBINE STREAM 1**
TRIB 3A	4.93	30	1140	31	1127	13	377	1133	6	189	NATURAL	0.0%	C	86	NATURAL CHANNEL

Post-Development Sub-Area Unit Hydrographs

U n i t H y d r o g r a p h A n a l y s i s

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Study date 08/21/25 File: TRIB1A3100.out

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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978

Program License Serial Number 5006

English (in-lb) Input Units Used
English Rainfall Data (Inches) Input Values Used

English Units used in output format

Drainage Area = 437.00(Ac.) = 0.683 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 437.00(Ac.) = 0.683 Sq. Mi.
Length along longest watercourse = 10260.00(Ft.)
Length along longest watercourse measured to centroid = 5411.00(Ft.)
Length along longest watercourse = 1.943 Mi.
Length along longest watercourse measured to centroid = 1.025 Mi.
Difference in elevation = 334.00(Ft.)
Slope along watercourse = 171.8830 Ft./Mi.
Average Manning's 'N' = 0.030
Lag time = 0.352 Hr.
Lag time = 21.11 Min.
25% of lag time = 5.28 Min.
40% of lag time = 8.44 Min.
Unit time = 5.00 Min.
Duration of storm = 3 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.)[1]	Rainfall(In)[2]	Weighting[1*2]
437.00	0.80	349.60

100 YEAR Area rainfall data:

Area(Ac.)[1]	Rainfall(In)[2]	Weighting[1*2]
437.00	2.00	874.00

STORM EVENT (YEAR) = 100.00
Area Averaged 2-Year Rainfall = 0.800(In)
Area Averaged 100-Year Rainfall = 2.000(In)

Point rain (area averaged) = 2.000(In)
Areal adjustment factor = 99.81 %
Adjusted average point rain = 1.996(In)

Sub-Area Data:

Area(Ac.)	Runoff Index	Impervious %
437.000	86.00	0.082

Total Area Entered = 437.00(Ac.)

RI AMC2	RI AMC-3	Infil. Rate (In/Hr)	Impervious (Dec.%)	Adj. Infil. Rate (In/Hr)	Area% (Dec.)	F (In/Hr)
86.0	94.4	0.073	0.082	0.067	1.000	0.067
					Sum (F) =	0.067

Area averaged mean soil loss (F) (In/Hr) = 0.067
Minimum soil loss rate ((In/Hr)) = 0.034
(for 24 hour storm duration)
Soil low loss rate (decimal) = 0.834

U n i t H y d r o g r a p h
VALLEY S-Curve

Unit Hydrograph Data

Unit time period (hrs)		Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	23.686	2.159	9.509
2	0.167	47.373	6.959	30.649
3	0.250	71.059	12.296	54.152
4	0.333	94.746	16.283	71.711
5	0.417	118.432	15.632	68.846
6	0.500	142.119	10.273	45.243
7	0.583	165.805	6.634	29.216
8	0.667	189.492	4.417	19.455
9	0.750	213.178	3.442	15.160
10	0.833	236.865	2.848	12.544
11	0.917	260.551	2.399	10.568
12	1.000	284.238	2.099	9.246
13	1.083	307.924	1.760	7.751
14	1.167	331.611	1.484	6.536
15	1.250	355.297	1.412	6.217
16	1.333	378.984	1.156	5.093
17	1.417	402.670	1.040	4.582
18	1.500	426.357	0.870	3.831
19	1.583	450.043	0.758	3.338
20	1.667	473.730	0.734	3.233
21	1.750	497.416	0.711	3.130
22	1.833	521.103	0.635	2.798
23	1.917	544.789	0.522	2.300
24	2.000	568.476	0.492	2.168
25	2.083	592.162	0.429	1.888
26	2.167	615.849	0.405	1.784
27	2.250	639.535	0.337	1.483
28	2.333	663.222	0.317	1.395
29	2.417	686.908	0.246	1.084
30	2.500	710.595	0.237	1.043
31	2.583	734.281	0.237	1.043
32	2.667	757.968	0.237	1.043
33	2.750	781.654	0.237	1.043
34	2.833	805.341	0.302	1.330
			Sum = 100.000	Sum= 440.414

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr) Max	Low	Effective (In/Hr)
1	0.08	1.30	0.311	0.067	(0.260)	0.244
2	0.17	1.30	0.311	0.067	(0.260)	0.244
3	0.25	1.10	0.263	0.067	(0.220)	0.196
4	0.33	1.50	0.359	0.067	(0.300)	0.292
5	0.42	1.50	0.359	0.067	(0.300)	0.292
6	0.50	1.80	0.431	0.067	(0.360)	0.364
7	0.58	1.50	0.359	0.067	(0.300)	0.292
8	0.67	1.80	0.431	0.067	(0.360)	0.364
9	0.75	1.80	0.431	0.067	(0.360)	0.364
10	0.83	1.50	0.359	0.067	(0.300)	0.292
11	0.92	1.60	0.383	0.067	(0.320)	0.316
12	1.00	1.80	0.431	0.067	(0.360)	0.364
13	1.08	2.20	0.527	0.067	(0.440)	0.460
14	1.17	2.20	0.527	0.067	(0.440)	0.460
15	1.25	2.20	0.527	0.067	(0.440)	0.460
16	1.33	2.00	0.479	0.067	(0.400)	0.412
17	1.42	2.60	0.623	0.067	(0.520)	0.555
18	1.50	2.70	0.647	0.067	(0.540)	0.579
19	1.58	2.40	0.575	0.067	(0.480)	0.507
20	1.67	2.70	0.647	0.067	(0.540)	0.579
21	1.75	3.30	0.790	0.067	(0.660)	0.723
22	1.83	3.10	0.743	0.067	(0.620)	0.675
23	1.92	2.90	0.695	0.067	(0.580)	0.627
24	2.00	3.00	0.719	0.067	(0.600)	0.651
25	2.08	3.10	0.743	0.067	(0.620)	0.675
26	2.17	4.20	1.006	0.067	(0.839)	0.939

27	2.25	5.00	1.198	0.067	(	0.999)	1.130
28	2.33	3.50	0.838	0.067	(	0.700)	0.771
29	2.42	6.80	1.629	0.067	(	1.359)	1.561
30	2.50	7.30	1.749	0.067	(	1.459)	1.681
31	2.58	8.20	1.964	0.067	(	1.639)	1.897
32	2.67	5.90	1.413	0.067	(	1.179)	1.346
33	2.75	2.00	0.479	0.067	(	0.400)	0.412
34	2.83	1.80	0.431	0.067	(	0.360)	0.364
35	2.92	1.80	0.431	0.067	(	0.360)	0.364
36	3.00	0.60	0.144	0.067	(	0.120)	0.076

(Loss Rate Not Used)

Sum = 100.0 Sum = 21.5

Flood volume = Effective rainfall 1.79(In)
times area 437.0(Ac.)/[(In)/(Ft.)] = 65.3(Ac.Ft)
Total soil loss = 0.20(In)
Total soil loss = 7.366(Ac.Ft)
Total rainfall = 2.00(In)
Flood volume = 2845672.3 Cubic Feet
Total soil loss = 320882.1 Cubic Feet

Peak flow rate of this hydrograph = 523.717(CFS)

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3 - H O U R S T O R M
R u n o f f H y d r o g r a p h

Hydrograph in 5 Minute intervals ((CFS))

Time(h+m)	Volume Ac.Ft	Q(CFS)	0	150.0	300.0	450.0	600.0
0+ 5	0.0160	2.32	Q	|	|	|	|
0+10	0.0835	9.80	Q	|	|	|	|
0+15	0.2389	22.57	VQ	|	|	|	|
0+20	0.5110	39.51	V Q	|	|	|	|
0+25	0.9013	56.66	V Q	|	|	|	|
0+30	1.3843	70.14	V Q	|	|	|	|
0+35	1.9516	82.37	|V Q	|	|	|	|
0+40	2.5985	93.92	|V Q	|	|	|	|
0+45	3.3149	104.03	| V Q	|	|	|	|
0+50	4.0860	111.96	| V Q	|	|	|	|
0+55	4.8929	117.16	| V Q	|	|	|	|
1+ 0	5.7287	121.36	| V Q	|	|	|	|
1+ 5	6.5898	125.03	| V Q	|	|	|	|
1+10	7.4940	131.29	| V Q	|	|	|	|
1+15	8.4689	141.56	| V Q|	|	|	|	|
1+20	9.5217	152.88	| V Q	|	|	|	|
1+25	10.6450	163.10	| V Q	|	|	|	|
1+30	11.8309	172.19	| V |Q	|	|	|	|
1+35	13.0806	181.45	| V | Q	|	|	|	|
1+40	14.4026	191.95	| V | Q	|	|	|	|
1+45	15.8081	204.08	| V| Q	|	|	|	|
1+50	17.2968	216.16	| V Q	|	|	|	|
1+55	18.8725	228.79	| |V Q	|	|	|	|
2+ 0	20.5370	241.69	| | V Q	|	|	|	|
2+ 5	22.2686	251.44	| | V Q	|	|	|	|
2+10	24.0566	259.61	| | V Q	|	|	|	|
2+15	25.9458	274.31	| | V Q |	|	|	|	|
2+20	27.9859	296.23	| | V Q|	|	|	|	|
2+25	30.2365	326.79	| | V |Q	|	|	|	|
2+30	32.7731	368.31	| | V Q	|	|	|	|
2+35	35.6609	419.31	| | |V Q	|	|	|	|
2+40	38.9536	478.10	| | | V |Q	|	|	|	|
2+45	42.5605	523.72	| | | V | Q	|	|	|	|
2+50	46.1659	523.50	| | | V | Q	|	|	|	|
2+55	49.4442	476.01	| | | VQ	|	|	|	|
3+ 0	52.1675	395.42	| | | Q |V	|	|	|	|
3+ 5	54.3370	315.02	| | |Q | V	|	|	|	|
3+10	56.0754	252.40	| | Q |	|	|	|	|
3+15	57.4622	201.37	| | Q |	|	|	|	|
3+20	58.5662	160.31	| | Q |	|	|	|	|
3+25	59.4653	130.54	| | Q |	|	|	|	|
3+30	60.2164	109.06	| | Q |	|	|	|	|
3+35	60.8608	93.58	| | Q |	|	|	|	|
3+40	61.4191	81.06	| | Q |	|	|	|	|
3+45	61.9096	71.22	| | Q |	|	|	|	|
3+50	62.3412	62.68	| | Q |	|	|	|	|
3+55	62.7189	54.83	| | Q |	|	|	|	|

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    4+ 0      63.0521     48.39  |  Q      |         |         |       V |
    4+ 5      63.3488     43.08  | Q       |         |         |       V |
    4+10      63.6164     38.85  | Q       |         |         |       V |
    4+15      63.8564     34.86  | Q       |         |         |        V|
    4+20      64.0698     30.98  | Q       |         |         |        V|
    4+25      64.2583     27.36  |Q        |         |         |        V|
    4+30      64.4259     24.34  |Q        |         |         |        V|
    4+35      64.5732     21.39  |Q        |         |         |        V|
    4+40      64.7027     18.80  |Q        |         |         |        V|
    4+45      64.8158     16.41  |Q        |         |         |        V|
    4+50      64.9146     14.35  Q         |         |         |        V|
    4+55      65.0018     12.67  Q         |         |         |        V|
    5+ 0      65.0778     11.04  Q         |         |         |        V|
    5+ 5      65.1428      9.42  Q         |         |         |        V|
    5+10      65.2024      8.66  Q         |         |         |        V|
    5+15      65.2501      6.93  Q         |         |         |        V|
    5+20      65.2860      5.20  Q         |         |         |        V|
    5+25      65.3070      3.06  Q         |         |         |        V|
    5+30      65.3166      1.39  Q         |         |         |        V|
    5+35      65.3231      0.94  Q         |         |         |        V|
    5+40      65.3269      0.56  Q         |         |         |        V|
    5+45      65.3276      0.10  Q         |         |         |         V
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       U n i t   H y d r o g r a p h   A n a l y s i s

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              Study date  08/21/25 File: TRIB1A6100.out


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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978


Program License Serial Number 5006

----------------------------------------------------------------------
 English (in-lb) Input Units Used
 English Rainfall Data (Inches) Input Values Used

 English Units used in output format



----------------------------------------------------------------------
----------------------------------------------------------------------
Drainage Area =     437.00(Ac.)  =      0.683 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment =     437.00(Ac.)  =      0.683 Sq. Mi.
Length along longest watercourse =   10260.00(Ft.)
Length along longest watercourse measured to centroid =    5411.00(Ft.)
Length along longest watercourse =      1.943 Mi.
Length along longest watercourse measured to centroid =      1.025 Mi.
Difference in elevation =     334.00(Ft.)
Slope along watercourse =    171.8830 Ft./Mi.
Average Manning's 'N' = 0.030
Lag time =    0.352 Hr.
Lag time =    21.11 Min.
25% of lag time =     5.28 Min.
40% of lag time =     8.44 Min.
Unit time =     5.00 Min.
Duration of storm = 6 Hour(s)
User Entered Base Flow =     0.00(CFS)

2 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
      437.00           1.10                480.70

100 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
      437.00           3.00               1311.00

STORM EVENT (YEAR) =  100.00
Area Averaged 2-Year Rainfall =    1.100(In)
Area Averaged 100-Year Rainfall =    3.000(In)

Point rain (area averaged) =    3.000(In)
Areal adjustment factor =   99.85 %
Adjusted average point rain =    2.995(In)

Sub-Area Data:
Area(Ac.)         Runoff Index   Impervious %
   437.000          86.00         0.082
 Total Area Entered =    437.00(Ac.)


RI    RI   Infil. Rate Impervious   Adj. Infil. Rate  Area%     F
AMC2 AMC-3     (In/Hr)    (Dec.%)     (In/Hr)      (Dec.)    (In/Hr)
86.0  94.4      0.073     0.082        0.067       1.000      0.067
                                                  Sum (F) =   0.067
Area averaged mean soil loss (F) (In/Hr) =  0.067
Minimum soil loss rate ((In/Hr)) =  0.034
(for 24 hour storm duration)
Soil low loss rate (decimal) =   0.834
```

U n i t H y d r o g r a p h
VALLEY S-Curve

Unit Hydrograph Data

Unit time period (hrs)		Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	23.686	2.159	9.509
2	0.167	47.373	6.959	30.649
3	0.250	71.059	12.296	54.152
4	0.333	94.746	16.283	71.711
5	0.417	118.432	15.632	68.846
6	0.500	142.119	10.273	45.243
7	0.583	165.805	6.634	29.216
8	0.667	189.492	4.417	19.455
9	0.750	213.178	3.442	15.160
10	0.833	236.865	2.848	12.544
11	0.917	260.551	2.399	10.568
12	1.000	284.238	2.099	9.246
13	1.083	307.924	1.760	7.751
14	1.167	331.611	1.484	6.536
15	1.250	355.297	1.412	6.217
16	1.333	378.984	1.156	5.093
17	1.417	402.670	1.040	4.582
18	1.500	426.357	0.870	3.831
19	1.583	450.043	0.758	3.338
20	1.667	473.730	0.734	3.233
21	1.750	497.416	0.711	3.130
22	1.833	521.103	0.635	2.798
23	1.917	544.789	0.522	2.300
24	2.000	568.476	0.492	2.168
25	2.083	592.162	0.429	1.888
26	2.167	615.849	0.405	1.784
27	2.250	639.535	0.337	1.483
28	2.333	663.222	0.317	1.395
29	2.417	686.908	0.246	1.084
30	2.500	710.595	0.237	1.043
31	2.583	734.281	0.237	1.043
32	2.667	757.968	0.237	1.043
33	2.750	781.654	0.237	1.043
34	2.833	805.341	0.302	1.330
		Sum = 100.000	Sum=	440.414

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr) Max	Low	Effective (In/Hr)
1	0.08	0.50	0.180	0.067	(0.150)	0.112
2	0.17	0.60	0.216	0.067	(0.180)	0.148
3	0.25	0.60	0.216	0.067	(0.180)	0.148
4	0.33	0.60	0.216	0.067	(0.180)	0.148
5	0.42	0.60	0.216	0.067	(0.180)	0.148
6	0.50	0.70	0.252	0.067	(0.210)	0.184
7	0.58	0.70	0.252	0.067	(0.210)	0.184
8	0.67	0.70	0.252	0.067	(0.210)	0.184
9	0.75	0.70	0.252	0.067	(0.210)	0.184
10	0.83	0.70	0.252	0.067	(0.210)	0.184
11	0.92	0.70	0.252	0.067	(0.210)	0.184
12	1.00	0.80	0.288	0.067	(0.240)	0.220
13	1.08	0.80	0.288	0.067	(0.240)	0.220
14	1.17	0.80	0.288	0.067	(0.240)	0.220
15	1.25	0.80	0.288	0.067	(0.240)	0.220
16	1.33	0.80	0.288	0.067	(0.240)	0.220
17	1.42	0.80	0.288	0.067	(0.240)	0.220
18	1.50	0.80	0.288	0.067	(0.240)	0.220
19	1.58	0.80	0.288	0.067	(0.240)	0.220
20	1.67	0.80	0.288	0.067	(0.240)	0.220
21	1.75	0.80	0.288	0.067	(0.240)	0.220
22	1.83	0.80	0.288	0.067	(0.240)	0.220
23	1.92	0.80	0.288	0.067	(0.240)	0.220
24	2.00	0.90	0.324	0.067	(0.270)	0.256

```
25   2.08     0.80      0.288          0.067    (  0.240)        0.220
26   2.17     0.90      0.324          0.067    (  0.270)        0.256
27   2.25     0.90      0.324          0.067    (  0.270)        0.256
28   2.33     0.90      0.324          0.067    (  0.270)        0.256
29   2.42     0.90      0.324          0.067    (  0.270)        0.256
30   2.50     0.90      0.324          0.067    (  0.270)        0.256
31   2.58     0.90      0.324          0.067    (  0.270)        0.256
32   2.67     0.90      0.324          0.067    (  0.270)        0.256
33   2.75     1.00      0.359          0.067    (  0.300)        0.292
34   2.83     1.00      0.359          0.067    (  0.300)        0.292
35   2.92     1.00      0.359          0.067    (  0.300)        0.292
36   3.00     1.00      0.359          0.067    (  0.300)        0.292
37   3.08     1.00      0.359          0.067    (  0.300)        0.292
38   3.17     1.10      0.395          0.067    (  0.330)        0.328
39   3.25     1.10      0.395          0.067    (  0.330)        0.328
40   3.33     1.10      0.395          0.067    (  0.330)        0.328
41   3.42     1.20      0.431          0.067    (  0.360)        0.364
42   3.50     1.30      0.467          0.067    (  0.390)        0.400
43   3.58     1.40      0.503          0.067    (  0.420)        0.436
44   3.67     1.40      0.503          0.067    (  0.420)        0.436
45   3.75     1.50      0.539          0.067    (  0.450)        0.472
46   3.83     1.50      0.539          0.067    (  0.450)        0.472
47   3.92     1.60      0.575          0.067    (  0.480)        0.508
48   4.00     1.60      0.575          0.067    (  0.480)        0.508
49   4.08     1.70      0.611          0.067    (  0.510)        0.544
50   4.17     1.80      0.647          0.067    (  0.540)        0.580
51   4.25     1.90      0.683          0.067    (  0.570)        0.616
52   4.33     2.00      0.719          0.067    (  0.600)        0.651
53   4.42     2.10      0.755          0.067    (  0.630)        0.687
54   4.50     2.10      0.755          0.067    (  0.630)        0.687
55   4.58     2.20      0.791          0.067    (  0.660)        0.723
56   4.67     2.30      0.827          0.067    (  0.690)        0.759
57   4.75     2.40      0.863          0.067    (  0.720)        0.795
58   4.83     2.40      0.863          0.067    (  0.720)        0.795
59   4.92     2.50      0.899          0.067    (  0.750)        0.831
60   5.00     2.60      0.935          0.067    (  0.780)        0.867
61   5.08     3.10      1.114          0.067    (  0.930)        1.047
62   5.17     3.60      1.294          0.067    (  1.080)        1.227
63   5.25     3.90      1.402          0.067    (  1.170)        1.334
64   5.33     4.20      1.510          0.067    (  1.260)        1.442
65   5.42     4.70      1.689          0.067    (  1.410)        1.622
66   5.50     5.60      2.013          0.067    (  1.680)        1.946
67   5.58     1.90      0.683          0.067    (  0.570)        0.616
68   5.67     0.90      0.324          0.067    (  0.270)        0.256
69   5.75     0.60      0.216          0.067    (  0.180)        0.148
70   5.83     0.50      0.180          0.067    (  0.150)        0.112
71   5.92     0.30      0.108          0.067    (  0.090)        0.040
72   6.00     0.20      0.072       (  0.067)       0.060        0.012
               (Loss Rate Not Used)
   Sum =     100.0                                  Sum =    31.1
      Flood volume = Effective rainfall      2.59(In)
       times area     437.0(Ac.)/[(In)/(Ft.)] =      94.4(Ac.Ft)
      Total soil loss =      0.40(In)
      Total soil loss =    14.710(Ac.Ft)
      Total rainfall =      3.00(In)
      Flood volume =     4111000.6 Cubic Feet
      Total soil loss =      640780.6 Cubic Feet
      ---------------------------------------------------------------------
       Peak flow rate of this hydrograph =    535.738(CFS)
      ---------------------------------------------------------------------
      +++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                          6 - H O U R    S T O R M
                     R u n o f f      H y d r o g r a p h
      ---------------------------------------------------------------------
                  Hydrograph in   5   Minute intervals ((CFS))

      ---------------------------------------------------------------------
Time(h+m) Volume Ac.Ft   Q(CFS)  0      150.0     300.0     450.0     600.0
-------------------------------------------------------------------------
  0+ 5       0.0074      1.07  Q         |         |         |         |
  0+10       0.0408      4.85  Q         |         |         |         |
  0+15       0.1237     12.04  Q         |         |         |         |
  0+20       0.2755     22.05  VQ        |         |         |         |
  0+25       0.4984     32.36  V Q       |         |         |         |
  0+30       0.7757     40.26  V Q       |         |         |         |
  0+35       1.0944     46.27  V  Q      |         |         |         |
  0+40       1.4488     51.46  V  Q      |         |         |         |
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0+45       1.8375     56.44  V  Q      |         |         |         |
0+50       2.2567     60.87  V   Q     |         |         |         |
0+55       2.6984     64.14  |V  Q     |         |         |         |
1+ 0       3.1595     66.95  |V  Q     |         |         |         |
1+ 5       3.6413     69.95  |V  Q     |         |         |         |
1+10       4.1472     73.46  |V  Q     |         |         |         |
1+15       4.6804     77.42  |V   Q    |         |         |         |
1+20       5.2388     81.08  | V  Q    |         |         |         |
1+25       5.8155     83.73  | V  Q    |         |         |         |
1+30       6.4054     85.66  | V  Q    |         |         |         |
1+35       7.0053     87.11  | V  Q    |         |         |         |
1+40       7.6139     88.36  |  V Q    |         |         |         |
1+45       8.2300     89.46  |  V Q    |         |         |         |
1+50       8.8528     90.43  |  V  Q   |         |         |         |
1+55       9.4813     91.26  |   V Q   |         |         |         |
2+ 0      10.1172     92.33  |   V Q   |         |         |         |
2+ 5      10.7627     93.73  |   V Q   |         |         |         |
2+10      11.4206     95.52  |   V Q   |         |         |         |
2+15      12.0939     97.77  |    VQ   |         |         |         |
2+20      12.7831    100.07  |    VQ   |         |         |         |
2+25      13.4869    102.19  |    VQ   |         |         |         |
2+30      14.2062    104.43  |     Q   |         |         |         |
2+35      14.9365    106.05  |     VQ  |         |         |         |
2+40      15.6752    107.26  |     VQ  |         |         |         |
2+45      16.4226    108.52  |     VQ  |         |         |         |
2+50      17.1829    110.40  |      Q  |         |         |         |
2+55      17.9606    112.92  |      Q  |         |         |         |
3+ 0      18.7590    115.93  |      Q  |         |         |         |
3+ 5      19.5771    118.79  |      QV |         |         |         |
3+10      20.4112    121.12  |       Q |         |         |         |
3+15      21.2622    123.57  |       QV|         |         |         |
3+20      22.1332    126.46  |       QV|         |         |         |
3+25      23.0293    130.12  |       QV|         |         |         |
3+30      23.9568    134.67  |       Q V         |         |         |
3+35      24.9226    140.24  |        QV         |         |         |
3+40      25.9379    147.41  |        QV         |         |         |
3+45      27.0114    155.88  |         QV        |         |         |
3+50      28.1447    164.54  |         QV        |         |         |
3+55      29.3345    172.76  |         |QV       |         |         |
4+ 0      30.5772    180.45  |         | Q       |         |         |
4+ 5      31.8726    188.09  |         | QV      |         |         |
4+10      33.2218    195.91  |         |  QV     |         |         |
4+15      34.6310    204.62  |         |  QV     |         |         |
4+20      36.1080    214.46  |         |   QV    |         |         |
4+25      37.6634    225.84  |         |    Q    |         |         |
4+30      39.3016    237.87  |         |    QV   |         |         |
4+35      41.0221    249.82  |         |     QV  |         |         |
4+40      42.8221    261.35  |         |      QV |         |         |
4+45      44.6995    272.61  |         |       Q |         |         |
4+50      46.6543    283.83  |         |       QV|         |         |
4+55      48.6889    295.43  |         |        QV         |         |
5+ 0      50.8024    306.89  |         |         QV        |         |
5+ 5      53.0038    319.64  |         |         |QV       |         |
5+10      55.3262    337.20  |         |         | QV      |         |
5+15      57.8259    362.96  |         |         |   Q     |         |
5+20      60.5641    397.58  |         |         |    VQ   |         |
5+25      63.5903    439.41  |         |         |     V  Q|         |
5+30      66.9406    486.47  |         |         |       V | Q       |
5+35      70.5598    525.51  |         |         |        V|    Q    |
5+40      74.2495    535.74  |         |         |         |V   Q    |
5+45      77.7208    504.03  |         |         |         | VQ      |
5+50      80.6711    428.38  |         |         |       Q |   V     |
5+55      82.9654    333.14  |         |         | Q       |    V    |
6+ 0      84.7370    257.24  |         |       Q |         |    V    |
6+ 5      86.1372    203.30  |         |  Q      |         |     V   |
6+10      87.2786    165.73  |         |Q        |         |     V   |
6+15      88.2251    137.43  |        Q|         |         |      V  |
6+20      89.0226    115.79  |      Q  |         |         |      V  |
6+25      89.7049     99.08  |     Q   |         |         |       V |
6+30      90.2941     85.55  |    Q    |         |         |       V |
6+35      90.8079     74.61  |   Q     |         |         |       V |
6+40      91.2615     65.87  |   Q     |         |         |       V |
6+45      91.6591     57.72  |  Q      |         |         |       V |
6+50      92.0109     51.08  |  Q      |         |         |       V |
6+55      92.3221     45.19  |  Q      |         |         |        V|
7+ 0      92.6001     40.36  | Q       |         |         |        V|
7+ 5      92.8504     36.34  | Q       |         |         |        V|
```

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    7+10      93.0747     32.56  | Q       |         |         |        V|
    7+15      93.2726     28.73  |Q        |         |         |        V|
    7+20      93.4461     25.20  |Q        |         |         |        V|
    7+25      93.5995     22.27  |Q        |         |         |        V|
    7+30      93.7339     19.52  |Q        |         |         |        V|
    7+35      93.8516     17.08  |Q        |         |         |        V|
    7+40      93.9535     14.81  Q         |         |         |        V|
    7+45      94.0425     12.92  Q         |         |         |        V|
    7+50      94.1197     11.21  Q         |         |         |        V|
    7+55      94.1872      9.80  Q         |         |         |        V|
    8+ 0      94.2450      8.39  Q         |         |         |        V|
    8+ 5      94.2928      6.95  Q         |         |         |        V|
    8+10      94.3304      5.45  Q         |         |         |        V|
    8+15      94.3567      3.83  Q         |         |         |        V|
    8+20      94.3665      1.41  Q         |         |         |        V|
    8+25      94.3711      0.67  Q         |         |         |        V|
    8+30      94.3736      0.37  Q         |         |         |        V|
    8+35      94.3750      0.20  Q         |         |         |        V|
    8+40      94.3755      0.07  Q         |         |         |        V|
    8+45      94.3756      0.02  Q         |         |         |         V
-------------------------------------------------------------------------
```

```
       U n i t   H y d r o g r a p h   A n a l y s i s

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              Study date  08/21/25 File: TRIB1B3100.out

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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978


Program License Serial Number 5006

----------------------------------------------------------------------
 English (in-lb) Input Units Used
 English Rainfall Data (Inches) Input Values Used

 English Units used in output format



----------------------------------------------------------------------
----------------------------------------------------------------------
Drainage Area =     186.77(Ac.)  =      0.292 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment =     186.77(Ac.)  =      0.292 Sq. Mi.
Length along longest watercourse =    4480.00(Ft.)
Length along longest watercourse measured to centroid =    2045.00(Ft.)
Length along longest watercourse =      0.848 Mi.
Length along longest watercourse measured to centroid =      0.387 Mi.
Difference in elevation =     152.00(Ft.)
Slope along watercourse =    179.1429 Ft./Mi.
Average Manning's 'N' = 0.030
Lag time =    0.176 Hr.
Lag time =    10.56 Min.
25% of lag time =     2.64 Min.
40% of lag time =     4.22 Min.
Unit time =     5.00 Min.
Duration of storm = 3 Hour(s)
User Entered Base Flow =     0.00(CFS)

2 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
      186.77           0.80                149.42

100 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
      186.77           2.00                373.54

STORM EVENT (YEAR) =  100.00
Area Averaged 2-Year Rainfall =    0.800(In)
Area Averaged 100-Year Rainfall =    2.000(In)

Point rain (area averaged) =    2.000(In)
Areal adjustment factor =   99.92 %
Adjusted average point rain =    1.998(In)

Sub-Area Data:
Area(Ac.)         Runoff Index   Impervious %
   186.770           74.00         0.355
 Total Area Entered =    186.77(Ac.)


RI    RI   Infil. Rate Impervious   Adj. Infil. Rate  Area%     F
AMC2 AMC-3     (In/Hr)    (Dec.%)     (In/Hr)      (Dec.)    (In/Hr)
74.0  87.4      0.160     0.355        0.109       1.000      0.109
                                                  Sum (F) =   0.109
Area averaged mean soil loss (F) (In/Hr) =  0.109
Minimum soil loss rate ((In/Hr)) =  0.054
(for 24 hour storm duration)
Soil low loss rate (decimal) =   0.616
```

U n i t H y d r o g r a p h
VALLEY S-Curve

Unit Hydrograph Data

Unit time period (hrs)		Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	47.342	5.633	10.603
2	0.167	94.684	23.890	44.969
3	0.250	142.026	28.908	54.414
4	0.333	189.368	13.992	26.337
5	0.417	236.710	7.079	13.324
6	0.500	284.052	4.875	9.176
7	0.583	331.394	3.554	6.689
8	0.667	378.736	2.733	5.145
9	0.750	426.078	2.055	3.869
10	0.833	473.420	1.561	2.938
11	0.917	520.762	1.396	2.628
12	1.000	568.104	1.087	2.047
13	1.083	615.446	0.878	1.653
14	1.167	662.788	0.699	1.315
15	1.250	710.130	0.524	0.986
16	1.333	757.472	0.473	0.891
17	1.417	804.814	0.662	1.246
			Sum = 100.000	Sum= 188.229

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr) Max	Low	Effective (In/Hr)
1	0.08	1.30	0.312	0.109	(0.192)	0.203
2	0.17	1.30	0.312	0.109	(0.192)	0.203
3	0.25	1.10	0.264	0.109	(0.162)	0.155
4	0.33	1.50	0.360	0.109	(0.222)	0.251
5	0.42	1.50	0.360	0.109	(0.222)	0.251
6	0.50	1.80	0.432	0.109	(0.266)	0.323
7	0.58	1.50	0.360	0.109	(0.222)	0.251
8	0.67	1.80	0.432	0.109	(0.266)	0.323
9	0.75	1.80	0.432	0.109	(0.266)	0.323
10	0.83	1.50	0.360	0.109	(0.222)	0.251
11	0.92	1.60	0.384	0.109	(0.236)	0.275
12	1.00	1.80	0.432	0.109	(0.266)	0.323
13	1.08	2.20	0.528	0.109	(0.325)	0.419
14	1.17	2.20	0.528	0.109	(0.325)	0.419
15	1.25	2.20	0.528	0.109	(0.325)	0.419
16	1.33	2.00	0.480	0.109	(0.295)	0.371
17	1.42	2.60	0.623	0.109	(0.384)	0.515
18	1.50	2.70	0.647	0.109	(0.399)	0.539
19	1.58	2.40	0.576	0.109	(0.355)	0.467
20	1.67	2.70	0.647	0.109	(0.399)	0.539
21	1.75	3.30	0.791	0.109	(0.487)	0.683
22	1.83	3.10	0.743	0.109	(0.458)	0.635
23	1.92	2.90	0.695	0.109	(0.428)	0.587
24	2.00	3.00	0.719	0.109	(0.443)	0.611
25	2.08	3.10	0.743	0.109	(0.458)	0.635
26	2.17	4.20	1.007	0.109	(0.620)	0.899
27	2.25	5.00	1.199	0.109	(0.739)	1.090
28	2.33	3.50	0.839	0.109	(0.517)	0.731
29	2.42	6.80	1.631	0.109	(1.004)	1.522
30	2.50	7.30	1.751	0.109	(1.078)	1.642
31	2.58	8.20	1.966	0.109	(1.211)	1.858
32	2.67	5.90	1.415	0.109	(0.872)	1.306
33	2.75	2.00	0.480	0.109	(0.295)	0.371
34	2.83	1.80	0.432	0.109	(0.266)	0.323
35	2.92	1.80	0.432	0.109	(0.266)	0.323
36	3.00	0.60	0.144	(0.109)	0.089	0.055
		(Loss Rate Not Used)				
Sum =		100.0			Sum =	20.1

Flood volume = Effective rainfall 1.67(In)
times area 186.8(Ac.)/[(In)/(Ft.)] = 26.1(Ac.Ft)
Total soil loss = 0.32(In)

```
      Total soil loss =     5.046(Ac.Ft)
      Total rainfall =      2.00(In)
      Flood volume =     1135016.9 Cubic Feet
      Total soil loss =      219825.4 Cubic Feet
      ---------------------------------------------------------------------
       Peak flow rate of this hydrograph =    266.084(CFS)
      ---------------------------------------------------------------------
      +++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                          3 - H O U R    S T O R M
                      R u n o f f     H y d r o g r a p h
      ---------------------------------------------------------------------
                    Hydrograph in   5   Minute intervals ((CFS))

      ---------------------------------------------------------------------
 Time(h+m) Volume Ac.Ft   Q(CFS)  0       75.0     150.0     225.0     300.0
 ---------------------------------------------------------------------------
   0+ 5       0.0148      2.15  Q         |         |         |         |
   0+10       0.0926     11.29  VQ        |         |         |         |
   0+15       0.2430     21.84  V Q       |         |         |         |
   0+20       0.4225     26.05  V  Q      |         |         |         |
   0+25       0.6323     30.47  V   Q     |         |         |         |
   0+30       0.8875     37.05  |V  Q     |         |         |         |
   0+35       1.1821     42.77  |V   Q    |         |         |         |
   0+40       1.4996     46.10  | V   Q   |         |         |         |
   0+45       1.8347     48.66  | V   Q   |         |         |         |
   0+50       2.1919     51.87  |  V  Q   |         |         |         |
   0+55       2.5454     51.33  |  V  Q   |         |         |         |
   1+ 0       2.8927     50.43  |   V Q   |         |         |         |
   1+ 5       3.2650     54.05  |    V Q  |         |         |         |
   1+10       3.6883     61.46  |    V  Q |         |         |         |
   1+15       4.1581     68.23  |     V  Q|         |         |         |
   1+20       4.6482     71.16  |      V Q|         |         |         |
   1+25       5.1478     72.54  |      V Q|         |         |         |
   1+30       5.6844     77.91  |       V Q         |         |         |
   1+35       6.2747     85.72  |        V|Q        |         |         |
   1+40       6.8841     88.48  |         VQ        |         |         |
   1+45       7.5173     91.95  |         |VQ       |         |         |
   1+50       8.2176    101.69  |         | VQ      |         |         |
   1+55       8.9683    109.00  |         |  VQ     |         |         |
   2+ 0       9.7233    109.62  |         |   Q     |         |         |
   2+ 5      10.4801    109.89  |         |   Q V   |         |         |
   2+10      11.2728    115.10  |         |    Q V  |         |         |
   2+15      12.1779    131.43  |         |      QV |         |         |
   2+20      13.2250    152.03  |         |         Q         |         |
   2+25      14.3443    162.53  |         |         |QV       |         |
   2+30      15.6459    188.99  |         |         |   VQ    |         |
   2+35      17.2696    235.75  |         |         |     V   |Q        |
   2+40      19.1021    266.08  |         |         |        V|    Q    |
   2+45      20.8690    256.55  |         |         |         | V Q     |
   2+50      22.2344    198.27  |         |         |     Q   |   V     |
   2+55      23.1965    139.69  |         |       Q |         |    V    |
   3+ 0      23.9482    109.16  |         |   Q     |         |     V   |
   3+ 5      24.5199     83.00  |         |Q        |         |      V  |
   3+10      24.9108     56.76  |       Q |         |         |       V |
   3+15      25.1886     40.34  |     Q   |         |         |       V |
   3+20      25.3992     30.58  |   Q     |         |         |       V |
   3+25      25.5645     24.00  |  Q      |         |         |        V|
   3+30      25.6963     19.14  | Q       |         |         |        V|
   3+35      25.7988     14.88  |Q        |         |         |        V|
   3+40      25.8764     11.27  |Q        |         |         |        V|
   3+45      25.9397      9.20  |Q        |         |         |        V|
   3+50      25.9867      6.82  Q         |         |         |        V|
   3+55      26.0206      4.92  Q         |         |         |        V|
   4+ 0      26.0398      2.79  Q         |         |         |        V|
   4+ 5      26.0477      1.14  Q         |         |         |        V|
   4+10      26.0528      0.75  Q         |         |         |        V|
   4+15      26.0559      0.45  Q         |         |         |        V|
   4+20      26.0564      0.07  Q         |         |         |         V
---------------------------------------------------------------------------
```

```
       U n i t   H y d r o g r a p h   A n a l y s i s

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              Study date  08/21/25 File: TRIB1B6100.out

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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978


Program License Serial Number 5006

----------------------------------------------------------------------
 English (in-lb) Input Units Used
 English Rainfall Data (Inches) Input Values Used

 English Units used in output format



----------------------------------------------------------------------
----------------------------------------------------------------------
Drainage Area =     186.77(Ac.)  =      0.292 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment =     186.77(Ac.)  =      0.292 Sq. Mi.
Length along longest watercourse =    4480.00(Ft.)
Length along longest watercourse measured to centroid =    2045.00(Ft.)
Length along longest watercourse =      0.848 Mi.
Length along longest watercourse measured to centroid =      0.387 Mi.
Difference in elevation =     152.00(Ft.)
Slope along watercourse =    179.1429 Ft./Mi.
Average Manning's 'N' = 0.030
Lag time =    0.176 Hr.
Lag time =    10.56 Min.
25% of lag time =     2.64 Min.
40% of lag time =     4.22 Min.
Unit time =     5.00 Min.
Duration of storm = 6 Hour(s)
User Entered Base Flow =     0.00(CFS)

2 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
      186.77           1.10                205.45

100 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
      186.77           3.00                560.31

STORM EVENT (YEAR) =  100.00
Area Averaged 2-Year Rainfall =    1.100(In)
Area Averaged 100-Year Rainfall =    3.000(In)

Point rain (area averaged) =    3.000(In)
Areal adjustment factor =   99.94 %
Adjusted average point rain =    2.998(In)

Sub-Area Data:
Area(Ac.)         Runoff Index   Impervious %
   186.770           74.00         0.355
 Total Area Entered =    186.77(Ac.)


RI    RI   Infil. Rate Impervious   Adj. Infil. Rate  Area%     F
AMC2 AMC-3     (In/Hr)    (Dec.%)     (In/Hr)      (Dec.)    (In/Hr)
74.0  87.4      0.160     0.355        0.109       1.000      0.109
                                                  Sum (F) =   0.109
Area averaged mean soil loss (F) (In/Hr) =  0.109
Minimum soil loss rate ((In/Hr)) =  0.054
(for 24 hour storm duration)
Soil low loss rate (decimal) =   0.616
```

U n i t H y d r o g r a p h
VALLEY S-Curve

Unit Hydrograph Data

Unit time period (hrs)		Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	47.342	5.633	10.603
2	0.167	94.684	23.890	44.969
3	0.250	142.026	28.908	54.414
4	0.333	189.368	13.992	26.337
5	0.417	236.710	7.079	13.324
6	0.500	284.052	4.875	9.176
7	0.583	331.394	3.554	6.689
8	0.667	378.736	2.733	5.145
9	0.750	426.078	2.055	3.869
10	0.833	473.420	1.561	2.938
11	0.917	520.762	1.396	2.628
12	1.000	568.104	1.087	2.047
13	1.083	615.446	0.878	1.653
14	1.167	662.788	0.699	1.315
15	1.250	710.130	0.524	0.986
16	1.333	757.472	0.473	0.891
17	1.417	804.814	0.662	1.246
			Sum = 100.000	Sum= 188.229

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr) Max	Low	Effective (In/Hr)
1	0.08	0.50	0.180	0.109	(0.111)	0.071
2	0.17	0.60	0.216	0.109	(0.133)	0.107
3	0.25	0.60	0.216	0.109	(0.133)	0.107
4	0.33	0.60	0.216	0.109	(0.133)	0.107
5	0.42	0.60	0.216	0.109	(0.133)	0.107
6	0.50	0.70	0.252	0.109	(0.155)	0.143
7	0.58	0.70	0.252	0.109	(0.155)	0.143
8	0.67	0.70	0.252	0.109	(0.155)	0.143
9	0.75	0.70	0.252	0.109	(0.155)	0.143
10	0.83	0.70	0.252	0.109	(0.155)	0.143
11	0.92	0.70	0.252	0.109	(0.155)	0.143
12	1.00	0.80	0.288	0.109	(0.177)	0.179
13	1.08	0.80	0.288	0.109	(0.177)	0.179
14	1.17	0.80	0.288	0.109	(0.177)	0.179
15	1.25	0.80	0.288	0.109	(0.177)	0.179
16	1.33	0.80	0.288	0.109	(0.177)	0.179
17	1.42	0.80	0.288	0.109	(0.177)	0.179
18	1.50	0.80	0.288	0.109	(0.177)	0.179
19	1.58	0.80	0.288	0.109	(0.177)	0.179
20	1.67	0.80	0.288	0.109	(0.177)	0.179
21	1.75	0.80	0.288	0.109	(0.177)	0.179
22	1.83	0.80	0.288	0.109	(0.177)	0.179
23	1.92	0.80	0.288	0.109	(0.177)	0.179
24	2.00	0.90	0.324	0.109	(0.199)	0.215
25	2.08	0.80	0.288	0.109	(0.177)	0.179
26	2.17	0.90	0.324	0.109	(0.199)	0.215
27	2.25	0.90	0.324	0.109	(0.199)	0.215
28	2.33	0.90	0.324	0.109	(0.199)	0.215
29	2.42	0.90	0.324	0.109	(0.199)	0.215
30	2.50	0.90	0.324	0.109	(0.199)	0.215
31	2.58	0.90	0.324	0.109	(0.199)	0.215
32	2.67	0.90	0.324	0.109	(0.199)	0.215
33	2.75	1.00	0.360	0.109	(0.222)	0.251
34	2.83	1.00	0.360	0.109	(0.222)	0.251
35	2.92	1.00	0.360	0.109	(0.222)	0.251
36	3.00	1.00	0.360	0.109	(0.222)	0.251
37	3.08	1.00	0.360	0.109	(0.222)	0.251
38	3.17	1.10	0.396	0.109	(0.244)	0.287
39	3.25	1.10	0.396	0.109	(0.244)	0.287
40	3.33	1.10	0.396	0.109	(0.244)	0.287
41	3.42	1.20	0.432	0.109	(0.266)	0.323

```
 42   3.50     1.30      0.468          0.109    (  0.288)        0.359
 43   3.58     1.40      0.504          0.109    (  0.310)        0.395
 44   3.67     1.40      0.504          0.109    (  0.310)        0.395
 45   3.75     1.50      0.540          0.109    (  0.332)        0.431
 46   3.83     1.50      0.540          0.109    (  0.332)        0.431
 47   3.92     1.60      0.576          0.109    (  0.355)        0.467
 48   4.00     1.60      0.576          0.109    (  0.355)        0.467
 49   4.08     1.70      0.612          0.109    (  0.377)        0.503
 50   4.17     1.80      0.648          0.109    (  0.399)        0.539
 51   4.25     1.90      0.684          0.109    (  0.421)        0.575
 52   4.33     2.00      0.720          0.109    (  0.443)        0.611
 53   4.42     2.10      0.756          0.109    (  0.465)        0.647
 54   4.50     2.10      0.756          0.109    (  0.465)        0.647
 55   4.58     2.20      0.791          0.109    (  0.488)        0.683
 56   4.67     2.30      0.827          0.109    (  0.510)        0.719
 57   4.75     2.40      0.863          0.109    (  0.532)        0.755
 58   4.83     2.40      0.863          0.109    (  0.532)        0.755
 59   4.92     2.50      0.899          0.109    (  0.554)        0.791
 60   5.00     2.60      0.935          0.109    (  0.576)        0.827
 61   5.08     3.10      1.115          0.109    (  0.687)        1.007
 62   5.17     3.60      1.295          0.109    (  0.798)        1.187
 63   5.25     3.90      1.403          0.109    (  0.864)        1.294
 64   5.33     4.20      1.511          0.109    (  0.931)        1.402
 65   5.42     4.70      1.691          0.109    (  1.042)        1.582
 66   5.50     5.60      2.015          0.109    (  1.241)        1.906
 67   5.58     1.90      0.684          0.109    (  0.421)        0.575
 68   5.67     0.90      0.324          0.109    (  0.199)        0.215
 69   5.75     0.60      0.216          0.109    (  0.133)        0.107
 70   5.83     0.50      0.180          0.109    (  0.111)        0.071
 71   5.92     0.30      0.108       (  0.109)       0.066        0.041
 72   6.00     0.20      0.072       (  0.109)       0.044        0.028
             (Loss Rate Not Used)
    Sum =     100.0                                  Sum =    28.3
      Flood volume = Effective rainfall      2.36(In)
       times area     186.8(Ac.)/[(In)/(Ft.)] =      36.7(Ac.Ft)
      Total soil loss =      0.64(In)
      Total soil loss =    10.007(Ac.Ft)
      Total rainfall =      3.00(In)
      Flood volume =     1596723.3 Cubic Feet
      Total soil loss =      435896.2 Cubic Feet
      ---------------------------------------------------------------------
       Peak flow rate of this hydrograph =    266.712(CFS)
      ---------------------------------------------------------------------
      +++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                          6 - H O U R    S T O R M
                      R u n o f f     H y d r o g r a p h
      ---------------------------------------------------------------------
                   Hydrograph in   5   Minute intervals ((CFS))

      ---------------------------------------------------------------------
Time(h+m) Volume Ac.Ft   Q(CFS)  0       75.0     150.0     225.0     300.0
-------------------------------------------------------------------------
  0+ 5       0.0052      0.76  Q         |         |         |         |
  0+10       0.0351      4.34  Q         |         |         |         |
  0+15       0.1029      9.84  VQ        |         |         |         |
  0+20       0.1971     13.68  VQ        |         |         |         |
  0+25       0.3043     15.57  V Q       |         |         |         |
  0+30       0.4220     17.09  V Q       |         |         |         |
  0+35       0.5565     19.52  V Q       |         |         |         |
  0+40       0.7085     22.08  V Q       |         |         |         |
  0+45       0.8703     23.49  V  Q      |         |         |         |
  0+50       1.0378     24.32  |V Q      |         |         |         |
  0+55       1.2096     24.94  |V Q      |         |         |         |
  1+ 0       1.3873     25.81  |V Q      |         |         |         |
  1+ 5       1.5788     27.80  |V Q      |         |         |         |
  1+10       1.7858     30.05  |V  Q     |         |         |         |
  1+15       2.0008     31.22  | V Q     |         |         |         |
  1+20       2.2205     31.90  | V Q     |         |         |         |
  1+25       2.4438     32.42  | V Q     |         |         |         |
  1+30       2.6694     32.77  | V Q     |         |         |         |
  1+35       2.8967     33.00  |  VQ     |         |         |         |
  1+40       3.1252     33.17  |  VQ     |         |         |         |
  1+45       3.3546     33.31  |  VQ     |         |         |         |
  1+50       3.5850     33.45  |  VQ     |         |         |         |
  1+55       3.8159     33.53  |   Q     |         |         |         |
  2+ 0       4.0498     33.97  |   Q     |         |         |         |
  2+ 5       4.2926     35.25  |   Q     |         |         |         |
```

2+10	4.5405	36.01	| Q |				
2+15	4.7929	36.65	| QV |				
2+20	5.0559	38.18	| Q |				
2+25	5.3244	38.98	| Q |				
2+30	5.5955	39.37	| QV |				
2+35	5.8686	39.65	| QV |				
2+40	6.1430	39.84	| QV |				
2+45	6.4210	40.37	| Q V |				
2+50	6.7111	42.12	| Q V |				
2+55	7.0153	44.16	| Q V |				
3+ 0	7.3265	45.19	| QV |				
3+ 5	7.6415	45.73	| Q V |				
3+10	7.9617	46.49	| Q V |				
3+15	8.2950	48.40	| Q V|				
3+20	8.6434	50.59	| Q V|				
3+25	9.0019	52.05	| Q V|				
3+30	9.3784	54.68	| Q V |				
3+35	9.7852	59.06	| Q V |				
3+40	10.2253	63.90	| Q |V |				
3+45	10.6930	67.91	| Q|V |				
3+50	11.1853	71.48	| Q| V |				
3+55	11.7018	75.01	| Q V |				
4+ 0	12.2422	78.46	| Q V |				
4+ 5	12.8066	81.96	| Q V |				
4+10	13.3971	85.73	|Q V |				
4+15	14.0224	90.80	| Q V |				
4+20	14.6872	96.53	| Q V |				
4+25	15.3935	102.55	| Q V |				
4+30	16.1401	108.41	| Q V |				
4+35	16.9191	113.12	| Q V |				
4+40	17.7291	117.60	| Q V|				
4+45	18.5775	123.20	| Q V |				
4+50	19.4655	128.92	| Q |V |				
4+55	20.3856	133.60	| Q | V |				
5+ 0	21.3362	138.03	| Q | V |				
5+ 5	22.3357	145.12	| Q| V |				
5+10	23.4321	159.20	| |Q V |				
5+15	24.6758	180.58	| Q V |				
5+20	26.0711	202.60	| QV |				
5+25	27.6104	223.51	| QV |				
5+30	29.3230	248.67	| |V Q |				
5+35	31.1599	266.71	| VQ |				
5+40	32.7469	230.43	| Q V |				
5+45	33.8164	155.29	| Q | V |				
5+50	34.5336	104.14	| Q | V |				
5+55	35.0536	75.50	| Q | V |				
6+ 0	35.4465	57.05	| Q | V |				
6+ 5	35.7472	43.67	| Q | V|				
6+10	35.9748	33.05	| Q | V|				
6+15	36.1472	25.04	| Q | V|				
6+20	36.2827	19.67	| Q | V|				
6+25	36.3888	15.41	| Q | V|				
6+30	36.4714	11.98	|Q | V|				
6+35	36.5342	9.12	|Q | V|				
6+40	36.5809	6.79	Q | V|				
6+45	36.6156	5.04	Q | V|				
6+50	36.6398	3.52	Q | V|				
6+55	36.6483	1.23	Q | V|				
7+ 0	36.6520	0.53	Q | V|				
7+ 5	36.6539	0.27	Q | V|				
7+10	36.6550	0.15	Q | V|				
7+15	36.6555	0.08	Q | V|				
7+20	36.6557	0.03	Q | V|				

```
       U n i t   H y d r o g r a p h   A n a l y s i s

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              Study date  08/21/25 File: TRIB1C3100.out


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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978


Program License Serial Number 5006

------------------------------------------------------------------------
 English (in-lb) Input Units Used
 English Rainfall Data (Inches) Input Values Used

 English Units used in output format



------------------------------------------------------------------------
------------------------------------------------------------------------
Drainage Area =      24.23(Ac.)  =      0.038 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment =      24.23(Ac.)  =      0.038 Sq. Mi.
Length along longest watercourse =    3074.00(Ft.)
Length along longest watercourse measured to centroid =    2245.00(Ft.)
Length along longest watercourse =      0.582 Mi.
Length along longest watercourse measured to centroid =      0.425 Mi.
Difference in elevation =      67.00(Ft.)
Slope along watercourse =    115.0813 Ft./Mi.
Average Manning's 'N' = 0.030
Lag time =    0.172 Hr.
Lag time =    10.32 Min.
25% of lag time =     2.58 Min.
40% of lag time =     4.13 Min.
Unit time =     5.00 Min.
Duration of storm = 3 Hour(s)
User Entered Base Flow =     0.00(CFS)

2 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
       24.23           0.80                 19.38

100 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
       24.23           2.00                 48.46

STORM EVENT (YEAR) =  100.00
Area Averaged 2-Year Rainfall =    0.800(In)
Area Averaged 100-Year Rainfall =    2.000(In)

Point rain (area averaged) =    2.000(In)
Areal adjustment factor =   99.99 %
Adjusted average point rain =    2.000(In)

Sub-Area Data:
Area(Ac.)         Runoff Index   Impervious %
    24.230           74.00         0.370
 Total Area Entered =     24.23(Ac.)


RI    RI   Infil. Rate Impervious   Adj. Infil. Rate  Area%     F
AMC2 AMC-3     (In/Hr)    (Dec.%)     (In/Hr)      (Dec.)    (In/Hr)
74.0  87.4      0.160     0.370        0.106       1.000      0.106
                                                  Sum (F) =   0.106
Area averaged mean soil loss (F) (In/Hr) =  0.106
Minimum soil loss rate ((In/Hr)) =  0.053
(for 24 hour storm duration)
Soil low loss rate (decimal) =   0.604
```

U n i t H y d r o g r a p h
VALLEY S-Curve

Unit Hydrograph Data

Unit time period (hrs)		Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	48.472	5.841	1.426
2	0.167	96.944	24.846	6.067
3	0.250	145.415	28.934	7.065
4	0.333	193.887	13.530	3.304
5	0.417	242.359	6.951	1.697
6	0.500	290.831	4.810	1.175
7	0.583	339.303	3.482	0.850
8	0.667	387.775	2.683	0.655
9	0.750	436.246	1.989	0.486
10	0.833	484.718	1.545	0.377
11	0.917	533.190	1.367	0.334
12	1.000	581.662	1.044	0.255
13	1.083	630.134	0.847	0.207
14	1.167	678.605	0.659	0.161
15	1.250	727.077	0.501	0.122
16	1.333	775.549	0.485	0.118
17	1.417	824.021	0.487	0.119
		Sum = 100.000	Sum=	24.419

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr) Max	Low	Effective (In/Hr)
1	0.08	1.30	0.312	0.106	(0.188)	0.205
2	0.17	1.30	0.312	0.106	(0.188)	0.205
3	0.25	1.10	0.264	0.106	(0.159)	0.157
4	0.33	1.50	0.360	0.106	(0.217)	0.253
5	0.42	1.50	0.360	0.106	(0.217)	0.253
6	0.50	1.80	0.432	0.106	(0.261)	0.325
7	0.58	1.50	0.360	0.106	(0.217)	0.253
8	0.67	1.80	0.432	0.106	(0.261)	0.325
9	0.75	1.80	0.432	0.106	(0.261)	0.325
10	0.83	1.50	0.360	0.106	(0.217)	0.253
11	0.92	1.60	0.384	0.106	(0.232)	0.277
12	1.00	1.80	0.432	0.106	(0.261)	0.325
13	1.08	2.20	0.528	0.106	(0.319)	0.421
14	1.17	2.20	0.528	0.106	(0.319)	0.421
15	1.25	2.20	0.528	0.106	(0.319)	0.421
16	1.33	2.00	0.480	0.106	(0.290)	0.373
17	1.42	2.60	0.624	0.106	(0.377)	0.517
18	1.50	2.70	0.648	0.106	(0.391)	0.541
19	1.58	2.40	0.576	0.106	(0.348)	0.469
20	1.67	2.70	0.648	0.106	(0.391)	0.541
21	1.75	3.30	0.792	0.106	(0.478)	0.685
22	1.83	3.10	0.744	0.106	(0.449)	0.637
23	1.92	2.90	0.696	0.106	(0.420)	0.589
24	2.00	3.00	0.720	0.106	(0.435)	0.613
25	2.08	3.10	0.744	0.106	(0.449)	0.637
26	2.17	4.20	1.008	0.106	(0.609)	0.901
27	2.25	5.00	1.200	0.106	(0.725)	1.093
28	2.33	3.50	0.840	0.106	(0.507)	0.733
29	2.42	6.80	1.632	0.106	(0.986)	1.525
30	2.50	7.30	1.752	0.106	(1.058)	1.645
31	2.58	8.20	1.968	0.106	(1.189)	1.861
32	2.67	5.90	1.416	0.106	(0.855)	1.309
33	2.75	2.00	0.480	0.106	(0.290)	0.373
34	2.83	1.80	0.432	0.106	(0.261)	0.325
35	2.92	1.80	0.432	0.106	(0.261)	0.325
36	3.00	0.60	0.144	(0.106)	0.087	0.057
		(Loss Rate Not Used)				
Sum =		100.0			Sum =	20.2

Flood volume = Effective rainfall 1.68(In)
times area 24.2(Ac.)/[(In)/(Ft.)] = 3.4(Ac.Ft)
Total soil loss = 0.32(In)

```
      Total soil loss =     0.642(Ac.Ft)
      Total rainfall =      2.00(In)
      Flood volume =      147937.9 Cubic Feet
      Total soil loss =       27953.3 Cubic Feet
      ---------------------------------------------------------------------
       Peak flow rate of this hydrograph =     34.824(CFS)
      ---------------------------------------------------------------------
      +++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                          3 - H O U R    S T O R M
                     R u n o f f     H y d r o g r a p h
      ---------------------------------------------------------------------
                   Hydrograph in   5   Minute intervals ((CFS))

      ---------------------------------------------------------------------
 Time(h+m) Volume Ac.Ft   Q(CFS)  0       10.0      20.0      30.0      40.0
 ---------------------------------------------------------------------------
   0+ 5       0.0020      0.29  Q         |         |         |         |
   0+10       0.0126      1.54  VQ        |         |         |         |
   0+15       0.0328      2.92  V Q       |         |         |         |
   0+20       0.0565      3.45  V  Q      |         |         |         |
   0+25       0.0844      4.04  V   Q     |         |         |         |
   0+30       0.1182      4.91  |V  Q     |         |         |         |
   0+35       0.1571      5.65  |V   Q    |         |         |         |
   0+40       0.1989      6.07  | V   Q   |         |         |         |
   0+45       0.2430      6.40  | V   Q   |         |         |         |
   0+50       0.2900      6.82  |  V  Q   |         |         |         |
   0+55       0.3363      6.73  |  V  Q   |         |         |         |
   1+ 0       0.3819      6.61  |   V Q   |         |         |         |
   1+ 5       0.4308      7.11  |    V Q  |         |         |         |
   1+10       0.4865      8.09  |    V  Q |         |         |         |
   1+15       0.5482      8.96  |     V Q |         |         |         |
   1+20       0.6125      9.33  |      V Q|         |         |         |
   1+25       0.6778      9.49  |      V Q|         |         |         |
   1+30       0.7482     10.22  |       V Q         |         |         |
   1+35       0.8256     11.24  |        V|Q        |         |         |
   1+40       0.9052     11.56  |         VQ        |         |         |
   1+45       0.9881     12.03  |         |VQ       |         |         |
   1+50       1.0799     13.33  |         | VQ      |         |         |
   1+55       1.1781     14.26  |         |  VQ     |         |         |
   2+ 0       1.2766     14.31  |         |   QV    |         |         |
   2+ 5       1.3754     14.35  |         |   Q V   |         |         |
   2+10       1.4790     15.05  |         |    Q V  |         |         |
   2+15       1.5977     17.23  |         |      QV |         |         |
   2+20       1.7349     19.93  |         |        QV         |         |
   2+25       1.8810     21.21  |         |         |QV       |         |
   2+30       2.0519     24.80  |         |         |   Q     |         |
   2+35       2.2650     30.95  |         |         |     V   Q         |
   2+40       2.5048     34.82  |         |         |        V|   Q     |
   2+45       2.7346     33.36  |         |         |         | VQ      |
   2+50       2.9104     25.53  |         |         |    Q    |   V     |
   2+55       3.0341     17.95  |         |      Q  |         |    V    |
   3+ 0       3.1310     14.08  |         |   Q     |         |     V   |
   3+ 5       3.2043     10.63  |         Q         |         |      V  |
   3+10       3.2539      7.21  |       Q |         |         |       V |
   3+15       3.2892      5.11  |     Q   |         |         |       V |
   3+20       3.3158      3.87  |  Q      |         |         |        V|
   3+25       3.3366      3.02  |  Q      |         |         |        V|
   3+30       3.3530      2.39  | Q       |         |         |        V|
   3+35       3.3656      1.83  |Q        |         |         |        V|
   3+40       3.3752      1.39  |Q        |         |         |        V|
   3+45       3.3829      1.11  |Q        |         |         |        V|
   3+50       3.3884      0.81  Q         |         |         |        V|
   3+55       3.3922      0.56  Q         |         |         |        V|
   4+ 0       3.3943      0.30  Q         |         |         |        V|
   4+ 5       3.3952      0.13  Q         |         |         |        V|
   4+10       3.3958      0.08  Q         |         |         |        V|
   4+15       3.3961      0.05  Q         |         |         |        V|
   4+20       3.3962      0.01  Q         |         |         |         V
---------------------------------------------------------------------------
```

```
       U n i t   H y d r o g r a p h   A n a l y s i s

       Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2008, Version 8.1
              Study date  08/21/25 File: TRIB1C6100.out


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------------------------------------------------------------------------------

Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978


Program License Serial Number 5006

------------------------------------------------------------------------
 English (in-lb) Input Units Used
 English Rainfall Data (Inches) Input Values Used

 English Units used in output format



------------------------------------------------------------------------
------------------------------------------------------------------------
Drainage Area =      24.23(Ac.)  =      0.038 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment =      24.23(Ac.)  =      0.038 Sq. Mi.
Length along longest watercourse =    3074.00(Ft.)
Length along longest watercourse measured to centroid =    2245.00(Ft.)
Length along longest watercourse =      0.582 Mi.
Length along longest watercourse measured to centroid =      0.425 Mi.
Difference in elevation =      67.00(Ft.)
Slope along watercourse =    115.0813 Ft./Mi.
Average Manning's 'N' = 0.030
Lag time =    0.172 Hr.
Lag time =    10.32 Min.
25% of lag time =     2.58 Min.
40% of lag time =     4.13 Min.
Unit time =     5.00 Min.
Duration of storm = 6 Hour(s)
User Entered Base Flow =     0.00(CFS)

2 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
       24.23           1.10                 26.65

100 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
       24.23           3.00                 72.69

STORM EVENT (YEAR) =  100.00
Area Averaged 2-Year Rainfall =    1.100(In)
Area Averaged 100-Year Rainfall =    3.000(In)

Point rain (area averaged) =    3.000(In)
Areal adjustment factor =   99.99 %
Adjusted average point rain =    3.000(In)

Sub-Area Data:
Area(Ac.)         Runoff Index   Impervious %
    24.230           74.00         0.370
 Total Area Entered =     24.23(Ac.)


RI    RI   Infil. Rate Impervious   Adj. Infil. Rate  Area%     F
AMC2 AMC-3     (In/Hr)    (Dec.%)     (In/Hr)      (Dec.)    (In/Hr)
74.0  87.4      0.160     0.370        0.106       1.000      0.106
                                                  Sum (F) =   0.106
Area averaged mean soil loss (F) (In/Hr) =  0.106
Minimum soil loss rate ((In/Hr)) =  0.053
(for 24 hour storm duration)
Soil low loss rate (decimal) =   0.604
```

U n i t H y d r o g r a p h
VALLEY S-Curve

Unit Hydrograph Data

Unit time period (hrs)		Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	48.472	5.841	1.426
2	0.167	96.944	24.846	6.067
3	0.250	145.415	28.934	7.065
4	0.333	193.887	13.530	3.304
5	0.417	242.359	6.951	1.697
6	0.500	290.831	4.810	1.175
7	0.583	339.303	3.482	0.850
8	0.667	387.775	2.683	0.655
9	0.750	436.246	1.989	0.486
10	0.833	484.718	1.545	0.377
11	0.917	533.190	1.367	0.334
12	1.000	581.662	1.044	0.255
13	1.083	630.134	0.847	0.207
14	1.167	678.605	0.659	0.161
15	1.250	727.077	0.501	0.122
16	1.333	775.549	0.485	0.118
17	1.417	824.021	0.487	0.119
		Sum = 100.000	Sum=	24.419

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr) Max	Low	Effective (In/Hr)
1	0.08	0.50	0.180	0.106	(0.109)	0.074
2	0.17	0.60	0.216	0.106	(0.130)	0.110
3	0.25	0.60	0.216	0.106	(0.130)	0.110
4	0.33	0.60	0.216	0.106	(0.130)	0.110
5	0.42	0.60	0.216	0.106	(0.130)	0.110
6	0.50	0.70	0.252	0.106	(0.152)	0.145
7	0.58	0.70	0.252	0.106	(0.152)	0.145
8	0.67	0.70	0.252	0.106	(0.152)	0.145
9	0.75	0.70	0.252	0.106	(0.152)	0.145
10	0.83	0.70	0.252	0.106	(0.152)	0.145
11	0.92	0.70	0.252	0.106	(0.152)	0.145
12	1.00	0.80	0.288	0.106	(0.174)	0.181
13	1.08	0.80	0.288	0.106	(0.174)	0.181
14	1.17	0.80	0.288	0.106	(0.174)	0.181
15	1.25	0.80	0.288	0.106	(0.174)	0.181
16	1.33	0.80	0.288	0.106	(0.174)	0.181
17	1.42	0.80	0.288	0.106	(0.174)	0.181
18	1.50	0.80	0.288	0.106	(0.174)	0.181
19	1.58	0.80	0.288	0.106	(0.174)	0.181
20	1.67	0.80	0.288	0.106	(0.174)	0.181
21	1.75	0.80	0.288	0.106	(0.174)	0.181
22	1.83	0.80	0.288	0.106	(0.174)	0.181
23	1.92	0.80	0.288	0.106	(0.174)	0.181
24	2.00	0.90	0.324	0.106	(0.196)	0.217
25	2.08	0.80	0.288	0.106	(0.174)	0.181
26	2.17	0.90	0.324	0.106	(0.196)	0.217
27	2.25	0.90	0.324	0.106	(0.196)	0.217
28	2.33	0.90	0.324	0.106	(0.196)	0.217
29	2.42	0.90	0.324	0.106	(0.196)	0.217
30	2.50	0.90	0.324	0.106	(0.196)	0.217
31	2.58	0.90	0.324	0.106	(0.196)	0.217
32	2.67	0.90	0.324	0.106	(0.196)	0.217
33	2.75	1.00	0.360	0.106	(0.217)	0.253
34	2.83	1.00	0.360	0.106	(0.217)	0.253
35	2.92	1.00	0.360	0.106	(0.217)	0.253
36	3.00	1.00	0.360	0.106	(0.217)	0.253
37	3.08	1.00	0.360	0.106	(0.217)	0.253
38	3.17	1.10	0.396	0.106	(0.239)	0.289
39	3.25	1.10	0.396	0.106	(0.239)	0.289
40	3.33	1.10	0.396	0.106	(0.239)	0.289
41	3.42	1.20	0.432	0.106	(0.261)	0.325

```
42   3.50     1.30      0.468          0.106    (  0.283)        0.361
43   3.58     1.40      0.504          0.106    (  0.304)        0.397
44   3.67     1.40      0.504          0.106    (  0.304)        0.397
45   3.75     1.50      0.540          0.106    (  0.326)        0.433
46   3.83     1.50      0.540          0.106    (  0.326)        0.433
47   3.92     1.60      0.576          0.106    (  0.348)        0.469
48   4.00     1.60      0.576          0.106    (  0.348)        0.469
49   4.08     1.70      0.612          0.106    (  0.370)        0.505
50   4.17     1.80      0.648          0.106    (  0.391)        0.541
51   4.25     1.90      0.684          0.106    (  0.413)        0.577
52   4.33     2.00      0.720          0.106    (  0.435)        0.613
53   4.42     2.10      0.756          0.106    (  0.457)        0.649
54   4.50     2.10      0.756          0.106    (  0.457)        0.649
55   4.58     2.20      0.792          0.106    (  0.478)        0.685
56   4.67     2.30      0.828          0.106    (  0.500)        0.721
57   4.75     2.40      0.864          0.106    (  0.522)        0.757
58   4.83     2.40      0.864          0.106    (  0.522)        0.757
59   4.92     2.50      0.900          0.106    (  0.544)        0.793
60   5.00     2.60      0.936          0.106    (  0.565)        0.829
61   5.08     3.10      1.116          0.106    (  0.674)        1.009
62   5.17     3.60      1.296          0.106    (  0.783)        1.189
63   5.25     3.90      1.404          0.106    (  0.848)        1.297
64   5.33     4.20      1.512          0.106    (  0.913)        1.405
65   5.42     4.70      1.692          0.106    (  1.022)        1.585
66   5.50     5.60      2.016          0.106    (  1.218)        1.909
67   5.58     1.90      0.684          0.106    (  0.413)        0.577
68   5.67     0.90      0.324          0.106    (  0.196)        0.217
69   5.75     0.60      0.216          0.106    (  0.130)        0.110
70   5.83     0.50      0.180          0.106    (  0.109)        0.074
71   5.92     0.30      0.108       (  0.106)       0.065        0.043
72   6.00     0.20      0.072       (  0.106)       0.043        0.029
              (Loss Rate Not Used)
   Sum =     100.0                                  Sum =    28.4
      Flood volume = Effective rainfall      2.37(In)
       times area      24.2(Ac.)/[(In)/(Ft.)] =       4.8(Ac.Ft)
      Total soil loss =      0.63(In)
      Total soil loss =     1.272(Ac.Ft)
      Total rainfall =      3.00(In)
      Flood volume =      208414.3 Cubic Feet
      Total soil loss =       55428.5 Cubic Feet
      --------------------------------------------------------------------
       Peak flow rate of this hydrograph =     34.847(CFS)
      --------------------------------------------------------------------
      ++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                          6 - H O U R    S T O R M
                     R u n o f f     H y d r o g r a p h
      --------------------------------------------------------------------
                   Hydrograph in   5   Minute intervals ((CFS))

      --------------------------------------------------------------------
Time(h+m) Volume Ac.Ft   Q(CFS)  0       10.0      20.0      30.0      40.0
-------------------------------------------------------------------------
  0+ 5       0.0007      0.10  Q         |         |         |         |
  0+10       0.0049      0.60  Q         |         |         |         |
  0+15       0.0141      1.34  VQ        |         |         |         |
  0+20       0.0268      1.84  VQ        |         |         |         |
  0+25       0.0411      2.08  V Q       |         |         |         |
  0+30       0.0568      2.28  V Q       |         |         |         |
  0+35       0.0747      2.60  V Q       |         |         |         |
  0+40       0.0950      2.94  V Q       |         |         |         |
  0+45       0.1164      3.12  V  Q      |         |         |         |
  0+50       0.1386      3.22  |V Q      |         |         |         |
  0+55       0.1614      3.30  |V Q      |         |         |         |
  1+ 0       0.1849      3.42  |V Q      |         |         |         |
  1+ 5       0.2102      3.68  |V Q      |         |         |         |
  1+10       0.2376      3.97  |V Q      |         |         |         |
  1+15       0.2660      4.12  | V Q     |         |         |         |
  1+20       0.2950      4.21  | V Q     |         |         |         |
  1+25       0.3244      4.27  | V Q     |         |         |         |
  1+30       0.3541      4.31  | V Q     |         |         |         |
  1+35       0.3840      4.34  |  VQ     |         |         |         |
  1+40       0.4140      4.36  |  VQ     |         |         |         |
  1+45       0.4442      4.38  |  VQ     |         |         |         |
  1+50       0.4745      4.40  |  VQ     |         |         |         |
  1+55       0.5049      4.41  |   Q     |         |         |         |
  2+ 0       0.5356      4.47  |   Q     |         |         |         |
  2+ 5       0.5676      4.64  |   Q     |         |         |         |
```

```
   2+10       0.6002      4.73  |   QV    |         |         |         |
   2+15       0.6334      4.82  |   QV    |         |         |         |
   2+20       0.6679      5.02  |    Q    |         |         |         |
   2+25       0.7032      5.12  |    Q    |         |         |         |
   2+30       0.7388      5.17  |    QV   |         |         |         |
   2+35       0.7747      5.20  |    QV   |         |         |         |
   2+40       0.8107      5.23  |    QV   |         |         |         |
   2+45       0.8472      5.30  |    Q V  |         |         |         |
   2+50       0.8853      5.53  |    Q V  |         |         |         |
   2+55       0.9252      5.80  |    Q V  |         |         |         |
   3+ 0       0.9661      5.93  |    Q  V |         |         |         |
   3+ 5       1.0074      6.00  |    Q  V |         |         |         |
   3+10       1.0494      6.10  |     Q V |         |         |         |
   3+15       1.0931      6.35  |     Q  V|         |         |         |
   3+20       1.1388      6.63  |     Q  V|         |         |         |
   3+25       1.1858      6.82  |     Q  V|         |         |         |
   3+30       1.2352      7.17  |      Q  V         |         |         |
   3+35       1.2886      7.75  |      Q  V         |         |         |
   3+40       1.3463      8.38  |       Q |V        |         |         |
   3+45       1.4076      8.90  |       Q |V        |         |         |
   3+50       1.4721      9.36  |        Q| V       |         |         |
   3+55       1.5397      9.82  |        Q| V       |         |         |
   4+ 0       1.6105     10.27  |         Q  V      |         |         |
   4+ 5       1.6843     10.72  |         Q   V     |         |         |
   4+10       1.7616     11.22  |         |Q  V     |         |         |
   4+15       1.8434     11.88  |         |Q   V    |         |         |
   4+20       1.9304     12.63  |         | Q   V   |         |         |
   4+25       2.0228     13.42  |         |  Q  V   |         |         |
   4+30       2.1204     14.18  |         |   Q  V  |         |         |
   4+35       2.2222     14.78  |         |   Q   V |         |         |
   4+40       2.3280     15.36  |         |    Q   V|         |         |
   4+45       2.4389     16.10  |         |     Q   V         |         |
   4+50       2.5549     16.84  |         |     Q   |V        |         |
   4+55       2.6750     17.44  |         |      Q  | V       |         |
   5+ 0       2.7990     18.02  |         |       Q |  V      |         |
   5+ 5       2.9296     18.95  |         |       Q |   V     |         |
   5+10       3.0730     20.82  |         |         Q    V    |         |
   5+15       3.2357     23.64  |         |          |  Q   V  |         |
   5+20       3.4183     26.50  |         |          |     Q V |         |
   5+25       3.6195     29.22  |         |          |        QV         |
   5+30       3.8435     32.52  |         |          |          | Q      |
   5+35       4.0835     34.85  |         |          |          |  Q     |
   5+40       4.2885     29.78  |         |          |        Q|    V    |
   5+45       4.4254     19.87  |         |         Q|         |     V   |
   5+50       4.5172     13.33  |         |  Q       |         |      V  |
   5+55       4.5838      9.67  |        Q|          |         |       V |
   6+ 0       4.6340      7.29  |      Q  |          |         |       V |
   6+ 5       4.6723      5.56  |    Q    |          |         |        V|
   6+10       4.7011      4.18  |   Q     |          |         |        V|
   6+15       4.7228      3.15  |  Q      |          |         |        V|
   6+20       4.7397      2.46  | Q       |          |         |        V|
   6+25       4.7529      1.91  |Q        |          |         |        V|
   6+30       4.7630      1.47  |Q        |          |         |        V|
   6+35       4.7706      1.10  |Q        |          |         |        V|
   6+40       4.7761      0.81  Q         |          |         |        V|
   6+45       4.7802      0.59  Q         |          |         |        V|
   6+50       4.7828      0.38  Q         |          |         |        V|
   6+55       4.7837      0.14  Q         |          |         |        V|
   7+ 0       4.7841      0.06  Q         |          |         |        V|
   7+ 5       4.7843      0.03  Q         |          |         |        V|
   7+10       4.7845      0.02  Q         |          |         |        V|
   7+15       4.7845      0.01  Q         |          |         |        V|
   7+20       4.7845      0.00  Q         |          |         |        V|
-------------------------------------------------------------------------
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       U n i t   H y d r o g r a p h   A n a l y s i s

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              Study date  08/21/25 File: TRIB1D3100.out

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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978


Program License Serial Number 5006

----------------------------------------------------------------------
 English (in-lb) Input Units Used
 English Rainfall Data (Inches) Input Values Used

 English Units used in output format



----------------------------------------------------------------------
----------------------------------------------------------------------
Drainage Area =      27.57(Ac.)  =      0.043 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment =      27.57(Ac.)  =      0.043 Sq. Mi.
Length along longest watercourse =    1683.00(Ft.)
Length along longest watercourse measured to centroid =     988.00(Ft.)
Length along longest watercourse =      0.319 Mi.
Length along longest watercourse measured to centroid =      0.187 Mi.
Difference in elevation =     157.00(Ft.)
Slope along watercourse =    492.5490 Ft./Mi.
Average Manning's 'N' = 0.030
Lag time =    0.076 Hr.
Lag time =     4.56 Min.
25% of lag time =     1.14 Min.
40% of lag time =     1.82 Min.
Unit time =     5.00 Min.
Duration of storm = 3 Hour(s)
User Entered Base Flow =     0.00(CFS)

2 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
       27.57            0.80                 22.06

100 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
       27.57            2.00                 55.14

STORM EVENT (YEAR) =  100.00
Area Averaged 2-Year Rainfall =    0.800(In)
Area Averaged 100-Year Rainfall =    2.000(In)

Point rain (area averaged) =    2.000(In)
Areal adjustment factor =   99.99 %
Adjusted average point rain =    2.000(In)

Sub-Area Data:
Area(Ac.)         Runoff Index   Impervious %
    27.570           86.00          0.000
 Total Area Entered =     27.57(Ac.)


RI    RI   Infil. Rate Impervious   Adj. Infil. Rate  Area%     F
AMC2 AMC-3     (In/Hr)    (Dec.%)     (In/Hr)      (Dec.)    (In/Hr)
86.0  94.4      0.073     0.000        0.073       1.000      0.073
                                                  Sum (F) =   0.073
Area averaged mean soil loss (F) (In/Hr) =  0.073
Minimum soil loss rate ((In/Hr)) =  0.036
(for 24 hour storm duration)
Soil low loss rate (decimal) =   0.900
```

U n i t H y d r o g r a p h
VALLEY S-Curve

Unit Hydrograph Data

Unit time period (hrs)		Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	109.732	22.159	6.157
2	0.167	219.464	48.829	13.567
3	0.250	329.196	14.339	3.984
4	0.333	438.929	6.558	1.822
5	0.417	548.661	3.642	1.012
6	0.500	658.393	2.274	0.632
7	0.583	768.125	1.333	0.370
8	0.667	877.857	0.867	0.241
			Sum = 100.000	Sum= 27.785

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr) Max	Low	Effective (In/Hr)
1	0.08	1.30	0.312	0.073	(0.281)	0.239
2	0.17	1.30	0.312	0.073	(0.281)	0.239
3	0.25	1.10	0.264	0.073	(0.238)	0.191
4	0.33	1.50	0.360	0.073	(0.324)	0.287
5	0.42	1.50	0.360	0.073	(0.324)	0.287
6	0.50	1.80	0.432	0.073	(0.389)	0.359
7	0.58	1.50	0.360	0.073	(0.324)	0.287
8	0.67	1.80	0.432	0.073	(0.389)	0.359
9	0.75	1.80	0.432	0.073	(0.389)	0.359
10	0.83	1.50	0.360	0.073	(0.324)	0.287
11	0.92	1.60	0.384	0.073	(0.346)	0.311
12	1.00	1.80	0.432	0.073	(0.389)	0.359
13	1.08	2.20	0.528	0.073	(0.475)	0.455
14	1.17	2.20	0.528	0.073	(0.475)	0.455
15	1.25	2.20	0.528	0.073	(0.475)	0.455
16	1.33	2.00	0.480	0.073	(0.432)	0.407
17	1.42	2.60	0.624	0.073	(0.562)	0.551
18	1.50	2.70	0.648	0.073	(0.583)	0.575
19	1.58	2.40	0.576	0.073	(0.518)	0.503
20	1.67	2.70	0.648	0.073	(0.583)	0.575
21	1.75	3.30	0.792	0.073	(0.713)	0.719
22	1.83	3.10	0.744	0.073	(0.670)	0.671
23	1.92	2.90	0.696	0.073	(0.626)	0.623
24	2.00	3.00	0.720	0.073	(0.648)	0.647
25	2.08	3.10	0.744	0.073	(0.670)	0.671
26	2.17	4.20	1.008	0.073	(0.907)	0.935
27	2.25	5.00	1.200	0.073	(1.080)	1.127
28	2.33	3.50	0.840	0.073	(0.756)	0.767
29	2.42	6.80	1.632	0.073	(1.469)	1.559
30	2.50	7.30	1.752	0.073	(1.577)	1.679
31	2.58	8.20	1.968	0.073	(1.771)	1.895
32	2.67	5.90	1.416	0.073	(1.274)	1.343
33	2.75	2.00	0.480	0.073	(0.432)	0.407
34	2.83	1.80	0.432	0.073	(0.389)	0.359
35	2.92	1.80	0.432	0.073	(0.389)	0.359
36	3.00	0.60	0.144	0.073	(0.130)	0.071
		(Loss Rate Not Used)				
Sum =		100.0			Sum =	21.4

Flood volume = Effective rainfall 1.78(In)
times area 27.6(Ac.)/[(In)/(Ft.)] = 4.1(Ac.Ft)
Total soil loss = 0.22(In)
Total soil loss = 0.502(Ac.Ft)
Total rainfall = 2.00(In)
Flood volume = 178276.8 Cubic Feet
Total soil loss = 21857.3 Cubic Feet

Peak flow rate of this hydrograph = 45.528(CFS)

3 - H O U R S T O R M

R u n o f f H y d r o g r a p h

Hydrograph in 5 Minute intervals ((CFS))

Time(h+m)	Volume Ac.Ft	Q(CFS)	0	12.5	25.0	37.5	50.0
0+ 5	0.0101	1.47	VQ				
0+10	0.0427	4.72	V Q				
0+15	0.0797	5.38	V Q				
0+20	0.1193	5.75	V Q				
0+25	0.1683	7.11	V Q				
0+30	0.2233	8.00	V Q				
0+35	0.2836	8.75	V Q				
0+40	0.3430	8.62	V Q				
0+45	0.4083	9.49	V Q				
0+50	0.4723	9.30	V Q				
0+55	0.5315	8.59	VQ				
1+ 0	0.5934	8.98	V Q				
1+ 5	0.6638	10.23	V Q				
1+10	0.7444	11.70	V Q				
1+15	0.8282	12.17	VQ				
1+20	0.9114	12.08	VQ				
1+25	0.9971	12.44	Q				
1+30	1.0965	14.43	VQ				
1+35	1.1987	14.85	Q				
1+40	1.2996	14.65	QV				
1+45	1.4125	16.38	Q				
1+50	1.5385	18.30	QV				
1+55	1.6627	18.04	Q V				
2+ 0	1.7844	17.68	Q V				
2+ 5	1.9087	18.04	Q V				
2+10	2.0468	20.05	Q V				
2+15	2.2186	24.95	Q V				
2+20	2.4008	26.45	Q V				
2+25	2.5915	27.69	Q V				
2+30	2.8558	38.38	V Q				
2+35	3.1603	44.21	V Q				
2+40	3.4739	45.53	V Q				
2+45	3.7085	34.06	Q V				
2+50	3.8447	19.79	Q V				
2+55	3.9474	14.90	Q V				
3+ 0	4.0234	11.04	Q V				
3+ 5	4.0608	5.42	Q V				
3+10	4.0781	2.51	Q V				
3+15	4.0863	1.20	Q V				
3+20	4.0900	0.53	Q V				
3+25	4.0918	0.26	Q V				
3+30	4.0926	0.11	Q V				
3+35	4.0927	0.02	Q V				

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       U n i t   H y d r o g r a p h   A n a l y s i s

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              Study date  08/21/25 File: TRIB1D6100.out

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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978


Program License Serial Number 5006

----------------------------------------------------------------------
 English (in-lb) Input Units Used
 English Rainfall Data (Inches) Input Values Used

 English Units used in output format



----------------------------------------------------------------------
----------------------------------------------------------------------
Drainage Area =      27.57(Ac.)  =      0.043 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment =      27.57(Ac.)  =      0.043 Sq. Mi.
Length along longest watercourse =    1683.00(Ft.)
Length along longest watercourse measured to centroid =     988.00(Ft.)
Length along longest watercourse =      0.319 Mi.
Length along longest watercourse measured to centroid =      0.187 Mi.
Difference in elevation =     157.00(Ft.)
Slope along watercourse =    492.5490 Ft./Mi.
Average Manning's 'N' = 0.030
Lag time =    0.076 Hr.
Lag time =     4.56 Min.
25% of lag time =     1.14 Min.
40% of lag time =     1.82 Min.
Unit time =     5.00 Min.
Duration of storm = 6 Hour(s)
User Entered Base Flow =     0.00(CFS)

2 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
       27.57           1.10                 30.33

100 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
       27.57           3.00                 82.71

STORM EVENT (YEAR) =  100.00
Area Averaged 2-Year Rainfall =    1.100(In)
Area Averaged 100-Year Rainfall =    3.000(In)

Point rain (area averaged) =    3.000(In)
Areal adjustment factor =   99.99 %
Adjusted average point rain =    3.000(In)

Sub-Area Data:
Area(Ac.)         Runoff Index   Impervious %
    27.570           86.00          0.000
 Total Area Entered =     27.57(Ac.)


RI    RI   Infil. Rate Impervious   Adj. Infil. Rate  Area%     F
AMC2 AMC-3     (In/Hr)    (Dec.%)     (In/Hr)      (Dec.)    (In/Hr)
86.0  94.4      0.073     0.000        0.073       1.000      0.073
                                                  Sum (F) =   0.073
Area averaged mean soil loss (F) (In/Hr) =  0.073
Minimum soil loss rate ((In/Hr)) =  0.036
(for 24 hour storm duration)
Soil low loss rate (decimal) =   0.900
```

U n i t H y d r o g r a p h
VALLEY S-Curve

Unit Hydrograph Data

Unit time period (hrs)		Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	109.732	22.159	6.157
2	0.167	219.464	48.829	13.567
3	0.250	329.196	14.339	3.984
4	0.333	438.929	6.558	1.822
5	0.417	548.661	3.642	1.012
6	0.500	658.393	2.274	0.632
7	0.583	768.125	1.333	0.370
8	0.667	877.857	0.867	0.241
			Sum = 100.000	Sum= 27.785

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit Time		Pattern	Storm Rain	Loss rate(In./Hr)			Effective
	(Hr.)	Percent	(In/Hr)	Max		Low	(In/Hr)
1	0.08	0.50	0.180	0.073	(	0.162)	0.107
2	0.17	0.60	0.216	0.073	(	0.194)	0.143
3	0.25	0.60	0.216	0.073	(	0.194)	0.143
4	0.33	0.60	0.216	0.073	(	0.194)	0.143
5	0.42	0.60	0.216	0.073	(	0.194)	0.143
6	0.50	0.70	0.252	0.073	(	0.227)	0.179
7	0.58	0.70	0.252	0.073	(	0.227)	0.179
8	0.67	0.70	0.252	0.073	(	0.227)	0.179
9	0.75	0.70	0.252	0.073	(	0.227)	0.179
10	0.83	0.70	0.252	0.073	(	0.227)	0.179
11	0.92	0.70	0.252	0.073	(	0.227)	0.179
12	1.00	0.80	0.288	0.073	(	0.259)	0.215
13	1.08	0.80	0.288	0.073	(	0.259)	0.215
14	1.17	0.80	0.288	0.073	(	0.259)	0.215
15	1.25	0.80	0.288	0.073	(	0.259)	0.215
16	1.33	0.80	0.288	0.073	(	0.259)	0.215
17	1.42	0.80	0.288	0.073	(	0.259)	0.215
18	1.50	0.80	0.288	0.073	(	0.259)	0.215
19	1.58	0.80	0.288	0.073	(	0.259)	0.215
20	1.67	0.80	0.288	0.073	(	0.259)	0.215
21	1.75	0.80	0.288	0.073	(	0.259)	0.215
22	1.83	0.80	0.288	0.073	(	0.259)	0.215
23	1.92	0.80	0.288	0.073	(	0.259)	0.215
24	2.00	0.90	0.324	0.073	(	0.292)	0.251
25	2.08	0.80	0.288	0.073	(	0.259)	0.215
26	2.17	0.90	0.324	0.073	(	0.292)	0.251
27	2.25	0.90	0.324	0.073	(	0.292)	0.251
28	2.33	0.90	0.324	0.073	(	0.292)	0.251
29	2.42	0.90	0.324	0.073	(	0.292)	0.251
30	2.50	0.90	0.324	0.073	(	0.292)	0.251
31	2.58	0.90	0.324	0.073	(	0.292)	0.251
32	2.67	0.90	0.324	0.073	(	0.292)	0.251
33	2.75	1.00	0.360	0.073	(	0.324)	0.287
34	2.83	1.00	0.360	0.073	(	0.324)	0.287
35	2.92	1.00	0.360	0.073	(	0.324)	0.287
36	3.00	1.00	0.360	0.073	(	0.324)	0.287
37	3.08	1.00	0.360	0.073	(	0.324)	0.287
38	3.17	1.10	0.396	0.073	(	0.356)	0.323
39	3.25	1.10	0.396	0.073	(	0.356)	0.323
40	3.33	1.10	0.396	0.073	(	0.356)	0.323
41	3.42	1.20	0.432	0.073	(	0.389)	0.359
42	3.50	1.30	0.468	0.073	(	0.421)	0.395
43	3.58	1.40	0.504	0.073	(	0.454)	0.431
44	3.67	1.40	0.504	0.073	(	0.454)	0.431
45	3.75	1.50	0.540	0.073	(	0.486)	0.467
46	3.83	1.50	0.540	0.073	(	0.486)	0.467
47	3.92	1.60	0.576	0.073	(	0.518)	0.503
48	4.00	1.60	0.576	0.073	(	0.518)	0.503
49	4.08	1.70	0.612	0.073	(	0.551)	0.539
50	4.17	1.80	0.648	0.073	(	0.583)	0.575

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51   4.25     1.90      0.684          0.073    (  0.616)        0.611
52   4.33     2.00      0.720          0.073    (  0.648)        0.647
53   4.42     2.10      0.756          0.073    (  0.680)        0.683
54   4.50     2.10      0.756          0.073    (  0.680)        0.683
55   4.58     2.20      0.792          0.073    (  0.713)        0.719
56   4.67     2.30      0.828          0.073    (  0.745)        0.755
57   4.75     2.40      0.864          0.073    (  0.778)        0.791
58   4.83     2.40      0.864          0.073    (  0.778)        0.791
59   4.92     2.50      0.900          0.073    (  0.810)        0.827
60   5.00     2.60      0.936          0.073    (  0.842)        0.863
61   5.08     3.10      1.116          0.073    (  1.004)        1.043
62   5.17     3.60      1.296          0.073    (  1.166)        1.223
63   5.25     3.90      1.404          0.073    (  1.263)        1.331
64   5.33     4.20      1.512          0.073    (  1.361)        1.439
65   5.42     4.70      1.692          0.073    (  1.523)        1.619
66   5.50     5.60      2.016          0.073    (  1.814)        1.943
67   5.58     1.90      0.684          0.073    (  0.616)        0.611
68   5.67     0.90      0.324          0.073    (  0.292)        0.251
69   5.75     0.60      0.216          0.073    (  0.194)        0.143
70   5.83     0.50      0.180          0.073    (  0.162)        0.107
71   5.92     0.30      0.108          0.073    (  0.097)        0.035
72   6.00     0.20      0.072       (  0.073)       0.065        0.007
              (Loss Rate Not Used)
   Sum =     100.0                                    Sum =    30.8
      Flood volume = Effective rainfall      2.56(In)
       times area      27.6(Ac.)/[(In)/(Ft.)] =       5.9(Ac.Ft)
      Total soil loss =      0.44(In)
      Total soil loss =     1.002(Ac.Ft)
      Total rainfall =      3.00(In)
      Flood volume =      256561.1 Cubic Feet
      Total soil loss =       43647.8 Cubic Feet
      ---------------------------------------------------------------------
       Peak flow rate of this hydrograph =     44.526(CFS)
      ---------------------------------------------------------------------
      +++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                          6 - H O U R    S T O R M
                     R u n o f f      H y d r o g r a p h
      ---------------------------------------------------------------------
                   Hydrograph in   5   Minute intervals ((CFS))

      ---------------------------------------------------------------------
Time(h+m) Volume Ac.Ft   Q(CFS)  0       12.5      25.0      37.5      50.0
---------------------------------------------------------------------------
  0+ 5       0.0045      0.66  Q         |         |         |         |
  0+10       0.0206      2.34  VQ        |         |         |         |
  0+15       0.0430      3.25  V Q       |         |         |         |
  0+20       0.0678      3.59  V Q       |         |         |         |
  0+25       0.0937      3.77  V  Q      |         |         |         |
  0+30       0.1219      4.09  V  Q      |         |         |         |
  0+35       0.1539      4.64  |V Q      |         |         |         |
  0+40       0.1871      4.83  |V Q      |         |         |         |
  0+45       0.2209      4.90  |V Q      |         |         |         |
  0+50       0.2548      4.94  |V Q      |         |         |         |
  0+55       0.2890      4.96  |V Q      |         |         |         |
  1+ 0       0.3248      5.19  | V Q     |         |         |         |
  1+ 5       0.3640      5.69  | V Q     |         |         |         |
  1+10       0.4042      5.83  | V Q     |         |         |         |
  1+15       0.4448      5.90  |  VQ     |         |         |         |
  1+20       0.4857      5.94  |  VQ     |         |         |         |
  1+25       0.5267      5.96  |  VQ     |         |         |         |
  1+30       0.5679      5.97  |  VQ     |         |         |         |
  1+35       0.6091      5.98  |   Q     |         |         |         |
  1+40       0.6503      5.98  |   Q     |         |         |         |
  1+45       0.6915      5.98  |   Q     |         |         |         |
  1+50       0.7326      5.98  |   Q     |         |         |         |
  1+55       0.7738      5.98  |   QV    |         |         |         |
  2+ 0       0.8166      6.20  |   QV    |         |         |         |
  2+ 5       0.8611      6.47  |    Q    |         |         |         |
  2+10       0.9048      6.35  |    QV   |         |         |         |
  2+15       0.9514      6.76  |    QV   |         |         |         |
  2+20       0.9987      6.87  |    QV   |         |         |         |
  2+25       1.0464      6.92  |    Q V  |         |         |         |
  2+30       1.0943      6.95  |    Q V  |         |         |         |
  2+35       1.1423      6.97  |    Q V  |         |         |         |
  2+40       1.1903      6.97  |    Q  V |         |         |         |
  2+45       1.2399      7.20  |    Q  V |         |         |         |
  2+50       1.2929      7.69  |     Q V |         |         |         |
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   2+55       1.3469      7.84  |     Q  V|         |         |         |
   3+ 0       1.4013      7.90  |     Q  V|         |         |         |
   3+ 5       1.4560      7.94  |     Q  V|         |         |         |
   3+10       1.5123      8.18  |     Q   V         |         |         |
   3+15       1.5721      8.68  |     Q   V         |         |         |
   3+20       1.6330      8.84  |      Q  |V        |         |         |
   3+25       1.6958      9.12  |      Q  |V        |         |         |
   3+30       1.7638      9.87  |      Q  |V        |         |         |
   3+35       1.8378     10.75  |       Q | V       |         |         |
   3+40       1.9167     11.46  |        Q|  V      |         |         |
   3+45       1.9989     11.93  |        Q|  V      |         |         |
   3+50       2.0854     12.55  |         Q   V     |         |         |
   3+55       2.1748     12.99  |         Q   V     |         |         |
   4+ 0       2.2684     13.59  |         Q    V    |         |         |
   4+ 5       2.3648     14.01  |         |Q    V   |         |         |
   4+10       2.4669     14.82  |         |Q    V   |         |         |
   4+15       2.5751     15.72  |         | Q    V  |         |         |
   4+20       2.6900     16.67  |         |  Q    V |         |         |
   4+25       2.8114     17.64  |         |   Q    V|         |         |
   4+30       2.9382     18.41  |         |   Q    V|         |         |
   4+35       3.0684     18.91  |         |    Q    V         |         |
   4+40       3.2046     19.77  |         |    Q    |V        |         |
   4+45       3.3471     20.70  |         |     Q   | V       |         |
   4+50       3.4948     21.44  |         |      Q  |  V      |         |
   4+55       3.6459     21.93  |         |      Q  |   V     |         |
   5+ 0       3.8027     22.78  |         |       Q |    V    |         |
   5+ 5       3.9721     24.59  |         |        Q|     V   |         |
   5+10       4.1677     28.40  |         |         | Q     V |         |
   5+15       4.3904     32.35  |         |         |    Q   V|         |
   5+20       4.6355     35.59  |         |         |       Q |V        |
   5+25       4.9051     39.14  |         |         |         |Q V      |
   5+30       5.2118     44.53  |         |         |         |    Q    |
   5+35       5.5006     41.93  |         |         |         |  Q   V  |
   5+40       5.6627     23.54  |         |       Q |         |       V |
   5+45       5.7564     13.61  |         |Q        |         |        V|
   5+50       5.8154      8.56  |     Q   |         |         |        V|
   5+55       5.8532      5.49  |   Q     |         |         |        V|
   6+ 0       5.8736      2.96  | Q       |         |         |        V|
   6+ 5       5.8835      1.43  |Q        |         |         |        V|
   6+10       5.8871      0.53  Q         |         |         |        V|
   6+15       5.8887      0.23  Q         |         |         |        V|
   6+20       5.8894      0.10  Q         |         |         |        V|
   6+25       5.8897      0.04  Q         |         |         |        V|
   6+30       5.8898      0.01  Q         |         |         |        V|
   6+35       5.8898      0.00  Q         |         |         |         V
-------------------------------------------------------------------------
```

```
       U n i t   H y d r o g r a p h   A n a l y s i s

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              Study date  08/21/25 File: TRIB2A3100.out

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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978


Program License Serial Number 5006

----------------------------------------------------------------------
 English (in-lb) Input Units Used
 English Rainfall Data (Inches) Input Values Used

 English Units used in output format



----------------------------------------------------------------------
----------------------------------------------------------------------
Drainage Area =     338.72(Ac.)  =      0.529 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment =     338.72(Ac.)  =      0.529 Sq. Mi.
Length along longest watercourse =    7413.00(Ft.)
Length along longest watercourse measured to centroid =    3649.00(Ft.)
Length along longest watercourse =      1.404 Mi.
Length along longest watercourse measured to centroid =      0.691 Mi.
Difference in elevation =     382.00(Ft.)
Slope along watercourse =    272.0842 Ft./Mi.
Average Manning's 'N' = 0.030
Lag time =    0.245 Hr.
Lag time =    14.72 Min.
25% of lag time =     3.68 Min.
40% of lag time =     5.89 Min.
Unit time =     5.00 Min.
Duration of storm = 3 Hour(s)
User Entered Base Flow =     0.00(CFS)

2 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
      338.72           0.80                270.98

100 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
      338.72           2.00                677.44

STORM EVENT (YEAR) =  100.00
Area Averaged 2-Year Rainfall =    0.800(In)
Area Averaged 100-Year Rainfall =    2.000(In)

Point rain (area averaged) =    2.000(In)
Areal adjustment factor =   99.85 %
Adjusted average point rain =    1.997(In)

Sub-Area Data:
Area(Ac.)         Runoff Index   Impervious %
   338.720           75.00         0.318
 Total Area Entered =    338.72(Ac.)


RI    RI   Infil. Rate Impervious   Adj. Infil. Rate  Area%     F
AMC2 AMC-3     (In/Hr)    (Dec.%)     (In/Hr)      (Dec.)    (In/Hr)
75.0  88.0      0.153     0.318        0.109       1.000      0.109
                                                  Sum (F) =   0.109
Area averaged mean soil loss (F) (In/Hr) =  0.109
Minimum soil loss rate ((In/Hr)) =  0.055
(for 24 hour storm duration)
Soil low loss rate (decimal) =   0.646
```

U n i t H y d r o g r a p h
VALLEY S-Curve

Unit Hydrograph Data

Unit time period (hrs)		Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	33.967	3.439	11.739
2	0.167	67.934	13.329	45.501
3	0.250	101.901	22.377	76.388
4	0.333	135.868	19.896	67.920
5	0.417	169.835	10.836	36.992
6	0.500	203.802	6.157	21.017
7	0.583	237.769	4.412	15.060
8	0.667	271.736	3.446	11.762
9	0.750	305.703	2.788	9.516
10	0.833	339.671	2.182	7.447
11	0.917	373.638	1.906	6.508
12	1.000	407.605	1.509	5.153
13	1.083	441.572	1.210	4.130
14	1.167	475.539	1.068	3.645
15	1.250	509.506	1.010	3.449
16	1.333	543.473	0.818	2.791
17	1.417	577.440	0.703	2.400
18	1.500	611.407	0.606	2.070
19	1.583	645.374	0.506	1.726
20	1.667	679.341	0.425	1.450
21	1.750	713.308	0.341	1.164
22	1.833	747.275	0.340	1.160
23	1.917	781.242	0.340	1.160
24	2.000	815.209	0.357	1.220
			Sum = 100.000	Sum= 341.366

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr) Max	Low	Effective (In/Hr)
1	0.08	1.30	0.312	0.109	(0.201)	0.202
2	0.17	1.30	0.312	0.109	(0.201)	0.202
3	0.25	1.10	0.264	0.109	(0.170)	0.155
4	0.33	1.50	0.359	0.109	(0.232)	0.250
5	0.42	1.50	0.359	0.109	(0.232)	0.250
6	0.50	1.80	0.431	0.109	(0.278)	0.322
7	0.58	1.50	0.359	0.109	(0.232)	0.250
8	0.67	1.80	0.431	0.109	(0.278)	0.322
9	0.75	1.80	0.431	0.109	(0.278)	0.322
10	0.83	1.50	0.359	0.109	(0.232)	0.250
11	0.92	1.60	0.383	0.109	(0.248)	0.274
12	1.00	1.80	0.431	0.109	(0.278)	0.322
13	1.08	2.20	0.527	0.109	(0.340)	0.418
14	1.17	2.20	0.527	0.109	(0.340)	0.418
15	1.25	2.20	0.527	0.109	(0.340)	0.418
16	1.33	2.00	0.479	0.109	(0.309)	0.370
17	1.42	2.60	0.623	0.109	(0.402)	0.514
18	1.50	2.70	0.647	0.109	(0.418)	0.538
19	1.58	2.40	0.575	0.109	(0.371)	0.466
20	1.67	2.70	0.647	0.109	(0.418)	0.538
21	1.75	3.30	0.791	0.109	(0.511)	0.682
22	1.83	3.10	0.743	0.109	(0.480)	0.634
23	1.92	2.90	0.695	0.109	(0.449)	0.586
24	2.00	3.00	0.719	0.109	(0.464)	0.610
25	2.08	3.10	0.743	0.109	(0.480)	0.634
26	2.17	4.20	1.007	0.109	(0.650)	0.897
27	2.25	5.00	1.198	0.109	(0.774)	1.089
28	2.33	3.50	0.839	0.109	(0.542)	0.730
29	2.42	6.80	1.630	0.109	(1.052)	1.521
30	2.50	7.30	1.749	0.109	(1.129)	1.640
31	2.58	8.20	1.965	0.109	(1.269)	1.856
32	2.67	5.90	1.414	0.109	(0.913)	1.305
33	2.75	2.00	0.479	0.109	(0.309)	0.370
34	2.83	1.80	0.431	0.109	(0.278)	0.322

```
35   2.92     1.80      0.431          0.109    (  0.278)        0.322
36   3.00     0.60      0.144       (  0.109)       0.093        0.051
            (Loss Rate Not Used)
   Sum =     100.0                                  Sum =    20.1
      Flood volume = Effective rainfall      1.67(In)
       times area     338.7(Ac.)/[(In)/(Ft.)] =      47.2(Ac.Ft)
      Total soil loss =      0.33(In)
      Total soil loss =     9.198(Ac.Ft)
      Total rainfall =      2.00(In)
      Flood volume =     2054809.8 Cubic Feet
      Total soil loss =      400653.2 Cubic Feet
      ---------------------------------------------------------------------
       Peak flow rate of this hydrograph =    446.027(CFS)
      ---------------------------------------------------------------------
      +++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                          3 - H O U R    S T O R M
                     R u n o f f     H y d r o g r a p h
      ---------------------------------------------------------------------
                   Hydrograph in   5   Minute intervals ((CFS))

      ---------------------------------------------------------------------
Time(h+m) Volume Ac.Ft   Q(CFS)  0      125.0     250.0     375.0     500.0
-------------------------------------------------------------------------
  0+ 5       0.0164      2.38  Q         |         |         |         |
  0+10       0.0962     11.60  Q         |         |         |         |
  0+15       0.2788     26.51  V Q       |         |         |         |
  0+20       0.5488     39.21  V  Q      |         |         |         |
  0+25       0.8753     47.40  V  Q      |         |         |         |
  0+30       1.2649     56.57  |V  Q     |         |         |         |
  0+35       1.7249     66.79  |V   Q    |         |         |         |
  0+40       2.2400     74.78  |V   Q    |         |         |         |
  0+45       2.7955     80.67  | V   Q   |         |         |         |
  0+50       3.3843     85.48  | V   Q   |         |         |         |
  0+55       3.9918     88.22  |  V   Q  |         |         |         |
  1+ 0       4.5993     88.21  |  V   Q  |         |         |         |
  1+ 5       5.2259     90.98  |   V  Q  |         |         |         |
  1+10       5.9146    100.01  |    V  Q |         |         |         |
  1+15       6.6836    111.66  |    V  Q |         |         |         |
  1+20       7.5115    120.21  |     V  Q|         |         |         |
  1+25       8.3716    124.89  |      V Q|         |         |         |
  1+30       9.2766    131.40  |      V  Q         |         |         |
  1+35      10.2540    141.92  |       V |Q        |         |         |
  1+40      11.2962    151.32  |        V| Q       |         |         |
  1+45      12.3868    158.35  |         V Q       |         |         |
  1+50      13.5544    169.54  |         |V Q      |         |         |
  1+55      14.8169    183.32  |         | V Q     |         |         |
  2+ 0      16.1341    191.25  |         |  V Q    |         |         |
  2+ 5      17.4660    193.39  |         |   VQ    |         |         |
  2+10      18.8378    199.19  |         |    Q    |         |         |
  2+15      20.3385    217.91  |         |      Q  |         |         |
  2+20      22.0347    246.28  |         |       VQ|         |         |
  2+25      23.9232    274.21  |         |         VQ        |         |
  2+30      26.0487    308.63  |         |          | V Q    |         |
  2+35      28.5750    366.82  |         |          |   V    Q|        |
  2+40      31.5289    428.89  |         |          |     V   |   Q     |
  2+45      34.6007    446.03  |         |          |         V|    Q    |
  2+50      37.3334    396.79  |         |          |          |Q        |
  2+55      39.4582    308.53  |         |          |   Q      |  V      |
  3+ 0      41.0681    233.76  |         |       Q  |          |   V     |
  3+ 5      42.3346    183.89  |         |   Q      |          |    V    |
  3+10      43.3042    140.79  |         |Q         |          |     V   |
  3+15      44.0288    105.21  |       Q  |         |          |      V  |
  3+20      44.5914     81.68  |     Q    |         |          |      V  |
  3+25      45.0462     66.05  |    Q     |         |          |       V |
  3+30      45.4211     54.43  |   Q      |         |          |       V |
  3+35      45.7342     45.46  |  Q       |         |          |       V |
  3+40      45.9986     38.39  |  Q       |         |          |        V|
  3+45      46.2235     32.66  | Q        |         |          |        V|
  3+50      46.4129     27.49  | Q        |         |          |        V|
  3+55      46.5714     23.02  |Q         |         |          |        V|
  4+ 0      46.7055     19.47  |Q         |         |          |        V|
  4+ 5      46.8181     16.35  |Q         |         |          |        V|
  4+10      46.9105     13.41  |Q         |         |          |        V|
  4+15      46.9851     10.83  Q          |         |          |        V|
  4+20      47.0492      9.32  Q          |         |          |        V|
  4+25      47.0990      7.23  Q          |         |          |        V|
  4+30      47.1344      5.14  Q          |         |          |        V|
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    4+35      47.1540      2.85  Q         |         |         |        V|
    4+40      47.1627      1.26  Q         |         |         |        V|
    4+45      47.1684      0.83  Q         |         |         |        V|
    4+50      47.1715      0.45  Q         |         |         |        V|
    4+55      47.1719      0.06  Q         |         |         |         V
-------------------------------------------------------------------------
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       U n i t   H y d r o g r a p h   A n a l y s i s

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              Study date  08/21/25 File: TRIB2A6100.out


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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978


Program License Serial Number 5006

------------------------------------------------------------------------
 English (in-lb) Input Units Used
 English Rainfall Data (Inches) Input Values Used

 English Units used in output format



------------------------------------------------------------------------
------------------------------------------------------------------------
Drainage Area =     338.72(Ac.)  =      0.529 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment =     338.72(Ac.)  =      0.529 Sq. Mi.
Length along longest watercourse =    7413.00(Ft.)
Length along longest watercourse measured to centroid =    3649.00(Ft.)
Length along longest watercourse =      1.404 Mi.
Length along longest watercourse measured to centroid =      0.691 Mi.
Difference in elevation =     382.00(Ft.)
Slope along watercourse =    272.0842 Ft./Mi.
Average Manning's 'N' = 0.030
Lag time =    0.245 Hr.
Lag time =    14.72 Min.
25% of lag time =     3.68 Min.
40% of lag time =     5.89 Min.
Unit time =     5.00 Min.
Duration of storm = 6 Hour(s)
User Entered Base Flow =     0.00(CFS)

2 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
      338.72           1.10                372.59

100 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
      338.72           3.00               1016.16

STORM EVENT (YEAR) =  100.00
Area Averaged 2-Year Rainfall =    1.100(In)
Area Averaged 100-Year Rainfall =    3.000(In)

Point rain (area averaged) =    3.000(In)
Areal adjustment factor =   99.88 %
Adjusted average point rain =    2.997(In)

Sub-Area Data:
Area(Ac.)         Runoff Index   Impervious %
   338.720           75.00         0.318
 Total Area Entered =    338.72(Ac.)


RI    RI   Infil. Rate Impervious   Adj. Infil. Rate  Area%     F
AMC2 AMC-3     (In/Hr)    (Dec.%)     (In/Hr)      (Dec.)    (In/Hr)
75.0  88.0      0.153     0.318        0.109       1.000      0.109
                                                  Sum (F) =   0.109
Area averaged mean soil loss (F) (In/Hr) =  0.109
Minimum soil loss rate ((In/Hr)) =  0.055
(for 24 hour storm duration)
Soil low loss rate (decimal) =   0.646
```

U n i t H y d r o g r a p h
VALLEY S-Curve

Unit Hydrograph Data

Unit time period (hrs)		Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	33.967	3.439	11.739
2	0.167	67.934	13.329	45.501
3	0.250	101.901	22.377	76.388
4	0.333	135.868	19.896	67.920
5	0.417	169.835	10.836	36.992
6	0.500	203.802	6.157	21.017
7	0.583	237.769	4.412	15.060
8	0.667	271.736	3.446	11.762
9	0.750	305.703	2.788	9.516
10	0.833	339.671	2.182	7.447
11	0.917	373.638	1.906	6.508
12	1.000	407.605	1.509	5.153
13	1.083	441.572	1.210	4.130
14	1.167	475.539	1.068	3.645
15	1.250	509.506	1.010	3.449
16	1.333	543.473	0.818	2.791
17	1.417	577.440	0.703	2.400
18	1.500	611.407	0.606	2.070
19	1.583	645.374	0.506	1.726
20	1.667	679.341	0.425	1.450
21	1.750	713.308	0.341	1.164
22	1.833	747.275	0.340	1.160
23	1.917	781.242	0.340	1.160
24	2.000	815.209	0.357	1.220
			Sum = 100.000	Sum= 341.366

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr) Max	Low	Effective (In/Hr)
1	0.08	0.50	0.180	0.109	(0.116)	0.071
2	0.17	0.60	0.216	0.109	(0.139)	0.107
3	0.25	0.60	0.216	0.109	(0.139)	0.107
4	0.33	0.60	0.216	0.109	(0.139)	0.107
5	0.42	0.60	0.216	0.109	(0.139)	0.107
6	0.50	0.70	0.252	0.109	(0.163)	0.143
7	0.58	0.70	0.252	0.109	(0.163)	0.143
8	0.67	0.70	0.252	0.109	(0.163)	0.143
9	0.75	0.70	0.252	0.109	(0.163)	0.143
10	0.83	0.70	0.252	0.109	(0.163)	0.143
11	0.92	0.70	0.252	0.109	(0.163)	0.143
12	1.00	0.80	0.288	0.109	(0.186)	0.179
13	1.08	0.80	0.288	0.109	(0.186)	0.179
14	1.17	0.80	0.288	0.109	(0.186)	0.179
15	1.25	0.80	0.288	0.109	(0.186)	0.179
16	1.33	0.80	0.288	0.109	(0.186)	0.179
17	1.42	0.80	0.288	0.109	(0.186)	0.179
18	1.50	0.80	0.288	0.109	(0.186)	0.179
19	1.58	0.80	0.288	0.109	(0.186)	0.179
20	1.67	0.80	0.288	0.109	(0.186)	0.179
21	1.75	0.80	0.288	0.109	(0.186)	0.179
22	1.83	0.80	0.288	0.109	(0.186)	0.179
23	1.92	0.80	0.288	0.109	(0.186)	0.179
24	2.00	0.90	0.324	0.109	(0.209)	0.215
25	2.08	0.80	0.288	0.109	(0.186)	0.179
26	2.17	0.90	0.324	0.109	(0.209)	0.215
27	2.25	0.90	0.324	0.109	(0.209)	0.215
28	2.33	0.90	0.324	0.109	(0.209)	0.215
29	2.42	0.90	0.324	0.109	(0.209)	0.215
30	2.50	0.90	0.324	0.109	(0.209)	0.215
31	2.58	0.90	0.324	0.109	(0.209)	0.215
32	2.67	0.90	0.324	0.109	(0.209)	0.215
33	2.75	1.00	0.360	0.109	(0.232)	0.251
34	2.83	1.00	0.360	0.109	(0.232)	0.251

```
35   2.92     1.00      0.360          0.109    (  0.232)        0.251
36   3.00     1.00      0.360          0.109    (  0.232)        0.251
37   3.08     1.00      0.360          0.109    (  0.232)        0.251
38   3.17     1.10      0.396          0.109    (  0.255)        0.286
39   3.25     1.10      0.396          0.109    (  0.255)        0.286
40   3.33     1.10      0.396          0.109    (  0.255)        0.286
41   3.42     1.20      0.431          0.109    (  0.279)        0.322
42   3.50     1.30      0.467          0.109    (  0.302)        0.358
43   3.58     1.40      0.503          0.109    (  0.325)        0.394
44   3.67     1.40      0.503          0.109    (  0.325)        0.394
45   3.75     1.50      0.539          0.109    (  0.348)        0.430
46   3.83     1.50      0.539          0.109    (  0.348)        0.430
47   3.92     1.60      0.575          0.109    (  0.371)        0.466
48   4.00     1.60      0.575          0.109    (  0.371)        0.466
49   4.08     1.70      0.611          0.109    (  0.395)        0.502
50   4.17     1.80      0.647          0.109    (  0.418)        0.538
51   4.25     1.90      0.683          0.109    (  0.441)        0.574
52   4.33     2.00      0.719          0.109    (  0.464)        0.610
53   4.42     2.10      0.755          0.109    (  0.488)        0.646
54   4.50     2.10      0.755          0.109    (  0.488)        0.646
55   4.58     2.20      0.791          0.109    (  0.511)        0.682
56   4.67     2.30      0.827          0.109    (  0.534)        0.718
57   4.75     2.40      0.863          0.109    (  0.557)        0.754
58   4.83     2.40      0.863          0.109    (  0.557)        0.754
59   4.92     2.50      0.899          0.109    (  0.580)        0.790
60   5.00     2.60      0.935          0.109    (  0.604)        0.826
61   5.08     3.10      1.115          0.109    (  0.720)        1.006
62   5.17     3.60      1.294          0.109    (  0.836)        1.185
63   5.25     3.90      1.402          0.109    (  0.905)        1.293
64   5.33     4.20      1.510          0.109    (  0.975)        1.401
65   5.42     4.70      1.690          0.109    (  1.091)        1.581
66   5.50     5.60      2.014          0.109    (  1.300)        1.905
67   5.58     1.90      0.683          0.109    (  0.441)        0.574
68   5.67     0.90      0.324          0.109    (  0.209)        0.215
69   5.75     0.60      0.216          0.109    (  0.139)        0.107
70   5.83     0.50      0.180          0.109    (  0.116)        0.071
71   5.92     0.30      0.108       (  0.109)       0.070        0.038
72   6.00     0.20      0.072       (  0.109)       0.046        0.025
              (Loss Rate Not Used)
   Sum =     100.0                                  Sum =    28.2
     Flood volume = Effective rainfall      2.35(In)
      times area     338.7(Ac.)/[(In)/(Ft.)] =      66.3(Ac.Ft)
     Total soil loss =      0.65(In)
     Total soil loss =    18.232(Ac.Ft)
     Total rainfall =      3.00(In)
     Flood volume =     2890189.3 Cubic Feet
     Total soil loss =      794176.6 Cubic Feet
     ---------------------------------------------------------------------
      Peak flow rate of this hydrograph =    444.073(CFS)
     ---------------------------------------------------------------------
     +++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                         6 - H O U R    S T O R M
                    R u n o f f      H y d r o g r a p h
     ---------------------------------------------------------------------
                 Hydrograph in   5   Minute intervals ((CFS))

     ---------------------------------------------------------------------
Time(h+m) Volume Ac.Ft   Q(CFS)  0      125.0     250.0     375.0     500.0
-------------------------------------------------------------------------
  0+ 5       0.0057      0.83  Q         |         |         |         |
  0+10       0.0365      4.47  Q         |         |         |         |
  0+15       0.1158     11.51  Q         |         |         |         |
  0+20       0.2472     19.07  VQ        |         |         |         |
  0+25       0.4133     24.13  VQ        |         |         |         |
  0+30       0.6018     27.37  V Q       |         |         |         |
  0+35       0.8142     30.83  V Q       |         |         |         |
  0+40       1.0549     34.95  V Q       |         |         |         |
  0+45       1.3200     38.49  V  Q      |         |         |         |
  0+50       1.6002     40.69  V  Q      |         |         |         |
  0+55       1.8907     42.18  |V Q      |         |         |         |
  1+ 0       2.1919     43.74  |V Q      |         |         |         |
  1+ 5       2.5106     46.28  |V Q      |         |         |         |
  1+10       2.8534     49.77  |V Q      |         |         |         |
  1+15       3.2174     52.86  |V  Q     |         |         |         |
  1+20       3.5945     54.75  | V Q     |         |         |         |
  1+25       3.9799     55.96  | V Q     |         |         |         |
  1+30       4.3716     56.88  | V Q     |         |         |         |
```

1+35	4.7685	57.63	V Q				
1+40	5.1698	58.26	VQ				
1+45	5.5745	58.77	VQ				
1+50	5.9823	59.21	VQ				
1+55	6.3927	59.59	VQ				
2+ 0	6.8084	60.36	Q				
2+ 5	7.2340	61.80	Q				
2+10	7.6713	63.50	VQ				
2+15	8.1188	64.97	VQ				
2+20	8.5784	66.73	Q				
2+25	9.0517	68.72	Q				
2+30	9.5331	69.90	Q				
2+35	10.0192	70.59	QV				
2+40	10.5089	71.09	QV				
2+45	11.0041	71.91	QV				
2+50	11.5130	73.89	QV				
2+55	12.0426	76.90	QV				
3+ 0	12.5905	79.55	QV				
3+ 5	13.1486	81.04	QV				
3+10	13.7159	82.36	Q V				
3+15	14.2988	84.65	Q V				
3+20	14.9044	87.93	QV				
3+25	15.5327	91.23	Q V				
3+30	16.1867	94.96	Q V				
3+35	16.8811	100.82	Q V				
3+40	17.6279	108.43	Q V				
3+45	18.4267	116.00	Q|V				
3+50	19.2717	122.68	Q|V				
3+55	20.1595	128.92	Q V				
4+ 0	21.0896	135.05	Q V				
4+ 5	22.0619	141.18	|Q V				
4+10	23.0791	147.69	|Q V				
4+15	24.1494	155.41	| Q V				
4+20	25.2837	164.70	| Q V				
4+25	26.4881	174.88	| Q V				
4+30	27.7627	185.08	| Q V				
4+35	29.1017	194.42	| Q V				
4+40	30.4990	202.89	| Q V				
4+45	31.9579	211.84	| Q V|			
4+50	33.4842	221.61	| Q V				
4+55	35.0744	230.91	| Q |V				
5+ 0	36.7233	239.41	| Q| V				
5+ 5	38.4459	250.13	| Q V				
5+10	40.2959	268.61	|Q V				
5+15	42.3481	297.98	| Q V				
5+20	44.6496	334.18	| Q				
5+25	47.2064	371.25	| VQ|			
5+30	50.0408	411.55	| V Q				
5+35	53.0991	444.07	| V Q				
5+40	56.0527	428.86	| VQ				
5+45	58.4437	347.17	| Q | V				
5+50	60.1429	246.74	| Q| V				
5+55	61.3689	178.00	| Q V				
6+ 0	62.3103	136.69	| Q V				
6+ 5	63.0584	108.63	| Q V				
6+10	63.6592	87.23	| Q V				
6+15	64.1428	70.22	| Q V				
6+20	64.5390	57.53	| Q V				
6+25	64.8655	47.40	| Q V				
6+30	65.1386	39.66	| Q V				
6+35	65.3709	33.72	| Q V				
6+40	65.5687	28.73	| Q V				
6+45	65.7336	23.94	|Q V				
6+50	65.8714	20.00	|Q V				
6+55	65.9861	16.66	|Q V				
7+ 0	66.0812	13.81	|Q V				
7+ 5	66.1589	11.29	Q V				
7+10	66.2212	9.05	Q V				
7+15	66.2710	7.23	Q V				
7+20	66.3087	5.47	Q V				
7+25	66.3334	3.59	Q V				
7+30	66.3420	1.26	Q V				
7+35	66.3458	0.55	Q V				
7+40	66.3478	0.29	Q V				
7+45	66.3489	0.16	Q V				
7+50	66.3494	0.08	Q V				
7+55	66.3496	0.03	Q V				

```
       U n i t   H y d r o g r a p h   A n a l y s i s

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              Study date  08/21/25 File: TRIB3A3100.out

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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978


Program License Serial Number 5006

----------------------------------------------------------------------
 English (in-lb) Input Units Used
 English Rainfall Data (Inches) Input Values Used

 English Units used in output format



----------------------------------------------------------------------
----------------------------------------------------------------------
Drainage Area =       4.93(Ac.)  =      0.008 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment =       4.93(Ac.)  =      0.008 Sq. Mi.
Length along longest watercourse =     377.00(Ft.)
Length along longest watercourse measured to centroid =     189.00(Ft.)
Length along longest watercourse =      0.071 Mi.
Length along longest watercourse measured to centroid =      0.036 Mi.
Difference in elevation =      13.00(Ft.)
Slope along watercourse =    182.0690 Ft./Mi.
Average Manning's 'N' = 0.030
Lag time =    0.028 Hr.
Lag time =     1.66 Min.
25% of lag time =     0.42 Min.
40% of lag time =     0.67 Min.
Unit time =     5.00 Min.
Duration of storm = 3 Hour(s)
User Entered Base Flow =     0.00(CFS)

2 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
        4.93            0.80                 3.94

100 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
        4.93            2.00                 9.86

STORM EVENT (YEAR) =  100.00
Area Averaged 2-Year Rainfall =    0.800(In)
Area Averaged 100-Year Rainfall =    2.000(In)

Point rain (area averaged) =    2.000(In)
Areal adjustment factor =  100.00 %
Adjusted average point rain =    2.000(In)

Sub-Area Data:
Area(Ac.)         Runoff Index   Impervious %
     4.930           86.00          0.000
 Total Area Entered =      4.93(Ac.)


RI    RI   Infil. Rate Impervious   Adj. Infil. Rate  Area%     F
AMC2 AMC-3     (In/Hr)    (Dec.%)     (In/Hr)      (Dec.)    (In/Hr)
86.0  94.4      0.073     0.000        0.073       1.000      0.073
                                                  Sum (F) =   0.073
Area averaged mean soil loss (F) (In/Hr) =  0.073
Minimum soil loss rate ((In/Hr)) =  0.036
(for 24 hour storm duration)
Soil low loss rate (decimal) =   0.900
```

U n i t H y d r o g r a p h
VALLEY S-Curve

Unit Hydrograph Data

Unit time period (hrs)		Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	300.654	56.747	2.819
2	0.167	601.309	37.092	1.843
3	0.250	901.963	6.161	0.306
		Sum = 100.000	Sum=	4.969

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr) Max	Low	Effective (In/Hr)
1	0.08	1.30	0.312	0.073	(0.281)	0.239
2	0.17	1.30	0.312	0.073	(0.281)	0.239
3	0.25	1.10	0.264	0.073	(0.238)	0.191
4	0.33	1.50	0.360	0.073	(0.324)	0.287
5	0.42	1.50	0.360	0.073	(0.324)	0.287
6	0.50	1.80	0.432	0.073	(0.389)	0.359
7	0.58	1.50	0.360	0.073	(0.324)	0.287
8	0.67	1.80	0.432	0.073	(0.389)	0.359
9	0.75	1.80	0.432	0.073	(0.389)	0.359
10	0.83	1.50	0.360	0.073	(0.324)	0.287
11	0.92	1.60	0.384	0.073	(0.346)	0.311
12	1.00	1.80	0.432	0.073	(0.389)	0.359
13	1.08	2.20	0.528	0.073	(0.475)	0.455
14	1.17	2.20	0.528	0.073	(0.475)	0.455
15	1.25	2.20	0.528	0.073	(0.475)	0.455
16	1.33	2.00	0.480	0.073	(0.432)	0.407
17	1.42	2.60	0.624	0.073	(0.562)	0.551
18	1.50	2.70	0.648	0.073	(0.583)	0.575
19	1.58	2.40	0.576	0.073	(0.518)	0.503
20	1.67	2.70	0.648	0.073	(0.583)	0.575
21	1.75	3.30	0.792	0.073	(0.713)	0.719
22	1.83	3.10	0.744	0.073	(0.670)	0.671
23	1.92	2.90	0.696	0.073	(0.626)	0.623
24	2.00	3.00	0.720	0.073	(0.648)	0.647
25	2.08	3.10	0.744	0.073	(0.670)	0.671
26	2.17	4.20	1.008	0.073	(0.907)	0.935
27	2.25	5.00	1.200	0.073	(1.080)	1.127
28	2.33	3.50	0.840	0.073	(0.756)	0.767
29	2.42	6.80	1.632	0.073	(1.469)	1.559
30	2.50	7.30	1.752	0.073	(1.577)	1.679
31	2.58	8.20	1.968	0.073	(1.771)	1.895
32	2.67	5.90	1.416	0.073	(1.274)	1.343
33	2.75	2.00	0.480	0.073	(0.432)	0.407
34	2.83	1.80	0.432	0.073	(0.389)	0.359
35	2.92	1.80	0.432	0.073	(0.389)	0.359
36	3.00	0.60	0.144	0.073	(0.130)	0.071
		(Loss Rate Not Used)			
Sum =		100.0			Sum = 21.4

Flood volume = Effective rainfall 1.78(In)
times area 4.9(Ac.)/[(In)/(Ft.)] = 0.7(Ac.Ft)
Total soil loss = 0.22(In)
Total soil loss = 0.090(Ac.Ft)
Total rainfall = 2.00(In)
Flood volume = 31882.6 Cubic Feet
Total soil loss = 3908.5 Cubic Feet

Peak flow rate of this hydrograph = 8.920(CFS)

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3 - H O U R S T O R M
R u n o f f H y d r o g r a p h

Hydrograph in 5 Minute intervals ((CFS))

Time(h+m)	Volume Ac.Ft	Q(CFS)	0	2.5	5.0	7.5	10.0
0+ 5	0.0046	0.67	V Q				
0+10	0.0123	1.12	V Q				
0+15	0.0196	1.05	V Q				
0+20	0.0281	1.24	V Q				
0+25	0.0377	1.40	V Q				
0+30	0.0490	1.63	V Q				
0+35	0.0597	1.56	V Q				
0+40	0.0711	1.65	V Q				
0+45	0.0832	1.76	V Q				
0+50	0.0941	1.58	VQ				
0+55	0.1046	1.52	VQ				
1+ 0	0.1161	1.68	Q				
1+ 5	0.1302	2.04	VQ				
1+10	0.1456	2.23	VQ				
1+15	0.1611	2.26	VQ				
1+20	0.1758	2.13	QV				
1+25	0.1926	2.45	QV				
1+30	0.2117	2.76	Q				
1+35	0.2299	2.65	Q V				
1+40	0.2487	2.73	Q V				
1+45	0.2710	3.24	Q V				
1+50	0.2944	3.40	Q V				
1+55	0.3166	3.22	Q V				
2+ 0	0.3385	3.18	Q V				
2+ 5	0.3610	3.28	Q V				
2+10	0.3891	4.07	Q V				
2+15	0.4243	5.11	Q V				
2+20	0.4555	4.53	Q V				
2+25	0.4979	6.16	Q V				
2+30	0.5519	7.85	VQ				
2+35	0.6134	8.92	V Q				
2+40	0.6671	7.80	Q V				
2+45	0.6960	4.21	Q			V	
2+50	0.7110	2.18	Q			V	
2+55	0.7234	1.80	Q			V	
3+ 0	0.7301	0.97	Q			V	
3+ 5	0.7318	0.24	Q			V	
3+10	0.7319	0.02	Q			V	

```
       U n i t   H y d r o g r a p h   A n a l y s i s

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              Study date  08/21/25 File: TRIB3A6100.out


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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978


Program License Serial Number 5006

----------------------------------------------------------------------
 English (in-lb) Input Units Used
 English Rainfall Data (Inches) Input Values Used

 English Units used in output format



----------------------------------------------------------------------
----------------------------------------------------------------------
Drainage Area =       4.93(Ac.)  =      0.008 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment =       4.93(Ac.)  =      0.008 Sq. Mi.
Length along longest watercourse =     377.00(Ft.)
Length along longest watercourse measured to centroid =     189.00(Ft.)
Length along longest watercourse =      0.071 Mi.
Length along longest watercourse measured to centroid =      0.036 Mi.
Difference in elevation =      13.00(Ft.)
Slope along watercourse =    182.0690 Ft./Mi.
Average Manning's 'N' = 0.030
Lag time =    0.028 Hr.
Lag time =     1.66 Min.
25% of lag time =     0.42 Min.
40% of lag time =     0.67 Min.
Unit time =     5.00 Min.
Duration of storm = 6 Hour(s)
User Entered Base Flow =     0.00(CFS)

2 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
        4.93            1.10                 5.42

100 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
        4.93            3.00                14.79

STORM EVENT (YEAR) =  100.00
Area Averaged 2-Year Rainfall =    1.100(In)
Area Averaged 100-Year Rainfall =    3.000(In)

Point rain (area averaged) =    3.000(In)
Areal adjustment factor =  100.00 %
Adjusted average point rain =    3.000(In)

Sub-Area Data:
Area(Ac.)         Runoff Index   Impervious %
     4.930           86.00          0.000
 Total Area Entered =      4.93(Ac.)


RI    RI   Infil. Rate Impervious   Adj. Infil. Rate  Area%     F
AMC2 AMC-3     (In/Hr)    (Dec.%)     (In/Hr)      (Dec.)    (In/Hr)
86.0  94.4      0.073     0.000        0.073       1.000      0.073
                                                  Sum (F) =   0.073
Area averaged mean soil loss (F) (In/Hr) =  0.073
Minimum soil loss rate ((In/Hr)) =  0.036
(for 24 hour storm duration)
Soil low loss rate (decimal) =   0.900
```

U n i t H y d r o g r a p h
VALLEY S-Curve

Unit Hydrograph Data

Unit time period (hrs)		Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	300.654	56.747	2.819
2	0.167	601.309	37.092	1.843
3	0.250	901.963	6.161	0.306
			Sum = 100.000 Sum=	4.969

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr) Max	Low	Effective (In/Hr)
1	0.08	0.50	0.180	0.073	(0.162)	0.107
2	0.17	0.60	0.216	0.073	(0.194)	0.143
3	0.25	0.60	0.216	0.073	(0.194)	0.143
4	0.33	0.60	0.216	0.073	(0.194)	0.143
5	0.42	0.60	0.216	0.073	(0.194)	0.143
6	0.50	0.70	0.252	0.073	(0.227)	0.179
7	0.58	0.70	0.252	0.073	(0.227)	0.179
8	0.67	0.70	0.252	0.073	(0.227)	0.179
9	0.75	0.70	0.252	0.073	(0.227)	0.179
10	0.83	0.70	0.252	0.073	(0.227)	0.179
11	0.92	0.70	0.252	0.073	(0.227)	0.179
12	1.00	0.80	0.288	0.073	(0.259)	0.215
13	1.08	0.80	0.288	0.073	(0.259)	0.215
14	1.17	0.80	0.288	0.073	(0.259)	0.215
15	1.25	0.80	0.288	0.073	(0.259)	0.215
16	1.33	0.80	0.288	0.073	(0.259)	0.215
17	1.42	0.80	0.288	0.073	(0.259)	0.215
18	1.50	0.80	0.288	0.073	(0.259)	0.215
19	1.58	0.80	0.288	0.073	(0.259)	0.215
20	1.67	0.80	0.288	0.073	(0.259)	0.215
21	1.75	0.80	0.288	0.073	(0.259)	0.215
22	1.83	0.80	0.288	0.073	(0.259)	0.215
23	1.92	0.80	0.288	0.073	(0.259)	0.215
24	2.00	0.90	0.324	0.073	(0.292)	0.251
25	2.08	0.80	0.288	0.073	(0.259)	0.215
26	2.17	0.90	0.324	0.073	(0.292)	0.251
27	2.25	0.90	0.324	0.073	(0.292)	0.251
28	2.33	0.90	0.324	0.073	(0.292)	0.251
29	2.42	0.90	0.324	0.073	(0.292)	0.251
30	2.50	0.90	0.324	0.073	(0.292)	0.251
31	2.58	0.90	0.324	0.073	(0.292)	0.251
32	2.67	0.90	0.324	0.073	(0.292)	0.251
33	2.75	1.00	0.360	0.073	(0.324)	0.287
34	2.83	1.00	0.360	0.073	(0.324)	0.287
35	2.92	1.00	0.360	0.073	(0.324)	0.287
36	3.00	1.00	0.360	0.073	(0.324)	0.287
37	3.08	1.00	0.360	0.073	(0.324)	0.287
38	3.17	1.10	0.396	0.073	(0.356)	0.323
39	3.25	1.10	0.396	0.073	(0.356)	0.323
40	3.33	1.10	0.396	0.073	(0.356)	0.323
41	3.42	1.20	0.432	0.073	(0.389)	0.359
42	3.50	1.30	0.468	0.073	(0.421)	0.395
43	3.58	1.40	0.504	0.073	(0.454)	0.431
44	3.67	1.40	0.504	0.073	(0.454)	0.431
45	3.75	1.50	0.540	0.073	(0.486)	0.467
46	3.83	1.50	0.540	0.073	(0.486)	0.467
47	3.92	1.60	0.576	0.073	(0.518)	0.503
48	4.00	1.60	0.576	0.073	(0.518)	0.503
49	4.08	1.70	0.612	0.073	(0.551)	0.539
50	4.17	1.80	0.648	0.073	(0.583)	0.575
51	4.25	1.90	0.684	0.073	(0.616)	0.611
52	4.33	2.00	0.720	0.073	(0.648)	0.647
53	4.42	2.10	0.756	0.073	(0.680)	0.683
54	4.50	2.10	0.756	0.073	(0.680)	0.683
55	4.58	2.20	0.792	0.073	(0.713)	0.719

```
56   4.67     2.30      0.828          0.073    (  0.745)        0.755
57   4.75     2.40      0.864          0.073    (  0.778)        0.791
58   4.83     2.40      0.864          0.073    (  0.778)        0.791
59   4.92     2.50      0.900          0.073    (  0.810)        0.827
60   5.00     2.60      0.936          0.073    (  0.842)        0.863
61   5.08     3.10      1.116          0.073    (  1.004)        1.043
62   5.17     3.60      1.296          0.073    (  1.166)        1.223
63   5.25     3.90      1.404          0.073    (  1.264)        1.331
64   5.33     4.20      1.512          0.073    (  1.361)        1.439
65   5.42     4.70      1.692          0.073    (  1.523)        1.619
66   5.50     5.60      2.016          0.073    (  1.814)        1.943
67   5.58     1.90      0.684          0.073    (  0.616)        0.611
68   5.67     0.90      0.324          0.073    (  0.292)        0.251
69   5.75     0.60      0.216          0.073    (  0.194)        0.143
70   5.83     0.50      0.180          0.073    (  0.162)        0.107
71   5.92     0.30      0.108          0.073    (  0.097)        0.035
72   6.00     0.20      0.072       (  0.073)       0.065        0.007
             (Loss Rate Not Used)
   Sum =     100.0                                    Sum =    30.8
      Flood volume = Effective rainfall      2.56(In)
       times area       4.9(Ac.)/[(In)/(Ft.)] =       1.1(Ac.Ft)
      Total soil loss =      0.44(In)
      Total soil loss =     0.179(Ac.Ft)
      Total rainfall =      3.00(In)
      Flood volume =       45881.8 Cubic Feet
      Total soil loss =        7805.0 Cubic Feet
      ---------------------------------------------------------------------
       Peak flow rate of this hydrograph =      8.908(CFS)
      ---------------------------------------------------------------------
      +++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                          6 - H O U R    S T O R M
                     R u n o f f     H y d r o g r a p h
      ---------------------------------------------------------------------
                  Hydrograph in   5   Minute intervals ((CFS))

      ---------------------------------------------------------------------
Time(h+m) Volume Ac.Ft   Q(CFS)  0        2.5       5.0       7.5      10.0
---------------------------------------------------------------------------
  0+ 5       0.0021      0.30  VQ        |         |         |         |
  0+10       0.0062      0.60  V Q       |         |         |         |
  0+15       0.0111      0.70  V Q       |         |         |         |
  0+20       0.0160      0.71  V Q       |         |         |         |
  0+25       0.0209      0.71  V Q       |         |         |         |
  0+30       0.0265      0.81  |V Q      |         |         |         |
  0+35       0.0325      0.88  |V Q      |         |         |         |
  0+40       0.0387      0.89  |V Q      |         |         |         |
  0+45       0.0448      0.89  |V Q      |         |         |         |
  0+50       0.0509      0.89  |V Q      |         |         |         |
  0+55       0.0571      0.89  | VQ      |         |         |         |
  1+ 0       0.0639      0.99  | VQ      |         |         |         |
  1+ 5       0.0712      1.06  | V Q     |         |         |         |
  1+10       0.0786      1.07  | V Q     |         |         |         |
  1+15       0.0859      1.07  |  VQ     |         |         |         |
  1+20       0.0933      1.07  |  VQ     |         |         |         |
  1+25       0.1007      1.07  |  VQ     |         |         |         |
  1+30       0.1080      1.07  |   Q     |         |         |         |
  1+35       0.1154      1.07  |   Q     |         |         |         |
  1+40       0.1228      1.07  |   Q     |         |         |         |
  1+45       0.1301      1.07  |   Q     |         |         |         |
  1+50       0.1375      1.07  |   QV    |         |         |         |
  1+55       0.1449      1.07  |   QV    |         |         |         |
  2+ 0       0.1529      1.17  |   QV    |         |         |         |
  2+ 5       0.1608      1.14  |   Q V   |         |         |         |
  2+10       0.1689      1.18  |   Q V   |         |         |         |
  2+15       0.1774      1.24  |   Q V   |         |         |         |
  2+20       0.1860      1.25  |   Q  V  |         |         |         |
  2+25       0.1946      1.25  |   Q  V  |         |         |         |
  2+30       0.2032      1.25  |   Q  V  |         |         |         |
  2+35       0.2118      1.25  |   Q   V |         |         |         |
  2+40       0.2204      1.25  |   Q   V |         |         |         |
  2+45       0.2297      1.35  |    Q  V |         |         |         |
  2+50       0.2395      1.42  |    Q   V|         |         |         |
  2+55       0.2493      1.43  |    Q   V|         |         |         |
  3+ 0       0.2591      1.43  |    Q   V|         |         |         |
  3+ 5       0.2690      1.43  |    Q    V         |         |         |
  3+10       0.2795      1.53  |     Q   V         |         |         |
  3+15       0.2905      1.60  |     Q   |V        |         |         |
```

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   3+20       0.3016      1.61  |     Q   |V        |         |         |
   3+25       0.3133      1.71  |     Q   |V        |         |         |
   3+30       0.3262      1.88  |      Q  | V       |         |         |
   3+35       0.3404      2.06  |       Q | V       |         |         |
   3+40       0.3551      2.13  |       Q |  V      |         |         |
   3+45       0.3705      2.25  |       Q |   V     |         |         |
   3+50       0.3865      2.31  |        Q|   V     |         |         |
   3+55       0.4032      2.42  |        Q|    V    |         |         |
   4+ 0       0.4203      2.49  |        Q|    V    |         |         |
   4+ 5       0.4382      2.60  |         Q     V   |         |         |
   4+10       0.4573      2.77  |         |Q     V  |         |         |
   4+15       0.4776      2.95  |         |Q      V |         |         |
   4+20       0.4992      3.13  |         | Q     V |         |         |
   4+25       0.5220      3.31  |         |  Q     V|         |         |
   4+30       0.5453      3.39  |         |  Q      V         |         |
   4+35       0.5694      3.50  |         |  Q      |V        |         |
   4+40       0.5946      3.67  |         |   Q     | V       |         |
   4+45       0.6211      3.84  |         |    Q    |  V      |         |
   4+50       0.6481      3.92  |         |    Q    |   V     |         |
   4+55       0.6759      4.03  |         |     Q   |    V    |         |
   5+ 0       0.7048      4.20  |         |     Q   |     V   |         |
   5+ 5       0.7378      4.79  |         |        Q|       V |         |
   5+10       0.7766      5.64  |         |         | Q      V|         |
   5+15       0.8202      6.33  |         |         |    Q    |V        |
   5+20       0.8677      6.89  |         |         |      Q  | V       |
   5+25       0.9202      7.63  |         |         |         Q   V     |
   5+30       0.9816      8.91  |         |         |         |    Q V  |
   5+35       1.0215      5.80  |         |         |  Q      |       V |
   5+40       1.0383      2.43  |        Q|         |         |        V|
   5+45       1.0455      1.05  |   Q     |         |         |        V|
   5+50       1.0500      0.64  | Q       |         |         |        V|
   5+55       1.0523      0.34  |Q        |         |         |        V|
   6+ 0       1.0531      0.12  Q         |         |         |        V|
   6+ 5       1.0533      0.02  Q         |         |         |        V|
   6+10       1.0533      0.00  Q         |         |         |        V|
-------------------------------------------------------------------------
```

Post-Development Confluenced Unit Hydrographs

```
                  FLOOD HYDROGRAPH ROUTING PROGRAM
            Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2005
                        Study date: 08/21/25

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Program License Serial Number 5006

------------------------------------------------------------------------
******************** HYDROGRAPH INFORMATION **********************

               From study/file name: TRIB1A3100.rte
****************************HYDROGRAPH DATA*****************************
               Number of intervals =    69
               Time interval =    5.0 (Min.)
               Maximum/Peak flow rate =      523.717 (CFS)
               Total volume =      65.328 (Ac.Ft)
       Status of hydrographs being held in storage
                  Stream 1  Stream 2  Stream 3  Stream 4  Stream 5
       Peak (CFS)      0.000     0.000     0.000     0.000     0.000
       Vol (Ac.Ft)      0.000     0.000     0.000     0.000     0.000
************************************************************************



++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       11.000 to Point/Station       13.000
**** STREAM ROUTING SCS CONVEX METHOD ****
________________________________________________________________________
HYDROGRAPH STREAM ROUTING DATA:
Length of stream =   2737.00 (Ft.)
Elevation difference =   71.00 (Ft.)
Slope of channel =  0.025941 (Vert/Horiz)
Channel type - Improved Channel


Channel length =  2737.00(Ft.)     Elevation difference =  71.00(Ft.)
Channel evaluation using mean flow rate of hydrograph
Channel base width  =    5.000(Ft.)
Slope or 'Z' of left channel bank =   1.000
Slope or 'Z' of right channel bank =   1.000
Manning's 'N'    = 0.045
Maximum depth of channel  =   20.000(Ft.)
Flow(q) thru subarea =    213.236(CFS)
Depth of flow =     3.213(Ft.)
Average velocity =     8.082(Ft/s)
Total flow rate =   213.236(CFS)
Channel flow top width =   11.425(Ft.)
Depth of flow in channel =   3.21(Ft.)
Total number of channels (same dimensions) = 1
Flow Velocity =    8.08(Ft/s)
Travel time  =    0.00 min.
Individual channel flow =  213.236(CFS)
Total capacity of improved channels =    213.236(CFS)
Critical Depth in Channel =    3.09(Ft.)


Channel evaluation using maximum flow rate of hydrograph
Flow(q) thru subarea =    523.717(CFS)
Depth of flow =     5.094(Ft.)
Average velocity =    10.184(Ft/s)
Total flow rate =   523.717(CFS)
Channel flow top width =   15.189(Ft.)
Depth of flow in channel =   5.09(Ft.)
Total number of channels (same dimensions) = 1
Flow Velocity =   10.18(Ft/s)
Travel time  =    0.00 min.
Individual channel flow =  523.717(CFS)
Total capacity of improved channels =    523.717(CFS)
Critical Depth in Channel =    5.03(Ft.)


********************** SCS CONVEX CHANNEL ROUTING ********************
```

Convex method of stream routing data items:
Using equation: Outflow =
O(t+dt) = (1-c*)O(t+dt-dt*) + Input(c*)
where c* = 1 - (1-c)^e and dt = c(length)/velocity
c(v/v+1.7) = 0.8569 Travel time = 4.48 (min.)
dt*(unit time interval) = 5.00(min.), e= 1.2017
dt(routing time-step) = 3.84 (min.), c* = 0.9034

Output hydrograph delayed by 0 unit time increments

++
P R I N T O F S T O R M
R u n o f f H y d r o g r a p h

Hydrograph in 5 Minute intervals (CFS)

Time(h+m)	Out = O(CFS)	In = I	0 130.9 261.9 392.8 523.7
0+ 5	0.4871	2.32	O | | | |
0+10	3.7138	9.80	O | | | |
0+15	11.8925	22.57	OI | | | |
0+20	25.0904	39.51	O I | | | |
0+25	41.7174	56.66	OI | | | |
0+30	58.0458	70.14	OI | | | |
0+35	71.5391	82.37	OI | | | |
0+40	83.7468	93.92	OI | | | |
0+45	95.0595	104.03	O | | | |
0+50	104.8247	111.96	O | | | |
0+55	112.3622	117.16	O | | | |
1+ 0	117.5798	121.36	OI | | | |
1+ 5	121.7676	125.03	O | | | |
1+10	126.0254	131.29	OI | | | |
1+15	132.9330	141.56	O | | | |
1+20	143.0983	152.88	OI | | | |
1+25	154.0788	163.10	OI | | | |
1+30	164.1373	172.19	OI | | | |
1+35	173.3578	181.45	O | | | |
1+40	182.8719	191.95	OI | | | |
1+45	193.6201	204.08	OI | | | |
1+50	205.6059	216.16	OI | | | |
1+55	217.7890	228.79	OI | | | |
2+ 0	230.4302	241.69	OI | | | |
2+ 5	242.6447	251.44	OI | | | |
2+10	252.3036	259.61	O | | | |
2+15	261.9894	274.31	O | | | |
2+20	277.7197	296.23	OI | | | |
2+25	300.8522	326.79	O I | | | |
2+30	332.9961	368.31	O I | | | |
2+35	375.5995	419.31	O I | | | |
2+40	427.4258	478.10	O I | | | |
2+45	482.7758	523.72	O I | | | |
2+50	519.7152	523.50	O I | | | |
2+55	513.1702	476.01	O I | | | |
3+ 0	462.6907	395.42	O I | | | |
3+ 5	385.0478	315.02	O I | | | |
3+10	308.6476	252.40	O I | | | |
3+15	247.1296	201.37	O I | | | |
3+20	197.1739	160.31	O I | | | |
3+25	157.6250	130.54	O I | | | |
3+30	128.6483	109.06	O I | | | |
3+35	107.7025	93.58	O I | | | |
3+40	92.3166	81.06	O I | | | |
3+45	80.0799	71.22	O I | | | |
3+50	70.2804	62.68	O I | | | |
3+55	61.7661	54.83	O I | | | |
4+ 0	54.1507	48.39	O I | | | |
4+ 5	47.8296	43.08	O I | | | |
4+10	42.6529	38.85	O I | | | |
4+15	38.3811	34.86	O I | | | |
4+20	34.3847	30.98	O I | | | |
4+25	30.5507	27.36	O I | | | |
4+30	27.0375	24.34	O I | | | |
4+35	23.9843	21.39	O I | | | |
4+40	21.0992	18.80	O I | | | |
4+45	18.5242	16.41	O I | | | |
4+50	16.1818	14.35	O I | | | |

```
   4+55      14.1719     12.67  IO        |         |         |         |
   5+ 0      12.4706     11.04  O         |         |         |         |
   5+ 5      10.8393      9.42  O         |         |         |         |
   5+10       9.4013      8.66  O         |         |         |         |
   5+15       8.3699      6.93  O         |         |         |         |
   5+20       6.7069      5.20  O         |         |         |         |
   5+25       4.8961      3.06  O         |         |         |         |
   5+30       2.8855      1.39  O         |         |         |         |
   5+35       1.4384      0.94  O         |         |         |         |
   5+40       0.9113      0.56  O         |         |         |         |
   5+45       0.5002      0.10  O         |         |         |         |
   5+50       0.1187      0.00  O         |         |         |         |
   5+55       0.0115      0.00  O         |         |         |         |
   6+ 0       0.0011      0.00  O         |         |         |         |
   6+ 5       0.0000      0.00  O         |         |         |         |
--------------------------------------------------------------------------

      ***************************HYDROGRAPH DATA**************************
                Number of intervals =    73
                Time interval =    5.0 (Min.)
                Maximum/Peak flow rate =      519.715 (CFS)
                Total volume =      65.328 (Ac.Ft)
          Status of hydrographs being held in storage
                    Stream 1  Stream 2  Stream 3  Stream 4  Stream 5
          Peak (CFS)      0.000     0.000     0.000     0.000     0.000
          Vol (Ac.Ft)     0.000     0.000     0.000     0.000     0.000
      ********************************************************************

      ----------------------------------------------------------------------


      ++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
      Process from Point/Station       12.000 to Point/Station       13.000
      **** ADD/COMBINE/RECOVER HYDROGRAPHS ****
      ______________________________________________________________________
      ********************* HYDROGRAPH INFORMATION **********************

                From study/file name: TRIB1B3100.rte
      ++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                   P R I N T  O F  S T O R M
                R u n o f f     H y d r o g r a p h
      ----------------------------------------------------------------------
                Hydrograph in   5   Minute intervals (CFS)

      ----------------------------------------------------------------------
 Time(h+m) Add q(CFS)  Tot. Q   0      184.8     369.7     554.5     739.3
 ----------------------------------------------------------------------
   0+ 5       2.1547      2.64  Q         |         |         |         |
   0+10      11.2930     15.01  Q         |         |         |         |
   0+15      21.8419     33.73  |Q        |         |         |         |
   0+20      26.0537     51.14  |qQ       |         |         |         |
   0+25      30.4660     72.18  |q Q      |         |         |         |
   0+30      37.0522     95.10  | q  Q    |         |         |         |
   0+35      42.7735    114.31  | q   Q   |         |         |         |
   0+40      46.1003    129.85  | q    Q  |         |         |         |
   0+45      48.6621    143.72  | q    Q  |         |         |         |
   0+50      51.8709    156.70  | q     Q |         |         |         |
   0+55      51.3277    163.69  | q     Q |         |         |         |
   1+ 0      50.4252    168.00  | q      Q|         |         |         |
   1+ 5      54.0515    175.82  | q      Q|         |         |         |
   1+10      61.4620    187.49  |  q      Q         |         |         |
   1+15      68.2279    201.16  |  q      Q         |         |         |
   1+20      71.1575    214.26  |  q      |Q        |         |         |
   1+25      72.5371    226.62  |  q      | Q       |         |         |
   1+30      77.9132    242.05  |   q     |  Q      |         |         |
   1+35      85.7174    259.08  |   q     |   Q     |         |         |
   1+40      88.4769    271.35  |   q     |   Q     |         |         |
   1+45      91.9490    285.57  |   q     |    Q    |         |         |
   1+50     101.6890    307.29  |    q    |     Q   |         |         |
   1+55     108.9983    326.79  |    q    |      Q  |         |         |
   2+ 0     109.6152    340.05  |    q    |       Q |         |         |
   2+ 5     109.8914    352.54  |    q    |        Q|         |         |
   2+10     115.0981    367.40  |     q   |        Q|         |         |
   2+15     131.4318    393.42  |      q  |         |Q        |         |
   2+20     152.0298    429.75  |       q |         |  Q      |         |
   2+25     162.5307    463.38  |       q |         |    Q    |         |
   2+30     188.9906    521.99  |         q         |       Q |         |
   2+35     235.7528    611.35  |         | q       |         |  Q      |
   2+40     266.0842    693.51  |         |   q     |         |      Q  |
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    2+45     256.5472    739.32  |          |  q       |          |          Q
    2+50     198.2670    717.98  |          q          |          |        Q |
    2+55     139.6865    652.86  |       q  |          |          |    Q     |
    3+ 0     109.1567    571.85  |     q    |          |          Q          |
    3+ 5      83.0009    468.05  |   q      |          |     Q    |          |
    3+10      56.7577    365.41  |  q       |          Q|         |          |
    3+15      40.3366    287.47  | q        |     Q    |         |          |
    3+20      30.5804    227.75  |q         | Q        |         |          |
    3+25      24.0002    181.63  |q        Q|          |         |          |
    3+30      19.1433    147.79  |q     Q   |          |         |          |
    3+35      14.8801    122.58  q      Q   |          |         |          |
    3+40      11.2652    103.58  q     Q    |          |         |          |
    3+45       9.1999     89.28  q    Q     |          |         |          |
    3+50       6.8212     77.10  q    Q     |          |         |          |
    3+55       4.9191     66.69  q   Q      |          |         |          |
    4+ 0       2.7944     56.95  q  Q       |          |         |          |
    4+ 5       1.1419     48.97  q Q        |          |         |          |
    4+10       0.7452     43.40  q Q        |          |         |          |
    4+15       0.4520     38.83  q Q        |          |         |          |
    4+20       0.0689     34.45  qQ         |          |         |          |
    4+25       0.0000     30.55  qQ         |          |         |          |
    4+30       0.0000     27.04  qQ         |          |         |          |
    4+35       0.0000     23.98  qQ         |          |         |          |
    4+40       0.0000     21.10  qQ         |          |         |          |
    4+45       0.0000     18.52  qQ         |          |         |          |
    4+50       0.0000     16.18  Q          |          |         |          |
    4+55       0.0000     14.17  Q          |          |         |          |
    5+ 0       0.0000     12.47  Q          |          |         |          |
    5+ 5       0.0000     10.84  Q          |          |         |          |
    5+10       0.0000      9.40  Q          |          |         |          |
    5+15       0.0000      8.37  Q          |          |         |          |
    5+20       0.0000      6.71  Q          |          |         |          |
    5+25       0.0000      4.90  Q          |          |         |          |
    5+30       0.0000      2.89  Q          |          |         |          |
    5+35       0.0000      1.44  Q          |          |         |          |
    5+40       0.0000      0.91  Q          |          |         |          |
    5+45       0.0000      0.50  Q          |          |         |          |
    5+50       0.0000      0.12  Q          |          |         |          |
    5+55       0.0000      0.01  Q          |          |         |          |
    6+ 0       0.0000      0.00  Q          |          |         |          |
    6+ 5       0.0000      0.00  Q          |          |         |          |
--------------------------------------------------------------------------
      ***************************HYDROGRAPH DATA****************************
                  Number of intervals =    73
                  Time interval =    5.0 (Min.)
                  Maximum/Peak flow rate =      739.323 (CFS)
                  Total volume =      91.384 (Ac.Ft)
            Status of hydrographs being held in storage
                       Stream 1  Stream 2  Stream 3  Stream 4  Stream 5
            Peak (CFS)      0.000     0.000     0.000     0.000     0.000
            Vol (Ac.Ft)     0.000     0.000     0.000     0.000     0.000
      **********************************************************************

      ----------------------------------------------------------------------


      ++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
      Process from Point/Station       13.000 to Point/Station       15.000
      **** STREAM ROUTING SCS CONVEX METHOD ****
      ________________________________________________________________________
      HYDROGRAPH STREAM ROUTING DATA:
      Length of stream =    763.00 (Ft.)
      Elevation difference =   27.00 (Ft.)
      Slope of channel =  0.035387 (Vert/Horiz)
      Channel type - Improved Channel


      Channel length =   763.00(Ft.)     Elevation difference =  27.00(Ft.)
      Channel evaluation using mean flow rate of hydrograph
      Channel base width  =    5.000(Ft.)
      Slope or 'Z' of left channel bank =   1.000
      Slope or 'Z' of right channel bank =   1.000
      Manning's 'N'    = 0.045
      Maximum depth of channel  =   20.000(Ft.)
      Flow(q) thru subarea =    301.810(CFS)
      Depth of flow =     3.554(Ft.)
      Average velocity =     9.926(Ft/s)
      Total flow rate =   301.810(CFS)
```

CULVERT 1

```
      Channel flow top width =   12.109(Ft.)
      Depth of flow in channel =   3.55(Ft.)
      Total number of channels (same dimensions) = 1
      Flow Velocity =    9.93(Ft/s)
      Travel time  =    0.00 min.
      Individual channel flow =  301.810(CFS)
      Total capacity of improved channels =    301.810(CFS)
      Critical Depth in Channel =    3.75(Ft.)


      Channel evaluation using maximum flow rate of hydrograph
      Flow(q) thru subarea =    739.323(CFS)
      Depth of flow =     5.594(Ft.)
      Average velocity =    12.476(Ft/s)
      Total flow rate =   739.323(CFS)
      Channel flow top width =   16.188(Ft.)
      Depth of flow in channel =   5.59(Ft.)
      Total number of channels (same dimensions) = 1
      Flow Velocity =   12.48(Ft/s)
      Travel time  =    0.00 min.
      Individual channel flow =  739.323(CFS)
      Total capacity of improved channels =    739.323(CFS)
      Critical Depth in Channel =    6.00(Ft.)


      ********************** SCS CONVEX CHANNEL ROUTING ********************
      Convex method of stream routing  data items:
      Using equation: Outflow =
      O(t+dt) = (1-c*)O(t+dt-dt*) + Input(c*)
                where c* = 1 - (1-c)^e and dt = c(length)/velocity
                c(v/v+1.7) =   0.8801   Travel time =   1.02 (min.)
               dt*(unit time interval) =   5.00(min.),  e=   4.0491
               dt(routing time-step) =   0.90 (min.),   c* =   0.9998

      Output hydrograph delayed by 0  unit time increments


      ++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                        P R I N T  O F  S T O R M
                     R u n o f f     H y d r o g r a p h
      ----------------------------------------------------------------------
                  Hydrograph in   5   Minute intervals (CFS)

      ----------------------------------------------------------------------
Time(h+m) Out = O(CFS) In = I  0      184.8     369.7     554.5     739.3
----------------------------------------------------------------------------
  0+ 5       2.1674      2.64  O         |         |         |         |
  0+10      12.7863     15.01  O         |         |         |         |
  0+15      30.3710     33.73  |O        |         |         |         |
  0+20      48.0172     51.14  | O       |         |         |         |
  0+25      68.4048     72.18  |  O      |         |         |         |
  0+30      90.9826     95.10  |   OI    |         |         |         |
  0+35     110.8614    114.31  |    OI   |         |         |         |
  0+40     127.0569    129.85  |     OI  |         |         |         |
  0+45     141.2296    143.72  |      O  |         |         |         |
  0+50     154.3654    156.70  |       O |         |         |         |
  0+55     162.4336    163.69  |       O |         |         |         |
  1+ 0     167.2299    168.00  |        O|         |         |         |
  1+ 5     174.4157    175.82  |        O|         |         |         |
  1+10     185.3918    187.49  |         O         |         |         |
  1+15     198.7051    201.16  |         O         |         |         |
  1+20     211.9039    214.26  |         |O        |         |         |
  1+25     224.3959    226.62  |         | O       |         |         |
  1+30     239.2785    242.05  |         | OI      |         |         |
  1+35     256.0175    259.08  |         |  OI     |         |         |
  1+40     269.1443    271.35  |         |   O     |         |         |
  1+45     283.0151    285.57  |         |    O    |         |         |
  1+50     303.3931    307.29  |         |     O   |         |         |
  1+55     323.2863    326.79  |         |      O  |         |         |
  2+ 0     337.6639    340.05  |         |       O |         |         |
  2+ 5     350.2927    352.54  |         |       OI|         |         |
  2+10     364.7319    367.40  |         |        O|         |         |
  2+15     388.7484    393.42  |         |         |O        |         |
  2+20     423.2251    429.75  |         |         | OI      |         |
  2+25     457.3422    463.38  |         |         |   OI    |         |
  2+30     511.4621    521.99  |         |         |      OI |         |
  2+35     595.3029    611.35  |         |         |         | OI      |
  2+40     678.7540    693.51  |         |         |         |     OI  |
```

```
   2+45     731.0936    739.32  |         |         |         |        OI
   2+50     721.8128    717.98  |         |         |         |       IO|
   2+55     664.5520    652.86  |         |         |         |    O    |
   3+ 0     586.3964    571.85  |         |         |        IO         |
   3+ 5     486.6905    468.05  |         |         |    IO   |         |
   3+10     383.8404    365.41  |         |        IO         |         |
   3+15     301.4651    287.47  |         |    IO   |         |         |
   3+20     238.4794    227.75  |         | O       |         |         |
   3+25     189.9106    181.63  |        IO         |         |         |
   3+30     153.8686    147.79  |      IO |         |         |         |
   3+35     127.1105    122.58  |     O   |         |         |         |
   3+40     106.9946    103.58  |    O    |         |         |         |
   3+45      91.8487     89.28  |   O     |         |         |         |
   3+50      79.2889     77.10  |   O     |         |         |         |
   3+55      68.5561     66.69  |  O      |         |         |         |
   4+ 0      58.6945     56.95  |  O      |         |         |         |
   4+ 5      50.4037     48.97  | O       |         |         |         |
   4+10      44.3992     43.40  | O       |         |         |         |
   4+15      39.6530     38.83  | O       |         |         |         |
   4+20      35.2401     34.45  |O        |         |         |         |
   4+25      31.2517     30.55  |O        |         |         |         |
   4+30      27.6685     27.04  |O        |         |         |         |
   4+35      24.5327     23.98  |O        |         |         |         |
   4+40      21.6174     21.10  |O        |         |         |         |
   4+45      18.9867     18.52  |O        |         |         |         |
   4+50      16.6026     16.18  O         |         |         |         |
   4+55      14.5329     14.17  O         |         |         |         |
   5+ 0      12.7762     12.47  O         |         |         |         |
   5+ 5      11.1323     10.84  O         |         |         |         |
   5+10       9.6596      9.40  O         |         |         |         |
   5+15       8.5552      8.37  O         |         |         |         |
   5+20       7.0055      6.71  O         |         |         |         |
   5+25       5.2213      4.90  O         |         |         |         |
   5+30       3.2466      2.89  O         |         |         |         |
   5+35       1.6983      1.44  O         |         |         |         |
   5+40       1.0060      0.91  O         |         |         |         |
   5+45       0.5740      0.50  O         |         |         |         |
   5+50       0.1872      0.12  O         |         |         |         |
   5+55       0.0307      0.01  O         |         |         |         |
   6+ 0       0.0030      0.00  O         |         |         |         |
   6+ 5       0.0002      0.00  O         |         |         |         |
   6+10       0.0000      0.00  O         |         |         |         |
--------------------------------------------------------------------------
      ****************************HYDROGRAPH DATA****************************
                  Number of intervals =    74
                  Time interval =    5.0 (Min.)
                  Maximum/Peak flow rate =      731.094 (CFS)
                  Total volume =      91.384 (Ac.Ft)
            Status of hydrographs being held in storage
                     Stream 1  Stream 2  Stream 3  Stream 4  Stream 5
            Peak (CFS)      0.000     0.000     0.000     0.000     0.000
            Vol (Ac.Ft)      0.000     0.000     0.000     0.000     0.000
      ************************************************************************

      ------------------------------------------------------------------------


      ++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
      Process from Point/Station       14.000 to Point/Station       15.000
      **** ADD/COMBINE/RECOVER HYDROGRAPHS ****
      ____________________________________________________________________
      ********************* HYDROGRAPH INFORMATION **********************

                  From study/file name: TRIB1C3100.rte
      ++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                     P R I N T  O F  S T O R M
                  R u n o f f     H y d r o g r a p h
      ------------------------------------------------------------------------
               Hydrograph in   5   Minute intervals (CFS)

      ------------------------------------------------------------------------
  Time(h+m) Add q(CFS)  Tot. Q   0      191.1     382.2     573.3     764.5
  ------------------------------------------------------------------------
    0+ 5       0.2932      2.46  Q         |         |         |         |
    0+10       1.5406     14.33  Q         |         |         |         |
    0+15       2.9247     33.30  qQ        |         |         |         |
    0+20       3.4496     51.47  q Q       |         |         |         |
    0+25       4.0420     72.45  q  Q      |         |         |         |
```

```
    0+30       4.9061     95.89  q    Q    |          |          |          |
    0+35       5.6510    116.51  q     Q   |          |          |          |
    0+40       6.0670    133.12  q     Q   |          |          |          |
    0+45       6.4049    147.63  q      Q  |          |          |          |
    0+50       6.8231    161.19  q       Q |          |          |          |
    0+55       6.7289    169.16  q       Q |          |          |          |
    1+ 0       6.6140    173.84  q        Q|          |          |          |
    1+ 5       7.1072    181.52  q        Q|          |          |          |
    1+10       8.0882    193.48  q         Q          |          |          |
    1+15       8.9607    207.67  q         Q          |          |          |
    1+20       9.3263    221.23  q         |Q         |          |          |
    1+25       9.4886    233.88  q         | Q        |          |          |
    1+30      10.2186    249.50  q         |  Q       |          |          |
    1+35      11.2390    267.26  q         |  Q       |          |          |
    1+40      11.5636    280.71  q         |   Q      |          |          |
    1+45      12.0304    295.05  q         |    Q     |          |          |
    1+50      13.3283    316.72  q         |     Q    |          |          |
    1+55      14.2589    337.55  q         |      Q   |          |          |
    2+ 0      14.3057    351.97  q         |       Q  |          |          |
    2+ 5      14.3451    364.64  q         |        Q |          |          |
    2+10      15.0458    379.78  q         |        Q |          |          |
    2+15      17.2331    405.98  q         |         Q|          |          |
    2+20      19.9278    443.15  |q        |          |  Q       |          |
    2+25      21.2118    478.55  |q        |          |    Q     |          |
    2+30      24.8048    536.27  |q        |          |       Q  |          |
    2+35      30.9478    626.25  |q        |          |          | Q        |
    2+40      34.8238    713.58  |q        |          |          |      Q   |
    2+45      33.3644    764.46  |q        |          |          |         Q|
    2+50      25.5303    747.34  |q        |          |          |        Q |
    2+55      17.9509    682.50  q         |          |          |    Q     |
    3+ 0      14.0812    600.48  q         |          |          |Q         |
    3+ 5      10.6308    497.32  q         |          |     Q    |          |
    3+10       7.2136    391.05  q         |          |   Q      |          |
    3+15       5.1139    306.58  q         |     Q    |          |          |
    3+20       3.8650    242.34  q         | Q        |          |          |
    3+25       3.0244    192.94  q        Q|          |          |          |
    3+30       2.3856    156.25  q       Q |          |          |          |
    3+35       1.8307    128.94  q      Q  |          |          |          |
    3+40       1.3942    108.39  q     Q   |          |          |          |
    3+45       1.1054     92.95  q    Q    |          |          |          |
    3+50       0.8059     80.09  q    Q    |          |          |          |
    3+55       0.5564     69.11  q  Q      |          |          |          |
    4+ 0       0.3040     59.00  q  Q      |          |          |          |
    4+ 5       0.1320     50.54  q Q       |          |          |          |
    4+10       0.0842     44.48  q Q       |          |          |          |
    4+15       0.0455     39.70  q Q       |          |          |          |
    4+20       0.0068     35.25  qQ        |          |          |          |
    4+25       0.0000     31.25  qQ        |          |          |          |
    4+30       0.0000     27.67  qQ        |          |          |          |
    4+35       0.0000     24.53  qQ        |          |          |          |
    4+40       0.0000     21.62  qQ        |          |          |          |
    4+45       0.0000     18.99  Q         |          |          |          |
    4+50       0.0000     16.60  Q         |          |          |          |
    4+55       0.0000     14.53  Q         |          |          |          |
    5+ 0       0.0000     12.78  Q         |          |          |          |
    5+ 5       0.0000     11.13  Q         |          |          |          |
    5+10       0.0000      9.66  Q         |          |          |          |
    5+15       0.0000      8.56  Q         |          |          |          |
    5+20       0.0000      7.01  Q         |          |          |          |
    5+25       0.0000      5.22  Q         |          |          |          |
    5+30       0.0000      3.25  Q         |          |          |          |
    5+35       0.0000      1.70  Q         |          |          |          |
    5+40       0.0000      1.01  Q         |          |          |          |
    5+45       0.0000      0.57  Q         |          |          |          |
    5+50       0.0000      0.19  Q         |          |          |          |
    5+55       0.0000      0.03  Q         |          |          |          |
    6+ 0       0.0000      0.00  Q         |          |          |          |
    6+ 5       0.0000      0.00  Q         |          |          |          |
    6+10       0.0000      0.00  Q         |          |          |          |
--------------------------------------------------------------------------
      ****************************HYDROGRAPH DATA****************************
                  Number of intervals =    74
                  Time interval =    5.0 (Min.)
                  Maximum/Peak flow rate =      764.458 (CFS)  CULVERT 2
                  Total volume =      94.780 (Ac.Ft)
            Status of hydrographs being held in storage
                       Stream 1  Stream 2  Stream 3  Stream 4  Stream 5
            Peak (CFS)      0.000     0.000     0.000     0.000     0.000
```

```
       Vol (Ac.Ft)      0.000     0.000     0.000     0.000     0.000
*******************************************************************************

-------------------------------------------------------------------------


+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       15.000 to Point/Station       30.000
**** STREAM ROUTING SCS CONVEX METHOD ****
_________________________________________________________________________
HYDROGRAPH STREAM ROUTING DATA:
Length of stream =   1313.00 (Ft.)
Elevation difference =   48.00 (Ft.)
Slope of channel =  0.036558 (Vert/Horiz)
Channel type - Improved Channel


Channel length =  1313.00(Ft.)     Elevation difference =  48.00(Ft.)
Channel evaluation using mean flow rate of hydrograph
Channel base width  =    5.000(Ft.)
Slope or 'Z' of left channel bank =   1.000
Slope or 'Z' of right channel bank =   1.000
Manning's 'N'    = 0.045
Maximum depth of channel  =   20.000(Ft.)
Flow(q) thru subarea =    314.190(CFS)
Depth of flow =     3.599(Ft.)
Average velocity =    10.152(Ft/s)
Total flow rate =   314.190(CFS)
Channel flow top width =   12.198(Ft.)
Depth of flow in channel =   3.60(Ft.)
Total number of channels (same dimensions) = 1
Flow Velocity =   10.15(Ft/s)
Travel time  =    0.00 min.
Individual channel flow =  314.190(CFS)
Total capacity of improved channels =    314.190(CFS)
Critical Depth in Channel =    3.84(Ft.)


Channel evaluation using maximum flow rate of hydrograph
Flow(q) thru subarea =    764.458(CFS)
Depth of flow =     5.641(Ft.)
Average velocity =    12.735(Ft/s)
Total flow rate =   764.458(CFS)
Channel flow top width =   16.282(Ft.)
Depth of flow in channel =   5.64(Ft.)
Total number of channels (same dimensions) = 1
Flow Velocity =   12.73(Ft/s)
Travel time  =    0.00 min.
Individual channel flow =  764.458(CFS)
Total capacity of improved channels =    764.458(CFS)
Critical Depth in Channel =    6.13(Ft.)


********************** SCS CONVEX CHANNEL ROUTING *********************
Convex method of stream routing  data items:
Using equation: Outflow =
O(t+dt) = (1-c*)O(t+dt-dt*) + Input(c*)
          where c* = 1 - (1-c)^e and dt = c(length)/velocity
          c(v/v+1.7) =   0.8822   Travel time =   1.72 (min.)
        dt*(unit time interval) =   5.00(min.),  e=   2.5321
        dt(routing time-step) =   1.52 (min.),   c* =   0.9956

Output hydrograph delayed by 0  unit time increments


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                  P R I N T  O F  S T O R M
               R u n o f f     H y d r o g r a p h
-------------------------------------------------------------------------
            Hydrograph in   5   Minute intervals (CFS)

-------------------------------------------------------------------------
Time(h+m) Out = O(CFS) In = I  0      191.1     382.2     573.3     764.5
-------------------------------------------------------------------------
  0+ 5       1.7069      2.46  O         |         |         |         |
  0+10      10.6890     14.33  O         |         |         |         |
  0+15      27.4696     33.30  |O        |         |         |         |
  0+20      45.8752     51.47  | O       |         |         |         |
```

```
    0+25      65.9959     72.45  |  O      |         |         |         |
    0+30      88.6799     95.89  |   OI    |         |         |         |
    0+35     110.1635    116.51  |    OI   |         |         |         |
    0+40     128.0077    133.12  |     O   |         |         |         |
    0+45     143.1672    147.63  |      O  |         |         |         |
    0+50     157.0171    161.19  |       O |         |         |         |
    0+55     166.7015    169.16  |       O |         |         |         |
    1+ 0     172.3990    173.84  |        O|         |         |         |
    1+ 5     179.1645    181.52  |        O|         |         |         |
    1+10     189.8072    193.48  |        OI         |         |         |
    1+15     203.3045    207.67  |         O         |         |         |
    1+20     217.0561    221.23  |         |O        |         |         |
    1+25     229.9900    233.88  |         | O       |         |         |
    1+30     244.6977    249.50  |         | OI      |         |         |
    1+35     261.7956    267.26  |         |  O      |         |         |
    1+40     276.5636    280.71  |         |   O     |         |         |
    1+45     290.6355    295.05  |         |    O    |         |         |
    1+50     310.0626    316.72  |         |     O   |         |         |
    1+55     331.1374    337.55  |         |      O  |         |         |
    2+ 0     347.5230    351.97  |         |       O |         |         |
    2+ 5     360.7378    364.64  |         |       OI|         |         |
    2+10     375.1231    379.78  |         |        O|         |         |
    2+15     397.9347    405.98  |         |         OI        |         |
    2+20     431.7318    443.15  |         |          | OI     |         |
    2+25     467.6601    478.55  |         |          |   OI   |         |
    2+30     518.5413    536.27  |         |          |      OI |         |
    2+35     598.6104    626.25  |         |          |         |OI       |
    2+40     686.7071    713.58  |         |          |         |    O I  |
    2+45     748.7542    764.46  |         |          |         |        OI
    2+50     752.5156    747.34  |         |          |         |        O|
    2+55     702.3861    682.50  |         |          |         |    IO   |
    3+ 0     625.6899    600.48  |         |          |         |IO       |
    3+ 5     529.0296    497.32  |         |          |     IO  |         |
    3+10     423.7440    391.05  |         |          | I O     |         |
    3+15     332.5986    306.58  |         |      IO  |         |         |
    3+20     262.1348    242.34  |         | IO       |         |         |
    3+25     208.1568    192.94  |         O          |         |         |
    3+30     167.5569    156.25  |       O |          |         |         |
    3+35     137.3572    128.94  |     IO  |          |         |         |
    3+40     114.7213    108.39  |    IO   |          |         |         |
    3+45      97.7098     92.95  |   IO    |          |         |         |
    3+50      84.0547     80.09  |   O     |          |         |         |
    3+55      72.4939     69.11  |  O      |          |         |         |
    4+ 0      62.1114     59.00  |  O      |          |         |         |
    4+ 5      53.1416     50.54  | O       |          |         |         |
    4+10      46.3488     44.48  | O       |          |         |         |
    4+15      41.1724     39.70  | O       |          |         |         |
    4+20      36.6170     35.25  |O        |          |         |         |
    4+25      32.4815     31.25  |O        |          |         |         |
    4+30      28.7714     27.67  |O        |          |         |         |
    4+35      25.4981     24.53  |O        |          |         |         |
    4+40      22.5146     21.62  |O        |          |         |         |
    4+45      19.7964     18.99  IO        |          |         |         |
    4+50      17.3364     16.60  O         |          |         |         |
    4+55      15.1701     14.53  O         |          |         |         |
    5+ 0      13.3171     12.78  O         |          |         |         |
    5+ 5      11.6382     11.13  O         |          |         |         |
    5+10      10.1129      9.66  O         |          |         |         |
    5+15       8.8955      8.56  O         |          |         |         |
    5+20       7.4817      7.01  O         |          |         |         |
    5+25       5.7699      5.22  O         |          |         |         |
    5+30       3.8539      3.25  O         |          |         |         |
    5+35       2.1752      1.70  O         |          |         |         |
    5+40       1.2202      1.01  O         |          |         |         |
    5+45       0.7073      0.57  O         |          |         |         |
    5+50       0.3063      0.19  O         |          |         |         |
    5+55       0.0792      0.03  O         |          |         |         |
    6+ 0       0.0117      0.00  O         |          |         |         |
    6+ 5       0.0011      0.00  O         |          |         |         |
    6+10       0.0001      0.00  O         |          |         |         |
    6+15       0.0000      0.00  O         |          |         |         |
--------------------------------------------------------------------------
       ****************************HYDROGRAPH DATA****************************
                    Number of intervals =    75
                    Time interval =    5.0 (Min.)
                    Maximum/Peak flow rate =      752.516 (CFS)
                    Total volume =      94.780 (Ac.Ft)
              Status of hydrographs being held in storage
```

```
                    Stream 1  Stream 2  Stream 3  Stream 4  Stream 5
          Peak (CFS)      0.000     0.000     0.000     0.000     0.000
          Vol (Ac.Ft)     0.000     0.000     0.000     0.000     0.000
     ***************************************************************************

     ---------------------------------------------------------------------


     +++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
     Process from Point/Station       16.000 to Point/Station       30.000
     **** ADD/COMBINE/RECOVER HYDROGRAPHS ****
     _________________________________________________________________________
     ********************* HYDROGRAPH INFORMATION **********************

                  From study/file name: TRIB1D3100.rte
     +++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                     P R I N T  O F  S T O R M
                   R u n o f f     H y d r o g r a p h
     ---------------------------------------------------------------------
               Hydrograph in   5   Minute intervals (CFS)

     ---------------------------------------------------------------------
Time(h+m) Add q(CFS)  Tot. Q   0      195.7     391.4     587.1     782.8
---------------------------------------------------------------------------
  0+ 5       1.4733      3.18  Q         |         |         |         |
  0+10       4.7197     15.41  Q         |         |         |         |
  0+15       5.3774     32.85  qQ        |         |         |         |
  0+20       5.7532     51.63  q Q       |         |         |         |
  0+25       7.1070     73.10  q  Q      |         |         |         |
  0+30       7.9968     96.68  q   Q     |         |         |         |
  0+35       8.7456    118.91  q     Q   |         |         |         |
  0+40       8.6233    136.63  q     Q   |         |         |         |
  0+45       9.4877    152.65  q      Q  |         |         |         |
  0+50       9.2968    166.31  q       Q |         |         |         |
  0+55       8.5944    175.30  q       Q |         |         |         |
  1+ 0       8.9829    181.38  q        Q|         |         |         |
  1+ 5      10.2263    189.39  q        Q|         |         |         |
  1+10      11.7008    201.51  q         Q         |         |         |
  1+15      12.1670    215.47  q         |Q        |         |         |
  1+20      12.0835    229.14  q         |Q        |         |         |
  1+25      12.4380    242.43  q         | Q       |         |         |
  1+30      14.4332    259.13  q         |  Q      |         |         |
  1+35      14.8490    276.64  q         |   Q     |         |         |
  1+40      14.6480    291.21  q         |   Q     |         |         |
  1+45      16.3844    307.02  q         |    Q    |         |         |
  1+50      18.2964    328.36  q         |     Q   |         |         |
  1+55      18.0385    349.18  q         |      Q  |         |         |
  2+ 0      17.6770    365.20  q         |       Q |         |         |
  2+ 5      18.0422    378.78  q         |        Q|         |         |
  2+10      20.0539    395.18  |q        |         Q         |         |
  2+15      24.9509    422.89  |q        |         |Q        |         |
  2+20      26.4463    458.18  |q        |         |  Q      |         |
  2+25      27.6949    495.36  |q        |         |    Q    |         |
  2+30      38.3785    556.92  |q        |         |       Q |         |
  2+35      44.2140    642.82  | q       |         |         | Q       |
  2+40      45.5281    732.24  | q       |         |         |      Q  |
  2+45      34.0595    782.81  |q        |         |         |         Q
  2+50      19.7884    772.30  |q        |         |         |        Q|
  2+55      14.9013    717.29  q         |         |         |     Q   |
  3+ 0      11.0430    636.73  q         |         |         | Q       |
  3+ 5       5.4206    534.45  q         |         |      Q  |         |
  3+10       2.5139    426.26  q         |         |Q        |         |
  3+15       1.1951    333.79  q         |       Q |         |         |
  3+20       0.5303    262.67  q         |  Q      |         |         |
  3+25       0.2646    208.42  q        Q          |         |         |
  3+30       0.1130    167.67  q       Q |         |         |         |
  3+35       0.0172    137.37  q      Q  |         |         |         |
  3+40       0.0000    114.72  q    Q    |         |         |         |
  3+45       0.0000     97.71  q   Q     |         |         |         |
  3+50       0.0000     84.05  q   Q     |         |         |         |
  3+55       0.0000     72.49  q  Q      |         |         |         |
  4+ 0       0.0000     62.11  q  Q      |         |         |         |
  4+ 5       0.0000     53.14  q Q       |         |         |         |
  4+10       0.0000     46.35  q Q       |         |         |         |
  4+15       0.0000     41.17  q Q       |         |         |         |
  4+20       0.0000     36.62  qQ        |         |         |         |
  4+25       0.0000     32.48  qQ        |         |         |         |
  4+30       0.0000     28.77  qQ        |         |         |         |
```

```
   4+35       0.0000     25.50  qQ        |         |         |         |
   4+40       0.0000     22.51  qQ        |         |         |         |
   4+45       0.0000     19.80  qQ        |         |         |         |
   4+50       0.0000     17.34  Q         |         |         |         |
   4+55       0.0000     15.17  Q         |         |         |         |
   5+ 0       0.0000     13.32  Q         |         |         |         |
   5+ 5       0.0000     11.64  Q         |         |         |         |
   5+10       0.0000     10.11  Q         |         |         |         |
   5+15       0.0000      8.90  Q         |         |         |         |
   5+20       0.0000      7.48  Q         |         |         |         |
   5+25       0.0000      5.77  Q         |         |         |         |
   5+30       0.0000      3.85  Q         |         |         |         |
   5+35       0.0000      2.18  Q         |         |         |         |
   5+40       0.0000      1.22  Q         |         |         |         |
   5+45       0.0000      0.71  Q         |         |         |         |
   5+50       0.0000      0.31  Q         |         |         |         |
   5+55       0.0000      0.08  Q         |         |         |         |
   6+ 0       0.0000      0.01  Q         |         |         |         |
   6+ 5       0.0000      0.00  Q         |         |         |         |
   6+10       0.0000      0.00  Q         |         |         |         |
   6+15       0.0000      0.00  Q         |         |         |         |
--------------------------------------------------------------------------

      ***************************HYDROGRAPH DATA**************************
                  Number of intervals =    75
                  Time interval =    5.0 (Min.)
                  Maximum/Peak flow rate =      782.814 (CFS)
                  Total volume =      98.873 (Ac.Ft)
            Status of hydrographs being held in storage
                     Stream 1  Stream 2  Stream 3  Stream 4  Stream 5
            Peak (CFS)      0.000     0.000     0.000     0.000     0.000
            Vol (Ac.Ft)      0.000     0.000     0.000     0.000     0.000
      ********************************************************************

      ----------------------------------------------------------------------


      ++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
      Process from Point/Station       20.000 to Point/Station       30.000
      **** ADD/COMBINE/RECOVER HYDROGRAPHS ****
      ______________________________________________________________________
      ********************* HYDROGRAPH INFORMATION **********************

                  From study/file name: TRIB2A3100.rte
      ++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                     P R I N T  O F  S T O R M
                  R u n o f f     H y d r o g r a p h
      ----------------------------------------------------------------------
               Hydrograph in   5   Minute intervals (CFS)

      ----------------------------------------------------------------------
  Time(h+m) Add q(CFS)  Tot. Q   0      307.2     614.4     921.6    1228.8
  ----------------------------------------------------------------------
    0+ 5       2.3780      5.56  Q         |         |         |         |
    0+10      11.5953     27.00  Q         |         |         |         |
    0+15      26.5066     59.35  qQ        |         |         |         |
    0+20      39.2093     90.84  |qQ       |         |         |         |
    0+25      47.4037    120.51  |q Q      |         |         |         |
    0+30      56.5746    153.25  |q  Q     |         |         |         |
    0+35      66.7940    185.70  | q   Q   |         |         |         |
    0+40      74.7828    211.41  | q   Q   |         |         |         |
    0+45      80.6678    233.32  | q    Q  |         |         |         |
    0+50      85.4823    251.80  | q     Q |         |         |         |
    0+55      88.2173    263.51  | q     Q |         |         |         |
    1+ 0      88.2084    269.59  | q     Q |         |         |         |
    1+ 5      90.9754    280.37  | q      Q|         |         |         |
    1+10     100.0072    301.52  |  q     Q|         |         |         |
    1+15     111.6578    327.13  |  q      Q         |         |         |
    1+20     120.2070    349.35  |  q      |Q        |         |         |
    1+25     124.8931    367.32  |   q     |Q        |         |         |
    1+30     131.4033    390.53  |   q     | Q       |         |         |
    1+35     141.9210    418.57  |   q     |  Q      |         |         |
    1+40     151.3237    442.54  |   q     |   Q     |         |         |
    1+45     158.3547    465.37  |    q    |    Q    |         |         |
    1+50     169.5385    497.90  |    q    |     Q   |         |         |
    1+55     183.3173    532.49  |    q    |      Q  |         |         |
    2+ 0     191.2532    556.45  |     q   |       Q |         |         |
    2+ 5     193.3870    572.17  |     q   |       Q |         |         |
    2+10     199.1885    594.37  |     q   |        Q|         |         |
```

EX. CULVERT @ 30 (S)

```
    2+15     217.9094    640.79  |      q  |          Q          |          |
    2+20     246.2797    704.46  |       q |          | Q        |          |
    2+25     274.2079    769.56  |       q |          |    Q     |          |
    2+30     308.6277    865.55  |         q          |       Q  |          |
    2+35     366.8243   1009.65  |          |q        |          | Q        |
    2+40     428.8923   1161.13  |          |  q      |          |      Q   |
    2+45     446.0266   1228.84  |CLVT 3 (E)   q      |          |         Q
    2+50     396.7901   1169.09  |          | q       |          |       Q  |
    2+55     308.5291   1025.82  |          q         |          |   Q      |
    3+ 0     233.7562    870.49  |       q |          |          |  Q       |
    3+ 5     183.8897    718.34  |     q   |          |          |  Q       |
    3+10     140.7874    567.05  |    q    |          |       Q  |          |
    3+15     105.2138    439.01  |   q     |          |    Q     |          |
    3+20      81.6827    344.35  | q       |          |Q         |          |
    3+25      66.0495    274.47  | q     Q |          |          |          |
    3+30      54.4272    222.10  |q      Q  |          |          |          |
    3+35      45.4609    182.84  |q    Q    |          |          |          |
    3+40      38.3949    153.12  |q   Q     |          |          |          |
    3+45      32.6577    130.37  |q   Q     |          |          |          |
    3+50      27.4918    111.55  q   Q      |          |          |          |
    3+55      23.0173     95.51  q   Q      |          |          |          |
    4+ 0      19.4744     81.59  q Q        |          |          |          |
    4+ 5      16.3496     69.49  q Q        |          |          |          |
    4+10      13.4124     59.76  qQ         |          |          |          |
    4+15      10.8349     52.01  qQ         |          |          |          |
    4+20       9.3150     45.93  qQ         |          |          |          |
    4+25       7.2301     39.71  qQ         |          |          |          |
    4+30       5.1399     33.91  qQ         |          |          |          |
    4+35       2.8455     28.34  Q          |          |          |          |
    4+40       1.2591     23.77  Q          |          |          |          |
    4+45       0.8264     20.62  Q          |          |          |          |
    4+50       0.4525     17.79  Q          |          |          |          |
    4+55       0.0622     15.23  Q          |          |          |          |
    5+ 0       0.0000     13.32  Q          |          |          |          |
    5+ 5       0.0000     11.64  Q          |          |          |          |
    5+10       0.0000     10.11  Q          |          |          |          |
    5+15       0.0000      8.90  Q          |          |          |          |
    5+20       0.0000      7.48  Q          |          |          |          |
    5+25       0.0000      5.77  Q          |          |          |          |
    5+30       0.0000      3.85  Q          |          |          |          |
    5+35       0.0000      2.18  Q          |          |          |          |
    5+40       0.0000      1.22  Q          |          |          |          |
    5+45       0.0000      0.71  Q          |          |          |          |
    5+50       0.0000      0.31  Q          |          |          |          |
    5+55       0.0000      0.08  Q          |          |          |          |
    6+ 0       0.0000      0.01  Q          |          |          |          |
    6+ 5       0.0000      0.00  Q          |          |          |          |
    6+10       0.0000      0.00  Q          |          |          |          |
    6+15       0.0000      0.00  Q          |          |          |          |
--------------------------------------------------------------------------------
        ****************************HYDROGRAPH DATA****************************
                    Number of intervals =    75
                    Time interval =    5.0 (Min.)
                    Maximum/Peak flow rate =     1228.840 (CFS) COMBINED @ 30
                    Total volume =     146.045 (Ac.Ft)
              Status of hydrographs being held in storage
                        Stream 1  Stream 2  Stream 3  Stream 4  Stream 5
              Peak (CFS)      0.000     0.000     0.000     0.000     0.000
              Vol (Ac.Ft)     0.000     0.000     0.000     0.000     0.000
        ********************************************************************************

        ------------------------------------------------------------------------


        ++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
        Process from Point/Station       30.000 to Point/Station       31.000
        **** STREAM ROUTING SCS CONVEX METHOD ****
        ____________________________________________________________________________
        HYDROGRAPH STREAM ROUTING DATA:
        Length of stream =    377.00 (Ft.)
        Elevation difference =   13.00 (Ft.)
        Slope of channel =  0.034483 (Vert/Horiz)
        Channel type - Improved Channel


        Channel length =   377.00(Ft.)     Elevation difference =  13.00(Ft.)
        Channel evaluation using mean flow rate of hydrograph
        Channel base width  =    5.000(Ft.)
```

```
Slope or 'Z' of left channel bank =   1.000
Slope or 'Z' of right channel bank =   1.000
Manning's 'N'    = 0.045
Maximum depth of channel  =   20.000(Ft.)
Flow(q) thru subarea =    490.044(CFS)
Depth of flow =     4.589(Ft.)
Average velocity =    11.136(Ft/s)
Total flow rate =   490.044(CFS)
Channel flow top width =   14.178(Ft.)
Depth of flow in channel =   4.59(Ft.)
Total number of channels (same dimensions) = 1
Flow Velocity =   11.14(Ft/s)
Travel time  =    0.00 min.
Individual channel flow =  490.044(CFS)
Total capacity of improved channels =    490.044(CFS)
Critical Depth in Channel =    4.88(Ft.)


Channel evaluation using maximum flow rate of hydrograph
Flow(q) thru subarea =   1228.840(CFS)
Depth of flow =     7.189(Ft.)
Average velocity =    14.025(Ft/s)
Total flow rate =  1228.840(CFS)
Channel flow top width =   19.377(Ft.)
Depth of flow in channel =   7.19(Ft.)
Total number of channels (same dimensions) = 1
Flow Velocity =   14.02(Ft/s)
Travel time  =    0.00 min.
Individual channel flow = 1228.840(CFS)
Total capacity of improved channels =   1228.840(CFS)
Critical Depth in Channel =    7.75(Ft.)


********************** SCS CONVEX CHANNEL ROUTING *********************
Convex method of stream routing  data items:
Using equation: Outflow =
O(t+dt) = (1-c*)O(t+dt-dt*) + Input(c*)
          where c* = 1 - (1-c)^e and dt = c(length)/velocity
          c(v/v+1.7) =   0.8919   Travel time =   0.45 (min.)
        dt*(unit time interval) =   5.00(min.),  e=   8.6753
        dt(routing time-step) =   0.40 (min.),   c* =   1.0000

Output hydrograph delayed by 0  unit time increments


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                  P R I N T  O F  S T O R M
               R u n o f f      H y d r o g r a p h
------------------------------------------------------------------------
            Hydrograph in   5   Minute intervals (CFS)

------------------------------------------------------------------------
```

Time(h+m)	Out = O(CFS)	In = I	0	307.2	614.4	921.6	1228.8
0+ 5	5.1140	5.56	O	|	|	|	|
0+10	25.2902	27.00	O	|	|	|	|
0+15	56.7683	59.35	|O	|	|	|	|
0+20	88.3216	90.84	| O	|	|	|	|
0+25	118.1356	120.51	| O	|	|	|	|
0+30	150.6345	153.25	| O	|	|	|	|
0+35	183.1096	185.70	| OI	|	|	|	|
0+40	209.3591	211.41	| O	|	|	|	|
0+45	231.5718	233.32	| O	|	|	|	|
0+50	250.3199	251.80	| O |	|	|	|
0+55	262.5769	263.51	| O |	|	|	|
1+ 0	269.1047	269.59	| O |	|	|	|
1+ 5	279.5050	280.37	| O|	|	|	|
1+10	299.8250	301.52	| O|	|	|	|
1+15	325.0823	327.13	| O	|	|	|	|
1+20	347.5711	349.35	| |O	|	|	|	|
1+25	365.8846	367.32	| |O	|	|	|	|
1+30	388.6790	390.53	| | O	|	|	|	|
1+35	416.3254	418.57	| | O	|	|	|	|
1+40	440.6196	442.54	| | O	|	|	|	|
1+45	463.5493	465.37	| | O	|	|	|	|
1+50	495.2984	497.90	| | O	|	|	|	|
1+55	529.7284	532.49	| | O |	|	|	|
2+ 0	554.5384	556.45	| | O |	|	|	|

```
    2+ 5     570.9113    572.17  |         |       O |         |         |
    2+10     592.5914    594.37  |         |        O|         |         |
    2+15     637.0844    640.79  |         |         O         |         |
    2+20     699.3700    704.46  |         |         | O       |         |
    2+25     764.3599    769.56  |         |         |   OI    |         |
    2+30     857.8767    865.55  |         |         |      OI |         |
    2+35     998.1325   1009.65  |         |         |         | O       |
    2+40    1149.0217   1161.13  |         |         |         |      O  |
    2+45    1223.4289   1228.84  |         |         |         |        OI
    2+50    1173.8688   1169.09  |         |         |         |       O |
    2+55    1037.2669   1025.82  |         |         |         |  O      |
    3+ 0     882.9024    870.49  |         |         |         O |       |
    3+ 5     730.4992    718.34  |         |         |  O      |         |
    3+10     579.1364    567.05  |         |         O |       |         |
    3+15     449.2399    439.01  |         |    O    |         |         |
    3+20     351.9127    344.35  |         |O        |         |         |
    3+25     280.0553    274.47  |        IO|         |         |         |
    3+30     226.2827    222.10  |       O  |         |         |         |
    3+35     185.9729    182.84  |     IO   |         |         |         |
    3+40     155.4912    153.12  |    IO    |         |         |         |
    3+45     132.1855    130.37  |    O     |         |         |         |
    3+50     113.0506    111.55  |  O       |         |         |         |
    3+55      96.7927     95.51  |  O       |         |         |         |
    4+ 0      82.6987     81.59  | O        |         |         |         |
    4+ 5      70.4578     69.49  | O        |         |         |         |
    4+10      60.5388     59.76  |O         |         |         |         |
    4+15      52.6269     52.01  |O         |         |         |         |
    4+20      46.4175     45.93  |O         |         |         |         |
    4+25      40.2087     39.71  |O         |         |         |         |
    4+30      34.3748     33.91  |O         |         |         |         |
    4+35      28.7885     28.34  O          |         |         |         |
    4+40      24.1389     23.77  O          |         |         |         |
    4+45      20.8747     20.62  O          |         |         |         |
    4+50      18.0154     17.79  O          |         |         |         |
    4+55      15.4366     15.23  O          |         |         |         |
    5+ 0      13.4701     13.32  O          |         |         |         |
    5+ 5      11.7724     11.64  O          |         |         |         |
    5+10      10.2348     10.11  O          |         |         |         |
    5+15       8.9928      8.90  O          |         |         |         |
    5+20       7.5947      7.48  O          |         |         |         |
    5+25       5.9067      5.77  O          |         |         |         |
    5+30       4.0070      3.85  O          |         |         |         |
    5+35       2.3094      2.18  O          |         |         |         |
    5+40       1.2965      1.22  O          |         |         |         |
    5+45       0.7483      0.71  O          |         |         |         |
    5+50       0.3383      0.31  O          |         |         |         |
    5+55       0.0974      0.08  O          |         |         |         |
    6+ 0       0.0171      0.01  O          |         |         |         |
    6+ 5       0.0019      0.00  O          |         |         |         |
    6+10       0.0001      0.00  O          |         |         |         |
    6+15       0.0000      0.00  O          |         |         |         |
    6+20       0.0000      0.00  O          |         |         |         |
--------------------------------------------------------------------------
      ****************************HYDROGRAPH DATA****************************
                  Number of intervals =    76
                  Time interval =    5.0 (Min.)
                  Maximum/Peak flow rate =     1223.429 (CFS)
                  Total volume =     146.045 (Ac.Ft)
            Status of hydrographs being held in storage
                       Stream 1  Stream 2  Stream 3  Stream 4  Stream 5
            Peak (CFS)      0.000     0.000     0.000     0.000     0.000
            Vol (Ac.Ft)     0.000     0.000     0.000     0.000     0.000
      ************************************************************************

      ------------------------------------------------------------------------


      ++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
      Process from Point/Station       30.000 to Point/Station       31.000
      **** ADD/COMBINE/RECOVER HYDROGRAPHS ****
      ________________________________________________________________________
      ********************* HYDROGRAPH INFORMATION **********************

                  From study/file name: TRIB3A3100.rte
      ++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                     P R I N T  O F  S T O R M
                  R u n o f f     H y d r o g r a p h
      ------------------------------------------------------------------------
```

Hydrograph in 5 Minute intervals (CFS)

Time(h+m)	Add q(CFS)	Tot. Q	0 306.9 613.8 920.7 1227.6
0+ 5	0.6748	5.79	Q
0+10	1.1158	26.41	Q
0+15	1.0536	57.82	qQ
0+20	1.2359	89.56	q Q
0+25	1.3983	119.53	q Q
0+30	1.6308	152.27	q Q
0+35	1.5604	184.67	q Q
0+40	1.6528	211.01	q Q
0+45	1.7635	233.34	q Q
0+50	1.5825	251.90	q Q
0+55	1.5174	264.09	q Q
1+ 0	1.6750	270.78	q Q
1+ 5	2.0417	281.55	q Q
1+10	2.2334	302.06	q Q
1+15	2.2628	327.35	q Q
1+20	2.1274	349.70	q Q
1+25	2.4451	368.33	q Q
1+30	2.7636	391.44	q Q
1+35	2.6488	418.97	q Q
1+40	2.7265	443.35	q Q
1+45	3.2435	466.79	q Q
1+50	3.3956	498.69	q Q
1+55	3.2158	532.94	q Q
2+ 0	3.1803	557.72	q Q
2+ 5	3.2776	574.19	q Q
2+10	4.0739	596.67	q Q
2+15	5.1096	642.19	q Q
2+20	4.5290	703.90	q Q
2+25	6.1581	770.52	q Q
2+30	7.8467	865.72	q Q
2+35	8.9198	1007.05	q Q
2+40	7.7977	1156.82	q Q
2+45	4.2057	1227.63	q Q
2+50	2.1754	1176.04	q Q
2+55	1.8003	1039.07	q Q
3+ 0	0.9732	883.88	q Q
3+ 5	0.2413	730.74	q Q
3+10	0.0218	579.16	q Q
3+15	0.0000	449.24	q Q
3+20	0.0000	351.91	q Q
3+25	0.0000	280.06	q Q
3+30	0.0000	226.28	q Q
3+35	0.0000	185.97	q Q
3+40	0.0000	155.49	q Q
3+45	0.0000	132.19	q Q
3+50	0.0000	113.05	q Q
3+55	0.0000	96.79	q Q
4+ 0	0.0000	82.70	q Q
4+ 5	0.0000	70.46	q Q
4+10	0.0000	60.54	qQ
4+15	0.0000	52.63	qQ
4+20	0.0000	46.42	qQ
4+25	0.0000	40.21	qQ
4+30	0.0000	34.37	qQ
4+35	0.0000	28.79	Q
4+40	0.0000	24.14	Q
4+45	0.0000	20.87	Q
4+50	0.0000	18.02	Q
4+55	0.0000	15.44	Q
5+ 0	0.0000	13.47	Q
5+ 5	0.0000	11.77	Q
5+10	0.0000	10.23	Q
5+15	0.0000	8.99	Q
5+20	0.0000	7.59	Q
5+25	0.0000	5.91	Q
5+30	0.0000	4.01	Q
5+35	0.0000	2.31	Q
5+40	0.0000	1.30	Q
5+45	0.0000	0.75	Q
5+50	0.0000	0.34	Q
5+55	0.0000	0.10	Q
6+ 0	0.0000	0.02	Q
6+ 5	0.0000	0.00	Q

```
    6+10       0.0000      0.00  Q         |         |         |         |
    6+15       0.0000      0.00  Q         |         |         |         |
    6+20       0.0000      0.00  Q         |         |         |         |
-------------------------------------------------------------------------
        ***************************HYDROGRAPH DATA****************************
                      Number of intervals =    76
                      Time interval =    5.0 (Min.)
                      Maximum/Peak flow rate =     1227.635 (CFS)
                      Total volume =     146.777 (Ac.Ft)
                Status of hydrographs being held in storage
                           Stream 1  Stream 2  Stream 3  Stream 4  Stream 5
                Peak (CFS)      0.000     0.000     0.000     0.000     0.000
                Vol (Ac.Ft)      0.000     0.000     0.000     0.000     0.000
        *************************************************************************

        -------------------------------------------------------------------
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OUTFALL

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                FLOOD HYDROGRAPH ROUTING PROGRAM
          Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2005
                     Study date: 08/21/25

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Program License Serial Number 5006

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******************** HYDROGRAPH INFORMATION **********************

               From study/file name: TRIB1A6100.rte
****************************HYDROGRAPH DATA****************************
               Number of intervals =   105
               Time interval =    5.0 (Min.)
               Maximum/Peak flow rate =      535.738 (CFS)
               Total volume =      94.376 (Ac.Ft)
       Status of hydrographs being held in storage
                  Stream 1  Stream 2  Stream 3  Stream 4  Stream 5
       Peak (CFS)      0.000     0.000     0.000     0.000     0.000
       Vol (Ac.Ft)      0.000     0.000     0.000     0.000     0.000
************************************************************************



++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       11.000 to Point/Station       13.000
**** STREAM ROUTING SCS CONVEX METHOD ****
________________________________________________________________________
HYDROGRAPH STREAM ROUTING DATA:
Length of stream =   2737.00 (Ft.)
Elevation difference =   71.00 (Ft.)
Slope of channel =  0.025941 (Vert/Horiz)
Channel type - Improved Channel


Channel length =  2737.00(Ft.)     Elevation difference =  71.00(Ft.)
Channel evaluation using mean flow rate of hydrograph
Channel base width  =    5.000(Ft.)
Slope or 'Z' of left channel bank =   1.000
Slope or 'Z' of right channel bank =   1.000
Manning's 'N'    = 0.045
Maximum depth of channel  =   20.000(Ft.)
Flow(q) thru subarea =    169.670(CFS)
Depth of flow =     2.844(Ft.)
Average velocity =     7.606(Ft/s)
Total flow rate =   169.670(CFS)
Channel flow top width =   10.688(Ft.)
Depth of flow in channel =   2.84(Ft.)
Total number of channels (same dimensions) = 1
Flow Velocity =    7.61(Ft/s)
Travel time  =    0.00 min.
Individual channel flow =  169.670(CFS)
Total capacity of improved channels =    169.670(CFS)
Critical Depth in Channel =    2.72(Ft.)


Channel evaluation using maximum flow rate of hydrograph
Flow(q) thru subarea =    535.738(CFS)
Depth of flow =     5.152(Ft.)
Average velocity =    10.242(Ft/s)
Total flow rate =   535.738(CFS)
Channel flow top width =   15.304(Ft.)
Depth of flow in channel =   5.15(Ft.)
Total number of channels (same dimensions) = 1
Flow Velocity =   10.24(Ft/s)
Travel time  =    0.00 min.
Individual channel flow =  535.738(CFS)
Total capacity of improved channels =    535.738(CFS)
Critical Depth in Channel =    5.06(Ft.)


********************** SCS CONVEX CHANNEL ROUTING ********************
```

Convex method of stream routing data items:
Using equation: Outflow =
O(t+dt) = (1-c*)O(t+dt-dt*) + Input(c*)
where c* = 1 - (1-c)^e and dt = c(length)/velocity
c(v/v+1.7) = 0.8576 Travel time = 4.45 (min.)
dt*(unit time interval) = 5.00(min.), e= 1.2060
dt(routing time-step) = 3.82 (min.), c* = 0.9047

Output hydrograph delayed by 0 unit time increments

++

P R I N T O F S T O R M
R u n o f f H y d r o g r a p h

Hydrograph in 5 Minute intervals (CFS)

Time(h+m)	Out = O(CFS)	In = I	0 133.9 267.9 401.8 535.7
0+ 5	0.2282	1.07	O | | | |
0+10	1.7968	4.85	O | | | |
0+15	6.0977	12.04	O | | | |
0+20	13.6114	22.05	|O | | | |
0+25	23.4452	32.36	|OI | | | |
0+30	33.1987	40.26	| OI | | | |
0+35	40.8732	46.27	| O | | | |
0+40	46.8669	51.46	| O | | | |
0+45	52.0851	56.44	| OI | | | |
0+50	56.9719	60.87	| O | | | |
0+55	61.1972	64.14	| O | | | |
1+ 0	64.4574	66.95	| O | | | |
1+ 5	67.3531	69.95	| O | | | |
1+10	70.4550	73.46	| O | | | |
1+15	74.0202	77.42	| O | | | |
1+20	77.8795	81.08	| OI | | | |
1+25	81.3388	83.73	| O | | | |
1+30	83.9163	85.66	| O | | | |
1+35	85.8014	87.11	| O | | | |
1+40	87.2489	88.36	| O | | | |
1+45	88.4877	89.46	| O | | | |
1+50	89.5751	90.43	| O | | | |
1+55	90.5275	91.26	| O | | | |
2+ 0	91.4194	92.33	| O | | | |
2+ 5	92.5413	93.73	| O | | | |
2+10	93.9997	95.52	| O | | | |
2+15	95.8572	97.77	| O | | | |
2+20	98.0799	100.07	| O | | | |
2+25	100.3351	102.19	| O | | | |
2+30	102.4930	104.43	| O | | | |
2+35	104.5935	106.05	| O | | | |
2+40	106.1672	107.26	| OI | | | |
2+45	107.4258	108.52	| O | | | |
2+50	108.8144	110.40	| O | | | |
2+55	110.7866	112.92	| O | | | |
3+ 0	113.3554	115.93	| O | | | |
3+ 5	116.2932	118.79	| O | | | |
3+10	119.0514	121.12	| OI| | | |
3+15	121.4450	123.57	| O| | | |
3+20	123.9809	126.46	| O| | | |
3+25	127.0026	130.12	| O| | | |
3+30	130.7931	134.67	| OI | | | |
3+35	135.4928	140.24	| O | | | |
3+40	141.3211	147.41	| OI | | | |
3+45	148.6393	155.88	| |O | | | |
3+50	157.0436	164.54	| |OI | | | |
3+55	165.5836	172.76	| | O | | | |
4+ 0	173.7178	180.45	| | OI | | | |
4+ 5	181.4412	188.09	| | OI | | | |
4+10	189.1226	195.91	| | O | | | |
4+15	197.1198	204.62	| | OI | | | |
4+20	206.0048	214.46	| | OI | | | |
4+25	216.0847	225.84	| | O | | | |
4+30	227.4795	237.87	| | OI | | | |
4+35	239.4330	249.82	| | OI | | | |
4+40	251.2906	261.35	| | OI| | | |
4+45	262.7982	272.61	| | OI | | | |
4+50	274.0690	283.83	| | OI | | | |

```
    4+55     285.3764    295.43  |         |         |OI       |         |
    5+ 0     296.9174    306.89  |         |         | O       |         |
    5+ 5     308.6621    319.64  |         |         |  O      |         |
    5+10     322.3472    337.20  |         |         |   OI    |         |
    5+15     341.2881    362.96  |         |         |    O I  |         |
    5+20     368.2903    397.58  |         |         |      O I|         |
    5+25     403.7260    439.41  |         |         |         O I       |
    5+30     446.0585    486.47  |         |         |         |  O  I   |
    5+35     490.9542    525.51  |         |         |         |     O  I|
    5+40     524.4017    535.74  |         |         |         |        OI
    5+45     527.8866    504.03  |         |         |         |      I O|
    5+50     490.1479    428.38  |         |         |         |I    O   |
    5+55     413.9262    333.14  |         |         |   I     O         |
    6+ 0     324.6246    257.24  |         |        I|   O     |         |
    6+ 5     252.1372    203.30  |         |    I  O |         |         |
    6+10     199.9289    165.73  |         | I O     |         |         |
    6+15     162.9467    137.43  |         I O       |         |         |
    6+20     135.2427    115.79  |       I O         |         |         |
    6+25     114.0775     99.08  |      IO |         |         |         |
    6+30      97.6190     85.55  |     IO  |         |         |         |
    6+35      84.3628     74.61  |    IO   |         |         |         |
    6+40      73.6686     65.87  |   IO    |         |         |         |
    6+45      64.8705     57.72  |   O     |         |         |         |
    6+50      56.9859     51.08  |  IO     |         |         |         |
    6+55      50.3877     45.19  |  O      |         |         |         |
    7+ 0      44.6562     40.36  |  O      |         |         |         |
    7+ 5      39.9113     36.34  | O       |         |         |         |
    7+10      35.8750     32.56  | O       |         |         |         |
    7+15      32.0600     28.73  | O       |         |         |         |
    7+20      28.2953     25.20  |IO       |         |         |         |
    7+25      24.8670     22.27  |O        |         |         |         |
    7+30      21.9311     19.52  |O        |         |         |         |
    7+35      19.2289     17.08  |O        |         |         |         |
    7+40      16.8015     14.81  |O        |         |         |         |
    7+45      14.5932     12.92  IO        |         |         |         |
    7+50      12.7136     11.21  O         |         |         |         |
    7+55      11.0491      9.80  O         |         |         |         |
    8+ 0       9.6192      8.39  O         |         |         |         |
    8+ 5       8.2015      6.95  O         |         |         |         |
    8+10       6.7491      5.45  O         |         |         |         |
    8+15       5.2269      3.83  O         |         |         |         |
    8+20       3.4471      1.41  O         |         |         |         |
    8+25       1.4476      0.67  O         |         |         |         |
    8+30       0.6779      0.37  O         |         |         |         |
    8+35       0.3632      0.20  O         |         |         |         |
    8+40       0.1897      0.07  O         |         |         |         |
    8+45       0.0672      0.02  O         |         |         |         |
    8+50       0.0173      0.00  O         |         |         |         |
    8+55       0.0017      0.00  O         |         |         |         |
    9+ 0       0.0000      0.00  O         |         |         |         |
--------------------------------------------------------------------------
      ****************************HYDROGRAPH DATA****************************
                  Number of intervals =   108
                  Time interval =    5.0 (Min.)
                  Maximum/Peak flow rate =      527.887 (CFS)
                  Total volume =      94.376 (Ac.Ft)
            Status of hydrographs being held in storage
                     Stream 1  Stream 2  Stream 3  Stream 4  Stream 5
            Peak (CFS)      0.000     0.000     0.000     0.000     0.000
            Vol (Ac.Ft)      0.000     0.000     0.000     0.000     0.000
      ************************************************************************

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      ++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
      Process from Point/Station       12.000 to Point/Station       13.000
      **** ADD/COMBINE/RECOVER HYDROGRAPHS ****
      ________________________________________________________________________
      ********************* HYDROGRAPH INFORMATION **********************

                  From study/file name: TRIB1B6100.rte
      ++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                     P R I N T  O F  S T O R M
                  R u n o f f     H y d r o g r a p h
      ------------------------------------------------------------------------
               Hydrograph in   5   Minute intervals (CFS)
```

Time(h+m)	Add q(CFS)	Tot. Q	0	189.4	378.8	568.2	757.7
0+ 5	0.7558	0.98	Q				
0+10	4.3432	6.14	Q				
0+15	9.8408	15.94	Q				
0+20	13.6769	27.29	qQ				
0+25	15.5747	39.02	q Q				
0+30	17.0901	50.29	q Q				
0+35	19.5160	60.39	|q Q				
0+40	22.0821	68.95	|q Q				
0+45	23.4911	75.58	|q Q				
0+50	24.3194	81.29	|q Q				
0+55	24.9428	86.14	|q Q				
1+ 0	25.8057	90.26	|q Q				
1+ 5	27.8011	95.15	|q Q				
1+10	30.0522	100.51	|q Q				
1+15	31.2236	105.24	|q Q				
1+20	31.8968	109.78	|q Q				
1+25	32.4217	113.76	|q Q				
1+30	32.7669	116.68	|q Q				
1+35	32.9994	118.80	|q Q				
1+40	33.1741	120.42	|q Q				
1+45	33.3120	121.80	|q Q				
1+50	33.4514	123.03	|q Q				
1+55	33.5251	124.05	|q Q				
2+ 0	33.9662	125.39	|q Q				
2+ 5	35.2506	127.79	|q Q				
2+10	36.0077	130.01	|q Q				
2+15	36.6478	132.51	|q Q				
2+20	38.1829	136.26	| q Q				
2+25	38.9816	139.32	| q Q				
2+30	39.3717	141.86	| q Q				
2+35	39.6464	144.24	| q Q				
2+40	39.8413	146.01	| q Q				
2+45	40.3746	147.80	| q Q				
2+50	42.1214	150.94	| q Q				
2+55	44.1649	154.95	| q Q				
3+ 0	45.1933	158.55	| q Q				
3+ 5	45.7344	162.03	| q Q				
3+10	46.4940	165.55	| q Q				
3+15	48.3974	169.84	| q Q				
3+20	50.5895	174.57	| q Q|				
3+25	52.0457	179.05	| q Q|				
3+30	54.6762	185.47	| q Q|				
3+35	59.0601	194.55	| q Q				
3+40	63.8998	205.22	| q Q				
3+45	67.9125	216.55	| q |Q				
3+50	71.4757	228.52	| q | Q				
3+55	75.0079	240.59	| q | Q				
4+ 0	78.4575	252.18	| q | Q				
4+ 5	81.9612	263.40	| q | Q				
4+10	85.7295	274.85	| q | Q				
4+15	90.7958	287.92	| q | Q				
4+20	96.5278	302.53	| q | Q				
4+25	102.5543	318.64	| q | Q				
4+30	108.4058	335.89	| q | Q				
4+35	113.1210	352.55	| q | Q				
4+40	117.5996	368.89	| q | Q|				
4+45	123.2002	386.00	| q | Q				
4+50	128.9247	402.99	| q | |Q				
4+55	133.5981	418.97	| q | | Q				
5+ 0	138.0342	434.95	| q | | Q				
5+ 5	145.1236	453.79	| q | | Q				
5+10	159.2011	481.55	| q | | Q				
5+15	180.5809	521.87	| q| | Q				
5+20	202.6034	570.89	| q | Q				
5+25	223.5117	627.24	| |q | Q				
5+30	248.6693	694.73	| | q | Q				
5+35	266.7122	757.67	| | q | Q				
5+40	230.4346	754.84	| | q | Q				
5+45	155.2863	683.17	| q | Q				
5+50	104.1397	594.29	| q | Q				
5+55	75.5004	489.43	| q | Q				
6+ 0	57.0460	381.67	| q | Q				
6+ 5	43.6673	295.80	| q | Q				
6+10	33.0450	232.97	|q | Q				
6+15	25.0376	187.98	|q Q|				

```
    6+20      19.6732    154.92  |q      Q |          |          |          |
    6+25      15.4125    129.49  q     Q   |          |          |          |
    6+30      11.9839    109.60  q    Q    |          |          |          |
    6+35       9.1192     93.48  q   Q     |          |          |          |
    6+40       6.7877     80.46  q   Q     |          |          |          |
    6+45       5.0358     69.91  q  Q      |          |          |          |
    6+50       3.5176     60.50  q  Q      |          |          |          |
    6+55       1.2333     51.62  q Q       |          |          |          |
    7+ 0       0.5344     45.19  q Q       |          |          |          |
    7+ 5       0.2745     40.19  q Q       |          |          |          |
    7+10       0.1530     36.03  qQ        |          |          |          |
    7+15       0.0763     32.14  qQ        |          |          |          |
    7+20       0.0344     28.33  qQ        |          |          |          |
    7+25       0.0000     24.87  qQ        |          |          |          |
    7+30       0.0000     21.93  qQ        |          |          |          |
    7+35       0.0000     19.23  qQ        |          |          |          |
    7+40       0.0000     16.80  Q         |          |          |          |
    7+45       0.0000     14.59  Q         |          |          |          |
    7+50       0.0000     12.71  Q         |          |          |          |
    7+55       0.0000     11.05  Q         |          |          |          |
    8+ 0       0.0000      9.62  Q         |          |          |          |
    8+ 5       0.0000      8.20  Q         |          |          |          |
    8+10       0.0000      6.75  Q         |          |          |          |
    8+15       0.0000      5.23  Q         |          |          |          |
    8+20       0.0000      3.45  Q         |          |          |          |
    8+25       0.0000      1.45  Q         |          |          |          |
    8+30       0.0000      0.68  Q         |          |          |          |
    8+35       0.0000      0.36  Q         |          |          |          |
    8+40       0.0000      0.19  Q         |          |          |          |
    8+45       0.0000      0.07  Q         |          |          |          |
    8+50       0.0000      0.02  Q         |          |          |          |
    8+55       0.0000      0.00  Q         |          |          |          |
    9+ 0       0.0000      0.00  Q         |          |          |          |
--------------------------------------------------------------------------------
      ****************************HYDROGRAPH DATA****************************
                  Number of intervals =   108
                  Time interval =    5.0 (Min.)
                  Maximum/Peak flow rate =      757.666 (CFS)  CULVERT 1
                  Total volume =     131.031 (Ac.Ft)
            Status of hydrographs being held in storage
                       Stream 1  Stream 2  Stream 3  Stream 4  Stream 5
            Peak (CFS)      0.000     0.000     0.000     0.000     0.000
            Vol (Ac.Ft)     0.000     0.000     0.000     0.000     0.000
      ********************************************************************************

      ------------------------------------------------------------------------


      ++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
      Process from Point/Station       13.000 to Point/Station       15.000
      **** STREAM ROUTING SCS CONVEX METHOD ****
      ____________________________________________________________________________
      HYDROGRAPH STREAM ROUTING DATA:
      Length of stream =    763.00 (Ft.)
      Elevation difference =   27.00 (Ft.)
      Slope of channel =  0.035387 (Vert/Horiz)
      Channel type - Improved Channel


      Channel length =   763.00(Ft.)     Elevation difference =  27.00(Ft.)
      Channel evaluation using mean flow rate of hydrograph
      Channel base width  =    5.000(Ft.)
      Slope or 'Z' of left channel bank =   1.000
      Slope or 'Z' of right channel bank =   1.000
      Manning's 'N'    = 0.045
      Maximum depth of channel  =   20.000(Ft.)
      Flow(q) thru subarea =    239.166(CFS)
      Depth of flow =     3.144(Ft.)
      Average velocity =     9.339(Ft/s)
      Total flow rate =   239.166(CFS)
      Channel flow top width =   11.289(Ft.)
      Depth of flow in channel =   3.14(Ft.)
      Total number of channels (same dimensions) = 1
      Flow Velocity =    9.34(Ft/s)
      Travel time  =    0.00 min.
      Individual channel flow =  239.166(CFS)
      Total capacity of improved channels =    239.166(CFS)
      Critical Depth in Channel =    3.31(Ft.)
```

```
      Channel evaluation using maximum flow rate of hydrograph
      Flow(q) thru subarea =    757.666(CFS)
      Depth of flow =     5.661(Ft.)
      Average velocity =    12.553(Ft/s)
      Total flow rate =   757.666(CFS)
      Channel flow top width =   16.323(Ft.)
      Depth of flow in channel =   5.66(Ft.)
      Total number of channels (same dimensions) = 1
      Flow Velocity =   12.55(Ft/s)
      Travel time  =    0.00 min.
      Individual channel flow =  757.666(CFS)
      Total capacity of improved channels =    757.666(CFS)
      Critical Depth in Channel =    6.06(Ft.)


      ********************** SCS CONVEX CHANNEL ROUTING ********************
      Convex method of stream routing  data items:
      Using equation: Outflow =
      O(t+dt) = (1-c*)O(t+dt-dt*) + Input(c*)
                where c* = 1 - (1-c)^e and dt = c(length)/velocity
                c(v/v+1.7) =   0.8807   Travel time =   1.01 (min.)
              dt*(unit time interval) =   5.00(min.),  e=   4.0692
              dt(routing time-step) =   0.89 (min.),   c* =   0.9998

      Output hydrograph delayed by 0  unit time increments


      ++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                        P R I N T  O F  S T O R M
                     R u n o f f     H y d r o g r a p h
      ----------------------------------------------------------------------
                  Hydrograph in   5   Minute intervals (CFS)

      ----------------------------------------------------------------------
Time(h+m) Out = O(CFS) In = I  0      189.4     378.8     568.2     757.7
----------------------------------------------------------------------------
  0+ 5       0.8083      0.98  O         |         |         |         |
  0+10       5.2192      6.14  O         |         |         |         |
  0+15      14.1884     15.94  O         |         |         |         |
  0+20      25.2610     27.29  |O        |         |         |         |
  0+25      36.9244     39.02  |OI       |         |         |         |
  0+30      48.2759     50.29  | O       |         |         |         |
  0+35      58.5849     60.39  |  O      |         |         |         |
  0+40      67.4200     68.95  |  O      |         |         |         |
  0+45      74.3924     75.58  |  O      |         |         |         |
  0+50      80.2705     81.29  |   O     |         |         |         |
  0+55      85.2739     86.14  |   O     |         |         |         |
  1+ 0      89.5266     90.26  |   O     |         |         |         |
  1+ 5      94.2805     95.15  |   OI    |         |         |         |
  1+10      99.5510    100.51  |    O    |         |         |         |
  1+15     104.3978    105.24  |    O    |         |         |         |
  1+20     108.9667    109.78  |    O    |         |         |         |
  1+25     113.0489    113.76  |    OI   |         |         |         |
  1+30     116.1611    116.68  |     O   |         |         |         |
  1+35     118.4225    118.80  |     O   |         |         |         |
  1+40     120.1333    120.42  |     O   |         |         |         |
  1+45     121.5538    121.80  |     O   |         |         |         |
  1+50     122.8074    123.03  |     O   |         |         |         |
  1+55     123.8693    124.05  |     O   |         |         |         |
  2+ 0     125.1475    125.39  |     O   |         |         |         |
  2+ 5     127.3621    127.79  |     O   |         |         |         |
  2+10     129.6117    130.01  |     O   |         |         |         |
  2+15     132.0589    132.51  |     O   |         |         |         |
  2+20     135.5916    136.26  |      O  |         |         |         |
  2+25     138.7712    139.32  |      O  |         |         |         |
  2+30     141.4096    141.86  |      O  |         |         |         |
  2+35     143.8157    144.24  |      O  |         |         |         |
  2+40     145.6925    146.01  |      O  |         |         |         |
  2+45     147.4803    147.80  |      O  |         |         |         |
  2+50     150.3758    150.94  |      O  |         |         |         |
  2+55     154.2342    154.95  |       O |         |         |         |
  3+ 0     157.9061    158.55  |       O |         |         |         |
  3+ 5     161.4062    162.03  |       O |         |         |         |
  3+10     164.9170    165.55  |       O |         |         |         |
  3+15     169.0749    169.84  |       O |         |         |         |
  3+20     173.7259    174.57  |        O|         |         |         |
```

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   3+25     178.2484    179.05  |        O|         |         |         |
   3+30     184.3224    185.47  |        O|         |         |         |
   3+35     192.9304    194.55  |         O         |         |         |
   3+40     203.3155    205.22  |         O         |         |         |
   3+45     214.5278    216.55  |         |O        |         |         |
   3+50     226.3816    228.52  |         |OI       |         |         |
   3+55     238.4352    240.59  |         | O       |         |         |
   4+ 0     250.1062    252.18  |         |  O      |         |         |
   4+ 5     261.3970    263.40  |         |  O      |         |         |
   4+10     272.8070    274.85  |         |   O     |         |         |
   4+15     285.5823    287.92  |         |    O    |         |         |
   4+20     299.9217    302.53  |         |    O    |         |         |
   4+25     315.7621    318.64  |         |     O   |         |         |
   4+30     332.8048    335.89  |         |      O  |         |         |
   4+35     349.5766    352.55  |         |       O |         |         |
   4+40     365.9722    368.89  |         |        O|         |         |
   4+45     382.9425    386.00  |         |         O         |         |
   4+50     399.9579    402.99  |         |         |O        |         |
   4+55     416.1199    418.97  |         |         |OI       |         |
   5+ 0     432.0977    434.95  |         |         | O       |         |
   5+ 5     450.4216    453.79  |         |         |  O      |         |
   5+10     476.5895    481.55  |         |         |    O    |         |
   5+15     514.6672    521.87  |         |         |      O  |         |
   5+20     562.1371    570.89  |         |         |        OI         |
   5+25     617.1736    627.24  |         |         |         | OI      |
   5+30     682.6729    694.73  |         |         |         |     O   |
   5+35     746.4240    757.67  |         |         |         |        OI
   5+40     755.3397    754.84  |         |         |         |        O|
   5+45     695.9714    683.17  |         |         |         |     O   |
   5+50     610.1640    594.29  |         |         |         |IO       |
   5+55     508.1566    489.43  |         |         |    IO   |         |
   6+ 0     400.9182    381.67  |         |         |IO       |         |
   6+ 5     311.1428    295.80  |         |    IO   |         |         |
   6+10     244.1977    232.97  |         | O       |         |         |
   6+15     196.0210    187.98  |        IO         |         |         |
   6+20     160.8231    154.92  |       O |         |         |         |
   6+25     134.0318    129.49  |     IO  |         |         |         |
   6+30     113.1554    109.60  |    O    |         |         |         |
   6+35      96.3617     93.48  |   IO    |         |         |         |
   6+40      82.7831     80.46  |   O     |         |         |         |
   6+45      71.7909     69.91  |  O      |         |         |         |
   6+50      62.1831     60.50  |  O      |         |         |         |
   6+55      53.2077     51.62  | O       |         |         |         |
   7+ 0      46.3393     45.19  | O       |         |         |         |
   7+ 5      41.0798     40.19  | O       |         |         |         |
   7+10      36.7707     36.03  |O        |         |         |         |
   7+15      32.8315     32.14  |O        |         |         |         |
   7+20      29.0097     28.33  |O        |         |         |         |
   7+25      25.4856     24.87  |O        |         |         |         |
   7+30      22.4555     21.93  |O        |         |         |         |
   7+35      19.7116     19.23  |O        |         |         |         |
   7+40      17.2351     16.80  O         |         |         |         |
   7+45      14.9877     14.59  O         |         |         |         |
   7+50      13.0494     12.71  O         |         |         |         |
   7+55      11.3464     11.05  O         |         |         |         |
   8+ 0       9.8746      9.62  O         |         |         |         |
   8+ 5       8.4547      8.20  O         |         |         |         |
   8+10       7.0085      6.75  O         |         |         |         |
   8+15       5.4988      5.23  O         |         |         |         |
   8+20       3.7650      3.45  O         |         |         |         |
   8+25       1.8047      1.45  O         |         |         |         |
   8+30       0.8154      0.68  O         |         |         |         |
   8+35       0.4194      0.36  O         |         |         |         |
   8+40       0.2207      0.19  O         |         |         |         |
   8+45       0.0891      0.07  O         |         |         |         |
   8+50       0.0263      0.02  O         |         |         |         |
   8+55       0.0045      0.00  O         |         |         |         |
   9+ 0       0.0003      0.00  O         |         |         |         |
   9+ 5       0.0000      0.00  O         |         |         |         |
--------------------------------------------------------------------------
      ****************************HYDROGRAPH DATA****************************
                  Number of intervals =   109
                  Time interval =    5.0 (Min.)
                  Maximum/Peak flow rate =      755.340 (CFS)
                  Total volume =     131.031 (Ac.Ft)
            Status of hydrographs being held in storage
                       Stream 1  Stream 2  Stream 3  Stream 4  Stream 5
            Peak (CFS)      0.000     0.000     0.000     0.000     0.000
```

```
        Vol (Ac.Ft)      0.000     0.000     0.000     0.000     0.000
      ******************************************************************************

      ------------------------------------------------------------------------


      ++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
      Process from Point/Station       14.000 to Point/Station       15.000
      **** ADD/COMBINE/RECOVER HYDROGRAPHS ****
      ____________________________________________________________________________
      ********************* HYDROGRAPH INFORMATION **********************

                   From study/file name: TRIB1C6100.rte
      ++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                        P R I N T  O F  S T O R M
                     R u n o f f     H y d r o g r a p h
      ----------------------------------------------------------------------------
                  Hydrograph in   5   Minute intervals (CFS)

      ----------------------------------------------------------------------------
Time(h+m) Add q(CFS)  Tot. Q   0      196.3     392.6     588.8     785.1
----------------------------------------------------------------------------
  0+ 5       0.1049      0.91  Q         |         |         |         |
  0+10       0.6025      5.82  Q         |         |         |         |
  0+15       1.3406     15.53  Q         |         |         |         |
  0+20       1.8380     27.10  qQ        |         |         |         |
  0+25       2.0819     39.01  qQ        |         |         |         |
  0+30       2.2807     50.56  q Q       |         |         |         |
  0+35       2.6041     61.19  q  Q      |         |         |         |
  0+40       2.9374     70.36  q  Q      |         |         |         |
  0+45       3.1157     77.51  q  Q      |         |         |         |
  0+50       3.2221     83.49  q   Q     |         |         |         |
  0+55       3.3025     88.58  q   Q     |         |         |         |
  1+ 0       3.4153     92.94  q   Q     |         |         |         |
  1+ 5       3.6818     97.96  q   Q     |         |         |         |
  1+10       3.9730    103.52  q    Q    |         |         |         |
  1+15       4.1204    108.52  q    Q    |         |         |         |
  1+20       4.2066    113.17  q    Q    |         |         |         |
  1+25       4.2711    117.32  q    Q    |         |         |         |
  1+30       4.3135    120.47  q     Q   |         |         |         |
  1+35       4.3429    122.77  q     Q   |         |         |         |
  1+40       4.3648    124.50  q     Q   |         |         |         |
  1+45       4.3826    125.94  q     Q   |         |         |         |
  1+50       4.3989    127.21  q     Q   |         |         |         |
  1+55       4.4081    128.28  q     Q   |         |         |         |
  2+ 0       4.4669    129.61  q     Q   |         |         |         |
  2+ 5       4.6399    132.00  q     Q   |         |         |         |
  2+10       4.7316    134.34  q     Q   |         |         |         |
  2+15       4.8189    136.88  q     Q   |         |         |         |
  2+20       5.0198    140.61  q      Q  |         |         |         |
  2+25       5.1199    143.89  q      Q  |         |         |         |
  2+30       5.1694    146.58  q      Q  |         |         |         |
  2+35       5.2047    149.02  q      Q  |         |         |         |
  2+40       5.2292    150.92  q      Q  |         |         |         |
  2+45       5.3002    152.78  q      Q  |         |         |         |
  2+50       5.5347    155.91  q      Q  |         |         |         |
  2+55       5.7999    160.03  q       Q |         |         |         |
  3+ 0       5.9292    163.84  q       Q |         |         |         |
  3+ 5       5.9979    167.40  q       Q |         |         |         |
  3+10       6.0976    171.01  q       Q |         |         |         |
  3+15       6.3524    175.43  q       Q |         |         |         |
  3+20       6.6349    180.36  q        Q|         |         |         |
  3+25       6.8227    185.07  q        Q|         |         |         |
  3+30       7.1716    191.49  q        Q|         |         |         |
  3+35       7.7503    200.68  q         Q         |         |         |
  3+40       8.3820    211.70  q         Q         |         |         |
  3+45       8.8990    223.43  q         |Q        |         |         |
  3+50       9.3633    235.74  q         | Q       |         |         |
  3+55       9.8212    248.26  q         | Q       |         |         |
  4+ 0      10.2715    260.38  q         |  Q      |         |         |
  4+ 5      10.7236    272.12  q         |  Q      |         |         |
  4+10      11.2169    284.02  q         |   Q     |         |         |
  4+15      11.8819    297.46  q         |    Q    |         |         |
  4+20      12.6304    312.55  q         |    Q    |         |         |
  4+25      13.4159    329.18  q         |     Q   |         |         |
  4+30      14.1752    346.98  q         |      Q  |         |         |
  4+35      14.7812    364.36  q         |       Q |         |         |
  4+40      15.3650    381.34  q         |        Q|         |         |
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    4+45      16.0969    399.04  q          |          Q          |          |
    4+50      16.8400    416.80  q          |          |Q         |          |
    4+55      17.4394    433.56  q          |          | Q        |          |
    5+ 0      18.0177    450.12  q          |          | Q        |          |
    5+ 5      18.9500    469.37  q          |          |  Q       |          |
    5+10      20.8217    497.41  |q         |          |    Q     |          |
    5+15      23.6356    538.30  |q         |          |      Q   |          |
    5+20      26.5018    588.64  |q         |          |        Q|          |
    5+25      29.2204    646.39  |q         |          |         | Q        |
    5+30      32.5206    715.19  |q         |          |         |    Q     |
    5+35      34.8468    781.27  |q         |          |         |      Q|
    5+40      29.7766    785.12  |q         |          |         |       Q
    5+45      19.8705    715.84  |q         |          |         |    Q     |
    5+50      13.3315    623.50  q          |          |         |Q         |
    5+55       9.6686    517.83  q          |          |     Q   |          |
    6+ 0       7.2884    408.21  q          |          |Q        |          |
    6+ 5       5.5597    316.70  q          |     Q    |         |          |
    6+10       4.1807    248.38  q          | Q        |         |          |
    6+15       3.1543    199.18  q          Q          |         |          |
    6+20       2.4622    163.29  q        Q |          |         |          |
    6+25       1.9073    135.94  q      Q   |          |         |          |
    6+30       1.4666    114.62  q    Q     |          |         |          |
    6+35       1.1008     97.46  q   Q      |          |         |          |
    6+40       0.8090     83.59  q   Q      |          |         |          |
    6+45       0.5868     72.38  q  Q       |          |         |          |
    6+50       0.3754     62.56  q  Q       |          |         |          |
    6+55       0.1358     53.34  q Q        |          |         |          |
    7+ 0       0.0606     46.40  q Q        |          |         |          |
    7+ 5       0.0316     41.11  q Q        |          |         |          |
    7+10       0.0173     36.79  qQ         |          |         |          |
    7+15       0.0085     32.84  qQ         |          |         |          |
    7+20       0.0034     29.01  qQ         |          |         |          |
    7+25       0.0000     25.49  qQ         |          |         |          |
    7+30       0.0000     22.46  qQ         |          |         |          |
    7+35       0.0000     19.71  qQ         |          |         |          |
    7+40       0.0000     17.24  Q          |          |         |          |
    7+45       0.0000     14.99  Q          |          |         |          |
    7+50       0.0000     13.05  Q          |          |         |          |
    7+55       0.0000     11.35  Q          |          |         |          |
    8+ 0       0.0000      9.87  Q          |          |         |          |
    8+ 5       0.0000      8.45  Q          |          |         |          |
    8+10       0.0000      7.01  Q          |          |         |          |
    8+15       0.0000      5.50  Q          |          |         |          |
    8+20       0.0000      3.76  Q          |          |         |          |
    8+25       0.0000      1.80  Q          |          |         |          |
    8+30       0.0000      0.82  Q          |          |         |          |
    8+35       0.0000      0.42  Q          |          |         |          |
    8+40       0.0000      0.22  Q          |          |         |          |
    8+45       0.0000      0.09  Q          |          |         |          |
    8+50       0.0000      0.03  Q          |          |         |          |
    8+55       0.0000      0.00  Q          |          |         |          |
    9+ 0       0.0000      0.00  Q          |          |         |          |
    9+ 5       0.0000      0.00  Q          |          |         |          |
--------------------------------------------------------------------------
      ****************************HYDROGRAPH DATA****************************
                Number of intervals =   109
                Time interval =    5.0 (Min.)
                Maximum/Peak flow rate =      785.116 (CFS)   CULVERT 2
                Total volume =     135.816 (Ac.Ft)
          Status of hydrographs being held in storage
                    Stream 1  Stream 2  Stream 3  Stream 4  Stream 5
          Peak (CFS)      0.000     0.000     0.000     0.000     0.000
          Vol (Ac.Ft)     0.000     0.000     0.000     0.000     0.000
      ************************************************************************

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      ++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
      Process from Point/Station       15.000 to Point/Station       30.000
      **** STREAM ROUTING SCS CONVEX METHOD ****
      ________________________________________________________________________
      HYDROGRAPH STREAM ROUTING DATA:
      Length of stream =   1313.00 (Ft.)
      Elevation difference =   48.00 (Ft.)
      Slope of channel =  0.036558 (Vert/Horiz)
      Channel type - Improved Channel
```

```
      Channel length =  1313.00(Ft.)     Elevation difference =  48.00(Ft.)
      Channel evaluation using mean flow rate of hydrograph
      Channel base width  =    5.000(Ft.)
      Slope or 'Z' of left channel bank =   1.000
      Slope or 'Z' of right channel bank =   1.000
      Manning's 'N'    = 0.045
      Maximum depth of channel  =   20.000(Ft.)
      Flow(q) thru subarea =    247.564(CFS)
      Depth of flow =     3.175(Ft.)
      Average velocity =     9.538(Ft/s)
      Total flow rate =   247.564(CFS)
      Channel flow top width =   11.350(Ft.)
      Depth of flow in channel =   3.18(Ft.)
      Total number of channels (same dimensions) = 1
      Flow Velocity =    9.54(Ft/s)
      Travel time  =    0.00 min.
      Individual channel flow =  247.564(CFS)
      Total capacity of improved channels =    247.564(CFS)
      Critical Depth in Channel =    3.38(Ft.)


      Channel evaluation using maximum flow rate of hydrograph
      Flow(q) thru subarea =    785.116(CFS)
      Depth of flow =     5.715(Ft.)
      Average velocity =    12.820(Ft/s)
      Total flow rate =   785.116(CFS)
      Channel flow top width =   16.430(Ft.)
      Depth of flow in channel =   5.72(Ft.)
      Total number of channels (same dimensions) = 1
      Flow Velocity =   12.82(Ft/s)
      Travel time  =    0.00 min.
      Individual channel flow =  785.116(CFS)
      Total capacity of improved channels =    785.116(CFS)
      Critical Depth in Channel =    6.19(Ft.)


      ********************** SCS CONVEX CHANNEL ROUTING *********************
      Convex method of stream routing  data items:
      Using equation: Outflow =
      O(t+dt) = (1-c*)O(t+dt-dt*) + Input(c*)
                where c* = 1 - (1-c)^e and dt = c(length)/velocity
                c(v/v+1.7) =   0.8829   Travel time =   1.71 (min.)
               dt*(unit time interval) =   5.00(min.),  e=   2.5451
               dt(routing time-step) =   1.51 (min.),   c* =   0.9957

      Output hydrograph delayed by 0  unit time increments


      ++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                        P R I N T  O F  S T O R M
                     R u n o f f     H y d r o g r a p h
      ----------------------------------------------------------------------
                  Hydrograph in   5   Minute intervals (CFS)

      ----------------------------------------------------------------------
Time(h+m) Out = O(CFS) In = I  0      196.3     392.6     588.8     785.1
----------------------------------------------------------------------------
  0+ 5       0.6352      0.91  O         |         |         |         |
  0+10       4.3264      5.82  O         |         |         |         |
  0+15      12.5678     15.53  O         |         |         |         |
  0+20      23.5647     27.10  |O        |         |         |         |
  0+25      35.3668     39.01  |O        |         |         |         |
  0+30      47.0254     50.56  | O       |         |         |         |
  0+35      57.9376     61.19  | OI      |         |         |         |
  0+40      67.5528     70.36  |  O      |         |         |         |
  0+45      75.3195     77.51  |  O      |         |         |         |
  0+50      81.6616     83.49  |   O     |         |         |         |
  0+55      87.0211     88.58  |   O     |         |         |         |
  1+ 0      91.6064     92.94  |   O     |         |         |         |
  1+ 5      96.4284     97.96  |   O     |         |         |         |
  1+10     101.8246    103.52  |    O    |         |         |         |
  1+15     106.9908    108.52  |    O    |         |         |         |
  1+20     111.7499    113.17  |    O    |         |         |         |
  1+25     116.0517    117.32  |    O    |         |         |         |
  1+30     119.5090    120.47  |     O   |         |         |         |
  1+35     122.0640    122.77  |     O   |         |         |         |
  1+40     123.9677    124.50  |     O   |         |         |         |
```

1+45	125.4963	125.94	| O |				
1+50	126.8179	127.21	| O |				
1+55	127.9497	128.28	| O |				
2+ 0	129.2061	129.61	| O |				
2+ 5	131.2735	132.00	| O |				
2+10	133.6275	134.34	| O |				
2+15	136.1033	136.88	| O |				
2+20	139.4717	140.61	| O |				
2+25	142.8880	143.89	| O |				
2+30	145.7566	146.58	| O |				
2+35	148.2737	149.02	| O |				
2+40	150.3398	150.92	| O |				
2+45	152.2123	152.78	| O |				
2+50	154.9554	155.91	| O |				
2+55	158.7748	160.03	| O |				
3+ 0	162.6729	163.84	| O |				
3+ 5	166.3128	167.40	| O |				
3+10	169.9110	171.01	| O |				
3+15	174.0794	175.43	| O |				
3+20	178.8533	180.36	| O|				
3+25	183.6309	185.07	| O|				
3+30	189.5328	191.49	| O|				
3+35	197.8760	200.68	| O |				
3+40	208.3322	211.70	| O |				
3+45	219.8422	223.43	| O |				
3+50	231.9802	235.74	| OI |				
3+55	244.4319	248.26	| O |				
4+ 0	256.6718	260.38	| O |				
4+ 5	268.5304	272.12	| O |				
4+10	280.3854	284.02	| O |				
4+15	293.3576	297.46	| OI |				
4+20	307.9420	312.55	| O |				
4+25	324.0976	329.18	| O |				
4+30	341.5396	346.98	| O |				
4+35	359.0450	364.36	| O |				
4+40	376.1462	381.34	| O|				
4+45	393.6289	399.04	| O |				
4+50	411.3694	416.80	| OI |				
4+55	428.4342	433.56	| OI |				
5+ 0	445.0541	450.12	| O |				
5+ 5	463.4886	469.37	| O |				
5+10	488.8512	497.41	| OI |				
5+15	525.8195	538.30	| OI |				
5+20	573.2641	588.64	| O|				
5+25	628.7486	646.39	| O |				
5+30	694.1766	715.19	| OI |				
5+35	761.0681	781.27	| OI|				
5+40	783.8598	785.12	| OI				
5+45	736.9229	715.84	| IO |				
5+50	651.6944	623.50	| I O |				
5+55	550.1101	517.83	| I O |				
6+ 0	441.7106	408.21	| I O |				
6+ 5	344.6979	316.70	| IO |				
6+10	269.2946	248.38	| IO |				
6+15	214.2412	199.18	| O |				
6+20	174.2739	163.29	| O |				
6+25	144.3097	135.94	| IO |				
6+30	121.1463	114.62	| IO |				
6+35	102.7134	97.46	| IO |				
6+40	87.8365	83.59	| O |				
6+45	75.8093	72.38	| O |				
6+50	65.5620	62.56	| O |				
6+55	56.1612	53.34	| O |				
7+ 0	48.5254	46.40	| O |				
7+ 5	42.7302	41.11	| O |				
7+10	38.1109	36.79	|O |				
7+15	34.0473	32.84	|O |				
7+20	30.1831	29.01	|O |				
7+25	26.5643	25.49	|O |				
7+30	23.3824	22.46	|O |				
7+35	20.5508	19.71	|O |				
7+40	17.9925	17.24	O |				
7+45	15.6750	14.99	O |				
7+50	13.6423	13.05	O |				
7+55	11.8673	11.35	O |				
8+ 0	10.3248	9.87	O |				
8+ 5	8.8889	8.45	O |				
8+10	7.4506	7.01	O |				

```
   8+15       5.9602      5.50  O         |         |         |         |
   8+20       4.2947      3.76  O         |         |         |         |
   8+25       2.4037      1.80  O         |         |         |         |
   8+30       1.1191      0.82  O         |         |         |         |
   8+35       0.5412      0.42  O         |         |         |         |
   8+40       0.2817      0.22  O         |         |         |         |
   8+45       0.1294      0.09  O         |         |         |         |
   8+50       0.0456      0.03  O         |         |         |         |
   8+55       0.0112      0.00  O         |         |         |         |
   9+ 0       0.0016      0.00  O         |         |         |         |
   9+ 5       0.0001      0.00  O         |         |         |         |
   9+10       0.0000      0.00  O         |         |         |         |
--------------------------------------------------------------------------

      ***************************HYDROGRAPH DATA****************************
                  Number of intervals =   110
                  Time interval =    5.0 (Min.)
                  Maximum/Peak flow rate =      783.860 (CFS)
                  Total volume =     135.816 (Ac.Ft)
            Status of hydrographs being held in storage
                     Stream 1  Stream 2  Stream 3  Stream 4  Stream 5
            Peak (CFS)      0.000     0.000     0.000     0.000     0.000
            Vol (Ac.Ft)      0.000     0.000     0.000     0.000     0.000
      ************************************************************************

      ------------------------------------------------------------------


      ++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
      Process from Point/Station       16.000 to Point/Station       30.000
      **** ADD/COMBINE/RECOVER HYDROGRAPHS ****
      ______________________________________________________________________
      ********************* HYDROGRAPH INFORMATION **********************

                  From study/file name: TRIB1D6100.rte
      ++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                     P R I N T  O F  S T O R M
                  R u n o f f     H y d r o g r a p h
      ----------------------------------------------------------------------
               Hydrograph in   5   Minute intervals (CFS)

      ----------------------------------------------------------------------
 Time(h+m) Add q(CFS)  Tot. Q   0      201.9     403.7     605.6     807.4
 ----------------------------------------------------------------------------
   0+ 5       0.6603       1.30  Q         |         |         |         |
   0+10       2.3369       6.66  Q         |         |         |         |
   0+15       3.2528      15.82  Q         |         |         |         |
   0+20       3.5917      27.16  qQ        |         |         |         |
   0+25       3.7658      39.13  qQ        |         |         |         |
   0+30       4.0918      51.12  q Q       |         |         |         |
   0+35       4.6429      62.58  q  Q      |         |         |         |
   0+40       4.8255      72.38  q  Q      |         |         |         |
   0+45       4.8998      80.22  q  Q      |         |         |         |
   0+50       4.9363      86.60  q   Q     |         |         |         |
   0+55       4.9590      91.98  q   Q     |         |         |         |
   1+ 0       5.1941      96.80  q   Q     |         |         |         |
   1+ 5       5.6914     102.12  q    Q    |         |         |         |
   1+10       5.8349     107.66  q    Q    |         |         |         |
   1+15       5.9005     112.89  q    Q    |         |         |         |
   1+20       5.9370     117.69  q    Q    |         |         |         |
   1+25       5.9597     122.01  q     Q   |         |         |         |
   1+30       5.9731     125.48  q     Q   |         |         |         |
   1+35       5.9817     128.05  q     Q   |         |         |         |
   1+40       5.9817     129.95  q     Q   |         |         |         |
   1+45       5.9817     131.48  q     Q   |         |         |         |
   1+50       5.9817     132.80  q     Q   |         |         |         |
   1+55       5.9817     133.93  q     Q   |         |         |         |
   2+ 0       6.2035     135.41  q     Q   |         |         |         |
   2+ 5       6.4704     137.74  q     Q   |         |         |         |
   2+10       6.3470     139.97  q     Q   |         |         |         |
   2+15       6.7577     142.86  q      Q  |         |         |         |
   2+20       6.8721     146.34  q      Q  |         |         |         |
   2+25       6.9240     149.81  q      Q  |         |         |         |
   2+30       6.9510     152.71  q      Q  |         |         |         |
   2+35       6.9691     155.24  q      Q  |         |         |         |
   2+40       6.9738     157.31  q      Q  |         |         |         |
   2+45       7.2042     159.42  q      Q  |         |         |         |
   2+50       7.6928     162.65  q       Q |         |         |         |
   2+55       7.8363     166.61  q       Q |         |         |         |
```

```
   3+ 0       7.9019    170.57  q       Q |          |          |          |
   3+ 5       7.9384    174.25  q       Q |          |          |          |
   3+10       8.1829    178.09  q       Q |          |          |          |
   3+15       8.6848    182.76  q        Q|          |          |          |
   3+20       8.8370    187.69  q        Q|          |          |          |
   3+25       9.1244    192.76  q        Q|          |          |          |
   3+30       9.8712    199.40  q        Q|          |          |          |
   3+35      10.7478    208.62  q         Q          |          |          |
   3+40      11.4589    219.79  q         Q          |          |          |
   3+45      11.9349    231.78  q         |Q         |          |          |
   3+50      12.5483    244.53  q         | Q        |          |          |
   3+55      12.9861    257.42  q         | Q        |          |          |
   4+ 0      13.5851    270.26  q         |  Q       |          |          |
   4+ 5      14.0088    282.54  q         |  Q       |          |          |
   4+10      14.8162    295.20  q         |   Q      |          |          |
   4+15      15.7198    309.08  q         |    Q     |          |          |
   4+20      16.6708    324.61  q         |     Q    |          |          |
   4+25      17.6400    341.74  q         |     Q    |          |          |
   4+30      18.4056    359.95  q         |      Q   |          |          |
   4+35      18.9090    377.95  q         |       Q  |          |          |
   4+40      19.7662    395.91  q         |        Q |          |          |
   4+45      20.7013    414.33  |q        |         Q          |          |
   4+50      21.4438    432.81  |q        |          |Q         |          |
   4+55      21.9331    450.37  |q        |          | Q        |          |
   5+ 0      22.7770    467.83  |q        |          |  Q       |          |
   5+ 5      24.5904    488.08  |q        |          |   Q      |          |
   5+10      28.3961    517.25  |q        |          |    Q     |          |
   5+15      32.3460    558.17  |q        |          |      Q   |          |
   5+20      35.5906    608.85  |q        |          |        Q |          |
   5+25      39.1421    667.89  |q        |          |          |  Q       |
   5+30      44.5262    738.70  | q       |          |          |     Q    |
   5+35      41.9321    803.00  | q       |          |          |        Q |
   5+40      23.5426    807.40  |q        |          |          |         Q|
   5+45      13.6066    750.53  q         |          |          |       Q  |
   5+50       8.5638    660.26  q         |          |          | Q        |
   5+55       5.4940    555.60  q         |          |       Q  |          |
   6+ 0       2.9611    444.67  q         |          | Q        |          |
   6+ 5       1.4320    346.13  q         |       Q  |          |          |
   6+10       0.5323    269.83  q         |  Q       |          |          |
   6+15       0.2301    214.47  q        Q|          |          |          |
   6+20       0.1038    174.38  q      Q  |          |          |          |
   6+25       0.0434    144.35  q     Q   |          |          |          |
   6+30       0.0112    121.16  q    Q    |          |          |          |
   6+35       0.0017    102.72  q   Q     |          |          |          |
   6+40       0.0000     87.84  q  Q      |          |          |          |
   6+45       0.0000     75.81  q  Q      |          |          |          |
   6+50       0.0000     65.56  q  Q      |          |          |          |
   6+55       0.0000     56.16  q Q       |          |          |          |
   7+ 0       0.0000     48.53  q Q       |          |          |          |
   7+ 5       0.0000     42.73  q Q       |          |          |          |
   7+10       0.0000     38.11  qQ        |          |          |          |
   7+15       0.0000     34.05  qQ        |          |          |          |
   7+20       0.0000     30.18  qQ        |          |          |          |
   7+25       0.0000     26.56  qQ        |          |          |          |
   7+30       0.0000     23.38  qQ        |          |          |          |
   7+35       0.0000     20.55  qQ        |          |          |          |
   7+40       0.0000     17.99  Q         |          |          |          |
   7+45       0.0000     15.68  Q         |          |          |          |
   7+50       0.0000     13.64  Q         |          |          |          |
   7+55       0.0000     11.87  Q         |          |          |          |
   8+ 0       0.0000     10.32  Q         |          |          |          |
   8+ 5       0.0000      8.89  Q         |          |          |          |
   8+10       0.0000      7.45  Q         |          |          |          |
   8+15       0.0000      5.96  Q         |          |          |          |
   8+20       0.0000      4.29  Q         |          |          |          |
   8+25       0.0000      2.40  Q         |          |          |          |
   8+30       0.0000      1.12  Q         |          |          |          |
   8+35       0.0000      0.54  Q         |          |          |          |
   8+40       0.0000      0.28  Q         |          |          |          |
   8+45       0.0000      0.13  Q         |          |          |          |
   8+50       0.0000      0.05  Q         |          |          |          |
   8+55       0.0000      0.01  Q         |          |          |          |
   9+ 0       0.0000      0.00  Q         |          |          |          |
   9+ 5       0.0000      0.00  Q         |          |          |          |
   9+10       0.0000      0.00  Q         |          |          |          |
-------------------------------------------------------------------------
      ***************************HYDROGRAPH DATA****************************
                  Number of intervals =   110
```

```
                    Time interval =    5.0 (Min.)
                    Maximum/Peak flow rate =      807.402 (CFS)
                    Total volume =     141.706 (Ac.Ft)
              Status of hydrographs being held in storage
                         Stream 1  Stream 2  Stream 3  Stream 4  Stream 5
              Peak (CFS)      0.000     0.000     0.000     0.000     0.000
              Vol (Ac.Ft)     0.000     0.000     0.000     0.000     0.000
      ****************************************************************************

      ----------------------------------------------------------------------


      ++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
      Process from Point/Station       20.000 to Point/Station       30.000
      **** ADD/COMBINE/RECOVER HYDROGRAPHS ****
      ________________________________________________________________________
      ********************* HYDROGRAPH INFORMATION **********************

                    From study/file name: TRIB2A6100.rte
      ++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                       P R I N T   O F   S T O R M
                    R u n o f f     H y d r o g r a p h
      ----------------------------------------------------------------------
                  Hydrograph in   5   Minute intervals (CFS)

      ----------------------------------------------------------------------
Time(h+m) Add q(CFS)  Tot. Q   0      311.8     623.5     935.3    1247.1
----------------------------------------------------------------------------
  0+ 5       0.8306      2.13  Q         |         |         |         |
  0+10       4.4725     11.14  Q         |         |         |         |
  0+15      11.5146     27.34  Q         |         |         |         |
  0+20      19.0687     46.23  qQ        |         |         |         |
  0+25      24.1297     63.26  q Q       |         |         |         |
  0+30      27.3700     78.49  q Q       |         |         |         |
  0+35      30.8287     93.41  q Q       |         |         |         |
  0+40      34.9509    107.33  |q Q      |         |         |         |
  0+45      38.4910    118.71  |q Q      |         |         |         |
  0+50      40.6912    127.29  |q  Q     |         |         |         |
  0+55      42.1757    134.16  |q  Q     |         |         |         |
  1+ 0      43.7386    140.54  |q  Q     |         |         |         |
  1+ 5      46.2763    148.40  |q  Q     |         |         |         |
  1+10      49.7733    157.43  |q   Q    |         |         |         |
  1+15      52.8600    165.75  |q   Q    |         |         |         |
  1+20      54.7466    172.43  |q   Q    |         |         |         |
  1+25      55.9583    177.97  |q   Q    |         |         |         |
  1+30      56.8814    182.36  |q   Q    |         |         |         |
  1+35      57.6323    185.68  |q   Q    |         |         |         |
  1+40      58.2634    188.21  |q    Q   |         |         |         |
  1+45      58.7663    190.24  |q    Q   |         |         |         |
  1+50      59.2107    192.01  |q    Q   |         |         |         |
  1+55      59.5943    193.53  |q    Q   |         |         |         |
  2+ 0      60.3553    195.76  |q    Q   |         |         |         |
  2+ 5      61.7972    199.54  |q    Q   |         |         |         |
  2+10      63.4967    203.47  | q   Q   |         |         |         |
  2+15      64.9711    207.83  | q   Q   |         |         |         |
  2+20      66.7347    213.08  | q   Q   |         |         |         |
  2+25      68.7218    218.53  | q    Q  |         |         |         |
  2+30      69.9005    222.61  | q    Q  |         |         |         |
  2+35      70.5901    225.83  | q    Q  |         |         |         |
  2+40      71.0930    228.41  | q    Q  |         |         |         |
  2+45      71.9058    231.32  | q    Q  |         |         |         |
  2+50      73.8930    236.54  | q    Q  |         |         |         |
  2+55      76.9043    243.52  | q    Q  |         |         |         |
  3+ 0      79.5451    250.12  | q     Q |         |         |         |
  3+ 5      81.0439    255.30  | q     Q |         |         |         |
  3+10      82.3639    260.46  | q     Q |         |         |         |
  3+15      84.6501    267.41  | q     Q |         |         |         |
  3+20      87.9315    275.62  | q     Q |         |         |         |
  3+25      91.2283    283.98  | q      Q|         |         |         |
  3+30      94.9603    294.36  |  q     Q|         |         |         |
  3+35     100.8226    309.45  |  q     Q|         |         |         |
  3+40     108.4303    328.22  |  q      Q         |         |         |
  3+45     115.9989    347.78  |  q      |Q        |         |         |
  3+50     122.6817    367.21  |  q      |Q        |         |         |
  3+55     128.9169    386.33  |   q     | Q       |         |         |
  4+ 0     135.0509    405.31  |   q     |  Q      |         |         |
  4+ 5     141.1752    423.71  |   q     |  Q      |         |         |
  4+10     147.6906    442.89  |   q     |   Q     |         |         |
```

EX. CULVERT @ 30 (S)

```
    4+15     155.4084    464.49  |   q      |   Q      |          |          |
    4+20     164.7024    489.32  |    q     |    Q     |          |          |
    4+25     174.8788    516.62  |    q     |     Q    |          |          |
    4+30     185.0787    545.02  |    q     |      Q   |          |          |
    4+35     194.4180    572.37  |     q    |      Q   |          |          |
    4+40     202.8877    598.80  |     q    |       Q  |          |          |
    4+45     211.8352    626.17  |     q    |        Q |          |          |
    4+50     221.6148    654.43  |      q   |        Q |          |          |
    4+55     230.9064    681.27  |      q   |         Q|          |          |
    5+ 0     239.4111    707.24  |      q   |          | Q        |          |
    5+ 5     250.1256    738.20  |       q  |          |  Q       |          |
    5+10     268.6127    785.86  |       q  |          |    Q     |          |
    5+15     297.9842    856.15  |        q |          |      Q   |          |
    5+20     334.1847    943.04  |         q|          |        Q |          |
    5+25     371.2462   1039.14  |          |q         |          |  Q       |
    5+30     411.5486   1150.25  |          |  q       |          |     Q    |
    5+35     444.0731   1247.07  |CLVT 3 (E)|   q      |          |        Q |
    5+40     428.8554   1236.26  |          |  q       |          |        Q |
    5+45     347.1675   1097.70  |          |q         |          |    Q     |
    5+50     246.7376    907.00  |       q  |          |         Q|          |
    5+55     178.0032    733.61  |    q     |          |  Q       |          |
    6+ 0     136.6941    581.37  |   q      |        Q |          |          |
    6+ 5     108.6307    454.76  |  q       |   Q      |          |          |
    6+10      87.2332    357.06  | q        |Q         |          |          |
    6+15      70.2245    284.70  | q      Q |          |          |          |
    6+20      57.5255    231.90  |q     Q   |          |          |          |
    6+25      47.4048    191.76  |q    Q    |          |          |          |
    6+30      39.6597    160.82  |q   Q     |          |          |          |
    6+35      33.7185    136.43  |q  Q      |          |          |          |
    6+40      28.7275    116.56  q  Q       |          |          |          |
    6+45      23.9431     99.75  q  Q       |          |          |          |
    6+50      19.9995     85.56  q Q        |          |          |          |
    6+55      16.6554     72.82  q Q        |          |          |          |
    7+ 0      13.8078     62.33  qQ         |          |          |          |
    7+ 5      11.2915     54.02  qQ         |          |          |          |
    7+10       9.0451     47.16  qQ         |          |          |          |
    7+15       7.2275     41.27  qQ         |          |          |          |
    7+20       5.4726     35.66  qQ         |          |          |          |
    7+25       3.5856     30.15  Q          |          |          |          |
    7+30       1.2554     24.64  Q          |          |          |          |
    7+35       0.5492     21.10  Q          |          |          |          |
    7+40       0.2863     18.28  Q          |          |          |          |
    7+45       0.1603     15.84  Q          |          |          |          |
    7+50       0.0762     13.72  Q          |          |          |          |
    7+55       0.0311     11.90  Q          |          |          |          |
    8+ 0       0.0000     10.32  Q          |          |          |          |
    8+ 5       0.0000      8.89  Q          |          |          |          |
    8+10       0.0000      7.45  Q          |          |          |          |
    8+15       0.0000      5.96  Q          |          |          |          |
    8+20       0.0000      4.29  Q          |          |          |          |
    8+25       0.0000      2.40  Q          |          |          |          |
    8+30       0.0000      1.12  Q          |          |          |          |
    8+35       0.0000      0.54  Q          |          |          |          |
    8+40       0.0000      0.28  Q          |          |          |          |
    8+45       0.0000      0.13  Q          |          |          |          |
    8+50       0.0000      0.05  Q          |          |          |          |
    8+55       0.0000      0.01  Q          |          |          |          |
    9+ 0       0.0000      0.00  Q          |          |          |          |
    9+ 5       0.0000      0.00  Q          |          |          |          |
    9+10       0.0000      0.00  Q          |          |          |          |
--------------------------------------------------------------------------
      ***************************HYDROGRAPH DATA**************************
                Number of intervals =   110
                Time interval =    5.0 (Min.)
                Maximum/Peak flow rate =     1247.073 (CFS) COMBINED @ 30
                Total volume =     208.055 (Ac.Ft)
          Status of hydrographs being held in storage
                     Stream 1  Stream 2  Stream 3  Stream 4  Stream 5
          Peak (CFS)       0.000     0.000     0.000     0.000     0.000
          Vol (Ac.Ft)      0.000     0.000     0.000     0.000     0.000
      ****************************************************************

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      ++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
      Process from Point/Station       30.000 to Point/Station       31.000
      **** STREAM ROUTING SCS CONVEX METHOD ****
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HYDROGRAPH STREAM ROUTING DATA:
Length of stream =    377.00 (Ft.)
Elevation difference =   13.00 (Ft.)
Slope of channel =  0.034483 (Vert/Horiz)
Channel type - Improved Channel


Channel length =   377.00(Ft.)     Elevation difference =  13.00(Ft.)
Channel evaluation using mean flow rate of hydrograph
Channel base width  =    5.000(Ft.)
Slope or 'Z' of left channel bank =   1.000
Slope or 'Z' of right channel bank =   1.000
Manning's 'N'    = 0.045
Maximum depth of channel  =   20.000(Ft.)
Flow(q) thru subarea =    380.544(CFS)
Depth of flow =     4.035(Ft.)
Average velocity =    10.439(Ft/s)
Total flow rate =   380.544(CFS)
Channel flow top width =   13.070(Ft.)
Depth of flow in channel =   4.03(Ft.)
Total number of channels (same dimensions) = 1
Flow Velocity =   10.44(Ft/s)
Travel time  =    0.00 min.
Individual channel flow =  380.544(CFS)
Total capacity of improved channels =    380.544(CFS)
Critical Depth in Channel =    4.25(Ft.)


Channel evaluation using maximum flow rate of hydrograph
Flow(q) thru subarea =   1247.073(CFS)
Depth of flow =     7.239(Ft.)
Average velocity =    14.076(Ft/s)
Total flow rate =  1247.073(CFS)
Channel flow top width =   19.478(Ft.)
Depth of flow in channel =   7.24(Ft.)
Total number of channels (same dimensions) = 1
Flow Velocity =   14.08(Ft/s)
Travel time  =    0.00 min.
Individual channel flow = 1247.073(CFS)
Total capacity of improved channels =   1247.073(CFS)
Critical Depth in Channel =    7.81(Ft.)


********************** SCS CONVEX CHANNEL ROUTING *********************
Convex method of stream routing  data items:
Using equation: Outflow =
O(t+dt) = (1-c*)O(t+dt-dt*) + Input(c*)
          where c* = 1 - (1-c)^e and dt = c(length)/velocity
          c(v/v+1.7) =   0.8922   Travel time =   0.45 (min.)
        dt*(unit time interval) =   5.00(min.),  e=   8.7025
        dt(routing time-step) =   0.40 (min.),   c* =   1.0000

Output hydrograph delayed by 0  unit time increments


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                P R I N T  O F  S T O R M
             R u n o f f     H y d r o g r a p h
------------------------------------------------------------------------
            Hydrograph in   5   Minute intervals (CFS)

------------------------------------------------------------------------
Time(h+m) Out = O(CFS) In = I  0      311.8     623.5     935.3    1247.1
------------------------------------------------------------------------
  0+ 5       1.9568      2.13  O         |         |         |         |
  0+10      10.4182     11.14  O         |         |         |         |
  0+15      26.0448     27.34  O         |         |         |         |
  0+20      44.7204     46.23  |O        |         |         |         |
  0+25      61.9052     63.26  |OI       |         |         |         |
  0+30      77.2744     78.49  | O       |         |         |         |
  0+35      92.2205     93.41  | O       |         |         |         |
  0+40     106.2204    107.33  |  O      |         |         |         |
  0+45     117.8038    118.71  |  O      |         |         |         |
  0+50     126.6057    127.29  |   O     |         |         |         |
  0+55     133.6089    134.16  |   O     |         |         |         |
  1+ 0     140.0306    140.54  |   O     |         |         |         |
  1+ 5     147.7703    148.40  |   O     |         |         |         |
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1+10     156.7130    157.43  |    O    |         |         |         |
1+15     165.0886    165.75  |    O    |         |         |         |
1+20     171.9011    172.43  |    O    |         |         |         |
1+25     177.5287    177.97  |    O    |         |         |         |
1+30     182.0135    182.36  |    O    |         |         |         |
1+35     185.4140    185.68  |    O    |         |         |         |
1+40     188.0109    188.21  |     O   |         |         |         |
1+45     190.0826    190.24  |     O   |         |         |         |
1+50     191.8697    192.01  |     O   |         |         |         |
1+55     193.4051    193.53  |     O   |         |         |         |
2+ 0     195.5865    195.76  |     O   |         |         |         |
2+ 5     199.2402    199.54  |     O   |         |         |         |
2+10     203.1581    203.47  |     O   |         |         |         |
2+15     207.4848    207.83  |     O   |         |         |         |
2+20     212.6605    213.08  |     O   |         |         |         |
2+25     218.0993    218.53  |     OI  |         |         |         |
2+30     222.2835    222.61  |      O  |         |         |         |
2+35     225.5760    225.83  |      O  |         |         |         |
2+40     228.2015    228.41  |      O  |         |         |         |
2+45     231.0900    231.32  |      O  |         |         |         |
2+50     236.1255    236.54  |      O  |         |         |         |
2+55     242.9599    243.52  |      O  |         |         |         |
3+ 0     249.5938    250.12  |       O |         |         |         |
3+ 5     254.8829    255.30  |       O |         |         |         |
3+10     260.0465    260.46  |       O |         |         |         |
3+15     266.8602    267.41  |       O |         |         |         |
3+20     274.9680    275.62  |       O |         |         |         |
3+25     283.3175    283.98  |        O|         |         |         |
3+30     293.5374    294.36  |        O|         |         |         |
3+35     308.2450    309.45  |        O|         |         |         |
3+40     326.7257    328.22  |         O         |         |         |
3+45     346.2183    347.78  |         |O        |         |         |
3+50     365.6621    367.21  |         |O        |         |         |
3+55     384.8115    386.33  |         | O       |         |         |
4+ 0     403.7964    405.31  |         | OI      |         |         |
4+ 5     422.2482    423.71  |         |  O      |         |         |
4+10     441.3646    442.89  |         |   O     |         |         |
4+15     462.7658    464.49  |         |   O     |         |         |
4+20     487.3373    489.32  |         |    O    |         |         |
4+25     514.4417    516.62  |         |     O   |         |         |
4+30     542.7611    545.02  |         |      O  |         |         |
4+35     570.1935    572.37  |         |       O |         |         |
4+40     596.6949    598.80  |         |        O|         |         |
4+45     623.9856    626.17  |         |         O         |         |
4+50     652.1768    654.43  |         |         O         |         |
4+55     679.1353    681.27  |         |         |O        |         |
5+ 0     705.1737    707.24  |         |         | O       |         |
5+ 5     735.7382    738.20  |         |         |  O      |         |
5+10     782.0639    785.86  |         |         |    O    |         |
5+15     850.5506    856.15  |         |         |      O  |         |
5+20     936.1179    943.04  |         |         |         O         |
5+25    1031.4820   1039.14  |         |         |         |  O      |
5+30    1141.4004   1150.25  |         |         |         |     O   |
5+35    1239.3608   1247.07  |         |         |         |        OI
5+40    1237.1193   1236.26  |         |         |         |        O|
5+45    1108.7343   1097.70  |         |         |         |    O    |
5+50     922.1865    907.00  |         |         |        O|         |
5+55     747.4189    733.61  |         |         |  O      |         |
6+ 0     593.4930    581.37  |         |        IO|         |         |
6+ 5     464.8457    454.76  |         |   O     |         |         |
6+10     364.8426    357.06  |         |O        |         |         |
6+15     290.4602    284.70  |        O|         |         |         |
6+20     236.1085    231.90  |      O  |         |         |         |
6+25     194.9558    191.76  |     O   |         |         |         |
6+30     163.2818    160.82  |    O    |         |         |         |
6+35     138.3760    136.43  |   O     |         |         |         |
6+40     118.1467    116.56  |  O      |         |         |         |
6+45     101.0916     99.75  |  O      |         |         |         |
6+50      86.6919     85.56  | O       |         |         |         |
6+55      73.8318     72.82  | O       |         |         |         |
7+ 0      63.1683     62.33  |IO       |         |         |         |
7+ 5      54.6838     54.02  |O        |         |         |         |
7+10      47.7029     47.16  |O        |         |         |         |
7+15      41.7433     41.27  |O        |         |         |         |
7+20      36.1033     35.66  |O        |         |         |         |
7+25      30.5884     30.15  O         |         |         |         |
7+30      25.0768     24.64  O         |         |         |         |
7+35      21.3818     21.10  O         |         |         |         |
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   7+40      18.5035     18.28  O         |         |         |         |
   7+45      16.0299     15.84  O         |         |         |         |
   7+50      13.8872     13.72  O         |         |         |         |
   7+55      12.0434     11.90  O         |         |         |         |
   8+ 0      10.4502     10.32  O         |         |         |         |
   8+ 5       9.0032      8.89  O         |         |         |         |
   8+10       7.5652      7.45  O         |         |         |         |
   8+15       6.0789      5.96  O         |         |         |         |
   8+20       4.4274      4.29  O         |         |         |         |
   8+25       2.5543      2.40  O         |         |         |         |
   8+30       1.2214      1.12  O         |         |         |         |
   8+35       0.5873      0.54  O         |         |         |         |
   8+40       0.3024      0.28  O         |         |         |         |
   8+45       0.1415      0.13  O         |         |         |         |
   8+50       0.0522      0.05  O         |         |         |         |
   8+55       0.0139      0.01  O         |         |         |         |
   9+ 0       0.0024      0.00  O         |         |         |         |
   9+ 5       0.0002      0.00  O         |         |         |         |
   9+10       0.0000      0.00  O         |         |         |         |
   9+15       0.0000      0.00  O         |         |         |         |
--------------------------------------------------------------------------
      ****************************HYDROGRAPH DATA****************************
                  Number of intervals =   111
                  Time interval =    5.0 (Min.)
                  Maximum/Peak flow rate =     1239.361 (CFS)
                  Total volume =     208.055 (Ac.Ft)
            Status of hydrographs being held in storage
                     Stream 1  Stream 2  Stream 3  Stream 4  Stream 5
            Peak (CFS)       0.000     0.000     0.000     0.000     0.000
            Vol (Ac.Ft)      0.000     0.000     0.000     0.000     0.000
      ***************************************************************************

      ---------------------------------------------------------------------


      +++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
      Process from Point/Station       30.000 to Point/Station       31.000
      **** ADD/COMBINE/RECOVER HYDROGRAPHS ****
      _____________________________________________________________________
      ********************* HYDROGRAPH INFORMATION **********************

                  From study/file name: TRIB3A6100.rte
      +++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                     P R I N T  O F  S T O R M
                  R u n o f f     H y d r o g r a p h
      ---------------------------------------------------------------------
               Hydrograph in   5   Minute intervals (CFS)

      ---------------------------------------------------------------------
  Time(h+m) Add q(CFS)  Tot. Q   0      311.3     622.6     933.9    1245.2
  ---------------------------------------------------------------------
    0+ 5       0.3024      2.26  Q         |         |         |         |
    0+10       0.6016     11.02  Q         |         |         |         |
    0+15       0.7008     26.75  Q         |         |         |         |
    0+20       0.7118     45.43  qQ        |         |         |         |
    0+25       0.7118     62.62  q Q       |         |         |         |
    0+30       0.8134     78.09  q Q       |         |         |         |
    0+35       0.8798     93.10  q Q       |         |         |         |
    0+40       0.8908    107.11  q  Q      |         |         |         |
    0+45       0.8908    118.69  q  Q      |         |         |         |
    0+50       0.8908    127.50  q   Q     |         |         |         |
    0+55       0.8908    134.50  q   Q     |         |         |         |
    1+ 0       0.9923    141.02  q   Q     |         |         |         |
    1+ 5       1.0587    148.83  q   Q     |         |         |         |
    1+10       1.0698    157.78  q    Q    |         |         |         |
    1+15       1.0698    166.16  q    Q    |         |         |         |
    1+20       1.0698    172.97  q    Q    |         |         |         |
    1+25       1.0698    178.60  q    Q    |         |         |         |
    1+30       1.0698    183.08  q    Q    |         |         |         |
    1+35       1.0698    186.48  q    Q    |         |         |         |
    1+40       1.0698    189.08  q     Q   |         |         |         |
    1+45       1.0698    191.15  q     Q   |         |         |         |
    1+50       1.0698    192.94  q     Q   |         |         |         |
    1+55       1.0698    194.47  q     Q   |         |         |         |
    2+ 0       1.1713    196.76  q     Q   |         |         |         |
    2+ 5       1.1361    200.38  q     Q   |         |         |         |
    2+10       1.1823    204.34  q     Q   |         |         |         |
    2+15       1.2377    208.72  q     Q   |         |         |         |
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2+20       1.2487    213.91  q     Q   |          |          |          |
2+25       1.2487    219.35  q      Q  |          |          |          |
2+30       1.2487    223.53  q      Q  |          |          |          |
2+35       1.2487    226.82  q      Q  |          |          |          |
2+40       1.2487    229.45  q      Q  |          |          |          |
2+45       1.3503    232.44  q      Q  |          |          |          |
2+50       1.4166    237.54  q      Q  |          |          |          |
2+55       1.4277    244.39  q      Q  |          |          |          |
3+ 0       1.4277    251.02  q       Q |          |          |          |
3+ 5       1.4277    256.31  q       Q |          |          |          |
3+10       1.5292    261.58  q       Q |          |          |          |
3+15       1.5956    268.46  q       Q |          |          |          |
3+20       1.6066    276.57  q       Q |          |          |          |
3+25       1.7082    285.03  q        Q|          |          |          |
3+30       1.8761    295.41  q        Q|          |          |          |
3+35       2.0551    310.30  q        Q|          |          |          |
3+40       2.1325    328.86  q         Q          |          |          |
3+45       2.2450    348.46  q         |Q         |          |          |
3+50       2.3114    367.97  q         |Q         |          |          |
3+55       2.4240    387.24  q         | Q        |          |          |
4+ 0       2.4904    406.29  q         |  Q       |          |          |
4+ 5       2.6030    424.85  q         |  Q       |          |          |
4+10       2.7709    444.14  q         |   Q      |          |          |
4+15       2.9498    465.72  q         |   Q      |          |          |
4+20       3.1288    490.47  q         |    Q     |          |          |
4+25       3.3078    517.75  q         |     Q    |          |          |
4+30       3.3852    546.15  q         |      Q   |          |          |
4+35       3.4977    573.69  q         |       Q  |          |          |
4+40       3.6657    600.36  q         |        Q |          |          |
4+45       3.8446    627.83  q         |         Q|          |          |
4+50       3.9220    656.10  q         |          |Q         |          |
4+55       4.0346    683.17  q         |          |Q         |          |
5+ 0       4.2025    709.38  q         |          | Q        |          |
5+ 5       4.7877    740.53  q         |          |  Q       |          |
5+10       5.6384    787.70  q         |          |   Q      |          |
5+15       6.3301    856.88  q         |          |    Q     |          |
5+20       6.8890    943.01  q         |          |     Q    |          |
5+25       7.6289   1039.11  q         |          |      Q   |          |
5+30       8.9079   1150.31  q         |          |       Q  |          |
5+35       5.8030   1245.16  q         |          |        Q |          |
5+40       2.4307   1239.55  q         |          |         Q|          |
5+45       1.0543   1109.79  q         |          |          |          |
5+50       0.6434    922.83  q         |          |          |          |
5+55       0.3408    747.76  q         |          |          |          |
6+ 0       0.1180    593.61  q         |          |          |          |
6+ 5       0.0241    464.87  q         |          |          |          |
6+10       0.0022    364.84  q         |          |          |          |
6+15       0.0000    290.46  q         |          |          |          |
6+20       0.0000    236.11  q       Q |          |          |          |
6+25       0.0000    194.96  q      Q  |          |          |          |
6+30       0.0000    163.28  q     Q   |          |          |          |
6+35       0.0000    138.38  q    Q    |          |          |          |
6+40       0.0000    118.15  q   Q     |          |          |          |
6+45       0.0000    101.09  q   Q     |          |          |          |
6+50       0.0000     86.69  q  Q      |          |          |          |
6+55       0.0000     73.83  q  Q      |          |          |          |
7+ 0       0.0000     63.17  q  Q      |          |          |          |
7+ 5       0.0000     54.68  qQ       |          |          |          |
7+10       0.0000     47.70  qQ       |          |          |          |
7+15       0.0000     41.74  qQ       |          |          |          |
7+20       0.0000     36.10  qQ       |          |          |          |
7+25       0.0000     30.59  Q        |          |          |          |
7+30       0.0000     25.08  Q        |          |          |          |
7+35       0.0000     21.38  Q        |          |          |          |
7+40       0.0000     18.50  Q        |          |          |          |
7+45       0.0000     16.03  Q        |          |          |          |
7+50       0.0000     13.89  Q        |          |          |          |
7+55       0.0000     12.04  Q        |          |          |          |
8+ 0       0.0000     10.45  Q        |          |          |          |
8+ 5       0.0000      9.00  Q        |          |          |          |
8+10       0.0000      7.57  Q        |          |          |          |
8+15       0.0000      6.08  Q        |          |          |          |
8+20       0.0000      4.43  Q        |          |          |          |
8+25       0.0000      2.55  Q        |          |          |          |
8+30       0.0000      1.22  Q        |          |          |          |
8+35       0.0000      0.59  Q        |          |          |          |
8+40       0.0000      0.30  Q        |          |          |          |
8+45       0.0000      0.14  Q        |          |          |          |
```

```
    8+50       0.0000      0.05  Q         |         |         |         |
    8+55       0.0000      0.01  Q         |         |         |         |
    9+ 0       0.0000      0.00  Q         |         |         |         |
    9+ 5       0.0000      0.00  Q         |         |         |         |
    9+10       0.0000      0.00  Q         |         |         |         |
    9+15       0.0000      0.00  Q         |         |         |         |
----------------------------------------------------------------------
        ***************************HYDROGRAPH DATA**************************
                    Number of intervals =   111
                    Time interval =    5.0 (Min.)
                    Maximum/Peak flow rate =     1245.164 (CFS) OUTFALL
                    Total volume =     209.109 (Ac.Ft)
              Status of hydrographs being held in storage
                         Stream 1  Stream 2  Stream 3  Stream 4  Stream 5
              Peak (CFS)      0.000     0.000     0.000     0.000     0.000
              Vol (Ac.Ft)      0.000     0.000     0.000     0.000     0.000
        ***********************************************************************

        ----------------------------------------------------------------------
```

Appendix C – Synthetic Unit Hydrograph Method for Basin Design/Hydromodification

PRECIPITATION VALUES

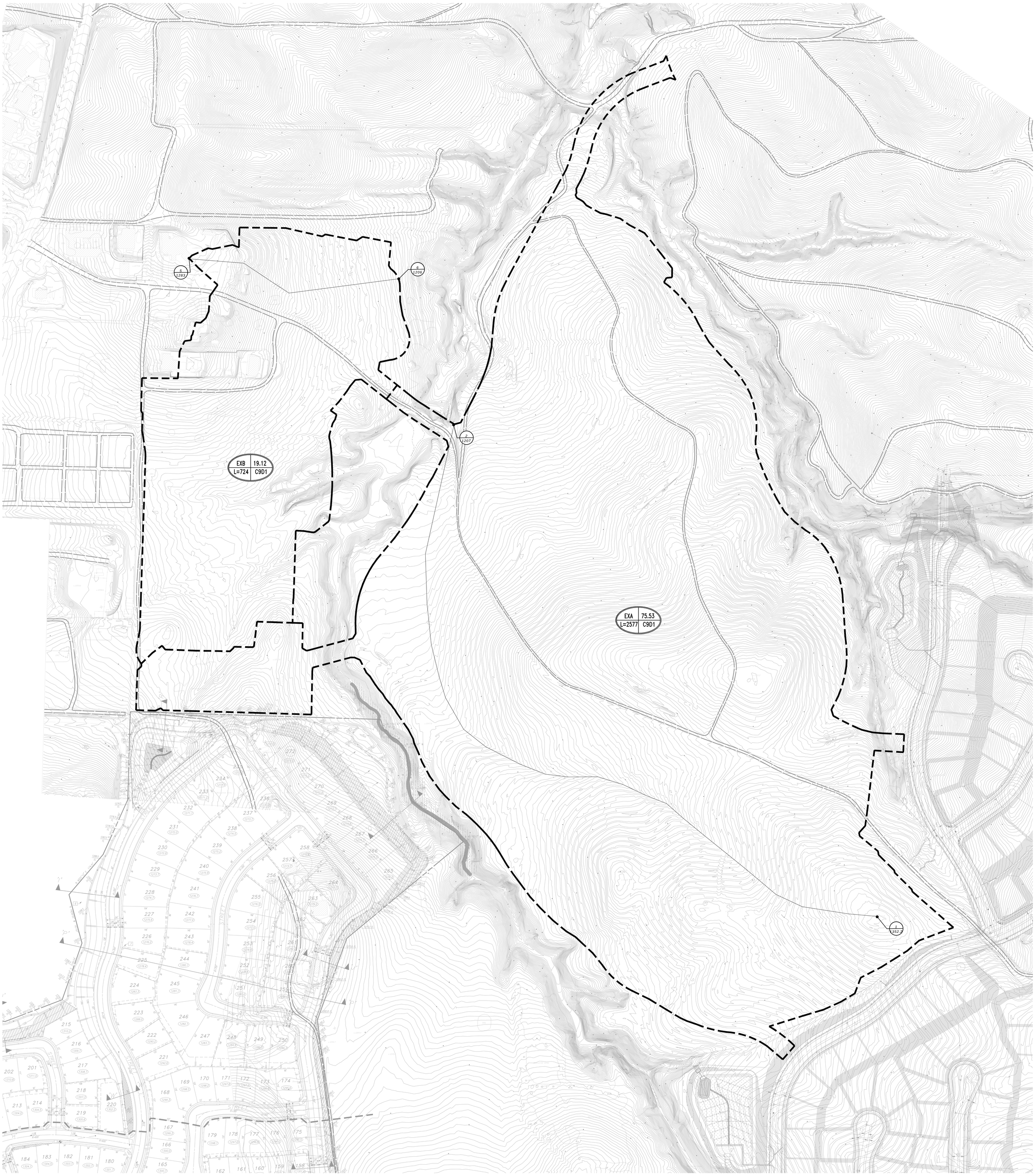
RETURN YR	1HR	3HR	6HR	24HR
2 YR	0.50	0.80	1.10	1.80
100 YR	1.30	2.00	3.00	5.00

WATERSHED ANALYSIS (UNIT)

ID	AREA (AC)	US NODE		DS NODE		ELEV Δ (FT)	LENGTH (FT)	CENTROID			WEIGHTED COVER DATA				NOTES
		ID	ELEV	ID	ELEV			ELEV	Δ (FT)	L_C (FT)	COVER	IMP	SOIL	RI	
EX A	75.83	1	1352	2	1207	145	2577	1280	73	1289	NATURAL	0.0%	C	91	NATURAL GRADED/BARREN LAND
PRO A	75.83	1	1346	2	1180	166	4720	1263	83	2360	URBAN	50.0%	C	69	URBAN RESIDENTIAL LANDSCAPING
EX B	19.12	5	1283	6	1206	77	724	1245	39	360	NATURAL	0.0%	C	91	NATURAL GRADED/BARREN LAND
PRO B	19.12	3	1255	4	1215	40	2644	1235	20	1322	URBAN	50%	C	69	URBAN RESIDENTIAL LANDSCAPING

Existing Synthetic Unit Hydrograph Method

EXISTING UNIT HYDROGRAPH MAP



0 100 300

50 200 400

SCALE: 1" = 100'

LEGEND

NODE / ELEV

AREA | ACRES

LENGTH | SOIL

WATERSHED BOUNDARY

FLOW PATH

EXISTING UNIT HYDROGRAPH MAP
PREPARATION DATE: OCTOBER 2024
REVISION DATE: APRIL 2025

PLAN PREPARED BY:
adkan ENGINEERS
Civil Engineering • Surveying • Planning
6879 Airport Drive, Riverside, CA 92504
Tel:(951) 688-0241 Fax:(951) 688-0599

EXISTING SUB AREA "A"

```
        U n i t   H y d r o g r a p h   A n a l y s i s

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                Study date  10/17/24 File: exa212.out

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------------------------------------------------------------------------------

Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978


Program License Serial Number 5006

------------------------------------------------------------------------
 English (in-lb) Input Units Used
 English Rainfall Data (Inches) Input Values Used

 English Units used in output format



------------------------------------------------------------------------
------------------------------------------------------------------------
Drainage Area =      75.83(Ac.)  =      0.118 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment =      75.83(Ac.)  =      0.118 Sq. Mi.
Length along longest watercourse =    2577.00(Ft.)
Length along longest watercourse measured to centroid =    1289.00(Ft.)
Length along longest watercourse =      0.488 Mi.
Length along longest watercourse measured to centroid =      0.244 Mi.
Difference in elevation =     145.20(Ft.)
Slope along watercourse =    297.4994 Ft./Mi.
Average Manning's 'N' = 0.030
Lag time =    0.109 Hr.
Lag time =     6.52 Min.
25% of lag time =     1.63 Min.
40% of lag time =     2.61 Min.
Unit time =     5.00 Min.
Duration of storm = 1 Hour(s)
User Entered Base Flow =     0.00(CFS)

2 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
       75.83           0.50                 37.91

100 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
       75.83           1.30                 98.58

STORM EVENT (YEAR) =    2.00
Area Averaged 2-Year Rainfall =    0.500(In)
Area Averaged 100-Year Rainfall =    1.300(In)

Point rain (area averaged) =    0.500(In)
Areal adjustment factor =   99.93 %
Adjusted average point rain =    0.500(In)

Sub-Area Data:
Area(Ac.)         Runoff Index   Impervious %
    75.830           91.00         0.000
 Total Area Entered =     75.83(Ac.)


RI    RI   Infil. Rate Impervious   Adj. Infil. Rate  Area%     F
AMC2 AMC-1     (In/Hr)    (Dec.%)     (In/Hr)      (Dec.)    (In/Hr)
91.0  79.8      0.246     0.000        0.246       1.000      0.246
                                                 Sum (F) =   0.246
Area averaged mean soil loss (F) (In/Hr) =  0.246
Minimum soil loss rate ((In/Hr)) =  0.123
(for 24 hour storm duration)
Soil low loss rate (decimal) =   0.900
------------------------------------------------------------------------
Slope of intensity-duration curve for a 1 hour storm =0.5500
------------------------------------------------------------------------

               U n i t  H y d r o g r a p h
                      VALLEY S-Curve
---------------------------------------------------------------
               Unit Hydrograph Data
---------------------------------------------------------------
```

Unit time period (hrs)		Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	76.653	12.379	9.460
2	0.167	153.307	43.174	32.994
3	0.250	229.960	20.942	16.004
4	0.333	306.613	8.476	6.477
5	0.417	383.266	5.111	3.906
6	0.500	459.920	3.287	2.512
7	0.583	536.573	2.310	1.765
8	0.667	613.226	1.661	1.270
9	0.750	689.880	1.141	0.872
10	0.833	766.533	0.802	0.613
11	0.917	843.186	0.718	0.549
			Sum = 100.000	Sum= 76.422

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr) Max	Low	Effective (In/Hr)
1	0.08	3.30	0.198	(0.246)	0.178	0.020
2	0.17	4.20	0.252	(0.246)	0.227	0.025
3	0.25	4.40	0.264	(0.246)	0.237	0.026
4	0.33	4.80	0.288	0.246	(0.259)	0.041
5	0.42	5.20	0.312	0.246	(0.281)	0.065
6	0.50	6.20	0.372	0.246	(0.335)	0.125
7	0.58	6.80	0.408	0.246	(0.367)	0.161
8	0.67	8.80	0.528	0.246	(0.475)	0.281
9	0.75	13.90	0.833	0.246	(0.750)	0.587
10	0.83	31.40	1.883	0.246	(1.694)	1.636
11	0.92	7.20	0.432	0.246	(0.389)	0.185
12	1.00	3.80	0.228	(0.246)	0.205	0.023
		(Loss Rate Not Used)				
Sum =		100.0			Sum =	3.2

Flood volume = Effective rainfall 0.26(In)
times area 75.8(Ac.)/[(In)/(Ft.)] = 1.7(Ac.Ft)
Total soil loss = 0.23(In)
Total soil loss = 1.484(Ac.Ft)
Total rainfall = 0.50(In)
Flood volume = 72893.7 Cubic Feet
Total soil loss = 64643.1 Cubic Feet

Peak flow rate of this hydrograph = 68.159(CFS)

1 - H O U R S T O R M
R u n o f f H y d r o g r a p h

Hydrograph in 5 Minute intervals ((CFS))

Time(h+m)	Volume Ac.Ft	Q(CFS)	0	17.5	35.0	52.5	70.0
0+ 5	0.0013	0.19	Q				
0+10	0.0074	0.89	Q				
0+15	0.0171	1.40	Q				
0+20	0.0294	1.79	VQ				
0+25	0.0477	2.65	|Q				
0+30	0.0775	4.33	|VQ				
0+35	0.1270	7.18	| VQ				
0+40	0.2008	10.72	| V Q				
0+45	0.3295	18.69	| V Q				
0+50	0.6134	41.21	| V | Q				
0+55	1.0828	68.16	| | V | Q				
1+ 0	1.3460	38.22	| | |Q | V				
1+ 5	1.4690	17.87	| Q | V				
1+10	1.5400	10.31	| Q | V				
1+15	1.5857	6.63	| Q | V				
1+20	1.6174	4.60	| Q | V				
1+25	1.6397	3.24	|Q | V				
1+30	1.6550	2.22	|Q | V				
1+35	1.6654	1.52	Q | V				
1+40	1.6725	1.03	Q | V				
1+45	1.6733	0.12	Q | V				
1+50	1.6734	0.01	Q | V				

```
       U n i t   H y d r o g r a p h   A n a l y s i s

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              Study date  10/17/24 File: exa232.out

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------------------------------------------------------------------------------

Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978


Program License Serial Number 5006

------------------------------------------------------------------------
 English (in-lb) Input Units Used
 English Rainfall Data (Inches) Input Values Used

 English Units used in output format



------------------------------------------------------------------------
------------------------------------------------------------------------
Drainage Area =      75.83(Ac.)  =      0.118 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment =      75.83(Ac.)  =      0.118 Sq. Mi.
Length along longest watercourse =    2577.00(Ft.)
Length along longest watercourse measured to centroid =    1289.00(Ft.)
Length along longest watercourse =      0.488 Mi.
Length along longest watercourse measured to centroid =      0.244 Mi.
Difference in elevation =     145.20(Ft.)
Slope along watercourse =    297.4994 Ft./Mi.
Average Manning's 'N' = 0.030
Lag time =    0.109 Hr.
Lag time =     6.52 Min.
25% of lag time =     1.63 Min.
40% of lag time =     2.61 Min.
Unit time =     5.00 Min.
Duration of storm = 3 Hour(s)
User Entered Base Flow =     0.00(CFS)

2 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
       75.83            0.80                 60.66

100 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
       75.83            2.00                151.66

STORM EVENT (YEAR) =    2.00
Area Averaged 2-Year Rainfall =    0.800(In)
Area Averaged 100-Year Rainfall =    2.000(In)

Point rain (area averaged) =    0.800(In)
Areal adjustment factor =   99.97 %
Adjusted average point rain =    0.800(In)

Sub-Area Data:
Area(Ac.)         Runoff Index   Impervious %
    75.830           91.00          0.000
 Total Area Entered =     75.83(Ac.)


RI    RI   Infil. Rate Impervious   Adj. Infil. Rate  Area%     F
AMC2 AMC-1     (In/Hr)    (Dec.%)     (In/Hr)      (Dec.)    (In/Hr)
91.0  79.8      0.246     0.000        0.246       1.000      0.246
                                                 Sum (F) =   0.246
Area averaged mean soil loss (F) (In/Hr) =  0.246
Minimum soil loss rate ((In/Hr)) =  0.123
(for 24 hour storm duration)
Soil low loss rate (decimal) =   0.900
------------------------------------------------------------------------

               U n i t  H y d r o g r a p h
                      VALLEY S-Curve
------------------------------------------------------------------
               Unit Hydrograph Data
------------------------------------------------------------------
Unit time period   Time % of lag   Distribution   Unit Hydrograph
    (hrs)                          Graph %           (CFS)
```

1	0.083	76.653	12.379	9.460
2	0.167	153.307	43.174	32.994
3	0.250	229.960	20.942	16.004
4	0.333	306.613	8.476	6.477
5	0.417	383.266	5.111	3.906
6	0.500	459.920	3.287	2.512
7	0.583	536.573	2.310	1.765
8	0.667	613.226	1.661	1.270
9	0.750	689.880	1.141	0.872
10	0.833	766.533	0.802	0.613
11	0.917	843.186	0.718	0.549
		Sum = 100.000	Sum=	76.422

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr) Max	Low	Effective (In/Hr)
1	0.08	1.30	0.125	(0.246)	0.112	0.012
2	0.17	1.30	0.125	(0.246)	0.112	0.012
3	0.25	1.10	0.106	(0.246)	0.095	0.011
4	0.33	1.50	0.144	(0.246)	0.130	0.014
5	0.42	1.50	0.144	(0.246)	0.130	0.014
6	0.50	1.80	0.173	(0.246)	0.155	0.017
7	0.58	1.50	0.144	(0.246)	0.130	0.014
8	0.67	1.80	0.173	(0.246)	0.155	0.017
9	0.75	1.80	0.173	(0.246)	0.155	0.017
10	0.83	1.50	0.144	(0.246)	0.130	0.014
11	0.92	1.60	0.154	(0.246)	0.138	0.015
12	1.00	1.80	0.173	(0.246)	0.155	0.017
13	1.08	2.20	0.211	(0.246)	0.190	0.021
14	1.17	2.20	0.211	(0.246)	0.190	0.021
15	1.25	2.20	0.211	(0.246)	0.190	0.021
16	1.33	2.00	0.192	(0.246)	0.173	0.019
17	1.42	2.60	0.250	(0.246)	0.225	0.025
18	1.50	2.70	0.259	(0.246)	0.233	0.026
19	1.58	2.40	0.230	(0.246)	0.207	0.023
20	1.67	2.70	0.259	(0.246)	0.233	0.026
21	1.75	3.30	0.317	0.246	(0.285)	0.070
22	1.83	3.10	0.298	0.246	(0.268)	0.051
23	1.92	2.90	0.278	0.246	(0.250)	0.032
24	2.00	3.00	0.288	0.246	(0.259)	0.042
25	2.08	3.10	0.298	0.246	(0.268)	0.051
26	2.17	4.20	0.403	0.246	(0.363)	0.157
27	2.25	5.00	0.480	0.246	(0.432)	0.233
28	2.33	3.50	0.336	0.246	(0.302)	0.090
29	2.42	6.80	0.653	0.246	(0.587)	0.406
30	2.50	7.30	0.701	0.246	(0.631)	0.454
31	2.58	8.20	0.787	0.246	(0.708)	0.541
32	2.67	5.90	0.566	0.246	(0.510)	0.320
33	2.75	2.00	0.192	(0.246)	0.173	0.019
34	2.83	1.80	0.173	(0.246)	0.155	0.017
35	2.92	1.80	0.173	(0.246)	0.155	0.017
36	3.00	0.60	0.058	(0.246)	0.052	0.006
		(Loss Rate Not Used)				
Sum =		100.0			Sum =	2.9

Flood volume = Effective rainfall 0.24(In)
times area 75.8(Ac.)/[(In)/(Ft.)] = 1.5(Ac.Ft)
Total soil loss = 0.56(In)
Total soil loss = 3.544(Ac.Ft)
Total rainfall = 0.80(In)
Flood volume = 65743.5 Cubic Feet
Total soil loss = 154393.8 Cubic Feet

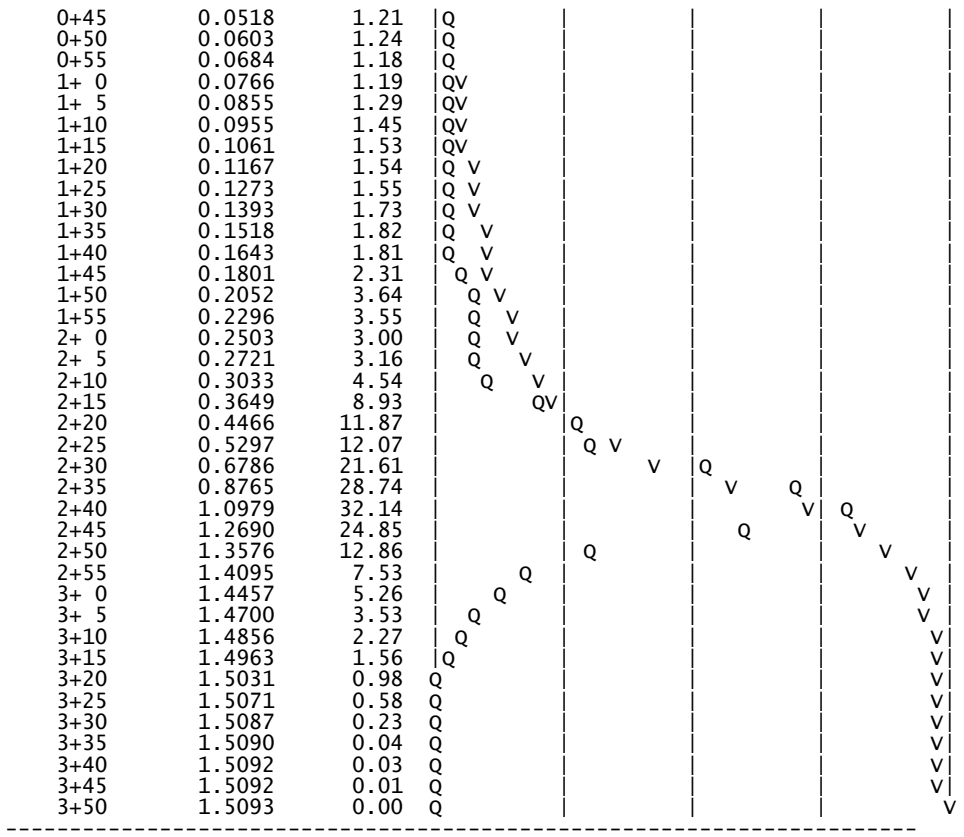
Peak flow rate of this hydrograph = 32.141(CFS)

++

3 - H O U R S T O R M
R u n o f f H y d r o g r a p h

Hydrograph in 5 Minute intervals ((CFS))

Time(h+m)	Volume Ac.Ft	Q(CFS)	0	10.0	20.0	30.0	40.0
0+ 5	0.0008	0.12	Q				
0+10	0.0045	0.53	Q				
0+15	0.0094	0.71	Q				
0+20	0.0146	0.77	Q				
0+25	0.0209	0.91	Q				
0+30	0.0279	1.02	VQ				
0+35	0.0357	1.12	VQ				
0+40	0.0434	1.13	|Q				



0+45	0.0518	1.21	
0+50	0.0603	1.24	
0+55	0.0684	1.18	
1+ 0	0.0766	1.19	
1+ 5	0.0855	1.29	
1+10	0.0955	1.45	
1+15	0.1061	1.53	
1+20	0.1167	1.54	
1+25	0.1273	1.55	
1+30	0.1393	1.73	
1+35	0.1518	1.82	
1+40	0.1643	1.81	
1+45	0.1801	2.31	
1+50	0.2052	3.64	
1+55	0.2296	3.55	
2+ 0	0.2503	3.00	
2+ 5	0.2721	3.16	
2+10	0.3033	4.54	
2+15	0.3649	8.93	
2+20	0.4466	11.87	
2+25	0.5297	12.07	
2+30	0.6786	21.61	
2+35	0.8765	28.74	
2+40	1.0979	32.14	
2+45	1.2690	24.85	
2+50	1.3576	12.86	
2+55	1.4095	7.53	
3+ 0	1.4457	5.26	
3+ 5	1.4700	3.53	
3+10	1.4856	2.27	
3+15	1.4963	1.56	
3+20	1.5031	0.98	
3+25	1.5071	0.58	
3+30	1.5087	0.23	
3+35	1.5090	0.04	
3+40	1.5092	0.03	
3+45	1.5092	0.01	
3+50	1.5093	0.00	

```
       U n i t   H y d r o g r a p h   A n a l y s i s

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              Study date  10/17/24 File: exa262.out

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------------------------------------------------------------------------------

Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978


Program License Serial Number 5006

------------------------------------------------------------------------
 English (in-lb) Input Units Used
 English Rainfall Data (Inches) Input Values Used

 English Units used in output format



------------------------------------------------------------------------
------------------------------------------------------------------------
Drainage Area =      75.83(Ac.)  =      0.118 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment =      75.83(Ac.)  =      0.118 Sq. Mi.
Length along longest watercourse =    2577.00(Ft.)
Length along longest watercourse measured to centroid =    1289.00(Ft.)
Length along longest watercourse =      0.488 Mi.
Length along longest watercourse measured to centroid =      0.244 Mi.
Difference in elevation =     145.20(Ft.)
Slope along watercourse =    297.4994 Ft./Mi.
Average Manning's 'N' = 0.030
Lag time =    0.109 Hr.
Lag time =     6.52 Min.
25% of lag time =     1.63 Min.
40% of lag time =     2.61 Min.
Unit time =     5.00 Min.
Duration of storm = 6 Hour(s)
User Entered Base Flow =     0.00(CFS)

2 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
       75.83           1.10                 83.41

100 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
       75.83           3.00                227.49

STORM EVENT (YEAR) =    2.00
Area Averaged 2-Year Rainfall =    1.100(In)
Area Averaged 100-Year Rainfall =    3.000(In)

Point rain (area averaged) =    1.100(In)
Areal adjustment factor =   99.97 %
Adjusted average point rain =    1.100(In)

Sub-Area Data:
Area(Ac.)         Runoff Index   Impervious %
    75.830           91.00         0.000
 Total Area Entered =     75.83(Ac.)


RI    RI   Infil. Rate Impervious   Adj. Infil. Rate  Area%     F
AMC2 AMC-1     (In/Hr)    (Dec.%)     (In/Hr)      (Dec.)    (In/Hr)
91.0  79.8      0.246     0.000        0.246       1.000      0.246
                                                 Sum (F) =   0.246
Area averaged mean soil loss (F) (In/Hr) =  0.246
Minimum soil loss rate ((In/Hr)) =  0.123
(for 24 hour storm duration)
Soil low loss rate (decimal) =   0.900
------------------------------------------------------------------------

               U n i t  H y d r o g r a p h
                      VALLEY S-Curve
------------------------------------------------------------------
               Unit Hydrograph Data
------------------------------------------------------------------
Unit time period   Time % of lag   Distribution   Unit Hydrograph
    (hrs)                          Graph %           (CFS)
```

1	0.083	76.653	12.379	9.460
2	0.167	153.307	43.174	32.994
3	0.250	229.960	20.942	16.004
4	0.333	306.613	8.476	6.477
5	0.417	383.266	5.111	3.906
6	0.500	459.920	3.287	2.512
7	0.583	536.573	2.310	1.765
8	0.667	613.226	1.661	1.270
9	0.750	689.880	1.141	0.872
10	0.833	766.533	0.802	0.613
11	0.917	843.186	0.718	0.549
		Sum = 100.000	Sum=	76.422

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr) Max	Low	Effective (In/Hr)
1	0.08	0.50	0.066	(0.246)	0.059	0.007
2	0.17	0.60	0.079	(0.246)	0.071	0.008
3	0.25	0.60	0.079	(0.246)	0.071	0.008
4	0.33	0.60	0.079	(0.246)	0.071	0.008
5	0.42	0.60	0.079	(0.246)	0.071	0.008
6	0.50	0.70	0.092	(0.246)	0.083	0.009
7	0.58	0.70	0.092	(0.246)	0.083	0.009
8	0.67	0.70	0.092	(0.246)	0.083	0.009
9	0.75	0.70	0.092	(0.246)	0.083	0.009
10	0.83	0.70	0.092	(0.246)	0.083	0.009
11	0.92	0.70	0.092	(0.246)	0.083	0.009
12	1.00	0.80	0.106	(0.246)	0.095	0.011
13	1.08	0.80	0.106	(0.246)	0.095	0.011
14	1.17	0.80	0.106	(0.246)	0.095	0.011
15	1.25	0.80	0.106	(0.246)	0.095	0.011
16	1.33	0.80	0.106	(0.246)	0.095	0.011
17	1.42	0.80	0.106	(0.246)	0.095	0.011
18	1.50	0.80	0.106	(0.246)	0.095	0.011
19	1.58	0.80	0.106	(0.246)	0.095	0.011
20	1.67	0.80	0.106	(0.246)	0.095	0.011
21	1.75	0.80	0.106	(0.246)	0.095	0.011
22	1.83	0.80	0.106	(0.246)	0.095	0.011
23	1.92	0.80	0.106	(0.246)	0.095	0.011
24	2.00	0.90	0.119	(0.246)	0.107	0.012
25	2.08	0.80	0.106	(0.246)	0.095	0.011
26	2.17	0.90	0.119	(0.246)	0.107	0.012
27	2.25	0.90	0.119	(0.246)	0.107	0.012
28	2.33	0.90	0.119	(0.246)	0.107	0.012
29	2.42	0.90	0.119	(0.246)	0.107	0.012
30	2.50	0.90	0.119	(0.246)	0.107	0.012
31	2.58	0.90	0.119	(0.246)	0.107	0.012
32	2.67	0.90	0.119	(0.246)	0.107	0.012
33	2.75	1.00	0.132	(0.246)	0.119	0.013
34	2.83	1.00	0.132	(0.246)	0.119	0.013
35	2.92	1.00	0.132	(0.246)	0.119	0.013
36	3.00	1.00	0.132	(0.246)	0.119	0.013
37	3.08	1.00	0.132	(0.246)	0.119	0.013
38	3.17	1.10	0.145	(0.246)	0.131	0.015
39	3.25	1.10	0.145	(0.246)	0.131	0.015
40	3.33	1.10	0.145	(0.246)	0.131	0.015
41	3.42	1.20	0.158	(0.246)	0.143	0.016
42	3.50	1.30	0.172	(0.246)	0.154	0.017
43	3.58	1.40	0.185	(0.246)	0.166	0.018
44	3.67	1.40	0.185	(0.246)	0.166	0.018
45	3.75	1.50	0.198	(0.246)	0.178	0.020
46	3.83	1.50	0.198	(0.246)	0.178	0.020
47	3.92	1.60	0.211	(0.246)	0.190	0.021
48	4.00	1.60	0.211	(0.246)	0.190	0.021
49	4.08	1.70	0.224	(0.246)	0.202	0.022
50	4.17	1.80	0.238	(0.246)	0.214	0.024
51	4.25	1.90	0.251	(0.246)	0.226	0.025
52	4.33	2.00	0.264	(0.246)	0.238	0.026
53	4.42	2.10	0.277	0.246	(0.249)	0.031
54	4.50	2.10	0.277	0.246	(0.249)	0.031
55	4.58	2.20	0.290	0.246	(0.261)	0.044
56	4.67	2.30	0.304	0.246	(0.273)	0.057
57	4.75	2.40	0.317	0.246	(0.285)	0.070
58	4.83	2.40	0.317	0.246	(0.285)	0.070
59	4.92	2.50	0.330	0.246	(0.297)	0.084
60	5.00	2.60	0.343	0.246	(0.309)	0.097
61	5.08	3.10	0.409	0.246	(0.368)	0.163
62	5.17	3.60	0.475	0.246	(0.428)	0.229
63	5.25	3.90	0.515	0.246	(0.463)	0.268
64	5.33	4.20	0.554	0.246	(0.499)	0.308
65	5.42	4.70	0.620	0.246	(0.558)	0.374

66	5.50	5.60	0.739		0.246	(0.665)	0.493
67	5.58	1.90	0.251	(	0.246)	0.226	0.025
68	5.67	0.90	0.119	(	0.246)	0.107	0.012
69	5.75	0.60	0.079	(	0.246)	0.071	0.008
70	5.83	0.50	0.066	(	0.246)	0.059	0.007
71	5.92	0.30	0.040	(	0.246)	0.036	0.004
72	6.00	0.20	0.026	(	0.246)	0.024	0.003

(Loss Rate Not Used)

Sum = 100.0 Sum = 3.1

Flood volume = Effective rainfall 0.26(In)
times area 75.8(Ac.)/[(In)/(Ft.)] = 1.6(Ac.Ft)
Total soil loss = 0.84(In)
Total soil loss = 5.337(Ac.Ft)
Total rainfall = 1.10(In)
Flood volume = 70210.9 Cubic Feet
Total soil loss = 232499.4 Cubic Feet

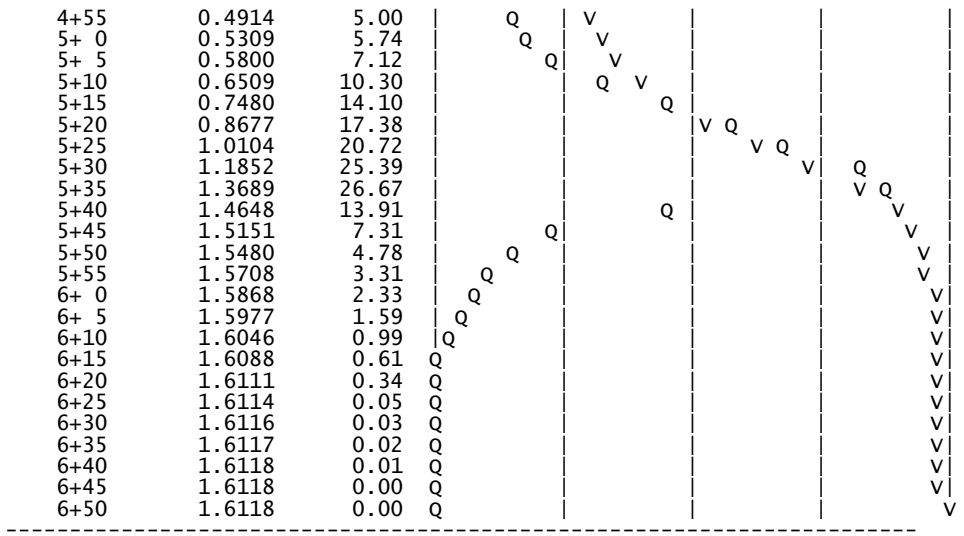
Peak flow rate of this hydrograph = 26.671(CFS)

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6 - H O U R S T O R M
R u n o f f H y d r o g r a p h

Hydrograph in 5 Minute intervals ((CFS))

Time(h+m)	Volume Ac.Ft	Q(CFS)	0	7.5	15.0	22.5	30.0
0+ 5	0.0004	0.06	Q				
0+10	0.0024	0.29	Q				
0+15	0.0055	0.44	Q				
0+20	0.0090	0.51	Q				
0+25	0.0127	0.54	Q				
0+30	0.0167	0.57	Q				
0+35	0.0210	0.63	Q				
0+40	0.0256	0.66	Q				
0+45	0.0303	0.68	Q				
0+50	0.0350	0.69	Q				
0+55	0.0399	0.70	Q				
1+ 0	0.0448	0.71	QV				
1+ 5	0.0500	0.76	|Q				
1+10	0.0554	0.78	|Q				
1+15	0.0608	0.79	|Q				
1+20	0.0663	0.80	|Q				
1+25	0.0718	0.80	|Q				
1+30	0.0774	0.80	|Q				
1+35	0.0829	0.80	|QV				
1+40	0.0885	0.81	|QV				
1+45	0.0940	0.81	|QV				
1+50	0.0996	0.81	|QV				
1+55	0.1051	0.81	|QV				
2+ 0	0.1108	0.82	|QV				
2+ 5	0.1166	0.85	|QV				
2+10	0.1224	0.84	|Q V				
2+15	0.1284	0.87	|Q V				
2+20	0.1346	0.89	|Q V				
2+25	0.1407	0.90	|Q V				
2+30	0.1469	0.90	|Q V				
2+35	0.1532	0.90	|Q V				
2+40	0.1594	0.90	|Q V				
2+45	0.1657	0.92	|Q V				
2+50	0.1724	0.96	|Q V				
2+55	0.1791	0.98	|Q V				
3+ 0	0.1860	0.99	|Q V				
3+ 5	0.1929	1.00	|Q V				
3+10	0.1998	1.01	|Q V				
3+15	0.2072	1.06	|Q V				
3+20	0.2146	1.08	|Q V				
3+25	0.2222	1.11	|Q V				
3+30	0.2303	1.17	|Q V				
3+35	0.2389	1.25	|Q V				
3+40	0.2480	1.32	|Q V				
3+45	0.2575	1.37	|Q V				
3+50	0.2673	1.44	|Q V				
3+55	0.2775	1.48	|Q V				
4+ 0	0.2881	1.54	| Q V				
4+ 5	0.2991	1.58	| Q V				
4+10	0.3105	1.66	| Q V				
4+15	0.3225	1.74	| Q V				
4+20	0.3351	1.84	| Q V				
4+25	0.3486	1.96	| Q V				
4+30	0.3634	2.14	| Q V				
4+35	0.3796	2.36	| Q V				
4+40	0.4001	2.96	| Q V				
4+45	0.4260	3.76	| Q V				
4+50	0.4570	4.51	| Q |V				


4+55 0.4914 5.00
5+ 0 0.5309 5.74
5+ 5 0.5800 7.12
5+10 0.6509 10.30
5+15 0.7480 14.10
5+20 0.8677 17.38
5+25 1.0104 20.72
5+30 1.1852 25.39
5+35 1.3689 26.67
5+40 1.4648 13.91
5+45 1.5151 7.31
5+50 1.5480 4.78
5+55 1.5708 3.31
6+ 0 1.5868 2.33
6+ 5 1.5977 1.59
6+10 1.6046 0.99
6+15 1.6088 0.61
6+20 1.6111 0.34
6+25 1.6114 0.05
6+30 1.6116 0.03
6+35 1.6117 0.02
6+40 1.6118 0.01
6+45 1.6118 0.00
6+50 1.6118 0.00

```
       U n i t   H y d r o g r a p h   A n a l y s i s

       Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2008, Version 8.1
              Study date  10/17/24 File: exa2242.out

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------------------------------------------------------------------------------

Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978


Program License Serial Number 5006

------------------------------------------------------------------------
 English (in-lb) Input Units Used
 English Rainfall Data (Inches) Input Values Used

 English Units used in output format



------------------------------------------------------------------------
------------------------------------------------------------------------
Drainage Area =      75.83(Ac.)  =      0.118 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment =      75.83(Ac.)  =      0.118 Sq. Mi.
Length along longest watercourse =    2577.00(Ft.)
Length along longest watercourse measured to centroid =    1289.00(Ft.)
Length along longest watercourse =      0.488 Mi.
Length along longest watercourse measured to centroid =      0.244 Mi.
Difference in elevation =     145.20(Ft.)
Slope along watercourse =    297.4994 Ft./Mi.
Average Manning's 'N' = 0.030
Lag time =    0.109 Hr.
Lag time =     6.52 Min.
25% of lag time =     1.63 Min.
40% of lag time =     2.61 Min.
Unit time =     5.00 Min.
Duration of storm = 24 Hour(s)
User Entered Base Flow =     0.00(CFS)

2 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
       75.83           1.80                136.49

100 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
       75.83           5.00                379.15

STORM EVENT (YEAR) =    2.00
Area Averaged 2-Year Rainfall =    1.800(In)
Area Averaged 100-Year Rainfall =    5.000(In)

Point rain (area averaged) =    1.800(In)
Areal adjustment factor =   99.99 %
Adjusted average point rain =    1.800(In)

Sub-Area Data:
Area(Ac.)         Runoff Index   Impervious %
    75.830           91.00         0.000
 Total Area Entered =     75.83(Ac.)


RI    RI   Infil. Rate Impervious   Adj. Infil. Rate  Area%     F
AMC2 AMC-1     (In/Hr)    (Dec.%)     (In/Hr)      (Dec.)    (In/Hr)
91.0  79.8      0.246     0.000        0.246       1.000      0.246
                                                 Sum (F) =   0.246
Area averaged mean soil loss (F) (In/Hr) =  0.246
Minimum soil loss rate ((In/Hr)) =  0.123
(for 24 hour storm duration)
Soil low loss rate (decimal) =   0.900
------------------------------------------------------------------------

               U n i t  H y d r o g r a p h
                      VALLEY S-Curve
------------------------------------------------------------------------
               Unit Hydrograph Data
------------------------------------------------------------------------
Unit time period   Time % of lag   Distribution   Unit Hydrograph
    (hrs)                          Graph %           (CFS)
```

1	0.083	76.653	12.379	9.460
2	0.167	153.307	43.174	32.994
3	0.250	229.960	20.942	16.004
4	0.333	306.613	8.476	6.477
5	0.417	383.266	5.111	3.906
6	0.500	459.920	3.287	2.512
7	0.583	536.573	2.310	1.765
8	0.667	613.226	1.661	1.270
9	0.750	689.880	1.141	0.872
10	0.833	766.533	0.802	0.613
11	0.917	843.186	0.718	0.549
		Sum = 100.000	Sum=	76.422

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr) Max	Low	Effective (In/Hr)
1	0.08	0.07	0.014	(0.437)	0.013	0.001
2	0.17	0.07	0.014	(0.435)	0.013	0.001
3	0.25	0.07	0.014	(0.433)	0.013	0.001
4	0.33	0.10	0.022	(0.432)	0.019	0.002
5	0.42	0.10	0.022	(0.430)	0.019	0.002
6	0.50	0.10	0.022	(0.428)	0.019	0.002
7	0.58	0.10	0.022	(0.427)	0.019	0.002
8	0.67	0.10	0.022	(0.425)	0.019	0.002
9	0.75	0.10	0.022	(0.423)	0.019	0.002
10	0.83	0.13	0.029	(0.422)	0.026	0.003
11	0.92	0.13	0.029	(0.420)	0.026	0.003
12	1.00	0.13	0.029	(0.418)	0.026	0.003
13	1.08	0.10	0.022	(0.417)	0.019	0.002
14	1.17	0.10	0.022	(0.415)	0.019	0.002
15	1.25	0.10	0.022	(0.413)	0.019	0.002
16	1.33	0.10	0.022	(0.412)	0.019	0.002
17	1.42	0.10	0.022	(0.410)	0.019	0.002
18	1.50	0.10	0.022	(0.408)	0.019	0.002
19	1.58	0.10	0.022	(0.407)	0.019	0.002
20	1.67	0.10	0.022	(0.405)	0.019	0.002
21	1.75	0.10	0.022	(0.404)	0.019	0.002
22	1.83	0.13	0.029	(0.402)	0.026	0.003
23	1.92	0.13	0.029	(0.400)	0.026	0.003
24	2.00	0.13	0.029	(0.399)	0.026	0.003
25	2.08	0.13	0.029	(0.397)	0.026	0.003
26	2.17	0.13	0.029	(0.395)	0.026	0.003
27	2.25	0.13	0.029	(0.394)	0.026	0.003
28	2.33	0.13	0.029	(0.392)	0.026	0.003
29	2.42	0.13	0.029	(0.391)	0.026	0.003
30	2.50	0.13	0.029	(0.389)	0.026	0.003
31	2.58	0.17	0.036	(0.387)	0.032	0.004
32	2.67	0.17	0.036	(0.386)	0.032	0.004
33	2.75	0.17	0.036	(0.384)	0.032	0.004
34	2.83	0.17	0.036	(0.383)	0.032	0.004
35	2.92	0.17	0.036	(0.381)	0.032	0.004
36	3.00	0.17	0.036	(0.380)	0.032	0.004
37	3.08	0.17	0.036	(0.378)	0.032	0.004
38	3.17	0.17	0.036	(0.376)	0.032	0.004
39	3.25	0.17	0.036	(0.375)	0.032	0.004
40	3.33	0.17	0.036	(0.373)	0.032	0.004
41	3.42	0.17	0.036	(0.372)	0.032	0.004
42	3.50	0.17	0.036	(0.370)	0.032	0.004
43	3.58	0.17	0.036	(0.369)	0.032	0.004
44	3.67	0.17	0.036	(0.367)	0.032	0.004
45	3.75	0.17	0.036	(0.366)	0.032	0.004
46	3.83	0.20	0.043	(0.364)	0.039	0.004
47	3.92	0.20	0.043	(0.362)	0.039	0.004
48	4.00	0.20	0.043	(0.361)	0.039	0.004
49	4.08	0.20	0.043	(0.359)	0.039	0.004
50	4.17	0.20	0.043	(0.358)	0.039	0.004
51	4.25	0.20	0.043	(0.356)	0.039	0.004
52	4.33	0.23	0.050	(0.355)	0.045	0.005
53	4.42	0.23	0.050	(0.353)	0.045	0.005
54	4.50	0.23	0.050	(0.352)	0.045	0.005
55	4.58	0.23	0.050	(0.350)	0.045	0.005
56	4.67	0.23	0.050	(0.349)	0.045	0.005
57	4.75	0.23	0.050	(0.347)	0.045	0.005
58	4.83	0.27	0.058	(0.346)	0.052	0.006
59	4.92	0.27	0.058	(0.344)	0.052	0.006
60	5.00	0.27	0.058	(0.343)	0.052	0.006
61	5.08	0.20	0.043	(0.341)	0.039	0.004
62	5.17	0.20	0.043	(0.340)	0.039	0.004
63	5.25	0.20	0.043	(0.338)	0.039	0.004
64	5.33	0.23	0.050	(0.337)	0.045	0.005
65	5.42	0.23	0.050	(0.335)	0.045	0.005

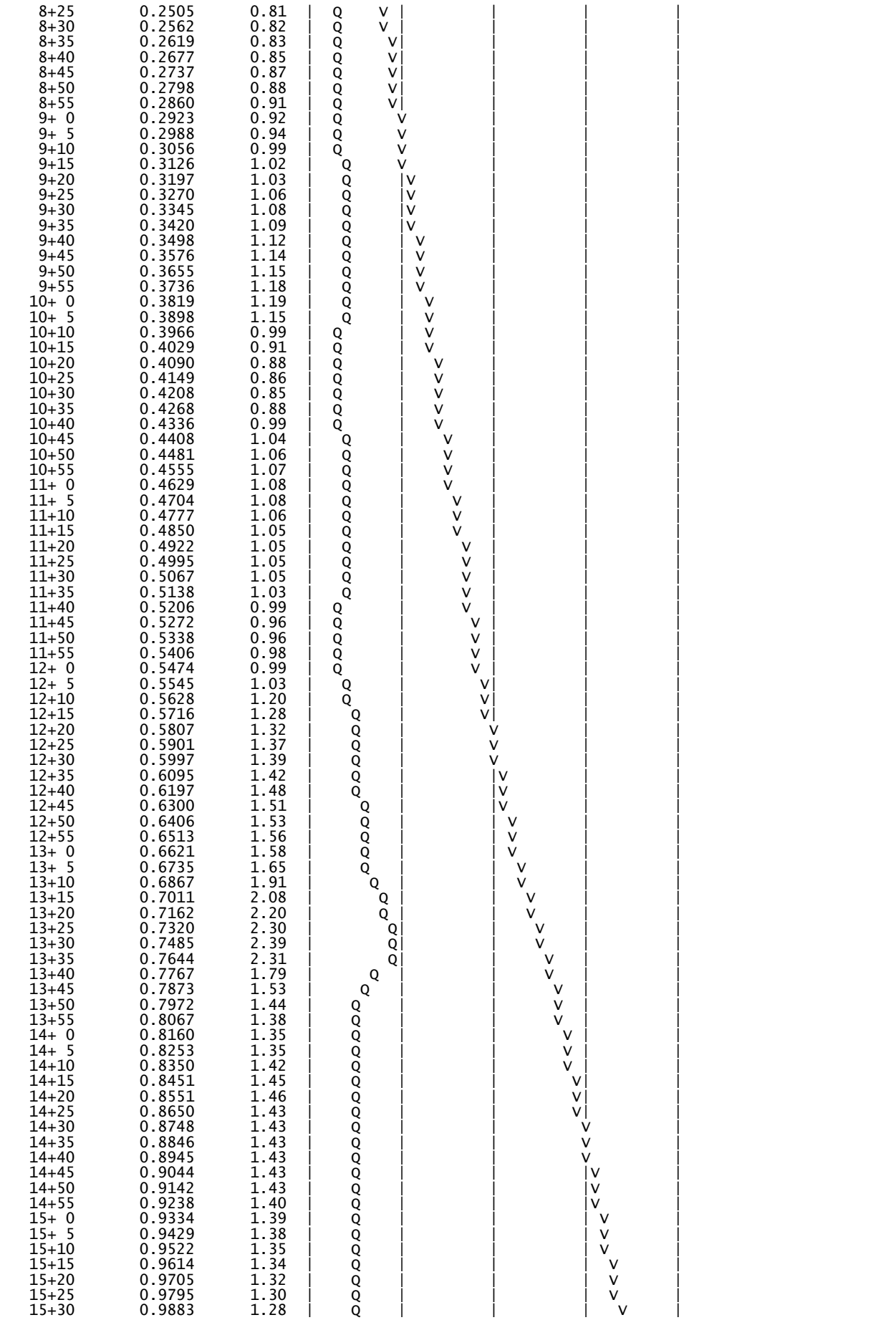
66	5.50	0.23	0.050	(0.334)	0.045	0.005
67	5.58	0.27	0.058	(0.332)	0.052	0.006
68	5.67	0.27	0.058	(0.331)	0.052	0.006
69	5.75	0.27	0.058	(0.330)	0.052	0.006
70	5.83	0.27	0.058	(0.328)	0.052	0.006
71	5.92	0.27	0.058	(0.327)	0.052	0.006
72	6.00	0.27	0.058	(0.325)	0.052	0.006
73	6.08	0.30	0.065	(0.324)	0.058	0.006
74	6.17	0.30	0.065	(0.322)	0.058	0.006
75	6.25	0.30	0.065	(0.321)	0.058	0.006
76	6.33	0.30	0.065	(0.319)	0.058	0.006
77	6.42	0.30	0.065	(0.318)	0.058	0.006
78	6.50	0.30	0.065	(0.317)	0.058	0.006
79	6.58	0.33	0.072	(0.315)	0.065	0.007
80	6.67	0.33	0.072	(0.314)	0.065	0.007
81	6.75	0.33	0.072	(0.312)	0.065	0.007
82	6.83	0.33	0.072	(0.311)	0.065	0.007
83	6.92	0.33	0.072	(0.310)	0.065	0.007
84	7.00	0.33	0.072	(0.308)	0.065	0.007
85	7.08	0.33	0.072	(0.307)	0.065	0.007
86	7.17	0.33	0.072	(0.305)	0.065	0.007
87	7.25	0.33	0.072	(0.304)	0.065	0.007
88	7.33	0.37	0.079	(0.303)	0.071	0.008
89	7.42	0.37	0.079	(0.301)	0.071	0.008
90	7.50	0.37	0.079	(0.300)	0.071	0.008
91	7.58	0.40	0.086	(0.298)	0.078	0.009
92	7.67	0.40	0.086	(0.297)	0.078	0.009
93	7.75	0.40	0.086	(0.296)	0.078	0.009
94	7.83	0.43	0.094	(0.294)	0.084	0.009
95	7.92	0.43	0.094	(0.293)	0.084	0.009
96	8.00	0.43	0.094	(0.292)	0.084	0.009
97	8.08	0.50	0.108	(0.290)	0.097	0.011
98	8.17	0.50	0.108	(0.289)	0.097	0.011
99	8.25	0.50	0.108	(0.288)	0.097	0.011
100	8.33	0.50	0.108	(0.286)	0.097	0.011
101	8.42	0.50	0.108	(0.285)	0.097	0.011
102	8.50	0.50	0.108	(0.283)	0.097	0.011
103	8.58	0.53	0.115	(0.282)	0.104	0.012
104	8.67	0.53	0.115	(0.281)	0.104	0.012
105	8.75	0.53	0.115	(0.280)	0.104	0.012
106	8.83	0.57	0.122	(0.278)	0.110	0.012
107	8.92	0.57	0.122	(0.277)	0.110	0.012
108	9.00	0.57	0.122	(0.276)	0.110	0.012
109	9.08	0.63	0.137	(0.274)	0.123	0.014
110	9.17	0.63	0.137	(0.273)	0.123	0.014
111	9.25	0.63	0.137	(0.272)	0.123	0.014
112	9.33	0.67	0.144	(0.270)	0.130	0.014
113	9.42	0.67	0.144	(0.269)	0.130	0.014
114	9.50	0.67	0.144	(0.268)	0.130	0.014
115	9.58	0.70	0.151	(0.267)	0.136	0.015
116	9.67	0.70	0.151	(0.265)	0.136	0.015
117	9.75	0.70	0.151	(0.264)	0.136	0.015
118	9.83	0.73	0.158	(0.263)	0.143	0.016
119	9.92	0.73	0.158	(0.261)	0.143	0.016
120	10.00	0.73	0.158	(0.260)	0.143	0.016
121	10.08	0.50	0.108	(0.259)	0.097	0.011
122	10.17	0.50	0.108	(0.258)	0.097	0.011
123	10.25	0.50	0.108	(0.256)	0.097	0.011
124	10.33	0.50	0.108	(0.255)	0.097	0.011
125	10.42	0.50	0.108	(0.254)	0.097	0.011
126	10.50	0.50	0.108	(0.253)	0.097	0.011
127	10.58	0.67	0.144	(0.251)	0.130	0.014
128	10.67	0.67	0.144	(0.250)	0.130	0.014
129	10.75	0.67	0.144	(0.249)	0.130	0.014
130	10.83	0.67	0.144	(0.248)	0.130	0.014
131	10.92	0.67	0.144	(0.247)	0.130	0.014
132	11.00	0.67	0.144	(0.245)	0.130	0.014
133	11.08	0.63	0.137	(0.244)	0.123	0.014
134	11.17	0.63	0.137	(0.243)	0.123	0.014
135	11.25	0.63	0.137	(0.242)	0.123	0.014
136	11.33	0.63	0.137	(0.241)	0.123	0.014
137	11.42	0.63	0.137	(0.239)	0.123	0.014
138	11.50	0.63	0.137	(0.238)	0.123	0.014
139	11.58	0.57	0.122	(0.237)	0.110	0.012
140	11.67	0.57	0.122	(0.236)	0.110	0.012
141	11.75	0.57	0.122	(0.235)	0.110	0.012
142	11.83	0.60	0.130	(0.233)	0.117	0.013
143	11.92	0.60	0.130	(0.232)	0.117	0.013
144	12.00	0.60	0.130	(0.231)	0.117	0.013
145	12.08	0.83	0.180	(0.230)	0.162	0.018
146	12.17	0.83	0.180	(0.229)	0.162	0.018
147	12.25	0.83	0.180	(0.228)	0.162	0.018
148	12.33	0.87	0.187	(0.227)	0.168	0.019
149	12.42	0.87	0.187	(0.225)	0.168	0.019
150	12.50	0.87	0.187	(0.224)	0.168	0.019
151	12.58	0.93	0.202	(0.223)	0.181	0.020

152	12.67	0.93	0.202	(	0.222)	0.181	0.020
153	12.75	0.93	0.202	(	0.221)	0.181	0.020
154	12.83	0.97	0.209	(	0.220)	0.188	0.021
155	12.92	0.97	0.209	(	0.219)	0.188	0.021
156	13.00	0.97	0.209	(	0.218)	0.188	0.021
157	13.08	1.13	0.245		0.216	(0.220)	0.028
158	13.17	1.13	0.245		0.215	(0.220)	0.029
159	13.25	1.13	0.245		0.214	(0.220)	0.031
160	13.33	1.13	0.245		0.213	(0.220)	0.032
161	13.42	1.13	0.245		0.212	(0.220)	0.033
162	13.50	1.13	0.245		0.211	(0.220)	0.034
163	13.58	0.77	0.166	(	0.210)	0.149	0.017
164	13.67	0.77	0.166	(	0.209)	0.149	0.017
165	13.75	0.77	0.166	(	0.208)	0.149	0.017
166	13.83	0.77	0.166	(	0.207)	0.149	0.017
167	13.92	0.77	0.166	(	0.206)	0.149	0.017
168	14.00	0.77	0.166	(	0.205)	0.149	0.017
169	14.08	0.90	0.194	(	0.204)	0.175	0.019
170	14.17	0.90	0.194	(	0.203)	0.175	0.019
171	14.25	0.90	0.194	(	0.202)	0.175	0.019
172	14.33	0.87	0.187	(	0.200)	0.168	0.019
173	14.42	0.87	0.187	(	0.199)	0.168	0.019
174	14.50	0.87	0.187	(	0.198)	0.168	0.019
175	14.58	0.87	0.187	(	0.197)	0.168	0.019
176	14.67	0.87	0.187	(	0.196)	0.168	0.019
177	14.75	0.87	0.187	(	0.195)	0.168	0.019
178	14.83	0.83	0.180	(	0.194)	0.162	0.018
179	14.92	0.83	0.180	(	0.193)	0.162	0.018
180	15.00	0.83	0.180	(	0.192)	0.162	0.018
181	15.08	0.80	0.173	(	0.191)	0.155	0.017
182	15.17	0.80	0.173	(	0.190)	0.155	0.017
183	15.25	0.80	0.173	(	0.189)	0.155	0.017
184	15.33	0.77	0.166	(	0.188)	0.149	0.017
185	15.42	0.77	0.166	(	0.188)	0.149	0.017
186	15.50	0.77	0.166	(	0.187)	0.149	0.017
187	15.58	0.63	0.137	(	0.186)	0.123	0.014
188	15.67	0.63	0.137	(	0.185)	0.123	0.014
189	15.75	0.63	0.137	(	0.184)	0.123	0.014
190	15.83	0.63	0.137	(	0.183)	0.123	0.014
191	15.92	0.63	0.137	(	0.182)	0.123	0.014
192	16.00	0.63	0.137	(	0.181)	0.123	0.014
193	16.08	0.13	0.029	(	0.180)	0.026	0.003
194	16.17	0.13	0.029	(	0.179)	0.026	0.003
195	16.25	0.13	0.029	(	0.178)	0.026	0.003
196	16.33	0.13	0.029	(	0.177)	0.026	0.003
197	16.42	0.13	0.029	(	0.176)	0.026	0.003
198	16.50	0.13	0.029	(	0.175)	0.026	0.003
199	16.58	0.10	0.022	(	0.175)	0.019	0.002
200	16.67	0.10	0.022	(	0.174)	0.019	0.002
201	16.75	0.10	0.022	(	0.173)	0.019	0.002
202	16.83	0.10	0.022	(	0.172)	0.019	0.002
203	16.92	0.10	0.022	(	0.171)	0.019	0.002
204	17.00	0.10	0.022	(	0.170)	0.019	0.002
205	17.08	0.17	0.036	(	0.169)	0.032	0.004
206	17.17	0.17	0.036	(	0.168)	0.032	0.004
207	17.25	0.17	0.036	(	0.168)	0.032	0.004
208	17.33	0.17	0.036	(	0.167)	0.032	0.004
209	17.42	0.17	0.036	(	0.166)	0.032	0.004
210	17.50	0.17	0.036	(	0.165)	0.032	0.004
211	17.58	0.17	0.036	(	0.164)	0.032	0.004
212	17.67	0.17	0.036	(	0.163)	0.032	0.004
213	17.75	0.17	0.036	(	0.163)	0.032	0.004
214	17.83	0.13	0.029	(	0.162)	0.026	0.003
215	17.92	0.13	0.029	(	0.161)	0.026	0.003
216	18.00	0.13	0.029	(	0.160)	0.026	0.003
217	18.08	0.13	0.029	(	0.159)	0.026	0.003
218	18.17	0.13	0.029	(	0.159)	0.026	0.003
219	18.25	0.13	0.029	(	0.158)	0.026	0.003
220	18.33	0.13	0.029	(	0.157)	0.026	0.003
221	18.42	0.13	0.029	(	0.156)	0.026	0.003
222	18.50	0.13	0.029	(	0.156)	0.026	0.003
223	18.58	0.10	0.022	(	0.155)	0.019	0.002
224	18.67	0.10	0.022	(	0.154)	0.019	0.002
225	18.75	0.10	0.022	(	0.153)	0.019	0.002
226	18.83	0.07	0.014	(	0.153)	0.013	0.001
227	18.92	0.07	0.014	(	0.152)	0.013	0.001
228	19.00	0.07	0.014	(	0.151)	0.013	0.001
229	19.08	0.10	0.022	(	0.150)	0.019	0.002
230	19.17	0.10	0.022	(	0.150)	0.019	0.002
231	19.25	0.10	0.022	(	0.149)	0.019	0.002
232	19.33	0.13	0.029	(	0.148)	0.026	0.003
233	19.42	0.13	0.029	(	0.148)	0.026	0.003
234	19.50	0.13	0.029	(	0.147)	0.026	0.003
235	19.58	0.10	0.022	(	0.146)	0.019	0.002
236	19.67	0.10	0.022	(	0.146)	0.019	0.002
237	19.75	0.10	0.022	(	0.145)	0.019	0.002

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238  19.83     0.07      0.014       (  0.144)       0.013        0.001
239  19.92     0.07      0.014       (  0.144)       0.013        0.001
240  20.00     0.07      0.014       (  0.143)       0.013        0.001
241  20.08     0.10      0.022       (  0.142)       0.019        0.002
242  20.17     0.10      0.022       (  0.142)       0.019        0.002
243  20.25     0.10      0.022       (  0.141)       0.019        0.002
244  20.33     0.10      0.022       (  0.141)       0.019        0.002
245  20.42     0.10      0.022       (  0.140)       0.019        0.002
246  20.50     0.10      0.022       (  0.139)       0.019        0.002
247  20.58     0.10      0.022       (  0.139)       0.019        0.002
248  20.67     0.10      0.022       (  0.138)       0.019        0.002
249  20.75     0.10      0.022       (  0.138)       0.019        0.002
250  20.83     0.07      0.014       (  0.137)       0.013        0.001
251  20.92     0.07      0.014       (  0.137)       0.013        0.001
252  21.00     0.07      0.014       (  0.136)       0.013        0.001
253  21.08     0.10      0.022       (  0.135)       0.019        0.002
254  21.17     0.10      0.022       (  0.135)       0.019        0.002
255  21.25     0.10      0.022       (  0.134)       0.019        0.002
256  21.33     0.07      0.014       (  0.134)       0.013        0.001
257  21.42     0.07      0.014       (  0.133)       0.013        0.001
258  21.50     0.07      0.014       (  0.133)       0.013        0.001
259  21.58     0.10      0.022       (  0.132)       0.019        0.002
260  21.67     0.10      0.022       (  0.132)       0.019        0.002
261  21.75     0.10      0.022       (  0.131)       0.019        0.002
262  21.83     0.07      0.014       (  0.131)       0.013        0.001
263  21.92     0.07      0.014       (  0.131)       0.013        0.001
264  22.00     0.07      0.014       (  0.130)       0.013        0.001
265  22.08     0.10      0.022       (  0.130)       0.019        0.002
266  22.17     0.10      0.022       (  0.129)       0.019        0.002
267  22.25     0.10      0.022       (  0.129)       0.019        0.002
268  22.33     0.07      0.014       (  0.128)       0.013        0.001
269  22.42     0.07      0.014       (  0.128)       0.013        0.001
270  22.50     0.07      0.014       (  0.128)       0.013        0.001
271  22.58     0.07      0.014       (  0.127)       0.013        0.001
272  22.67     0.07      0.014       (  0.127)       0.013        0.001
273  22.75     0.07      0.014       (  0.127)       0.013        0.001
274  22.83     0.07      0.014       (  0.126)       0.013        0.001
275  22.92     0.07      0.014       (  0.126)       0.013        0.001
276  23.00     0.07      0.014       (  0.126)       0.013        0.001
277  23.08     0.07      0.014       (  0.125)       0.013        0.001
278  23.17     0.07      0.014       (  0.125)       0.013        0.001
279  23.25     0.07      0.014       (  0.125)       0.013        0.001
280  23.33     0.07      0.014       (  0.125)       0.013        0.001
281  23.42     0.07      0.014       (  0.124)       0.013        0.001
282  23.50     0.07      0.014       (  0.124)       0.013        0.001
283  23.58     0.07      0.014       (  0.124)       0.013        0.001
284  23.67     0.07      0.014       (  0.124)       0.013        0.001
285  23.75     0.07      0.014       (  0.124)       0.013        0.001
286  23.83     0.07      0.014       (  0.123)       0.013        0.001
287  23.92     0.07      0.014       (  0.123)       0.013        0.001
288  24.00     0.07      0.014       (  0.123)       0.013        0.001
               (Loss Rate Not Used)
    Sum =     100.0                                  Sum =     2.2
      Flood volume = Effective rainfall      0.18(In)
       times area      75.8(Ac.)/[(In)/(Ft.)] =       1.2(Ac.Ft)
      Total soil loss =      1.62(In)
      Total soil loss =    10.215(Ac.Ft)
      Total rainfall =      1.80(In)
      Flood volume =       50443.2 Cubic Feet
      Total soil loss =      444956.6 Cubic Feet
      ---------------------------------------------------------------------
       Peak flow rate of this hydrograph =      2.393(CFS)
      ---------------------------------------------------------------------
      +++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                         24 - H O U R    S T O R M
                    R u n o f f      H y d r o g r a p h
      ---------------------------------------------------------------------
                  Hydrograph in   5   Minute intervals ((CFS))

      ---------------------------------------------------------------------
 Time(h+m) Volume Ac.Ft   Q(CFS)  0        2.5       5.0       7.5      10.0
 ---------------------------------------------------------------------------
   0+ 5       0.0001      0.01  Q         |         |         |         |
   0+10       0.0005      0.06  Q         |         |         |         |
   0+15       0.0011      0.08  Q         |         |         |         |
   0+20       0.0018      0.10  Q         |         |         |         |
   0+25       0.0027      0.13  Q         |         |         |         |
   0+30       0.0037      0.14  Q         |         |         |         |
   0+35       0.0047      0.15  Q         |         |         |         |
   0+40       0.0058      0.16  Q         |         |         |         |
   0+45       0.0069      0.16  Q         |         |         |         |
   0+50       0.0081      0.17  Q         |         |         |         |
   0+55       0.0094      0.19  Q         |         |         |         |
   1+ 0       0.0108      0.21  Q         |         |         |         |
   1+ 5       0.0122      0.20  Q         |         |         |         |
   1+10       0.0135      0.18  Q         |         |         |         |
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1+15      0.0147      0.17  Q          |          |          |          |
1+20      0.0159      0.17  Q          |          |          |          |
1+25      0.0170      0.17  Q          |          |          |          |
1+30      0.0182      0.17  Q          |          |          |          |
1+35      0.0194      0.17  Q          |          |          |          |
1+40      0.0205      0.17  Q          |          |          |          |
1+45      0.0216      0.17  Q          |          |          |          |
1+50      0.0228      0.17  Q          |          |          |          |
1+55      0.0242      0.20  Q          |          |          |          |
2+ 0      0.0256      0.21  Q          |          |          |          |
2+ 5      0.0271      0.21  Q          |          |          |          |
2+10      0.0285      0.21  Q          |          |          |          |
2+15      0.0300      0.22  QV         |          |          |          |
2+20      0.0315      0.22  QV         |          |          |          |
2+25      0.0330      0.22  QV         |          |          |          |
2+30      0.0346      0.22  QV         |          |          |          |
2+35      0.0361      0.23  QV         |          |          |          |
2+40      0.0378      0.25  |Q         |          |          |          |
2+45      0.0396      0.26  |Q         |          |          |          |
2+50      0.0415      0.27  |Q         |          |          |          |
2+55      0.0433      0.27  |Q         |          |          |          |
3+ 0      0.0452      0.27  |Q         |          |          |          |
3+ 5      0.0471      0.27  |Q         |          |          |          |
3+10      0.0490      0.27  |Q         |          |          |          |
3+15      0.0509      0.27  |Q         |          |          |          |
3+20      0.0528      0.27  |Q         |          |          |          |
3+25      0.0547      0.28  |Q         |          |          |          |
3+30      0.0566      0.28  |Q         |          |          |          |
3+35      0.0584      0.28  |QV        |          |          |          |
3+40      0.0603      0.28  |QV        |          |          |          |
3+45      0.0622      0.28  |QV        |          |          |          |
3+50      0.0642      0.28  |QV        |          |          |          |
3+55      0.0663      0.31  |QV        |          |          |          |
4+ 0      0.0685      0.32  |QV        |          |          |          |
4+ 5      0.0707      0.32  |QV        |          |          |          |
4+10      0.0729      0.32  |QV        |          |          |          |
4+15      0.0752      0.33  |QV        |          |          |          |
4+20      0.0775      0.33  |QV        |          |          |          |
4+25      0.0800      0.36  |QV        |          |          |          |
4+30      0.0825      0.37  |QV        |          |          |          |
4+35      0.0851      0.38  |QV        |          |          |          |
4+40      0.0877      0.38  |Q V       |          |          |          |
4+45      0.0904      0.38  |Q V       |          |          |          |
4+50      0.0930      0.39  |Q V       |          |          |          |
4+55      0.0959      0.41  |Q V       |          |          |          |
5+ 0      0.0988      0.43  |Q V       |          |          |          |
5+ 5      0.1017      0.42  |Q V       |          |          |          |
5+10      0.1043      0.37  |Q V       |          |          |          |
5+15      0.1067      0.35  |Q V       |          |          |          |
5+20      0.1091      0.35  |Q V       |          |          |          |
5+25      0.1117      0.37  |Q V       |          |          |          |
5+30      0.1143      0.38  |Q V       |          |          |          |
5+35      0.1170      0.39  |Q  V      |          |          |          |
5+40      0.1198      0.41  |Q  V      |          |          |          |
5+45      0.1227      0.43  |Q  V      |          |          |          |
5+50      0.1257      0.43  |Q  V      |          |          |          |
5+55      0.1287      0.43  |Q  V      |          |          |          |
6+ 0      0.1317      0.44  |Q  V      |          |          |          |
6+ 5      0.1348      0.44  |Q  V      |          |          |          |
6+10      0.1380      0.47  |Q  V      |          |          |          |
6+15      0.1413      0.48  |Q  V      |          |          |          |
6+20      0.1447      0.49  |Q  V      |          |          |          |
6+25      0.1480      0.49  |Q   V     |          |          |          |
6+30      0.1514      0.49  |Q   V     |          |          |          |
6+35      0.1549      0.50  |Q   V     |          |          |          |
6+40      0.1585      0.52  | Q  V     |          |          |          |
6+45      0.1622      0.54  | Q  V     |          |          |          |
6+50      0.1659      0.54  | Q  V     |          |          |          |
6+55      0.1697      0.54  | Q  V     |          |          |          |
7+ 0      0.1734      0.55  | Q  V     |          |          |          |
7+ 5      0.1772      0.55  | Q   V    |          |          |          |
7+10      0.1810      0.55  | Q   V    |          |          |          |
7+15      0.1848      0.55  | Q   V    |          |          |          |
7+20      0.1886      0.56  | Q   V    |          |          |          |
7+25      0.1926      0.58  | Q   V    |          |          |          |
7+30      0.1967      0.59  | Q   V    |          |          |          |
7+35      0.2008      0.60  | Q   V    |          |          |          |
7+40      0.2052      0.63  | Q    V   |          |          |          |
7+45      0.2096      0.64  | Q    V   |          |          |          |
7+50      0.2141      0.66  | Q    V   |          |          |          |
7+55      0.2188      0.68  | Q    V   |          |          |          |
8+ 0      0.2237      0.70  | Q    V   |          |          |          |
8+ 5      0.2286      0.72  | Q    V   |          |          |          |
8+10      0.2339      0.77  |  Q    V  |          |          |          |
8+15      0.2394      0.80  |  Q    V  |          |          |          |
8+20      0.2449      0.81  |  Q    V  |          |          |          |
```



8+25	0.2505	0.81	Q V				
8+30	0.2562	0.82	Q V				
8+35	0.2619	0.83	Q V				
8+40	0.2677	0.85	Q V				
8+45	0.2737	0.87	Q V				
8+50	0.2798	0.88	Q V				
8+55	0.2860	0.91	Q V				
9+ 0	0.2923	0.92	Q V				
9+ 5	0.2988	0.94	Q V				
9+10	0.3056	0.99	Q V				
9+15	0.3126	1.02	Q V				
9+20	0.3197	1.03	Q V				
9+25	0.3270	1.06	Q V				
9+30	0.3345	1.08	Q V				
9+35	0.3420	1.09	Q V				
9+40	0.3498	1.12	Q V				
9+45	0.3576	1.14	Q V				
9+50	0.3655	1.15	Q V				
9+55	0.3736	1.18	Q V				
10+ 0	0.3819	1.19	Q V				
10+ 5	0.3898	1.15	Q V				
10+10	0.3966	0.99	Q V				
10+15	0.4029	0.91	Q V				
10+20	0.4090	0.88	Q V				
10+25	0.4149	0.86	Q V				
10+30	0.4208	0.85	Q V				
10+35	0.4268	0.88	Q V				
10+40	0.4336	0.99	Q V				
10+45	0.4408	1.04	Q V				
10+50	0.4481	1.06	Q V				
10+55	0.4555	1.07	Q V				
11+ 0	0.4629	1.08	Q V				
11+ 5	0.4704	1.08	Q V				
11+10	0.4777	1.06	Q V				
11+15	0.4850	1.05	Q V				
11+20	0.4922	1.05	Q V				
11+25	0.4995	1.05	Q V				
11+30	0.5067	1.05	Q V				
11+35	0.5138	1.03	Q V				
11+40	0.5206	0.99	Q V				
11+45	0.5272	0.96	Q V				
11+50	0.5338	0.96	Q V				
11+55	0.5406	0.98	Q V				
12+ 0	0.5474	0.99	Q V				
12+ 5	0.5545	1.03	Q V				
12+10	0.5628	1.20	Q V				
12+15	0.5716	1.28	Q V				
12+20	0.5807	1.32	Q V				
12+25	0.5901	1.37	Q V				
12+30	0.5997	1.39	Q V				
12+35	0.6095	1.42	Q V				
12+40	0.6197	1.48	Q V				
12+45	0.6300	1.51	Q V				
12+50	0.6406	1.53	Q V				
12+55	0.6513	1.56	Q V				
13+ 0	0.6621	1.58	Q V				
13+ 5	0.6735	1.65	Q V				
13+10	0.6867	1.91	Q V				
13+15	0.7011	2.08	Q V				
13+20	0.7162	2.20	Q V				
13+25	0.7320	2.30	Q V				
13+30	0.7485	2.39	Q V				
13+35	0.7644	2.31	Q V				
13+40	0.7767	1.79	Q V				
13+45	0.7873	1.53	Q V				
13+50	0.7972	1.44	Q V				
13+55	0.8067	1.38	Q V				
14+ 0	0.8160	1.35	Q V				
14+ 5	0.8253	1.35	Q V				
14+10	0.8350	1.42	Q V				
14+15	0.8451	1.45	Q V				
14+20	0.8551	1.46	Q V				
14+25	0.8650	1.43	Q V				
14+30	0.8748	1.43	Q V				
14+35	0.8846	1.43	Q V				
14+40	0.8945	1.43	Q V				
14+45	0.9044	1.43	Q V				
14+50	0.9142	1.43	Q V				
14+55	0.9238	1.40	Q V				
15+ 0	0.9334	1.39	Q V				
15+ 5	0.9429	1.38	Q V				
15+10	0.9522	1.35	Q V				
15+15	0.9614	1.34	Q V				
15+20	0.9705	1.32	Q V				
15+25	0.9795	1.30	Q V				
15+30	0.9883	1.28	Q V				

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15+35       0.9969      1.25  |    Q      |           |           |    V      |
15+40       1.0048      1.15  |    Q      |           |           |    V      |
15+45       1.0124      1.10  |    Q      |           |           |    V      |
15+50       1.0199      1.08  |    Q      |           |           |     V     |
15+55       1.0272      1.07  |    Q      |           |           |     V     |
16+ 0       1.0346      1.06  |    Q      |           |           |     V     |
16+ 5       1.0411      0.95  |   Q       |           |           |     V     |
16+10       1.0452      0.59  |  Q        |           |           |      V    |
16+15       1.0481      0.42  |Q          |           |           |      V    |
16+20       1.0505      0.35  |Q          |           |           |      V    |
16+25       1.0525      0.30  |Q          |           |           |      V    |
16+30       1.0544      0.27  |Q          |           |           |      V    |
16+35       1.0561      0.25  Q           |           |           |      V    |
16+40       1.0576      0.21  Q           |           |           |      V    |
16+45       1.0589      0.19  Q           |           |           |      V    |
16+50       1.0602      0.18  Q           |           |           |      V    |
16+55       1.0613      0.17  Q           |           |           |      V    |
17+ 0       1.0625      0.17  Q           |           |           |      V    |
17+ 5       1.0637      0.18  Q           |           |           |      V    |
17+10       1.0653      0.23  Q           |           |           |      V    |
17+15       1.0670      0.25  |Q          |           |           |      V    |
17+20       1.0688      0.26  |Q          |           |           |      V    |
17+25       1.0706      0.26  |Q          |           |           |      V    |
17+30       1.0725      0.27  |Q          |           |           |       V   |
17+35       1.0743      0.27  |Q          |           |           |       V   |
17+40       1.0762      0.27  |Q          |           |           |       V   |
17+45       1.0781      0.27  |Q          |           |           |       V   |
17+50       1.0799      0.27  |Q          |           |           |       V   |
17+55       1.0816      0.24  Q           |           |           |       V   |
18+ 0       1.0832      0.23  Q           |           |           |       V   |
18+ 5       1.0848      0.23  Q           |           |           |       V   |
18+10       1.0864      0.23  Q           |           |           |       V   |
18+15       1.0879      0.22  Q           |           |           |       V   |
18+20       1.0894      0.22  Q           |           |           |       V   |
18+25       1.0910      0.22  Q           |           |           |       V   |
18+30       1.0925      0.22  Q           |           |           |       V   |
18+35       1.0940      0.21  Q           |           |           |       V   |
18+40       1.0953      0.19  Q           |           |           |       V   |
18+45       1.0965      0.18  Q           |           |           |       V   |
18+50       1.0976      0.17  Q           |           |           |       V   |
18+55       1.0986      0.14  Q           |           |           |       V   |
19+ 0       1.0995      0.13  Q           |           |           |       V   |
19+ 5       1.1004      0.13  Q           |           |           |        V  |
19+10       1.1014      0.15  Q           |           |           |        V  |
19+15       1.1024      0.16  Q           |           |           |        V  |
19+20       1.1036      0.17  Q           |           |           |        V  |
19+25       1.1049      0.19  Q           |           |           |        V  |
19+30       1.1063      0.20  Q           |           |           |        V  |
19+35       1.1077      0.20  Q           |           |           |        V  |
19+40       1.1090      0.18  Q           |           |           |        V  |
19+45       1.1102      0.17  Q           |           |           |        V  |
19+50       1.1113      0.16  Q           |           |           |        V  |
19+55       1.1123      0.14  Q           |           |           |        V  |
20+ 0       1.1131      0.13  Q           |           |           |        V  |
20+ 5       1.1140      0.13  Q           |           |           |        V  |
20+10       1.1150      0.15  Q           |           |           |        V  |
20+15       1.1161      0.16  Q           |           |           |        V  |
20+20       1.1172      0.16  Q           |           |           |        V  |
20+25       1.1183      0.16  Q           |           |           |        V  |
20+30       1.1194      0.16  Q           |           |           |        V  |
20+35       1.1205      0.16  Q           |           |           |        V  |
20+40       1.1217      0.16  Q           |           |           |        V  |
20+45       1.1228      0.16  Q           |           |           |        V  |
20+50       1.1239      0.16  Q           |           |           |        V  |
20+55       1.1248      0.13  Q           |           |           |        V  |
21+ 0       1.1257      0.12  Q           |           |           |        V  |
21+ 5       1.1265      0.13  Q           |           |           |        V  |
21+10       1.1275      0.15  Q           |           |           |        V  |
21+15       1.1286      0.16  Q           |           |           |        V  |
21+20       1.1297      0.15  Q           |           |           |         V |
21+25       1.1306      0.13  Q           |           |           |         V |
21+30       1.1314      0.12  Q           |           |           |         V |
21+35       1.1322      0.12  Q           |           |           |         V |
21+40       1.1332      0.14  Q           |           |           |         V |
21+45       1.1343      0.16  Q           |           |           |         V |
21+50       1.1353      0.15  Q           |           |           |         V |
21+55       1.1362      0.13  Q           |           |           |         V |
22+ 0       1.1371      0.12  Q           |           |           |         V |
22+ 5       1.1379      0.12  Q           |           |           |         V |
22+10       1.1389      0.14  Q           |           |           |         V |
22+15       1.1400      0.16  Q           |           |           |         V |
22+20       1.1410      0.15  Q           |           |           |         V |
22+25       1.1419      0.13  Q           |           |           |         V |
22+30       1.1428      0.12  Q           |           |           |         V |
22+35       1.1436      0.12  Q           |           |           |         V |
22+40       1.1443      0.11  Q           |           |           |         V |
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   22+45       1.1451      0.11  Q          |          |          |          v|
   22+50       1.1459      0.11  Q          |          |          |          v|
   22+55       1.1467      0.11  Q          |          |          |          v|
   23+ 0       1.1474      0.11  Q          |          |          |          v|
   23+ 5       1.1482      0.11  Q          |          |          |          v|
   23+10       1.1489      0.11  Q          |          |          |          v|
   23+15       1.1497      0.11  Q          |          |          |          v|
   23+20       1.1505      0.11  Q          |          |          |          v|
   23+25       1.1512      0.11  Q          |          |          |          v|
   23+30       1.1520      0.11  Q          |          |          |          v|
   23+35       1.1527      0.11  Q          |          |          |          v|
   23+40       1.1535      0.11  Q          |          |          |          v|
   23+45       1.1543      0.11  Q          |          |          |          v|
   23+50       1.1550      0.11  Q          |          |          |          v|
   23+55       1.1558      0.11  Q          |          |          |          v|
   24+ 0       1.1565      0.11  Q          |          |          |          v|
   24+ 5       1.1572      0.10  Q          |          |          |          v|
   24+10       1.1575      0.05  Q          |          |          |          v|
   24+15       1.1577      0.03  Q          |          |          |          v|
   24+20       1.1578      0.02  Q          |          |          |          v|
   24+25       1.1579      0.01  Q          |          |          |          v|
   24+30       1.1579      0.01  Q          |          |          |          v|
   24+35       1.1580      0.00  Q          |          |          |          v|
   24+40       1.1580      0.00  Q          |          |          |          v|
   24+45       1.1580      0.00  Q          |          |          |          v|
   24+50       1.1580      0.00  Q          |          |          |          v|
-------------------------------------------------------------------------------
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        U n i t   H y d r o g r a p h   A n a l y s i s

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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978


Program License Serial Number 5006

------------------------------------------------------------------------
 English (in-lb) Input Units Used
 English Rainfall Data (Inches) Input Values Used

 English Units used in output format



------------------------------------------------------------------------
------------------------------------------------------------------------
Drainage Area =      75.83(Ac.)  =      0.118 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment =      75.83(Ac.)  =      0.118 Sq. Mi.
Length along longest watercourse =    2577.00(Ft.)
Length along longest watercourse measured to centroid =    1289.00(Ft.)
Length along longest watercourse =      0.488 Mi.
Length along longest watercourse measured to centroid =      0.244 Mi.
Difference in elevation =     145.20(Ft.)
Slope along watercourse =    297.4994 Ft./Mi.
Average Manning's 'N' = 0.030
Lag time =    0.109 Hr.
Lag time =     6.52 Min.
25% of lag time =     1.63 Min.
40% of lag time =     2.61 Min.
Unit time =     5.00 Min.
Duration of storm = 1 Hour(s)
User Entered Base Flow =     0.00(CFS)

2 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
       75.83           0.50                 37.91

100 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
       75.83           1.30                 98.58

STORM EVENT (YEAR) =    5.00
Area Averaged 2-Year Rainfall =    0.500(In)
Area Averaged 100-Year Rainfall =    1.300(In)

Point rain (area averaged) =    0.687(In)
Areal adjustment factor =   99.93 %
Adjusted average point rain =    0.687(In)

Sub-Area Data:
Area(Ac.)         Runoff Index   Impervious %
    75.830           91.00          0.000
 Total Area Entered =     75.83(Ac.)


RI    RI   Infil. Rate Impervious   Adj. Infil. Rate  Area%     F
AMC2 AMC-1     (In/Hr)    (Dec.%)     (In/Hr)      (Dec.)    (In/Hr)
91.0  79.8      0.246     0.000        0.246       1.000      0.246
                                                 Sum (F) =   0.246
Area averaged mean soil loss (F) (In/Hr) =  0.246
Minimum soil loss rate ((In/Hr)) =  0.123
(for 24 hour storm duration)
Soil low loss rate (decimal) =   0.900
------------------------------------------------------------------------
Slope of intensity-duration curve for a 1 hour storm =0.5500
------------------------------------------------------------------------

               U n i t  H y d r o g r a p h
                      VALLEY S-Curve
---------------------------------------------------------------
               Unit Hydrograph Data
---------------------------------------------------------------
```

Unit time period (hrs)		Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	76.653	12.379	9.460
2	0.167	153.307	43.174	32.994
3	0.250	229.960	20.942	16.004
4	0.333	306.613	8.476	6.477
5	0.417	383.266	5.111	3.906
6	0.500	459.920	3.287	2.512
7	0.583	536.573	2.310	1.765
8	0.667	613.226	1.661	1.270
9	0.750	689.880	1.141	0.872
10	0.833	766.533	0.802	0.613
11	0.917	843.186	0.718	0.549
			Sum = 100.000	Sum= 76.422

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr) Max	Low	Effective (In/Hr)
1	0.08	3.30	0.272	(0.246)	0.245	0.027
2	0.17	4.20	0.346	0.246	(0.312)	0.100
3	0.25	4.40	0.363	0.246	(0.326)	0.116
4	0.33	4.80	0.396	0.246	(0.356)	0.149
5	0.42	5.20	0.429	0.246	(0.386)	0.182
6	0.50	6.20	0.511	0.246	(0.460)	0.265
7	0.58	6.80	0.561	0.246	(0.504)	0.314
8	0.67	8.80	0.725	0.246	(0.653)	0.479
9	0.75	13.90	1.146	0.246	(1.031)	0.899
10	0.83	31.40	2.588	0.246	(2.329)	2.342
11	0.92	7.20	0.593	0.246	(0.534)	0.347
12	1.00	3.80	0.313	0.246	(0.282)	0.067
		(Loss Rate Not Used)				
Sum =		100.0			Sum =	5.3

Flood volume = Effective rainfall 0.44(In)
times area 75.8(Ac.)/[(In)/(Ft.)] = 2.8(Ac.Ft)
Total soil loss = 0.25(In)
Total soil loss = 1.556(Ac.Ft)
Total rainfall = 0.69(In)
Flood volume = 121301.7 Cubic Feet
Total soil loss = 67778.3 Cubic Feet

Peak flow rate of this hydrograph = 100.683(CFS)

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1 - H O U R S T O R M
R u n o f f H y d r o g r a p h

Hydrograph in 5 Minute intervals ((CFS))

Time(h+m)	Volume Ac.Ft	Q(CFS)	0	50.0	100.0	150.0	200.0
0+ 5	0.0018	0.26	Q				
0+10	0.0145	1.84	Q				
0+15	0.0477	4.83	Q				
0+20	0.0962	7.03	Q				
0+25	0.1600	9.27	QV				
0+30	0.2435	12.13	QV				
0+35	0.3561	16.35	Q V				
0+40	0.5036	21.41	Q V				
0+45	0.7275	32.52	Q V				
0+50	1.1653	63.57	Q V				
0+55	1.8587	100.68	Q V				
1+ 0	2.2653	59.04	Q			V	
1+ 5	2.4641	28.87	Q			V	
1+10	2.5771	16.40	Q			V	
1+15	2.6488	10.41	Q			V	
1+20	2.6982	7.17	Q			V	
1+25	2.7326	5.01	Q			V	
1+30	2.7562	3.42	Q			V	
1+35	2.7721	2.32	Q			V	
1+40	2.7829	1.56	Q			V	
1+45	2.7845	0.23	Q			V	
1+50	2.7847	0.04	Q				V

U n i t H y d r o g r a p h A n a l y s i s

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Study date 10/17/24 File: exa535.out

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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978

Program License Serial Number 5006

English (in-lb) Input Units Used
English Rainfall Data (Inches) Input Values Used

English Units used in output format

Drainage Area = 75.83(Ac.) = 0.118 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 75.83(Ac.) = 0.118 Sq. Mi.
Length along longest watercourse = 2577.00(Ft.)
Length along longest watercourse measured to centroid = 1289.00(Ft.)
Length along longest watercourse = 0.488 Mi.
Length along longest watercourse measured to centroid = 0.244 Mi.
Difference in elevation = 145.20(Ft.)
Slope along watercourse = 297.4994 Ft./Mi.
Average Manning's 'N' = 0.030
Lag time = 0.109 Hr.
Lag time = 6.52 Min.
25% of lag time = 1.63 Min.
40% of lag time = 2.61 Min.
Unit time = 5.00 Min.
Duration of storm = 3 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.)[1]	Rainfall(In)[2]	Weighting[1*2]
75.83	0.80	60.66

100 YEAR Area rainfall data:

Area(Ac.)[1]	Rainfall(In)[2]	Weighting[1*2]
75.83	2.00	151.66

STORM EVENT (YEAR) = 5.00
Area Averaged 2-Year Rainfall = 0.800(In)
Area Averaged 100-Year Rainfall = 2.000(In)

Point rain (area averaged) = 1.081(In)
Areal adjustment factor = 99.97 %
Adjusted average point rain = 1.081(In)

Sub-Area Data:

Area(Ac.)	Runoff Index	Impervious %
75.830	91.00	0.000

Total Area Entered = 75.83(Ac.)

RI AMC2	RI AMC-1	Infil. Rate (In/Hr)	Impervious (Dec.%)	Adj. Infil. Rate (In/Hr)	Area% (Dec.)	F (In/Hr)
91.0	79.8	0.246	0.000	0.246	1.000	0.246
					Sum (F) =	0.246

Area averaged mean soil loss (F) (In/Hr) = 0.246
Minimum soil loss rate ((In/Hr)) = 0.123
(for 24 hour storm duration)
Soil low loss rate (decimal) = 0.900

U n i t H y d r o g r a p h
VALLEY S-Curve

Unit Hydrograph Data

Unit time period (hrs)	Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)

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-------------------------------------------------------------------
    1   0.083        76.653        12.379             9.460
    2   0.167       153.307        43.174            32.994
    3   0.250       229.960        20.942            16.004
    4   0.333       306.613         8.476             6.477
    5   0.417       383.266         5.111             3.906
    6   0.500       459.920         3.287             2.512
    7   0.583       536.573         2.310             1.765
    8   0.667       613.226         1.661             1.270
    9   0.750       689.880         1.141             0.872
   10   0.833       766.533         0.802             0.613
   11   0.917       843.186         0.718             0.549
                              Sum = 100.000   Sum=     76.422
-------------------------------------------------------------------
```

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr) Max	Low	Effective (In/Hr)
1 0.08	1.30	0.169	(0.246)	0.152	0.017
2 0.17	1.30	0.169	(0.246)	0.152	0.017
3 0.25	1.10	0.143	(0.246)	0.128	0.014
4 0.33	1.50	0.195	(0.246)	0.175	0.019
5 0.42	1.50	0.195	(0.246)	0.175	0.019
6 0.50	1.80	0.233	(0.246)	0.210	0.023
7 0.58	1.50	0.195	(0.246)	0.175	0.019
8 0.67	1.80	0.233	(0.246)	0.210	0.023
9 0.75	1.80	0.233	(0.246)	0.210	0.023
10 0.83	1.50	0.195	(0.246)	0.175	0.019
11 0.92	1.60	0.207	(0.246)	0.187	0.021
12 1.00	1.80	0.233	(0.246)	0.210	0.023
13 1.08	2.20	0.285	0.246	(0.257)	0.039
14 1.17	2.20	0.285	0.246	(0.257)	0.039
15 1.25	2.20	0.285	0.246	(0.257)	0.039
16 1.33	2.00	0.259	(0.246)	0.233	0.026
17 1.42	2.60	0.337	0.246	(0.303)	0.091
18 1.50	2.70	0.350	0.246	(0.315)	0.104
19 1.58	2.40	0.311	0.246	(0.280)	0.065
20 1.67	2.70	0.350	0.246	(0.315)	0.104
21 1.75	3.30	0.428	0.246	(0.385)	0.182
22 1.83	3.10	0.402	0.246	(0.362)	0.156
23 1.92	2.90	0.376	0.246	(0.338)	0.130
24 2.00	3.00	0.389	0.246	(0.350)	0.143
25 2.08	3.10	0.402	0.246	(0.362)	0.156
26 2.17	4.20	0.545	0.246	(0.490)	0.298
27 2.25	5.00	0.648	0.246	(0.584)	0.402
28 2.33	3.50	0.454	0.246	(0.409)	0.208
29 2.42	6.80	0.882	0.246	(0.794)	0.635
30 2.50	7.30	0.947	0.246	(0.852)	0.700
31 2.58	8.20	1.063	0.246	(0.957)	0.817
32 2.67	5.90	0.765	0.246	(0.689)	0.519
33 2.75	2.00	0.259	(0.246)	0.233	0.026
34 2.83	1.80	0.233	(0.246)	0.210	0.023
35 2.92	1.80	0.233	(0.246)	0.210	0.023
36 3.00	0.60	0.078	(0.246)	0.070	0.008
	(Loss Rate Not Used)				
Sum =	100.0			Sum =	5.2

```
   Flood volume = Effective rainfall      0.43(In)
    times area      75.8(Ac.)/[(In)/(Ft.)] =       2.7(Ac.Ft)
   Total soil loss =      0.65(In)
   Total soil loss =     4.106(Ac.Ft)
   Total rainfall =      1.08(In)
   Flood volume =      118623.4 Cubic Feet
   Total soil loss =      178856.1 Cubic Feet
   -------------------------------------------------------------------
    Peak flow rate of this hydrograph =     50.051(CFS)
   -------------------------------------------------------------------
   +++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                        3 - H O U R    S T O R M
                   R u n o f f     H y d r o g r a p h
   -------------------------------------------------------------------
               Hydrograph in   5   Minute intervals ((CFS))

   -------------------------------------------------------------------
Time(h+m) Volume Ac.Ft   Q(CFS)  0       15.0      30.0      45.0      60.0
-------------------------------------------------------------------------
  0+ 5       0.0011      0.16  Q         |         |         |         |
  0+10       0.0060      0.72  Q         |         |         |         |
  0+15       0.0127      0.96  Q         |         |         |         |
  0+20       0.0198      1.03  Q         |         |         |         |
  0+25       0.0282      1.23  Q         |         |         |         |
  0+30       0.0377      1.38  Q         |         |         |         |
  0+35       0.0482      1.52  VQ        |         |         |         |
  0+40       0.0587      1.53  VQ        |         |         |         |
```

```
    0+45       0.0700      1.64  |Q         |          |          |          |
    0+50       0.0815      1.67  |Q         |          |          |          |
    0+55       0.0925      1.59  |Q         |          |          |          |
    1+ 0       0.1035      1.61  |Q         |          |          |          |
    1+ 5       0.1163      1.85  |Q         |          |          |          |
    1+10       0.1328      2.41  |Q         |          |          |          |
    1+15       0.1512      2.67  |QV        |          |          |          |
    1+20       0.1696      2.66  |QV        |          |          |          |
    1+25       0.1896      2.91  |QV        |          |          |          |
    1+30       0.2241      5.01  |  Q       |          |          |          |
    1+35       0.2658      6.05  |  VQ      |          |          |          |
    1+40       0.3053      5.74  |  QV      |          |          |          |
    1+45       0.3567      7.45  |   QV     |          |          |          |
    1+50       0.4279     10.35  |     Q    |          |          |          |
    1+55       0.5019     10.73  |      Q   |          |          |          |
    2+ 0       0.5724     10.24  |     Q V  |          |          |          |
    2+ 5       0.6454     10.60  |      Q V |          |          |          |
    2+10       0.7320     12.58  |       Q V|          |          |          |
    2+15       0.8601     18.59  |          | Q        |          |          |
    2+20       1.0157     22.60  |          |  VQ      |          |          |
    2+25       1.1734     22.89  |          |   Q V    |          |          |
    2+30       1.4200     35.81  |          |       V  Q          |          |
    2+35       1.7331     45.46  |          |          |   V      Q          |
    2+40       2.0778     50.05  |          |          |          V  Q       |
    2+45       2.3490     39.38  |          |          |     Q    |   V      |
    2+50       2.4890     20.32  |          |  Q       |          |     V    |
    2+55       2.5698     11.73  |      Q   |          |          |       V  |
    3+ 0       2.6256      8.10  |     Q    |          |          |         V|
    3+ 5       2.6629      5.42  |  Q       |          |          |          V|
    3+10       2.6870      3.50  | Q        |          |          |          V|
    3+15       2.7035      2.40  |Q         |          |          |          V|
    3+20       2.7139      1.50  |Q         |          |          |          V|
    3+25       2.7199      0.88  Q          |          |          |          V|
    3+30       2.7224      0.36  Q          |          |          |          V|
    3+35       2.7228      0.06  Q          |          |          |          V|
    3+40       2.7231      0.03  Q          |          |          |          V|
    3+45       2.7232      0.02  Q          |          |          |          V|
    3+50       2.7232      0.00  Q          |          |          |           V
-------------------------------------------------------------------------------
```

```
       U n i t   H y d r o g r a p h   A n a l y s i s

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              Study date  10/17/24 File: exa565.out

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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978


Program License Serial Number 5006

------------------------------------------------------------------------
 English (in-lb) Input Units Used
 English Rainfall Data (Inches) Input Values Used

 English Units used in output format



------------------------------------------------------------------------
------------------------------------------------------------------------
Drainage Area =      75.83(Ac.)  =      0.118 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment =      75.83(Ac.)  =      0.118 Sq. Mi.
Length along longest watercourse =    2577.00(Ft.)
Length along longest watercourse measured to centroid =    1289.00(Ft.)
Length along longest watercourse =      0.488 Mi.
Length along longest watercourse measured to centroid =      0.244 Mi.
Difference in elevation =     145.20(Ft.)
Slope along watercourse =    297.4994 Ft./Mi.
Average Manning's 'N' = 0.030
Lag time =    0.109 Hr.
Lag time =     6.52 Min.
25% of lag time =     1.63 Min.
40% of lag time =     2.61 Min.
Unit time =     5.00 Min.
Duration of storm = 6 Hour(s)
User Entered Base Flow =     0.00(CFS)

2 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
       75.83            1.10                 83.41

100 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
       75.83            3.00                227.49

STORM EVENT (YEAR) =    5.00
Area Averaged 2-Year Rainfall =    1.100(In)
Area Averaged 100-Year Rainfall =    3.000(In)

Point rain (area averaged) =    1.545(In)
Areal adjustment factor =   99.97 %
Adjusted average point rain =    1.545(In)

Sub-Area Data:
Area(Ac.)         Runoff Index   Impervious %
    75.830           91.00          0.000
 Total Area Entered =     75.83(Ac.)


RI    RI   Infil. Rate Impervious   Adj. Infil. Rate  Area%     F
AMC2 AMC-1     (In/Hr)    (Dec.%)     (In/Hr)      (Dec.)    (In/Hr)
91.0  79.8      0.246     0.000        0.246       1.000      0.246
                                                 Sum (F) =   0.246
Area averaged mean soil loss (F) (In/Hr) =  0.246
Minimum soil loss rate ((In/Hr)) =  0.123
(for 24 hour storm duration)
Soil low loss rate (decimal) =   0.900
------------------------------------------------------------------------

               U n i t  H y d r o g r a p h
                      VALLEY S-Curve
------------------------------------------------------------------
               Unit Hydrograph Data
------------------------------------------------------------------
Unit time period   Time % of lag   Distribution   Unit Hydrograph
    (hrs)                          Graph %           (CFS)
```

1	0.083	76.653	12.379	9.460
2	0.167	153.307	43.174	32.994
3	0.250	229.960	20.942	16.004
4	0.333	306.613	8.476	6.477
5	0.417	383.266	5.111	3.906
6	0.500	459.920	3.287	2.512
7	0.583	536.573	2.310	1.765
8	0.667	613.226	1.661	1.270
9	0.750	689.880	1.141	0.872
10	0.833	766.533	0.802	0.613
11	0.917	843.186	0.718	0.549
		Sum = 100.000	Sum=	76.422

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr) Max	Low	Effective (In/Hr)
1	0.08	0.50	0.093	(0.246)	0.083	0.009
2	0.17	0.60	0.111	(0.246)	0.100	0.011
3	0.25	0.60	0.111	(0.246)	0.100	0.011
4	0.33	0.60	0.111	(0.246)	0.100	0.011
5	0.42	0.60	0.111	(0.246)	0.100	0.011
6	0.50	0.70	0.130	(0.246)	0.117	0.013
7	0.58	0.70	0.130	(0.246)	0.117	0.013
8	0.67	0.70	0.130	(0.246)	0.117	0.013
9	0.75	0.70	0.130	(0.246)	0.117	0.013
10	0.83	0.70	0.130	(0.246)	0.117	0.013
11	0.92	0.70	0.130	(0.246)	0.117	0.013
12	1.00	0.80	0.148	(0.246)	0.133	0.015
13	1.08	0.80	0.148	(0.246)	0.133	0.015
14	1.17	0.80	0.148	(0.246)	0.133	0.015
15	1.25	0.80	0.148	(0.246)	0.133	0.015
16	1.33	0.80	0.148	(0.246)	0.133	0.015
17	1.42	0.80	0.148	(0.246)	0.133	0.015
18	1.50	0.80	0.148	(0.246)	0.133	0.015
19	1.58	0.80	0.148	(0.246)	0.133	0.015
20	1.67	0.80	0.148	(0.246)	0.133	0.015
21	1.75	0.80	0.148	(0.246)	0.133	0.015
22	1.83	0.80	0.148	(0.246)	0.133	0.015
23	1.92	0.80	0.148	(0.246)	0.133	0.015
24	2.00	0.90	0.167	(0.246)	0.150	0.017
25	2.08	0.80	0.148	(0.246)	0.133	0.015
26	2.17	0.90	0.167	(0.246)	0.150	0.017
27	2.25	0.90	0.167	(0.246)	0.150	0.017
28	2.33	0.90	0.167	(0.246)	0.150	0.017
29	2.42	0.90	0.167	(0.246)	0.150	0.017
30	2.50	0.90	0.167	(0.246)	0.150	0.017
31	2.58	0.90	0.167	(0.246)	0.150	0.017
32	2.67	0.90	0.167	(0.246)	0.150	0.017
33	2.75	1.00	0.185	(0.246)	0.167	0.019
34	2.83	1.00	0.185	(0.246)	0.167	0.019
35	2.92	1.00	0.185	(0.246)	0.167	0.019
36	3.00	1.00	0.185	(0.246)	0.167	0.019
37	3.08	1.00	0.185	(0.246)	0.167	0.019
38	3.17	1.10	0.204	(0.246)	0.184	0.020
39	3.25	1.10	0.204	(0.246)	0.184	0.020
40	3.33	1.10	0.204	(0.246)	0.184	0.020
41	3.42	1.20	0.222	(0.246)	0.200	0.022
42	3.50	1.30	0.241	(0.246)	0.217	0.024
43	3.58	1.40	0.259	(0.246)	0.234	0.026
44	3.67	1.40	0.259	(0.246)	0.234	0.026
45	3.75	1.50	0.278	0.246	(0.250)	0.032
46	3.83	1.50	0.278	0.246	(0.250)	0.032
47	3.92	1.60	0.297	0.246	(0.267)	0.050
48	4.00	1.60	0.297	0.246	(0.267)	0.050
49	4.08	1.70	0.315	0.246	(0.284)	0.069
50	4.17	1.80	0.334	0.246	(0.300)	0.087
51	4.25	1.90	0.352	0.246	(0.317)	0.106
52	4.33	2.00	0.371	0.246	(0.334)	0.124
53	4.42	2.10	0.389	0.246	(0.350)	0.143
54	4.50	2.10	0.389	0.246	(0.350)	0.143
55	4.58	2.20	0.408	0.246	(0.367)	0.161
56	4.67	2.30	0.426	0.246	(0.384)	0.180
57	4.75	2.40	0.445	0.246	(0.400)	0.198
58	4.83	2.40	0.445	0.246	(0.400)	0.198
59	4.92	2.50	0.463	0.246	(0.417)	0.217
60	5.00	2.60	0.482	0.246	(0.434)	0.236
61	5.08	3.10	0.575	0.246	(0.517)	0.328
62	5.17	3.60	0.667	0.246	(0.601)	0.421
63	5.25	3.90	0.723	0.246	(0.651)	0.477
64	5.33	4.20	0.778	0.246	(0.701)	0.532
65	5.42	4.70	0.871	0.246	(0.784)	0.625

66	5.50	5.60	1.038		0.246	(0.934)	0.792
67	5.58	1.90	0.352		0.246	(0.317)	0.106
68	5.67	0.90	0.167	(	0.246)	0.150	0.017
69	5.75	0.60	0.111	(	0.246)	0.100	0.011
70	5.83	0.50	0.093	(	0.246)	0.083	0.009
71	5.92	0.30	0.056	(	0.246)	0.050	0.006
72	6.00	0.20	0.037	(	0.246)	0.033	0.004

(Loss Rate Not Used)

Sum = 100.0 Sum = 6.1

Flood volume = Effective rainfall 0.51(In)
times area 75.8(Ac.)/[(In)/(Ft.)] = 3.2(Ac.Ft)
Total soil loss = 1.04(In)
Total soil loss = 6.568(Ac.Ft)
Total rainfall = 1.54(In)
Flood volume = 139075.9 Cubic Feet
Total soil loss = 286101.6 Cubic Feet

Peak flow rate of this hydrograph = 44.807(CFS)

++

6 - H O U R S T O R M
R u n o f f H y d r o g r a p h

Hydrograph in 5 Minute intervals ((CFS))

Time(h+m)	Volume Ac.Ft	Q(CFS)	0	12.5	25.0	37.5	50.0
0+ 5	0.0006	0.09	Q				
0+10	0.0034	0.41	Q				
0+15	0.0077	0.62	Q				
0+20	0.0126	0.71	Q				
0+25	0.0178	0.76	Q				
0+30	0.0234	0.81	Q				
0+35	0.0295	0.89	Q				
0+40	0.0359	0.93	Q				
0+45	0.0425	0.96	Q				
0+50	0.0492	0.97	Q				
0+55	0.0560	0.98	Q				
1+ 0	0.0629	1.00	Q				
1+ 5	0.0702	1.07	Q				
1+10	0.0778	1.10	Q				
1+15	0.0855	1.11	QV				
1+20	0.0932	1.12	QV				
1+25	0.1009	1.12	QV				
1+30	0.1087	1.13	QV				
1+35	0.1165	1.13	QV				
1+40	0.1243	1.13	QV				
1+45	0.1321	1.13	QV				
1+50	0.1399	1.13	QV				
1+55	0.1477	1.13	QV				
2+ 0	0.1556	1.15	QV				
2+ 5	0.1638	1.19	Q V				
2+10	0.1720	1.18	Q V				
2+15	0.1804	1.22	Q V				
2+20	0.1890	1.25	Q V				
2+25	0.1977	1.26	|QV				
2+30	0.2064	1.26	|QV				
2+35	0.2151	1.27	|QV				
2+40	0.2239	1.27	|QV				
2+45	0.2328	1.29	|QV				
2+50	0.2421	1.35	|Q V				
2+55	0.2516	1.38	|Q V				
3+ 0	0.2612	1.40	|Q V				
3+ 5	0.2709	1.40	|Q V				
3+10	0.2807	1.43	|Q V				
3+15	0.2910	1.49	|Q V				
3+20	0.3014	1.52	|Q V				
3+25	0.3121	1.55	|Q V				
3+30	0.3234	1.64	|Q V				
3+35	0.3355	1.75	|Q V				
3+40	0.3483	1.86	|Q V				
3+45	0.3619	1.97	|Q V				
3+50	0.3769	2.18	|Q V				
3+55	0.3938	2.46	|Q V				
4+ 0	0.4154	3.12	| Q V				
4+ 5	0.4403	3.63	| Q V				
4+10	0.4717	4.55	| Q V				
4+15	0.5111	5.72	| Q V				
4+20	0.5592	6.98	| Q V				
4+25	0.6164	8.30	| QV				
4+30	0.6816	9.47	| QV				
4+35	0.7521	10.24	| QV|				
4+40	0.8301	11.33	| QV				
4+45	0.9170	12.62	| QV				
4+50	1.0119	13.78	| |QV				

```
    4+55       1.1120     14.54  |          |Q V       |          |          |
    5+ 0       1.2196     15.62  |          | Q  V     |          |          |
    5+ 5       1.3408     17.60  |          |   Q V    |          |          |
    5+10       1.4929     22.08  |          |      QV  |          |          |
    5+15       1.6817     27.42  |          |          |Q         |          |
    5+20       1.9024     32.04  |          |          |  V Q     |          |
    5+25       2.1552     36.72  |          |          |      V Q |          |
    5+30       2.4533     43.28  |          |          |         V|  Q       |
    5+35       2.7619     44.81  |          |          |          |  VQ      |
    5+40       2.9359     25.26  |          |          |Q         |    V     |
    5+45       3.0267     13.19  |          |Q         |          |      V   |
    5+50       3.0840      8.31  |        Q |          |          |        V |
    5+55       3.1231      5.68  |    Q     |          |          |          V|
    6+ 0       3.1503      3.95  |  Q       |          |          |          V|
    6+ 5       3.1688      2.68  | Q        |          |          |          V|
    6+10       3.1804      1.69  |Q         |          |          |          V|
    6+15       3.1875      1.03  Q          |          |          |          V|
    6+20       3.1915      0.57  Q          |          |          |          V|
    6+25       3.1922      0.11  Q          |          |          |          V|
    6+30       3.1925      0.04  Q          |          |          |          V|
    6+35       3.1926      0.02  Q          |          |          |          V|
    6+40       3.1927      0.01  Q          |          |          |          V|
    6+45       3.1927      0.01  Q          |          |          |          V|
    6+50       3.1927      0.00  Q          |          |          |           V
-------------------------------------------------------------------------------
```

U n i t H y d r o g r a p h A n a l y s i s

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Study date 10/17/24 File: exa5245.out

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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978

Program License Serial Number 5006

English (in-lb) Input Units Used
English Rainfall Data (Inches) Input Values Used

English Units used in output format

Drainage Area = 75.83(Ac.) = 0.118 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 75.83(Ac.) = 0.118 Sq. Mi.
Length along longest watercourse = 2577.00(Ft.)
Length along longest watercourse measured to centroid = 1289.00(Ft.)
Length along longest watercourse = 0.488 Mi.
Length along longest watercourse measured to centroid = 0.244 Mi.
Difference in elevation = 145.20(Ft.)
Slope along watercourse = 297.4994 Ft./Mi.
Average Manning's 'N' = 0.030
Lag time = 0.109 Hr.
Lag time = 6.52 Min.
25% of lag time = 1.63 Min.
40% of lag time = 2.61 Min.
Unit time = 5.00 Min.
Duration of storm = 24 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.)[1]	Rainfall(In)[2]	Weighting[1*2]
75.83	1.80	136.49

100 YEAR Area rainfall data:

Area(Ac.)[1]	Rainfall(In)[2]	Weighting[1*2]
75.83	5.00	379.15

STORM EVENT (YEAR) = 5.00
Area Averaged 2-Year Rainfall = 1.800(In)
Area Averaged 100-Year Rainfall = 5.000(In)

Point rain (area averaged) = 2.550(In)
Areal adjustment factor = 99.99 %
Adjusted average point rain = 2.549(In)

Sub-Area Data:

Area(Ac.)	Runoff Index	Impervious %
75.830	91.00	0.000

Total Area Entered = 75.83(Ac.)

RI AMC2	RI AMC-1	Infil. Rate (In/Hr)	Impervious (Dec.%)	Adj. Infil. Rate (In/Hr)	Area% (Dec.)	F (In/Hr)
91.0	79.8	0.246	0.000	0.246	1.000	0.246
					Sum (F) =	0.246

Area averaged mean soil loss (F) (In/Hr) = 0.246
Minimum soil loss rate ((In/Hr)) = 0.123
(for 24 hour storm duration)
Soil low loss rate (decimal) = 0.900

U n i t H y d r o g r a p h
VALLEY S-Curve

Unit Hydrograph Data

Unit time period (hrs)	Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)

1	0.083	76.653	12.379		9.460
2	0.167	153.307	43.174		32.994
3	0.250	229.960	20.942		16.004
4	0.333	306.613	8.476		6.477
5	0.417	383.266	5.111		3.906
6	0.500	459.920	3.287		2.512
7	0.583	536.573	2.310		1.765
8	0.667	613.226	1.661		1.270
9	0.750	689.880	1.141		0.872
10	0.833	766.533	0.802		0.613
11	0.917	843.186	0.718		0.549
			Sum = 100.000	Sum=	76.422

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr) Max	Low	Effective (In/Hr)
1	0.08	0.07	0.020	(0.437)	0.018	0.002
2	0.17	0.07	0.020	(0.435)	0.018	0.002
3	0.25	0.07	0.020	(0.433)	0.018	0.002
4	0.33	0.10	0.031	(0.432)	0.028	0.003
5	0.42	0.10	0.031	(0.430)	0.028	0.003
6	0.50	0.10	0.031	(0.428)	0.028	0.003
7	0.58	0.10	0.031	(0.427)	0.028	0.003
8	0.67	0.10	0.031	(0.425)	0.028	0.003
9	0.75	0.10	0.031	(0.423)	0.028	0.003
10	0.83	0.13	0.041	(0.422)	0.037	0.004
11	0.92	0.13	0.041	(0.420)	0.037	0.004
12	1.00	0.13	0.041	(0.418)	0.037	0.004
13	1.08	0.10	0.031	(0.417)	0.028	0.003
14	1.17	0.10	0.031	(0.415)	0.028	0.003
15	1.25	0.10	0.031	(0.413)	0.028	0.003
16	1.33	0.10	0.031	(0.412)	0.028	0.003
17	1.42	0.10	0.031	(0.410)	0.028	0.003
18	1.50	0.10	0.031	(0.408)	0.028	0.003
19	1.58	0.10	0.031	(0.407)	0.028	0.003
20	1.67	0.10	0.031	(0.405)	0.028	0.003
21	1.75	0.10	0.031	(0.404)	0.028	0.003
22	1.83	0.13	0.041	(0.402)	0.037	0.004
23	1.92	0.13	0.041	(0.400)	0.037	0.004
24	2.00	0.13	0.041	(0.399)	0.037	0.004
25	2.08	0.13	0.041	(0.397)	0.037	0.004
26	2.17	0.13	0.041	(0.395)	0.037	0.004
27	2.25	0.13	0.041	(0.394)	0.037	0.004
28	2.33	0.13	0.041	(0.392)	0.037	0.004
29	2.42	0.13	0.041	(0.391)	0.037	0.004
30	2.50	0.13	0.041	(0.389)	0.037	0.004
31	2.58	0.17	0.051	(0.387)	0.046	0.005
32	2.67	0.17	0.051	(0.386)	0.046	0.005
33	2.75	0.17	0.051	(0.384)	0.046	0.005
34	2.83	0.17	0.051	(0.383)	0.046	0.005
35	2.92	0.17	0.051	(0.381)	0.046	0.005
36	3.00	0.17	0.051	(0.380)	0.046	0.005
37	3.08	0.17	0.051	(0.378)	0.046	0.005
38	3.17	0.17	0.051	(0.376)	0.046	0.005
39	3.25	0.17	0.051	(0.375)	0.046	0.005
40	3.33	0.17	0.051	(0.373)	0.046	0.005
41	3.42	0.17	0.051	(0.372)	0.046	0.005
42	3.50	0.17	0.051	(0.370)	0.046	0.005
43	3.58	0.17	0.051	(0.369)	0.046	0.005
44	3.67	0.17	0.051	(0.367)	0.046	0.005
45	3.75	0.17	0.051	(0.366)	0.046	0.005
46	3.83	0.20	0.061	(0.364)	0.055	0.006
47	3.92	0.20	0.061	(0.362)	0.055	0.006
48	4.00	0.20	0.061	(0.361)	0.055	0.006
49	4.08	0.20	0.061	(0.359)	0.055	0.006
50	4.17	0.20	0.061	(0.358)	0.055	0.006
51	4.25	0.20	0.061	(0.356)	0.055	0.006
52	4.33	0.23	0.071	(0.355)	0.064	0.007
53	4.42	0.23	0.071	(0.353)	0.064	0.007
54	4.50	0.23	0.071	(0.352)	0.064	0.007
55	4.58	0.23	0.071	(0.350)	0.064	0.007
56	4.67	0.23	0.071	(0.349)	0.064	0.007
57	4.75	0.23	0.071	(0.347)	0.064	0.007
58	4.83	0.27	0.082	(0.346)	0.073	0.008
59	4.92	0.27	0.082	(0.344)	0.073	0.008
60	5.00	0.27	0.082	(0.343)	0.073	0.008
61	5.08	0.20	0.061	(0.341)	0.055	0.006
62	5.17	0.20	0.061	(0.340)	0.055	0.006
63	5.25	0.20	0.061	(0.338)	0.055	0.006
64	5.33	0.23	0.071	(0.337)	0.064	0.007
65	5.42	0.23	0.071	(0.335)	0.064	0.007

66	5.50	0.23	0.071	(0.334)	0.064	0.007
67	5.58	0.27	0.082	(0.332)	0.073	0.008
68	5.67	0.27	0.082	(0.331)	0.073	0.008
69	5.75	0.27	0.082	(0.330)	0.073	0.008
70	5.83	0.27	0.082	(0.328)	0.073	0.008
71	5.92	0.27	0.082	(0.327)	0.073	0.008
72	6.00	0.27	0.082	(0.325)	0.073	0.008
73	6.08	0.30	0.092	(0.324)	0.083	0.009
74	6.17	0.30	0.092	(0.322)	0.083	0.009
75	6.25	0.30	0.092	(0.321)	0.083	0.009
76	6.33	0.30	0.092	(0.319)	0.083	0.009
77	6.42	0.30	0.092	(0.318)	0.083	0.009
78	6.50	0.30	0.092	(0.317)	0.083	0.009
79	6.58	0.33	0.102	(0.315)	0.092	0.010
80	6.67	0.33	0.102	(0.314)	0.092	0.010
81	6.75	0.33	0.102	(0.312)	0.092	0.010
82	6.83	0.33	0.102	(0.311)	0.092	0.010
83	6.92	0.33	0.102	(0.310)	0.092	0.010
84	7.00	0.33	0.102	(0.308)	0.092	0.010
85	7.08	0.33	0.102	(0.307)	0.092	0.010
86	7.17	0.33	0.102	(0.305)	0.092	0.010
87	7.25	0.33	0.102	(0.304)	0.092	0.010
88	7.33	0.37	0.112	(0.303)	0.101	0.011
89	7.42	0.37	0.112	(0.301)	0.101	0.011
90	7.50	0.37	0.112	(0.300)	0.101	0.011
91	7.58	0.40	0.122	(0.298)	0.110	0.012
92	7.67	0.40	0.122	(0.297)	0.110	0.012
93	7.75	0.40	0.122	(0.296)	0.110	0.012
94	7.83	0.43	0.133	(0.294)	0.119	0.013
95	7.92	0.43	0.133	(0.293)	0.119	0.013
96	8.00	0.43	0.133	(0.292)	0.119	0.013
97	8.08	0.50	0.153	(0.290)	0.138	0.015
98	8.17	0.50	0.153	(0.289)	0.138	0.015
99	8.25	0.50	0.153	(0.288)	0.138	0.015
100	8.33	0.50	0.153	(0.286)	0.138	0.015
101	8.42	0.50	0.153	(0.285)	0.138	0.015
102	8.50	0.50	0.153	(0.283)	0.138	0.015
103	8.58	0.53	0.163	(0.282)	0.147	0.016
104	8.67	0.53	0.163	(0.281)	0.147	0.016
105	8.75	0.53	0.163	(0.280)	0.147	0.016
106	8.83	0.57	0.173	(0.278)	0.156	0.017
107	8.92	0.57	0.173	(0.277)	0.156	0.017
108	9.00	0.57	0.173	(0.276)	0.156	0.017
109	9.08	0.63	0.194	(0.274)	0.174	0.019
110	9.17	0.63	0.194	(0.273)	0.174	0.019
111	9.25	0.63	0.194	(0.272)	0.174	0.019
112	9.33	0.67	0.204	(0.270)	0.184	0.020
113	9.42	0.67	0.204	(0.269)	0.184	0.020
114	9.50	0.67	0.204	(0.268)	0.184	0.020
115	9.58	0.70	0.214	(0.267)	0.193	0.021
116	9.67	0.70	0.214	(0.265)	0.193	0.021
117	9.75	0.70	0.214	(0.264)	0.193	0.021
118	9.83	0.73	0.224	(0.263)	0.202	0.022
119	9.92	0.73	0.224	(0.261)	0.202	0.022
120	10.00	0.73	0.224	(0.260)	0.202	0.022
121	10.08	0.50	0.153	(0.259)	0.138	0.015
122	10.17	0.50	0.153	(0.258)	0.138	0.015
123	10.25	0.50	0.153	(0.256)	0.138	0.015
124	10.33	0.50	0.153	(0.255)	0.138	0.015
125	10.42	0.50	0.153	(0.254)	0.138	0.015
126	10.50	0.50	0.153	(0.253)	0.138	0.015
127	10.58	0.67	0.204	(0.251)	0.184	0.020
128	10.67	0.67	0.204	(0.250)	0.184	0.020
129	10.75	0.67	0.204	(0.249)	0.184	0.020
130	10.83	0.67	0.204	(0.248)	0.184	0.020
131	10.92	0.67	0.204	(0.247)	0.184	0.020
132	11.00	0.67	0.204	(0.245)	0.184	0.020
133	11.08	0.63	0.194	(0.244)	0.174	0.019
134	11.17	0.63	0.194	(0.243)	0.174	0.019
135	11.25	0.63	0.194	(0.242)	0.174	0.019
136	11.33	0.63	0.194	(0.241)	0.174	0.019
137	11.42	0.63	0.194	(0.239)	0.174	0.019
138	11.50	0.63	0.194	(0.238)	0.174	0.019
139	11.58	0.57	0.173	(0.237)	0.156	0.017
140	11.67	0.57	0.173	(0.236)	0.156	0.017
141	11.75	0.57	0.173	(0.235)	0.156	0.017
142	11.83	0.60	0.184	(0.233)	0.165	0.018
143	11.92	0.60	0.184	(0.232)	0.165	0.018
144	12.00	0.60	0.184	(0.231)	0.165	0.018
145	12.08	0.83	0.255	(0.230)	0.229	0.025
146	12.17	0.83	0.255	0.229	(0.229)	0.026
147	12.25	0.83	0.255	0.228	(0.229)	0.027
148	12.33	0.87	0.265	0.227	(0.239)	0.039
149	12.42	0.87	0.265	0.225	(0.239)	0.040
150	12.50	0.87	0.265	0.224	(0.239)	0.041
151	12.58	0.93	0.286	0.223	(0.257)	0.062

152	12.67	0.93	0.286		0.222	(0.257)	0.063
153	12.75	0.93	0.286		0.221	(0.257)	0.065
154	12.83	0.97	0.296		0.220	(0.266)	0.076
155	12.92	0.97	0.296		0.219	(0.266)	0.077
156	13.00	0.97	0.296		0.218	(0.266)	0.078
157	13.08	1.13	0.347		0.216	(0.312)	0.130
158	13.17	1.13	0.347		0.215	(0.312)	0.131
159	13.25	1.13	0.347		0.214	(0.312)	0.132
160	13.33	1.13	0.347		0.213	(0.312)	0.134
161	13.42	1.13	0.347		0.212	(0.312)	0.135
162	13.50	1.13	0.347		0.211	(0.312)	0.136
163	13.58	0.77	0.235		0.210	(0.211)	0.025
164	13.67	0.77	0.235		0.209	(0.211)	0.026
165	13.75	0.77	0.235		0.208	(0.211)	0.027
166	13.83	0.77	0.235		0.207	(0.211)	0.028
167	13.92	0.77	0.235		0.206	(0.211)	0.029
168	14.00	0.77	0.235		0.205	(0.211)	0.030
169	14.08	0.90	0.275		0.204	(0.248)	0.072
170	14.17	0.90	0.275		0.203	(0.248)	0.073
171	14.25	0.90	0.275		0.202	(0.248)	0.074
172	14.33	0.87	0.265		0.200	(0.239)	0.065
173	14.42	0.87	0.265		0.199	(0.239)	0.066
174	14.50	0.87	0.265		0.198	(0.239)	0.067
175	14.58	0.87	0.265		0.197	(0.239)	0.068
176	14.67	0.87	0.265		0.196	(0.239)	0.069
177	14.75	0.87	0.265		0.195	(0.239)	0.070
178	14.83	0.83	0.255		0.194	(0.229)	0.061
179	14.92	0.83	0.255		0.193	(0.229)	0.062
180	15.00	0.83	0.255		0.192	(0.229)	0.062
181	15.08	0.80	0.245		0.191	(0.220)	0.053
182	15.17	0.80	0.245		0.190	(0.220)	0.054
183	15.25	0.80	0.245		0.189	(0.220)	0.055
184	15.33	0.77	0.235		0.188	(0.211)	0.046
185	15.42	0.77	0.235		0.188	(0.211)	0.047
186	15.50	0.77	0.235		0.187	(0.211)	0.048
187	15.58	0.63	0.194	(0.186)		0.174	0.019
188	15.67	0.63	0.194	(0.185)		0.174	0.019
189	15.75	0.63	0.194	(0.184)		0.174	0.019
190	15.83	0.63	0.194	(0.183)		0.174	0.019
191	15.92	0.63	0.194	(0.182)		0.174	0.019
192	16.00	0.63	0.194	(0.181)		0.174	0.019
193	16.08	0.13	0.041	(0.180)		0.037	0.004
194	16.17	0.13	0.041	(0.179)		0.037	0.004
195	16.25	0.13	0.041	(0.178)		0.037	0.004
196	16.33	0.13	0.041	(0.177)		0.037	0.004
197	16.42	0.13	0.041	(0.176)		0.037	0.004
198	16.50	0.13	0.041	(0.175)		0.037	0.004
199	16.58	0.10	0.031	(0.175)		0.028	0.003
200	16.67	0.10	0.031	(0.174)		0.028	0.003
201	16.75	0.10	0.031	(0.173)		0.028	0.003
202	16.83	0.10	0.031	(0.172)		0.028	0.003
203	16.92	0.10	0.031	(0.171)		0.028	0.003
204	17.00	0.10	0.031	(0.170)		0.028	0.003
205	17.08	0.17	0.051	(0.169)		0.046	0.005
206	17.17	0.17	0.051	(0.168)		0.046	0.005
207	17.25	0.17	0.051	(0.168)		0.046	0.005
208	17.33	0.17	0.051	(0.167)		0.046	0.005
209	17.42	0.17	0.051	(0.166)		0.046	0.005
210	17.50	0.17	0.051	(0.165)		0.046	0.005
211	17.58	0.17	0.051	(0.164)		0.046	0.005
212	17.67	0.17	0.051	(0.163)		0.046	0.005
213	17.75	0.17	0.051	(0.163)		0.046	0.005
214	17.83	0.13	0.041	(0.162)		0.037	0.004
215	17.92	0.13	0.041	(0.161)		0.037	0.004
216	18.00	0.13	0.041	(0.160)		0.037	0.004
217	18.08	0.13	0.041	(0.159)		0.037	0.004
218	18.17	0.13	0.041	(0.159)		0.037	0.004
219	18.25	0.13	0.041	(0.158)		0.037	0.004
220	18.33	0.13	0.041	(0.157)		0.037	0.004
221	18.42	0.13	0.041	(0.156)		0.037	0.004
222	18.50	0.13	0.041	(0.156)		0.037	0.004
223	18.58	0.10	0.031	(0.155)		0.028	0.003
224	18.67	0.10	0.031	(0.154)		0.028	0.003
225	18.75	0.10	0.031	(0.153)		0.028	0.003
226	18.83	0.07	0.020	(0.153)		0.018	0.002
227	18.92	0.07	0.020	(0.152)		0.018	0.002
228	19.00	0.07	0.020	(0.151)		0.018	0.002
229	19.08	0.10	0.031	(0.150)		0.028	0.003
230	19.17	0.10	0.031	(0.150)		0.028	0.003
231	19.25	0.10	0.031	(0.149)		0.028	0.003
232	19.33	0.13	0.041	(0.148)		0.037	0.004
233	19.42	0.13	0.041	(0.148)		0.037	0.004
234	19.50	0.13	0.041	(0.147)		0.037	0.004
235	19.58	0.10	0.031	(0.146)		0.028	0.003
236	19.67	0.10	0.031	(0.146)		0.028	0.003
237	19.75	0.10	0.031	(0.145)		0.028	0.003

238	19.83	0.07	0.020	(0.144)	0.018	0.002
239	19.92	0.07	0.020	(0.144)	0.018	0.002
240	20.00	0.07	0.020	(0.143)	0.018	0.002
241	20.08	0.10	0.031	(0.142)	0.028	0.003
242	20.17	0.10	0.031	(0.142)	0.028	0.003
243	20.25	0.10	0.031	(0.141)	0.028	0.003
244	20.33	0.10	0.031	(0.141)	0.028	0.003
245	20.42	0.10	0.031	(0.140)	0.028	0.003
246	20.50	0.10	0.031	(0.139)	0.028	0.003
247	20.58	0.10	0.031	(0.139)	0.028	0.003
248	20.67	0.10	0.031	(0.138)	0.028	0.003
249	20.75	0.10	0.031	(0.138)	0.028	0.003
250	20.83	0.07	0.020	(0.137)	0.018	0.002
251	20.92	0.07	0.020	(0.137)	0.018	0.002
252	21.00	0.07	0.020	(0.136)	0.018	0.002
253	21.08	0.10	0.031	(0.135)	0.028	0.003
254	21.17	0.10	0.031	(0.135)	0.028	0.003
255	21.25	0.10	0.031	(0.134)	0.028	0.003
256	21.33	0.07	0.020	(0.134)	0.018	0.002
257	21.42	0.07	0.020	(0.133)	0.018	0.002
258	21.50	0.07	0.020	(0.133)	0.018	0.002
259	21.58	0.10	0.031	(0.132)	0.028	0.003
260	21.67	0.10	0.031	(0.132)	0.028	0.003
261	21.75	0.10	0.031	(0.131)	0.028	0.003
262	21.83	0.07	0.020	(0.131)	0.018	0.002
263	21.92	0.07	0.020	(0.131)	0.018	0.002
264	22.00	0.07	0.020	(0.130)	0.018	0.002
265	22.08	0.10	0.031	(0.130)	0.028	0.003
266	22.17	0.10	0.031	(0.129)	0.028	0.003
267	22.25	0.10	0.031	(0.129)	0.028	0.003
268	22.33	0.07	0.020	(0.128)	0.018	0.002
269	22.42	0.07	0.020	(0.128)	0.018	0.002
270	22.50	0.07	0.020	(0.128)	0.018	0.002
271	22.58	0.07	0.020	(0.127)	0.018	0.002
272	22.67	0.07	0.020	(0.127)	0.018	0.002
273	22.75	0.07	0.020	(0.127)	0.018	0.002
274	22.83	0.07	0.020	(0.126)	0.018	0.002
275	22.92	0.07	0.020	(0.126)	0.018	0.002
276	23.00	0.07	0.020	(0.126)	0.018	0.002
277	23.08	0.07	0.020	(0.125)	0.018	0.002
278	23.17	0.07	0.020	(0.125)	0.018	0.002
279	23.25	0.07	0.020	(0.125)	0.018	0.002
280	23.33	0.07	0.020	(0.125)	0.018	0.002
281	23.42	0.07	0.020	(0.124)	0.018	0.002
282	23.50	0.07	0.020	(0.124)	0.018	0.002
283	23.58	0.07	0.020	(0.124)	0.018	0.002
284	23.67	0.07	0.020	(0.124)	0.018	0.002
285	23.75	0.07	0.020	(0.124)	0.018	0.002
286	23.83	0.07	0.020	(0.123)	0.018	0.002
287	23.92	0.07	0.020	(0.123)	0.018	0.002
288	24.00	0.07	0.020	(0.123)	0.018	0.002

(Loss Rate Not Used)

Sum = 100.0 Sum = 4.6

Flood volume = Effective rainfall 0.38(In)
times area 75.8(Ac.)/[(In)/(Ft.)] = 2.4(Ac.Ft)
Total soil loss = 2.17(In)
Total soil loss = 13.682(Ac.Ft)
Total rainfall = 2.55(In)
Flood volume = 105707.9 Cubic Feet
Total soil loss = 595975.8 Cubic Feet

Peak flow rate of this hydrograph = 9.940(CFS)

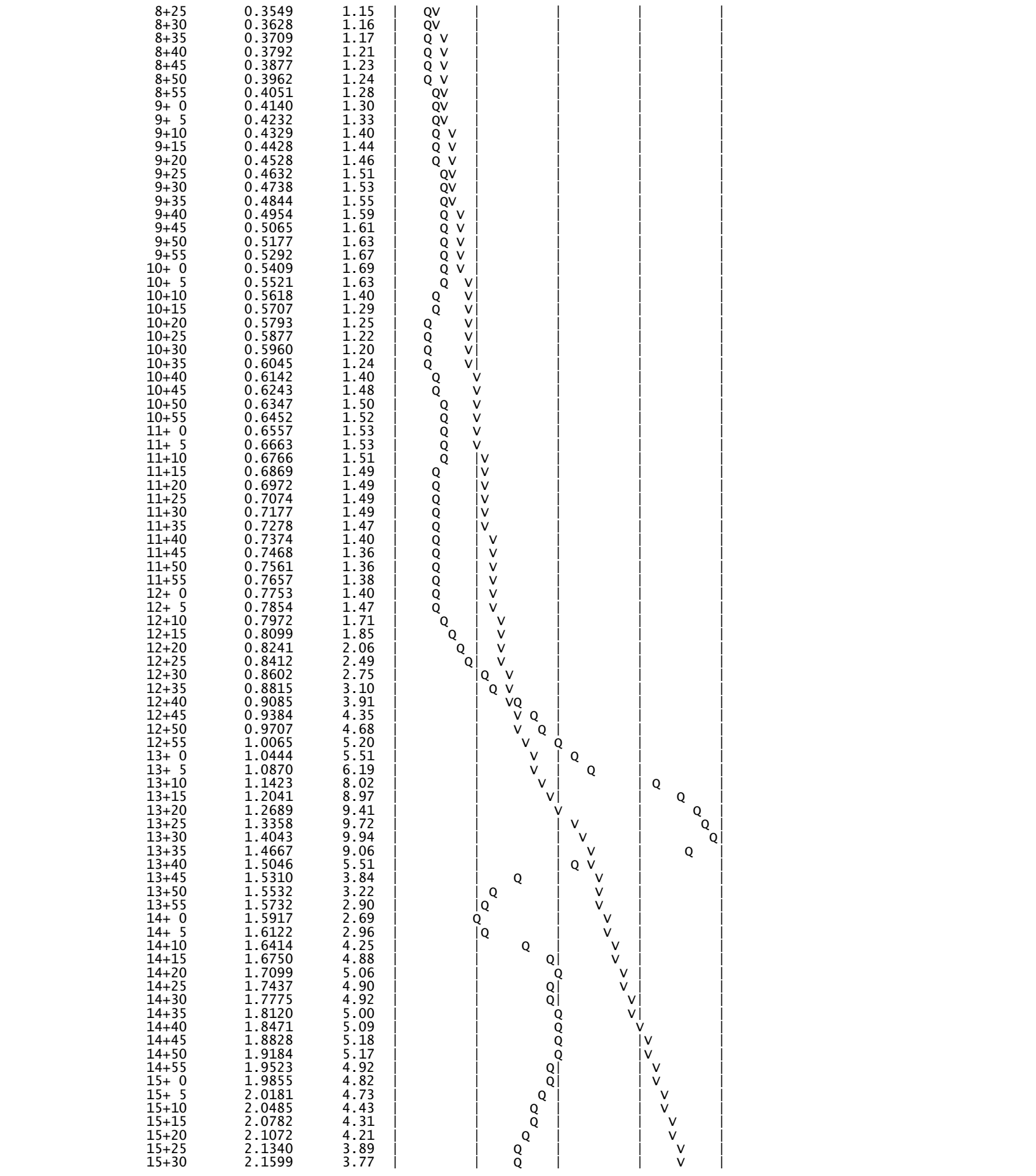
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24 - H O U R S T O R M
R u n o f f H y d r o g r a p h

Hydrograph in 5 Minute intervals ((CFS))

Time(h+m)	Volume Ac.Ft	Q(CFS)	0	2.5	5.0	7.5	10.0
0+ 5	0.0001	0.02	Q				
0+10	0.0007	0.09	Q				
0+15	0.0016	0.12	Q				
0+20	0.0025	0.14	Q				
0+25	0.0038	0.18	Q				
0+30	0.0052	0.21	Q				
0+35	0.0067	0.22	Q				
0+40	0.0082	0.22	Q				
0+45	0.0098	0.23	Q				
0+50	0.0114	0.24	Q				
0+55	0.0133	0.28	VQ				
1+ 0	0.0153	0.29	VQ				
1+ 5	0.0173	0.29	VQ				
1+10	0.0191	0.26	VQ				

1+15	0.0208	0.25	Q	|	|	|	|
1+20	0.0225	0.24	Q	|	|	|	|
1+25	0.0241	0.24	Q	|	|	|	|
1+30	0.0258	0.24	Q	|	|	|	|
1+35	0.0274	0.24	Q	|	|	|	|
1+40	0.0290	0.24	Q	|	|	|	|
1+45	0.0307	0.24	Q	|	|	|	|
1+50	0.0323	0.24	Q	|	|	|	|
1+55	0.0343	0.28	VQ	|	|	|	|
2+ 0	0.0363	0.29	VQ	|	|	|	|
2+ 5	0.0383	0.30	VQ	|	|	|	|
2+10	0.0404	0.30	VQ	|	|	|	|
2+15	0.0425	0.31	VQ	|	|	|	|
2+20	0.0447	0.31	VQ	|	|	|	|
2+25	0.0468	0.31	VQ	|	|	|	|
2+30	0.0489	0.31	VQ	|	|	|	|
2+35	0.0512	0.32	VQ	|	|	|	|
2+40	0.0536	0.36	VQ	|	|	|	|
2+45	0.0562	0.37	VQ	|	|	|	|
2+50	0.0588	0.38	VQ	|	|	|	|
2+55	0.0614	0.38	|Q	|	|	|	|
3+ 0	0.0640	0.38	|Q	|	|	|	|
3+ 5	0.0667	0.39	|Q	|	|	|	|
3+10	0.0694	0.39	|Q	|	|	|	|
3+15	0.0721	0.39	|Q	|	|	|	|
3+20	0.0747	0.39	|Q	|	|	|	|
3+25	0.0774	0.39	|Q	|	|	|	|
3+30	0.0801	0.39	|Q	|	|	|	|
3+35	0.0828	0.39	|Q	|	|	|	|
3+40	0.0855	0.39	|Q	|	|	|	|
3+45	0.0882	0.39	|Q	|	|	|	|
3+50	0.0909	0.40	|Q	|	|	|	|
3+55	0.0939	0.43	|Q	|	|	|	|
4+ 0	0.0970	0.45	|Q	|	|	|	|
4+ 5	0.1001	0.46	|Q	|	|	|	|
4+10	0.1033	0.46	|Q	|	|	|	|
4+15	0.1065	0.46	|Q	|	|	|	|
4+20	0.1097	0.47	|Q	|	|	|	|
4+25	0.1133	0.51	|VQ	|	|	|	|
4+30	0.1169	0.53	|VQ	|	|	|	|
4+35	0.1206	0.53	|VQ	|	|	|	|
4+40	0.1243	0.54	| Q	|	|	|	|
4+45	0.1280	0.54	| Q	|	|	|	|
4+50	0.1318	0.55	| Q	|	|	|	|
4+55	0.1358	0.59	| Q	|	|	|	|
5+ 0	0.1400	0.60	| Q	|	|	|	|
5+ 5	0.1441	0.59	| Q	|	|	|	|
5+10	0.1477	0.53	| Q	|	|	|	|
5+15	0.1511	0.50	|QV	|	|	|	|
5+20	0.1546	0.50	|QV	|	|	|	|
5+25	0.1582	0.52	| Q	|	|	|	|
5+30	0.1619	0.54	| Q	|	|	|	|
5+35	0.1657	0.55	| Q	|	|	|	|
5+40	0.1697	0.59	| Q	|	|	|	|
5+45	0.1739	0.60	| Q	|	|	|	|
5+50	0.1781	0.61	| Q	|	|	|	|
5+55	0.1823	0.61	| QV	|	|	|	|
6+ 0	0.1865	0.62	| QV	|	|	|	|
6+ 5	0.1909	0.63	| QV	|	|	|	|
6+10	0.1954	0.66	| QV	|	|	|	|
6+15	0.2001	0.68	| QV	|	|	|	|
6+20	0.2049	0.69	| QV	|	|	|	|
6+25	0.2097	0.69	| QV	|	|	|	|
6+30	0.2145	0.70	| QV	|	|	|	|
6+35	0.2193	0.71	| QV	|	|	|	|
6+40	0.2245	0.74	| QV	|	|	|	|
6+45	0.2297	0.76	| Q	|	|	|	|
6+50	0.2350	0.77	| Q	|	|	|	|
6+55	0.2403	0.77	| Q	|	|	|	|
7+ 0	0.2456	0.77	| QV	|	|	|	|
7+ 5	0.2510	0.78	| QV	|	|	|	|
7+10	0.2563	0.78	| QV	|	|	|	|
7+15	0.2617	0.78	| QV	|	|	|	|
7+20	0.2671	0.79	| QV	|	|	|	|
7+25	0.2728	0.82	| QV	|	|	|	|
7+30	0.2786	0.84	| QV	|	|	|	|
7+35	0.2845	0.86	| QV	|	|	|	|
7+40	0.2906	0.89	| QV	|	|	|	|
7+45	0.2969	0.91	| QV	|	|	|	|
7+50	0.3033	0.93	| QV	|	|	|	|
7+55	0.3100	0.97	| Q V	|	|	|	|
8+ 0	0.3168	0.99	| Q V	|	|	|	|
8+ 5	0.3238	1.02	| QV	|	|	|	|
8+10	0.3313	1.09	| QV	|	|	|	|
8+15	0.3391	1.13	| QV	|	|	|	|
8+20	0.3469	1.14	| QV	|	|	|	|



8+25	0.3549	1.15	QV
8+30	0.3628	1.16	QV
8+35	0.3709	1.17	Q V
8+40	0.3792	1.21	Q V
8+45	0.3877	1.23	Q V
8+50	0.3962	1.24	Q V
8+55	0.4051	1.28	QV
9+ 0	0.4140	1.30	QV
9+ 5	0.4232	1.33	QV
9+10	0.4329	1.40	Q V
9+15	0.4428	1.44	Q V
9+20	0.4528	1.46	Q V
9+25	0.4632	1.51	QV
9+30	0.4738	1.53	QV
9+35	0.4844	1.55	QV
9+40	0.4954	1.59	Q V
9+45	0.5065	1.61	Q V
9+50	0.5177	1.63	Q V
9+55	0.5292	1.67	Q V
10+ 0	0.5409	1.69	Q V
10+ 5	0.5521	1.63	Q V
10+10	0.5618	1.40	Q V
10+15	0.5707	1.29	Q V
10+20	0.5793	1.25	Q V
10+25	0.5877	1.22	Q V
10+30	0.5960	1.20	Q V
10+35	0.6045	1.24	Q V
10+40	0.6142	1.40	Q V
10+45	0.6243	1.48	Q V
10+50	0.6347	1.50	Q V
10+55	0.6452	1.52	Q V
11+ 0	0.6557	1.53	Q V
11+ 5	0.6663	1.53	Q V
11+10	0.6766	1.51	Q V
11+15	0.6869	1.49	Q V
11+20	0.6972	1.49	Q V
11+25	0.7074	1.49	Q V
11+30	0.7177	1.49	Q V
11+35	0.7278	1.47	Q V
11+40	0.7374	1.40	Q V
11+45	0.7468	1.36	Q V
11+50	0.7561	1.36	Q V
11+55	0.7657	1.38	Q V
12+ 0	0.7753	1.40	Q V
12+ 5	0.7854	1.47	Q V
12+10	0.7972	1.71	Q V
12+15	0.8099	1.85	Q V
12+20	0.8241	2.06	Q V
12+25	0.8412	2.49	Q V
12+30	0.8602	2.75	Q V
12+35	0.8815	3.10	Q V
12+40	0.9085	3.91	VQ
12+45	0.9384	4.35	V Q
12+50	0.9707	4.68	V Q
12+55	1.0065	5.20	V Q
13+ 0	1.0444	5.51	V Q
13+ 5	1.0870	6.19	V Q
13+10	1.1423	8.02	V Q
13+15	1.2041	8.97	V Q
13+20	1.2689	9.41	V Q
13+25	1.3358	9.72	V Q
13+30	1.4043	9.94	V Q
13+35	1.4667	9.06	V Q
13+40	1.5046	5.51	Q V
13+45	1.5310	3.84	Q V
13+50	1.5532	3.22	Q V
13+55	1.5732	2.90	Q V
14+ 0	1.5917	2.69	Q V
14+ 5	1.6122	2.96	Q V
14+10	1.6414	4.25	Q V
14+15	1.6750	4.88	Q V
14+20	1.7099	5.06	Q V
14+25	1.7437	4.90	Q V
14+30	1.7775	4.92	Q V
14+35	1.8120	5.00	Q V
14+40	1.8471	5.09	Q V
14+45	1.8828	5.18	Q V
14+50	1.9184	5.17	Q V
14+55	1.9523	4.92	Q V
15+ 0	1.9855	4.82	Q V
15+ 5	2.0181	4.73	Q V
15+10	2.0485	4.43	Q V
15+15	2.0782	4.31	Q V
15+20	2.1072	4.21	Q V
15+25	2.1340	3.89	Q V
15+30	2.1599	3.77	Q V

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15+35       2.1839      3.47  |          |  Q       |          |     V    |
15+40       2.2011      2.50  |          |    Q     |          |      V   |
15+45       2.2151      2.03  |          |       Q  |          |      V   |
15+50       2.2277      1.83  |          |        Q |          |      V   |
15+55       2.2394      1.71  |          |      Q   |          |      V   |
16+ 0       2.2507      1.63  |          |     Q    |          |       V  |
16+ 5       2.2605      1.43  |          |   Q      |          |       V  |
16+10       2.2666      0.89  |          | Q        |          |       V  |
16+15       2.2709      0.62  |          |Q         |          |       V  |
16+20       2.2744      0.50  |          Q          |          |       V  |
16+25       2.2773      0.43  |Q         |          |          |       V  |
16+30       2.2800      0.39  |Q         |          |          |       V  |
16+35       2.2824      0.35  |Q         |          |          |       V  |
16+40       2.2845      0.30  |Q         |          |          |       V  |
16+45       2.2864      0.27  |Q         |          |          |       V  |
16+50       2.2881      0.25  |Q         |          |          |       V  |
16+55       2.2898      0.24  Q          |          |          |       V  |
17+ 0       2.2914      0.24  Q          |          |          |       V  |
17+ 5       2.2932      0.26  |Q         |          |          |       V  |
17+10       2.2954      0.32  |Q         |          |          |       V  |
17+15       2.2978      0.35  |Q         |          |          |       V  |
17+20       2.3004      0.37  |Q         |          |          |       V  |
17+25       2.3030      0.37  |Q         |          |          |       V  |
17+30       2.3056      0.38  |Q         |          |          |        V |
17+35       2.3082      0.38  |Q         |          |          |        V |
17+40       2.3109      0.39  |Q         |          |          |        V |
17+45       2.3135      0.39  |Q         |          |          |        V |
17+50       2.3161      0.38  |Q         |          |          |        V |
17+55       2.3185      0.35  |Q         |          |          |        V |
18+ 0       2.3208      0.33  |Q         |          |          |        V |
18+ 5       2.3230      0.32  |Q         |          |          |        V |
18+10       2.3252      0.32  |Q         |          |          |        V |
18+15       2.3274      0.32  |Q         |          |          |        V |
18+20       2.3296      0.32  |Q         |          |          |        V |
18+25       2.3317      0.31  |Q         |          |          |        V |
18+30       2.3339      0.31  |Q         |          |          |        V |
18+35       2.3360      0.30  |Q         |          |          |        V |
18+40       2.3378      0.27  |Q         |          |          |        V |
18+45       2.3396      0.25  |Q         |          |          |        V |
18+50       2.3412      0.24  Q          |          |          |        V |
18+55       2.3426      0.20  Q          |          |          |        V |
19+ 0       2.3438      0.18  Q          |          |          |        V |
19+ 5       2.3450      0.18  Q          |          |          |        V |
19+10       2.3465      0.21  Q          |          |          |        V |
19+15       2.3480      0.22  Q          |          |          |        V |
19+20       2.3496      0.24  Q          |          |          |        V |
19+25       2.3515      0.27  |Q         |          |          |        V |
19+30       2.3535      0.29  |Q         |          |          |        V |
19+35       2.3555      0.29  |Q         |          |          |        V |
19+40       2.3573      0.26  |Q         |          |          |        V |
19+45       2.3590      0.25  Q          |          |          |        V |
19+50       2.3606      0.23  Q          |          |          |        V |
19+55       2.3619      0.20  Q          |          |          |        V |
20+ 0       2.3631      0.18  Q          |          |          |        V |
20+ 5       2.3644      0.18  Q          |          |          |        V |
20+10       2.3658      0.21  Q          |          |          |        V |
20+15       2.3673      0.22  Q          |          |          |         V|
20+20       2.3689      0.23  Q          |          |          |         V|
20+25       2.3705      0.23  Q          |          |          |         V|
20+30       2.3721      0.23  Q          |          |          |         V|
20+35       2.3736      0.23  Q          |          |          |         V|
20+40       2.3752      0.23  Q          |          |          |         V|
20+45       2.3768      0.23  Q          |          |          |         V|
20+50       2.3784      0.22  Q          |          |          |         V|
20+55       2.3797      0.19  Q          |          |          |         V|
21+ 0       2.3809      0.17  Q          |          |          |         V|
21+ 5       2.3821      0.18  Q          |          |          |         V|
21+10       2.3835      0.21  Q          |          |          |         V|
21+15       2.3851      0.22  Q          |          |          |         V|
21+20       2.3866      0.22  Q          |          |          |         V|
21+25       2.3878      0.18  Q          |          |          |         V|
21+30       2.3890      0.17  Q          |          |          |         V|
21+35       2.3902      0.17  Q          |          |          |         V|
21+40       2.3916      0.20  Q          |          |          |         V|
21+45       2.3931      0.22  Q          |          |          |         V|
21+50       2.3946      0.22  Q          |          |          |         V|
21+55       2.3959      0.18  Q          |          |          |         V|
22+ 0       2.3971      0.17  Q          |          |          |         V|
22+ 5       2.3983      0.17  Q          |          |          |         V|
22+10       2.3997      0.20  Q          |          |          |         V|
22+15       2.4012      0.22  Q          |          |          |         V|
22+20       2.4027      0.22  Q          |          |          |         V|
22+25       2.4039      0.18  Q          |          |          |         V|
22+30       2.4051      0.17  Q          |          |          |         V|
22+35       2.4062      0.16  Q          |          |          |         V|
22+40       2.4074      0.16  Q          |          |          |         V|
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   22+45       2.4085      0.16  Q          |          |          |         v|
   22+50       2.4095      0.16  Q          |          |          |         v|
   22+55       2.4106      0.16  Q          |          |          |         v|
   23+ 0       2.4117      0.16  Q          |          |          |         v|
   23+ 5       2.4128      0.16  Q          |          |          |         v|
   23+10       2.4139      0.16  Q          |          |          |         v|
   23+15       2.4149      0.16  Q          |          |          |         v|
   23+20       2.4160      0.16  Q          |          |          |         v|
   23+25       2.4171      0.16  Q          |          |          |         v|
   23+30       2.4182      0.16  Q          |          |          |         v|
   23+35       2.4192      0.16  Q          |          |          |         v|
   23+40       2.4203      0.16  Q          |          |          |         v|
   23+45       2.4214      0.16  Q          |          |          |         v|
   23+50       2.4225      0.16  Q          |          |          |         v|
   23+55       2.4235      0.16  Q          |          |          |         v|
   24+ 0       2.4246      0.16  Q          |          |          |         v|
   24+ 5       2.4256      0.14  Q          |          |          |         v|
   24+10       2.4260      0.07  Q          |          |          |         v|
   24+15       2.4263      0.04  Q          |          |          |         v|
   24+20       2.4264      0.02  Q          |          |          |         v|
   24+25       2.4265      0.02  Q          |          |          |         v|
   24+30       2.4266      0.01  Q          |          |          |         v|
   24+35       2.4267      0.01  Q          |          |          |         v|
   24+40       2.4267      0.00  Q          |          |          |         v|
   24+45       2.4267      0.00  Q          |          |          |         v|
   24+50       2.4267      0.00  Q          |          |          |          v
-------------------------------------------------------------------------------
```

```
       U n i t   H y d r o g r a p h   A n a l y s i s

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              Study date  10/17/24 File: exa10110.out

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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978


Program License Serial Number 5006

------------------------------------------------------------------------
 English (in-lb) Input Units Used
 English Rainfall Data (Inches) Input Values Used

 English Units used in output format



------------------------------------------------------------------------
------------------------------------------------------------------------
Drainage Area =      75.83(Ac.)  =      0.118 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment =      75.83(Ac.)  =      0.118 Sq. Mi.
Length along longest watercourse =    2577.00(Ft.)
Length along longest watercourse measured to centroid =    1289.00(Ft.)
Length along longest watercourse =      0.488 Mi.
Length along longest watercourse measured to centroid =      0.244 Mi.
Difference in elevation =     145.20(Ft.)
Slope along watercourse =    297.4994 Ft./Mi.
Average Manning's 'N' = 0.030
Lag time =    0.109 Hr.
Lag time =     6.52 Min.
25% of lag time =     1.63 Min.
40% of lag time =     2.61 Min.
Unit time =     5.00 Min.
Duration of storm = 1 Hour(s)
User Entered Base Flow =     0.00(CFS)

2 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
       75.83           0.50                 37.91

100 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
       75.83           1.30                 98.58

STORM EVENT (YEAR) =   10.00
Area Averaged 2-Year Rainfall =    0.500(In)
Area Averaged 100-Year Rainfall =    1.300(In)

Point rain (area averaged) =    0.829(In)
Areal adjustment factor =   99.93 %
Adjusted average point rain =    0.829(In)

Sub-Area Data:
Area(Ac.)         Runoff Index   Impervious %
    75.830           91.00         0.000
 Total Area Entered =     75.83(Ac.)


RI    RI   Infil. Rate Impervious   Adj. Infil. Rate  Area%     F
AMC2 AMC-2     (In/Hr)    (Dec.%)     (In/Hr)      (Dec.)    (In/Hr)
91.0  91.0      0.117     0.000        0.117       1.000      0.117
                                                 Sum (F) =   0.117
Area averaged mean soil loss (F) (In/Hr) =  0.117
Minimum soil loss rate ((In/Hr)) =  0.059
(for 24 hour storm duration)
Soil low loss rate (decimal) =   0.900
------------------------------------------------------------------------
Slope of intensity-duration curve for a 1 hour storm =0.5500
------------------------------------------------------------------------

               U n i t  H y d r o g r a p h
                      VALLEY S-Curve
---------------------------------------------------------------
               Unit Hydrograph Data
---------------------------------------------------------------
```

Unit time period (hrs)		Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	76.653	12.379	9.460
2	0.167	153.307	43.174	32.994
3	0.250	229.960	20.942	16.004
4	0.333	306.613	8.476	6.477
5	0.417	383.266	5.111	3.906
6	0.500	459.920	3.287	2.512
7	0.583	536.573	2.310	1.765
8	0.667	613.226	1.661	1.270
9	0.750	689.880	1.141	0.872
10	0.833	766.533	0.802	0.613
11	0.917	843.186	0.718	0.549
			Sum = 100.000	Sum= 76.422

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr) Max	Low	Effective (In/Hr)
1	0.08	3.30	0.328	0.117	(0.295)	0.211
2	0.17	4.20	0.418	0.117	(0.376)	0.301
3	0.25	4.40	0.437	0.117	(0.394)	0.320
4	0.33	4.80	0.477	0.117	(0.430)	0.360
5	0.42	5.20	0.517	0.117	(0.465)	0.400
6	0.50	6.20	0.616	0.117	(0.555)	0.499
7	0.58	6.80	0.676	0.117	(0.608)	0.559
8	0.67	8.80	0.875	0.117	(0.787)	0.758
9	0.75	13.90	1.382	0.117	(1.244)	1.265
10	0.83	31.40	3.122	0.117	(2.810)	3.005
11	0.92	7.20	0.716	0.117	(0.644)	0.599
12	1.00	3.80	0.378	0.117	(0.340)	0.261
		(Loss Rate Not Used)				
Sum =		100.0			Sum =	8.5

Flood volume = Effective rainfall 0.71(In)
times area 75.8(Ac.)/[(In)/(Ft.)] = 4.5(Ac.Ft)
Total soil loss = 0.12(In)
Total soil loss = 0.739(Ac.Ft)
Total rainfall = 0.83(In)
Flood volume = 195865.2 Cubic Feet
Total soil loss = 32205.8 Cubic Feet

Peak flow rate of this hydrograph = 135.220(CFS)

++

1 - H O U R S T O R M
R u n o f f H y d r o g r a p h

Hydrograph in 5 Minute intervals ((CFS))

Time(h+m)	Volume Ac.Ft	Q(CFS)	0	50.0	100.0	150.0	200.0
0+ 5	0.0138	2.00	Q	|	|	|	|
0+10	0.0814	9.81	VQ	|	|	|	|
0+15	0.1939	16.34	|V Q	|	|	|	|
0+20	0.3328	20.17	| V Q	|	|	|	|
0+25	0.4952	23.58	| Q	|	|	|	|
0+30	0.6845	27.48	| QV	|	|	|	|
0+35	0.9111	32.90	| Q V |	|	|	|	|
0+40	1.1813	39.23	| Q V	|	|	|	|
0+45	1.5448	52.79	| Q V	|	|	|	|
0+50	2.1671	90.36	| | QV|	|	|	|	|
0+55	3.0983	135.22	| | Q	|	|	|	|
1+ 0	3.6837	84.99	| | Q	|	|	| V	|
1+ 5	4.0066	46.89	| Q|	|	|	| V	|
1+10	4.1850	25.91	| Q	|	|	| V	|
1+15	4.2938	15.79	| Q	|	|	| V	|
1+20	4.3676	10.72	| Q	|	|	| V	|
1+25	4.4186	7.41	|Q	|	|	| V|	|
1+30	4.4533	5.04	|Q	|	|	| V|	|
1+35	4.4766	3.39	Q	|	|	| V|	|
1+40	4.4921	2.24	Q	|	|	| V|	|
1+45	4.4955	0.49	Q	|	|	| V|	|
1+50	4.4964	0.14	Q	|	|	| V	|

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       U n i t   H y d r o g r a p h   A n a l y s i s

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              Study date  10/17/24 File: exa10310.out

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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978


Program License Serial Number 5006

------------------------------------------------------------------------
 English (in-lb) Input Units Used
 English Rainfall Data (Inches) Input Values Used

 English Units used in output format



------------------------------------------------------------------------
------------------------------------------------------------------------
Drainage Area =      75.83(Ac.)  =      0.118 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment =      75.83(Ac.)  =      0.118 Sq. Mi.
Length along longest watercourse =    2577.00(Ft.)
Length along longest watercourse measured to centroid =    1289.00(Ft.)
Length along longest watercourse =      0.488 Mi.
Length along longest watercourse measured to centroid =      0.244 Mi.
Difference in elevation =     145.20(Ft.)
Slope along watercourse =    297.4994 Ft./Mi.
Average Manning's 'N' = 0.030
Lag time =    0.109 Hr.
Lag time =     6.52 Min.
25% of lag time =     1.63 Min.
40% of lag time =     2.61 Min.
Unit time =     5.00 Min.
Duration of storm = 3 Hour(s)
User Entered Base Flow =     0.00(CFS)

2 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
       75.83           0.80                 60.66

100 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
       75.83           2.00                151.66

STORM EVENT (YEAR) =   10.00
Area Averaged 2-Year Rainfall =    0.800(In)
Area Averaged 100-Year Rainfall =    2.000(In)

Point rain (area averaged) =    1.294(In)
Areal adjustment factor =   99.97 %
Adjusted average point rain =    1.293(In)

Sub-Area Data:
Area(Ac.)         Runoff Index   Impervious %
    75.830           91.00         0.000
 Total Area Entered =     75.83(Ac.)


RI    RI   Infil. Rate Impervious   Adj. Infil. Rate  Area%     F
AMC2 AMC-2     (In/Hr)    (Dec.%)     (In/Hr)      (Dec.)    (In/Hr)
91.0  91.0      0.117     0.000        0.117       1.000      0.117
                                                 Sum (F) =   0.117
Area averaged mean soil loss (F) (In/Hr) =  0.117
Minimum soil loss rate ((In/Hr)) =  0.059
(for 24 hour storm duration)
Soil low loss rate (decimal) =   0.900
------------------------------------------------------------------------

               U n i t  H y d r o g r a p h
                      VALLEY S-Curve
------------------------------------------------------------------
               Unit Hydrograph Data
------------------------------------------------------------------
Unit time period   Time % of lag   Distribution   Unit Hydrograph
    (hrs)                          Graph %           (CFS)
```

1	0.083	76.653	12.379	9.460
2	0.167	153.307	43.174	32.994
3	0.250	229.960	20.942	16.004
4	0.333	306.613	8.476	6.477
5	0.417	383.266	5.111	3.906
6	0.500	459.920	3.287	2.512
7	0.583	536.573	2.310	1.765
8	0.667	613.226	1.661	1.270
9	0.750	689.880	1.141	0.872
10	0.833	766.533	0.802	0.613
11	0.917	843.186	0.718	0.549
		Sum = 100.000	Sum=	76.422

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr) Max	Low	Effective (In/Hr)
1	0.08	1.30	0.202	0.117	(0.182)	0.085
2	0.17	1.30	0.202	0.117	(0.182)	0.085
3	0.25	1.10	0.171	0.117	(0.154)	0.054
4	0.33	1.50	0.233	0.117	(0.210)	0.116
5	0.42	1.50	0.233	0.117	(0.210)	0.116
6	0.50	1.80	0.279	0.117	(0.251)	0.162
7	0.58	1.50	0.233	0.117	(0.210)	0.116
8	0.67	1.80	0.279	0.117	(0.251)	0.162
9	0.75	1.80	0.279	0.117	(0.251)	0.162
10	0.83	1.50	0.233	0.117	(0.210)	0.116
11	0.92	1.60	0.248	0.117	(0.223)	0.131
12	1.00	1.80	0.279	0.117	(0.251)	0.162
13	1.08	2.20	0.341	0.117	(0.307)	0.224
14	1.17	2.20	0.341	0.117	(0.307)	0.224
15	1.25	2.20	0.341	0.117	(0.307)	0.224
16	1.33	2.00	0.310	0.117	(0.279)	0.193
17	1.42	2.60	0.403	0.117	(0.363)	0.286
18	1.50	2.70	0.419	0.117	(0.377)	0.302
19	1.58	2.40	0.372	0.117	(0.335)	0.255
20	1.67	2.70	0.419	0.117	(0.377)	0.302
21	1.75	3.30	0.512	0.117	(0.461)	0.395
22	1.83	3.10	0.481	0.117	(0.433)	0.364
23	1.92	2.90	0.450	0.117	(0.405)	0.333
24	2.00	3.00	0.466	0.117	(0.419)	0.349
25	2.08	3.10	0.481	0.117	(0.433)	0.364
26	2.17	4.20	0.652	0.117	(0.587)	0.535
27	2.25	5.00	0.776	0.117	(0.698)	0.659
28	2.33	3.50	0.543	0.117	(0.489)	0.426
29	2.42	6.80	1.055	0.117	(0.950)	0.938
30	2.50	7.30	1.133	0.117	(1.020)	1.016
31	2.58	8.20	1.273	0.117	(1.145)	1.156
32	2.67	5.90	0.916	0.117	(0.824)	0.799
33	2.75	2.00	0.310	0.117	(0.279)	0.193
34	2.83	1.80	0.279	0.117	(0.251)	0.162
35	2.92	1.80	0.279	0.117	(0.251)	0.162
36	3.00	0.60	0.093	(0.117)	0.084	0.009
		(Loss Rate Not Used)				
Sum =		100.0			Sum =	11.3

Flood volume = Effective rainfall 0.95(In)
times area 75.8(Ac.)/[(In)/(Ft.)] = 6.0(Ac.Ft)
Total soil loss = 0.35(In)
Total soil loss = 2.201(Ac.Ft)
Total rainfall = 1.29(In)
Flood volume = 260130.8 Cubic Feet
Total soil loss = 95855.8 Cubic Feet

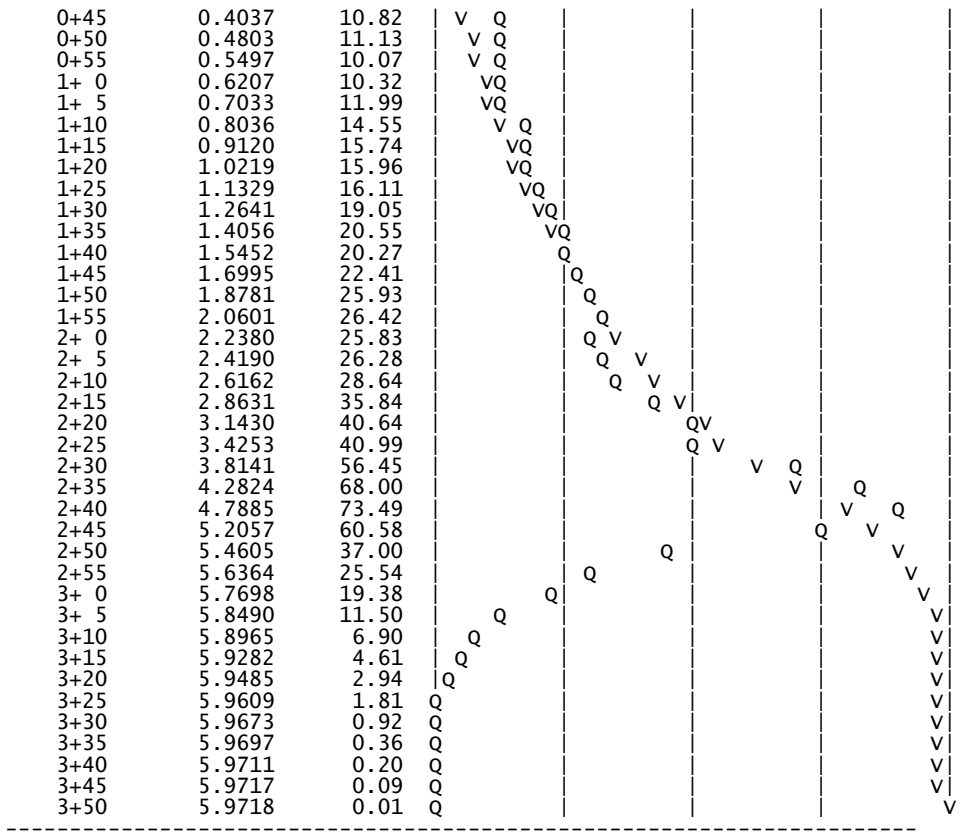
Peak flow rate of this hydrograph = 73.491(CFS)

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3 - H O U R S T O R M
R u n o f f H y d r o g r a p h

Hydrograph in 5 Minute intervals ((CFS))

Time(h+m)	Volume Ac.Ft	Q(CFS)	0	20.0	40.0	60.0	80.0
0+ 5	0.0055	0.80	Q				
0+10	0.0303	3.60	VQ				
0+15	0.0624	4.66	V Q				
0+20	0.0953	4.78	V Q				
0+25	0.1412	6.66	V Q				
0+30	0.1970	8.11	|V Q				
0+35	0.2633	9.63	|V Q				
0+40	0.3291	9.55	| V Q				



0+45	0.4037	10.82	
0+50	0.4803	11.13	
0+55	0.5497	10.07	
1+ 0	0.6207	10.32	
1+ 5	0.7033	11.99	
1+10	0.8036	14.55	
1+15	0.9120	15.74	
1+20	1.0219	15.96	
1+25	1.1329	16.11	
1+30	1.2641	19.05	
1+35	1.4056	20.55	
1+40	1.5452	20.27	
1+45	1.6995	22.41	
1+50	1.8781	25.93	
1+55	2.0601	26.42	
2+ 0	2.2380	25.83	
2+ 5	2.4190	26.28	
2+10	2.6162	28.64	
2+15	2.8631	35.84	
2+20	3.1430	40.64	
2+25	3.4253	40.99	
2+30	3.8141	56.45	
2+35	4.2824	68.00	
2+40	4.7885	73.49	
2+45	5.2057	60.58	
2+50	5.4605	37.00	
2+55	5.6364	25.54	
3+ 0	5.7698	19.38	
3+ 5	5.8490	11.50	
3+10	5.8965	6.90	
3+15	5.9282	4.61	
3+20	5.9485	2.94	
3+25	5.9609	1.81	
3+30	5.9673	0.92	
3+35	5.9697	0.36	
3+40	5.9711	0.20	
3+45	5.9717	0.09	
3+50	5.9718	0.01	

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       U n i t   H y d r o g r a p h   A n a l y s i s

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              Study date  10/17/24 File: exa10610.out

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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978


Program License Serial Number 5006

------------------------------------------------------------------------
 English (in-lb) Input Units Used
 English Rainfall Data (Inches) Input Values Used

 English Units used in output format



------------------------------------------------------------------------
------------------------------------------------------------------------
Drainage Area =      75.83(Ac.)  =      0.118 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment =      75.83(Ac.)  =      0.118 Sq. Mi.
Length along longest watercourse =    2577.00(Ft.)
Length along longest watercourse measured to centroid =    1289.00(Ft.)
Length along longest watercourse =      0.488 Mi.
Length along longest watercourse measured to centroid =      0.244 Mi.
Difference in elevation =     145.20(Ft.)
Slope along watercourse =    297.4994 Ft./Mi.
Average Manning's 'N' = 0.030
Lag time =    0.109 Hr.
Lag time =     6.52 Min.
25% of lag time =     1.63 Min.
40% of lag time =     2.61 Min.
Unit time =     5.00 Min.
Duration of storm = 6 Hour(s)
User Entered Base Flow =     0.00(CFS)

2 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
       75.83            1.10                 83.41

100 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
       75.83            3.00                227.49

STORM EVENT (YEAR) =   10.00
Area Averaged 2-Year Rainfall =    1.100(In)
Area Averaged 100-Year Rainfall =    3.000(In)

Point rain (area averaged) =    1.882(In)
Areal adjustment factor =   99.97 %
Adjusted average point rain =    1.881(In)

Sub-Area Data:
Area(Ac.)         Runoff Index   Impervious %
    75.830           91.00          0.000
 Total Area Entered =     75.83(Ac.)


RI    RI   Infil. Rate Impervious   Adj. Infil. Rate  Area%     F
AMC2 AMC-2     (In/Hr)    (Dec.%)     (In/Hr)      (Dec.)    (In/Hr)
91.0  91.0      0.117     0.000        0.117       1.000      0.117
                                                 Sum (F) =   0.117
Area averaged mean soil loss (F) (In/Hr) =  0.117
Minimum soil loss rate ((In/Hr)) =  0.059
(for 24 hour storm duration)
Soil low loss rate (decimal) =   0.900
------------------------------------------------------------------------

               U n i t  H y d r o g r a p h
                      VALLEY S-Curve
------------------------------------------------------------------
               Unit Hydrograph Data
------------------------------------------------------------------
Unit time period   Time % of lag   Distribution   Unit Hydrograph
    (hrs)                          Graph %           (CFS)
```

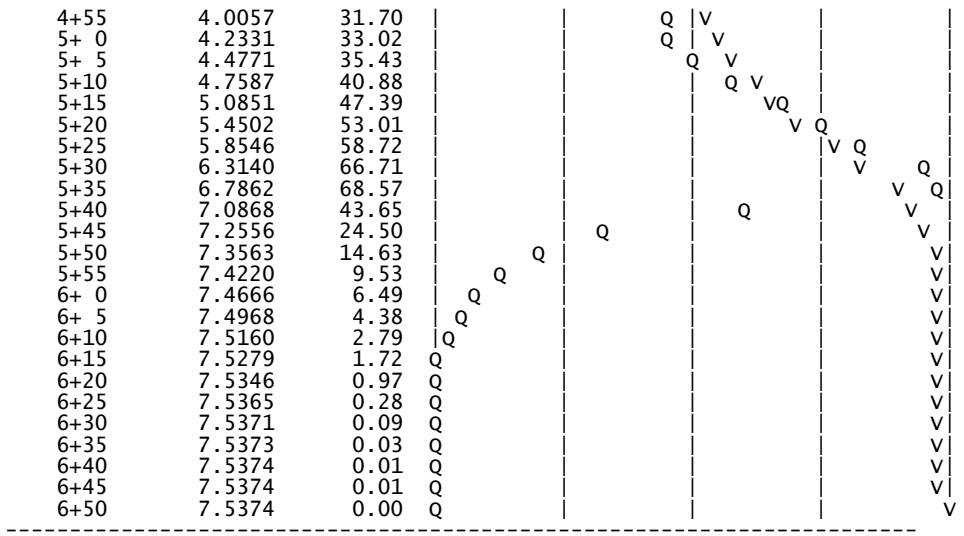
1	0.083	76.653	12.379	9.460
2	0.167	153.307	43.174	32.994
3	0.250	229.960	20.942	16.004
4	0.333	306.613	8.476	6.477
5	0.417	383.266	5.111	3.906
6	0.500	459.920	3.287	2.512
7	0.583	536.573	2.310	1.765
8	0.667	613.226	1.661	1.270
9	0.750	689.880	1.141	0.872
10	0.833	766.533	0.802	0.613
11	0.917	843.186	0.718	0.549
			Sum = 100.000 Sum=	76.422

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr) Max	Low	Effective (In/Hr)
1	0.08	0.50	0.113	(0.117)	0.102	0.011
2	0.17	0.60	0.135	0.117	(0.122)	0.018
3	0.25	0.60	0.135	0.117	(0.122)	0.018
4	0.33	0.60	0.135	0.117	(0.122)	0.018
5	0.42	0.60	0.135	0.117	(0.122)	0.018
6	0.50	0.70	0.158	0.117	(0.142)	0.041
7	0.58	0.70	0.158	0.117	(0.142)	0.041
8	0.67	0.70	0.158	0.117	(0.142)	0.041
9	0.75	0.70	0.158	0.117	(0.142)	0.041
10	0.83	0.70	0.158	0.117	(0.142)	0.041
11	0.92	0.70	0.158	0.117	(0.142)	0.041
12	1.00	0.80	0.181	0.117	(0.163)	0.064
13	1.08	0.80	0.181	0.117	(0.163)	0.064
14	1.17	0.80	0.181	0.117	(0.163)	0.064
15	1.25	0.80	0.181	0.117	(0.163)	0.064
16	1.33	0.80	0.181	0.117	(0.163)	0.064
17	1.42	0.80	0.181	0.117	(0.163)	0.064
18	1.50	0.80	0.181	0.117	(0.163)	0.064
19	1.58	0.80	0.181	0.117	(0.163)	0.064
20	1.67	0.80	0.181	0.117	(0.163)	0.064
21	1.75	0.80	0.181	0.117	(0.163)	0.064
22	1.83	0.80	0.181	0.117	(0.163)	0.064
23	1.92	0.80	0.181	0.117	(0.163)	0.064
24	2.00	0.90	0.203	0.117	(0.183)	0.086
25	2.08	0.80	0.181	0.117	(0.163)	0.064
26	2.17	0.90	0.203	0.117	(0.183)	0.086
27	2.25	0.90	0.203	0.117	(0.183)	0.086
28	2.33	0.90	0.203	0.117	(0.183)	0.086
29	2.42	0.90	0.203	0.117	(0.183)	0.086
30	2.50	0.90	0.203	0.117	(0.183)	0.086
31	2.58	0.90	0.203	0.117	(0.183)	0.086
32	2.67	0.90	0.203	0.117	(0.183)	0.086
33	2.75	1.00	0.226	0.117	(0.203)	0.109
34	2.83	1.00	0.226	0.117	(0.203)	0.109
35	2.92	1.00	0.226	0.117	(0.203)	0.109
36	3.00	1.00	0.226	0.117	(0.203)	0.109
37	3.08	1.00	0.226	0.117	(0.203)	0.109
38	3.17	1.10	0.248	0.117	(0.223)	0.131
39	3.25	1.10	0.248	0.117	(0.223)	0.131
40	3.33	1.10	0.248	0.117	(0.223)	0.131
41	3.42	1.20	0.271	0.117	(0.244)	0.154
42	3.50	1.30	0.293	0.117	(0.264)	0.176
43	3.58	1.40	0.316	0.117	(0.284)	0.199
44	3.67	1.40	0.316	0.117	(0.284)	0.199
45	3.75	1.50	0.339	0.117	(0.305)	0.222
46	3.83	1.50	0.339	0.117	(0.305)	0.222
47	3.92	1.60	0.361	0.117	(0.325)	0.244
48	4.00	1.60	0.361	0.117	(0.325)	0.244
49	4.08	1.70	0.384	0.117	(0.345)	0.267
50	4.17	1.80	0.406	0.117	(0.366)	0.289
51	4.25	1.90	0.429	0.117	(0.386)	0.312
52	4.33	2.00	0.451	0.117	(0.406)	0.334
53	4.42	2.10	0.474	0.117	(0.427)	0.357
54	4.50	2.10	0.474	0.117	(0.427)	0.357
55	4.58	2.20	0.497	0.117	(0.447)	0.380
56	4.67	2.30	0.519	0.117	(0.467)	0.402
57	4.75	2.40	0.542	0.117	(0.488)	0.425
58	4.83	2.40	0.542	0.117	(0.488)	0.425
59	4.92	2.50	0.564	0.117	(0.508)	0.447
60	5.00	2.60	0.587	0.117	(0.528)	0.470
61	5.08	3.10	0.700	0.117	(0.630)	0.583
62	5.17	3.60	0.813	0.117	(0.731)	0.696
63	5.25	3.90	0.880	0.117	(0.792)	0.763
64	5.33	4.20	0.948	0.117	(0.853)	0.831
65	5.42	4.70	1.061	0.117	(0.955)	0.944

```
66   5.50     5.60      1.264          0.117    (  1.138)        1.147
67   5.58     1.90      0.429          0.117    (  0.386)        0.312
68   5.67     0.90      0.203          0.117    (  0.183)        0.086
69   5.75     0.60      0.135          0.117    (  0.122)        0.018
70   5.83     0.50      0.113       (  0.117)       0.102        0.011
71   5.92     0.30      0.068       (  0.117)       0.061        0.007
72   6.00     0.20      0.045       (  0.117)       0.041        0.005
              (Loss Rate Not Used)
   Sum =     100.0                                   Sum =    14.3
      Flood volume = Effective rainfall      1.19(In)
       times area      75.8(Ac.)/[(In)/(Ft.)] =       7.5(Ac.Ft)
      Total soil loss =      0.69(In)
      Total soil loss =     4.350(Ac.Ft)
      Total rainfall =      1.88(In)
      Flood volume =      328330.5 Cubic Feet
      Total soil loss =      189489.9 Cubic Feet
      ---------------------------------------------------------------------
       Peak flow rate of this hydrograph =     68.565(CFS)
      ---------------------------------------------------------------------
      +++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                          6 - H O U R    S T O R M
                     R u n o f f      H y d r o g r a p h
      ---------------------------------------------------------------------
                  Hydrograph in   5   Minute intervals ((CFS))

      ---------------------------------------------------------------------
Time(h+m) Volume Ac.Ft   Q(CFS)  0       17.5      35.0      52.5      70.0
-------------------------------------------------------------------------
  0+ 5       0.0007      0.11  Q          |         |         |         |
  0+10       0.0045      0.55  Q          |         |         |         |
  0+15       0.0111      0.96  Q          |         |         |         |
  0+20       0.0191      1.15  Q          |         |         |         |
  0+25       0.0276      1.24  Q          |         |         |         |
  0+30       0.0381      1.51  Q          |         |         |         |
  0+35       0.0539      2.30  VQ         |         |         |         |
  0+40       0.0723      2.68  VQ         |         |         |         |
  0+45       0.0920      2.85  VQ         |         |         |         |
  0+50       0.1123      2.95  VQ         |         |         |         |
  0+55       0.1331      3.02  VQ         |         |         |         |
  1+ 0       0.1556      3.28  VQ         |         |         |         |
  1+ 5       0.1835      4.05  V Q        |         |         |         |
  1+10       0.2140      4.43  |VQ        |         |         |         |
  1+15       0.2457      4.59  |VQ        |         |         |         |
  1+20       0.2780      4.69  |VQ        |         |         |         |
  1+25       0.3107      4.75  |VQ        |         |         |         |
  1+30       0.3436      4.79  |VQ        |         |         |         |
  1+35       0.3768      4.82  |VQ        |         |         |         |
  1+40       0.4101      4.84  | Q        |         |         |         |
  1+45       0.4435      4.85  | Q        |         |         |         |
  1+50       0.4770      4.86  | Q        |         |         |         |
  1+55       0.5105      4.86  | Q        |         |         |         |
  2+ 0       0.5455      5.08  | Q        |         |         |         |
  2+ 5       0.5841      5.61  |  Q       |         |         |         |
  2+10       0.6215      5.44  |  Q       |         |         |         |
  2+15       0.6626      5.97  |  Q       |         |         |         |
  2+20       0.7058      6.27  |  Q       |         |         |         |
  2+25       0.7498      6.39  |  Q       |         |         |         |
  2+30       0.7943      6.46  |  QV      |         |         |         |
  2+35       0.8391      6.50  |  QV      |         |         |         |
  2+40       0.8840      6.53  |  QV      |         |         |         |
  2+45       0.9307      6.77  |  QV      |         |         |         |
  2+50       0.9826      7.53  |   QV     |         |         |         |
  2+55       1.0369      7.90  |   QV     |         |         |         |
  3+ 0       1.0924      8.06  |   QV     |         |         |         |
  3+ 5       1.1485      8.14  |   Q V    |         |         |         |
  3+10       1.2065      8.41  |   Q V    |         |         |         |
  3+15       1.2698      9.20  |    QV    |         |         |         |
  3+20       1.3358      9.59  |    Q V   |         |         |         |
  3+25       1.4045      9.97  |    Q V   |         |         |         |
  3+30       1.4805     11.03  |     QV   |         |         |         |
  3+35       1.5660     12.42  |      QV  |         |         |         |
  3+40       1.6604     13.71  |      QV  |         |         |         |
  3+45       1.7606     14.55  |       QV |         |         |         |
  3+50       1.8681     15.61  |       QV |         |         |         |
  3+55       1.9809     16.38  |        QV|         |         |         |
  4+ 0       2.1008     17.41  |        Q|V         |         |         |
  4+ 5       2.2259     18.16  |         QV         |         |         |
  4+10       2.3594     19.39  |          |QV       |         |         |
  4+15       2.5032     20.88  |          |Q V      |         |         |
  4+20       2.6579     22.46  |          | Q V     |         |         |
  4+25       2.8238     24.08  |          |  QV     |         |         |
  4+30       2.9995     25.53  |          |   QV    |         |         |
  4+35       3.1818     26.46  |          |    QV   |         |         |
  4+40       3.3732     27.80  |          |    Q V  |         |         |
  4+45       3.5754     29.36  |          |     Q V |         |         |
  4+50       3.7874     30.77  |          |      Q  V         |         |
```


4+55 4.0057 31.70
5+ 0 4.2331 33.02
5+ 5 4.4771 35.43
5+10 4.7587 40.88
5+15 5.0851 47.39
5+20 5.4502 53.01
5+25 5.8546 58.72
5+30 6.3140 66.71
5+35 6.7862 68.57
5+40 7.0868 43.65
5+45 7.2556 24.50
5+50 7.3563 14.63
5+55 7.4220 9.53
6+ 0 7.4666 6.49
6+ 5 7.4968 4.38
6+10 7.5160 2.79
6+15 7.5279 1.72
6+20 7.5346 0.97
6+25 7.5365 0.28
6+30 7.5371 0.09
6+35 7.5373 0.03
6+40 7.5374 0.01
6+45 7.5374 0.01
6+50 7.5374 0.00

```
       U n i t   H y d r o g r a p h   A n a l y s i s

       Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2008, Version 8.1
              Study date  10/17/24 File: exa102410.out

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------------------------------------------------------------------------------

Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978


Program License Serial Number 5006

------------------------------------------------------------------------
 English (in-lb) Input Units Used
 English Rainfall Data (Inches) Input Values Used

 English Units used in output format



------------------------------------------------------------------------
------------------------------------------------------------------------
Drainage Area =      75.83(Ac.)  =      0.118 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment =      75.83(Ac.)  =      0.118 Sq. Mi.
Length along longest watercourse =    2577.00(Ft.)
Length along longest watercourse measured to centroid =    1289.00(Ft.)
Length along longest watercourse =      0.488 Mi.
Length along longest watercourse measured to centroid =      0.244 Mi.
Difference in elevation =     145.20(Ft.)
Slope along watercourse =    297.4994 Ft./Mi.
Average Manning's 'N' = 0.030
Lag time =    0.109 Hr.
Lag time =     6.52 Min.
25% of lag time =     1.63 Min.
40% of lag time =     2.61 Min.
Unit time =     5.00 Min.
Duration of storm = 24 Hour(s)
User Entered Base Flow =     0.00(CFS)

2 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
       75.83           1.80                136.49

100 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
       75.83           5.00                379.15

STORM EVENT (YEAR) =   10.00
Area Averaged 2-Year Rainfall =    1.800(In)
Area Averaged 100-Year Rainfall =    5.000(In)

Point rain (area averaged) =    3.117(In)
Areal adjustment factor =   99.99 %
Adjusted average point rain =    3.116(In)

Sub-Area Data:
Area(Ac.)         Runoff Index   Impervious %
    75.830           91.00         0.000
 Total Area Entered =     75.83(Ac.)


RI    RI   Infil. Rate Impervious   Adj. Infil. Rate  Area%     F
AMC2 AMC-2     (In/Hr)    (Dec.%)     (In/Hr)      (Dec.)    (In/Hr)
91.0  91.0      0.117     0.000        0.117       1.000      0.117
                                                 Sum (F) =   0.117
Area averaged mean soil loss (F) (In/Hr) =  0.117
Minimum soil loss rate ((In/Hr)) =  0.059
(for 24 hour storm duration)
Soil low loss rate (decimal) =   0.900
------------------------------------------------------------------------

               U n i t  H y d r o g r a p h
                      VALLEY S-Curve
------------------------------------------------------------------
               Unit Hydrograph Data
------------------------------------------------------------------
Unit time period   Time % of lag   Distribution   Unit Hydrograph
    (hrs)                          Graph %           (CFS)
```

1	0.083	76.653	12.379	9.460
2	0.167	153.307	43.174	32.994
3	0.250	229.960	20.942	16.004
4	0.333	306.613	8.476	6.477
5	0.417	383.266	5.111	3.906
6	0.500	459.920	3.287	2.512
7	0.583	536.573	2.310	1.765
8	0.667	613.226	1.661	1.270
9	0.750	689.880	1.141	0.872
10	0.833	766.533	0.802	0.613
11	0.917	843.186	0.718	0.549
		Sum = 100.000	Sum=	76.422

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr) Max	Low	Effective (In/Hr)
1	0.08	0.07	0.025	(0.207)	0.022	0.002
2	0.17	0.07	0.025	(0.207)	0.022	0.002
3	0.25	0.07	0.025	(0.206)	0.022	0.002
4	0.33	0.10	0.037	(0.205)	0.034	0.004
5	0.42	0.10	0.037	(0.204)	0.034	0.004
6	0.50	0.10	0.037	(0.203)	0.034	0.004
7	0.58	0.10	0.037	(0.203)	0.034	0.004
8	0.67	0.10	0.037	(0.202)	0.034	0.004
9	0.75	0.10	0.037	(0.201)	0.034	0.004
10	0.83	0.13	0.050	(0.200)	0.045	0.005
11	0.92	0.13	0.050	(0.199)	0.045	0.005
12	1.00	0.13	0.050	(0.199)	0.045	0.005
13	1.08	0.10	0.037	(0.198)	0.034	0.004
14	1.17	0.10	0.037	(0.197)	0.034	0.004
15	1.25	0.10	0.037	(0.196)	0.034	0.004
16	1.33	0.10	0.037	(0.196)	0.034	0.004
17	1.42	0.10	0.037	(0.195)	0.034	0.004
18	1.50	0.10	0.037	(0.194)	0.034	0.004
19	1.58	0.10	0.037	(0.193)	0.034	0.004
20	1.67	0.10	0.037	(0.192)	0.034	0.004
21	1.75	0.10	0.037	(0.192)	0.034	0.004
22	1.83	0.13	0.050	(0.191)	0.045	0.005
23	1.92	0.13	0.050	(0.190)	0.045	0.005
24	2.00	0.13	0.050	(0.189)	0.045	0.005
25	2.08	0.13	0.050	(0.189)	0.045	0.005
26	2.17	0.13	0.050	(0.188)	0.045	0.005
27	2.25	0.13	0.050	(0.187)	0.045	0.005
28	2.33	0.13	0.050	(0.186)	0.045	0.005
29	2.42	0.13	0.050	(0.186)	0.045	0.005
30	2.50	0.13	0.050	(0.185)	0.045	0.005
31	2.58	0.17	0.062	(0.184)	0.056	0.006
32	2.67	0.17	0.062	(0.183)	0.056	0.006
33	2.75	0.17	0.062	(0.183)	0.056	0.006
34	2.83	0.17	0.062	(0.182)	0.056	0.006
35	2.92	0.17	0.062	(0.181)	0.056	0.006
36	3.00	0.17	0.062	(0.180)	0.056	0.006
37	3.08	0.17	0.062	(0.180)	0.056	0.006
38	3.17	0.17	0.062	(0.179)	0.056	0.006
39	3.25	0.17	0.062	(0.178)	0.056	0.006
40	3.33	0.17	0.062	(0.177)	0.056	0.006
41	3.42	0.17	0.062	(0.177)	0.056	0.006
42	3.50	0.17	0.062	(0.176)	0.056	0.006
43	3.58	0.17	0.062	(0.175)	0.056	0.006
44	3.67	0.17	0.062	(0.174)	0.056	0.006
45	3.75	0.17	0.062	(0.174)	0.056	0.006
46	3.83	0.20	0.075	(0.173)	0.067	0.007
47	3.92	0.20	0.075	(0.172)	0.067	0.007
48	4.00	0.20	0.075	(0.171)	0.067	0.007
49	4.08	0.20	0.075	(0.171)	0.067	0.007
50	4.17	0.20	0.075	(0.170)	0.067	0.007
51	4.25	0.20	0.075	(0.169)	0.067	0.007
52	4.33	0.23	0.087	(0.169)	0.079	0.009
53	4.42	0.23	0.087	(0.168)	0.079	0.009
54	4.50	0.23	0.087	(0.167)	0.079	0.009
55	4.58	0.23	0.087	(0.166)	0.079	0.009
56	4.67	0.23	0.087	(0.166)	0.079	0.009
57	4.75	0.23	0.087	(0.165)	0.079	0.009
58	4.83	0.27	0.100	(0.164)	0.090	0.010
59	4.92	0.27	0.100	(0.164)	0.090	0.010
60	5.00	0.27	0.100	(0.163)	0.090	0.010
61	5.08	0.20	0.075	(0.162)	0.067	0.007
62	5.17	0.20	0.075	(0.161)	0.067	0.007
63	5.25	0.20	0.075	(0.161)	0.067	0.007
64	5.33	0.23	0.087	(0.160)	0.079	0.009
65	5.42	0.23	0.087	(0.159)	0.079	0.009

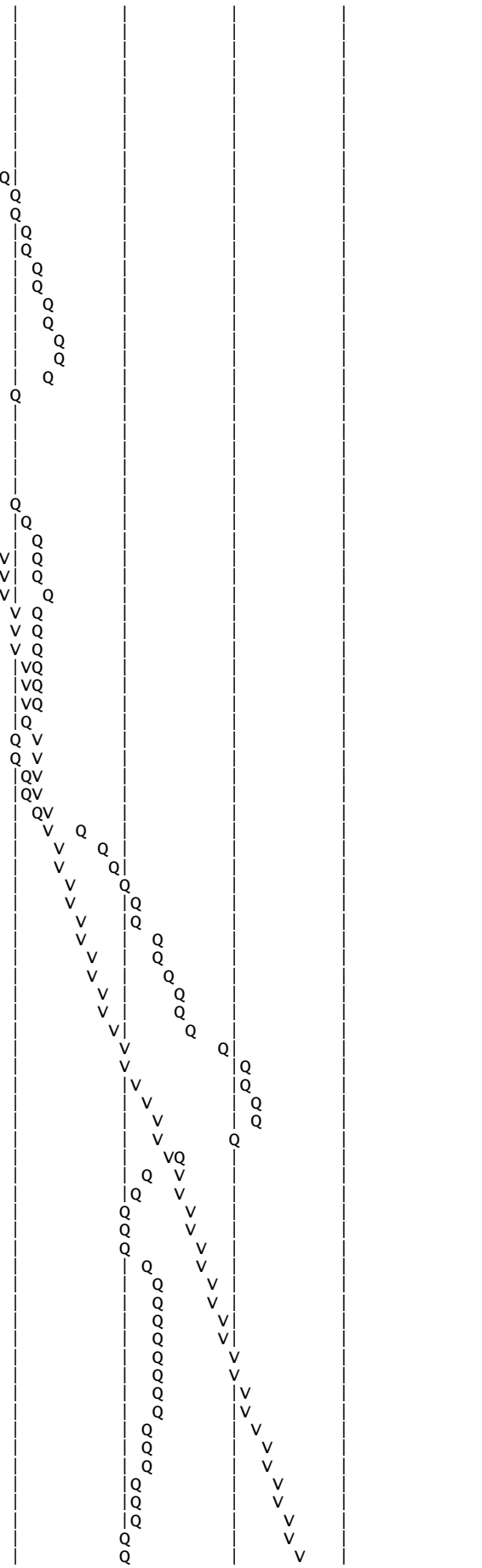
66	5.50	0.23	0.087	(0.159)	0.079	0.009
67	5.58	0.27	0.100	(0.158)	0.090	0.010
68	5.67	0.27	0.100	(0.157)	0.090	0.010
69	5.75	0.27	0.100	(0.157)	0.090	0.010
70	5.83	0.27	0.100	(0.156)	0.090	0.010
71	5.92	0.27	0.100	(0.155)	0.090	0.010
72	6.00	0.27	0.100	(0.154)	0.090	0.010
73	6.08	0.30	0.112	(0.154)	0.101	0.011
74	6.17	0.30	0.112	(0.153)	0.101	0.011
75	6.25	0.30	0.112	(0.152)	0.101	0.011
76	6.33	0.30	0.112	(0.152)	0.101	0.011
77	6.42	0.30	0.112	(0.151)	0.101	0.011
78	6.50	0.30	0.112	(0.150)	0.101	0.011
79	6.58	0.33	0.125	(0.150)	0.112	0.012
80	6.67	0.33	0.125	(0.149)	0.112	0.012
81	6.75	0.33	0.125	(0.148)	0.112	0.012
82	6.83	0.33	0.125	(0.148)	0.112	0.012
83	6.92	0.33	0.125	(0.147)	0.112	0.012
84	7.00	0.33	0.125	(0.146)	0.112	0.012
85	7.08	0.33	0.125	(0.146)	0.112	0.012
86	7.17	0.33	0.125	(0.145)	0.112	0.012
87	7.25	0.33	0.125	(0.144)	0.112	0.012
88	7.33	0.37	0.137	(0.144)	0.123	0.014
89	7.42	0.37	0.137	(0.143)	0.123	0.014
90	7.50	0.37	0.137	(0.142)	0.123	0.014
91	7.58	0.40	0.150	(0.142)	0.135	0.015
92	7.67	0.40	0.150	(0.141)	0.135	0.015
93	7.75	0.40	0.150	(0.140)	0.135	0.015
94	7.83	0.43	0.162	0.140	(0.146)	0.022
95	7.92	0.43	0.162	0.139	(0.146)	0.023
96	8.00	0.43	0.162	0.138	(0.146)	0.024
97	8.08	0.50	0.187	0.138	(0.168)	0.049
98	8.17	0.50	0.187	0.137	(0.168)	0.050
99	8.25	0.50	0.187	0.137	(0.168)	0.050
100	8.33	0.50	0.187	0.136	(0.168)	0.051
101	8.42	0.50	0.187	0.135	(0.168)	0.052
102	8.50	0.50	0.187	0.135	(0.168)	0.052
103	8.58	0.53	0.199	0.134	(0.179)	0.065
104	8.67	0.53	0.199	0.133	(0.179)	0.066
105	8.75	0.53	0.199	0.133	(0.179)	0.067
106	8.83	0.57	0.212	0.132	(0.191)	0.080
107	8.92	0.57	0.212	0.131	(0.191)	0.080
108	9.00	0.57	0.212	0.131	(0.191)	0.081
109	9.08	0.63	0.237	0.130	(0.213)	0.107
110	9.17	0.63	0.237	0.130	(0.213)	0.107
111	9.25	0.63	0.237	0.129	(0.213)	0.108
112	9.33	0.67	0.249	0.128	(0.224)	0.121
113	9.42	0.67	0.249	0.128	(0.224)	0.121
114	9.50	0.67	0.249	0.127	(0.224)	0.122
115	9.58	0.70	0.262	0.127	(0.236)	0.135
116	9.67	0.70	0.262	0.126	(0.236)	0.136
117	9.75	0.70	0.262	0.125	(0.236)	0.136
118	9.83	0.73	0.274	0.125	(0.247)	0.149
119	9.92	0.73	0.274	0.124	(0.247)	0.150
120	10.00	0.73	0.274	0.124	(0.247)	0.151
121	10.08	0.50	0.187	0.123	(0.168)	0.064
122	10.17	0.50	0.187	0.122	(0.168)	0.065
123	10.25	0.50	0.187	0.122	(0.168)	0.065
124	10.33	0.50	0.187	0.121	(0.168)	0.066
125	10.42	0.50	0.187	0.121	(0.168)	0.066
126	10.50	0.50	0.187	0.120	(0.168)	0.067
127	10.58	0.67	0.249	0.119	(0.224)	0.130
128	10.67	0.67	0.249	0.119	(0.224)	0.130
129	10.75	0.67	0.249	0.118	(0.224)	0.131
130	10.83	0.67	0.249	0.118	(0.224)	0.132
131	10.92	0.67	0.249	0.117	(0.224)	0.132
132	11.00	0.67	0.249	0.117	(0.224)	0.133
133	11.08	0.63	0.237	0.116	(0.213)	0.121
134	11.17	0.63	0.237	0.115	(0.213)	0.121
135	11.25	0.63	0.237	0.115	(0.213)	0.122
136	11.33	0.63	0.237	0.114	(0.213)	0.123
137	11.42	0.63	0.237	0.114	(0.213)	0.123
138	11.50	0.63	0.237	0.113	(0.213)	0.124
139	11.58	0.57	0.212	0.113	(0.191)	0.099
140	11.67	0.57	0.212	0.112	(0.191)	0.100
141	11.75	0.57	0.212	0.111	(0.191)	0.100
142	11.83	0.60	0.224	0.111	(0.202)	0.113
143	11.92	0.60	0.224	0.110	(0.202)	0.114
144	12.00	0.60	0.224	0.110	(0.202)	0.115
145	12.08	0.83	0.312	0.109	(0.280)	0.202
146	12.17	0.83	0.312	0.109	(0.280)	0.203
147	12.25	0.83	0.312	0.108	(0.280)	0.203
148	12.33	0.87	0.324	0.108	(0.292)	0.216
149	12.42	0.87	0.324	0.107	(0.292)	0.217
150	12.50	0.87	0.324	0.107	(0.292)	0.218
151	12.58	0.93	0.349	0.106	(0.314)	0.243

152	12.67	0.93	0.349	0.105	(0.314)	0.244
153	12.75	0.93	0.349	0.105	(0.314)	0.244
154	12.83	0.97	0.361	0.104	(0.325)	0.257
155	12.92	0.97	0.361	0.104	(0.325)	0.258
156	13.00	0.97	0.361	0.103	(0.325)	0.258
157	13.08	1.13	0.424	0.103	(0.381)	0.321
158	13.17	1.13	0.424	0.102	(0.381)	0.322
159	13.25	1.13	0.424	0.102	(0.381)	0.322
160	13.33	1.13	0.424	0.101	(0.381)	0.323
161	13.42	1.13	0.424	0.101	(0.381)	0.323
162	13.50	1.13	0.424	0.100	(0.381)	0.324
163	13.58	0.77	0.287	0.100	(0.258)	0.187
164	13.67	0.77	0.287	0.099	(0.258)	0.187
165	13.75	0.77	0.287	0.099	(0.258)	0.188
166	13.83	0.77	0.287	0.098	(0.258)	0.188
167	13.92	0.77	0.287	0.098	(0.258)	0.189
168	14.00	0.77	0.287	0.097	(0.258)	0.189
169	14.08	0.90	0.337	0.097	(0.303)	0.240
170	14.17	0.90	0.337	0.096	(0.303)	0.240
171	14.25	0.90	0.337	0.096	(0.303)	0.241
172	14.33	0.87	0.324	0.095	(0.292)	0.229
173	14.42	0.87	0.324	0.095	(0.292)	0.229
174	14.50	0.87	0.324	0.094	(0.292)	0.230
175	14.58	0.87	0.324	0.094	(0.292)	0.230
176	14.67	0.87	0.324	0.093	(0.292)	0.231
177	14.75	0.87	0.324	0.093	(0.292)	0.231
178	14.83	0.83	0.312	0.092	(0.280)	0.219
179	14.92	0.83	0.312	0.092	(0.280)	0.220
180	15.00	0.83	0.312	0.091	(0.280)	0.220
181	15.08	0.80	0.299	0.091	(0.269)	0.208
182	15.17	0.80	0.299	0.090	(0.269)	0.209
183	15.25	0.80	0.299	0.090	(0.269)	0.209
184	15.33	0.77	0.287	0.090	(0.258)	0.197
185	15.42	0.77	0.287	0.089	(0.258)	0.198
186	15.50	0.77	0.287	0.089	(0.258)	0.198
187	15.58	0.63	0.237	0.088	(0.213)	0.149
188	15.67	0.63	0.237	0.088	(0.213)	0.149
189	15.75	0.63	0.237	0.087	(0.213)	0.150
190	15.83	0.63	0.237	0.087	(0.213)	0.150
191	15.92	0.63	0.237	0.086	(0.213)	0.150
192	16.00	0.63	0.237	0.086	(0.213)	0.151
193	16.08	0.13	0.050	(0.085)	0.045	0.005
194	16.17	0.13	0.050	(0.085)	0.045	0.005
195	16.25	0.13	0.050	(0.085)	0.045	0.005
196	16.33	0.13	0.050	(0.084)	0.045	0.005
197	16.42	0.13	0.050	(0.084)	0.045	0.005
198	16.50	0.13	0.050	(0.083)	0.045	0.005
199	16.58	0.10	0.037	(0.083)	0.034	0.004
200	16.67	0.10	0.037	(0.082)	0.034	0.004
201	16.75	0.10	0.037	(0.082)	0.034	0.004
202	16.83	0.10	0.037	(0.082)	0.034	0.004
203	16.92	0.10	0.037	(0.081)	0.034	0.004
204	17.00	0.10	0.037	(0.081)	0.034	0.004
205	17.08	0.17	0.062	(0.080)	0.056	0.006
206	17.17	0.17	0.062	(0.080)	0.056	0.006
207	17.25	0.17	0.062	(0.080)	0.056	0.006
208	17.33	0.17	0.062	(0.079)	0.056	0.006
209	17.42	0.17	0.062	(0.079)	0.056	0.006
210	17.50	0.17	0.062	(0.078)	0.056	0.006
211	17.58	0.17	0.062	(0.078)	0.056	0.006
212	17.67	0.17	0.062	(0.078)	0.056	0.006
213	17.75	0.17	0.062	(0.077)	0.056	0.006
214	17.83	0.13	0.050	(0.077)	0.045	0.005
215	17.92	0.13	0.050	(0.076)	0.045	0.005
216	18.00	0.13	0.050	(0.076)	0.045	0.005
217	18.08	0.13	0.050	(0.076)	0.045	0.005
218	18.17	0.13	0.050	(0.075)	0.045	0.005
219	18.25	0.13	0.050	(0.075)	0.045	0.005
220	18.33	0.13	0.050	(0.075)	0.045	0.005
221	18.42	0.13	0.050	(0.074)	0.045	0.005
222	18.50	0.13	0.050	(0.074)	0.045	0.005
223	18.58	0.10	0.037	(0.074)	0.034	0.004
224	18.67	0.10	0.037	(0.073)	0.034	0.004
225	18.75	0.10	0.037	(0.073)	0.034	0.004
226	18.83	0.07	0.025	(0.072)	0.022	0.002
227	18.92	0.07	0.025	(0.072)	0.022	0.002
228	19.00	0.07	0.025	(0.072)	0.022	0.002
229	19.08	0.10	0.037	(0.071)	0.034	0.004
230	19.17	0.10	0.037	(0.071)	0.034	0.004
231	19.25	0.10	0.037	(0.071)	0.034	0.004
232	19.33	0.13	0.050	(0.070)	0.045	0.005
233	19.42	0.13	0.050	(0.070)	0.045	0.005
234	19.50	0.13	0.050	(0.070)	0.045	0.005
235	19.58	0.10	0.037	(0.069)	0.034	0.004
236	19.67	0.10	0.037	(0.069)	0.034	0.004
237	19.75	0.10	0.037	(0.069)	0.034	0.004

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238  19.83     0.07      0.025       (  0.069)       0.022        0.002
239  19.92     0.07      0.025       (  0.068)       0.022        0.002
240  20.00     0.07      0.025       (  0.068)       0.022        0.002
241  20.08     0.10      0.037       (  0.068)       0.034        0.004
242  20.17     0.10      0.037       (  0.067)       0.034        0.004
243  20.25     0.10      0.037       (  0.067)       0.034        0.004
244  20.33     0.10      0.037       (  0.067)       0.034        0.004
245  20.42     0.10      0.037       (  0.066)       0.034        0.004
246  20.50     0.10      0.037       (  0.066)       0.034        0.004
247  20.58     0.10      0.037       (  0.066)       0.034        0.004
248  20.67     0.10      0.037       (  0.066)       0.034        0.004
249  20.75     0.10      0.037       (  0.065)       0.034        0.004
250  20.83     0.07      0.025       (  0.065)       0.022        0.002
251  20.92     0.07      0.025       (  0.065)       0.022        0.002
252  21.00     0.07      0.025       (  0.065)       0.022        0.002
253  21.08     0.10      0.037       (  0.064)       0.034        0.004
254  21.17     0.10      0.037       (  0.064)       0.034        0.004
255  21.25     0.10      0.037       (  0.064)       0.034        0.004
256  21.33     0.07      0.025       (  0.064)       0.022        0.002
257  21.42     0.07      0.025       (  0.063)       0.022        0.002
258  21.50     0.07      0.025       (  0.063)       0.022        0.002
259  21.58     0.10      0.037       (  0.063)       0.034        0.004
260  21.67     0.10      0.037       (  0.063)       0.034        0.004
261  21.75     0.10      0.037       (  0.062)       0.034        0.004
262  21.83     0.07      0.025       (  0.062)       0.022        0.002
263  21.92     0.07      0.025       (  0.062)       0.022        0.002
264  22.00     0.07      0.025       (  0.062)       0.022        0.002
265  22.08     0.10      0.037       (  0.062)       0.034        0.004
266  22.17     0.10      0.037       (  0.061)       0.034        0.004
267  22.25     0.10      0.037       (  0.061)       0.034        0.004
268  22.33     0.07      0.025       (  0.061)       0.022        0.002
269  22.42     0.07      0.025       (  0.061)       0.022        0.002
270  22.50     0.07      0.025       (  0.061)       0.022        0.002
271  22.58     0.07      0.025       (  0.060)       0.022        0.002
272  22.67     0.07      0.025       (  0.060)       0.022        0.002
273  22.75     0.07      0.025       (  0.060)       0.022        0.002
274  22.83     0.07      0.025       (  0.060)       0.022        0.002
275  22.92     0.07      0.025       (  0.060)       0.022        0.002
276  23.00     0.07      0.025       (  0.060)       0.022        0.002
277  23.08     0.07      0.025       (  0.060)       0.022        0.002
278  23.17     0.07      0.025       (  0.059)       0.022        0.002
279  23.25     0.07      0.025       (  0.059)       0.022        0.002
280  23.33     0.07      0.025       (  0.059)       0.022        0.002
281  23.42     0.07      0.025       (  0.059)       0.022        0.002
282  23.50     0.07      0.025       (  0.059)       0.022        0.002
283  23.58     0.07      0.025       (  0.059)       0.022        0.002
284  23.67     0.07      0.025       (  0.059)       0.022        0.002
285  23.75     0.07      0.025       (  0.059)       0.022        0.002
286  23.83     0.07      0.025       (  0.059)       0.022        0.002
287  23.92     0.07      0.025       (  0.059)       0.022        0.002
288  24.00     0.07      0.025       (  0.059)       0.022        0.002
               (Loss Rate Not Used)
    Sum =     100.0                                  Sum =    16.7
      Flood volume = Effective rainfall      1.39(In)
       times area      75.8(Ac.)/[(In)/(Ft.)] =       8.8(Ac.Ft)
      Total soil loss =      1.72(In)
      Total soil loss =    10.900(Ac.Ft)
      Total rainfall =      3.12(In)
      Flood volume =      382945.0 Cubic Feet
      Total soil loss =      474786.4 Cubic Feet
      ---------------------------------------------------------------
       Peak flow rate of this hydrograph =     24.333(CFS)
      ---------------------------------------------------------------
      +++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                         24 - H O U R    S T O R M
                    R u n o f f      H y d r o g r a p h
      ---------------------------------------------------------------
                  Hydrograph in   5   Minute intervals ((CFS))

      ---------------------------------------------------------------
 Time(h+m) Volume Ac.Ft   Q(CFS)  0        7.5      15.0      22.5      30.0
 ---------------------------------------------------------------------------
   0+ 5       0.0002      0.02  Q          |          |          |          |
   0+10       0.0009      0.11  Q          |          |          |          |
   0+15       0.0019      0.15  Q          |          |          |          |
   0+20       0.0031      0.17  Q          |          |          |          |
   0+25       0.0046      0.22  Q          |          |          |          |
   0+30       0.0064      0.25  Q          |          |          |          |
   0+35       0.0082      0.26  Q          |          |          |          |
   0+40       0.0101      0.27  Q          |          |          |          |
   0+45       0.0120      0.28  Q          |          |          |          |
   0+50       0.0140      0.29  Q          |          |          |          |
   0+55       0.0163      0.34  Q          |          |          |          |
   1+ 0       0.0187      0.36  Q          |          |          |          |
   1+ 5       0.0212      0.35  Q          |          |          |          |
   1+10       0.0234      0.32  Q          |          |          |          |
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1+15	0.0255	0.30	Q				
1+20	0.0275	0.30	Q				
1+25	0.0295	0.29	Q				
1+30	0.0315	0.29	Q				
1+35	0.0335	0.29	Q				
1+40	0.0355	0.29	Q				
1+45	0.0375	0.29	Q				
1+50	0.0395	0.30	Q				
1+55	0.0419	0.34	Q				
2+ 0	0.0443	0.36	Q				
2+ 5	0.0469	0.37	Q				
2+10	0.0494	0.37	Q				
2+15	0.0520	0.37	Q				
2+20	0.0546	0.38	Q				
2+25	0.0572	0.38	Q				
2+30	0.0598	0.38	Q				
2+35	0.0625	0.39	Q				
2+40	0.0655	0.43	Q				
2+45	0.0686	0.45	Q				
2+50	0.0718	0.46	Q				
2+55	0.0750	0.47	Q				
3+ 0	0.0783	0.47	Q				
3+ 5	0.0815	0.47	Q				
3+10	0.0848	0.47	Q				
3+15	0.0881	0.48	Q				
3+20	0.0914	0.48	Q				
3+25	0.0946	0.48	Q				
3+30	0.0979	0.48	Q				
3+35	0.1012	0.48	Q				
3+40	0.1045	0.48	Q				
3+45	0.1078	0.48	Q				
3+50	0.1111	0.49	Q				
3+55	0.1148	0.53	Q				
4+ 0	0.1186	0.55	Q				
4+ 5	0.1224	0.56	Q				
4+10	0.1263	0.56	Q				
4+15	0.1302	0.57	Q				
4+20	0.1342	0.58	Q				
4+25	0.1384	0.62	Q				
4+30	0.1429	0.64	Q				
4+35	0.1474	0.65	Q				
4+40	0.1519	0.66	Q				
4+45	0.1564	0.66	Q				
4+50	0.1611	0.67	Q				
4+55	0.1660	0.72	Q				
5+ 0	0.1711	0.74	Q				
5+ 5	0.1761	0.72	Q				
5+10	0.1806	0.65	Q				
5+15	0.1848	0.61	Q				
5+20	0.1889	0.61	Q				
5+25	0.1934	0.64	Q				
5+30	0.1979	0.66	Q				
5+35	0.2025	0.67	Q				
5+40	0.2074	0.72	Q				
5+45	0.2125	0.74	Q				
5+50	0.2176	0.75	Q				
5+55	0.2228	0.75	|Q				
6+ 0	0.2280	0.75	|Q				
6+ 5	0.2333	0.77	|Q				
6+10	0.2389	0.81	|Q				
6+15	0.2447	0.83	|Q				
6+20	0.2505	0.84	|Q				
6+25	0.2563	0.85	|Q				
6+30	0.2622	0.85	|Q				
6+35	0.2681	0.87	|Q				
6+40	0.2744	0.91	|Q				
6+45	0.2808	0.93	|Q				
6+50	0.2872	0.94	|Q				
6+55	0.2937	0.94	|Q				
7+ 0	0.3003	0.95	|Q				
7+ 5	0.3068	0.95	|Q				
7+10	0.3133	0.95	|Q				
7+15	0.3199	0.95	|Q				
7+20	0.3265	0.96	|Q				
7+25	0.3335	1.01	|Q				
7+30	0.3405	1.03	|Q				
7+35	0.3477	1.05	|Q				
7+40	0.3552	1.09	|Q				
7+45	0.3629	1.11	|Q				
7+50	0.3712	1.19	|Q				
7+55	0.3811	1.45	|Q				
8+ 0	0.3921	1.60	|VQ				
8+ 5	0.4054	1.92	|VQ				
8+10	0.4248	2.82	|V Q				
8+15	0.4474	3.28	| V Q				
8+20	0.4715	3.50	| V Q				

8+25	0.4966	3.66	
8+30	0.5226	3.77	
8+35	0.5501	3.99	
8+40	0.5809	4.48	
8+45	0.6137	4.75	
8+50	0.6482	5.01	
8+55	0.6863	5.54	
9+ 0	0.7263	5.81	
9+ 5	0.7690	6.20	
9+10	0.8182	7.14	
9+15	0.8707	7.62	
9+20	0.9257	7.98	
9+25	0.9846	8.56	
9+30	1.0458	8.88	
9+35	1.1090	9.18	
9+40	1.1759	9.72	
9+45	1.2449	10.02	
9+50	1.3159	10.30	
9+55	1.3905	10.84	
10+ 0	1.4672	11.13	
10+ 5	1.5392	10.46	
10+10	1.5922	7.70	
10+15	1.6362	6.39	
10+20	1.6768	5.90	
10+25	1.7155	5.62	
10+30	1.7531	5.46	
10+35	1.7941	5.95	
10+40	1.8488	7.95	
10+45	1.9102	8.91	
10+50	1.9743	9.31	
10+55	2.0401	9.55	
11+ 0	2.1072	9.75	
11+ 5	2.1746	9.79	
11+10	2.2400	9.50	
11+15	2.3047	9.40	
11+20	2.3694	9.40	
11+25	2.4343	9.43	
11+30	2.4993	9.44	
11+35	2.5629	9.22	
11+40	2.6209	8.43	
11+45	2.6764	8.06	
11+50	2.7319	8.05	
11+55	2.7897	8.40	
12+ 0	2.8488	8.58	
12+ 5	2.9141	9.49	
12+10	2.9997	12.43	
12+15	3.0953	13.87	
12+20	3.1959	14.61	
12+25	3.3019	15.40	
12+30	3.4113	15.87	
12+35	3.5242	16.39	
12+40	3.6442	17.42	
12+45	3.7679	17.97	
12+50	3.8944	18.37	
12+55	4.0251	18.98	
13+ 0	4.1580	19.29	
13+ 5	4.2961	20.06	
13+10	4.4493	22.24	
13+15	4.6100	23.33	
13+20	4.7740	23.81	
13+25	4.9402	24.13	
13+30	5.1077	24.33	
13+35	5.2675	23.19	
13+40	5.3969	18.79	
13+45	5.5118	16.69	
13+50	5.6212	15.88	
13+55	5.7273	15.41	
14+ 0	5.8314	15.11	
14+ 5	5.9373	15.38	
14+10	6.0536	16.89	
14+15	6.1748	17.60	
14+20	6.2971	17.76	
14+25	6.4177	17.51	
14+30	6.5380	17.47	
14+35	6.6587	17.52	
14+40	6.7797	17.57	
14+45	6.9010	17.62	
14+50	7.0218	17.54	
14+55	7.1401	17.18	
15+ 0	7.2572	17.01	
15+ 5	7.3732	16.84	
15+10	7.4862	16.40	
15+15	7.5978	16.21	
15+20	7.7082	16.02	
15+25	7.8155	15.58	
15+30	7.9214	15.38	

```
15+35     8.0235    14.83  |          |          Q|          |      V    |
15+40     8.1141    13.15  |          |         Q |          |      V    |
15+45     8.1991    12.34  |          |        Q  |          |       V   |
15+50     8.2819    12.02  |          |       Q   |          |       V   |
15+55     8.3635    11.84  |          |      Q    |          |        V  |
16+ 0     8.4443    11.74  |          |      Q    |          |        V  |
16+ 5     8.5152    10.29  |          |   Q       |          |        V  |
16+10     8.5525     5.42  |        Q  |           |          |        V  |
16+15     8.5735     3.05  |     Q     |           |          |         V |
16+20     8.5878     2.08  |  Q        |           |          |         V |
16+25     8.5980     1.48  |Q          |           |          |         V |
16+30     8.6057     1.12  |Q          |           |          |         V |
16+35     8.6116     0.85  |Q          |           |          |         V |
16+40     8.6159     0.62  Q           |           |          |         V |
16+45     8.6192     0.48  Q           |           |          |         V |
16+50     8.6218     0.38  Q           |           |          |         V |
16+55     8.6238     0.30  Q           |           |          |         V |
17+ 0     8.6258     0.29  Q           |           |          |         V |
17+ 5     8.6280     0.31  Q           |           |          |         V |
17+10     8.6307     0.39  Q           |           |          |         V |
17+15     8.6337     0.43  Q           |           |          |         V |
17+20     8.6368     0.45  Q           |           |          |         V |
17+25     8.6399     0.46  Q           |           |          |         V |
17+30     8.6431     0.46  Q           |           |          |         V |
17+35     8.6463     0.47  Q           |           |          |         V |
17+40     8.6496     0.47  Q           |           |          |         V |
17+45     8.6528     0.47  Q           |           |          |         V |
17+50     8.6560     0.46  Q           |           |          |         V |
17+55     8.6590     0.42  Q           |           |          |         V |
18+ 0     8.6617     0.40  Q           |           |          |         V |
18+ 5     8.6645     0.40  Q           |           |          |         V |
18+10     8.6671     0.39  Q           |           |          |         V |
18+15     8.6698     0.39  Q           |           |          |         V |
18+20     8.6725     0.39  Q           |           |          |         V |
18+25     8.6751     0.38  Q           |           |          |         V |
18+30     8.6777     0.38  Q           |           |          |         V |
18+35     8.6803     0.37  Q           |           |          |         V |
18+40     8.6826     0.33  Q           |           |          |         V |
18+45     8.6847     0.31  Q           |           |          |         V |
18+50     8.6867     0.29  Q           |           |          |         V |
18+55     8.6883     0.24  Q           |           |          |         V |
19+ 0     8.6898     0.22  Q           |           |          |         V |
19+ 5     8.6914     0.22  Q           |           |          |         V |
19+10     8.6931     0.26  Q           |           |          |         V |
19+15     8.6950     0.27  Q           |           |          |         V |
19+20     8.6970     0.29  Q           |           |          |         V |
19+25     8.6993     0.33  Q           |           |          |         V |
19+30     8.7017     0.35  Q           |           |          |         V |
19+35     8.7041     0.35  Q           |           |          |         V |
19+40     8.7063     0.32  Q           |           |          |         V |
19+45     8.7084     0.30  Q           |           |          |         V |
19+50     8.7103     0.28  Q           |           |          |         V |
19+55     8.7120     0.24  Q           |           |          |         V |
20+ 0     8.7135     0.22  Q           |           |          |         V |
20+ 5     8.7150     0.22  Q           |           |          |         V |
20+10     8.7168     0.26  Q           |           |          |         V |
20+15     8.7186     0.27  Q           |           |          |         V |
20+20     8.7205     0.28  Q           |           |          |         V |
20+25     8.7225     0.28  Q           |           |          |         V |
20+30     8.7244     0.28  Q           |           |          |         V |
20+35     8.7263     0.28  Q           |           |          |         V |
20+40     8.7283     0.28  Q           |           |          |         V |
20+45     8.7302     0.28  Q           |           |          |         V |
20+50     8.7321     0.27  Q           |           |          |         V |
20+55     8.7337     0.23  Q           |           |          |         V |
21+ 0     8.7352     0.21  Q           |           |          |         V |
21+ 5     8.7367     0.22  Q           |           |          |         V |
21+10     8.7384     0.25  Q           |           |          |         V |
21+15     8.7403     0.27  Q           |           |          |         V |
21+20     8.7421     0.26  Q           |           |          |         V |
21+25     8.7437     0.23  Q           |           |          |         V |
21+30     8.7451     0.21  Q           |           |          |         V |
21+35     8.7466     0.21  Q           |           |          |         V |
21+40     8.7483     0.25  Q           |           |          |         V |
21+45     8.7501     0.27  Q           |           |          |         V |
21+50     8.7520     0.26  Q           |           |          |         V |
21+55     8.7535     0.23  Q           |           |          |         V |
22+ 0     8.7549     0.21  Q           |           |          |         V |
22+ 5     8.7564     0.21  Q           |           |          |         V |
22+10     8.7581     0.25  Q           |           |          |         V |
22+15     8.7600     0.27  Q           |           |          |         V |
22+20     8.7618     0.26  Q           |           |          |         V |
22+25     8.7634     0.23  Q           |           |          |         V |
22+30     8.7648     0.21  Q           |           |          |         V |
22+35     8.7662     0.20  Q           |           |          |         V |
22+40     8.7675     0.20  Q           |           |          |         V |
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   22+45       8.7689      0.20  Q          |          |          |          v|
   22+50       8.7702      0.19  Q          |          |          |          v|
   22+55       8.7716      0.19  Q          |          |          |          v|
   23+ 0       8.7729      0.19  Q          |          |          |          v|
   23+ 5       8.7742      0.19  Q          |          |          |          v|
   23+10       8.7755      0.19  Q          |          |          |          v|
   23+15       8.7768      0.19  Q          |          |          |          v|
   23+20       8.7781      0.19  Q          |          |          |          v|
   23+25       8.7794      0.19  Q          |          |          |          v|
   23+30       8.7808      0.19  Q          |          |          |          v|
   23+35       8.7821      0.19  Q          |          |          |          v|
   23+40       8.7834      0.19  Q          |          |          |          v|
   23+45       8.7847      0.19  Q          |          |          |          v|
   23+50       8.7860      0.19  Q          |          |          |          v|
   23+55       8.7873      0.19  Q          |          |          |          v|
   24+ 0       8.7886      0.19  Q          |          |          |          v|
   24+ 5       8.7898      0.17  Q          |          |          |          v|
   24+10       8.7904      0.08  Q          |          |          |          v|
   24+15       8.7907      0.04  Q          |          |          |          v|
   24+20       8.7909      0.03  Q          |          |          |          v|
   24+25       8.7910      0.02  Q          |          |          |          v|
   24+30       8.7911      0.01  Q          |          |          |          v|
   24+35       8.7911      0.01  Q          |          |          |          v|
   24+40       8.7912      0.01  Q          |          |          |          v|
   24+45       8.7912      0.00  Q          |          |          |          v|
   24+50       8.7912      0.00  Q          |          |          |          v|
-------------------------------------------------------------------------------
```

```
       U n i t   H y d r o g r a p h   A n a l y s i s

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              Study date  10/17/24 File: exa1001100.out

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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978


Program License Serial Number 5006

------------------------------------------------------------------------
 English (in-lb) Input Units Used
 English Rainfall Data (Inches) Input Values Used

 English Units used in output format



------------------------------------------------------------------------
------------------------------------------------------------------------
Drainage Area =      75.83(Ac.)  =      0.118 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment =      75.83(Ac.)  =      0.118 Sq. Mi.
Length along longest watercourse =    2577.00(Ft.)
Length along longest watercourse measured to centroid =    1289.00(Ft.)
Length along longest watercourse =      0.488 Mi.
Length along longest watercourse measured to centroid =      0.244 Mi.
Difference in elevation =     145.20(Ft.)
Slope along watercourse =    297.4994 Ft./Mi.
Average Manning's 'N' = 0.030
Lag time =    0.109 Hr.
Lag time =     6.52 Min.
25% of lag time =     1.63 Min.
40% of lag time =     2.61 Min.
Unit time =     5.00 Min.
Duration of storm = 1 Hour(s)
User Entered Base Flow =     0.00(CFS)

2 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
       75.83           0.50                 37.91

100 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
       75.83           1.30                 98.58

STORM EVENT (YEAR) =  100.00
Area Averaged 2-Year Rainfall =    0.500(In)
Area Averaged 100-Year Rainfall =    1.300(In)

Point rain (area averaged) =    1.300(In)
Areal adjustment factor =   99.93 %
Adjusted average point rain =    1.299(In)

Sub-Area Data:
Area(Ac.)         Runoff Index   Impervious %
    75.830           91.00          0.000
 Total Area Entered =     75.83(Ac.)


RI    RI   Infil. Rate Impervious   Adj. Infil. Rate  Area%     F
AMC2 AMC-2     (In/Hr)    (Dec.%)     (In/Hr)      (Dec.)    (In/Hr)
91.0  91.0      0.117     0.000        0.117       1.000      0.117
                                                 Sum (F) =    0.117
Area averaged mean soil loss (F) (In/Hr) =  0.117
Minimum soil loss rate ((In/Hr)) =  0.059
(for 24 hour storm duration)
Soil low loss rate (decimal) =   0.900
------------------------------------------------------------------------
Slope of intensity-duration curve for a 1 hour storm =0.5500
------------------------------------------------------------------------

               U n i t  H y d r o g r a p h
                      VALLEY S-Curve
---------------------------------------------------------------
               Unit Hydrograph Data
---------------------------------------------------------------
```

Unit time period (hrs)		Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	76.653	12.379	9.460
2	0.167	153.307	43.174	32.994
3	0.250	229.960	20.942	16.004
4	0.333	306.613	8.476	6.477
5	0.417	383.266	5.111	3.906
6	0.500	459.920	3.287	2.512
7	0.583	536.573	2.310	1.765
8	0.667	613.226	1.661	1.270
9	0.750	689.880	1.141	0.872
10	0.833	766.533	0.802	0.613
11	0.917	843.186	0.718	0.549
			Sum = 100.000	Sum= 76.422

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr) Max	Low	Effective (In/Hr)
1	0.08	3.30	0.514	0.117	(0.463)	0.397
2	0.17	4.20	0.655	0.117	(0.589)	0.538
3	0.25	4.40	0.686	0.117	(0.617)	0.569
4	0.33	4.80	0.748	0.117	(0.673)	0.631
5	0.42	5.20	0.811	0.117	(0.730)	0.694
6	0.50	6.20	0.967	0.117	(0.870)	0.850
7	0.58	6.80	1.060	0.117	(0.954)	0.943
8	0.67	8.80	1.372	0.117	(1.235)	1.255
9	0.75	13.90	2.167	0.117	(1.950)	2.050
10	0.83	31.40	4.895	0.117	(4.406)	4.778
11	0.92	7.20	1.122	0.117	(1.010)	1.005
12	1.00	3.80	0.592	0.117	(0.533)	0.475
		(Loss Rate Not Used)				
Sum =		100.0			Sum =	14.2

Flood volume = Effective rainfall 1.18(In)
times area 75.8(Ac.)/[(In)/(Ft.)] = 7.5(Ac.Ft)
Total soil loss = 0.12(In)
Total soil loss = 0.739(Ac.Ft)
Total rainfall = 1.30(In)
Flood volume = 325390.1 Cubic Feet
Total soil loss = 32205.8 Cubic Feet

Peak flow rate of this hydrograph = 217.094(CFS)

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1 - H O U R S T O R M
R u n o f f H y d r o g r a p h

Hydrograph in 5 Minute intervals ((CFS))

Time(h+m)	Volume Ac.Ft	Q(CFS)	0	75.0	150.0	225.0	300.0
0+ 5	0.0259	3.76	Q	|	|	|	|
0+10	0.1513	18.21	V Q	|	|	|	|
0+15	0.3545	29.50	|V Q	|	|	|	|
0+20	0.6020	35.94	| VQ	|	|	|	|
0+25	0.8882	41.55	| VQ	|	|	|	|
0+30	1.2177	47.83	| Q	|	|	|	|
0+35	1.6064	56.45	| QV	|	|	|	|
0+40	2.0641	66.46	| Q |V	|	|	|	|
0+45	2.6686	87.77	| |Q V	|	|	|	|
0+50	3.6790	146.71	| |	Q|	|	|	|
0+55	5.1741	217.09	| |	|	VQ |	|	|
1+ 0	6.1268	138.33	| |	Q |	| V	|	|
1+ 5	6.6638	77.97	| Q	|	|	V |	|
1+10	6.9591	42.88	| Q |	|	|	| V	|
1+15	7.1379	25.96	| Q |	|	|	| V	|
1+20	7.2589	17.57	| Q |	|	|	| V	|
1+25	7.3423	12.12	|Q |	|	|	| V|	|
1+30	7.3990	8.23	|Q |	|	|	| V|	|
1+35	7.4372	5.54	Q |	|	|	| V|	|
1+40	7.4623	3.65	Q |	|	|	| V|	|
1+45	7.4681	0.84	Q |	|	|	| V|	|
1+50	7.4699	0.26	Q |	|	|	| V	|

```
       U n i t   H y d r o g r a p h   A n a l y s i s

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              Study date  10/17/24 File: exa1003100.out

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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978


Program License Serial Number 5006

------------------------------------------------------------------------
 English (in-lb) Input Units Used
 English Rainfall Data (Inches) Input Values Used

 English Units used in output format



------------------------------------------------------------------------
------------------------------------------------------------------------
Drainage Area =      75.83(Ac.)  =      0.118 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment =      75.83(Ac.)  =      0.118 Sq. Mi.
Length along longest watercourse =    2577.00(Ft.)
Length along longest watercourse measured to centroid =    1289.00(Ft.)
Length along longest watercourse =      0.488 Mi.
Length along longest watercourse measured to centroid =      0.244 Mi.
Difference in elevation =     145.20(Ft.)
Slope along watercourse =    297.4994 Ft./Mi.
Average Manning's 'N' = 0.030
Lag time =    0.109 Hr.
Lag time =     6.52 Min.
25% of lag time =     1.63 Min.
40% of lag time =     2.61 Min.
Unit time =     5.00 Min.
Duration of storm = 3 Hour(s)
User Entered Base Flow =     0.00(CFS)

2 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
       75.83           0.80                 60.66

100 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
       75.83           2.00                151.66

STORM EVENT (YEAR) =  100.00
Area Averaged 2-Year Rainfall =    0.800(In)
Area Averaged 100-Year Rainfall =    2.000(In)

Point rain (area averaged) =    2.000(In)
Areal adjustment factor =   99.97 %
Adjusted average point rain =    1.999(In)

Sub-Area Data:
Area(Ac.)         Runoff Index   Impervious %
    75.830           91.00         0.000
 Total Area Entered =     75.83(Ac.)


RI    RI   Infil. Rate Impervious   Adj. Infil. Rate  Area%     F
AMC2 AMC-2     (In/Hr)    (Dec.%)     (In/Hr)      (Dec.)    (In/Hr)
91.0  91.0      0.117     0.000        0.117       1.000      0.117
                                                 Sum (F) =   0.117
Area averaged mean soil loss (F) (In/Hr) =  0.117
Minimum soil loss rate ((In/Hr)) =  0.059
(for 24 hour storm duration)
Soil low loss rate (decimal) =   0.900
------------------------------------------------------------------------

               U n i t  H y d r o g r a p h
                      VALLEY S-Curve
------------------------------------------------------------------
               Unit Hydrograph Data
------------------------------------------------------------------
Unit time period   Time % of lag   Distribution   Unit Hydrograph
    (hrs)                          Graph %           (CFS)
```

1	0.083	76.653	12.379	9.460
2	0.167	153.307	43.174	32.994
3	0.250	229.960	20.942	16.004
4	0.333	306.613	8.476	6.477
5	0.417	383.266	5.111	3.906
6	0.500	459.920	3.287	2.512
7	0.583	536.573	2.310	1.765
8	0.667	613.226	1.661	1.270
9	0.750	689.880	1.141	0.872
10	0.833	766.533	0.802	0.613
11	0.917	843.186	0.718	0.549
		Sum = 100.000	Sum=	76.422

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr) Max	Low	Effective (In/Hr)
1	0.08	1.30	0.312	0.117	(0.281)	0.195
2	0.17	1.30	0.312	0.117	(0.281)	0.195
3	0.25	1.10	0.264	0.117	(0.238)	0.147
4	0.33	1.50	0.360	0.117	(0.324)	0.243
5	0.42	1.50	0.360	0.117	(0.324)	0.243
6	0.50	1.80	0.432	0.117	(0.389)	0.315
7	0.58	1.50	0.360	0.117	(0.324)	0.243
8	0.67	1.80	0.432	0.117	(0.389)	0.315
9	0.75	1.80	0.432	0.117	(0.389)	0.315
10	0.83	1.50	0.360	0.117	(0.324)	0.243
11	0.92	1.60	0.384	0.117	(0.345)	0.267
12	1.00	1.80	0.432	0.117	(0.389)	0.315
13	1.08	2.20	0.528	0.117	(0.475)	0.411
14	1.17	2.20	0.528	0.117	(0.475)	0.411
15	1.25	2.20	0.528	0.117	(0.475)	0.411
16	1.33	2.00	0.480	0.117	(0.432)	0.363
17	1.42	2.60	0.624	0.117	(0.561)	0.507
18	1.50	2.70	0.648	0.117	(0.583)	0.531
19	1.58	2.40	0.576	0.117	(0.518)	0.459
20	1.67	2.70	0.648	0.117	(0.583)	0.531
21	1.75	3.30	0.792	0.117	(0.713)	0.675
22	1.83	3.10	0.744	0.117	(0.669)	0.627
23	1.92	2.90	0.696	0.117	(0.626)	0.579
24	2.00	3.00	0.720	0.117	(0.648)	0.603
25	2.08	3.10	0.744	0.117	(0.669)	0.627
26	2.17	4.20	1.008	0.117	(0.907)	0.891
27	2.25	5.00	1.200	0.117	(1.080)	1.083
28	2.33	3.50	0.840	0.117	(0.756)	0.723
29	2.42	6.80	1.631	0.117	(1.468)	1.514
30	2.50	7.30	1.751	0.117	(1.576)	1.634
31	2.58	8.20	1.967	0.117	(1.771)	1.850
32	2.67	5.90	1.416	0.117	(1.274)	1.299
33	2.75	2.00	0.480	0.117	(0.432)	0.363
34	2.83	1.80	0.432	0.117	(0.389)	0.315
35	2.92	1.80	0.432	0.117	(0.389)	0.315
36	3.00	0.60	0.144	0.117	(0.130)	0.027
		(Loss Rate Not Used)				
Sum =		100.0			Sum =	19.8

Flood volume = Effective rainfall 1.65(In)
times area 75.8(Ac.)/[(In)/(Ft.)] = 10.4(Ac.Ft)
Total soil loss = 0.35(In)
Total soil loss = 2.218(Ac.Ft)
Total rainfall = 2.00(In)
Flood volume = 453725.9 Cubic Feet
Total soil loss = 96617.3 Cubic Feet

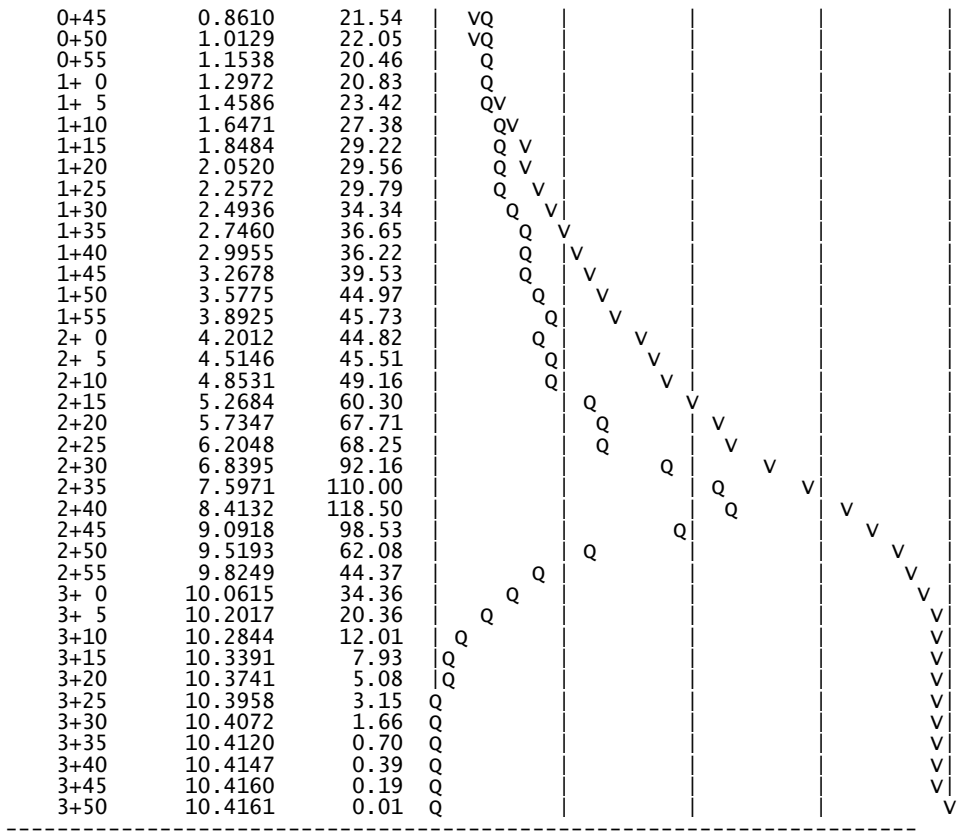
Peak flow rate of this hydrograph = 118.498(CFS)

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3 - H O U R S T O R M
R u n o f f H y d r o g r a p h

Hydrograph in 5 Minute intervals ((CFS))

Time(h+m)	Volume Ac.Ft	Q(CFS)	0	50.0	100.0	150.0	200.0
0+ 5	0.0127	1.84	Q				
0+10	0.0697	8.28	VQ				
0+15	0.1451	10.95	V Q				
0+20	0.2245	11.53	V Q				
0+25	0.3257	14.69	|VQ				
0+30	0.4434	17.09	|V Q				
0+35	0.5782	19.56	| VQ				
0+40	0.7126	19.52	| VQ				



0+45	0.8610	21.54	
0+50	1.0129	22.05	
0+55	1.1538	20.46	
1+ 0	1.2972	20.83	
1+ 5	1.4586	23.42	
1+10	1.6471	27.38	
1+15	1.8484	29.22	
1+20	2.0520	29.56	
1+25	2.2572	29.79	
1+30	2.4936	34.34	
1+35	2.7460	36.65	
1+40	2.9955	36.22	
1+45	3.2678	39.53	
1+50	3.5775	44.97	
1+55	3.8925	45.73	
2+ 0	4.2012	44.82	
2+ 5	4.5146	45.51	
2+10	4.8531	49.16	
2+15	5.2684	60.30	
2+20	5.7347	67.71	
2+25	6.2048	68.25	
2+30	6.8395	92.16	
2+35	7.5971	110.00	
2+40	8.4132	118.50	
2+45	9.0918	98.53	
2+50	9.5193	62.08	
2+55	9.8249	44.37	
3+ 0	10.0615	34.36	
3+ 5	10.2017	20.36	
3+10	10.2844	12.01	
3+15	10.3391	7.93	
3+20	10.3741	5.08	
3+25	10.3958	3.15	
3+30	10.4072	1.66	
3+35	10.4120	0.70	
3+40	10.4147	0.39	
3+45	10.4160	0.19	
3+50	10.4161	0.01	

U n i t H y d r o g r a p h A n a l y s i s

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Study date 10/17/24 File: exa1006100.out

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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978

Program License Serial Number 5006

English (in-lb) Input Units Used
English Rainfall Data (Inches) Input Values Used

English Units used in output format

Drainage Area = 75.83(Ac.) = 0.118 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 75.83(Ac.) = 0.118 Sq. Mi.
Length along longest watercourse = 2577.00(Ft.)
Length along longest watercourse measured to centroid = 1289.00(Ft.)
Length along longest watercourse = 0.488 Mi.
Length along longest watercourse measured to centroid = 0.244 Mi.
Difference in elevation = 145.20(Ft.)
Slope along watercourse = 297.4994 Ft./Mi.
Average Manning's 'N' = 0.030
Lag time = 0.109 Hr.
Lag time = 6.52 Min.
25% of lag time = 1.63 Min.
40% of lag time = 2.61 Min.
Unit time = 5.00 Min.
Duration of storm = 6 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.)[1]	Rainfall(In)[2]	Weighting[1*2]
75.83	1.10	83.41

100 YEAR Area rainfall data:

Area(Ac.)[1]	Rainfall(In)[2]	Weighting[1*2]
75.83	3.00	227.49

STORM EVENT (YEAR) = 100.00
Area Averaged 2-Year Rainfall = 1.100(In)
Area Averaged 100-Year Rainfall = 3.000(In)

Point rain (area averaged) = 3.000(In)
Areal adjustment factor = 99.97 %
Adjusted average point rain = 2.999(In)

Sub-Area Data:

Area(Ac.)	Runoff Index	Impervious %
75.830	91.00	0.000

Total Area Entered = 75.83(Ac.)

RI AMC2	RI AMC-2	Infil. Rate (In/Hr)	Impervious (Dec.%)	Adj. Infil. Rate (In/Hr)	Area% (Dec.)	F (In/Hr)
91.0	91.0	0.117	0.000	0.117	1.000	0.117
					Sum (F) =	0.117

Area averaged mean soil loss (F) (In/Hr) = 0.117
Minimum soil loss rate ((In/Hr)) = 0.059
(for 24 hour storm duration)
Soil low loss rate (decimal) = 0.900

U n i t H y d r o g r a p h
VALLEY S-Curve

Unit Hydrograph Data

Unit time period (hrs)	Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)

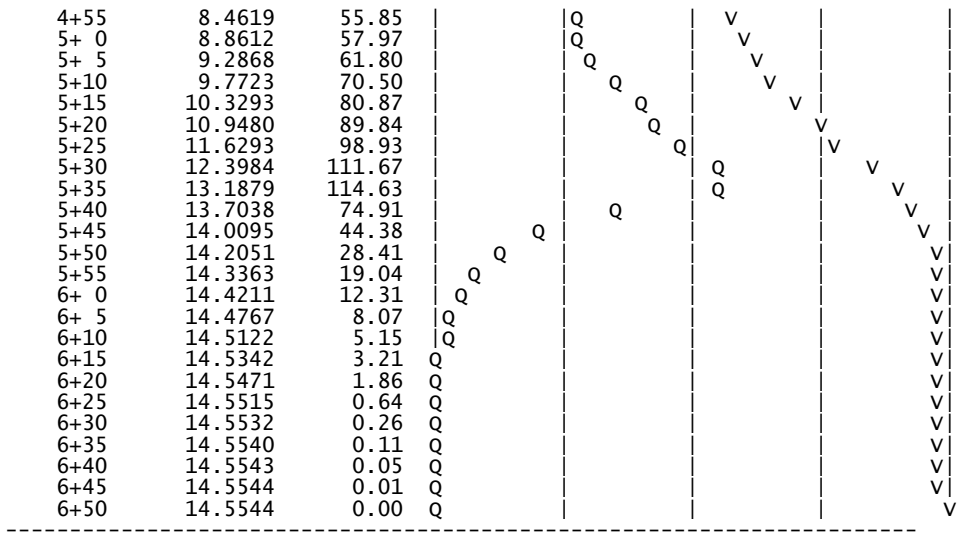
1	0.083	76.653	12.379	9.460
2	0.167	153.307	43.174	32.994
3	0.250	229.960	20.942	16.004
4	0.333	306.613	8.476	6.477
5	0.417	383.266	5.111	3.906
6	0.500	459.920	3.287	2.512
7	0.583	536.573	2.310	1.765
8	0.667	613.226	1.661	1.270
9	0.750	689.880	1.141	0.872
10	0.833	766.533	0.802	0.613
11	0.917	843.186	0.718	0.549
			Sum = 100.000 Sum=	76.422

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr) Max	Low	Effective (In/Hr)
1	0.08	0.50	0.180	0.117	(0.162)	0.063
2	0.17	0.60	0.216	0.117	(0.194)	0.099
3	0.25	0.60	0.216	0.117	(0.194)	0.099
4	0.33	0.60	0.216	0.117	(0.194)	0.099
5	0.42	0.60	0.216	0.117	(0.194)	0.099
6	0.50	0.70	0.252	0.117	(0.227)	0.135
7	0.58	0.70	0.252	0.117	(0.227)	0.135
8	0.67	0.70	0.252	0.117	(0.227)	0.135
9	0.75	0.70	0.252	0.117	(0.227)	0.135
10	0.83	0.70	0.252	0.117	(0.227)	0.135
11	0.92	0.70	0.252	0.117	(0.227)	0.135
12	1.00	0.80	0.288	0.117	(0.259)	0.171
13	1.08	0.80	0.288	0.117	(0.259)	0.171
14	1.17	0.80	0.288	0.117	(0.259)	0.171
15	1.25	0.80	0.288	0.117	(0.259)	0.171
16	1.33	0.80	0.288	0.117	(0.259)	0.171
17	1.42	0.80	0.288	0.117	(0.259)	0.171
18	1.50	0.80	0.288	0.117	(0.259)	0.171
19	1.58	0.80	0.288	0.117	(0.259)	0.171
20	1.67	0.80	0.288	0.117	(0.259)	0.171
21	1.75	0.80	0.288	0.117	(0.259)	0.171
22	1.83	0.80	0.288	0.117	(0.259)	0.171
23	1.92	0.80	0.288	0.117	(0.259)	0.171
24	2.00	0.90	0.324	0.117	(0.292)	0.207
25	2.08	0.80	0.288	0.117	(0.259)	0.171
26	2.17	0.90	0.324	0.117	(0.292)	0.207
27	2.25	0.90	0.324	0.117	(0.292)	0.207
28	2.33	0.90	0.324	0.117	(0.292)	0.207
29	2.42	0.90	0.324	0.117	(0.292)	0.207
30	2.50	0.90	0.324	0.117	(0.292)	0.207
31	2.58	0.90	0.324	0.117	(0.292)	0.207
32	2.67	0.90	0.324	0.117	(0.292)	0.207
33	2.75	1.00	0.360	0.117	(0.324)	0.243
34	2.83	1.00	0.360	0.117	(0.324)	0.243
35	2.92	1.00	0.360	0.117	(0.324)	0.243
36	3.00	1.00	0.360	0.117	(0.324)	0.243
37	3.08	1.00	0.360	0.117	(0.324)	0.243
38	3.17	1.10	0.396	0.117	(0.356)	0.279
39	3.25	1.10	0.396	0.117	(0.356)	0.279
40	3.33	1.10	0.396	0.117	(0.356)	0.279
41	3.42	1.20	0.432	0.117	(0.389)	0.315
42	3.50	1.30	0.468	0.117	(0.421)	0.351
43	3.58	1.40	0.504	0.117	(0.453)	0.387
44	3.67	1.40	0.504	0.117	(0.453)	0.387
45	3.75	1.50	0.540	0.117	(0.486)	0.423
46	3.83	1.50	0.540	0.117	(0.486)	0.423
47	3.92	1.60	0.576	0.117	(0.518)	0.459
48	4.00	1.60	0.576	0.117	(0.518)	0.459
49	4.08	1.70	0.612	0.117	(0.551)	0.495
50	4.17	1.80	0.648	0.117	(0.583)	0.531
51	4.25	1.90	0.684	0.117	(0.615)	0.567
52	4.33	2.00	0.720	0.117	(0.648)	0.603
53	4.42	2.10	0.756	0.117	(0.680)	0.639
54	4.50	2.10	0.756	0.117	(0.680)	0.639
55	4.58	2.20	0.792	0.117	(0.713)	0.675
56	4.67	2.30	0.828	0.117	(0.745)	0.711
57	4.75	2.40	0.864	0.117	(0.777)	0.747
58	4.83	2.40	0.864	0.117	(0.777)	0.747
59	4.92	2.50	0.900	0.117	(0.810)	0.783
60	5.00	2.60	0.936	0.117	(0.842)	0.819
61	5.08	3.10	1.116	0.117	(1.004)	0.999
62	5.17	3.60	1.296	0.117	(1.166)	1.179
63	5.25	3.90	1.404	0.117	(1.263)	1.287
64	5.33	4.20	1.512	0.117	(1.360)	1.395
65	5.42	4.70	1.692	0.117	(1.522)	1.575

```
66   5.50     5.60      2.015          0.117    (  1.814)        1.898
67   5.58     1.90      0.684          0.117    (  0.615)        0.567
68   5.67     0.90      0.324          0.117    (  0.292)        0.207
69   5.75     0.60      0.216          0.117    (  0.194)        0.099
70   5.83     0.50      0.180          0.117    (  0.162)        0.063
71   5.92     0.30      0.108       (  0.117)       0.097        0.011
72   6.00     0.20      0.072       (  0.117)       0.065        0.007
              (Loss Rate Not Used)
   Sum =     100.0                                   Sum =    27.6
      Flood volume = Effective rainfall      2.30(In)
       times area      75.8(Ac.)/[(In)/(Ft.)] =      14.6(Ac.Ft)
      Total soil loss =      0.70(In)
      Total soil loss =     4.398(Ac.Ft)
      Total rainfall =      3.00(In)
      Flood volume =      633991.4 Cubic Feet
      Total soil loss =      191582.0 Cubic Feet
      ---------------------------------------------------------------------
       Peak flow rate of this hydrograph =    114.632(CFS)
      ---------------------------------------------------------------------
      +++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                        6 - H O U R    S T O R M
                   R u n o f f     H y d r o g r a p h
      ---------------------------------------------------------------------
                 Hydrograph in   5   Minute intervals ((CFS))

      ---------------------------------------------------------------------
Time(h+m) Volume Ac.Ft   Q(CFS)  0       50.0     100.0     150.0     200.0
-------------------------------------------------------------------------
  0+ 5       0.0041      0.60  Q         |         |         |         |
  0+10       0.0249      3.01  Q         |         |         |         |
  0+15       0.0608      5.21  VQ        |         |         |         |
  0+20       0.1034      6.20  VQ        |         |         |         |
  0+25       0.1494      6.67  VQ        |         |         |         |
  0+30       0.1998      7.31  VQ        |         |         |         |
  0+35       0.2597      8.70  VQ        |         |         |         |
  0+40       0.3246      9.42  VQ        |         |         |         |
  0+45       0.3918      9.76  |Q        |         |         |         |
  0+50       0.4604      9.97  |Q        |         |         |         |
  0+55       0.5301     10.12  |VQ       |         |         |         |
  1+ 0       0.6027     10.54  |VQ       |         |         |         |
  1+ 5       0.6838     11.77  |VQ       |         |         |         |
  1+10       0.7690     12.38  | Q       |         |         |         |
  1+15       0.8561     12.64  | Q       |         |         |         |
  1+20       0.9442     12.80  | Q       |         |         |         |
  1+25       1.0329     12.89  | Q       |         |         |         |
  1+30       1.1221     12.95  | QV      |         |         |         |
  1+35       1.2116     13.00  | QV      |         |         |         |
  1+40       1.3014     13.03  | QV      |         |         |         |
  1+45       1.3912     13.05  | QV      |         |         |         |
  1+50       1.4812     13.07  | Q V     |         |         |         |
  1+55       1.5712     13.07  | Q V     |         |         |         |
  2+ 0       1.6636     13.41  | Q V     |         |         |         |
  2+ 5       1.7618     14.26  | Q V     |         |         |         |
  2+10       1.8581     13.99  | Q  V    |         |         |         |
  2+15       1.9603     14.83  | Q  V    |         |         |         |
  2+20       2.0657     15.31  |  Q V    |         |         |         |
  2+25       2.1725     15.50  |  Q V    |         |         |         |
  2+30       2.2800     15.61  |  Q  V   |         |         |         |
  2+35       2.3880     15.68  |  Q  V   |         |         |         |
  2+40       2.4964     15.73  |  Q  V   |         |         |         |
  2+45       2.6073     16.11  |  Q   V  |         |         |         |
  2+50       2.7267     17.33  |  Q   V  |         |         |         |
  2+55       2.8500     17.91  |  Q   V  |         |         |         |
  3+ 0       2.9750     18.16  |  Q    V |         |         |         |
  3+ 5       3.1011     18.30  |  Q    V |         |         |         |
  3+10       3.2301     18.73  |  Q    V |         |         |         |
  3+15       3.3677     19.98  |  Q     V|         |         |         |
  3+20       3.5096     20.60  |   Q    V|         |         |         |
  3+25       3.6557     21.21  |   Q     V         |         |         |
  3+30       3.8134     22.90  |   Q     V         |         |         |
  3+35       3.9864     25.12  |    Q    V         |         |         |
  3+40       4.1736     27.18  |    Q    |V        |         |         |
  3+45       4.3700     28.51  |    Q    | V       |         |         |
  3+50       4.5779     30.20  |     Q   | V       |         |         |
  3+55       4.7944     31.43  |     Q   |  V      |         |         |
  4+ 0       5.0222     33.07  |     Q   |  V      |         |         |
  4+ 5       5.2582     34.27  |     Q   |   V     |         |         |
  4+10       5.5077     36.22  |      Q  |    V    |         |         |
  4+15       5.7736     38.61  |      Q  |    V    |         |         |
  4+20       6.0568     41.12  |       Q |     V   |         |         |
  4+25       6.3578     43.72  |       Q |      V  |         |         |
  4+30       6.6747     46.01  |        Q|       V |         |         |
  4+35       7.0019     47.51  |        Q|        V|         |         |
  4+40       7.3437     49.63  |         Q|        V         |         |
  4+45       7.7028     52.13  |          Q         |V       |         |
  4+50       8.0773     54.38  |          Q         | V      |         |
```


4+55 8.4619 55.85
5+ 0 8.8612 57.97
5+ 5 9.2868 61.80
5+10 9.7723 70.50
5+15 10.3293 80.87
5+20 10.9480 89.84
5+25 11.6293 98.93
5+30 12.3984 111.67
5+35 13.1879 114.63
5+40 13.7038 74.91
5+45 14.0095 44.38
5+50 14.2051 28.41
5+55 14.3363 19.04
6+ 0 14.4211 12.31
6+ 5 14.4767 8.07
6+10 14.5122 5.15
6+15 14.5342 3.21
6+20 14.5471 1.86
6+25 14.5515 0.64
6+30 14.5532 0.26
6+35 14.5540 0.11
6+40 14.5543 0.05
6+45 14.5544 0.01
6+50 14.5544 0.00

U n i t H y d r o g r a p h A n a l y s i s

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Study date 10/17/24 File: exa10024100.out

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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978

Program License Serial Number 5006

English (in-lb) Input Units Used
English Rainfall Data (Inches) Input Values Used

English Units used in output format

Drainage Area = 75.83(Ac.) = 0.118 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 75.83(Ac.) = 0.118 Sq. Mi.
Length along longest watercourse = 2577.00(Ft.)
Length along longest watercourse measured to centroid = 1289.00(Ft.)
Length along longest watercourse = 0.488 Mi.
Length along longest watercourse measured to centroid = 0.244 Mi.
Difference in elevation = 145.20(Ft.)
Slope along watercourse = 297.4994 Ft./Mi.
Average Manning's 'N' = 0.030
Lag time = 0.109 Hr.
Lag time = 6.52 Min.
25% of lag time = 1.63 Min.
40% of lag time = 2.61 Min.
Unit time = 5.00 Min.
Duration of storm = 24 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.)[1]	Rainfall(In)[2]	Weighting[1*2]
75.83	1.80	136.49

100 YEAR Area rainfall data:

Area(Ac.)[1]	Rainfall(In)[2]	Weighting[1*2]
75.83	5.00	379.15

STORM EVENT (YEAR) = 100.00
Area Averaged 2-Year Rainfall = 1.800(In)
Area Averaged 100-Year Rainfall = 5.000(In)

Point rain (area averaged) = 5.000(In)
Areal adjustment factor = 99.99 %
Adjusted average point rain = 4.999(In)

Sub-Area Data:

Area(Ac.)	Runoff Index	Impervious %
75.830	91.00	0.000

Total Area Entered = 75.83(Ac.)

RI AMC2	RI AMC-2	Infil. Rate (In/Hr)	Impervious (Dec.%)	Adj. Infil. Rate (In/Hr)	Area% (Dec.)	F (In/Hr)
91.0	91.0	0.117	0.000	0.117	1.000	0.117
					Sum (F) =	0.117

Area averaged mean soil loss (F) (In/Hr) = 0.117
Minimum soil loss rate ((In/Hr)) = 0.059
(for 24 hour storm duration)
Soil low loss rate (decimal) = 0.900

U n i t H y d r o g r a p h
VALLEY S-Curve

Unit Hydrograph Data

Unit time period (hrs)	Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)

1	0.083	76.653	12.379	9.460
2	0.167	153.307	43.174	32.994
3	0.250	229.960	20.942	16.004
4	0.333	306.613	8.476	6.477
5	0.417	383.266	5.111	3.906
6	0.500	459.920	3.287	2.512
7	0.583	536.573	2.310	1.765
8	0.667	613.226	1.661	1.270
9	0.750	689.880	1.141	0.872
10	0.833	766.533	0.802	0.613
11	0.917	843.186	0.718	0.549
		Sum = 100.000	Sum=	76.422

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr) Max	Low	Effective (In/Hr)
1	0.08	0.07	0.040	(0.207)	0.036	0.004
2	0.17	0.07	0.040	(0.207)	0.036	0.004
3	0.25	0.07	0.040	(0.206)	0.036	0.004
4	0.33	0.10	0.060	(0.205)	0.054	0.006
5	0.42	0.10	0.060	(0.204)	0.054	0.006
6	0.50	0.10	0.060	(0.203)	0.054	0.006
7	0.58	0.10	0.060	(0.203)	0.054	0.006
8	0.67	0.10	0.060	(0.202)	0.054	0.006
9	0.75	0.10	0.060	(0.201)	0.054	0.006
10	0.83	0.13	0.080	(0.200)	0.072	0.008
11	0.92	0.13	0.080	(0.199)	0.072	0.008
12	1.00	0.13	0.080	(0.199)	0.072	0.008
13	1.08	0.10	0.060	(0.198)	0.054	0.006
14	1.17	0.10	0.060	(0.197)	0.054	0.006
15	1.25	0.10	0.060	(0.196)	0.054	0.006
16	1.33	0.10	0.060	(0.196)	0.054	0.006
17	1.42	0.10	0.060	(0.195)	0.054	0.006
18	1.50	0.10	0.060	(0.194)	0.054	0.006
19	1.58	0.10	0.060	(0.193)	0.054	0.006
20	1.67	0.10	0.060	(0.192)	0.054	0.006
21	1.75	0.10	0.060	(0.192)	0.054	0.006
22	1.83	0.13	0.080	(0.191)	0.072	0.008
23	1.92	0.13	0.080	(0.190)	0.072	0.008
24	2.00	0.13	0.080	(0.189)	0.072	0.008
25	2.08	0.13	0.080	(0.189)	0.072	0.008
26	2.17	0.13	0.080	(0.188)	0.072	0.008
27	2.25	0.13	0.080	(0.187)	0.072	0.008
28	2.33	0.13	0.080	(0.186)	0.072	0.008
29	2.42	0.13	0.080	(0.186)	0.072	0.008
30	2.50	0.13	0.080	(0.185)	0.072	0.008
31	2.58	0.17	0.100	(0.184)	0.090	0.010
32	2.67	0.17	0.100	(0.183)	0.090	0.010
33	2.75	0.17	0.100	(0.183)	0.090	0.010
34	2.83	0.17	0.100	(0.182)	0.090	0.010
35	2.92	0.17	0.100	(0.181)	0.090	0.010
36	3.00	0.17	0.100	(0.180)	0.090	0.010
37	3.08	0.17	0.100	(0.180)	0.090	0.010
38	3.17	0.17	0.100	(0.179)	0.090	0.010
39	3.25	0.17	0.100	(0.178)	0.090	0.010
40	3.33	0.17	0.100	(0.177)	0.090	0.010
41	3.42	0.17	0.100	(0.177)	0.090	0.010
42	3.50	0.17	0.100	(0.176)	0.090	0.010
43	3.58	0.17	0.100	(0.175)	0.090	0.010
44	3.67	0.17	0.100	(0.174)	0.090	0.010
45	3.75	0.17	0.100	(0.174)	0.090	0.010
46	3.83	0.20	0.120	(0.173)	0.108	0.012
47	3.92	0.20	0.120	(0.172)	0.108	0.012
48	4.00	0.20	0.120	(0.171)	0.108	0.012
49	4.08	0.20	0.120	(0.171)	0.108	0.012
50	4.17	0.20	0.120	(0.170)	0.108	0.012
51	4.25	0.20	0.120	(0.169)	0.108	0.012
52	4.33	0.23	0.140	(0.169)	0.126	0.014
53	4.42	0.23	0.140	(0.168)	0.126	0.014
54	4.50	0.23	0.140	(0.167)	0.126	0.014
55	4.58	0.23	0.140	(0.166)	0.126	0.014
56	4.67	0.23	0.140	(0.166)	0.126	0.014
57	4.75	0.23	0.140	(0.165)	0.126	0.014
58	4.83	0.27	0.160	(0.164)	0.144	0.016
59	4.92	0.27	0.160	(0.164)	0.144	0.016
60	5.00	0.27	0.160	(0.163)	0.144	0.016
61	5.08	0.20	0.120	(0.162)	0.108	0.012
62	5.17	0.20	0.120	(0.161)	0.108	0.012
63	5.25	0.20	0.120	(0.161)	0.108	0.012
64	5.33	0.23	0.140	(0.160)	0.126	0.014
65	5.42	0.23	0.140	(0.159)	0.126	0.014

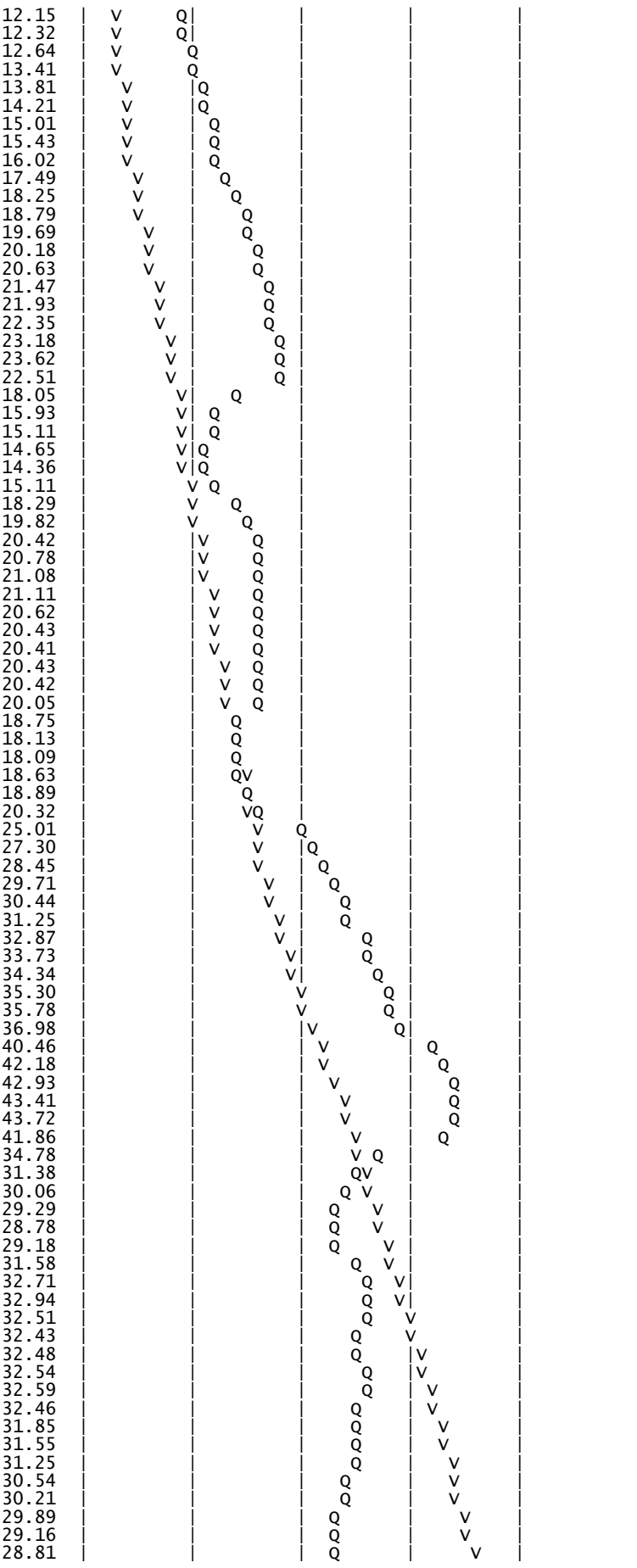
66	5.50	0.23	0.140	(0.159)	0.126	0.014
67	5.58	0.27	0.160	(0.158)	0.144	0.016
68	5.67	0.27	0.160	(0.157)	0.144	0.016
69	5.75	0.27	0.160	(0.157)	0.144	0.016
70	5.83	0.27	0.160	(0.156)	0.144	0.016
71	5.92	0.27	0.160	(0.155)	0.144	0.016
72	6.00	0.27	0.160	(0.154)	0.144	0.016
73	6.08	0.30	0.180	0.154	(0.162)	0.026
74	6.17	0.30	0.180	0.153	(0.162)	0.027
75	6.25	0.30	0.180	0.152	(0.162)	0.028
76	6.33	0.30	0.180	0.152	(0.162)	0.028
77	6.42	0.30	0.180	0.151	(0.162)	0.029
78	6.50	0.30	0.180	0.150	(0.162)	0.030
79	6.58	0.33	0.200	0.150	(0.180)	0.050
80	6.67	0.33	0.200	0.149	(0.180)	0.051
81	6.75	0.33	0.200	0.148	(0.180)	0.052
82	6.83	0.33	0.200	0.148	(0.180)	0.052
83	6.92	0.33	0.200	0.147	(0.180)	0.053
84	7.00	0.33	0.200	0.146	(0.180)	0.054
85	7.08	0.33	0.200	0.146	(0.180)	0.054
86	7.17	0.33	0.200	0.145	(0.180)	0.055
87	7.25	0.33	0.200	0.144	(0.180)	0.056
88	7.33	0.37	0.220	0.144	(0.198)	0.076
89	7.42	0.37	0.220	0.143	(0.198)	0.077
90	7.50	0.37	0.220	0.142	(0.198)	0.078
91	7.58	0.40	0.240	0.142	(0.216)	0.098
92	7.67	0.40	0.240	0.141	(0.216)	0.099
93	7.75	0.40	0.240	0.140	(0.216)	0.100
94	7.83	0.43	0.260	0.140	(0.234)	0.120
95	7.92	0.43	0.260	0.139	(0.234)	0.121
96	8.00	0.43	0.260	0.138	(0.234)	0.121
97	8.08	0.50	0.300	0.138	(0.270)	0.162
98	8.17	0.50	0.300	0.137	(0.270)	0.163
99	8.25	0.50	0.300	0.137	(0.270)	0.163
100	8.33	0.50	0.300	0.136	(0.270)	0.164
101	8.42	0.50	0.300	0.135	(0.270)	0.165
102	8.50	0.50	0.300	0.135	(0.270)	0.165
103	8.58	0.53	0.320	0.134	(0.288)	0.186
104	8.67	0.53	0.320	0.133	(0.288)	0.187
105	8.75	0.53	0.320	0.133	(0.288)	0.187
106	8.83	0.57	0.340	0.132	(0.306)	0.208
107	8.92	0.57	0.340	0.131	(0.306)	0.208
108	9.00	0.57	0.340	0.131	(0.306)	0.209
109	9.08	0.63	0.380	0.130	(0.342)	0.250
110	9.17	0.63	0.380	0.130	(0.342)	0.250
111	9.25	0.63	0.380	0.129	(0.342)	0.251
112	9.33	0.67	0.400	0.128	(0.360)	0.272
113	9.42	0.67	0.400	0.128	(0.360)	0.272
114	9.50	0.67	0.400	0.127	(0.360)	0.273
115	9.58	0.70	0.420	0.127	(0.378)	0.293
116	9.67	0.70	0.420	0.126	(0.378)	0.294
117	9.75	0.70	0.420	0.125	(0.378)	0.295
118	9.83	0.73	0.440	0.125	(0.396)	0.315
119	9.92	0.73	0.440	0.124	(0.396)	0.316
120	10.00	0.73	0.440	0.124	(0.396)	0.316
121	10.08	0.50	0.300	0.123	(0.270)	0.177
122	10.17	0.50	0.300	0.122	(0.270)	0.178
123	10.25	0.50	0.300	0.122	(0.270)	0.178
124	10.33	0.50	0.300	0.121	(0.270)	0.179
125	10.42	0.50	0.300	0.121	(0.270)	0.179
126	10.50	0.50	0.300	0.120	(0.270)	0.180
127	10.58	0.67	0.400	0.119	(0.360)	0.281
128	10.67	0.67	0.400	0.119	(0.360)	0.281
129	10.75	0.67	0.400	0.118	(0.360)	0.282
130	10.83	0.67	0.400	0.118	(0.360)	0.282
131	10.92	0.67	0.400	0.117	(0.360)	0.283
132	11.00	0.67	0.400	0.117	(0.360)	0.283
133	11.08	0.63	0.380	0.116	(0.342)	0.264
134	11.17	0.63	0.380	0.115	(0.342)	0.265
135	11.25	0.63	0.380	0.115	(0.342)	0.265
136	11.33	0.63	0.380	0.114	(0.342)	0.266
137	11.42	0.63	0.380	0.114	(0.342)	0.266
138	11.50	0.63	0.380	0.113	(0.342)	0.267
139	11.58	0.57	0.340	0.113	(0.306)	0.227
140	11.67	0.57	0.340	0.112	(0.306)	0.228
141	11.75	0.57	0.340	0.111	(0.306)	0.229
142	11.83	0.60	0.360	0.111	(0.324)	0.249
143	11.92	0.60	0.360	0.110	(0.324)	0.250
144	12.00	0.60	0.360	0.110	(0.324)	0.250
145	12.08	0.83	0.500	0.109	(0.450)	0.391
146	12.17	0.83	0.500	0.109	(0.450)	0.391
147	12.25	0.83	0.500	0.108	(0.450)	0.392
148	12.33	0.87	0.520	0.108	(0.468)	0.412
149	12.42	0.87	0.520	0.107	(0.468)	0.413
150	12.50	0.87	0.520	0.107	(0.468)	0.413
151	12.58	0.93	0.560	0.106	(0.504)	0.454

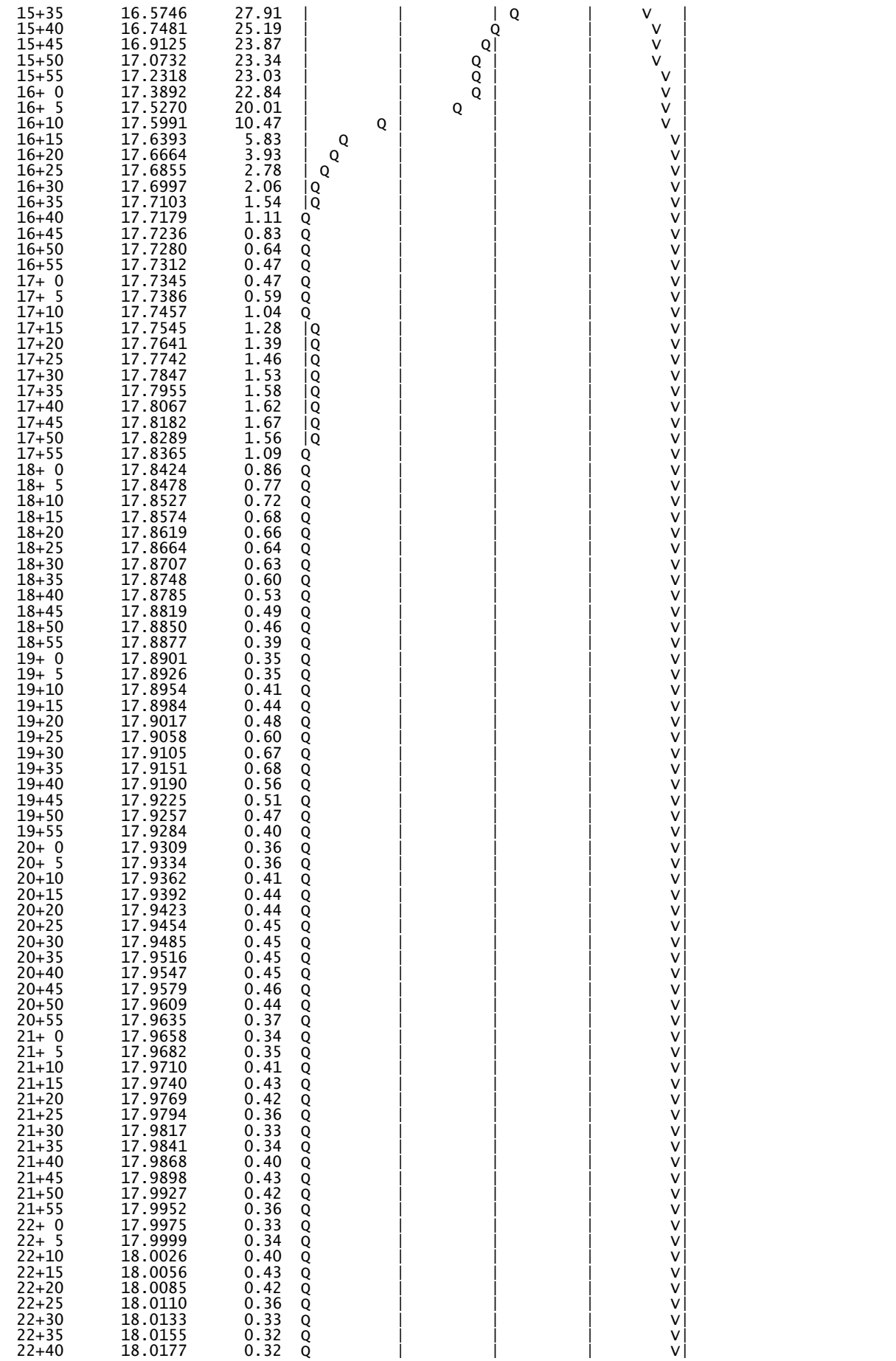
152	12.67	0.93	0.560	0.105	(0.504)	0.454
153	12.75	0.93	0.560	0.105	(0.504)	0.455
154	12.83	0.97	0.580	0.104	(0.522)	0.476
155	12.92	0.97	0.580	0.104	(0.522)	0.476
156	13.00	0.97	0.580	0.103	(0.522)	0.477
157	13.08	1.13	0.680	0.103	(0.612)	0.577
158	13.17	1.13	0.680	0.102	(0.612)	0.578
159	13.25	1.13	0.680	0.102	(0.612)	0.578
160	13.33	1.13	0.680	0.101	(0.612)	0.579
161	13.42	1.13	0.680	0.101	(0.612)	0.579
162	13.50	1.13	0.680	0.100	(0.612)	0.580
163	13.58	0.77	0.460	0.100	(0.414)	0.360
164	13.67	0.77	0.460	0.099	(0.414)	0.361
165	13.75	0.77	0.460	0.099	(0.414)	0.361
166	13.83	0.77	0.460	0.098	(0.414)	0.362
167	13.92	0.77	0.460	0.098	(0.414)	0.362
168	14.00	0.77	0.460	0.097	(0.414)	0.363
169	14.08	0.90	0.540	0.097	(0.486)	0.443
170	14.17	0.90	0.540	0.096	(0.486)	0.444
171	14.25	0.90	0.540	0.096	(0.486)	0.444
172	14.33	0.87	0.520	0.095	(0.468)	0.425
173	14.42	0.87	0.520	0.095	(0.468)	0.425
174	14.50	0.87	0.520	0.094	(0.468)	0.426
175	14.58	0.87	0.520	0.094	(0.468)	0.426
176	14.67	0.87	0.520	0.093	(0.468)	0.427
177	14.75	0.87	0.520	0.093	(0.468)	0.427
178	14.83	0.83	0.500	0.092	(0.450)	0.408
179	14.92	0.83	0.500	0.092	(0.450)	0.408
180	15.00	0.83	0.500	0.091	(0.450)	0.409
181	15.08	0.80	0.480	0.091	(0.432)	0.389
182	15.17	0.80	0.480	0.090	(0.432)	0.389
183	15.25	0.80	0.480	0.090	(0.432)	0.390
184	15.33	0.77	0.460	0.090	(0.414)	0.370
185	15.42	0.77	0.460	0.089	(0.414)	0.371
186	15.50	0.77	0.460	0.089	(0.414)	0.371
187	15.58	0.63	0.380	0.088	(0.342)	0.292
188	15.67	0.63	0.380	0.088	(0.342)	0.292
189	15.75	0.63	0.380	0.087	(0.342)	0.293
190	15.83	0.63	0.380	0.087	(0.342)	0.293
191	15.92	0.63	0.380	0.086	(0.342)	0.294
192	16.00	0.63	0.380	0.086	(0.342)	0.294
193	16.08	0.13	0.080	(0.085)	0.072	0.008
194	16.17	0.13	0.080	(0.085)	0.072	0.008
195	16.25	0.13	0.080	(0.085)	0.072	0.008
196	16.33	0.13	0.080	(0.084)	0.072	0.008
197	16.42	0.13	0.080	(0.084)	0.072	0.008
198	16.50	0.13	0.080	(0.083)	0.072	0.008
199	16.58	0.10	0.060	(0.083)	0.054	0.006
200	16.67	0.10	0.060	(0.082)	0.054	0.006
201	16.75	0.10	0.060	(0.082)	0.054	0.006
202	16.83	0.10	0.060	(0.082)	0.054	0.006
203	16.92	0.10	0.060	(0.081)	0.054	0.006
204	17.00	0.10	0.060	(0.081)	0.054	0.006
205	17.08	0.17	0.100	0.080	(0.090)	0.020
206	17.17	0.17	0.100	0.080	(0.090)	0.020
207	17.25	0.17	0.100	0.080	(0.090)	0.020
208	17.33	0.17	0.100	0.079	(0.090)	0.021
209	17.42	0.17	0.100	0.079	(0.090)	0.021
210	17.50	0.17	0.100	0.078	(0.090)	0.022
211	17.58	0.17	0.100	0.078	(0.090)	0.022
212	17.67	0.17	0.100	0.078	(0.090)	0.022
213	17.75	0.17	0.100	0.077	(0.090)	0.023
214	17.83	0.13	0.080	(0.077)	0.072	0.008
215	17.92	0.13	0.080	(0.076)	0.072	0.008
216	18.00	0.13	0.080	(0.076)	0.072	0.008
217	18.08	0.13	0.080	(0.076)	0.072	0.008
218	18.17	0.13	0.080	(0.075)	0.072	0.008
219	18.25	0.13	0.080	(0.075)	0.072	0.008
220	18.33	0.13	0.080	(0.075)	0.072	0.008
221	18.42	0.13	0.080	(0.074)	0.072	0.008
222	18.50	0.13	0.080	(0.074)	0.072	0.008
223	18.58	0.10	0.060	(0.074)	0.054	0.006
224	18.67	0.10	0.060	(0.073)	0.054	0.006
225	18.75	0.10	0.060	(0.073)	0.054	0.006
226	18.83	0.07	0.040	(0.072)	0.036	0.004
227	18.92	0.07	0.040	(0.072)	0.036	0.004
228	19.00	0.07	0.040	(0.072)	0.036	0.004
229	19.08	0.10	0.060	(0.071)	0.054	0.006
230	19.17	0.10	0.060	(0.071)	0.054	0.006
231	19.25	0.10	0.060	(0.071)	0.054	0.006
232	19.33	0.13	0.080	0.070	(0.072)	0.010
233	19.42	0.13	0.080	0.070	(0.072)	0.010
234	19.50	0.13	0.080	0.070	(0.072)	0.010
235	19.58	0.10	0.060	(0.069)	0.054	0.006
236	19.67	0.10	0.060	(0.069)	0.054	0.006
237	19.75	0.10	0.060	(0.069)	0.054	0.006

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238  19.83     0.07      0.040       (  0.069)       0.036        0.004
239  19.92     0.07      0.040       (  0.068)       0.036        0.004
240  20.00     0.07      0.040       (  0.068)       0.036        0.004
241  20.08     0.10      0.060       (  0.068)       0.054        0.006
242  20.17     0.10      0.060       (  0.067)       0.054        0.006
243  20.25     0.10      0.060       (  0.067)       0.054        0.006
244  20.33     0.10      0.060       (  0.067)       0.054        0.006
245  20.42     0.10      0.060       (  0.066)       0.054        0.006
246  20.50     0.10      0.060       (  0.066)       0.054        0.006
247  20.58     0.10      0.060       (  0.066)       0.054        0.006
248  20.67     0.10      0.060       (  0.066)       0.054        0.006
249  20.75     0.10      0.060       (  0.065)       0.054        0.006
250  20.83     0.07      0.040       (  0.065)       0.036        0.004
251  20.92     0.07      0.040       (  0.065)       0.036        0.004
252  21.00     0.07      0.040       (  0.065)       0.036        0.004
253  21.08     0.10      0.060       (  0.064)       0.054        0.006
254  21.17     0.10      0.060       (  0.064)       0.054        0.006
255  21.25     0.10      0.060       (  0.064)       0.054        0.006
256  21.33     0.07      0.040       (  0.064)       0.036        0.004
257  21.42     0.07      0.040       (  0.063)       0.036        0.004
258  21.50     0.07      0.040       (  0.063)       0.036        0.004
259  21.58     0.10      0.060       (  0.063)       0.054        0.006
260  21.67     0.10      0.060       (  0.063)       0.054        0.006
261  21.75     0.10      0.060       (  0.062)       0.054        0.006
262  21.83     0.07      0.040       (  0.062)       0.036        0.004
263  21.92     0.07      0.040       (  0.062)       0.036        0.004
264  22.00     0.07      0.040       (  0.062)       0.036        0.004
265  22.08     0.10      0.060       (  0.062)       0.054        0.006
266  22.17     0.10      0.060       (  0.061)       0.054        0.006
267  22.25     0.10      0.060       (  0.061)       0.054        0.006
268  22.33     0.07      0.040       (  0.061)       0.036        0.004
269  22.42     0.07      0.040       (  0.061)       0.036        0.004
270  22.50     0.07      0.040       (  0.061)       0.036        0.004
271  22.58     0.07      0.040       (  0.060)       0.036        0.004
272  22.67     0.07      0.040       (  0.060)       0.036        0.004
273  22.75     0.07      0.040       (  0.060)       0.036        0.004
274  22.83     0.07      0.040       (  0.060)       0.036        0.004
275  22.92     0.07      0.040       (  0.060)       0.036        0.004
276  23.00     0.07      0.040       (  0.060)       0.036        0.004
277  23.08     0.07      0.040       (  0.060)       0.036        0.004
278  23.17     0.07      0.040       (  0.059)       0.036        0.004
279  23.25     0.07      0.040       (  0.059)       0.036        0.004
280  23.33     0.07      0.040       (  0.059)       0.036        0.004
281  23.42     0.07      0.040       (  0.059)       0.036        0.004
282  23.50     0.07      0.040       (  0.059)       0.036        0.004
283  23.58     0.07      0.040       (  0.059)       0.036        0.004
284  23.67     0.07      0.040       (  0.059)       0.036        0.004
285  23.75     0.07      0.040       (  0.059)       0.036        0.004
286  23.83     0.07      0.040       (  0.059)       0.036        0.004
287  23.92     0.07      0.040       (  0.059)       0.036        0.004
288  24.00     0.07      0.040       (  0.059)       0.036        0.004
               (Loss Rate Not Used)
    Sum =     100.0                                  Sum =    34.3
      Flood volume = Effective rainfall      2.86(In)
       times area      75.8(Ac.)/[(In)/(Ft.)] =      18.1(Ac.Ft)
      Total soil loss =      2.14(In)
      Total soil loss =    13.535(Ac.Ft)
      Total rainfall =      5.00(In)
      Flood volume =      786506.2 Cubic Feet
      Total soil loss =      589604.4 Cubic Feet
      ---------------------------------------------------------------------
       Peak flow rate of this hydrograph =     43.716(CFS)
      ---------------------------------------------------------------------
      +++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                          24 - H O U R    S T O R M
                     R u n o f f      H y d r o g r a p h
      ---------------------------------------------------------------------
                  Hydrograph in   5   Minute intervals ((CFS))

      ---------------------------------------------------------------------
 Time(h+m) Volume Ac.Ft   Q(CFS)  0       12.5      25.0      37.5      50.0
 ---------------------------------------------------------------------------
   0+ 5       0.0003      0.04  Q         |         |         |         |
   0+10       0.0014      0.17  Q         |         |         |         |
   0+15       0.0030      0.23  Q         |         |         |         |
   0+20       0.0050      0.28  Q         |         |         |         |
   0+25       0.0074      0.36  Q         |         |         |         |
   0+30       0.0102      0.40  Q         |         |         |         |
   0+35       0.0131      0.42  Q         |         |         |         |
   0+40       0.0161      0.44  Q         |         |         |         |
   0+45       0.0192      0.44  Q         |         |         |         |
   0+50       0.0224      0.47  Q         |         |         |         |
   0+55       0.0261      0.54  Q         |         |         |         |
   1+ 0       0.0301      0.57  Q         |         |         |         |
   1+ 5       0.0340      0.57  Q         |         |         |         |
   1+10       0.0375      0.51  Q         |         |         |         |
```

1+15	0.0409	0.48	Q	|	|	|	|
1+20	0.0441	0.48	Q	|	|	|	|
1+25	0.0474	0.47	Q	|	|	|	|
1+30	0.0506	0.47	Q	|	|	|	|
1+35	0.0538	0.46	Q	|	|	|	|
1+40	0.0570	0.46	Q	|	|	|	|
1+45	0.0601	0.46	Q	|	|	|	|
1+50	0.0634	0.48	Q	|	|	|	|
1+55	0.0672	0.54	Q	|	|	|	|
2+ 0	0.0711	0.58	Q	|	|	|	|
2+ 5	0.0752	0.59	Q	|	|	|	|
2+10	0.0793	0.60	Q	|	|	|	|
2+15	0.0834	0.60	Q	|	|	|	|
2+20	0.0876	0.60	Q	|	|	|	|
2+25	0.0918	0.61	Q	|	|	|	|
2+30	0.0960	0.61	Q	|	|	|	|
2+35	0.1003	0.63	Q	|	|	|	|
2+40	0.1051	0.70	Q	|	|	|	|
2+45	0.1101	0.73	Q	|	|	|	|
2+50	0.1152	0.74	Q	|	|	|	|
2+55	0.1204	0.75	Q	|	|	|	|
3+ 0	0.1256	0.75	Q	|	|	|	|
3+ 5	0.1308	0.76	Q	|	|	|	|
3+10	0.1361	0.76	Q	|	|	|	|
3+15	0.1413	0.76	Q	|	|	|	|
3+20	0.1466	0.76	Q	|	|	|	|
3+25	0.1518	0.76	Q	|	|	|	|
3+30	0.1571	0.76	Q	|	|	|	|
3+35	0.1624	0.76	Q	|	|	|	|
3+40	0.1676	0.76	Q	|	|	|	|
3+45	0.1729	0.76	Q	|	|	|	|
3+50	0.1783	0.78	Q	|	|	|	|
3+55	0.1841	0.85	Q	|	|	|	|
4+ 0	0.1902	0.88	Q	|	|	|	|
4+ 5	0.1964	0.89	Q	|	|	|	|
4+10	0.2026	0.90	Q	|	|	|	|
4+15	0.2088	0.91	Q	|	|	|	|
4+20	0.2152	0.93	Q	|	|	|	|
4+25	0.2221	1.00	Q	|	|	|	|
4+30	0.2292	1.03	Q	|	|	|	|
4+35	0.2364	1.05	Q	|	|	|	|
4+40	0.2437	1.06	Q	|	|	|	|
4+45	0.2510	1.06	Q	|	|	|	|
4+50	0.2584	1.08	Q	|	|	|	|
4+55	0.2664	1.15	Q	|	|	|	|
5+ 0	0.2745	1.18	Q	|	|	|	|
5+ 5	0.2825	1.16	Q	|	|	|	|
5+10	0.2897	1.04	Q	|	|	|	|
5+15	0.2964	0.98	Q	|	|	|	|
5+20	0.3031	0.98	Q	|	|	|	|
5+25	0.3102	1.03	Q	|	|	|	|
5+30	0.3175	1.05	Q	|	|	|	|
5+35	0.3249	1.08	Q	|	|	|	|
5+40	0.3328	1.15	Q	|	|	|	|
5+45	0.3409	1.18	Q	|	|	|	|
5+50	0.3492	1.20	Q	|	|	|	|
5+55	0.3575	1.20	Q	|	|	|	|
6+ 0	0.3658	1.21	Q	|	|	|	|
6+ 5	0.3749	1.31	VQ	|	|	|	|
6+10	0.3863	1.66	VQ	|	|	|	|
6+15	0.3991	1.85	VQ	|	|	|	|
6+20	0.4126	1.96	VQ	|	|	|	|
6+25	0.4267	2.05	VQ	|	|	|	|
6+30	0.4413	2.12	VQ	|	|	|	|
6+35	0.4576	2.38	|Q	|	|	|	|
6+40	0.4790	3.10	|VQ	|	|	|	|
6+45	0.5029	3.48	|VQ	|	|	|	|
6+50	0.5281	3.66	|VQ	|	|	|	|
6+55	0.5543	3.80	|V Q	|	|	|	|
7+ 0	0.5812	3.90	|V Q	|	|	|	|
7+ 5	0.6086	3.99	|V Q	|	|	|	|
7+10	0.6366	4.06	|V Q	|	|	|	|
7+15	0.6651	4.13	|V Q	|	|	|	|
7+20	0.6952	4.38	|V Q	|	|	|	|
7+25	0.7304	5.11	|V Q	|	|	|	|
7+30	0.7681	5.48	|V Q	|	|	|	|
7+35	0.8084	5.84	|V Q	|	|	|	|
7+40	0.8540	6.63	|V Q	|	|	|	|
7+45	0.9026	7.05	|V Q	|	|	|	|
7+50	0.9540	7.46	| V Q	|	|	|	|
7+55	1.0110	8.27	| V Q	|	|	|	|
8+ 0	1.0709	8.71	| V Q	|	|	|	|
8+ 5	1.1351	9.31	| V Q	|	|	|	|
8+10	1.2094	10.80	| V Q |	|	|	|
8+15	1.2890	11.56	| V Q|	|	|	|
8+20	1.3711	11.91	| V Q|	|	|	|

8+25	1.4547	12.15	
8+30	1.5396	12.32	
8+35	1.6266	12.64	
8+40	1.7190	13.41	
8+45	1.8141	13.81	
8+50	1.9120	14.21	
8+55	2.0154	15.01	
9+ 0	2.1216	15.43	
9+ 5	2.2320	16.02	
9+10	2.3525	17.49	
9+15	2.4782	18.25	
9+20	2.6076	18.79	
9+25	2.7432	19.69	
9+30	2.8822	20.18	
9+35	3.0243	20.63	
9+40	3.1721	21.47	
9+45	3.3232	21.93	
9+50	3.4771	22.35	
9+55	3.6367	23.18	
10+ 0	3.7994	23.62	
10+ 5	3.9545	22.51	
10+10	4.0788	18.05	
10+15	4.1885	15.93	
10+20	4.2926	15.11	
10+25	4.3934	14.65	
10+30	4.4923	14.36	
10+35	4.5964	15.11	
10+40	4.7224	18.29	
10+45	4.8589	19.82	
10+50	4.9995	20.42	
10+55	5.1427	20.78	
11+ 0	5.2878	21.08	
11+ 5	5.4332	21.11	
11+10	5.5752	20.62	
11+15	5.7159	20.43	
11+20	5.8565	20.41	
11+25	5.9971	20.43	
11+30	6.1378	20.42	
11+35	6.2758	20.05	
11+40	6.4050	18.75	
11+45	6.5298	18.13	
11+50	6.6544	18.09	
11+55	6.7827	18.63	
12+ 0	6.9128	18.89	
12+ 5	7.0527	20.32	
12+10	7.2249	25.01	
12+15	7.4130	27.30	
12+20	7.6090	28.45	
12+25	7.8135	29.71	
12+30	8.0232	30.44	
12+35	8.2384	31.25	
12+40	8.4648	32.87	
12+45	8.6971	33.73	
12+50	8.9335	34.34	
12+55	9.1766	35.30	
13+ 0	9.4230	35.78	
13+ 5	9.6777	36.98	
13+10	9.9563	40.46	
13+15	10.2468	42.18	
13+20	10.5425	42.93	
13+25	10.8414	43.41	
13+30	11.1425	43.72	
13+35	11.4308	41.86	
13+40	11.6704	34.78	
13+45	11.8865	31.38	
13+50	12.0935	30.06	
13+55	12.2952	29.29	
14+ 0	12.4934	28.78	
14+ 5	12.6944	29.18	
14+10	12.9119	31.58	
14+15	13.1372	32.71	
14+20	13.3640	32.94	
14+25	13.5879	32.51	
14+30	13.8113	32.43	
14+35	14.0349	32.48	
14+40	14.2590	32.54	
14+45	14.4835	32.59	
14+50	14.7070	32.46	
14+55	14.9264	31.85	
15+ 0	15.1437	31.55	
15+ 5	15.3589	31.25	
15+10	15.5693	30.54	
15+15	15.7773	30.21	
15+20	15.9832	29.89	
15+25	16.1840	29.16	
15+30	16.3824	28.81	



15+35	16.5746	27.91	
15+40	16.7481	25.19	
15+45	16.9125	23.87	
15+50	17.0732	23.34	
15+55	17.2318	23.03	
16+ 0	17.3892	22.84	
16+ 5	17.5270	20.01	
16+10	17.5991	10.47	
16+15	17.6393	5.83	
16+20	17.6664	3.93	
16+25	17.6855	2.78	
16+30	17.6997	2.06	
16+35	17.7103	1.54	
16+40	17.7179	1.11	
16+45	17.7236	0.83	
16+50	17.7280	0.64	
16+55	17.7312	0.47	
17+ 0	17.7345	0.47	
17+ 5	17.7386	0.59	
17+10	17.7457	1.04	
17+15	17.7545	1.28	
17+20	17.7641	1.39	
17+25	17.7742	1.46	
17+30	17.7847	1.53	
17+35	17.7955	1.58	
17+40	17.8067	1.62	
17+45	17.8182	1.67	
17+50	17.8289	1.56	
17+55	17.8365	1.09	
18+ 0	17.8424	0.86	
18+ 5	17.8478	0.77	
18+10	17.8527	0.72	
18+15	17.8574	0.68	
18+20	17.8619	0.66	
18+25	17.8664	0.64	
18+30	17.8707	0.63	
18+35	17.8748	0.60	
18+40	17.8785	0.53	
18+45	17.8819	0.49	
18+50	17.8850	0.46	
18+55	17.8877	0.39	
19+ 0	17.8901	0.35	
19+ 5	17.8926	0.35	
19+10	17.8954	0.41	
19+15	17.8984	0.44	
19+20	17.9017	0.48	
19+25	17.9058	0.60	
19+30	17.9105	0.67	
19+35	17.9151	0.68	
19+40	17.9190	0.56	
19+45	17.9225	0.51	
19+50	17.9257	0.47	
19+55	17.9284	0.40	
20+ 0	17.9309	0.36	
20+ 5	17.9334	0.36	
20+10	17.9362	0.41	
20+15	17.9392	0.44	
20+20	17.9423	0.44	
20+25	17.9454	0.45	
20+30	17.9485	0.45	
20+35	17.9516	0.45	
20+40	17.9547	0.45	
20+45	17.9579	0.46	
20+50	17.9609	0.44	
20+55	17.9635	0.37	
21+ 0	17.9658	0.34	
21+ 5	17.9682	0.35	
21+10	17.9710	0.41	
21+15	17.9740	0.43	
21+20	17.9769	0.42	
21+25	17.9794	0.36	
21+30	17.9817	0.33	
21+35	17.9841	0.34	
21+40	17.9868	0.40	
21+45	17.9898	0.43	
21+50	17.9927	0.42	
21+55	17.9952	0.36	
22+ 0	17.9975	0.33	
22+ 5	17.9999	0.34	
22+10	18.0026	0.40	
22+15	18.0056	0.43	
22+20	18.0085	0.42	
22+25	18.0110	0.36	
22+30	18.0133	0.33	
22+35	18.0155	0.32	
22+40	18.0177	0.32	

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   22+45      18.0199      0.31  Q          |          |          |          V|
   22+50      18.0220      0.31  Q          |          |          |          V|
   22+55      18.0242      0.31  Q          |          |          |          V|
   23+ 0      18.0263      0.31  Q          |          |          |          V|
   23+ 5      18.0284      0.31  Q          |          |          |          V|
   23+10      18.0305      0.31  Q          |          |          |          V|
   23+15      18.0326      0.31  Q          |          |          |          V|
   23+20      18.0347      0.31  Q          |          |          |          V|
   23+25      18.0368      0.31  Q          |          |          |          V|
   23+30      18.0389      0.31  Q          |          |          |          V|
   23+35      18.0410      0.31  Q          |          |          |          V|
   23+40      18.0431      0.31  Q          |          |          |          V|
   23+45      18.0452      0.31  Q          |          |          |          V|
   23+50      18.0474      0.31  Q          |          |          |          V|
   23+55      18.0495      0.31  Q          |          |          |          V|
   24+ 0      18.0516      0.31  Q          |          |          |          V|
   24+ 5      18.0534      0.27  Q          |          |          |          V|
   24+10      18.0543      0.14  Q          |          |          |          V|
   24+15      18.0548      0.07  Q          |          |          |          V|
   24+20      18.0552      0.05  Q          |          |          |          V|
   24+25      18.0554      0.03  Q          |          |          |          V|
   24+30      18.0555      0.02  Q          |          |          |          V|
   24+35      18.0556      0.01  Q          |          |          |          V|
   24+40      18.0557      0.01  Q          |          |          |          V|
   24+45      18.0557      0.00  Q          |          |          |          V|
   24+50      18.0557      0.00  Q          |          |          |           V
-------------------------------------------------------------------------------
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EXISTING SUB AREA "B"

U n i t H y d r o g r a p h A n a l y s i s

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Study date 10/17/24 File: EXB212.out

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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978

Program License Serial Number 5006

English (in-lb) Input Units Used
English Rainfall Data (Inches) Input Values Used

English Units used in output format

Drainage Area = 19.12(Ac.) = 0.030 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 19.12(Ac.) = 0.030 Sq. Mi.
Length along longest watercourse = 724.00(Ft.)
Length along longest watercourse measured to centroid = 360.00(Ft.)
Length along longest watercourse = 0.137 Mi.
Length along longest watercourse measured to centroid = 0.068 Mi.
Difference in elevation = 77.00(Ft.)
Slope along watercourse = 561.5470 Ft./Mi.
Average Manning's 'N' = 0.030
Lag time = 0.037 Hr.
Lag time = 2.20 Min.
25% of lag time = 0.55 Min.
40% of lag time = 0.88 Min.
Unit time = 5.00 Min.
Duration of storm = 1 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.)[1]	Rainfall(In)[2]	Weighting[1*2]
19.12	0.50	9.56

100 YEAR Area rainfall data:

Area(Ac.)[1]	Rainfall(In)[2]	Weighting[1*2]
19.12	1.30	24.86

STORM EVENT (YEAR) = 2.00
Area Averaged 2-Year Rainfall = 0.500(In)
Area Averaged 100-Year Rainfall = 1.300(In)

Point rain (area averaged) = 0.500(In)
Areal adjustment factor = 99.98 %
Adjusted average point rain = 0.500(In)

Sub-Area Data:

Area(Ac.)	Runoff Index	Impervious %
19.120	91.00	0.000

Total Area Entered = 19.12(Ac.)

RI AMC2	RI AMC-1	Infil. Rate (In/Hr)	Impervious (Dec.%)	Adj. Infil. Rate (In/Hr)	Area% (Dec.)	F (In/Hr)
91.0	79.8	0.246	0.000	0.246	1.000	0.246
					Sum (F) =	0.246

Area averaged mean soil loss (F) (In/Hr) = 0.246
Minimum soil loss rate ((In/Hr)) = 0.123
(for 24 hour storm duration)
Soil low loss rate (decimal) = 0.900

Slope of intensity-duration curve for a 1 hour storm =0.5500

U n i t H y d r o g r a p h
VALLEY S-Curve

Unit Hydrograph Data

Unit time period (hrs)		Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	227.497	47.782	9.207
2	0.167	454.994	41.494	7.996
3	0.250	682.491	7.777	1.499
4	0.333	909.988	2.947	0.568
		Sum = 100.000	Sum=	19.269

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit Time		Pattern	Storm Rain	Loss rate(In./Hr)			Effective
	(Hr.)	Percent	(In/Hr)	Max		Low	(In/Hr)
1	0.08	3.30	0.198	(0.246)		0.178	0.020
2	0.17	4.20	0.252	(0.246)		0.227	0.025
3	0.25	4.40	0.264	(0.246)		0.238	0.026
4	0.33	4.80	0.288	0.246	(	0.259)	0.042
5	0.42	5.20	0.312	0.246	(	0.281)	0.066
6	0.50	6.20	0.372	0.246	(	0.335)	0.126
7	0.58	6.80	0.408	0.246	(	0.367)	0.162
8	0.67	8.80	0.528	0.246	(	0.475)	0.282
9	0.75	13.90	0.834	0.246	(	0.750)	0.587
10	0.83	31.40	1.884	0.246	(	1.695)	1.637
11	0.92	7.20	0.432	0.246	(	0.389)	0.186
12	1.00	3.80	0.228	(0.246)		0.205	0.023
		(Loss Rate Not Used)					
Sum =		100.0				Sum =	3.2

Flood volume = Effective rainfall 0.27(In)
times area 19.1(Ac.)/[(In)/(Ft.)] = 0.4(Ac.Ft)
Total soil loss = 0.23(In)
Total soil loss = 0.374(Ac.Ft)
Total rainfall = 0.50(In)
Flood volume = 18395.0 Cubic Feet
Total soil loss = 16301.8 Cubic Feet

Peak flow rate of this hydrograph = 20.297(CFS)

1 - H O U R S T O R M
R u n o f f H y d r o g r a p h

Hydrograph in 5 Minute intervals ((CFS))

Time(h+m)	Volume Ac.Ft	Q(CFS)	0	7.5	15.0	22.5	30.0
0+ 5	0.0013	0.18	Q				
0+10	0.0039	0.39	Q				
0+15	0.0072	0.47	Q				
0+20	0.0116	0.64	QV				
0+25	0.0185	0.99	Q				
0+30	0.0306	1.76	Q				
0+35	0.0486	2.61	QV				
0+40	0.0769	4.11	Q V				
0+45	0.1319	7.98	Q V				
0+50	0.2716	20.30			V Q		
0+55	0.3808	15.85			Q	V	
1+ 0	0.4117	4.48	Q			V	
1+ 5	0.4212	1.39	Q			V	
1+10	0.4222	0.14	Q			V	
1+15	0.4223	0.01	Q			V	

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       U n i t   H y d r o g r a p h   A n a l y s i s

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              Study date  10/17/24 File: EXB232.out

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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978


Program License Serial Number 5006

------------------------------------------------------------------------
 English (in-lb) Input Units Used
 English Rainfall Data (Inches) Input Values Used

 English Units used in output format



------------------------------------------------------------------------
------------------------------------------------------------------------
Drainage Area =      19.12(Ac.)  =      0.030 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment =      19.12(Ac.)  =      0.030 Sq. Mi.
Length along longest watercourse =     724.00(Ft.)
Length along longest watercourse measured to centroid =     360.00(Ft.)
Length along longest watercourse =      0.137 Mi.
Length along longest watercourse measured to centroid =      0.068 Mi.
Difference in elevation =      77.00(Ft.)
Slope along watercourse =    561.5470 Ft./Mi.
Average Manning's 'N' = 0.030
Lag time =    0.037 Hr.
Lag time =     2.20 Min.
25% of lag time =     0.55 Min.
40% of lag time =     0.88 Min.
Unit time =     5.00 Min.
Duration of storm = 3 Hour(s)
User Entered Base Flow =     0.00(CFS)

2 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
       19.12            0.80                 15.30

100 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
       19.12            2.00                 38.24

STORM EVENT (YEAR) =    2.00
Area Averaged 2-Year Rainfall =    0.800(In)
Area Averaged 100-Year Rainfall =    2.000(In)

Point rain (area averaged) =    0.800(In)
Areal adjustment factor =   99.99 %
Adjusted average point rain =    0.800(In)

Sub-Area Data:
Area(Ac.)         Runoff Index   Impervious %
    19.120           91.00          0.000
 Total Area Entered =     19.12(Ac.)


RI    RI   Infil. Rate Impervious   Adj. Infil. Rate  Area%     F
AMC2 AMC-1     (In/Hr)    (Dec.%)     (In/Hr)      (Dec.)    (In/Hr)
91.0  79.8      0.246     0.000        0.246       1.000      0.246
                                                 Sum (F) =   0.246
Area averaged mean soil loss (F) (In/Hr) =  0.246
Minimum soil loss rate ((In/Hr)) =  0.123
(for 24 hour storm duration)
Soil low loss rate (decimal) =   0.900
------------------------------------------------------------------------

               U n i t  H y d r o g r a p h
                      VALLEY S-Curve
------------------------------------------------------------------
               Unit Hydrograph Data
------------------------------------------------------------------
Unit time period   Time % of lag   Distribution   Unit Hydrograph
    (hrs)                          Graph %           (CFS)
```

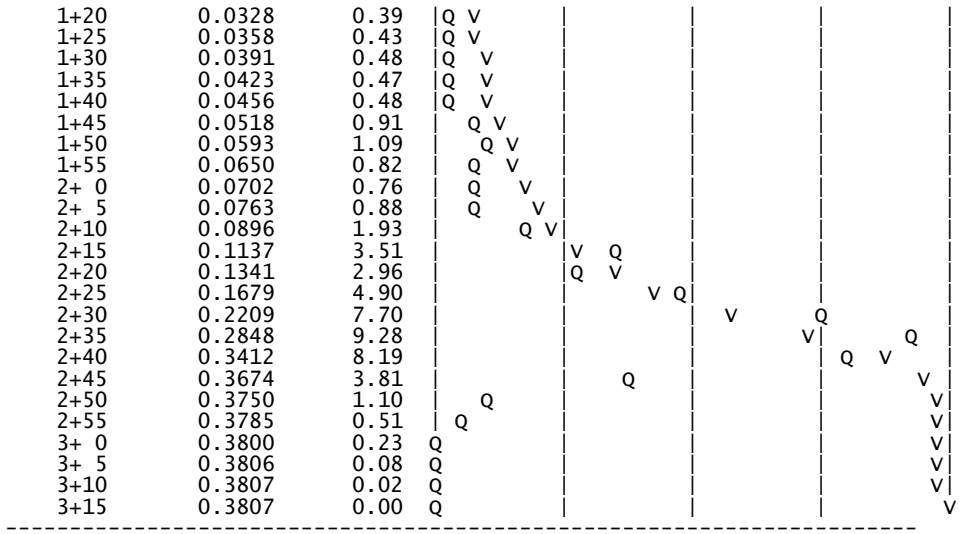
```
-------------------------------------------------------------------------
          1   0.083        227.497          47.782              9.207
          2   0.167        454.994          41.494              7.996
          3   0.250        682.491           7.777              1.499
          4   0.333        909.988           2.947              0.568
                                   Sum = 100.000    Sum=       19.269
-------------------------------------------------------------------------
```

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr) Max	Low	Effective (In/Hr)
1	0.08	1.30	0.125	(0.246)	0.112	0.012
2	0.17	1.30	0.125	(0.246)	0.112	0.012
3	0.25	1.10	0.106	(0.246)	0.095	0.011
4	0.33	1.50	0.144	(0.246)	0.130	0.014
5	0.42	1.50	0.144	(0.246)	0.130	0.014
6	0.50	1.80	0.173	(0.246)	0.156	0.017
7	0.58	1.50	0.144	(0.246)	0.130	0.014
8	0.67	1.80	0.173	(0.246)	0.156	0.017
9	0.75	1.80	0.173	(0.246)	0.156	0.017
10	0.83	1.50	0.144	(0.246)	0.130	0.014
11	0.92	1.60	0.154	(0.246)	0.138	0.015
12	1.00	1.80	0.173	(0.246)	0.156	0.017
13	1.08	2.20	0.211	(0.246)	0.190	0.021
14	1.17	2.20	0.211	(0.246)	0.190	0.021
15	1.25	2.20	0.211	(0.246)	0.190	0.021
16	1.33	2.00	0.192	(0.246)	0.173	0.019
17	1.42	2.60	0.250	(0.246)	0.225	0.025
18	1.50	2.70	0.259	(0.246)	0.233	0.026
19	1.58	2.40	0.230	(0.246)	0.207	0.023
20	1.67	2.70	0.259	(0.246)	0.233	0.026
21	1.75	3.30	0.317	0.246	(0.285)	0.070
22	1.83	3.10	0.298	0.246	(0.268)	0.051
23	1.92	2.90	0.278	0.246	(0.251)	0.032
24	2.00	3.00	0.288	0.246	(0.259)	0.042
25	2.08	3.10	0.298	0.246	(0.268)	0.051
26	2.17	4.20	0.403	0.246	(0.363)	0.157
27	2.25	5.00	0.480	0.246	(0.432)	0.234
28	2.33	3.50	0.336	0.246	(0.302)	0.090
29	2.42	6.80	0.653	0.246	(0.587)	0.406
30	2.50	7.30	0.701	0.246	(0.631)	0.454
31	2.58	8.20	0.787	0.246	(0.708)	0.541
32	2.67	5.90	0.566	0.246	(0.510)	0.320
33	2.75	2.00	0.192	(0.246)	0.173	0.019
34	2.83	1.80	0.173	(0.246)	0.156	0.017
35	2.92	1.80	0.173	(0.246)	0.156	0.017
36	3.00	0.60	0.058	(0.246)	0.052	0.006
		(Loss Rate Not Used)				
Sum =		100.0			Sum =	2.9

```
   Flood volume = Effective rainfall      0.24(In)
    times area      19.1(Ac.)/[(In)/(Ft.)] =       0.4(Ac.Ft)
   Total soil loss =      0.56(In)
   Total soil loss =     0.894(Ac.Ft)
   Total rainfall =      0.80(In)
   Flood volume =       16585.1 Cubic Feet
   Total soil loss =       38934.7 Cubic Feet
   ---------------------------------------------------------------------
    Peak flow rate of this hydrograph =      9.277(CFS)
   ---------------------------------------------------------------------
   +++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                        3 - H O U R    S T O R M
                    R u n o f f      H y d r o g r a p h
   ---------------------------------------------------------------------
               Hydrograph in   5   Minute intervals ((CFS))

   ---------------------------------------------------------------------
Time(h+m) Volume Ac.Ft   Q(CFS)  0        2.5       5.0       7.5      10.0
-------------------------------------------------------------------------
  0+ 5       0.0008      0.11  Q          |         |         |         |
  0+10       0.0023      0.21  Q          |         |         |         |
  0+15       0.0038      0.22  Q          |         |         |         |
  0+20       0.0054      0.24  Q          |         |         |         |
  0+25       0.0073      0.27  VQ         |         |         |         |
  0+30       0.0094      0.30  VQ         |         |         |         |
  0+35       0.0114      0.30  |Q         |         |         |         |
  0+40       0.0136      0.31  |Q         |         |         |         |
  0+45       0.0158      0.33  |Q         |         |         |         |
  0+50       0.0179      0.30  |Q         |         |         |         |
  0+55       0.0199      0.29  |QV        |         |         |         |
  1+ 0       0.0221      0.31  |QV        |         |         |         |
  1+ 5       0.0246      0.36  |QV        |         |         |         |
  1+10       0.0274      0.40  |QV        |         |         |         |
  1+15       0.0301      0.40  |Q V       |         |         |         |
```


1+20 0.0328 0.39
1+25 0.0358 0.43
1+30 0.0391 0.48
1+35 0.0423 0.47
1+40 0.0456 0.48
1+45 0.0518 0.91
1+50 0.0593 1.09
1+55 0.0650 0.82
2+ 0 0.0702 0.76
2+ 5 0.0763 0.88
2+10 0.0896 1.93
2+15 0.1137 3.51
2+20 0.1341 2.96
2+25 0.1679 4.90
2+30 0.2209 7.70
2+35 0.2848 9.28
2+40 0.3412 8.19
2+45 0.3674 3.81
2+50 0.3750 1.10
2+55 0.3785 0.51
3+ 0 0.3800 0.23
3+ 5 0.3806 0.08
3+10 0.3807 0.02
3+15 0.3807 0.00

```
       U n i t   H y d r o g r a p h   A n a l y s i s

       Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2008, Version 8.1
              Study date  10/17/24 File: EXB262.out

++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
------------------------------------------------------------------------------

Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978


Program License Serial Number 5006

------------------------------------------------------------------------
 English (in-lb) Input Units Used
 English Rainfall Data (Inches) Input Values Used

 English Units used in output format



------------------------------------------------------------------------
------------------------------------------------------------------------
Drainage Area =      19.12(Ac.)  =      0.030 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment =      19.12(Ac.)  =      0.030 Sq. Mi.
Length along longest watercourse =     724.00(Ft.)
Length along longest watercourse measured to centroid =     360.00(Ft.)
Length along longest watercourse =      0.137 Mi.
Length along longest watercourse measured to centroid =      0.068 Mi.
Difference in elevation =      77.00(Ft.)
Slope along watercourse =    561.5470 Ft./Mi.
Average Manning's 'N' = 0.030
Lag time =    0.037 Hr.
Lag time =     2.20 Min.
25% of lag time =     0.55 Min.
40% of lag time =     0.88 Min.
Unit time =     5.00 Min.
Duration of storm = 6 Hour(s)
User Entered Base Flow =     0.00(CFS)

2 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
       19.12            1.10                 21.03

100 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
       19.12            3.00                 57.36

STORM EVENT (YEAR) =    2.00
Area Averaged 2-Year Rainfall =    1.100(In)
Area Averaged 100-Year Rainfall =    3.000(In)

Point rain (area averaged) =    1.100(In)
Areal adjustment factor =   99.99 %
Adjusted average point rain =    1.100(In)

Sub-Area Data:
Area(Ac.)         Runoff Index   Impervious %
    19.120           91.00          0.000
 Total Area Entered =     19.12(Ac.)


RI    RI   Infil. Rate Impervious   Adj. Infil. Rate  Area%     F
AMC2 AMC-1     (In/Hr)    (Dec.%)     (In/Hr)      (Dec.)    (In/Hr)
91.0  79.8      0.246     0.000        0.246       1.000      0.246
                                                 Sum (F) =   0.246
Area averaged mean soil loss (F) (In/Hr) =  0.246
Minimum soil loss rate ((In/Hr)) =  0.123
(for 24 hour storm duration)
Soil low loss rate (decimal) =   0.900
------------------------------------------------------------------------

               U n i t  H y d r o g r a p h
                      VALLEY S-Curve
------------------------------------------------------------------
               Unit Hydrograph Data
------------------------------------------------------------------
Unit time period   Time % of lag   Distribution   Unit Hydrograph
    (hrs)                          Graph %           (CFS)
```

1	0.083	227.497	47.782	9.207
2	0.167	454.994	41.494	7.996
3	0.250	682.491	7.777	1.499
4	0.333	909.988	2.947	0.568
			Sum = 100.000	Sum= 19.269

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr) Max	Low	Effective (In/Hr)
1	0.08	0.50	0.066	(0.246)	0.059	0.007
2	0.17	0.60	0.079	(0.246)	0.071	0.008
3	0.25	0.60	0.079	(0.246)	0.071	0.008
4	0.33	0.60	0.079	(0.246)	0.071	0.008
5	0.42	0.60	0.079	(0.246)	0.071	0.008
6	0.50	0.70	0.092	(0.246)	0.083	0.009
7	0.58	0.70	0.092	(0.246)	0.083	0.009
8	0.67	0.70	0.092	(0.246)	0.083	0.009
9	0.75	0.70	0.092	(0.246)	0.083	0.009
10	0.83	0.70	0.092	(0.246)	0.083	0.009
11	0.92	0.70	0.092	(0.246)	0.083	0.009
12	1.00	0.80	0.106	(0.246)	0.095	0.011
13	1.08	0.80	0.106	(0.246)	0.095	0.011
14	1.17	0.80	0.106	(0.246)	0.095	0.011
15	1.25	0.80	0.106	(0.246)	0.095	0.011
16	1.33	0.80	0.106	(0.246)	0.095	0.011
17	1.42	0.80	0.106	(0.246)	0.095	0.011
18	1.50	0.80	0.106	(0.246)	0.095	0.011
19	1.58	0.80	0.106	(0.246)	0.095	0.011
20	1.67	0.80	0.106	(0.246)	0.095	0.011
21	1.75	0.80	0.106	(0.246)	0.095	0.011
22	1.83	0.80	0.106	(0.246)	0.095	0.011
23	1.92	0.80	0.106	(0.246)	0.095	0.011
24	2.00	0.90	0.119	(0.246)	0.107	0.012
25	2.08	0.80	0.106	(0.246)	0.095	0.011
26	2.17	0.90	0.119	(0.246)	0.107	0.012
27	2.25	0.90	0.119	(0.246)	0.107	0.012
28	2.33	0.90	0.119	(0.246)	0.107	0.012
29	2.42	0.90	0.119	(0.246)	0.107	0.012
30	2.50	0.90	0.119	(0.246)	0.107	0.012
31	2.58	0.90	0.119	(0.246)	0.107	0.012
32	2.67	0.90	0.119	(0.246)	0.107	0.012
33	2.75	1.00	0.132	(0.246)	0.119	0.013
34	2.83	1.00	0.132	(0.246)	0.119	0.013
35	2.92	1.00	0.132	(0.246)	0.119	0.013
36	3.00	1.00	0.132	(0.246)	0.119	0.013
37	3.08	1.00	0.132	(0.246)	0.119	0.013
38	3.17	1.10	0.145	(0.246)	0.131	0.015
39	3.25	1.10	0.145	(0.246)	0.131	0.015
40	3.33	1.10	0.145	(0.246)	0.131	0.015
41	3.42	1.20	0.158	(0.246)	0.143	0.016
42	3.50	1.30	0.172	(0.246)	0.154	0.017
43	3.58	1.40	0.185	(0.246)	0.166	0.018
44	3.67	1.40	0.185	(0.246)	0.166	0.018
45	3.75	1.50	0.198	(0.246)	0.178	0.020
46	3.83	1.50	0.198	(0.246)	0.178	0.020
47	3.92	1.60	0.211	(0.246)	0.190	0.021
48	4.00	1.60	0.211	(0.246)	0.190	0.021
49	4.08	1.70	0.224	(0.246)	0.202	0.022
50	4.17	1.80	0.238	(0.246)	0.214	0.024
51	4.25	1.90	0.251	(0.246)	0.226	0.025
52	4.33	2.00	0.264	(0.246)	0.238	0.026
53	4.42	2.10	0.277	0.246	(0.249)	0.031
54	4.50	2.10	0.277	0.246	(0.249)	0.031
55	4.58	2.20	0.290	0.246	(0.261)	0.044
56	4.67	2.30	0.304	0.246	(0.273)	0.057
57	4.75	2.40	0.317	0.246	(0.285)	0.070
58	4.83	2.40	0.317	0.246	(0.285)	0.070
59	4.92	2.50	0.330	0.246	(0.297)	0.084
60	5.00	2.60	0.343	0.246	(0.309)	0.097
61	5.08	3.10	0.409	0.246	(0.368)	0.163
62	5.17	3.60	0.475	0.246	(0.428)	0.229
63	5.25	3.90	0.515	0.246	(0.463)	0.268
64	5.33	4.20	0.554	0.246	(0.499)	0.308
65	5.42	4.70	0.620	0.246	(0.558)	0.374
66	5.50	5.60	0.739	0.246	(0.665)	0.493
67	5.58	1.90	0.251	(0.246)	0.226	0.025
68	5.67	0.90	0.119	(0.246)	0.107	0.012
69	5.75	0.60	0.079	(0.246)	0.071	0.008
70	5.83	0.50	0.066	(0.246)	0.059	0.007
71	5.92	0.30	0.040	(0.246)	0.036	0.004
72	6.00	0.20	0.026	(0.246)	0.024	0.003

```
            (Loss Rate Not Used)
 Sum =     100.0                                    Sum =     3.1
    Flood volume = Effective rainfall      0.26(In)
     times area      19.1(Ac.)/[(In)/(Ft.)] =       0.4(Ac.Ft)
    Total soil loss =      0.84(In)
    Total soil loss =     1.346(Ac.Ft)
    Total rainfall =      1.10(In)
    Flood volume =       17710.5 Cubic Feet
    Total soil loss =       58630.6 Cubic Feet
    --------------------------------------------------------------------
     Peak flow rate of this hydrograph =      8.146(CFS)
    --------------------------------------------------------------------
    ++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                        6 - H O U R    S T O R M
                   R u n o f f      H y d r o g r a p h
    --------------------------------------------------------------------
              Hydrograph in   5   Minute intervals ((CFS))

    --------------------------------------------------------------------
Time(h+m) Volume Ac.Ft   Q(CFS)  0        2.5       5.0       7.5      10.0
-------------------------------------------------------------------------
  0+ 5       0.0004      0.06  Q         |         |         |         |
  0+10       0.0013      0.13  Q         |         |         |         |
  0+15       0.0023      0.15  Q         |         |         |         |
  0+20       0.0033      0.15  Q         |         |         |         |
  0+25       0.0044      0.15  Q         |         |         |         |
  0+30       0.0055      0.16  Q         |         |         |         |
  0+35       0.0067      0.18  Q         |         |         |         |
  0+40       0.0080      0.18  Q         |         |         |         |
  0+45       0.0092      0.18  Q         |         |         |         |
  0+50       0.0104      0.18  QV        |         |         |         |
  0+55       0.0116      0.18  QV        |         |         |         |
  1+ 0       0.0129      0.19  QV        |         |         |         |
  1+ 5       0.0143      0.20  QV        |         |         |         |
  1+10       0.0157      0.20  QV        |         |         |         |
  1+15       0.0171      0.20  QV        |         |         |         |
  1+20       0.0185      0.20  QV        |         |         |         |
  1+25       0.0199      0.20  QV        |         |         |         |
  1+30       0.0213      0.20  Q V       |         |         |         |
  1+35       0.0227      0.20  Q V       |         |         |         |
  1+40       0.0241      0.20  Q V       |         |         |         |
  1+45       0.0255      0.20  Q V       |         |         |         |
  1+50       0.0269      0.20  Q V       |         |         |         |
  1+55       0.0283      0.20  Q V       |         |         |         |
  2+ 0       0.0298      0.22  Q V       |         |         |         |
  2+ 5       0.0313      0.21  Q  V      |         |         |         |
  2+10       0.0328      0.22  Q  V      |         |         |         |
  2+15       0.0344      0.23  Q  V      |         |         |         |
  2+20       0.0359      0.23  Q  V      |         |         |         |
  2+25       0.0375      0.23  Q  V      |         |         |         |
  2+30       0.0391      0.23  Q  V      |         |         |         |
  2+35       0.0407      0.23  Q   V     |         |         |         |
  2+40       0.0422      0.23  Q   V     |         |         |         |
  2+45       0.0439      0.24  Q   V     |         |         |         |
  2+50       0.0456      0.25  |Q  V     |         |         |         |
  2+55       0.0474      0.25  |Q  V     |         |         |         |
  3+ 0       0.0491      0.25  |Q  V     |         |         |         |
  3+ 5       0.0509      0.25  |Q   V    |         |         |         |
  3+10       0.0527      0.27  |Q   V    |         |         |         |
  3+15       0.0546      0.28  |Q   V    |         |         |         |
  3+20       0.0566      0.28  |Q   V    |         |         |         |
  3+25       0.0586      0.29  |Q   V    |         |         |         |
  3+30       0.0607      0.31  |Q   V    |         |         |         |
  3+35       0.0631      0.34  |Q    V   |         |         |         |
  3+40       0.0655      0.35  |Q    V   |         |         |         |
  3+45       0.0680      0.37  |Q    V   |         |         |         |
  3+50       0.0707      0.38  |Q    V   |         |         |         |
  3+55       0.0734      0.39  |Q     V  |         |         |         |
  4+ 0       0.0761      0.40  |Q     V  |         |         |         |
  4+ 5       0.0790      0.42  |Q     V  |         |         |         |
  4+10       0.0821      0.44  |Q      V |         |         |         |
  4+15       0.0853      0.47  |Q      V |         |         |         |
  4+20       0.0887      0.49  |Q      V |         |         |         |
  4+25       0.0924      0.55  | Q      V|         |         |         |
  4+30       0.0965      0.58  | Q      V|         |         |         |
  4+35       0.1014      0.71  | Q      V|         |         |         |
  4+40       0.1079      0.94  |  Q      V         |         |         |
  4+45       0.1161      1.19  |   Q     |V        |         |         |
  4+50       0.1252      1.32  |    Q    | V       |         |         |
  4+55       0.1353      1.47  |    Q    |  V      |         |         |
  5+ 0       0.1471      1.71  |     Q   |   V     |         |         |
  5+ 5       0.1639      2.44  |         Q|     V   |         |         |
  5+10       0.1887      3.60  |          |   Q   V |         |         |
  5+15       0.2204      4.60  |          |       Q |V        |         |
  5+20       0.2577      5.42  |          |         |Q   V    |         |
  5+25       0.3021      6.44  |          |         |    Q   V|         |
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    5+30       0.3582      8.15  |          |           |          | Q  V     |
    5+35       0.3920      4.91  |          |          Q|          |       V  |
    5+40       0.4007      1.26  |     Q    |           |          |         V|
    5+45       0.4040      0.49  |Q         |           |          |         V|
    5+50       0.4051      0.16  Q          |           |          |         V|
    5+55       0.4058      0.11  Q          |           |          |         V|
    6+ 0       0.4063      0.07  Q          |           |          |         V|
    6+ 5       0.4065      0.03  Q          |           |          |         V|
    6+10       0.4066      0.01  Q          |           |          |         V|
    6+15       0.4066      0.00  Q          |           |          |         V|
-------------------------------------------------------------------------------
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U n i t H y d r o g r a p h A n a l y s i s

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Study date 10/17/24 File: EXB2242.out

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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978

Program License Serial Number 5006

English (in-lb) Input Units Used
English Rainfall Data (Inches) Input Values Used

English Units used in output format

Drainage Area = 19.12(Ac.) = 0.030 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 19.12(Ac.) = 0.030 Sq. Mi.
Length along longest watercourse = 724.00(Ft.)
Length along longest watercourse measured to centroid = 360.00(Ft.)
Length along longest watercourse = 0.137 Mi.
Length along longest watercourse measured to centroid = 0.068 Mi.
Difference in elevation = 77.00(Ft.)
Slope along watercourse = 561.5470 Ft./Mi.
Average Manning's 'N' = 0.030
Lag time = 0.037 Hr.
Lag time = 2.20 Min.
25% of lag time = 0.55 Min.
40% of lag time = 0.88 Min.
Unit time = 5.00 Min.
Duration of storm = 24 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.)[1]	Rainfall(In)[2]	Weighting[1*2]
19.12	1.80	34.42

100 YEAR Area rainfall data:

Area(Ac.)[1]	Rainfall(In)[2]	Weighting[1*2]
19.12	5.00	95.60

STORM EVENT (YEAR) = 2.00
Area Averaged 2-Year Rainfall = 1.800(In)
Area Averaged 100-Year Rainfall = 5.000(In)

Point rain (area averaged) = 1.800(In)
Areal adjustment factor = 100.00 %
Adjusted average point rain = 1.800(In)

Sub-Area Data:

Area(Ac.)	Runoff Index	Impervious %
19.120	91.00	0.000

Total Area Entered = 19.12(Ac.)

RI AMC2	RI AMC-1	Infil. Rate (In/Hr)	Impervious (Dec.%)	Adj. Infil. Rate (In/Hr)	Area% (Dec.)	F (In/Hr)
91.0	79.8	0.246	0.000	0.246	1.000	0.246
					Sum (F) =	0.246

Area averaged mean soil loss (F) (In/Hr) = 0.246
Minimum soil loss rate ((In/Hr)) = 0.123
(for 24 hour storm duration)
Soil low loss rate (decimal) = 0.900

U n i t H y d r o g r a p h
VALLEY S-Curve

Unit Hydrograph Data

Unit time period (hrs)	Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)

1	0.083	227.497	47.782	9.207
2	0.167	454.994	41.494	7.996
3	0.250	682.491	7.777	1.499
4	0.333	909.988	2.947	0.568
			Sum = 100.000	Sum= 19.269

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr) Max	Low	Effective (In/Hr)
1	0.08	0.07	0.014	(0.437)	0.013	0.001
2	0.17	0.07	0.014	(0.435)	0.013	0.001
3	0.25	0.07	0.014	(0.433)	0.013	0.001
4	0.33	0.10	0.022	(0.432)	0.019	0.002
5	0.42	0.10	0.022	(0.430)	0.019	0.002
6	0.50	0.10	0.022	(0.428)	0.019	0.002
7	0.58	0.10	0.022	(0.427)	0.019	0.002
8	0.67	0.10	0.022	(0.425)	0.019	0.002
9	0.75	0.10	0.022	(0.423)	0.019	0.002
10	0.83	0.13	0.029	(0.422)	0.026	0.003
11	0.92	0.13	0.029	(0.420)	0.026	0.003
12	1.00	0.13	0.029	(0.418)	0.026	0.003
13	1.08	0.10	0.022	(0.417)	0.019	0.002
14	1.17	0.10	0.022	(0.415)	0.019	0.002
15	1.25	0.10	0.022	(0.413)	0.019	0.002
16	1.33	0.10	0.022	(0.412)	0.019	0.002
17	1.42	0.10	0.022	(0.410)	0.019	0.002
18	1.50	0.10	0.022	(0.408)	0.019	0.002
19	1.58	0.10	0.022	(0.407)	0.019	0.002
20	1.67	0.10	0.022	(0.405)	0.019	0.002
21	1.75	0.10	0.022	(0.404)	0.019	0.002
22	1.83	0.13	0.029	(0.402)	0.026	0.003
23	1.92	0.13	0.029	(0.400)	0.026	0.003
24	2.00	0.13	0.029	(0.399)	0.026	0.003
25	2.08	0.13	0.029	(0.397)	0.026	0.003
26	2.17	0.13	0.029	(0.395)	0.026	0.003
27	2.25	0.13	0.029	(0.394)	0.026	0.003
28	2.33	0.13	0.029	(0.392)	0.026	0.003
29	2.42	0.13	0.029	(0.391)	0.026	0.003
30	2.50	0.13	0.029	(0.389)	0.026	0.003
31	2.58	0.17	0.036	(0.387)	0.032	0.004
32	2.67	0.17	0.036	(0.386)	0.032	0.004
33	2.75	0.17	0.036	(0.384)	0.032	0.004
34	2.83	0.17	0.036	(0.383)	0.032	0.004
35	2.92	0.17	0.036	(0.381)	0.032	0.004
36	3.00	0.17	0.036	(0.380)	0.032	0.004
37	3.08	0.17	0.036	(0.378)	0.032	0.004
38	3.17	0.17	0.036	(0.376)	0.032	0.004
39	3.25	0.17	0.036	(0.375)	0.032	0.004
40	3.33	0.17	0.036	(0.373)	0.032	0.004
41	3.42	0.17	0.036	(0.372)	0.032	0.004
42	3.50	0.17	0.036	(0.370)	0.032	0.004
43	3.58	0.17	0.036	(0.369)	0.032	0.004
44	3.67	0.17	0.036	(0.367)	0.032	0.004
45	3.75	0.17	0.036	(0.366)	0.032	0.004
46	3.83	0.20	0.043	(0.364)	0.039	0.004
47	3.92	0.20	0.043	(0.362)	0.039	0.004
48	4.00	0.20	0.043	(0.361)	0.039	0.004
49	4.08	0.20	0.043	(0.359)	0.039	0.004
50	4.17	0.20	0.043	(0.358)	0.039	0.004
51	4.25	0.20	0.043	(0.356)	0.039	0.004
52	4.33	0.23	0.050	(0.355)	0.045	0.005
53	4.42	0.23	0.050	(0.353)	0.045	0.005
54	4.50	0.23	0.050	(0.352)	0.045	0.005
55	4.58	0.23	0.050	(0.350)	0.045	0.005
56	4.67	0.23	0.050	(0.349)	0.045	0.005
57	4.75	0.23	0.050	(0.347)	0.045	0.005
58	4.83	0.27	0.058	(0.346)	0.052	0.006
59	4.92	0.27	0.058	(0.344)	0.052	0.006
60	5.00	0.27	0.058	(0.343)	0.052	0.006
61	5.08	0.20	0.043	(0.341)	0.039	0.004
62	5.17	0.20	0.043	(0.340)	0.039	0.004
63	5.25	0.20	0.043	(0.338)	0.039	0.004
64	5.33	0.23	0.050	(0.337)	0.045	0.005
65	5.42	0.23	0.050	(0.335)	0.045	0.005
66	5.50	0.23	0.050	(0.334)	0.045	0.005
67	5.58	0.27	0.058	(0.332)	0.052	0.006
68	5.67	0.27	0.058	(0.331)	0.052	0.006
69	5.75	0.27	0.058	(0.330)	0.052	0.006
70	5.83	0.27	0.058	(0.328)	0.052	0.006
71	5.92	0.27	0.058	(0.327)	0.052	0.006
72	6.00	0.27	0.058	(0.325)	0.052	0.006

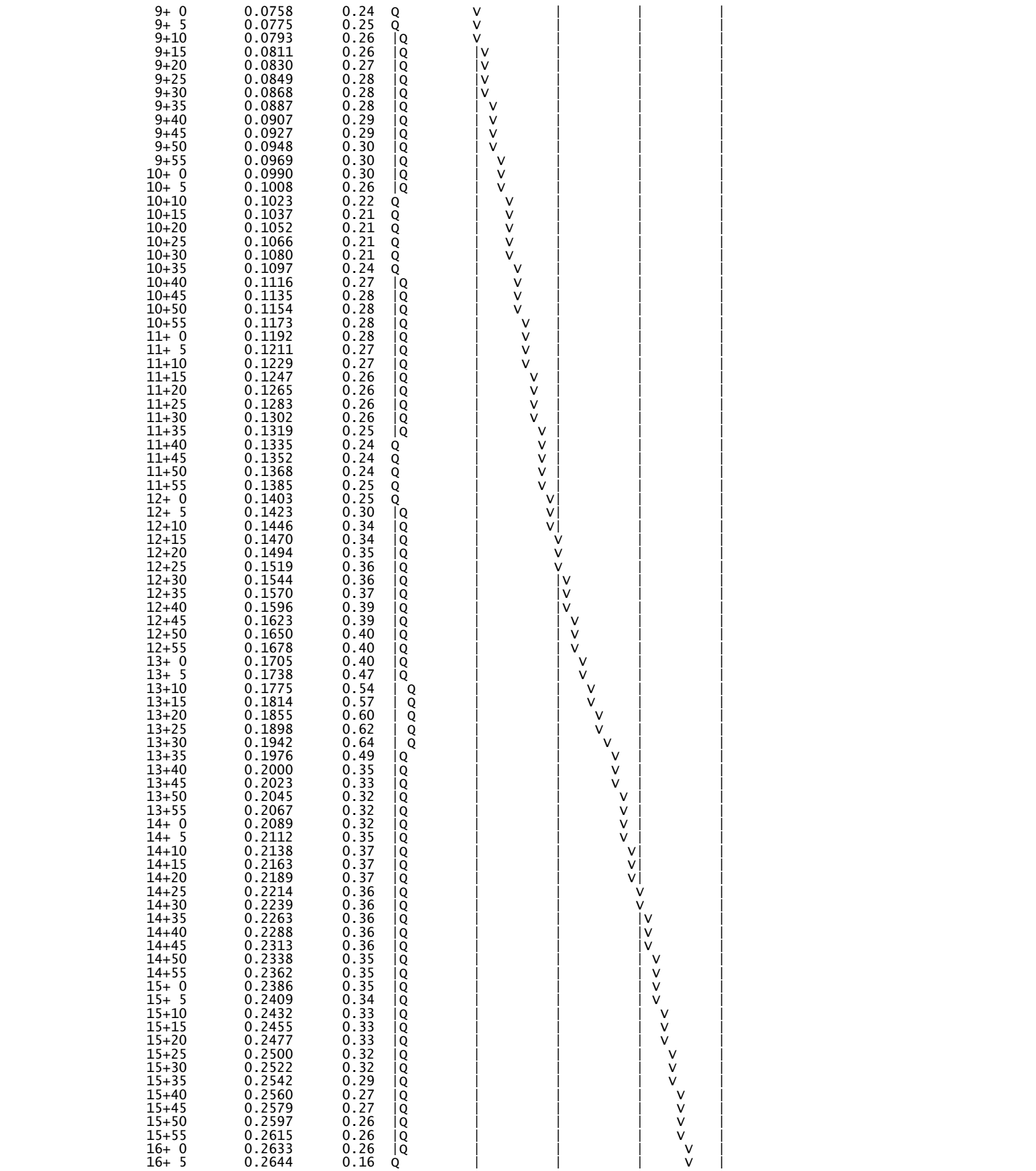
73	6.08	0.30	0.065	(0.324)	0.058	0.006
74	6.17	0.30	0.065	(0.322)	0.058	0.006
75	6.25	0.30	0.065	(0.321)	0.058	0.006
76	6.33	0.30	0.065	(0.319)	0.058	0.006
77	6.42	0.30	0.065	(0.318)	0.058	0.006
78	6.50	0.30	0.065	(0.317)	0.058	0.006
79	6.58	0.33	0.072	(0.315)	0.065	0.007
80	6.67	0.33	0.072	(0.314)	0.065	0.007
81	6.75	0.33	0.072	(0.312)	0.065	0.007
82	6.83	0.33	0.072	(0.311)	0.065	0.007
83	6.92	0.33	0.072	(0.310)	0.065	0.007
84	7.00	0.33	0.072	(0.308)	0.065	0.007
85	7.08	0.33	0.072	(0.307)	0.065	0.007
86	7.17	0.33	0.072	(0.305)	0.065	0.007
87	7.25	0.33	0.072	(0.304)	0.065	0.007
88	7.33	0.37	0.079	(0.303)	0.071	0.008
89	7.42	0.37	0.079	(0.301)	0.071	0.008
90	7.50	0.37	0.079	(0.300)	0.071	0.008
91	7.58	0.40	0.086	(0.298)	0.078	0.009
92	7.67	0.40	0.086	(0.297)	0.078	0.009
93	7.75	0.40	0.086	(0.296)	0.078	0.009
94	7.83	0.43	0.094	(0.294)	0.084	0.009
95	7.92	0.43	0.094	(0.293)	0.084	0.009
96	8.00	0.43	0.094	(0.292)	0.084	0.009
97	8.08	0.50	0.108	(0.290)	0.097	0.011
98	8.17	0.50	0.108	(0.289)	0.097	0.011
99	8.25	0.50	0.108	(0.288)	0.097	0.011
100	8.33	0.50	0.108	(0.286)	0.097	0.011
101	8.42	0.50	0.108	(0.285)	0.097	0.011
102	8.50	0.50	0.108	(0.283)	0.097	0.011
103	8.58	0.53	0.115	(0.282)	0.104	0.012
104	8.67	0.53	0.115	(0.281)	0.104	0.012
105	8.75	0.53	0.115	(0.280)	0.104	0.012
106	8.83	0.57	0.122	(0.278)	0.110	0.012
107	8.92	0.57	0.122	(0.277)	0.110	0.012
108	9.00	0.57	0.122	(0.276)	0.110	0.012
109	9.08	0.63	0.137	(0.274)	0.123	0.014
110	9.17	0.63	0.137	(0.273)	0.123	0.014
111	9.25	0.63	0.137	(0.272)	0.123	0.014
112	9.33	0.67	0.144	(0.270)	0.130	0.014
113	9.42	0.67	0.144	(0.269)	0.130	0.014
114	9.50	0.67	0.144	(0.268)	0.130	0.014
115	9.58	0.70	0.151	(0.267)	0.136	0.015
116	9.67	0.70	0.151	(0.265)	0.136	0.015
117	9.75	0.70	0.151	(0.264)	0.136	0.015
118	9.83	0.73	0.158	(0.263)	0.143	0.016
119	9.92	0.73	0.158	(0.261)	0.143	0.016
120	10.00	0.73	0.158	(0.260)	0.143	0.016
121	10.08	0.50	0.108	(0.259)	0.097	0.011
122	10.17	0.50	0.108	(0.258)	0.097	0.011
123	10.25	0.50	0.108	(0.256)	0.097	0.011
124	10.33	0.50	0.108	(0.255)	0.097	0.011
125	10.42	0.50	0.108	(0.254)	0.097	0.011
126	10.50	0.50	0.108	(0.253)	0.097	0.011
127	10.58	0.67	0.144	(0.251)	0.130	0.014
128	10.67	0.67	0.144	(0.250)	0.130	0.014
129	10.75	0.67	0.144	(0.249)	0.130	0.014
130	10.83	0.67	0.144	(0.248)	0.130	0.014
131	10.92	0.67	0.144	(0.247)	0.130	0.014
132	11.00	0.67	0.144	(0.245)	0.130	0.014
133	11.08	0.63	0.137	(0.244)	0.123	0.014
134	11.17	0.63	0.137	(0.243)	0.123	0.014
135	11.25	0.63	0.137	(0.242)	0.123	0.014
136	11.33	0.63	0.137	(0.241)	0.123	0.014
137	11.42	0.63	0.137	(0.239)	0.123	0.014
138	11.50	0.63	0.137	(0.238)	0.123	0.014
139	11.58	0.57	0.122	(0.237)	0.110	0.012
140	11.67	0.57	0.122	(0.236)	0.110	0.012
141	11.75	0.57	0.122	(0.235)	0.110	0.012
142	11.83	0.60	0.130	(0.233)	0.117	0.013
143	11.92	0.60	0.130	(0.232)	0.117	0.013
144	12.00	0.60	0.130	(0.231)	0.117	0.013
145	12.08	0.83	0.180	(0.230)	0.162	0.018
146	12.17	0.83	0.180	(0.229)	0.162	0.018
147	12.25	0.83	0.180	(0.228)	0.162	0.018
148	12.33	0.87	0.187	(0.227)	0.168	0.019
149	12.42	0.87	0.187	(0.225)	0.168	0.019
150	12.50	0.87	0.187	(0.224)	0.168	0.019
151	12.58	0.93	0.202	(0.223)	0.181	0.020
152	12.67	0.93	0.202	(0.222)	0.181	0.020
153	12.75	0.93	0.202	(0.221)	0.181	0.020
154	12.83	0.97	0.209	(0.220)	0.188	0.021
155	12.92	0.97	0.209	(0.219)	0.188	0.021
156	13.00	0.97	0.209	(0.218)	0.188	0.021
157	13.08	1.13	0.245	0.216	(0.220)	0.028
158	13.17	1.13	0.245	0.215	(0.220)	0.029

159	13.25	1.13	0.245	0.214	(0.220)	0.031
160	13.33	1.13	0.245	0.213	(0.220)	0.032
161	13.42	1.13	0.245	0.212	(0.220)	0.033
162	13.50	1.13	0.245	0.211	(0.220)	0.034
163	13.58	0.77	0.166	(0.210)	0.149	0.017
164	13.67	0.77	0.166	(0.209)	0.149	0.017
165	13.75	0.77	0.166	(0.208)	0.149	0.017
166	13.83	0.77	0.166	(0.207)	0.149	0.017
167	13.92	0.77	0.166	(0.206)	0.149	0.017
168	14.00	0.77	0.166	(0.205)	0.149	0.017
169	14.08	0.90	0.194	(0.204)	0.175	0.019
170	14.17	0.90	0.194	(0.203)	0.175	0.019
171	14.25	0.90	0.194	(0.202)	0.175	0.019
172	14.33	0.87	0.187	(0.200)	0.168	0.019
173	14.42	0.87	0.187	(0.199)	0.168	0.019
174	14.50	0.87	0.187	(0.198)	0.168	0.019
175	14.58	0.87	0.187	(0.197)	0.168	0.019
176	14.67	0.87	0.187	(0.196)	0.168	0.019
177	14.75	0.87	0.187	(0.195)	0.168	0.019
178	14.83	0.83	0.180	(0.194)	0.162	0.018
179	14.92	0.83	0.180	(0.193)	0.162	0.018
180	15.00	0.83	0.180	(0.192)	0.162	0.018
181	15.08	0.80	0.173	(0.191)	0.156	0.017
182	15.17	0.80	0.173	(0.190)	0.156	0.017
183	15.25	0.80	0.173	(0.189)	0.156	0.017
184	15.33	0.77	0.166	(0.188)	0.149	0.017
185	15.42	0.77	0.166	(0.188)	0.149	0.017
186	15.50	0.77	0.166	(0.187)	0.149	0.017
187	15.58	0.63	0.137	(0.186)	0.123	0.014
188	15.67	0.63	0.137	(0.185)	0.123	0.014
189	15.75	0.63	0.137	(0.184)	0.123	0.014
190	15.83	0.63	0.137	(0.183)	0.123	0.014
191	15.92	0.63	0.137	(0.182)	0.123	0.014
192	16.00	0.63	0.137	(0.181)	0.123	0.014
193	16.08	0.13	0.029	(0.180)	0.026	0.003
194	16.17	0.13	0.029	(0.179)	0.026	0.003
195	16.25	0.13	0.029	(0.178)	0.026	0.003
196	16.33	0.13	0.029	(0.177)	0.026	0.003
197	16.42	0.13	0.029	(0.176)	0.026	0.003
198	16.50	0.13	0.029	(0.175)	0.026	0.003
199	16.58	0.10	0.022	(0.175)	0.019	0.002
200	16.67	0.10	0.022	(0.174)	0.019	0.002
201	16.75	0.10	0.022	(0.173)	0.019	0.002
202	16.83	0.10	0.022	(0.172)	0.019	0.002
203	16.92	0.10	0.022	(0.171)	0.019	0.002
204	17.00	0.10	0.022	(0.170)	0.019	0.002
205	17.08	0.17	0.036	(0.169)	0.032	0.004
206	17.17	0.17	0.036	(0.168)	0.032	0.004
207	17.25	0.17	0.036	(0.168)	0.032	0.004
208	17.33	0.17	0.036	(0.167)	0.032	0.004
209	17.42	0.17	0.036	(0.166)	0.032	0.004
210	17.50	0.17	0.036	(0.165)	0.032	0.004
211	17.58	0.17	0.036	(0.164)	0.032	0.004
212	17.67	0.17	0.036	(0.163)	0.032	0.004
213	17.75	0.17	0.036	(0.163)	0.032	0.004
214	17.83	0.13	0.029	(0.162)	0.026	0.003
215	17.92	0.13	0.029	(0.161)	0.026	0.003
216	18.00	0.13	0.029	(0.160)	0.026	0.003
217	18.08	0.13	0.029	(0.159)	0.026	0.003
218	18.17	0.13	0.029	(0.159)	0.026	0.003
219	18.25	0.13	0.029	(0.158)	0.026	0.003
220	18.33	0.13	0.029	(0.157)	0.026	0.003
221	18.42	0.13	0.029	(0.156)	0.026	0.003
222	18.50	0.13	0.029	(0.156)	0.026	0.003
223	18.58	0.10	0.022	(0.155)	0.019	0.002
224	18.67	0.10	0.022	(0.154)	0.019	0.002
225	18.75	0.10	0.022	(0.153)	0.019	0.002
226	18.83	0.07	0.014	(0.153)	0.013	0.001
227	18.92	0.07	0.014	(0.152)	0.013	0.001
228	19.00	0.07	0.014	(0.151)	0.013	0.001
229	19.08	0.10	0.022	(0.150)	0.019	0.002
230	19.17	0.10	0.022	(0.150)	0.019	0.002
231	19.25	0.10	0.022	(0.149)	0.019	0.002
232	19.33	0.13	0.029	(0.148)	0.026	0.003
233	19.42	0.13	0.029	(0.148)	0.026	0.003
234	19.50	0.13	0.029	(0.147)	0.026	0.003
235	19.58	0.10	0.022	(0.146)	0.019	0.002
236	19.67	0.10	0.022	(0.146)	0.019	0.002
237	19.75	0.10	0.022	(0.145)	0.019	0.002
238	19.83	0.07	0.014	(0.144)	0.013	0.001
239	19.92	0.07	0.014	(0.144)	0.013	0.001
240	20.00	0.07	0.014	(0.143)	0.013	0.001
241	20.08	0.10	0.022	(0.142)	0.019	0.002
242	20.17	0.10	0.022	(0.142)	0.019	0.002
243	20.25	0.10	0.022	(0.141)	0.019	0.002
244	20.33	0.10	0.022	(0.141)	0.019	0.002

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245  20.42     0.10      0.022       (  0.140)       0.019        0.002
246  20.50     0.10      0.022       (  0.139)       0.019        0.002
247  20.58     0.10      0.022       (  0.139)       0.019        0.002
248  20.67     0.10      0.022       (  0.138)       0.019        0.002
249  20.75     0.10      0.022       (  0.138)       0.019        0.002
250  20.83     0.07      0.014       (  0.137)       0.013        0.001
251  20.92     0.07      0.014       (  0.137)       0.013        0.001
252  21.00     0.07      0.014       (  0.136)       0.013        0.001
253  21.08     0.10      0.022       (  0.135)       0.019        0.002
254  21.17     0.10      0.022       (  0.135)       0.019        0.002
255  21.25     0.10      0.022       (  0.134)       0.019        0.002
256  21.33     0.07      0.014       (  0.134)       0.013        0.001
257  21.42     0.07      0.014       (  0.133)       0.013        0.001
258  21.50     0.07      0.014       (  0.133)       0.013        0.001
259  21.58     0.10      0.022       (  0.132)       0.019        0.002
260  21.67     0.10      0.022       (  0.132)       0.019        0.002
261  21.75     0.10      0.022       (  0.131)       0.019        0.002
262  21.83     0.07      0.014       (  0.131)       0.013        0.001
263  21.92     0.07      0.014       (  0.131)       0.013        0.001
264  22.00     0.07      0.014       (  0.130)       0.013        0.001
265  22.08     0.10      0.022       (  0.130)       0.019        0.002
266  22.17     0.10      0.022       (  0.129)       0.019        0.002
267  22.25     0.10      0.022       (  0.129)       0.019        0.002
268  22.33     0.07      0.014       (  0.128)       0.013        0.001
269  22.42     0.07      0.014       (  0.128)       0.013        0.001
270  22.50     0.07      0.014       (  0.128)       0.013        0.001
271  22.58     0.07      0.014       (  0.127)       0.013        0.001
272  22.67     0.07      0.014       (  0.127)       0.013        0.001
273  22.75     0.07      0.014       (  0.127)       0.013        0.001
274  22.83     0.07      0.014       (  0.126)       0.013        0.001
275  22.92     0.07      0.014       (  0.126)       0.013        0.001
276  23.00     0.07      0.014       (  0.126)       0.013        0.001
277  23.08     0.07      0.014       (  0.125)       0.013        0.001
278  23.17     0.07      0.014       (  0.125)       0.013        0.001
279  23.25     0.07      0.014       (  0.125)       0.013        0.001
280  23.33     0.07      0.014       (  0.125)       0.013        0.001
281  23.42     0.07      0.014       (  0.124)       0.013        0.001
282  23.50     0.07      0.014       (  0.124)       0.013        0.001
283  23.58     0.07      0.014       (  0.124)       0.013        0.001
284  23.67     0.07      0.014       (  0.124)       0.013        0.001
285  23.75     0.07      0.014       (  0.124)       0.013        0.001
286  23.83     0.07      0.014       (  0.123)       0.013        0.001
287  23.92     0.07      0.014       (  0.123)       0.013        0.001
288  24.00     0.07      0.014       (  0.123)       0.013        0.001
                (Loss Rate Not Used)
    Sum =     100.0                                  Sum =      2.2
      Flood volume = Effective rainfall      0.18(In)
       times area      19.1(Ac.)/[(In)/(Ft.)] =       0.3(Ac.Ft)
      Total soil loss =      1.62(In)
      Total soil loss =     2.576(Ac.Ft)
      Total rainfall =      1.80(In)
      Flood volume =       12721.1 Cubic Feet
      Total soil loss =      112204.3 Cubic Feet
      ---------------------------------------------------------------------
       Peak flow rate of this hydrograph =      0.638(CFS)
      ---------------------------------------------------------------------
      +++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                          24 - H O U R    S T O R M
                     R u n o f f      H y d r o g r a p h
      ---------------------------------------------------------------------
                  Hydrograph in   5   Minute intervals ((CFS))

      ---------------------------------------------------------------------
 Time(h+m) Volume Ac.Ft   Q(CFS)  0        2.5       5.0       7.5      10.0
 ---------------------------------------------------------------------------
   0+ 5       0.0001      0.01  Q          |         |         |         |
   0+10       0.0003      0.02  Q          |         |         |         |
   0+15       0.0004      0.03  Q          |         |         |         |
   0+20       0.0007      0.03  Q          |         |         |         |
   0+25       0.0010      0.04  Q          |         |         |         |
   0+30       0.0012      0.04  Q          |         |         |         |
   0+35       0.0015      0.04  Q          |         |         |         |
   0+40       0.0018      0.04  Q          |         |         |         |
   0+45       0.0021      0.04  Q          |         |         |         |
   0+50       0.0024      0.05  Q          |         |         |         |
   0+55       0.0028      0.05  Q          |         |         |         |
   1+ 0       0.0032      0.06  Q          |         |         |         |
   1+ 5       0.0035      0.05  Q          |         |         |         |
   1+10       0.0038      0.04  Q          |         |         |         |
   1+15       0.0041      0.04  Q          |         |         |         |
   1+20       0.0044      0.04  Q          |         |         |         |
   1+25       0.0047      0.04  Q          |         |         |         |
   1+30       0.0050      0.04  Q          |         |         |         |
   1+35       0.0053      0.04  Q          |         |         |         |
   1+40       0.0055      0.04  Q          |         |         |         |
   1+45       0.0058      0.04  Q          |         |         |         |
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1+50       0.0062      0.05  Q          |          |          |          |
1+55       0.0065      0.05  Q          |          |          |          |
2+ 0       0.0069      0.06  Q          |          |          |          |
2+ 5       0.0073      0.06  Q          |          |          |          |
2+10       0.0077      0.06  QV         |          |          |          |
2+15       0.0081      0.06  QV         |          |          |          |
2+20       0.0084      0.06  QV         |          |          |          |
2+25       0.0088      0.06  QV         |          |          |          |
2+30       0.0092      0.06  QV         |          |          |          |
2+35       0.0096      0.06  QV         |          |          |          |
2+40       0.0101      0.07  QV         |          |          |          |
2+45       0.0106      0.07  QV         |          |          |          |
2+50       0.0111      0.07  QV         |          |          |          |
2+55       0.0115      0.07  QV         |          |          |          |
3+ 0       0.0120      0.07  QV         |          |          |          |
3+ 5       0.0125      0.07  QV         |          |          |          |
3+10       0.0130      0.07  QV         |          |          |          |
3+15       0.0135      0.07  QV         |          |          |          |
3+20       0.0139      0.07  QV         |          |          |          |
3+25       0.0144      0.07  QV         |          |          |          |
3+30       0.0149      0.07  Q V        |          |          |          |
3+35       0.0154      0.07  Q V        |          |          |          |
3+40       0.0158      0.07  Q V        |          |          |          |
3+45       0.0163      0.07  Q V        |          |          |          |
3+50       0.0168      0.08  Q V        |          |          |          |
3+55       0.0174      0.08  Q V        |          |          |          |
4+ 0       0.0180      0.08  Q V        |          |          |          |
4+ 5       0.0186      0.08  Q V        |          |          |          |
4+10       0.0191      0.08  Q V        |          |          |          |
4+15       0.0197      0.08  Q V        |          |          |          |
4+20       0.0203      0.09  Q V        |          |          |          |
4+25       0.0210      0.10  Q V        |          |          |          |
4+30       0.0216      0.10  Q V        |          |          |          |
4+35       0.0223      0.10  Q  V       |          |          |          |
4+40       0.0230      0.10  Q  V       |          |          |          |
4+45       0.0236      0.10  Q  V       |          |          |          |
4+50       0.0244      0.10  Q  V       |          |          |          |
4+55       0.0251      0.11  Q  V       |          |          |          |
5+ 0       0.0259      0.11  Q  V       |          |          |          |
5+ 5       0.0266      0.10  Q  V       |          |          |          |
5+10       0.0271      0.09  Q  V       |          |          |          |
5+15       0.0277      0.08  Q  V       |          |          |          |
5+20       0.0283      0.09  Q  V       |          |          |          |
5+25       0.0290      0.10  Q  V       |          |          |          |
5+30       0.0297      0.10  Q   V      |          |          |          |
5+35       0.0304      0.10  Q   V      |          |          |          |
5+40       0.0311      0.11  Q   V      |          |          |          |
5+45       0.0319      0.11  Q   V      |          |          |          |
5+50       0.0327      0.11  Q   V      |          |          |          |
5+55       0.0334      0.11  Q   V      |          |          |          |
6+ 0       0.0342      0.11  Q   V      |          |          |          |
6+ 5       0.0350      0.12  Q   V      |          |          |          |
6+10       0.0359      0.12  Q   V      |          |          |          |
6+15       0.0367      0.12  Q    V     |          |          |          |
6+20       0.0376      0.12  Q    V     |          |          |          |
6+25       0.0384      0.12  Q    V     |          |          |          |
6+30       0.0393      0.12  Q    V     |          |          |          |
6+35       0.0402      0.13  Q    V     |          |          |          |
6+40       0.0411      0.14  Q    V     |          |          |          |
6+45       0.0421      0.14  Q    V     |          |          |          |
6+50       0.0431      0.14  Q    V     |          |          |          |
6+55       0.0440      0.14  Q     V    |          |          |          |
7+ 0       0.0450      0.14  Q     V    |          |          |          |
7+ 5       0.0459      0.14  Q     V    |          |          |          |
7+10       0.0469      0.14  Q     V    |          |          |          |
7+15       0.0478      0.14  Q     V    |          |          |          |
7+20       0.0488      0.15  Q     V    |          |          |          |
7+25       0.0499      0.15  Q     V    |          |          |          |
7+30       0.0509      0.15  Q     V    |          |          |          |
7+35       0.0520      0.16  Q      V   |          |          |          |
7+40       0.0532      0.17  Q      V   |          |          |          |
7+45       0.0543      0.17  Q      V   |          |          |          |
7+50       0.0555      0.17  Q      V   |          |          |          |
7+55       0.0567      0.18  Q      V   |          |          |          |
8+ 0       0.0580      0.18  Q      V   |          |          |          |
8+ 5       0.0593      0.19  Q       V  |          |          |          |
8+10       0.0607      0.21  Q       V  |          |          |          |
8+15       0.0621      0.21  Q       V  |          |          |          |
8+20       0.0636      0.21  Q       V  |          |          |          |
8+25       0.0650      0.21  Q       V  |          |          |          |
8+30       0.0665      0.21  Q        V |          |          |          |
8+35       0.0679      0.21  Q        V |          |          |          |
8+40       0.0694      0.22  Q        V |          |          |          |
8+45       0.0710      0.22  Q        V |          |          |          |
8+50       0.0726      0.23  Q        V |          |          |          |
8+55       0.0742      0.23  Q         V|          |          |          |
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9+ 0	0.0758	0.24	Q	V
9+ 5	0.0775	0.25	Q	V
9+10	0.0793	0.26	|Q	V
9+15	0.0811	0.26	|Q	|V
9+20	0.0830	0.27	|Q	|V
9+25	0.0849	0.28	|Q	|V
9+30	0.0868	0.28	|Q	|V
9+35	0.0887	0.28	|Q	| V
9+40	0.0907	0.29	|Q	| V
9+45	0.0927	0.29	|Q	| V
9+50	0.0948	0.30	|Q	| V
9+55	0.0969	0.30	|Q	| V
10+ 0	0.0990	0.30	|Q	| V
10+ 5	0.1008	0.26	|Q	| V
10+10	0.1023	0.22	Q	| V
10+15	0.1037	0.21	Q	| V
10+20	0.1052	0.21	Q	| V
10+25	0.1066	0.21	Q	| V
10+30	0.1080	0.21	Q	| V
10+35	0.1097	0.24	Q	| V
10+40	0.1116	0.27	|Q	| V
10+45	0.1135	0.28	|Q	| V
10+50	0.1154	0.28	|Q	| V
10+55	0.1173	0.28	|Q	| V
11+ 0	0.1192	0.28	|Q	| V
11+ 5	0.1211	0.27	|Q	| V
11+10	0.1229	0.27	|Q	| V
11+15	0.1247	0.26	|Q	| V
11+20	0.1265	0.26	|Q	| V
11+25	0.1283	0.26	|Q	| V
11+30	0.1302	0.26	|Q	| V
11+35	0.1319	0.25	|Q	| V
11+40	0.1335	0.24	Q	| V
11+45	0.1352	0.24	Q	| V
11+50	0.1368	0.24	Q	| V
11+55	0.1385	0.25	Q	| V
12+ 0	0.1403	0.25	Q	| V|
12+ 5	0.1423	0.30	|Q	| V|
12+10	0.1446	0.34	|Q	| V|
12+15	0.1470	0.34	|Q	| V
12+20	0.1494	0.35	|Q	| V
12+25	0.1519	0.36	|Q	| V
12+30	0.1544	0.36	|Q	| |V
12+35	0.1570	0.37	|Q	| |V
12+40	0.1596	0.39	|Q	| |V
12+45	0.1623	0.39	|Q	| | V
12+50	0.1650	0.40	|Q	| | V
12+55	0.1678	0.40	|Q	| | V
13+ 0	0.1705	0.40	|Q	| | V
13+ 5	0.1738	0.47	|Q	| | V
13+10	0.1775	0.54	| Q	| | V
13+15	0.1814	0.57	| Q	| | V
13+20	0.1855	0.60	| Q	| | V
13+25	0.1898	0.62	| Q	| | V
13+30	0.1942	0.64	| Q	| | V
13+35	0.1976	0.49	|Q	| | V
13+40	0.2000	0.35	|Q	| | V
13+45	0.2023	0.33	|Q	| | V
13+50	0.2045	0.32	|Q	| | V
13+55	0.2067	0.32	|Q	| | V
14+ 0	0.2089	0.32	|Q	| | V
14+ 5	0.2112	0.35	|Q	| | V
14+10	0.2138	0.37	|Q	| | V|
14+15	0.2163	0.37	|Q	| | V|
14+20	0.2189	0.37	|Q	| | V|
14+25	0.2214	0.36	|Q	| | V
14+30	0.2239	0.36	|Q	| | V
14+35	0.2263	0.36	|Q	| | |V
14+40	0.2288	0.36	|Q	| | |V
14+45	0.2313	0.36	|Q	| | |V
14+50	0.2338	0.35	|Q	| | | V
14+55	0.2362	0.35	|Q	| | | V
15+ 0	0.2386	0.35	|Q	| | | V
15+ 5	0.2409	0.34	|Q	| | | V
15+10	0.2432	0.33	|Q	| | | V
15+15	0.2455	0.33	|Q	| | | V
15+20	0.2477	0.33	|Q	| | | V
15+25	0.2500	0.32	|Q	| | | V
15+30	0.2522	0.32	|Q	| | | V
15+35	0.2542	0.29	|Q	| | | V
15+40	0.2560	0.27	|Q	| | | V
15+45	0.2579	0.27	|Q	| | | V
15+50	0.2597	0.26	|Q	| | | V
15+55	0.2615	0.26	|Q	| | | V
16+ 0	0.2633	0.26	|Q	| | | V
16+ 5	0.2644	0.16	Q	| | | V

16+10	0.2650	0.08	Q	|	|	|	V |
16+15	0.2654	0.06	Q	|	|	|	V |
16+20	0.2658	0.06	Q	|	|	|	V |
16+25	0.2662	0.06	Q	|	|	|	V |
16+30	0.2665	0.06	Q	|	|	|	V |
16+35	0.2669	0.05	Q	|	|	|	V |
16+40	0.2672	0.04	Q	|	|	|	V |
16+45	0.2675	0.04	Q	|	|	|	V |
16+50	0.2678	0.04	Q	|	|	|	V |
16+55	0.2680	0.04	Q	|	|	|	V |
17+ 0	0.2683	0.04	Q	|	|	|	V |
17+ 5	0.2687	0.05	Q	|	|	|	V |
17+10	0.2692	0.07	Q	|	|	|	V |
17+15	0.2696	0.07	Q	|	|	|	V |
17+20	0.2701	0.07	Q	|	|	|	V |
17+25	0.2706	0.07	Q	|	|	|	V |
17+30	0.2711	0.07	Q	|	|	|	V |
17+35	0.2716	0.07	Q	|	|	|	V |
17+40	0.2720	0.07	Q	|	|	|	V |
17+45	0.2725	0.07	Q	|	|	|	V |
17+50	0.2729	0.06	Q	|	|	|	V |
17+55	0.2733	0.06	Q	|	|	|	V |
18+ 0	0.2737	0.06	Q	|	|	|	V |
18+ 5	0.2741	0.06	Q	|	|	|	V |
18+10	0.2745	0.06	Q	|	|	|	V |
18+15	0.2749	0.06	Q	|	|	|	V |
18+20	0.2752	0.06	Q	|	|	|	V |
18+25	0.2756	0.06	Q	|	|	|	V |
18+30	0.2760	0.06	Q	|	|	|	V |
18+35	0.2763	0.05	Q	|	|	|	V |
18+40	0.2766	0.04	Q	|	|	|	V |
18+45	0.2769	0.04	Q	|	|	|	V |
18+50	0.2772	0.04	Q	|	|	|	V |
18+55	0.2774	0.03	Q	|	|	|	V |
19+ 0	0.2776	0.03	Q	|	|	|	V |
19+ 5	0.2778	0.03	Q	|	|	|	V |
19+10	0.2781	0.04	Q	|	|	|	V |
19+15	0.2784	0.04	Q	|	|	|	V |
19+20	0.2787	0.05	Q	|	|	|	V |
19+25	0.2791	0.05	Q	|	|	|	V |
19+30	0.2795	0.06	Q	|	|	|	V |
19+35	0.2798	0.05	Q	|	|	|	V |
19+40	0.2801	0.04	Q	|	|	|	V |
19+45	0.2804	0.04	Q	|	|	|	V |
19+50	0.2806	0.04	Q	|	|	|	V |
19+55	0.2808	0.03	Q	|	|	|	V |
20+ 0	0.2810	0.03	Q	|	|	|	V |
20+ 5	0.2813	0.03	Q	|	|	|	V |
20+10	0.2815	0.04	Q	|	|	|	V |
20+15	0.2818	0.04	Q	|	|	|	V |
20+20	0.2821	0.04	Q	|	|	|	V |
20+25	0.2824	0.04	Q	|	|	|	V |
20+30	0.2827	0.04	Q	|	|	|	V |
20+35	0.2830	0.04	Q	|	|	|	V |
20+40	0.2832	0.04	Q	|	|	|	V |
20+45	0.2835	0.04	Q	|	|	|	V |
20+50	0.2838	0.04	Q	|	|	|	V |
20+55	0.2840	0.03	Q	|	|	|	V |
21+ 0	0.2842	0.03	Q	|	|	|	V |
21+ 5	0.2844	0.03	Q	|	|	|	V |
21+10	0.2847	0.04	Q	|	|	|	V |
21+15	0.2850	0.04	Q	|	|	|	V|
21+20	0.2852	0.04	Q	|	|	|	V|
21+25	0.2854	0.03	Q	|	|	|	V|
21+30	0.2856	0.03	Q	|	|	|	V|
21+35	0.2858	0.03	Q	|	|	|	V|
21+40	0.2861	0.04	Q	|	|	|	V|
21+45	0.2864	0.04	Q	|	|	|	V|
21+50	0.2866	0.04	Q	|	|	|	V|
21+55	0.2868	0.03	Q	|	|	|	V|
22+ 0	0.2870	0.03	Q	|	|	|	V|
22+ 5	0.2873	0.03	Q	|	|	|	V|
22+10	0.2875	0.04	Q	|	|	|	V|
22+15	0.2878	0.04	Q	|	|	|	V|
22+20	0.2881	0.04	Q	|	|	|	V|
22+25	0.2883	0.03	Q	|	|	|	V|
22+30	0.2885	0.03	Q	|	|	|	V|
22+35	0.2887	0.03	Q	|	|	|	V|
22+40	0.2889	0.03	Q	|	|	|	V|
22+45	0.2890	0.03	Q	|	|	|	V|
22+50	0.2892	0.03	Q	|	|	|	V|
22+55	0.2894	0.03	Q	|	|	|	V|
23+ 0	0.2896	0.03	Q	|	|	|	V|
23+ 5	0.2898	0.03	Q	|	|	|	V|
23+10	0.2900	0.03	Q	|	|	|	V|
23+15	0.2902	0.03	Q	|	|	|	V|

```
   23+20       0.2904      0.03  Q          |          |          |         v|
   23+25       0.2906      0.03  Q          |          |          |         v|
   23+30       0.2908      0.03  Q          |          |          |         v|
   23+35       0.2910      0.03  Q          |          |          |         v|
   23+40       0.2911      0.03  Q          |          |          |         v|
   23+45       0.2913      0.03  Q          |          |          |         v|
   23+50       0.2915      0.03  Q          |          |          |         v|
   23+55       0.2917      0.03  Q          |          |          |         v|
   24+ 0       0.2919      0.03  Q          |          |          |         v|
   24+ 5       0.2920      0.01  Q          |          |          |         v|
   24+10       0.2920      0.00  Q          |          |          |         v|
   24+15       0.2920      0.00  Q          |          |          |          v
------------------------------------------------------------------------------
```

```
       U n i t   H y d r o g r a p h   A n a l y s i s

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              Study date  10/17/24 File: EXB515.out

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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978


Program License Serial Number 5006

------------------------------------------------------------------------
 English (in-lb) Input Units Used
 English Rainfall Data (Inches) Input Values Used

 English Units used in output format



------------------------------------------------------------------------
------------------------------------------------------------------------
Drainage Area =      19.12(Ac.)  =      0.030 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment =      19.12(Ac.)  =      0.030 Sq. Mi.
Length along longest watercourse =     724.00(Ft.)
Length along longest watercourse measured to centroid =     360.00(Ft.)
Length along longest watercourse =      0.137 Mi.
Length along longest watercourse measured to centroid =      0.068 Mi.
Difference in elevation =      77.00(Ft.)
Slope along watercourse =    561.5470 Ft./Mi.
Average Manning's 'N' = 0.030
Lag time =    0.037 Hr.
Lag time =     2.20 Min.
25% of lag time =     0.55 Min.
40% of lag time =     0.88 Min.
Unit time =     5.00 Min.
Duration of storm = 1 Hour(s)
User Entered Base Flow =     0.00(CFS)

2 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
       19.12            0.50                 9.56

100 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
       19.12            1.30                24.86

STORM EVENT (YEAR) =    5.00
Area Averaged 2-Year Rainfall =    0.500(In)
Area Averaged 100-Year Rainfall =    1.300(In)

Point rain (area averaged) =    0.687(In)
Areal adjustment factor =   99.98 %
Adjusted average point rain =    0.687(In)

Sub-Area Data:
Area(Ac.)         Runoff Index   Impervious %
    19.120           91.00          0.000
 Total Area Entered =     19.12(Ac.)


RI    RI   Infil. Rate Impervious   Adj. Infil. Rate  Area%     F
AMC2 AMC-1     (In/Hr)    (Dec.%)     (In/Hr)      (Dec.)    (In/Hr)
91.0  79.8      0.246     0.000        0.246       1.000      0.246
                                                 Sum (F) =    0.246
Area averaged mean soil loss (F) (In/Hr) =  0.246
Minimum soil loss rate ((In/Hr)) =  0.123
(for 24 hour storm duration)
Soil low loss rate (decimal) =   0.900
------------------------------------------------------------------------
Slope of intensity-duration curve for a 1 hour storm =0.5500
------------------------------------------------------------------------

               U n i t  H y d r o g r a p h
                      VALLEY S-Curve
---------------------------------------------------------------
               Unit Hydrograph Data
---------------------------------------------------------------
```

Unit time period (hrs)		Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	227.497	47.782	9.207
2	0.167	454.994	41.494	7.996
3	0.250	682.491	7.777	1.499
4	0.333	909.988	2.947	0.568
		Sum = 100.000	Sum=	19.269

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit Time		Pattern	Storm Rain	Loss rate(In./Hr)		Effective
	(Hr.)	Percent	(In/Hr)	Max	Low	(In/Hr)
1	0.08	3.30	0.272	(0.246)	0.245	0.027
2	0.17	4.20	0.346	0.246	(0.312)	0.100
3	0.25	4.40	0.363	0.246	(0.327)	0.117
4	0.33	4.80	0.396	0.246	(0.356)	0.150
5	0.42	5.20	0.429	0.246	(0.386)	0.182
6	0.50	6.20	0.511	0.246	(0.460)	0.265
7	0.58	6.80	0.561	0.246	(0.505)	0.314
8	0.67	8.80	0.726	0.246	(0.653)	0.479
9	0.75	13.90	1.146	0.246	(1.032)	0.900
10	0.83	31.40	2.590	0.246	(2.331)	2.343
11	0.92	7.20	0.594	0.246	(0.534)	0.347
12	1.00	3.80	0.313	0.246	(0.282)	0.067
		(Loss Rate Not Used)				
Sum =		100.0			Sum =	5.3

Flood volume = Effective rainfall 0.44(In)
times area 19.1(Ac.)/[(In)/(Ft.)] = 0.7(Ac.Ft)
Total soil loss = 0.25(In)
Total soil loss = 0.392(Ac.Ft)
Total rainfall = 0.69(In)
Flood volume = 30609.2 Cubic Feet
Total soil loss = 17090.5 Cubic Feet

Peak flow rate of this hydrograph = 29.683(CFS)

++

1 - H O U R S T O R M
R u n o f f H y d r o g r a p h

Hydrograph in 5 Minute intervals ((CFS))

Time(h+m)	Volume Ac.Ft	Q(CFS)	0	7.5	15.0	22.5	30.0
0+ 5	0.0017	0.25	Q				
0+10	0.0096	1.14	VQ				
0+15	0.0228	1.91	VQ				
0+20	0.0398	2.47	VQ				
0+25	0.0612	3.11	VQ				
0+30	0.0901	4.19	Q				
0+35	0.1271	5.37	Q				
0+40	0.1783	7.43	QV				
0+45	0.2661	12.75		VQ			
0+50	0.4705	29.68			V		Q
0+55	0.6328	23.57				Q V	
1+ 0	0.6839	7.42		Q			V
1+ 5	0.7004	2.39	Q				V
1+10	0.7024	0.30	Q				V
1+15	0.7027	0.04	Q				V

U n i t H y d r o g r a p h A n a l y s i s

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Study date 10/17/24 File: EXB535.out

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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978

Program License Serial Number 5006

English (in-lb) Input Units Used
English Rainfall Data (Inches) Input Values Used

English Units used in output format

Drainage Area = 19.12(Ac.) = 0.030 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 19.12(Ac.) = 0.030 Sq. Mi.
Length along longest watercourse = 724.00(Ft.)
Length along longest watercourse measured to centroid = 360.00(Ft.)
Length along longest watercourse = 0.137 Mi.
Length along longest watercourse measured to centroid = 0.068 Mi.
Difference in elevation = 77.00(Ft.)
Slope along watercourse = 561.5470 Ft./Mi.
Average Manning's 'N' = 0.030
Lag time = 0.037 Hr.
Lag time = 2.20 Min.
25% of lag time = 0.55 Min.
40% of lag time = 0.88 Min.
Unit time = 5.00 Min.
Duration of storm = 3 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.)[1]	Rainfall(In)[2]	Weighting[1*2]
19.12	0.80	15.30

100 YEAR Area rainfall data:

Area(Ac.)[1]	Rainfall(In)[2]	Weighting[1*2]
19.12	2.00	38.24

STORM EVENT (YEAR) = 5.00
Area Averaged 2-Year Rainfall = 0.800(In)
Area Averaged 100-Year Rainfall = 2.000(In)

Point rain (area averaged) = 1.081(In)
Areal adjustment factor = 99.99 %
Adjusted average point rain = 1.081(In)

Sub-Area Data:

Area(Ac.)	Runoff Index	Impervious %
19.120	91.00	0.000

Total Area Entered = 19.12(Ac.)

RI AMC2	RI AMC-1	Infil. Rate (In/Hr)	Impervious (Dec.%)	Adj. Infil. Rate (In/Hr)	Area% (Dec.)	F (In/Hr)
91.0	79.8	0.246	0.000	0.246	1.000	0.246
					Sum (F) =	0.246

Area averaged mean soil loss (F) (In/Hr) = 0.246
Minimum soil loss rate ((In/Hr)) = 0.123
(for 24 hour storm duration)
Soil low loss rate (decimal) = 0.900

U n i t H y d r o g r a p h
VALLEY S-Curve

Unit Hydrograph Data

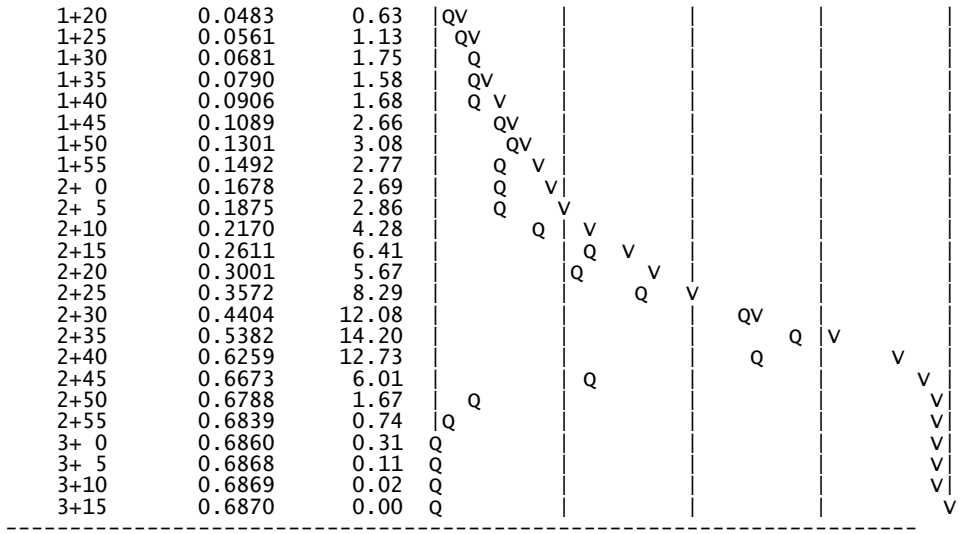
Unit time period (hrs)	Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)

```
      ----------------------------------------------------------------------
          1   0.083        227.497         47.782              9.207
          2   0.167        454.994         41.494              7.996
          3   0.250        682.491          7.777              1.499
          4   0.333        909.988          2.947              0.568
                                    Sum = 100.000   Sum=      19.269
----------------------------------------------------------------------


 The following loss rate calculations reflect use of the minimum calculated loss
 rate subtracted from the Storm Rain to produce the maximum Effective Rain value

  Unit Time   Pattern   Storm Rain     Loss rate(In./Hr)     Effective
       (Hr.)  Percent   (In/Hr)         Max   |   Low        (In/Hr)
   1   0.08     1.30      0.169       (  0.246)       0.152        0.017
   2   0.17     1.30      0.169       (  0.246)       0.152        0.017
   3   0.25     1.10      0.143       (  0.246)       0.128        0.014
   4   0.33     1.50      0.195       (  0.246)       0.175        0.019
   5   0.42     1.50      0.195       (  0.246)       0.175        0.019
   6   0.50     1.80      0.233       (  0.246)       0.210        0.023
   7   0.58     1.50      0.195       (  0.246)       0.175        0.019
   8   0.67     1.80      0.233       (  0.246)       0.210        0.023
   9   0.75     1.80      0.233       (  0.246)       0.210        0.023
  10   0.83     1.50      0.195       (  0.246)       0.175        0.019
  11   0.92     1.60      0.208       (  0.246)       0.187        0.021
  12   1.00     1.80      0.233       (  0.246)       0.210        0.023
  13   1.08     2.20      0.285          0.246    (  0.257)        0.039
  14   1.17     2.20      0.285          0.246    (  0.257)        0.039
  15   1.25     2.20      0.285          0.246    (  0.257)        0.039
  16   1.33     2.00      0.259       (  0.246)       0.233        0.026
  17   1.42     2.60      0.337          0.246    (  0.304)        0.091
  18   1.50     2.70      0.350          0.246    (  0.315)        0.104
  19   1.58     2.40      0.311          0.246    (  0.280)        0.065
  20   1.67     2.70      0.350          0.246    (  0.315)        0.104
  21   1.75     3.30      0.428          0.246    (  0.385)        0.182
  22   1.83     3.10      0.402          0.246    (  0.362)        0.156
  23   1.92     2.90      0.376          0.246    (  0.339)        0.130
  24   2.00     3.00      0.389          0.246    (  0.350)        0.143
  25   2.08     3.10      0.402          0.246    (  0.362)        0.156
  26   2.17     4.20      0.545          0.246    (  0.490)        0.298
  27   2.25     5.00      0.649          0.246    (  0.584)        0.402
  28   2.33     3.50      0.454          0.246    (  0.409)        0.208
  29   2.42     6.80      0.882          0.246    (  0.794)        0.636
  30   2.50     7.30      0.947          0.246    (  0.852)        0.701
  31   2.58     8.20      1.064          0.246    (  0.957)        0.817
  32   2.67     5.90      0.765          0.246    (  0.689)        0.519
  33   2.75     2.00      0.259       (  0.246)       0.233        0.026
  34   2.83     1.80      0.233       (  0.246)       0.210        0.023
  35   2.92     1.80      0.233       (  0.246)       0.210        0.023
  36   3.00     0.60      0.078       (  0.246)       0.070        0.008
               (Loss Rate Not Used)
     Sum =     100.0                                  Sum =      5.2
        Flood volume = Effective rainfall      0.43(In)
         times area      19.1(Ac.)/[(In)/(Ft.)] =       0.7(Ac.Ft)
        Total soil loss =      0.65(In)
        Total soil loss =     1.035(Ac.Ft)
        Total rainfall =      1.08(In)
        Flood volume =       29924.2 Cubic Feet
        Total soil loss =       45101.8 Cubic Feet
        ----------------------------------------------------------------------
         Peak flow rate of this hydrograph =     14.205(CFS)
        ----------------------------------------------------------------------
        ++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                            3 - H O U R    S T O R M
                        R u n o f f      H y d r o g r a p h
        ----------------------------------------------------------------------
                    Hydrograph in   5   Minute intervals ((CFS))

        ----------------------------------------------------------------------
  Time(h+m) Volume Ac.Ft   Q(CFS)  0        5.0      10.0      15.0      20.0
  ------------------------------------------------------------------------
    0+ 5       0.0011      0.16  Q          |         |         |         |
    0+10       0.0031      0.29  Q          |         |         |         |
    0+15       0.0051      0.29  Q          |         |         |         |
    0+20       0.0073      0.33  Q          |         |         |         |
    0+25       0.0099      0.37  Q          |         |         |         |
    0+30       0.0127      0.41  Q          |         |         |         |
    0+35       0.0155      0.41  Q          |         |         |         |
    0+40       0.0183      0.42  QV         |         |         |         |
    0+45       0.0214      0.44  QV         |         |         |         |
    0+50       0.0242      0.41  QV         |         |         |         |
    0+55       0.0270      0.40  QV         |         |         |         |
    1+ 0       0.0299      0.42  QV         |         |         |         |
    1+ 5       0.0339      0.59  |Q         |         |         |         |
    1+10       0.0389      0.72  |QV        |         |         |         |
    1+15       0.0440      0.74  |QV        |         |         |         |
```


1+20 0.0483 0.63
1+25 0.0561 1.13
1+30 0.0681 1.75
1+35 0.0790 1.58
1+40 0.0906 1.68
1+45 0.1089 2.66
1+50 0.1301 3.08
1+55 0.1492 2.77
2+ 0 0.1678 2.69
2+ 5 0.1875 2.86
2+10 0.2170 4.28
2+15 0.2611 6.41
2+20 0.3001 5.67
2+25 0.3572 8.29
2+30 0.4404 12.08
2+35 0.5382 14.20
2+40 0.6259 12.73
2+45 0.6673 6.01
2+50 0.6788 1.67
2+55 0.6839 0.74
3+ 0 0.6860 0.31
3+ 5 0.6868 0.11
3+10 0.6869 0.02
3+15 0.6870 0.00

U n i t H y d r o g r a p h A n a l y s i s

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Study date 10/17/24 File: EXB565.out

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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978

Program License Serial Number 5006

English (in-lb) Input Units Used
English Rainfall Data (Inches) Input Values Used

English Units used in output format

Drainage Area = 19.12(Ac.) = 0.030 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 19.12(Ac.) = 0.030 Sq. Mi.
Length along longest watercourse = 724.00(Ft.)
Length along longest watercourse measured to centroid = 360.00(Ft.)
Length along longest watercourse = 0.137 Mi.
Length along longest watercourse measured to centroid = 0.068 Mi.
Difference in elevation = 77.00(Ft.)
Slope along watercourse = 561.5470 Ft./Mi.
Average Manning's 'N' = 0.030
Lag time = 0.037 Hr.
Lag time = 2.20 Min.
25% of lag time = 0.55 Min.
40% of lag time = 0.88 Min.
Unit time = 5.00 Min.
Duration of storm = 6 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.)[1]	Rainfall(In)[2]	Weighting[1*2]
19.12	1.10	21.03

100 YEAR Area rainfall data:

Area(Ac.)[1]	Rainfall(In)[2]	Weighting[1*2]
19.12	3.00	57.36

STORM EVENT (YEAR) = 5.00
Area Averaged 2-Year Rainfall = 1.100(In)
Area Averaged 100-Year Rainfall = 3.000(In)

Point rain (area averaged) = 1.545(In)
Areal adjustment factor = 99.99 %
Adjusted average point rain = 1.545(In)

Sub-Area Data:

Area(Ac.)	Runoff Index	Impervious %
19.120	91.00	0.000

Total Area Entered = 19.12(Ac.)

RI AMC2	RI AMC-1	Infil. Rate (In/Hr)	Impervious (Dec.%)	Adj. Infil. Rate (In/Hr)	Area% (Dec.)	F (In/Hr)
91.0	79.8	0.246	0.000	0.246	1.000	0.246
					Sum (F) =	0.246

Area averaged mean soil loss (F) (In/Hr) = 0.246
Minimum soil loss rate ((In/Hr)) = 0.123
(for 24 hour storm duration)
Soil low loss rate (decimal) = 0.900

U n i t H y d r o g r a p h
VALLEY S-Curve

Unit Hydrograph Data

Unit time period (hrs)	Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)

1	0.083	227.497	47.782	9.207
2	0.167	454.994	41.494	7.996
3	0.250	682.491	7.777	1.499
4	0.333	909.988	2.947	0.568
			Sum = 100.000	Sum= 19.269

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr) Max	Low	Effective (In/Hr)
1	0.08	0.50	0.093	(0.246)	0.083	0.009
2	0.17	0.60	0.111	(0.246)	0.100	0.011
3	0.25	0.60	0.111	(0.246)	0.100	0.011
4	0.33	0.60	0.111	(0.246)	0.100	0.011
5	0.42	0.60	0.111	(0.246)	0.100	0.011
6	0.50	0.70	0.130	(0.246)	0.117	0.013
7	0.58	0.70	0.130	(0.246)	0.117	0.013
8	0.67	0.70	0.130	(0.246)	0.117	0.013
9	0.75	0.70	0.130	(0.246)	0.117	0.013
10	0.83	0.70	0.130	(0.246)	0.117	0.013
11	0.92	0.70	0.130	(0.246)	0.117	0.013
12	1.00	0.80	0.148	(0.246)	0.133	0.015
13	1.08	0.80	0.148	(0.246)	0.133	0.015
14	1.17	0.80	0.148	(0.246)	0.133	0.015
15	1.25	0.80	0.148	(0.246)	0.133	0.015
16	1.33	0.80	0.148	(0.246)	0.133	0.015
17	1.42	0.80	0.148	(0.246)	0.133	0.015
18	1.50	0.80	0.148	(0.246)	0.133	0.015
19	1.58	0.80	0.148	(0.246)	0.133	0.015
20	1.67	0.80	0.148	(0.246)	0.133	0.015
21	1.75	0.80	0.148	(0.246)	0.133	0.015
22	1.83	0.80	0.148	(0.246)	0.133	0.015
23	1.92	0.80	0.148	(0.246)	0.133	0.015
24	2.00	0.90	0.167	(0.246)	0.150	0.017
25	2.08	0.80	0.148	(0.246)	0.133	0.015
26	2.17	0.90	0.167	(0.246)	0.150	0.017
27	2.25	0.90	0.167	(0.246)	0.150	0.017
28	2.33	0.90	0.167	(0.246)	0.150	0.017
29	2.42	0.90	0.167	(0.246)	0.150	0.017
30	2.50	0.90	0.167	(0.246)	0.150	0.017
31	2.58	0.90	0.167	(0.246)	0.150	0.017
32	2.67	0.90	0.167	(0.246)	0.150	0.017
33	2.75	1.00	0.185	(0.246)	0.167	0.019
34	2.83	1.00	0.185	(0.246)	0.167	0.019
35	2.92	1.00	0.185	(0.246)	0.167	0.019
36	3.00	1.00	0.185	(0.246)	0.167	0.019
37	3.08	1.00	0.185	(0.246)	0.167	0.019
38	3.17	1.10	0.204	(0.246)	0.184	0.020
39	3.25	1.10	0.204	(0.246)	0.184	0.020
40	3.33	1.10	0.204	(0.246)	0.184	0.020
41	3.42	1.20	0.222	(0.246)	0.200	0.022
42	3.50	1.30	0.241	(0.246)	0.217	0.024
43	3.58	1.40	0.260	(0.246)	0.234	0.026
44	3.67	1.40	0.260	(0.246)	0.234	0.026
45	3.75	1.50	0.278	0.246	(0.250)	0.032
46	3.83	1.50	0.278	0.246	(0.250)	0.032
47	3.92	1.60	0.297	0.246	(0.267)	0.050
48	4.00	1.60	0.297	0.246	(0.267)	0.050
49	4.08	1.70	0.315	0.246	(0.284)	0.069
50	4.17	1.80	0.334	0.246	(0.300)	0.087
51	4.25	1.90	0.352	0.246	(0.317)	0.106
52	4.33	2.00	0.371	0.246	(0.334)	0.124
53	4.42	2.10	0.389	0.246	(0.350)	0.143
54	4.50	2.10	0.389	0.246	(0.350)	0.143
55	4.58	2.20	0.408	0.246	(0.367)	0.162
56	4.67	2.30	0.426	0.246	(0.384)	0.180
57	4.75	2.40	0.445	0.246	(0.400)	0.199
58	4.83	2.40	0.445	0.246	(0.400)	0.199
59	4.92	2.50	0.463	0.246	(0.417)	0.217
60	5.00	2.60	0.482	0.246	(0.434)	0.236
61	5.08	3.10	0.575	0.246	(0.517)	0.328
62	5.17	3.60	0.667	0.246	(0.601)	0.421
63	5.25	3.90	0.723	0.246	(0.651)	0.477
64	5.33	4.20	0.779	0.246	(0.701)	0.532
65	5.42	4.70	0.871	0.246	(0.784)	0.625
66	5.50	5.60	1.038	0.246	(0.934)	0.792
67	5.58	1.90	0.352	0.246	(0.317)	0.106
68	5.67	0.90	0.167	(0.246)	0.150	0.017
69	5.75	0.60	0.111	(0.246)	0.100	0.011
70	5.83	0.50	0.093	(0.246)	0.083	0.009
71	5.92	0.30	0.056	(0.246)	0.050	0.006
72	6.00	0.20	0.037	(0.246)	0.033	0.004

```
            (Loss Rate Not Used)
 Sum =     100.0                                    Sum =     6.1
    Flood volume = Effective rainfall      0.51(In)
     times area      19.1(Ac.)/[(In)/(Ft.)] =       0.8(Ac.Ft)
    Total soil loss =      1.04(In)
    Total soil loss =     1.656(Ac.Ft)
    Total rainfall =      1.54(In)
    Flood volume =       35080.2 Cubic Feet
    Total soil loss =       72146.2 Cubic Feet
    ---------------------------------------------------------------------
     Peak flow rate of this hydrograph =     13.363(CFS)
    ---------------------------------------------------------------------
    +++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                        6 - H O U R    S T O R M
                   R u n o f f      H y d r o g r a p h
    ---------------------------------------------------------------------
              Hydrograph in   5   Minute intervals ((CFS))

    ---------------------------------------------------------------------
Time(h+m) Volume Ac.Ft   Q(CFS)  0        5.0      10.0      15.0      20.0
-------------------------------------------------------------------------
  0+ 5       0.0006      0.09  Q         |         |         |         |
  0+10       0.0018      0.18  Q         |         |         |         |
  0+15       0.0032      0.21  Q         |         |         |         |
  0+20       0.0047      0.21  Q         |         |         |         |
  0+25       0.0062      0.21  Q         |         |         |         |
  0+30       0.0078      0.23  Q         |         |         |         |
  0+35       0.0095      0.25  Q         |         |         |         |
  0+40       0.0112      0.25  Q         |         |         |         |
  0+45       0.0129      0.25  Q         |         |         |         |
  0+50       0.0146      0.25  Q         |         |         |         |
  0+55       0.0163      0.25  Q         |         |         |         |
  1+ 0       0.0182      0.27  Q         |         |         |         |
  1+ 5       0.0201      0.28  Q         |         |         |         |
  1+10       0.0221      0.28  QV        |         |         |         |
  1+15       0.0241      0.29  QV        |         |         |         |
  1+20       0.0260      0.29  QV        |         |         |         |
  1+25       0.0280      0.29  QV        |         |         |         |
  1+30       0.0300      0.29  QV        |         |         |         |
  1+35       0.0319      0.29  QV        |         |         |         |
  1+40       0.0339      0.29  QV        |         |         |         |
  1+45       0.0359      0.29  QV        |         |         |         |
  1+50       0.0378      0.29  QV        |         |         |         |
  1+55       0.0398      0.29  QV        |         |         |         |
  2+ 0       0.0419      0.30  Q V       |         |         |         |
  2+ 5       0.0440      0.30  Q V       |         |         |         |
  2+10       0.0461      0.31  Q V       |         |         |         |
  2+15       0.0483      0.32  Q V       |         |         |         |
  2+20       0.0505      0.32  Q V       |         |         |         |
  2+25       0.0527      0.32  Q V       |         |         |         |
  2+30       0.0549      0.32  Q V       |         |         |         |
  2+35       0.0571      0.32  Q V       |         |         |         |
  2+40       0.0593      0.32  Q V       |         |         |         |
  2+45       0.0617      0.34  Q  V      |         |         |         |
  2+50       0.0641      0.35  Q  V      |         |         |         |
  2+55       0.0666      0.36  Q  V      |         |         |         |
  3+ 0       0.0690      0.36  Q  V      |         |         |         |
  3+ 5       0.0715      0.36  Q  V      |         |         |         |
  3+10       0.0741      0.37  Q  V      |         |         |         |
  3+15       0.0767      0.39  Q  V      |         |         |         |
  3+20       0.0794      0.39  Q  V      |         |         |         |
  3+25       0.0823      0.41  Q   V     |         |         |         |
  3+30       0.0853      0.44  Q   V     |         |         |         |
  3+35       0.0886      0.48  Q   V     |         |         |         |
  3+40       0.0920      0.50  Q   V     |         |         |         |
  3+45       0.0958      0.55  |Q  V     |         |         |         |
  3+50       0.1000      0.60  |Q  V     |         |         |         |
  3+55       0.1053      0.78  |Q   V    |         |         |         |
  4+ 0       0.1117      0.93  |Q   V    |         |         |         |
  4+ 5       0.1195      1.13  | Q  V    |         |         |         |
  4+10       0.1296      1.46  | Q   V   |         |         |         |
  4+15       0.1420      1.81  |  Q   V  |         |         |         |
  4+20       0.1569      2.16  |   Q  V  |         |         |         |
  4+25       0.1742      2.52  |    Q  V |         |         |         |
  4+30       0.1929      2.71  |    Q   V|         |         |         |
  4+35       0.2130      2.92  |    Q    V         |         |         |
  4+40       0.2353      3.25  |     Q   |V        |         |         |
  4+45       0.2601      3.59  |      Q  | V       |         |         |
  4+50       0.2861      3.78  |      Q  |   V     |         |         |
  4+55       0.3136      3.99  |      Q  |     V   |         |         |
  5+ 0       0.3433      4.32  |       Q |       V |         |         |
  5+ 5       0.3802      5.35  |         Q         V         |         |
  5+10       0.4282      6.98  |         |  Q      |V        |         |
  5+15       0.4860      8.39  |         |    Q    |  V      |         |
  5+20       0.5517      9.53  |         |      Q  |    V    |         |
  5+25       0.6272     10.97  |         |         |Q        |V        |
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    5+30       0.7192     13.36  |          |          |     Q    |    V     |
    5+35       0.7781      8.55  |          |      Q   |          |       V  |
    5+40       0.7956      2.54  |     Q    |          |          |        V |
    5+45       0.8014      0.84  |Q         |          |          |        V |
    5+50       0.8032      0.26  Q          |          |          |        V |
    5+55       0.8043      0.15  Q          |          |          |        V |
    6+ 0       0.8050      0.10  Q          |          |          |        V |
    6+ 5       0.8053      0.04  Q          |          |          |        V |
    6+10       0.8053      0.01  Q          |          |          |        V |
    6+15       0.8053      0.00  Q          |          |          |         V
-------------------------------------------------------------------------------
```

U n i t H y d r o g r a p h A n a l y s i s

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Study date 10/17/24 File: EXB5245.out

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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978

Program License Serial Number 5006

English (in-lb) Input Units Used
English Rainfall Data (Inches) Input Values Used

English Units used in output format

Drainage Area = 19.12(Ac.) = 0.030 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 19.12(Ac.) = 0.030 Sq. Mi.
Length along longest watercourse = 724.00(Ft.)
Length along longest watercourse measured to centroid = 360.00(Ft.)
Length along longest watercourse = 0.137 Mi.
Length along longest watercourse measured to centroid = 0.068 Mi.
Difference in elevation = 77.00(Ft.)
Slope along watercourse = 561.5470 Ft./Mi.
Average Manning's 'N' = 0.030
Lag time = 0.037 Hr.
Lag time = 2.20 Min.
25% of lag time = 0.55 Min.
40% of lag time = 0.88 Min.
Unit time = 5.00 Min.
Duration of storm = 24 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.)[1]	Rainfall(In)[2]	Weighting[1*2]
19.12	1.80	34.42

100 YEAR Area rainfall data:

Area(Ac.)[1]	Rainfall(In)[2]	Weighting[1*2]
19.12	5.00	95.60

STORM EVENT (YEAR) = 5.00
Area Averaged 2-Year Rainfall = 1.800(In)
Area Averaged 100-Year Rainfall = 5.000(In)

Point rain (area averaged) = 2.550(In)
Areal adjustment factor = 100.00 %
Adjusted average point rain = 2.549(In)

Sub-Area Data:

Area(Ac.)	Runoff Index	Impervious %
19.120	91.00	0.000

Total Area Entered = 19.12(Ac.)

RI AMC2	RI AMC-1	Infil. Rate (In/Hr)	Impervious (Dec.%)	Adj. Infil. Rate (In/Hr)	Area% (Dec.)	F (In/Hr)
91.0	79.8	0.246	0.000	0.246	1.000	0.246
					Sum (F) =	0.246

Area averaged mean soil loss (F) (In/Hr) = 0.246
Minimum soil loss rate ((In/Hr)) = 0.123
(for 24 hour storm duration)
Soil low loss rate (decimal) = 0.900

U n i t H y d r o g r a p h
VALLEY S-Curve

Unit Hydrograph Data

Unit time period (hrs)	Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)

1	0.083	227.497	47.782	9.207
2	0.167	454.994	41.494	7.996
3	0.250	682.491	7.777	1.499
4	0.333	909.988	2.947	0.568
			Sum = 100.000	Sum= 19.269

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr) Max	Low	Effective (In/Hr)
1	0.08	0.07	0.020	(0.437)	0.018	0.002
2	0.17	0.07	0.020	(0.435)	0.018	0.002
3	0.25	0.07	0.020	(0.433)	0.018	0.002
4	0.33	0.10	0.031	(0.432)	0.028	0.003
5	0.42	0.10	0.031	(0.430)	0.028	0.003
6	0.50	0.10	0.031	(0.428)	0.028	0.003
7	0.58	0.10	0.031	(0.427)	0.028	0.003
8	0.67	0.10	0.031	(0.425)	0.028	0.003
9	0.75	0.10	0.031	(0.423)	0.028	0.003
10	0.83	0.13	0.041	(0.422)	0.037	0.004
11	0.92	0.13	0.041	(0.420)	0.037	0.004
12	1.00	0.13	0.041	(0.418)	0.037	0.004
13	1.08	0.10	0.031	(0.417)	0.028	0.003
14	1.17	0.10	0.031	(0.415)	0.028	0.003
15	1.25	0.10	0.031	(0.413)	0.028	0.003
16	1.33	0.10	0.031	(0.412)	0.028	0.003
17	1.42	0.10	0.031	(0.410)	0.028	0.003
18	1.50	0.10	0.031	(0.408)	0.028	0.003
19	1.58	0.10	0.031	(0.407)	0.028	0.003
20	1.67	0.10	0.031	(0.405)	0.028	0.003
21	1.75	0.10	0.031	(0.404)	0.028	0.003
22	1.83	0.13	0.041	(0.402)	0.037	0.004
23	1.92	0.13	0.041	(0.400)	0.037	0.004
24	2.00	0.13	0.041	(0.399)	0.037	0.004
25	2.08	0.13	0.041	(0.397)	0.037	0.004
26	2.17	0.13	0.041	(0.395)	0.037	0.004
27	2.25	0.13	0.041	(0.394)	0.037	0.004
28	2.33	0.13	0.041	(0.392)	0.037	0.004
29	2.42	0.13	0.041	(0.391)	0.037	0.004
30	2.50	0.13	0.041	(0.389)	0.037	0.004
31	2.58	0.17	0.051	(0.387)	0.046	0.005
32	2.67	0.17	0.051	(0.386)	0.046	0.005
33	2.75	0.17	0.051	(0.384)	0.046	0.005
34	2.83	0.17	0.051	(0.383)	0.046	0.005
35	2.92	0.17	0.051	(0.381)	0.046	0.005
36	3.00	0.17	0.051	(0.380)	0.046	0.005
37	3.08	0.17	0.051	(0.378)	0.046	0.005
38	3.17	0.17	0.051	(0.376)	0.046	0.005
39	3.25	0.17	0.051	(0.375)	0.046	0.005
40	3.33	0.17	0.051	(0.373)	0.046	0.005
41	3.42	0.17	0.051	(0.372)	0.046	0.005
42	3.50	0.17	0.051	(0.370)	0.046	0.005
43	3.58	0.17	0.051	(0.369)	0.046	0.005
44	3.67	0.17	0.051	(0.367)	0.046	0.005
45	3.75	0.17	0.051	(0.366)	0.046	0.005
46	3.83	0.20	0.061	(0.364)	0.055	0.006
47	3.92	0.20	0.061	(0.362)	0.055	0.006
48	4.00	0.20	0.061	(0.361)	0.055	0.006
49	4.08	0.20	0.061	(0.359)	0.055	0.006
50	4.17	0.20	0.061	(0.358)	0.055	0.006
51	4.25	0.20	0.061	(0.356)	0.055	0.006
52	4.33	0.23	0.071	(0.355)	0.064	0.007
53	4.42	0.23	0.071	(0.353)	0.064	0.007
54	4.50	0.23	0.071	(0.352)	0.064	0.007
55	4.58	0.23	0.071	(0.350)	0.064	0.007
56	4.67	0.23	0.071	(0.349)	0.064	0.007
57	4.75	0.23	0.071	(0.347)	0.064	0.007
58	4.83	0.27	0.082	(0.346)	0.073	0.008
59	4.92	0.27	0.082	(0.344)	0.073	0.008
60	5.00	0.27	0.082	(0.343)	0.073	0.008
61	5.08	0.20	0.061	(0.341)	0.055	0.006
62	5.17	0.20	0.061	(0.340)	0.055	0.006
63	5.25	0.20	0.061	(0.338)	0.055	0.006
64	5.33	0.23	0.071	(0.337)	0.064	0.007
65	5.42	0.23	0.071	(0.335)	0.064	0.007
66	5.50	0.23	0.071	(0.334)	0.064	0.007
67	5.58	0.27	0.082	(0.332)	0.073	0.008
68	5.67	0.27	0.082	(0.331)	0.073	0.008
69	5.75	0.27	0.082	(0.330)	0.073	0.008
70	5.83	0.27	0.082	(0.328)	0.073	0.008
71	5.92	0.27	0.082	(0.327)	0.073	0.008
72	6.00	0.27	0.082	(0.325)	0.073	0.008

73	6.08	0.30	0.092	(0.324)	0.083	0.009
74	6.17	0.30	0.092	(0.322)	0.083	0.009
75	6.25	0.30	0.092	(0.321)	0.083	0.009
76	6.33	0.30	0.092	(0.319)	0.083	0.009
77	6.42	0.30	0.092	(0.318)	0.083	0.009
78	6.50	0.30	0.092	(0.317)	0.083	0.009
79	6.58	0.33	0.102	(0.315)	0.092	0.010
80	6.67	0.33	0.102	(0.314)	0.092	0.010
81	6.75	0.33	0.102	(0.312)	0.092	0.010
82	6.83	0.33	0.102	(0.311)	0.092	0.010
83	6.92	0.33	0.102	(0.310)	0.092	0.010
84	7.00	0.33	0.102	(0.308)	0.092	0.010
85	7.08	0.33	0.102	(0.307)	0.092	0.010
86	7.17	0.33	0.102	(0.305)	0.092	0.010
87	7.25	0.33	0.102	(0.304)	0.092	0.010
88	7.33	0.37	0.112	(0.303)	0.101	0.011
89	7.42	0.37	0.112	(0.301)	0.101	0.011
90	7.50	0.37	0.112	(0.300)	0.101	0.011
91	7.58	0.40	0.122	(0.298)	0.110	0.012
92	7.67	0.40	0.122	(0.297)	0.110	0.012
93	7.75	0.40	0.122	(0.296)	0.110	0.012
94	7.83	0.43	0.133	(0.294)	0.119	0.013
95	7.92	0.43	0.133	(0.293)	0.119	0.013
96	8.00	0.43	0.133	(0.292)	0.119	0.013
97	8.08	0.50	0.153	(0.290)	0.138	0.015
98	8.17	0.50	0.153	(0.289)	0.138	0.015
99	8.25	0.50	0.153	(0.288)	0.138	0.015
100	8.33	0.50	0.153	(0.286)	0.138	0.015
101	8.42	0.50	0.153	(0.285)	0.138	0.015
102	8.50	0.50	0.153	(0.283)	0.138	0.015
103	8.58	0.53	0.163	(0.282)	0.147	0.016
104	8.67	0.53	0.163	(0.281)	0.147	0.016
105	8.75	0.53	0.163	(0.280)	0.147	0.016
106	8.83	0.57	0.173	(0.278)	0.156	0.017
107	8.92	0.57	0.173	(0.277)	0.156	0.017
108	9.00	0.57	0.173	(0.276)	0.156	0.017
109	9.08	0.63	0.194	(0.274)	0.174	0.019
110	9.17	0.63	0.194	(0.273)	0.174	0.019
111	9.25	0.63	0.194	(0.272)	0.174	0.019
112	9.33	0.67	0.204	(0.270)	0.184	0.020
113	9.42	0.67	0.204	(0.269)	0.184	0.020
114	9.50	0.67	0.204	(0.268)	0.184	0.020
115	9.58	0.70	0.214	(0.267)	0.193	0.021
116	9.67	0.70	0.214	(0.265)	0.193	0.021
117	9.75	0.70	0.214	(0.264)	0.193	0.021
118	9.83	0.73	0.224	(0.263)	0.202	0.022
119	9.92	0.73	0.224	(0.261)	0.202	0.022
120	10.00	0.73	0.224	(0.260)	0.202	0.022
121	10.08	0.50	0.153	(0.259)	0.138	0.015
122	10.17	0.50	0.153	(0.258)	0.138	0.015
123	10.25	0.50	0.153	(0.256)	0.138	0.015
124	10.33	0.50	0.153	(0.255)	0.138	0.015
125	10.42	0.50	0.153	(0.254)	0.138	0.015
126	10.50	0.50	0.153	(0.253)	0.138	0.015
127	10.58	0.67	0.204	(0.251)	0.184	0.020
128	10.67	0.67	0.204	(0.250)	0.184	0.020
129	10.75	0.67	0.204	(0.249)	0.184	0.020
130	10.83	0.67	0.204	(0.248)	0.184	0.020
131	10.92	0.67	0.204	(0.247)	0.184	0.020
132	11.00	0.67	0.204	(0.245)	0.184	0.020
133	11.08	0.63	0.194	(0.244)	0.174	0.019
134	11.17	0.63	0.194	(0.243)	0.174	0.019
135	11.25	0.63	0.194	(0.242)	0.174	0.019
136	11.33	0.63	0.194	(0.241)	0.174	0.019
137	11.42	0.63	0.194	(0.239)	0.174	0.019
138	11.50	0.63	0.194	(0.238)	0.174	0.019
139	11.58	0.57	0.173	(0.237)	0.156	0.017
140	11.67	0.57	0.173	(0.236)	0.156	0.017
141	11.75	0.57	0.173	(0.235)	0.156	0.017
142	11.83	0.60	0.184	(0.233)	0.165	0.018
143	11.92	0.60	0.184	(0.232)	0.165	0.018
144	12.00	0.60	0.184	(0.231)	0.165	0.018
145	12.08	0.83	0.255	(0.230)	0.229	0.025
146	12.17	0.83	0.255	0.229	(0.229)	0.026
147	12.25	0.83	0.255	0.228	(0.229)	0.027
148	12.33	0.87	0.265	0.227	(0.239)	0.039
149	12.42	0.87	0.265	0.225	(0.239)	0.040
150	12.50	0.87	0.265	0.224	(0.239)	0.041
151	12.58	0.93	0.286	0.223	(0.257)	0.062
152	12.67	0.93	0.286	0.222	(0.257)	0.064
153	12.75	0.93	0.286	0.221	(0.257)	0.065
154	12.83	0.97	0.296	0.220	(0.266)	0.076
155	12.92	0.97	0.296	0.219	(0.266)	0.077
156	13.00	0.97	0.296	0.218	(0.266)	0.078
157	13.08	1.13	0.347	0.216	(0.312)	0.130
158	13.17	1.13	0.347	0.215	(0.312)	0.131

159	13.25	1.13	0.347	0.214	(0.312)	0.132
160	13.33	1.13	0.347	0.213	(0.312)	0.134
161	13.42	1.13	0.347	0.212	(0.312)	0.135
162	13.50	1.13	0.347	0.211	(0.312)	0.136
163	13.58	0.77	0.235	0.210	(0.211)	0.025
164	13.67	0.77	0.235	0.209	(0.211)	0.026
165	13.75	0.77	0.235	0.208	(0.211)	0.027
166	13.83	0.77	0.235	0.207	(0.211)	0.028
167	13.92	0.77	0.235	0.206	(0.211)	0.029
168	14.00	0.77	0.235	0.205	(0.211)	0.030
169	14.08	0.90	0.275	0.204	(0.248)	0.072
170	14.17	0.90	0.275	0.203	(0.248)	0.073
171	14.25	0.90	0.275	0.202	(0.248)	0.074
172	14.33	0.87	0.265	0.200	(0.239)	0.065
173	14.42	0.87	0.265	0.199	(0.239)	0.066
174	14.50	0.87	0.265	0.198	(0.239)	0.067
175	14.58	0.87	0.265	0.197	(0.239)	0.068
176	14.67	0.87	0.265	0.196	(0.239)	0.069
177	14.75	0.87	0.265	0.195	(0.239)	0.070
178	14.83	0.83	0.255	0.194	(0.229)	0.061
179	14.92	0.83	0.255	0.193	(0.229)	0.062
180	15.00	0.83	0.255	0.192	(0.229)	0.063
181	15.08	0.80	0.245	0.191	(0.220)	0.053
182	15.17	0.80	0.245	0.190	(0.220)	0.054
183	15.25	0.80	0.245	0.189	(0.220)	0.055
184	15.33	0.77	0.235	0.188	(0.211)	0.046
185	15.42	0.77	0.235	0.188	(0.211)	0.047
186	15.50	0.77	0.235	0.187	(0.211)	0.048
187	15.58	0.63	0.194	(0.186)	0.174	0.019
188	15.67	0.63	0.194	(0.185)	0.174	0.019
189	15.75	0.63	0.194	(0.184)	0.174	0.019
190	15.83	0.63	0.194	(0.183)	0.174	0.019
191	15.92	0.63	0.194	(0.182)	0.174	0.019
192	16.00	0.63	0.194	(0.181)	0.174	0.019
193	16.08	0.13	0.041	(0.180)	0.037	0.004
194	16.17	0.13	0.041	(0.179)	0.037	0.004
195	16.25	0.13	0.041	(0.178)	0.037	0.004
196	16.33	0.13	0.041	(0.177)	0.037	0.004
197	16.42	0.13	0.041	(0.176)	0.037	0.004
198	16.50	0.13	0.041	(0.175)	0.037	0.004
199	16.58	0.10	0.031	(0.175)	0.028	0.003
200	16.67	0.10	0.031	(0.174)	0.028	0.003
201	16.75	0.10	0.031	(0.173)	0.028	0.003
202	16.83	0.10	0.031	(0.172)	0.028	0.003
203	16.92	0.10	0.031	(0.171)	0.028	0.003
204	17.00	0.10	0.031	(0.170)	0.028	0.003
205	17.08	0.17	0.051	(0.169)	0.046	0.005
206	17.17	0.17	0.051	(0.168)	0.046	0.005
207	17.25	0.17	0.051	(0.168)	0.046	0.005
208	17.33	0.17	0.051	(0.167)	0.046	0.005
209	17.42	0.17	0.051	(0.166)	0.046	0.005
210	17.50	0.17	0.051	(0.165)	0.046	0.005
211	17.58	0.17	0.051	(0.164)	0.046	0.005
212	17.67	0.17	0.051	(0.163)	0.046	0.005
213	17.75	0.17	0.051	(0.163)	0.046	0.005
214	17.83	0.13	0.041	(0.162)	0.037	0.004
215	17.92	0.13	0.041	(0.161)	0.037	0.004
216	18.00	0.13	0.041	(0.160)	0.037	0.004
217	18.08	0.13	0.041	(0.159)	0.037	0.004
218	18.17	0.13	0.041	(0.159)	0.037	0.004
219	18.25	0.13	0.041	(0.158)	0.037	0.004
220	18.33	0.13	0.041	(0.157)	0.037	0.004
221	18.42	0.13	0.041	(0.156)	0.037	0.004
222	18.50	0.13	0.041	(0.156)	0.037	0.004
223	18.58	0.10	0.031	(0.155)	0.028	0.003
224	18.67	0.10	0.031	(0.154)	0.028	0.003
225	18.75	0.10	0.031	(0.153)	0.028	0.003
226	18.83	0.07	0.020	(0.153)	0.018	0.002
227	18.92	0.07	0.020	(0.152)	0.018	0.002
228	19.00	0.07	0.020	(0.151)	0.018	0.002
229	19.08	0.10	0.031	(0.150)	0.028	0.003
230	19.17	0.10	0.031	(0.150)	0.028	0.003
231	19.25	0.10	0.031	(0.149)	0.028	0.003
232	19.33	0.13	0.041	(0.148)	0.037	0.004
233	19.42	0.13	0.041	(0.148)	0.037	0.004
234	19.50	0.13	0.041	(0.147)	0.037	0.004
235	19.58	0.10	0.031	(0.146)	0.028	0.003
236	19.67	0.10	0.031	(0.146)	0.028	0.003
237	19.75	0.10	0.031	(0.145)	0.028	0.003
238	19.83	0.07	0.020	(0.144)	0.018	0.002
239	19.92	0.07	0.020	(0.144)	0.018	0.002
240	20.00	0.07	0.020	(0.143)	0.018	0.002
241	20.08	0.10	0.031	(0.142)	0.028	0.003
242	20.17	0.10	0.031	(0.142)	0.028	0.003
243	20.25	0.10	0.031	(0.141)	0.028	0.003
244	20.33	0.10	0.031	(0.141)	0.028	0.003

245	20.42	0.10	0.031	(0.140)	0.028	0.003
246	20.50	0.10	0.031	(0.139)	0.028	0.003
247	20.58	0.10	0.031	(0.139)	0.028	0.003
248	20.67	0.10	0.031	(0.138)	0.028	0.003
249	20.75	0.10	0.031	(0.138)	0.028	0.003
250	20.83	0.07	0.020	(0.137)	0.018	0.002
251	20.92	0.07	0.020	(0.137)	0.018	0.002
252	21.00	0.07	0.020	(0.136)	0.018	0.002
253	21.08	0.10	0.031	(0.135)	0.028	0.003
254	21.17	0.10	0.031	(0.135)	0.028	0.003
255	21.25	0.10	0.031	(0.134)	0.028	0.003
256	21.33	0.07	0.020	(0.134)	0.018	0.002
257	21.42	0.07	0.020	(0.133)	0.018	0.002
258	21.50	0.07	0.020	(0.133)	0.018	0.002
259	21.58	0.10	0.031	(0.132)	0.028	0.003
260	21.67	0.10	0.031	(0.132)	0.028	0.003
261	21.75	0.10	0.031	(0.131)	0.028	0.003
262	21.83	0.07	0.020	(0.131)	0.018	0.002
263	21.92	0.07	0.020	(0.131)	0.018	0.002
264	22.00	0.07	0.020	(0.130)	0.018	0.002
265	22.08	0.10	0.031	(0.130)	0.028	0.003
266	22.17	0.10	0.031	(0.129)	0.028	0.003
267	22.25	0.10	0.031	(0.129)	0.028	0.003
268	22.33	0.07	0.020	(0.128)	0.018	0.002
269	22.42	0.07	0.020	(0.128)	0.018	0.002
270	22.50	0.07	0.020	(0.128)	0.018	0.002
271	22.58	0.07	0.020	(0.127)	0.018	0.002
272	22.67	0.07	0.020	(0.127)	0.018	0.002
273	22.75	0.07	0.020	(0.127)	0.018	0.002
274	22.83	0.07	0.020	(0.126)	0.018	0.002
275	22.92	0.07	0.020	(0.126)	0.018	0.002
276	23.00	0.07	0.020	(0.126)	0.018	0.002
277	23.08	0.07	0.020	(0.125)	0.018	0.002
278	23.17	0.07	0.020	(0.125)	0.018	0.002
279	23.25	0.07	0.020	(0.125)	0.018	0.002
280	23.33	0.07	0.020	(0.125)	0.018	0.002
281	23.42	0.07	0.020	(0.124)	0.018	0.002
282	23.50	0.07	0.020	(0.124)	0.018	0.002
283	23.58	0.07	0.020	(0.124)	0.018	0.002
284	23.67	0.07	0.020	(0.124)	0.018	0.002
285	23.75	0.07	0.020	(0.124)	0.018	0.002
286	23.83	0.07	0.020	(0.123)	0.018	0.002
287	23.92	0.07	0.020	(0.123)	0.018	0.002
288	24.00	0.07	0.020	(0.123)	0.018	0.002

(Loss Rate Not Used)

Sum = 100.0 Sum = 4.6

Flood volume = Effective rainfall 0.38(In)
times area 19.1(Ac.)/[(In)/(Ft.)] = 0.6(Ac.Ft)
Total soil loss = 2.17(In)
Total soil loss = 3.450(Ac.Ft)
Total rainfall = 2.55(In)
Flood volume = 26661.9 Cubic Feet
Total soil loss = 150282.3 Cubic Feet

Peak flow rate of this hydrograph = 2.603(CFS)

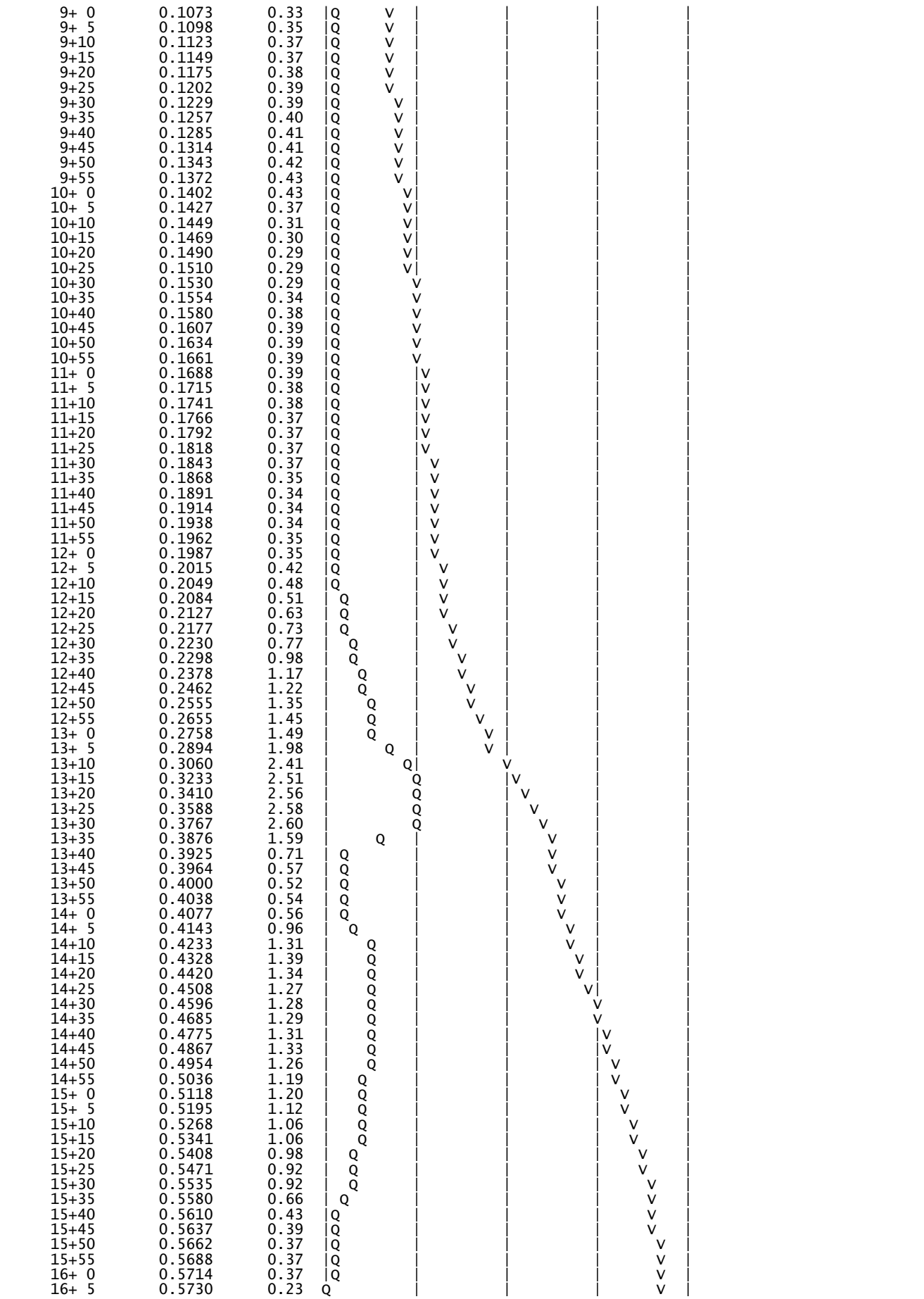
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24 - H O U R S T O R M
R u n o f f H y d r o g r a p h

Hydrograph in 5 Minute intervals ((CFS))

Time(h+m)	Volume Ac.Ft	Q(CFS)	0	2.5	5.0	7.5	10.0
0+ 5	0.0001	0.02	Q				
0+10	0.0004	0.04	Q				
0+15	0.0006	0.04	Q				
0+20	0.0010	0.05	Q				
0+25	0.0014	0.06	Q				
0+30	0.0018	0.06	Q				
0+35	0.0022	0.06	Q				
0+40	0.0026	0.06	Q				
0+45	0.0030	0.06	Q				
0+50	0.0035	0.07	Q				
0+55	0.0040	0.08	Q				
1+ 0	0.0045	0.08	Q				
1+ 5	0.0050	0.07	Q				
1+10	0.0054	0.06	Q				
1+15	0.0058	0.06	Q				
1+20	0.0062	0.06	Q				
1+25	0.0066	0.06	Q				
1+30	0.0070	0.06	Q				
1+35	0.0075	0.06	Q				
1+40	0.0079	0.06	Q				
1+45	0.0083	0.06	Q				

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1+50      0.0087      0.07  Q          |          |          |          |
1+55      0.0093      0.08  Q          |          |          |          |
2+ 0      0.0098      0.08  Q          |          |          |          |
2+ 5      0.0103      0.08  Q          |          |          |          |
2+10      0.0109      0.08  Q          |          |          |          |
2+15      0.0114      0.08  Q          |          |          |          |
2+20      0.0120      0.08  Q          |          |          |          |
2+25      0.0125      0.08  Q          |          |          |          |
2+30      0.0130      0.08  Q          |          |          |          |
2+35      0.0137      0.09  Q          |          |          |          |
2+40      0.0143      0.10  Q          |          |          |          |
2+45      0.0150      0.10  Q          |          |          |          |
2+50      0.0157      0.10  QV         |          |          |          |
2+55      0.0163      0.10  QV         |          |          |          |
3+ 0      0.0170      0.10  QV         |          |          |          |
3+ 5      0.0177      0.10  QV         |          |          |          |
3+10      0.0184      0.10  QV         |          |          |          |
3+15      0.0191      0.10  QV         |          |          |          |
3+20      0.0197      0.10  QV         |          |          |          |
3+25      0.0204      0.10  QV         |          |          |          |
3+30      0.0211      0.10  QV         |          |          |          |
3+35      0.0218      0.10  QV         |          |          |          |
3+40      0.0224      0.10  QV         |          |          |          |
3+45      0.0231      0.10  QV         |          |          |          |
3+50      0.0239      0.11  QV         |          |          |          |
3+55      0.0247      0.12  QV         |          |          |          |
4+ 0      0.0255      0.12  QV         |          |          |          |
4+ 5      0.0263      0.12  QV         |          |          |          |
4+10      0.0271      0.12  QV         |          |          |          |
4+15      0.0279      0.12  QV         |          |          |          |
4+20      0.0288      0.13  QV         |          |          |          |
4+25      0.0297      0.14  QV         |          |          |          |
4+30      0.0307      0.14  Q V        |          |          |          |
4+35      0.0316      0.14  Q V        |          |          |          |
4+40      0.0325      0.14  Q V        |          |          |          |
4+45      0.0335      0.14  Q V        |          |          |          |
4+50      0.0345      0.15  Q V        |          |          |          |
4+55      0.0356      0.16  Q V        |          |          |          |
5+ 0      0.0367      0.16  Q V        |          |          |          |
5+ 5      0.0376      0.14  Q V        |          |          |          |
5+10      0.0385      0.12  Q V        |          |          |          |
5+15      0.0393      0.12  Q V        |          |          |          |
5+20      0.0402      0.13  Q V        |          |          |          |
5+25      0.0411      0.14  Q V        |          |          |          |
5+30      0.0420      0.14  Q V        |          |          |          |
5+35      0.0430      0.15  Q V        |          |          |          |
5+40      0.0441      0.16  Q V        |          |          |          |
5+45      0.0452      0.16  Q V        |          |          |          |
5+50      0.0463      0.16  Q  V       |          |          |          |
5+55      0.0474      0.16  Q  V       |          |          |          |
6+ 0      0.0484      0.16  Q  V       |          |          |          |
6+ 5      0.0496      0.17  Q  V       |          |          |          |
6+10      0.0508      0.17  Q  V       |          |          |          |
6+15      0.0520      0.18  Q  V       |          |          |          |
6+20      0.0532      0.18  Q  V       |          |          |          |
6+25      0.0544      0.18  Q  V       |          |          |          |
6+30      0.0557      0.18  Q  V       |          |          |          |
6+35      0.0569      0.19  Q  V       |          |          |          |
6+40      0.0583      0.19  Q  V       |          |          |          |
6+45      0.0596      0.20  Q  V       |          |          |          |
6+50      0.0610      0.20  Q  V       |          |          |          |
6+55      0.0623      0.20  Q   V      |          |          |          |
7+ 0      0.0637      0.20  Q   V      |          |          |          |
7+ 5      0.0650      0.20  Q   V      |          |          |          |
7+10      0.0664      0.20  Q   V      |          |          |          |
7+15      0.0678      0.20  Q   V      |          |          |          |
7+20      0.0692      0.21  Q   V      |          |          |          |
7+25      0.0707      0.21  Q   V      |          |          |          |
7+30      0.0721      0.22  Q   V      |          |          |          |
7+35      0.0737      0.23  Q   V      |          |          |          |
7+40      0.0753      0.23  Q   V      |          |          |          |
7+45      0.0769      0.24  Q    V     |          |          |          |
7+50      0.0786      0.25  Q    V     |          |          |          |
7+55      0.0804      0.25  |Q   V     |          |          |          |
8+ 0      0.0821      0.26  |Q   V     |          |          |          |
8+ 5      0.0840      0.27  |Q   V     |          |          |          |
8+10      0.0860      0.29  |Q   V     |          |          |          |
8+15      0.0880      0.29  |Q   V     |          |          |          |
8+20      0.0901      0.29  |Q   V     |          |          |          |
8+25      0.0921      0.29  |Q    V    |          |          |          |
8+30      0.0941      0.29  |Q    V    |          |          |          |
8+35      0.0962      0.30  |Q    V    |          |          |          |
8+40      0.0984      0.31  |Q    V    |          |          |          |
8+45      0.1005      0.31  |Q    V    |          |          |          |
8+50      0.1028      0.32  |Q    V    |          |          |          |
8+55      0.1050      0.33  |Q    V    |          |          |          |
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9+ 0	0.1073	0.33	
9+ 5	0.1098	0.35	
9+10	0.1123	0.37	
9+15	0.1149	0.37	
9+20	0.1175	0.38	
9+25	0.1202	0.39	
9+30	0.1229	0.39	
9+35	0.1257	0.40	
9+40	0.1285	0.41	
9+45	0.1314	0.41	
9+50	0.1343	0.42	
9+55	0.1372	0.43	
10+ 0	0.1402	0.43	
10+ 5	0.1427	0.37	
10+10	0.1449	0.31	
10+15	0.1469	0.30	
10+20	0.1490	0.29	
10+25	0.1510	0.29	
10+30	0.1530	0.29	
10+35	0.1554	0.34	
10+40	0.1580	0.38	
10+45	0.1607	0.39	
10+50	0.1634	0.39	
10+55	0.1661	0.39	
11+ 0	0.1688	0.39	
11+ 5	0.1715	0.38	
11+10	0.1741	0.38	
11+15	0.1766	0.37	
11+20	0.1792	0.37	
11+25	0.1818	0.37	
11+30	0.1843	0.37	
11+35	0.1868	0.35	
11+40	0.1891	0.34	
11+45	0.1914	0.34	
11+50	0.1938	0.34	
11+55	0.1962	0.35	
12+ 0	0.1987	0.35	
12+ 5	0.2015	0.42	
12+10	0.2049	0.48	
12+15	0.2084	0.51	
12+20	0.2127	0.63	
12+25	0.2177	0.73	
12+30	0.2230	0.77	
12+35	0.2298	0.98	
12+40	0.2378	1.17	
12+45	0.2462	1.22	
12+50	0.2555	1.35	
12+55	0.2655	1.45	
13+ 0	0.2758	1.49	
13+ 5	0.2894	1.98	
13+10	0.3060	2.41	
13+15	0.3233	2.51	
13+20	0.3410	2.56	
13+25	0.3588	2.58	
13+30	0.3767	2.60	
13+35	0.3876	1.59	
13+40	0.3925	0.71	
13+45	0.3964	0.57	
13+50	0.4000	0.52	
13+55	0.4038	0.54	
14+ 0	0.4077	0.56	
14+ 5	0.4143	0.96	
14+10	0.4233	1.31	
14+15	0.4328	1.39	
14+20	0.4420	1.34	
14+25	0.4508	1.27	
14+30	0.4596	1.28	
14+35	0.4685	1.29	
14+40	0.4775	1.31	
14+45	0.4867	1.33	
14+50	0.4954	1.26	
14+55	0.5036	1.19	
15+ 0	0.5118	1.20	
15+ 5	0.5195	1.12	
15+10	0.5268	1.06	
15+15	0.5341	1.06	
15+20	0.5408	0.98	
15+25	0.5471	0.92	
15+30	0.5535	0.92	
15+35	0.5580	0.66	
15+40	0.5610	0.43	
15+45	0.5637	0.39	
15+50	0.5662	0.37	
15+55	0.5688	0.37	
16+ 0	0.5714	0.37	
16+ 5	0.5730	0.23	

16+10	0.5737	0.11	Q	|	|	|	V |
16+15	0.5743	0.09	Q	|	|	|	V |
16+20	0.5749	0.08	Q	|	|	|	V |
16+25	0.5754	0.08	Q	|	|	|	V |
16+30	0.5760	0.08	Q	|	|	|	V |
16+35	0.5764	0.07	Q	|	|	|	V |
16+40	0.5769	0.06	Q	|	|	|	V |
16+45	0.5773	0.06	Q	|	|	|	V |
16+50	0.5777	0.06	Q	|	|	|	V |
16+55	0.5781	0.06	Q	|	|	|	V |
17+ 0	0.5785	0.06	Q	|	|	|	V |
17+ 5	0.5790	0.08	Q	|	|	|	V |
17+10	0.5797	0.09	Q	|	|	|	V |
17+15	0.5803	0.10	Q	|	|	|	V |
17+20	0.5810	0.10	Q	|	|	|	V |
17+25	0.5817	0.10	Q	|	|	|	V |
17+30	0.5824	0.10	Q	|	|	|	V |
17+35	0.5831	0.10	Q	|	|	|	V |
17+40	0.5837	0.10	Q	|	|	|	V |
17+45	0.5844	0.10	Q	|	|	|	V |
17+50	0.5850	0.09	Q	|	|	|	V |
17+55	0.5856	0.08	Q	|	|	|	V |
18+ 0	0.5861	0.08	Q	|	|	|	V |
18+ 5	0.5867	0.08	Q	|	|	|	V |
18+10	0.5872	0.08	Q	|	|	|	V |
18+15	0.5877	0.08	Q	|	|	|	V |
18+20	0.5883	0.08	Q	|	|	|	V |
18+25	0.5888	0.08	Q	|	|	|	V |
18+30	0.5894	0.08	Q	|	|	|	V |
18+35	0.5899	0.07	Q	|	|	|	V |
18+40	0.5903	0.06	Q	|	|	|	V |
18+45	0.5907	0.06	Q	|	|	|	V |
18+50	0.5910	0.05	Q	|	|	|	V |
18+55	0.5913	0.04	Q	|	|	|	V |
19+ 0	0.5916	0.04	Q	|	|	|	V |
19+ 5	0.5919	0.05	Q	|	|	|	V |
19+10	0.5923	0.06	Q	|	|	|	V |
19+15	0.5927	0.06	Q	|	|	|	V |
19+20	0.5932	0.07	Q	|	|	|	V |
19+25	0.5937	0.08	Q	|	|	|	V |
19+30	0.5942	0.08	Q	|	|	|	V |
19+35	0.5947	0.07	Q	|	|	|	V |
19+40	0.5951	0.06	Q	|	|	|	V |
19+45	0.5956	0.06	Q	|	|	|	V |
19+50	0.5959	0.05	Q	|	|	|	V |
19+55	0.5962	0.04	Q	|	|	|	V |
20+ 0	0.5965	0.04	Q	|	|	|	V |
20+ 5	0.5968	0.05	Q	|	|	|	V|
20+10	0.5972	0.06	Q	|	|	|	V|
20+15	0.5976	0.06	Q	|	|	|	V|
20+20	0.5980	0.06	Q	|	|	|	V|
20+25	0.5984	0.06	Q	|	|	|	V|
20+30	0.5988	0.06	Q	|	|	|	V|
20+35	0.5992	0.06	Q	|	|	|	V|
20+40	0.5996	0.06	Q	|	|	|	V|
20+45	0.6000	0.06	Q	|	|	|	V|
20+50	0.6004	0.05	Q	|	|	|	V|
20+55	0.6007	0.04	Q	|	|	|	V|
21+ 0	0.6009	0.04	Q	|	|	|	V|
21+ 5	0.6013	0.05	Q	|	|	|	V|
21+10	0.6017	0.06	Q	|	|	|	V|
21+15	0.6021	0.06	Q	|	|	|	V|
21+20	0.6024	0.05	Q	|	|	|	V|
21+25	0.6027	0.04	Q	|	|	|	V|
21+30	0.6030	0.04	Q	|	|	|	V|
21+35	0.6033	0.05	Q	|	|	|	V|
21+40	0.6037	0.06	Q	|	|	|	V|
21+45	0.6041	0.06	Q	|	|	|	V|
21+50	0.6044	0.05	Q	|	|	|	V|
21+55	0.6047	0.04	Q	|	|	|	V|
22+ 0	0.6050	0.04	Q	|	|	|	V|
22+ 5	0.6053	0.05	Q	|	|	|	V|
22+10	0.6057	0.06	Q	|	|	|	V|
22+15	0.6061	0.06	Q	|	|	|	V|
22+20	0.6065	0.05	Q	|	|	|	V|
22+25	0.6067	0.04	Q	|	|	|	V|
22+30	0.6070	0.04	Q	|	|	|	V|
22+35	0.6073	0.04	Q	|	|	|	V|
22+40	0.6076	0.04	Q	|	|	|	V|
22+45	0.6078	0.04	Q	|	|	|	V|
22+50	0.6081	0.04	Q	|	|	|	V|
22+55	0.6084	0.04	Q	|	|	|	V|
23+ 0	0.6086	0.04	Q	|	|	|	V|
23+ 5	0.6089	0.04	Q	|	|	|	V|
23+10	0.6092	0.04	Q	|	|	|	V|
23+15	0.6095	0.04	Q	|	|	|	V|

```
   23+20       0.6097      0.04  Q          |          |          |          v|
   23+25       0.6100      0.04  Q          |          |          |          v|
   23+30       0.6103      0.04  Q          |          |          |          v|
   23+35       0.6105      0.04  Q          |          |          |          v|
   23+40       0.6108      0.04  Q          |          |          |          v|
   23+45       0.6111      0.04  Q          |          |          |          v|
   23+50       0.6114      0.04  Q          |          |          |          v|
   23+55       0.6116      0.04  Q          |          |          |          v|
   24+ 0       0.6119      0.04  Q          |          |          |          v|
   24+ 5       0.6120      0.02  Q          |          |          |          v|
   24+10       0.6121      0.00  Q          |          |          |          v|
   24+15       0.6121      0.00  Q          |          |          |          v|
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       U n i t   H y d r o g r a p h   A n a l y s i s

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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978


Program License Serial Number 5006

------------------------------------------------------------------------
 English (in-lb) Input Units Used
 English Rainfall Data (Inches) Input Values Used

 English Units used in output format



------------------------------------------------------------------------
------------------------------------------------------------------------
Drainage Area =      19.12(Ac.)  =      0.030 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment =      19.12(Ac.)  =      0.030 Sq. Mi.
Length along longest watercourse =     724.00(Ft.)
Length along longest watercourse measured to centroid =     360.00(Ft.)
Length along longest watercourse =      0.137 Mi.
Length along longest watercourse measured to centroid =      0.068 Mi.
Difference in elevation =      77.00(Ft.)
Slope along watercourse =    561.5470 Ft./Mi.
Average Manning's 'N' = 0.030
Lag time =    0.037 Hr.
Lag time =     2.20 Min.
25% of lag time =     0.55 Min.
40% of lag time =     0.88 Min.
Unit time =     5.00 Min.
Duration of storm = 1 Hour(s)
User Entered Base Flow =     0.00(CFS)

2 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
       19.12            0.50                 9.56

100 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
       19.12            1.30                24.86

STORM EVENT (YEAR) =   10.00
Area Averaged 2-Year Rainfall =    0.500(In)
Area Averaged 100-Year Rainfall =    1.300(In)

Point rain (area averaged) =    0.829(In)
Areal adjustment factor =   99.98 %
Adjusted average point rain =    0.829(In)

Sub-Area Data:
Area(Ac.)         Runoff Index   Impervious %
    19.120           91.00          0.000
 Total Area Entered =     19.12(Ac.)


RI    RI   Infil. Rate Impervious   Adj. Infil. Rate  Area%     F
AMC2 AMC-2     (In/Hr)    (Dec.%)     (In/Hr)      (Dec.)    (In/Hr)
91.0  91.0      0.117     0.000        0.117       1.000      0.117
                                                 Sum (F) =   0.117
Area averaged mean soil loss (F) (In/Hr) =  0.117
Minimum soil loss rate ((In/Hr)) =  0.059
(for 24 hour storm duration)
Soil low loss rate (decimal) =   0.900
------------------------------------------------------------------------
Slope of intensity-duration curve for a 1 hour storm =0.5500
------------------------------------------------------------------------

               U n i t  H y d r o g r a p h
                      VALLEY S-Curve
---------------------------------------------------------------
               Unit Hydrograph Data
---------------------------------------------------------------
```

Unit time period (hrs)		Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	227.497	47.782	9.207
2	0.167	454.994	41.494	7.996
3	0.250	682.491	7.777	1.499
4	0.333	909.988	2.947	0.568
		Sum = 100.000	Sum=	19.269

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit Time	Pattern	Storm Rain	Loss rate(In./Hr)		Effective
(Hr.)	Percent	(In/Hr)	Max |	Low	(In/Hr)
1 0.08	3.30	0.328	0.117	(0.295)	0.211
2 0.17	4.20	0.418	0.117	(0.376)	0.301
3 0.25	4.40	0.438	0.117	(0.394)	0.321
4 0.33	4.80	0.477	0.117	(0.430)	0.360
5 0.42	5.20	0.517	0.117	(0.466)	0.400
6 0.50	6.20	0.617	0.117	(0.555)	0.500
7 0.58	6.80	0.676	0.117	(0.609)	0.559
8 0.67	8.80	0.875	0.117	(0.788)	0.758
9 0.75	13.90	1.383	0.117	(1.244)	1.266
10 0.83	31.40	3.124	0.117	(2.811)	3.007
11 0.92	7.20	0.716	0.117	(0.645)	0.599
12 1.00	3.80	0.378	0.117	(0.340)	0.261
	(Loss Rate Not Used)				
Sum =	100.0			Sum =	8.5

Flood volume = Effective rainfall 0.71(In)
times area 19.1(Ac.)/[(In)/(Ft.)] = 1.1(Ac.Ft)
Total soil loss = 0.12(In)
Total soil loss = 0.186(Ac.Ft)
Total rainfall = 0.83(In)
Flood volume = 49415.6 Cubic Feet
Total soil loss = 8120.5 Cubic Feet

Peak flow rate of this hydrograph = 39.278(CFS)

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1 - H O U R S T O R M
R u n o f f H y d r o g r a p h

Hydrograph in 5 Minute intervals ((CFS))

Time(h+m)	Volume Ac.Ft	Q(CFS)	0	10.0	20.0	30.0	40.0
0+ 5	0.0134	1.95	VQ	|	|	|	|
0+10	0.0441	4.46	|V Q	|	|	|	|
0+15	0.0832	5.68	| V Q	|	|	|	|
0+20	0.1277	6.46	| V Q	|	|	|	|
0+25	0.1774	7.22	| VQ	|	|	|	|
0+30	0.2362	8.53	| Q	|	|	|	|
0+35	0.3048	9.96	| QV	|	|	|	|
0+40	0.3904	12.44	| | QV	|	|	|	|
0+45	0.5202	18.85	| | Q	|	|	|	|
0+50	0.7908	39.28	| | |	V |	|	|	Q|
0+55	1.0105	31.90	| | |	|	Q V |	|	|
1+ 0	1.0960	12.43	| | Q	|	|	V |	|
1+ 5	1.1284	4.69	| Q	|	|	|	V|
1+10	1.1334	0.73	Q	|	|	|	V|
1+15	1.1344	0.15	Q	|	|	|	V

U n i t H y d r o g r a p h A n a l y s i s

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Study date 10/17/24 File: EXB10310.out

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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978

Program License Serial Number 5006

English (in-lb) Input Units Used
English Rainfall Data (Inches) Input Values Used

English Units used in output format

Drainage Area = 19.12(Ac.) = 0.030 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 19.12(Ac.) = 0.030 Sq. Mi.
Length along longest watercourse = 724.00(Ft.)
Length along longest watercourse measured to centroid = 360.00(Ft.)
Length along longest watercourse = 0.137 Mi.
Length along longest watercourse measured to centroid = 0.068 Mi.
Difference in elevation = 77.00(Ft.)
Slope along watercourse = 561.5470 Ft./Mi.
Average Manning's 'N' = 0.030
Lag time = 0.037 Hr.
Lag time = 2.20 Min.
25% of lag time = 0.55 Min.
40% of lag time = 0.88 Min.
Unit time = 5.00 Min.
Duration of storm = 3 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.)[1]	Rainfall(In)[2]	Weighting[1*2]
19.12	0.80	15.30

100 YEAR Area rainfall data:

Area(Ac.)[1]	Rainfall(In)[2]	Weighting[1*2]
19.12	2.00	38.24

STORM EVENT (YEAR) = 10.00
Area Averaged 2-Year Rainfall = 0.800(In)
Area Averaged 100-Year Rainfall = 2.000(In)

Point rain (area averaged) = 1.294(In)
Areal adjustment factor = 99.99 %
Adjusted average point rain = 1.294(In)

Sub-Area Data:

Area(Ac.)	Runoff Index	Impervious %
19.120	91.00	0.000

Total Area Entered = 19.12(Ac.)

RI AMC2	RI AMC-2	Infil. Rate (In/Hr)	Impervious (Dec.%)	Adj. Infil. Rate (In/Hr)	Area% (Dec.)	F (In/Hr)
91.0	91.0	0.117	0.000	0.117	1.000	0.117
					Sum (F) =	0.117

Area averaged mean soil loss (F) (In/Hr) = 0.117
Minimum soil loss rate ((In/Hr)) = 0.059
(for 24 hour storm duration)
Soil low loss rate (decimal) = 0.900

U n i t H y d r o g r a p h
VALLEY S-Curve

Unit Hydrograph Data

Unit time period (hrs)	Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)

1	0.083	227.497	47.782	9.207
2	0.167	454.994	41.494	7.996
3	0.250	682.491	7.777	1.499
4	0.333	909.988	2.947	0.568
			Sum = 100.000 Sum=	19.269

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr) Max	Low	Effective (In/Hr)
1	0.08	1.30	0.202	0.117	(0.182)	0.085
2	0.17	1.30	0.202	0.117	(0.182)	0.085
3	0.25	1.10	0.171	0.117	(0.154)	0.054
4	0.33	1.50	0.233	0.117	(0.210)	0.116
5	0.42	1.50	0.233	0.117	(0.210)	0.116
6	0.50	1.80	0.279	0.117	(0.251)	0.162
7	0.58	1.50	0.233	0.117	(0.210)	0.116
8	0.67	1.80	0.279	0.117	(0.251)	0.162
9	0.75	1.80	0.279	0.117	(0.251)	0.162
10	0.83	1.50	0.233	0.117	(0.210)	0.116
11	0.92	1.60	0.248	0.117	(0.224)	0.131
12	1.00	1.80	0.279	0.117	(0.251)	0.162
13	1.08	2.20	0.342	0.117	(0.307)	0.225
14	1.17	2.20	0.342	0.117	(0.307)	0.225
15	1.25	2.20	0.342	0.117	(0.307)	0.225
16	1.33	2.00	0.310	0.117	(0.279)	0.193
17	1.42	2.60	0.404	0.117	(0.363)	0.287
18	1.50	2.70	0.419	0.117	(0.377)	0.302
19	1.58	2.40	0.373	0.117	(0.335)	0.256
20	1.67	2.70	0.419	0.117	(0.377)	0.302
21	1.75	3.30	0.512	0.117	(0.461)	0.395
22	1.83	3.10	0.481	0.117	(0.433)	0.364
23	1.92	2.90	0.450	0.117	(0.405)	0.333
24	2.00	3.00	0.466	0.117	(0.419)	0.349
25	2.08	3.10	0.481	0.117	(0.433)	0.364
26	2.17	4.20	0.652	0.117	(0.587)	0.535
27	2.25	5.00	0.776	0.117	(0.699)	0.659
28	2.33	3.50	0.543	0.117	(0.489)	0.426
29	2.42	6.80	1.056	0.117	(0.950)	0.939
30	2.50	7.30	1.133	0.117	(1.020)	1.016
31	2.58	8.20	1.273	0.117	(1.146)	1.156
32	2.67	5.90	0.916	0.117	(0.824)	0.799
33	2.75	2.00	0.310	0.117	(0.279)	0.193
34	2.83	1.80	0.279	0.117	(0.251)	0.162
35	2.92	1.80	0.279	0.117	(0.251)	0.162
36	3.00	0.60	0.093	(0.117)	0.084	0.009
		(Loss Rate Not Used)				
Sum =		100.0			Sum =	11.3

Flood volume = Effective rainfall 0.95(In)
times area 19.1(Ac.)/[(In)/(Ft.)] = 1.5(Ac.Ft)
Total soil loss = 0.35(In)
Total soil loss = 0.555(Ac.Ft)
Total rainfall = 1.29(In)
Flood volume = 65612.3 Cubic Feet
Total soil loss = 24169.5 Cubic Feet

Peak flow rate of this hydrograph = 20.427(CFS)

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3 - H O U R S T O R M
R u n o f f H y d r o g r a p h

Hydrograph in 5 Minute intervals ((CFS))

Time(h+m)	Volume Ac.Ft	Q(CFS)	0	7.5	15.0	22.5	30.0
0+ 5	0.0054	0.78	VQ				
0+10	0.0154	1.46	VQ				
0+15	0.0244	1.30	VQ				
0+20	0.0359	1.67	V Q				
0+25	0.0505	2.12	|VQ				
0+30	0.0686	2.63	|V Q				
0+35	0.0866	2.61	| VQ				
0+40	0.1054	2.73	| VQ				
0+45	0.1265	3.06	| VQ				
0+50	0.1449	2.68	| Q				
0+55	0.1619	2.47	| QV				
1+ 0	0.1813	2.81	| QV				
1+ 5	0.2063	3.63	| QV				
1+10	0.2351	4.18	| QV				
1+15	0.2647	4.29	| Q V				

```
    1+20       0.2925      4.04  |     Q V  |          |          |          |
    1+25       0.3245      4.65  |      Q V |          |          |          |
    1+30       0.3624      5.49  |       Q V|          |          |          |
    1+35       0.3990      5.31  |       Q  V          |          |          |
    1+40       0.4364      5.44  |       Q  |V         |          |          |
    1+45       0.4820      6.61  |        Q | V        |          |          |
    1+50       0.5310      7.12  |         Q|   V      |          |          |
    1+55       0.5775      6.75  |        Q |     V    |          |          |
    2+ 0       0.6232      6.65  |        Q |       V  |          |          |
    2+ 5       0.6704      6.85  |         Q|        V |          |          |
    2+10       0.7293      8.55  |          |Q         V|          |          |
    2+15       0.8058     11.10  |          |   Q      |V         |          |
    2+20       0.8761     10.21  |          |  Q       |  V       |          |
    2+25       0.9680     13.35  |          |      Q   |    V     |          |
    2+30       1.0912     17.88  |          |          |  Q    V  |          |
    2+35       1.2318     20.43  |          |          |     Q    | V        |
    2+40       1.3604     18.66  |          |          |   Q      |     V    |
    2+45       1.4326     10.48  |          |  Q       |          |       V  |
    2+50       1.4663      4.90  |       Q  |          |          |       V  |
    2+55       1.4907      3.54  |    Q     |          |          |        V |
    3+ 0       1.5027      1.74  | Q        |          |          |        V |
    3+ 5       1.5055      0.41  Q          |          |          |        V |
    3+10       1.5062      0.11  Q          |          |          |        V |
    3+15       1.5063      0.01  Q          |          |          |         V
-------------------------------------------------------------------------
```

U n i t H y d r o g r a p h A n a l y s i s

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Study date 10/17/24 File: EXB10610.out

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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978

Program License Serial Number 5006

English (in-lb) Input Units Used
English Rainfall Data (Inches) Input Values Used

English Units used in output format

Drainage Area = 19.12(Ac.) = 0.030 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 19.12(Ac.) = 0.030 Sq. Mi.
Length along longest watercourse = 724.00(Ft.)
Length along longest watercourse measured to centroid = 360.00(Ft.)
Length along longest watercourse = 0.137 Mi.
Length along longest watercourse measured to centroid = 0.068 Mi.
Difference in elevation = 77.00(Ft.)
Slope along watercourse = 561.5470 Ft./Mi.
Average Manning's 'N' = 0.030
Lag time = 0.037 Hr.
Lag time = 2.20 Min.
25% of lag time = 0.55 Min.
40% of lag time = 0.88 Min.
Unit time = 5.00 Min.
Duration of storm = 6 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.)[1]	Rainfall(In)[2]	Weighting[1*2]
19.12	1.10	21.03

100 YEAR Area rainfall data:

Area(Ac.)[1]	Rainfall(In)[2]	Weighting[1*2]
19.12	3.00	57.36

STORM EVENT (YEAR) = 10.00
Area Averaged 2-Year Rainfall = 1.100(In)
Area Averaged 100-Year Rainfall = 3.000(In)

Point rain (area averaged) = 1.882(In)
Areal adjustment factor = 99.99 %
Adjusted average point rain = 1.882(In)

Sub-Area Data:

Area(Ac.)	Runoff Index	Impervious %
19.120	91.00	0.000

Total Area Entered = 19.12(Ac.)

RI AMC2	RI AMC-2	Infil. Rate (In/Hr)	Impervious (Dec.%)	Adj. Infil. Rate (In/Hr)	Area% (Dec.)	F (In/Hr)
91.0	91.0	0.117	0.000	0.117	1.000	0.117
					Sum (F) =	0.117

Area averaged mean soil loss (F) (In/Hr) = 0.117
Minimum soil loss rate ((In/Hr)) = 0.059
(for 24 hour storm duration)
Soil low loss rate (decimal) = 0.900

U n i t H y d r o g r a p h
VALLEY S-Curve

Unit Hydrograph Data

Unit time period (hrs)	Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)

1	0.083	227.497	47.782	9.207
2	0.167	454.994	41.494	7.996
3	0.250	682.491	7.777	1.499
4	0.333	909.988	2.947	0.568
			Sum = 100.000 Sum=	19.269

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr) Max	Low	Effective (In/Hr)
1	0.08	0.50	0.113	(0.117)	0.102	0.011
2	0.17	0.60	0.135	0.117	(0.122)	0.018
3	0.25	0.60	0.135	0.117	(0.122)	0.018
4	0.33	0.60	0.135	0.117	(0.122)	0.018
5	0.42	0.60	0.135	0.117	(0.122)	0.018
6	0.50	0.70	0.158	0.117	(0.142)	0.041
7	0.58	0.70	0.158	0.117	(0.142)	0.041
8	0.67	0.70	0.158	0.117	(0.142)	0.041
9	0.75	0.70	0.158	0.117	(0.142)	0.041
10	0.83	0.70	0.158	0.117	(0.142)	0.041
11	0.92	0.70	0.158	0.117	(0.142)	0.041
12	1.00	0.80	0.181	0.117	(0.163)	0.064
13	1.08	0.80	0.181	0.117	(0.163)	0.064
14	1.17	0.80	0.181	0.117	(0.163)	0.064
15	1.25	0.80	0.181	0.117	(0.163)	0.064
16	1.33	0.80	0.181	0.117	(0.163)	0.064
17	1.42	0.80	0.181	0.117	(0.163)	0.064
18	1.50	0.80	0.181	0.117	(0.163)	0.064
19	1.58	0.80	0.181	0.117	(0.163)	0.064
20	1.67	0.80	0.181	0.117	(0.163)	0.064
21	1.75	0.80	0.181	0.117	(0.163)	0.064
22	1.83	0.80	0.181	0.117	(0.163)	0.064
23	1.92	0.80	0.181	0.117	(0.163)	0.064
24	2.00	0.90	0.203	0.117	(0.183)	0.086
25	2.08	0.80	0.181	0.117	(0.163)	0.064
26	2.17	0.90	0.203	0.117	(0.183)	0.086
27	2.25	0.90	0.203	0.117	(0.183)	0.086
28	2.33	0.90	0.203	0.117	(0.183)	0.086
29	2.42	0.90	0.203	0.117	(0.183)	0.086
30	2.50	0.90	0.203	0.117	(0.183)	0.086
31	2.58	0.90	0.203	0.117	(0.183)	0.086
32	2.67	0.90	0.203	0.117	(0.183)	0.086
33	2.75	1.00	0.226	0.117	(0.203)	0.109
34	2.83	1.00	0.226	0.117	(0.203)	0.109
35	2.92	1.00	0.226	0.117	(0.203)	0.109
36	3.00	1.00	0.226	0.117	(0.203)	0.109
37	3.08	1.00	0.226	0.117	(0.203)	0.109
38	3.17	1.10	0.248	0.117	(0.224)	0.131
39	3.25	1.10	0.248	0.117	(0.224)	0.131
40	3.33	1.10	0.248	0.117	(0.224)	0.131
41	3.42	1.20	0.271	0.117	(0.244)	0.154
42	3.50	1.30	0.294	0.117	(0.264)	0.177
43	3.58	1.40	0.316	0.117	(0.284)	0.199
44	3.67	1.40	0.316	0.117	(0.284)	0.199
45	3.75	1.50	0.339	0.117	(0.305)	0.222
46	3.83	1.50	0.339	0.117	(0.305)	0.222
47	3.92	1.60	0.361	0.117	(0.325)	0.244
48	4.00	1.60	0.361	0.117	(0.325)	0.244
49	4.08	1.70	0.384	0.117	(0.345)	0.267
50	4.17	1.80	0.406	0.117	(0.366)	0.289
51	4.25	1.90	0.429	0.117	(0.386)	0.312
52	4.33	2.00	0.452	0.117	(0.406)	0.335
53	4.42	2.10	0.474	0.117	(0.427)	0.357
54	4.50	2.10	0.474	0.117	(0.427)	0.357
55	4.58	2.20	0.497	0.117	(0.447)	0.380
56	4.67	2.30	0.519	0.117	(0.467)	0.402
57	4.75	2.40	0.542	0.117	(0.488)	0.425
58	4.83	2.40	0.542	0.117	(0.488)	0.425
59	4.92	2.50	0.564	0.117	(0.508)	0.447
60	5.00	2.60	0.587	0.117	(0.528)	0.470
61	5.08	3.10	0.700	0.117	(0.630)	0.583
62	5.17	3.60	0.813	0.117	(0.732)	0.696
63	5.25	3.90	0.881	0.117	(0.793)	0.764
64	5.33	4.20	0.948	0.117	(0.853)	0.831
65	5.42	4.70	1.061	0.117	(0.955)	0.944
66	5.50	5.60	1.264	0.117	(1.138)	1.147
67	5.58	1.90	0.429	0.117	(0.386)	0.312
68	5.67	0.90	0.203	0.117	(0.183)	0.086
69	5.75	0.60	0.135	0.117	(0.122)	0.018
70	5.83	0.50	0.113	(0.117)	0.102	0.011
71	5.92	0.30	0.068	(0.117)	0.061	0.007
72	6.00	0.20	0.045	(0.117)	0.041	0.005

```
            (Loss Rate Not Used)
   Sum =     100.0                                  Sum =    14.3
      Flood volume = Effective rainfall      1.19(In)
       times area      19.1(Ac.)/[(In)/(Ft.)] =       1.9(Ac.Ft)
      Total soil loss =      0.69(In)
      Total soil loss =     1.097(Ac.Ft)
      Total rainfall =      1.88(In)
      Flood volume =       82811.3 Cubic Feet
      Total soil loss =       47778.9 Cubic Feet
      ---------------------------------------------------------------------
       Peak flow rate of this hydrograph =     19.804(CFS)
      ---------------------------------------------------------------------
      +++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                          6 - H O U R    S T O R M
                     R u n o f f      H y d r o g r a p h
      ---------------------------------------------------------------------
                  Hydrograph in   5   Minute intervals ((CFS))

      ---------------------------------------------------------------------
Time(h+m) Volume Ac.Ft   Q(CFS)  0        5.0      10.0      15.0      20.0
-------------------------------------------------------------------------
  0+ 5       0.0007      0.10  Q          |         |         |         |
  0+10       0.0025      0.26  Q          |         |         |         |
  0+15       0.0048      0.33  Q          |         |         |         |
  0+20       0.0072      0.35  Q          |         |         |         |
  0+25       0.0097      0.36  Q          |         |         |         |
  0+30       0.0136      0.56  VQ         |         |         |         |
  0+35       0.0187      0.74  VQ         |         |         |         |
  0+40       0.0241      0.78  VQ         |         |         |         |
  0+45       0.0295      0.79  VQ         |         |         |         |
  0+50       0.0350      0.79  VQ         |         |         |         |
  0+55       0.0404      0.79  VQ         |         |         |         |
  1+ 0       0.0473      1.00  VQ         |         |         |         |
  1+ 5       0.0554      1.18  |VQ        |         |         |         |
  1+10       0.0638      1.21  |VQ        |         |         |         |
  1+15       0.0722      1.23  |VQ        |         |         |         |
  1+20       0.0807      1.23  |VQ        |         |         |         |
  1+25       0.0891      1.23  |VQ        |         |         |         |
  1+30       0.0976      1.23  | Q        |         |         |         |
  1+35       0.1060      1.23  | Q        |         |         |         |
  1+40       0.1145      1.23  | Q        |         |         |         |
  1+45       0.1229      1.23  | Q        |         |         |         |
  1+50       0.1314      1.23  | Q        |         |         |         |
  1+55       0.1398      1.23  | Q        |         |         |         |
  2+ 0       0.1497      1.43  | QV       |         |         |         |
  2+ 5       0.1594      1.41  | QV       |         |         |         |
  2+10       0.1695      1.47  | QV       |         |         |         |
  2+15       0.1807      1.63  |  Q       |         |         |         |
  2+20       0.1921      1.65  |  QV      |         |         |         |
  2+25       0.2035      1.66  |  QV      |         |         |         |
  2+30       0.2150      1.66  |  QV      |         |         |         |
  2+35       0.2264      1.66  |  QV      |         |         |         |
  2+40       0.2379      1.66  |  Q V     |         |         |         |
  2+45       0.2508      1.87  |  Q V     |         |         |         |
  2+50       0.2649      2.05  |   QV     |         |         |         |
  2+55       0.2792      2.08  |   QV     |         |         |         |
  3+ 0       0.2937      2.10  |   Q V    |         |         |         |
  3+ 5       0.3081      2.10  |   Q V    |         |         |         |
  3+10       0.3240      2.31  |   Q V    |         |         |         |
  3+15       0.3411      2.49  |   Q  V   |         |         |         |
  3+20       0.3585      2.52  |    Q V   |         |         |         |
  3+25       0.3773      2.74  |    Q V   |         |         |         |
  3+30       0.3989      3.13  |     Q V  |         |         |         |
  3+35       0.4234      3.55  |      QV  |         |         |         |
  3+40       0.4494      3.78  |      Q V |         |         |         |
  3+45       0.4772      4.03  |       Q V|         |         |         |
  3+50       0.5063      4.23  |       Q V|         |         |         |
  3+55       0.5371      4.47  |       Q |V         |         |         |
  4+ 0       0.5692      4.66  |        Q|V         |         |         |
  4+ 5       0.6029      4.90  |        Q| V        |         |         |
  4+10       0.6395      5.31  |         Q  V       |         |         |
  4+15       0.6789      5.73  |         |Q  V      |         |         |
  4+20       0.7214      6.16  |         | Q  V     |         |         |
  4+25       0.7668      6.60  |         |  Q  V    |         |         |
  4+30       0.8138      6.83  |         |  Q   V   |         |         |
  4+35       0.8626      7.08  |         |   Q    V |         |         |
  4+40       0.9141      7.48  |         |   Q     V|         |         |
  4+45       0.9686      7.90  |         |    Q     V         |         |
  4+50       1.0246      8.13  |         |     Q    |V        |         |
  4+55       1.0823      8.39  |         |     Q    | V       |         |
  5+ 0       1.1429      8.79  |         |      Q   |  V      |         |
  5+ 5       1.2120     10.04  |         |         Q    V     |         |
  5+10       1.2949     12.03  |         |              Q  V  |         |
  5+15       1.3895     13.74  |         |                 Q V|         |
  5+20       1.4938     15.14  |         |                    QV       |
  5+25       1.6101     16.89  |         |                    |  Q      |
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    5+30       1.7465     19.80  |          |          |          |     V  Q|
    5+35       1.8425     13.94  |          |          |       Q  |        V |
    5+40       1.8807      5.55  |          |Q         |          |         V|
    5+45       1.8944      1.98  |   Q      |          |          |         V|
    5+50       1.8982      0.56  |Q         |          |          |         V|
    5+55       1.8998      0.23  Q          |          |          |         V|
    6+ 0       1.9006      0.12  Q          |          |          |         V|
    6+ 5       1.9010      0.05  Q          |          |          |         V|
    6+10       1.9011      0.01  Q          |          |          |         V|
    6+15       1.9011      0.00  Q          |          |          |          V
-------------------------------------------------------------------------------
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U n i t H y d r o g r a p h A n a l y s i s

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Study date 10/17/24 File: EXB102410.out

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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978

Program License Serial Number 5006

English (in-lb) Input Units Used
English Rainfall Data (Inches) Input Values Used

English Units used in output format

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Drainage Area for Depth-Area Areal Adjustment = 19.12(Ac.) = 0.030 Sq. Mi.
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Length along longest watercourse measured to centroid = 360.00(Ft.)
Length along longest watercourse = 0.137 Mi.
Length along longest watercourse measured to centroid = 0.068 Mi.
Difference in elevation = 77.00(Ft.)
Slope along watercourse = 561.5470 Ft./Mi.
Average Manning's 'N' = 0.030
Lag time = 0.037 Hr.
Lag time = 2.20 Min.
25% of lag time = 0.55 Min.
40% of lag time = 0.88 Min.
Unit time = 5.00 Min.
Duration of storm = 24 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.)[1]	Rainfall(In)[2]	Weighting[1*2]
19.12	1.80	34.42

100 YEAR Area rainfall data:

Area(Ac.)[1]	Rainfall(In)[2]	Weighting[1*2]
19.12	5.00	95.60

STORM EVENT (YEAR) = 10.00
Area Averaged 2-Year Rainfall = 1.800(In)
Area Averaged 100-Year Rainfall = 5.000(In)

Point rain (area averaged) = 3.117(In)
Areal adjustment factor = 100.00 %
Adjusted average point rain = 3.116(In)

Sub-Area Data:

Area(Ac.)	Runoff Index	Impervious %
19.120	91.00	0.000

Total Area Entered = 19.12(Ac.)

RI AMC2	RI AMC-2	Infil. Rate (In/Hr)	Impervious (Dec.%)	Adj. Infil. Rate (In/Hr)	Area% (Dec.)	F (In/Hr)
91.0	91.0	0.117	0.000	0.117	1.000	0.117
					Sum (F) =	0.117

Area averaged mean soil loss (F) (In/Hr) = 0.117
Minimum soil loss rate ((In/Hr)) = 0.059
(for 24 hour storm duration)
Soil low loss rate (decimal) = 0.900

U n i t H y d r o g r a p h
VALLEY S-Curve

Unit Hydrograph Data

Unit time period (hrs)	Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)

1	0.083	227.497	47.782	9.207
2	0.167	454.994	41.494	7.996
3	0.250	682.491	7.777	1.499
4	0.333	909.988	2.947	0.568
			Sum = 100.000	Sum= 19.269

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr) Max	Low	Effective (In/Hr)
1	0.08	0.07	0.025	(0.207)	0.022	0.002
2	0.17	0.07	0.025	(0.207)	0.022	0.002
3	0.25	0.07	0.025	(0.206)	0.022	0.002
4	0.33	0.10	0.037	(0.205)	0.034	0.004
5	0.42	0.10	0.037	(0.204)	0.034	0.004
6	0.50	0.10	0.037	(0.203)	0.034	0.004
7	0.58	0.10	0.037	(0.203)	0.034	0.004
8	0.67	0.10	0.037	(0.202)	0.034	0.004
9	0.75	0.10	0.037	(0.201)	0.034	0.004
10	0.83	0.13	0.050	(0.200)	0.045	0.005
11	0.92	0.13	0.050	(0.199)	0.045	0.005
12	1.00	0.13	0.050	(0.199)	0.045	0.005
13	1.08	0.10	0.037	(0.198)	0.034	0.004
14	1.17	0.10	0.037	(0.197)	0.034	0.004
15	1.25	0.10	0.037	(0.196)	0.034	0.004
16	1.33	0.10	0.037	(0.196)	0.034	0.004
17	1.42	0.10	0.037	(0.195)	0.034	0.004
18	1.50	0.10	0.037	(0.194)	0.034	0.004
19	1.58	0.10	0.037	(0.193)	0.034	0.004
20	1.67	0.10	0.037	(0.192)	0.034	0.004
21	1.75	0.10	0.037	(0.192)	0.034	0.004
22	1.83	0.13	0.050	(0.191)	0.045	0.005
23	1.92	0.13	0.050	(0.190)	0.045	0.005
24	2.00	0.13	0.050	(0.189)	0.045	0.005
25	2.08	0.13	0.050	(0.189)	0.045	0.005
26	2.17	0.13	0.050	(0.188)	0.045	0.005
27	2.25	0.13	0.050	(0.187)	0.045	0.005
28	2.33	0.13	0.050	(0.186)	0.045	0.005
29	2.42	0.13	0.050	(0.186)	0.045	0.005
30	2.50	0.13	0.050	(0.185)	0.045	0.005
31	2.58	0.17	0.062	(0.184)	0.056	0.006
32	2.67	0.17	0.062	(0.183)	0.056	0.006
33	2.75	0.17	0.062	(0.183)	0.056	0.006
34	2.83	0.17	0.062	(0.182)	0.056	0.006
35	2.92	0.17	0.062	(0.181)	0.056	0.006
36	3.00	0.17	0.062	(0.180)	0.056	0.006
37	3.08	0.17	0.062	(0.180)	0.056	0.006
38	3.17	0.17	0.062	(0.179)	0.056	0.006
39	3.25	0.17	0.062	(0.178)	0.056	0.006
40	3.33	0.17	0.062	(0.177)	0.056	0.006
41	3.42	0.17	0.062	(0.177)	0.056	0.006
42	3.50	0.17	0.062	(0.176)	0.056	0.006
43	3.58	0.17	0.062	(0.175)	0.056	0.006
44	3.67	0.17	0.062	(0.174)	0.056	0.006
45	3.75	0.17	0.062	(0.174)	0.056	0.006
46	3.83	0.20	0.075	(0.173)	0.067	0.007
47	3.92	0.20	0.075	(0.172)	0.067	0.007
48	4.00	0.20	0.075	(0.171)	0.067	0.007
49	4.08	0.20	0.075	(0.171)	0.067	0.007
50	4.17	0.20	0.075	(0.170)	0.067	0.007
51	4.25	0.20	0.075	(0.169)	0.067	0.007
52	4.33	0.23	0.087	(0.169)	0.079	0.009
53	4.42	0.23	0.087	(0.168)	0.079	0.009
54	4.50	0.23	0.087	(0.167)	0.079	0.009
55	4.58	0.23	0.087	(0.166)	0.079	0.009
56	4.67	0.23	0.087	(0.166)	0.079	0.009
57	4.75	0.23	0.087	(0.165)	0.079	0.009
58	4.83	0.27	0.100	(0.164)	0.090	0.010
59	4.92	0.27	0.100	(0.164)	0.090	0.010
60	5.00	0.27	0.100	(0.163)	0.090	0.010
61	5.08	0.20	0.075	(0.162)	0.067	0.007
62	5.17	0.20	0.075	(0.161)	0.067	0.007
63	5.25	0.20	0.075	(0.161)	0.067	0.007
64	5.33	0.23	0.087	(0.160)	0.079	0.009
65	5.42	0.23	0.087	(0.159)	0.079	0.009
66	5.50	0.23	0.087	(0.159)	0.079	0.009
67	5.58	0.27	0.100	(0.158)	0.090	0.010
68	5.67	0.27	0.100	(0.157)	0.090	0.010
69	5.75	0.27	0.100	(0.157)	0.090	0.010
70	5.83	0.27	0.100	(0.156)	0.090	0.010
71	5.92	0.27	0.100	(0.155)	0.090	0.010
72	6.00	0.27	0.100	(0.154)	0.090	0.010

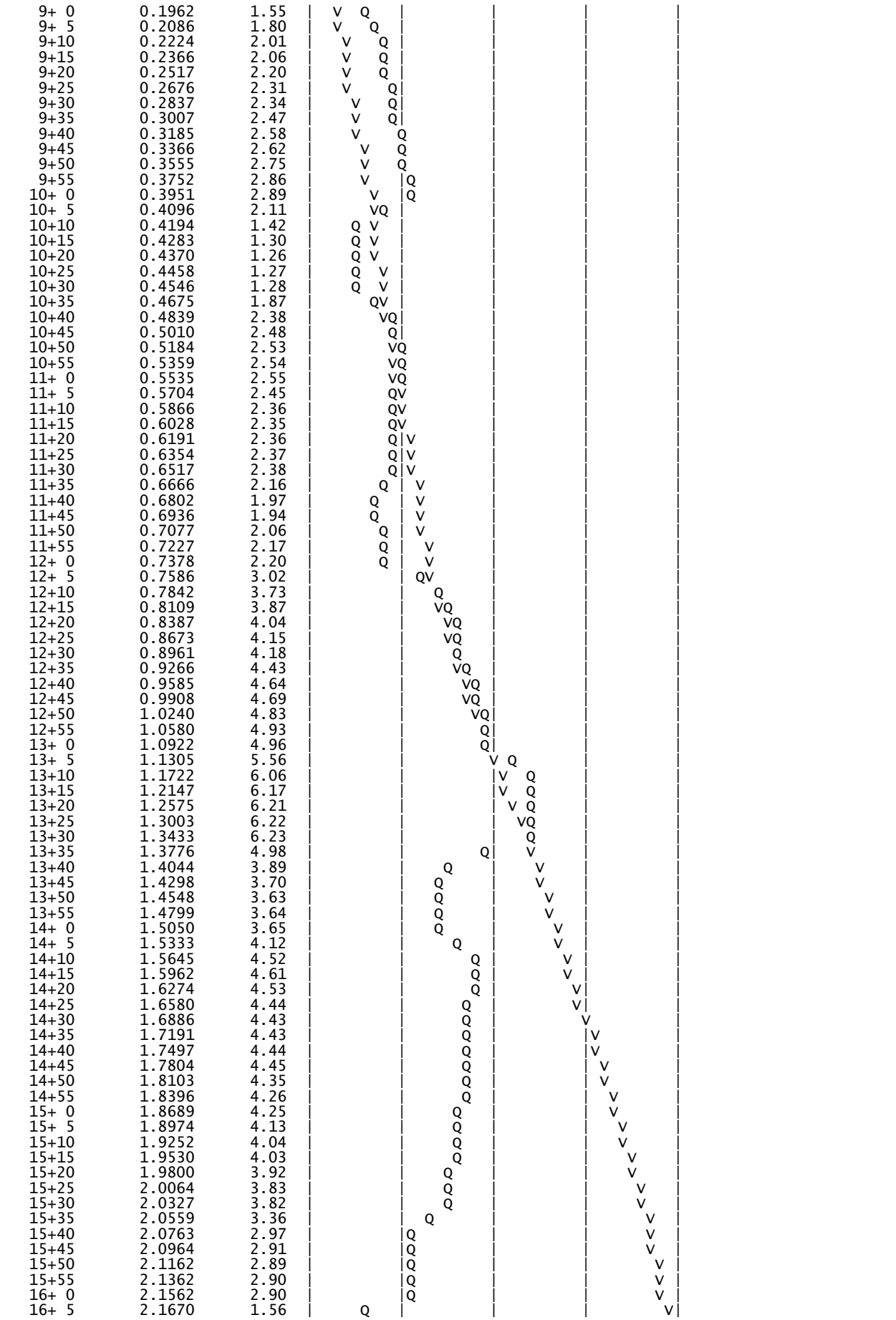
73	6.08	0.30	0.112	(0.154)	0.101	0.011
74	6.17	0.30	0.112	(0.153)	0.101	0.011
75	6.25	0.30	0.112	(0.152)	0.101	0.011
76	6.33	0.30	0.112	(0.152)	0.101	0.011
77	6.42	0.30	0.112	(0.151)	0.101	0.011
78	6.50	0.30	0.112	(0.150)	0.101	0.011
79	6.58	0.33	0.125	(0.150)	0.112	0.012
80	6.67	0.33	0.125	(0.149)	0.112	0.012
81	6.75	0.33	0.125	(0.148)	0.112	0.012
82	6.83	0.33	0.125	(0.148)	0.112	0.012
83	6.92	0.33	0.125	(0.147)	0.112	0.012
84	7.00	0.33	0.125	(0.146)	0.112	0.012
85	7.08	0.33	0.125	(0.146)	0.112	0.012
86	7.17	0.33	0.125	(0.145)	0.112	0.012
87	7.25	0.33	0.125	(0.144)	0.112	0.012
88	7.33	0.37	0.137	(0.144)	0.123	0.014
89	7.42	0.37	0.137	(0.143)	0.123	0.014
90	7.50	0.37	0.137	(0.142)	0.123	0.014
91	7.58	0.40	0.150	(0.142)	0.135	0.015
92	7.67	0.40	0.150	(0.141)	0.135	0.015
93	7.75	0.40	0.150	(0.140)	0.135	0.015
94	7.83	0.43	0.162	0.140	(0.146)	0.022
95	7.92	0.43	0.162	0.139	(0.146)	0.023
96	8.00	0.43	0.162	0.138	(0.146)	0.024
97	8.08	0.50	0.187	0.138	(0.168)	0.049
98	8.17	0.50	0.187	0.137	(0.168)	0.050
99	8.25	0.50	0.187	0.137	(0.168)	0.050
100	8.33	0.50	0.187	0.136	(0.168)	0.051
101	8.42	0.50	0.187	0.135	(0.168)	0.052
102	8.50	0.50	0.187	0.135	(0.168)	0.052
103	8.58	0.53	0.199	0.134	(0.180)	0.065
104	8.67	0.53	0.199	0.133	(0.180)	0.066
105	8.75	0.53	0.199	0.133	(0.180)	0.067
106	8.83	0.57	0.212	0.132	(0.191)	0.080
107	8.92	0.57	0.212	0.131	(0.191)	0.080
108	9.00	0.57	0.212	0.131	(0.191)	0.081
109	9.08	0.63	0.237	0.130	(0.213)	0.107
110	9.17	0.63	0.237	0.130	(0.213)	0.107
111	9.25	0.63	0.237	0.129	(0.213)	0.108
112	9.33	0.67	0.249	0.128	(0.224)	0.121
113	9.42	0.67	0.249	0.128	(0.224)	0.122
114	9.50	0.67	0.249	0.127	(0.224)	0.122
115	9.58	0.70	0.262	0.127	(0.236)	0.135
116	9.67	0.70	0.262	0.126	(0.236)	0.136
117	9.75	0.70	0.262	0.125	(0.236)	0.136
118	9.83	0.73	0.274	0.125	(0.247)	0.149
119	9.92	0.73	0.274	0.124	(0.247)	0.150
120	10.00	0.73	0.274	0.124	(0.247)	0.151
121	10.08	0.50	0.187	0.123	(0.168)	0.064
122	10.17	0.50	0.187	0.122	(0.168)	0.065
123	10.25	0.50	0.187	0.122	(0.168)	0.065
124	10.33	0.50	0.187	0.121	(0.168)	0.066
125	10.42	0.50	0.187	0.121	(0.168)	0.066
126	10.50	0.50	0.187	0.120	(0.168)	0.067
127	10.58	0.67	0.249	0.119	(0.224)	0.130
128	10.67	0.67	0.249	0.119	(0.224)	0.130
129	10.75	0.67	0.249	0.118	(0.224)	0.131
130	10.83	0.67	0.249	0.118	(0.224)	0.132
131	10.92	0.67	0.249	0.117	(0.224)	0.132
132	11.00	0.67	0.249	0.117	(0.224)	0.133
133	11.08	0.63	0.237	0.116	(0.213)	0.121
134	11.17	0.63	0.237	0.115	(0.213)	0.121
135	11.25	0.63	0.237	0.115	(0.213)	0.122
136	11.33	0.63	0.237	0.114	(0.213)	0.123
137	11.42	0.63	0.237	0.114	(0.213)	0.123
138	11.50	0.63	0.237	0.113	(0.213)	0.124
139	11.58	0.57	0.212	0.113	(0.191)	0.099
140	11.67	0.57	0.212	0.112	(0.191)	0.100
141	11.75	0.57	0.212	0.111	(0.191)	0.100
142	11.83	0.60	0.224	0.111	(0.202)	0.114
143	11.92	0.60	0.224	0.110	(0.202)	0.114
144	12.00	0.60	0.224	0.110	(0.202)	0.115
145	12.08	0.83	0.312	0.109	(0.280)	0.202
146	12.17	0.83	0.312	0.109	(0.280)	0.203
147	12.25	0.83	0.312	0.108	(0.280)	0.204
148	12.33	0.87	0.324	0.108	(0.292)	0.217
149	12.42	0.87	0.324	0.107	(0.292)	0.217
150	12.50	0.87	0.324	0.107	(0.292)	0.218
151	12.58	0.93	0.349	0.106	(0.314)	0.243
152	12.67	0.93	0.349	0.105	(0.314)	0.244
153	12.75	0.93	0.349	0.105	(0.314)	0.244
154	12.83	0.97	0.362	0.104	(0.325)	0.257
155	12.92	0.97	0.362	0.104	(0.325)	0.258
156	13.00	0.97	0.362	0.103	(0.325)	0.258
157	13.08	1.13	0.424	0.103	(0.381)	0.321
158	13.17	1.13	0.424	0.102	(0.381)	0.322

159	13.25	1.13	0.424	0.102	(0.381)	0.322
160	13.33	1.13	0.424	0.101	(0.381)	0.323
161	13.42	1.13	0.424	0.101	(0.381)	0.323
162	13.50	1.13	0.424	0.100	(0.381)	0.324
163	13.58	0.77	0.287	0.100	(0.258)	0.187
164	13.67	0.77	0.287	0.099	(0.258)	0.188
165	13.75	0.77	0.287	0.099	(0.258)	0.188
166	13.83	0.77	0.287	0.098	(0.258)	0.189
167	13.92	0.77	0.287	0.098	(0.258)	0.189
168	14.00	0.77	0.287	0.097	(0.258)	0.190
169	14.08	0.90	0.337	0.097	(0.303)	0.240
170	14.17	0.90	0.337	0.096	(0.303)	0.240
171	14.25	0.90	0.337	0.096	(0.303)	0.241
172	14.33	0.87	0.324	0.095	(0.292)	0.229
173	14.42	0.87	0.324	0.095	(0.292)	0.229
174	14.50	0.87	0.324	0.094	(0.292)	0.230
175	14.58	0.87	0.324	0.094	(0.292)	0.230
176	14.67	0.87	0.324	0.093	(0.292)	0.231
177	14.75	0.87	0.324	0.093	(0.292)	0.231
178	14.83	0.83	0.312	0.092	(0.280)	0.219
179	14.92	0.83	0.312	0.092	(0.280)	0.220
180	15.00	0.83	0.312	0.091	(0.280)	0.220
181	15.08	0.80	0.299	0.091	(0.269)	0.208
182	15.17	0.80	0.299	0.090	(0.269)	0.209
183	15.25	0.80	0.299	0.090	(0.269)	0.209
184	15.33	0.77	0.287	0.090	(0.258)	0.197
185	15.42	0.77	0.287	0.089	(0.258)	0.198
186	15.50	0.77	0.287	0.089	(0.258)	0.198
187	15.58	0.63	0.237	0.088	(0.213)	0.149
188	15.67	0.63	0.237	0.088	(0.213)	0.149
189	15.75	0.63	0.237	0.087	(0.213)	0.150
190	15.83	0.63	0.237	0.087	(0.213)	0.150
191	15.92	0.63	0.237	0.086	(0.213)	0.150
192	16.00	0.63	0.237	0.086	(0.213)	0.151
193	16.08	0.13	0.050	(0.085)	0.045	0.005
194	16.17	0.13	0.050	(0.085)	0.045	0.005
195	16.25	0.13	0.050	(0.085)	0.045	0.005
196	16.33	0.13	0.050	(0.084)	0.045	0.005
197	16.42	0.13	0.050	(0.084)	0.045	0.005
198	16.50	0.13	0.050	(0.083)	0.045	0.005
199	16.58	0.10	0.037	(0.083)	0.034	0.004
200	16.67	0.10	0.037	(0.082)	0.034	0.004
201	16.75	0.10	0.037	(0.082)	0.034	0.004
202	16.83	0.10	0.037	(0.082)	0.034	0.004
203	16.92	0.10	0.037	(0.081)	0.034	0.004
204	17.00	0.10	0.037	(0.081)	0.034	0.004
205	17.08	0.17	0.062	(0.080)	0.056	0.006
206	17.17	0.17	0.062	(0.080)	0.056	0.006
207	17.25	0.17	0.062	(0.080)	0.056	0.006
208	17.33	0.17	0.062	(0.079)	0.056	0.006
209	17.42	0.17	0.062	(0.079)	0.056	0.006
210	17.50	0.17	0.062	(0.078)	0.056	0.006
211	17.58	0.17	0.062	(0.078)	0.056	0.006
212	17.67	0.17	0.062	(0.078)	0.056	0.006
213	17.75	0.17	0.062	(0.077)	0.056	0.006
214	17.83	0.13	0.050	(0.077)	0.045	0.005
215	17.92	0.13	0.050	(0.076)	0.045	0.005
216	18.00	0.13	0.050	(0.076)	0.045	0.005
217	18.08	0.13	0.050	(0.076)	0.045	0.005
218	18.17	0.13	0.050	(0.075)	0.045	0.005
219	18.25	0.13	0.050	(0.075)	0.045	0.005
220	18.33	0.13	0.050	(0.075)	0.045	0.005
221	18.42	0.13	0.050	(0.074)	0.045	0.005
222	18.50	0.13	0.050	(0.074)	0.045	0.005
223	18.58	0.10	0.037	(0.074)	0.034	0.004
224	18.67	0.10	0.037	(0.073)	0.034	0.004
225	18.75	0.10	0.037	(0.073)	0.034	0.004
226	18.83	0.07	0.025	(0.072)	0.022	0.002
227	18.92	0.07	0.025	(0.072)	0.022	0.002
228	19.00	0.07	0.025	(0.072)	0.022	0.002
229	19.08	0.10	0.037	(0.071)	0.034	0.004
230	19.17	0.10	0.037	(0.071)	0.034	0.004
231	19.25	0.10	0.037	(0.071)	0.034	0.004
232	19.33	0.13	0.050	(0.070)	0.045	0.005
233	19.42	0.13	0.050	(0.070)	0.045	0.005
234	19.50	0.13	0.050	(0.070)	0.045	0.005
235	19.58	0.10	0.037	(0.069)	0.034	0.004
236	19.67	0.10	0.037	(0.069)	0.034	0.004
237	19.75	0.10	0.037	(0.069)	0.034	0.004
238	19.83	0.07	0.025	(0.069)	0.022	0.002
239	19.92	0.07	0.025	(0.068)	0.022	0.002
240	20.00	0.07	0.025	(0.068)	0.022	0.002
241	20.08	0.10	0.037	(0.068)	0.034	0.004
242	20.17	0.10	0.037	(0.067)	0.034	0.004
243	20.25	0.10	0.037	(0.067)	0.034	0.004
244	20.33	0.10	0.037	(0.067)	0.034	0.004

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245  20.42     0.10      0.037       (  0.066)       0.034        0.004
246  20.50     0.10      0.037       (  0.066)       0.034        0.004
247  20.58     0.10      0.037       (  0.066)       0.034        0.004
248  20.67     0.10      0.037       (  0.066)       0.034        0.004
249  20.75     0.10      0.037       (  0.065)       0.034        0.004
250  20.83     0.07      0.025       (  0.065)       0.022        0.002
251  20.92     0.07      0.025       (  0.065)       0.022        0.002
252  21.00     0.07      0.025       (  0.065)       0.022        0.002
253  21.08     0.10      0.037       (  0.064)       0.034        0.004
254  21.17     0.10      0.037       (  0.064)       0.034        0.004
255  21.25     0.10      0.037       (  0.064)       0.034        0.004
256  21.33     0.07      0.025       (  0.064)       0.022        0.002
257  21.42     0.07      0.025       (  0.063)       0.022        0.002
258  21.50     0.07      0.025       (  0.063)       0.022        0.002
259  21.58     0.10      0.037       (  0.063)       0.034        0.004
260  21.67     0.10      0.037       (  0.063)       0.034        0.004
261  21.75     0.10      0.037       (  0.062)       0.034        0.004
262  21.83     0.07      0.025       (  0.062)       0.022        0.002
263  21.92     0.07      0.025       (  0.062)       0.022        0.002
264  22.00     0.07      0.025       (  0.062)       0.022        0.002
265  22.08     0.10      0.037       (  0.062)       0.034        0.004
266  22.17     0.10      0.037       (  0.061)       0.034        0.004
267  22.25     0.10      0.037       (  0.061)       0.034        0.004
268  22.33     0.07      0.025       (  0.061)       0.022        0.002
269  22.42     0.07      0.025       (  0.061)       0.022        0.002
270  22.50     0.07      0.025       (  0.061)       0.022        0.002
271  22.58     0.07      0.025       (  0.060)       0.022        0.002
272  22.67     0.07      0.025       (  0.060)       0.022        0.002
273  22.75     0.07      0.025       (  0.060)       0.022        0.002
274  22.83     0.07      0.025       (  0.060)       0.022        0.002
275  22.92     0.07      0.025       (  0.060)       0.022        0.002
276  23.00     0.07      0.025       (  0.060)       0.022        0.002
277  23.08     0.07      0.025       (  0.060)       0.022        0.002
278  23.17     0.07      0.025       (  0.059)       0.022        0.002
279  23.25     0.07      0.025       (  0.059)       0.022        0.002
280  23.33     0.07      0.025       (  0.059)       0.022        0.002
281  23.42     0.07      0.025       (  0.059)       0.022        0.002
282  23.50     0.07      0.025       (  0.059)       0.022        0.002
283  23.58     0.07      0.025       (  0.059)       0.022        0.002
284  23.67     0.07      0.025       (  0.059)       0.022        0.002
285  23.75     0.07      0.025       (  0.059)       0.022        0.002
286  23.83     0.07      0.025       (  0.059)       0.022        0.002
287  23.92     0.07      0.025       (  0.059)       0.022        0.002
288  24.00     0.07      0.025       (  0.059)       0.022        0.002
                (Loss Rate Not Used)
    Sum =     100.0                                  Sum =    16.7
      Flood volume = Effective rainfall      1.39(In)
       times area      19.1(Ac.)/[(In)/(Ft.)] =       2.2(Ac.Ft)
      Total soil loss =      1.72(In)
      Total soil loss =     2.748(Ac.Ft)
      Total rainfall =      3.12(In)
      Flood volume =       96574.6 Cubic Feet
      Total soil loss =      119720.2 Cubic Feet
      ---------------------------------------------------------------------
       Peak flow rate of this hydrograph =      6.233(CFS)
      ---------------------------------------------------------------------
      +++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                          24 - H O U R    S T O R M
                     R u n o f f      H y d r o g r a p h
      ---------------------------------------------------------------------
                  Hydrograph in   5   Minute intervals ((CFS))

      ---------------------------------------------------------------------
 Time(h+m) Volume Ac.Ft   Q(CFS)  0        2.5       5.0       7.5      10.0
 ---------------------------------------------------------------------------
   0+ 5       0.0002      0.02  Q          |         |         |         |
   0+10       0.0005      0.04  Q          |         |         |         |
   0+15       0.0008      0.05  Q          |         |         |         |
   0+20       0.0012      0.06  Q          |         |         |         |
   0+25       0.0017      0.07  Q          |         |         |         |
   0+30       0.0022      0.07  Q          |         |         |         |
   0+35       0.0027      0.07  Q          |         |         |         |
   0+40       0.0031      0.07  Q          |         |         |         |
   0+45       0.0036      0.07  Q          |         |         |         |
   0+50       0.0042      0.08  Q          |         |         |         |
   0+55       0.0049      0.09  Q          |         |         |         |
   1+ 0       0.0055      0.10  Q          |         |         |         |
   1+ 5       0.0061      0.08  Q          |         |         |         |
   1+10       0.0066      0.07  Q          |         |         |         |
   1+15       0.0071      0.07  Q          |         |         |         |
   1+20       0.0076      0.07  Q          |         |         |         |
   1+25       0.0081      0.07  Q          |         |         |         |
   1+30       0.0086      0.07  Q          |         |         |         |
   1+35       0.0091      0.07  Q          |         |         |         |
   1+40       0.0096      0.07  Q          |         |         |         |
   1+45       0.0101      0.07  Q          |         |         |         |
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1+50	0.0107	0.08	Q	|	|	|	|
1+55	0.0113	0.09	Q	|	|	|	|
2+ 0	0.0120	0.10	Q	|	|	|	|
2+ 5	0.0126	0.10	Q	|	|	|	|
2+10	0.0133	0.10	Q	|	|	|	|
2+15	0.0140	0.10	Q	|	|	|	|
2+20	0.0146	0.10	Q	|	|	|	|
2+25	0.0153	0.10	Q	|	|	|	|
2+30	0.0159	0.10	Q	|	|	|	|
2+35	0.0167	0.11	Q	|	|	|	|
2+40	0.0175	0.12	Q	|	|	|	|
2+45	0.0183	0.12	Q	|	|	|	|
2+50	0.0192	0.12	Q	|	|	|	|
2+55	0.0200	0.12	Q	|	|	|	|
3+ 0	0.0208	0.12	Q	|	|	|	|
3+ 5	0.0216	0.12	Q	|	|	|	|
3+10	0.0225	0.12	Q	|	|	|	|
3+15	0.0233	0.12	Q	|	|	|	|
3+20	0.0241	0.12	Q	|	|	|	|
3+25	0.0249	0.12	Q	|	|	|	|
3+30	0.0258	0.12	Q	|	|	|	|
3+35	0.0266	0.12	Q	|	|	|	|
3+40	0.0274	0.12	Q	|	|	|	|
3+45	0.0283	0.12	Q	|	|	|	|
3+50	0.0292	0.13	Q	|	|	|	|
3+55	0.0301	0.14	Q	|	|	|	|
4+ 0	0.0311	0.14	Q	|	|	|	|
4+ 5	0.0321	0.14	Q	|	|	|	|
4+10	0.0331	0.14	Q	|	|	|	|
4+15	0.0341	0.14	Q	|	|	|	|
4+20	0.0352	0.16	Q	|	|	|	|
4+25	0.0363	0.17	Q	|	|	|	|
4+30	0.0375	0.17	Q	|	|	|	|
4+35	0.0386	0.17	Q	|	|	|	|
4+40	0.0398	0.17	Q	|	|	|	|
4+45	0.0409	0.17	Q	|	|	|	|
4+50	0.0422	0.18	Q	|	|	|	|
4+55	0.0435	0.19	Q	|	|	|	|
5+ 0	0.0448	0.19	Q	|	|	|	|
5+ 5	0.0460	0.17	Q	|	|	|	|
5+10	0.0470	0.15	Q	|	|	|	|
5+15	0.0480	0.15	Q	|	|	|	|
5+20	0.0491	0.16	Q	|	|	|	|
5+25	0.0502	0.17	Q	|	|	|	|
5+30	0.0514	0.17	Q	|	|	|	|
5+35	0.0526	0.18	Q	|	|	|	|
5+40	0.0539	0.19	Q	|	|	|	|
5+45	0.0552	0.19	Q	|	|	|	|
5+50	0.0566	0.19	QV	|	|	|	|
5+55	0.0579	0.19	QV	|	|	|	|
6+ 0	0.0592	0.19	QV	|	|	|	|
6+ 5	0.0606	0.20	QV	|	|	|	|
6+10	0.0621	0.21	QV	|	|	|	|
6+15	0.0636	0.22	QV	|	|	|	|
6+20	0.0651	0.22	QV	|	|	|	|
6+25	0.0665	0.22	QV	|	|	|	|
6+30	0.0680	0.22	QV	|	|	|	|
6+35	0.0696	0.23	QV	|	|	|	|
6+40	0.0712	0.24	QV	|	|	|	|
6+45	0.0729	0.24	QV	|	|	|	|
6+50	0.0745	0.24	QV	|	|	|	|
6+55	0.0762	0.24	QV	|	|	|	|
7+ 0	0.0779	0.24	QV	|	|	|	|
7+ 5	0.0795	0.24	QV	|	|	|	|
7+10	0.0812	0.24	QV	|	|	|	|
7+15	0.0828	0.24	QV	|	|	|	|
7+20	0.0846	0.25	|Q	|	|	|	|
7+25	0.0864	0.26	|Q	|	|	|	|
7+30	0.0882	0.26	|Q	|	|	|	|
7+35	0.0901	0.28	|Q	|	|	|	|
7+40	0.0920	0.29	|Q	|	|	|	|
7+45	0.0940	0.29	|Q	|	|	|	|
7+50	0.0965	0.36	|Q	|	|	|	|
7+55	0.0994	0.42	|Q	|	|	|	|
8+ 0	0.1024	0.44	|Q	|	|	|	|
8+ 5	0.1072	0.69	|VQ	|	|	|	|
8+10	0.1134	0.90	| VQ	|	|	|	|
8+15	0.1199	0.95	| VQ	|	|	|	|
8+20	0.1266	0.98	| VQ	|	|	|	|
8+25	0.1335	0.99	| VQ	|	|	|	|
8+30	0.1403	1.00	| V Q	|	|	|	|
8+35	0.1481	1.13	| V Q	|	|	|	|
8+40	0.1567	1.24	| V Q	|	|	|	|
8+45	0.1654	1.27	| V Q	|	|	|	|
8+50	0.1751	1.40	| V Q	|	|	|	|
8+55	0.1855	1.52	| V Q	|	|	|	|



9+ 0	0.1962	1.55	V Q
9+ 5	0.2086	1.80	V Q
9+10	0.2224	2.01	V Q
9+15	0.2366	2.06	V Q
9+20	0.2517	2.20	V Q
9+25	0.2676	2.31	V Q
9+30	0.2837	2.34	V Q
9+35	0.3007	2.47	V Q
9+40	0.3185	2.58	V Q
9+45	0.3366	2.62	V Q
9+50	0.3555	2.75	V Q
9+55	0.3752	2.86	V Q
10+ 0	0.3951	2.89	V Q
10+ 5	0.4096	2.11	VQ
10+10	0.4194	1.42	Q V
10+15	0.4283	1.30	Q V
10+20	0.4370	1.26	Q V
10+25	0.4458	1.27	Q V
10+30	0.4546	1.28	Q V
10+35	0.4675	1.87	QV
10+40	0.4839	2.38	VQ
10+45	0.5010	2.48	Q
10+50	0.5184	2.53	VQ
10+55	0.5359	2.54	VQ
11+ 0	0.5535	2.55	VQ
11+ 5	0.5704	2.45	QV
11+10	0.5866	2.36	QV
11+15	0.6028	2.35	QV
11+20	0.6191	2.36	Q V
11+25	0.6354	2.37	Q V
11+30	0.6517	2.38	Q V
11+35	0.6666	2.16	Q V
11+40	0.6802	1.97	Q V
11+45	0.6936	1.94	Q V
11+50	0.7077	2.06	Q V
11+55	0.7227	2.17	Q V
12+ 0	0.7378	2.20	Q V
12+ 5	0.7586	3.02	QV
12+10	0.7842	3.73	Q
12+15	0.8109	3.87	VQ
12+20	0.8387	4.04	VQ
12+25	0.8673	4.15	VQ
12+30	0.8961	4.18	Q
12+35	0.9266	4.43	VQ
12+40	0.9585	4.64	VQ
12+45	0.9908	4.69	VQ
12+50	1.0240	4.83	VQ
12+55	1.0580	4.93	Q
13+ 0	1.0922	4.96	Q
13+ 5	1.1305	5.56	V Q
13+10	1.1722	6.06	V Q
13+15	1.2147	6.17	V Q
13+20	1.2575	6.21	V Q
13+25	1.3003	6.22	VQ
13+30	1.3433	6.23	Q
13+35	1.3776	4.98	Q V
13+40	1.4044	3.89	Q V
13+45	1.4298	3.70	Q V
13+50	1.4548	3.63	Q V
13+55	1.4799	3.64	Q V
14+ 0	1.5050	3.65	Q V
14+ 5	1.5333	4.12	Q V
14+10	1.5645	4.52	Q V
14+15	1.5962	4.61	Q V
14+20	1.6274	4.53	Q V
14+25	1.6580	4.44	Q V
14+30	1.6886	4.43	Q V
14+35	1.7191	4.43	Q V
14+40	1.7497	4.44	Q V
14+45	1.7804	4.45	Q V
14+50	1.8103	4.35	Q V
14+55	1.8396	4.26	Q V
15+ 0	1.8689	4.25	Q V
15+ 5	1.8974	4.13	Q V
15+10	1.9252	4.04	Q V
15+15	1.9530	4.03	Q V
15+20	1.9800	3.92	Q V
15+25	2.0064	3.83	Q V
15+30	2.0327	3.82	Q V
15+35	2.0559	3.36	Q V
15+40	2.0763	2.97	Q V
15+45	2.0964	2.91	Q V
15+50	2.1162	2.89	Q V
15+55	2.1362	2.90	Q V
16+ 0	2.1562	2.90	Q V
16+ 5	2.1670	1.56	Q V

16+10	2.1697	0.40	|Q	|	|	|	V|
16+15	2.1709	0.18	Q	|	|	|	V|
16+20	2.1716	0.10	Q	|	|	|	V|
16+25	2.1723	0.10	Q	|	|	|	V|
16+30	2.1729	0.10	Q	|	|	|	V|
16+35	2.1735	0.08	Q	|	|	|	V|
16+40	2.1740	0.07	Q	|	|	|	V|
16+45	2.1745	0.07	Q	|	|	|	V|
16+50	2.1750	0.07	Q	|	|	|	V|
16+55	2.1755	0.07	Q	|	|	|	V|
17+ 0	2.1760	0.07	Q	|	|	|	V|
17+ 5	2.1767	0.10	Q	|	|	|	V|
17+10	2.1775	0.12	Q	|	|	|	V|
17+15	2.1783	0.12	Q	|	|	|	V|
17+20	2.1791	0.12	Q	|	|	|	V|
17+25	2.1799	0.12	Q	|	|	|	V|
17+30	2.1808	0.12	Q	|	|	|	V|
17+35	2.1816	0.12	Q	|	|	|	V|
17+40	2.1824	0.12	Q	|	|	|	V|
17+45	2.1832	0.12	Q	|	|	|	V|
17+50	2.1840	0.11	Q	|	|	|	V|
17+55	2.1847	0.10	Q	|	|	|	V|
18+ 0	2.1853	0.10	Q	|	|	|	V|
18+ 5	2.1860	0.10	Q	|	|	|	V|
18+10	2.1867	0.10	Q	|	|	|	V|
18+15	2.1873	0.10	Q	|	|	|	V|
18+20	2.1880	0.10	Q	|	|	|	V|
18+25	2.1886	0.10	Q	|	|	|	V|
18+30	2.1893	0.10	Q	|	|	|	V|
18+35	2.1899	0.08	Q	|	|	|	V|
18+40	2.1904	0.07	Q	|	|	|	V|
18+45	2.1909	0.07	Q	|	|	|	V|
18+50	2.1913	0.06	Q	|	|	|	V|
18+55	2.1917	0.05	Q	|	|	|	V|
19+ 0	2.1920	0.05	Q	|	|	|	V|
19+ 5	2.1924	0.06	Q	|	|	|	V|
19+10	2.1929	0.07	Q	|	|	|	V|
19+15	2.1934	0.07	Q	|	|	|	V|
19+20	2.1940	0.08	Q	|	|	|	V|
19+25	2.1946	0.09	Q	|	|	|	V|
19+30	2.1953	0.10	Q	|	|	|	V|
19+35	2.1958	0.08	Q	|	|	|	V|
19+40	2.1964	0.07	Q	|	|	|	V|
19+45	2.1969	0.07	Q	|	|	|	V|
19+50	2.1973	0.06	Q	|	|	|	V|
19+55	2.1976	0.05	Q	|	|	|	V|
20+ 0	2.1980	0.05	Q	|	|	|	V|
20+ 5	2.1984	0.06	Q	|	|	|	V|
20+10	2.1989	0.07	Q	|	|	|	V|
20+15	2.1993	0.07	Q	|	|	|	V|
20+20	2.1998	0.07	Q	|	|	|	V|
20+25	2.2003	0.07	Q	|	|	|	V|
20+30	2.2008	0.07	Q	|	|	|	V|
20+35	2.2013	0.07	Q	|	|	|	V|
20+40	2.2018	0.07	Q	|	|	|	V|
20+45	2.2023	0.07	Q	|	|	|	V|
20+50	2.2027	0.06	Q	|	|	|	V|
20+55	2.2031	0.05	Q	|	|	|	V|
21+ 0	2.2034	0.05	Q	|	|	|	V|
21+ 5	2.2038	0.06	Q	|	|	|	V|
21+10	2.2043	0.07	Q	|	|	|	V|
21+15	2.2048	0.07	Q	|	|	|	V|
21+20	2.2052	0.06	Q	|	|	|	V|
21+25	2.2056	0.05	Q	|	|	|	V|
21+30	2.2059	0.05	Q	|	|	|	V|
21+35	2.2063	0.06	Q	|	|	|	V|
21+40	2.2068	0.07	Q	|	|	|	V|
21+45	2.2073	0.07	Q	|	|	|	V|
21+50	2.2077	0.06	Q	|	|	|	V|
21+55	2.2081	0.05	Q	|	|	|	V|
22+ 0	2.2084	0.05	Q	|	|	|	V|
22+ 5	2.2088	0.06	Q	|	|	|	V|
22+10	2.2093	0.07	Q	|	|	|	V|
22+15	2.2098	0.07	Q	|	|	|	V|
22+20	2.2102	0.06	Q	|	|	|	V|
22+25	2.2105	0.05	Q	|	|	|	V|
22+30	2.2109	0.05	Q	|	|	|	V|
22+35	2.2112	0.05	Q	|	|	|	V|
22+40	2.2115	0.05	Q	|	|	|	V|
22+45	2.2119	0.05	Q	|	|	|	V|
22+50	2.2122	0.05	Q	|	|	|	V|
22+55	2.2125	0.05	Q	|	|	|	V|
23+ 0	2.2129	0.05	Q	|	|	|	V|
23+ 5	2.2132	0.05	Q	|	|	|	V|
23+10	2.2135	0.05	Q	|	|	|	V|
23+15	2.2139	0.05	Q	|	|	|	V|

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   23+20       2.2142      0.05  Q          |          |          |         v|
   23+25       2.2145      0.05  Q          |          |          |         v|
   23+30       2.2148      0.05  Q          |          |          |         v|
   23+35       2.2152      0.05  Q          |          |          |         v|
   23+40       2.2155      0.05  Q          |          |          |         v|
   23+45       2.2158      0.05  Q          |          |          |         v|
   23+50       2.2162      0.05  Q          |          |          |         v|
   23+55       2.2165      0.05  Q          |          |          |         v|
   24+ 0       2.2168      0.05  Q          |          |          |         v|
   24+ 5       2.2170      0.03  Q          |          |          |         v|
   24+10       2.2170      0.01  Q          |          |          |         v|
   24+15       2.2170      0.00  Q          |          |          |          v
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       U n i t   H y d r o g r a p h   A n a l y s i s

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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978


Program License Serial Number 5006

------------------------------------------------------------------------
 English (in-lb) Input Units Used
 English Rainfall Data (Inches) Input Values Used

 English Units used in output format



------------------------------------------------------------------------
------------------------------------------------------------------------
Drainage Area =      19.12(Ac.)  =      0.030 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment =      19.12(Ac.)  =      0.030 Sq. Mi.
Length along longest watercourse =     724.00(Ft.)
Length along longest watercourse measured to centroid =     360.00(Ft.)
Length along longest watercourse =      0.137 Mi.
Length along longest watercourse measured to centroid =      0.068 Mi.
Difference in elevation =      77.00(Ft.)
Slope along watercourse =    561.5470 Ft./Mi.
Average Manning's 'N' = 0.030
Lag time =    0.037 Hr.
Lag time =     2.20 Min.
25% of lag time =     0.55 Min.
40% of lag time =     0.88 Min.
Unit time =     5.00 Min.
Duration of storm = 1 Hour(s)
User Entered Base Flow =     0.00(CFS)

2 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
       19.12            0.50                 9.56

100 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
       19.12            1.30                24.86

STORM EVENT (YEAR) =  100.00
Area Averaged 2-Year Rainfall =    0.500(In)
Area Averaged 100-Year Rainfall =    1.300(In)

Point rain (area averaged) =    1.300(In)
Areal adjustment factor =   99.98 %
Adjusted average point rain =    1.300(In)

Sub-Area Data:
Area(Ac.)         Runoff Index   Impervious %
    19.120           91.00          0.000
 Total Area Entered =     19.12(Ac.)


RI    RI   Infil. Rate Impervious   Adj. Infil. Rate  Area%     F
AMC2 AMC-2     (In/Hr)    (Dec.%)     (In/Hr)      (Dec.)    (In/Hr)
91.0  91.0      0.117     0.000        0.117       1.000      0.117
                                                 Sum (F) =    0.117
Area averaged mean soil loss (F) (In/Hr) =  0.117
Minimum soil loss rate ((In/Hr)) =  0.059
(for 24 hour storm duration)
Soil low loss rate (decimal) =   0.900
------------------------------------------------------------------------
Slope of intensity-duration curve for a 1 hour storm =0.5500
------------------------------------------------------------------------

               U n i t  H y d r o g r a p h
                      VALLEY S-Curve
---------------------------------------------------------------
               Unit Hydrograph Data
---------------------------------------------------------------
```

Unit time period (hrs)		Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	227.497	47.782	9.207
2	0.167	454.994	41.494	7.996
3	0.250	682.491	7.777	1.499
4	0.333	909.988	2.947	0.568
		Sum = 100.000	Sum=	19.269

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr) Max	Low	Effective (In/Hr)
1	0.08	3.30	0.515	0.117	(0.463)	0.398
2	0.17	4.20	0.655	0.117	(0.590)	0.538
3	0.25	4.40	0.686	0.117	(0.618)	0.569
4	0.33	4.80	0.749	0.117	(0.674)	0.632
5	0.42	5.20	0.811	0.117	(0.730)	0.694
6	0.50	6.20	0.967	0.117	(0.870)	0.850
7	0.58	6.80	1.061	0.117	(0.955)	0.944
8	0.67	8.80	1.373	0.117	(1.235)	1.256
9	0.75	13.90	2.168	0.117	(1.951)	2.051
10	0.83	31.40	4.898	0.117	(4.408)	4.781
11	0.92	7.20	1.123	0.117	(1.011)	1.006
12	1.00	3.80	0.593	0.117	(0.533)	0.476
		(Loss Rate Not Used)			
Sum =		100.0		Sum =	14.2

Flood volume = Effective rainfall 1.18(In)
times area 19.1(Ac.)/[(In)/(Ft.)] = 1.9(Ac.Ft)
Total soil loss = 0.12(In)
Total soil loss = 0.186(Ac.Ft)
Total rainfall = 1.30(In)
Flood volume = 82091.2 Cubic Feet
Total soil loss = 8120.5 Cubic Feet

Peak flow rate of this hydrograph = 62.865(CFS)

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1 - H O U R S T O R M
R u n o f f H y d r o g r a p h

Hydrograph in 5 Minute intervals ((CFS))

Time(h+m)	Volume Ac.Ft	Q(CFS)	0	17.5	35.0	52.5	70.0
0+ 5	0.0252	3.66	V Q				
0+10	0.0813	8.14	V Q				
0+15	0.1512	10.15	V Q				
0+20	0.2297	11.41	V Q				
0+25	0.3165	12.61	VQ				
0+30	0.4174	14.65	Q				
0+35	0.5338	16.89	Q V				
0+40	0.6769	20.78	Q V				
0+45	0.8893	30.84	QV				
0+50	1.3222	62.87	V	Q			
0+55	1.6755	51.30	Q	V			
1+ 0	1.8185	20.76	Q	V			
1+ 5	1.8738	8.03	Q	V			
1+10	1.8827	1.28	Q	V			
1+15	1.8846	0.27	Q	V			

U n i t H y d r o g r a p h A n a l y s i s

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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978

Program License Serial Number 5006

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English Rainfall Data (Inches) Input Values Used

English Units used in output format

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Lag time = 0.037 Hr.
Lag time = 2.20 Min.
25% of lag time = 0.55 Min.
40% of lag time = 0.88 Min.
Unit time = 5.00 Min.
Duration of storm = 3 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.)[1]	Rainfall(In)[2]	Weighting[1*2]
19.12	0.80	15.30

100 YEAR Area rainfall data:

Area(Ac.)[1]	Rainfall(In)[2]	Weighting[1*2]
19.12	2.00	38.24

STORM EVENT (YEAR) = 100.00
Area Averaged 2-Year Rainfall = 0.800(In)
Area Averaged 100-Year Rainfall = 2.000(In)

Point rain (area averaged) = 2.000(In)
Areal adjustment factor = 99.99 %
Adjusted average point rain = 2.000(In)

Sub-Area Data:

Area(Ac.)	Runoff Index	Impervious %
19.120	91.00	0.000

Total Area Entered = 19.12(Ac.)

RI AMC2	RI AMC-2	Infil. Rate (In/Hr)	Impervious (Dec.%)	Adj. Infil. Rate (In/Hr)	Area% (Dec.)	F (In/Hr)
91.0	91.0	0.117	0.000	0.117	1.000	0.117
					Sum (F) =	0.117

Area averaged mean soil loss (F) (In/Hr) = 0.117
Minimum soil loss rate ((In/Hr)) = 0.059
(for 24 hour storm duration)
Soil low loss rate (decimal) = 0.900

U n i t H y d r o g r a p h
VALLEY S-Curve

Unit Hydrograph Data

Unit time period (hrs)	Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)

1	0.083	227.497	47.782	9.207
2	0.167	454.994	41.494	7.996
3	0.250	682.491	7.777	1.499
4	0.333	909.988	2.947	0.568
			Sum = 100.000 Sum=	19.269

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr) Max	Low	Effective (In/Hr)
1	0.08	1.30	0.312	0.117	(0.281)	0.195
2	0.17	1.30	0.312	0.117	(0.281)	0.195
3	0.25	1.10	0.264	0.117	(0.238)	0.147
4	0.33	1.50	0.360	0.117	(0.324)	0.243
5	0.42	1.50	0.360	0.117	(0.324)	0.243
6	0.50	1.80	0.432	0.117	(0.389)	0.315
7	0.58	1.50	0.360	0.117	(0.324)	0.243
8	0.67	1.80	0.432	0.117	(0.389)	0.315
9	0.75	1.80	0.432	0.117	(0.389)	0.315
10	0.83	1.50	0.360	0.117	(0.324)	0.243
11	0.92	1.60	0.384	0.117	(0.346)	0.267
12	1.00	1.80	0.432	0.117	(0.389)	0.315
13	1.08	2.20	0.528	0.117	(0.475)	0.411
14	1.17	2.20	0.528	0.117	(0.475)	0.411
15	1.25	2.20	0.528	0.117	(0.475)	0.411
16	1.33	2.00	0.480	0.117	(0.432)	0.363
17	1.42	2.60	0.624	0.117	(0.562)	0.507
18	1.50	2.70	0.648	0.117	(0.583)	0.531
19	1.58	2.40	0.576	0.117	(0.518)	0.459
20	1.67	2.70	0.648	0.117	(0.583)	0.531
21	1.75	3.30	0.792	0.117	(0.713)	0.675
22	1.83	3.10	0.744	0.117	(0.670)	0.627
23	1.92	2.90	0.696	0.117	(0.626)	0.579
24	2.00	3.00	0.720	0.117	(0.648)	0.603
25	2.08	3.10	0.744	0.117	(0.670)	0.627
26	2.17	4.20	1.008	0.117	(0.907)	0.891
27	2.25	5.00	1.200	0.117	(1.080)	1.083
28	2.33	3.50	0.840	0.117	(0.756)	0.723
29	2.42	6.80	1.632	0.117	(1.469)	1.515
30	2.50	7.30	1.752	0.117	(1.577)	1.635
31	2.58	8.20	1.968	0.117	(1.771)	1.851
32	2.67	5.90	1.416	0.117	(1.274)	1.299
33	2.75	2.00	0.480	0.117	(0.432)	0.363
34	2.83	1.80	0.432	0.117	(0.389)	0.315
35	2.92	1.80	0.432	0.117	(0.389)	0.315
36	3.00	0.60	0.144	0.117	(0.130)	0.027
		(Loss Rate Not Used)				
Sum =		100.0			Sum =	19.8

Flood volume = Effective rainfall 1.65(In)
times area 19.1(Ac.)/[(In)/(Ft.)] = 2.6(Ac.Ft)
Total soil loss = 0.35(In)
Total soil loss = 0.559(Ac.Ft)
Total rainfall = 2.00(In)
Flood volume = 114438.2 Cubic Feet
Total soil loss = 24361.4 Cubic Feet

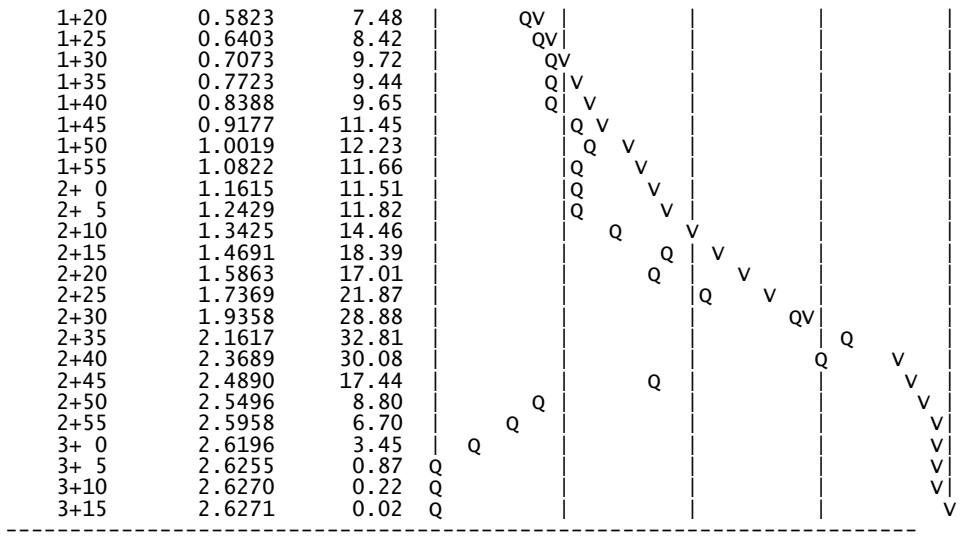
Peak flow rate of this hydrograph = 32.811(CFS)

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3 - H O U R S T O R M
R u n o f f H y d r o g r a p h

Hydrograph in 5 Minute intervals ((CFS))

Time(h+m)	Volume Ac.Ft	Q(CFS)	0	10.0	20.0	30.0	40.0
0+ 5	0.0124	1.80	VQ				
0+10	0.0355	3.36	V Q				
0+15	0.0576	3.21	V Q				
0+20	0.0839	3.82	V Q				
0+25	0.1149	4.51	V Q				
0+30	0.1514	5.29	V Q				
0+35	0.1876	5.26	V Q				
0+40	0.2252	5.46	V Q				
0+45	0.2663	5.96	VQ				
0+50	0.3032	5.37	VQ				
0+55	0.3380	5.05	Q				
1+ 0	0.3765	5.58	Q				
1+ 5	0.4236	6.84	Q				
1+10	0.4766	7.70	Q				
1+15	0.5308	7.87	QV				


1+20 0.5823 7.48
1+25 0.6403 8.42
1+30 0.7073 9.72
1+35 0.7723 9.44
1+40 0.8388 9.65
1+45 0.9177 11.45
1+50 1.0019 12.23
1+55 1.0822 11.66
2+ 0 1.1615 11.51
2+ 5 1.2429 11.82
2+10 1.3425 14.46
2+15 1.4691 18.39
2+20 1.5863 17.01
2+25 1.7369 21.87
2+30 1.9358 28.88
2+35 2.1617 32.81
2+40 2.3689 30.08
2+45 2.4890 17.44
2+50 2.5496 8.80
2+55 2.5958 6.70
3+ 0 2.6196 3.45
3+ 5 2.6255 0.87
3+10 2.6270 0.22
3+15 2.6271 0.02

U n i t H y d r o g r a p h A n a l y s i s

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Study date 10/17/24 File: EXB1006100.out

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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978

Program License Serial Number 5006

English (in-lb) Input Units Used
English Rainfall Data (Inches) Input Values Used

English Units used in output format

Drainage Area = 19.12(Ac.) = 0.030 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 19.12(Ac.) = 0.030 Sq. Mi.
Length along longest watercourse = 724.00(Ft.)
Length along longest watercourse measured to centroid = 360.00(Ft.)
Length along longest watercourse = 0.137 Mi.
Length along longest watercourse measured to centroid = 0.068 Mi.
Difference in elevation = 77.00(Ft.)
Slope along watercourse = 561.5470 Ft./Mi.
Average Manning's 'N' = 0.030
Lag time = 0.037 Hr.
Lag time = 2.20 Min.
25% of lag time = 0.55 Min.
40% of lag time = 0.88 Min.
Unit time = 5.00 Min.
Duration of storm = 6 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.)[1]	Rainfall(In)[2]	Weighting[1*2]
19.12	1.10	21.03

100 YEAR Area rainfall data:

Area(Ac.)[1]	Rainfall(In)[2]	Weighting[1*2]
19.12	3.00	57.36

STORM EVENT (YEAR) = 100.00
Area Averaged 2-Year Rainfall = 1.100(In)
Area Averaged 100-Year Rainfall = 3.000(In)

Point rain (area averaged) = 3.000(In)
Areal adjustment factor = 99.99 %
Adjusted average point rain = 3.000(In)

Sub-Area Data:

Area(Ac.)	Runoff Index	Impervious %
19.120	91.00	0.000

Total Area Entered = 19.12(Ac.)

RI AMC2	RI AMC-2	Infil. Rate (In/Hr)	Impervious (Dec.%)	Adj. Infil. Rate (In/Hr)	Area% (Dec.)	F (In/Hr)
91.0	91.0	0.117	0.000	0.117	1.000	0.117
					Sum (F) =	0.117

Area averaged mean soil loss (F) (In/Hr) = 0.117
Minimum soil loss rate ((In/Hr)) = 0.059
(for 24 hour storm duration)
Soil low loss rate (decimal) = 0.900

U n i t H y d r o g r a p h
VALLEY S-Curve

Unit Hydrograph Data

Unit time period (hrs)	Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)

1	0.083	227.497	47.782	9.207
2	0.167	454.994	41.494	7.996
3	0.250	682.491	7.777	1.499
4	0.333	909.988	2.947	0.568
			Sum = 100.000 Sum=	19.269

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr) Max	Low	Effective (In/Hr)
1	0.08	0.50	0.180	0.117	(0.162)	0.063
2	0.17	0.60	0.216	0.117	(0.194)	0.099
3	0.25	0.60	0.216	0.117	(0.194)	0.099
4	0.33	0.60	0.216	0.117	(0.194)	0.099
5	0.42	0.60	0.216	0.117	(0.194)	0.099
6	0.50	0.70	0.252	0.117	(0.227)	0.135
7	0.58	0.70	0.252	0.117	(0.227)	0.135
8	0.67	0.70	0.252	0.117	(0.227)	0.135
9	0.75	0.70	0.252	0.117	(0.227)	0.135
10	0.83	0.70	0.252	0.117	(0.227)	0.135
11	0.92	0.70	0.252	0.117	(0.227)	0.135
12	1.00	0.80	0.288	0.117	(0.259)	0.171
13	1.08	0.80	0.288	0.117	(0.259)	0.171
14	1.17	0.80	0.288	0.117	(0.259)	0.171
15	1.25	0.80	0.288	0.117	(0.259)	0.171
16	1.33	0.80	0.288	0.117	(0.259)	0.171
17	1.42	0.80	0.288	0.117	(0.259)	0.171
18	1.50	0.80	0.288	0.117	(0.259)	0.171
19	1.58	0.80	0.288	0.117	(0.259)	0.171
20	1.67	0.80	0.288	0.117	(0.259)	0.171
21	1.75	0.80	0.288	0.117	(0.259)	0.171
22	1.83	0.80	0.288	0.117	(0.259)	0.171
23	1.92	0.80	0.288	0.117	(0.259)	0.171
24	2.00	0.90	0.324	0.117	(0.292)	0.207
25	2.08	0.80	0.288	0.117	(0.259)	0.171
26	2.17	0.90	0.324	0.117	(0.292)	0.207
27	2.25	0.90	0.324	0.117	(0.292)	0.207
28	2.33	0.90	0.324	0.117	(0.292)	0.207
29	2.42	0.90	0.324	0.117	(0.292)	0.207
30	2.50	0.90	0.324	0.117	(0.292)	0.207
31	2.58	0.90	0.324	0.117	(0.292)	0.207
32	2.67	0.90	0.324	0.117	(0.292)	0.207
33	2.75	1.00	0.360	0.117	(0.324)	0.243
34	2.83	1.00	0.360	0.117	(0.324)	0.243
35	2.92	1.00	0.360	0.117	(0.324)	0.243
36	3.00	1.00	0.360	0.117	(0.324)	0.243
37	3.08	1.00	0.360	0.117	(0.324)	0.243
38	3.17	1.10	0.396	0.117	(0.356)	0.279
39	3.25	1.10	0.396	0.117	(0.356)	0.279
40	3.33	1.10	0.396	0.117	(0.356)	0.279
41	3.42	1.20	0.432	0.117	(0.389)	0.315
42	3.50	1.30	0.468	0.117	(0.421)	0.351
43	3.58	1.40	0.504	0.117	(0.454)	0.387
44	3.67	1.40	0.504	0.117	(0.454)	0.387
45	3.75	1.50	0.540	0.117	(0.486)	0.423
46	3.83	1.50	0.540	0.117	(0.486)	0.423
47	3.92	1.60	0.576	0.117	(0.518)	0.459
48	4.00	1.60	0.576	0.117	(0.518)	0.459
49	4.08	1.70	0.612	0.117	(0.551)	0.495
50	4.17	1.80	0.648	0.117	(0.583)	0.531
51	4.25	1.90	0.684	0.117	(0.616)	0.567
52	4.33	2.00	0.720	0.117	(0.648)	0.603
53	4.42	2.10	0.756	0.117	(0.680)	0.639
54	4.50	2.10	0.756	0.117	(0.680)	0.639
55	4.58	2.20	0.792	0.117	(0.713)	0.675
56	4.67	2.30	0.828	0.117	(0.745)	0.711
57	4.75	2.40	0.864	0.117	(0.778)	0.747
58	4.83	2.40	0.864	0.117	(0.778)	0.747
59	4.92	2.50	0.900	0.117	(0.810)	0.783
60	5.00	2.60	0.936	0.117	(0.842)	0.819
61	5.08	3.10	1.116	0.117	(1.004)	0.999
62	5.17	3.60	1.296	0.117	(1.166)	1.179
63	5.25	3.90	1.404	0.117	(1.264)	1.287
64	5.33	4.20	1.512	0.117	(1.361)	1.395
65	5.42	4.70	1.692	0.117	(1.523)	1.575
66	5.50	5.60	2.016	0.117	(1.814)	1.899
67	5.58	1.90	0.684	0.117	(0.616)	0.567
68	5.67	0.90	0.324	0.117	(0.292)	0.207
69	5.75	0.60	0.216	0.117	(0.194)	0.099
70	5.83	0.50	0.180	0.117	(0.162)	0.063
71	5.92	0.30	0.108	(0.117)	0.097	0.011
72	6.00	0.20	0.072	(0.117)	0.065	0.007

```
            (Loss Rate Not Used)
 Sum =     100.0                                  Sum =    27.6
    Flood volume = Effective rainfall      2.30(In)
     times area      19.1(Ac.)/[(In)/(Ft.)] =       3.7(Ac.Ft)
    Total soil loss =      0.70(In)
    Total soil loss =     1.109(Ac.Ft)
    Total rainfall =      3.00(In)
    Flood volume =      159896.9 Cubic Feet
    Total soil loss =       48306.2 Cubic Feet
    ------------------------------------------------------------------------
     Peak flow rate of this hydrograph =     32.914(CFS)
    ------------------------------------------------------------------------
    ++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                        6 - H O U R    S T O R M
                   R u n o f f      H y d r o g r a p h
    ------------------------------------------------------------------------
              Hydrograph in   5   Minute intervals ((CFS))

    ------------------------------------------------------------------------
Time(h+m) Volume Ac.Ft   Q(CFS)  0       10.0      20.0      30.0      40.0
-------------------------------------------------------------------------
  0+ 5       0.0040      0.58  Q         |         |         |         |
  0+10       0.0137      1.42  VQ        |         |         |         |
  0+15       0.0261      1.80  VQ        |         |         |         |
  0+20       0.0391      1.89  VQ        |         |         |         |
  0+25       0.0523      1.91  VQ        |         |         |         |
  0+30       0.0677      2.24  V Q       |         |         |         |
  0+35       0.0851      2.53  V Q       |         |         |         |
  0+40       0.1029      2.58  |VQ       |         |         |         |
  0+45       0.1208      2.60  |VQ       |         |         |         |
  0+50       0.1387      2.60  |VQ       |         |         |         |
  0+55       0.1567      2.60  |VQ       |         |         |         |
  1+ 0       0.1769      2.93  |VQ       |         |         |         |
  1+ 5       0.1991      3.22  | VQ      |         |         |         |
  1+10       0.2216      3.28  | VQ      |         |         |         |
  1+15       0.2443      3.30  | VQ      |         |         |         |
  1+20       0.2670      3.30  | VQ      |         |         |         |
  1+25       0.2897      3.30  |  Q      |         |         |         |
  1+30       0.3124      3.30  |  Q      |         |         |         |
  1+35       0.3351      3.30  |  Q      |         |         |         |
  1+40       0.3578      3.30  |  Q      |         |         |         |
  1+45       0.3805      3.30  |  QV     |         |         |         |
  1+50       0.4032      3.30  |  QV     |         |         |         |
  1+55       0.4259      3.30  |  QV     |         |         |         |
  2+ 0       0.4509      3.63  |  QV     |         |         |         |
  2+ 5       0.4756      3.58  |  Q V    |         |         |         |
  2+10       0.5010      3.68  |  Q V    |         |         |         |
  2+15       0.5281      3.94  |  Q V    |         |         |         |
  2+20       0.5554      3.97  |  Q  V   |         |         |         |
  2+25       0.5829      3.99  |  Q  V   |         |         |         |
  2+30       0.6104      3.99  |  Q  V   |         |         |         |
  2+35       0.6379      3.99  |  Q  V   |         |         |         |
  2+40       0.6654      3.99  |  Q   V  |         |         |         |
  2+45       0.6951      4.32  |   Q  V  |         |         |         |
  2+50       0.7269      4.61  |   Q  V  |         |         |         |
  2+55       0.7590      4.66  |   Q   V |         |         |         |
  3+ 0       0.7913      4.68  |   Q   V |         |         |         |
  3+ 5       0.8235      4.68  |   Q   V |         |         |         |
  3+10       0.8581      5.02  |    Q   V|         |         |         |
  3+15       0.8946      5.30  |    Q   V|         |         |         |
  3+20       0.9315      5.36  |    Q    V         |         |         |
  3+25       0.9708      5.71  |    Q    V         |         |         |
  3+30       1.0144      6.33  |     Q   |V        |         |         |
  3+35       1.0626      7.00  |      Q  |V        |         |         |
  3+40       1.1134      7.37  |      Q  | V       |         |         |
  3+45       1.1669      7.77  |      Q  | V       |         |         |
  3+50       1.2225      8.08  |       Q |  V      |         |         |
  3+55       1.2808      8.47  |       Q |  V      |         |         |
  4+ 0       1.3413      8.77  |       Q |   V     |         |         |
  4+ 5       1.4044      9.16  |        Q|    V    |         |         |
  4+10       1.4718      9.80  |        Q|     V   |         |         |
  4+15       1.5440     10.47  |         Q     V   |         |         |
  4+20       1.6209     11.17  |          |Q     V  |         |         |
  4+25       1.7026     11.86  |          |Q      V |         |         |
  4+30       1.7868     12.22  |          | Q      V|         |         |
  4+35       1.8737     12.63  |          | Q       V         |         |
  4+40       1.9651     13.27  |          |  Q      |V        |         |
  4+45       2.0612     13.94  |          |  Q      | V       |         |
  4+50       2.1597     14.31  |          |   Q     |  V      |         |
  4+55       2.2610     14.71  |          |   Q     |   V     |         |
  5+ 0       2.3667     15.35  |          |    Q    |    V    |         |
  5+ 5       2.4862     17.35  |          |      Q  |      V  |         |
  5+10       2.6276     20.52  |          |         Q       V |         |
  5+15       2.7877     23.25  |          |          |  Q      V        |
  5+20       2.9632     25.48  |          |          |    Q    | V      |
  5+25       3.1579     28.27  |          |          |       Q |   V    |
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    5+30       3.3845     32.91  |          |          |          | Q   V    |
    5+35       3.5468     23.57  |          |          |  Q       |       V  |
    5+40       3.6170     10.18  |          |        Q |          |          V|
    5+45       3.6479      4.50  |    Q     |          |          |          V|
    5+50       3.6618      2.00  |  Q       |          |          |          V|
    5+55       3.6677      0.87  Q          |          |          |          V|
    6+ 0       3.6698      0.30  Q          |          |          |          V|
    6+ 5       3.6706      0.11  Q          |          |          |          V|
    6+10       3.6707      0.02  Q          |          |          |          V|
    6+15       3.6707      0.00  Q          |          |          |          V|
-------------------------------------------------------------------------------
```

U n i t H y d r o g r a p h A n a l y s i s

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Study date 10/17/24 File: EXB10024100.out

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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978

Program License Serial Number 5006

English (in-lb) Input Units Used
English Rainfall Data (Inches) Input Values Used

English Units used in output format

Drainage Area = 19.12(Ac.) = 0.030 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 19.12(Ac.) = 0.030 Sq. Mi.
Length along longest watercourse = 724.00(Ft.)
Length along longest watercourse measured to centroid = 360.00(Ft.)
Length along longest watercourse = 0.137 Mi.
Length along longest watercourse measured to centroid = 0.068 Mi.
Difference in elevation = 77.00(Ft.)
Slope along watercourse = 561.5470 Ft./Mi.
Average Manning's 'N' = 0.030
Lag time = 0.037 Hr.
Lag time = 2.20 Min.
25% of lag time = 0.55 Min.
40% of lag time = 0.88 Min.
Unit time = 5.00 Min.
Duration of storm = 24 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.)[1]	Rainfall(In)[2]	Weighting[1*2]
19.12	1.80	34.42

100 YEAR Area rainfall data:

Area(Ac.)[1]	Rainfall(In)[2]	Weighting[1*2]
19.12	5.00	95.60

STORM EVENT (YEAR) = 100.00
Area Averaged 2-Year Rainfall = 1.800(In)
Area Averaged 100-Year Rainfall = 5.000(In)

Point rain (area averaged) = 5.000(In)
Areal adjustment factor = 100.00 %
Adjusted average point rain = 5.000(In)

Sub-Area Data:

Area(Ac.)	Runoff Index	Impervious %
19.120	91.00	0.000

Total Area Entered = 19.12(Ac.)

RI AMC2	RI AMC-2	Infil. Rate (In/Hr)	Impervious (Dec.%)	Adj. Infil. Rate (In/Hr)	Area% (Dec.)	F (In/Hr)
91.0	91.0	0.117	0.000	0.117	1.000	0.117
					Sum (F) =	0.117

Area averaged mean soil loss (F) (In/Hr) = 0.117
Minimum soil loss rate ((In/Hr)) = 0.059
(for 24 hour storm duration)
Soil low loss rate (decimal) = 0.900

U n i t H y d r o g r a p h
VALLEY S-Curve

Unit Hydrograph Data

Unit time period (hrs)	Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)

1	0.083	227.497	47.782	9.207
2	0.167	454.994	41.494	7.996
3	0.250	682.491	7.777	1.499
4	0.333	909.988	2.947	0.568
			Sum = 100.000	Sum= 19.269

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr) Max	Low	Effective (In/Hr)
1	0.08	0.07	0.040	(0.207)	0.036	0.004
2	0.17	0.07	0.040	(0.207)	0.036	0.004
3	0.25	0.07	0.040	(0.206)	0.036	0.004
4	0.33	0.10	0.060	(0.205)	0.054	0.006
5	0.42	0.10	0.060	(0.204)	0.054	0.006
6	0.50	0.10	0.060	(0.203)	0.054	0.006
7	0.58	0.10	0.060	(0.203)	0.054	0.006
8	0.67	0.10	0.060	(0.202)	0.054	0.006
9	0.75	0.10	0.060	(0.201)	0.054	0.006
10	0.83	0.13	0.080	(0.200)	0.072	0.008
11	0.92	0.13	0.080	(0.199)	0.072	0.008
12	1.00	0.13	0.080	(0.199)	0.072	0.008
13	1.08	0.10	0.060	(0.198)	0.054	0.006
14	1.17	0.10	0.060	(0.197)	0.054	0.006
15	1.25	0.10	0.060	(0.196)	0.054	0.006
16	1.33	0.10	0.060	(0.196)	0.054	0.006
17	1.42	0.10	0.060	(0.195)	0.054	0.006
18	1.50	0.10	0.060	(0.194)	0.054	0.006
19	1.58	0.10	0.060	(0.193)	0.054	0.006
20	1.67	0.10	0.060	(0.192)	0.054	0.006
21	1.75	0.10	0.060	(0.192)	0.054	0.006
22	1.83	0.13	0.080	(0.191)	0.072	0.008
23	1.92	0.13	0.080	(0.190)	0.072	0.008
24	2.00	0.13	0.080	(0.189)	0.072	0.008
25	2.08	0.13	0.080	(0.189)	0.072	0.008
26	2.17	0.13	0.080	(0.188)	0.072	0.008
27	2.25	0.13	0.080	(0.187)	0.072	0.008
28	2.33	0.13	0.080	(0.186)	0.072	0.008
29	2.42	0.13	0.080	(0.186)	0.072	0.008
30	2.50	0.13	0.080	(0.185)	0.072	0.008
31	2.58	0.17	0.100	(0.184)	0.090	0.010
32	2.67	0.17	0.100	(0.183)	0.090	0.010
33	2.75	0.17	0.100	(0.183)	0.090	0.010
34	2.83	0.17	0.100	(0.182)	0.090	0.010
35	2.92	0.17	0.100	(0.181)	0.090	0.010
36	3.00	0.17	0.100	(0.180)	0.090	0.010
37	3.08	0.17	0.100	(0.180)	0.090	0.010
38	3.17	0.17	0.100	(0.179)	0.090	0.010
39	3.25	0.17	0.100	(0.178)	0.090	0.010
40	3.33	0.17	0.100	(0.177)	0.090	0.010
41	3.42	0.17	0.100	(0.177)	0.090	0.010
42	3.50	0.17	0.100	(0.176)	0.090	0.010
43	3.58	0.17	0.100	(0.175)	0.090	0.010
44	3.67	0.17	0.100	(0.174)	0.090	0.010
45	3.75	0.17	0.100	(0.174)	0.090	0.010
46	3.83	0.20	0.120	(0.173)	0.108	0.012
47	3.92	0.20	0.120	(0.172)	0.108	0.012
48	4.00	0.20	0.120	(0.171)	0.108	0.012
49	4.08	0.20	0.120	(0.171)	0.108	0.012
50	4.17	0.20	0.120	(0.170)	0.108	0.012
51	4.25	0.20	0.120	(0.169)	0.108	0.012
52	4.33	0.23	0.140	(0.169)	0.126	0.014
53	4.42	0.23	0.140	(0.168)	0.126	0.014
54	4.50	0.23	0.140	(0.167)	0.126	0.014
55	4.58	0.23	0.140	(0.166)	0.126	0.014
56	4.67	0.23	0.140	(0.166)	0.126	0.014
57	4.75	0.23	0.140	(0.165)	0.126	0.014
58	4.83	0.27	0.160	(0.164)	0.144	0.016
59	4.92	0.27	0.160	(0.164)	0.144	0.016
60	5.00	0.27	0.160	(0.163)	0.144	0.016
61	5.08	0.20	0.120	(0.162)	0.108	0.012
62	5.17	0.20	0.120	(0.161)	0.108	0.012
63	5.25	0.20	0.120	(0.161)	0.108	0.012
64	5.33	0.23	0.140	(0.160)	0.126	0.014
65	5.42	0.23	0.140	(0.159)	0.126	0.014
66	5.50	0.23	0.140	(0.159)	0.126	0.014
67	5.58	0.27	0.160	(0.158)	0.144	0.016
68	5.67	0.27	0.160	(0.157)	0.144	0.016
69	5.75	0.27	0.160	(0.157)	0.144	0.016
70	5.83	0.27	0.160	(0.156)	0.144	0.016
71	5.92	0.27	0.160	(0.155)	0.144	0.016
72	6.00	0.27	0.160	(0.154)	0.144	0.016

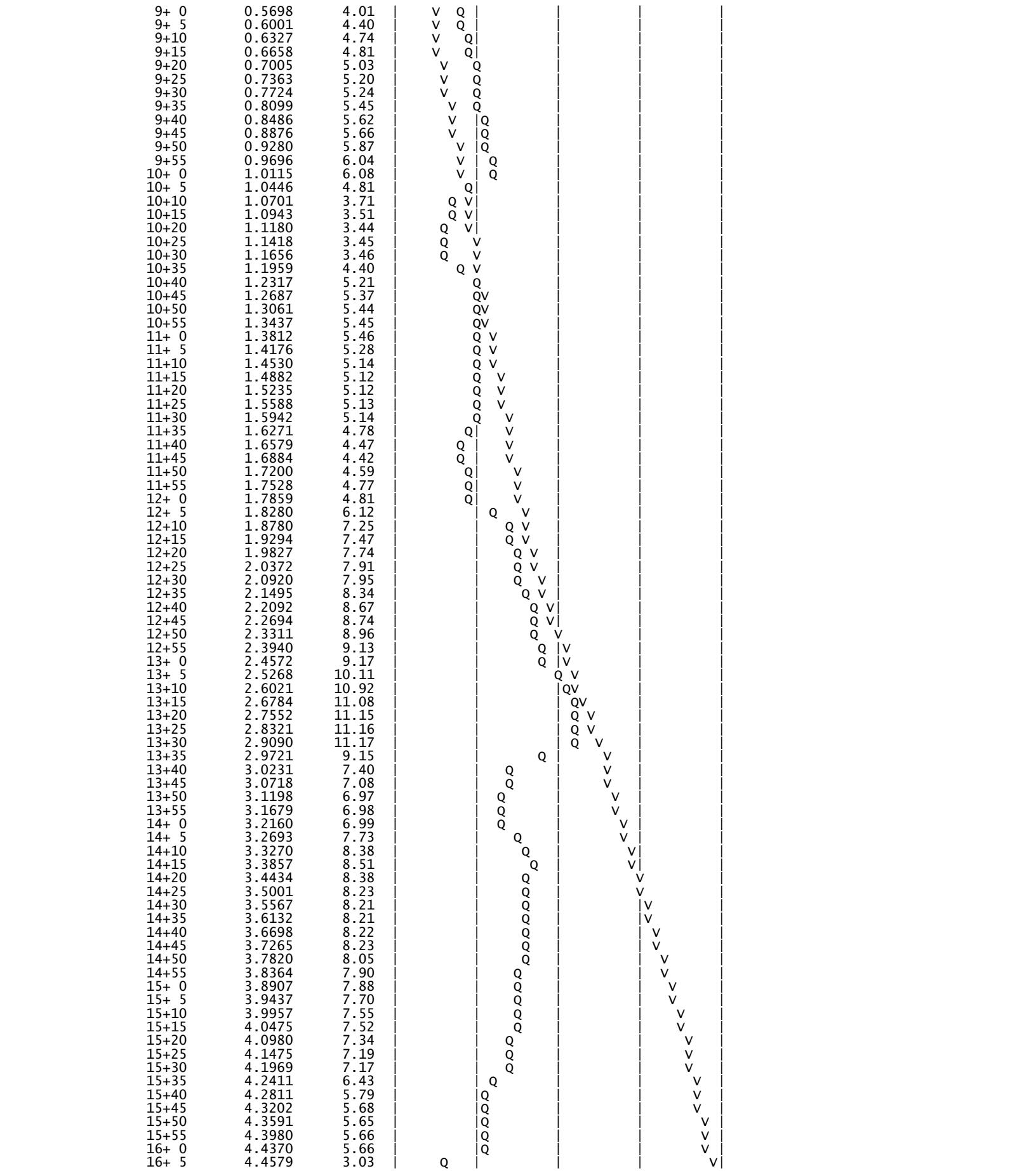
73	6.08	0.30	0.180	0.154	(0.162)	0.026
74	6.17	0.30	0.180	0.153	(0.162)	0.027
75	6.25	0.30	0.180	0.152	(0.162)	0.028
76	6.33	0.30	0.180	0.152	(0.162)	0.028
77	6.42	0.30	0.180	0.151	(0.162)	0.029
78	6.50	0.30	0.180	0.150	(0.162)	0.030
79	6.58	0.33	0.200	0.150	(0.180)	0.050
80	6.67	0.33	0.200	0.149	(0.180)	0.051
81	6.75	0.33	0.200	0.148	(0.180)	0.052
82	6.83	0.33	0.200	0.148	(0.180)	0.052
83	6.92	0.33	0.200	0.147	(0.180)	0.053
84	7.00	0.33	0.200	0.146	(0.180)	0.054
85	7.08	0.33	0.200	0.146	(0.180)	0.054
86	7.17	0.33	0.200	0.145	(0.180)	0.055
87	7.25	0.33	0.200	0.144	(0.180)	0.056
88	7.33	0.37	0.220	0.144	(0.198)	0.076
89	7.42	0.37	0.220	0.143	(0.198)	0.077
90	7.50	0.37	0.220	0.142	(0.198)	0.078
91	7.58	0.40	0.240	0.142	(0.216)	0.098
92	7.67	0.40	0.240	0.141	(0.216)	0.099
93	7.75	0.40	0.240	0.140	(0.216)	0.100
94	7.83	0.43	0.260	0.140	(0.234)	0.120
95	7.92	0.43	0.260	0.139	(0.234)	0.121
96	8.00	0.43	0.260	0.138	(0.234)	0.122
97	8.08	0.50	0.300	0.138	(0.270)	0.162
98	8.17	0.50	0.300	0.137	(0.270)	0.163
99	8.25	0.50	0.300	0.137	(0.270)	0.163
100	8.33	0.50	0.300	0.136	(0.270)	0.164
101	8.42	0.50	0.300	0.135	(0.270)	0.165
102	8.50	0.50	0.300	0.135	(0.270)	0.165
103	8.58	0.53	0.320	0.134	(0.288)	0.186
104	8.67	0.53	0.320	0.133	(0.288)	0.187
105	8.75	0.53	0.320	0.133	(0.288)	0.187
106	8.83	0.57	0.340	0.132	(0.306)	0.208
107	8.92	0.57	0.340	0.131	(0.306)	0.208
108	9.00	0.57	0.340	0.131	(0.306)	0.209
109	9.08	0.63	0.380	0.130	(0.342)	0.250
110	9.17	0.63	0.380	0.130	(0.342)	0.250
111	9.25	0.63	0.380	0.129	(0.342)	0.251
112	9.33	0.67	0.400	0.128	(0.360)	0.272
113	9.42	0.67	0.400	0.128	(0.360)	0.272
114	9.50	0.67	0.400	0.127	(0.360)	0.273
115	9.58	0.70	0.420	0.127	(0.378)	0.293
116	9.67	0.70	0.420	0.126	(0.378)	0.294
117	9.75	0.70	0.420	0.125	(0.378)	0.295
118	9.83	0.73	0.440	0.125	(0.396)	0.315
119	9.92	0.73	0.440	0.124	(0.396)	0.316
120	10.00	0.73	0.440	0.124	(0.396)	0.316
121	10.08	0.50	0.300	0.123	(0.270)	0.177
122	10.17	0.50	0.300	0.122	(0.270)	0.178
123	10.25	0.50	0.300	0.122	(0.270)	0.178
124	10.33	0.50	0.300	0.121	(0.270)	0.179
125	10.42	0.50	0.300	0.121	(0.270)	0.179
126	10.50	0.50	0.300	0.120	(0.270)	0.180
127	10.58	0.67	0.400	0.119	(0.360)	0.281
128	10.67	0.67	0.400	0.119	(0.360)	0.281
129	10.75	0.67	0.400	0.118	(0.360)	0.282
130	10.83	0.67	0.400	0.118	(0.360)	0.282
131	10.92	0.67	0.400	0.117	(0.360)	0.283
132	11.00	0.67	0.400	0.117	(0.360)	0.283
133	11.08	0.63	0.380	0.116	(0.342)	0.264
134	11.17	0.63	0.380	0.115	(0.342)	0.265
135	11.25	0.63	0.380	0.115	(0.342)	0.265
136	11.33	0.63	0.380	0.114	(0.342)	0.266
137	11.42	0.63	0.380	0.114	(0.342)	0.266
138	11.50	0.63	0.380	0.113	(0.342)	0.267
139	11.58	0.57	0.340	0.113	(0.306)	0.227
140	11.67	0.57	0.340	0.112	(0.306)	0.228
141	11.75	0.57	0.340	0.111	(0.306)	0.229
142	11.83	0.60	0.360	0.111	(0.324)	0.249
143	11.92	0.60	0.360	0.110	(0.324)	0.250
144	12.00	0.60	0.360	0.110	(0.324)	0.250
145	12.08	0.83	0.500	0.109	(0.450)	0.391
146	12.17	0.83	0.500	0.109	(0.450)	0.391
147	12.25	0.83	0.500	0.108	(0.450)	0.392
148	12.33	0.87	0.520	0.108	(0.468)	0.412
149	12.42	0.87	0.520	0.107	(0.468)	0.413
150	12.50	0.87	0.520	0.107	(0.468)	0.413
151	12.58	0.93	0.560	0.106	(0.504)	0.454
152	12.67	0.93	0.560	0.105	(0.504)	0.455
153	12.75	0.93	0.560	0.105	(0.504)	0.455
154	12.83	0.97	0.580	0.104	(0.522)	0.476
155	12.92	0.97	0.580	0.104	(0.522)	0.476
156	13.00	0.97	0.580	0.103	(0.522)	0.477
157	13.08	1.13	0.680	0.103	(0.612)	0.577
158	13.17	1.13	0.680	0.102	(0.612)	0.578

159	13.25	1.13	0.680	0.102	(0.612)	0.578
160	13.33	1.13	0.680	0.101	(0.612)	0.579
161	13.42	1.13	0.680	0.101	(0.612)	0.579
162	13.50	1.13	0.680	0.100	(0.612)	0.580
163	13.58	0.77	0.460	0.100	(0.414)	0.360
164	13.67	0.77	0.460	0.099	(0.414)	0.361
165	13.75	0.77	0.460	0.099	(0.414)	0.361
166	13.83	0.77	0.460	0.098	(0.414)	0.362
167	13.92	0.77	0.460	0.098	(0.414)	0.362
168	14.00	0.77	0.460	0.097	(0.414)	0.363
169	14.08	0.90	0.540	0.097	(0.486)	0.443
170	14.17	0.90	0.540	0.096	(0.486)	0.444
171	14.25	0.90	0.540	0.096	(0.486)	0.444
172	14.33	0.87	0.520	0.095	(0.468)	0.425
173	14.42	0.87	0.520	0.095	(0.468)	0.425
174	14.50	0.87	0.520	0.094	(0.468)	0.426
175	14.58	0.87	0.520	0.094	(0.468)	0.426
176	14.67	0.87	0.520	0.093	(0.468)	0.427
177	14.75	0.87	0.520	0.093	(0.468)	0.427
178	14.83	0.83	0.500	0.092	(0.450)	0.408
179	14.92	0.83	0.500	0.092	(0.450)	0.408
180	15.00	0.83	0.500	0.091	(0.450)	0.409
181	15.08	0.80	0.480	0.091	(0.432)	0.389
182	15.17	0.80	0.480	0.090	(0.432)	0.390
183	15.25	0.80	0.480	0.090	(0.432)	0.390
184	15.33	0.77	0.460	0.090	(0.414)	0.370
185	15.42	0.77	0.460	0.089	(0.414)	0.371
186	15.50	0.77	0.460	0.089	(0.414)	0.371
187	15.58	0.63	0.380	0.088	(0.342)	0.292
188	15.67	0.63	0.380	0.088	(0.342)	0.292
189	15.75	0.63	0.380	0.087	(0.342)	0.293
190	15.83	0.63	0.380	0.087	(0.342)	0.293
191	15.92	0.63	0.380	0.086	(0.342)	0.294
192	16.00	0.63	0.380	0.086	(0.342)	0.294
193	16.08	0.13	0.080	(0.085)	0.072	0.008
194	16.17	0.13	0.080	(0.085)	0.072	0.008
195	16.25	0.13	0.080	(0.085)	0.072	0.008
196	16.33	0.13	0.080	(0.084)	0.072	0.008
197	16.42	0.13	0.080	(0.084)	0.072	0.008
198	16.50	0.13	0.080	(0.083)	0.072	0.008
199	16.58	0.10	0.060	(0.083)	0.054	0.006
200	16.67	0.10	0.060	(0.082)	0.054	0.006
201	16.75	0.10	0.060	(0.082)	0.054	0.006
202	16.83	0.10	0.060	(0.082)	0.054	0.006
203	16.92	0.10	0.060	(0.081)	0.054	0.006
204	17.00	0.10	0.060	(0.081)	0.054	0.006
205	17.08	0.17	0.100	0.080	(0.090)	0.020
206	17.17	0.17	0.100	0.080	(0.090)	0.020
207	17.25	0.17	0.100	0.080	(0.090)	0.020
208	17.33	0.17	0.100	0.079	(0.090)	0.021
209	17.42	0.17	0.100	0.079	(0.090)	0.021
210	17.50	0.17	0.100	0.078	(0.090)	0.022
211	17.58	0.17	0.100	0.078	(0.090)	0.022
212	17.67	0.17	0.100	0.078	(0.090)	0.022
213	17.75	0.17	0.100	0.077	(0.090)	0.023
214	17.83	0.13	0.080	(0.077)	0.072	0.008
215	17.92	0.13	0.080	(0.076)	0.072	0.008
216	18.00	0.13	0.080	(0.076)	0.072	0.008
217	18.08	0.13	0.080	(0.076)	0.072	0.008
218	18.17	0.13	0.080	(0.075)	0.072	0.008
219	18.25	0.13	0.080	(0.075)	0.072	0.008
220	18.33	0.13	0.080	(0.075)	0.072	0.008
221	18.42	0.13	0.080	(0.074)	0.072	0.008
222	18.50	0.13	0.080	(0.074)	0.072	0.008
223	18.58	0.10	0.060	(0.074)	0.054	0.006
224	18.67	0.10	0.060	(0.073)	0.054	0.006
225	18.75	0.10	0.060	(0.073)	0.054	0.006
226	18.83	0.07	0.040	(0.072)	0.036	0.004
227	18.92	0.07	0.040	(0.072)	0.036	0.004
228	19.00	0.07	0.040	(0.072)	0.036	0.004
229	19.08	0.10	0.060	(0.071)	0.054	0.006
230	19.17	0.10	0.060	(0.071)	0.054	0.006
231	19.25	0.10	0.060	(0.071)	0.054	0.006
232	19.33	0.13	0.080	0.070	(0.072)	0.010
233	19.42	0.13	0.080	0.070	(0.072)	0.010
234	19.50	0.13	0.080	0.070	(0.072)	0.010
235	19.58	0.10	0.060	(0.069)	0.054	0.006
236	19.67	0.10	0.060	(0.069)	0.054	0.006
237	19.75	0.10	0.060	(0.069)	0.054	0.006
238	19.83	0.07	0.040	(0.069)	0.036	0.004
239	19.92	0.07	0.040	(0.068)	0.036	0.004
240	20.00	0.07	0.040	(0.068)	0.036	0.004
241	20.08	0.10	0.060	(0.068)	0.054	0.006
242	20.17	0.10	0.060	(0.067)	0.054	0.006
243	20.25	0.10	0.060	(0.067)	0.054	0.006
244	20.33	0.10	0.060	(0.067)	0.054	0.006

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245  20.42     0.10      0.060       (  0.066)       0.054        0.006
246  20.50     0.10      0.060       (  0.066)       0.054        0.006
247  20.58     0.10      0.060       (  0.066)       0.054        0.006
248  20.67     0.10      0.060       (  0.066)       0.054        0.006
249  20.75     0.10      0.060       (  0.065)       0.054        0.006
250  20.83     0.07      0.040       (  0.065)       0.036        0.004
251  20.92     0.07      0.040       (  0.065)       0.036        0.004
252  21.00     0.07      0.040       (  0.065)       0.036        0.004
253  21.08     0.10      0.060       (  0.064)       0.054        0.006
254  21.17     0.10      0.060       (  0.064)       0.054        0.006
255  21.25     0.10      0.060       (  0.064)       0.054        0.006
256  21.33     0.07      0.040       (  0.064)       0.036        0.004
257  21.42     0.07      0.040       (  0.063)       0.036        0.004
258  21.50     0.07      0.040       (  0.063)       0.036        0.004
259  21.58     0.10      0.060       (  0.063)       0.054        0.006
260  21.67     0.10      0.060       (  0.063)       0.054        0.006
261  21.75     0.10      0.060       (  0.062)       0.054        0.006
262  21.83     0.07      0.040       (  0.062)       0.036        0.004
263  21.92     0.07      0.040       (  0.062)       0.036        0.004
264  22.00     0.07      0.040       (  0.062)       0.036        0.004
265  22.08     0.10      0.060       (  0.062)       0.054        0.006
266  22.17     0.10      0.060       (  0.061)       0.054        0.006
267  22.25     0.10      0.060       (  0.061)       0.054        0.006
268  22.33     0.07      0.040       (  0.061)       0.036        0.004
269  22.42     0.07      0.040       (  0.061)       0.036        0.004
270  22.50     0.07      0.040       (  0.061)       0.036        0.004
271  22.58     0.07      0.040       (  0.060)       0.036        0.004
272  22.67     0.07      0.040       (  0.060)       0.036        0.004
273  22.75     0.07      0.040       (  0.060)       0.036        0.004
274  22.83     0.07      0.040       (  0.060)       0.036        0.004
275  22.92     0.07      0.040       (  0.060)       0.036        0.004
276  23.00     0.07      0.040       (  0.060)       0.036        0.004
277  23.08     0.07      0.040       (  0.060)       0.036        0.004
278  23.17     0.07      0.040       (  0.059)       0.036        0.004
279  23.25     0.07      0.040       (  0.059)       0.036        0.004
280  23.33     0.07      0.040       (  0.059)       0.036        0.004
281  23.42     0.07      0.040       (  0.059)       0.036        0.004
282  23.50     0.07      0.040       (  0.059)       0.036        0.004
283  23.58     0.07      0.040       (  0.059)       0.036        0.004
284  23.67     0.07      0.040       (  0.059)       0.036        0.004
285  23.75     0.07      0.040       (  0.059)       0.036        0.004
286  23.83     0.07      0.040       (  0.059)       0.036        0.004
287  23.92     0.07      0.040       (  0.059)       0.036        0.004
288  24.00     0.07      0.040       (  0.059)       0.036        0.004
                (Loss Rate Not Used)
    Sum =     100.0                                  Sum =    34.3
      Flood volume = Effective rainfall      2.86(In)
       times area      19.1(Ac.)/[(In)/(Ft.)] =       4.6(Ac.Ft)
      Total soil loss =      2.14(In)
      Total soil loss =     3.413(Ac.Ft)
      Total rainfall =      5.00(In)
      Flood volume =      198343.6 Cubic Feet
      Total soil loss =      148671.5 Cubic Feet
      ---------------------------------------------------------------------
       Peak flow rate of this hydrograph =     11.171(CFS)
      ---------------------------------------------------------------------
      +++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                          24 - H O U R    S T O R M
                     R u n o f f      H y d r o g r a p h
      ---------------------------------------------------------------------
                  Hydrograph in   5   Minute intervals ((CFS))

      ---------------------------------------------------------------------
 Time(h+m) Volume Ac.Ft   Q(CFS)  0        5.0      10.0      15.0      20.0
 ---------------------------------------------------------------------------
   0+ 5       0.0003      0.04  Q          |          |          |          |
   0+10       0.0007      0.07  Q          |          |          |          |
   0+15       0.0012      0.07  Q          |          |          |          |
   0+20       0.0019      0.10  Q          |          |          |          |
   0+25       0.0027      0.11  Q          |          |          |          |
   0+30       0.0035      0.11  Q          |          |          |          |
   0+35       0.0043      0.12  Q          |          |          |          |
   0+40       0.0051      0.12  Q          |          |          |          |
   0+45       0.0058      0.12  Q          |          |          |          |
   0+50       0.0068      0.13  Q          |          |          |          |
   0+55       0.0078      0.15  Q          |          |          |          |
   1+ 0       0.0089      0.15  Q          |          |          |          |
   1+ 5       0.0098      0.14  Q          |          |          |          |
   1+10       0.0106      0.12  Q          |          |          |          |
   1+15       0.0114      0.12  Q          |          |          |          |
   1+20       0.0122      0.12  Q          |          |          |          |
   1+25       0.0130      0.12  Q          |          |          |          |
   1+30       0.0138      0.12  Q          |          |          |          |
   1+35       0.0146      0.12  Q          |          |          |          |
   1+40       0.0154      0.12  Q          |          |          |          |
   1+45       0.0162      0.12  Q          |          |          |          |
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1+50       0.0171      0.13  Q          |          |          |          |
1+55       0.0182      0.15  Q          |          |          |          |
2+ 0       0.0192      0.15  Q          |          |          |          |
2+ 5       0.0203      0.15  Q          |          |          |          |
2+10       0.0213      0.15  Q          |          |          |          |
2+15       0.0224      0.15  Q          |          |          |          |
2+20       0.0235      0.15  Q          |          |          |          |
2+25       0.0245      0.15  Q          |          |          |          |
2+30       0.0256      0.15  Q          |          |          |          |
2+35       0.0268      0.17  Q          |          |          |          |
2+40       0.0281      0.19  Q          |          |          |          |
2+45       0.0294      0.19  Q          |          |          |          |
2+50       0.0307      0.19  Q          |          |          |          |
2+55       0.0321      0.19  Q          |          |          |          |
3+ 0       0.0334      0.19  Q          |          |          |          |
3+ 5       0.0347      0.19  Q          |          |          |          |
3+10       0.0360      0.19  Q          |          |          |          |
3+15       0.0374      0.19  Q          |          |          |          |
3+20       0.0387      0.19  Q          |          |          |          |
3+25       0.0400      0.19  Q          |          |          |          |
3+30       0.0413      0.19  Q          |          |          |          |
3+35       0.0427      0.19  Q          |          |          |          |
3+40       0.0440      0.19  Q          |          |          |          |
3+45       0.0453      0.19  Q          |          |          |          |
3+50       0.0468      0.21  Q          |          |          |          |
3+55       0.0483      0.23  Q          |          |          |          |
4+ 0       0.0499      0.23  Q          |          |          |          |
4+ 5       0.0515      0.23  Q          |          |          |          |
4+10       0.0531      0.23  Q          |          |          |          |
4+15       0.0547      0.23  Q          |          |          |          |
4+20       0.0564      0.25  Q          |          |          |          |
4+25       0.0583      0.27  Q          |          |          |          |
4+30       0.0601      0.27  Q          |          |          |          |
4+35       0.0620      0.27  Q          |          |          |          |
4+40       0.0638      0.27  Q          |          |          |          |
4+45       0.0657      0.27  Q          |          |          |          |
4+50       0.0677      0.29  Q          |          |          |          |
4+55       0.0698      0.30  Q          |          |          |          |
5+ 0       0.0719      0.31  Q          |          |          |          |
5+ 5       0.0738      0.27  Q          |          |          |          |
5+10       0.0754      0.24  Q          |          |          |          |
5+15       0.0770      0.23  Q          |          |          |          |
5+20       0.0787      0.25  Q          |          |          |          |
5+25       0.0806      0.27  Q          |          |          |          |
5+30       0.0824      0.27  Q          |          |          |          |
5+35       0.0844      0.29  Q          |          |          |          |
5+40       0.0865      0.30  Q          |          |          |          |
5+45       0.0886      0.31  Q          |          |          |          |
5+50       0.0907      0.31  Q          |          |          |          |
5+55       0.0929      0.31  Q          |          |          |          |
6+ 0       0.0950      0.31  Q          |          |          |          |
6+ 5       0.0978      0.40  Q          |          |          |          |
6+10       0.1011      0.49  Q          |          |          |          |
6+15       0.1047      0.52  VQ         |          |          |          |
6+20       0.1084      0.54  VQ         |          |          |          |
6+25       0.1122      0.55  VQ         |          |          |          |
6+30       0.1161      0.56  |Q         |          |          |          |
6+35       0.1213      0.76  |Q         |          |          |          |
6+40       0.1277      0.93  |Q         |          |          |          |
6+45       0.1345      0.98  |Q         |          |          |          |
6+50       0.1414      1.00  |VQ        |          |          |          |
6+55       0.1483      1.01  |VQ        |          |          |          |
7+ 0       0.1554      1.03  |VQ        |          |          |          |
7+ 5       0.1626      1.04  |VQ        |          |          |          |
7+10       0.1698      1.05  |VQ        |          |          |          |
7+15       0.1771      1.06  |VQ        |          |          |          |
7+20       0.1858      1.26  |VQ        |          |          |          |
7+25       0.1957      1.43  |VQ        |          |          |          |
7+30       0.2059      1.48  |VQ        |          |          |          |
7+35       0.2175      1.69  |V Q       |          |          |          |
7+40       0.2303      1.86  | VQ       |          |          |          |
7+45       0.2434      1.90  | VQ       |          |          |          |
7+50       0.2579      2.11  | V Q      |          |          |          |
7+55       0.2736      2.28  | V Q      |          |          |          |
8+ 0       0.2896      2.32  | V Q      |          |          |          |
8+ 5       0.3083      2.72  | V  Q     |          |          |          |
8+10       0.3293      3.05  | V   Q    |          |          |          |
8+15       0.3508      3.12  |  V  Q    |          |          |          |
8+20       0.3725      3.16  |  V  Q    |          |          |          |
8+25       0.3943      3.17  |  V  Q    |          |          |          |
8+30       0.4162      3.18  |  V  Q    |          |          |          |
8+35       0.4395      3.38  |  V  Q    |          |          |          |
8+40       0.4639      3.55  |   V  Q   |          |          |          |
8+45       0.4886      3.59  |   V  Q   |          |          |          |
8+50       0.5148      3.80  |   V  Q   |          |          |          |
8+55       0.5421      3.97  |   V  Q   |          |          |          |
```



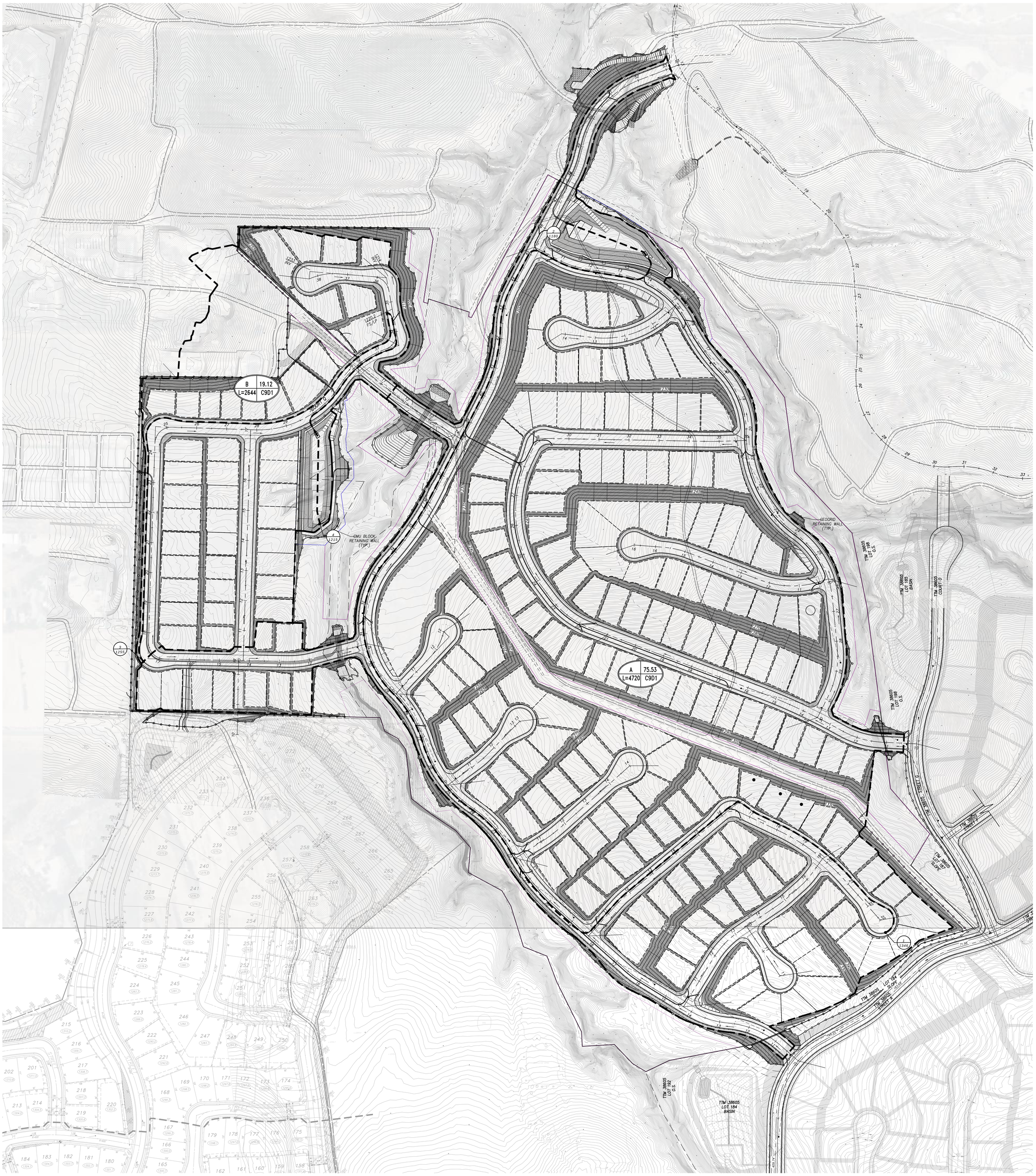
9+ 0	0.5698	4.01	V Q				
9+ 5	0.6001	4.40	V Q				
9+10	0.6327	4.74	V Q				
9+15	0.6658	4.81	V Q				
9+20	0.7005	5.03	V Q				
9+25	0.7363	5.20	V Q				
9+30	0.7724	5.24	V Q				
9+35	0.8099	5.45	V Q				
9+40	0.8486	5.62	V Q				
9+45	0.8876	5.66	V Q				
9+50	0.9280	5.87	V Q				
9+55	0.9696	6.04	V Q				
10+ 0	1.0115	6.08	V Q				
10+ 5	1.0446	4.81	Q				
10+10	1.0701	3.71	Q V				
10+15	1.0943	3.51	Q V				
10+20	1.1180	3.44	Q V				
10+25	1.1418	3.45	Q V				
10+30	1.1656	3.46	Q V				
10+35	1.1959	4.40	Q V				
10+40	1.2317	5.21	Q				
10+45	1.2687	5.37	QV				
10+50	1.3061	5.44	QV				
10+55	1.3437	5.45	QV				
11+ 0	1.3812	5.46	Q V				
11+ 5	1.4176	5.28	Q V				
11+10	1.4530	5.14	Q V				
11+15	1.4882	5.12	Q V				
11+20	1.5235	5.12	Q V				
11+25	1.5588	5.13	Q V				
11+30	1.5942	5.14	Q V				
11+35	1.6271	4.78	Q V				
11+40	1.6579	4.47	Q V				
11+45	1.6884	4.42	Q V				
11+50	1.7200	4.59	Q V				
11+55	1.7528	4.77	Q V				
12+ 0	1.7859	4.81	Q V				
12+ 5	1.8280	6.12	Q V				
12+10	1.8780	7.25	Q V				
12+15	1.9294	7.47	Q V				
12+20	1.9827	7.74	Q V				
12+25	2.0372	7.91	Q V				
12+30	2.0920	7.95	Q V				
12+35	2.1495	8.34	Q V				
12+40	2.2092	8.67	Q V				
12+45	2.2694	8.74	Q V				
12+50	2.3311	8.96	Q V				
12+55	2.3940	9.13	Q V				
13+ 0	2.4572	9.17	Q V				
13+ 5	2.5268	10.11	Q V				
13+10	2.6021	10.92	QV				
13+15	2.6784	11.08	QV				
13+20	2.7552	11.15	Q V				
13+25	2.8321	11.16	Q V				
13+30	2.9090	11.17	Q V				
13+35	2.9721	9.15	Q V				
13+40	3.0231	7.40	Q V				
13+45	3.0718	7.08	Q V				
13+50	3.1198	6.97	Q V				
13+55	3.1679	6.98	Q V				
14+ 0	3.2160	6.99	Q V				
14+ 5	3.2693	7.73	Q V				
14+10	3.3270	8.38	Q V				
14+15	3.3857	8.51	Q V				
14+20	3.4434	8.38	Q V				
14+25	3.5001	8.23	Q V				
14+30	3.5567	8.21	Q V				
14+35	3.6132	8.21	Q V				
14+40	3.6698	8.22	Q V				
14+45	3.7265	8.23	Q V				
14+50	3.7820	8.05	Q V				
14+55	3.8364	7.90	Q V				
15+ 0	3.8907	7.88	Q V				
15+ 5	3.9437	7.70	Q V				
15+10	3.9957	7.55	Q V				
15+15	4.0475	7.52	Q V				
15+20	4.0980	7.34	Q V				
15+25	4.1475	7.19	Q V				
15+30	4.1969	7.17	Q V				
15+35	4.2411	6.43	Q V				
15+40	4.2811	5.79	Q V				
15+45	4.3202	5.68	Q V				
15+50	4.3591	5.65	Q V				
15+55	4.3980	5.66	Q V				
16+ 0	4.4370	5.66	Q V				
16+ 5	4.4579	3.03	Q				V

16+10	4.4631	0.75	|Q	|	|	|	V|
16+15	4.4652	0.32	Q	|	|	|	V|
16+20	4.4663	0.15	Q	|	|	|	V|
16+25	4.4674	0.15	Q	|	|	|	V|
16+30	4.4684	0.15	Q	|	|	|	V|
16+35	4.4694	0.14	Q	|	|	|	V|
16+40	4.4702	0.12	Q	|	|	|	V|
16+45	4.4710	0.12	Q	|	|	|	V|
16+50	4.4718	0.12	Q	|	|	|	V|
16+55	4.4726	0.12	Q	|	|	|	V|
17+ 0	4.4734	0.12	Q	|	|	|	V|
17+ 5	4.4750	0.24	Q	|	|	|	V|
17+10	4.4775	0.35	Q	|	|	|	V|
17+15	4.4801	0.38	Q	|	|	|	V|
17+20	4.4828	0.40	Q	|	|	|	V|
17+25	4.4856	0.40	Q	|	|	|	V|
17+30	4.4884	0.41	Q	|	|	|	V|
17+35	4.4913	0.42	Q	|	|	|	V|
17+40	4.4943	0.43	Q	|	|	|	V|
17+45	4.4972	0.43	Q	|	|	|	V|
17+50	4.4993	0.30	Q	|	|	|	V|
17+55	4.5006	0.18	Q	|	|	|	V|
18+ 0	4.5017	0.16	Q	|	|	|	V|
18+ 5	4.5028	0.15	Q	|	|	|	V|
18+10	4.5038	0.15	Q	|	|	|	V|
18+15	4.5049	0.15	Q	|	|	|	V|
18+20	4.5060	0.15	Q	|	|	|	V|
18+25	4.5070	0.15	Q	|	|	|	V|
18+30	4.5081	0.15	Q	|	|	|	V|
18+35	4.5090	0.14	Q	|	|	|	V|
18+40	4.5098	0.12	Q	|	|	|	V|
18+45	4.5107	0.12	Q	|	|	|	V|
18+50	4.5113	0.10	Q	|	|	|	V|
18+55	4.5119	0.08	Q	|	|	|	V|
19+ 0	4.5124	0.08	Q	|	|	|	V|
19+ 5	4.5131	0.10	Q	|	|	|	V|
19+10	4.5138	0.11	Q	|	|	|	V|
19+15	4.5146	0.11	Q	|	|	|	V|
19+20	4.5157	0.15	Q	|	|	|	V|
19+25	4.5169	0.18	Q	|	|	|	V|
19+30	4.5182	0.19	Q	|	|	|	V|
19+35	4.5193	0.16	Q	|	|	|	V|
19+40	4.5201	0.12	Q	|	|	|	V|
19+45	4.5210	0.12	Q	|	|	|	V|
19+50	4.5216	0.10	Q	|	|	|	V|
19+55	4.5222	0.08	Q	|	|	|	V|
20+ 0	4.5227	0.08	Q	|	|	|	V|
20+ 5	4.5234	0.10	Q	|	|	|	V|
20+10	4.5241	0.11	Q	|	|	|	V|
20+15	4.5249	0.11	Q	|	|	|	V|
20+20	4.5257	0.12	Q	|	|	|	V|
20+25	4.5265	0.12	Q	|	|	|	V|
20+30	4.5273	0.12	Q	|	|	|	V|
20+35	4.5281	0.12	Q	|	|	|	V|
20+40	4.5289	0.12	Q	|	|	|	V|
20+45	4.5297	0.12	Q	|	|	|	V|
20+50	4.5304	0.10	Q	|	|	|	V|
20+55	4.5309	0.08	Q	|	|	|	V|
21+ 0	4.5315	0.08	Q	|	|	|	V|
21+ 5	4.5321	0.10	Q	|	|	|	V|
21+10	4.5329	0.11	Q	|	|	|	V|
21+15	4.5337	0.11	Q	|	|	|	V|
21+20	4.5344	0.10	Q	|	|	|	V|
21+25	4.5349	0.08	Q	|	|	|	V|
21+30	4.5355	0.08	Q	|	|	|	V|
21+35	4.5361	0.10	Q	|	|	|	V|
21+40	4.5369	0.11	Q	|	|	|	V|
21+45	4.5377	0.11	Q	|	|	|	V|
21+50	4.5384	0.10	Q	|	|	|	V|
21+55	4.5389	0.08	Q	|	|	|	V|
22+ 0	4.5394	0.08	Q	|	|	|	V|
22+ 5	4.5401	0.10	Q	|	|	|	V|
22+10	4.5409	0.11	Q	|	|	|	V|
22+15	4.5417	0.11	Q	|	|	|	V|
22+20	4.5423	0.10	Q	|	|	|	V|
22+25	4.5429	0.08	Q	|	|	|	V|
22+30	4.5434	0.08	Q	|	|	|	V|
22+35	4.5440	0.08	Q	|	|	|	V|
22+40	4.5445	0.08	Q	|	|	|	V|
22+45	4.5450	0.08	Q	|	|	|	V|
22+50	4.5456	0.08	Q	|	|	|	V|
22+55	4.5461	0.08	Q	|	|	|	V|
23+ 0	4.5466	0.08	Q	|	|	|	V|
23+ 5	4.5472	0.08	Q	|	|	|	V|
23+10	4.5477	0.08	Q	|	|	|	V|
23+15	4.5482	0.08	Q	|	|	|	V|

```
   23+20       4.5487      0.08  Q          |          |          |         v|
   23+25       4.5493      0.08  Q          |          |          |         v|
   23+30       4.5498      0.08  Q          |          |          |         v|
   23+35       4.5503      0.08  Q          |          |          |         v|
   23+40       4.5509      0.08  Q          |          |          |         v|
   23+45       4.5514      0.08  Q          |          |          |         v|
   23+50       4.5519      0.08  Q          |          |          |         v|
   23+55       4.5525      0.08  Q          |          |          |         v|
   24+ 0       4.5530      0.08  Q          |          |          |         v|
   24+ 5       4.5533      0.04  Q          |          |          |         v|
   24+10       4.5533      0.01  Q          |          |          |         v|
   24+15       4.5533      0.00  Q          |          |          |          v
-------------------------------------------------------------------------------
```

Proposed Synthetic Unit Hydrograph Method

PROPOSED UNIT HYDROGRAPH MAP



0 100 300
50 200 400
SCALE: 1" = 100'

LEGEND

NODE / ELEV

AREA | ACRES
LENGTH | SOIL

WATERSHED BOUNDARY

FLOW PATH

PROPOSED UNIT HYDROGRAPH MAP
PREPARATION DATE: OCTOBER 2024
REVISION DATE: APRIL 2025

PLAN PREPARED BY:
adkan ENGINEERS
Civil Engineering • Surveying • Planning
6879 Airport Drive, Riverside, CA 92504
Tel:(951) 688-0241 • Fax:(951) 688-0599

PROPOSED SUB AREA "A"

```
       U n i t   H y d r o g r a p h   A n a l y s i s

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              Study date  08/14/25 File: PROA12.out

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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978


Program License Serial Number 5006

----------------------------------------------------------------------
 English (in-lb) Input Units Used
 English Rainfall Data (Inches) Input Values Used

 English Units used in output format



----------------------------------------------------------------------
----------------------------------------------------------------------
Drainage Area =      75.83(Ac.)  =      0.118 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment =      75.83(Ac.)  =      0.118 Sq. Mi.
Length along longest watercourse =    4720.00(Ft.)
Length along longest watercourse measured to centroid =    2360.00(Ft.)
Length along longest watercourse =      0.894 Mi.
Length along longest watercourse measured to centroid =      0.447 Mi.
Difference in elevation =     166.00(Ft.)
Slope along watercourse =    185.6949 Ft./Mi.
Average Manning's 'N' = 0.030
Lag time =    0.188 Hr.
Lag time =    11.30 Min.
25% of lag time =     2.82 Min.
40% of lag time =     4.52 Min.
Unit time =     5.00 Min.
Duration of storm = 1 Hour(s)
User Entered Base Flow =     0.00(CFS)

2 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
       75.83           0.50                 37.91

100 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
       75.83           1.30                 98.58

STORM EVENT (YEAR) =    2.00
Area Averaged 2-Year Rainfall =    0.500(In)
Area Averaged 100-Year Rainfall =    1.300(In)

Point rain (area averaged) =    0.500(In)
Areal adjustment factor =   99.93 %
Adjusted average point rain =    0.500(In)

Sub-Area Data:
Area(Ac.)         Runoff Index   Impervious %
    75.830           69.00         0.500
 Total Area Entered =     75.83(Ac.)


RI    RI   Infil. Rate Impervious   Adj. Infil. Rate  Area%     F
AMC2 AMC-2     (In/Hr)    (Dec.%)     (In/Hr)      (Dec.)    (In/Hr)
```

```
69.0  69.0      0.373     0.500        0.205       1.000      0.205
                                                  Sum (F) =   0.205
Area averaged mean soil loss (F) (In/Hr) =  0.205
Minimum soil loss rate ((In/Hr)) =  0.103
(for 24 hour storm duration)
Soil low loss rate (decimal) =   0.500
------------------------------------------------------------------------
Slope of intensity-duration curve for a 1 hour storm =0.5500
------------------------------------------------------------------------

                U n i t  H y d r o g r a p h
                       VALLEY S-Curve
------------------------------------------------------------------------
                Unit Hydrograph Data
------------------------------------------------------------------------
Unit time period   Time % of lag   Distribution   Unit Hydrograph
    (hrs)                          Graph %            (CFS)
------------------------------------------------------------------------
    1   0.083         44.254          5.079              3.882
    2   0.167         88.509         21.318             16.291
    3   0.250        132.763         28.439             21.734
    4   0.333        177.017         15.372             11.747
    5   0.417        221.272          7.523              5.749
    6   0.500        265.526          5.074              3.878
    7   0.583        309.780          3.778              2.887
    8   0.667        354.034          2.830              2.163
    9   0.750        398.289          2.240              1.712
   10   0.833        442.543          1.702              1.301
   11   0.917        486.797          1.386              1.059
   12   1.000        531.052          1.242              0.949
   13   1.083        575.306          0.960              0.734
   14   1.167        619.560          0.796              0.608
   15   1.250        663.815          0.638              0.488
   16   1.333        708.069          0.484              0.370
   17   1.417        752.323          0.443              0.338
   18   1.500        796.577          0.443              0.338
   19   1.583        840.832          0.255              0.195
                                Sum = 100.000   Sum=      76.422
------------------------------------------------------------------------

 The following loss rate calculations reflect use of the minimum calculated loss
 rate subtracted from the Storm Rain to produce the maximum Effective Rain value

  Unit Time   Pattern   Storm Rain     Loss rate(In./Hr)     Effective
       (Hr.)  Percent   (In/Hr)         Max    |   Low        (In/Hr)
   1   0.08     3.30      0.198       (  0.205)       0.099        0.099
   2   0.17     4.20      0.252       (  0.205)       0.126        0.126
   3   0.25     4.40      0.264       (  0.205)       0.132        0.132
   4   0.33     4.80      0.288       (  0.205)       0.144        0.144
   5   0.42     5.20      0.312       (  0.205)       0.156        0.156
   6   0.50     6.20      0.372       (  0.205)       0.186        0.186
   7   0.58     6.80      0.408       (  0.205)       0.204        0.204
   8   0.67     8.80      0.528          0.205    (  0.264)        0.323
   9   0.75    13.90      0.833          0.205    (  0.417)        0.628
  10   0.83    31.40      1.883          0.205    (  0.941)        1.678
  11   0.92     7.20      0.432          0.205    (  0.216)        0.227
  12   1.00     3.80      0.228       (  0.205)       0.114        0.114
              (Loss Rate Not Used)
     Sum =     100.0                                  Sum =     4.0
       Flood volume = Effective rainfall      0.33(In)
        times area      75.8(Ac.)/[(In)/(Ft.)] =       2.1(Ac.Ft)
       Total soil loss =      0.17(In)
       Total soil loss =     1.043(Ac.Ft)
       Total rainfall =      0.50(In)
       Flood volume =       92110.2 Cubic Feet
       Total soil loss =       45426.7 Cubic Feet
       ---------------------------------------------------------------------
        Peak flow rate of this hydrograph =     52.169(CFS)
       ---------------------------------------------------------------------
       +++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
```

1 - H O U R S T O R M
R u n o f f H y d r o g r a p h

Hydrograph in 5 Minute intervals ((CFS))

Time(h+m)	Volume Ac.Ft	Q(CFS)	0	15.0	30.0	45.0	60.0
0+ 5	0.0026	0.38	Q				
0+10	0.0171	2.10	VQ				
0+15	0.0496	4.72	V Q				
0+20	0.0951	6.61	V Q				
0+25	0.1493	7.87	V Q				
0+30	0.2116	9.05	V Q				
0+35	0.2835	10.44	VQ				
0+40	0.3687	12.37	V Q				
0+45	0.4830	16.59	V Q				
0+50	0.6819	28.89	V Q				
0+55	1.0182	48.83	V Q				
1+ 0	1.3775	52.17	V Q				
1+ 5	1.6058	33.15	Q V				
1+10	1.7405	19.55	Q V				
1+15	1.8285	12.78	Q V				
1+20	1.8918	9.19	Q V				
1+25	1.9397	6.96	Q V				
1+30	1.9774	5.47	Q V				
1+35	2.0069	4.29	Q V				
1+40	2.0310	3.49	Q V				
1+45	2.0512	2.93	Q V				
1+50	2.0672	2.33	Q V				
1+55	2.0802	1.88	Q V				
2+ 0	2.0904	1.49	Q V				
2+ 5	2.0984	1.16	Q V				
2+10	2.1052	0.98	Q V				
2+15	2.1108	0.81	Q V				
2+20	2.1138	0.44	Q V				
2+25	2.1144	0.08	Q V				
2+30	2.1146	0.02	Q V				

```
       U n i t   H y d r o g r a p h   A n a l y s i s

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----------------------------------------------------------------------

Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978


Program License Serial Number 5006

----------------------------------------------------------------------
 English (in-lb) Input Units Used
 English Rainfall Data (Inches) Input Values Used

 English Units used in output format



----------------------------------------------------------------------
----------------------------------------------------------------------
Drainage Area =      75.83(Ac.)  =      0.118 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment =      75.83(Ac.)  =      0.118 Sq. Mi.
Length along longest watercourse =    4720.00(Ft.)
Length along longest watercourse measured to centroid =    2360.00(Ft.)
Length along longest watercourse =      0.894 Mi.
Length along longest watercourse measured to centroid =      0.447 Mi.
Difference in elevation =     166.00(Ft.)
Slope along watercourse =    185.6949 Ft./Mi.
Average Manning's 'N' = 0.030
Lag time =    0.188 Hr.
Lag time =    11.30 Min.
25% of lag time =     2.82 Min.
40% of lag time =     4.52 Min.
Unit time =     5.00 Min.
Duration of storm = 3 Hour(s)
User Entered Base Flow =     0.00(CFS)

2 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
       75.83           0.80                 60.66

100 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
       75.83           2.00                151.66

STORM EVENT (YEAR) =    2.00
Area Averaged 2-Year Rainfall =    0.800(In)
Area Averaged 100-Year Rainfall =    2.000(In)

Point rain (area averaged) =    0.800(In)
Areal adjustment factor =   99.97 %
Adjusted average point rain =    0.800(In)

Sub-Area Data:
Area(Ac.)         Runoff Index   Impervious %
    75.830           69.00         0.500
 Total Area Entered =     75.83(Ac.)


RI    RI   Infil. Rate Impervious   Adj. Infil. Rate  Area%     F
AMC2 AMC-2     (In/Hr)    (Dec.%)     (In/Hr)      (Dec.)    (In/Hr)
```

```
69.0  69.0      0.373     0.500        0.205       1.000      0.205
                                                  Sum (F) =   0.205
Area averaged mean soil loss (F) (In/Hr) =  0.205
Minimum soil loss rate ((In/Hr)) =  0.103
(for 24 hour storm duration)
Soil low loss rate (decimal) =   0.500
------------------------------------------------------------------------

               U n i t  H y d r o g r a p h
                      VALLEY S-Curve
------------------------------------------------------------------------
               Unit Hydrograph Data
------------------------------------------------------------------------
Unit time period   Time % of lag   Distribution   Unit Hydrograph
    (hrs)                          Graph %           (CFS)
------------------------------------------------------------------------
    1   0.083         44.254          5.079             3.882
    2   0.167         88.509         21.318            16.291
    3   0.250        132.763         28.439            21.734
    4   0.333        177.017         15.372            11.747
    5   0.417        221.272          7.523             5.749
    6   0.500        265.526          5.074             3.878
    7   0.583        309.780          3.778             2.887
    8   0.667        354.034          2.830             2.163
    9   0.750        398.289          2.240             1.712
   10   0.833        442.543          1.702             1.301
   11   0.917        486.797          1.386             1.059
   12   1.000        531.052          1.242             0.949
   13   1.083        575.306          0.960             0.734
   14   1.167        619.560          0.796             0.608
   15   1.250        663.815          0.638             0.488
   16   1.333        708.069          0.484             0.370
   17   1.417        752.323          0.443             0.338
   18   1.500        796.577          0.443             0.338
   19   1.583        840.832          0.255             0.195
                                Sum = 100.000   Sum=      76.422
------------------------------------------------------------------------

 The following loss rate calculations reflect use of the minimum calculated loss
 rate subtracted from the Storm Rain to produce the maximum Effective Rain value

 Unit Time   Pattern   Storm Rain     Loss rate(In./Hr)     Effective
      (Hr.)  Percent   (In/Hr)         Max    |   Low         (In/Hr)
  1   0.08     1.30      0.125       (  0.205)       0.062        0.062
  2   0.17     1.30      0.125       (  0.205)       0.062        0.062
  3   0.25     1.10      0.106       (  0.205)       0.053        0.053
  4   0.33     1.50      0.144       (  0.205)       0.072        0.072
  5   0.42     1.50      0.144       (  0.205)       0.072        0.072
  6   0.50     1.80      0.173       (  0.205)       0.086        0.086
  7   0.58     1.50      0.144       (  0.205)       0.072        0.072
  8   0.67     1.80      0.173       (  0.205)       0.086        0.086
  9   0.75     1.80      0.173       (  0.205)       0.086        0.086
 10   0.83     1.50      0.144       (  0.205)       0.072        0.072
 11   0.92     1.60      0.154       (  0.205)       0.077        0.077
 12   1.00     1.80      0.173       (  0.205)       0.086        0.086
 13   1.08     2.20      0.211       (  0.205)       0.106        0.106
 14   1.17     2.20      0.211       (  0.205)       0.106        0.106
 15   1.25     2.20      0.211       (  0.205)       0.106        0.106
 16   1.33     2.00      0.192       (  0.205)       0.096        0.096
 17   1.42     2.60      0.250       (  0.205)       0.125        0.125
 18   1.50     2.70      0.259       (  0.205)       0.130        0.130
 19   1.58     2.40      0.230       (  0.205)       0.115        0.115
 20   1.67     2.70      0.259       (  0.205)       0.130        0.130
 21   1.75     3.30      0.317       (  0.205)       0.158        0.158
 22   1.83     3.10      0.298       (  0.205)       0.149        0.149
 23   1.92     2.90      0.278       (  0.205)       0.139        0.139
 24   2.00     3.00      0.288       (  0.205)       0.144        0.144
 25   2.08     3.10      0.298       (  0.205)       0.149        0.149
 26   2.17     4.20      0.403       (  0.205)       0.202        0.202
 27   2.25     5.00      0.480          0.205    (  0.240)        0.275
```

```
28   2.33     3.50      0.336       (  0.205)       0.168        0.168
29   2.42     6.80      0.653          0.205    (  0.326)        0.448
30   2.50     7.30      0.701          0.205    (  0.350)        0.496
31   2.58     8.20      0.787          0.205    (  0.393)        0.582
32   2.67     5.90      0.566          0.205    (  0.283)        0.361
33   2.75     2.00      0.192       (  0.205)       0.096        0.096
34   2.83     1.80      0.173       (  0.205)       0.086        0.086
35   2.92     1.80      0.173       (  0.205)       0.086        0.086
36   3.00     0.60      0.058       (  0.205)       0.029        0.029
            (Loss Rate Not Used)
   Sum =     100.0                                    Sum =     5.4
      Flood volume = Effective rainfall      0.45(In)
       times area      75.8(Ac.)/[(In)/(Ft.)] =       2.8(Ac.Ft)
      Total soil loss =      0.35(In)
      Total soil loss =     2.228(Ac.Ft)
      Total rainfall =      0.80(In)
      Flood volume =      123094.8 Cubic Feet
      Total soil loss =       97042.5 Cubic Feet
      ---------------------------------------------------------------------
       Peak flow rate of this hydrograph =     30.958(CFS)
      ---------------------------------------------------------------------
      +++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                          3 - H O U R    S T O R M
                     R u n o f f     H y d r o g r a p h
      ---------------------------------------------------------------------
                  Hydrograph in   5   Minute intervals ((CFS))

      ---------------------------------------------------------------------
Time(h+m) Volume Ac.Ft   Q(CFS)  0       10.0      20.0      30.0      40.0
-------------------------------------------------------------------------
  0+ 5       0.0017      0.24  Q         |         |         |         |
  0+10       0.0103      1.26  VQ        |         |         |         |
  0+15       0.0281      2.58  V Q       |         |         |         |
  0+20       0.0503      3.23  V  Q      |         |         |         |
  0+25       0.0758      3.69  |V Q      |         |         |         |
  0+30       0.1053      4.29  |V  Q     |         |         |         |
  0+35       0.1386      4.82  |V  Q     |         |         |         |
  0+40       0.1742      5.17  | V  Q    |         |         |         |
  0+45       0.2114      5.41  | V  Q    |         |         |         |
  0+50       0.2507      5.70  |  V Q    |         |         |         |
  0+55       0.2900      5.72  |   VQ    |         |         |         |
  1+ 0       0.3290      5.67  |   VQ    |         |         |         |
  1+ 5       0.3699      5.94  |    Q    |         |         |         |
  1+10       0.4148      6.52  |    VQ   |         |         |         |
  1+15       0.4636      7.09  |     VQ  |         |         |         |
  1+20       0.5143      7.36  |      Q  |         |         |         |
  1+25       0.5659      7.49  |      QV |         |         |         |
  1+30       0.6203      7.90  |      QV |         |         |         |
  1+35       0.6790      8.53  |       QV|         |         |         |
  1+40       0.7396      8.80  |       Q V         |         |         |
  1+45       0.8020      9.06  |        Q|V        |         |         |
  1+50       0.8694      9.79  |        Q| V       |         |         |
  1+55       0.9411     10.42  |         Q  V      |         |         |
  2+ 0       1.0136     10.52  |         Q   V     |         |         |
  2+ 5       1.0862     10.54  |         Q    V    |         |         |
  2+10       1.1615     10.94  |         Q     V   |         |         |
  2+15       1.2460     12.28  |         | Q    V  |         |         |
  2+20       1.3447     14.32  |         |   Q    V|         |         |
  2+25       1.4546     15.96  |         |    Q    V         |         |
  2+30       1.5897     19.61  |         |        Q| V       |         |
  2+35       1.7703     26.22  |         |         |    VQ   |         |
  2+40       1.9835     30.96  |         |         |       V Q         |
  2+45       2.1923     30.32  |         |         |         QV        |
  2+50       2.3541     23.50  |         |         |  Q      |  V      |
  2+55       2.4674     16.45  |         |     Q   |         |   V     |
  3+ 0       2.5548     12.69  |         | Q       |         |     V   |
  3+ 5       2.6235      9.98  |        Q|         |         |      V  |
  3+10       2.6729      7.17  |      Q  |         |         |      V  |
  3+15       2.7079      5.08  |    Q    |         |         |       V |
  3+20       2.7345      3.85  |  Q      |         |         |       V |
  3+25       2.7554      3.04  |  Q      |         |         |        V|
```

3+30	2.7722	2.44	| Q	|	|	V|
3+35	2.7857	1.97	|Q	|	|	V|
3+40	2.7965	1.56	|Q	|	|	V|
3+45	2.8050	1.23	|Q	|	|	V|
3+50	2.8117	0.98	Q	|	|	V|
3+55	2.8170	0.78	Q	|	|	V|
4+ 0	2.8209	0.57	Q	|	|	V|
4+ 5	2.8234	0.36	Q	|	|	V|
4+10	2.8247	0.18	Q	|	|	V|
4+15	2.8253	0.09	Q	|	|	V|
4+20	2.8256	0.06	Q	|	|	V|
4+25	2.8258	0.03	Q	|	|	V|
4+30	2.8259	0.01	Q	|	|	V|

```
       U n i t   H y d r o g r a p h   A n a l y s i s

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              Study date  08/14/25 File: PROA62.out

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----------------------------------------------------------------------

Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978


Program License Serial Number 5006

----------------------------------------------------------------------
 English (in-lb) Input Units Used
 English Rainfall Data (Inches) Input Values Used

 English Units used in output format



----------------------------------------------------------------------
----------------------------------------------------------------------
Drainage Area =      75.83(Ac.)  =      0.118 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment =      75.83(Ac.)  =      0.118 Sq. Mi.
Length along longest watercourse =    4720.00(Ft.)
Length along longest watercourse measured to centroid =    2360.00(Ft.)
Length along longest watercourse =      0.894 Mi.
Length along longest watercourse measured to centroid =      0.447 Mi.
Difference in elevation =     166.00(Ft.)
Slope along watercourse =    185.6949 Ft./Mi.
Average Manning's 'N' = 0.030
Lag time =    0.188 Hr.
Lag time =    11.30 Min.
25% of lag time =     2.82 Min.
40% of lag time =     4.52 Min.
Unit time =     5.00 Min.
Duration of storm = 6 Hour(s)
User Entered Base Flow =     0.00(CFS)

2 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
       75.83           1.10                 83.41

100 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
       75.83           3.00                227.49

STORM EVENT (YEAR) =    2.00
Area Averaged 2-Year Rainfall =    1.100(In)
Area Averaged 100-Year Rainfall =    3.000(In)

Point rain (area averaged) =    1.100(In)
Areal adjustment factor =   99.97 %
Adjusted average point rain =    1.100(In)

Sub-Area Data:
Area(Ac.)         Runoff Index   Impervious %
    75.830           69.00         0.500
 Total Area Entered =     75.83(Ac.)


RI    RI   Infil. Rate Impervious   Adj. Infil. Rate  Area%     F
AMC2 AMC-2    (In/Hr)    (Dec.%)     (In/Hr)      (Dec.)    (In/Hr)
```

69.0 69.0 0.373 0.500 0.205 1.000 0.205
Sum (F) = 0.205

Area averaged mean soil loss (F) (In/Hr) = 0.205
Minimum soil loss rate ((In/Hr)) = 0.103
(for 24 hour storm duration)
Soil low loss rate (decimal) = 0.500

U n i t H y d r o g r a p h
VALLEY S-Curve

Unit Hydrograph Data

Unit time period (hrs)		Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	44.254	5.079	3.882
2	0.167	88.509	21.318	16.291
3	0.250	132.763	28.439	21.734
4	0.333	177.017	15.372	11.747
5	0.417	221.272	7.523	5.749
6	0.500	265.526	5.074	3.878
7	0.583	309.780	3.778	2.887
8	0.667	354.034	2.830	2.163
9	0.750	398.289	2.240	1.712
10	0.833	442.543	1.702	1.301
11	0.917	486.797	1.386	1.059
12	1.000	531.052	1.242	0.949
13	1.083	575.306	0.960	0.734
14	1.167	619.560	0.796	0.608
15	1.250	663.815	0.638	0.488
16	1.333	708.069	0.484	0.370
17	1.417	752.323	0.443	0.338
18	1.500	796.577	0.443	0.338
19	1.583	840.832	0.255	0.195
			Sum = 100.000	Sum= 76.422

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr) Max	Low	Effective (In/Hr)
1	0.08	0.50	0.066	(0.205)	0.033	0.033
2	0.17	0.60	0.079	(0.205)	0.040	0.040
3	0.25	0.60	0.079	(0.205)	0.040	0.040
4	0.33	0.60	0.079	(0.205)	0.040	0.040
5	0.42	0.60	0.079	(0.205)	0.040	0.040
6	0.50	0.70	0.092	(0.205)	0.046	0.046
7	0.58	0.70	0.092	(0.205)	0.046	0.046
8	0.67	0.70	0.092	(0.205)	0.046	0.046
9	0.75	0.70	0.092	(0.205)	0.046	0.046
10	0.83	0.70	0.092	(0.205)	0.046	0.046
11	0.92	0.70	0.092	(0.205)	0.046	0.046
12	1.00	0.80	0.106	(0.205)	0.053	0.053
13	1.08	0.80	0.106	(0.205)	0.053	0.053
14	1.17	0.80	0.106	(0.205)	0.053	0.053
15	1.25	0.80	0.106	(0.205)	0.053	0.053
16	1.33	0.80	0.106	(0.205)	0.053	0.053
17	1.42	0.80	0.106	(0.205)	0.053	0.053
18	1.50	0.80	0.106	(0.205)	0.053	0.053
19	1.58	0.80	0.106	(0.205)	0.053	0.053
20	1.67	0.80	0.106	(0.205)	0.053	0.053
21	1.75	0.80	0.106	(0.205)	0.053	0.053
22	1.83	0.80	0.106	(0.205)	0.053	0.053
23	1.92	0.80	0.106	(0.205)	0.053	0.053
24	2.00	0.90	0.119	(0.205)	0.059	0.059
25	2.08	0.80	0.106	(0.205)	0.053	0.053
26	2.17	0.90	0.119	(0.205)	0.059	0.059
27	2.25	0.90	0.119	(0.205)	0.059	0.059

```
28   2.33     0.90      0.119       (  0.205)       0.059        0.059
29   2.42     0.90      0.119       (  0.205)       0.059        0.059
30   2.50     0.90      0.119       (  0.205)       0.059        0.059
31   2.58     0.90      0.119       (  0.205)       0.059        0.059
32   2.67     0.90      0.119       (  0.205)       0.059        0.059
33   2.75     1.00      0.132       (  0.205)       0.066        0.066
34   2.83     1.00      0.132       (  0.205)       0.066        0.066
35   2.92     1.00      0.132       (  0.205)       0.066        0.066
36   3.00     1.00      0.132       (  0.205)       0.066        0.066
37   3.08     1.00      0.132       (  0.205)       0.066        0.066
38   3.17     1.10      0.145       (  0.205)       0.073        0.073
39   3.25     1.10      0.145       (  0.205)       0.073        0.073
40   3.33     1.10      0.145       (  0.205)       0.073        0.073
41   3.42     1.20      0.158       (  0.205)       0.079        0.079
42   3.50     1.30      0.172       (  0.205)       0.086        0.086
43   3.58     1.40      0.185       (  0.205)       0.092        0.092
44   3.67     1.40      0.185       (  0.205)       0.092        0.092
45   3.75     1.50      0.198       (  0.205)       0.099        0.099
46   3.83     1.50      0.198       (  0.205)       0.099        0.099
47   3.92     1.60      0.211       (  0.205)       0.106        0.106
48   4.00     1.60      0.211       (  0.205)       0.106        0.106
49   4.08     1.70      0.224       (  0.205)       0.112        0.112
50   4.17     1.80      0.238       (  0.205)       0.119        0.119
51   4.25     1.90      0.251       (  0.205)       0.125        0.125
52   4.33     2.00      0.264       (  0.205)       0.132        0.132
53   4.42     2.10      0.277       (  0.205)       0.139        0.139
54   4.50     2.10      0.277       (  0.205)       0.139        0.139
55   4.58     2.20      0.290       (  0.205)       0.145        0.145
56   4.67     2.30      0.304       (  0.205)       0.152        0.152
57   4.75     2.40      0.317       (  0.205)       0.158        0.158
58   4.83     2.40      0.317       (  0.205)       0.158        0.158
59   4.92     2.50      0.330       (  0.205)       0.165        0.165
60   5.00     2.60      0.343       (  0.205)       0.172        0.172
61   5.08     3.10      0.409       (  0.205)       0.205        0.205
62   5.17     3.60      0.475          0.205    (  0.238)        0.270
63   5.25     3.90      0.515          0.205    (  0.257)        0.310
64   5.33     4.20      0.554          0.205    (  0.277)        0.349
65   5.42     4.70      0.620          0.205    (  0.310)        0.415
66   5.50     5.60      0.739          0.205    (  0.370)        0.534
67   5.58     1.90      0.251       (  0.205)       0.125        0.125
68   5.67     0.90      0.119       (  0.205)       0.059        0.059
69   5.75     0.60      0.079       (  0.205)       0.040        0.040
70   5.83     0.50      0.066       (  0.205)       0.033        0.033
71   5.92     0.30      0.040       (  0.205)       0.020        0.020
72   6.00     0.20      0.026       (  0.205)       0.013        0.013
            (Loss Rate Not Used)
   Sum =     100.0                                  Sum =     7.0
      Flood volume = Effective rainfall      0.59(In)
       times area      75.8(Ac.)/[(In)/(Ft.)] =       3.7(Ac.Ft)
      Total soil loss =      0.51(In)
      Total soil loss =     3.250(Ac.Ft)
      Total rainfall =      1.10(In)
      Flood volume =      161136.6 Cubic Feet
      Total soil loss =      141573.6 Cubic Feet
      ---------------------------------------------------------------------
       Peak flow rate of this hydrograph =     27.326(CFS)
      ---------------------------------------------------------------------
      +++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                          6 - H O U R    S T O R M
                       R u n o f f      H y d r o g r a p h
      ---------------------------------------------------------------------
                   Hydrograph in   5   Minute intervals ((CFS))

      ---------------------------------------------------------------------
Time(h+m) Volume Ac.Ft   Q(CFS)  0        7.5      15.0      22.5      30.0
-------------------------------------------------------------------------
  0+ 5       0.0009      0.13  Q         |         |         |         |
  0+10       0.0056      0.69  Q         |         |         |         |
  0+15       0.0161      1.52  V Q       |         |         |         |
  0+20       0.0302      2.05  V Q       |         |         |         |
  0+25       0.0461      2.32  V  Q      |         |         |         |
```

```
0+30       0.0634      2.51  V  Q      |         |         |         |
0+35       0.0822      2.74  V  Q      |         |         |         |
0+40       0.1027      2.97  |V Q      |         |         |         |
0+45       0.1242      3.12  |V  Q     |         |         |         |
0+50       0.1463      3.21  |V  Q     |         |         |         |
0+55       0.1688      3.28  |V  Q     |         |         |         |
1+ 0       0.1920      3.36  | V Q     |         |         |         |
1+ 5       0.2162      3.51  | V Q     |         |         |         |
1+10       0.2416      3.69  | V Q     |         |         |         |
1+15       0.2678      3.80  | V  Q    |         |         |         |
1+20       0.2944      3.86  |  V Q    |         |         |         |
1+25       0.3213      3.91  |  V Q    |         |         |         |
1+30       0.3484      3.94  |  V Q    |         |         |         |
1+35       0.3758      3.97  |   VQ    |         |         |         |
1+40       0.4032      3.99  |   VQ    |         |         |         |
1+45       0.4308      4.00  |   VQ    |         |         |         |
1+50       0.4583      4.01  |   VQ    |         |         |         |
1+55       0.4860      4.01  |    Q    |         |         |         |
2+ 0       0.5139      4.05  |    Q    |         |         |         |
2+ 5       0.5423      4.13  |    Q    |         |         |         |
2+10       0.5712      4.20  |    QV   |         |         |         |
2+15       0.6004      4.24  |    QV   |         |         |         |
2+20       0.6304      4.35  |    QV   |         |         |         |
2+25       0.6608      4.41  |    Q V  |         |         |         |
2+30       0.6914      4.45  |    Q V  |         |         |         |
2+35       0.7222      4.47  |    Q V  |         |         |         |
2+40       0.7531      4.48  |    Q  V |         |         |         |
2+45       0.7842      4.52  |     Q V |         |         |         |
2+50       0.8161      4.64  |     Q V |         |         |         |
2+55       0.8491      4.79  |     Q  V|         |         |         |
3+ 0       0.8827      4.87  |     Q  V|         |         |         |
3+ 5       0.9166      4.92  |     Q  V|         |         |         |
3+10       0.9508      4.97  |     Q   V         |         |         |
3+15       0.9859      5.10  |     Q   V         |         |         |
3+20       1.0222      5.26  |      Q  |V        |         |         |
3+25       1.0592      5.38  |      Q  |V        |         |         |
3+30       1.0975      5.56  |      Q  |V        |         |         |
3+35       1.1380      5.87  |      Q  | V       |         |         |
3+40       1.1808      6.23  |       Q | V       |         |         |
3+45       1.2258      6.53  |       Q |  V      |         |         |
3+50       1.2726      6.79  |        Q|  V      |         |         |
3+55       1.3212      7.06  |        Q|   V     |         |         |
4+ 0       1.3715      7.31  |        Q|   V     |         |         |
4+ 5       1.4237      7.57  |         Q    V    |         |         |
4+10       1.4777      7.85  |         Q    V    |         |         |
4+15       1.5343      8.21  |         Q     V   |         |         |
4+20       1.5938      8.63  |         |Q     V  |         |         |
4+25       1.6563      9.08  |         | Q    V  |         |         |
4+30       1.7217      9.51  |         | Q     V |         |         |
4+35       1.7897      9.87  |         |  Q     V|         |         |
4+40       1.8600     10.20  |         |  Q      V         |         |
4+45       1.9331     10.61  |         |   Q     V         |         |
4+50       2.0090     11.03  |         |   Q     |V        |         |
4+55       2.0875     11.39  |         |    Q    | V       |         |
5+ 0       2.1682     11.72  |         |    Q    |  V      |         |
5+ 5       2.2525     12.23  |         |     Q   |   V     |         |
5+10       2.3443     13.34  |         |      Q  |    V    |         |
5+15       2.4508     15.47  |         |         Q     V   |         |
5+20       2.5762     18.20  |         |         |   Q  V  |         |
5+25       2.7208     21.01  |         |         |       QV|         |
5+30       2.8892     24.45  |         |         |         |VQ       |
5+35       3.0774     27.33  |         |         |         |  V  Q   |
5+40       3.2458     24.45  |         |         |         | Q  V    |
5+45       3.3608     16.69  |         |         | Q       |     V   |
5+50       3.4394     11.43  |         |    Q    |         |      V  |
5+55       3.4991      8.66  |         |Q        |         |      V  |
6+ 0       3.5459      6.80  |        Q|         |         |       V |
6+ 5       3.5823      5.29  |      Q  |         |         |       V |
6+10       3.6100      4.03  |    Q    |         |         |        V|
6+15       3.6308      3.02  |   Q     |         |         |        V|
6+20       3.6470      2.36  |  Q      |         |         |        V|
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    6+25       3.6601      1.89  | Q       |         |         |        V|
    6+30       3.6704      1.49  |Q        |         |         |        V|
    6+35       3.6785      1.19  |Q        |         |         |        V|
    6+40       3.6849      0.93  |Q        |         |         |        V|
    6+45       3.6899      0.71  Q         |         |         |        V|
    6+50       3.6936      0.55  Q         |         |         |        V|
    6+55       3.6963      0.39  Q         |         |         |        V|
    7+ 0       3.6978      0.22  Q         |         |         |        V|
    7+ 5       3.6984      0.09  Q         |         |         |        V|
    7+10       3.6988      0.05  Q         |         |         |        V|
    7+15       3.6990      0.03  Q         |         |         |        V|
    7+20       3.6991      0.02  Q         |         |         |        V|
    7+25       3.6992      0.01  Q         |         |         |        V|
    7+30       3.6992      0.00  Q         |         |         |         V
--------------------------------------------------------------------------
```

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       U n i t   H y d r o g r a p h   A n a l y s i s

       Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2008, Version 8.1
              Study date  08/14/25 File: PROA242.out

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------------------------------------------------------------------------------

Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978


Program License Serial Number 5006

------------------------------------------------------------------------
 English (in-lb) Input Units Used
 English Rainfall Data (Inches) Input Values Used

 English Units used in output format



------------------------------------------------------------------------
------------------------------------------------------------------------
Drainage Area =      75.83(Ac.)  =      0.118 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment =      75.83(Ac.)  =      0.118 Sq. Mi.
Length along longest watercourse =    4720.00(Ft.)
Length along longest watercourse measured to centroid =    2360.00(Ft.)
Length along longest watercourse =      0.894 Mi.
Length along longest watercourse measured to centroid =      0.447 Mi.
Difference in elevation =     166.00(Ft.)
Slope along watercourse =    185.6949 Ft./Mi.
Average Manning's 'N' = 0.030
Lag time =    0.188 Hr.
Lag time =    11.30 Min.
25% of lag time =     2.82 Min.
40% of lag time =     4.52 Min.
Unit time =     5.00 Min.
Duration of storm = 24 Hour(s)
User Entered Base Flow =     0.00(CFS)

2 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
       75.83           1.80                136.49

100 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
       75.83           5.00                379.15

STORM EVENT (YEAR) =    2.00
Area Averaged 2-Year Rainfall =    1.800(In)
Area Averaged 100-Year Rainfall =    5.000(In)

Point rain (area averaged) =    1.800(In)
Areal adjustment factor =   99.99 %
Adjusted average point rain =    1.800(In)

Sub-Area Data:
Area(Ac.)         Runoff Index   Impervious %
    75.830           69.00         0.500
 Total Area Entered =     75.83(Ac.)


RI    RI   Infil. Rate Impervious   Adj. Infil. Rate  Area%     F
AMC2 AMC-2     (In/Hr)    (Dec.%)     (In/Hr)      (Dec.)    (In/Hr)
```

```
69.0  69.0      0.373     0.500        0.205       1.000      0.205
                                                  Sum (F) =   0.205
Area averaged mean soil loss (F) (In/Hr) =  0.205
Minimum soil loss rate ((In/Hr)) =  0.103
(for 24 hour storm duration)
Soil low loss rate (decimal) =   0.500
------------------------------------------------------------------------

               U n i t  H y d r o g r a p h
                      VALLEY S-Curve
------------------------------------------------------------------------
               Unit Hydrograph Data
------------------------------------------------------------------------
Unit time period   Time % of lag   Distribution   Unit Hydrograph
    (hrs)                          Graph %           (CFS)
------------------------------------------------------------------------
    1   0.083         44.254          5.079             3.882
    2   0.167         88.509         21.318            16.291
    3   0.250        132.763         28.439            21.734
    4   0.333        177.017         15.372            11.747
    5   0.417        221.272          7.523             5.749
    6   0.500        265.526          5.074             3.878
    7   0.583        309.780          3.778             2.887
    8   0.667        354.034          2.830             2.163
    9   0.750        398.289          2.240             1.712
   10   0.833        442.543          1.702             1.301
   11   0.917        486.797          1.386             1.059
   12   1.000        531.052          1.242             0.949
   13   1.083        575.306          0.960             0.734
   14   1.167        619.560          0.796             0.608
   15   1.250        663.815          0.638             0.488
   16   1.333        708.069          0.484             0.370
   17   1.417        752.323          0.443             0.338
   18   1.500        796.577          0.443             0.338
   19   1.583        840.832          0.255             0.195
                                 Sum = 100.000   Sum=      76.422
------------------------------------------------------------------------

 The following loss rate calculations reflect use of the minimum calculated loss
 rate subtracted from the Storm Rain to produce the maximum Effective Rain value

 Unit Time   Pattern   Storm Rain     Loss rate(In./Hr)     Effective
      (Hr.)  Percent   (In/Hr)         Max    |   Low         (In/Hr)
  1   0.08     0.07      0.014       (  0.363)       0.007         0.007
  2   0.17     0.07      0.014       (  0.362)       0.007         0.007
  3   0.25     0.07      0.014       (  0.361)       0.007         0.007
  4   0.33     0.10      0.022       (  0.359)       0.011         0.011
  5   0.42     0.10      0.022       (  0.358)       0.011         0.011
  6   0.50     0.10      0.022       (  0.356)       0.011         0.011
  7   0.58     0.10      0.022       (  0.355)       0.011         0.011
  8   0.67     0.10      0.022       (  0.354)       0.011         0.011
  9   0.75     0.10      0.022       (  0.352)       0.011         0.011
 10   0.83     0.13      0.029       (  0.351)       0.014         0.014
 11   0.92     0.13      0.029       (  0.350)       0.014         0.014
 12   1.00     0.13      0.029       (  0.348)       0.014         0.014
 13   1.08     0.10      0.022       (  0.347)       0.011         0.011
 14   1.17     0.10      0.022       (  0.345)       0.011         0.011
 15   1.25     0.10      0.022       (  0.344)       0.011         0.011
 16   1.33     0.10      0.022       (  0.343)       0.011         0.011
 17   1.42     0.10      0.022       (  0.341)       0.011         0.011
 18   1.50     0.10      0.022       (  0.340)       0.011         0.011
 19   1.58     0.10      0.022       (  0.339)       0.011         0.011
 20   1.67     0.10      0.022       (  0.337)       0.011         0.011
 21   1.75     0.10      0.022       (  0.336)       0.011         0.011
 22   1.83     0.13      0.029       (  0.335)       0.014         0.014
 23   1.92     0.13      0.029       (  0.333)       0.014         0.014
 24   2.00     0.13      0.029       (  0.332)       0.014         0.014
 25   2.08     0.13      0.029       (  0.330)       0.014         0.014
 26   2.17     0.13      0.029       (  0.329)       0.014         0.014
 27   2.25     0.13      0.029       (  0.328)       0.014         0.014
```

28	2.33	0.13	0.029	(0.326)	0.014	0.014
29	2.42	0.13	0.029	(0.325)	0.014	0.014
30	2.50	0.13	0.029	(0.324)	0.014	0.014
31	2.58	0.17	0.036	(0.323)	0.018	0.018
32	2.67	0.17	0.036	(0.321)	0.018	0.018
33	2.75	0.17	0.036	(0.320)	0.018	0.018
34	2.83	0.17	0.036	(0.319)	0.018	0.018
35	2.92	0.17	0.036	(0.317)	0.018	0.018
36	3.00	0.17	0.036	(0.316)	0.018	0.018
37	3.08	0.17	0.036	(0.315)	0.018	0.018
38	3.17	0.17	0.036	(0.313)	0.018	0.018
39	3.25	0.17	0.036	(0.312)	0.018	0.018
40	3.33	0.17	0.036	(0.311)	0.018	0.018
41	3.42	0.17	0.036	(0.309)	0.018	0.018
42	3.50	0.17	0.036	(0.308)	0.018	0.018
43	3.58	0.17	0.036	(0.307)	0.018	0.018
44	3.67	0.17	0.036	(0.306)	0.018	0.018
45	3.75	0.17	0.036	(0.304)	0.018	0.018
46	3.83	0.20	0.043	(0.303)	0.022	0.022
47	3.92	0.20	0.043	(0.302)	0.022	0.022
48	4.00	0.20	0.043	(0.300)	0.022	0.022
49	4.08	0.20	0.043	(0.299)	0.022	0.022
50	4.17	0.20	0.043	(0.298)	0.022	0.022
51	4.25	0.20	0.043	(0.297)	0.022	0.022
52	4.33	0.23	0.050	(0.295)	0.025	0.025
53	4.42	0.23	0.050	(0.294)	0.025	0.025
54	4.50	0.23	0.050	(0.293)	0.025	0.025
55	4.58	0.23	0.050	(0.292)	0.025	0.025
56	4.67	0.23	0.050	(0.290)	0.025	0.025
57	4.75	0.23	0.050	(0.289)	0.025	0.025
58	4.83	0.27	0.058	(0.288)	0.029	0.029
59	4.92	0.27	0.058	(0.287)	0.029	0.029
60	5.00	0.27	0.058	(0.285)	0.029	0.029
61	5.08	0.20	0.043	(0.284)	0.022	0.022
62	5.17	0.20	0.043	(0.283)	0.022	0.022
63	5.25	0.20	0.043	(0.282)	0.022	0.022
64	5.33	0.23	0.050	(0.280)	0.025	0.025
65	5.42	0.23	0.050	(0.279)	0.025	0.025
66	5.50	0.23	0.050	(0.278)	0.025	0.025
67	5.58	0.27	0.058	(0.277)	0.029	0.029
68	5.67	0.27	0.058	(0.275)	0.029	0.029
69	5.75	0.27	0.058	(0.274)	0.029	0.029
70	5.83	0.27	0.058	(0.273)	0.029	0.029
71	5.92	0.27	0.058	(0.272)	0.029	0.029
72	6.00	0.27	0.058	(0.271)	0.029	0.029
73	6.08	0.30	0.065	(0.269)	0.032	0.032
74	6.17	0.30	0.065	(0.268)	0.032	0.032
75	6.25	0.30	0.065	(0.267)	0.032	0.032
76	6.33	0.30	0.065	(0.266)	0.032	0.032
77	6.42	0.30	0.065	(0.265)	0.032	0.032
78	6.50	0.30	0.065	(0.263)	0.032	0.032
79	6.58	0.33	0.072	(0.262)	0.036	0.036
80	6.67	0.33	0.072	(0.261)	0.036	0.036
81	6.75	0.33	0.072	(0.260)	0.036	0.036
82	6.83	0.33	0.072	(0.259)	0.036	0.036
83	6.92	0.33	0.072	(0.258)	0.036	0.036
84	7.00	0.33	0.072	(0.256)	0.036	0.036
85	7.08	0.33	0.072	(0.255)	0.036	0.036
86	7.17	0.33	0.072	(0.254)	0.036	0.036
87	7.25	0.33	0.072	(0.253)	0.036	0.036
88	7.33	0.37	0.079	(0.252)	0.040	0.040
89	7.42	0.37	0.079	(0.251)	0.040	0.040
90	7.50	0.37	0.079	(0.249)	0.040	0.040
91	7.58	0.40	0.086	(0.248)	0.043	0.043
92	7.67	0.40	0.086	(0.247)	0.043	0.043
93	7.75	0.40	0.086	(0.246)	0.043	0.043
94	7.83	0.43	0.094	(0.245)	0.047	0.047
95	7.92	0.43	0.094	(0.244)	0.047	0.047
96	8.00	0.43	0.094	(0.243)	0.047	0.047
97	8.08	0.50	0.108	(0.242)	0.054	0.054
98	8.17	0.50	0.108	(0.240)	0.054	0.054

99	8.25	0.50	0.108	(0.239)	0.054	0.054
100	8.33	0.50	0.108	(0.238)	0.054	0.054
101	8.42	0.50	0.108	(0.237)	0.054	0.054
102	8.50	0.50	0.108	(0.236)	0.054	0.054
103	8.58	0.53	0.115	(0.235)	0.058	0.058
104	8.67	0.53	0.115	(0.234)	0.058	0.058
105	8.75	0.53	0.115	(0.233)	0.058	0.058
106	8.83	0.57	0.122	(0.232)	0.061	0.061
107	8.92	0.57	0.122	(0.230)	0.061	0.061
108	9.00	0.57	0.122	(0.229)	0.061	0.061
109	9.08	0.63	0.137	(0.228)	0.068	0.068
110	9.17	0.63	0.137	(0.227)	0.068	0.068
111	9.25	0.63	0.137	(0.226)	0.068	0.068
112	9.33	0.67	0.144	(0.225)	0.072	0.072
113	9.42	0.67	0.144	(0.224)	0.072	0.072
114	9.50	0.67	0.144	(0.223)	0.072	0.072
115	9.58	0.70	0.151	(0.222)	0.076	0.076
116	9.67	0.70	0.151	(0.221)	0.076	0.076
117	9.75	0.70	0.151	(0.220)	0.076	0.076
118	9.83	0.73	0.158	(0.219)	0.079	0.079
119	9.92	0.73	0.158	(0.218)	0.079	0.079
120	10.00	0.73	0.158	(0.217)	0.079	0.079
121	10.08	0.50	0.108	(0.215)	0.054	0.054
122	10.17	0.50	0.108	(0.214)	0.054	0.054
123	10.25	0.50	0.108	(0.213)	0.054	0.054
124	10.33	0.50	0.108	(0.212)	0.054	0.054
125	10.42	0.50	0.108	(0.211)	0.054	0.054
126	10.50	0.50	0.108	(0.210)	0.054	0.054
127	10.58	0.67	0.144	(0.209)	0.072	0.072
128	10.67	0.67	0.144	(0.208)	0.072	0.072
129	10.75	0.67	0.144	(0.207)	0.072	0.072
130	10.83	0.67	0.144	(0.206)	0.072	0.072
131	10.92	0.67	0.144	(0.205)	0.072	0.072
132	11.00	0.67	0.144	(0.204)	0.072	0.072
133	11.08	0.63	0.137	(0.203)	0.068	0.068
134	11.17	0.63	0.137	(0.202)	0.068	0.068
135	11.25	0.63	0.137	(0.201)	0.068	0.068
136	11.33	0.63	0.137	(0.200)	0.068	0.068
137	11.42	0.63	0.137	(0.199)	0.068	0.068
138	11.50	0.63	0.137	(0.198)	0.068	0.068
139	11.58	0.57	0.122	(0.197)	0.061	0.061
140	11.67	0.57	0.122	(0.196)	0.061	0.061
141	11.75	0.57	0.122	(0.195)	0.061	0.061
142	11.83	0.60	0.130	(0.194)	0.065	0.065
143	11.92	0.60	0.130	(0.193)	0.065	0.065
144	12.00	0.60	0.130	(0.192)	0.065	0.065
145	12.08	0.83	0.180	(0.191)	0.090	0.090
146	12.17	0.83	0.180	(0.190)	0.090	0.090
147	12.25	0.83	0.180	(0.189)	0.090	0.090
148	12.33	0.87	0.187	(0.189)	0.094	0.094
149	12.42	0.87	0.187	(0.188)	0.094	0.094
150	12.50	0.87	0.187	(0.187)	0.094	0.094
151	12.58	0.93	0.202	(0.186)	0.101	0.101
152	12.67	0.93	0.202	(0.185)	0.101	0.101
153	12.75	0.93	0.202	(0.184)	0.101	0.101
154	12.83	0.97	0.209	(0.183)	0.104	0.104
155	12.92	0.97	0.209	(0.182)	0.104	0.104
156	13.00	0.97	0.209	(0.181)	0.104	0.104
157	13.08	1.13	0.245	(0.180)	0.122	0.122
158	13.17	1.13	0.245	(0.179)	0.122	0.122
159	13.25	1.13	0.245	(0.178)	0.122	0.122
160	13.33	1.13	0.245	(0.177)	0.122	0.122
161	13.42	1.13	0.245	(0.177)	0.122	0.122
162	13.50	1.13	0.245	(0.176)	0.122	0.122
163	13.58	0.77	0.166	(0.175)	0.083	0.083
164	13.67	0.77	0.166	(0.174)	0.083	0.083
165	13.75	0.77	0.166	(0.173)	0.083	0.083
166	13.83	0.77	0.166	(0.172)	0.083	0.083
167	13.92	0.77	0.166	(0.171)	0.083	0.083
168	14.00	0.77	0.166	(0.170)	0.083	0.083
169	14.08	0.90	0.194	(0.169)	0.097	0.097

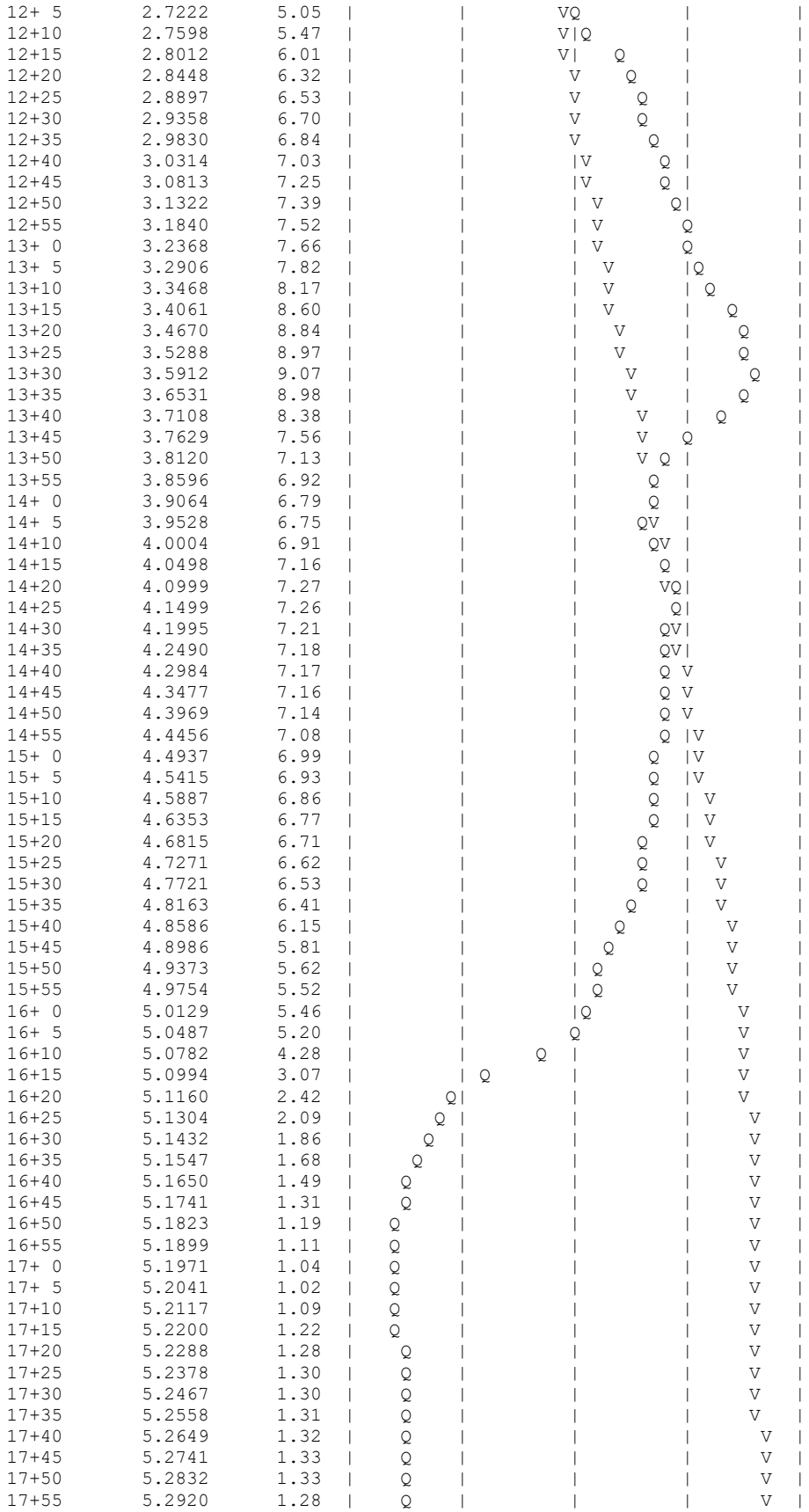
170	14.17	0.90	0.194	(0.169)	0.097	0.097
171	14.25	0.90	0.194	(0.168)	0.097	0.097
172	14.33	0.87	0.187	(0.167)	0.094	0.094
173	14.42	0.87	0.187	(0.166)	0.094	0.094
174	14.50	0.87	0.187	(0.165)	0.094	0.094
175	14.58	0.87	0.187	(0.164)	0.094	0.094
176	14.67	0.87	0.187	(0.163)	0.094	0.094
177	14.75	0.87	0.187	(0.163)	0.094	0.094
178	14.83	0.83	0.180	(0.162)	0.090	0.090
179	14.92	0.83	0.180	(0.161)	0.090	0.090
180	15.00	0.83	0.180	(0.160)	0.090	0.090
181	15.08	0.80	0.173	(0.159)	0.086	0.086
182	15.17	0.80	0.173	(0.159)	0.086	0.086
183	15.25	0.80	0.173	(0.158)	0.086	0.086
184	15.33	0.77	0.166	(0.157)	0.083	0.083
185	15.42	0.77	0.166	(0.156)	0.083	0.083
186	15.50	0.77	0.166	(0.155)	0.083	0.083
187	15.58	0.63	0.137	(0.154)	0.068	0.068
188	15.67	0.63	0.137	(0.154)	0.068	0.068
189	15.75	0.63	0.137	(0.153)	0.068	0.068
190	15.83	0.63	0.137	(0.152)	0.068	0.068
191	15.92	0.63	0.137	(0.151)	0.068	0.068
192	16.00	0.63	0.137	(0.151)	0.068	0.068
193	16.08	0.13	0.029	(0.150)	0.014	0.014
194	16.17	0.13	0.029	(0.149)	0.014	0.014
195	16.25	0.13	0.029	(0.148)	0.014	0.014
196	16.33	0.13	0.029	(0.148)	0.014	0.014
197	16.42	0.13	0.029	(0.147)	0.014	0.014
198	16.50	0.13	0.029	(0.146)	0.014	0.014
199	16.58	0.10	0.022	(0.145)	0.011	0.011
200	16.67	0.10	0.022	(0.145)	0.011	0.011
201	16.75	0.10	0.022	(0.144)	0.011	0.011
202	16.83	0.10	0.022	(0.143)	0.011	0.011
203	16.92	0.10	0.022	(0.142)	0.011	0.011
204	17.00	0.10	0.022	(0.142)	0.011	0.011
205	17.08	0.17	0.036	(0.141)	0.018	0.018
206	17.17	0.17	0.036	(0.140)	0.018	0.018
207	17.25	0.17	0.036	(0.140)	0.018	0.018
208	17.33	0.17	0.036	(0.139)	0.018	0.018
209	17.42	0.17	0.036	(0.138)	0.018	0.018
210	17.50	0.17	0.036	(0.137)	0.018	0.018
211	17.58	0.17	0.036	(0.137)	0.018	0.018
212	17.67	0.17	0.036	(0.136)	0.018	0.018
213	17.75	0.17	0.036	(0.135)	0.018	0.018
214	17.83	0.13	0.029	(0.135)	0.014	0.014
215	17.92	0.13	0.029	(0.134)	0.014	0.014
216	18.00	0.13	0.029	(0.133)	0.014	0.014
217	18.08	0.13	0.029	(0.133)	0.014	0.014
218	18.17	0.13	0.029	(0.132)	0.014	0.014
219	18.25	0.13	0.029	(0.131)	0.014	0.014
220	18.33	0.13	0.029	(0.131)	0.014	0.014
221	18.42	0.13	0.029	(0.130)	0.014	0.014
222	18.50	0.13	0.029	(0.130)	0.014	0.014
223	18.58	0.10	0.022	(0.129)	0.011	0.011
224	18.67	0.10	0.022	(0.128)	0.011	0.011
225	18.75	0.10	0.022	(0.128)	0.011	0.011
226	18.83	0.07	0.014	(0.127)	0.007	0.007
227	18.92	0.07	0.014	(0.126)	0.007	0.007
228	19.00	0.07	0.014	(0.126)	0.007	0.007
229	19.08	0.10	0.022	(0.125)	0.011	0.011
230	19.17	0.10	0.022	(0.125)	0.011	0.011
231	19.25	0.10	0.022	(0.124)	0.011	0.011
232	19.33	0.13	0.029	(0.123)	0.014	0.014
233	19.42	0.13	0.029	(0.123)	0.014	0.014
234	19.50	0.13	0.029	(0.122)	0.014	0.014
235	19.58	0.10	0.022	(0.122)	0.011	0.011
236	19.67	0.10	0.022	(0.121)	0.011	0.011
237	19.75	0.10	0.022	(0.121)	0.011	0.011
238	19.83	0.07	0.014	(0.120)	0.007	0.007
239	19.92	0.07	0.014	(0.120)	0.007	0.007
240	20.00	0.07	0.014	(0.119)	0.007	0.007

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241  20.08     0.10      0.022       (  0.119)       0.011        0.011
242  20.17     0.10      0.022       (  0.118)       0.011        0.011
243  20.25     0.10      0.022       (  0.118)       0.011        0.011
244  20.33     0.10      0.022       (  0.117)       0.011        0.011
245  20.42     0.10      0.022       (  0.116)       0.011        0.011
246  20.50     0.10      0.022       (  0.116)       0.011        0.011
247  20.58     0.10      0.022       (  0.116)       0.011        0.011
248  20.67     0.10      0.022       (  0.115)       0.011        0.011
249  20.75     0.10      0.022       (  0.115)       0.011        0.011
250  20.83     0.07      0.014       (  0.114)       0.007        0.007
251  20.92     0.07      0.014       (  0.114)       0.007        0.007
252  21.00     0.07      0.014       (  0.113)       0.007        0.007
253  21.08     0.10      0.022       (  0.113)       0.011        0.011
254  21.17     0.10      0.022       (  0.112)       0.011        0.011
255  21.25     0.10      0.022       (  0.112)       0.011        0.011
256  21.33     0.07      0.014       (  0.111)       0.007        0.007
257  21.42     0.07      0.014       (  0.111)       0.007        0.007
258  21.50     0.07      0.014       (  0.111)       0.007        0.007
259  21.58     0.10      0.022       (  0.110)       0.011        0.011
260  21.67     0.10      0.022       (  0.110)       0.011        0.011
261  21.75     0.10      0.022       (  0.109)       0.011        0.011
262  21.83     0.07      0.014       (  0.109)       0.007        0.007
263  21.92     0.07      0.014       (  0.109)       0.007        0.007
264  22.00     0.07      0.014       (  0.108)       0.007        0.007
265  22.08     0.10      0.022       (  0.108)       0.011        0.011
266  22.17     0.10      0.022       (  0.108)       0.011        0.011
267  22.25     0.10      0.022       (  0.107)       0.011        0.011
268  22.33     0.07      0.014       (  0.107)       0.007        0.007
269  22.42     0.07      0.014       (  0.107)       0.007        0.007
270  22.50     0.07      0.014       (  0.106)       0.007        0.007
271  22.58     0.07      0.014       (  0.106)       0.007        0.007
272  22.67     0.07      0.014       (  0.106)       0.007        0.007
273  22.75     0.07      0.014       (  0.105)       0.007        0.007
274  22.83     0.07      0.014       (  0.105)       0.007        0.007
275  22.92     0.07      0.014       (  0.105)       0.007        0.007
276  23.00     0.07      0.014       (  0.105)       0.007        0.007
277  23.08     0.07      0.014       (  0.104)       0.007        0.007
278  23.17     0.07      0.014       (  0.104)       0.007        0.007
279  23.25     0.07      0.014       (  0.104)       0.007        0.007
280  23.33     0.07      0.014       (  0.104)       0.007        0.007
281  23.42     0.07      0.014       (  0.103)       0.007        0.007
282  23.50     0.07      0.014       (  0.103)       0.007        0.007
283  23.58     0.07      0.014       (  0.103)       0.007        0.007
284  23.67     0.07      0.014       (  0.103)       0.007        0.007
285  23.75     0.07      0.014       (  0.103)       0.007        0.007
286  23.83     0.07      0.014       (  0.103)       0.007        0.007
287  23.92     0.07      0.014       (  0.103)       0.007        0.007
288  24.00     0.07      0.014       (  0.103)       0.007        0.007
               (Loss Rate Not Used)
    Sum =     100.0                                  Sum =    10.8
      Flood volume = Effective rainfall      0.90(In)
       times area      75.8(Ac.)/[(In)/(Ft.)] =       5.7(Ac.Ft)
      Total soil loss =      0.90(In)
      Total soil loss =     5.686(Ac.Ft)
      Total rainfall =      1.80(In)
      Flood volume =      247699.9 Cubic Feet
      Total soil loss =      247699.9 Cubic Feet
      ---------------------------------------------------------------------
       Peak flow rate of this hydrograph =      9.066(CFS)
      ---------------------------------------------------------------------
      +++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                          24 - H O U R    S T O R M
                     R u n o f f     H y d r o g r a p h
      ---------------------------------------------------------------------
                  Hydrograph in   5   Minute intervals ((CFS))

      ---------------------------------------------------------------------
 Time(h+m) Volume Ac.Ft   Q(CFS)  0        2.5       5.0       7.5      10.0
 ---------------------------------------------------------------------------
   0+ 5       0.0002      0.03  Q         |         |         |         |
   0+10       0.0012      0.15  Q         |         |         |         |
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0+15      0.0033      0.30  VQ        |         |         |         |
0+20      0.0060      0.40  VQ        |         |         |         |
0+25      0.0095      0.50  V Q       |         |         |         |
0+30      0.0137      0.61  V Q       |         |         |         |
0+35      0.0183      0.67  V Q       |         |         |         |
0+40      0.0231      0.71  V Q       |         |         |         |
0+45      0.0282      0.73  V Q       |         |         |         |
0+50      0.0335      0.77  V  Q      |         |         |         |
0+55      0.0392      0.84  V  Q      |         |         |         |
1+ 0      0.0457      0.93  V  Q      |         |         |         |
1+ 5      0.0523      0.97  V  Q      |         |         |         |
1+10      0.0588      0.94  V  Q      |         |         |         |
1+15      0.0649      0.88  V  Q      |         |         |         |
1+20      0.0708      0.86  V  Q      |         |         |         |
1+25      0.0766      0.85  V  Q      |         |         |         |
1+30      0.0824      0.84  V  Q      |         |         |         |
1+35      0.0882      0.84  V  Q      |         |         |         |
1+40      0.0940      0.84  V  Q      |         |         |         |
1+45      0.0998      0.84  V  Q      |         |         |         |
1+50      0.1056      0.85  V  Q      |         |         |         |
1+55      0.1119      0.91  V  Q      |         |         |         |
2+ 0      0.1186      0.98  V  Q      |         |         |         |
2+ 5      0.1257      1.02  V   Q     |         |         |         |
2+10      0.1329      1.04  V   Q     |         |         |         |
2+15      0.1402      1.06  V   Q     |         |         |         |
2+20      0.1475      1.07  |V  Q     |         |         |         |
2+25      0.1549      1.07  |V  Q     |         |         |         |
2+30      0.1623      1.08  |V  Q     |         |         |         |
2+35      0.1699      1.10  |V  Q     |         |         |         |
2+40      0.1779      1.16  |V  Q     |         |         |         |
2+45      0.1864      1.24  |V  Q     |         |         |         |
2+50      0.1953      1.29  |V   Q    |         |         |         |
2+55      0.2043      1.31  |V   Q    |         |         |         |
3+ 0      0.2134      1.32  |V   Q    |         |         |         |
3+ 5      0.2226      1.34  |V   Q    |         |         |         |
3+10      0.2319      1.35  |V   Q    |         |         |         |
3+15      0.2412      1.35  |V   Q    |         |         |         |
3+20      0.2505      1.36  |V   Q    |         |         |         |
3+25      0.2599      1.36  |V   Q    |         |         |         |
3+30      0.2693      1.37  |V   Q    |         |         |         |
3+35      0.2787      1.37  |V   Q    |         |         |         |
3+40      0.2882      1.37  | V  Q    |         |         |         |
3+45      0.2976      1.37  | V  Q    |         |         |         |
3+50      0.3072      1.39  | V  Q    |         |         |         |
3+55      0.3171      1.45  | V  Q    |         |         |         |
4+ 0      0.3276      1.53  | V   Q   |         |         |         |
4+ 5      0.3384      1.57  | V   Q   |         |         |         |
4+10      0.3494      1.59  | V   Q   |         |         |         |
4+15      0.3604      1.60  | V   Q   |         |         |         |
4+20      0.3717      1.63  | V   Q   |         |         |         |
4+25      0.3833      1.69  | V   Q   |         |         |         |
4+30      0.3956      1.78  | V    Q  |         |         |         |
4+35      0.4082      1.83  | V    Q  |         |         |         |
4+40      0.4209      1.85  | V    Q  |         |         |         |
4+45      0.4338      1.87  |  V   Q  |         |         |         |
4+50      0.4468      1.90  |  V   Q  |         |         |         |
4+55      0.4603      1.96  |  V   Q  |         |         |         |
5+ 0      0.4745      2.05  |  V    Q |         |         |         |
5+ 5      0.4887      2.07  |  V    Q |         |         |         |
5+10      0.5024      1.98  |  V   Q  |         |         |         |
5+15      0.5150      1.84  |  V   Q  |         |         |         |
5+20      0.5273      1.78  |  V   Q  |         |         |         |
5+25      0.5398      1.81  |  V   Q  |         |         |         |
5+30      0.5527      1.87  |  V   Q  |         |         |         |
5+35      0.5658      1.91  |  V   Q  |         |         |         |
5+40      0.5795      1.98  |   V  Q  |         |         |         |
5+45      0.5937      2.06  |   V   Q |         |         |         |
5+50      0.6082      2.11  |   V   Q |         |         |         |
5+55      0.6229      2.13  |   V   Q |         |         |         |
6+ 0      0.6377      2.15  |   V   Q |         |         |         |
6+ 5      0.6527      2.17  |   V   Q |         |         |         |
```

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 6+10       0.6681      2.24  |   V   Q |         |         |         |
 6+15       0.6842      2.33  |   V    Q|         |         |         |
 6+20       0.7005      2.37  |   V    Q|         |         |         |
 6+25       0.7170      2.40  |    V   Q|         |         |         |
 6+30       0.7337      2.42  |    V   Q|         |         |         |
 6+35       0.7505      2.44  |    V   Q|         |         |         |
 6+40       0.7678      2.51  |    V    Q         |         |         |
 6+45       0.7857      2.60  |    V    Q         |         |         |
 6+50       0.8039      2.65  |    V    Q         |         |         |
 6+55       0.8224      2.67  |    V    Q         |         |         |
 7+ 0       0.8409      2.69  |    V    Q         |         |         |
 7+ 5       0.8595      2.71  |     V   Q         |         |         |
 7+10       0.8783      2.72  |     V   Q         |         |         |
 7+15       0.8970      2.72  |     V   Q         |         |         |
 7+20       0.9159      2.74  |     V   Q         |         |         |
 7+25       0.9353      2.81  |     V   |Q        |         |         |
 7+30       0.9552      2.89  |     V   |Q        |         |         |
 7+35       0.9755      2.95  |     V   |Q        |         |         |
 7+40       0.9964      3.03  |      V  | Q       |         |         |
 7+45       1.0179      3.13  |      V  | Q       |         |         |
 7+50       1.0399      3.19  |      V  | Q       |         |         |
 7+55       1.0625      3.28  |      V  |  Q      |         |         |
 8+ 0       1.0858      3.38  |      V  |  Q      |         |         |
 8+ 5       1.1097      3.47  |      V  |  Q      |         |         |
 8+10       1.1346      3.62  |      V  |   Q     |         |         |
 8+15       1.1608      3.80  |       V |    Q    |         |         |
 8+20       1.1877      3.90  |       V |    Q    |         |         |
 8+25       1.2149      3.96  |       V |    Q    |         |         |
 8+30       1.2424      4.00  |       V |    Q    |         |         |
 8+35       1.2702      4.04  |       V |     Q   |         |         |
 8+40       1.2986      4.12  |        V|     Q   |         |         |
 8+45       1.3276      4.22  |        V|     Q   |         |         |
 8+50       1.3572      4.29  |        V|      Q  |         |         |
 8+55       1.3873      4.38  |        V|      Q  |         |         |
 9+ 0       1.4182      4.48  |        V|      Q  |         |         |
 9+ 5       1.4496      4.57  |         V       Q |         |         |
 9+10       1.4821      4.72  |         V       Q |         |         |
 9+15       1.5159      4.90  |         V        Q|         |         |
 9+20       1.5504      5.02  |         V         Q         |         |
 9+25       1.5858      5.13  |         |V        Q         |         |
 9+30       1.6219      5.25  |         |V        |Q        |         |
 9+35       1.6587      5.34  |         |V        |Q        |         |
 9+40       1.6961      5.44  |         |V        |Q        |         |
 9+45       1.7343      5.55  |         | V       | Q       |         |
 9+50       1.7731      5.63  |         | V       | Q       |         |
 9+55       1.8125      5.72  |         | V       | Q       |         |
10+ 0       1.8527      5.83  |         |  V      |  Q      |         |
10+ 5       1.8926      5.80  |         |  V      |  Q      |         |
10+10       1.9300      5.43  |         |  V      |Q        |         |
10+15       1.9638      4.91  |         |  V     Q|         |         |
10+20       1.9957      4.63  |         |   V   Q |         |         |
10+25       2.0267      4.50  |         |   V   Q |         |         |
10+30       2.0572      4.42  |         |   V  Q  |         |         |
10+35       2.0877      4.43  |         |   V  Q  |         |         |
10+40       2.1198      4.67  |         |   V   Q |         |         |
10+45       2.1545      5.03  |         |    V    Q         |         |
10+50       2.1904      5.21  |         |    V    Q         |         |
10+55       2.2268      5.29  |         |    V    |Q        |         |
11+ 0       2.2636      5.34  |         |    V    |Q        |         |
11+ 5       2.3005      5.36  |         |     V   |Q        |         |
11+10       2.3372      5.33  |         |     V   |Q        |         |
11+15       2.3735      5.27  |         |     V   |Q        |         |
11+20       2.4096      5.24  |         |     V   Q         |         |
11+25       2.4456      5.23  |         |      V  Q         |         |
11+30       2.4816      5.23  |         |      V  Q         |         |
11+35       2.5174      5.20  |         |      V  Q         |         |
11+40       2.5524      5.08  |         |      V  Q         |         |
11+45       2.5863      4.93  |         |       VQ|         |         |
11+50       2.6198      4.86  |         |       VQ|         |         |
11+55       2.6534      4.88  |         |       VQ|         |         |
12+ 0       2.6874      4.93  |         |       VQ|         |         |
```



18+ 0	5.3003	1.20	| Q |	|	|	| V |
18+ 5	5.3083	1.17	| Q |	|	|	| V |
18+10	5.3163	1.15	| Q |	|	|	| V |
18+15	5.3241	1.14	| Q |	|	|	| V |
18+20	5.3319	1.13	| Q |	|	|	| V |
18+25	5.3397	1.13	| Q |	|	|	| V |
18+30	5.3474	1.12	| Q |	|	|	| V |
18+35	5.3550	1.11	| Q |	|	|	| V |
18+40	5.3622	1.04	| Q |	|	|	| V |
18+45	5.3688	0.96	| Q |	|	|	| V |
18+50	5.3750	0.90	| Q |	|	|	| V |
18+55	5.3807	0.82	| Q |	|	|	| V |
19+ 0	5.3857	0.73	| Q |	|	|	| V |
19+ 5	5.3904	0.69	| Q |	|	|	| V |
19+10	5.3953	0.72	| Q |	|	|	| V |
19+15	5.4006	0.77	| Q |	|	|	| V |
19+20	5.4062	0.81	| Q |	|	|	| V |
19+25	5.4123	0.88	| Q |	|	|	| V |
19+30	5.4189	0.96	| Q |	|	|	| V |
19+35	5.4258	0.99	| Q |	|	|	| V |
19+40	5.4324	0.96	| Q |	|	|	| V |
19+45	5.4386	0.90	| Q |	|	|	| V |
19+50	5.4444	0.85	| Q |	|	|	| V |
19+55	5.4498	0.78	| Q |	|	|	| V |
20+ 0	5.4545	0.69	| Q |	|	|	| V |
20+ 5	5.4591	0.66	| Q |	|	|	| V |
20+10	5.4639	0.69	| Q |	|	|	| V |
20+15	5.4691	0.76	| Q |	|	|	| V |
20+20	5.4745	0.79	| Q |	|	|	| V |
20+25	5.4800	0.80	| Q |	|	|	| V |
20+30	5.4856	0.81	| Q |	|	|	| V |
20+35	5.4912	0.81	| Q |	|	|	| V |
20+40	5.4968	0.82	| Q |	|	|	| V |
20+45	5.5024	0.82	| Q |	|	|	| V |
20+50	5.5080	0.80	| Q |	|	|	| V |
20+55	5.5131	0.75	| Q |	|	|	| V |
21+ 0	5.5177	0.67	| Q |	|	|	| V |
21+ 5	5.5221	0.64	| Q |	|	|	| V |
21+10	5.5268	0.68	| Q |	|	|	| V |
21+15	5.5319	0.74	| Q |	|	|	| V |
21+20	5.5372	0.76	| Q |	|	|	| V |
21+25	5.5421	0.72	| Q |	|	|	| V |
21+30	5.5466	0.65	| Q |	|	|	| V|
21+35	5.5509	0.63	| Q |	|	|	| V|
21+40	5.5556	0.67	| Q |	|	|	| V|
21+45	5.5606	0.74	| Q |	|	|	| V|
21+50	5.5658	0.76	| Q |	|	|	| V|
21+55	5.5708	0.71	| Q |	|	|	| V|
22+ 0	5.5752	0.64	| Q |	|	|	| V|
22+ 5	5.5795	0.62	| Q |	|	|	| V|
22+10	5.5841	0.67	| Q |	|	|	| V|
22+15	5.5891	0.73	| Q |	|	|	| V|
22+20	5.5943	0.75	| Q |	|	|	| V|
22+25	5.5992	0.71	| Q |	|	|	| V|
22+30	5.6036	0.64	| Q |	|	|	| V|
22+35	5.6078	0.61	| Q |	|	|	| V|
22+40	5.6119	0.59	| Q |	|	|	| V|
22+45	5.6159	0.58	| Q |	|	|	| V|
22+50	5.6199	0.57	| Q |	|	|	| V|
22+55	5.6238	0.57	| Q |	|	|	| V|
23+ 0	5.6277	0.57	| Q |	|	|	| V|
23+ 5	5.6316	0.56	| Q |	|	|	| V|
23+10	5.6354	0.56	| Q |	|	|	| V|
23+15	5.6393	0.56	| Q |	|	|	| V|
23+20	5.6431	0.56	| Q |	|	|	| V|
23+25	5.6469	0.55	| Q |	|	|	| V|
23+30	5.6507	0.55	| Q |	|	|	| V|
23+35	5.6545	0.55	| Q |	|	|	| V|
23+40	5.6583	0.55	| Q |	|	|	| V|
23+45	5.6621	0.55	| Q |	|	|	| V|
23+50	5.6659	0.55	| Q |	|	|	| V|

```
   23+55       5.6697      0.55  | Q       |         |         |        V|
   24+ 0       5.6735      0.55  | Q       |         |         |        V|
   24+ 5       5.6771      0.52  | Q       |         |         |        V|
   24+10       5.6799      0.41  |Q        |         |         |        V|
   24+15       5.6816      0.25  Q         |         |         |        V|
   24+20       5.6827      0.16  Q         |         |         |        V|
   24+25       5.6836      0.12  Q         |         |         |        V|
   24+30       5.6842      0.09  Q         |         |         |        V|
   24+35       5.6847      0.07  Q         |         |         |        V|
   24+40       5.6851      0.06  Q         |         |         |        V|
   24+45       5.6855      0.05  Q         |         |         |        V|
   24+50       5.6857      0.04  Q         |         |         |        V|
   24+55       5.6859      0.03  Q         |         |         |        V|
   25+ 0       5.6861      0.02  Q         |         |         |        V|
   25+ 5       5.6862      0.02  Q         |         |         |        V|
   25+10       5.6863      0.01  Q         |         |         |        V|
   25+15       5.6863      0.01  Q         |         |         |        V|
   25+20       5.6864      0.01  Q         |         |         |        V|
   25+25       5.6864      0.00  Q         |         |         |        V|
   25+30       5.6864      0.00  Q         |         |         |         V
-------------------------------------------------------------------------
```

U n i t H y d r o g r a p h A n a l y s i s

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Study date 08/14/25 File: PROA15.out

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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978

Program License Serial Number 5006

English (in-lb) Input Units Used
English Rainfall Data (Inches) Input Values Used

English Units used in output format

Drainage Area = 75.83(Ac.) = 0.118 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 75.83(Ac.) = 0.118 Sq. Mi.
Length along longest watercourse = 4720.00(Ft.)
Length along longest watercourse measured to centroid = 2360.00(Ft.)
Length along longest watercourse = 0.894 Mi.
Length along longest watercourse measured to centroid = 0.447 Mi.
Difference in elevation = 166.00(Ft.)
Slope along watercourse = 185.6949 Ft./Mi.
Average Manning's 'N' = 0.030
Lag time = 0.188 Hr.
Lag time = 11.30 Min.
25% of lag time = 2.82 Min.
40% of lag time = 4.52 Min.
Unit time = 5.00 Min.
Duration of storm = 1 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.)[1]	Rainfall(In)[2]	Weighting[1*2]
75.83	0.50	37.91

100 YEAR Area rainfall data:

Area(Ac.)[1]	Rainfall(In)[2]	Weighting[1*2]
75.83	1.30	98.58

STORM EVENT (YEAR) = 5.00
Area Averaged 2-Year Rainfall = 0.500(In)
Area Averaged 100-Year Rainfall = 1.300(In)

Point rain (area averaged) = 0.687(In)
Areal adjustment factor = 99.93 %
Adjusted average point rain = 0.687(In)

Sub-Area Data:

Area(Ac.)	Runoff Index	Impervious %
75.830	69.00	0.500

Total Area Entered = 75.83(Ac.)

RI AMC2	RI AMC-2	Infil. Rate (In/Hr)	Impervious (Dec.%)	Adj. Infil. Rate (In/Hr)	Area% (Dec.)	F (In/Hr)

```
69.0  69.0      0.373     0.500        0.205       1.000      0.205
                                                  Sum (F) =   0.205
Area averaged mean soil loss (F) (In/Hr) =  0.205
Minimum soil loss rate ((In/Hr)) =  0.103
(for 24 hour storm duration)
Soil low loss rate (decimal) =   0.500
------------------------------------------------------------------------
Slope of intensity-duration curve for a 1 hour storm =0.5500
------------------------------------------------------------------------

                U n i t  H y d r o g r a p h
                       VALLEY S-Curve
------------------------------------------------------------------------
                Unit Hydrograph Data
------------------------------------------------------------------------
Unit time period   Time % of lag   Distribution   Unit Hydrograph
    (hrs)                          Graph %            (CFS)
------------------------------------------------------------------------
    1   0.083         44.254          5.079              3.882
    2   0.167         88.509         21.318             16.291
    3   0.250        132.763         28.439             21.734
    4   0.333        177.017         15.372             11.747
    5   0.417        221.272          7.523              5.749
    6   0.500        265.526          5.074              3.878
    7   0.583        309.780          3.778              2.887
    8   0.667        354.034          2.830              2.163
    9   0.750        398.289          2.240              1.712
   10   0.833        442.543          1.702              1.301
   11   0.917        486.797          1.386              1.059
   12   1.000        531.052          1.242              0.949
   13   1.083        575.306          0.960              0.734
   14   1.167        619.560          0.796              0.608
   15   1.250        663.815          0.638              0.488
   16   1.333        708.069          0.484              0.370
   17   1.417        752.323          0.443              0.338
   18   1.500        796.577          0.443              0.338
   19   1.583        840.832          0.255              0.195
                                Sum = 100.000   Sum=      76.422
------------------------------------------------------------------------

 The following loss rate calculations reflect use of the minimum calculated loss
 rate subtracted from the Storm Rain to produce the maximum Effective Rain value

  Unit Time   Pattern   Storm Rain     Loss rate(In./Hr)     Effective
       (Hr.)  Percent   (In/Hr)          Max    |   Low        (In/Hr)
   1   0.08     3.30      0.272       (  0.205)       0.136        0.136
   2   0.17     4.20      0.346       (  0.205)       0.173        0.173
   3   0.25     4.40      0.363       (  0.205)       0.181        0.181
   4   0.33     4.80      0.396       (  0.205)       0.198        0.198
   5   0.42     5.20      0.429          0.205    (  0.214)        0.224
   6   0.50     6.20      0.511          0.205    (  0.256)        0.306
   7   0.58     6.80      0.561          0.205    (  0.280)        0.355
   8   0.67     8.80      0.725          0.205    (  0.363)        0.520
   9   0.75    13.90      1.146          0.205    (  0.573)        0.941
  10   0.83    31.40      2.588          0.205    (  1.294)        2.383
  11   0.92     7.20      0.593          0.205    (  0.297)        0.388
  12   1.00     3.80      0.313       (  0.205)       0.157        0.157
               (Loss Rate Not Used)
     Sum =     100.0                                  Sum =     6.0
       Flood volume = Effective rainfall      0.50(In)
        times area      75.8(Ac.)/[(In)/(Ft.)] =       3.1(Ac.Ft)
       Total soil loss =      0.19(In)
       Total soil loss =     1.201(Ac.Ft)
       Total rainfall =      0.69(In)
       Flood volume =      136776.0 Cubic Feet
       Total soil loss =       52304.0 Cubic Feet
       ---------------------------------------------------------------------
        Peak flow rate of this hydrograph =     76.447(CFS)
       ---------------------------------------------------------------------
       +++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
```

1 - H O U R S T O R M
R u n o f f H y d r o g r a p h

Hydrograph in 5 Minute intervals ((CFS))

Time(h+m)	Volume Ac.Ft	Q(CFS)	0	20.0	40.0	60.0	80.0
0+ 5	0.0036	0.53	Q				
0+10	0.0235	2.89	VQ				
0+15	0.0682	6.48	V Q				
0+20	0.1308	9.09	V Q				
0+25	0.2055	10.85	V Q				
0+30	0.2936	12.79	V Q				
0+35	0.4015	15.66	V Q				
0+40	0.5374	19.73	V Q				
0+45	0.7209	26.65	V Q				
0+50	1.0249	44.15	V Q				
0+55	1.5202	71.91	V Q				
1+ 0	2.0467	76.45	V Q				
1+ 5	2.3857	49.23	Q V				
1+10	2.5855	29.01	Q V				
1+15	2.7157	18.90	Q V				
1+20	2.8094	13.61	Q V				
1+25	2.8805	10.32	Q V				
1+30	2.9364	8.12	Q V				
1+35	2.9803	6.37	Q V				
1+40	3.0160	5.19	Q V				
1+45	3.0459	4.35	Q V				
1+50	3.0698	3.46	Q V				
1+55	3.0891	2.80	Q V				
2+ 0	3.1044	2.22	Q V				
2+ 5	3.1163	1.73	Q V				
2+10	3.1262	1.45	Q V				
2+15	3.1344	1.18	Q V				
2+20	3.1388	0.65	Q V				
2+25	3.1397	0.13	Q V				
2+30	3.1399	0.03	Q V				

```
       U n i t   H y d r o g r a p h   A n a l y s i s

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              Study date  08/14/25 File: PROA35.out

++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
----------------------------------------------------------------------

Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978


Program License Serial Number 5006

----------------------------------------------------------------------
 English (in-lb) Input Units Used
 English Rainfall Data (Inches) Input Values Used

 English Units used in output format



----------------------------------------------------------------------
----------------------------------------------------------------------
Drainage Area =      75.83(Ac.)  =      0.118 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment =      75.83(Ac.)  =      0.118 Sq. Mi.
Length along longest watercourse =    4720.00(Ft.)
Length along longest watercourse measured to centroid =    2360.00(Ft.)
Length along longest watercourse =      0.894 Mi.
Length along longest watercourse measured to centroid =      0.447 Mi.
Difference in elevation =     166.00(Ft.)
Slope along watercourse =    185.6949 Ft./Mi.
Average Manning's 'N' = 0.030
Lag time =    0.188 Hr.
Lag time =    11.30 Min.
25% of lag time =     2.82 Min.
40% of lag time =     4.52 Min.
Unit time =     5.00 Min.
Duration of storm = 3 Hour(s)
User Entered Base Flow =     0.00(CFS)

2 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
       75.83           0.80                 60.66

100 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
       75.83           2.00                151.66

STORM EVENT (YEAR) =    5.00
Area Averaged 2-Year Rainfall =    0.800(In)
Area Averaged 100-Year Rainfall =    2.000(In)

Point rain (area averaged) =    1.081(In)
Areal adjustment factor =   99.97 %
Adjusted average point rain =    1.081(In)

Sub-Area Data:
Area(Ac.)         Runoff Index   Impervious %
    75.830           69.00         0.500
 Total Area Entered =     75.83(Ac.)


RI    RI   Infil. Rate Impervious   Adj. Infil. Rate  Area%     F
AMC2 AMC-2     (In/Hr)    (Dec.%)     (In/Hr)      (Dec.)    (In/Hr)
```

69.0 69.0 0.373 0.500 0.205 1.000 0.205
Sum (F) = 0.205

Area averaged mean soil loss (F) (In/Hr) = 0.205
Minimum soil loss rate ((In/Hr)) = 0.103
(for 24 hour storm duration)
Soil low loss rate (decimal) = 0.500

U n i t H y d r o g r a p h
VALLEY S-Curve

Unit Hydrograph Data

Unit time period (hrs)	Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	44.254	5.079	3.882
2	0.167	88.509	21.318	16.291
3	0.250	132.763	28.439	21.734
4	0.333	177.017	15.372	11.747
5	0.417	221.272	7.523	5.749
6	0.500	265.526	5.074	3.878
7	0.583	309.780	3.778	2.887
8	0.667	354.034	2.830	2.163
9	0.750	398.289	2.240	1.712
10	0.833	442.543	1.702	1.301
11	0.917	486.797	1.386	1.059
12	1.000	531.052	1.242	0.949
13	1.083	575.306	0.960	0.734
14	1.167	619.560	0.796	0.608
15	1.250	663.815	0.638	0.488
16	1.333	708.069	0.484	0.370
17	1.417	752.323	0.443	0.338
18	1.500	796.577	0.443	0.338
19	1.583	840.832	0.255	0.195
		Sum = 100.000	Sum=	76.422

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr) Max	Low	Effective (In/Hr)
1	0.08	1.30	0.169	(0.205)	0.084	0.084
2	0.17	1.30	0.169	(0.205)	0.084	0.084
3	0.25	1.10	0.143	(0.205)	0.071	0.071
4	0.33	1.50	0.195	(0.205)	0.097	0.097
5	0.42	1.50	0.195	(0.205)	0.097	0.097
6	0.50	1.80	0.233	(0.205)	0.117	0.117
7	0.58	1.50	0.195	(0.205)	0.097	0.097
8	0.67	1.80	0.233	(0.205)	0.117	0.117
9	0.75	1.80	0.233	(0.205)	0.117	0.117
10	0.83	1.50	0.195	(0.205)	0.097	0.097
11	0.92	1.60	0.207	(0.205)	0.104	0.104
12	1.00	1.80	0.233	(0.205)	0.117	0.117
13	1.08	2.20	0.285	(0.205)	0.143	0.143
14	1.17	2.20	0.285	(0.205)	0.143	0.143
15	1.25	2.20	0.285	(0.205)	0.143	0.143
16	1.33	2.00	0.259	(0.205)	0.130	0.130
17	1.42	2.60	0.337	(0.205)	0.169	0.169
18	1.50	2.70	0.350	(0.205)	0.175	0.175
19	1.58	2.40	0.311	(0.205)	0.156	0.156
20	1.67	2.70	0.350	(0.205)	0.175	0.175
21	1.75	3.30	0.428	0.205	(0.214)	0.223
22	1.83	3.10	0.402	(0.205)	0.201	0.201
23	1.92	2.90	0.376	(0.205)	0.188	0.188
24	2.00	3.00	0.389	(0.205)	0.195	0.195
25	2.08	3.10	0.402	(0.205)	0.201	0.201
26	2.17	4.20	0.545	0.205	(0.272)	0.340
27	2.25	5.00	0.648	0.205	(0.324)	0.443

```
28   2.33     3.50      0.454          0.205    (  0.227)        0.249
29   2.42     6.80      0.882          0.205    (  0.441)        0.677
30   2.50     7.30      0.947          0.205    (  0.473)        0.742
31   2.58     8.20      1.063          0.205    (  0.532)        0.858
32   2.67     5.90      0.765          0.205    (  0.383)        0.560
33   2.75     2.00      0.259       (  0.205)       0.130        0.130
34   2.83     1.80      0.233       (  0.205)       0.117        0.117
35   2.92     1.80      0.233       (  0.205)       0.117        0.117
36   3.00     0.60      0.078       (  0.205)       0.039        0.039
            (Loss Rate Not Used)
   Sum =     100.0                                    Sum =     7.7
      Flood volume = Effective rainfall      0.64(In)
       times area      75.8(Ac.)/[(In)/(Ft.)] =       4.1(Ac.Ft)
      Total soil loss =      0.44(In)
      Total soil loss =     2.769(Ac.Ft)
      Total rainfall =      1.08(In)
      Flood volume =      176856.1 Cubic Feet
      Total soil loss =      120623.4 Cubic Feet
      ---------------------------------------------------------------------
       Peak flow rate of this hydrograph =     46.310(CFS)
      ---------------------------------------------------------------------
      +++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                          3 - H O U R    S T O R M
                     R u n o f f     H y d r o g r a p h
      ---------------------------------------------------------------------
                  Hydrograph in   5   Minute intervals ((CFS))

      ---------------------------------------------------------------------
Time(h+m) Volume Ac.Ft   Q(CFS)  0       12.5      25.0      37.5      50.0
-------------------------------------------------------------------------
  0+ 5       0.0023      0.33  Q         |         |         |         |
  0+10       0.0140      1.70  VQ        |         |         |         |
  0+15       0.0380      3.48  V Q       |         |         |         |
  0+20       0.0680      4.36  V  Q      |         |         |         |
  0+25       0.1024      4.99  |V Q      |         |         |         |
  0+30       0.1424      5.80  |V  Q     |         |         |         |
  0+35       0.1873      6.52  |V   Q    |         |         |         |
  0+40       0.2353      6.98  | V  Q    |         |         |         |
  0+45       0.2857      7.31  | V  Q    |         |         |         |
  0+50       0.3387      7.70  |  V  Q   |         |         |         |
  0+55       0.3919      7.72  |  V  Q   |         |         |         |
  1+ 0       0.4446      7.66  |   V Q   |         |         |         |
  1+ 5       0.4999      8.02  |   V Q   |         |         |         |
  1+10       0.5606      8.81  |    V Q  |         |         |         |
  1+15       0.6265      9.58  |     VQ  |         |         |         |
  1+20       0.6950      9.94  |     VQ  |         |         |         |
  1+25       0.7647     10.12  |      VQ |         |         |         |
  1+30       0.8382     10.67  |       Q |         |         |         |
  1+35       0.9175     11.52  |        Q|         |         |         |
  1+40       0.9994     11.89  |        Q|         |         |         |
  1+45       1.0840     12.28  |        QV         |         |         |
  1+50       1.1761     13.37  |         QV        |         |         |
  1+55       1.2744     14.27  |         |QV       |         |         |
  2+ 0       1.3730     14.32  |         |Q V      |         |         |
  2+ 5       1.4715     14.30  |         |Q  V     |         |         |
  2+10       1.5753     15.07  |         | Q  V    |         |         |
  2+15       1.6992     17.99  |         |   Q V   |         |         |
  2+20       1.8514     22.10  |         |      QV |         |         |
  2+25       2.0207     24.58  |         |        Q|         |         |
  2+30       2.2250     29.67  |         |         |V Q      |         |
  2+35       2.4964     39.40  |         |         |   V     |Q        |
  2+40       2.8153     46.31  |         |         |      V  |      Q  |
  2+45       3.1281     45.42  |         |         |         V     Q   |
  2+50       3.3705     35.20  |         |         |       Q |  V      |
  2+55       3.5375     24.24  |         |        Q|         |   V     |
  3+ 0       3.6643     18.41  |         |   Q     |         |     V   |
  3+ 5       3.7636     14.42  |         |Q        |         |      V  |
  3+10       3.8353     10.42  |       Q |         |         |      V  |
  3+15       3.8865      7.43  |    Q    |         |         |       V |
  3+20       3.9255      5.66  |   Q     |         |         |       V |
  3+25       3.9563      4.47  |  Q      |         |         |       V |
```

```
    3+30       3.9811      3.61  | Q       |         |         |        V|
    3+35       4.0012      2.91  | Q       |         |         |        V|
    3+40       4.0171      2.31  |Q        |         |         |        V|
    3+45       4.0296      1.81  |Q        |         |         |        V|
    3+50       4.0395      1.44  |Q        |         |         |        V|
    3+55       4.0473      1.14  Q         |         |         |        V|
    4+ 0       4.0530      0.83  Q         |         |         |        V|
    4+ 5       4.0567      0.52  Q         |         |         |        V|
    4+10       4.0584      0.26  Q         |         |         |        V|
    4+15       4.0592      0.12  Q         |         |         |        V|
    4+20       4.0598      0.08  Q         |         |         |        V|
    4+25       4.0600      0.04  Q         |         |         |        V|
    4+30       4.0601      0.01  Q         |         |         |        V|
-------------------------------------------------------------------------
```

U n i t H y d r o g r a p h A n a l y s i s

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Study date 08/14/25 File: PROA65.out

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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978

Program License Serial Number 5006

English (in-lb) Input Units Used
English Rainfall Data (Inches) Input Values Used

English Units used in output format

Drainage Area = 75.83(Ac.) = 0.118 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 75.83(Ac.) = 0.118 Sq. Mi.
Length along longest watercourse = 4720.00(Ft.)
Length along longest watercourse measured to centroid = 2360.00(Ft.)
Length along longest watercourse = 0.894 Mi.
Length along longest watercourse measured to centroid = 0.447 Mi.
Difference in elevation = 166.00(Ft.)
Slope along watercourse = 185.6949 Ft./Mi.
Average Manning's 'N' = 0.030
Lag time = 0.188 Hr.
Lag time = 11.30 Min.
25% of lag time = 2.82 Min.
40% of lag time = 4.52 Min.
Unit time = 5.00 Min.
Duration of storm = 6 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.)[1]	Rainfall(In)[2]	Weighting[1*2]
75.83	1.10	83.41

100 YEAR Area rainfall data:

Area(Ac.)[1]	Rainfall(In)[2]	Weighting[1*2]
75.83	3.00	227.49

STORM EVENT (YEAR) = 5.00
Area Averaged 2-Year Rainfall = 1.100(In)
Area Averaged 100-Year Rainfall = 3.000(In)

Point rain (area averaged) = 1.545(In)
Areal adjustment factor = 99.97 %
Adjusted average point rain = 1.545(In)

Sub-Area Data:

Area(Ac.)	Runoff Index	Impervious %
75.830	69.00	0.500

Total Area Entered = 75.83(Ac.)

RI AMC2	RI AMC-2	Infil. Rate (In/Hr)	Impervious (Dec.%)	Adj. Infil. Rate (In/Hr)	Area% (Dec.)	F (In/Hr)

```
69.0  69.0      0.373     0.500        0.205       1.000      0.205
                                                  Sum (F) =   0.205
Area averaged mean soil loss (F) (In/Hr) =  0.205
Minimum soil loss rate ((In/Hr)) =  0.103
(for 24 hour storm duration)
Soil low loss rate (decimal) =   0.500
------------------------------------------------------------------------

               U n i t  H y d r o g r a p h
                      VALLEY S-Curve
------------------------------------------------------------------------
               Unit Hydrograph Data
------------------------------------------------------------------------
Unit time period   Time % of lag   Distribution   Unit Hydrograph
    (hrs)                          Graph %           (CFS)
------------------------------------------------------------------------
     1   0.083         44.254          5.079             3.882
     2   0.167         88.509         21.318            16.291
     3   0.250        132.763         28.439            21.734
     4   0.333        177.017         15.372            11.747
     5   0.417        221.272          7.523             5.749
     6   0.500        265.526          5.074             3.878
     7   0.583        309.780          3.778             2.887
     8   0.667        354.034          2.830             2.163
     9   0.750        398.289          2.240             1.712
    10   0.833        442.543          1.702             1.301
    11   0.917        486.797          1.386             1.059
    12   1.000        531.052          1.242             0.949
    13   1.083        575.306          0.960             0.734
    14   1.167        619.560          0.796             0.608
    15   1.250        663.815          0.638             0.488
    16   1.333        708.069          0.484             0.370
    17   1.417        752.323          0.443             0.338
    18   1.500        796.577          0.443             0.338
    19   1.583        840.832          0.255             0.195
                                 Sum = 100.000   Sum=      76.422
------------------------------------------------------------------------

 The following loss rate calculations reflect use of the minimum calculated loss
 rate subtracted from the Storm Rain to produce the maximum Effective Rain value

  Unit Time   Pattern   Storm Rain     Loss rate(In./Hr)     Effective
       (Hr.)  Percent   (In/Hr)         Max    |   Low         (In/Hr)
   1   0.08     0.50      0.093       (  0.205)       0.046         0.046
   2   0.17     0.60      0.111       (  0.205)       0.056         0.056
   3   0.25     0.60      0.111       (  0.205)       0.056         0.056
   4   0.33     0.60      0.111       (  0.205)       0.056         0.056
   5   0.42     0.60      0.111       (  0.205)       0.056         0.056
   6   0.50     0.70      0.130       (  0.205)       0.065         0.065
   7   0.58     0.70      0.130       (  0.205)       0.065         0.065
   8   0.67     0.70      0.130       (  0.205)       0.065         0.065
   9   0.75     0.70      0.130       (  0.205)       0.065         0.065
  10   0.83     0.70      0.130       (  0.205)       0.065         0.065
  11   0.92     0.70      0.130       (  0.205)       0.065         0.065
  12   1.00     0.80      0.148       (  0.205)       0.074         0.074
  13   1.08     0.80      0.148       (  0.205)       0.074         0.074
  14   1.17     0.80      0.148       (  0.205)       0.074         0.074
  15   1.25     0.80      0.148       (  0.205)       0.074         0.074
  16   1.33     0.80      0.148       (  0.205)       0.074         0.074
  17   1.42     0.80      0.148       (  0.205)       0.074         0.074
  18   1.50     0.80      0.148       (  0.205)       0.074         0.074
  19   1.58     0.80      0.148       (  0.205)       0.074         0.074
  20   1.67     0.80      0.148       (  0.205)       0.074         0.074
  21   1.75     0.80      0.148       (  0.205)       0.074         0.074
  22   1.83     0.80      0.148       (  0.205)       0.074         0.074
  23   1.92     0.80      0.148       (  0.205)       0.074         0.074
  24   2.00     0.90      0.167       (  0.205)       0.083         0.083
  25   2.08     0.80      0.148       (  0.205)       0.074         0.074
  26   2.17     0.90      0.167       (  0.205)       0.083         0.083
  27   2.25     0.90      0.167       (  0.205)       0.083         0.083
```

28	2.33	0.90	0.167	(0.205)	0.083	0.083	
29	2.42	0.90	0.167	(0.205)	0.083	0.083	
30	2.50	0.90	0.167	(0.205)	0.083	0.083	
31	2.58	0.90	0.167	(0.205)	0.083	0.083	
32	2.67	0.90	0.167	(0.205)	0.083	0.083	
33	2.75	1.00	0.185	(0.205)	0.093	0.093	
34	2.83	1.00	0.185	(0.205)	0.093	0.093	
35	2.92	1.00	0.185	(0.205)	0.093	0.093	
36	3.00	1.00	0.185	(0.205)	0.093	0.093	
37	3.08	1.00	0.185	(0.205)	0.093	0.093	
38	3.17	1.10	0.204	(0.205)	0.102	0.102	
39	3.25	1.10	0.204	(0.205)	0.102	0.102	
40	3.33	1.10	0.204	(0.205)	0.102	0.102	
41	3.42	1.20	0.222	(0.205)	0.111	0.111	
42	3.50	1.30	0.241	(0.205)	0.120	0.120	
43	3.58	1.40	0.259	(0.205)	0.130	0.130	
44	3.67	1.40	0.259	(0.205)	0.130	0.130	
45	3.75	1.50	0.278	(0.205)	0.139	0.139	
46	3.83	1.50	0.278	(0.205)	0.139	0.139	
47	3.92	1.60	0.297	(0.205)	0.148	0.148	
48	4.00	1.60	0.297	(0.205)	0.148	0.148	
49	4.08	1.70	0.315	(0.205)	0.158	0.158	
50	4.17	1.80	0.334	(0.205)	0.167	0.167	
51	4.25	1.90	0.352	(0.205)	0.176	0.176	
52	4.33	2.00	0.371	(0.205)	0.185	0.185	
53	4.42	2.10	0.389	(0.205)	0.195	0.195	
54	4.50	2.10	0.389	(0.205)	0.195	0.195	
55	4.58	2.20	0.408	(0.205)	0.204	0.204	
56	4.67	2.30	0.426	0.205	(0.213)	0.221	
57	4.75	2.40	0.445	0.205	(0.222)	0.240	
58	4.83	2.40	0.445	0.205	(0.222)	0.240	
59	4.92	2.50	0.463	0.205	(0.232)	0.258	
60	5.00	2.60	0.482	0.205	(0.241)	0.277	
61	5.08	3.10	0.575	0.205	(0.287)	0.370	
62	5.17	3.60	0.667	0.205	(0.334)	0.462	
63	5.25	3.90	0.723	0.205	(0.361)	0.518	
64	5.33	4.20	0.778	0.205	(0.389)	0.573	
65	5.42	4.70	0.871	0.205	(0.436)	0.666	
66	5.50	5.60	1.038	0.205	(0.519)	0.833	
67	5.58	1.90	0.352	(0.205)	0.176	0.176	
68	5.67	0.90	0.167	(0.205)	0.083	0.083	
69	5.75	0.60	0.111	(0.205)	0.056	0.056	
70	5.83	0.50	0.093	(0.205)	0.046	0.046	
71	5.92	0.30	0.056	(0.205)	0.028	0.028	
72	6.00	0.20	0.037	(0.205)	0.019	0.019	

(Loss Rate Not Used)

Sum = 100.0 Sum = 10.5

Flood volume = Effective rainfall 0.87(In)
times area 75.8(Ac.)/[(In)/(Ft.)] = 5.5(Ac.Ft)
Total soil loss = 0.67(In)
Total soil loss = 4.248(Ac.Ft)
Total rainfall = 1.54(In)
Flood volume = 240147.8 Cubic Feet
Total soil loss = 185029.7 Cubic Feet

Peak flow rate of this hydrograph = 43.721(CFS)

++

6 - H O U R S T O R M
R u n o f f H y d r o g r a p h

Hydrograph in 5 Minute intervals ((CFS))

Time(h+m)	Volume Ac.Ft	Q(CFS)	0	12.5	25.0	37.5	50.0
0+ 5	0.0012	0.18	Q	|	|	|	|
0+10	0.0079	0.97	Q	|	|	|	|
0+15	0.0226	2.13	VQ	|	|	|	|
0+20	0.0424	2.88	V Q	|	|	|	|
0+25	0.0648	3.25	V Q	|	|	|	|

```
0+30       0.0890      3.52  V Q       |         |         |         |
0+35       0.1155      3.84  V  Q      |         |         |         |
0+40       0.1442      4.17  |V Q      |         |         |         |
0+45       0.1744      4.38  |V Q      |         |         |         |
0+50       0.2054      4.51  |V Q      |         |         |         |
0+55       0.2371      4.61  |V Q      |         |         |         |
1+ 0       0.2697      4.72  |V Q      |         |         |         |
1+ 5       0.3036      4.94  | VQ      |         |         |         |
1+10       0.3394      5.19  | V Q     |         |         |         |
1+15       0.3761      5.34  | V Q     |         |         |         |
1+20       0.4135      5.42  |  VQ     |         |         |         |
1+25       0.4513      5.49  |  VQ     |         |         |         |
1+30       0.4894      5.54  |  VQ     |         |         |         |
1+35       0.5278      5.58  |  VQ     |         |         |         |
1+40       0.5664      5.60  |   Q     |         |         |         |
1+45       0.6050      5.61  |   Q     |         |         |         |
1+50       0.6438      5.63  |   Q     |         |         |         |
1+55       0.6826      5.64  |   Q     |         |         |         |
2+ 0       0.7218      5.68  |   QV    |         |         |         |
2+ 5       0.7617      5.80  |   QV    |         |         |         |
2+10       0.8023      5.90  |   QV    |         |         |         |
2+15       0.8434      5.96  |   Q V   |         |         |         |
2+20       0.8854      6.11  |   Q V   |         |         |         |
2+25       0.9281      6.20  |   Q V   |         |         |         |
2+30       0.9711      6.25  |   Q  V  |         |         |         |
2+35       1.0143      6.28  |    Q V  |         |         |         |
2+40       1.0577      6.30  |    Q V  |         |         |         |
2+45       1.1015      6.35  |    Q V  |         |         |         |
2+50       1.1463      6.52  |    Q  V |         |         |         |
2+55       1.1927      6.73  |    Q  V |         |         |         |
3+ 0       1.2398      6.84  |    Q  V |         |         |         |
3+ 5       1.2874      6.91  |    Q   V|         |         |         |
3+10       1.3355      6.98  |    Q   V|         |         |         |
3+15       1.3848      7.17  |    Q    V         |         |         |
3+20       1.4357      7.39  |    Q    V         |         |         |
3+25       1.4878      7.56  |     Q   V         |         |         |
3+30       1.5415      7.81  |     Q   |V        |         |         |
3+35       1.5983      8.25  |     Q   |V        |         |         |
3+40       1.6586      8.74  |     Q   | V       |         |         |
3+45       1.7217      9.17  |      Q  | V       |         |         |
3+50       1.7874      9.54  |      Q  | V       |         |         |
3+55       1.8557      9.91  |      Q  |  V      |         |         |
4+ 0       1.9264     10.27  |       Q |  V      |         |         |
4+ 5       1.9996     10.63  |       Q |   V     |         |         |
4+10       2.0756     11.02  |       Q |    V    |         |         |
4+15       2.1550     11.54  |        Q|    V    |         |         |
4+20       2.2385     12.13  |        Q|     V   |         |         |
4+25       2.3263     12.75  |         Q     V   |         |         |
4+30       2.4183     13.36  |         Q      V  |         |         |
4+35       2.5138     13.86  |         |Q      V |         |         |
4+40       2.6127     14.36  |         |Q      V |         |         |
4+45       2.7167     15.10  |         | Q      V|         |         |
4+50       2.8271     16.02  |         | Q       V         |         |
4+55       2.9432     16.86  |         |  Q      |V        |         |
5+ 0       3.0649     17.67  |         |   Q     | V       |         |
5+ 5       3.1957     19.00  |         |    Q    |  V      |         |
5+10       3.3451     21.68  |         |      Q  |   V     |         |
5+15       3.5234     25.90  |         |         Q    V    |         |
5+20       3.7329     30.42  |         |         |   Q  V  |         |
5+25       3.9720     34.73  |         |         |      QV |         |
5+30       4.2462     39.81  |         |         |         VQ        |
5+35       4.5473     43.72  |         |         |         | V Q     |
5+40       4.8123     38.48  |         |         |         Q   V     |
5+45       4.9906     25.89  |         |         Q         |     V   |
5+50       5.1118     17.61  |         |   Q     |         |      V  |
5+55       5.2035     13.31  |         Q         |         |      V  |
6+ 0       5.2754     10.44  |       Q |         |         |       V |
6+ 5       5.3314      8.13  |     Q   |         |         |       V |
6+10       5.3743      6.23  |   Q     |         |         |       V |
6+15       5.4067      4.69  |  Q      |         |         |        V|
6+20       5.4320      3.68  | Q       |         |         |        V|
```

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    6+25       5.4524      2.96  | Q       |         |         |        V|
    6+30       5.4686      2.35  |Q        |         |         |        V|
    6+35       5.4814      1.86  |Q        |         |         |        V|
    6+40       5.4914      1.45  |Q        |         |         |        V|
    6+45       5.4990      1.10  Q         |         |         |        V|
    6+50       5.5048      0.84  Q         |         |         |        V|
    6+55       5.5089      0.60  Q         |         |         |        V|
    7+ 0       5.5111      0.32  Q         |         |         |        V|
    7+ 5       5.5120      0.12  Q         |         |         |        V|
    7+10       5.5125      0.07  Q         |         |         |        V|
    7+15       5.5128      0.04  Q         |         |         |        V|
    7+20       5.5129      0.02  Q         |         |         |        V|
    7+25       5.5130      0.01  Q         |         |         |        V|
    7+30       5.5130      0.00  Q         |         |         |        V|
-------------------------------------------------------------------------
```

```
       U n i t   H y d r o g r a p h   A n a l y s i s

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              Study date  08/14/25 File: PROA245.out

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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978


Program License Serial Number 5006

------------------------------------------------------------------------
 English (in-lb) Input Units Used
 English Rainfall Data (Inches) Input Values Used

 English Units used in output format



------------------------------------------------------------------------
------------------------------------------------------------------------
Drainage Area =      75.83(Ac.)  =      0.118 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment =      75.83(Ac.)  =      0.118 Sq. Mi.
Length along longest watercourse =    4720.00(Ft.)
Length along longest watercourse measured to centroid =    2360.00(Ft.)
Length along longest watercourse =      0.894 Mi.
Length along longest watercourse measured to centroid =      0.447 Mi.
Difference in elevation =     166.00(Ft.)
Slope along watercourse =    185.6949 Ft./Mi.
Average Manning's 'N' = 0.030
Lag time =    0.188 Hr.
Lag time =    11.30 Min.
25% of lag time =     2.82 Min.
40% of lag time =     4.52 Min.
Unit time =     5.00 Min.
Duration of storm = 24 Hour(s)
User Entered Base Flow =     0.00(CFS)

2 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
       75.83           1.80                136.49

100 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
       75.83           5.00                379.15

STORM EVENT (YEAR) =    5.00
Area Averaged 2-Year Rainfall =    1.800(In)
Area Averaged 100-Year Rainfall =    5.000(In)

Point rain (area averaged) =    2.550(In)
Areal adjustment factor =   99.99 %
Adjusted average point rain =    2.549(In)

Sub-Area Data:
Area(Ac.)         Runoff Index   Impervious %
    75.830           69.00         0.500
 Total Area Entered =     75.83(Ac.)


RI    RI   Infil. Rate Impervious   Adj. Infil. Rate  Area%     F
AMC2 AMC-2     (In/Hr)    (Dec.%)     (In/Hr)      (Dec.)    (In/Hr)
```

```
69.0  69.0      0.373     0.500        0.205       1.000      0.205
                                                  Sum (F) =   0.205
Area averaged mean soil loss (F) (In/Hr) =  0.205
Minimum soil loss rate ((In/Hr)) =  0.103
(for 24 hour storm duration)
Soil low loss rate (decimal) =   0.500
------------------------------------------------------------------------

               U n i t  H y d r o g r a p h
                      VALLEY S-Curve
------------------------------------------------------------------------
               Unit Hydrograph Data
------------------------------------------------------------------------
Unit time period   Time % of lag   Distribution   Unit Hydrograph
    (hrs)                          Graph %           (CFS)
------------------------------------------------------------------------
    1   0.083         44.254          5.079             3.882
    2   0.167         88.509         21.318            16.291
    3   0.250        132.763         28.439            21.734
    4   0.333        177.017         15.372            11.747
    5   0.417        221.272          7.523             5.749
    6   0.500        265.526          5.074             3.878
    7   0.583        309.780          3.778             2.887
    8   0.667        354.034          2.830             2.163
    9   0.750        398.289          2.240             1.712
   10   0.833        442.543          1.702             1.301
   11   0.917        486.797          1.386             1.059
   12   1.000        531.052          1.242             0.949
   13   1.083        575.306          0.960             0.734
   14   1.167        619.560          0.796             0.608
   15   1.250        663.815          0.638             0.488
   16   1.333        708.069          0.484             0.370
   17   1.417        752.323          0.443             0.338
   18   1.500        796.577          0.443             0.338
   19   1.583        840.832          0.255             0.195
                                Sum = 100.000   Sum=      76.422
------------------------------------------------------------------------

 The following loss rate calculations reflect use of the minimum calculated loss
 rate subtracted from the Storm Rain to produce the maximum Effective Rain value

 Unit Time   Pattern   Storm Rain     Loss rate(In./Hr)     Effective
      (Hr.)  Percent   (In/Hr)         Max    |   Low         (In/Hr)
  1   0.08     0.07      0.020       (  0.363)       0.010         0.010
  2   0.17     0.07      0.020       (  0.362)       0.010         0.010
  3   0.25     0.07      0.020       (  0.361)       0.010         0.010
  4   0.33     0.10      0.031       (  0.359)       0.015         0.015
  5   0.42     0.10      0.031       (  0.358)       0.015         0.015
  6   0.50     0.10      0.031       (  0.356)       0.015         0.015
  7   0.58     0.10      0.031       (  0.355)       0.015         0.015
  8   0.67     0.10      0.031       (  0.354)       0.015         0.015
  9   0.75     0.10      0.031       (  0.352)       0.015         0.015
 10   0.83     0.13      0.041       (  0.351)       0.020         0.020
 11   0.92     0.13      0.041       (  0.350)       0.020         0.020
 12   1.00     0.13      0.041       (  0.348)       0.020         0.020
 13   1.08     0.10      0.031       (  0.347)       0.015         0.015
 14   1.17     0.10      0.031       (  0.345)       0.015         0.015
 15   1.25     0.10      0.031       (  0.344)       0.015         0.015
 16   1.33     0.10      0.031       (  0.343)       0.015         0.015
 17   1.42     0.10      0.031       (  0.341)       0.015         0.015
 18   1.50     0.10      0.031       (  0.340)       0.015         0.015
 19   1.58     0.10      0.031       (  0.339)       0.015         0.015
 20   1.67     0.10      0.031       (  0.337)       0.015         0.015
 21   1.75     0.10      0.031       (  0.336)       0.015         0.015
 22   1.83     0.13      0.041       (  0.335)       0.020         0.020
 23   1.92     0.13      0.041       (  0.333)       0.020         0.020
 24   2.00     0.13      0.041       (  0.332)       0.020         0.020
 25   2.08     0.13      0.041       (  0.330)       0.020         0.020
 26   2.17     0.13      0.041       (  0.329)       0.020         0.020
 27   2.25     0.13      0.041       (  0.328)       0.020         0.020
```

28	2.33	0.13	0.041	(0.326)	0.020	0.020
29	2.42	0.13	0.041	(0.325)	0.020	0.020
30	2.50	0.13	0.041	(0.324)	0.020	0.020
31	2.58	0.17	0.051	(0.323)	0.025	0.025
32	2.67	0.17	0.051	(0.321)	0.025	0.025
33	2.75	0.17	0.051	(0.320)	0.025	0.025
34	2.83	0.17	0.051	(0.319)	0.025	0.025
35	2.92	0.17	0.051	(0.317)	0.025	0.025
36	3.00	0.17	0.051	(0.316)	0.025	0.025
37	3.08	0.17	0.051	(0.315)	0.025	0.025
38	3.17	0.17	0.051	(0.313)	0.025	0.025
39	3.25	0.17	0.051	(0.312)	0.025	0.025
40	3.33	0.17	0.051	(0.311)	0.025	0.025
41	3.42	0.17	0.051	(0.309)	0.025	0.025
42	3.50	0.17	0.051	(0.308)	0.025	0.025
43	3.58	0.17	0.051	(0.307)	0.025	0.025
44	3.67	0.17	0.051	(0.306)	0.025	0.025
45	3.75	0.17	0.051	(0.304)	0.025	0.025
46	3.83	0.20	0.061	(0.303)	0.031	0.031
47	3.92	0.20	0.061	(0.302)	0.031	0.031
48	4.00	0.20	0.061	(0.300)	0.031	0.031
49	4.08	0.20	0.061	(0.299)	0.031	0.031
50	4.17	0.20	0.061	(0.298)	0.031	0.031
51	4.25	0.20	0.061	(0.297)	0.031	0.031
52	4.33	0.23	0.071	(0.295)	0.036	0.036
53	4.42	0.23	0.071	(0.294)	0.036	0.036
54	4.50	0.23	0.071	(0.293)	0.036	0.036
55	4.58	0.23	0.071	(0.292)	0.036	0.036
56	4.67	0.23	0.071	(0.290)	0.036	0.036
57	4.75	0.23	0.071	(0.289)	0.036	0.036
58	4.83	0.27	0.082	(0.288)	0.041	0.041
59	4.92	0.27	0.082	(0.287)	0.041	0.041
60	5.00	0.27	0.082	(0.285)	0.041	0.041
61	5.08	0.20	0.061	(0.284)	0.031	0.031
62	5.17	0.20	0.061	(0.283)	0.031	0.031
63	5.25	0.20	0.061	(0.282)	0.031	0.031
64	5.33	0.23	0.071	(0.280)	0.036	0.036
65	5.42	0.23	0.071	(0.279)	0.036	0.036
66	5.50	0.23	0.071	(0.278)	0.036	0.036
67	5.58	0.27	0.082	(0.277)	0.041	0.041
68	5.67	0.27	0.082	(0.275)	0.041	0.041
69	5.75	0.27	0.082	(0.274)	0.041	0.041
70	5.83	0.27	0.082	(0.273)	0.041	0.041
71	5.92	0.27	0.082	(0.272)	0.041	0.041
72	6.00	0.27	0.082	(0.271)	0.041	0.041
73	6.08	0.30	0.092	(0.269)	0.046	0.046
74	6.17	0.30	0.092	(0.268)	0.046	0.046
75	6.25	0.30	0.092	(0.267)	0.046	0.046
76	6.33	0.30	0.092	(0.266)	0.046	0.046
77	6.42	0.30	0.092	(0.265)	0.046	0.046
78	6.50	0.30	0.092	(0.263)	0.046	0.046
79	6.58	0.33	0.102	(0.262)	0.051	0.051
80	6.67	0.33	0.102	(0.261)	0.051	0.051
81	6.75	0.33	0.102	(0.260)	0.051	0.051
82	6.83	0.33	0.102	(0.259)	0.051	0.051
83	6.92	0.33	0.102	(0.258)	0.051	0.051
84	7.00	0.33	0.102	(0.256)	0.051	0.051
85	7.08	0.33	0.102	(0.255)	0.051	0.051
86	7.17	0.33	0.102	(0.254)	0.051	0.051
87	7.25	0.33	0.102	(0.253)	0.051	0.051
88	7.33	0.37	0.112	(0.252)	0.056	0.056
89	7.42	0.37	0.112	(0.251)	0.056	0.056
90	7.50	0.37	0.112	(0.249)	0.056	0.056
91	7.58	0.40	0.122	(0.248)	0.061	0.061
92	7.67	0.40	0.122	(0.247)	0.061	0.061
93	7.75	0.40	0.122	(0.246)	0.061	0.061
94	7.83	0.43	0.133	(0.245)	0.066	0.066
95	7.92	0.43	0.133	(0.244)	0.066	0.066
96	8.00	0.43	0.133	(0.243)	0.066	0.066
97	8.08	0.50	0.153	(0.242)	0.076	0.076
98	8.17	0.50	0.153	(0.240)	0.076	0.076

99	8.25	0.50	0.153	(0.239)	0.076	0.076
100	8.33	0.50	0.153	(0.238)	0.076	0.076
101	8.42	0.50	0.153	(0.237)	0.076	0.076
102	8.50	0.50	0.153	(0.236)	0.076	0.076
103	8.58	0.53	0.163	(0.235)	0.082	0.082
104	8.67	0.53	0.163	(0.234)	0.082	0.082
105	8.75	0.53	0.163	(0.233)	0.082	0.082
106	8.83	0.57	0.173	(0.232)	0.087	0.087
107	8.92	0.57	0.173	(0.230)	0.087	0.087
108	9.00	0.57	0.173	(0.229)	0.087	0.087
109	9.08	0.63	0.194	(0.228)	0.097	0.097
110	9.17	0.63	0.194	(0.227)	0.097	0.097
111	9.25	0.63	0.194	(0.226)	0.097	0.097
112	9.33	0.67	0.204	(0.225)	0.102	0.102
113	9.42	0.67	0.204	(0.224)	0.102	0.102
114	9.50	0.67	0.204	(0.223)	0.102	0.102
115	9.58	0.70	0.214	(0.222)	0.107	0.107
116	9.67	0.70	0.214	(0.221)	0.107	0.107
117	9.75	0.70	0.214	(0.220)	0.107	0.107
118	9.83	0.73	0.224	(0.219)	0.112	0.112
119	9.92	0.73	0.224	(0.218)	0.112	0.112
120	10.00	0.73	0.224	(0.217)	0.112	0.112
121	10.08	0.50	0.153	(0.215)	0.076	0.076
122	10.17	0.50	0.153	(0.214)	0.076	0.076
123	10.25	0.50	0.153	(0.213)	0.076	0.076
124	10.33	0.50	0.153	(0.212)	0.076	0.076
125	10.42	0.50	0.153	(0.211)	0.076	0.076
126	10.50	0.50	0.153	(0.210)	0.076	0.076
127	10.58	0.67	0.204	(0.209)	0.102	0.102
128	10.67	0.67	0.204	(0.208)	0.102	0.102
129	10.75	0.67	0.204	(0.207)	0.102	0.102
130	10.83	0.67	0.204	(0.206)	0.102	0.102
131	10.92	0.67	0.204	(0.205)	0.102	0.102
132	11.00	0.67	0.204	(0.204)	0.102	0.102
133	11.08	0.63	0.194	(0.203)	0.097	0.097
134	11.17	0.63	0.194	(0.202)	0.097	0.097
135	11.25	0.63	0.194	(0.201)	0.097	0.097
136	11.33	0.63	0.194	(0.200)	0.097	0.097
137	11.42	0.63	0.194	(0.199)	0.097	0.097
138	11.50	0.63	0.194	(0.198)	0.097	0.097
139	11.58	0.57	0.173	(0.197)	0.087	0.087
140	11.67	0.57	0.173	(0.196)	0.087	0.087
141	11.75	0.57	0.173	(0.195)	0.087	0.087
142	11.83	0.60	0.184	(0.194)	0.092	0.092
143	11.92	0.60	0.184	(0.193)	0.092	0.092
144	12.00	0.60	0.184	(0.192)	0.092	0.092
145	12.08	0.83	0.255	(0.191)	0.127	0.127
146	12.17	0.83	0.255	(0.190)	0.127	0.127
147	12.25	0.83	0.255	(0.189)	0.127	0.127
148	12.33	0.87	0.265	(0.189)	0.133	0.133
149	12.42	0.87	0.265	(0.188)	0.133	0.133
150	12.50	0.87	0.265	(0.187)	0.133	0.133
151	12.58	0.93	0.286	(0.186)	0.143	0.143
152	12.67	0.93	0.286	(0.185)	0.143	0.143
153	12.75	0.93	0.286	(0.184)	0.143	0.143
154	12.83	0.97	0.296	(0.183)	0.148	0.148
155	12.92	0.97	0.296	(0.182)	0.148	0.148
156	13.00	0.97	0.296	(0.181)	0.148	0.148
157	13.08	1.13	0.347	(0.180)	0.173	0.173
158	13.17	1.13	0.347	(0.179)	0.173	0.173
159	13.25	1.13	0.347	(0.178)	0.173	0.173
160	13.33	1.13	0.347	(0.177)	0.173	0.173
161	13.42	1.13	0.347	(0.177)	0.173	0.173
162	13.50	1.13	0.347	(0.176)	0.173	0.173
163	13.58	0.77	0.235	(0.175)	0.117	0.117
164	13.67	0.77	0.235	(0.174)	0.117	0.117
165	13.75	0.77	0.235	(0.173)	0.117	0.117
166	13.83	0.77	0.235	(0.172)	0.117	0.117
167	13.92	0.77	0.235	(0.171)	0.117	0.117
168	14.00	0.77	0.235	(0.170)	0.117	0.117
169	14.08	0.90	0.275	(0.169)	0.138	0.138

170	14.17	0.90	0.275	(0.169)	0.138	0.138
171	14.25	0.90	0.275	(0.168)	0.138	0.138
172	14.33	0.87	0.265	(0.167)	0.133	0.133
173	14.42	0.87	0.265	(0.166)	0.133	0.133
174	14.50	0.87	0.265	(0.165)	0.133	0.133
175	14.58	0.87	0.265	(0.164)	0.133	0.133
176	14.67	0.87	0.265	(0.163)	0.133	0.133
177	14.75	0.87	0.265	(0.163)	0.133	0.133
178	14.83	0.83	0.255	(0.162)	0.127	0.127
179	14.92	0.83	0.255	(0.161)	0.127	0.127
180	15.00	0.83	0.255	(0.160)	0.127	0.127
181	15.08	0.80	0.245	(0.159)	0.122	0.122
182	15.17	0.80	0.245	(0.159)	0.122	0.122
183	15.25	0.80	0.245	(0.158)	0.122	0.122
184	15.33	0.77	0.235	(0.157)	0.117	0.117
185	15.42	0.77	0.235	(0.156)	0.117	0.117
186	15.50	0.77	0.235	(0.155)	0.117	0.117
187	15.58	0.63	0.194	(0.154)	0.097	0.097
188	15.67	0.63	0.194	(0.154)	0.097	0.097
189	15.75	0.63	0.194	(0.153)	0.097	0.097
190	15.83	0.63	0.194	(0.152)	0.097	0.097
191	15.92	0.63	0.194	(0.151)	0.097	0.097
192	16.00	0.63	0.194	(0.151)	0.097	0.097
193	16.08	0.13	0.041	(0.150)	0.020	0.020
194	16.17	0.13	0.041	(0.149)	0.020	0.020
195	16.25	0.13	0.041	(0.148)	0.020	0.020
196	16.33	0.13	0.041	(0.148)	0.020	0.020
197	16.42	0.13	0.041	(0.147)	0.020	0.020
198	16.50	0.13	0.041	(0.146)	0.020	0.020
199	16.58	0.10	0.031	(0.145)	0.015	0.015
200	16.67	0.10	0.031	(0.145)	0.015	0.015
201	16.75	0.10	0.031	(0.144)	0.015	0.015
202	16.83	0.10	0.031	(0.143)	0.015	0.015
203	16.92	0.10	0.031	(0.142)	0.015	0.015
204	17.00	0.10	0.031	(0.142)	0.015	0.015
205	17.08	0.17	0.051	(0.141)	0.025	0.025
206	17.17	0.17	0.051	(0.140)	0.025	0.025
207	17.25	0.17	0.051	(0.140)	0.025	0.025
208	17.33	0.17	0.051	(0.139)	0.025	0.025
209	17.42	0.17	0.051	(0.138)	0.025	0.025
210	17.50	0.17	0.051	(0.137)	0.025	0.025
211	17.58	0.17	0.051	(0.137)	0.025	0.025
212	17.67	0.17	0.051	(0.136)	0.025	0.025
213	17.75	0.17	0.051	(0.135)	0.025	0.025
214	17.83	0.13	0.041	(0.135)	0.020	0.020
215	17.92	0.13	0.041	(0.134)	0.020	0.020
216	18.00	0.13	0.041	(0.133)	0.020	0.020
217	18.08	0.13	0.041	(0.133)	0.020	0.020
218	18.17	0.13	0.041	(0.132)	0.020	0.020
219	18.25	0.13	0.041	(0.131)	0.020	0.020
220	18.33	0.13	0.041	(0.131)	0.020	0.020
221	18.42	0.13	0.041	(0.130)	0.020	0.020
222	18.50	0.13	0.041	(0.130)	0.020	0.020
223	18.58	0.10	0.031	(0.129)	0.015	0.015
224	18.67	0.10	0.031	(0.128)	0.015	0.015
225	18.75	0.10	0.031	(0.128)	0.015	0.015
226	18.83	0.07	0.020	(0.127)	0.010	0.010
227	18.92	0.07	0.020	(0.126)	0.010	0.010
228	19.00	0.07	0.020	(0.126)	0.010	0.010
229	19.08	0.10	0.031	(0.125)	0.015	0.015
230	19.17	0.10	0.031	(0.125)	0.015	0.015
231	19.25	0.10	0.031	(0.124)	0.015	0.015
232	19.33	0.13	0.041	(0.123)	0.020	0.020
233	19.42	0.13	0.041	(0.123)	0.020	0.020
234	19.50	0.13	0.041	(0.122)	0.020	0.020
235	19.58	0.10	0.031	(0.122)	0.015	0.015
236	19.67	0.10	0.031	(0.121)	0.015	0.015
237	19.75	0.10	0.031	(0.121)	0.015	0.015
238	19.83	0.07	0.020	(0.120)	0.010	0.010
239	19.92	0.07	0.020	(0.120)	0.010	0.010
240	20.00	0.07	0.020	(0.119)	0.010	0.010

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241  20.08     0.10      0.031       (  0.119)       0.015        0.015
242  20.17     0.10      0.031       (  0.118)       0.015        0.015
243  20.25     0.10      0.031       (  0.118)       0.015        0.015
244  20.33     0.10      0.031       (  0.117)       0.015        0.015
245  20.42     0.10      0.031       (  0.116)       0.015        0.015
246  20.50     0.10      0.031       (  0.116)       0.015        0.015
247  20.58     0.10      0.031       (  0.116)       0.015        0.015
248  20.67     0.10      0.031       (  0.115)       0.015        0.015
249  20.75     0.10      0.031       (  0.115)       0.015        0.015
250  20.83     0.07      0.020       (  0.114)       0.010        0.010
251  20.92     0.07      0.020       (  0.114)       0.010        0.010
252  21.00     0.07      0.020       (  0.113)       0.010        0.010
253  21.08     0.10      0.031       (  0.113)       0.015        0.015
254  21.17     0.10      0.031       (  0.112)       0.015        0.015
255  21.25     0.10      0.031       (  0.112)       0.015        0.015
256  21.33     0.07      0.020       (  0.111)       0.010        0.010
257  21.42     0.07      0.020       (  0.111)       0.010        0.010
258  21.50     0.07      0.020       (  0.111)       0.010        0.010
259  21.58     0.10      0.031       (  0.110)       0.015        0.015
260  21.67     0.10      0.031       (  0.110)       0.015        0.015
261  21.75     0.10      0.031       (  0.109)       0.015        0.015
262  21.83     0.07      0.020       (  0.109)       0.010        0.010
263  21.92     0.07      0.020       (  0.109)       0.010        0.010
264  22.00     0.07      0.020       (  0.108)       0.010        0.010
265  22.08     0.10      0.031       (  0.108)       0.015        0.015
266  22.17     0.10      0.031       (  0.108)       0.015        0.015
267  22.25     0.10      0.031       (  0.107)       0.015        0.015
268  22.33     0.07      0.020       (  0.107)       0.010        0.010
269  22.42     0.07      0.020       (  0.107)       0.010        0.010
270  22.50     0.07      0.020       (  0.106)       0.010        0.010
271  22.58     0.07      0.020       (  0.106)       0.010        0.010
272  22.67     0.07      0.020       (  0.106)       0.010        0.010
273  22.75     0.07      0.020       (  0.105)       0.010        0.010
274  22.83     0.07      0.020       (  0.105)       0.010        0.010
275  22.92     0.07      0.020       (  0.105)       0.010        0.010
276  23.00     0.07      0.020       (  0.105)       0.010        0.010
277  23.08     0.07      0.020       (  0.104)       0.010        0.010
278  23.17     0.07      0.020       (  0.104)       0.010        0.010
279  23.25     0.07      0.020       (  0.104)       0.010        0.010
280  23.33     0.07      0.020       (  0.104)       0.010        0.010
281  23.42     0.07      0.020       (  0.103)       0.010        0.010
282  23.50     0.07      0.020       (  0.103)       0.010        0.010
283  23.58     0.07      0.020       (  0.103)       0.010        0.010
284  23.67     0.07      0.020       (  0.103)       0.010        0.010
285  23.75     0.07      0.020       (  0.103)       0.010        0.010
286  23.83     0.07      0.020       (  0.103)       0.010        0.010
287  23.92     0.07      0.020       (  0.103)       0.010        0.010
288  24.00     0.07      0.020       (  0.103)       0.010        0.010
               (Loss Rate Not Used)
    Sum =     100.0                                  Sum =    15.3
      Flood volume = Effective rainfall      1.27(In)
       times area      75.8(Ac.)/[(In)/(Ft.)] =       8.1(Ac.Ft)
      Total soil loss =      1.27(In)
      Total soil loss =     8.054(Ac.Ft)
      Total rainfall =      2.55(In)
      Flood volume =      350841.8 Cubic Feet
      Total soil loss =      350841.8 Cubic Feet
      ---------------------------------------------------------------------
       Peak flow rate of this hydrograph =     12.842(CFS)
      ---------------------------------------------------------------------
      +++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                          24 - H O U R    S T O R M
                     R u n o f f     H y d r o g r a p h
      ---------------------------------------------------------------------
                  Hydrograph in   5   Minute intervals ((CFS))

      ---------------------------------------------------------------------
 Time(h+m) Volume Ac.Ft   Q(CFS)  0        5.0      10.0      15.0      20.0
 ---------------------------------------------------------------------------
   0+ 5       0.0003      0.04  Q         |         |         |         |
   0+10       0.0017      0.21  Q         |         |         |         |
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0+15	0.0046	0.43	Q	|	|	|	|
0+20	0.0085	0.57	VQ	|	|	|	|
0+25	0.0134	0.71	VQ	|	|	|	|
0+30	0.0193	0.86	VQ	|	|	|	|
0+35	0.0259	0.95	VQ	|	|	|	|
0+40	0.0328	1.00	V Q	|	|	|	|
0+45	0.0399	1.04	V Q	|	|	|	|
0+50	0.0474	1.09	V Q	|	|	|	|
0+55	0.0556	1.19	V Q	|	|	|	|
1+ 0	0.0647	1.32	V Q	|	|	|	|
1+ 5	0.0741	1.37	V Q	|	|	|	|
1+10	0.0833	1.33	V Q	|	|	|	|
1+15	0.0919	1.25	V Q	|	|	|	|
1+20	0.1003	1.21	V Q	|	|	|	|
1+25	0.1085	1.20	V Q	|	|	|	|
1+30	0.1168	1.20	V Q	|	|	|	|
1+35	0.1250	1.19	V Q	|	|	|	|
1+40	0.1331	1.19	V Q	|	|	|	|
1+45	0.1413	1.19	V Q	|	|	|	|
1+50	0.1496	1.20	V Q	|	|	|	|
1+55	0.1584	1.28	V Q	|	|	|	|
2+ 0	0.1680	1.39	V Q	|	|	|	|
2+ 5	0.1780	1.45	V Q	|	|	|	|
2+10	0.1882	1.48	V Q	|	|	|	|
2+15	0.1985	1.50	V Q	|	|	|	|
2+20	0.2089	1.51	|V Q	|	|	|	|
2+25	0.2194	1.52	|V Q	|	|	|	|
2+30	0.2299	1.53	|V Q	|	|	|	|
2+35	0.2406	1.55	|V Q	|	|	|	|
2+40	0.2519	1.64	|V Q	|	|	|	|
2+45	0.2640	1.76	|V Q	|	|	|	|
2+50	0.2766	1.82	|V Q	|	|	|	|
2+55	0.2893	1.85	|V Q	|	|	|	|
3+ 0	0.3022	1.88	|V Q	|	|	|	|
3+ 5	0.3153	1.89	|V Q	|	|	|	|
3+10	0.3284	1.91	|V Q	|	|	|	|
3+15	0.3416	1.92	|V Q	|	|	|	|
3+20	0.3548	1.92	|V Q	|	|	|	|
3+25	0.3681	1.93	|V Q	|	|	|	|
3+30	0.3814	1.93	|V Q	|	|	|	|
3+35	0.3948	1.94	|V Q	|	|	|	|
3+40	0.4081	1.94	| VQ	|	|	|	|
3+45	0.4215	1.94	| VQ	|	|	|	|
3+50	0.4351	1.96	| VQ	|	|	|	|
3+55	0.4492	2.05	| V Q	|	|	|	|
4+ 0	0.4641	2.16	| V Q	|	|	|	|
4+ 5	0.4794	2.22	| V Q	|	|	|	|
4+10	0.4949	2.25	| V Q	|	|	|	|
4+15	0.5105	2.27	| V Q	|	|	|	|
4+20	0.5264	2.31	| V Q	|	|	|	|
4+25	0.5429	2.40	| V Q	|	|	|	|
4+30	0.5603	2.52	| V Q	|	|	|	|
4+35	0.5781	2.59	| V Q	|	|	|	|
4+40	0.5962	2.62	| V Q	|	|	|	|
4+45	0.6144	2.65	| V Q	|	|	|	|
4+50	0.6329	2.68	| V Q	|	|	|	|
4+55	0.6520	2.78	| V Q	|	|	|	|
5+ 0	0.6720	2.90	| V Q	|	|	|	|
5+ 5	0.6922	2.93	| V Q	|	|	|	|
5+10	0.7115	2.80	| V Q	|	|	|	|
5+15	0.7295	2.61	| V Q	|	|	|	|
5+20	0.7469	2.53	| V Q	|	|	|	|
5+25	0.7646	2.57	| V Q	|	|	|	|
5+30	0.7828	2.65	| V Q	|	|	|	|
5+35	0.8014	2.71	| V Q	|	|	|	|
5+40	0.8207	2.80	| VQ	|	|	|	|
5+45	0.8409	2.92	| VQ	|	|	|	|
5+50	0.8615	2.99	| VQ	|	|	|	|
5+55	0.8823	3.02	| V Q	|	|	|	|
6+ 0	0.9033	3.04	| V Q	|	|	|	|
6+ 5	0.9245	3.08	| V Q	|	|	|	|

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 6+10      0.9463     3.17  |   V Q   |         |         |         |
 6+15      0.9690     3.30  |   V Q   |         |         |         |
 6+20      0.9922     3.36  |   V Q   |         |         |         |
 6+25      1.0156     3.40  |    VQ   |         |         |         |
 6+30      1.0392     3.42  |    VQ   |         |         |         |
 6+35      1.0630     3.46  |    VQ   |         |         |         |
 6+40      1.0875     3.56  |    V Q  |         |         |         |
 6+45      1.1129     3.68  |    V Q  |         |         |         |
 6+50      1.1387     3.75  |    V Q  |         |         |         |
 6+55      1.1648     3.79  |    V Q  |         |         |         |
 7+ 0      1.1910     3.81  |    V Q  |         |         |         |
 7+ 5      1.2175     3.83  |     VQ  |         |         |         |
 7+10      1.2440     3.85  |     VQ  |         |         |         |
 7+15      1.2705     3.86  |     VQ  |         |         |         |
 7+20      1.2973     3.89  |     VQ  |         |         |         |
 7+25      1.3247     3.98  |     VQ  |         |         |         |
 7+30      1.3529     4.10  |     V Q |         |         |         |
 7+35      1.3817     4.18  |     V Q |         |         |         |
 7+40      1.4113     4.30  |      VQ |         |         |         |
 7+45      1.4418     4.43  |      VQ |         |         |         |
 7+50      1.4729     4.52  |      V Q|         |         |         |
 7+55      1.5050     4.65  |      V Q|         |         |         |
 8+ 0      1.5380     4.79  |      V Q|         |         |         |
 8+ 5      1.5718     4.91  |      V Q|         |         |         |
 8+10      1.6071     5.12  |      V  Q         |         |         |
 8+15      1.6441     5.38  |       V Q         |         |         |
 8+20      1.6822     5.52  |       V |Q        |         |         |
 8+25      1.7208     5.60  |       V |Q        |         |         |
 8+30      1.7598     5.66  |       V |Q        |         |         |
 8+35      1.7992     5.72  |       V |Q        |         |         |
 8+40      1.8393     5.84  |        V|Q        |         |         |
 8+45      1.8805     5.97  |        V|Q        |         |         |
 8+50      1.9223     6.07  |        V| Q       |         |         |
 8+55      1.9650     6.20  |        V| Q       |         |         |
 9+ 0      2.0087     6.35  |        V| Q       |         |         |
 9+ 5      2.0533     6.47  |         V Q       |         |         |
 9+10      2.0993     6.68  |         V  Q      |         |         |
 9+15      2.1471     6.94  |         V  Q      |         |         |
 9+20      2.1961     7.11  |         V   Q     |         |         |
 9+25      2.2461     7.27  |         |V  Q     |         |         |
 9+30      2.2973     7.44  |         |V  Q     |         |         |
 9+35      2.3494     7.56  |         |V   Q    |         |         |
 9+40      2.4024     7.70  |         |V   Q    |         |         |
 9+45      2.4565     7.86  |         | V  Q    |         |         |
 9+50      2.5114     7.97  |         | V  Q    |         |         |
 9+55      2.5672     8.11  |         | V   Q   |         |         |
10+ 0      2.6241     8.26  |         |  V  Q   |         |         |
10+ 5      2.6807     8.21  |         |  V  Q   |         |         |
10+10      2.7337     7.69  |         |  V Q    |         |         |
10+15      2.7815     6.95  |         |  Q      |         |         |
10+20      2.8267     6.56  |         |  QV     |         |         |
10+25      2.8707     6.38  |         | Q V     |         |         |
10+30      2.9138     6.26  |         | Q V     |         |         |
10+35      2.9570     6.27  |         | Q V     |         |         |
10+40      3.0025     6.62  |         |  QV     |         |         |
10+45      3.0516     7.12  |         |   QV    |         |         |
10+50      3.1024     7.38  |         |   QV    |         |         |
10+55      3.1540     7.49  |         |   QV    |         |         |
11+ 0      3.2061     7.56  |         |    Q    |         |         |
11+ 5      3.2584     7.59  |         |    QV   |         |         |
11+10      3.3104     7.55  |         |    QV   |         |         |
11+15      3.3618     7.46  |         |   Q V   |         |         |
11+20      3.4129     7.42  |         |   Q V   |         |         |
11+25      3.4640     7.41  |         |   Q  V  |         |         |
11+30      3.5149     7.40  |         |   Q  V  |         |         |
11+35      3.5656     7.36  |         |   Q  V  |         |         |
11+40      3.6152     7.20  |         |   Q  V  |         |         |
11+45      3.6633     6.98  |         |  Q    V |         |         |
11+50      3.7107     6.88  |         |  Q    V |         |         |
11+55      3.7583     6.91  |         |  Q    V |         |         |
12+ 0      3.8064     6.99  |         |  Q    V |         |         |
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12+ 5       3.8557      7.16  |          |   Q    V|          |          |
12+10       3.9090      7.74  |          |    Q   V|          |          |
12+15       3.9676      8.52  |          |      Q V|          |          |
12+20       4.0293      8.96  |          |      Q  V          |          |
12+25       4.0930      9.24  |          |       Q V          |          |
12+30       4.1583      9.49  |          |       Q V          |          |
12+35       4.2251      9.69  |          |        QV          |          |
12+40       4.2937      9.96  |          |        Q|V         |          |
12+45       4.3644     10.27  |          |         QV         |          |
12+50       4.4365     10.47  |          |         Q V        |          |
12+55       4.5099     10.66  |          |         |QV        |          |
13+ 0       4.5846     10.85  |          |         |QV        |          |
13+ 5       4.6608     11.07  |          |         | QV       |          |
13+10       4.7404     11.57  |          |         |  Q       |          |
13+15       4.8243     12.18  |          |         |  VQ      |          |
13+20       4.9106     12.53  |          |         |   VQ     |          |
13+25       4.9981     12.71  |          |         |   VQ     |          |
13+30       5.0866     12.84  |          |         |    Q     |          |
13+35       5.1742     12.72  |          |         |    Q     |          |
13+40       5.2560     11.87  |          |         |  Q  V    |          |
13+45       5.3297     10.71  |          |         |Q    V    |          |
13+50       5.3992     10.09  |          |         Q     V    |          |
13+55       5.4668      9.80  |          |        Q|      V   |          |
14+ 0       5.5330      9.62  |          |        Q|      V   |          |
14+ 5       5.5988      9.56  |          |        Q|      V   |          |
14+10       5.6662      9.78  |          |        Q|       V  |          |
14+15       5.7361     10.15  |          |         Q       V  |          |
14+20       5.8070     10.30  |          |         Q       V  |          |
14+25       5.8779     10.29  |          |         Q        V|          |
14+30       5.9482     10.21  |          |         Q        V|          |
14+35       6.0183     10.17  |          |         Q        V|          |
14+40       6.0882     10.15  |          |         Q         V          |
14+45       6.1581     10.14  |          |         Q         V          |
14+50       6.2277     10.11  |          |         Q         V          |
14+55       6.2967     10.02  |          |         Q         |V         |
15+ 0       6.3649      9.90  |          |        Q|         |V         |
15+ 5       6.4326      9.82  |          |        Q|         |V         |
15+10       6.4995      9.71  |          |        Q|         | V        |
15+15       6.5655      9.59  |          |        Q|         | V        |
15+20       6.6309      9.50  |          |       Q |         | V        |
15+25       6.6955      9.38  |          |       Q |         |  V       |
15+30       6.7592      9.24  |          |       Q |         |  V       |
15+35       6.8217      9.09  |          |       Q |         |  V       |
15+40       6.8817      8.71  |          |      Q  |         |   V      |
15+45       6.9384      8.23  |          |     Q   |         |   V      |
15+50       6.9932      7.96  |          |    Q    |         |   V      |
15+55       7.0471      7.82  |          |    Q    |         |   V      |
16+ 0       7.1003      7.73  |          |    Q    |         |    V     |
16+ 5       7.1510      7.36  |          |   Q     |         |    V     |
16+10       7.1928      6.06  |          | Q       |         |    V     |
16+15       7.2227      4.35  |        Q |         |         |    V     |
16+20       7.2463      3.42  |      Q   |         |         |    V     |
16+25       7.2666      2.96  |    Q     |         |         |     V    |
16+30       7.2848      2.63  |    Q     |         |         |     V    |
16+35       7.3012      2.38  |   Q      |         |         |     V    |
16+40       7.3157      2.11  |   Q      |         |         |     V    |
16+45       7.3285      1.86  |  Q       |         |         |     V    |
16+50       7.3402      1.69  |  Q       |         |         |     V    |
16+55       7.3510      1.57  |  Q       |         |         |     V    |
17+ 0       7.3612      1.48  | Q        |         |         |     V    |
17+ 5       7.3711      1.44  | Q        |         |         |     V    |
17+10       7.3818      1.55  |  Q       |         |         |     V    |
17+15       7.3937      1.72  |  Q       |         |         |     V    |
17+20       7.4061      1.81  |  Q       |         |         |     V    |
17+25       7.4188      1.84  |  Q       |         |         |     V    |
17+30       7.4315      1.85  |  Q       |         |         |     V    |
17+35       7.4443      1.86  |  Q       |         |         |     V    |
17+40       7.4572      1.88  |  Q       |         |         |      V   |
17+45       7.4702      1.89  |  Q       |         |         |      V   |
17+50       7.4832      1.88  |  Q       |         |         |      V   |
17+55       7.4956      1.81  |  Q       |         |         |      V   |
```

18+ 0	7.5074	1.71	| Q	|	|	|	V |
18+ 5	7.5187	1.65	| Q	|	|	|	V |
18+10	7.5299	1.63	| Q	|	|	|	V |
18+15	7.5411	1.61	| Q	|	|	|	V |
18+20	7.5521	1.60	| Q	|	|	|	V |
18+25	7.5631	1.60	| Q	|	|	|	V |
18+30	7.5740	1.59	| Q	|	|	|	V |
18+35	7.5848	1.57	| Q	|	|	|	V |
18+40	7.5950	1.48	| Q	|	|	|	V |
18+45	7.6044	1.36	| Q	|	|	|	V |
18+50	7.6132	1.28	| Q	|	|	|	V |
18+55	7.6212	1.16	| Q	|	|	|	V |
19+ 0	7.6282	1.03	| Q	|	|	|	V |
19+ 5	7.6349	0.97	|Q	|	|	|	V |
19+10	7.6419	1.01	| Q	|	|	|	V |
19+15	7.6495	1.09	| Q	|	|	|	V |
19+20	7.6574	1.15	| Q	|	|	|	V |
19+25	7.6660	1.25	| Q	|	|	|	V |
19+30	7.6754	1.36	| Q	|	|	|	V |
19+35	7.6851	1.41	| Q	|	|	|	V |
19+40	7.6944	1.36	| Q	|	|	|	V |
19+45	7.7032	1.27	| Q	|	|	|	V |
19+50	7.7114	1.20	| Q	|	|	|	V |
19+55	7.7190	1.10	| Q	|	|	|	V |
20+ 0	7.7258	0.98	|Q	|	|	|	V |
20+ 5	7.7322	0.93	|Q	|	|	|	V |
20+10	7.7390	0.98	|Q	|	|	|	V |
20+15	7.7464	1.07	| Q	|	|	|	V |
20+20	7.7541	1.12	| Q	|	|	|	V |
20+25	7.7619	1.13	| Q	|	|	|	V |
20+30	7.7698	1.14	| Q	|	|	|	V |
20+35	7.7777	1.15	| Q	|	|	|	V |
20+40	7.7856	1.15	| Q	|	|	|	V |
20+45	7.7936	1.16	| Q	|	|	|	V |
20+50	7.8015	1.14	| Q	|	|	|	V |
20+55	7.8087	1.06	| Q	|	|	|	V |
21+ 0	7.8153	0.95	|Q	|	|	|	V |
21+ 5	7.8215	0.91	|Q	|	|	|	V |
21+10	7.8282	0.96	|Q	|	|	|	V |
21+15	7.8354	1.06	| Q	|	|	|	V |
21+20	7.8429	1.08	| Q	|	|	|	V |
21+25	7.8499	1.02	| Q	|	|	|	V |
21+30	7.8562	0.92	|Q	|	|	|	V|
21+35	7.8624	0.89	|Q	|	|	|	V|
21+40	7.8689	0.95	|Q	|	|	|	V|
21+45	7.8761	1.04	| Q	|	|	|	V|
21+50	7.8835	1.07	| Q	|	|	|	V|
21+55	7.8904	1.01	| Q	|	|	|	V|
22+ 0	7.8967	0.91	|Q	|	|	|	V|
22+ 5	7.9028	0.88	|Q	|	|	|	V|
22+10	7.9092	0.94	|Q	|	|	|	V|
22+15	7.9164	1.04	| Q	|	|	|	V|
22+20	7.9237	1.07	| Q	|	|	|	V|
22+25	7.9307	1.01	| Q	|	|	|	V|
22+30	7.9370	0.91	|Q	|	|	|	V|
22+35	7.9429	0.86	|Q	|	|	|	V|
22+40	7.9487	0.84	|Q	|	|	|	V|
22+45	7.9544	0.82	|Q	|	|	|	V|
22+50	7.9600	0.81	|Q	|	|	|	V|
22+55	7.9655	0.81	|Q	|	|	|	V|
23+ 0	7.9710	0.80	|Q	|	|	|	V|
23+ 5	7.9765	0.80	|Q	|	|	|	V|
23+10	7.9820	0.79	|Q	|	|	|	V|
23+15	7.9874	0.79	|Q	|	|	|	V|
23+20	7.9929	0.79	|Q	|	|	|	V|
23+25	7.9983	0.79	|Q	|	|	|	V|
23+30	8.0037	0.78	|Q	|	|	|	V|
23+35	8.0091	0.78	|Q	|	|	|	V|
23+40	8.0145	0.78	|Q	|	|	|	V|
23+45	8.0198	0.78	|Q	|	|	|	V|
23+50	8.0252	0.78	|Q	|	|	|	V|

```
   23+55       8.0306      0.78  |Q        |         |         |        V|
   24+ 0       8.0359      0.78  |Q        |         |         |        V|
   24+ 5       8.0410      0.74  |Q        |         |         |        V|
   24+10       8.0450      0.57  |Q        |         |         |        V|
   24+15       8.0474      0.35  Q         |         |         |        V|
   24+20       8.0490      0.23  Q         |         |         |        V|
   24+25       8.0502      0.17  Q         |         |         |        V|
   24+30       8.0511      0.13  Q         |         |         |        V|
   24+35       8.0519      0.10  Q         |         |         |        V|
   24+40       8.0524      0.08  Q         |         |         |        V|
   24+45       8.0529      0.07  Q         |         |         |        V|
   24+50       8.0532      0.05  Q         |         |         |        V|
   24+55       8.0535      0.04  Q         |         |         |        V|
   25+ 0       8.0537      0.03  Q         |         |         |        V|
   25+ 5       8.0539      0.02  Q         |         |         |        V|
   25+10       8.0540      0.02  Q         |         |         |        V|
   25+15       8.0541      0.01  Q         |         |         |        V|
   25+20       8.0542      0.01  Q         |         |         |        V|
   25+25       8.0542      0.01  Q         |         |         |        V|
   25+30       8.0542      0.00  Q         |         |         |         V
--------------------------------------------------------------------------
```

U n i t H y d r o g r a p h A n a l y s i s

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Study date 08/14/25 File: PROA110.out

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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978

Program License Serial Number 5006

English (in-lb) Input Units Used
English Rainfall Data (Inches) Input Values Used

English Units used in output format

Drainage Area = 75.83(Ac.) = 0.118 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 75.83(Ac.) = 0.118 Sq. Mi.
Length along longest watercourse = 4720.00(Ft.)
Length along longest watercourse measured to centroid = 2360.00(Ft.)
Length along longest watercourse = 0.894 Mi.
Length along longest watercourse measured to centroid = 0.447 Mi.
Difference in elevation = 166.00(Ft.)
Slope along watercourse = 185.6949 Ft./Mi.
Average Manning's 'N' = 0.030
Lag time = 0.188 Hr.
Lag time = 11.30 Min.
25% of lag time = 2.82 Min.
40% of lag time = 4.52 Min.
Unit time = 5.00 Min.
Duration of storm = 1 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.)[1]	Rainfall(In)[2]	Weighting[1*2]
75.83	0.50	37.91

100 YEAR Area rainfall data:

Area(Ac.)[1]	Rainfall(In)[2]	Weighting[1*2]
75.83	1.30	98.58

STORM EVENT (YEAR) = 10.00
Area Averaged 2-Year Rainfall = 0.500(In)
Area Averaged 100-Year Rainfall = 1.300(In)

Point rain (area averaged) = 0.829(In)
Areal adjustment factor = 99.93 %
Adjusted average point rain = 0.829(In)

Sub-Area Data:

Area(Ac.)	Runoff Index	Impervious %
75.830	69.00	0.500

Total Area Entered = 75.83(Ac.)

RI AMC2	RI AMC-2	Infil. Rate (In/Hr)	Impervious (Dec.%)	Adj. Infil. Rate (In/Hr)	Area% (Dec.)	F (In/Hr)

```
      69.0  69.0      0.373     0.500        0.205       1.000      0.205
                                                        Sum (F) =   0.205
      Area averaged mean soil loss (F) (In/Hr) =  0.205
      Minimum soil loss rate ((In/Hr)) =  0.103
      (for 24 hour storm duration)
      Soil low loss rate (decimal) =   0.500
      ------------------------------------------------------------------------
      Slope of intensity-duration curve for a 1 hour storm =0.5500
      ------------------------------------------------------------------------

                  U n i t  H y d r o g r a p h
                         VALLEY S-Curve
      ------------------------------------------------------------------------
                  Unit Hydrograph Data
      ------------------------------------------------------------------------
      Unit time period   Time % of lag   Distribution   Unit Hydrograph
          (hrs)                          Graph %           (CFS)
      ------------------------------------------------------------------------
          1   0.083         44.254          5.079             3.882
          2   0.167         88.509         21.318            16.291
          3   0.250        132.763         28.439            21.734
          4   0.333        177.017         15.372            11.747
          5   0.417        221.272          7.523             5.749
          6   0.500        265.526          5.074             3.878
          7   0.583        309.780          3.778             2.887
          8   0.667        354.034          2.830             2.163
          9   0.750        398.289          2.240             1.712
         10   0.833        442.543          1.702             1.301
         11   0.917        486.797          1.386             1.059
         12   1.000        531.052          1.242             0.949
         13   1.083        575.306          0.960             0.734
         14   1.167        619.560          0.796             0.608
         15   1.250        663.815          0.638             0.488
         16   1.333        708.069          0.484             0.370
         17   1.417        752.323          0.443             0.338
         18   1.500        796.577          0.443             0.338
         19   1.583        840.832          0.255             0.195
                                    Sum = 100.000   Sum=      76.422
------------------------------------------------------------------------

 The following loss rate calculations reflect use of the minimum calculated loss
 rate subtracted from the Storm Rain to produce the maximum Effective Rain value

  Unit Time   Pattern   Storm Rain     Loss rate(In./Hr)     Effective
       (Hr.)  Percent   (In/Hr)         Max    |   Low        (In/Hr)
   1   0.08     3.30      0.328       (  0.205)       0.164        0.164
   2   0.17     4.20      0.418          0.205    (  0.209)        0.213
   3   0.25     4.40      0.437          0.205    (  0.219)        0.232
   4   0.33     4.80      0.477          0.205    (  0.239)        0.272
   5   0.42     5.20      0.517          0.205    (  0.259)        0.312
   6   0.50     6.20      0.616          0.205    (  0.308)        0.411
   7   0.58     6.80      0.676          0.205    (  0.338)        0.471
   8   0.67     8.80      0.875          0.205    (  0.437)        0.670
   9   0.75    13.90      1.382          0.205    (  0.691)        1.177
  10   0.83    31.40      3.122          0.205    (  1.561)        2.917
  11   0.92     7.20      0.716          0.205    (  0.358)        0.511
  12   1.00     3.80      0.378       (  0.205)       0.189        0.189
                (Loss Rate Not Used)
     Sum =     100.0                                    Sum =      7.5
       Flood volume = Effective rainfall      0.63(In)
        times area      75.8(Ac.)/[(In)/(Ft.)] =       4.0(Ac.Ft)
       Total soil loss =      0.20(In)
       Total soil loss =     1.266(Ac.Ft)
       Total rainfall =      0.83(In)
       Flood volume =      172941.1 Cubic Feet
       Total soil loss =       55129.8 Cubic Feet
       ---------------------------------------------------------------------
        Peak flow rate of this hydrograph =     95.017(CFS)
       ---------------------------------------------------------------------
       +++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
```

1 - H O U R S T O R M
R u n o f f H y d r o g r a p h

Hydrograph in 5 Minute intervals ((CFS))

Time(h+m)	Volume Ac.Ft	Q(CFS)	0	25.0	50.0	75.0	100.0
0+ 5	0.0044	0.64	Q				
0+10	0.0285	3.50	VQ				
0+15	0.0831	7.93	V Q				
0+20	0.1616	11.40	V Q				
0+25	0.2590	14.14	V Q				
0+30	0.3774	17.19	V Q				
0+35	0.5231	21.15	V Q				
0+40	0.7045	26.33	V Q				
0+45	0.9444	34.83	V Q				
0+50	1.3305	56.06	V Q				
0+55	1.9478	89.64	V Q				
1+ 0	2.6022	95.02	V Q				
1+ 5	3.0261	61.55	Q V				
1+10	3.2760	36.29	Q V				
1+15	3.4388	23.64	Q V				
1+20	3.5561	17.04	Q V				
1+25	3.6452	12.94	Q V				
1+30	3.7153	10.17	Q V				
1+35	3.7704	7.99	Q V				
1+40	3.8152	6.50	Q V				
1+45	3.8527	5.45	Q V				
1+50	3.8826	4.34	Q V				
1+55	3.9068	3.51	Q V				
2+ 0	3.9259	2.78	Q V				
2+ 5	3.9408	2.16	Q V				
2+10	3.9532	1.80	Q V				
2+15	3.9632	1.46	Q V				
2+20	3.9688	0.81	Q V				
2+25	3.9699	0.16	Q V				
2+30	3.9702	0.04	Q V				

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       U n i t   H y d r o g r a p h   A n a l y s i s

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              Study date  08/14/25 File: PROA310.out

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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978


Program License Serial Number 5006

------------------------------------------------------------------------
 English (in-lb) Input Units Used
 English Rainfall Data (Inches) Input Values Used

 English Units used in output format



------------------------------------------------------------------------
------------------------------------------------------------------------
Drainage Area =      75.83(Ac.)  =      0.118 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment =      75.83(Ac.)  =      0.118 Sq. Mi.
Length along longest watercourse =    4720.00(Ft.)
Length along longest watercourse measured to centroid =    2360.00(Ft.)
Length along longest watercourse =      0.894 Mi.
Length along longest watercourse measured to centroid =      0.447 Mi.
Difference in elevation =     166.00(Ft.)
Slope along watercourse =    185.6949 Ft./Mi.
Average Manning's 'N' = 0.030
Lag time =    0.188 Hr.
Lag time =    11.30 Min.
25% of lag time =     2.82 Min.
40% of lag time =     4.52 Min.
Unit time =     5.00 Min.
Duration of storm = 3 Hour(s)
User Entered Base Flow =     0.00(CFS)

2 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
       75.83           0.80                 60.66

100 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
       75.83           2.00                151.66

STORM EVENT (YEAR) =   10.00
Area Averaged 2-Year Rainfall =    0.800(In)
Area Averaged 100-Year Rainfall =    2.000(In)

Point rain (area averaged) =    1.294(In)
Areal adjustment factor =   99.97 %
Adjusted average point rain =    1.293(In)

Sub-Area Data:
Area(Ac.)         Runoff Index   Impervious %
    75.830           69.00         0.500
 Total Area Entered =     75.83(Ac.)


RI    RI   Infil. Rate Impervious   Adj. Infil. Rate  Area%     F
AMC2 AMC-2     (In/Hr)   (Dec.%)     (In/Hr)      (Dec.)    (In/Hr)
```

69.0 69.0 0.373 0.500 0.205 1.000 0.205
Sum (F) = 0.205

Area averaged mean soil loss (F) (In/Hr) = 0.205
Minimum soil loss rate ((In/Hr)) = 0.103
(for 24 hour storm duration)
Soil low loss rate (decimal) = 0.500

U n i t H y d r o g r a p h
VALLEY S-Curve

Unit Hydrograph Data

Unit time period (hrs)	Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	44.254	5.079	3.882
2	0.167	88.509	21.318	16.291
3	0.250	132.763	28.439	21.734
4	0.333	177.017	15.372	11.747
5	0.417	221.272	7.523	5.749
6	0.500	265.526	5.074	3.878
7	0.583	309.780	3.778	2.887
8	0.667	354.034	2.830	2.163
9	0.750	398.289	2.240	1.712
10	0.833	442.543	1.702	1.301
11	0.917	486.797	1.386	1.059
12	1.000	531.052	1.242	0.949
13	1.083	575.306	0.960	0.734
14	1.167	619.560	0.796	0.608
15	1.250	663.815	0.638	0.488
16	1.333	708.069	0.484	0.370
17	1.417	752.323	0.443	0.338
18	1.500	796.577	0.443	0.338
19	1.583	840.832	0.255	0.195
			Sum = 100.000	Sum= 76.422

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr) Max		Low	Effective (In/Hr)
1	0.08	1.30	0.202	(0.205)		0.101	0.101
2	0.17	1.30	0.202	(0.205)		0.101	0.101
3	0.25	1.10	0.171	(0.205)		0.085	0.085
4	0.33	1.50	0.233	(0.205)		0.116	0.116
5	0.42	1.50	0.233	(0.205)		0.116	0.116
6	0.50	1.80	0.279	(0.205)		0.140	0.140
7	0.58	1.50	0.233	(0.205)		0.116	0.116
8	0.67	1.80	0.279	(0.205)		0.140	0.140
9	0.75	1.80	0.279	(0.205)		0.140	0.140
10	0.83	1.50	0.233	(0.205)		0.116	0.116
11	0.92	1.60	0.248	(0.205)		0.124	0.124
12	1.00	1.80	0.279	(0.205)		0.140	0.140
13	1.08	2.20	0.341	(0.205)		0.171	0.171
14	1.17	2.20	0.341	(0.205)		0.171	0.171
15	1.25	2.20	0.341	(0.205)		0.171	0.171
16	1.33	2.00	0.310	(0.205)		0.155	0.155
17	1.42	2.60	0.403	(0.205)		0.202	0.202
18	1.50	2.70	0.419	0.205	(	0.210)	0.214
19	1.58	2.40	0.372	(0.205)		0.186	0.186
20	1.67	2.70	0.419	0.205	(	0.210)	0.214
21	1.75	3.30	0.512	0.205	(	0.256)	0.307
22	1.83	3.10	0.481	0.205	(	0.241)	0.276
23	1.92	2.90	0.450	0.205	(	0.225)	0.245
24	2.00	3.00	0.466	0.205	(	0.233)	0.261
25	2.08	3.10	0.481	0.205	(	0.241)	0.276
26	2.17	4.20	0.652	0.205	(	0.326)	0.447
27	2.25	5.00	0.776	0.205	(	0.388)	0.571

```
28   2.33     3.50      0.543          0.205    (  0.272)        0.338
29   2.42     6.80      1.055          0.205    (  0.528)        0.850
30   2.50     7.30      1.133          0.205    (  0.566)        0.928
31   2.58     8.20      1.273          0.205    (  0.636)        1.068
32   2.67     5.90      0.916          0.205    (  0.458)        0.711
33   2.75     2.00      0.310       (  0.205)       0.155        0.155
34   2.83     1.80      0.279       (  0.205)       0.140        0.140
35   2.92     1.80      0.279       (  0.205)       0.140        0.140
36   3.00     0.60      0.093       (  0.205)       0.047        0.047
            (Loss Rate Not Used)
   Sum =     100.0                                    Sum =     9.7
      Flood volume = Effective rainfall      0.81(In)
       times area      75.8(Ac.)/[(In)/(Ft.)] =       5.1(Ac.Ft)
      Total soil loss =      0.49(In)
      Total soil loss =     3.077(Ac.Ft)
      Total rainfall =      1.29(In)
      Flood volume =      221968.6 Cubic Feet
      Total soil loss =      134018.0 Cubic Feet
      ---------------------------------------------------------------------
       Peak flow rate of this hydrograph =     58.320(CFS)
      ---------------------------------------------------------------------
      +++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                          3 - H O U R    S T O R M
                     R u n o f f     H y d r o g r a p h
      ---------------------------------------------------------------------
                   Hydrograph in   5   Minute intervals ((CFS))

      ---------------------------------------------------------------------
Time(h+m) Volume Ac.Ft   Q(CFS)  0       15.0      30.0      45.0      60.0
-------------------------------------------------------------------------
  0+ 5       0.0027      0.39  Q         |         |         |         |
  0+10       0.0167      2.04  VQ        |         |         |         |
  0+15       0.0454      4.17  V Q       |         |         |         |
  0+20       0.0814      5.22  V  Q      |         |         |         |
  0+25       0.1225      5.97  V  Q      |         |         |         |
  0+30       0.1704      6.95  |V  Q     |         |         |         |
  0+35       0.2241      7.80  |V   Q    |         |         |         |
  0+40       0.2816      8.36  | V  Q    |         |         |         |
  0+45       0.3419      8.75  | V  Q    |         |         |         |
  0+50       0.4053      9.21  |  V  Q   |         |         |         |
  0+55       0.4690      9.24  |  V  Q   |         |         |         |
  1+ 0       0.5321      9.16  |   V Q   |         |         |         |
  1+ 5       0.5982      9.60  |   V Q   |         |         |         |
  1+10       0.6708     10.54  |    V Q  |         |         |         |
  1+15       0.7497     11.46  |    V Q  |         |         |         |
  1+20       0.8317     11.90  |     VQ  |         |         |         |
  1+25       0.9151     12.11  |      VQ |         |         |         |
  1+30       1.0032     12.79  |      VQ |         |         |         |
  1+35       1.0986     13.86  |       VQ|         |         |         |
  1+40       1.1974     14.34  |        Q|         |         |         |
  1+45       1.3005     14.98  |        QV         |         |         |
  1+50       1.4171     16.92  |         |Q        |         |         |
  1+55       1.5457     18.68  |         | Q       |         |         |
  2+ 0       1.6756     18.86  |         | QV      |         |         |
  2+ 5       1.8051     18.81  |         | Q V     |         |         |
  2+10       1.9428     19.99  |         |  Q V    |         |         |
  2+15       2.1069     23.83  |         |    QV   |         |         |
  2+20       2.3066     28.99  |         |       VQ|         |         |
  2+25       2.5277     32.11  |         |        V|Q        |         |
  2+30       2.7914     38.29  |         |         |V   Q    |         |
  2+35       3.1357     49.99  |         |         |   V     |  Q      |
  2+40       3.5373     58.32  |         |         |      V  |       Q |
  2+45       3.9308     57.14  |         |         |         V       Q |
  2+50       4.2358     44.29  |         |         |        Q|  V      |
  2+55       4.4447     30.32  |         |         Q         |   V     |
  3+ 0       4.6023     22.89  |         |    Q    |         |     V   |
  3+ 5       4.7256     17.90  |         |Q        |         |      V  |
  3+10       4.8149     12.97  |       Q |         |         |      V  |
  3+15       4.8789      9.29  |     Q   |         |         |       V |
  3+20       4.9277      7.09  |   Q     |         |         |       V |
  3+25       4.9663      5.59  |  Q      |         |         |       V |
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    3+30       4.9973      4.51  |  Q      |         |         |        V|
    3+35       5.0225      3.65  | Q       |         |         |        V|
    3+40       5.0424      2.89  |Q        |         |         |        V|
    3+45       5.0580      2.27  |Q        |         |         |        V|
    3+50       5.0703      1.79  |Q        |         |         |        V|
    3+55       5.0800      1.41  Q         |         |         |        V|
    4+ 0       5.0871      1.03  Q         |         |         |        V|
    4+ 5       5.0916      0.65  Q         |         |         |        V|
    4+10       5.0937      0.31  Q         |         |         |        V|
    4+15       5.0947      0.14  Q         |         |         |        V|
    4+20       5.0953      0.09  Q         |         |         |        V|
    4+25       5.0956      0.04  Q         |         |         |        V|
    4+30       5.0957      0.01  Q         |         |         |        V|
-------------------------------------------------------------------------
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U n i t H y d r o g r a p h A n a l y s i s

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Study date 08/14/25 File: PROA610.out

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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978

Program License Serial Number 5006

English (in-lb) Input Units Used
English Rainfall Data (Inches) Input Values Used

English Units used in output format

Drainage Area = 75.83(Ac.) = 0.118 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 75.83(Ac.) = 0.118 Sq. Mi.
Length along longest watercourse = 4720.00(Ft.)
Length along longest watercourse measured to centroid = 2360.00(Ft.)
Length along longest watercourse = 0.894 Mi.
Length along longest watercourse measured to centroid = 0.447 Mi.
Difference in elevation = 166.00(Ft.)
Slope along watercourse = 185.6949 Ft./Mi.
Average Manning's 'N' = 0.030
Lag time = 0.188 Hr.
Lag time = 11.30 Min.
25% of lag time = 2.82 Min.
40% of lag time = 4.52 Min.
Unit time = 5.00 Min.
Duration of storm = 6 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.)[1]	Rainfall(In)[2]	Weighting[1*2]
75.83	1.10	83.41

100 YEAR Area rainfall data:

Area(Ac.)[1]	Rainfall(In)[2]	Weighting[1*2]
75.83	3.00	227.49

STORM EVENT (YEAR) = 10.00
Area Averaged 2-Year Rainfall = 1.100(In)
Area Averaged 100-Year Rainfall = 3.000(In)

Point rain (area averaged) = 1.882(In)
Areal adjustment factor = 99.97 %
Adjusted average point rain = 1.881(In)

Sub-Area Data:

Area(Ac.)	Runoff Index	Impervious %
75.830	69.00	0.500

Total Area Entered = 75.83(Ac.)

RI AMC2	RI AMC-2	Infil. Rate (In/Hr)	Impervious (Dec.%)	Adj. Infil. Rate (In/Hr)	Area% (Dec.)	F (In/Hr)

69.0 69.0 0.373 0.500 0.205 1.000 0.205
Sum (F) = 0.205

Area averaged mean soil loss (F) (In/Hr) = 0.205
Minimum soil loss rate ((In/Hr)) = 0.103
(for 24 hour storm duration)
Soil low loss rate (decimal) = 0.500

U n i t H y d r o g r a p h
VALLEY S-Curve

Unit Hydrograph Data

Unit time period (hrs)		Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	44.254	5.079	3.882
2	0.167	88.509	21.318	16.291
3	0.250	132.763	28.439	21.734
4	0.333	177.017	15.372	11.747
5	0.417	221.272	7.523	5.749
6	0.500	265.526	5.074	3.878
7	0.583	309.780	3.778	2.887
8	0.667	354.034	2.830	2.163
9	0.750	398.289	2.240	1.712
10	0.833	442.543	1.702	1.301
11	0.917	486.797	1.386	1.059
12	1.000	531.052	1.242	0.949
13	1.083	575.306	0.960	0.734
14	1.167	619.560	0.796	0.608
15	1.250	663.815	0.638	0.488
16	1.333	708.069	0.484	0.370
17	1.417	752.323	0.443	0.338
18	1.500	796.577	0.443	0.338
19	1.583	840.832	0.255	0.195
			Sum = 100.000	Sum= 76.422

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr) Max		Low	Effective (In/Hr)
1	0.08	0.50	0.113	(0.205)		0.056	0.056
2	0.17	0.60	0.135	(0.205)		0.068	0.068
3	0.25	0.60	0.135	(0.205)		0.068	0.068
4	0.33	0.60	0.135	(0.205)		0.068	0.068
5	0.42	0.60	0.135	(0.205)		0.068	0.068
6	0.50	0.70	0.158	(0.205)		0.079	0.079
7	0.58	0.70	0.158	(0.205)		0.079	0.079
8	0.67	0.70	0.158	(0.205)		0.079	0.079
9	0.75	0.70	0.158	(0.205)		0.079	0.079
10	0.83	0.70	0.158	(0.205)		0.079	0.079
11	0.92	0.70	0.158	(0.205)		0.079	0.079
12	1.00	0.80	0.181	(0.205)		0.090	0.090
13	1.08	0.80	0.181	(0.205)		0.090	0.090
14	1.17	0.80	0.181	(0.205)		0.090	0.090
15	1.25	0.80	0.181	(0.205)		0.090	0.090
16	1.33	0.80	0.181	(0.205)		0.090	0.090
17	1.42	0.80	0.181	(0.205)		0.090	0.090
18	1.50	0.80	0.181	(0.205)		0.090	0.090
19	1.58	0.80	0.181	(0.205)		0.090	0.090
20	1.67	0.80	0.181	(0.205)		0.090	0.090
21	1.75	0.80	0.181	(0.205)		0.090	0.090
22	1.83	0.80	0.181	(0.205)		0.090	0.090
23	1.92	0.80	0.181	(0.205)		0.090	0.090
24	2.00	0.90	0.203	(0.205)		0.102	0.102
25	2.08	0.80	0.181	(0.205)		0.090	0.090
26	2.17	0.90	0.203	(0.205)		0.102	0.102
27	2.25	0.90	0.203	(0.205)		0.102	0.102

28	2.33	0.90	0.203	(0.205)	0.102	0.102	
29	2.42	0.90	0.203	(0.205)	0.102	0.102	
30	2.50	0.90	0.203	(0.205)	0.102	0.102	
31	2.58	0.90	0.203	(0.205)	0.102	0.102	
32	2.67	0.90	0.203	(0.205)	0.102	0.102	
33	2.75	1.00	0.226	(0.205)	0.113	0.113	
34	2.83	1.00	0.226	(0.205)	0.113	0.113	
35	2.92	1.00	0.226	(0.205)	0.113	0.113	
36	3.00	1.00	0.226	(0.205)	0.113	0.113	
37	3.08	1.00	0.226	(0.205)	0.113	0.113	
38	3.17	1.10	0.248	(0.205)	0.124	0.124	
39	3.25	1.10	0.248	(0.205)	0.124	0.124	
40	3.33	1.10	0.248	(0.205)	0.124	0.124	
41	3.42	1.20	0.271	(0.205)	0.135	0.135	
42	3.50	1.30	0.293	(0.205)	0.147	0.147	
43	3.58	1.40	0.316	(0.205)	0.158	0.158	
44	3.67	1.40	0.316	(0.205)	0.158	0.158	
45	3.75	1.50	0.339	(0.205)	0.169	0.169	
46	3.83	1.50	0.339	(0.205)	0.169	0.169	
47	3.92	1.60	0.361	(0.205)	0.181	0.181	
48	4.00	1.60	0.361	(0.205)	0.181	0.181	
49	4.08	1.70	0.384	(0.205)	0.192	0.192	
50	4.17	1.80	0.406	(0.205)	0.203	0.203	
51	4.25	1.90	0.429	0.205	(0.214)	0.224	
52	4.33	2.00	0.451	0.205	(0.226)	0.246	
53	4.42	2.10	0.474	0.205	(0.237)	0.269	
54	4.50	2.10	0.474	0.205	(0.237)	0.269	
55	4.58	2.20	0.497	0.205	(0.248)	0.292	
56	4.67	2.30	0.519	0.205	(0.260)	0.314	
57	4.75	2.40	0.542	0.205	(0.271)	0.337	
58	4.83	2.40	0.542	0.205	(0.271)	0.337	
59	4.92	2.50	0.564	0.205	(0.282)	0.359	
60	5.00	2.60	0.587	0.205	(0.293)	0.382	
61	5.08	3.10	0.700	0.205	(0.350)	0.495	
62	5.17	3.60	0.813	0.205	(0.406)	0.608	
63	5.25	3.90	0.880	0.205	(0.440)	0.675	
64	5.33	4.20	0.948	0.205	(0.474)	0.743	
65	5.42	4.70	1.061	0.205	(0.530)	0.856	
66	5.50	5.60	1.264	0.205	(0.632)	1.059	
67	5.58	1.90	0.429	0.205	(0.214)	0.224	
68	5.67	0.90	0.203	(0.205)	0.102	0.102	
69	5.75	0.60	0.135	(0.205)	0.068	0.068	
70	5.83	0.50	0.113	(0.205)	0.056	0.056	
71	5.92	0.30	0.068	(0.205)	0.034	0.034	
72	6.00	0.20	0.045	(0.205)	0.023	0.023	

(Loss Rate Not Used)

Sum = 100.0 Sum = 13.4

Flood volume = Effective rainfall 1.12(In)
times area 75.8(Ac.)/[(In)/(Ft.)] = 7.1(Ac.Ft)
Total soil loss = 0.77(In)
Total soil loss = 4.837(Ac.Ft)
Total rainfall = 1.88(In)
Flood volume = 307114.2 Cubic Feet
Total soil loss = 210706.2 Cubic Feet

Peak flow rate of this hydrograph = 56.468(CFS)

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6 - H O U R S T O R M
R u n o f f H y d r o g r a p h

Hydrograph in 5 Minute intervals ((CFS))

Time(h+m)	Volume Ac.Ft	Q(CFS)	0	15.0	30.0	45.0	60.0
0+ 5	0.0015	0.22	Q	|	|	|	|
0+10	0.0097	1.18	Q	|	|	|	|
0+15	0.0275	2.59	VQ	|	|	|	|
0+20	0.0516	3.50	V Q	|	|	|	|
0+25	0.0789	3.96	V Q	|	|	|	|

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0+30       0.1084      4.29  V Q       |         |         |         |
0+35       0.1407      4.68  V  Q      |         |         |         |
0+40       0.1756      5.08  V  Q      |         |         |         |
0+45       0.2124      5.33  |V Q      |         |         |         |
0+50       0.2502      5.49  |V Q      |         |         |         |
0+55       0.2888      5.61  |V Q      |         |         |         |
1+ 0       0.3284      5.75  |V Q      |         |         |         |
1+ 5       0.3698      6.01  | V Q     |         |         |         |
1+10       0.4133      6.32  | V Q     |         |         |         |
1+15       0.4581      6.50  | V Q     |         |         |         |
1+20       0.5036      6.60  | V Q     |         |         |         |
1+25       0.5496      6.68  |  VQ     |         |         |         |
1+30       0.5960      6.75  |  VQ     |         |         |         |
1+35       0.6428      6.79  |  VQ     |         |         |         |
1+40       0.6898      6.82  |  VQ     |         |         |         |
1+45       0.7369      6.84  |   Q     |         |         |         |
1+50       0.7841      6.85  |   Q     |         |         |         |
1+55       0.8313      6.87  |   Q     |         |         |         |
2+ 0       0.8790      6.92  |   Q     |         |         |         |
2+ 5       0.9277      7.07  |   QV    |         |         |         |
2+10       0.9771      7.18  |   QV    |         |         |         |
2+15       1.0271      7.25  |   QV    |         |         |         |
2+20       1.0783      7.44  |   Q V   |         |         |         |
2+25       1.1303      7.55  |    QV   |         |         |         |
2+30       1.1827      7.61  |    QV   |         |         |         |
2+35       1.2354      7.64  |    Q V  |         |         |         |
2+40       1.2882      7.67  |    Q V  |         |         |         |
2+45       1.3415      7.73  |    Q V  |         |         |         |
2+50       1.3961      7.94  |    Q V  |         |         |         |
2+55       1.4525      8.19  |    Q  V |         |         |         |
3+ 0       1.5100      8.34  |    Q  V |         |         |         |
3+ 5       1.5679      8.41  |    Q  V |         |         |         |
3+10       1.6265      8.50  |    Q   V|         |         |         |
3+15       1.6866      8.73  |    Q   V|         |         |         |
3+20       1.7486      9.00  |     Q  V|         |         |         |
3+25       1.8119      9.20  |     Q   V         |         |         |
3+30       1.8774      9.51  |     Q   V         |         |         |
3+35       1.9466     10.04  |     Q   |V        |         |         |
3+40       2.0199     10.65  |      Q  |V        |         |         |
3+45       2.0969     11.17  |      Q  |V        |         |         |
3+50       2.1769     11.62  |      Q  | V       |         |         |
3+55       2.2600     12.07  |       Q | V       |         |         |
4+ 0       2.3462     12.51  |       Q |  V      |         |         |
4+ 5       2.4354     12.95  |       Q |  V      |         |         |
4+10       2.5278     13.43  |       Q |   V     |         |         |
4+15       2.6248     14.09  |        Q|   V     |         |         |
4+20       2.7282     15.00  |         Q    V    |         |         |
4+25       2.8397     16.19  |         Q     V   |         |         |
4+30       2.9600     17.47  |         |Q    V   |         |         |
4+35       3.0879     18.57  |         | Q    V  |         |         |
4+40       3.2229     19.60  |         |  Q    V |         |         |
4+45       3.3668     20.90  |         |  Q     V|         |         |
4+50       3.5203     22.29  |         |   Q    V|         |         |
4+55       3.6819     23.46  |         |    Q    V         |         |
5+ 0       3.8510     24.55  |         |     Q   |V        |         |
5+ 5       4.0318     26.25  |         |      Q  | V       |         |
5+10       4.2355     29.58  |         |        Q|   V     |         |
5+15       4.4750     34.77  |         |         |  Q V    |         |
5+20       4.7526     40.31  |         |         |     Q   |         |
5+25       5.0667     45.60  |         |         |       V Q         |
5+30       5.4235     51.81  |         |         |         V   Q     |
5+35       5.8124     56.47  |         |         |         | V    Q  |
5+40       6.1532     49.49  |         |         |         | Q V     |
5+45       6.3822     33.25  |         |         | Q       |     V   |
5+50       6.5376     22.56  |         |    Q    |         |      V  |
5+55       6.6548     17.02  |         |Q        |         |      V  |
6+ 0       6.7467     13.34  |       Q |         |         |       V |
6+ 5       6.8182     10.39  |     Q   |         |         |       V |
6+10       6.8731      7.97  |    Q    |         |         |       V |
6+15       6.9145      6.02  |   Q     |         |         |        V|
6+20       6.9471      4.72  |  Q      |         |         |        V|
```

```
    6+25       6.9732      3.80  | Q       |         |         |        V|
    6+30       6.9939      3.00  | Q       |         |         |        V|
    6+35       7.0103      2.38  |Q        |         |         |        V|
    6+40       7.0230      1.85  |Q        |         |         |        V|
    6+45       7.0327      1.40  Q         |         |         |        V|
    6+50       7.0401      1.06  Q         |         |         |        V|
    6+55       7.0452      0.75  Q         |         |         |        V|
    7+ 0       7.0480      0.41  Q         |         |         |        V|
    7+ 5       7.0491      0.15  Q         |         |         |        V|
    7+10       7.0497      0.09  Q         |         |         |        V|
    7+15       7.0500      0.05  Q         |         |         |        V|
    7+20       7.0502      0.03  Q         |         |         |        V|
    7+25       7.0503      0.01  Q         |         |         |        V|
    7+30       7.0504      0.00  Q         |         |         |         V
--------------------------------------------------------------------------
```

U n i t H y d r o g r a p h A n a l y s i s

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Study date 08/14/25 File: PROA2410.out

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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978

Program License Serial Number 5006

English (in-lb) Input Units Used
English Rainfall Data (Inches) Input Values Used

English Units used in output format

Drainage Area = 75.83(Ac.) = 0.118 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 75.83(Ac.) = 0.118 Sq. Mi.
Length along longest watercourse = 4720.00(Ft.)
Length along longest watercourse measured to centroid = 2360.00(Ft.)
Length along longest watercourse = 0.894 Mi.
Length along longest watercourse measured to centroid = 0.447 Mi.
Difference in elevation = 166.00(Ft.)
Slope along watercourse = 185.6949 Ft./Mi.
Average Manning's 'N' = 0.030
Lag time = 0.188 Hr.
Lag time = 11.30 Min.
25% of lag time = 2.82 Min.
40% of lag time = 4.52 Min.
Unit time = 5.00 Min.
Duration of storm = 24 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.)[1]	Rainfall(In)[2]	Weighting[1*2]
75.83	1.80	136.49

100 YEAR Area rainfall data:

Area(Ac.)[1]	Rainfall(In)[2]	Weighting[1*2]
75.83	5.00	379.15

STORM EVENT (YEAR) = 10.00
Area Averaged 2-Year Rainfall = 1.800(In)
Area Averaged 100-Year Rainfall = 5.000(In)

Point rain (area averaged) = 3.117(In)
Areal adjustment factor = 99.99 %
Adjusted average point rain = 3.116(In)

Sub-Area Data:

Area(Ac.)	Runoff Index	Impervious %
75.830	69.00	0.500

Total Area Entered = 75.83(Ac.)

RI AMC2	RI AMC-2	Infil. Rate (In/Hr)	Impervious (Dec.%)	Adj. Infil. Rate (In/Hr)	Area% (Dec.)	F (In/Hr)

```
69.0  69.0      0.373     0.500        0.205       1.000      0.205
                                                  Sum (F) =   0.205
Area averaged mean soil loss (F) (In/Hr) =  0.205
Minimum soil loss rate ((In/Hr)) =  0.103
(for 24 hour storm duration)
Soil low loss rate (decimal) =   0.500
------------------------------------------------------------------------

               U n i t  H y d r o g r a p h
                      VALLEY S-Curve
------------------------------------------------------------------------
               Unit Hydrograph Data
------------------------------------------------------------------------
Unit time period   Time % of lag   Distribution   Unit Hydrograph
    (hrs)                          Graph %           (CFS)
------------------------------------------------------------------------
    1   0.083         44.254          5.079             3.882
    2   0.167         88.509         21.318            16.291
    3   0.250        132.763         28.439            21.734
    4   0.333        177.017         15.372            11.747
    5   0.417        221.272          7.523             5.749
    6   0.500        265.526          5.074             3.878
    7   0.583        309.780          3.778             2.887
    8   0.667        354.034          2.830             2.163
    9   0.750        398.289          2.240             1.712
   10   0.833        442.543          1.702             1.301
   11   0.917        486.797          1.386             1.059
   12   1.000        531.052          1.242             0.949
   13   1.083        575.306          0.960             0.734
   14   1.167        619.560          0.796             0.608
   15   1.250        663.815          0.638             0.488
   16   1.333        708.069          0.484             0.370
   17   1.417        752.323          0.443             0.338
   18   1.500        796.577          0.443             0.338
   19   1.583        840.832          0.255             0.195
                                Sum = 100.000   Sum=      76.422
------------------------------------------------------------------------

 The following loss rate calculations reflect use of the minimum calculated loss
 rate subtracted from the Storm Rain to produce the maximum Effective Rain value

 Unit Time   Pattern   Storm Rain     Loss rate(In./Hr)     Effective
      (Hr.)  Percent   (In/Hr)         Max    |   Low         (In/Hr)
  1   0.08     0.07      0.025       (  0.363)       0.012         0.012
  2   0.17     0.07      0.025       (  0.362)       0.012         0.012
  3   0.25     0.07      0.025       (  0.361)       0.012         0.012
  4   0.33     0.10      0.037       (  0.359)       0.019         0.019
  5   0.42     0.10      0.037       (  0.358)       0.019         0.019
  6   0.50     0.10      0.037       (  0.356)       0.019         0.019
  7   0.58     0.10      0.037       (  0.355)       0.019         0.019
  8   0.67     0.10      0.037       (  0.354)       0.019         0.019
  9   0.75     0.10      0.037       (  0.352)       0.019         0.019
 10   0.83     0.13      0.050       (  0.351)       0.025         0.025
 11   0.92     0.13      0.050       (  0.350)       0.025         0.025
 12   1.00     0.13      0.050       (  0.348)       0.025         0.025
 13   1.08     0.10      0.037       (  0.347)       0.019         0.019
 14   1.17     0.10      0.037       (  0.345)       0.019         0.019
 15   1.25     0.10      0.037       (  0.344)       0.019         0.019
 16   1.33     0.10      0.037       (  0.343)       0.019         0.019
 17   1.42     0.10      0.037       (  0.341)       0.019         0.019
 18   1.50     0.10      0.037       (  0.340)       0.019         0.019
 19   1.58     0.10      0.037       (  0.339)       0.019         0.019
 20   1.67     0.10      0.037       (  0.337)       0.019         0.019
 21   1.75     0.10      0.037       (  0.336)       0.019         0.019
 22   1.83     0.13      0.050       (  0.335)       0.025         0.025
 23   1.92     0.13      0.050       (  0.333)       0.025         0.025
 24   2.00     0.13      0.050       (  0.332)       0.025         0.025
 25   2.08     0.13      0.050       (  0.330)       0.025         0.025
 26   2.17     0.13      0.050       (  0.329)       0.025         0.025
 27   2.25     0.13      0.050       (  0.328)       0.025         0.025
```

28	2.33	0.13	0.050	(0.326)	0.025	0.025
29	2.42	0.13	0.050	(0.325)	0.025	0.025
30	2.50	0.13	0.050	(0.324)	0.025	0.025
31	2.58	0.17	0.062	(0.323)	0.031	0.031
32	2.67	0.17	0.062	(0.321)	0.031	0.031
33	2.75	0.17	0.062	(0.320)	0.031	0.031
34	2.83	0.17	0.062	(0.319)	0.031	0.031
35	2.92	0.17	0.062	(0.317)	0.031	0.031
36	3.00	0.17	0.062	(0.316)	0.031	0.031
37	3.08	0.17	0.062	(0.315)	0.031	0.031
38	3.17	0.17	0.062	(0.313)	0.031	0.031
39	3.25	0.17	0.062	(0.312)	0.031	0.031
40	3.33	0.17	0.062	(0.311)	0.031	0.031
41	3.42	0.17	0.062	(0.309)	0.031	0.031
42	3.50	0.17	0.062	(0.308)	0.031	0.031
43	3.58	0.17	0.062	(0.307)	0.031	0.031
44	3.67	0.17	0.062	(0.306)	0.031	0.031
45	3.75	0.17	0.062	(0.304)	0.031	0.031
46	3.83	0.20	0.075	(0.303)	0.037	0.037
47	3.92	0.20	0.075	(0.302)	0.037	0.037
48	4.00	0.20	0.075	(0.300)	0.037	0.037
49	4.08	0.20	0.075	(0.299)	0.037	0.037
50	4.17	0.20	0.075	(0.298)	0.037	0.037
51	4.25	0.20	0.075	(0.297)	0.037	0.037
52	4.33	0.23	0.087	(0.295)	0.044	0.044
53	4.42	0.23	0.087	(0.294)	0.044	0.044
54	4.50	0.23	0.087	(0.293)	0.044	0.044
55	4.58	0.23	0.087	(0.292)	0.044	0.044
56	4.67	0.23	0.087	(0.290)	0.044	0.044
57	4.75	0.23	0.087	(0.289)	0.044	0.044
58	4.83	0.27	0.100	(0.288)	0.050	0.050
59	4.92	0.27	0.100	(0.287)	0.050	0.050
60	5.00	0.27	0.100	(0.285)	0.050	0.050
61	5.08	0.20	0.075	(0.284)	0.037	0.037
62	5.17	0.20	0.075	(0.283)	0.037	0.037
63	5.25	0.20	0.075	(0.282)	0.037	0.037
64	5.33	0.23	0.087	(0.280)	0.044	0.044
65	5.42	0.23	0.087	(0.279)	0.044	0.044
66	5.50	0.23	0.087	(0.278)	0.044	0.044
67	5.58	0.27	0.100	(0.277)	0.050	0.050
68	5.67	0.27	0.100	(0.275)	0.050	0.050
69	5.75	0.27	0.100	(0.274)	0.050	0.050
70	5.83	0.27	0.100	(0.273)	0.050	0.050
71	5.92	0.27	0.100	(0.272)	0.050	0.050
72	6.00	0.27	0.100	(0.271)	0.050	0.050
73	6.08	0.30	0.112	(0.269)	0.056	0.056
74	6.17	0.30	0.112	(0.268)	0.056	0.056
75	6.25	0.30	0.112	(0.267)	0.056	0.056
76	6.33	0.30	0.112	(0.266)	0.056	0.056
77	6.42	0.30	0.112	(0.265)	0.056	0.056
78	6.50	0.30	0.112	(0.263)	0.056	0.056
79	6.58	0.33	0.125	(0.262)	0.062	0.062
80	6.67	0.33	0.125	(0.261)	0.062	0.062
81	6.75	0.33	0.125	(0.260)	0.062	0.062
82	6.83	0.33	0.125	(0.259)	0.062	0.062
83	6.92	0.33	0.125	(0.258)	0.062	0.062
84	7.00	0.33	0.125	(0.256)	0.062	0.062
85	7.08	0.33	0.125	(0.255)	0.062	0.062
86	7.17	0.33	0.125	(0.254)	0.062	0.062
87	7.25	0.33	0.125	(0.253)	0.062	0.062
88	7.33	0.37	0.137	(0.252)	0.069	0.069
89	7.42	0.37	0.137	(0.251)	0.069	0.069
90	7.50	0.37	0.137	(0.249)	0.069	0.069
91	7.58	0.40	0.150	(0.248)	0.075	0.075
92	7.67	0.40	0.150	(0.247)	0.075	0.075
93	7.75	0.40	0.150	(0.246)	0.075	0.075
94	7.83	0.43	0.162	(0.245)	0.081	0.081
95	7.92	0.43	0.162	(0.244)	0.081	0.081
96	8.00	0.43	0.162	(0.243)	0.081	0.081
97	8.08	0.50	0.187	(0.242)	0.093	0.093
98	8.17	0.50	0.187	(0.240)	0.093	0.093

99	8.25	0.50	0.187	(0.239)	0.093	0.093
100	8.33	0.50	0.187	(0.238)	0.093	0.093
101	8.42	0.50	0.187	(0.237)	0.093	0.093
102	8.50	0.50	0.187	(0.236)	0.093	0.093
103	8.58	0.53	0.199	(0.235)	0.100	0.100
104	8.67	0.53	0.199	(0.234)	0.100	0.100
105	8.75	0.53	0.199	(0.233)	0.100	0.100
106	8.83	0.57	0.212	(0.232)	0.106	0.106
107	8.92	0.57	0.212	(0.230)	0.106	0.106
108	9.00	0.57	0.212	(0.229)	0.106	0.106
109	9.08	0.63	0.237	(0.228)	0.118	0.118
110	9.17	0.63	0.237	(0.227)	0.118	0.118
111	9.25	0.63	0.237	(0.226)	0.118	0.118
112	9.33	0.67	0.249	(0.225)	0.125	0.125
113	9.42	0.67	0.249	(0.224)	0.125	0.125
114	9.50	0.67	0.249	(0.223)	0.125	0.125
115	9.58	0.70	0.262	(0.222)	0.131	0.131
116	9.67	0.70	0.262	(0.221)	0.131	0.131
117	9.75	0.70	0.262	(0.220)	0.131	0.131
118	9.83	0.73	0.274	(0.219)	0.137	0.137
119	9.92	0.73	0.274	(0.218)	0.137	0.137
120	10.00	0.73	0.274	(0.217)	0.137	0.137
121	10.08	0.50	0.187	(0.215)	0.093	0.093
122	10.17	0.50	0.187	(0.214)	0.093	0.093
123	10.25	0.50	0.187	(0.213)	0.093	0.093
124	10.33	0.50	0.187	(0.212)	0.093	0.093
125	10.42	0.50	0.187	(0.211)	0.093	0.093
126	10.50	0.50	0.187	(0.210)	0.093	0.093
127	10.58	0.67	0.249	(0.209)	0.125	0.125
128	10.67	0.67	0.249	(0.208)	0.125	0.125
129	10.75	0.67	0.249	(0.207)	0.125	0.125
130	10.83	0.67	0.249	(0.206)	0.125	0.125
131	10.92	0.67	0.249	(0.205)	0.125	0.125
132	11.00	0.67	0.249	(0.204)	0.125	0.125
133	11.08	0.63	0.237	(0.203)	0.118	0.118
134	11.17	0.63	0.237	(0.202)	0.118	0.118
135	11.25	0.63	0.237	(0.201)	0.118	0.118
136	11.33	0.63	0.237	(0.200)	0.118	0.118
137	11.42	0.63	0.237	(0.199)	0.118	0.118
138	11.50	0.63	0.237	(0.198)	0.118	0.118
139	11.58	0.57	0.212	(0.197)	0.106	0.106
140	11.67	0.57	0.212	(0.196)	0.106	0.106
141	11.75	0.57	0.212	(0.195)	0.106	0.106
142	11.83	0.60	0.224	(0.194)	0.112	0.112
143	11.92	0.60	0.224	(0.193)	0.112	0.112
144	12.00	0.60	0.224	(0.192)	0.112	0.112
145	12.08	0.83	0.312	(0.191)	0.156	0.156
146	12.17	0.83	0.312	(0.190)	0.156	0.156
147	12.25	0.83	0.312	(0.189)	0.156	0.156
148	12.33	0.87	0.324	(0.189)	0.162	0.162
149	12.42	0.87	0.324	(0.188)	0.162	0.162
150	12.50	0.87	0.324	(0.187)	0.162	0.162
151	12.58	0.93	0.349	(0.186)	0.174	0.174
152	12.67	0.93	0.349	(0.185)	0.174	0.174
153	12.75	0.93	0.349	(0.184)	0.174	0.174
154	12.83	0.97	0.361	(0.183)	0.181	0.181
155	12.92	0.97	0.361	(0.182)	0.181	0.181
156	13.00	0.97	0.361	(0.181)	0.181	0.181
157	13.08	1.13	0.424	0.180	(0.212)	0.244
158	13.17	1.13	0.424	0.179	(0.212)	0.245
159	13.25	1.13	0.424	0.178	(0.212)	0.245
160	13.33	1.13	0.424	0.177	(0.212)	0.246
161	13.42	1.13	0.424	0.177	(0.212)	0.247
162	13.50	1.13	0.424	0.176	(0.212)	0.248
163	13.58	0.77	0.287	(0.175)	0.143	0.143
164	13.67	0.77	0.287	(0.174)	0.143	0.143
165	13.75	0.77	0.287	(0.173)	0.143	0.143
166	13.83	0.77	0.287	(0.172)	0.143	0.143
167	13.92	0.77	0.287	(0.171)	0.143	0.143
168	14.00	0.77	0.287	(0.170)	0.143	0.143
169	14.08	0.90	0.337	(0.169)	0.168	0.168

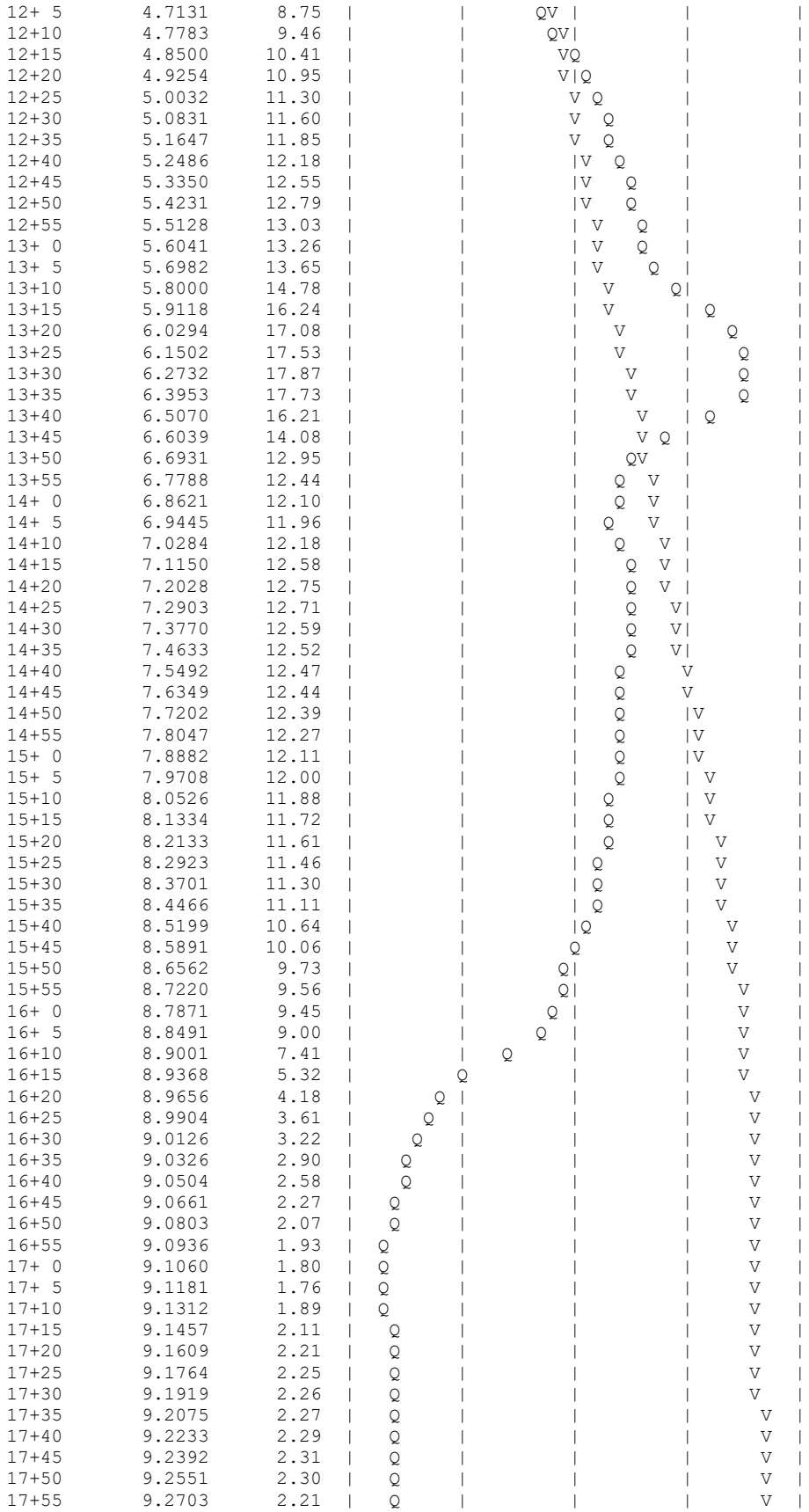
170	14.17	0.90	0.337	(0.169)	0.168	0.168
171	14.25	0.90	0.337	0.168	(0.168)	0.169
172	14.33	0.87	0.324	(0.167)	0.162	0.162
173	14.42	0.87	0.324	(0.166)	0.162	0.162
174	14.50	0.87	0.324	(0.165)	0.162	0.162
175	14.58	0.87	0.324	(0.164)	0.162	0.162
176	14.67	0.87	0.324	(0.163)	0.162	0.162
177	14.75	0.87	0.324	(0.163)	0.162	0.162
178	14.83	0.83	0.312	(0.162)	0.156	0.156
179	14.92	0.83	0.312	(0.161)	0.156	0.156
180	15.00	0.83	0.312	(0.160)	0.156	0.156
181	15.08	0.80	0.299	(0.159)	0.150	0.150
182	15.17	0.80	0.299	(0.159)	0.150	0.150
183	15.25	0.80	0.299	(0.158)	0.150	0.150
184	15.33	0.77	0.287	(0.157)	0.143	0.143
185	15.42	0.77	0.287	(0.156)	0.143	0.143
186	15.50	0.77	0.287	(0.155)	0.143	0.143
187	15.58	0.63	0.237	(0.154)	0.118	0.118
188	15.67	0.63	0.237	(0.154)	0.118	0.118
189	15.75	0.63	0.237	(0.153)	0.118	0.118
190	15.83	0.63	0.237	(0.152)	0.118	0.118
191	15.92	0.63	0.237	(0.151)	0.118	0.118
192	16.00	0.63	0.237	(0.151)	0.118	0.118
193	16.08	0.13	0.050	(0.150)	0.025	0.025
194	16.17	0.13	0.050	(0.149)	0.025	0.025
195	16.25	0.13	0.050	(0.148)	0.025	0.025
196	16.33	0.13	0.050	(0.148)	0.025	0.025
197	16.42	0.13	0.050	(0.147)	0.025	0.025
198	16.50	0.13	0.050	(0.146)	0.025	0.025
199	16.58	0.10	0.037	(0.145)	0.019	0.019
200	16.67	0.10	0.037	(0.145)	0.019	0.019
201	16.75	0.10	0.037	(0.144)	0.019	0.019
202	16.83	0.10	0.037	(0.143)	0.019	0.019
203	16.92	0.10	0.037	(0.142)	0.019	0.019
204	17.00	0.10	0.037	(0.142)	0.019	0.019
205	17.08	0.17	0.062	(0.141)	0.031	0.031
206	17.17	0.17	0.062	(0.140)	0.031	0.031
207	17.25	0.17	0.062	(0.140)	0.031	0.031
208	17.33	0.17	0.062	(0.139)	0.031	0.031
209	17.42	0.17	0.062	(0.138)	0.031	0.031
210	17.50	0.17	0.062	(0.137)	0.031	0.031
211	17.58	0.17	0.062	(0.137)	0.031	0.031
212	17.67	0.17	0.062	(0.136)	0.031	0.031
213	17.75	0.17	0.062	(0.135)	0.031	0.031
214	17.83	0.13	0.050	(0.135)	0.025	0.025
215	17.92	0.13	0.050	(0.134)	0.025	0.025
216	18.00	0.13	0.050	(0.133)	0.025	0.025
217	18.08	0.13	0.050	(0.133)	0.025	0.025
218	18.17	0.13	0.050	(0.132)	0.025	0.025
219	18.25	0.13	0.050	(0.131)	0.025	0.025
220	18.33	0.13	0.050	(0.131)	0.025	0.025
221	18.42	0.13	0.050	(0.130)	0.025	0.025
222	18.50	0.13	0.050	(0.130)	0.025	0.025
223	18.58	0.10	0.037	(0.129)	0.019	0.019
224	18.67	0.10	0.037	(0.128)	0.019	0.019
225	18.75	0.10	0.037	(0.128)	0.019	0.019
226	18.83	0.07	0.025	(0.127)	0.012	0.012
227	18.92	0.07	0.025	(0.126)	0.012	0.012
228	19.00	0.07	0.025	(0.126)	0.012	0.012
229	19.08	0.10	0.037	(0.125)	0.019	0.019
230	19.17	0.10	0.037	(0.125)	0.019	0.019
231	19.25	0.10	0.037	(0.124)	0.019	0.019
232	19.33	0.13	0.050	(0.123)	0.025	0.025
233	19.42	0.13	0.050	(0.123)	0.025	0.025
234	19.50	0.13	0.050	(0.122)	0.025	0.025
235	19.58	0.10	0.037	(0.122)	0.019	0.019
236	19.67	0.10	0.037	(0.121)	0.019	0.019
237	19.75	0.10	0.037	(0.121)	0.019	0.019
238	19.83	0.07	0.025	(0.120)	0.012	0.012
239	19.92	0.07	0.025	(0.120)	0.012	0.012
240	20.00	0.07	0.025	(0.119)	0.012	0.012

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241  20.08     0.10      0.037       (  0.119)       0.019        0.019
242  20.17     0.10      0.037       (  0.118)       0.019        0.019
243  20.25     0.10      0.037       (  0.118)       0.019        0.019
244  20.33     0.10      0.037       (  0.117)       0.019        0.019
245  20.42     0.10      0.037       (  0.116)       0.019        0.019
246  20.50     0.10      0.037       (  0.116)       0.019        0.019
247  20.58     0.10      0.037       (  0.116)       0.019        0.019
248  20.67     0.10      0.037       (  0.115)       0.019        0.019
249  20.75     0.10      0.037       (  0.115)       0.019        0.019
250  20.83     0.07      0.025       (  0.114)       0.012        0.012
251  20.92     0.07      0.025       (  0.114)       0.012        0.012
252  21.00     0.07      0.025       (  0.113)       0.012        0.012
253  21.08     0.10      0.037       (  0.113)       0.019        0.019
254  21.17     0.10      0.037       (  0.112)       0.019        0.019
255  21.25     0.10      0.037       (  0.112)       0.019        0.019
256  21.33     0.07      0.025       (  0.111)       0.012        0.012
257  21.42     0.07      0.025       (  0.111)       0.012        0.012
258  21.50     0.07      0.025       (  0.111)       0.012        0.012
259  21.58     0.10      0.037       (  0.110)       0.019        0.019
260  21.67     0.10      0.037       (  0.110)       0.019        0.019
261  21.75     0.10      0.037       (  0.109)       0.019        0.019
262  21.83     0.07      0.025       (  0.109)       0.012        0.012
263  21.92     0.07      0.025       (  0.109)       0.012        0.012
264  22.00     0.07      0.025       (  0.108)       0.012        0.012
265  22.08     0.10      0.037       (  0.108)       0.019        0.019
266  22.17     0.10      0.037       (  0.108)       0.019        0.019
267  22.25     0.10      0.037       (  0.107)       0.019        0.019
268  22.33     0.07      0.025       (  0.107)       0.012        0.012
269  22.42     0.07      0.025       (  0.107)       0.012        0.012
270  22.50     0.07      0.025       (  0.106)       0.012        0.012
271  22.58     0.07      0.025       (  0.106)       0.012        0.012
272  22.67     0.07      0.025       (  0.106)       0.012        0.012
273  22.75     0.07      0.025       (  0.105)       0.012        0.012
274  22.83     0.07      0.025       (  0.105)       0.012        0.012
275  22.92     0.07      0.025       (  0.105)       0.012        0.012
276  23.00     0.07      0.025       (  0.105)       0.012        0.012
277  23.08     0.07      0.025       (  0.104)       0.012        0.012
278  23.17     0.07      0.025       (  0.104)       0.012        0.012
279  23.25     0.07      0.025       (  0.104)       0.012        0.012
280  23.33     0.07      0.025       (  0.104)       0.012        0.012
281  23.42     0.07      0.025       (  0.103)       0.012        0.012
282  23.50     0.07      0.025       (  0.103)       0.012        0.012
283  23.58     0.07      0.025       (  0.103)       0.012        0.012
284  23.67     0.07      0.025       (  0.103)       0.012        0.012
285  23.75     0.07      0.025       (  0.103)       0.012        0.012
286  23.83     0.07      0.025       (  0.103)       0.012        0.012
287  23.92     0.07      0.025       (  0.103)       0.012        0.012
288  24.00     0.07      0.025       (  0.103)       0.012        0.012
               (Loss Rate Not Used)
    Sum =     100.0                                  Sum =    18.9
      Flood volume = Effective rainfall      1.58(In)
       times area      75.8(Ac.)/[(In)/(Ft.)] =      10.0(Ac.Ft)
      Total soil loss =      1.54(In)
      Total soil loss =     9.738(Ac.Ft)
      Total rainfall =      3.12(In)
      Flood volume =      433559.5 Cubic Feet
      Total soil loss =      424171.9 Cubic Feet
      ---------------------------------------------------------------------
       Peak flow rate of this hydrograph =     17.870(CFS)
      ---------------------------------------------------------------------
      +++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                          24 - H O U R    S T O R M
                     R u n o f f     H y d r o g r a p h
      ---------------------------------------------------------------------
                  Hydrograph in   5   Minute intervals ((CFS))

      ---------------------------------------------------------------------
 Time(h+m) Volume Ac.Ft   Q(CFS)  0        5.0      10.0      15.0      20.0
 ---------------------------------------------------------------------------
   0+ 5       0.0003      0.05  Q         |         |         |         |
   0+10       0.0021      0.25  Q         |         |         |         |
```

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0+15      0.0057      0.52  VQ        |         |         |         |
0+20      0.0104      0.69  VQ        |         |         |         |
0+25      0.0164      0.87  VQ        |         |         |         |
0+30      0.0236      1.05  V Q       |         |         |         |
0+35      0.0316      1.16  V Q       |         |         |         |
0+40      0.0400      1.22  V Q       |         |         |         |
0+45      0.0488      1.27  V Q       |         |         |         |
0+50      0.0579      1.33  V Q       |         |         |         |
0+55      0.0679      1.45  V Q       |         |         |         |
1+ 0      0.0790      1.61  V  Q      |         |         |         |
1+ 5      0.0906      1.68  V  Q      |         |         |         |
1+10      0.1018      1.63  V  Q      |         |         |         |
1+15      0.1123      1.53  V  Q      |         |         |         |
1+20      0.1225      1.48  V Q       |         |         |         |
1+25      0.1327      1.47  V Q       |         |         |         |
1+30      0.1427      1.46  V Q       |         |         |         |
1+35      0.1528      1.46  V Q       |         |         |         |
1+40      0.1628      1.45  V Q       |         |         |         |
1+45      0.1727      1.45  V Q       |         |         |         |
1+50      0.1829      1.47  V Q       |         |         |         |
1+55      0.1937      1.57  V  Q      |         |         |         |
2+ 0      0.2054      1.70  V  Q      |         |         |         |
2+ 5      0.2176      1.77  V  Q      |         |         |         |
2+10      0.2301      1.81  V  Q      |         |         |         |
2+15      0.2427      1.83  V  Q      |         |         |         |
2+20      0.2554      1.85  |V Q       |         |         |         |
2+25      0.2682      1.86  |V Q       |         |         |         |
2+30      0.2810      1.87  |V Q       |         |         |         |
2+35      0.2941      1.90  |V Q       |         |         |         |
2+40      0.3079      2.01  |V  Q      |         |         |         |
2+45      0.3227      2.15  |V  Q      |         |         |         |
2+50      0.3381      2.23  |V  Q      |         |         |         |
2+55      0.3537      2.27  |V  Q      |         |         |         |
3+ 0      0.3695      2.29  |V  Q      |         |         |         |
3+ 5      0.3854      2.31  |V  Q      |         |         |         |
3+10      0.4014      2.33  |V  Q      |         |         |         |
3+15      0.4176      2.34  |V  Q      |         |         |         |
3+20      0.4338      2.35  |V  Q      |         |         |         |
3+25      0.4500      2.36  |V  Q      |         |         |         |
3+30      0.4663      2.36  |V  Q      |         |         |         |
3+35      0.4826      2.37  |V  Q      |         |         |         |
3+40      0.4989      2.37  | V Q      |         |         |         |
3+45      0.5153      2.37  | V Q      |         |         |         |
3+50      0.5318      2.40  | V Q      |         |         |         |
3+55      0.5491      2.51  | V  Q     |         |         |         |
4+ 0      0.5673      2.64  | V  Q     |         |         |         |
4+ 5      0.5860      2.72  | V  Q     |         |         |         |
4+10      0.6049      2.75  | V  Q     |         |         |         |
4+15      0.6241      2.78  | V  Q     |         |         |         |
4+20      0.6435      2.82  | V  Q     |         |         |         |
4+25      0.6637      2.93  | V  Q     |         |         |         |
4+30      0.6849      3.08  | V   Q    |         |         |         |
4+35      0.7067      3.16  | V   Q    |         |         |         |
4+40      0.7287      3.20  | V   Q    |         |         |         |
4+45      0.7510      3.23  |  V  Q    |         |         |         |
4+50      0.7736      3.28  |  V  Q    |         |         |         |
4+55      0.7970      3.40  |  V  Q    |         |         |         |
5+ 0      0.8215      3.55  |  V   Q   |         |         |         |
5+ 5      0.8462      3.58  |  V   Q   |         |         |         |
5+10      0.8698      3.43  |  V  Q    |         |         |         |
5+15      0.8917      3.19  |  V  Q    |         |         |         |
5+20      0.9130      3.09  |  V  Q    |         |         |         |
5+25      0.9346      3.14  |  V  Q    |         |         |         |
5+30      0.9569      3.24  |  V  Q    |         |         |         |
5+35      0.9797      3.31  |  V  Q    |         |         |         |
5+40      1.0033      3.43  |   V Q    |         |         |         |
5+45      1.0279      3.57  |   V  Q   |         |         |         |
5+50      1.0531      3.66  |   V  Q   |         |         |         |
5+55      1.0785      3.69  |   V  Q   |         |         |         |
6+ 0      1.1041      3.72  |   V  Q   |         |         |         |
6+ 5      1.1301      3.76  |   V  Q   |         |         |         |
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6+10	1.1568	3.88	| V Q |	|	|	|
6+15	1.1845	4.03	| V Q |	|	|	|
6+20	1.2128	4.11	| V Q |	|	|	|
6+25	1.2415	4.15	| V Q |	|	|	|
6+30	1.2703	4.18	| V Q |	|	|	|
6+35	1.2994	4.23	| V Q |	|	|	|
6+40	1.3293	4.35	| V Q |	|	|	|
6+45	1.3603	4.50	| V Q|	|	|	|
6+50	1.3919	4.59	| V Q|	|	|	|
6+55	1.4238	4.63	| V Q|	|	|	|
7+ 0	1.4559	4.66	| V Q|	|	|	|
7+ 5	1.4882	4.69	| V Q|	|	|	|
7+10	1.5206	4.70	| V Q|	|	|	|
7+15	1.5531	4.72	| V Q|	|	|	|
7+20	1.5858	4.75	| V Q|	|	|	|
7+25	1.6193	4.86	| V Q|	|	|	|
7+30	1.6538	5.01	| V Q	|	|	|
7+35	1.6890	5.11	| V Q	|	|	|
7+40	1.7251	5.25	| V Q	|	|	|
7+45	1.7624	5.41	| V Q	|	|	|
7+50	1.8005	5.53	| V |Q	|	|	|
7+55	1.8397	5.68	| V |Q	|	|	|
8+ 0	1.8800	5.86	| V |Q	|	|	|
8+ 5	1.9214	6.01	| V | Q	|	|	|
8+10	1.9645	6.26	| V | Q	|	|	|
8+15	2.0098	6.58	| V | Q	|	|	|
8+20	2.0563	6.75	| V | Q	|	|	|
8+25	2.1035	6.85	| V | Q	|	|	|
8+30	2.1511	6.92	| V | Q	|	|	|
8+35	2.1993	6.99	| V | Q	|	|	|
8+40	2.2484	7.13	| V| Q	|	|	|
8+45	2.2987	7.30	| V| Q	|	|	|
8+50	2.3498	7.42	| V| Q	|	|	|
8+55	2.4020	7.58	| V| Q	|	|	|
9+ 0	2.4554	7.76	| V| Q	|	|	|
9+ 5	2.5099	7.91	| V Q	|	|	|
9+10	2.5662	8.17	| V Q	|	|	|
9+15	2.6246	8.48	| V Q	|	|	|
9+20	2.6844	8.69	| V Q	|	|	|
9+25	2.7456	8.89	| V Q	|	|	|
9+30	2.8082	9.09	| V Q	|	|	|
9+35	2.8719	9.24	| V Q	|	|	|
9+40	2.9367	9.41	| V Q	|	|	|
9+45	3.0028	9.60	| V Q|	|	|	|
9+50	3.0699	9.74	| V Q|	|	|	|
9+55	3.1382	9.91	| V Q|	|	|	|
10+ 0	3.2077	10.10	| V Q	|	|	|
10+ 5	3.2769	10.04	| V Q	|	|	|
10+10	3.3416	9.40	| V Q |	|	|	|
10+15	3.4001	8.50	| V Q |	|	|	|
10+20	3.4554	8.02	| V Q |	|	|	|
10+25	3.5091	7.80	| VQ |	|	|	|
10+30	3.5618	7.65	| VQ |	|	|	|
10+35	3.6146	7.66	| VQ |	|	|	|
10+40	3.6703	8.09	| V Q |	|	|	|
10+45	3.7302	8.70	| V Q |	|	|	|
10+50	3.7924	9.02	| V Q |	|	|	|
10+55	3.8555	9.16	| V Q |	|	|	|
11+ 0	3.9191	9.25	| V Q |	|	|	|
11+ 5	3.9831	9.28	| V Q |	|	|	|
11+10	4.0466	9.22	| V Q |	|	|	|
11+15	4.1094	9.12	| V Q |	|	|	|
11+20	4.1719	9.08	| V Q |	|	|	|
11+25	4.2343	9.06	| VQ |	|	|	|
11+30	4.2966	9.05	| VQ |	|	|	|
11+35	4.3586	9.00	| Q |	|	|	|
11+40	4.4192	8.80	| Q |	|	|	|
11+45	4.4779	8.53	| Q |	|	|	|
11+50	4.5359	8.41	| Q V |	|	|	|
11+55	4.5941	8.45	| Q V |	|	|	|
12+ 0	4.6529	8.54	| QV |	|	|	|



12+ 5	4.7131	8.75			QV			
12+10	4.7783	9.46			QV			
12+15	4.8500	10.41			VQ			
12+20	4.9254	10.95			V|Q			
12+25	5.0032	11.30			V Q			
12+30	5.0831	11.60			V Q			
12+35	5.1647	11.85			V Q			
12+40	5.2486	12.18			|V Q			
12+45	5.3350	12.55			|V Q			
12+50	5.4231	12.79			|V Q			
12+55	5.5128	13.03			V Q			
13+ 0	5.6041	13.26			V Q			
13+ 5	5.6982	13.65			V Q			
13+10	5.8000	14.78			V Q			
13+15	5.9118	16.24			V	Q		
13+20	6.0294	17.08			V	Q		
13+25	6.1502	17.53			V	Q		
13+30	6.2732	17.87			V	Q		
13+35	6.3953	17.73			V	Q		
13+40	6.5070	16.21			V	Q		
13+45	6.6039	14.08			V Q			
13+50	6.6931	12.95			QV			
13+55	6.7788	12.44			Q V			
14+ 0	6.8621	12.10			Q V			
14+ 5	6.9445	11.96			Q V			
14+10	7.0284	12.18			Q V			
14+15	7.1150	12.58			Q V			
14+20	7.2028	12.75			Q V			
14+25	7.2903	12.71			Q V			
14+30	7.3770	12.59			Q V			
14+35	7.4633	12.52			Q V			
14+40	7.5492	12.47			Q V			
14+45	7.6349	12.44			Q V			
14+50	7.7202	12.39			Q |V			
14+55	7.8047	12.27			Q |V			
15+ 0	7.8882	12.11			Q |V			
15+ 5	7.9708	12.00			Q V			
15+10	8.0526	11.88			Q V			
15+15	8.1334	11.72			Q V			
15+20	8.2133	11.61			Q V			
15+25	8.2923	11.46			Q V			
15+30	8.3701	11.30			Q V			
15+35	8.4466	11.11			Q V			
15+40	8.5199	10.64			|Q V			
15+45	8.5891	10.06			Q V			
15+50	8.6562	9.73			Q| V			
15+55	8.7220	9.56			Q| V			
16+ 0	8.7871	9.45			Q | V			
16+ 5	8.8491	9.00			Q | V			
16+10	8.9001	7.41		Q	| V			
16+15	8.9368	5.32		Q	| V			
16+20	8.9656	4.18		Q |	V			
16+25	8.9904	3.61		Q |	V			
16+30	9.0126	3.22		Q |	V			
16+35	9.0326	2.90		Q |	V			
16+40	9.0504	2.58		Q |	V			
16+45	9.0661	2.27		Q |	V			
16+50	9.0803	2.07		Q |	V			
16+55	9.0936	1.93		Q |	V			
17+ 0	9.1060	1.80		Q |	V			
17+ 5	9.1181	1.76		Q |	V			
17+10	9.1312	1.89		Q |	V			
17+15	9.1457	2.11		Q |	V			
17+20	9.1609	2.21		Q |	V			
17+25	9.1764	2.25		Q |	V			
17+30	9.1919	2.26		Q |	V			
17+35	9.2075	2.27		Q |	V			
17+40	9.2233	2.29		Q |	V			
17+45	9.2392	2.31		Q |	V			
17+50	9.2551	2.30		Q |	V			
17+55	9.2703	2.21		Q |	V			

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18+ 0       9.2847      2.08  |   Q     |         |         |      V  |
18+ 5       9.2986      2.02  |   Q     |         |         |      V  |
18+10       9.3123      1.99  |  Q      |         |         |      V  |
18+15       9.3259      1.97  |  Q      |         |         |      V  |
18+20       9.3394      1.96  |  Q      |         |         |      V  |
18+25       9.3528      1.95  |  Q      |         |         |      V  |
18+30       9.3662      1.94  |  Q      |         |         |      V  |
18+35       9.3794      1.91  |  Q      |         |         |      V  |
18+40       9.3918      1.81  |  Q      |         |         |      V  |
18+45       9.4032      1.66  |  Q      |         |         |      V  |
18+50       9.4140      1.56  |  Q      |         |         |      V  |
18+55       9.4238      1.42  | Q       |         |         |      V  |
19+ 0       9.4324      1.26  | Q       |         |         |      V  |
19+ 5       9.4406      1.19  | Q       |         |         |      V  |
19+10       9.4492      1.24  | Q       |         |         |      V  |
19+15       9.4584      1.34  | Q       |         |         |       V |
19+20       9.4681      1.41  | Q       |         |         |       V |
19+25       9.4786      1.52  |  Q      |         |         |       V |
19+30       9.4901      1.67  |  Q      |         |         |       V |
19+35       9.5019      1.72  |  Q      |         |         |       V |
19+40       9.5133      1.66  |  Q      |         |         |       V |
19+45       9.5240      1.55  |  Q      |         |         |       V |
19+50       9.5342      1.47  | Q       |         |         |       V |
19+55       9.5434      1.35  | Q       |         |         |       V |
20+ 0       9.5517      1.20  | Q       |         |         |       V |
20+ 5       9.5596      1.14  | Q       |         |         |       V |
20+10       9.5679      1.20  | Q       |         |         |       V |
20+15       9.5769      1.31  | Q       |         |         |       V |
20+20       9.5863      1.36  | Q       |         |         |       V |
20+25       9.5958      1.38  | Q       |         |         |       V |
20+30       9.6054      1.40  | Q       |         |         |       V |
20+35       9.6151      1.41  | Q       |         |         |       V |
20+40       9.6248      1.41  | Q       |         |         |       V |
20+45       9.6346      1.42  | Q       |         |         |       V |
20+50       9.6442      1.39  | Q       |         |         |       V |
20+55       9.6531      1.29  | Q       |         |         |       V |
21+ 0       9.6611      1.16  | Q       |         |         |       V |
21+ 5       9.6687      1.11  | Q       |         |         |       V |
21+10       9.6768      1.18  | Q       |         |         |       V |
21+15       9.6857      1.29  | Q       |         |         |       V |
21+20       9.6948      1.32  | Q       |         |         |       V |
21+25       9.7034      1.24  | Q       |         |         |       V |
21+30       9.7111      1.12  | Q       |         |         |        V|
21+35       9.7186      1.09  | Q       |         |         |        V|
21+40       9.7266      1.16  | Q       |         |         |        V|
21+45       9.7354      1.28  | Q       |         |         |        V|
21+50       9.7444      1.31  | Q       |         |         |        V|
21+55       9.7529      1.23  | Q       |         |         |        V|
22+ 0       9.7606      1.11  | Q       |         |         |        V|
22+ 5       9.7680      1.08  | Q       |         |         |        V|
22+10       9.7759      1.15  | Q       |         |         |        V|
22+15       9.7847      1.27  | Q       |         |         |        V|
22+20       9.7937      1.30  | Q       |         |         |        V|
22+25       9.8021      1.23  | Q       |         |         |        V|
22+30       9.8098      1.11  | Q       |         |         |        V|
22+35       9.8171      1.05  | Q       |         |         |        V|
22+40       9.8241      1.03  | Q       |         |         |        V|
22+45       9.8311      1.01  | Q       |         |         |        V|
22+50       9.8379      0.99  |Q        |         |         |        V|
22+55       9.8447      0.99  |Q        |         |         |        V|
23+ 0       9.8515      0.98  |Q        |         |         |        V|
23+ 5       9.8582      0.98  |Q        |         |         |        V|
23+10       9.8649      0.97  |Q        |         |         |        V|
23+15       9.8715      0.97  |Q        |         |         |        V|
23+20       9.8781      0.96  |Q        |         |         |        V|
23+25       9.8848      0.96  |Q        |         |         |        V|
23+30       9.8914      0.96  |Q        |         |         |        V|
23+35       9.8980      0.96  |Q        |         |         |        V|
23+40       9.9046      0.96  |Q        |         |         |        V|
23+45       9.9111      0.95  |Q        |         |         |        V|
23+50       9.9177      0.95  |Q        |         |         |        V|
```

```
   23+55       9.9243      0.95  |Q        |         |         |        V|
   24+ 0       9.9308      0.95  |Q        |         |         |        V|
   24+ 5       9.9371      0.90  |Q        |         |         |        V|
   24+10       9.9419      0.70  |Q        |         |         |        V|
   24+15       9.9448      0.43  Q         |         |         |        V|
   24+20       9.9468      0.28  Q         |         |         |        V|
   24+25       9.9483      0.21  Q         |         |         |        V|
   24+30       9.9494      0.16  Q         |         |         |        V|
   24+35       9.9503      0.13  Q         |         |         |        V|
   24+40       9.9510      0.10  Q         |         |         |        V|
   24+45       9.9515      0.08  Q         |         |         |        V|
   24+50       9.9520      0.06  Q         |         |         |        V|
   24+55       9.9523      0.05  Q         |         |         |        V|
   25+ 0       9.9526      0.04  Q         |         |         |        V|
   25+ 5       9.9528      0.03  Q         |         |         |        V|
   25+10       9.9529      0.02  Q         |         |         |        V|
   25+15       9.9530      0.02  Q         |         |         |        V|
   25+20       9.9531      0.01  Q         |         |         |        V|
   25+25       9.9531      0.01  Q         |         |         |        V|
   25+30       9.9532      0.00  Q         |         |         |         V
-------------------------------------------------------------------------
```

U n i t H y d r o g r a p h A n a l y s i s

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Study date 08/14/25 File: PROA1100.out

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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978

Program License Serial Number 5006

English (in-lb) Input Units Used
English Rainfall Data (Inches) Input Values Used

English Units used in output format

Drainage Area = 75.83(Ac.) = 0.118 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 75.83(Ac.) = 0.118 Sq. Mi.
Length along longest watercourse = 4720.00(Ft.)
Length along longest watercourse measured to centroid = 2360.00(Ft.)
Length along longest watercourse = 0.894 Mi.
Length along longest watercourse measured to centroid = 0.447 Mi.
Difference in elevation = 166.00(Ft.)
Slope along watercourse = 185.6949 Ft./Mi.
Average Manning's 'N' = 0.030
Lag time = 0.188 Hr.
Lag time = 11.30 Min.
25% of lag time = 2.82 Min.
40% of lag time = 4.52 Min.
Unit time = 5.00 Min.
Duration of storm = 1 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.)[1]	Rainfall(In)[2]	Weighting[1*2]
75.83	0.50	37.91

100 YEAR Area rainfall data:

Area(Ac.)[1]	Rainfall(In)[2]	Weighting[1*2]
75.83	1.30	98.58

STORM EVENT (YEAR) = 100.00
Area Averaged 2-Year Rainfall = 0.500(In)
Area Averaged 100-Year Rainfall = 1.300(In)

Point rain (area averaged) = 1.300(In)
Areal adjustment factor = 99.93 %
Adjusted average point rain = 1.299(In)

Sub-Area Data:

Area(Ac.)	Runoff Index	Impervious %
75.830	69.00	0.500

Total Area Entered = 75.83(Ac.)

RI AMC2	RI AMC-2	Infil. Rate (In/Hr)	Impervious (Dec.%)	Adj. Infil. Rate (In/Hr)	Area% (Dec.)	F (In/Hr)

```
69.0  69.0      0.373     0.500        0.205       1.000      0.205
                                                  Sum (F) =   0.205
Area averaged mean soil loss (F) (In/Hr) =  0.205
Minimum soil loss rate ((In/Hr)) =  0.103
(for 24 hour storm duration)
Soil low loss rate (decimal) =   0.500
------------------------------------------------------------------------
Slope of intensity-duration curve for a 1 hour storm =0.5500
------------------------------------------------------------------------

                U n i t  H y d r o g r a p h
                       VALLEY S-Curve
------------------------------------------------------------------------
                Unit Hydrograph Data
------------------------------------------------------------------------
Unit time period   Time % of lag   Distribution   Unit Hydrograph
    (hrs)                          Graph %            (CFS)
------------------------------------------------------------------------
    1   0.083         44.254          5.079              3.882
    2   0.167         88.509         21.318             16.291
    3   0.250        132.763         28.439             21.734
    4   0.333        177.017         15.372             11.747
    5   0.417        221.272          7.523              5.749
    6   0.500        265.526          5.074              3.878
    7   0.583        309.780          3.778              2.887
    8   0.667        354.034          2.830              2.163
    9   0.750        398.289          2.240              1.712
   10   0.833        442.543          1.702              1.301
   11   0.917        486.797          1.386              1.059
   12   1.000        531.052          1.242              0.949
   13   1.083        575.306          0.960              0.734
   14   1.167        619.560          0.796              0.608
   15   1.250        663.815          0.638              0.488
   16   1.333        708.069          0.484              0.370
   17   1.417        752.323          0.443              0.338
   18   1.500        796.577          0.443              0.338
   19   1.583        840.832          0.255              0.195
                                Sum = 100.000   Sum=      76.422
------------------------------------------------------------------------

 The following loss rate calculations reflect use of the minimum calculated loss
 rate subtracted from the Storm Rain to produce the maximum Effective Rain value

  Unit Time   Pattern   Storm Rain     Loss rate(In./Hr)     Effective
       (Hr.)  Percent   (In/Hr)         Max   |   Low        (In/Hr)
   1   0.08     3.30      0.514          0.205    (  0.257)        0.309
   2   0.17     4.20      0.655          0.205    (  0.327)        0.450
   3   0.25     4.40      0.686          0.205    (  0.343)        0.481
   4   0.33     4.80      0.748          0.205    (  0.374)        0.543
   5   0.42     5.20      0.811          0.205    (  0.405)        0.606
   6   0.50     6.20      0.967          0.205    (  0.483)        0.761
   7   0.58     6.80      1.060          0.205    (  0.530)        0.855
   8   0.67     8.80      1.372          0.205    (  0.686)        1.167
   9   0.75    13.90      2.167          0.205    (  1.083)        1.962
  10   0.83    31.40      4.895          0.205    (  2.448)        4.690
  11   0.92     7.20      1.122          0.205    (  0.561)        0.917
  12   1.00     3.80      0.592          0.205    (  0.296)        0.387
               (Loss Rate Not Used)
    Sum =     100.0                                  Sum =    13.1
      Flood volume = Effective rainfall      1.09(In)
       times area      75.8(Ac.)/[(In)/(Ft.)] =       6.9(Ac.Ft)
      Total soil loss =      0.21(In)
      Total soil loss =     1.296(Ac.Ft)
      Total rainfall =      1.30(In)
      Flood volume =      301156.0 Cubic Feet
      Total soil loss =       56439.9 Cubic Feet
      ---------------------------------------------------------------------
       Peak flow rate of this hydrograph =    157.365(CFS)
      ---------------------------------------------------------------------
      +++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
```

1 - H O U R S T O R M
R u n o f f H y d r o g r a p h

Hydrograph in 5 Minute intervals ((CFS))

Time(h+m)	Volume Ac.Ft	Q(CFS)	0	50.0	100.0	150.0	200.0
0+ 5	0.0083	1.20	Q				
0+10	0.0550	6.79	VQ				
0+15	0.1647	15.93	V Q				
0+20	0.3256	23.36	V Q				
0+25	0.5235	28.73	V Q				
0+30	0.7582	34.08	V Q				
0+35	1.0384	40.69	V Q				
0+40	1.3766	49.10	V Q				
0+45	1.8082	62.66	V Q				
0+50	2.4702	96.13	V Q				
0+55	3.4958	148.92	V Q				
1+ 0	4.5796	157.36	V Q				
1+ 5	5.2974	104.22	Q V				
1+10	5.7289	62.66	Q V				
1+15	6.0086	40.61	Q V				
1+20	6.2090	29.10	Q V				
1+25	6.3611	22.09	Q V				
1+30	6.4807	17.36	Q V				
1+35	6.5748	13.66	Q V				
1+40	6.6512	11.10	Q V				
1+45	6.7150	9.26	Q V				
1+50	6.7658	7.37	Q V				
1+55	6.8067	5.95	Q V				
2+ 0	6.8391	4.69	Q V				
2+ 5	6.8642	3.65	Q V				
2+10	6.8849	3.01	Q V				
2+15	6.9016	2.42	Q V				
2+20	6.9109	1.36	Q V				
2+25	6.9131	0.31	Q V				
2+30	6.9136	0.08	Q V				

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       U n i t   H y d r o g r a p h   A n a l y s i s

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              Study date  08/14/25 File: PROA3100.out

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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978


Program License Serial Number 5006

------------------------------------------------------------------------
 English (in-lb) Input Units Used
 English Rainfall Data (Inches) Input Values Used

 English Units used in output format



------------------------------------------------------------------------
------------------------------------------------------------------------
Drainage Area =      75.83(Ac.)  =      0.118 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment =      75.83(Ac.)  =      0.118 Sq. Mi.
Length along longest watercourse =    4720.00(Ft.)
Length along longest watercourse measured to centroid =    2360.00(Ft.)
Length along longest watercourse =      0.894 Mi.
Length along longest watercourse measured to centroid =      0.447 Mi.
Difference in elevation =     166.00(Ft.)
Slope along watercourse =    185.6949 Ft./Mi.
Average Manning's 'N' = 0.030
Lag time =    0.188 Hr.
Lag time =    11.30 Min.
25% of lag time =     2.82 Min.
40% of lag time =     4.52 Min.
Unit time =     5.00 Min.
Duration of storm = 3 Hour(s)
User Entered Base Flow =     0.00(CFS)

2 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
       75.83           0.80                 60.66

100 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
       75.83           2.00                151.66

STORM EVENT (YEAR) =  100.00
Area Averaged 2-Year Rainfall =    0.800(In)
Area Averaged 100-Year Rainfall =    2.000(In)

Point rain (area averaged) =    2.000(In)
Areal adjustment factor =   99.97 %
Adjusted average point rain =    1.999(In)

Sub-Area Data:
Area(Ac.)         Runoff Index   Impervious %
    75.830           69.00         0.500
 Total Area Entered =     75.83(Ac.)


RI    RI   Infil. Rate Impervious   Adj. Infil. Rate  Area%     F
AMC2 AMC-2     (In/Hr)    (Dec.%)     (In/Hr)      (Dec.)    (In/Hr)
```

69.0 69.0 0.373 0.500 0.205 1.000 0.205
Sum (F) = 0.205

Area averaged mean soil loss (F) (In/Hr) = 0.205
Minimum soil loss rate ((In/Hr)) = 0.103
(for 24 hour storm duration)
Soil low loss rate (decimal) = 0.500

U n i t H y d r o g r a p h
VALLEY S-Curve

Unit Hydrograph Data

Unit time period (hrs)	Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	44.254	5.079	3.882
2	0.167	88.509	21.318	16.291
3	0.250	132.763	28.439	21.734
4	0.333	177.017	15.372	11.747
5	0.417	221.272	7.523	5.749
6	0.500	265.526	5.074	3.878
7	0.583	309.780	3.778	2.887
8	0.667	354.034	2.830	2.163
9	0.750	398.289	2.240	1.712
10	0.833	442.543	1.702	1.301
11	0.917	486.797	1.386	1.059
12	1.000	531.052	1.242	0.949
13	1.083	575.306	0.960	0.734
14	1.167	619.560	0.796	0.608
15	1.250	663.815	0.638	0.488
16	1.333	708.069	0.484	0.370
17	1.417	752.323	0.443	0.338
18	1.500	796.577	0.443	0.338
19	1.583	840.832	0.255	0.195
			Sum = 100.000	Sum= 76.422

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr) Max	Low	Effective (In/Hr)
1	0.08	1.30	0.312	(0.205)	0.156	0.156
2	0.17	1.30	0.312	(0.205)	0.156	0.156
3	0.25	1.10	0.264	(0.205)	0.132	0.132
4	0.33	1.50	0.360	(0.205)	0.180	0.180
5	0.42	1.50	0.360	(0.205)	0.180	0.180
6	0.50	1.80	0.432	0.205	(0.216)	0.227
7	0.58	1.50	0.360	(0.205)	0.180	0.180
8	0.67	1.80	0.432	0.205	(0.216)	0.227
9	0.75	1.80	0.432	0.205	(0.216)	0.227
10	0.83	1.50	0.360	(0.205)	0.180	0.180
11	0.92	1.60	0.384	(0.205)	0.192	0.192
12	1.00	1.80	0.432	0.205	(0.216)	0.227
13	1.08	2.20	0.528	0.205	(0.264)	0.323
14	1.17	2.20	0.528	0.205	(0.264)	0.323
15	1.25	2.20	0.528	0.205	(0.264)	0.323
16	1.33	2.00	0.480	0.205	(0.240)	0.275
17	1.42	2.60	0.624	0.205	(0.312)	0.419
18	1.50	2.70	0.648	0.205	(0.324)	0.443
19	1.58	2.40	0.576	0.205	(0.288)	0.371
20	1.67	2.70	0.648	0.205	(0.324)	0.443
21	1.75	3.30	0.792	0.205	(0.396)	0.587
22	1.83	3.10	0.744	0.205	(0.372)	0.539
23	1.92	2.90	0.696	0.205	(0.348)	0.491
24	2.00	3.00	0.720	0.205	(0.360)	0.515
25	2.08	3.10	0.744	0.205	(0.372)	0.539
26	2.17	4.20	1.008	0.205	(0.504)	0.803
27	2.25	5.00	1.200	0.205	(0.600)	0.995

```
28   2.33     3.50      0.840          0.205    (  0.420)        0.635
29   2.42     6.80      1.631          0.205    (  0.816)        1.426
30   2.50     7.30      1.751          0.205    (  0.876)        1.546
31   2.58     8.20      1.967          0.205    (  0.984)        1.762
32   2.67     5.90      1.416          0.205    (  0.708)        1.210
33   2.75     2.00      0.480          0.205    (  0.240)        0.275
34   2.83     1.80      0.432          0.205    (  0.216)        0.227
35   2.92     1.80      0.432          0.205    (  0.216)        0.227
36   3.00     0.60      0.144       (  0.205)       0.072        0.072
            (Loss Rate Not Used)
   Sum =     100.0                                    Sum =    17.0
      Flood volume = Effective rainfall      1.42(In)
       times area      75.8(Ac.)/[(In)/(Ft.)] =       9.0(Ac.Ft)
      Total soil loss =      0.58(In)
      Total soil loss =     3.667(Ac.Ft)
      Total rainfall =      2.00(In)
      Flood volume =      390608.0 Cubic Feet
      Total soil loss =      159735.2 Cubic Feet
      ---------------------------------------------------------------------
       Peak flow rate of this hydrograph =     98.646(CFS)
      ---------------------------------------------------------------------
      +++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                          3 - H O U R    S T O R M
                     R u n o f f     H y d r o g r a p h
      ---------------------------------------------------------------------
                  Hydrograph in   5   Minute intervals ((CFS))

      ---------------------------------------------------------------------
Time(h+m) Volume Ac.Ft   Q(CFS)  0       25.0      50.0      75.0     100.0
-------------------------------------------------------------------------
  0+ 5       0.0042      0.61  Q         |         |         |         |
  0+10       0.0258      3.15  VQ        |         |         |         |
  0+15       0.0702      6.45  V Q       |         |         |         |
  0+20       0.1258      8.07  V  Q      |         |         |         |
  0+25       0.1894      9.23  V  Q      |         |         |         |
  0+30       0.2637     10.78  |V  Q     |         |         |         |
  0+35       0.3479     12.24  |V  Q     |         |         |         |
  0+40       0.4388     13.20  |V   Q    |         |         |         |
  0+45       0.5344     13.88  | V  Q    |         |         |         |
  0+50       0.6358     14.72  | V  Q    |         |         |         |
  0+55       0.7370     14.69  |  V Q    |         |         |         |
  1+ 0       0.8363     14.43  |  V Q    |         |         |         |
  1+ 5       0.9423     15.38  |   V Q   |         |         |         |
  1+10       1.0649     17.81  |   V  Q  |         |         |         |
  1+15       1.2053     20.38  |    V  Q |         |         |         |
  1+20       1.3539     21.58  |     V Q |         |         |         |
  1+25       1.5061     22.10  |     V Q |         |         |         |
  1+30       1.6716     24.03  |      V Q|         |         |         |
  1+35       1.8582     27.10  |       V Q         |         |         |
  1+40       2.0539     28.41  |        V|Q        |         |         |
  1+45       2.2585     29.71  |         VQ        |         |         |
  1+50       2.4880     33.32  |         |V Q      |         |         |
  1+55       2.7390     36.45  |         | V Q     |         |         |
  2+ 0       2.9935     36.95  |         |  VQ     |         |         |
  2+ 5       3.2487     37.05  |         |   Q     |         |         |
  2+10       3.5174     39.01  |         |    Q    |         |         |
  2+15       3.8276     45.04  |         |      VQ |         |         |
  2+20       4.1933     53.11  |         |       V |Q        |         |
  2+25       4.5927     57.99  |         |         V  Q      |         |
  2+30       5.0584     67.61  |         |         | V    Q  |         |
  2+35       5.6489     85.74  |         |         |    V     |   Q     |
  2+40       6.3283     98.65  |         |         |       V  |        Q|
  2+45       6.9931     96.54  |         |         |          |V      Q |
  2+50       7.5120     75.35  |         |         |         Q  V       |
  2+55       7.8682     51.71  |         |         |Q         |    V     |
  3+ 0       8.1351     38.75  |         |    Q    |          |     V    |
  3+ 5       8.3426     30.14  |         | Q       |          |      V   |
  3+10       8.4931     21.85  |       Q |         |          |      V   |
  3+15       8.6014     15.72  |     Q   |         |          |       V  |
  3+20       8.6841     12.01  |   Q     |         |          |       V  |
  3+25       8.7494      9.48  |  Q      |         |          |        V |
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    3+30       8.8020      7.64  |  Q      |         |         |        V|
    3+35       8.8444      6.16  | Q       |         |         |        V|
    3+40       8.8779      4.87  |Q        |         |         |        V|
    3+45       8.9042      3.81  |Q        |         |         |        V|
    3+50       8.9249      3.00  |Q        |         |         |        V|
    3+55       8.9411      2.35  Q         |         |         |        V|
    4+ 0       8.9528      1.71  Q         |         |         |        V|
    4+ 5       8.9603      1.09  Q         |         |         |        V|
    4+10       8.9639      0.53  Q         |         |         |        V|
    4+15       8.9656      0.23  Q         |         |         |        V|
    4+20       8.9666      0.15  Q         |         |         |        V|
    4+25       8.9670      0.07  Q         |         |         |        V|
    4+30       8.9671      0.01  Q         |         |         |        V|
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U n i t H y d r o g r a p h A n a l y s i s

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Study date 08/14/25 File: PROA6100.out

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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978

Program License Serial Number 5006

English (in-lb) Input Units Used
English Rainfall Data (Inches) Input Values Used

English Units used in output format

Drainage Area = 75.83(Ac.) = 0.118 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 75.83(Ac.) = 0.118 Sq. Mi.
Length along longest watercourse = 4720.00(Ft.)
Length along longest watercourse measured to centroid = 2360.00(Ft.)
Length along longest watercourse = 0.894 Mi.
Length along longest watercourse measured to centroid = 0.447 Mi.
Difference in elevation = 166.00(Ft.)
Slope along watercourse = 185.6949 Ft./Mi.
Average Manning's 'N' = 0.030
Lag time = 0.188 Hr.
Lag time = 11.30 Min.
25% of lag time = 2.82 Min.
40% of lag time = 4.52 Min.
Unit time = 5.00 Min.
Duration of storm = 6 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.)[1]	Rainfall(In)[2]	Weighting[1*2]
75.83	1.10	83.41

100 YEAR Area rainfall data:

Area(Ac.)[1]	Rainfall(In)[2]	Weighting[1*2]
75.83	3.00	227.49

STORM EVENT (YEAR) = 100.00
Area Averaged 2-Year Rainfall = 1.100(In)
Area Averaged 100-Year Rainfall = 3.000(In)

Point rain (area averaged) = 3.000(In)
Areal adjustment factor = 99.97 %
Adjusted average point rain = 2.999(In)

Sub-Area Data:

Area(Ac.)	Runoff Index	Impervious %
75.830	69.00	0.500

Total Area Entered = 75.83(Ac.)

RI AMC2	RI AMC-2	Infil. Rate (In/Hr)	Impervious (Dec.%)	Adj. Infil. Rate (In/Hr)	Area% (Dec.)	F (In/Hr)

69.0 69.0 0.373 0.500 0.205 1.000 0.205
Sum (F) = 0.205

Area averaged mean soil loss (F) (In/Hr) = 0.205
Minimum soil loss rate ((In/Hr)) = 0.103
(for 24 hour storm duration)
Soil low loss rate (decimal) = 0.500

U n i t H y d r o g r a p h
VALLEY S-Curve

Unit Hydrograph Data

Unit time period (hrs)		Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	44.254	5.079	3.882
2	0.167	88.509	21.318	16.291
3	0.250	132.763	28.439	21.734
4	0.333	177.017	15.372	11.747
5	0.417	221.272	7.523	5.749
6	0.500	265.526	5.074	3.878
7	0.583	309.780	3.778	2.887
8	0.667	354.034	2.830	2.163
9	0.750	398.289	2.240	1.712
10	0.833	442.543	1.702	1.301
11	0.917	486.797	1.386	1.059
12	1.000	531.052	1.242	0.949
13	1.083	575.306	0.960	0.734
14	1.167	619.560	0.796	0.608
15	1.250	663.815	0.638	0.488
16	1.333	708.069	0.484	0.370
17	1.417	752.323	0.443	0.338
18	1.500	796.577	0.443	0.338
19	1.583	840.832	0.255	0.195
			Sum = 100.000	Sum= 76.422

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr) Max		Low	Effective (In/Hr)
1	0.08	0.50	0.180	(0.205)		0.090	0.090
2	0.17	0.60	0.216	(0.205)		0.108	0.108
3	0.25	0.60	0.216	(0.205)		0.108	0.108
4	0.33	0.60	0.216	(0.205)		0.108	0.108
5	0.42	0.60	0.216	(0.205)		0.108	0.108
6	0.50	0.70	0.252	(0.205)		0.126	0.126
7	0.58	0.70	0.252	(0.205)		0.126	0.126
8	0.67	0.70	0.252	(0.205)		0.126	0.126
9	0.75	0.70	0.252	(0.205)		0.126	0.126
10	0.83	0.70	0.252	(0.205)		0.126	0.126
11	0.92	0.70	0.252	(0.205)		0.126	0.126
12	1.00	0.80	0.288	(0.205)		0.144	0.144
13	1.08	0.80	0.288	(0.205)		0.144	0.144
14	1.17	0.80	0.288	(0.205)		0.144	0.144
15	1.25	0.80	0.288	(0.205)		0.144	0.144
16	1.33	0.80	0.288	(0.205)		0.144	0.144
17	1.42	0.80	0.288	(0.205)		0.144	0.144
18	1.50	0.80	0.288	(0.205)		0.144	0.144
19	1.58	0.80	0.288	(0.205)		0.144	0.144
20	1.67	0.80	0.288	(0.205)		0.144	0.144
21	1.75	0.80	0.288	(0.205)		0.144	0.144
22	1.83	0.80	0.288	(0.205)		0.144	0.144
23	1.92	0.80	0.288	(0.205)		0.144	0.144
24	2.00	0.90	0.324	(0.205)		0.162	0.162
25	2.08	0.80	0.288	(0.205)		0.144	0.144
26	2.17	0.90	0.324	(0.205)		0.162	0.162
27	2.25	0.90	0.324	(0.205)		0.162	0.162

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28   2.33     0.90      0.324       (  0.205)       0.162        0.162
29   2.42     0.90      0.324       (  0.205)       0.162        0.162
30   2.50     0.90      0.324       (  0.205)       0.162        0.162
31   2.58     0.90      0.324       (  0.205)       0.162        0.162
32   2.67     0.90      0.324       (  0.205)       0.162        0.162
33   2.75     1.00      0.360       (  0.205)       0.180        0.180
34   2.83     1.00      0.360       (  0.205)       0.180        0.180
35   2.92     1.00      0.360       (  0.205)       0.180        0.180
36   3.00     1.00      0.360       (  0.205)       0.180        0.180
37   3.08     1.00      0.360       (  0.205)       0.180        0.180
38   3.17     1.10      0.396       (  0.205)       0.198        0.198
39   3.25     1.10      0.396       (  0.205)       0.198        0.198
40   3.33     1.10      0.396       (  0.205)       0.198        0.198
41   3.42     1.20      0.432          0.205    (  0.216)       0.227
42   3.50     1.30      0.468          0.205    (  0.234)       0.263
43   3.58     1.40      0.504          0.205    (  0.252)       0.299
44   3.67     1.40      0.504          0.205    (  0.252)       0.299
45   3.75     1.50      0.540          0.205    (  0.270)       0.335
46   3.83     1.50      0.540          0.205    (  0.270)       0.335
47   3.92     1.60      0.576          0.205    (  0.288)       0.371
48   4.00     1.60      0.576          0.205    (  0.288)       0.371
49   4.08     1.70      0.612          0.205    (  0.306)       0.407
50   4.17     1.80      0.648          0.205    (  0.324)       0.443
51   4.25     1.90      0.684          0.205    (  0.342)       0.479
52   4.33     2.00      0.720          0.205    (  0.360)       0.515
53   4.42     2.10      0.756          0.205    (  0.378)       0.551
54   4.50     2.10      0.756          0.205    (  0.378)       0.551
55   4.58     2.20      0.792          0.205    (  0.396)       0.587
56   4.67     2.30      0.828          0.205    (  0.414)       0.623
57   4.75     2.40      0.864          0.205    (  0.432)       0.659
58   4.83     2.40      0.864          0.205    (  0.432)       0.659
59   4.92     2.50      0.900          0.205    (  0.450)       0.695
60   5.00     2.60      0.936          0.205    (  0.468)       0.731
61   5.08     3.10      1.116          0.205    (  0.558)       0.911
62   5.17     3.60      1.296          0.205    (  0.648)       1.091
63   5.25     3.90      1.404          0.205    (  0.702)       1.199
64   5.33     4.20      1.512          0.205    (  0.756)       1.307
65   5.42     4.70      1.692          0.205    (  0.846)       1.487
66   5.50     5.60      2.015          0.205    (  1.008)       1.810
67   5.58     1.90      0.684          0.205    (  0.342)       0.479
68   5.67     0.90      0.324       (  0.205)       0.162        0.162
69   5.75     0.60      0.216       (  0.205)       0.108        0.108
70   5.83     0.50      0.180       (  0.205)       0.090        0.090
71   5.92     0.30      0.108       (  0.205)       0.054        0.054
72   6.00     0.20      0.072       (  0.205)       0.036        0.036
            (Loss Rate Not Used)
   Sum =     100.0                                    Sum =    24.1
      Flood volume = Effective rainfall      2.01(In)
       times area      75.8(Ac.)/[(In)/(Ft.)] =      12.7(Ac.Ft)
      Total soil loss =      0.99(In)
      Total soil loss =     6.279(Ac.Ft)
      Total rainfall =      3.00(In)
      Flood volume =      552044.4 Cubic Feet
      Total soil loss =      273529.1 Cubic Feet
      ---------------------------------------------------------------------
       Peak flow rate of this hydrograph =     99.340(CFS)
      ---------------------------------------------------------------------
      +++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                          6 - H O U R    S T O R M
                     R u n o f f      H y d r o g r a p h
      ---------------------------------------------------------------------
                  Hydrograph in   5   Minute intervals ((CFS))

      ---------------------------------------------------------------------
Time(h+m) Volume Ac.Ft   Q(CFS)  0       25.0      50.0      75.0     100.0
---------------------------------------------------------------------------
  0+ 5       0.0024      0.35  Q         |         |         |         |
  0+10       0.0154      1.89  Q         |         |         |         |
  0+15       0.0439      4.14  VQ        |         |         |         |
  0+20       0.0823      5.58  V Q       |         |         |         |
  0+25       0.1258      6.31  V Q       |         |         |         |
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0+30      0.1729      6.84  V Q       |         |         |         |
0+35      0.2243      7.46  V Q       |         |         |         |
0+40      0.2800      8.10  V  Q      |         |         |         |
0+45      0.3386      8.50  |V Q      |         |         |         |
0+50      0.3989      8.75  |V Q      |         |         |         |
0+55      0.4605      8.94  |V Q      |         |         |         |
1+ 0      0.5236      9.17  |V Q      |         |         |         |
1+ 5      0.5896      9.58  |V Q      |         |         |         |
1+10      0.6590     10.07  | V Q     |         |         |         |
1+15      0.7303     10.36  | V Q     |         |         |         |
1+20      0.8029     10.53  | V Q     |         |         |         |
1+25      0.8762     10.65  | V Q     |         |         |         |
1+30      0.9503     10.75  | V Q     |         |         |         |
1+35      1.0248     10.83  |  VQ     |         |         |         |
1+40      1.0997     10.87  |  VQ     |         |         |         |
1+45      1.1748     10.90  |  VQ     |         |         |         |
1+50      1.2500     10.93  |  VQ     |         |         |         |
1+55      1.3254     10.95  |   Q     |         |         |         |
2+ 0      1.4014     11.04  |   Q     |         |         |         |
2+ 5      1.4791     11.27  |   Q     |         |         |         |
2+10      1.5579     11.45  |   Q     |         |         |         |
2+15      1.6375     11.57  |   QV    |         |         |         |
2+20      1.7192     11.86  |   QV    |         |         |         |
2+25      1.8021     12.04  |   QV    |         |         |         |
2+30      1.8857     12.13  |   QV    |         |         |         |
2+35      1.9696     12.19  |   Q V   |         |         |         |
2+40      2.0538     12.23  |   Q V   |         |         |         |
2+45      2.1387     12.33  |   Q V   |         |         |         |
2+50      2.2259     12.65  |    Q V  |         |         |         |
2+55      2.3158     13.06  |    Q V  |         |         |         |
3+ 0      2.4074     13.29  |    Q V  |         |         |         |
3+ 5      2.4997     13.41  |    Q V  |         |         |         |
3+10      2.5931     13.56  |    Q  V |         |         |         |
3+15      2.6889     13.91  |    Q  V |         |         |         |
3+20      2.7878     14.35  |    Q  V |         |         |         |
3+25      2.8891     14.71  |    Q   V|         |         |         |
3+30      2.9955     15.45  |     Q  V|         |         |         |
3+35      3.1119     16.90  |     Q  V|         |         |         |
3+40      3.2406     18.68  |      Q  V         |         |         |
3+45      3.3800     20.25  |       Q V         |         |         |
3+50      3.5289     21.62  |       Q |V        |         |         |
3+55      3.6873     23.00  |        Q|V        |         |         |
4+ 0      3.8550     24.34  |        Q| V       |         |         |
4+ 5      4.0322     25.73  |         Q V       |         |         |
4+10      4.2196     27.21  |         Q  V      |         |         |
4+15      4.4206     29.19  |         |Q V      |         |         |
4+20      4.6372     31.46  |         | Q V     |         |         |
4+25      4.8704     33.86  |         |  Q V    |         |         |
4+30      5.1198     36.21  |         |   Q V   |         |         |
4+35      5.3827     38.17  |         |    QV   |         |         |
4+40      5.6581     39.99  |         |    Q V  |         |         |
4+45      5.9487     42.19  |         |     Q V |         |         |
4+50      6.2552     44.50  |         |      Q V|         |         |
4+55      6.5751     46.46  |         |       Q V         |         |
5+ 0      6.9076     48.27  |         |        Q|V        |         |
5+ 5      7.2590     51.03  |         |         Q V       |         |
5+10      7.6473     56.38  |         |         | Q V     |         |
5+15      8.0928     64.68  |         |         |    Q    |         |
5+20      8.5993     73.55  |         |         |      V Q|         |
5+25      9.1640     81.99  |         |         |       V | Q       |
5+30      9.7970     91.91  |         |         |         V     Q   |
5+35     10.4811     99.34  |         |         |         |  V     Q|
5+40     11.0854     87.75  |         |         |         |   VQ    |
5+45     11.4978     59.87  |         |         |  Q      |     V   |
5+50     11.7744     40.17  |         |     Q   |         |      V  |
5+55     11.9804     29.91  |         |Q        |         |      V  |
6+ 0     12.1412     23.34  |        Q|         |         |       V |
6+ 5     12.2663     18.16  |      Q  |         |         |       V |
6+10     12.3623     13.95  |    Q    |         |         |        V|
6+15     12.4352     10.58  |   Q     |         |         |        V|
6+20     12.4924      8.31  |  Q      |         |         |        V|
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    6+25      12.5384      6.68  | Q       |         |         |        V|
    6+30      12.5748      5.28  | Q       |         |         |        V|
    6+35      12.6035      4.17  |Q        |         |         |        V|
    6+40      12.6258      3.24  |Q        |         |         |        V|
    6+45      12.6427      2.45  Q         |         |         |        V|
    6+50      12.6554      1.85  Q         |         |         |        V|
    6+55      12.6644      1.31  Q         |         |         |        V|
    7+ 0      12.6693      0.71  Q         |         |         |        V|
    7+ 5      12.6711      0.27  Q         |         |         |        V|
    7+10      12.6721      0.14  Q         |         |         |        V|
    7+15      12.6727      0.08  Q         |         |         |        V|
    7+20      12.6730      0.05  Q         |         |         |        V|
    7+25      12.6731      0.02  Q         |         |         |        V|
    7+30      12.6732      0.01  Q         |         |         |         V
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       U n i t   H y d r o g r a p h   A n a l y s i s

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              Study date  08/14/25 File: PROA24100.out

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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978


Program License Serial Number 5006

----------------------------------------------------------------------
 English (in-lb) Input Units Used
 English Rainfall Data (Inches) Input Values Used

 English Units used in output format



----------------------------------------------------------------------
----------------------------------------------------------------------
Drainage Area =      75.83(Ac.)  =      0.118 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment =      75.83(Ac.)  =      0.118 Sq. Mi.
Length along longest watercourse =    4720.00(Ft.)
Length along longest watercourse measured to centroid =    2360.00(Ft.)
Length along longest watercourse =      0.894 Mi.
Length along longest watercourse measured to centroid =      0.447 Mi.
Difference in elevation =     166.00(Ft.)
Slope along watercourse =    185.6949 Ft./Mi.
Average Manning's 'N' = 0.030
Lag time =    0.188 Hr.
Lag time =    11.30 Min.
25% of lag time =     2.82 Min.
40% of lag time =     4.52 Min.
Unit time =     5.00 Min.
Duration of storm = 24 Hour(s)
User Entered Base Flow =     0.00(CFS)

2 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
       75.83           1.80                136.49

100 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
       75.83           5.00                379.15

STORM EVENT (YEAR) =  100.00
Area Averaged 2-Year Rainfall =    1.800(In)
Area Averaged 100-Year Rainfall =    5.000(In)

Point rain (area averaged) =    5.000(In)
Areal adjustment factor =   99.99 %
Adjusted average point rain =    4.999(In)

Sub-Area Data:
Area(Ac.)         Runoff Index   Impervious %
    75.830           69.00         0.500
 Total Area Entered =     75.83(Ac.)


RI    RI   Infil. Rate Impervious   Adj. Infil. Rate  Area%     F
AMC2 AMC-2     (In/Hr)    (Dec.%)     (In/Hr)      (Dec.)    (In/Hr)
```

```
69.0  69.0      0.373     0.500        0.205       1.000      0.205
                                                  Sum (F) =   0.205
Area averaged mean soil loss (F) (In/Hr) =  0.205
Minimum soil loss rate ((In/Hr)) =  0.103
(for 24 hour storm duration)
Soil low loss rate (decimal) =   0.500
------------------------------------------------------------------------

               U n i t  H y d r o g r a p h
                      VALLEY S-Curve
------------------------------------------------------------------------
               Unit Hydrograph Data
------------------------------------------------------------------------
Unit time period   Time % of lag   Distribution   Unit Hydrograph
    (hrs)                          Graph %           (CFS)
------------------------------------------------------------------------
    1   0.083         44.254          5.079             3.882
    2   0.167         88.509         21.318            16.291
    3   0.250        132.763         28.439            21.734
    4   0.333        177.017         15.372            11.747
    5   0.417        221.272          7.523             5.749
    6   0.500        265.526          5.074             3.878
    7   0.583        309.780          3.778             2.887
    8   0.667        354.034          2.830             2.163
    9   0.750        398.289          2.240             1.712
   10   0.833        442.543          1.702             1.301
   11   0.917        486.797          1.386             1.059
   12   1.000        531.052          1.242             0.949
   13   1.083        575.306          0.960             0.734
   14   1.167        619.560          0.796             0.608
   15   1.250        663.815          0.638             0.488
   16   1.333        708.069          0.484             0.370
   17   1.417        752.323          0.443             0.338
   18   1.500        796.577          0.443             0.338
   19   1.583        840.832          0.255             0.195
                                 Sum = 100.000   Sum=      76.422
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 The following loss rate calculations reflect use of the minimum calculated loss
 rate subtracted from the Storm Rain to produce the maximum Effective Rain value

 Unit Time   Pattern   Storm Rain     Loss rate(In./Hr)     Effective
      (Hr.)  Percent   (In/Hr)         Max    |   Low         (In/Hr)
  1   0.08     0.07      0.040       (  0.363)       0.020         0.020
  2   0.17     0.07      0.040       (  0.362)       0.020         0.020
  3   0.25     0.07      0.040       (  0.361)       0.020         0.020
  4   0.33     0.10      0.060       (  0.359)       0.030         0.030
  5   0.42     0.10      0.060       (  0.358)       0.030         0.030
  6   0.50     0.10      0.060       (  0.356)       0.030         0.030
  7   0.58     0.10      0.060       (  0.355)       0.030         0.030
  8   0.67     0.10      0.060       (  0.354)       0.030         0.030
  9   0.75     0.10      0.060       (  0.352)       0.030         0.030
 10   0.83     0.13      0.080       (  0.351)       0.040         0.040
 11   0.92     0.13      0.080       (  0.350)       0.040         0.040
 12   1.00     0.13      0.080       (  0.348)       0.040         0.040
 13   1.08     0.10      0.060       (  0.347)       0.030         0.030
 14   1.17     0.10      0.060       (  0.345)       0.030         0.030
 15   1.25     0.10      0.060       (  0.344)       0.030         0.030
 16   1.33     0.10      0.060       (  0.343)       0.030         0.030
 17   1.42     0.10      0.060       (  0.341)       0.030         0.030
 18   1.50     0.10      0.060       (  0.340)       0.030         0.030
 19   1.58     0.10      0.060       (  0.339)       0.030         0.030
 20   1.67     0.10      0.060       (  0.337)       0.030         0.030
 21   1.75     0.10      0.060       (  0.336)       0.030         0.030
 22   1.83     0.13      0.080       (  0.335)       0.040         0.040
 23   1.92     0.13      0.080       (  0.333)       0.040         0.040
 24   2.00     0.13      0.080       (  0.332)       0.040         0.040
 25   2.08     0.13      0.080       (  0.330)       0.040         0.040
 26   2.17     0.13      0.080       (  0.329)       0.040         0.040
 27   2.25     0.13      0.080       (  0.328)       0.040         0.040
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28	2.33	0.13	0.080	(0.326)	0.040	0.040
29	2.42	0.13	0.080	(0.325)	0.040	0.040
30	2.50	0.13	0.080	(0.324)	0.040	0.040
31	2.58	0.17	0.100	(0.323)	0.050	0.050
32	2.67	0.17	0.100	(0.321)	0.050	0.050
33	2.75	0.17	0.100	(0.320)	0.050	0.050
34	2.83	0.17	0.100	(0.319)	0.050	0.050
35	2.92	0.17	0.100	(0.317)	0.050	0.050
36	3.00	0.17	0.100	(0.316)	0.050	0.050
37	3.08	0.17	0.100	(0.315)	0.050	0.050
38	3.17	0.17	0.100	(0.313)	0.050	0.050
39	3.25	0.17	0.100	(0.312)	0.050	0.050
40	3.33	0.17	0.100	(0.311)	0.050	0.050
41	3.42	0.17	0.100	(0.309)	0.050	0.050
42	3.50	0.17	0.100	(0.308)	0.050	0.050
43	3.58	0.17	0.100	(0.307)	0.050	0.050
44	3.67	0.17	0.100	(0.306)	0.050	0.050
45	3.75	0.17	0.100	(0.304)	0.050	0.050
46	3.83	0.20	0.120	(0.303)	0.060	0.060
47	3.92	0.20	0.120	(0.302)	0.060	0.060
48	4.00	0.20	0.120	(0.300)	0.060	0.060
49	4.08	0.20	0.120	(0.299)	0.060	0.060
50	4.17	0.20	0.120	(0.298)	0.060	0.060
51	4.25	0.20	0.120	(0.297)	0.060	0.060
52	4.33	0.23	0.140	(0.295)	0.070	0.070
53	4.42	0.23	0.140	(0.294)	0.070	0.070
54	4.50	0.23	0.140	(0.293)	0.070	0.070
55	4.58	0.23	0.140	(0.292)	0.070	0.070
56	4.67	0.23	0.140	(0.290)	0.070	0.070
57	4.75	0.23	0.140	(0.289)	0.070	0.070
58	4.83	0.27	0.160	(0.288)	0.080	0.080
59	4.92	0.27	0.160	(0.287)	0.080	0.080
60	5.00	0.27	0.160	(0.285)	0.080	0.080
61	5.08	0.20	0.120	(0.284)	0.060	0.060
62	5.17	0.20	0.120	(0.283)	0.060	0.060
63	5.25	0.20	0.120	(0.282)	0.060	0.060
64	5.33	0.23	0.140	(0.280)	0.070	0.070
65	5.42	0.23	0.140	(0.279)	0.070	0.070
66	5.50	0.23	0.140	(0.278)	0.070	0.070
67	5.58	0.27	0.160	(0.277)	0.080	0.080
68	5.67	0.27	0.160	(0.275)	0.080	0.080
69	5.75	0.27	0.160	(0.274)	0.080	0.080
70	5.83	0.27	0.160	(0.273)	0.080	0.080
71	5.92	0.27	0.160	(0.272)	0.080	0.080
72	6.00	0.27	0.160	(0.271)	0.080	0.080
73	6.08	0.30	0.180	(0.269)	0.090	0.090
74	6.17	0.30	0.180	(0.268)	0.090	0.090
75	6.25	0.30	0.180	(0.267)	0.090	0.090
76	6.33	0.30	0.180	(0.266)	0.090	0.090
77	6.42	0.30	0.180	(0.265)	0.090	0.090
78	6.50	0.30	0.180	(0.263)	0.090	0.090
79	6.58	0.33	0.200	(0.262)	0.100	0.100
80	6.67	0.33	0.200	(0.261)	0.100	0.100
81	6.75	0.33	0.200	(0.260)	0.100	0.100
82	6.83	0.33	0.200	(0.259)	0.100	0.100
83	6.92	0.33	0.200	(0.258)	0.100	0.100
84	7.00	0.33	0.200	(0.256)	0.100	0.100
85	7.08	0.33	0.200	(0.255)	0.100	0.100
86	7.17	0.33	0.200	(0.254)	0.100	0.100
87	7.25	0.33	0.200	(0.253)	0.100	0.100
88	7.33	0.37	0.220	(0.252)	0.110	0.110
89	7.42	0.37	0.220	(0.251)	0.110	0.110
90	7.50	0.37	0.220	(0.249)	0.110	0.110
91	7.58	0.40	0.240	(0.248)	0.120	0.120
92	7.67	0.40	0.240	(0.247)	0.120	0.120
93	7.75	0.40	0.240	(0.246)	0.120	0.120
94	7.83	0.43	0.260	(0.245)	0.130	0.130
95	7.92	0.43	0.260	(0.244)	0.130	0.130
96	8.00	0.43	0.260	(0.243)	0.130	0.130
97	8.08	0.50	0.300	(0.242)	0.150	0.150
98	8.17	0.50	0.300	(0.240)	0.150	0.150

99	8.25	0.50	0.300	(0.239)	0.150	0.150
100	8.33	0.50	0.300	(0.238)	0.150	0.150
101	8.42	0.50	0.300	(0.237)	0.150	0.150
102	8.50	0.50	0.300	(0.236)	0.150	0.150
103	8.58	0.53	0.320	(0.235)	0.160	0.160
104	8.67	0.53	0.320	(0.234)	0.160	0.160
105	8.75	0.53	0.320	(0.233)	0.160	0.160
106	8.83	0.57	0.340	(0.232)	0.170	0.170
107	8.92	0.57	0.340	(0.230)	0.170	0.170
108	9.00	0.57	0.340	(0.229)	0.170	0.170
109	9.08	0.63	0.380	(0.228)	0.190	0.190
110	9.17	0.63	0.380	(0.227)	0.190	0.190
111	9.25	0.63	0.380	(0.226)	0.190	0.190
112	9.33	0.67	0.400	(0.225)	0.200	0.200
113	9.42	0.67	0.400	(0.224)	0.200	0.200
114	9.50	0.67	0.400	(0.223)	0.200	0.200
115	9.58	0.70	0.420	(0.222)	0.210	0.210
116	9.67	0.70	0.420	(0.221)	0.210	0.210
117	9.75	0.70	0.420	(0.220)	0.210	0.210
118	9.83	0.73	0.440	0.219	(0.220)	0.221
119	9.92	0.73	0.440	0.218	(0.220)	0.222
120	10.00	0.73	0.440	0.217	(0.220)	0.223
121	10.08	0.50	0.300	(0.215)	0.150	0.150
122	10.17	0.50	0.300	(0.214)	0.150	0.150
123	10.25	0.50	0.300	(0.213)	0.150	0.150
124	10.33	0.50	0.300	(0.212)	0.150	0.150
125	10.42	0.50	0.300	(0.211)	0.150	0.150
126	10.50	0.50	0.300	(0.210)	0.150	0.150
127	10.58	0.67	0.400	(0.209)	0.200	0.200
128	10.67	0.67	0.400	(0.208)	0.200	0.200
129	10.75	0.67	0.400	(0.207)	0.200	0.200
130	10.83	0.67	0.400	(0.206)	0.200	0.200
131	10.92	0.67	0.400	(0.205)	0.200	0.200
132	11.00	0.67	0.400	(0.204)	0.200	0.200
133	11.08	0.63	0.380	(0.203)	0.190	0.190
134	11.17	0.63	0.380	(0.202)	0.190	0.190
135	11.25	0.63	0.380	(0.201)	0.190	0.190
136	11.33	0.63	0.380	(0.200)	0.190	0.190
137	11.42	0.63	0.380	(0.199)	0.190	0.190
138	11.50	0.63	0.380	(0.198)	0.190	0.190
139	11.58	0.57	0.340	(0.197)	0.170	0.170
140	11.67	0.57	0.340	(0.196)	0.170	0.170
141	11.75	0.57	0.340	(0.195)	0.170	0.170
142	11.83	0.60	0.360	(0.194)	0.180	0.180
143	11.92	0.60	0.360	(0.193)	0.180	0.180
144	12.00	0.60	0.360	(0.192)	0.180	0.180
145	12.08	0.83	0.500	0.191	(0.250)	0.309
146	12.17	0.83	0.500	0.190	(0.250)	0.309
147	12.25	0.83	0.500	0.189	(0.250)	0.310
148	12.33	0.87	0.520	0.189	(0.260)	0.331
149	12.42	0.87	0.520	0.188	(0.260)	0.332
150	12.50	0.87	0.520	0.187	(0.260)	0.333
151	12.58	0.93	0.560	0.186	(0.280)	0.374
152	12.67	0.93	0.560	0.185	(0.280)	0.375
153	12.75	0.93	0.560	0.184	(0.280)	0.376
154	12.83	0.97	0.580	0.183	(0.290)	0.397
155	12.92	0.97	0.580	0.182	(0.290)	0.398
156	13.00	0.97	0.580	0.181	(0.290)	0.399
157	13.08	1.13	0.680	0.180	(0.340)	0.500
158	13.17	1.13	0.680	0.179	(0.340)	0.501
159	13.25	1.13	0.680	0.178	(0.340)	0.502
160	13.33	1.13	0.680	0.177	(0.340)	0.502
161	13.42	1.13	0.680	0.177	(0.340)	0.503
162	13.50	1.13	0.680	0.176	(0.340)	0.504
163	13.58	0.77	0.460	0.175	(0.230)	0.285
164	13.67	0.77	0.460	0.174	(0.230)	0.286
165	13.75	0.77	0.460	0.173	(0.230)	0.287
166	13.83	0.77	0.460	0.172	(0.230)	0.288
167	13.92	0.77	0.460	0.171	(0.230)	0.289
168	14.00	0.77	0.460	0.170	(0.230)	0.290
169	14.08	0.90	0.540	0.169	(0.270)	0.370

170	14.17	0.90	0.540	0.169	(0.270)	0.371
171	14.25	0.90	0.540	0.168	(0.270)	0.372
172	14.33	0.87	0.520	0.167	(0.260)	0.353
173	14.42	0.87	0.520	0.166	(0.260)	0.354
174	14.50	0.87	0.520	0.165	(0.260)	0.355
175	14.58	0.87	0.520	0.164	(0.260)	0.356
176	14.67	0.87	0.520	0.163	(0.260)	0.356
177	14.75	0.87	0.520	0.163	(0.260)	0.357
178	14.83	0.83	0.500	0.162	(0.250)	0.338
179	14.92	0.83	0.500	0.161	(0.250)	0.339
180	15.00	0.83	0.500	0.160	(0.250)	0.340
181	15.08	0.80	0.480	0.159	(0.240)	0.321
182	15.17	0.80	0.480	0.159	(0.240)	0.321
183	15.25	0.80	0.480	0.158	(0.240)	0.322
184	15.33	0.77	0.460	0.157	(0.230)	0.303
185	15.42	0.77	0.460	0.156	(0.230)	0.304
186	15.50	0.77	0.460	0.155	(0.230)	0.305
187	15.58	0.63	0.380	0.154	(0.190)	0.225
188	15.67	0.63	0.380	0.154	(0.190)	0.226
189	15.75	0.63	0.380	0.153	(0.190)	0.227
190	15.83	0.63	0.380	0.152	(0.190)	0.228
191	15.92	0.63	0.380	0.151	(0.190)	0.229
192	16.00	0.63	0.380	0.151	(0.190)	0.229
193	16.08	0.13	0.080	(0.150)	0.040	0.040
194	16.17	0.13	0.080	(0.149)	0.040	0.040
195	16.25	0.13	0.080	(0.148)	0.040	0.040
196	16.33	0.13	0.080	(0.148)	0.040	0.040
197	16.42	0.13	0.080	(0.147)	0.040	0.040
198	16.50	0.13	0.080	(0.146)	0.040	0.040
199	16.58	0.10	0.060	(0.145)	0.030	0.030
200	16.67	0.10	0.060	(0.145)	0.030	0.030
201	16.75	0.10	0.060	(0.144)	0.030	0.030
202	16.83	0.10	0.060	(0.143)	0.030	0.030
203	16.92	0.10	0.060	(0.142)	0.030	0.030
204	17.00	0.10	0.060	(0.142)	0.030	0.030
205	17.08	0.17	0.100	(0.141)	0.050	0.050
206	17.17	0.17	0.100	(0.140)	0.050	0.050
207	17.25	0.17	0.100	(0.140)	0.050	0.050
208	17.33	0.17	0.100	(0.139)	0.050	0.050
209	17.42	0.17	0.100	(0.138)	0.050	0.050
210	17.50	0.17	0.100	(0.137)	0.050	0.050
211	17.58	0.17	0.100	(0.137)	0.050	0.050
212	17.67	0.17	0.100	(0.136)	0.050	0.050
213	17.75	0.17	0.100	(0.135)	0.050	0.050
214	17.83	0.13	0.080	(0.135)	0.040	0.040
215	17.92	0.13	0.080	(0.134)	0.040	0.040
216	18.00	0.13	0.080	(0.133)	0.040	0.040
217	18.08	0.13	0.080	(0.133)	0.040	0.040
218	18.17	0.13	0.080	(0.132)	0.040	0.040
219	18.25	0.13	0.080	(0.131)	0.040	0.040
220	18.33	0.13	0.080	(0.131)	0.040	0.040
221	18.42	0.13	0.080	(0.130)	0.040	0.040
222	18.50	0.13	0.080	(0.130)	0.040	0.040
223	18.58	0.10	0.060	(0.129)	0.030	0.030
224	18.67	0.10	0.060	(0.128)	0.030	0.030
225	18.75	0.10	0.060	(0.128)	0.030	0.030
226	18.83	0.07	0.040	(0.127)	0.020	0.020
227	18.92	0.07	0.040	(0.126)	0.020	0.020
228	19.00	0.07	0.040	(0.126)	0.020	0.020
229	19.08	0.10	0.060	(0.125)	0.030	0.030
230	19.17	0.10	0.060	(0.125)	0.030	0.030
231	19.25	0.10	0.060	(0.124)	0.030	0.030
232	19.33	0.13	0.080	(0.123)	0.040	0.040
233	19.42	0.13	0.080	(0.123)	0.040	0.040
234	19.50	0.13	0.080	(0.122)	0.040	0.040
235	19.58	0.10	0.060	(0.122)	0.030	0.030
236	19.67	0.10	0.060	(0.121)	0.030	0.030
237	19.75	0.10	0.060	(0.121)	0.030	0.030
238	19.83	0.07	0.040	(0.120)	0.020	0.020
239	19.92	0.07	0.040	(0.120)	0.020	0.020
240	20.00	0.07	0.040	(0.119)	0.020	0.020

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241  20.08     0.10      0.060       (  0.119)       0.030        0.030
242  20.17     0.10      0.060       (  0.118)       0.030        0.030
243  20.25     0.10      0.060       (  0.118)       0.030        0.030
244  20.33     0.10      0.060       (  0.117)       0.030        0.030
245  20.42     0.10      0.060       (  0.116)       0.030        0.030
246  20.50     0.10      0.060       (  0.116)       0.030        0.030
247  20.58     0.10      0.060       (  0.116)       0.030        0.030
248  20.67     0.10      0.060       (  0.115)       0.030        0.030
249  20.75     0.10      0.060       (  0.115)       0.030        0.030
250  20.83     0.07      0.040       (  0.114)       0.020        0.020
251  20.92     0.07      0.040       (  0.114)       0.020        0.020
252  21.00     0.07      0.040       (  0.113)       0.020        0.020
253  21.08     0.10      0.060       (  0.113)       0.030        0.030
254  21.17     0.10      0.060       (  0.112)       0.030        0.030
255  21.25     0.10      0.060       (  0.112)       0.030        0.030
256  21.33     0.07      0.040       (  0.111)       0.020        0.020
257  21.42     0.07      0.040       (  0.111)       0.020        0.020
258  21.50     0.07      0.040       (  0.111)       0.020        0.020
259  21.58     0.10      0.060       (  0.110)       0.030        0.030
260  21.67     0.10      0.060       (  0.110)       0.030        0.030
261  21.75     0.10      0.060       (  0.109)       0.030        0.030
262  21.83     0.07      0.040       (  0.109)       0.020        0.020
263  21.92     0.07      0.040       (  0.109)       0.020        0.020
264  22.00     0.07      0.040       (  0.108)       0.020        0.020
265  22.08     0.10      0.060       (  0.108)       0.030        0.030
266  22.17     0.10      0.060       (  0.108)       0.030        0.030
267  22.25     0.10      0.060       (  0.107)       0.030        0.030
268  22.33     0.07      0.040       (  0.107)       0.020        0.020
269  22.42     0.07      0.040       (  0.107)       0.020        0.020
270  22.50     0.07      0.040       (  0.106)       0.020        0.020
271  22.58     0.07      0.040       (  0.106)       0.020        0.020
272  22.67     0.07      0.040       (  0.106)       0.020        0.020
273  22.75     0.07      0.040       (  0.105)       0.020        0.020
274  22.83     0.07      0.040       (  0.105)       0.020        0.020
275  22.92     0.07      0.040       (  0.105)       0.020        0.020
276  23.00     0.07      0.040       (  0.105)       0.020        0.020
277  23.08     0.07      0.040       (  0.104)       0.020        0.020
278  23.17     0.07      0.040       (  0.104)       0.020        0.020
279  23.25     0.07      0.040       (  0.104)       0.020        0.020
280  23.33     0.07      0.040       (  0.104)       0.020        0.020
281  23.42     0.07      0.040       (  0.103)       0.020        0.020
282  23.50     0.07      0.040       (  0.103)       0.020        0.020
283  23.58     0.07      0.040       (  0.103)       0.020        0.020
284  23.67     0.07      0.040       (  0.103)       0.020        0.020
285  23.75     0.07      0.040       (  0.103)       0.020        0.020
286  23.83     0.07      0.040       (  0.103)       0.020        0.020
287  23.92     0.07      0.040       (  0.103)       0.020        0.020
288  24.00     0.07      0.040       (  0.103)       0.020        0.020
               (Loss Rate Not Used)
    Sum =     100.0                                  Sum =    34.2
      Flood volume = Effective rainfall      2.85(In)
       times area      75.8(Ac.)/[(In)/(Ft.)] =      18.0(Ac.Ft)
      Total soil loss =      2.15(In)
      Total soil loss =    13.604(Ac.Ft)
      Total rainfall =      5.00(In)
      Flood volume =      783540.1 Cubic Feet
      Total soil loss =      592570.6 Cubic Feet
      ---------------------------------------------------------------------
       Peak flow rate of this hydrograph =     36.707(CFS)
      ---------------------------------------------------------------------
      +++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                          24 - H O U R    S T O R M
                     R u n o f f     H y d r o g r a p h
      ---------------------------------------------------------------------
                  Hydrograph in   5   Minute intervals ((CFS))

      ---------------------------------------------------------------------
 Time(h+m) Volume Ac.Ft   Q(CFS)  0       10.0      20.0      30.0      40.0
 ---------------------------------------------------------------------
   0+ 5       0.0005      0.08  Q         |         |         |         |
   0+10       0.0033      0.40  Q         |         |         |         |
```

0+15	0.0091	0.84	Q	|	|	|	|
0+20	0.0167	1.11	VQ	|	|	|	|
0+25	0.0263	1.39	VQ	|	|	|	|
0+30	0.0379	1.69	VQ	|	|	|	|
0+35	0.0507	1.86	VQ	|	|	|	|
0+40	0.0643	1.96	VQ	|	|	|	|
0+45	0.0783	2.03	V Q	|	|	|	|
0+50	0.0929	2.13	V Q	|	|	|	|
0+55	0.1090	2.33	V Q	|	|	|	|
1+ 0	0.1268	2.59	V Q	|	|	|	|
1+ 5	0.1454	2.69	V Q	|	|	|	|
1+10	0.1634	2.61	V Q	|	|	|	|
1+15	0.1802	2.45	V Q	|	|	|	|
1+20	0.1966	2.38	V Q	|	|	|	|
1+25	0.2128	2.35	V Q	|	|	|	|
1+30	0.2290	2.34	V Q	|	|	|	|
1+35	0.2451	2.34	V Q	|	|	|	|
1+40	0.2611	2.33	V Q	|	|	|	|
1+45	0.2771	2.32	V Q	|	|	|	|
1+50	0.2934	2.36	V Q	|	|	|	|
1+55	0.3107	2.52	V Q	|	|	|	|
2+ 0	0.3295	2.73	V Q	|	|	|	|
2+ 5	0.3491	2.84	V Q	|	|	|	|
2+10	0.3691	2.90	V Q	|	|	|	|
2+15	0.3893	2.94	V Q	|	|	|	|
2+20	0.4097	2.96	V Q	|	|	|	|
2+25	0.4303	2.98	V Q	|	|	|	|
2+30	0.4509	3.00	|VQ	|	|	|	|
2+35	0.4719	3.05	|V Q	|	|	|	|
2+40	0.4941	3.22	|V Q	|	|	|	|
2+45	0.5178	3.45	|V Q	|	|	|	|
2+50	0.5424	3.57	|V Q	|	|	|	|
2+55	0.5674	3.63	|V Q	|	|	|	|
3+ 0	0.5928	3.68	|V Q	|	|	|	|
3+ 5	0.6183	3.71	|V Q	|	|	|	|
3+10	0.6440	3.74	|V Q	|	|	|	|
3+15	0.6699	3.76	|V Q	|	|	|	|
3+20	0.6959	3.77	|V Q	|	|	|	|
3+25	0.7219	3.78	|V Q	|	|	|	|
3+30	0.7481	3.79	|V Q	|	|	|	|
3+35	0.7742	3.80	|V Q	|	|	|	|
3+40	0.8004	3.81	|V Q	|	|	|	|
3+45	0.8267	3.81	|V Q	|	|	|	|
3+50	0.8532	3.85	|V Q	|	|	|	|
3+55	0.8809	4.02	|V Q	|	|	|	|
4+ 0	0.9101	4.24	| V Q	|	|	|	|
4+ 5	0.9401	4.36	| V Q	|	|	|	|
4+10	0.9705	4.42	| V Q	|	|	|	|
4+15	1.0012	4.46	| V Q	|	|	|	|
4+20	1.0324	4.52	| V Q	|	|	|	|
4+25	1.0648	4.71	| V Q	|	|	|	|
4+30	1.0988	4.94	| V Q	|	|	|	|
4+35	1.1338	5.07	| V Q	|	|	|	|
4+40	1.1692	5.14	| V Q	|	|	|	|
4+45	1.2049	5.19	| V Q	|	|	|	|
4+50	1.2412	5.26	| V Q	|	|	|	|
4+55	1.2787	5.46	| V Q	|	|	|	|
5+ 0	1.3180	5.69	| V Q	|	|	|	|
5+ 5	1.3576	5.75	| V Q	|	|	|	|
5+10	1.3954	5.50	| V Q	|	|	|	|
5+15	1.4306	5.11	| V Q	|	|	|	|
5+20	1.4648	4.96	| VQ	|	|	|	|
5+25	1.4994	5.03	| V Q	|	|	|	|
5+30	1.5352	5.19	| V Q	|	|	|	|
5+35	1.5717	5.31	| V Q	|	|	|	|
5+40	1.6096	5.50	| V Q	|	|	|	|
5+45	1.6491	5.73	| V Q	|	|	|	|
5+50	1.6895	5.86	| V Q	|	|	|	|
5+55	1.7303	5.93	| V Q	|	|	|	|
6+ 0	1.7714	5.97	| V Q	|	|	|	|
6+ 5	1.8130	6.04	| V Q	|	|	|	|

6+10	1.8559	6.23	V Q				
6+15	1.9004	6.46	V Q				
6+20	1.9458	6.60	V Q				
6+25	1.9917	6.66	V Q				
6+30	2.0379	6.71	V Q				
6+35	2.0847	6.78	V Q				
6+40	2.1327	6.98	V Q				
6+45	2.1825	7.22	V Q				
6+50	2.2331	7.36	V Q				
6+55	2.2843	7.43	V Q				
7+ 0	2.3358	7.48	V Q				
7+ 5	2.3876	7.52	V Q				
7+10	2.4396	7.55	V Q				
7+15	2.4917	7.57	V Q				
7+20	2.5442	7.62	V Q				
7+25	2.5980	7.80	V Q				
7+30	2.6533	8.03	V Q				
7+35	2.7097	8.20	V Q				
7+40	2.7677	8.42	V Q				
7+45	2.8276	8.68	V Q				
7+50	2.8887	8.87	V Q				
7+55	2.9515	9.12	V Q				
8+ 0	3.0162	9.40	V Q				
8+ 5	3.0825	9.64	V Q				
8+10	3.1518	10.05	V Q				
8+15	3.2244	10.55	V Q				
8+20	3.2991	10.84	V Q				
8+25	3.3747	10.99	V Q				
8+30	3.4512	11.10	V Q				
8+35	3.5284	11.22	V Q				
8+40	3.6072	11.44	V Q				
8+45	3.6879	11.71	V Q				
8+50	3.7699	11.91	V Q				
8+55	3.8537	12.16	V Q				
9+ 0	3.9394	12.44	V Q				
9+ 5	4.0268	12.69	V Q				
9+10	4.1171	13.11	V Q				
9+15	4.2108	13.61	V Q				
9+20	4.3068	13.94	V Q				
9+25	4.4050	14.26	V Q				
9+30	4.5054	14.58	V Q				
9+35	4.6075	14.82	V Q				
9+40	4.7115	15.10	V Q				
9+45	4.8176	15.41	V Q				
9+50	4.9253	15.63	V Q				
9+55	5.0350	15.93	V Q				
10+ 0	5.1472	16.28	V Q				
10+ 5	5.2590	16.23	V Q				
10+10	5.3636	15.19	V Q				
10+15	5.4579	13.69	VQ				
10+20	5.5467	12.90	Q				
10+25	5.6330	12.53	Q				
10+30	5.7177	12.29	Q				
10+35	5.8025	12.31	Q				
10+40	5.8919	12.99	QV				
10+45	5.9882	13.97	Q				
10+50	6.0879	14.48	VQ				
10+55	6.1892	14.70	VQ				
11+ 0	6.2914	14.84	VQ				
11+ 5	6.3940	14.90	Q				
11+10	6.4959	14.80	Q				
11+15	6.5967	14.64	Q				
11+20	6.6970	14.56	Q				
11+25	6.7971	14.53	QV				
11+30	6.8971	14.52	QV				
11+35	6.9965	14.43	QV				
11+40	7.0937	14.12	QV				
11+45	7.1880	13.69	Q V				
11+50	7.2810	13.50	Q V				
11+55	7.3743	13.55	Q V				
12+ 0	7.4687	13.70	Q V				

12+ 5	7.5669	14.26	|	| Q V |	|	|
12+10	7.6796	16.37	|	| QV |	|	|
12+15	7.8117	19.18	|	| V Q|	|	|
12+20	7.9551	20.81	|	| V Q	|	|
12+25	8.1060	21.92	|	| V |Q	|	|
12+30	8.2638	22.91	|	| V | Q	|	|
12+35	8.4272	23.73	|	| V | Q	|	|
12+40	8.5983	24.83	|	| V| Q	|	|
12+45	8.7778	26.06	|	| V| Q	|	|
12+50	8.9631	26.90	|	| V| Q	|	|
12+55	9.1539	27.70	|	| V Q	|	|
13+ 0	9.3502	28.52	|	| V Q |	|	|
13+ 5	9.5530	29.44	|	| |V Q|	|	|
13+10	9.7696	31.45	|	| |V |Q	|	|
13+15	10.0032	33.92	|	| | V | Q	|	|
13+20	10.2466	35.34	|	| | V | Q	|	|
13+25	10.4954	36.12	|	| | V | Q	|	|
13+30	10.7482	36.71	|	| | V | Q	|	|
13+35	10.9982	36.30	|	| | V | Q	|	|
13+40	11.2258	33.05	|	| | V | Q	|	|
13+45	11.4224	28.55	|	| | V Q |	|	|
13+50	11.6029	26.20	|	| | VQ |	|	|
13+55	11.7760	25.13	|	| | QV |	|	|
14+ 0	11.9445	24.47	|	| | Q V |	|	|
14+ 5	12.1118	24.30	|	| | Q V |	|	|
14+10	12.2858	25.26	|	| | Q V |	|	|
14+15	12.4700	26.75	|	| | QV |	|	|
14+20	12.6589	27.43	|	| | QV |	|	|
14+25	12.8478	27.43	|	| | QV |	|	|
14+30	13.0351	27.20	|	| | QV |	|	|
14+35	13.2219	27.12	|	| | Q V|	|	|
14+40	13.4086	27.11	|	| | Q V|	|	|
14+45	13.5954	27.12	|	| | Q V	|	|
14+50	13.7818	27.08	|	| | Q V	|	|
14+55	13.9663	26.78	|	| | Q |V	|	|
15+ 0	14.1480	26.38	|	| | Q |V	|	|
15+ 5	14.3278	26.12	|	| | Q |V	|	|
15+10	14.5053	25.77	|	| | Q | V	|	|
15+15	14.6798	25.34	|	| | Q | V	|	|
15+20	14.8523	25.05	|	| | Q | V	|	|
15+25	15.0220	24.64	|	| | Q | V	|	|
15+30	15.1885	24.17	|	| | Q | V	|	|
15+35	15.3512	23.61	|	| | Q | V	|	|
15+40	15.5040	22.19	|	| | Q | V	|	|
15+45	15.6442	20.37	|	| Q | V	|	|
15+50	15.7778	19.39	|	| Q| V	|	|
15+55	15.9080	18.91	|	| Q | V	|	|
16+ 0	16.0361	18.60	|	| Q | V	|	|
16+ 5	16.1576	17.64	|	| Q | V	|	|
16+10	16.2567	14.39	|	| Q | V	|	|
16+15	16.3264	10.12	|	Q | V	|	|
16+20	16.3800	7.78	|	Q | V	|	|
16+25	16.4255	6.60	|	Q | V	|	|
16+30	16.4654	5.79	|	Q | V	|	|
16+35	16.5008	5.14	|	Q | V	|	|
16+40	16.5319	4.52	|	Q | V	|	|
16+45	16.5590	3.94	| Q	| V	|	|
16+50	16.5834	3.54	| Q	| V	|	|
16+55	16.6059	3.26	| Q	| V	|	|
17+ 0	16.6266	3.02	| Q	| V	|	|
17+ 5	16.6467	2.91	| Q	| V	|	|
17+10	16.6681	3.10	| Q	| V	|	|
17+15	16.6917	3.43	| Q	| V	|	|
17+20	16.7164	3.58	| Q	| V	|	|
17+25	16.7413	3.62	| Q	| V	|	|
17+30	16.7663	3.63	| Q	| V	|	|
17+35	16.7914	3.64	| Q	| V	|	|
17+40	16.8167	3.68	| Q	| V	|	|
17+45	16.8422	3.71	| Q	| V	|	|
17+50	16.8677	3.69	| Q	| V	|	|
17+55	16.8921	3.55	| Q	| V	|	|

18+ 0	16.9151	3.34	| Q	|	|	|	V |
18+ 5	16.9374	3.24	| Q	|	|	|	V |
18+10	16.9594	3.19	| Q	|	|	|	V |
18+15	16.9812	3.16	| Q	|	|	|	V |
18+20	17.0029	3.14	| Q	|	|	|	V |
18+25	17.0244	3.13	| Q	|	|	|	V |
18+30	17.0459	3.12	| Q	|	|	|	V |
18+35	17.0670	3.07	| Q	|	|	|	V |
18+40	17.0870	2.90	| Q	|	|	|	V |
18+45	17.1053	2.67	| Q	|	|	|	V |
18+50	17.1226	2.51	| Q	|	|	|	V |
18+55	17.1383	2.28	| Q	|	|	|	V |
19+ 0	17.1522	2.02	| Q	|	|	|	V |
19+ 5	17.1653	1.91	|Q	|	|	|	V |
19+10	17.1790	1.99	|Q	|	|	|	V |
19+15	17.1938	2.15	| Q	|	|	|	V |
19+20	17.2093	2.26	| Q	|	|	|	V |
19+25	17.2262	2.45	| Q	|	|	|	V |
19+30	17.2446	2.68	| Q	|	|	|	V |
19+35	17.2637	2.76	| Q	|	|	|	V |
19+40	17.2820	2.66	| Q	|	|	|	V |
19+45	17.2991	2.49	| Q	|	|	|	V |
19+50	17.3154	2.36	| Q	|	|	|	V |
19+55	17.3303	2.16	| Q	|	|	|	V |
20+ 0	17.3435	1.93	|Q	|	|	|	V |
20+ 5	17.3562	1.83	|Q	|	|	|	V |
20+10	17.3695	1.93	|Q	|	|	|	V |
20+15	17.3839	2.10	| Q	|	|	|	V |
20+20	17.3990	2.19	| Q	|	|	|	V |
20+25	17.4143	2.22	| Q	|	|	|	V |
20+30	17.4297	2.24	| Q	|	|	|	V |
20+35	17.4453	2.26	| Q	|	|	|	V |
20+40	17.4609	2.26	| Q	|	|	|	V |
20+45	17.4765	2.27	| Q	|	|	|	V |
20+50	17.4919	2.24	| Q	|	|	|	V |
20+55	17.5062	2.07	| Q	|	|	|	V |
21+ 0	17.5190	1.86	|Q	|	|	|	V |
21+ 5	17.5313	1.78	|Q	|	|	|	V |
21+10	17.5443	1.89	|Q	|	|	|	V|
21+15	17.5585	2.07	| Q	|	|	|	V|
21+20	17.5731	2.12	| Q	|	|	|	V|
21+25	17.5869	2.00	|Q	|	|	|	V|
21+30	17.5993	1.80	|Q	|	|	|	V|
21+35	17.6113	1.74	|Q	|	|	|	V|
21+40	17.6241	1.86	|Q	|	|	|	V|
21+45	17.6382	2.05	| Q	|	|	|	V|
21+50	17.6527	2.10	| Q	|	|	|	V|
21+55	17.6663	1.98	|Q	|	|	|	V|
22+ 0	17.6787	1.79	|Q	|	|	|	V|
22+ 5	17.6906	1.73	|Q	|	|	|	V|
22+10	17.7033	1.85	|Q	|	|	|	V|
22+15	17.7173	2.04	| Q	|	|	|	V|
22+20	17.7317	2.09	| Q	|	|	|	V|
22+25	17.7453	1.97	|Q	|	|	|	V|
22+30	17.7576	1.79	|Q	|	|	|	V|
22+35	17.7693	1.69	|Q	|	|	|	V|
22+40	17.7806	1.65	|Q	|	|	|	V|
22+45	17.7917	1.62	|Q	|	|	|	V|
22+50	17.8027	1.60	|Q	|	|	|	V|
22+55	17.8136	1.58	|Q	|	|	|	V|
23+ 0	17.8245	1.57	|Q	|	|	|	V|
23+ 5	17.8352	1.57	|Q	|	|	|	V|
23+10	17.8460	1.56	|Q	|	|	|	V|
23+15	17.8566	1.55	|Q	|	|	|	V|
23+20	17.8673	1.54	|Q	|	|	|	V|
23+25	17.8779	1.54	|Q	|	|	|	V|
23+30	17.8885	1.54	|Q	|	|	|	V|
23+35	17.8991	1.54	|Q	|	|	|	V|
23+40	17.9096	1.53	|Q	|	|	|	V|
23+45	17.9202	1.53	|Q	|	|	|	V|
23+50	17.9307	1.53	|Q	|	|	|	V|

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   23+55      17.9412      1.53  |Q        |         |         |        V|
   24+ 0      17.9518      1.53  |Q        |         |         |        V|
   24+ 5      17.9618      1.45  |Q        |         |         |        V|
   24+10      17.9695      1.13  |Q        |         |         |        V|
   24+15      17.9743      0.69  Q         |         |         |        V|
   24+20      17.9774      0.46  Q         |         |         |        V|
   24+25      17.9798      0.34  Q         |         |         |        V|
   24+30      17.9816      0.26  Q         |         |         |        V|
   24+35      17.9830      0.21  Q         |         |         |        V|
   24+40      17.9841      0.16  Q         |         |         |        V|
   24+45      17.9850      0.13  Q         |         |         |        V|
   24+50      17.9857      0.10  Q         |         |         |        V|
   24+55      17.9862      0.08  Q         |         |         |        V|
   25+ 0      17.9867      0.06  Q         |         |         |        V|
   25+ 5      17.9870      0.05  Q         |         |         |        V|
   25+10      17.9872      0.03  Q         |         |         |        V|
   25+15      17.9874      0.02  Q         |         |         |        V|
   25+20      17.9875      0.02  Q         |         |         |        V|
   25+25      17.9876      0.01  Q         |         |         |        V|
   25+30      17.9876      0.00  Q         |         |         |         V
-------------------------------------------------------------------------
```

PROPOSED SUB AREA "B"

```
       U n i t   H y d r o g r a p h   A n a l y s i s

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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978


Program License Serial Number 5006

----------------------------------------------------------------------
 English (in-lb) Input Units Used
 English Rainfall Data (Inches) Input Values Used

 English Units used in output format



----------------------------------------------------------------------
----------------------------------------------------------------------
Drainage Area =      19.12(Ac.)  =      0.030 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment =      19.12(Ac.)  =      0.030 Sq. Mi.
Length along longest watercourse =    2644.00(Ft.)
Length along longest watercourse measured to centroid =    1322.00(Ft.)
Length along longest watercourse =      0.501 Mi.
Length along longest watercourse measured to centroid =      0.250 Mi.
Difference in elevation =      40.00(Ft.)
Slope along watercourse =     79.8790 Ft./Mi.
Average Manning's 'N' = 0.030
Lag time =    0.142 Hr.
Lag time =     8.54 Min.
25% of lag time =     2.13 Min.
40% of lag time =     3.42 Min.
Unit time =     5.00 Min.
Duration of storm = 1 Hour(s)
User Entered Base Flow =     0.00(CFS)

2 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
       19.12           0.50                 9.56

100 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
       19.12           1.30                24.86

STORM EVENT (YEAR) =    2.00
Area Averaged 2-Year Rainfall =    0.500(In)
Area Averaged 100-Year Rainfall =    1.300(In)

Point rain (area averaged) =    0.500(In)
Areal adjustment factor =   99.98 %
Adjusted average point rain =    0.500(In)

Sub-Area Data:
Area(Ac.)         Runoff Index   Impervious %
    19.120           69.00         0.500
 Total Area Entered =     19.12(Ac.)


RI    RI   Infil. Rate Impervious   Adj. Infil. Rate  Area%     F
AMC2 AMC-2     (In/Hr)    (Dec.%)     (In/Hr)      (Dec.)    (In/Hr)
```

```
      69.0  69.0      0.373     0.500        0.205       1.000      0.205
                                                        Sum (F) =   0.205
      Area averaged mean soil loss (F) (In/Hr) =  0.205
      Minimum soil loss rate ((In/Hr)) =  0.103
      (for 24 hour storm duration)
      Soil low loss rate (decimal) =   0.500
      ------------------------------------------------------------------------
      Slope of intensity-duration curve for a 1 hour storm =0.5500
      ------------------------------------------------------------------------

                  U n i t  H y d r o g r a p h
                         VALLEY S-Curve
      ------------------------------------------------------------------------
                  Unit Hydrograph Data
      ------------------------------------------------------------------------
      Unit time period   Time % of lag   Distribution   Unit Hydrograph
          (hrs)                          Graph %            (CFS)
      ------------------------------------------------------------------------
          1   0.083         58.563          7.892              1.521
          2   0.167        117.126         32.937              6.347
          3   0.250        175.689         27.037              5.210
          4   0.333        234.252         10.574              2.038
          5   0.417        292.815          6.182              1.191
          6   0.500        351.378          4.198              0.809
          7   0.583        409.941          3.019              0.582
          8   0.667        468.504          2.110              0.407
          9   0.750        527.066          1.734              0.334
         10   0.833        585.629          1.313              0.253
         11   0.917        644.192          1.005              0.194
         12   1.000        702.755          0.732              0.141
         13   1.083        761.318          0.587              0.113
         14   1.167        819.881          0.680              0.131
                                  Sum = 100.000   Sum=      19.269
------------------------------------------------------------------------

 The following loss rate calculations reflect use of the minimum calculated loss
 rate subtracted from the Storm Rain to produce the maximum Effective Rain value

  Unit Time   Pattern   Storm Rain     Loss rate(In./Hr)     Effective
       (Hr.)  Percent   (In/Hr)         Max    |   Low        (In/Hr)
   1   0.08     3.30      0.198       (  0.205)       0.099        0.099
   2   0.17     4.20      0.252       (  0.205)       0.126        0.126
   3   0.25     4.40      0.264       (  0.205)       0.132        0.132
   4   0.33     4.80      0.288       (  0.205)       0.144        0.144
   5   0.42     5.20      0.312       (  0.205)       0.156        0.156
   6   0.50     6.20      0.372       (  0.205)       0.186        0.186
   7   0.58     6.80      0.408       (  0.205)       0.204        0.204
   8   0.67     8.80      0.528          0.205    (  0.264)        0.323
   9   0.75    13.90      0.834          0.205    (  0.417)        0.629
  10   0.83    31.40      1.884          0.205    (  0.942)        1.679
  11   0.92     7.20      0.432          0.205    (  0.216)        0.227
  12   1.00     3.80      0.228       (  0.205)       0.114        0.114
              (Loss Rate Not Used)
     Sum =     100.0                                  Sum =     4.0
       Flood volume = Effective rainfall      0.33(In)
        times area      19.1(Ac.)/[(In)/(Ft.)] =       0.5(Ac.Ft)
       Total soil loss =      0.17(In)
       Total soil loss =     0.263(Ac.Ft)
       Total rainfall =      0.50(In)
       Flood volume =       23239.3 Cubic Feet
       Total soil loss =       11457.5 Cubic Feet
       ------------------------------------------------------------------------
        Peak flow rate of this hydrograph =     15.579(CFS)
       ------------------------------------------------------------------------
       ++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                          1 - H O U R    S T O R M
                       R u n o f f     H y d r o g r a p h
       ------------------------------------------------------------------------
                   Hydrograph in   5   Minute intervals ((CFS))
```

Time(h+m)	Volume Ac.Ft	Q(CFS)	0	5.0	10.0	15.0	20.0
0+ 5	0.0010	0.15	Q				
0+10	0.0067	0.82	VQ				
0+15	0.0171	1.52	V Q				
0+20	0.0303	1.92	VQ				
0+25	0.0456	2.21	VQ				
0+30	0.0630	2.52	VQ				
0+35	0.0830	2.91	QV				
0+40	0.1069	3.47	Q V				
0+45	0.1407	4.91	QV				
0+50	0.2041	9.20	V Q				
0+55	0.3114	15.58	V			Q	
1+ 0	0.3974	12.49	Q V				
1+ 5	0.4434	6.68	Q			V	
1+10	0.4710	4.01	Q			V	
1+15	0.4886	2.56	Q			V	
1+20	0.5010	1.80	Q			V	
1+25	0.5100	1.30	Q			V	
1+30	0.5169	1.01	Q			V	
1+35	0.5222	0.76	Q			V	
1+40	0.5261	0.57	Q			V	
1+45	0.5291	0.42	Q			V	
1+50	0.5313	0.33	Q			V	
1+55	0.5331	0.26	Q			V	
2+ 0	0.5334	0.04	Q			V	
2+ 5	0.5335	0.01	Q				V

```
       U n i t   H y d r o g r a p h   A n a l y s i s

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              Study date  08/14/25 File: PROB15.out

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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978


Program License Serial Number 5006

----------------------------------------------------------------------
 English (in-lb) Input Units Used
 English Rainfall Data (Inches) Input Values Used

 English Units used in output format



----------------------------------------------------------------------
----------------------------------------------------------------------
Drainage Area =      19.12(Ac.)  =      0.030 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment =      19.12(Ac.)  =      0.030 Sq. Mi.
Length along longest watercourse =    2644.00(Ft.)
Length along longest watercourse measured to centroid =    1322.00(Ft.)
Length along longest watercourse =      0.501 Mi.
Length along longest watercourse measured to centroid =      0.250 Mi.
Difference in elevation =      40.00(Ft.)
Slope along watercourse =     79.8790 Ft./Mi.
Average Manning's 'N' = 0.030
Lag time =    0.142 Hr.
Lag time =     8.54 Min.
25% of lag time =     2.13 Min.
40% of lag time =     3.42 Min.
Unit time =     5.00 Min.
Duration of storm = 1 Hour(s)
User Entered Base Flow =     0.00(CFS)

2 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
       19.12           0.50                 9.56

100 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
       19.12           1.30                24.86

STORM EVENT (YEAR) =    5.00
Area Averaged 2-Year Rainfall =    0.500(In)
Area Averaged 100-Year Rainfall =    1.300(In)

Point rain (area averaged) =    0.687(In)
Areal adjustment factor =   99.98 %
Adjusted average point rain =    0.687(In)

Sub-Area Data:
Area(Ac.)         Runoff Index   Impervious %
    19.120           69.00         0.500
 Total Area Entered =     19.12(Ac.)


RI    RI   Infil. Rate Impervious   Adj. Infil. Rate  Area%     F
AMC2 AMC-2     (In/Hr)    (Dec.%)     (In/Hr)      (Dec.)    (In/Hr)
```

```
      69.0  69.0      0.373     0.500        0.205       1.000      0.205
                                                        Sum (F) =   0.205
      Area averaged mean soil loss (F) (In/Hr) =  0.205
      Minimum soil loss rate ((In/Hr)) =  0.103
      (for 24 hour storm duration)
      Soil low loss rate (decimal) =   0.500
      ------------------------------------------------------------------------
      Slope of intensity-duration curve for a 1 hour storm =0.5500
      ------------------------------------------------------------------------

                  U n i t  H y d r o g r a p h
                         VALLEY S-Curve
      ------------------------------------------------------------------------
                  Unit Hydrograph Data
      ------------------------------------------------------------------------
      Unit time period   Time % of lag   Distribution   Unit Hydrograph
          (hrs)                          Graph %            (CFS)
      ------------------------------------------------------------------------
          1   0.083         58.563          7.892              1.521
          2   0.167        117.126         32.937              6.347
          3   0.250        175.689         27.037              5.210
          4   0.333        234.252         10.574              2.038
          5   0.417        292.815          6.182              1.191
          6   0.500        351.378          4.198              0.809
          7   0.583        409.941          3.019              0.582
          8   0.667        468.504          2.110              0.407
          9   0.750        527.066          1.734              0.334
         10   0.833        585.629          1.313              0.253
         11   0.917        644.192          1.005              0.194
         12   1.000        702.755          0.732              0.141
         13   1.083        761.318          0.587              0.113
         14   1.167        819.881          0.680              0.131
                                  Sum = 100.000   Sum=      19.269
------------------------------------------------------------------------

 The following loss rate calculations reflect use of the minimum calculated loss
 rate subtracted from the Storm Rain to produce the maximum Effective Rain value

  Unit Time   Pattern   Storm Rain     Loss rate(In./Hr)     Effective
       (Hr.)  Percent   (In/Hr)         Max    |   Low        (In/Hr)
   1   0.08     3.30      0.272       (  0.205)       0.136        0.136
   2   0.17     4.20      0.346       (  0.205)       0.173        0.173
   3   0.25     4.40      0.363       (  0.205)       0.181        0.181
   4   0.33     4.80      0.396       (  0.205)       0.198        0.198
   5   0.42     5.20      0.429          0.205    (  0.214)        0.224
   6   0.50     6.20      0.511          0.205    (  0.256)        0.306
   7   0.58     6.80      0.561          0.205    (  0.280)        0.356
   8   0.67     8.80      0.726          0.205    (  0.363)        0.521
   9   0.75    13.90      1.146          0.205    (  0.573)        0.941
  10   0.83    31.40      2.590          0.205    (  1.295)        2.385
  11   0.92     7.20      0.594          0.205    (  0.297)        0.389
  12   1.00     3.80      0.313       (  0.205)       0.157        0.157
              (Loss Rate Not Used)
     Sum =     100.0                                   Sum =     6.0
       Flood volume = Effective rainfall      0.50(In)
        times area      19.1(Ac.)/[(In)/(Ft.)] =       0.8(Ac.Ft)
       Total soil loss =      0.19(In)
       Total soil loss =     0.303(Ac.Ft)
       Total rainfall =      0.69(In)
       Flood volume =       34509.1 Cubic Feet
       Total soil loss =       13190.6 Cubic Feet
       ------------------------------------------------------------------------
        Peak flow rate of this hydrograph =     22.715(CFS)
       ------------------------------------------------------------------------
       ++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                          1 - H O U R    S T O R M
                     R u n o f f     H y d r o g r a p h
       ------------------------------------------------------------------------
                  Hydrograph in   5   Minute intervals ((CFS))
```

Time(h+m)	Volume Ac.Ft	Q(CFS)	0	7.5	15.0	22.5	30.0
0+ 5	0.0014	0.21	Q				
0+10	0.0092	1.13	VQ				
0+15	0.0236	2.09	VQ				
0+20	0.0417	2.63	VQ				
0+25	0.0628	3.06	VQ				
0+30	0.0876	3.61	Q				
0+35	0.1185	4.49	Q				
0+40	0.1574	5.64	Q				
0+45	0.2116	7.87	Q				
0+50	0.3071	13.87		V Q			
0+55	0.4635	22.72			V Q		
1+ 0	0.5903	18.40			Q V		
1+ 5	0.6588	9.96		Q		V	
1+10	0.6996	5.92	Q			V	
1+15	0.7257	3.78	Q			V	
1+20	0.7441	2.67	Q			V	
1+25	0.7574	1.93	Q			V	
1+30	0.7677	1.50	Q			V	
1+35	0.7755	1.13	Q			V	
1+40	0.7814	0.85	Q			V	
1+45	0.7857	0.63	Q			V	
1+50	0.7890	0.48	Q			V	
1+55	0.7916	0.38	Q			V	
2+ 0	0.7921	0.07	Q			V	
2+ 5	0.7922	0.02	Q				V

```
       U n i t   H y d r o g r a p h   A n a l y s i s

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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978


Program License Serial Number 5006

----------------------------------------------------------------------
 English (in-lb) Input Units Used
 English Rainfall Data (Inches) Input Values Used

 English Units used in output format



----------------------------------------------------------------------
----------------------------------------------------------------------
Drainage Area =      19.12(Ac.)  =      0.030 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment =      19.12(Ac.)  =      0.030 Sq. Mi.
Length along longest watercourse =    2644.00(Ft.)
Length along longest watercourse measured to centroid =    1322.00(Ft.)
Length along longest watercourse =      0.501 Mi.
Length along longest watercourse measured to centroid =      0.250 Mi.
Difference in elevation =      40.00(Ft.)
Slope along watercourse =     79.8790 Ft./Mi.
Average Manning's 'N' = 0.030
Lag time =    0.142 Hr.
Lag time =     8.54 Min.
25% of lag time =     2.13 Min.
40% of lag time =     3.42 Min.
Unit time =     5.00 Min.
Duration of storm = 1 Hour(s)
User Entered Base Flow =     0.00(CFS)

2 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
       19.12           0.50                 9.56

100 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
       19.12           1.30                24.86

STORM EVENT (YEAR) =   10.00
Area Averaged 2-Year Rainfall =    0.500(In)
Area Averaged 100-Year Rainfall =    1.300(In)

Point rain (area averaged) =    0.829(In)
Areal adjustment factor =   99.98 %
Adjusted average point rain =    0.829(In)

Sub-Area Data:
Area(Ac.)         Runoff Index   Impervious %
    19.120           69.00         0.500
 Total Area Entered =     19.12(Ac.)


RI    RI   Infil. Rate Impervious   Adj. Infil. Rate  Area%     F
AMC2 AMC-2     (In/Hr)    (Dec.%)     (In/Hr)      (Dec.)    (In/Hr)
```

```
      69.0  69.0      0.373     0.500        0.205       1.000      0.205
                                                        Sum (F) =   0.205
      Area averaged mean soil loss (F) (In/Hr) =  0.205
      Minimum soil loss rate ((In/Hr)) =  0.103
      (for 24 hour storm duration)
      Soil low loss rate (decimal) =   0.500
      ------------------------------------------------------------------------
      Slope of intensity-duration curve for a 1 hour storm =0.5500
      ------------------------------------------------------------------------

                  U n i t  H y d r o g r a p h
                         VALLEY S-Curve
      ------------------------------------------------------------------------
                  Unit Hydrograph Data
      ------------------------------------------------------------------------
      Unit time period   Time % of lag   Distribution   Unit Hydrograph
          (hrs)                          Graph %            (CFS)
      ------------------------------------------------------------------------
          1   0.083         58.563          7.892              1.521
          2   0.167        117.126         32.937              6.347
          3   0.250        175.689         27.037              5.210
          4   0.333        234.252         10.574              2.038
          5   0.417        292.815          6.182              1.191
          6   0.500        351.378          4.198              0.809
          7   0.583        409.941          3.019              0.582
          8   0.667        468.504          2.110              0.407
          9   0.750        527.066          1.734              0.334
         10   0.833        585.629          1.313              0.253
         11   0.917        644.192          1.005              0.194
         12   1.000        702.755          0.732              0.141
         13   1.083        761.318          0.587              0.113
         14   1.167        819.881          0.680              0.131
                                  Sum = 100.000   Sum=      19.269
------------------------------------------------------------------------

 The following loss rate calculations reflect use of the minimum calculated loss
 rate subtracted from the Storm Rain to produce the maximum Effective Rain value

  Unit Time   Pattern   Storm Rain     Loss rate(In./Hr)     Effective
       (Hr.)  Percent   (In/Hr)         Max    |   Low        (In/Hr)
    1   0.08     3.30      0.328       (  0.205)       0.164        0.164
    2   0.17     4.20      0.418          0.205    (  0.209)        0.213
    3   0.25     4.40      0.438          0.205    (  0.219)        0.233
    4   0.33     4.80      0.477          0.205    (  0.239)        0.272
    5   0.42     5.20      0.517          0.205    (  0.259)        0.312
    6   0.50     6.20      0.617          0.205    (  0.308)        0.412
    7   0.58     6.80      0.676          0.205    (  0.338)        0.471
    8   0.67     8.80      0.875          0.205    (  0.438)        0.670
    9   0.75    13.90      1.383          0.205    (  0.691)        1.178
   10   0.83    31.40      3.124          0.205    (  1.562)        2.919
   11   0.92     7.20      0.716          0.205    (  0.358)        0.511
   12   1.00     3.80      0.378       (  0.205)       0.189        0.189
              (Loss Rate Not Used)
     Sum =     100.0                                    Sum =     7.5
       Flood volume = Effective rainfall      0.63(In)
        times area      19.1(Ac.)/[(In)/(Ft.)] =       1.0(Ac.Ft)
       Total soil loss =      0.20(In)
       Total soil loss =     0.319(Ac.Ft)
       Total rainfall =      0.83(In)
       Flood volume =       43634.4 Cubic Feet
       Total soil loss =       13901.6 Cubic Feet
       ------------------------------------------------------------------------
        Peak flow rate of this hydrograph =     28.167(CFS)
       ------------------------------------------------------------------------
       ++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                          1 - H O U R    S T O R M
                     R u n o f f     H y d r o g r a p h
       ------------------------------------------------------------------------
                   Hydrograph in   5   Minute intervals ((CFS))
```

Time(h+m)	Volume Ac.Ft	Q(CFS)	0	7.5	15.0	22.5	30.0
0+ 5	0.0017	0.25	Q				
0+10	0.0111	1.37	VQ				
0+15	0.0288	2.56	V Q				
0+20	0.0517	3.34	V Q				
0+25	0.0796	4.05	V Q				
0+30	0.1133	4.89	V Q				
0+35	0.1550	6.06	V Q				
0+40	0.2067	7.50	VQ				
0+45	0.2770	10.21	V Q				
0+50	0.3974	17.48	V	Q			
0+55	0.5914	28.17	V	Q			
1+ 0	0.7492	22.91	VQ				
1+ 5	0.8351	12.47	Q	V			
1+10	0.8860	7.39	Q	V			
1+15	0.9185	4.73	Q	V			
1+20	0.9416	3.35	Q	V			
1+25	0.9583	2.42	Q	V			
1+30	0.9712	1.88	Q	V			
1+35	0.9809	1.42	Q	V			
1+40	0.9883	1.06	Q	V			
1+45	0.9936	0.78	Q	V			
1+50	0.9977	0.59	Q	V			
1+55	1.0009	0.47	Q	V			
2+ 0	1.0015	0.09	Q	V			
2+ 5	1.0017	0.02	Q	V			

```
       U n i t   H y d r o g r a p h   A n a l y s i s

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              Study date  08/14/25 File: PROB1100.out

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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978


Program License Serial Number 5006

------------------------------------------------------------------------
 English (in-lb) Input Units Used
 English Rainfall Data (Inches) Input Values Used

 English Units used in output format



------------------------------------------------------------------------
------------------------------------------------------------------------
Drainage Area =      19.12(Ac.)  =      0.030 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment =      19.12(Ac.)  =      0.030 Sq. Mi.
Length along longest watercourse =    2644.00(Ft.)
Length along longest watercourse measured to centroid =    1322.00(Ft.)
Length along longest watercourse =      0.501 Mi.
Length along longest watercourse measured to centroid =      0.250 Mi.
Difference in elevation =      40.00(Ft.)
Slope along watercourse =     79.8790 Ft./Mi.
Average Manning's 'N' = 0.030
Lag time =    0.142 Hr.
Lag time =     8.54 Min.
25% of lag time =     2.13 Min.
40% of lag time =     3.42 Min.
Unit time =     5.00 Min.
Duration of storm = 1 Hour(s)
User Entered Base Flow =     0.00(CFS)

2 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
       19.12           0.50                 9.56

100 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
       19.12           1.30                24.86

STORM EVENT (YEAR) =  100.00
Area Averaged 2-Year Rainfall =    0.500(In)
Area Averaged 100-Year Rainfall =    1.300(In)

Point rain (area averaged) =    1.300(In)
Areal adjustment factor =   99.98 %
Adjusted average point rain =    1.300(In)

Sub-Area Data:
Area(Ac.)         Runoff Index   Impervious %
    19.120           69.00         0.500
 Total Area Entered =     19.12(Ac.)


RI    RI   Infil. Rate Impervious   Adj. Infil. Rate  Area%     F
AMC2 AMC-2     (In/Hr)    (Dec.%)     (In/Hr)      (Dec.)    (In/Hr)
```

```
      69.0  69.0      0.373     0.500        0.205       1.000      0.205
                                                        Sum (F) =   0.205
      Area averaged mean soil loss (F) (In/Hr) =  0.205
      Minimum soil loss rate ((In/Hr)) =  0.103
      (for 24 hour storm duration)
      Soil low loss rate (decimal) =   0.500
      ------------------------------------------------------------------------
      Slope of intensity-duration curve for a 1 hour storm =0.5500
      ------------------------------------------------------------------------

                  U n i t  H y d r o g r a p h
                         VALLEY S-Curve
      ------------------------------------------------------------------------
                  Unit Hydrograph Data
      ------------------------------------------------------------------------
      Unit time period   Time % of lag   Distribution   Unit Hydrograph
          (hrs)                          Graph %            (CFS)
      ------------------------------------------------------------------------
          1   0.083         58.563          7.892              1.521
          2   0.167        117.126         32.937              6.347
          3   0.250        175.689         27.037              5.210
          4   0.333        234.252         10.574              2.038
          5   0.417        292.815          6.182              1.191
          6   0.500        351.378          4.198              0.809
          7   0.583        409.941          3.019              0.582
          8   0.667        468.504          2.110              0.407
          9   0.750        527.066          1.734              0.334
         10   0.833        585.629          1.313              0.253
         11   0.917        644.192          1.005              0.194
         12   1.000        702.755          0.732              0.141
         13   1.083        761.318          0.587              0.113
         14   1.167        819.881          0.680              0.131
                                  Sum = 100.000   Sum=      19.269
------------------------------------------------------------------------

 The following loss rate calculations reflect use of the minimum calculated loss
 rate subtracted from the Storm Rain to produce the maximum Effective Rain value

  Unit Time   Pattern   Storm Rain     Loss rate(In./Hr)     Effective
       (Hr.)  Percent   (In/Hr)         Max    |   Low        (In/Hr)
   1   0.08     3.30      0.515          0.205    (  0.257)        0.310
   2   0.17     4.20      0.655          0.205    (  0.328)        0.450
   3   0.25     4.40      0.686          0.205    (  0.343)        0.481
   4   0.33     4.80      0.749          0.205    (  0.374)        0.544
   5   0.42     5.20      0.811          0.205    (  0.406)        0.606
   6   0.50     6.20      0.967          0.205    (  0.484)        0.762
   7   0.58     6.80      1.061          0.205    (  0.530)        0.856
   8   0.67     8.80      1.373          0.205    (  0.686)        1.168
   9   0.75    13.90      2.168          0.205    (  1.084)        1.963
  10   0.83    31.40      4.898          0.205    (  2.449)        4.693
  11   0.92     7.20      1.123          0.205    (  0.562)        0.918
  12   1.00     3.80      0.593          0.205    (  0.296)        0.388
              (Loss Rate Not Used)
     Sum =     100.0                                  Sum =    13.1
       Flood volume = Effective rainfall      1.09(In)
        times area      19.1(Ac.)/[(In)/(Ft.)] =       1.7(Ac.Ft)
       Total soil loss =      0.21(In)
       Total soil loss =     0.327(Ac.Ft)
       Total rainfall =      1.30(In)
       Flood volume =       75980.7 Cubic Feet
       Total soil loss =       14230.9 Cubic Feet
       ------------------------------------------------------------------------
        Peak flow rate of this hydrograph =     46.352(CFS)
       ------------------------------------------------------------------------
       ++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                          1 - H O U R    S T O R M
                     R u n o f f     H y d r o g r a p h
       ------------------------------------------------------------------------
                  Hydrograph in   5   Minute intervals ((CFS))
```

Time(h+m)	Volume Ac.Ft	Q(CFS)	0	12.5	25.0	37.5	50.0
0+ 5	0.0032	0.47	Q				
0+10	0.0215	2.65	V Q				
0+15	0.0573	5.20	V Q				
0+20	0.1046	6.86	V Q				
0+25	0.1609	8.17	V Q				
0+30	0.2270	9.61	V Q				
0+35	0.3064	11.53	V Q				
0+40	0.4017	13.84	V Q				
0+45	0.5267	18.14	V Q				
0+50	0.7304	29.57	V	Q			
0+55	1.0496	46.35	V			Q	
1+ 0	1.3119	38.09			Q		
1+ 5	1.4596	21.44		Q		V	
1+10	1.5475	12.77	Q			V	
1+15	1.6032	8.09	Q			V	
1+20	1.6425	5.70	Q			V	
1+25	1.6709	4.12	Q			V	
1+30	1.6928	3.18	Q			V	
1+35	1.7092	2.39	Q			V	
1+40	1.7216	1.79	Q			V	
1+45	1.7306	1.31	Q			V	
1+50	1.7375	0.99	Q			V	
1+55	1.7428	0.77	Q			V	
2+ 0	1.7439	0.16	Q			V	
2+ 5	1.7443	0.05	Q				V

```
       U n i t   H y d r o g r a p h   A n a l y s i s

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              Study date  08/14/25 File: PROB32.out

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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978


Program License Serial Number 5006

----------------------------------------------------------------------
 English (in-lb) Input Units Used
 English Rainfall Data (Inches) Input Values Used

 English Units used in output format



----------------------------------------------------------------------
----------------------------------------------------------------------
Drainage Area =      19.12(Ac.)  =      0.030 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment =      19.12(Ac.)  =      0.030 Sq. Mi.
Length along longest watercourse =    2644.00(Ft.)
Length along longest watercourse measured to centroid =    1322.00(Ft.)
Length along longest watercourse =      0.501 Mi.
Length along longest watercourse measured to centroid =      0.250 Mi.
Difference in elevation =      40.00(Ft.)
Slope along watercourse =     79.8790 Ft./Mi.
Average Manning's 'N' = 0.030
Lag time =    0.142 Hr.
Lag time =     8.54 Min.
25% of lag time =     2.13 Min.
40% of lag time =     3.42 Min.
Unit time =     5.00 Min.
Duration of storm = 3 Hour(s)
User Entered Base Flow =     0.00(CFS)

2 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
       19.12           0.80                 15.30

100 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
       19.12           2.00                 38.24

STORM EVENT (YEAR) =    2.00
Area Averaged 2-Year Rainfall =    0.800(In)
Area Averaged 100-Year Rainfall =    2.000(In)

Point rain (area averaged) =    0.800(In)
Areal adjustment factor =   99.99 %
Adjusted average point rain =    0.800(In)

Sub-Area Data:
Area(Ac.)         Runoff Index   Impervious %
    19.120           69.00         0.500
 Total Area Entered =     19.12(Ac.)


RI    RI   Infil. Rate Impervious   Adj. Infil. Rate  Area%     F
AMC2 AMC-2     (In/Hr)    (Dec.%)     (In/Hr)      (Dec.)    (In/Hr)
```

```
69.0  69.0      0.373     0.500        0.205       1.000      0.205
                                                  Sum (F) =   0.205
Area averaged mean soil loss (F) (In/Hr) =  0.205
Minimum soil loss rate ((In/Hr)) =  0.103
(for 24 hour storm duration)
Soil low loss rate (decimal) =   0.500
```

U n i t H y d r o g r a p h
VALLEY S-Curve

Unit Hydrograph Data

Unit time period (hrs)		Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	58.563	7.892	1.521
2	0.167	117.126	32.937	6.347
3	0.250	175.689	27.037	5.210
4	0.333	234.252	10.574	2.038
5	0.417	292.815	6.182	1.191
6	0.500	351.378	4.198	0.809
7	0.583	409.941	3.019	0.582
8	0.667	468.504	2.110	0.407
9	0.750	527.066	1.734	0.334
10	0.833	585.629	1.313	0.253
11	0.917	644.192	1.005	0.194
12	1.000	702.755	0.732	0.141
13	1.083	761.318	0.587	0.113
14	1.167	819.881	0.680	0.131
		Sum = 100.000	Sum=	19.269

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr) Max		Low	Effective (In/Hr)
1	0.08	1.30	0.125	(0.205)		0.062	0.062
2	0.17	1.30	0.125	(0.205)		0.062	0.062
3	0.25	1.10	0.106	(0.205)		0.053	0.053
4	0.33	1.50	0.144	(0.205)		0.072	0.072
5	0.42	1.50	0.144	(0.205)		0.072	0.072
6	0.50	1.80	0.173	(0.205)		0.086	0.086
7	0.58	1.50	0.144	(0.205)		0.072	0.072
8	0.67	1.80	0.173	(0.205)		0.086	0.086
9	0.75	1.80	0.173	(0.205)		0.086	0.086
10	0.83	1.50	0.144	(0.205)		0.072	0.072
11	0.92	1.60	0.154	(0.205)		0.077	0.077
12	1.00	1.80	0.173	(0.205)		0.086	0.086
13	1.08	2.20	0.211	(0.205)		0.106	0.106
14	1.17	2.20	0.211	(0.205)		0.106	0.106
15	1.25	2.20	0.211	(0.205)		0.106	0.106
16	1.33	2.00	0.192	(0.205)		0.096	0.096
17	1.42	2.60	0.250	(0.205)		0.125	0.125
18	1.50	2.70	0.259	(0.205)		0.130	0.130
19	1.58	2.40	0.230	(0.205)		0.115	0.115
20	1.67	2.70	0.259	(0.205)		0.130	0.130
21	1.75	3.30	0.317	(0.205)		0.158	0.158
22	1.83	3.10	0.298	(0.205)		0.149	0.149
23	1.92	2.90	0.278	(0.205)		0.139	0.139
24	2.00	3.00	0.288	(0.205)		0.144	0.144
25	2.08	3.10	0.298	(0.205)		0.149	0.149
26	2.17	4.20	0.403	(0.205)		0.202	0.202
27	2.25	5.00	0.480	0.205	(	0.240)	0.275
28	2.33	3.50	0.336	(0.205)		0.168	0.168
29	2.42	6.80	0.653	0.205	(	0.326)	0.448
30	2.50	7.30	0.701	0.205	(	0.350)	0.496
31	2.58	8.20	0.787	0.205	(	0.394)	0.582
32	2.67	5.90	0.566	0.205	(	0.283)	0.361

```
33   2.75     2.00      0.192       (  0.205)       0.096        0.096
34   2.83     1.80      0.173       (  0.205)       0.086        0.086
35   2.92     1.80      0.173       (  0.205)       0.086        0.086
36   3.00     0.60      0.058       (  0.205)       0.029        0.029
             (Loss Rate Not Used)
   Sum =     100.0                                  Sum =      5.4
      Flood volume = Effective rainfall      0.45(In)
       times area      19.1(Ac.)/[(In)/(Ft.)] =       0.7(Ac.Ft)
      Total soil loss =      0.35(In)
      Total soil loss =     0.562(Ac.Ft)
      Total rainfall =      0.80(In)
      Flood volume =       31046.7 Cubic Feet
      Total soil loss =       24473.2 Cubic Feet
      ---------------------------------------------------------------------
       Peak flow rate of this hydrograph =      8.508(CFS)
      ---------------------------------------------------------------------
      +++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                          3 - H O U R    S T O R M
                     R u n o f f     H y d r o g r a p h
      ---------------------------------------------------------------------
                  Hydrograph in   5   Minute intervals ((CFS))

      ---------------------------------------------------------------------
Time(h+m) Volume Ac.Ft   Q(CFS)  0        2.5       5.0       7.5      10.0
----------------------------------------------------------------------------
  0+ 5       0.0007      0.09  Q         |         |         |         |
  0+10       0.0040      0.49  VQ        |         |         |         |
  0+15       0.0096      0.80  V  Q      |         |         |         |
  0+20       0.0157      0.90  V  Q      |         |         |         |
  0+25       0.0229      1.04  |V  Q     |         |         |         |
  0+30       0.0312      1.20  |V  Q     |         |         |         |
  0+35       0.0403      1.33  | V  Q    |         |         |         |
  0+40       0.0498      1.38  | V  Q    |         |         |         |
  0+45       0.0598      1.45  |  V Q    |         |         |         |
  0+50       0.0702      1.52  |  V  Q   |         |         |         |
  0+55       0.0804      1.47  |   VQ    |         |         |         |
  1+ 0       0.0905      1.47  |    Q    |         |         |         |
  1+ 5       0.1014      1.57  |    VQ   |         |         |         |
  1+10       0.1135      1.76  |     VQ  |         |         |         |
  1+15       0.1264      1.88  |      Q  |         |         |         |
  1+20       0.1396      1.91  |      Q  |         |         |         |
  1+25       0.1529      1.93  |      QV |         |         |         |
  1+30       0.1672      2.09  |       QV|         |         |         |
  1+35       0.1827      2.24  |       Q V         |         |         |
  1+40       0.1982      2.26  |        Q|V        |         |         |
  1+45       0.2145      2.36  |        Q| V       |         |         |
  1+50       0.2325      2.61  |         Q  V      |         |         |
  1+55       0.2511      2.71  |         Q   V     |         |         |
  2+ 0       0.2697      2.69  |         Q    V    |         |         |
  2+ 5       0.2883      2.71  |         Q     V   |         |         |
  2+10       0.3079      2.85  |         |Q     V  |         |         |
  2+15       0.3309      3.33  |         |  Q    V |         |         |
  2+20       0.3580      3.93  |         |    Q    V         |         |
  2+25       0.3867      4.18  |         |     Q   |V        |         |
  2+30       0.4260      5.70  |         |         | QV      |         |
  2+35       0.4777      7.51  |         |         |     V   Q         |
  2+40       0.5363      8.51  |         |         |         V   Q     |
  2+45       0.5884      7.57  |         |         |         Q  V      |
  2+50       0.6240      5.16  |         |         Q         |    V    |
  2+55       0.6485      3.57  |         |   Q     |         |     V   |
  3+ 0       0.6680      2.83  |         |Q        |         |      V  |
  3+ 5       0.6823      2.07  |       Q |         |         |       V |
  3+10       0.6915      1.35  |    Q    |         |         |       V |
  3+15       0.6979      0.92  |  Q      |         |         |        V|
  3+20       0.7025      0.68  | Q       |         |         |        V|
  3+25       0.7059      0.49  |Q        |         |         |        V|
  3+30       0.7085      0.37  |Q        |         |         |        V|
  3+35       0.7103      0.26  |Q        |         |         |        V|
  3+40       0.7115      0.18  Q         |         |         |        V|
  3+45       0.7122      0.09  Q         |         |         |        V|
  3+50       0.7124      0.04  Q         |         |         |        V|
```

```
    3+55       0.7126      0.03  Q         |         |         |        V|
    4+ 0       0.7127      0.01  Q         |         |         |        V|
    4+ 5       0.7127      0.00  Q         |         |         |        V|
-------------------------------------------------------------------------
```

```
       U n i t   H y d r o g r a p h   A n a l y s i s

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              Study date  08/14/25 File: PROB35.out

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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978


Program License Serial Number 5006

----------------------------------------------------------------------
 English (in-lb) Input Units Used
 English Rainfall Data (Inches) Input Values Used

 English Units used in output format



----------------------------------------------------------------------
----------------------------------------------------------------------
Drainage Area =      19.12(Ac.)  =      0.030 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment =      19.12(Ac.)  =      0.030 Sq. Mi.
Length along longest watercourse =    2644.00(Ft.)
Length along longest watercourse measured to centroid =    1322.00(Ft.)
Length along longest watercourse =      0.501 Mi.
Length along longest watercourse measured to centroid =      0.250 Mi.
Difference in elevation =      40.00(Ft.)
Slope along watercourse =     79.8790 Ft./Mi.
Average Manning's 'N' = 0.030
Lag time =    0.142 Hr.
Lag time =     8.54 Min.
25% of lag time =     2.13 Min.
40% of lag time =     3.42 Min.
Unit time =     5.00 Min.
Duration of storm = 3 Hour(s)
User Entered Base Flow =     0.00(CFS)

2 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
       19.12           0.80                 15.30

100 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
       19.12           2.00                 38.24

STORM EVENT (YEAR) =    5.00
Area Averaged 2-Year Rainfall =    0.800(In)
Area Averaged 100-Year Rainfall =    2.000(In)

Point rain (area averaged) =    1.081(In)
Areal adjustment factor =   99.99 %
Adjusted average point rain =    1.081(In)

Sub-Area Data:
Area(Ac.)         Runoff Index   Impervious %
    19.120           69.00         0.500
 Total Area Entered =     19.12(Ac.)


RI    RI   Infil. Rate Impervious   Adj. Infil. Rate  Area%     F
AMC2 AMC-2     (In/Hr)    (Dec.%)     (In/Hr)      (Dec.)    (In/Hr)
```

```
69.0  69.0      0.373     0.500        0.205       1.000      0.205
                                                  Sum (F) =   0.205
Area averaged mean soil loss (F) (In/Hr) =  0.205
Minimum soil loss rate ((In/Hr)) =  0.103
(for 24 hour storm duration)
Soil low loss rate (decimal) =   0.500
------------------------------------------------------------------------

               U n i t  H y d r o g r a p h
                      VALLEY S-Curve
------------------------------------------------------------------------
               Unit Hydrograph Data
------------------------------------------------------------------------
Unit time period   Time % of lag   Distribution   Unit Hydrograph
    (hrs)                          Graph %           (CFS)
------------------------------------------------------------------------
     1   0.083         58.563          7.892             1.521
     2   0.167        117.126         32.937             6.347
     3   0.250        175.689         27.037             5.210
     4   0.333        234.252         10.574             2.038
     5   0.417        292.815          6.182             1.191
     6   0.500        351.378          4.198             0.809
     7   0.583        409.941          3.019             0.582
     8   0.667        468.504          2.110             0.407
     9   0.750        527.066          1.734             0.334
    10   0.833        585.629          1.313             0.253
    11   0.917        644.192          1.005             0.194
    12   1.000        702.755          0.732             0.141
    13   1.083        761.318          0.587             0.113
    14   1.167        819.881          0.680             0.131
                                Sum = 100.000   Sum=      19.269
------------------------------------------------------------------------
```

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr) Max	Low	Effective (In/Hr)
1	0.08	1.30	0.169	(0.205)	0.084	0.084
2	0.17	1.30	0.169	(0.205)	0.084	0.084
3	0.25	1.10	0.143	(0.205)	0.071	0.071
4	0.33	1.50	0.195	(0.205)	0.097	0.097
5	0.42	1.50	0.195	(0.205)	0.097	0.097
6	0.50	1.80	0.233	(0.205)	0.117	0.117
7	0.58	1.50	0.195	(0.205)	0.097	0.097
8	0.67	1.80	0.233	(0.205)	0.117	0.117
9	0.75	1.80	0.233	(0.205)	0.117	0.117
10	0.83	1.50	0.195	(0.205)	0.097	0.097
11	0.92	1.60	0.208	(0.205)	0.104	0.104
12	1.00	1.80	0.233	(0.205)	0.117	0.117
13	1.08	2.20	0.285	(0.205)	0.143	0.143
14	1.17	2.20	0.285	(0.205)	0.143	0.143
15	1.25	2.20	0.285	(0.205)	0.143	0.143
16	1.33	2.00	0.259	(0.205)	0.130	0.130
17	1.42	2.60	0.337	(0.205)	0.169	0.169
18	1.50	2.70	0.350	(0.205)	0.175	0.175
19	1.58	2.40	0.311	(0.205)	0.156	0.156
20	1.67	2.70	0.350	(0.205)	0.175	0.175
21	1.75	3.30	0.428	0.205	(0.214)	0.223
22	1.83	3.10	0.402	(0.205)	0.201	0.201
23	1.92	2.90	0.376	(0.205)	0.188	0.188
24	2.00	3.00	0.389	(0.205)	0.195	0.195
25	2.08	3.10	0.402	(0.205)	0.201	0.201
26	2.17	4.20	0.545	0.205	(0.272)	0.340
27	2.25	5.00	0.649	0.205	(0.324)	0.444
28	2.33	3.50	0.454	0.205	(0.227)	0.249
29	2.42	6.80	0.882	0.205	(0.441)	0.677
30	2.50	7.30	0.947	0.205	(0.473)	0.742
31	2.58	8.20	1.064	0.205	(0.532)	0.859
32	2.67	5.90	0.765	0.205	(0.383)	0.560

```
33   2.75     2.00      0.259       (  0.205)       0.130        0.130
34   2.83     1.80      0.233       (  0.205)       0.117        0.117
35   2.92     1.80      0.233       (  0.205)       0.117        0.117
36   3.00     0.60      0.078       (  0.205)       0.039        0.039
             (Loss Rate Not Used)
   Sum =     100.0                                  Sum =      7.7
      Flood volume = Effective rainfall      0.64(In)
       times area      19.1(Ac.)/[(In)/(Ft.)] =       1.0(Ac.Ft)
      Total soil loss =      0.44(In)
      Total soil loss =     0.698(Ac.Ft)
      Total rainfall =      1.08(In)
      Flood volume =       44606.4 Cubic Feet
      Total soil loss =       30419.5 Cubic Feet
      ---------------------------------------------------------------------
       Peak flow rate of this hydrograph =     12.711(CFS)
      ---------------------------------------------------------------------
      +++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                          3 - H O U R    S T O R M
                     R u n o f f     H y d r o g r a p h
      ---------------------------------------------------------------------
                  Hydrograph in   5   Minute intervals ((CFS))

      ---------------------------------------------------------------------
Time(h+m) Volume Ac.Ft   Q(CFS)  0        5.0      10.0      15.0      20.0
-------------------------------------------------------------------------
  0+ 5       0.0009      0.13  Q         |         |         |         |
  0+10       0.0055      0.66  VQ        |         |         |         |
  0+15       0.0129      1.08  V Q       |         |         |         |
  0+20       0.0213      1.21  V Q       |         |         |         |
  0+25       0.0310      1.41  |VQ       |         |         |         |
  0+30       0.0421      1.62  |V Q      |         |         |         |
  0+35       0.0545      1.80  | VQ      |         |         |         |
  0+40       0.0673      1.86  | VQ      |         |         |         |
  0+45       0.0808      1.96  |  Q      |         |         |         |
  0+50       0.0949      2.05  |  VQ     |         |         |         |
  0+55       0.1086      1.99  |  QV     |         |         |         |
  1+ 0       0.1223      1.99  |  QV     |         |         |         |
  1+ 5       0.1370      2.13  |   QV    |         |         |         |
  1+10       0.1533      2.37  |   QV    |         |         |         |
  1+15       0.1708      2.54  |    QV   |         |         |         |
  1+20       0.1886      2.59  |    Q V  |         |         |         |
  1+25       0.2066      2.61  |    Q  V |         |         |         |
  1+30       0.2260      2.82  |    Q  V |         |         |         |
  1+35       0.2469      3.03  |     Q  V|         |         |         |
  1+40       0.2679      3.05  |     Q   V         |         |         |
  1+45       0.2900      3.21  |     Q   |V        |         |         |
  1+50       0.3146      3.58  |      Q  | V       |         |         |
  1+55       0.3402      3.71  |      Q  |  V      |         |         |
  2+ 0       0.3653      3.65  |      Q  |   V     |         |         |
  2+ 5       0.3906      3.67  |      Q  |    V    |         |         |
  2+10       0.4179      3.96  |      Q  |     V   |         |         |
  2+15       0.4526      5.05  |         Q      V  |         |         |
  2+20       0.4950      6.16  |         | Q      V|         |         |
  2+25       0.5392      6.41  |         | Q       |V        |         |
  2+30       0.5985      8.61  |         |      Q  |  V      |         |
  2+35       0.6762     11.28  |         |         | Q   V   |         |
  2+40       0.7637     12.71  |         |         |    Q   V|         |
  2+45       0.8421     11.38  |         |         | Q       | V       |
  2+50       0.8952      7.71  |         |    Q    |         |   V     |
  2+55       0.9310      5.20  |         Q         |         |     V   |
  3+ 0       0.9591      4.08  |       Q |         |         |      V  |
  3+ 5       0.9796      2.97  |    Q    |         |         |       V |
  3+10       0.9931      1.96  |  Q      |         |         |       V |
  3+15       1.0024      1.35  | Q       |         |         |        V|
  3+20       1.0092      0.99  |Q        |         |         |        V|
  3+25       1.0141      0.71  |Q        |         |         |        V|
  3+30       1.0179      0.54  |Q        |         |         |        V|
  3+35       1.0205      0.38  Q         |         |         |        V|
  3+40       1.0223      0.26  Q         |         |         |        V|
  3+45       1.0232      0.14  Q         |         |         |        V|
  3+50       1.0236      0.05  Q         |         |         |        V|
```

```
    3+55       1.0239      0.03  Q         |         |         |        V|
    4+ 0       1.0240      0.02  Q         |         |         |        V|
    4+ 5       1.0240      0.01  Q         |         |         |        V|
-------------------------------------------------------------------------
```

```
       U n i t   H y d r o g r a p h   A n a l y s i s

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              Study date  08/14/25 File: PROB310.out

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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978


Program License Serial Number 5006

------------------------------------------------------------------------
 English (in-lb) Input Units Used
 English Rainfall Data (Inches) Input Values Used

 English Units used in output format



------------------------------------------------------------------------
------------------------------------------------------------------------
Drainage Area =      19.12(Ac.)  =      0.030 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment =      19.12(Ac.)  =      0.030 Sq. Mi.
Length along longest watercourse =    2644.00(Ft.)
Length along longest watercourse measured to centroid =    1322.00(Ft.)
Length along longest watercourse =      0.501 Mi.
Length along longest watercourse measured to centroid =      0.250 Mi.
Difference in elevation =      40.00(Ft.)
Slope along watercourse =     79.8790 Ft./Mi.
Average Manning's 'N' = 0.030
Lag time =    0.142 Hr.
Lag time =     8.54 Min.
25% of lag time =     2.13 Min.
40% of lag time =     3.42 Min.
Unit time =     5.00 Min.
Duration of storm = 3 Hour(s)
User Entered Base Flow =     0.00(CFS)

2 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
       19.12           0.80                 15.30

100 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
       19.12           2.00                 38.24

STORM EVENT (YEAR) =   10.00
Area Averaged 2-Year Rainfall =    0.800(In)
Area Averaged 100-Year Rainfall =    2.000(In)

Point rain (area averaged) =    1.294(In)
Areal adjustment factor =   99.99 %
Adjusted average point rain =    1.294(In)

Sub-Area Data:
Area(Ac.)         Runoff Index   Impervious %
    19.120           69.00         0.500
 Total Area Entered =     19.12(Ac.)


RI    RI   Infil. Rate Impervious   Adj. Infil. Rate  Area%     F
AMC2 AMC-2     (In/Hr)    (Dec.%)     (In/Hr)      (Dec.)    (In/Hr)
```

```
69.0  69.0      0.373     0.500        0.205       1.000      0.205
                                                  Sum (F) =   0.205
Area averaged mean soil loss (F) (In/Hr) =  0.205
Minimum soil loss rate ((In/Hr)) =  0.103
(for 24 hour storm duration)
Soil low loss rate (decimal) =   0.500
------------------------------------------------------------------------

               U n i t  H y d r o g r a p h
                      VALLEY S-Curve
------------------------------------------------------------------------
               Unit Hydrograph Data
------------------------------------------------------------------------
Unit time period   Time % of lag   Distribution   Unit Hydrograph
    (hrs)                          Graph %           (CFS)
------------------------------------------------------------------------
     1   0.083         58.563          7.892             1.521
     2   0.167        117.126         32.937             6.347
     3   0.250        175.689         27.037             5.210
     4   0.333        234.252         10.574             2.038
     5   0.417        292.815          6.182             1.191
     6   0.500        351.378          4.198             0.809
     7   0.583        409.941          3.019             0.582
     8   0.667        468.504          2.110             0.407
     9   0.750        527.066          1.734             0.334
    10   0.833        585.629          1.313             0.253
    11   0.917        644.192          1.005             0.194
    12   1.000        702.755          0.732             0.141
    13   1.083        761.318          0.587             0.113
    14   1.167        819.881          0.680             0.131
                                Sum = 100.000   Sum=      19.269
------------------------------------------------------------------------
```

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr) Max		Low	Effective (In/Hr)
1	0.08	1.30	0.202	(0.205)		0.101	0.101
2	0.17	1.30	0.202	(0.205)		0.101	0.101
3	0.25	1.10	0.171	(0.205)		0.085	0.085
4	0.33	1.50	0.233	(0.205)		0.116	0.116
5	0.42	1.50	0.233	(0.205)		0.116	0.116
6	0.50	1.80	0.279	(0.205)		0.140	0.140
7	0.58	1.50	0.233	(0.205)		0.116	0.116
8	0.67	1.80	0.279	(0.205)		0.140	0.140
9	0.75	1.80	0.279	(0.205)		0.140	0.140
10	0.83	1.50	0.233	(0.205)		0.116	0.116
11	0.92	1.60	0.248	(0.205)		0.124	0.124
12	1.00	1.80	0.279	(0.205)		0.140	0.140
13	1.08	2.20	0.342	(0.205)		0.171	0.171
14	1.17	2.20	0.342	(0.205)		0.171	0.171
15	1.25	2.20	0.342	(0.205)		0.171	0.171
16	1.33	2.00	0.310	(0.205)		0.155	0.155
17	1.42	2.60	0.404	(0.205)		0.202	0.202
18	1.50	2.70	0.419	0.205	(	0.210)	0.214
19	1.58	2.40	0.373	(0.205)		0.186	0.186
20	1.67	2.70	0.419	0.205	(	0.210)	0.214
21	1.75	3.30	0.512	0.205	(	0.256)	0.307
22	1.83	3.10	0.481	0.205	(	0.241)	0.276
23	1.92	2.90	0.450	0.205	(	0.225)	0.245
24	2.00	3.00	0.466	0.205	(	0.233)	0.261
25	2.08	3.10	0.481	0.205	(	0.241)	0.276
26	2.17	4.20	0.652	0.205	(	0.326)	0.447
27	2.25	5.00	0.776	0.205	(	0.388)	0.571
28	2.33	3.50	0.543	0.205	(	0.272)	0.338
29	2.42	6.80	1.056	0.205	(	0.528)	0.851
30	2.50	7.30	1.133	0.205	(	0.567)	0.928
31	2.58	8.20	1.273	0.205	(	0.636)	1.068
32	2.67	5.90	0.916	0.205	(	0.458)	0.711

```
33   2.75     2.00      0.310       (  0.205)       0.155        0.155
34   2.83     1.80      0.279       (  0.205)       0.140        0.140
35   2.92     1.80      0.279       (  0.205)       0.140        0.140
36   3.00     0.60      0.093       (  0.205)       0.047        0.047
             (Loss Rate Not Used)
   Sum =     100.0                                  Sum =      9.7
      Flood volume = Effective rainfall      0.81(In)
       times area      19.1(Ac.)/[(In)/(Ft.)] =       1.3(Ac.Ft)
      Total soil loss =      0.49(In)
      Total soil loss =     0.776(Ac.Ft)
      Total rainfall =      1.29(In)
      Flood volume =       55985.8 Cubic Feet
      Total soil loss =       33796.0 Cubic Feet
      ---------------------------------------------------------------------
       Peak flow rate of this hydrograph =     15.967(CFS)
      ---------------------------------------------------------------------
      +++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                          3 - H O U R    S T O R M
                     R u n o f f     H y d r o g r a p h
      ---------------------------------------------------------------------
                  Hydrograph in   5   Minute intervals ((CFS))

      ---------------------------------------------------------------------
Time(h+m) Volume Ac.Ft   Q(CFS)  0        5.0      10.0      15.0      20.0
-------------------------------------------------------------------------
  0+ 5       0.0011      0.15  Q         |         |         |         |
  0+10       0.0065      0.79  VQ        |         |         |         |
  0+15       0.0155      1.30  V Q       |         |         |         |
  0+20       0.0254      1.45  V Q       |         |         |         |
  0+25       0.0371      1.69  |V Q      |         |         |         |
  0+30       0.0504      1.93  |V Q      |         |         |         |
  0+35       0.0652      2.15  | V Q     |         |         |         |
  0+40       0.0805      2.23  | V Q     |         |         |         |
  0+45       0.0967      2.35  |  VQ     |         |         |         |
  0+50       0.1136      2.45  |  VQ     |         |         |         |
  0+55       0.1300      2.38  |   Q     |         |         |         |
  1+ 0       0.1464      2.38  |   Q     |         |         |         |
  1+ 5       0.1639      2.55  |    Q    |         |         |         |
  1+10       0.1835      2.84  |    Q    |         |         |         |
  1+15       0.2044      3.04  |     Q   |         |         |         |
  1+20       0.2257      3.09  |     QV  |         |         |         |
  1+25       0.2472      3.12  |     QV  |         |         |         |
  1+30       0.2705      3.39  |     Q V |         |         |         |
  1+35       0.2957      3.66  |      Q V|         |         |         |
  1+40       0.3210      3.68  |      Q V|         |         |         |
  1+45       0.3481      3.94  |      Q  V         |         |         |
  1+50       0.3800      4.62  |        Q|V        |         |         |
  1+55       0.4139      4.92  |        Q| V       |         |         |
  2+ 0       0.4470      4.82  |        Q|  V      |         |         |
  2+ 5       0.4805      4.85  |        Q|   V     |         |         |
  2+10       0.5169      5.29  |         Q     V   |         |         |
  2+15       0.5629      6.68  |         |  Q   V  |         |         |
  2+20       0.6184      8.06  |         |     Q  V|         |         |
  2+25       0.6762      8.39  |         |     Q   |V        |         |
  2+30       0.7522     11.04  |         |         | QV      |         |
  2+35       0.8503     14.24  |         |         |     V Q |         |
  2+40       0.9602     15.97  |         |         |        V|Q        |
  2+45       1.0588     14.32  |         |         |       Q | V       |
  2+50       1.1255      9.68  |         |        Q|         |    V    |
  2+55       1.1701      6.47  |         | Q       |         |     V   |
  3+ 0       1.2048      5.05  |         Q         |         |      V  |
  3+ 5       1.2302      3.68  |      Q  |         |         |       V |
  3+10       1.2469      2.43  |   Q     |         |         |       V |
  3+15       1.2584      1.68  |  Q      |         |         |        V|
  3+20       1.2669      1.23  | Q       |         |         |        V|
  3+25       1.2730      0.89  |Q        |         |         |        V|
  3+30       1.2777      0.67  |Q        |         |         |        V|
  3+35       1.2810      0.47  Q         |         |         |        V|
  3+40       1.2832      0.32  Q         |         |         |        V|
  3+45       1.2843      0.17  Q         |         |         |        V|
  3+50       1.2848      0.06  Q         |         |         |        V|
```

```
    3+55       1.2851      0.04  Q         |         |         |        V|
    4+ 0       1.2852      0.02  Q         |         |         |        V|
    4+ 5       1.2853      0.01  Q         |         |         |         V
-------------------------------------------------------------------------
```

U n i t H y d r o g r a p h A n a l y s i s

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Study date 08/14/25 File: PROB3100.out

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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978

Program License Serial Number 5006

English (in-lb) Input Units Used
English Rainfall Data (Inches) Input Values Used

English Units used in output format

Drainage Area = 19.12(Ac.) = 0.030 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 19.12(Ac.) = 0.030 Sq. Mi.
Length along longest watercourse = 2644.00(Ft.)
Length along longest watercourse measured to centroid = 1322.00(Ft.)
Length along longest watercourse = 0.501 Mi.
Length along longest watercourse measured to centroid = 0.250 Mi.
Difference in elevation = 40.00(Ft.)
Slope along watercourse = 79.8790 Ft./Mi.
Average Manning's 'N' = 0.030
Lag time = 0.142 Hr.
Lag time = 8.54 Min.
25% of lag time = 2.13 Min.
40% of lag time = 3.42 Min.
Unit time = 5.00 Min.
Duration of storm = 3 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.)[1]	Rainfall(In)[2]	Weighting[1*2]
19.12	0.80	15.30

100 YEAR Area rainfall data:

Area(Ac.)[1]	Rainfall(In)[2]	Weighting[1*2]
19.12	2.00	38.24

STORM EVENT (YEAR) = 100.00
Area Averaged 2-Year Rainfall = 0.800(In)
Area Averaged 100-Year Rainfall = 2.000(In)

Point rain (area averaged) = 2.000(In)
Areal adjustment factor = 99.99 %
Adjusted average point rain = 2.000(In)

Sub-Area Data:

Area(Ac.)	Runoff Index	Impervious %
19.120	69.00	0.500

Total Area Entered = 19.12(Ac.)

RI AMC2	RI AMC-2	Infil. Rate (In/Hr)	Impervious (Dec.%)	Adj. Infil. Rate (In/Hr)	Area% (Dec.)	F (In/Hr)

```
69.0  69.0      0.373     0.500        0.205       1.000      0.205
                                                  Sum (F) =   0.205
Area averaged mean soil loss (F) (In/Hr) =  0.205
Minimum soil loss rate ((In/Hr)) =  0.103
(for 24 hour storm duration)
Soil low loss rate (decimal) =   0.500
```

U n i t H y d r o g r a p h
VALLEY S-Curve

Unit Hydrograph Data

Unit time period (hrs)		Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	58.563	7.892	1.521
2	0.167	117.126	32.937	6.347
3	0.250	175.689	27.037	5.210
4	0.333	234.252	10.574	2.038
5	0.417	292.815	6.182	1.191
6	0.500	351.378	4.198	0.809
7	0.583	409.941	3.019	0.582
8	0.667	468.504	2.110	0.407
9	0.750	527.066	1.734	0.334
10	0.833	585.629	1.313	0.253
11	0.917	644.192	1.005	0.194
12	1.000	702.755	0.732	0.141
13	1.083	761.318	0.587	0.113
14	1.167	819.881	0.680	0.131
		Sum = 100.000	Sum=	19.269

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr) Max	Low	Effective (In/Hr)
1	0.08	1.30	0.312	(0.205)	0.156	0.156
2	0.17	1.30	0.312	(0.205)	0.156	0.156
3	0.25	1.10	0.264	(0.205)	0.132	0.132
4	0.33	1.50	0.360	(0.205)	0.180	0.180
5	0.42	1.50	0.360	(0.205)	0.180	0.180
6	0.50	1.80	0.432	0.205	(0.216)	0.227
7	0.58	1.50	0.360	(0.205)	0.180	0.180
8	0.67	1.80	0.432	0.205	(0.216)	0.227
9	0.75	1.80	0.432	0.205	(0.216)	0.227
10	0.83	1.50	0.360	(0.205)	0.180	0.180
11	0.92	1.60	0.384	(0.205)	0.192	0.192
12	1.00	1.80	0.432	0.205	(0.216)	0.227
13	1.08	2.20	0.528	0.205	(0.264)	0.323
14	1.17	2.20	0.528	0.205	(0.264)	0.323
15	1.25	2.20	0.528	0.205	(0.264)	0.323
16	1.33	2.00	0.480	0.205	(0.240)	0.275
17	1.42	2.60	0.624	0.205	(0.312)	0.419
18	1.50	2.70	0.648	0.205	(0.324)	0.443
19	1.58	2.40	0.576	0.205	(0.288)	0.371
20	1.67	2.70	0.648	0.205	(0.324)	0.443
21	1.75	3.30	0.792	0.205	(0.396)	0.587
22	1.83	3.10	0.744	0.205	(0.372)	0.539
23	1.92	2.90	0.696	0.205	(0.348)	0.491
24	2.00	3.00	0.720	0.205	(0.360)	0.515
25	2.08	3.10	0.744	0.205	(0.372)	0.539
26	2.17	4.20	1.008	0.205	(0.504)	0.803
27	2.25	5.00	1.200	0.205	(0.600)	0.995
28	2.33	3.50	0.840	0.205	(0.420)	0.635
29	2.42	6.80	1.632	0.205	(0.816)	1.427
30	2.50	7.30	1.752	0.205	(0.876)	1.547
31	2.58	8.20	1.968	0.205	(0.984)	1.763
32	2.67	5.90	1.416	0.205	(0.708)	1.211

```
33   2.75     2.00      0.480          0.205    (  0.240)        0.275
34   2.83     1.80      0.432          0.205    (  0.216)        0.227
35   2.92     1.80      0.432          0.205    (  0.216)        0.227
36   3.00     0.60      0.144       (  0.205)       0.072        0.072
              (Loss Rate Not Used)
   Sum =     100.0                                    Sum =    17.0
      Flood volume = Effective rainfall      1.42(In)
       times area      19.1(Ac.)/[(In)/(Ft.)] =       2.3(Ac.Ft)
      Total soil loss =      0.58(In)
      Total soil loss =     0.925(Ac.Ft)
      Total rainfall =      2.00(In)
      Flood volume =       98521.4 Cubic Feet
      Total soil loss =       40278.2 Cubic Feet
      ---------------------------------------------------------------------
       Peak flow rate of this hydrograph =     26.839(CFS)
      ---------------------------------------------------------------------
      +++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                          3 - H O U R    S T O R M
                     R u n o f f     H y d r o g r a p h
      ---------------------------------------------------------------------
                  Hydrograph in   5   Minute intervals ((CFS))

      ---------------------------------------------------------------------
Time(h+m) Volume Ac.Ft   Q(CFS)  0        7.5      15.0      22.5      30.0
-------------------------------------------------------------------------
  0+ 5       0.0016      0.24  Q         |         |         |         |
  0+10       0.0101      1.23  VQ        |         |         |         |
  0+15       0.0239      2.00  V Q       |         |         |         |
  0+20       0.0393      2.24  V Q       |         |         |         |
  0+25       0.0573      2.61  |V Q      |         |         |         |
  0+30       0.0780      3.01  |V  Q     |         |         |         |
  0+35       0.1014      3.39  |V  Q     |         |         |         |
  0+40       0.1256      3.51  | V Q     |         |         |         |
  0+45       0.1514      3.74  | V Q     |         |         |         |
  0+50       0.1784      3.93  |  V Q    |         |         |         |
  0+55       0.2044      3.77  |  V Q    |         |         |         |
  1+ 0       0.2301      3.73  |   Q     |         |         |         |
  1+ 5       0.2585      4.12  |   VQ    |         |         |         |
  1+10       0.2925      4.93  |    VQ   |         |         |         |
  1+15       0.3303      5.50  |    V Q  |         |         |         |
  1+20       0.3693      5.66  |     VQ  |         |         |         |
  1+25       0.4087      5.72  |      Q  |         |         |         |
  1+30       0.4536      6.52  |       Q |         |         |         |
  1+35       0.5038      7.28  |       VQ|         |         |         |
  1+40       0.5543      7.34  |        Q|         |         |         |
  1+45       0.6085      7.87  |         Q         |         |         |
  1+50       0.6711      9.08  |         |VQ       |         |         |
  1+55       0.7373      9.62  |         | QV      |         |         |
  2+ 0       0.8027      9.50  |         | Q V     |         |         |
  2+ 5       0.8687      9.59  |         | Q  V    |         |         |
  2+10       0.9395     10.29  |         |  Q  V   |         |         |
  2+15       1.0253     12.45  |         |     Q V |         |         |
  2+20       1.1258     14.59  |         |        Q|         |         |
  2+25       1.2299     15.12  |         |         QV        |         |
  2+30       1.3622     19.22  |         |         |   VQ    |         |
  2+35       1.5287     24.17  |         |         |      V  | Q       |
  2+40       1.7135     26.84  |         |         |         V    Q    |
  2+45       1.8800     24.18  |         |         |         | QV      |
  2+50       1.9935     16.48  |         |         |Q        |    V    |
  2+55       2.0690     10.97  |         |   Q     |         |     V   |
  3+ 0       2.1273      8.46  |         |Q        |         |      V  |
  3+ 5       2.1696      6.14  |       Q |         |         |       V |
  3+10       2.1975      4.06  |    Q    |         |         |       V |
  3+15       2.2169      2.82  |  Q      |         |         |        V|
  3+20       2.2312      2.07  | Q       |         |         |        V|
  3+25       2.2414      1.49  |Q        |         |         |        V|
  3+30       2.2492      1.13  |Q        |         |         |        V|
  3+35       2.2546      0.79  |Q        |         |         |        V|
  3+40       2.2583      0.53  Q         |         |         |        V|
  3+45       2.2602      0.28  Q         |         |         |        V|
  3+50       2.2610      0.11  Q         |         |         |        V|
```

```
    3+55       2.2614      0.07  Q         |         |         |        V|
    4+ 0       2.2617      0.04  Q         |         |         |        V|
    4+ 5       2.2617      0.01  Q         |         |         |        V|
-------------------------------------------------------------------------
```

```
       U n i t   H y d r o g r a p h   A n a l y s i s

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              Study date  08/14/25 File: PROB62.out

++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
----------------------------------------------------------------------

Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978


Program License Serial Number 5006

----------------------------------------------------------------------
 English (in-lb) Input Units Used
 English Rainfall Data (Inches) Input Values Used

 English Units used in output format



----------------------------------------------------------------------
----------------------------------------------------------------------
Drainage Area =      19.12(Ac.)  =      0.030 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment =      19.12(Ac.)  =      0.030 Sq. Mi.
Length along longest watercourse =    2644.00(Ft.)
Length along longest watercourse measured to centroid =    1322.00(Ft.)
Length along longest watercourse =      0.501 Mi.
Length along longest watercourse measured to centroid =      0.250 Mi.
Difference in elevation =      40.00(Ft.)
Slope along watercourse =     79.8790 Ft./Mi.
Average Manning's 'N' = 0.030
Lag time =    0.142 Hr.
Lag time =     8.54 Min.
25% of lag time =     2.13 Min.
40% of lag time =     3.42 Min.
Unit time =     5.00 Min.
Duration of storm = 6 Hour(s)
User Entered Base Flow =     0.00(CFS)

2 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
       19.12           1.10                 21.03

100 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
       19.12           3.00                 57.36

STORM EVENT (YEAR) =    2.00
Area Averaged 2-Year Rainfall =    1.100(In)
Area Averaged 100-Year Rainfall =    3.000(In)

Point rain (area averaged) =    1.100(In)
Areal adjustment factor =   99.99 %
Adjusted average point rain =    1.100(In)

Sub-Area Data:
Area(Ac.)         Runoff Index   Impervious %
    19.120           69.00         0.500
 Total Area Entered =     19.12(Ac.)


RI    RI   Infil. Rate Impervious   Adj. Infil. Rate  Area%     F
AMC2 AMC-2     (In/Hr)    (Dec.%)     (In/Hr)      (Dec.)    (In/Hr)
```

```
69.0  69.0      0.373     0.500        0.205       1.000      0.205
                                                  Sum (F) =   0.205
Area averaged mean soil loss (F) (In/Hr) =  0.205
Minimum soil loss rate ((In/Hr)) =  0.103
(for 24 hour storm duration)
Soil low loss rate (decimal) =   0.500
------------------------------------------------------------------------

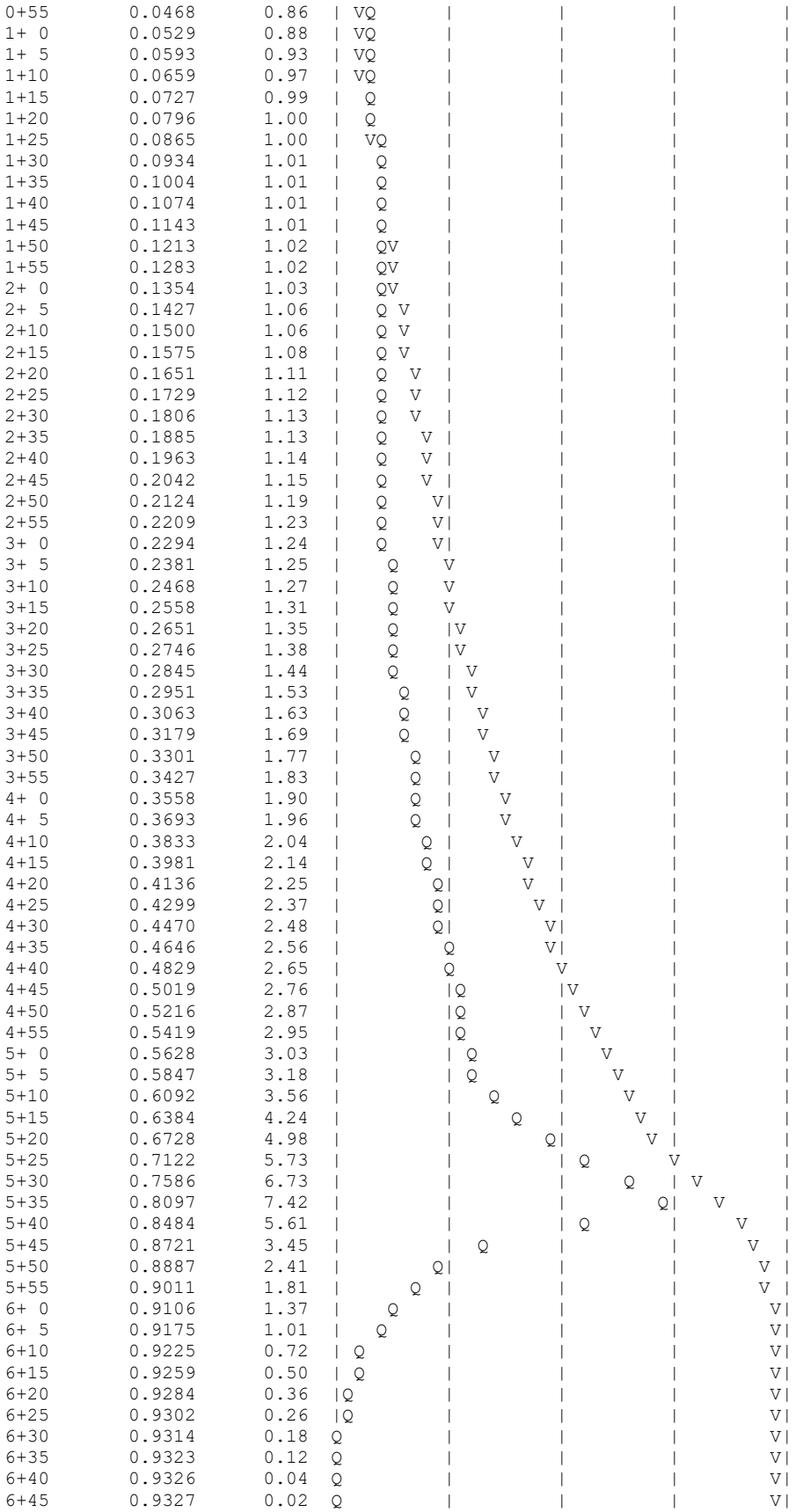
               U n i t  H y d r o g r a p h
                      VALLEY S-Curve
------------------------------------------------------------------------
               Unit Hydrograph Data
------------------------------------------------------------------------
Unit time period   Time % of lag   Distribution   Unit Hydrograph
    (hrs)                          Graph %           (CFS)
------------------------------------------------------------------------
     1   0.083        58.563          7.892             1.521
     2   0.167       117.126         32.937             6.347
     3   0.250       175.689         27.037             5.210
     4   0.333       234.252         10.574             2.038
     5   0.417       292.815          6.182             1.191
     6   0.500       351.378          4.198             0.809
     7   0.583       409.941          3.019             0.582
     8   0.667       468.504          2.110             0.407
     9   0.750       527.066          1.734             0.334
    10   0.833       585.629          1.313             0.253
    11   0.917       644.192          1.005             0.194
    12   1.000       702.755          0.732             0.141
    13   1.083       761.318          0.587             0.113
    14   1.167       819.881          0.680             0.131
                               Sum = 100.000   Sum=      19.269
------------------------------------------------------------------------

 The following loss rate calculations reflect use of the minimum calculated loss
 rate subtracted from the Storm Rain to produce the maximum Effective Rain value

  Unit Time   Pattern   Storm Rain     Loss rate(In./Hr)     Effective
       (Hr.)  Percent   (In/Hr)         Max    |   Low         (In/Hr)
   1   0.08     0.50      0.066       (  0.205)       0.033         0.033
   2   0.17     0.60      0.079       (  0.205)       0.040         0.040
   3   0.25     0.60      0.079       (  0.205)       0.040         0.040
   4   0.33     0.60      0.079       (  0.205)       0.040         0.040
   5   0.42     0.60      0.079       (  0.205)       0.040         0.040
   6   0.50     0.70      0.092       (  0.205)       0.046         0.046
   7   0.58     0.70      0.092       (  0.205)       0.046         0.046
   8   0.67     0.70      0.092       (  0.205)       0.046         0.046
   9   0.75     0.70      0.092       (  0.205)       0.046         0.046
  10   0.83     0.70      0.092       (  0.205)       0.046         0.046
  11   0.92     0.70      0.092       (  0.205)       0.046         0.046
  12   1.00     0.80      0.106       (  0.205)       0.053         0.053
  13   1.08     0.80      0.106       (  0.205)       0.053         0.053
  14   1.17     0.80      0.106       (  0.205)       0.053         0.053
  15   1.25     0.80      0.106       (  0.205)       0.053         0.053
  16   1.33     0.80      0.106       (  0.205)       0.053         0.053
  17   1.42     0.80      0.106       (  0.205)       0.053         0.053
  18   1.50     0.80      0.106       (  0.205)       0.053         0.053
  19   1.58     0.80      0.106       (  0.205)       0.053         0.053
  20   1.67     0.80      0.106       (  0.205)       0.053         0.053
  21   1.75     0.80      0.106       (  0.205)       0.053         0.053
  22   1.83     0.80      0.106       (  0.205)       0.053         0.053
  23   1.92     0.80      0.106       (  0.205)       0.053         0.053
  24   2.00     0.90      0.119       (  0.205)       0.059         0.059
  25   2.08     0.80      0.106       (  0.205)       0.053         0.053
  26   2.17     0.90      0.119       (  0.205)       0.059         0.059
  27   2.25     0.90      0.119       (  0.205)       0.059         0.059
  28   2.33     0.90      0.119       (  0.205)       0.059         0.059
  29   2.42     0.90      0.119       (  0.205)       0.059         0.059
  30   2.50     0.90      0.119       (  0.205)       0.059         0.059
  31   2.58     0.90      0.119       (  0.205)       0.059         0.059
  32   2.67     0.90      0.119       (  0.205)       0.059         0.059
```

```
33   2.75     1.00      0.132       (  0.205)       0.066        0.066
34   2.83     1.00      0.132       (  0.205)       0.066        0.066
35   2.92     1.00      0.132       (  0.205)       0.066        0.066
36   3.00     1.00      0.132       (  0.205)       0.066        0.066
37   3.08     1.00      0.132       (  0.205)       0.066        0.066
38   3.17     1.10      0.145       (  0.205)       0.073        0.073
39   3.25     1.10      0.145       (  0.205)       0.073        0.073
40   3.33     1.10      0.145       (  0.205)       0.073        0.073
41   3.42     1.20      0.158       (  0.205)       0.079        0.079
42   3.50     1.30      0.172       (  0.205)       0.086        0.086
43   3.58     1.40      0.185       (  0.205)       0.092        0.092
44   3.67     1.40      0.185       (  0.205)       0.092        0.092
45   3.75     1.50      0.198       (  0.205)       0.099        0.099
46   3.83     1.50      0.198       (  0.205)       0.099        0.099
47   3.92     1.60      0.211       (  0.205)       0.106        0.106
48   4.00     1.60      0.211       (  0.205)       0.106        0.106
49   4.08     1.70      0.224       (  0.205)       0.112        0.112
50   4.17     1.80      0.238       (  0.205)       0.119        0.119
51   4.25     1.90      0.251       (  0.205)       0.125        0.125
52   4.33     2.00      0.264       (  0.205)       0.132        0.132
53   4.42     2.10      0.277       (  0.205)       0.139        0.139
54   4.50     2.10      0.277       (  0.205)       0.139        0.139
55   4.58     2.20      0.290       (  0.205)       0.145        0.145
56   4.67     2.30      0.304       (  0.205)       0.152        0.152
57   4.75     2.40      0.317       (  0.205)       0.158        0.158
58   4.83     2.40      0.317       (  0.205)       0.158        0.158
59   4.92     2.50      0.330       (  0.205)       0.165        0.165
60   5.00     2.60      0.343       (  0.205)       0.172        0.172
61   5.08     3.10      0.409       (  0.205)       0.205        0.205
62   5.17     3.60      0.475          0.205    (  0.238)       0.270
63   5.25     3.90      0.515          0.205    (  0.257)       0.310
64   5.33     4.20      0.554          0.205    (  0.277)       0.349
65   5.42     4.70      0.620          0.205    (  0.310)       0.415
66   5.50     5.60      0.739          0.205    (  0.370)       0.534
67   5.58     1.90      0.251       (  0.205)       0.125        0.125
68   5.67     0.90      0.119       (  0.205)       0.059        0.059
69   5.75     0.60      0.079       (  0.205)       0.040        0.040
70   5.83     0.50      0.066       (  0.205)       0.033        0.033
71   5.92     0.30      0.040       (  0.205)       0.020        0.020
72   6.00     0.20      0.026       (  0.205)       0.013        0.013
              (Loss Rate Not Used)
   Sum =     100.0                                  Sum =      7.0
      Flood volume = Effective rainfall      0.59(In)
       times area      19.1(Ac.)/[(In)/(Ft.)] =       0.9(Ac.Ft)
      Total soil loss =      0.51(In)
      Total soil loss =     0.820(Ac.Ft)
      Total rainfall =      1.10(In)
      Flood volume =       40638.5 Cubic Feet
      Total soil loss =       35702.6 Cubic Feet
      ---------------------------------------------------------------------
       Peak flow rate of this hydrograph =      7.418(CFS)
      ---------------------------------------------------------------------
      +++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                          6 - H O U R    S T O R M
                       R u n o f f     H y d r o g r a p h
      ---------------------------------------------------------------------
                   Hydrograph in   5   Minute intervals ((CFS))

      ---------------------------------------------------------------------
Time(h+m) Volume Ac.Ft   Q(CFS)  0        2.5       5.0       7.5      10.0
-------------------------------------------------------------------------
  0+ 5       0.0003      0.05  Q         |         |         |         |
  0+10       0.0022      0.27  VQ        |         |         |         |
  0+15       0.0055      0.48  VQ        |         |         |         |
  0+20       0.0096      0.59  V Q       |         |         |         |
  0+25       0.0140      0.64  V Q       |         |         |         |
  0+30       0.0187      0.68  V Q       |         |         |         |
  0+35       0.0238      0.75  |VQ       |         |         |         |
  0+40       0.0293      0.80  |V Q      |         |         |         |
  0+45       0.0350      0.83  |V Q      |         |         |         |
  0+50       0.0409      0.85  |V Q      |         |         |         |
```



0+55	0.0468	0.86	VQ
1+ 0	0.0529	0.88	VQ
1+ 5	0.0593	0.93	VQ
1+10	0.0659	0.97	VQ
1+15	0.0727	0.99	Q
1+20	0.0796	1.00	Q
1+25	0.0865	1.00	VQ
1+30	0.0934	1.01	Q
1+35	0.1004	1.01	Q
1+40	0.1074	1.01	Q
1+45	0.1143	1.01	Q
1+50	0.1213	1.02	QV
1+55	0.1283	1.02	QV
2+ 0	0.1354	1.03	QV
2+ 5	0.1427	1.06	Q V
2+10	0.1500	1.06	Q V
2+15	0.1575	1.08	Q V
2+20	0.1651	1.11	Q V
2+25	0.1729	1.12	Q V
2+30	0.1806	1.13	Q V
2+35	0.1885	1.13	Q V
2+40	0.1963	1.14	Q V
2+45	0.2042	1.15	Q V
2+50	0.2124	1.19	Q V
2+55	0.2209	1.23	Q V
3+ 0	0.2294	1.24	Q V
3+ 5	0.2381	1.25	Q V
3+10	0.2468	1.27	Q V
3+15	0.2558	1.31	Q V
3+20	0.2651	1.35	Q V
3+25	0.2746	1.38	Q V
3+30	0.2845	1.44	Q V
3+35	0.2951	1.53	Q V
3+40	0.3063	1.63	Q V
3+45	0.3179	1.69	Q V
3+50	0.3301	1.77	Q V
3+55	0.3427	1.83	Q V
4+ 0	0.3558	1.90	Q V
4+ 5	0.3693	1.96	Q V
4+10	0.3833	2.04	Q V
4+15	0.3981	2.14	Q V
4+20	0.4136	2.25	Q V
4+25	0.4299	2.37	Q V
4+30	0.4470	2.48	Q V
4+35	0.4646	2.56	Q V
4+40	0.4829	2.65	Q V
4+45	0.5019	2.76	Q V
4+50	0.5216	2.87	Q V
4+55	0.5419	2.95	Q V
5+ 0	0.5628	3.03	Q V
5+ 5	0.5847	3.18	Q V
5+10	0.6092	3.56	Q V
5+15	0.6384	4.24	Q V
5+20	0.6728	4.98	Q V
5+25	0.7122	5.73	Q V
5+30	0.7586	6.73	Q V
5+35	0.8097	7.42	Q V
5+40	0.8484	5.61	Q V
5+45	0.8721	3.45	Q V
5+50	0.8887	2.41	Q V
5+55	0.9011	1.81	Q V
6+ 0	0.9106	1.37	Q V
6+ 5	0.9175	1.01	Q V
6+10	0.9225	0.72	Q V
6+15	0.9259	0.50	Q V
6+20	0.9284	0.36	Q V
6+25	0.9302	0.26	Q V
6+30	0.9314	0.18	Q V
6+35	0.9323	0.12	Q V
6+40	0.9326	0.04	Q V
6+45	0.9327	0.02	Q V

```
    6+50       0.9328      0.01  Q         |         |         |        V|
    6+55       0.9329      0.01  Q         |         |         |        V|
    7+ 0       0.9329      0.00  Q         |         |         |        V|
    7+ 5       0.9329      0.00  Q         |         |         |         V
-------------------------------------------------------------------------
```

```
       U n i t   H y d r o g r a p h   A n a l y s i s

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              Study date  08/14/25 File: PROB65.out

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------------------------------------------------------------------------------

Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978


Program License Serial Number 5006

------------------------------------------------------------------------
 English (in-lb) Input Units Used
 English Rainfall Data (Inches) Input Values Used

 English Units used in output format



------------------------------------------------------------------------
------------------------------------------------------------------------
Drainage Area =      19.12(Ac.)  =      0.030 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment =      19.12(Ac.)  =      0.030 Sq. Mi.
Length along longest watercourse =    2644.00(Ft.)
Length along longest watercourse measured to centroid =    1322.00(Ft.)
Length along longest watercourse =      0.501 Mi.
Length along longest watercourse measured to centroid =      0.250 Mi.
Difference in elevation =      40.00(Ft.)
Slope along watercourse =     79.8790 Ft./Mi.
Average Manning's 'N' = 0.030
Lag time =    0.142 Hr.
Lag time =     8.54 Min.
25% of lag time =     2.13 Min.
40% of lag time =     3.42 Min.
Unit time =     5.00 Min.
Duration of storm = 6 Hour(s)
User Entered Base Flow =     0.00(CFS)

2 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
       19.12           1.10                 21.03

100 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
       19.12           3.00                 57.36

STORM EVENT (YEAR) =    5.00
Area Averaged 2-Year Rainfall =    1.100(In)
Area Averaged 100-Year Rainfall =    3.000(In)

Point rain (area averaged) =    1.545(In)
Areal adjustment factor =   99.99 %
Adjusted average point rain =    1.545(In)

Sub-Area Data:
Area(Ac.)         Runoff Index   Impervious %
    19.120           69.00         0.500
 Total Area Entered =     19.12(Ac.)


RI    RI   Infil. Rate Impervious   Adj. Infil. Rate  Area%     F
AMC2 AMC-2     (In/Hr)    (Dec.%)     (In/Hr)      (Dec.)    (In/Hr)
```

```
69.0  69.0      0.373     0.500        0.205       1.000      0.205
                                                  Sum (F) =   0.205
Area averaged mean soil loss (F) (In/Hr) =  0.205
Minimum soil loss rate ((In/Hr)) =  0.103
(for 24 hour storm duration)
Soil low loss rate (decimal) =   0.500
------------------------------------------------------------------------

               U n i t  H y d r o g r a p h
                      VALLEY S-Curve
------------------------------------------------------------------------
               Unit Hydrograph Data
------------------------------------------------------------------------
Unit time period   Time % of lag   Distribution   Unit Hydrograph
    (hrs)                          Graph %           (CFS)
------------------------------------------------------------------------
     1   0.083         58.563          7.892             1.521
     2   0.167        117.126         32.937             6.347
     3   0.250        175.689         27.037             5.210
     4   0.333        234.252         10.574             2.038
     5   0.417        292.815          6.182             1.191
     6   0.500        351.378          4.198             0.809
     7   0.583        409.941          3.019             0.582
     8   0.667        468.504          2.110             0.407
     9   0.750        527.066          1.734             0.334
    10   0.833        585.629          1.313             0.253
    11   0.917        644.192          1.005             0.194
    12   1.000        702.755          0.732             0.141
    13   1.083        761.318          0.587             0.113
    14   1.167        819.881          0.680             0.131
                                Sum = 100.000   Sum=      19.269
------------------------------------------------------------------------

 The following loss rate calculations reflect use of the minimum calculated loss
 rate subtracted from the Storm Rain to produce the maximum Effective Rain value

  Unit Time   Pattern   Storm Rain     Loss rate(In./Hr)     Effective
       (Hr.)  Percent   (In/Hr)         Max    |   Low         (In/Hr)
   1   0.08     0.50      0.093       (  0.205)       0.046        0.046
   2   0.17     0.60      0.111       (  0.205)       0.056        0.056
   3   0.25     0.60      0.111       (  0.205)       0.056        0.056
   4   0.33     0.60      0.111       (  0.205)       0.056        0.056
   5   0.42     0.60      0.111       (  0.205)       0.056        0.056
   6   0.50     0.70      0.130       (  0.205)       0.065        0.065
   7   0.58     0.70      0.130       (  0.205)       0.065        0.065
   8   0.67     0.70      0.130       (  0.205)       0.065        0.065
   9   0.75     0.70      0.130       (  0.205)       0.065        0.065
  10   0.83     0.70      0.130       (  0.205)       0.065        0.065
  11   0.92     0.70      0.130       (  0.205)       0.065        0.065
  12   1.00     0.80      0.148       (  0.205)       0.074        0.074
  13   1.08     0.80      0.148       (  0.205)       0.074        0.074
  14   1.17     0.80      0.148       (  0.205)       0.074        0.074
  15   1.25     0.80      0.148       (  0.205)       0.074        0.074
  16   1.33     0.80      0.148       (  0.205)       0.074        0.074
  17   1.42     0.80      0.148       (  0.205)       0.074        0.074
  18   1.50     0.80      0.148       (  0.205)       0.074        0.074
  19   1.58     0.80      0.148       (  0.205)       0.074        0.074
  20   1.67     0.80      0.148       (  0.205)       0.074        0.074
  21   1.75     0.80      0.148       (  0.205)       0.074        0.074
  22   1.83     0.80      0.148       (  0.205)       0.074        0.074
  23   1.92     0.80      0.148       (  0.205)       0.074        0.074
  24   2.00     0.90      0.167       (  0.205)       0.083        0.083
  25   2.08     0.80      0.148       (  0.205)       0.074        0.074
  26   2.17     0.90      0.167       (  0.205)       0.083        0.083
  27   2.25     0.90      0.167       (  0.205)       0.083        0.083
  28   2.33     0.90      0.167       (  0.205)       0.083        0.083
  29   2.42     0.90      0.167       (  0.205)       0.083        0.083
  30   2.50     0.90      0.167       (  0.205)       0.083        0.083
  31   2.58     0.90      0.167       (  0.205)       0.083        0.083
  32   2.67     0.90      0.167       (  0.205)       0.083        0.083
```

```
33   2.75     1.00      0.185       (  0.205)       0.093        0.093
34   2.83     1.00      0.185       (  0.205)       0.093        0.093
35   2.92     1.00      0.185       (  0.205)       0.093        0.093
36   3.00     1.00      0.185       (  0.205)       0.093        0.093
37   3.08     1.00      0.185       (  0.205)       0.093        0.093
38   3.17     1.10      0.204       (  0.205)       0.102        0.102
39   3.25     1.10      0.204       (  0.205)       0.102        0.102
40   3.33     1.10      0.204       (  0.205)       0.102        0.102
41   3.42     1.20      0.222       (  0.205)       0.111        0.111
42   3.50     1.30      0.241       (  0.205)       0.121        0.121
43   3.58     1.40      0.260       (  0.205)       0.130        0.130
44   3.67     1.40      0.260       (  0.205)       0.130        0.130
45   3.75     1.50      0.278       (  0.205)       0.139        0.139
46   3.83     1.50      0.278       (  0.205)       0.139        0.139
47   3.92     1.60      0.297       (  0.205)       0.148        0.148
48   4.00     1.60      0.297       (  0.205)       0.148        0.148
49   4.08     1.70      0.315       (  0.205)       0.158        0.158
50   4.17     1.80      0.334       (  0.205)       0.167        0.167
51   4.25     1.90      0.352       (  0.205)       0.176        0.176
52   4.33     2.00      0.371       (  0.205)       0.185        0.185
53   4.42     2.10      0.389       (  0.205)       0.195        0.195
54   4.50     2.10      0.389       (  0.205)       0.195        0.195
55   4.58     2.20      0.408       (  0.205)       0.204        0.204
56   4.67     2.30      0.426          0.205    (  0.213)       0.221
57   4.75     2.40      0.445          0.205    (  0.222)       0.240
58   4.83     2.40      0.445          0.205    (  0.222)       0.240
59   4.92     2.50      0.463          0.205    (  0.232)       0.258
60   5.00     2.60      0.482          0.205    (  0.241)       0.277
61   5.08     3.10      0.575          0.205    (  0.287)       0.370
62   5.17     3.60      0.667          0.205    (  0.334)       0.462
63   5.25     3.90      0.723          0.205    (  0.362)       0.518
64   5.33     4.20      0.779          0.205    (  0.389)       0.574
65   5.42     4.70      0.871          0.205    (  0.436)       0.666
66   5.50     5.60      1.038          0.205    (  0.519)       0.833
67   5.58     1.90      0.352       (  0.205)       0.176        0.176
68   5.67     0.90      0.167       (  0.205)       0.083        0.083
69   5.75     0.60      0.111       (  0.205)       0.056        0.056
70   5.83     0.50      0.093       (  0.205)       0.046        0.046
71   5.92     0.30      0.056       (  0.205)       0.028        0.028
72   6.00     0.20      0.037       (  0.205)       0.019        0.019
              (Loss Rate Not Used)
   Sum =     100.0                                  Sum =    10.5
      Flood volume = Effective rainfall      0.87(In)
       times area      19.1(Ac.)/[(In)/(Ft.)] =       1.4(Ac.Ft)
      Total soil loss =      0.67(In)
      Total soil loss =     1.071(Ac.Ft)
      Total rainfall =      1.54(In)
      Flood volume =       60565.9 Cubic Feet
      Total soil loss =       46660.5 Cubic Feet
      ---------------------------------------------------------------------
       Peak flow rate of this hydrograph =     11.794(CFS)
      ---------------------------------------------------------------------
      +++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                          6 - H O U R    S T O R M
                     R u n o f f     H y d r o g r a p h
      ---------------------------------------------------------------------
                  Hydrograph in   5   Minute intervals ((CFS))

      ---------------------------------------------------------------------
Time(h+m) Volume Ac.Ft   Q(CFS)  0        5.0      10.0      15.0      20.0
---------------------------------------------------------------------------
  0+ 5       0.0005      0.07  Q         |         |         |         |
  0+10       0.0031      0.38  Q         |         |         |         |
  0+15       0.0078      0.68  VQ        |         |         |         |
  0+20       0.0134      0.82  VQ        |         |         |         |
  0+25       0.0196      0.90  VQ        |         |         |         |
  0+30       0.0262      0.96  VQ        |         |         |         |
  0+35       0.0335      1.05  V Q       |         |         |         |
  0+40       0.0412      1.12  |VQ       |         |         |         |
  0+45       0.0492      1.16  |VQ       |         |         |         |
  0+50       0.0574      1.19  |VQ       |         |         |         |
```

0+55	0.0657	1.21	|VQ
1+ 0	0.0742	1.24		Q
1+ 5	0.0832	1.30		Q
1+10	0.0926	1.36		Q
1+15	0.1022	1.39		Q
1+20	0.1118	1.40		QV
1+25	0.1215	1.41		QV
1+30	0.1312	1.41		QV
1+35	0.1410	1.42		Q V
1+40	0.1508	1.42		Q V
1+45	0.1606	1.42		Q V
1+50	0.1704	1.43		Q V
1+55	0.1802	1.43		Q V
2+ 0	0.1902	1.44		Q V
2+ 5	0.2004	1.49		Q V
2+10	0.2107	1.49		Q V
2+15	0.2212	1.52		Q V
2+20	0.2319	1.56		Q V
2+25	0.2428	1.58		Q V
2+30	0.2537	1.59		Q V
2+35	0.2647	1.59		Q V
2+40	0.2757	1.60		Q V
2+45	0.2868	1.61		Q V
2+50	0.2984	1.68		Q V
2+55	0.3102	1.73		Q V
3+ 0	0.3223	1.75		Q V
3+ 5	0.3344	1.76		Q V
3+10	0.3466	1.78		Q V
3+15	0.3593	1.85		Q V
3+20	0.3724	1.90		Q V
3+25	0.3857	1.93		Q	V
3+30	0.3996	2.02		Q	V
3+35	0.4145	2.15		Q	V
3+40	0.4302	2.28		Q	V
3+45	0.4466	2.38		Q	V
3+50	0.4637	2.48		Q	V
3+55	0.4814	2.57		Q	V
4+ 0	0.4997	2.67		Q	V
4+ 5	0.5187	2.75		Q	V
4+10	0.5384	2.86		Q	V
4+15	0.5591	3.01		Q	V
4+20	0.5809	3.17		Q	V
4+25	0.6039	3.33		Q	V
4+30	0.6279	3.48		Q	V
4+35	0.6526	3.60		Q	V
4+40	0.6783	3.73		Q	V
4+45	0.7056	3.95		Q	V
4+50	0.7345	4.21		Q		V
4+55	0.7648	4.40		Q		V
5+ 0	0.7966	4.62		Q		V
5+ 5	0.8313	5.03		Q	V
5+10	0.8721	5.93			Q	V
5+15	0.9215	7.17			Q	V
5+20	0.9789	8.34			Q	V
5+25	1.0440	9.46			Q	V
5+30	1.1193	10.92				Q	V
5+35	1.2005	11.79				Q	V
5+40	1.2608	8.76			Q		V
5+45	1.2974	5.31		Q		V
5+50	1.3228	3.69		Q			V
5+55	1.3419	2.76		Q			V
6+ 0	1.3562	2.09		Q			V
6+ 5	1.3669	1.54		Q			V
6+10	1.3745	1.11		Q			V
6+15	1.3798	0.77		Q			V
6+20	1.3836	0.55		Q			V
6+25	1.3863	0.39	Q			V
6+30	1.3882	0.27	Q			V
6+35	1.3895	0.18	Q			V
6+40	1.3899	0.06	Q			V
6+45	1.3901	0.03	Q			V

```
    6+50       1.3903      0.02  Q         |         |         |        V|
    6+55       1.3903      0.01  Q         |         |         |        V|
    7+ 0       1.3904      0.01  Q         |         |         |        V|
    7+ 5       1.3904      0.00  Q         |         |         |        V|
-------------------------------------------------------------------------
```

U n i t H y d r o g r a p h A n a l y s i s

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Study date 08/14/25 File: PROB610.out

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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978

Program License Serial Number 5006

English (in-lb) Input Units Used
English Rainfall Data (Inches) Input Values Used

English Units used in output format

Drainage Area = 19.12(Ac.) = 0.030 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 19.12(Ac.) = 0.030 Sq. Mi.
Length along longest watercourse = 2644.00(Ft.)
Length along longest watercourse measured to centroid = 1322.00(Ft.)
Length along longest watercourse = 0.501 Mi.
Length along longest watercourse measured to centroid = 0.250 Mi.
Difference in elevation = 40.00(Ft.)
Slope along watercourse = 79.8790 Ft./Mi.
Average Manning's 'N' = 0.030
Lag time = 0.142 Hr.
Lag time = 8.54 Min.
25% of lag time = 2.13 Min.
40% of lag time = 3.42 Min.
Unit time = 5.00 Min.
Duration of storm = 6 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.)[1]	Rainfall(In)[2]	Weighting[1*2]
19.12	1.10	21.03

100 YEAR Area rainfall data:

Area(Ac.)[1]	Rainfall(In)[2]	Weighting[1*2]
19.12	3.00	57.36

STORM EVENT (YEAR) = 10.00
Area Averaged 2-Year Rainfall = 1.100(In)
Area Averaged 100-Year Rainfall = 3.000(In)

Point rain (area averaged) = 1.882(In)
Areal adjustment factor = 99.99 %
Adjusted average point rain = 1.882(In)

Sub-Area Data:

Area(Ac.)	Runoff Index	Impervious %
19.120	69.00	0.500

Total Area Entered = 19.12(Ac.)

RI AMC2	RI AMC-2	Infil. Rate (In/Hr)	Impervious (Dec.%)	Adj. Infil. Rate (In/Hr)	Area% (Dec.)	F (In/Hr)

```
69.0  69.0      0.373     0.500        0.205       1.000      0.205
                                                  Sum (F) =   0.205
Area averaged mean soil loss (F) (In/Hr) =  0.205
Minimum soil loss rate ((In/Hr)) =  0.103
(for 24 hour storm duration)
Soil low loss rate (decimal) =   0.500
```

U n i t H y d r o g r a p h
VALLEY S-Curve

Unit Hydrograph Data

Unit time period (hrs)		Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	58.563	7.892	1.521
2	0.167	117.126	32.937	6.347
3	0.250	175.689	27.037	5.210
4	0.333	234.252	10.574	2.038
5	0.417	292.815	6.182	1.191
6	0.500	351.378	4.198	0.809
7	0.583	409.941	3.019	0.582
8	0.667	468.504	2.110	0.407
9	0.750	527.066	1.734	0.334
10	0.833	585.629	1.313	0.253
11	0.917	644.192	1.005	0.194
12	1.000	702.755	0.732	0.141
13	1.083	761.318	0.587	0.113
14	1.167	819.881	0.680	0.131
		Sum = 100.000	Sum=	19.269

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr) Max		Low	Effective (In/Hr)
1	0.08	0.50	0.113	(0.205)		0.056	0.056
2	0.17	0.60	0.135	(0.205)		0.068	0.068
3	0.25	0.60	0.135	(0.205)		0.068	0.068
4	0.33	0.60	0.135	(0.205)		0.068	0.068
5	0.42	0.60	0.135	(0.205)		0.068	0.068
6	0.50	0.70	0.158	(0.205)		0.079	0.079
7	0.58	0.70	0.158	(0.205)		0.079	0.079
8	0.67	0.70	0.158	(0.205)		0.079	0.079
9	0.75	0.70	0.158	(0.205)		0.079	0.079
10	0.83	0.70	0.158	(0.205)		0.079	0.079
11	0.92	0.70	0.158	(0.205)		0.079	0.079
12	1.00	0.80	0.181	(0.205)		0.090	0.090
13	1.08	0.80	0.181	(0.205)		0.090	0.090
14	1.17	0.80	0.181	(0.205)		0.090	0.090
15	1.25	0.80	0.181	(0.205)		0.090	0.090
16	1.33	0.80	0.181	(0.205)		0.090	0.090
17	1.42	0.80	0.181	(0.205)		0.090	0.090
18	1.50	0.80	0.181	(0.205)		0.090	0.090
19	1.58	0.80	0.181	(0.205)		0.090	0.090
20	1.67	0.80	0.181	(0.205)		0.090	0.090
21	1.75	0.80	0.181	(0.205)		0.090	0.090
22	1.83	0.80	0.181	(0.205)		0.090	0.090
23	1.92	0.80	0.181	(0.205)		0.090	0.090
24	2.00	0.90	0.203	(0.205)		0.102	0.102
25	2.08	0.80	0.181	(0.205)		0.090	0.090
26	2.17	0.90	0.203	(0.205)		0.102	0.102
27	2.25	0.90	0.203	(0.205)		0.102	0.102
28	2.33	0.90	0.203	(0.205)		0.102	0.102
29	2.42	0.90	0.203	(0.205)		0.102	0.102
30	2.50	0.90	0.203	(0.205)		0.102	0.102
31	2.58	0.90	0.203	(0.205)		0.102	0.102
32	2.67	0.90	0.203	(0.205)		0.102	0.102

```
33   2.75     1.00      0.226       (  0.205)       0.113        0.113
34   2.83     1.00      0.226       (  0.205)       0.113        0.113
35   2.92     1.00      0.226       (  0.205)       0.113        0.113
36   3.00     1.00      0.226       (  0.205)       0.113        0.113
37   3.08     1.00      0.226       (  0.205)       0.113        0.113
38   3.17     1.10      0.248       (  0.205)       0.124        0.124
39   3.25     1.10      0.248       (  0.205)       0.124        0.124
40   3.33     1.10      0.248       (  0.205)       0.124        0.124
41   3.42     1.20      0.271       (  0.205)       0.135        0.135
42   3.50     1.30      0.294       (  0.205)       0.147        0.147
43   3.58     1.40      0.316       (  0.205)       0.158        0.158
44   3.67     1.40      0.316       (  0.205)       0.158        0.158
45   3.75     1.50      0.339       (  0.205)       0.169        0.169
46   3.83     1.50      0.339       (  0.205)       0.169        0.169
47   3.92     1.60      0.361       (  0.205)       0.181        0.181
48   4.00     1.60      0.361       (  0.205)       0.181        0.181
49   4.08     1.70      0.384       (  0.205)       0.192        0.192
50   4.17     1.80      0.406       (  0.205)       0.203        0.203
51   4.25     1.90      0.429          0.205    (  0.214)        0.224
52   4.33     2.00      0.452          0.205    (  0.226)        0.247
53   4.42     2.10      0.474          0.205    (  0.237)        0.269
54   4.50     2.10      0.474          0.205    (  0.237)        0.269
55   4.58     2.20      0.497          0.205    (  0.248)        0.292
56   4.67     2.30      0.519          0.205    (  0.260)        0.314
57   4.75     2.40      0.542          0.205    (  0.271)        0.337
58   4.83     2.40      0.542          0.205    (  0.271)        0.337
59   4.92     2.50      0.564          0.205    (  0.282)        0.359
60   5.00     2.60      0.587          0.205    (  0.294)        0.382
61   5.08     3.10      0.700          0.205    (  0.350)        0.495
62   5.17     3.60      0.813          0.205    (  0.406)        0.608
63   5.25     3.90      0.881          0.205    (  0.440)        0.676
64   5.33     4.20      0.948          0.205    (  0.474)        0.743
65   5.42     4.70      1.061          0.205    (  0.531)        0.856
66   5.50     5.60      1.264          0.205    (  0.632)        1.059
67   5.58     1.90      0.429          0.205    (  0.214)        0.224
68   5.67     0.90      0.203       (  0.205)       0.102        0.102
69   5.75     0.60      0.135       (  0.205)       0.068        0.068
70   5.83     0.50      0.113       (  0.205)       0.056        0.056
71   5.92     0.30      0.068       (  0.205)       0.034        0.034
72   6.00     0.20      0.045       (  0.205)       0.023        0.023
              (Loss Rate Not Used)
   Sum =     100.0                                  Sum =    13.4
      Flood volume = Effective rainfall      1.12(In)
       times area      19.1(Ac.)/[(In)/(Ft.)] =       1.8(Ac.Ft)
      Total soil loss =      0.77(In)
      Total soil loss =     1.220(Ac.Ft)
      Total rainfall =      1.88(In)
      Flood volume =       77455.7 Cubic Feet
      Total soil loss =       53134.5 Cubic Feet
      ---------------------------------------------------------------------
       Peak flow rate of this hydrograph =     15.170(CFS)
      ---------------------------------------------------------------------
      +++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                          6 - H O U R    S T O R M
                      R u n o f f     H y d r o g r a p h
      ---------------------------------------------------------------------
                  Hydrograph in   5   Minute intervals ((CFS))

      ---------------------------------------------------------------------
Time(h+m) Volume Ac.Ft   Q(CFS)  0        5.0      10.0      15.0      20.0
---------------------------------------------------------------------------
  0+ 5       0.0006      0.09  Q         |         |         |         |
  0+10       0.0038      0.46  Q         |         |         |         |
  0+15       0.0095      0.83  VQ        |         |         |         |
  0+20       0.0164      1.00  V Q       |         |         |         |
  0+25       0.0239      1.09  V Q       |         |         |         |
  0+30       0.0319      1.17  V Q       |         |         |         |
  0+35       0.0408      1.28  V Q       |         |         |         |
  0+40       0.0502      1.37  |VQ       |         |         |         |
  0+45       0.0599      1.42  |VQ       |         |         |         |
  0+50       0.0699      1.45  |VQ       |         |         |         |
```

```
0+55       0.0800      1.47  |VQ       |         |         |         |
1+ 0       0.0904      1.50  | VQ      |         |         |         |
1+ 5       0.1014      1.59  | VQ      |         |         |         |
1+10       0.1128      1.66  | VQ      |         |         |         |
1+15       0.1244      1.69  | VQ      |         |         |         |
1+20       0.1361      1.70  |  Q      |         |         |         |
1+25       0.1479      1.71  |  Q      |         |         |         |
1+30       0.1598      1.72  |  Q      |         |         |         |
1+35       0.1717      1.73  |  Q      |         |         |         |
1+40       0.1836      1.73  |  QV     |         |         |         |
1+45       0.1956      1.73  |  QV     |         |         |         |
1+50       0.2075      1.74  |  QV     |         |         |         |
1+55       0.2195      1.74  |  QV     |         |         |         |
2+ 0       0.2316      1.76  |  Q V    |         |         |         |
2+ 5       0.2441      1.81  |  Q V    |         |         |         |
2+10       0.2566      1.82  |  Q V    |         |         |         |
2+15       0.2694      1.85  |  Q  V   |         |         |         |
2+20       0.2825      1.90  |  Q  V   |         |         |         |
2+25       0.2957      1.92  |  Q  V   |         |         |         |
2+30       0.3090      1.93  |  Q  V   |         |         |         |
2+35       0.3224      1.94  |  Q   V  |         |         |         |
2+40       0.3358      1.94  |  Q   V  |         |         |         |
2+45       0.3493      1.97  |  Q   V  |         |         |         |
2+50       0.3634      2.04  |   Q   V |         |         |         |
2+55       0.3778      2.10  |   Q   V |         |         |         |
3+ 0       0.3925      2.13  |   Q   V |         |         |         |
3+ 5       0.4072      2.14  |   Q    V|         |         |         |
3+10       0.4222      2.17  |   Q    V|         |         |         |
3+15       0.4376      2.25  |   Q    V|         |         |         |
3+20       0.4536      2.31  |   Q     V         |         |         |
3+25       0.4698      2.36  |   Q     V         |         |         |
3+30       0.4867      2.46  |   Q     V         |         |         |
3+35       0.5048      2.62  |    Q    |V        |         |         |
3+40       0.5239      2.78  |    Q    |V        |         |         |
3+45       0.5439      2.90  |    Q    | V       |         |         |
3+50       0.5647      3.02  |     Q   | V       |         |         |
3+55       0.5862      3.13  |     Q   |  V      |         |         |
4+ 0       0.6086      3.25  |     Q   |  V      |         |         |
4+ 5       0.6317      3.35  |     Q   |   V     |         |         |
4+10       0.6557      3.49  |     Q   |   V     |         |         |
4+15       0.6810      3.68  |      Q  |    V    |         |         |
4+20       0.7082      3.95  |      Q  |    V    |         |         |
4+25       0.7377      4.29  |       Q |     V   |         |         |
4+30       0.7696      4.62  |        Q|      V  |         |         |
4+35       0.8031      4.87  |        Q|       V |         |         |
4+40       0.8386      5.15  |         Q       V |         |         |
4+45       0.8766      5.52  |         |Q       V|         |         |
4+50       0.9171      5.88  |         |Q        V         |         |
4+55       0.9594      6.14  |         | Q       |V        |         |
5+ 0       1.0037      6.43  |         | Q       | V       |         |
5+ 5       1.0515      6.94  |         |  Q      |  V      |         |
5+10       1.1069      8.05  |         |    Q    |   V     |         |
5+15       1.1729      9.58  |         |       Q |     V   |         |
5+20       1.2487     11.00  |         |         | Q     V |         |
5+25       1.3339     12.38  |         |         |   Q     V         |
5+30       1.4314     14.16  |         |         |       Q | V       |
5+35       1.5359     15.17  |         |         |         Q   V     |
5+40       1.6133     11.24  |         |         | Q       |     V   |
5+45       1.6601      6.80  |         |  Q      |         |      V  |
5+50       1.6925      4.70  |         Q|        |         |       V |
5+55       1.7166      3.51  |       Q  |        |         |       V |
6+ 0       1.7349      2.65  |    Q     |        |         |        V|
6+ 5       1.7483      1.96  |  Q       |        |         |        V|
6+10       1.7580      1.40  | Q        |        |         |        V|
6+15       1.7648      0.98  |Q         |        |         |        V|
6+20       1.7696      0.70  |Q         |        |         |        V|
6+25       1.7730      0.50  Q          |        |         |        V|
6+30       1.7754      0.35  Q          |        |         |        V|
6+35       1.7770      0.23  Q          |        |         |        V|
6+40       1.7775      0.08  Q          |        |         |        V|
6+45       1.7778      0.04  Q          |        |         |        V|
```

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    6+50       1.7780      0.02  Q         |         |         |        V|
    6+55       1.7781      0.01  Q         |         |         |        V|
    7+ 0       1.7781      0.01  Q         |         |         |        V|
    7+ 5       1.7781      0.00  Q         |         |         |        V|
-------------------------------------------------------------------------
```

U n i t H y d r o g r a p h A n a l y s i s

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Study date 08/14/25 File: PROB6100.out

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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978

Program License Serial Number 5006

English (in-lb) Input Units Used
English Rainfall Data (Inches) Input Values Used

English Units used in output format

Drainage Area = 19.12(Ac.) = 0.030 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 19.12(Ac.) = 0.030 Sq. Mi.
Length along longest watercourse = 2644.00(Ft.)
Length along longest watercourse measured to centroid = 1322.00(Ft.)
Length along longest watercourse = 0.501 Mi.
Length along longest watercourse measured to centroid = 0.250 Mi.
Difference in elevation = 40.00(Ft.)
Slope along watercourse = 79.8790 Ft./Mi.
Average Manning's 'N' = 0.030
Lag time = 0.142 Hr.
Lag time = 8.54 Min.
25% of lag time = 2.13 Min.
40% of lag time = 3.42 Min.
Unit time = 5.00 Min.
Duration of storm = 6 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.)[1]	Rainfall(In)[2]	Weighting[1*2]
19.12	1.10	21.03

100 YEAR Area rainfall data:

Area(Ac.)[1]	Rainfall(In)[2]	Weighting[1*2]
19.12	3.00	57.36

STORM EVENT (YEAR) = 100.00
Area Averaged 2-Year Rainfall = 1.100(In)
Area Averaged 100-Year Rainfall = 3.000(In)

Point rain (area averaged) = 3.000(In)
Areal adjustment factor = 99.99 %
Adjusted average point rain = 3.000(In)

Sub-Area Data:

Area(Ac.)	Runoff Index	Impervious %
19.120	69.00	0.500

Total Area Entered = 19.12(Ac.)

RI AMC2	RI AMC-2	Infil. Rate (In/Hr)	Impervious (Dec.%)	Adj. Infil. Rate (In/Hr)	Area% (Dec.)	F (In/Hr)

```
69.0  69.0      0.373     0.500        0.205       1.000      0.205
                                                  Sum (F) =   0.205
Area averaged mean soil loss (F) (In/Hr) =  0.205
Minimum soil loss rate ((In/Hr)) =  0.103
(for 24 hour storm duration)
Soil low loss rate (decimal) =   0.500
```

U n i t H y d r o g r a p h
VALLEY S-Curve

Unit Hydrograph Data

Unit time period (hrs)		Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	58.563	7.892	1.521
2	0.167	117.126	32.937	6.347
3	0.250	175.689	27.037	5.210
4	0.333	234.252	10.574	2.038
5	0.417	292.815	6.182	1.191
6	0.500	351.378	4.198	0.809
7	0.583	409.941	3.019	0.582
8	0.667	468.504	2.110	0.407
9	0.750	527.066	1.734	0.334
10	0.833	585.629	1.313	0.253
11	0.917	644.192	1.005	0.194
12	1.000	702.755	0.732	0.141
13	1.083	761.318	0.587	0.113
14	1.167	819.881	0.680	0.131
		Sum = 100.000	Sum=	19.269

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr) Max	Low	Effective (In/Hr)
1	0.08	0.50	0.180	(0.205)	0.090	0.090
2	0.17	0.60	0.216	(0.205)	0.108	0.108
3	0.25	0.60	0.216	(0.205)	0.108	0.108
4	0.33	0.60	0.216	(0.205)	0.108	0.108
5	0.42	0.60	0.216	(0.205)	0.108	0.108
6	0.50	0.70	0.252	(0.205)	0.126	0.126
7	0.58	0.70	0.252	(0.205)	0.126	0.126
8	0.67	0.70	0.252	(0.205)	0.126	0.126
9	0.75	0.70	0.252	(0.205)	0.126	0.126
10	0.83	0.70	0.252	(0.205)	0.126	0.126
11	0.92	0.70	0.252	(0.205)	0.126	0.126
12	1.00	0.80	0.288	(0.205)	0.144	0.144
13	1.08	0.80	0.288	(0.205)	0.144	0.144
14	1.17	0.80	0.288	(0.205)	0.144	0.144
15	1.25	0.80	0.288	(0.205)	0.144	0.144
16	1.33	0.80	0.288	(0.205)	0.144	0.144
17	1.42	0.80	0.288	(0.205)	0.144	0.144
18	1.50	0.80	0.288	(0.205)	0.144	0.144
19	1.58	0.80	0.288	(0.205)	0.144	0.144
20	1.67	0.80	0.288	(0.205)	0.144	0.144
21	1.75	0.80	0.288	(0.205)	0.144	0.144
22	1.83	0.80	0.288	(0.205)	0.144	0.144
23	1.92	0.80	0.288	(0.205)	0.144	0.144
24	2.00	0.90	0.324	(0.205)	0.162	0.162
25	2.08	0.80	0.288	(0.205)	0.144	0.144
26	2.17	0.90	0.324	(0.205)	0.162	0.162
27	2.25	0.90	0.324	(0.205)	0.162	0.162
28	2.33	0.90	0.324	(0.205)	0.162	0.162
29	2.42	0.90	0.324	(0.205)	0.162	0.162
30	2.50	0.90	0.324	(0.205)	0.162	0.162
31	2.58	0.90	0.324	(0.205)	0.162	0.162
32	2.67	0.90	0.324	(0.205)	0.162	0.162

33	2.75	1.00	0.360	(0.205)	0.180	0.180
34	2.83	1.00	0.360	(0.205)	0.180	0.180
35	2.92	1.00	0.360	(0.205)	0.180	0.180
36	3.00	1.00	0.360	(0.205)	0.180	0.180
37	3.08	1.00	0.360	(0.205)	0.180	0.180
38	3.17	1.10	0.396	(0.205)	0.198	0.198
39	3.25	1.10	0.396	(0.205)	0.198	0.198
40	3.33	1.10	0.396	(0.205)	0.198	0.198
41	3.42	1.20	0.432	0.205	(0.216)	0.227
42	3.50	1.30	0.468	0.205	(0.234)	0.263
43	3.58	1.40	0.504	0.205	(0.252)	0.299
44	3.67	1.40	0.504	0.205	(0.252)	0.299
45	3.75	1.50	0.540	0.205	(0.270)	0.335
46	3.83	1.50	0.540	0.205	(0.270)	0.335
47	3.92	1.60	0.576	0.205	(0.288)	0.371
48	4.00	1.60	0.576	0.205	(0.288)	0.371
49	4.08	1.70	0.612	0.205	(0.306)	0.407
50	4.17	1.80	0.648	0.205	(0.324)	0.443
51	4.25	1.90	0.684	0.205	(0.342)	0.479
52	4.33	2.00	0.720	0.205	(0.360)	0.515
53	4.42	2.10	0.756	0.205	(0.378)	0.551
54	4.50	2.10	0.756	0.205	(0.378)	0.551
55	4.58	2.20	0.792	0.205	(0.396)	0.587
56	4.67	2.30	0.828	0.205	(0.414)	0.623
57	4.75	2.40	0.864	0.205	(0.432)	0.659
58	4.83	2.40	0.864	0.205	(0.432)	0.659
59	4.92	2.50	0.900	0.205	(0.450)	0.695
60	5.00	2.60	0.936	0.205	(0.468)	0.731
61	5.08	3.10	1.116	0.205	(0.558)	0.911
62	5.17	3.60	1.296	0.205	(0.648)	1.091
63	5.25	3.90	1.404	0.205	(0.702)	1.199
64	5.33	4.20	1.512	0.205	(0.756)	1.307
65	5.42	4.70	1.692	0.205	(0.846)	1.487
66	5.50	5.60	2.016	0.205	(1.008)	1.811
67	5.58	1.90	0.684	0.205	(0.342)	0.479
68	5.67	0.90	0.324	(0.205)	0.162	0.162
69	5.75	0.60	0.216	(0.205)	0.108	0.108
70	5.83	0.50	0.180	(0.205)	0.090	0.090
71	5.92	0.30	0.108	(0.205)	0.054	0.054
72	6.00	0.20	0.072	(0.205)	0.036	0.036

(Loss Rate Not Used)
Sum = 100.0 Sum = 24.1

Flood volume = Effective rainfall 2.01(In)
times area 19.1(Ac.)/[(In)/(Ft.)] = 3.2(Ac.Ft)
Total soil loss = 0.99(In)
Total soil loss = 1.583(Ac.Ft)
Total rainfall = 3.00(In)
Flood volume = 139227.5 Cubic Feet
Total soil loss = 68975.6 Cubic Feet

Peak flow rate of this hydrograph = 26.535(CFS)

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6 - H O U R S T O R M
R u n o f f H y d r o g r a p h

Hydrograph in 5 Minute intervals ((CFS))

Time(h+m)	Volume Ac.Ft	Q(CFS)	0	7.5	15.0	22.5	30.0
0+ 5	0.0009	0.14	Q				
0+10	0.0060	0.74	Q				
0+15	0.0151	1.32	VQ				
0+20	0.0261	1.60	V Q				
0+25	0.0381	1.74	V Q				
0+30	0.0509	1.86	V Q				
0+35	0.0650	2.04	V Q				
0+40	0.0800	2.18	|VQ				
0+45	0.0956	2.26	|V Q				
0+50	0.1115	2.31	|V Q				

```
0+55       0.1276      2.35  |V Q      |         |         |         |
1+ 0       0.1441      2.40  |V Q      |         |         |         |
1+ 5       0.1616      2.53  | VQ      |         |         |         |
1+10       0.1798      2.65  | VQ      |         |         |         |
1+15       0.1984      2.69  | VQ      |         |         |         |
1+20       0.2171      2.72  | VQ      |         |         |         |
1+25       0.2359      2.73  | VQ      |         |         |         |
1+30       0.2548      2.75  |  Q      |         |         |         |
1+35       0.2738      2.76  |  Q      |         |         |         |
1+40       0.2928      2.76  |  Q      |         |         |         |
1+45       0.3118      2.77  |  Q      |         |         |         |
1+50       0.3309      2.77  |  QV     |         |         |         |
1+55       0.3500      2.77  |  QV     |         |         |         |
2+ 0       0.3693      2.80  |  QV     |         |         |         |
2+ 5       0.3892      2.89  |  QV     |         |         |         |
2+10       0.4091      2.90  |  Q V    |         |         |         |
2+15       0.4295      2.95  |  Q V    |         |         |         |
2+20       0.4504      3.03  |   QV    |         |         |         |
2+25       0.4715      3.06  |   QV    |         |         |         |
2+30       0.4927      3.08  |   Q V   |         |         |         |
2+35       0.5140      3.09  |   Q V   |         |         |         |
2+40       0.5353      3.10  |   Q V   |         |         |         |
2+45       0.5569      3.13  |   Q V   |         |         |         |
2+50       0.5793      3.25  |   Q  V  |         |         |         |
2+55       0.6024      3.35  |   Q  V  |         |         |         |
3+ 0       0.6257      3.39  |   Q  V  |         |         |         |
3+ 5       0.6493      3.41  |   Q   V |         |         |         |
3+10       0.6731      3.46  |   Q   V |         |         |         |
3+15       0.6977      3.58  |   Q   V |         |         |         |
3+20       0.7231      3.68  |   Q    V|         |         |         |
3+25       0.7491      3.77  |    Q   V|         |         |         |
3+30       0.7769      4.04  |    Q   V|         |         |         |
3+35       0.8078      4.49  |    Q    V         |         |         |
3+40       0.8421      4.98  |     Q   V         |         |         |
3+45       0.8788      5.34  |      Q  V         |         |         |
3+50       0.9182      5.71  |      Q  |V        |         |         |
3+55       0.9598      6.05  |       Q | V       |         |         |
4+ 0       1.0040      6.42  |       Q | V       |         |         |
4+ 5       1.0505      6.75  |       Q |  V      |         |         |
4+10       1.0999      7.17  |        Q|  V      |         |         |
4+15       1.1531      7.73  |         Q   V     |         |         |
4+20       1.2106      8.34  |         |Q   V    |         |         |
4+25       1.2724      8.98  |         |Q   V    |         |         |
4+30       1.3384      9.58  |         | Q   V   |         |         |
4+35       1.4074     10.01  |         |  Q   V  |         |         |
4+40       1.4797     10.50  |         |  Q    V |         |         |
4+45       1.5561     11.10  |         |   Q    V|         |         |
4+50       1.6366     11.68  |         |    Q    V         |         |
4+55       1.7200     12.11  |         |     Q   |V        |         |
5+ 0       1.8067     12.59  |         |     Q   | V       |         |
5+ 5       1.8991     13.41  |         |      Q  |  V      |         |
5+10       2.0036     15.18  |         |         Q    V    |         |
5+15       2.1250     17.62  |         |         |  Q  V   |         |
5+20       2.2620     19.89  |         |         |     Q V |         |
5+25       2.4140     22.08  |         |         |        QV         |
5+30       2.5857     24.92  |         |         |          | VQ     |
5+35       2.7684     26.53  |         |         |          |   VQ   |
5+40       2.9067     20.08  |         |         |     Q    |     V  |
5+45       2.9909     12.23  |         |     Q   |          |      V |
5+50       3.0477      8.25  |         Q         |          |       V|
5+55       3.0898      6.10  |       Q |         |          |       V|
6+ 0       3.1213      4.58  |     Q   |         |          |        V|
6+ 5       3.1446      3.38  |   Q     |         |          |        V|
6+10       3.1613      2.43  |  Q      |         |          |        V|
6+15       3.1731      1.71  | Q       |         |          |        V|
6+20       3.1815      1.22  |Q        |         |          |        V|
6+25       3.1875      0.86  |Q        |         |          |        V|
6+30       3.1916      0.60  Q         |         |          |        V|
6+35       3.1943      0.39  Q         |         |          |        V|
6+40       3.1952      0.14  Q         |         |          |        V|
6+45       3.1957      0.07  Q         |         |          |        V|
```

```
    6+50       3.1960      0.04  Q         |         |         |        V|
    6+55       3.1961      0.02  Q         |         |         |        V|
    7+ 0       3.1962      0.01  Q         |         |         |        V|
    7+ 5       3.1962      0.00  Q         |         |         |         V
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       U n i t   H y d r o g r a p h   A n a l y s i s

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              Study date  08/14/25 File: PROB242.out

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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978


Program License Serial Number 5006

------------------------------------------------------------------------
 English (in-lb) Input Units Used
 English Rainfall Data (Inches) Input Values Used

 English Units used in output format



------------------------------------------------------------------------
------------------------------------------------------------------------
Drainage Area =      19.12(Ac.)  =      0.030 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment =      19.12(Ac.)  =      0.030 Sq. Mi.
Length along longest watercourse =    2644.00(Ft.)
Length along longest watercourse measured to centroid =    1322.00(Ft.)
Length along longest watercourse =      0.501 Mi.
Length along longest watercourse measured to centroid =      0.250 Mi.
Difference in elevation =      40.00(Ft.)
Slope along watercourse =     79.8790 Ft./Mi.
Average Manning's 'N' = 0.030
Lag time =    0.142 Hr.
Lag time =     8.54 Min.
25% of lag time =     2.13 Min.
40% of lag time =     3.42 Min.
Unit time =     5.00 Min.
Duration of storm = 24 Hour(s)
User Entered Base Flow =     0.00(CFS)

2 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
       19.12           1.80                 34.42

100 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
       19.12           5.00                 95.60

STORM EVENT (YEAR) =    2.00
Area Averaged 2-Year Rainfall =    1.800(In)
Area Averaged 100-Year Rainfall =    5.000(In)

Point rain (area averaged) =    1.800(In)
Areal adjustment factor =  100.00 %
Adjusted average point rain =    1.800(In)

Sub-Area Data:
Area(Ac.)         Runoff Index   Impervious %
    19.120           69.00         0.500
 Total Area Entered =     19.12(Ac.)


RI    RI   Infil. Rate Impervious   Adj. Infil. Rate  Area%     F
AMC2 AMC-2     (In/Hr)    (Dec.%)     (In/Hr)      (Dec.)    (In/Hr)
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69.0  69.0      0.373     0.500        0.205       1.000      0.205
                                                  Sum (F) =   0.205
Area averaged mean soil loss (F) (In/Hr) =  0.205
Minimum soil loss rate ((In/Hr)) =  0.103
(for 24 hour storm duration)
Soil low loss rate (decimal) =   0.500
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U n i t H y d r o g r a p h
VALLEY S-Curve

Unit Hydrograph Data

Unit time period (hrs)		Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	58.563	7.892	1.521
2	0.167	117.126	32.937	6.347
3	0.250	175.689	27.037	5.210
4	0.333	234.252	10.574	2.038
5	0.417	292.815	6.182	1.191
6	0.500	351.378	4.198	0.809
7	0.583	409.941	3.019	0.582
8	0.667	468.504	2.110	0.407
9	0.750	527.066	1.734	0.334
10	0.833	585.629	1.313	0.253
11	0.917	644.192	1.005	0.194
12	1.000	702.755	0.732	0.141
13	1.083	761.318	0.587	0.113
14	1.167	819.881	0.680	0.131
		Sum = 100.000	Sum=	19.269

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr) Max	Low	Effective (In/Hr)
1	0.08	0.07	0.014	(0.363)	0.007	0.007
2	0.17	0.07	0.014	(0.362)	0.007	0.007
3	0.25	0.07	0.014	(0.361)	0.007	0.007
4	0.33	0.10	0.022	(0.359)	0.011	0.011
5	0.42	0.10	0.022	(0.358)	0.011	0.011
6	0.50	0.10	0.022	(0.356)	0.011	0.011
7	0.58	0.10	0.022	(0.355)	0.011	0.011
8	0.67	0.10	0.022	(0.354)	0.011	0.011
9	0.75	0.10	0.022	(0.352)	0.011	0.011
10	0.83	0.13	0.029	(0.351)	0.014	0.014
11	0.92	0.13	0.029	(0.350)	0.014	0.014
12	1.00	0.13	0.029	(0.348)	0.014	0.014
13	1.08	0.10	0.022	(0.347)	0.011	0.011
14	1.17	0.10	0.022	(0.345)	0.011	0.011
15	1.25	0.10	0.022	(0.344)	0.011	0.011
16	1.33	0.10	0.022	(0.343)	0.011	0.011
17	1.42	0.10	0.022	(0.341)	0.011	0.011
18	1.50	0.10	0.022	(0.340)	0.011	0.011
19	1.58	0.10	0.022	(0.339)	0.011	0.011
20	1.67	0.10	0.022	(0.337)	0.011	0.011
21	1.75	0.10	0.022	(0.336)	0.011	0.011
22	1.83	0.13	0.029	(0.335)	0.014	0.014
23	1.92	0.13	0.029	(0.333)	0.014	0.014
24	2.00	0.13	0.029	(0.332)	0.014	0.014
25	2.08	0.13	0.029	(0.330)	0.014	0.014
26	2.17	0.13	0.029	(0.329)	0.014	0.014
27	2.25	0.13	0.029	(0.328)	0.014	0.014
28	2.33	0.13	0.029	(0.326)	0.014	0.014
29	2.42	0.13	0.029	(0.325)	0.014	0.014
30	2.50	0.13	0.029	(0.324)	0.014	0.014
31	2.58	0.17	0.036	(0.323)	0.018	0.018
32	2.67	0.17	0.036	(0.321)	0.018	0.018

33	2.75	0.17	0.036	(0.320)	0.018	0.018
34	2.83	0.17	0.036	(0.319)	0.018	0.018
35	2.92	0.17	0.036	(0.317)	0.018	0.018
36	3.00	0.17	0.036	(0.316)	0.018	0.018
37	3.08	0.17	0.036	(0.315)	0.018	0.018
38	3.17	0.17	0.036	(0.313)	0.018	0.018
39	3.25	0.17	0.036	(0.312)	0.018	0.018
40	3.33	0.17	0.036	(0.311)	0.018	0.018
41	3.42	0.17	0.036	(0.309)	0.018	0.018
42	3.50	0.17	0.036	(0.308)	0.018	0.018
43	3.58	0.17	0.036	(0.307)	0.018	0.018
44	3.67	0.17	0.036	(0.306)	0.018	0.018
45	3.75	0.17	0.036	(0.304)	0.018	0.018
46	3.83	0.20	0.043	(0.303)	0.022	0.022
47	3.92	0.20	0.043	(0.302)	0.022	0.022
48	4.00	0.20	0.043	(0.300)	0.022	0.022
49	4.08	0.20	0.043	(0.299)	0.022	0.022
50	4.17	0.20	0.043	(0.298)	0.022	0.022
51	4.25	0.20	0.043	(0.297)	0.022	0.022
52	4.33	0.23	0.050	(0.295)	0.025	0.025
53	4.42	0.23	0.050	(0.294)	0.025	0.025
54	4.50	0.23	0.050	(0.293)	0.025	0.025
55	4.58	0.23	0.050	(0.292)	0.025	0.025
56	4.67	0.23	0.050	(0.290)	0.025	0.025
57	4.75	0.23	0.050	(0.289)	0.025	0.025
58	4.83	0.27	0.058	(0.288)	0.029	0.029
59	4.92	0.27	0.058	(0.287)	0.029	0.029
60	5.00	0.27	0.058	(0.285)	0.029	0.029
61	5.08	0.20	0.043	(0.284)	0.022	0.022
62	5.17	0.20	0.043	(0.283)	0.022	0.022
63	5.25	0.20	0.043	(0.282)	0.022	0.022
64	5.33	0.23	0.050	(0.280)	0.025	0.025
65	5.42	0.23	0.050	(0.279)	0.025	0.025
66	5.50	0.23	0.050	(0.278)	0.025	0.025
67	5.58	0.27	0.058	(0.277)	0.029	0.029
68	5.67	0.27	0.058	(0.275)	0.029	0.029
69	5.75	0.27	0.058	(0.274)	0.029	0.029
70	5.83	0.27	0.058	(0.273)	0.029	0.029
71	5.92	0.27	0.058	(0.272)	0.029	0.029
72	6.00	0.27	0.058	(0.271)	0.029	0.029
73	6.08	0.30	0.065	(0.269)	0.032	0.032
74	6.17	0.30	0.065	(0.268)	0.032	0.032
75	6.25	0.30	0.065	(0.267)	0.032	0.032
76	6.33	0.30	0.065	(0.266)	0.032	0.032
77	6.42	0.30	0.065	(0.265)	0.032	0.032
78	6.50	0.30	0.065	(0.263)	0.032	0.032
79	6.58	0.33	0.072	(0.262)	0.036	0.036
80	6.67	0.33	0.072	(0.261)	0.036	0.036
81	6.75	0.33	0.072	(0.260)	0.036	0.036
82	6.83	0.33	0.072	(0.259)	0.036	0.036
83	6.92	0.33	0.072	(0.258)	0.036	0.036
84	7.00	0.33	0.072	(0.256)	0.036	0.036
85	7.08	0.33	0.072	(0.255)	0.036	0.036
86	7.17	0.33	0.072	(0.254)	0.036	0.036
87	7.25	0.33	0.072	(0.253)	0.036	0.036
88	7.33	0.37	0.079	(0.252)	0.040	0.040
89	7.42	0.37	0.079	(0.251)	0.040	0.040
90	7.50	0.37	0.079	(0.249)	0.040	0.040
91	7.58	0.40	0.086	(0.248)	0.043	0.043
92	7.67	0.40	0.086	(0.247)	0.043	0.043
93	7.75	0.40	0.086	(0.246)	0.043	0.043
94	7.83	0.43	0.094	(0.245)	0.047	0.047
95	7.92	0.43	0.094	(0.244)	0.047	0.047
96	8.00	0.43	0.094	(0.243)	0.047	0.047
97	8.08	0.50	0.108	(0.242)	0.054	0.054
98	8.17	0.50	0.108	(0.240)	0.054	0.054
99	8.25	0.50	0.108	(0.239)	0.054	0.054
100	8.33	0.50	0.108	(0.238)	0.054	0.054
101	8.42	0.50	0.108	(0.237)	0.054	0.054
102	8.50	0.50	0.108	(0.236)	0.054	0.054
103	8.58	0.53	0.115	(0.235)	0.058	0.058

104	8.67	0.53	0.115	(0.234)	0.058	0.058
105	8.75	0.53	0.115	(0.233)	0.058	0.058
106	8.83	0.57	0.122	(0.232)	0.061	0.061
107	8.92	0.57	0.122	(0.230)	0.061	0.061
108	9.00	0.57	0.122	(0.229)	0.061	0.061
109	9.08	0.63	0.137	(0.228)	0.068	0.068
110	9.17	0.63	0.137	(0.227)	0.068	0.068
111	9.25	0.63	0.137	(0.226)	0.068	0.068
112	9.33	0.67	0.144	(0.225)	0.072	0.072
113	9.42	0.67	0.144	(0.224)	0.072	0.072
114	9.50	0.67	0.144	(0.223)	0.072	0.072
115	9.58	0.70	0.151	(0.222)	0.076	0.076
116	9.67	0.70	0.151	(0.221)	0.076	0.076
117	9.75	0.70	0.151	(0.220)	0.076	0.076
118	9.83	0.73	0.158	(0.219)	0.079	0.079
119	9.92	0.73	0.158	(0.218)	0.079	0.079
120	10.00	0.73	0.158	(0.217)	0.079	0.079
121	10.08	0.50	0.108	(0.215)	0.054	0.054
122	10.17	0.50	0.108	(0.214)	0.054	0.054
123	10.25	0.50	0.108	(0.213)	0.054	0.054
124	10.33	0.50	0.108	(0.212)	0.054	0.054
125	10.42	0.50	0.108	(0.211)	0.054	0.054
126	10.50	0.50	0.108	(0.210)	0.054	0.054
127	10.58	0.67	0.144	(0.209)	0.072	0.072
128	10.67	0.67	0.144	(0.208)	0.072	0.072
129	10.75	0.67	0.144	(0.207)	0.072	0.072
130	10.83	0.67	0.144	(0.206)	0.072	0.072
131	10.92	0.67	0.144	(0.205)	0.072	0.072
132	11.00	0.67	0.144	(0.204)	0.072	0.072
133	11.08	0.63	0.137	(0.203)	0.068	0.068
134	11.17	0.63	0.137	(0.202)	0.068	0.068
135	11.25	0.63	0.137	(0.201)	0.068	0.068
136	11.33	0.63	0.137	(0.200)	0.068	0.068
137	11.42	0.63	0.137	(0.199)	0.068	0.068
138	11.50	0.63	0.137	(0.198)	0.068	0.068
139	11.58	0.57	0.122	(0.197)	0.061	0.061
140	11.67	0.57	0.122	(0.196)	0.061	0.061
141	11.75	0.57	0.122	(0.195)	0.061	0.061
142	11.83	0.60	0.130	(0.194)	0.065	0.065
143	11.92	0.60	0.130	(0.193)	0.065	0.065
144	12.00	0.60	0.130	(0.192)	0.065	0.065
145	12.08	0.83	0.180	(0.191)	0.090	0.090
146	12.17	0.83	0.180	(0.190)	0.090	0.090
147	12.25	0.83	0.180	(0.189)	0.090	0.090
148	12.33	0.87	0.187	(0.189)	0.094	0.094
149	12.42	0.87	0.187	(0.188)	0.094	0.094
150	12.50	0.87	0.187	(0.187)	0.094	0.094
151	12.58	0.93	0.202	(0.186)	0.101	0.101
152	12.67	0.93	0.202	(0.185)	0.101	0.101
153	12.75	0.93	0.202	(0.184)	0.101	0.101
154	12.83	0.97	0.209	(0.183)	0.104	0.104
155	12.92	0.97	0.209	(0.182)	0.104	0.104
156	13.00	0.97	0.209	(0.181)	0.104	0.104
157	13.08	1.13	0.245	(0.180)	0.122	0.122
158	13.17	1.13	0.245	(0.179)	0.122	0.122
159	13.25	1.13	0.245	(0.178)	0.122	0.122
160	13.33	1.13	0.245	(0.177)	0.122	0.122
161	13.42	1.13	0.245	(0.177)	0.122	0.122
162	13.50	1.13	0.245	(0.176)	0.122	0.122
163	13.58	0.77	0.166	(0.175)	0.083	0.083
164	13.67	0.77	0.166	(0.174)	0.083	0.083
165	13.75	0.77	0.166	(0.173)	0.083	0.083
166	13.83	0.77	0.166	(0.172)	0.083	0.083
167	13.92	0.77	0.166	(0.171)	0.083	0.083
168	14.00	0.77	0.166	(0.170)	0.083	0.083
169	14.08	0.90	0.194	(0.169)	0.097	0.097
170	14.17	0.90	0.194	(0.169)	0.097	0.097
171	14.25	0.90	0.194	(0.168)	0.097	0.097
172	14.33	0.87	0.187	(0.167)	0.094	0.094
173	14.42	0.87	0.187	(0.166)	0.094	0.094
174	14.50	0.87	0.187	(0.165)	0.094	0.094

175	14.58	0.87	0.187	(0.164)	0.094	0.094
176	14.67	0.87	0.187	(0.163)	0.094	0.094
177	14.75	0.87	0.187	(0.163)	0.094	0.094
178	14.83	0.83	0.180	(0.162)	0.090	0.090
179	14.92	0.83	0.180	(0.161)	0.090	0.090
180	15.00	0.83	0.180	(0.160)	0.090	0.090
181	15.08	0.80	0.173	(0.159)	0.086	0.086
182	15.17	0.80	0.173	(0.159)	0.086	0.086
183	15.25	0.80	0.173	(0.158)	0.086	0.086
184	15.33	0.77	0.166	(0.157)	0.083	0.083
185	15.42	0.77	0.166	(0.156)	0.083	0.083
186	15.50	0.77	0.166	(0.155)	0.083	0.083
187	15.58	0.63	0.137	(0.154)	0.068	0.068
188	15.67	0.63	0.137	(0.154)	0.068	0.068
189	15.75	0.63	0.137	(0.153)	0.068	0.068
190	15.83	0.63	0.137	(0.152)	0.068	0.068
191	15.92	0.63	0.137	(0.151)	0.068	0.068
192	16.00	0.63	0.137	(0.151)	0.068	0.068
193	16.08	0.13	0.029	(0.150)	0.014	0.014
194	16.17	0.13	0.029	(0.149)	0.014	0.014
195	16.25	0.13	0.029	(0.148)	0.014	0.014
196	16.33	0.13	0.029	(0.148)	0.014	0.014
197	16.42	0.13	0.029	(0.147)	0.014	0.014
198	16.50	0.13	0.029	(0.146)	0.014	0.014
199	16.58	0.10	0.022	(0.145)	0.011	0.011
200	16.67	0.10	0.022	(0.145)	0.011	0.011
201	16.75	0.10	0.022	(0.144)	0.011	0.011
202	16.83	0.10	0.022	(0.143)	0.011	0.011
203	16.92	0.10	0.022	(0.142)	0.011	0.011
204	17.00	0.10	0.022	(0.142)	0.011	0.011
205	17.08	0.17	0.036	(0.141)	0.018	0.018
206	17.17	0.17	0.036	(0.140)	0.018	0.018
207	17.25	0.17	0.036	(0.140)	0.018	0.018
208	17.33	0.17	0.036	(0.139)	0.018	0.018
209	17.42	0.17	0.036	(0.138)	0.018	0.018
210	17.50	0.17	0.036	(0.137)	0.018	0.018
211	17.58	0.17	0.036	(0.137)	0.018	0.018
212	17.67	0.17	0.036	(0.136)	0.018	0.018
213	17.75	0.17	0.036	(0.135)	0.018	0.018
214	17.83	0.13	0.029	(0.135)	0.014	0.014
215	17.92	0.13	0.029	(0.134)	0.014	0.014
216	18.00	0.13	0.029	(0.133)	0.014	0.014
217	18.08	0.13	0.029	(0.133)	0.014	0.014
218	18.17	0.13	0.029	(0.132)	0.014	0.014
219	18.25	0.13	0.029	(0.131)	0.014	0.014
220	18.33	0.13	0.029	(0.131)	0.014	0.014
221	18.42	0.13	0.029	(0.130)	0.014	0.014
222	18.50	0.13	0.029	(0.130)	0.014	0.014
223	18.58	0.10	0.022	(0.129)	0.011	0.011
224	18.67	0.10	0.022	(0.128)	0.011	0.011
225	18.75	0.10	0.022	(0.128)	0.011	0.011
226	18.83	0.07	0.014	(0.127)	0.007	0.007
227	18.92	0.07	0.014	(0.126)	0.007	0.007
228	19.00	0.07	0.014	(0.126)	0.007	0.007
229	19.08	0.10	0.022	(0.125)	0.011	0.011
230	19.17	0.10	0.022	(0.125)	0.011	0.011
231	19.25	0.10	0.022	(0.124)	0.011	0.011
232	19.33	0.13	0.029	(0.123)	0.014	0.014
233	19.42	0.13	0.029	(0.123)	0.014	0.014
234	19.50	0.13	0.029	(0.122)	0.014	0.014
235	19.58	0.10	0.022	(0.122)	0.011	0.011
236	19.67	0.10	0.022	(0.121)	0.011	0.011
237	19.75	0.10	0.022	(0.121)	0.011	0.011
238	19.83	0.07	0.014	(0.120)	0.007	0.007
239	19.92	0.07	0.014	(0.120)	0.007	0.007
240	20.00	0.07	0.014	(0.119)	0.007	0.007
241	20.08	0.10	0.022	(0.119)	0.011	0.011
242	20.17	0.10	0.022	(0.118)	0.011	0.011
243	20.25	0.10	0.022	(0.118)	0.011	0.011
244	20.33	0.10	0.022	(0.117)	0.011	0.011
245	20.42	0.10	0.022	(0.116)	0.011	0.011

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246  20.50     0.10      0.022       (  0.116)       0.011        0.011
247  20.58     0.10      0.022       (  0.116)       0.011        0.011
248  20.67     0.10      0.022       (  0.115)       0.011        0.011
249  20.75     0.10      0.022       (  0.115)       0.011        0.011
250  20.83     0.07      0.014       (  0.114)       0.007        0.007
251  20.92     0.07      0.014       (  0.114)       0.007        0.007
252  21.00     0.07      0.014       (  0.113)       0.007        0.007
253  21.08     0.10      0.022       (  0.113)       0.011        0.011
254  21.17     0.10      0.022       (  0.112)       0.011        0.011
255  21.25     0.10      0.022       (  0.112)       0.011        0.011
256  21.33     0.07      0.014       (  0.111)       0.007        0.007
257  21.42     0.07      0.014       (  0.111)       0.007        0.007
258  21.50     0.07      0.014       (  0.111)       0.007        0.007
259  21.58     0.10      0.022       (  0.110)       0.011        0.011
260  21.67     0.10      0.022       (  0.110)       0.011        0.011
261  21.75     0.10      0.022       (  0.109)       0.011        0.011
262  21.83     0.07      0.014       (  0.109)       0.007        0.007
263  21.92     0.07      0.014       (  0.109)       0.007        0.007
264  22.00     0.07      0.014       (  0.108)       0.007        0.007
265  22.08     0.10      0.022       (  0.108)       0.011        0.011
266  22.17     0.10      0.022       (  0.108)       0.011        0.011
267  22.25     0.10      0.022       (  0.107)       0.011        0.011
268  22.33     0.07      0.014       (  0.107)       0.007        0.007
269  22.42     0.07      0.014       (  0.107)       0.007        0.007
270  22.50     0.07      0.014       (  0.106)       0.007        0.007
271  22.58     0.07      0.014       (  0.106)       0.007        0.007
272  22.67     0.07      0.014       (  0.106)       0.007        0.007
273  22.75     0.07      0.014       (  0.105)       0.007        0.007
274  22.83     0.07      0.014       (  0.105)       0.007        0.007
275  22.92     0.07      0.014       (  0.105)       0.007        0.007
276  23.00     0.07      0.014       (  0.105)       0.007        0.007
277  23.08     0.07      0.014       (  0.104)       0.007        0.007
278  23.17     0.07      0.014       (  0.104)       0.007        0.007
279  23.25     0.07      0.014       (  0.104)       0.007        0.007
280  23.33     0.07      0.014       (  0.104)       0.007        0.007
281  23.42     0.07      0.014       (  0.103)       0.007        0.007
282  23.50     0.07      0.014       (  0.103)       0.007        0.007
283  23.58     0.07      0.014       (  0.103)       0.007        0.007
284  23.67     0.07      0.014       (  0.103)       0.007        0.007
285  23.75     0.07      0.014       (  0.103)       0.007        0.007
286  23.83     0.07      0.014       (  0.103)       0.007        0.007
287  23.92     0.07      0.014       (  0.103)       0.007        0.007
288  24.00     0.07      0.014       (  0.103)       0.007        0.007
                (Loss Rate Not Used)
    Sum =     100.0                                    Sum =    10.8
      Flood volume = Effective rainfall      0.90(In)
       times area      19.1(Ac.)/[(In)/(Ft.)] =       1.4(Ac.Ft)
      Total soil loss =      0.90(In)
      Total soil loss =     1.434(Ac.Ft)
      Total rainfall =      1.80(In)
      Flood volume =       62462.7 Cubic Feet
      Total soil loss =       62462.7 Cubic Feet
      ---------------------------------------------------------------------
       Peak flow rate of this hydrograph =      2.316(CFS)
      ---------------------------------------------------------------------
      +++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                          24 - H O U R    S T O R M
                     R u n o f f      H y d r o g r a p h
      ---------------------------------------------------------------------
                  Hydrograph in   5   Minute intervals ((CFS))

      ---------------------------------------------------------------------
 Time(h+m) Volume Ac.Ft   Q(CFS)  0        2.5       5.0       7.5      10.0
 ---------------------------------------------------------------------------
   0+ 5       0.0001      0.01  Q         |         |         |         |
   0+10       0.0005      0.06  Q         |         |         |         |
   0+15       0.0011      0.09  Q         |         |         |         |
   0+20       0.0019      0.11  Q         |         |         |         |
   0+25       0.0029      0.15  Q         |         |         |         |
   0+30       0.0041      0.17  Q         |         |         |         |
   0+35       0.0053      0.18  Q         |         |         |         |
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0+40	0.0066	0.19	Q				
0+45	0.0080	0.19	Q				
0+50	0.0094	0.20	Q				
0+55	0.0110	0.23	Q				
1+ 0	0.0127	0.25	VQ				
1+ 5	0.0144	0.25	VQ				
1+10	0.0161	0.24	Q				
1+15	0.0176	0.22	Q				
1+20	0.0191	0.22	Q				
1+25	0.0206	0.21	Q				
1+30	0.0220	0.21	Q				
1+35	0.0235	0.21	Q				
1+40	0.0249	0.21	Q				
1+45	0.0264	0.21	Q				
1+50	0.0279	0.22	Q				
1+55	0.0295	0.24	Q				
2+ 0	0.0313	0.26	VQ				
2+ 5	0.0331	0.26	VQ				
2+10	0.0349	0.27	VQ				
2+15	0.0368	0.27	|Q				
2+20	0.0387	0.27	|Q				
2+25	0.0405	0.27	|Q				
2+30	0.0424	0.27	|Q				
2+35	0.0444	0.28	|Q				
2+40	0.0465	0.30	|Q				
2+45	0.0487	0.32	|Q				
2+50	0.0510	0.33	|Q				
2+55	0.0533	0.34	|Q				
3+ 0	0.0556	0.34	|Q				
3+ 5	0.0580	0.34	|Q				
3+10	0.0604	0.34	|Q				
3+15	0.0627	0.34	|Q				
3+20	0.0651	0.34	|Q				
3+25	0.0675	0.35	|Q				
3+30	0.0699	0.35	|Q				
3+35	0.0722	0.35	|QV				
3+40	0.0746	0.35	|QV				
3+45	0.0770	0.35	|QV				
3+50	0.0795	0.35	|QV				
3+55	0.0820	0.38	|QV				
4+ 0	0.0848	0.39	|QV				
4+ 5	0.0875	0.40	|QV				
4+10	0.0903	0.41	|QV				
4+15	0.0931	0.41	|QV				
4+20	0.0960	0.42	|QV				
4+25	0.0990	0.44	|QV				
4+30	0.1022	0.46	|QV				
4+35	0.1054	0.47	|QV				
4+40	0.1087	0.47	|Q V				
4+45	0.1120	0.48	|Q V				
4+50	0.1153	0.49	|Q V				
4+55	0.1188	0.51	| QV				
5+ 0	0.1225	0.53	| QV				
5+ 5	0.1261	0.53	| QV				
5+10	0.1295	0.49	|Q V				
5+15	0.1326	0.45	|Q V				
5+20	0.1356	0.45	|Q V				
5+25	0.1388	0.46	|Q V				
5+30	0.1421	0.48	|Q V				
5+35	0.1455	0.49	|Q V				
5+40	0.1490	0.51	| Q V				
5+45	0.1526	0.53	| Q V				
5+50	0.1563	0.54	| Q V				
5+55	0.1601	0.54	| Q V				
6+ 0	0.1638	0.55	| Q V				
6+ 5	0.1676	0.55	| Q V				
6+10	0.1716	0.58	| Q V				
6+15	0.1757	0.60	| Q V				
6+20	0.1799	0.61	| Q V				
6+25	0.1841	0.61	| Q V				
6+30	0.1884	0.62	| Q V				

6+35	0.1927	0.62	Q V				
6+40	0.1972	0.65	Q V				
6+45	0.2018	0.67	Q V				
6+50	0.2064	0.68	Q V				
6+55	0.2111	0.68	Q V				
7+ 0	0.2158	0.69	Q V				
7+ 5	0.2206	0.69	Q V				
7+10	0.2253	0.69	Q V				
7+15	0.2301	0.69	Q V				
7+20	0.2349	0.70	Q V				
7+25	0.2399	0.72	Q V				
7+30	0.2450	0.74	Q V				
7+35	0.2501	0.75	Q V				
7+40	0.2555	0.78	Q V				
7+45	0.2610	0.80	Q V				
7+50	0.2667	0.82	Q V				
7+55	0.2725	0.85	Q V				
8+ 0	0.2785	0.87	Q V				
8+ 5	0.2846	0.89	Q V				
8+10	0.2911	0.94	Q V				
8+15	0.2979	0.98	Q V				
8+20	0.3048	1.00	Q V				
8+25	0.3118	1.01	Q V				
8+30	0.3188	1.02	Q V				
8+35	0.3259	1.03	Q V				
8+40	0.3332	1.06	Q V				
8+45	0.3407	1.08	Q V				
8+50	0.3482	1.10	Q V				
8+55	0.3560	1.13	Q V				
9+ 0	0.3639	1.15	Q V				
9+ 5	0.3719	1.17	Q V				
9+10	0.3804	1.22	Q V				
9+15	0.3891	1.26	Q V				
9+20	0.3979	1.29	Q V				
9+25	0.4070	1.32	Q V				
9+30	0.4163	1.35	Q V				
9+35	0.4257	1.36	Q V				
9+40	0.4353	1.40	Q V				
9+45	0.4451	1.42	Q V				
9+50	0.4550	1.44	Q V				
9+55	0.4651	1.47	Q V				
10+ 0	0.4754	1.49	Q V				
10+ 5	0.4855	1.46	Q V				
10+10	0.4945	1.31	Q V				
10+15	0.5027	1.19	Q V				
10+20	0.5105	1.14	Q V				
10+25	0.5181	1.11	Q V				
10+30	0.5257	1.09	Q V				
10+35	0.5333	1.11	Q V				
10+40	0.5416	1.21	Q V				
10+45	0.5505	1.30	Q V				
10+50	0.5597	1.33	Q V				
10+55	0.5689	1.34	Q V				
11+ 0	0.5783	1.36	Q V				
11+ 5	0.5876	1.36	Q V				
11+10	0.5968	1.34	Q V				
11+15	0.6060	1.33	Q V				
11+20	0.6151	1.32	Q V				
11+25	0.6242	1.32	Q V				
11+30	0.6333	1.32	Q V				
11+35	0.6423	1.31	Q V				
11+40	0.6511	1.27	Q V				
11+45	0.6595	1.23	Q V				
11+50	0.6679	1.22	Q V				
11+55	0.6764	1.23	Q V				
12+ 0	0.6849	1.24	Q V				
12+ 5	0.6938	1.28	Q V				
12+10	0.7037	1.45	Q V				
12+15	0.7146	1.58	Q V				
12+20	0.7258	1.63	Q V				
12+25	0.7375	1.69	Q V				

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12+30       0.7494      1.73  |     Q    |          V          |          |
12+35       0.7615      1.76  |      Q   |          |V         |          |
12+40       0.7740      1.82  |      Q   |          |V         |          |
12+45       0.7869      1.87  |      Q   |          |V         |          |
12+50       0.8000      1.90  |      Q   |          | V        |          |
12+55       0.8133      1.94  |      Q   |          | V        |          |
13+ 0       0.8268      1.97  |      Q   |          |  V       |          |
13+ 5       0.8407      2.01  |       Q  |          |  V       |          |
13+10       0.8554      2.13  |       Q  |          |  V       |          |
13+15       0.8707      2.23  |       Q  |          |   V      |          |
13+20       0.8864      2.27  |        Q |          |   V      |          |
13+25       0.9022      2.30  |        Q |          |    V     |          |
13+30       0.9182      2.32  |        Q |          |    V     |          |
13+35       0.9338      2.27  |        Q |          |     V    |          |
13+40       0.9478      2.03  |       Q  |          |     V    |          |
13+45       0.9603      1.83  |      Q   |          |     V    |          |
13+50       0.9724      1.75  |     Q    |          |      V   |          |
13+55       0.9841      1.71  |     Q    |          |      V   |          |
14+ 0       0.9957      1.68  |     Q    |          |      V   |          |
14+ 5       1.0073      1.68  |     Q    |          |       V  |          |
14+10       1.0193      1.76  |      Q   |          |       V  |          |
14+15       1.0319      1.82  |      Q   |          |       V  |          |
14+20       1.0445      1.83  |      Q   |          |        V |          |
14+25       1.0570      1.82  |      Q   |          |        V |          |
14+30       1.0694      1.81  |      Q   |          |        V |          |
14+35       1.0818      1.80  |      Q   |          |         V          |
14+40       1.0942      1.80  |      Q   |          |         V          |
14+45       1.1066      1.80  |      Q   |          |         V          |
14+50       1.1190      1.80  |      Q   |          |         |V         |
14+55       1.1312      1.77  |      Q   |          |         |V         |
15+ 0       1.1433      1.76  |      Q   |          |         |V         |
15+ 5       1.1553      1.74  |     Q    |          |         | V        |
15+10       1.1672      1.72  |     Q    |          |         | V        |
15+15       1.1789      1.70  |     Q    |          |         | V        |
15+20       1.1904      1.68  |     Q    |          |         |  V       |
15+25       1.2018      1.65  |     Q    |          |         |  V       |
15+30       1.2130      1.63  |     Q    |          |         |  V       |
15+35       1.2240      1.60  |     Q    |          |         |   V      |
15+40       1.2344      1.50  |    Q     |          |         |   V      |
15+45       1.2441      1.42  |    Q     |          |         |   V      |
15+50       1.2537      1.39  |    Q     |          |         |   V      |
15+55       1.2631      1.37  |    Q     |          |         |    V     |
16+ 0       1.2724      1.35  |    Q     |          |         |    V     |
16+ 5       1.2811      1.26  |    Q     |          |         |    V     |
16+10       1.2874      0.91  |   Q      |          |         |    V     |
16+15       1.2917      0.63  | Q        |          |         |     V    |
16+20       1.2952      0.51  | Q        |          |         |     V    |
16+25       1.2983      0.44  |Q         |          |         |     V    |
16+30       1.3010      0.40  |Q         |          |         |     V    |
16+35       1.3035      0.36  |Q         |          |         |     V    |
16+40       1.3056      0.31  |Q         |          |         |     V    |
16+45       1.3075      0.28  |Q         |          |         |     V    |
16+50       1.3093      0.25  |Q         |          |         |     V    |
16+55       1.3109      0.24  Q          |          |         |     V    |
17+ 0       1.3125      0.23  Q          |          |         |     V    |
17+ 5       1.3141      0.23  Q          |          |         |     V    |
17+10       1.3160      0.27  |Q         |          |         |     V    |
17+15       1.3181      0.31  |Q         |          |         |     V    |
17+20       1.3203      0.32  |Q         |          |         |     V    |
17+25       1.3225      0.33  |Q         |          |         |     V    |
17+30       1.3248      0.33  |Q         |          |         |     V    |
17+35       1.3271      0.34  |Q         |          |         |      V   |
17+40       1.3294      0.34  |Q         |          |         |      V   |
17+45       1.3318      0.34  |Q         |          |         |      V   |
17+50       1.3341      0.34  |Q         |          |         |      V   |
17+55       1.3363      0.32  |Q         |          |         |      V   |
18+ 0       1.3383      0.30  |Q         |          |         |      V   |
18+ 5       1.3404      0.29  |Q         |          |         |      V   |
18+10       1.3423      0.29  |Q         |          |         |      V   |
18+15       1.3443      0.29  |Q         |          |         |      V   |
18+20       1.3463      0.28  |Q         |          |         |      V   |
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18+25	1.3482	0.28	|Q	|	|	|	V |
18+30	1.3501	0.28	|Q	|	|	|	V |
18+35	1.3520	0.27	|Q	|	|	|	V |
18+40	1.3537	0.25	|Q	|	|	|	V |
18+45	1.3553	0.23	Q	|	|	|	V |
18+50	1.3568	0.22	Q	|	|	|	V |
18+55	1.3582	0.19	Q	|	|	|	V |
19+ 0	1.3593	0.17	Q	|	|	|	V |
19+ 5	1.3605	0.16	Q	|	|	|	V |
19+10	1.3617	0.18	Q	|	|	|	V |
19+15	1.3631	0.20	Q	|	|	|	V |
19+20	1.3645	0.21	Q	|	|	|	V |
19+25	1.3661	0.23	Q	|	|	|	V |
19+30	1.3678	0.25	|Q	|	|	|	V |
19+35	1.3696	0.25	|Q	|	|	|	V |
19+40	1.3712	0.24	Q	|	|	|	V |
19+45	1.3727	0.22	Q	|	|	|	V |
19+50	1.3742	0.21	Q	|	|	|	V |
19+55	1.3754	0.18	Q	|	|	|	V |
20+ 0	1.3766	0.16	Q	|	|	|	V |
20+ 5	1.3777	0.16	Q	|	|	|	V |
20+10	1.3789	0.18	Q	|	|	|	V |
20+15	1.3803	0.20	Q	|	|	|	V |
20+20	1.3817	0.20	Q	|	|	|	V |
20+25	1.3831	0.20	Q	|	|	|	V |
20+30	1.3845	0.20	Q	|	|	|	V |
20+35	1.3859	0.21	Q	|	|	|	V |
20+40	1.3873	0.21	Q	|	|	|	V |
20+45	1.3887	0.21	Q	|	|	|	V |
20+50	1.3901	0.20	Q	|	|	|	V |
20+55	1.3913	0.18	Q	|	|	|	V |
21+ 0	1.3924	0.16	Q	|	|	|	V |
21+ 5	1.3935	0.16	Q	|	|	|	V |
21+10	1.3947	0.18	Q	|	|	|	V |
21+15	1.3961	0.19	Q	|	|	|	V |
21+20	1.3974	0.19	Q	|	|	|	V |
21+25	1.3986	0.17	Q	|	|	|	V|
21+30	1.3997	0.16	Q	|	|	|	V|
21+35	1.4008	0.16	Q	|	|	|	V|
21+40	1.4020	0.18	Q	|	|	|	V|
21+45	1.4033	0.19	Q	|	|	|	V|
21+50	1.4046	0.19	Q	|	|	|	V|
21+55	1.4058	0.17	Q	|	|	|	V|
22+ 0	1.4069	0.16	Q	|	|	|	V|
22+ 5	1.4079	0.16	Q	|	|	|	V|
22+10	1.4091	0.18	Q	|	|	|	V|
22+15	1.4104	0.19	Q	|	|	|	V|
22+20	1.4118	0.19	Q	|	|	|	V|
22+25	1.4130	0.17	Q	|	|	|	V|
22+30	1.4140	0.16	Q	|	|	|	V|
22+35	1.4151	0.15	Q	|	|	|	V|
22+40	1.4161	0.15	Q	|	|	|	V|
22+45	1.4171	0.14	Q	|	|	|	V|
22+50	1.4180	0.14	Q	|	|	|	V|
22+55	1.4190	0.14	Q	|	|	|	V|
23+ 0	1.4200	0.14	Q	|	|	|	V|
23+ 5	1.4210	0.14	Q	|	|	|	V|
23+10	1.4219	0.14	Q	|	|	|	V|
23+15	1.4229	0.14	Q	|	|	|	V|
23+20	1.4238	0.14	Q	|	|	|	V|
23+25	1.4248	0.14	Q	|	|	|	V|
23+30	1.4258	0.14	Q	|	|	|	V|
23+35	1.4267	0.14	Q	|	|	|	V|
23+40	1.4277	0.14	Q	|	|	|	V|
23+45	1.4286	0.14	Q	|	|	|	V|
23+50	1.4296	0.14	Q	|	|	|	V|
23+55	1.4305	0.14	Q	|	|	|	V|
24+ 0	1.4315	0.14	Q	|	|	|	V|
24+ 5	1.4324	0.13	Q	|	|	|	V|
24+10	1.4329	0.08	Q	|	|	|	V|
24+15	1.4332	0.04	Q	|	|	|	V|

24+20	1.4334	0.03	Q	|	|	|	V|
24+25	1.4336	0.02	Q	|	|	|	V|
24+30	1.4337	0.02	Q	|	|	|	V|
24+35	1.4338	0.01	Q	|	|	|	V|
24+40	1.4338	0.01	Q	|	|	|	V|
24+45	1.4339	0.01	Q	|	|	|	V|
24+50	1.4339	0.00	Q	|	|	|	V|
24+55	1.4339	0.00	Q	|	|	|	V|
25+ 0	1.4339	0.00	Q	|	|	|	V|
25+ 5	1.4339	0.00	Q	|	|	|	V|

```
       U n i t   H y d r o g r a p h   A n a l y s i s

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              Study date  08/14/25 File: PROB245.out

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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978


Program License Serial Number 5006

------------------------------------------------------------------------
 English (in-lb) Input Units Used
 English Rainfall Data (Inches) Input Values Used

 English Units used in output format



------------------------------------------------------------------------
------------------------------------------------------------------------
Drainage Area =      19.12(Ac.)  =      0.030 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment =      19.12(Ac.)  =      0.030 Sq. Mi.
Length along longest watercourse =    2644.00(Ft.)
Length along longest watercourse measured to centroid =    1322.00(Ft.)
Length along longest watercourse =      0.501 Mi.
Length along longest watercourse measured to centroid =      0.250 Mi.
Difference in elevation =      40.00(Ft.)
Slope along watercourse =     79.8790 Ft./Mi.
Average Manning's 'N' = 0.030
Lag time =    0.142 Hr.
Lag time =     8.54 Min.
25% of lag time =     2.13 Min.
40% of lag time =     3.42 Min.
Unit time =     5.00 Min.
Duration of storm = 24 Hour(s)
User Entered Base Flow =     0.00(CFS)

2 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
       19.12           1.80                 34.42

100 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
       19.12           5.00                 95.60

STORM EVENT (YEAR) =    5.00
Area Averaged 2-Year Rainfall =    1.800(In)
Area Averaged 100-Year Rainfall =    5.000(In)

Point rain (area averaged) =    2.550(In)
Areal adjustment factor =  100.00 %
Adjusted average point rain =    2.549(In)

Sub-Area Data:
Area(Ac.)         Runoff Index   Impervious %
    19.120           69.00         0.500
 Total Area Entered =     19.12(Ac.)


RI    RI   Infil. Rate Impervious   Adj. Infil. Rate  Area%     F
AMC2 AMC-2     (In/Hr)    (Dec.%)     (In/Hr)      (Dec.)    (In/Hr)
```

```
69.0  69.0      0.373     0.500        0.205       1.000      0.205
                                                  Sum (F) =   0.205
Area averaged mean soil loss (F) (In/Hr) =  0.205
Minimum soil loss rate ((In/Hr)) =  0.103
(for 24 hour storm duration)
Soil low loss rate (decimal) =   0.500
```

U n i t H y d r o g r a p h
VALLEY S-Curve

Unit Hydrograph Data

Unit time period (hrs)		Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	58.563	7.892	1.521
2	0.167	117.126	32.937	6.347
3	0.250	175.689	27.037	5.210
4	0.333	234.252	10.574	2.038
5	0.417	292.815	6.182	1.191
6	0.500	351.378	4.198	0.809
7	0.583	409.941	3.019	0.582
8	0.667	468.504	2.110	0.407
9	0.750	527.066	1.734	0.334
10	0.833	585.629	1.313	0.253
11	0.917	644.192	1.005	0.194
12	1.000	702.755	0.732	0.141
13	1.083	761.318	0.587	0.113
14	1.167	819.881	0.680	0.131
		Sum = 100.000	Sum=	19.269

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr) Max	Low	Effective (In/Hr)
1	0.08	0.07	0.020	(0.363)	0.010	0.010
2	0.17	0.07	0.020	(0.362)	0.010	0.010
3	0.25	0.07	0.020	(0.361)	0.010	0.010
4	0.33	0.10	0.031	(0.359)	0.015	0.015
5	0.42	0.10	0.031	(0.358)	0.015	0.015
6	0.50	0.10	0.031	(0.356)	0.015	0.015
7	0.58	0.10	0.031	(0.355)	0.015	0.015
8	0.67	0.10	0.031	(0.354)	0.015	0.015
9	0.75	0.10	0.031	(0.352)	0.015	0.015
10	0.83	0.13	0.041	(0.351)	0.020	0.020
11	0.92	0.13	0.041	(0.350)	0.020	0.020
12	1.00	0.13	0.041	(0.348)	0.020	0.020
13	1.08	0.10	0.031	(0.347)	0.015	0.015
14	1.17	0.10	0.031	(0.345)	0.015	0.015
15	1.25	0.10	0.031	(0.344)	0.015	0.015
16	1.33	0.10	0.031	(0.343)	0.015	0.015
17	1.42	0.10	0.031	(0.341)	0.015	0.015
18	1.50	0.10	0.031	(0.340)	0.015	0.015
19	1.58	0.10	0.031	(0.339)	0.015	0.015
20	1.67	0.10	0.031	(0.337)	0.015	0.015
21	1.75	0.10	0.031	(0.336)	0.015	0.015
22	1.83	0.13	0.041	(0.335)	0.020	0.020
23	1.92	0.13	0.041	(0.333)	0.020	0.020
24	2.00	0.13	0.041	(0.332)	0.020	0.020
25	2.08	0.13	0.041	(0.330)	0.020	0.020
26	2.17	0.13	0.041	(0.329)	0.020	0.020
27	2.25	0.13	0.041	(0.328)	0.020	0.020
28	2.33	0.13	0.041	(0.326)	0.020	0.020
29	2.42	0.13	0.041	(0.325)	0.020	0.020
30	2.50	0.13	0.041	(0.324)	0.020	0.020
31	2.58	0.17	0.051	(0.323)	0.025	0.025
32	2.67	0.17	0.051	(0.321)	0.025	0.025

33	2.75	0.17	0.051	(0.320)	0.025	0.025
34	2.83	0.17	0.051	(0.319)	0.025	0.025
35	2.92	0.17	0.051	(0.317)	0.025	0.025
36	3.00	0.17	0.051	(0.316)	0.025	0.025
37	3.08	0.17	0.051	(0.315)	0.025	0.025
38	3.17	0.17	0.051	(0.313)	0.025	0.025
39	3.25	0.17	0.051	(0.312)	0.025	0.025
40	3.33	0.17	0.051	(0.311)	0.025	0.025
41	3.42	0.17	0.051	(0.309)	0.025	0.025
42	3.50	0.17	0.051	(0.308)	0.025	0.025
43	3.58	0.17	0.051	(0.307)	0.025	0.025
44	3.67	0.17	0.051	(0.306)	0.025	0.025
45	3.75	0.17	0.051	(0.304)	0.025	0.025
46	3.83	0.20	0.061	(0.303)	0.031	0.031
47	3.92	0.20	0.061	(0.302)	0.031	0.031
48	4.00	0.20	0.061	(0.300)	0.031	0.031
49	4.08	0.20	0.061	(0.299)	0.031	0.031
50	4.17	0.20	0.061	(0.298)	0.031	0.031
51	4.25	0.20	0.061	(0.297)	0.031	0.031
52	4.33	0.23	0.071	(0.295)	0.036	0.036
53	4.42	0.23	0.071	(0.294)	0.036	0.036
54	4.50	0.23	0.071	(0.293)	0.036	0.036
55	4.58	0.23	0.071	(0.292)	0.036	0.036
56	4.67	0.23	0.071	(0.290)	0.036	0.036
57	4.75	0.23	0.071	(0.289)	0.036	0.036
58	4.83	0.27	0.082	(0.288)	0.041	0.041
59	4.92	0.27	0.082	(0.287)	0.041	0.041
60	5.00	0.27	0.082	(0.285)	0.041	0.041
61	5.08	0.20	0.061	(0.284)	0.031	0.031
62	5.17	0.20	0.061	(0.283)	0.031	0.031
63	5.25	0.20	0.061	(0.282)	0.031	0.031
64	5.33	0.23	0.071	(0.280)	0.036	0.036
65	5.42	0.23	0.071	(0.279)	0.036	0.036
66	5.50	0.23	0.071	(0.278)	0.036	0.036
67	5.58	0.27	0.082	(0.277)	0.041	0.041
68	5.67	0.27	0.082	(0.275)	0.041	0.041
69	5.75	0.27	0.082	(0.274)	0.041	0.041
70	5.83	0.27	0.082	(0.273)	0.041	0.041
71	5.92	0.27	0.082	(0.272)	0.041	0.041
72	6.00	0.27	0.082	(0.271)	0.041	0.041
73	6.08	0.30	0.092	(0.269)	0.046	0.046
74	6.17	0.30	0.092	(0.268)	0.046	0.046
75	6.25	0.30	0.092	(0.267)	0.046	0.046
76	6.33	0.30	0.092	(0.266)	0.046	0.046
77	6.42	0.30	0.092	(0.265)	0.046	0.046
78	6.50	0.30	0.092	(0.263)	0.046	0.046
79	6.58	0.33	0.102	(0.262)	0.051	0.051
80	6.67	0.33	0.102	(0.261)	0.051	0.051
81	6.75	0.33	0.102	(0.260)	0.051	0.051
82	6.83	0.33	0.102	(0.259)	0.051	0.051
83	6.92	0.33	0.102	(0.258)	0.051	0.051
84	7.00	0.33	0.102	(0.256)	0.051	0.051
85	7.08	0.33	0.102	(0.255)	0.051	0.051
86	7.17	0.33	0.102	(0.254)	0.051	0.051
87	7.25	0.33	0.102	(0.253)	0.051	0.051
88	7.33	0.37	0.112	(0.252)	0.056	0.056
89	7.42	0.37	0.112	(0.251)	0.056	0.056
90	7.50	0.37	0.112	(0.249)	0.056	0.056
91	7.58	0.40	0.122	(0.248)	0.061	0.061
92	7.67	0.40	0.122	(0.247)	0.061	0.061
93	7.75	0.40	0.122	(0.246)	0.061	0.061
94	7.83	0.43	0.133	(0.245)	0.066	0.066
95	7.92	0.43	0.133	(0.244)	0.066	0.066
96	8.00	0.43	0.133	(0.243)	0.066	0.066
97	8.08	0.50	0.153	(0.242)	0.076	0.076
98	8.17	0.50	0.153	(0.240)	0.076	0.076
99	8.25	0.50	0.153	(0.239)	0.076	0.076
100	8.33	0.50	0.153	(0.238)	0.076	0.076
101	8.42	0.50	0.153	(0.237)	0.076	0.076
102	8.50	0.50	0.153	(0.236)	0.076	0.076
103	8.58	0.53	0.163	(0.235)	0.082	0.082

104	8.67	0.53	0.163	(0.234)	0.082	0.082
105	8.75	0.53	0.163	(0.233)	0.082	0.082
106	8.83	0.57	0.173	(0.232)	0.087	0.087
107	8.92	0.57	0.173	(0.230)	0.087	0.087
108	9.00	0.57	0.173	(0.229)	0.087	0.087
109	9.08	0.63	0.194	(0.228)	0.097	0.097
110	9.17	0.63	0.194	(0.227)	0.097	0.097
111	9.25	0.63	0.194	(0.226)	0.097	0.097
112	9.33	0.67	0.204	(0.225)	0.102	0.102
113	9.42	0.67	0.204	(0.224)	0.102	0.102
114	9.50	0.67	0.204	(0.223)	0.102	0.102
115	9.58	0.70	0.214	(0.222)	0.107	0.107
116	9.67	0.70	0.214	(0.221)	0.107	0.107
117	9.75	0.70	0.214	(0.220)	0.107	0.107
118	9.83	0.73	0.224	(0.219)	0.112	0.112
119	9.92	0.73	0.224	(0.218)	0.112	0.112
120	10.00	0.73	0.224	(0.217)	0.112	0.112
121	10.08	0.50	0.153	(0.215)	0.076	0.076
122	10.17	0.50	0.153	(0.214)	0.076	0.076
123	10.25	0.50	0.153	(0.213)	0.076	0.076
124	10.33	0.50	0.153	(0.212)	0.076	0.076
125	10.42	0.50	0.153	(0.211)	0.076	0.076
126	10.50	0.50	0.153	(0.210)	0.076	0.076
127	10.58	0.67	0.204	(0.209)	0.102	0.102
128	10.67	0.67	0.204	(0.208)	0.102	0.102
129	10.75	0.67	0.204	(0.207)	0.102	0.102
130	10.83	0.67	0.204	(0.206)	0.102	0.102
131	10.92	0.67	0.204	(0.205)	0.102	0.102
132	11.00	0.67	0.204	(0.204)	0.102	0.102
133	11.08	0.63	0.194	(0.203)	0.097	0.097
134	11.17	0.63	0.194	(0.202)	0.097	0.097
135	11.25	0.63	0.194	(0.201)	0.097	0.097
136	11.33	0.63	0.194	(0.200)	0.097	0.097
137	11.42	0.63	0.194	(0.199)	0.097	0.097
138	11.50	0.63	0.194	(0.198)	0.097	0.097
139	11.58	0.57	0.173	(0.197)	0.087	0.087
140	11.67	0.57	0.173	(0.196)	0.087	0.087
141	11.75	0.57	0.173	(0.195)	0.087	0.087
142	11.83	0.60	0.184	(0.194)	0.092	0.092
143	11.92	0.60	0.184	(0.193)	0.092	0.092
144	12.00	0.60	0.184	(0.192)	0.092	0.092
145	12.08	0.83	0.255	(0.191)	0.127	0.127
146	12.17	0.83	0.255	(0.190)	0.127	0.127
147	12.25	0.83	0.255	(0.189)	0.127	0.127
148	12.33	0.87	0.265	(0.189)	0.133	0.133
149	12.42	0.87	0.265	(0.188)	0.133	0.133
150	12.50	0.87	0.265	(0.187)	0.133	0.133
151	12.58	0.93	0.286	(0.186)	0.143	0.143
152	12.67	0.93	0.286	(0.185)	0.143	0.143
153	12.75	0.93	0.286	(0.184)	0.143	0.143
154	12.83	0.97	0.296	(0.183)	0.148	0.148
155	12.92	0.97	0.296	(0.182)	0.148	0.148
156	13.00	0.97	0.296	(0.181)	0.148	0.148
157	13.08	1.13	0.347	(0.180)	0.173	0.173
158	13.17	1.13	0.347	(0.179)	0.173	0.173
159	13.25	1.13	0.347	(0.178)	0.173	0.173
160	13.33	1.13	0.347	(0.177)	0.173	0.173
161	13.42	1.13	0.347	(0.177)	0.173	0.173
162	13.50	1.13	0.347	(0.176)	0.173	0.173
163	13.58	0.77	0.235	(0.175)	0.117	0.117
164	13.67	0.77	0.235	(0.174)	0.117	0.117
165	13.75	0.77	0.235	(0.173)	0.117	0.117
166	13.83	0.77	0.235	(0.172)	0.117	0.117
167	13.92	0.77	0.235	(0.171)	0.117	0.117
168	14.00	0.77	0.235	(0.170)	0.117	0.117
169	14.08	0.90	0.275	(0.169)	0.138	0.138
170	14.17	0.90	0.275	(0.169)	0.138	0.138
171	14.25	0.90	0.275	(0.168)	0.138	0.138
172	14.33	0.87	0.265	(0.167)	0.133	0.133
173	14.42	0.87	0.265	(0.166)	0.133	0.133
174	14.50	0.87	0.265	(0.165)	0.133	0.133

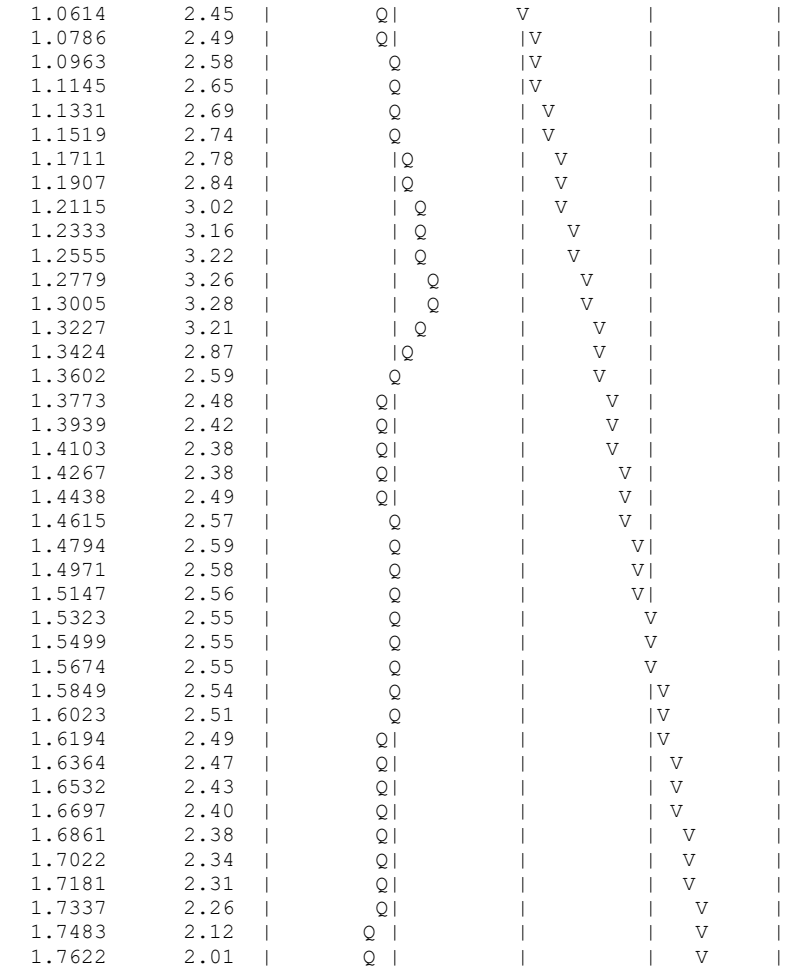
175	14.58	0.87	0.265	(0.164)	0.133	0.133
176	14.67	0.87	0.265	(0.163)	0.133	0.133
177	14.75	0.87	0.265	(0.163)	0.133	0.133
178	14.83	0.83	0.255	(0.162)	0.127	0.127
179	14.92	0.83	0.255	(0.161)	0.127	0.127
180	15.00	0.83	0.255	(0.160)	0.127	0.127
181	15.08	0.80	0.245	(0.159)	0.122	0.122
182	15.17	0.80	0.245	(0.159)	0.122	0.122
183	15.25	0.80	0.245	(0.158)	0.122	0.122
184	15.33	0.77	0.235	(0.157)	0.117	0.117
185	15.42	0.77	0.235	(0.156)	0.117	0.117
186	15.50	0.77	0.235	(0.155)	0.117	0.117
187	15.58	0.63	0.194	(0.154)	0.097	0.097
188	15.67	0.63	0.194	(0.154)	0.097	0.097
189	15.75	0.63	0.194	(0.153)	0.097	0.097
190	15.83	0.63	0.194	(0.152)	0.097	0.097
191	15.92	0.63	0.194	(0.151)	0.097	0.097
192	16.00	0.63	0.194	(0.151)	0.097	0.097
193	16.08	0.13	0.041	(0.150)	0.020	0.020
194	16.17	0.13	0.041	(0.149)	0.020	0.020
195	16.25	0.13	0.041	(0.148)	0.020	0.020
196	16.33	0.13	0.041	(0.148)	0.020	0.020
197	16.42	0.13	0.041	(0.147)	0.020	0.020
198	16.50	0.13	0.041	(0.146)	0.020	0.020
199	16.58	0.10	0.031	(0.145)	0.015	0.015
200	16.67	0.10	0.031	(0.145)	0.015	0.015
201	16.75	0.10	0.031	(0.144)	0.015	0.015
202	16.83	0.10	0.031	(0.143)	0.015	0.015
203	16.92	0.10	0.031	(0.142)	0.015	0.015
204	17.00	0.10	0.031	(0.142)	0.015	0.015
205	17.08	0.17	0.051	(0.141)	0.025	0.025
206	17.17	0.17	0.051	(0.140)	0.025	0.025
207	17.25	0.17	0.051	(0.140)	0.025	0.025
208	17.33	0.17	0.051	(0.139)	0.025	0.025
209	17.42	0.17	0.051	(0.138)	0.025	0.025
210	17.50	0.17	0.051	(0.137)	0.025	0.025
211	17.58	0.17	0.051	(0.137)	0.025	0.025
212	17.67	0.17	0.051	(0.136)	0.025	0.025
213	17.75	0.17	0.051	(0.135)	0.025	0.025
214	17.83	0.13	0.041	(0.135)	0.020	0.020
215	17.92	0.13	0.041	(0.134)	0.020	0.020
216	18.00	0.13	0.041	(0.133)	0.020	0.020
217	18.08	0.13	0.041	(0.133)	0.020	0.020
218	18.17	0.13	0.041	(0.132)	0.020	0.020
219	18.25	0.13	0.041	(0.131)	0.020	0.020
220	18.33	0.13	0.041	(0.131)	0.020	0.020
221	18.42	0.13	0.041	(0.130)	0.020	0.020
222	18.50	0.13	0.041	(0.130)	0.020	0.020
223	18.58	0.10	0.031	(0.129)	0.015	0.015
224	18.67	0.10	0.031	(0.128)	0.015	0.015
225	18.75	0.10	0.031	(0.128)	0.015	0.015
226	18.83	0.07	0.020	(0.127)	0.010	0.010
227	18.92	0.07	0.020	(0.126)	0.010	0.010
228	19.00	0.07	0.020	(0.126)	0.010	0.010
229	19.08	0.10	0.031	(0.125)	0.015	0.015
230	19.17	0.10	0.031	(0.125)	0.015	0.015
231	19.25	0.10	0.031	(0.124)	0.015	0.015
232	19.33	0.13	0.041	(0.123)	0.020	0.020
233	19.42	0.13	0.041	(0.123)	0.020	0.020
234	19.50	0.13	0.041	(0.122)	0.020	0.020
235	19.58	0.10	0.031	(0.122)	0.015	0.015
236	19.67	0.10	0.031	(0.121)	0.015	0.015
237	19.75	0.10	0.031	(0.121)	0.015	0.015
238	19.83	0.07	0.020	(0.120)	0.010	0.010
239	19.92	0.07	0.020	(0.120)	0.010	0.010
240	20.00	0.07	0.020	(0.119)	0.010	0.010
241	20.08	0.10	0.031	(0.119)	0.015	0.015
242	20.17	0.10	0.031	(0.118)	0.015	0.015
243	20.25	0.10	0.031	(0.118)	0.015	0.015
244	20.33	0.10	0.031	(0.117)	0.015	0.015
245	20.42	0.10	0.031	(0.116)	0.015	0.015

```
246  20.50     0.10      0.031       (  0.116)       0.015        0.015
247  20.58     0.10      0.031       (  0.116)       0.015        0.015
248  20.67     0.10      0.031       (  0.115)       0.015        0.015
249  20.75     0.10      0.031       (  0.115)       0.015        0.015
250  20.83     0.07      0.020       (  0.114)       0.010        0.010
251  20.92     0.07      0.020       (  0.114)       0.010        0.010
252  21.00     0.07      0.020       (  0.113)       0.010        0.010
253  21.08     0.10      0.031       (  0.113)       0.015        0.015
254  21.17     0.10      0.031       (  0.112)       0.015        0.015
255  21.25     0.10      0.031       (  0.112)       0.015        0.015
256  21.33     0.07      0.020       (  0.111)       0.010        0.010
257  21.42     0.07      0.020       (  0.111)       0.010        0.010
258  21.50     0.07      0.020       (  0.111)       0.010        0.010
259  21.58     0.10      0.031       (  0.110)       0.015        0.015
260  21.67     0.10      0.031       (  0.110)       0.015        0.015
261  21.75     0.10      0.031       (  0.109)       0.015        0.015
262  21.83     0.07      0.020       (  0.109)       0.010        0.010
263  21.92     0.07      0.020       (  0.109)       0.010        0.010
264  22.00     0.07      0.020       (  0.108)       0.010        0.010
265  22.08     0.10      0.031       (  0.108)       0.015        0.015
266  22.17     0.10      0.031       (  0.108)       0.015        0.015
267  22.25     0.10      0.031       (  0.107)       0.015        0.015
268  22.33     0.07      0.020       (  0.107)       0.010        0.010
269  22.42     0.07      0.020       (  0.107)       0.010        0.010
270  22.50     0.07      0.020       (  0.106)       0.010        0.010
271  22.58     0.07      0.020       (  0.106)       0.010        0.010
272  22.67     0.07      0.020       (  0.106)       0.010        0.010
273  22.75     0.07      0.020       (  0.105)       0.010        0.010
274  22.83     0.07      0.020       (  0.105)       0.010        0.010
275  22.92     0.07      0.020       (  0.105)       0.010        0.010
276  23.00     0.07      0.020       (  0.105)       0.010        0.010
277  23.08     0.07      0.020       (  0.104)       0.010        0.010
278  23.17     0.07      0.020       (  0.104)       0.010        0.010
279  23.25     0.07      0.020       (  0.104)       0.010        0.010
280  23.33     0.07      0.020       (  0.104)       0.010        0.010
281  23.42     0.07      0.020       (  0.103)       0.010        0.010
282  23.50     0.07      0.020       (  0.103)       0.010        0.010
283  23.58     0.07      0.020       (  0.103)       0.010        0.010
284  23.67     0.07      0.020       (  0.103)       0.010        0.010
285  23.75     0.07      0.020       (  0.103)       0.010        0.010
286  23.83     0.07      0.020       (  0.103)       0.010        0.010
287  23.92     0.07      0.020       (  0.103)       0.010        0.010
288  24.00     0.07      0.020       (  0.103)       0.010        0.010
                (Loss Rate Not Used)
    Sum =     100.0                                    Sum =    15.3
      Flood volume = Effective rainfall      1.27(In)
       times area      19.1(Ac.)/[(In)/(Ft.)] =       2.0(Ac.Ft)
      Total soil loss =      1.27(In)
      Total soil loss =     2.031(Ac.Ft)
      Total rainfall =      2.55(In)
      Flood volume =       88472.1 Cubic Feet
      Total soil loss =       88472.1 Cubic Feet
      ---------------------------------------------------------------------
       Peak flow rate of this hydrograph =      3.281(CFS)
      ---------------------------------------------------------------------
      +++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                          24 - H O U R    S T O R M
                     R u n o f f      H y d r o g r a p h
      ---------------------------------------------------------------------
                  Hydrograph in   5   Minute intervals ((CFS))

      ---------------------------------------------------------------------
 Time(h+m) Volume Ac.Ft   Q(CFS)  0        2.5       5.0       7.5      10.0
 ---------------------------------------------------------------------------
   0+ 5       0.0001      0.02  Q         |         |         |         |
   0+10       0.0007      0.08  Q         |         |         |         |
   0+15       0.0016      0.13  Q         |         |         |         |
   0+20       0.0027      0.16  Q         |         |         |         |
   0+25       0.0041      0.21  Q         |         |         |         |
   0+30       0.0058      0.24  Q         |         |         |         |
   0+35       0.0076      0.26  VQ        |         |         |         |
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0+40	0.0094	0.27	VQ				
0+45	0.0113	0.28	VQ				
0+50	0.0133	0.29	VQ				
0+55	0.0155	0.33	VQ				
1+ 0	0.0180	0.35	VQ				
1+ 5	0.0204	0.36	VQ				
1+10	0.0228	0.34	VQ				
1+15	0.0249	0.31	VQ				
1+20	0.0270	0.31	VQ				
1+25	0.0291	0.30	VQ				
1+30	0.0312	0.30	VQ				
1+35	0.0333	0.30	VQ				
1+40	0.0353	0.30	VQ				
1+45	0.0374	0.30	VQ				
1+50	0.0395	0.30	VQ				
1+55	0.0418	0.34	VQ				
2+ 0	0.0443	0.36	VQ				
2+ 5	0.0469	0.37	VQ				
2+10	0.0495	0.38	VQ				
2+15	0.0521	0.38	|Q				
2+20	0.0548	0.39	|Q				
2+25	0.0574	0.39	|Q				
2+30	0.0601	0.39	|Q				
2+35	0.0629	0.40	|Q				
2+40	0.0658	0.43	|Q				
2+45	0.0690	0.46	|Q				
2+50	0.0722	0.47	|Q				
2+55	0.0755	0.48	|Q				
3+ 0	0.0788	0.48	|Q				
3+ 5	0.0821	0.48	|Q				
3+10	0.0855	0.49	|Q				
3+15	0.0888	0.49	|Q				
3+20	0.0922	0.49	|Q				
3+25	0.0956	0.49	|Q				
3+30	0.0989	0.49	|Q				
3+35	0.1023	0.49	|QV				
3+40	0.1057	0.49	|QV				
3+45	0.1091	0.49	|QV				
3+50	0.1125	0.50	|QV				
3+55	0.1162	0.53	| Q				
4+ 0	0.1200	0.56	| Q				
4+ 5	0.1240	0.57	| Q				
4+10	0.1279	0.57	| Q				
4+15	0.1319	0.58	| Q				
4+20	0.1360	0.59	| Q				
4+25	0.1403	0.62	| Q				
4+30	0.1448	0.65	| Q				
4+35	0.1493	0.66	| Q				
4+40	0.1539	0.67	| QV				
4+45	0.1586	0.68	| QV				
4+50	0.1633	0.69	| QV				
4+55	0.1683	0.72	| QV				
5+ 0	0.1735	0.75	| Q				
5+ 5	0.1786	0.75	| QV				
5+10	0.1834	0.69	| QV				
5+15	0.1878	0.64	| QV				
5+20	0.1921	0.63	| QV				
5+25	0.1966	0.65	| QV				
5+30	0.2013	0.67	| QV				
5+35	0.2060	0.69	| Q V				
5+40	0.2110	0.72	| Q V				
5+45	0.2162	0.75	| QV				
5+50	0.2214	0.76	| QV				
5+55	0.2267	0.77	| QV				
6+ 0	0.2320	0.77	| QV				
6+ 5	0.2374	0.78	| QV				
6+10	0.2431	0.82	| QV				
6+15	0.2489	0.85	| QV				
6+20	0.2548	0.86	| Q V				
6+25	0.2608	0.87	| Q V				
6+30	0.2668	0.87	| Q V				

6+35	0.2729	0.88	Q V				
6+40	0.2792	0.92	Q V				
6+45	0.2858	0.95	Q V				
6+50	0.2924	0.96	Q V				
6+55	0.2990	0.97	Q V				
7+ 0	0.3057	0.97	Q V				
7+ 5	0.3124	0.97	Q V				
7+10	0.3192	0.98	Q V				
7+15	0.3259	0.98	Q V				
7+20	0.3327	0.99	Q V				
7+25	0.3397	1.02	Q V				
7+30	0.3470	1.05	Q V				
7+35	0.3543	1.07	Q V				
7+40	0.3619	1.11	Q V				
7+45	0.3698	1.14	Q V				
7+50	0.3777	1.16	Q V				
7+55	0.3860	1.20	Q V				
8+ 0	0.3945	1.23	Q V				
8+ 5	0.4031	1.26	Q V				
8+10	0.4123	1.34	Q V				
8+15	0.4219	1.39	Q V				
8+20	0.4317	1.42	Q V				
8+25	0.4416	1.44	Q V				
8+30	0.4516	1.45	Q V				
8+35	0.4617	1.46	Q V				
8+40	0.4720	1.50	Q V				
8+45	0.4825	1.53	Q V				
8+50	0.4932	1.55	Q V				
8+55	0.5042	1.59	Q V				
9+ 0	0.5154	1.63	Q V				
9+ 5	0.5268	1.66	Q V				
9+10	0.5387	1.73	Q V				
9+15	0.5511	1.79	Q V				
9+20	0.5636	1.82	Q V				
9+25	0.5765	1.87	Q V				
9+30	0.5896	1.91	Q V				
9+35	0.6029	1.93	Q V				
9+40	0.6166	1.98	Q V				
9+45	0.6304	2.01	Q V				
9+50	0.6444	2.04	Q V				
9+55	0.6588	2.08	Q V				
10+ 0	0.6733	2.11	Q V				
10+ 5	0.6876	2.07	Q V				
10+10	0.7004	1.86	Q V				
10+15	0.7120	1.68	Q V				
10+20	0.7231	1.61	Q V				
10+25	0.7339	1.57	Q V				
10+30	0.7445	1.55	Q V				
10+35	0.7553	1.57	Q V				
10+40	0.7671	1.71	Q V				
10+45	0.7798	1.84	Q V				
10+50	0.7927	1.88	Q V				
10+55	0.8058	1.90	Q V				
11+ 0	0.8191	1.92	Q V				
11+ 5	0.8323	1.92	Q V				
11+10	0.8454	1.90	Q V				
11+15	0.8583	1.88	Q V				
11+20	0.8712	1.87	Q V				
11+25	0.8841	1.87	Q V				
11+30	0.8970	1.87	Q V				
11+35	0.9098	1.86	Q V				
11+40	0.9221	1.79	Q V				
11+45	0.9341	1.74	Q V				
11+50	0.9460	1.72	Q V				
11+55	0.9580	1.74	Q V				
12+ 0	0.9701	1.76	Q V				
12+ 5	0.9827	1.82	Q V				
12+10	0.9968	2.05	Q V				
12+15	1.0121	2.23	Q V				
12+20	1.0281	2.31	Q V				
12+25	1.0445	2.39	Q V				

12+30	1.0614	2.45	
12+35	1.0786	2.49	
12+40	1.0963	2.58	
12+45	1.1145	2.65	
12+50	1.1331	2.69	
12+55	1.1519	2.74	
13+ 0	1.1711	2.78	
13+ 5	1.1907	2.84	
13+10	1.2115	3.02	
13+15	1.2333	3.16	
13+20	1.2555	3.22	
13+25	1.2779	3.26	
13+30	1.3005	3.28	
13+35	1.3227	3.21	
13+40	1.3424	2.87	
13+45	1.3602	2.59	
13+50	1.3773	2.48	
13+55	1.3939	2.42	
14+ 0	1.4103	2.38	
14+ 5	1.4267	2.38	
14+10	1.4438	2.49	
14+15	1.4615	2.57	
14+20	1.4794	2.59	
14+25	1.4971	2.58	
14+30	1.5147	2.56	
14+35	1.5323	2.55	
14+40	1.5499	2.55	
14+45	1.5674	2.55	
14+50	1.5849	2.54	
14+55	1.6023	2.51	
15+ 0	1.6194	2.49	
15+ 5	1.6364	2.47	
15+10	1.6532	2.43	
15+15	1.6697	2.40	
15+20	1.6861	2.38	
15+25	1.7022	2.34	
15+30	1.7181	2.31	
15+35	1.7337	2.26	
15+40	1.7483	2.12	
15+45	1.7622	2.01	
15+50	1.7757	1.96	
15+55	1.7891	1.94	
16+ 0	1.8023	1.92	
16+ 5	1.8146	1.79	
16+10	1.8235	1.29	
16+15	1.8296	0.89	
16+20	1.8345	0.72	
16+25	1.8389	0.63	
16+30	1.8427	0.56	
16+35	1.8462	0.51	
16+40	1.8493	0.44	
16+45	1.8520	0.39	
16+50	1.8545	0.36	
16+55	1.8568	0.34	
17+ 0	1.8590	0.32	
17+ 5	1.8613	0.33	
17+10	1.8639	0.38	
17+15	1.8669	0.43	
17+20	1.8700	0.45	
17+25	1.8732	0.46	
17+30	1.8764	0.47	
17+35	1.8797	0.48	
17+40	1.8830	0.48	
17+45	1.8864	0.48	
17+50	1.8896	0.48	
17+55	1.8927	0.45	
18+ 0	1.8956	0.42	
18+ 5	1.8985	0.41	
18+10	1.9013	0.41	
18+15	1.9041	0.40	
18+20	1.9068	0.40	

18+25	1.9096	0.40	|Q	|	|	|	V |
18+30	1.9123	0.40	|Q	|	|	|	V |
18+35	1.9150	0.39	|Q	|	|	|	V |
18+40	1.9174	0.36	|Q	|	|	|	V |
18+45	1.9197	0.33	|Q	|	|	|	V |
18+50	1.9218	0.31	|Q	|	|	|	V |
18+55	1.9237	0.27	|Q	|	|	|	V |
19+ 0	1.9253	0.24	Q	|	|	|	V |
19+ 5	1.9269	0.23	Q	|	|	|	V |
19+10	1.9287	0.26	|Q	|	|	|	V |
19+15	1.9306	0.28	|Q	|	|	|	V |
19+20	1.9327	0.29	|Q	|	|	|	V |
19+25	1.9349	0.33	|Q	|	|	|	V |
19+30	1.9374	0.36	|Q	|	|	|	V |
19+35	1.9398	0.36	|Q	|	|	|	V |
19+40	1.9421	0.33	|Q	|	|	|	V |
19+45	1.9443	0.31	|Q	|	|	|	V |
19+50	1.9463	0.30	|Q	|	|	|	V |
19+55	1.9482	0.26	|Q	|	|	|	V |
20+ 0	1.9498	0.23	Q	|	|	|	V |
20+ 5	1.9513	0.23	Q	|	|	|	V |
20+10	1.9531	0.26	|Q	|	|	|	V |
20+15	1.9550	0.28	|Q	|	|	|	V |
20+20	1.9570	0.28	|Q	|	|	|	V |
20+25	1.9590	0.29	|Q	|	|	|	V |
20+30	1.9609	0.29	|Q	|	|	|	V |
20+35	1.9629	0.29	|Q	|	|	|	V |
20+40	1.9650	0.29	|Q	|	|	|	V |
20+45	1.9670	0.29	|Q	|	|	|	V |
20+50	1.9689	0.28	|Q	|	|	|	V |
20+55	1.9707	0.25	|Q	|	|	|	V |
21+ 0	1.9722	0.23	Q	|	|	|	V |
21+ 5	1.9738	0.22	Q	|	|	|	V |
21+10	1.9755	0.25	|Q	|	|	|	V |
21+15	1.9774	0.27	|Q	|	|	|	V |
21+20	1.9793	0.27	|Q	|	|	|	V |
21+25	1.9810	0.25	Q	|	|	|	V|
21+30	1.9825	0.22	Q	|	|	|	V|
21+35	1.9840	0.22	Q	|	|	|	V|
21+40	1.9857	0.25	Q	|	|	|	V|
21+45	1.9876	0.27	|Q	|	|	|	V|
21+50	1.9895	0.27	|Q	|	|	|	V|
21+55	1.9911	0.24	Q	|	|	|	V|
22+ 0	1.9927	0.22	Q	|	|	|	V|
22+ 5	1.9942	0.22	Q	|	|	|	V|
22+10	1.9959	0.25	Q	|	|	|	V|
22+15	1.9978	0.27	|Q	|	|	|	V|
22+20	1.9996	0.27	|Q	|	|	|	V|
22+25	2.0013	0.24	Q	|	|	|	V|
22+30	2.0028	0.22	Q	|	|	|	V|
22+35	2.0043	0.21	Q	|	|	|	V|
22+40	2.0057	0.21	Q	|	|	|	V|
22+45	2.0071	0.20	Q	|	|	|	V|
22+50	2.0085	0.20	Q	|	|	|	V|
22+55	2.0099	0.20	Q	|	|	|	V|
23+ 0	2.0113	0.20	Q	|	|	|	V|
23+ 5	2.0126	0.20	Q	|	|	|	V|
23+10	2.0140	0.20	Q	|	|	|	V|
23+15	2.0154	0.20	Q	|	|	|	V|
23+20	2.0167	0.20	Q	|	|	|	V|
23+25	2.0181	0.20	Q	|	|	|	V|
23+30	2.0194	0.20	Q	|	|	|	V|
23+35	2.0208	0.20	Q	|	|	|	V|
23+40	2.0221	0.20	Q	|	|	|	V|
23+45	2.0235	0.20	Q	|	|	|	V|
23+50	2.0249	0.20	Q	|	|	|	V|
23+55	2.0262	0.20	Q	|	|	|	V|
24+ 0	2.0276	0.20	Q	|	|	|	V|
24+ 5	2.0288	0.18	Q	|	|	|	V|
24+10	2.0296	0.12	Q	|	|	|	V|
24+15	2.0300	0.06	Q	|	|	|	V|

24+20	2.0303	0.04	Q	|	|	|	V|
24+25	2.0305	0.03	Q	|	|	|	V|
24+30	2.0307	0.02	Q	|	|	|	V|
24+35	2.0308	0.02	Q	|	|	|	V|
24+40	2.0309	0.01	Q	|	|	|	V|
24+45	2.0309	0.01	Q	|	|	|	V|
24+50	2.0310	0.01	Q	|	|	|	V|
24+55	2.0310	0.00	Q	|	|	|	V|
25+ 0	2.0310	0.00	Q	|	|	|	V|
25+ 5	2.0310	0.00	Q	|	|	|	V

PROPOSED SUBAREA B - 5YR24HR Page 1 of 5

U n i t H y d r o g r a p h A n a l y s i s

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Study date 08/14/25 File: PROB2410.out

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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978

Program License Serial Number 5006

English (in-lb) Input Units Used
English Rainfall Data (Inches) Input Values Used

English Units used in output format

Drainage Area = 19.12(Ac.) = 0.030 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 19.12(Ac.) = 0.030 Sq. Mi.
Length along longest watercourse = 2644.00(Ft.)
Length along longest watercourse measured to centroid = 1322.00(Ft.)
Length along longest watercourse = 0.501 Mi.
Length along longest watercourse measured to centroid = 0.250 Mi.
Difference in elevation = 40.00(Ft.)
Slope along watercourse = 79.8790 Ft./Mi.
Average Manning's 'N' = 0.030
Lag time = 0.142 Hr.
Lag time = 8.54 Min.
25% of lag time = 2.13 Min.
40% of lag time = 3.42 Min.
Unit time = 5.00 Min.
Duration of storm = 24 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.)[1]	Rainfall(In)[2]	Weighting[1*2]
19.12	1.80	34.42

100 YEAR Area rainfall data:

Area(Ac.)[1]	Rainfall(In)[2]	Weighting[1*2]
19.12	5.00	95.60

STORM EVENT (YEAR) = 10.00
Area Averaged 2-Year Rainfall = 1.800(In)
Area Averaged 100-Year Rainfall = 5.000(In)

Point rain (area averaged) = 3.117(In)
Areal adjustment factor = 100.00 %
Adjusted average point rain = 3.116(In)

Sub-Area Data:

Area(Ac.)	Runoff Index	Impervious %
19.120	69.00	0.500

Total Area Entered = 19.12(Ac.)

RI AMC2	RI AMC-2	Infil. Rate (In/Hr)	Impervious (Dec.%)	Adj. Infil. Rate (In/Hr)	Area% (Dec.)	F (In/Hr)

```
69.0  69.0      0.373     0.500        0.205       1.000      0.205
                                                  Sum (F) =   0.205
Area averaged mean soil loss (F) (In/Hr) =  0.205
Minimum soil loss rate ((In/Hr)) =  0.103
(for 24 hour storm duration)
Soil low loss rate (decimal) =   0.500
------------------------------------------------------------------------

               U n i t  H y d r o g r a p h
                      VALLEY S-Curve
------------------------------------------------------------------------
               Unit Hydrograph Data
------------------------------------------------------------------------
Unit time period   Time % of lag   Distribution   Unit Hydrograph
    (hrs)                          Graph %           (CFS)
------------------------------------------------------------------------
    1   0.083         58.563          7.892             1.521
    2   0.167        117.126         32.937             6.347
    3   0.250        175.689         27.037             5.210
    4   0.333        234.252         10.574             2.038
    5   0.417        292.815          6.182             1.191
    6   0.500        351.378          4.198             0.809
    7   0.583        409.941          3.019             0.582
    8   0.667        468.504          2.110             0.407
    9   0.750        527.066          1.734             0.334
   10   0.833        585.629          1.313             0.253
   11   0.917        644.192          1.005             0.194
   12   1.000        702.755          0.732             0.141
   13   1.083        761.318          0.587             0.113
   14   1.167        819.881          0.680             0.131
                              Sum = 100.000   Sum=      19.269
------------------------------------------------------------------------
```

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr) Max	Low	Effective (In/Hr)
1	0.08	0.07	0.025	(0.363)	0.012	0.012
2	0.17	0.07	0.025	(0.362)	0.012	0.012
3	0.25	0.07	0.025	(0.361)	0.012	0.012
4	0.33	0.10	0.037	(0.359)	0.019	0.019
5	0.42	0.10	0.037	(0.358)	0.019	0.019
6	0.50	0.10	0.037	(0.356)	0.019	0.019
7	0.58	0.10	0.037	(0.355)	0.019	0.019
8	0.67	0.10	0.037	(0.354)	0.019	0.019
9	0.75	0.10	0.037	(0.352)	0.019	0.019
10	0.83	0.13	0.050	(0.351)	0.025	0.025
11	0.92	0.13	0.050	(0.350)	0.025	0.025
12	1.00	0.13	0.050	(0.348)	0.025	0.025
13	1.08	0.10	0.037	(0.347)	0.019	0.019
14	1.17	0.10	0.037	(0.345)	0.019	0.019
15	1.25	0.10	0.037	(0.344)	0.019	0.019
16	1.33	0.10	0.037	(0.343)	0.019	0.019
17	1.42	0.10	0.037	(0.341)	0.019	0.019
18	1.50	0.10	0.037	(0.340)	0.019	0.019
19	1.58	0.10	0.037	(0.339)	0.019	0.019
20	1.67	0.10	0.037	(0.337)	0.019	0.019
21	1.75	0.10	0.037	(0.336)	0.019	0.019
22	1.83	0.13	0.050	(0.335)	0.025	0.025
23	1.92	0.13	0.050	(0.333)	0.025	0.025
24	2.00	0.13	0.050	(0.332)	0.025	0.025
25	2.08	0.13	0.050	(0.330)	0.025	0.025
26	2.17	0.13	0.050	(0.329)	0.025	0.025
27	2.25	0.13	0.050	(0.328)	0.025	0.025
28	2.33	0.13	0.050	(0.326)	0.025	0.025
29	2.42	0.13	0.050	(0.325)	0.025	0.025
30	2.50	0.13	0.050	(0.324)	0.025	0.025
31	2.58	0.17	0.062	(0.323)	0.031	0.031
32	2.67	0.17	0.062	(0.321)	0.031	0.031

33	2.75	0.17	0.062	(0.320)	0.031	0.031
34	2.83	0.17	0.062	(0.319)	0.031	0.031
35	2.92	0.17	0.062	(0.317)	0.031	0.031
36	3.00	0.17	0.062	(0.316)	0.031	0.031
37	3.08	0.17	0.062	(0.315)	0.031	0.031
38	3.17	0.17	0.062	(0.313)	0.031	0.031
39	3.25	0.17	0.062	(0.312)	0.031	0.031
40	3.33	0.17	0.062	(0.311)	0.031	0.031
41	3.42	0.17	0.062	(0.309)	0.031	0.031
42	3.50	0.17	0.062	(0.308)	0.031	0.031
43	3.58	0.17	0.062	(0.307)	0.031	0.031
44	3.67	0.17	0.062	(0.306)	0.031	0.031
45	3.75	0.17	0.062	(0.304)	0.031	0.031
46	3.83	0.20	0.075	(0.303)	0.037	0.037
47	3.92	0.20	0.075	(0.302)	0.037	0.037
48	4.00	0.20	0.075	(0.300)	0.037	0.037
49	4.08	0.20	0.075	(0.299)	0.037	0.037
50	4.17	0.20	0.075	(0.298)	0.037	0.037
51	4.25	0.20	0.075	(0.297)	0.037	0.037
52	4.33	0.23	0.087	(0.295)	0.044	0.044
53	4.42	0.23	0.087	(0.294)	0.044	0.044
54	4.50	0.23	0.087	(0.293)	0.044	0.044
55	4.58	0.23	0.087	(0.292)	0.044	0.044
56	4.67	0.23	0.087	(0.290)	0.044	0.044
57	4.75	0.23	0.087	(0.289)	0.044	0.044
58	4.83	0.27	0.100	(0.288)	0.050	0.050
59	4.92	0.27	0.100	(0.287)	0.050	0.050
60	5.00	0.27	0.100	(0.285)	0.050	0.050
61	5.08	0.20	0.075	(0.284)	0.037	0.037
62	5.17	0.20	0.075	(0.283)	0.037	0.037
63	5.25	0.20	0.075	(0.282)	0.037	0.037
64	5.33	0.23	0.087	(0.280)	0.044	0.044
65	5.42	0.23	0.087	(0.279)	0.044	0.044
66	5.50	0.23	0.087	(0.278)	0.044	0.044
67	5.58	0.27	0.100	(0.277)	0.050	0.050
68	5.67	0.27	0.100	(0.275)	0.050	0.050
69	5.75	0.27	0.100	(0.274)	0.050	0.050
70	5.83	0.27	0.100	(0.273)	0.050	0.050
71	5.92	0.27	0.100	(0.272)	0.050	0.050
72	6.00	0.27	0.100	(0.271)	0.050	0.050
73	6.08	0.30	0.112	(0.269)	0.056	0.056
74	6.17	0.30	0.112	(0.268)	0.056	0.056
75	6.25	0.30	0.112	(0.267)	0.056	0.056
76	6.33	0.30	0.112	(0.266)	0.056	0.056
77	6.42	0.30	0.112	(0.265)	0.056	0.056
78	6.50	0.30	0.112	(0.263)	0.056	0.056
79	6.58	0.33	0.125	(0.262)	0.062	0.062
80	6.67	0.33	0.125	(0.261)	0.062	0.062
81	6.75	0.33	0.125	(0.260)	0.062	0.062
82	6.83	0.33	0.125	(0.259)	0.062	0.062
83	6.92	0.33	0.125	(0.258)	0.062	0.062
84	7.00	0.33	0.125	(0.256)	0.062	0.062
85	7.08	0.33	0.125	(0.255)	0.062	0.062
86	7.17	0.33	0.125	(0.254)	0.062	0.062
87	7.25	0.33	0.125	(0.253)	0.062	0.062
88	7.33	0.37	0.137	(0.252)	0.069	0.069
89	7.42	0.37	0.137	(0.251)	0.069	0.069
90	7.50	0.37	0.137	(0.249)	0.069	0.069
91	7.58	0.40	0.150	(0.248)	0.075	0.075
92	7.67	0.40	0.150	(0.247)	0.075	0.075
93	7.75	0.40	0.150	(0.246)	0.075	0.075
94	7.83	0.43	0.162	(0.245)	0.081	0.081
95	7.92	0.43	0.162	(0.244)	0.081	0.081
96	8.00	0.43	0.162	(0.243)	0.081	0.081
97	8.08	0.50	0.187	(0.242)	0.093	0.093
98	8.17	0.50	0.187	(0.240)	0.093	0.093
99	8.25	0.50	0.187	(0.239)	0.093	0.093
100	8.33	0.50	0.187	(0.238)	0.093	0.093
101	8.42	0.50	0.187	(0.237)	0.093	0.093
102	8.50	0.50	0.187	(0.236)	0.093	0.093
103	8.58	0.53	0.199	(0.235)	0.100	0.100

104	8.67	0.53	0.199	(0.234)	0.100	0.100
105	8.75	0.53	0.199	(0.233)	0.100	0.100
106	8.83	0.57	0.212	(0.232)	0.106	0.106
107	8.92	0.57	0.212	(0.230)	0.106	0.106
108	9.00	0.57	0.212	(0.229)	0.106	0.106
109	9.08	0.63	0.237	(0.228)	0.118	0.118
110	9.17	0.63	0.237	(0.227)	0.118	0.118
111	9.25	0.63	0.237	(0.226)	0.118	0.118
112	9.33	0.67	0.249	(0.225)	0.125	0.125
113	9.42	0.67	0.249	(0.224)	0.125	0.125
114	9.50	0.67	0.249	(0.223)	0.125	0.125
115	9.58	0.70	0.262	(0.222)	0.131	0.131
116	9.67	0.70	0.262	(0.221)	0.131	0.131
117	9.75	0.70	0.262	(0.220)	0.131	0.131
118	9.83	0.73	0.274	(0.219)	0.137	0.137
119	9.92	0.73	0.274	(0.218)	0.137	0.137
120	10.00	0.73	0.274	(0.217)	0.137	0.137
121	10.08	0.50	0.187	(0.215)	0.093	0.093
122	10.17	0.50	0.187	(0.214)	0.093	0.093
123	10.25	0.50	0.187	(0.213)	0.093	0.093
124	10.33	0.50	0.187	(0.212)	0.093	0.093
125	10.42	0.50	0.187	(0.211)	0.093	0.093
126	10.50	0.50	0.187	(0.210)	0.093	0.093
127	10.58	0.67	0.249	(0.209)	0.125	0.125
128	10.67	0.67	0.249	(0.208)	0.125	0.125
129	10.75	0.67	0.249	(0.207)	0.125	0.125
130	10.83	0.67	0.249	(0.206)	0.125	0.125
131	10.92	0.67	0.249	(0.205)	0.125	0.125
132	11.00	0.67	0.249	(0.204)	0.125	0.125
133	11.08	0.63	0.237	(0.203)	0.118	0.118
134	11.17	0.63	0.237	(0.202)	0.118	0.118
135	11.25	0.63	0.237	(0.201)	0.118	0.118
136	11.33	0.63	0.237	(0.200)	0.118	0.118
137	11.42	0.63	0.237	(0.199)	0.118	0.118
138	11.50	0.63	0.237	(0.198)	0.118	0.118
139	11.58	0.57	0.212	(0.197)	0.106	0.106
140	11.67	0.57	0.212	(0.196)	0.106	0.106
141	11.75	0.57	0.212	(0.195)	0.106	0.106
142	11.83	0.60	0.224	(0.194)	0.112	0.112
143	11.92	0.60	0.224	(0.193)	0.112	0.112
144	12.00	0.60	0.224	(0.192)	0.112	0.112
145	12.08	0.83	0.312	(0.191)	0.156	0.156
146	12.17	0.83	0.312	(0.190)	0.156	0.156
147	12.25	0.83	0.312	(0.189)	0.156	0.156
148	12.33	0.87	0.324	(0.189)	0.162	0.162
149	12.42	0.87	0.324	(0.188)	0.162	0.162
150	12.50	0.87	0.324	(0.187)	0.162	0.162
151	12.58	0.93	0.349	(0.186)	0.175	0.175
152	12.67	0.93	0.349	(0.185)	0.175	0.175
153	12.75	0.93	0.349	(0.184)	0.175	0.175
154	12.83	0.97	0.362	(0.183)	0.181	0.181
155	12.92	0.97	0.362	(0.182)	0.181	0.181
156	13.00	0.97	0.362	(0.181)	0.181	0.181
157	13.08	1.13	0.424	0.180	(0.212)	0.244
158	13.17	1.13	0.424	0.179	(0.212)	0.245
159	13.25	1.13	0.424	0.178	(0.212)	0.246
160	13.33	1.13	0.424	0.177	(0.212)	0.246
161	13.42	1.13	0.424	0.177	(0.212)	0.247
162	13.50	1.13	0.424	0.176	(0.212)	0.248
163	13.58	0.77	0.287	(0.175)	0.143	0.143
164	13.67	0.77	0.287	(0.174)	0.143	0.143
165	13.75	0.77	0.287	(0.173)	0.143	0.143
166	13.83	0.77	0.287	(0.172)	0.143	0.143
167	13.92	0.77	0.287	(0.171)	0.143	0.143
168	14.00	0.77	0.287	(0.170)	0.143	0.143
169	14.08	0.90	0.337	(0.169)	0.168	0.168
170	14.17	0.90	0.337	(0.169)	0.168	0.168
171	14.25	0.90	0.337	0.168	(0.168)	0.169
172	14.33	0.87	0.324	(0.167)	0.162	0.162
173	14.42	0.87	0.324	(0.166)	0.162	0.162
174	14.50	0.87	0.324	(0.165)	0.162	0.162

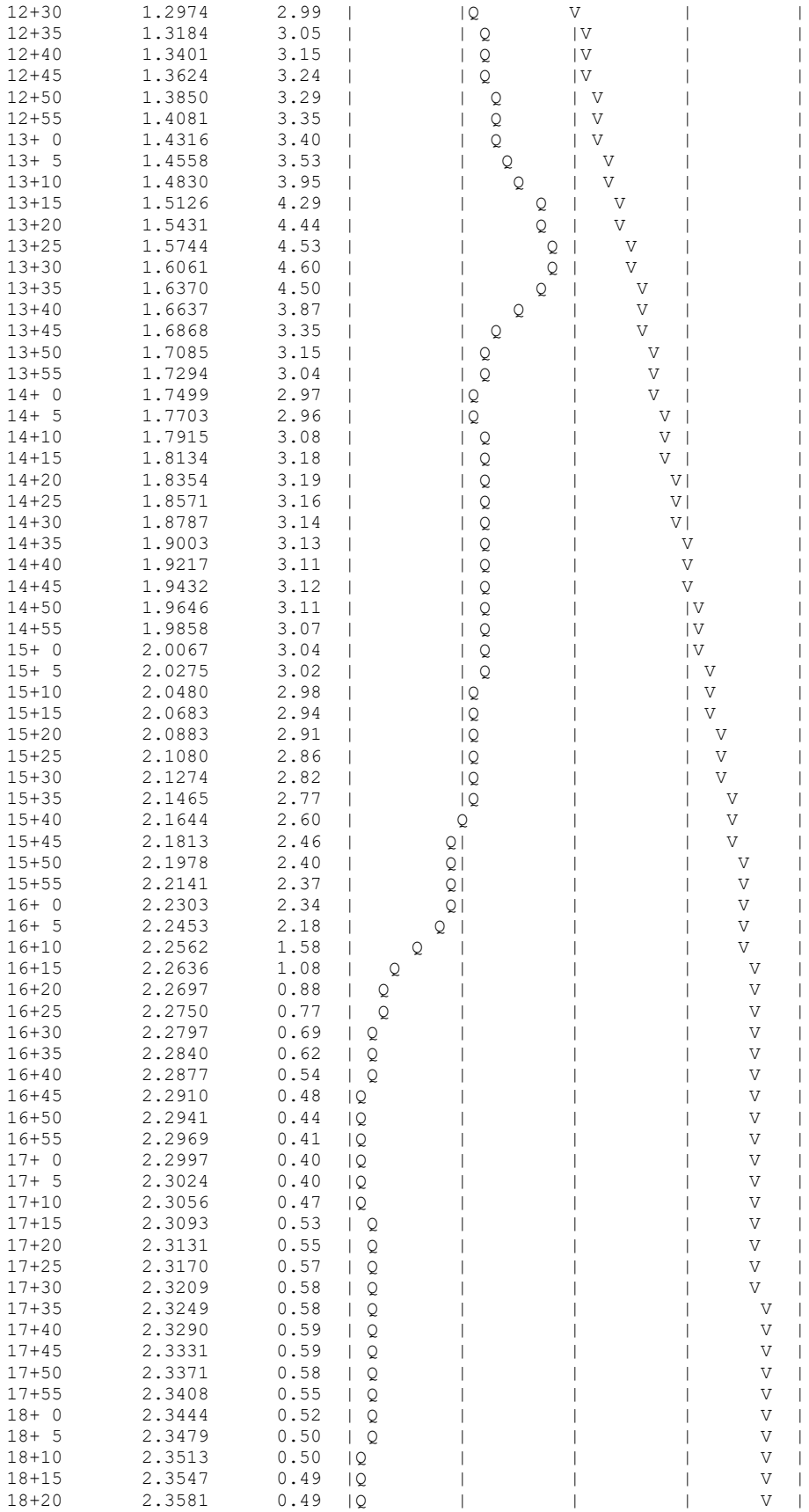
175	14.58	0.87	0.324	(0.164)	0.162	0.162
176	14.67	0.87	0.324	(0.163)	0.162	0.162
177	14.75	0.87	0.324	(0.163)	0.162	0.162
178	14.83	0.83	0.312	(0.162)	0.156	0.156
179	14.92	0.83	0.312	(0.161)	0.156	0.156
180	15.00	0.83	0.312	(0.160)	0.156	0.156
181	15.08	0.80	0.299	(0.159)	0.150	0.150
182	15.17	0.80	0.299	(0.159)	0.150	0.150
183	15.25	0.80	0.299	(0.158)	0.150	0.150
184	15.33	0.77	0.287	(0.157)	0.143	0.143
185	15.42	0.77	0.287	(0.156)	0.143	0.143
186	15.50	0.77	0.287	(0.155)	0.143	0.143
187	15.58	0.63	0.237	(0.154)	0.118	0.118
188	15.67	0.63	0.237	(0.154)	0.118	0.118
189	15.75	0.63	0.237	(0.153)	0.118	0.118
190	15.83	0.63	0.237	(0.152)	0.118	0.118
191	15.92	0.63	0.237	(0.151)	0.118	0.118
192	16.00	0.63	0.237	(0.151)	0.118	0.118
193	16.08	0.13	0.050	(0.150)	0.025	0.025
194	16.17	0.13	0.050	(0.149)	0.025	0.025
195	16.25	0.13	0.050	(0.148)	0.025	0.025
196	16.33	0.13	0.050	(0.148)	0.025	0.025
197	16.42	0.13	0.050	(0.147)	0.025	0.025
198	16.50	0.13	0.050	(0.146)	0.025	0.025
199	16.58	0.10	0.037	(0.145)	0.019	0.019
200	16.67	0.10	0.037	(0.145)	0.019	0.019
201	16.75	0.10	0.037	(0.144)	0.019	0.019
202	16.83	0.10	0.037	(0.143)	0.019	0.019
203	16.92	0.10	0.037	(0.142)	0.019	0.019
204	17.00	0.10	0.037	(0.142)	0.019	0.019
205	17.08	0.17	0.062	(0.141)	0.031	0.031
206	17.17	0.17	0.062	(0.140)	0.031	0.031
207	17.25	0.17	0.062	(0.140)	0.031	0.031
208	17.33	0.17	0.062	(0.139)	0.031	0.031
209	17.42	0.17	0.062	(0.138)	0.031	0.031
210	17.50	0.17	0.062	(0.137)	0.031	0.031
211	17.58	0.17	0.062	(0.137)	0.031	0.031
212	17.67	0.17	0.062	(0.136)	0.031	0.031
213	17.75	0.17	0.062	(0.135)	0.031	0.031
214	17.83	0.13	0.050	(0.135)	0.025	0.025
215	17.92	0.13	0.050	(0.134)	0.025	0.025
216	18.00	0.13	0.050	(0.133)	0.025	0.025
217	18.08	0.13	0.050	(0.133)	0.025	0.025
218	18.17	0.13	0.050	(0.132)	0.025	0.025
219	18.25	0.13	0.050	(0.131)	0.025	0.025
220	18.33	0.13	0.050	(0.131)	0.025	0.025
221	18.42	0.13	0.050	(0.130)	0.025	0.025
222	18.50	0.13	0.050	(0.130)	0.025	0.025
223	18.58	0.10	0.037	(0.129)	0.019	0.019
224	18.67	0.10	0.037	(0.128)	0.019	0.019
225	18.75	0.10	0.037	(0.128)	0.019	0.019
226	18.83	0.07	0.025	(0.127)	0.012	0.012
227	18.92	0.07	0.025	(0.126)	0.012	0.012
228	19.00	0.07	0.025	(0.126)	0.012	0.012
229	19.08	0.10	0.037	(0.125)	0.019	0.019
230	19.17	0.10	0.037	(0.125)	0.019	0.019
231	19.25	0.10	0.037	(0.124)	0.019	0.019
232	19.33	0.13	0.050	(0.123)	0.025	0.025
233	19.42	0.13	0.050	(0.123)	0.025	0.025
234	19.50	0.13	0.050	(0.122)	0.025	0.025
235	19.58	0.10	0.037	(0.122)	0.019	0.019
236	19.67	0.10	0.037	(0.121)	0.019	0.019
237	19.75	0.10	0.037	(0.121)	0.019	0.019
238	19.83	0.07	0.025	(0.120)	0.012	0.012
239	19.92	0.07	0.025	(0.120)	0.012	0.012
240	20.00	0.07	0.025	(0.119)	0.012	0.012
241	20.08	0.10	0.037	(0.119)	0.019	0.019
242	20.17	0.10	0.037	(0.118)	0.019	0.019
243	20.25	0.10	0.037	(0.118)	0.019	0.019
244	20.33	0.10	0.037	(0.117)	0.019	0.019
245	20.42	0.10	0.037	(0.116)	0.019	0.019

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246  20.50     0.10      0.037       (  0.116)       0.019        0.019
247  20.58     0.10      0.037       (  0.116)       0.019        0.019
248  20.67     0.10      0.037       (  0.115)       0.019        0.019
249  20.75     0.10      0.037       (  0.115)       0.019        0.019
250  20.83     0.07      0.025       (  0.114)       0.012        0.012
251  20.92     0.07      0.025       (  0.114)       0.012        0.012
252  21.00     0.07      0.025       (  0.113)       0.012        0.012
253  21.08     0.10      0.037       (  0.113)       0.019        0.019
254  21.17     0.10      0.037       (  0.112)       0.019        0.019
255  21.25     0.10      0.037       (  0.112)       0.019        0.019
256  21.33     0.07      0.025       (  0.111)       0.012        0.012
257  21.42     0.07      0.025       (  0.111)       0.012        0.012
258  21.50     0.07      0.025       (  0.111)       0.012        0.012
259  21.58     0.10      0.037       (  0.110)       0.019        0.019
260  21.67     0.10      0.037       (  0.110)       0.019        0.019
261  21.75     0.10      0.037       (  0.109)       0.019        0.019
262  21.83     0.07      0.025       (  0.109)       0.012        0.012
263  21.92     0.07      0.025       (  0.109)       0.012        0.012
264  22.00     0.07      0.025       (  0.108)       0.012        0.012
265  22.08     0.10      0.037       (  0.108)       0.019        0.019
266  22.17     0.10      0.037       (  0.108)       0.019        0.019
267  22.25     0.10      0.037       (  0.107)       0.019        0.019
268  22.33     0.07      0.025       (  0.107)       0.012        0.012
269  22.42     0.07      0.025       (  0.107)       0.012        0.012
270  22.50     0.07      0.025       (  0.106)       0.012        0.012
271  22.58     0.07      0.025       (  0.106)       0.012        0.012
272  22.67     0.07      0.025       (  0.106)       0.012        0.012
273  22.75     0.07      0.025       (  0.105)       0.012        0.012
274  22.83     0.07      0.025       (  0.105)       0.012        0.012
275  22.92     0.07      0.025       (  0.105)       0.012        0.012
276  23.00     0.07      0.025       (  0.105)       0.012        0.012
277  23.08     0.07      0.025       (  0.104)       0.012        0.012
278  23.17     0.07      0.025       (  0.104)       0.012        0.012
279  23.25     0.07      0.025       (  0.104)       0.012        0.012
280  23.33     0.07      0.025       (  0.104)       0.012        0.012
281  23.42     0.07      0.025       (  0.103)       0.012        0.012
282  23.50     0.07      0.025       (  0.103)       0.012        0.012
283  23.58     0.07      0.025       (  0.103)       0.012        0.012
284  23.67     0.07      0.025       (  0.103)       0.012        0.012
285  23.75     0.07      0.025       (  0.103)       0.012        0.012
286  23.83     0.07      0.025       (  0.103)       0.012        0.012
287  23.92     0.07      0.025       (  0.103)       0.012        0.012
288  24.00     0.07      0.025       (  0.103)       0.012        0.012
                (Loss Rate Not Used)
    Sum =     100.0                                    Sum =    18.9
      Flood volume = Effective rainfall      1.58(In)
       times area      19.1(Ac.)/[(In)/(Ft.)] =       2.5(Ac.Ft)
      Total soil loss =      1.54(In)
      Total soil loss =     2.456(Ac.Ft)
      Total rainfall =      3.12(In)
      Flood volume =      109331.9 Cubic Feet
      Total soil loss =      106963.0 Cubic Feet
      ---------------------------------------------------------------------
       Peak flow rate of this hydrograph =      4.603(CFS)
      ---------------------------------------------------------------------
      +++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                          24 - H O U R    S T O R M
                     R u n o f f      H y d r o g r a p h
      ---------------------------------------------------------------------
                  Hydrograph in   5   Minute intervals ((CFS))

      ---------------------------------------------------------------------
 Time(h+m) Volume Ac.Ft   Q(CFS)  0        2.5       5.0       7.5      10.0
 ---------------------------------------------------------------------------
   0+ 5       0.0001      0.02  Q         |         |         |         |
   0+10       0.0008      0.10  Q         |         |         |         |
   0+15       0.0019      0.16  Q         |         |         |         |
   0+20       0.0033      0.20  Q         |         |         |         |
   0+25       0.0050      0.25  VQ        |         |         |         |
   0+30       0.0071      0.30  VQ        |         |         |         |
   0+35       0.0092      0.31  VQ        |         |         |         |
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0+40	0.0115	0.33	VQ	|	|	|	|
0+45	0.0138	0.34	VQ	|	|	|	|
0+50	0.0162	0.35	VQ	|	|	|	|
0+55	0.0190	0.40	VQ	|	|	|	|
1+ 0	0.0220	0.43	VQ	|	|	|	|
1+ 5	0.0250	0.44	VQ	|	|	|	|
1+10	0.0278	0.41	VQ	|	|	|	|
1+15	0.0305	0.38	VQ	|	|	|	|
1+20	0.0331	0.38	VQ	|	|	|	|
1+25	0.0356	0.37	VQ	|	|	|	|
1+30	0.0382	0.37	VQ	|	|	|	|
1+35	0.0407	0.37	VQ	|	|	|	|
1+40	0.0432	0.37	VQ	|	|	|	|
1+45	0.0457	0.36	VQ	|	|	|	|
1+50	0.0483	0.37	VQ	|	|	|	|
1+55	0.0511	0.41	VQ	|	|	|	|
2+ 0	0.0542	0.44	VQ	|	|	|	|
2+ 5	0.0573	0.46	VQ	|	|	|	|
2+10	0.0605	0.46	VQ	|	|	|	|
2+15	0.0637	0.47	|Q	|	|	|	|
2+20	0.0669	0.47	|Q	|	|	|	|
2+25	0.0702	0.47	|Q	|	|	|	|
2+30	0.0735	0.48	|Q	|	|	|	|
2+35	0.0768	0.49	|Q	|	|	|	|
2+40	0.0805	0.53	|VQ	|	|	|	|
2+45	0.0843	0.56	|VQ	|	|	|	|
2+50	0.0883	0.57	|VQ	|	|	|	|
2+55	0.0923	0.58	|VQ	|	|	|	|
3+ 0	0.0963	0.59	|VQ	|	|	|	|
3+ 5	0.1004	0.59	|VQ	|	|	|	|
3+10	0.1045	0.59	|VQ	|	|	|	|
3+15	0.1086	0.60	|VQ	|	|	|	|
3+20	0.1127	0.60	|VQ	|	|	|	|
3+25	0.1168	0.60	|VQ	|	|	|	|
3+30	0.1210	0.60	|VQ	|	|	|	|
3+35	0.1251	0.60	|VQ	|	|	|	|
3+40	0.1292	0.60	| Q	|	|	|	|
3+45	0.1334	0.60	| Q	|	|	|	|
3+50	0.1376	0.61	| Q	|	|	|	|
3+55	0.1420	0.65	| Q	|	|	|	|
4+ 0	0.1467	0.68	| Q	|	|	|	|
4+ 5	0.1515	0.70	| Q	|	|	|	|
4+10	0.1564	0.70	| Q	|	|	|	|
4+15	0.1612	0.71	| Q	|	|	|	|
4+20	0.1662	0.72	| Q	|	|	|	|
4+25	0.1715	0.76	| VQ	|	|	|	|
4+30	0.1769	0.80	| VQ	|	|	|	|
4+35	0.1825	0.81	| VQ	|	|	|	|
4+40	0.1882	0.82	| VQ	|	|	|	|
4+45	0.1939	0.83	| Q	|	|	|	|
4+50	0.1997	0.84	| Q	|	|	|	|
4+55	0.2057	0.88	| Q	|	|	|	|
5+ 0	0.2121	0.92	| Q	|	|	|	|
5+ 5	0.2183	0.91	| Q	|	|	|	|
5+10	0.2241	0.84	| Q	|	|	|	|
5+15	0.2295	0.78	| Q	|	|	|	|
5+20	0.2349	0.77	| Q	|	|	|	|
5+25	0.2404	0.80	| Q	|	|	|	|
5+30	0.2460	0.82	| Q	|	|	|	|
5+35	0.2518	0.84	| QV	|	|	|	|
5+40	0.2579	0.88	| QV	|	|	|	|
5+45	0.2642	0.92	| QV	|	|	|	|
5+50	0.2707	0.93	| QV	|	|	|	|
5+55	0.2771	0.94	| QV	|	|	|	|
6+ 0	0.2837	0.95	| QV	|	|	|	|
6+ 5	0.2903	0.96	| QV	|	|	|	|
6+10	0.2971	1.00	| Q	|	|	|	|
6+15	0.3043	1.04	| Q	|	|	|	|
6+20	0.3115	1.05	| Q	|	|	|	|
6+25	0.3188	1.06	| QV	|	|	|	|
6+30	0.3262	1.07	| QV	|	|	|	|

6+35	0.3336	1.08	QV				
6+40	0.3413	1.12	QV				
6+45	0.3493	1.16	QV				
6+50	0.3574	1.17	QV				
6+55	0.3655	1.18	QV				
7+ 0	0.3737	1.19	QV				
7+ 5	0.3819	1.19	Q V				
7+10	0.3901	1.19	Q V				
7+15	0.3984	1.20	Q V				
7+20	0.4067	1.21	Q V				
7+25	0.4153	1.25	Q V				
7+30	0.4241	1.28	QV				
7+35	0.4331	1.30	QV				
7+40	0.4424	1.35	Q V				
7+45	0.4520	1.39	Q V				
7+50	0.4617	1.42	Q V				
7+55	0.4718	1.47	Q V				
8+ 0	0.4822	1.50	QV				
8+ 5	0.4928	1.54	QV				
8+10	0.5040	1.63	Q V				
8+15	0.5158	1.71	Q V				
8+20	0.5277	1.74	Q V				
8+25	0.5398	1.76	QV				
8+30	0.5520	1.77	QV				
8+35	0.5643	1.79	QV				
8+40	0.5770	1.83	Q V|			
8+45	0.5899	1.87	Q V|			
8+50	0.6029	1.90	Q V|			
8+55	0.6164	1.95	Q V|			
9+ 0	0.6300	1.99	Q V				
9+ 5	0.6440	2.02	Q V				
9+10	0.6586	2.12	Q V				
9+15	0.6736	2.19	Q V				
9+20	0.6890	2.23	Q V				
9+25	0.7047	2.29	Q|V				
9+30	0.7208	2.33	Q|V				
9+35	0.7370	2.36	Q|V				
9+40	0.7537	2.42	Q| V				
9+45	0.7706	2.46	Q| V				
9+50	0.7878	2.49	Q| V				
9+55	0.8053	2.54	Q V				
10+ 0	0.8230	2.58	Q V				
10+ 5	0.8405	2.54	Q V				
10+10	0.8562	2.27	Q| V				
10+15	0.8703	2.05	Q | V				
10+20	0.8839	1.97	Q | V				
10+25	0.8971	1.92	Q | V				
10+30	0.9101	1.89	Q | V				
10+35	0.9233	1.91	Q | V				
10+40	0.9377	2.10	Q | V				
10+45	0.9532	2.24	Q | V				
10+50	0.9690	2.30	Q| V				
10+55	0.9851	2.33	Q| V				
11+ 0	1.0012	2.35	Q| V				
11+ 5	1.0174	2.35	Q| V				
11+10	1.0334	2.32	Q| V				
11+15	1.0492	2.30	Q| V				
11+20	1.0650	2.29	Q| V				
11+25	1.0807	2.29	Q| V				
11+30	1.0965	2.29	Q| V				
11+35	1.1121	2.27	Q| V				
11+40	1.1272	2.19	Q | V				
11+45	1.1419	2.13	Q | V				
11+50	1.1564	2.11	Q | V				
11+55	1.1711	2.13	Q | V				
12+ 0	1.1859	2.15	Q | V				
12+ 5	1.2012	2.22	Q | V|			
12+10	1.2184	2.50	Q V|			
12+15	1.2372	2.73	Q V|			
12+20	1.2567	2.83	|Q V				
12+25	1.2768	2.92	|Q V				



12+30	1.2974	2.99	
12+35	1.3184	3.05	
12+40	1.3401	3.15	
12+45	1.3624	3.24	
12+50	1.3850	3.29	
12+55	1.4081	3.35	
13+ 0	1.4316	3.40	
13+ 5	1.4558	3.53	
13+10	1.4830	3.95	
13+15	1.5126	4.29	
13+20	1.5431	4.44	
13+25	1.5744	4.53	
13+30	1.6061	4.60	
13+35	1.6370	4.50	
13+40	1.6637	3.87	
13+45	1.6868	3.35	
13+50	1.7085	3.15	
13+55	1.7294	3.04	
14+ 0	1.7499	2.97	
14+ 5	1.7703	2.96	
14+10	1.7915	3.08	
14+15	1.8134	3.18	
14+20	1.8354	3.19	
14+25	1.8571	3.16	
14+30	1.8787	3.14	
14+35	1.9003	3.13	
14+40	1.9217	3.11	
14+45	1.9432	3.12	
14+50	1.9646	3.11	
14+55	1.9858	3.07	
15+ 0	2.0067	3.04	
15+ 5	2.0275	3.02	
15+10	2.0480	2.98	
15+15	2.0683	2.94	
15+20	2.0883	2.91	
15+25	2.1080	2.86	
15+30	2.1274	2.82	
15+35	2.1465	2.77	
15+40	2.1644	2.60	
15+45	2.1813	2.46	
15+50	2.1978	2.40	
15+55	2.2141	2.37	
16+ 0	2.2303	2.34	
16+ 5	2.2453	2.18	
16+10	2.2562	1.58	
16+15	2.2636	1.08	
16+20	2.2697	0.88	
16+25	2.2750	0.77	
16+30	2.2797	0.69	
16+35	2.2840	0.62	
16+40	2.2877	0.54	
16+45	2.2910	0.48	
16+50	2.2941	0.44	
16+55	2.2969	0.41	
17+ 0	2.2997	0.40	
17+ 5	2.3024	0.40	
17+10	2.3056	0.47	
17+15	2.3093	0.53	
17+20	2.3131	0.55	
17+25	2.3170	0.57	
17+30	2.3209	0.58	
17+35	2.3249	0.58	
17+40	2.3290	0.59	
17+45	2.3331	0.59	
17+50	2.3371	0.58	
17+55	2.3408	0.55	
18+ 0	2.3444	0.52	
18+ 5	2.3479	0.50	
18+10	2.3513	0.50	
18+15	2.3547	0.49	
18+20	2.3581	0.49	

18+25	2.3615	0.49	|Q	|	|	|	V |
18+30	2.3648	0.49	|Q	|	|	|	V |
18+35	2.3681	0.47	|Q	|	|	|	V |
18+40	2.3711	0.43	|Q	|	|	|	V |
18+45	2.3738	0.40	|Q	|	|	|	V |
18+50	2.3764	0.38	|Q	|	|	|	V |
18+55	2.3787	0.33	|Q	|	|	|	V |
19+ 0	2.3807	0.29	|Q	|	|	|	V |
19+ 5	2.3827	0.29	|Q	|	|	|	V |
19+10	2.3848	0.32	|Q	|	|	|	V |
19+15	2.3872	0.34	|Q	|	|	|	V |
19+20	2.3896	0.36	|Q	|	|	|	V |
19+25	2.3924	0.40	|Q	|	|	|	V |
19+30	2.3954	0.44	|Q	|	|	|	V |
19+35	2.3984	0.44	|Q	|	|	|	V |
19+40	2.4012	0.41	|Q	|	|	|	V |
19+45	2.4039	0.38	|Q	|	|	|	V |
19+50	2.4064	0.36	|Q	|	|	|	V |
19+55	2.4086	0.32	|Q	|	|	|	V |
20+ 0	2.4106	0.29	|Q	|	|	|	V |
20+ 5	2.4125	0.28	|Q	|	|	|	V |
20+10	2.4147	0.31	|Q	|	|	|	V |
20+15	2.4170	0.34	|Q	|	|	|	V |
20+20	2.4194	0.35	|Q	|	|	|	V |
20+25	2.4218	0.35	|Q	|	|	|	V |
20+30	2.4242	0.35	|Q	|	|	|	V |
20+35	2.4267	0.36	|Q	|	|	|	V |
20+40	2.4291	0.36	|Q	|	|	|	V |
20+45	2.4316	0.36	|Q	|	|	|	V |
20+50	2.4340	0.35	|Q	|	|	|	V |
20+55	2.4361	0.31	|Q	|	|	|	V |
21+ 0	2.4380	0.28	|Q	|	|	|	V |
21+ 5	2.4399	0.27	|Q	|	|	|	V |
21+10	2.4420	0.31	|Q	|	|	|	V |
21+15	2.4443	0.34	|Q	|	|	|	V |
21+20	2.4467	0.33	|Q	|	|	|	V |
21+25	2.4487	0.30	|Q	|	|	|	V|
21+30	2.4506	0.27	|Q	|	|	|	V|
21+35	2.4524	0.27	|Q	|	|	|	V|
21+40	2.4545	0.30	|Q	|	|	|	V|
21+45	2.4568	0.33	|Q	|	|	|	V|
21+50	2.4591	0.33	|Q	|	|	|	V|
21+55	2.4612	0.30	|Q	|	|	|	V|
22+ 0	2.4630	0.27	|Q	|	|	|	V|
22+ 5	2.4649	0.27	|Q	|	|	|	V|
22+10	2.4669	0.30	|Q	|	|	|	V|
22+15	2.4692	0.33	|Q	|	|	|	V|
22+20	2.4715	0.33	|Q	|	|	|	V|
22+25	2.4736	0.30	|Q	|	|	|	V|
22+30	2.4754	0.27	|Q	|	|	|	V|
22+35	2.4772	0.26	|Q	|	|	|	V|
22+40	2.4790	0.25	|Q	|	|	|	V|
22+45	2.4807	0.25	|Q	|	|	|	V|
22+50	2.4824	0.25	Q	|	|	|	V|
22+55	2.4841	0.25	Q	|	|	|	V|
23+ 0	2.4857	0.24	Q	|	|	|	V|
23+ 5	2.4874	0.24	Q	|	|	|	V|
23+10	2.4891	0.24	Q	|	|	|	V|
23+15	2.4908	0.24	Q	|	|	|	V|
23+20	2.4924	0.24	Q	|	|	|	V|
23+25	2.4941	0.24	Q	|	|	|	V|
23+30	2.4957	0.24	Q	|	|	|	V|
23+35	2.4974	0.24	Q	|	|	|	V|
23+40	2.4990	0.24	Q	|	|	|	V|
23+45	2.5007	0.24	Q	|	|	|	V|
23+50	2.5024	0.24	Q	|	|	|	V|
23+55	2.5040	0.24	Q	|	|	|	V|
24+ 0	2.5057	0.24	Q	|	|	|	V|
24+ 5	2.5072	0.22	Q	|	|	|	V|
24+10	2.5082	0.14	Q	|	|	|	V|
24+15	2.5087	0.08	Q	|	|	|	V|

24+20	2.5091	0.05	Q	|	|	|	V|
24+25	2.5093	0.04	Q	|	|	|	V|
24+30	2.5095	0.03	Q	|	|	|	V|
24+35	2.5096	0.02	Q	|	|	|	V|
24+40	2.5097	0.01	Q	|	|	|	V|
24+45	2.5098	0.01	Q	|	|	|	V|
24+50	2.5098	0.01	Q	|	|	|	V|
24+55	2.5099	0.00	Q	|	|	|	V|
25+ 0	2.5099	0.00	Q	|	|	|	V|
25+ 5	2.5099	0.00	Q	|	|	|	V|

```
       U n i t   H y d r o g r a p h   A n a l y s i s

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              Study date  08/14/25 File: PROB24100.out

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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978


Program License Serial Number 5006

------------------------------------------------------------------------
 English (in-lb) Input Units Used
 English Rainfall Data (Inches) Input Values Used

 English Units used in output format



------------------------------------------------------------------------
------------------------------------------------------------------------
Drainage Area =      19.12(Ac.)  =      0.030 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment =      19.12(Ac.)  =      0.030 Sq. Mi.
Length along longest watercourse =    2644.00(Ft.)
Length along longest watercourse measured to centroid =    1322.00(Ft.)
Length along longest watercourse =      0.501 Mi.
Length along longest watercourse measured to centroid =      0.250 Mi.
Difference in elevation =      40.00(Ft.)
Slope along watercourse =     79.8790 Ft./Mi.
Average Manning's 'N' = 0.030
Lag time =    0.142 Hr.
Lag time =     8.54 Min.
25% of lag time =     2.13 Min.
40% of lag time =     3.42 Min.
Unit time =     5.00 Min.
Duration of storm = 24 Hour(s)
User Entered Base Flow =     0.00(CFS)

2 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
       19.12           1.80                 34.42

100 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
       19.12           5.00                 95.60

STORM EVENT (YEAR) =  100.00
Area Averaged 2-Year Rainfall =    1.800(In)
Area Averaged 100-Year Rainfall =    5.000(In)

Point rain (area averaged) =    5.000(In)
Areal adjustment factor =  100.00 %
Adjusted average point rain =    5.000(In)

Sub-Area Data:
Area(Ac.)         Runoff Index   Impervious %
    19.120           69.00         0.500
 Total Area Entered =     19.12(Ac.)


RI    RI   Infil. Rate Impervious   Adj. Infil. Rate  Area%     F
AMC2 AMC-2     (In/Hr)    (Dec.%)     (In/Hr)      (Dec.)    (In/Hr)
```

```
69.0  69.0      0.373     0.500        0.205       1.000      0.205
                                                  Sum (F) =   0.205
Area averaged mean soil loss (F) (In/Hr) =  0.205
Minimum soil loss rate ((In/Hr)) =  0.103
(for 24 hour storm duration)
Soil low loss rate (decimal) =   0.500
------------------------------------------------------------------------

               U n i t  H y d r o g r a p h
                      VALLEY S-Curve
------------------------------------------------------------------------
               Unit Hydrograph Data
------------------------------------------------------------------------
Unit time period   Time % of lag   Distribution   Unit Hydrograph
    (hrs)                          Graph %           (CFS)
------------------------------------------------------------------------
    1   0.083         58.563          7.892             1.521
    2   0.167        117.126         32.937             6.347
    3   0.250        175.689         27.037             5.210
    4   0.333        234.252         10.574             2.038
    5   0.417        292.815          6.182             1.191
    6   0.500        351.378          4.198             0.809
    7   0.583        409.941          3.019             0.582
    8   0.667        468.504          2.110             0.407
    9   0.750        527.066          1.734             0.334
   10   0.833        585.629          1.313             0.253
   11   0.917        644.192          1.005             0.194
   12   1.000        702.755          0.732             0.141
   13   1.083        761.318          0.587             0.113
   14   1.167        819.881          0.680             0.131
                              Sum = 100.000   Sum=      19.269
------------------------------------------------------------------------
```

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr) Max	Low	Effective (In/Hr)
1	0.08	0.07	0.040	(0.363)	0.020	0.020
2	0.17	0.07	0.040	(0.362)	0.020	0.020
3	0.25	0.07	0.040	(0.361)	0.020	0.020
4	0.33	0.10	0.060	(0.359)	0.030	0.030
5	0.42	0.10	0.060	(0.358)	0.030	0.030
6	0.50	0.10	0.060	(0.356)	0.030	0.030
7	0.58	0.10	0.060	(0.355)	0.030	0.030
8	0.67	0.10	0.060	(0.354)	0.030	0.030
9	0.75	0.10	0.060	(0.352)	0.030	0.030
10	0.83	0.13	0.080	(0.351)	0.040	0.040
11	0.92	0.13	0.080	(0.350)	0.040	0.040
12	1.00	0.13	0.080	(0.348)	0.040	0.040
13	1.08	0.10	0.060	(0.347)	0.030	0.030
14	1.17	0.10	0.060	(0.345)	0.030	0.030
15	1.25	0.10	0.060	(0.344)	0.030	0.030
16	1.33	0.10	0.060	(0.343)	0.030	0.030
17	1.42	0.10	0.060	(0.341)	0.030	0.030
18	1.50	0.10	0.060	(0.340)	0.030	0.030
19	1.58	0.10	0.060	(0.339)	0.030	0.030
20	1.67	0.10	0.060	(0.337)	0.030	0.030
21	1.75	0.10	0.060	(0.336)	0.030	0.030
22	1.83	0.13	0.080	(0.335)	0.040	0.040
23	1.92	0.13	0.080	(0.333)	0.040	0.040
24	2.00	0.13	0.080	(0.332)	0.040	0.040
25	2.08	0.13	0.080	(0.330)	0.040	0.040
26	2.17	0.13	0.080	(0.329)	0.040	0.040
27	2.25	0.13	0.080	(0.328)	0.040	0.040
28	2.33	0.13	0.080	(0.326)	0.040	0.040
29	2.42	0.13	0.080	(0.325)	0.040	0.040
30	2.50	0.13	0.080	(0.324)	0.040	0.040
31	2.58	0.17	0.100	(0.323)	0.050	0.050
32	2.67	0.17	0.100	(0.321)	0.050	0.050

33	2.75	0.17	0.100	(0.320)	0.050	0.050
34	2.83	0.17	0.100	(0.319)	0.050	0.050
35	2.92	0.17	0.100	(0.317)	0.050	0.050
36	3.00	0.17	0.100	(0.316)	0.050	0.050
37	3.08	0.17	0.100	(0.315)	0.050	0.050
38	3.17	0.17	0.100	(0.313)	0.050	0.050
39	3.25	0.17	0.100	(0.312)	0.050	0.050
40	3.33	0.17	0.100	(0.311)	0.050	0.050
41	3.42	0.17	0.100	(0.309)	0.050	0.050
42	3.50	0.17	0.100	(0.308)	0.050	0.050
43	3.58	0.17	0.100	(0.307)	0.050	0.050
44	3.67	0.17	0.100	(0.306)	0.050	0.050
45	3.75	0.17	0.100	(0.304)	0.050	0.050
46	3.83	0.20	0.120	(0.303)	0.060	0.060
47	3.92	0.20	0.120	(0.302)	0.060	0.060
48	4.00	0.20	0.120	(0.300)	0.060	0.060
49	4.08	0.20	0.120	(0.299)	0.060	0.060
50	4.17	0.20	0.120	(0.298)	0.060	0.060
51	4.25	0.20	0.120	(0.297)	0.060	0.060
52	4.33	0.23	0.140	(0.295)	0.070	0.070
53	4.42	0.23	0.140	(0.294)	0.070	0.070
54	4.50	0.23	0.140	(0.293)	0.070	0.070
55	4.58	0.23	0.140	(0.292)	0.070	0.070
56	4.67	0.23	0.140	(0.290)	0.070	0.070
57	4.75	0.23	0.140	(0.289)	0.070	0.070
58	4.83	0.27	0.160	(0.288)	0.080	0.080
59	4.92	0.27	0.160	(0.287)	0.080	0.080
60	5.00	0.27	0.160	(0.285)	0.080	0.080
61	5.08	0.20	0.120	(0.284)	0.060	0.060
62	5.17	0.20	0.120	(0.283)	0.060	0.060
63	5.25	0.20	0.120	(0.282)	0.060	0.060
64	5.33	0.23	0.140	(0.280)	0.070	0.070
65	5.42	0.23	0.140	(0.279)	0.070	0.070
66	5.50	0.23	0.140	(0.278)	0.070	0.070
67	5.58	0.27	0.160	(0.277)	0.080	0.080
68	5.67	0.27	0.160	(0.275)	0.080	0.080
69	5.75	0.27	0.160	(0.274)	0.080	0.080
70	5.83	0.27	0.160	(0.273)	0.080	0.080
71	5.92	0.27	0.160	(0.272)	0.080	0.080
72	6.00	0.27	0.160	(0.271)	0.080	0.080
73	6.08	0.30	0.180	(0.269)	0.090	0.090
74	6.17	0.30	0.180	(0.268)	0.090	0.090
75	6.25	0.30	0.180	(0.267)	0.090	0.090
76	6.33	0.30	0.180	(0.266)	0.090	0.090
77	6.42	0.30	0.180	(0.265)	0.090	0.090
78	6.50	0.30	0.180	(0.263)	0.090	0.090
79	6.58	0.33	0.200	(0.262)	0.100	0.100
80	6.67	0.33	0.200	(0.261)	0.100	0.100
81	6.75	0.33	0.200	(0.260)	0.100	0.100
82	6.83	0.33	0.200	(0.259)	0.100	0.100
83	6.92	0.33	0.200	(0.258)	0.100	0.100
84	7.00	0.33	0.200	(0.256)	0.100	0.100
85	7.08	0.33	0.200	(0.255)	0.100	0.100
86	7.17	0.33	0.200	(0.254)	0.100	0.100
87	7.25	0.33	0.200	(0.253)	0.100	0.100
88	7.33	0.37	0.220	(0.252)	0.110	0.110
89	7.42	0.37	0.220	(0.251)	0.110	0.110
90	7.50	0.37	0.220	(0.249)	0.110	0.110
91	7.58	0.40	0.240	(0.248)	0.120	0.120
92	7.67	0.40	0.240	(0.247)	0.120	0.120
93	7.75	0.40	0.240	(0.246)	0.120	0.120
94	7.83	0.43	0.260	(0.245)	0.130	0.130
95	7.92	0.43	0.260	(0.244)	0.130	0.130
96	8.00	0.43	0.260	(0.243)	0.130	0.130
97	8.08	0.50	0.300	(0.242)	0.150	0.150
98	8.17	0.50	0.300	(0.240)	0.150	0.150
99	8.25	0.50	0.300	(0.239)	0.150	0.150
100	8.33	0.50	0.300	(0.238)	0.150	0.150
101	8.42	0.50	0.300	(0.237)	0.150	0.150
102	8.50	0.50	0.300	(0.236)	0.150	0.150
103	8.58	0.53	0.320	(0.235)	0.160	0.160

104	8.67	0.53	0.320	(0.234)	0.160	0.160
105	8.75	0.53	0.320	(0.233)	0.160	0.160
106	8.83	0.57	0.340	(0.232)	0.170	0.170
107	8.92	0.57	0.340	(0.230)	0.170	0.170
108	9.00	0.57	0.340	(0.229)	0.170	0.170
109	9.08	0.63	0.380	(0.228)	0.190	0.190
110	9.17	0.63	0.380	(0.227)	0.190	0.190
111	9.25	0.63	0.380	(0.226)	0.190	0.190
112	9.33	0.67	0.400	(0.225)	0.200	0.200
113	9.42	0.67	0.400	(0.224)	0.200	0.200
114	9.50	0.67	0.400	(0.223)	0.200	0.200
115	9.58	0.70	0.420	(0.222)	0.210	0.210
116	9.67	0.70	0.420	(0.221)	0.210	0.210
117	9.75	0.70	0.420	(0.220)	0.210	0.210
118	9.83	0.73	0.440	0.219	(0.220)	0.221
119	9.92	0.73	0.440	0.218	(0.220)	0.222
120	10.00	0.73	0.440	0.217	(0.220)	0.223
121	10.08	0.50	0.300	(0.215)	0.150	0.150
122	10.17	0.50	0.300	(0.214)	0.150	0.150
123	10.25	0.50	0.300	(0.213)	0.150	0.150
124	10.33	0.50	0.300	(0.212)	0.150	0.150
125	10.42	0.50	0.300	(0.211)	0.150	0.150
126	10.50	0.50	0.300	(0.210)	0.150	0.150
127	10.58	0.67	0.400	(0.209)	0.200	0.200
128	10.67	0.67	0.400	(0.208)	0.200	0.200
129	10.75	0.67	0.400	(0.207)	0.200	0.200
130	10.83	0.67	0.400	(0.206)	0.200	0.200
131	10.92	0.67	0.400	(0.205)	0.200	0.200
132	11.00	0.67	0.400	(0.204)	0.200	0.200
133	11.08	0.63	0.380	(0.203)	0.190	0.190
134	11.17	0.63	0.380	(0.202)	0.190	0.190
135	11.25	0.63	0.380	(0.201)	0.190	0.190
136	11.33	0.63	0.380	(0.200)	0.190	0.190
137	11.42	0.63	0.380	(0.199)	0.190	0.190
138	11.50	0.63	0.380	(0.198)	0.190	0.190
139	11.58	0.57	0.340	(0.197)	0.170	0.170
140	11.67	0.57	0.340	(0.196)	0.170	0.170
141	11.75	0.57	0.340	(0.195)	0.170	0.170
142	11.83	0.60	0.360	(0.194)	0.180	0.180
143	11.92	0.60	0.360	(0.193)	0.180	0.180
144	12.00	0.60	0.360	(0.192)	0.180	0.180
145	12.08	0.83	0.500	0.191	(0.250)	0.309
146	12.17	0.83	0.500	0.190	(0.250)	0.310
147	12.25	0.83	0.500	0.189	(0.250)	0.310
148	12.33	0.87	0.520	0.189	(0.260)	0.331
149	12.42	0.87	0.520	0.188	(0.260)	0.332
150	12.50	0.87	0.520	0.187	(0.260)	0.333
151	12.58	0.93	0.560	0.186	(0.280)	0.374
152	12.67	0.93	0.560	0.185	(0.280)	0.375
153	12.75	0.93	0.560	0.184	(0.280)	0.376
154	12.83	0.97	0.580	0.183	(0.290)	0.397
155	12.92	0.97	0.580	0.182	(0.290)	0.398
156	13.00	0.97	0.580	0.181	(0.290)	0.399
157	13.08	1.13	0.680	0.180	(0.340)	0.500
158	13.17	1.13	0.680	0.179	(0.340)	0.501
159	13.25	1.13	0.680	0.178	(0.340)	0.502
160	13.33	1.13	0.680	0.177	(0.340)	0.503
161	13.42	1.13	0.680	0.177	(0.340)	0.503
162	13.50	1.13	0.680	0.176	(0.340)	0.504
163	13.58	0.77	0.460	0.175	(0.230)	0.285
164	13.67	0.77	0.460	0.174	(0.230)	0.286
165	13.75	0.77	0.460	0.173	(0.230)	0.287
166	13.83	0.77	0.460	0.172	(0.230)	0.288
167	13.92	0.77	0.460	0.171	(0.230)	0.289
168	14.00	0.77	0.460	0.170	(0.230)	0.290
169	14.08	0.90	0.540	0.169	(0.270)	0.371
170	14.17	0.90	0.540	0.169	(0.270)	0.371
171	14.25	0.90	0.540	0.168	(0.270)	0.372
172	14.33	0.87	0.520	0.167	(0.260)	0.353
173	14.42	0.87	0.520	0.166	(0.260)	0.354
174	14.50	0.87	0.520	0.165	(0.260)	0.355

175	14.58	0.87	0.520	0.164	(0.260)	0.356
176	14.67	0.87	0.520	0.163	(0.260)	0.357
177	14.75	0.87	0.520	0.163	(0.260)	0.357
178	14.83	0.83	0.500	0.162	(0.250)	0.338
179	14.92	0.83	0.500	0.161	(0.250)	0.339
180	15.00	0.83	0.500	0.160	(0.250)	0.340
181	15.08	0.80	0.480	0.159	(0.240)	0.321
182	15.17	0.80	0.480	0.159	(0.240)	0.321
183	15.25	0.80	0.480	0.158	(0.240)	0.322
184	15.33	0.77	0.460	0.157	(0.230)	0.303
185	15.42	0.77	0.460	0.156	(0.230)	0.304
186	15.50	0.77	0.460	0.155	(0.230)	0.305
187	15.58	0.63	0.380	0.154	(0.190)	0.226
188	15.67	0.63	0.380	0.154	(0.190)	0.226
189	15.75	0.63	0.380	0.153	(0.190)	0.227
190	15.83	0.63	0.380	0.152	(0.190)	0.228
191	15.92	0.63	0.380	0.151	(0.190)	0.229
192	16.00	0.63	0.380	0.151	(0.190)	0.229
193	16.08	0.13	0.080	(0.150)	0.040	0.040
194	16.17	0.13	0.080	(0.149)	0.040	0.040
195	16.25	0.13	0.080	(0.148)	0.040	0.040
196	16.33	0.13	0.080	(0.148)	0.040	0.040
197	16.42	0.13	0.080	(0.147)	0.040	0.040
198	16.50	0.13	0.080	(0.146)	0.040	0.040
199	16.58	0.10	0.060	(0.145)	0.030	0.030
200	16.67	0.10	0.060	(0.145)	0.030	0.030
201	16.75	0.10	0.060	(0.144)	0.030	0.030
202	16.83	0.10	0.060	(0.143)	0.030	0.030
203	16.92	0.10	0.060	(0.142)	0.030	0.030
204	17.00	0.10	0.060	(0.142)	0.030	0.030
205	17.08	0.17	0.100	(0.141)	0.050	0.050
206	17.17	0.17	0.100	(0.140)	0.050	0.050
207	17.25	0.17	0.100	(0.140)	0.050	0.050
208	17.33	0.17	0.100	(0.139)	0.050	0.050
209	17.42	0.17	0.100	(0.138)	0.050	0.050
210	17.50	0.17	0.100	(0.137)	0.050	0.050
211	17.58	0.17	0.100	(0.137)	0.050	0.050
212	17.67	0.17	0.100	(0.136)	0.050	0.050
213	17.75	0.17	0.100	(0.135)	0.050	0.050
214	17.83	0.13	0.080	(0.135)	0.040	0.040
215	17.92	0.13	0.080	(0.134)	0.040	0.040
216	18.00	0.13	0.080	(0.133)	0.040	0.040
217	18.08	0.13	0.080	(0.133)	0.040	0.040
218	18.17	0.13	0.080	(0.132)	0.040	0.040
219	18.25	0.13	0.080	(0.131)	0.040	0.040
220	18.33	0.13	0.080	(0.131)	0.040	0.040
221	18.42	0.13	0.080	(0.130)	0.040	0.040
222	18.50	0.13	0.080	(0.130)	0.040	0.040
223	18.58	0.10	0.060	(0.129)	0.030	0.030
224	18.67	0.10	0.060	(0.128)	0.030	0.030
225	18.75	0.10	0.060	(0.128)	0.030	0.030
226	18.83	0.07	0.040	(0.127)	0.020	0.020
227	18.92	0.07	0.040	(0.126)	0.020	0.020
228	19.00	0.07	0.040	(0.126)	0.020	0.020
229	19.08	0.10	0.060	(0.125)	0.030	0.030
230	19.17	0.10	0.060	(0.125)	0.030	0.030
231	19.25	0.10	0.060	(0.124)	0.030	0.030
232	19.33	0.13	0.080	(0.123)	0.040	0.040
233	19.42	0.13	0.080	(0.123)	0.040	0.040
234	19.50	0.13	0.080	(0.122)	0.040	0.040
235	19.58	0.10	0.060	(0.122)	0.030	0.030
236	19.67	0.10	0.060	(0.121)	0.030	0.030
237	19.75	0.10	0.060	(0.121)	0.030	0.030
238	19.83	0.07	0.040	(0.120)	0.020	0.020
239	19.92	0.07	0.040	(0.120)	0.020	0.020
240	20.00	0.07	0.040	(0.119)	0.020	0.020
241	20.08	0.10	0.060	(0.119)	0.030	0.030
242	20.17	0.10	0.060	(0.118)	0.030	0.030
243	20.25	0.10	0.060	(0.118)	0.030	0.030
244	20.33	0.10	0.060	(0.117)	0.030	0.030
245	20.42	0.10	0.060	(0.116)	0.030	0.030

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246  20.50     0.10      0.060       (  0.116)       0.030        0.030
247  20.58     0.10      0.060       (  0.116)       0.030        0.030
248  20.67     0.10      0.060       (  0.115)       0.030        0.030
249  20.75     0.10      0.060       (  0.115)       0.030        0.030
250  20.83     0.07      0.040       (  0.114)       0.020        0.020
251  20.92     0.07      0.040       (  0.114)       0.020        0.020
252  21.00     0.07      0.040       (  0.113)       0.020        0.020
253  21.08     0.10      0.060       (  0.113)       0.030        0.030
254  21.17     0.10      0.060       (  0.112)       0.030        0.030
255  21.25     0.10      0.060       (  0.112)       0.030        0.030
256  21.33     0.07      0.040       (  0.111)       0.020        0.020
257  21.42     0.07      0.040       (  0.111)       0.020        0.020
258  21.50     0.07      0.040       (  0.111)       0.020        0.020
259  21.58     0.10      0.060       (  0.110)       0.030        0.030
260  21.67     0.10      0.060       (  0.110)       0.030        0.030
261  21.75     0.10      0.060       (  0.109)       0.030        0.030
262  21.83     0.07      0.040       (  0.109)       0.020        0.020
263  21.92     0.07      0.040       (  0.109)       0.020        0.020
264  22.00     0.07      0.040       (  0.108)       0.020        0.020
265  22.08     0.10      0.060       (  0.108)       0.030        0.030
266  22.17     0.10      0.060       (  0.108)       0.030        0.030
267  22.25     0.10      0.060       (  0.107)       0.030        0.030
268  22.33     0.07      0.040       (  0.107)       0.020        0.020
269  22.42     0.07      0.040       (  0.107)       0.020        0.020
270  22.50     0.07      0.040       (  0.106)       0.020        0.020
271  22.58     0.07      0.040       (  0.106)       0.020        0.020
272  22.67     0.07      0.040       (  0.106)       0.020        0.020
273  22.75     0.07      0.040       (  0.105)       0.020        0.020
274  22.83     0.07      0.040       (  0.105)       0.020        0.020
275  22.92     0.07      0.040       (  0.105)       0.020        0.020
276  23.00     0.07      0.040       (  0.105)       0.020        0.020
277  23.08     0.07      0.040       (  0.104)       0.020        0.020
278  23.17     0.07      0.040       (  0.104)       0.020        0.020
279  23.25     0.07      0.040       (  0.104)       0.020        0.020
280  23.33     0.07      0.040       (  0.104)       0.020        0.020
281  23.42     0.07      0.040       (  0.103)       0.020        0.020
282  23.50     0.07      0.040       (  0.103)       0.020        0.020
283  23.58     0.07      0.040       (  0.103)       0.020        0.020
284  23.67     0.07      0.040       (  0.103)       0.020        0.020
285  23.75     0.07      0.040       (  0.103)       0.020        0.020
286  23.83     0.07      0.040       (  0.103)       0.020        0.020
287  23.92     0.07      0.040       (  0.103)       0.020        0.020
288  24.00     0.07      0.040       (  0.103)       0.020        0.020
                (Loss Rate Not Used)
    Sum =     100.0                                    Sum =    34.2
      Flood volume = Effective rainfall      2.85(In)
       times area      19.1(Ac.)/[(In)/(Ft.)] =       4.5(Ac.Ft)
      Total soil loss =      2.15(In)
      Total soil loss =     3.430(Ac.Ft)
      Total rainfall =      5.00(In)
      Flood volume =      197591.6 Cubic Feet
      Total soil loss =      149423.4 Cubic Feet
      ---------------------------------------------------------------------
       Peak flow rate of this hydrograph =      9.437(CFS)
      ---------------------------------------------------------------------
      +++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                          24 - H O U R    S T O R M
                     R u n o f f      H y d r o g r a p h
      ---------------------------------------------------------------------
                  Hydrograph in   5   Minute intervals ((CFS))

      ---------------------------------------------------------------------
 Time(h+m) Volume Ac.Ft   Q(CFS)  0        2.5       5.0       7.5      10.0
 ---------------------------------------------------------------------------
   0+ 5       0.0002      0.03  Q         |         |         |         |
   0+10       0.0013      0.16  Q         |         |         |         |
   0+15       0.0031      0.26  VQ        |         |         |         |
   0+20       0.0053      0.32  VQ        |         |         |         |
   0+25       0.0081      0.40  VQ        |         |         |         |
   0+30       0.0113      0.47  VQ        |         |         |         |
   0+35       0.0148      0.51  V Q       |         |         |         |
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0+40      0.0184      0.53  V Q       |         |         |         |
0+45      0.0222      0.54  V Q       |         |         |         |
0+50      0.0261      0.57  V Q       |         |         |         |
0+55      0.0304      0.64  V Q       |         |         |         |
1+ 0      0.0352      0.70  V Q       |         |         |         |
1+ 5      0.0401      0.71  V Q       |         |         |         |
1+10      0.0446      0.66  V Q       |         |         |         |
1+15      0.0489      0.62  V Q       |         |         |         |
1+20      0.0530      0.60  V Q       |         |         |         |
1+25      0.0571      0.60  V Q       |         |         |         |
1+30      0.0612      0.59  V Q       |         |         |         |
1+35      0.0653      0.59  V Q       |         |         |         |
1+40      0.0693      0.59  V Q       |         |         |         |
1+45      0.0733      0.58  V Q       |         |         |         |
1+50      0.0774      0.60  V Q       |         |         |         |
1+55      0.0820      0.66  V Q       |         |         |         |
2+ 0      0.0869      0.71  V Q       |         |         |         |
2+ 5      0.0919      0.73  V Q       |         |         |         |
2+10      0.0970      0.74  V Q       |         |         |         |
2+15      0.1022      0.75  V Q       |         |         |         |
2+20      0.1074      0.76  V  Q      |         |         |         |
2+25      0.1126      0.76  V  Q      |         |         |         |
2+30      0.1179      0.76  |V Q      |         |         |         |
2+35      0.1233      0.78  |V Q      |         |         |         |
2+40      0.1291      0.85  |V Q      |         |         |         |
2+45      0.1353      0.90  |V Q      |         |         |         |
2+50      0.1416      0.92  |V Q      |         |         |         |
2+55      0.1481      0.93  |V Q      |         |         |         |
3+ 0      0.1546      0.94  |V Q      |         |         |         |
3+ 5      0.1611      0.95  |V Q      |         |         |         |
3+10      0.1676      0.95  |V Q      |         |         |         |
3+15      0.1742      0.96  |V Q      |         |         |         |
3+20      0.1808      0.96  |V Q      |         |         |         |
3+25      0.1874      0.96  |V Q      |         |         |         |
3+30      0.1941      0.96  |V Q      |         |         |         |
3+35      0.2007      0.96  |V Q      |         |         |         |
3+40      0.2073      0.96  |V Q      |         |         |         |
3+45      0.2140      0.96  |V Q      |         |         |         |
3+50      0.2207      0.98  |V Q      |         |         |         |
3+55      0.2279      1.04  | V Q     |         |         |         |
4+ 0      0.2354      1.09  | V Q     |         |         |         |
4+ 5      0.2431      1.12  | V Q     |         |         |         |
4+10      0.2509      1.13  | V Q     |         |         |         |
4+15      0.2587      1.14  | V Q     |         |         |         |
4+20      0.2666      1.16  | V Q     |         |         |         |
4+25      0.2751      1.22  | V Q     |         |         |         |
4+30      0.2839      1.28  | V  Q    |         |         |         |
4+35      0.2929      1.30  | V  Q    |         |         |         |
4+40      0.3019      1.32  | V  Q    |         |         |         |
4+45      0.3110      1.33  | V  Q    |         |         |         |
4+50      0.3203      1.35  | V  Q    |         |         |         |
4+55      0.3301      1.42  | V  Q    |         |         |         |
5+ 0      0.3402      1.47  |  V Q    |         |         |         |
5+ 5      0.3503      1.46  |  V Q    |         |         |         |
5+10      0.3596      1.35  |  V Q    |         |         |         |
5+15      0.3683      1.26  |  V Q    |         |         |         |
5+20      0.3768      1.24  |  VQ     |         |         |         |
5+25      0.3856      1.28  |  V Q    |         |         |         |
5+30      0.3947      1.32  |  V Q    |         |         |         |
5+35      0.4040      1.35  |  V Q    |         |         |         |
5+40      0.4138      1.42  |  V Q    |         |         |         |
5+45      0.4239      1.47  |  V Q    |         |         |         |
5+50      0.4342      1.50  |  V Q    |         |         |         |
5+55      0.4446      1.51  |  V  Q   |         |         |         |
6+ 0      0.4551      1.52  |   V Q   |         |         |         |
6+ 5      0.4657      1.54  |   V Q   |         |         |         |
6+10      0.4767      1.61  |   V Q   |         |         |         |
6+15      0.4882      1.66  |   V Q   |         |         |         |
6+20      0.4998      1.69  |   V Q   |         |         |         |
6+25      0.5115      1.70  |   V Q   |         |         |         |
6+30      0.5233      1.71  |   V Q   |         |         |         |
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6+35	0.5352	1.73	V Q				
6+40	0.5476	1.80	V Q				
6+45	0.5604	1.86	V Q				
6+50	0.5734	1.88	V Q				
6+55	0.5864	1.89	V Q				
7+ 0	0.5996	1.90	V Q				
7+ 5	0.6127	1.91	V Q				
7+10	0.6259	1.92	V Q				
7+15	0.6391	1.92	V Q				
7+20	0.6525	1.94	V Q				
7+25	0.6663	2.00	V Q				
7+30	0.6804	2.06	V Q				
7+35	0.6948	2.09	V Q				
7+40	0.7098	2.17	V Q				
7+45	0.7251	2.23	V Q				
7+50	0.7408	2.27	V Q				
7+55	0.7570	2.35	V Q				
8+ 0	0.7736	2.41	V Q				
8+ 5	0.7906	2.47	V Q				
8+10	0.8087	2.62	V Q				
8+15	0.8275	2.74	V Q				
8+20	0.8467	2.79	V Q				
8+25	0.8661	2.82	V Q				
8+30	0.8856	2.84	V Q				
8+35	0.9054	2.87	V Q				
8+40	0.9257	2.94	V Q				
8+45	0.9464	3.00	V Q				
8+50	0.9673	3.05	V Q				
8+55	0.9889	3.13	V Q				
9+ 0	1.0108	3.19	V Q				
9+ 5	1.0332	3.25	V Q				
9+10	1.0566	3.39	V Q				
9+15	1.0807	3.51	V Q				
9+20	1.1053	3.57	V Q				
9+25	1.1306	3.67	V Q				
9+30	1.1563	3.74	V Q				
9+35	1.1825	3.79	V Q				
9+40	1.2092	3.88	V Q				
9+45	1.2363	3.95	V Q				
9+50	1.2639	4.00	V Q				
9+55	1.2920	4.09	V Q				
10+ 0	1.3208	4.17	V Q				
10+ 5	1.3490	4.11	V Q				
10+10	1.3743	3.67	V Q				
10+15	1.3971	3.30	VQ				
10+20	1.4189	3.17	Q				
10+25	1.4402	3.09	Q				
10+30	1.4611	3.04	Q				
10+35	1.4822	3.07	QV				
10+40	1.5054	3.37	Q				
10+45	1.5302	3.60	VQ				
10+50	1.5556	3.69	VQ				
10+55	1.5813	3.74	VQ				
11+ 0	1.6073	3.77	VQ				
11+ 5	1.6333	3.77	VQ				
11+10	1.6589	3.72	Q				
11+15	1.6842	3.68	Q				
11+20	1.7095	3.68	QV				
11+25	1.7348	3.67	QV				
11+30	1.7601	3.67	QV				
11+35	1.7852	3.64	QV				
11+40	1.8094	3.52	QV				
11+45	1.8329	3.41	Q V				
11+50	1.8562	3.38	Q V				
11+55	1.8798	3.42	Q V				
12+ 0	1.9035	3.45	Q V				
12+ 5	1.9287	3.66	Q V				
12+10	1.9596	4.48	Q				
12+15	1.9951	5.16	V Q				
12+20	2.0327	5.46	V Q				
12+25	2.0724	5.76	V Q				

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12+30       2.1135      5.98  |          |          V |  Q       |          |
12+35       2.1561      6.17  |          |          V|   Q      |          |
12+40       2.2010      6.52  |          |          V|     Q    |          |
12+45       2.2479      6.81  |          |          V|       Q  |          |
12+50       2.2959      6.98  |          |           V       Q  |          |
12+55       2.3456      7.21  |          |           V         Q|          |
13+ 0       2.3965      7.39  |          |           |V        Q|          |
13+ 5       2.4491      7.64  |          |           |V         Q          |
13+10       2.5066      8.35  |          |           | V        |  Q       |
13+15       2.5681      8.93  |          |           | V        |    Q     |
13+20       2.6312      9.17  |          |           |  V       |     Q    |
13+25       2.6955      9.33  |          |           |  V       |      Q   |
13+30       2.7605      9.44  |          |           |   V      |      Q   |
13+35       2.8237      9.19  |          |           |   V      |     Q    |
13+40       2.8779      7.86  |          |           |    V     |Q         |
13+45       2.9244      6.76  |          |           |    V Q   |          |
13+50       2.9682      6.36  |          |           |    QV    |          |
13+55       3.0105      6.14  |          |           |   Q V    |          |
14+ 0       3.0518      5.99  |          |           |  Q  V    |          |
14+ 5       3.0932      6.01  |          |           |   Q  V   |          |
14+10       3.1377      6.46  |          |           |    Q V   |          |
14+15       3.1847      6.82  |          |           |      QV  |          |
14+20       3.2323      6.92  |          |           |      QV  |          |
14+25       3.2795      6.86  |          |           |      QV  |          |
14+30       3.3264      6.80  |          |           |      Q V|          |
14+35       3.3732      6.80  |          |           |      Q V|          |
14+40       3.4200      6.80  |          |           |      Q  V          |
14+45       3.4670      6.82  |          |           |      Q  V          |
14+50       3.5140      6.82  |          |           |      Q  V          |
14+55       3.5602      6.72  |          |           |     Q   |V         |
15+ 0       3.6059      6.63  |          |           |     Q   |V         |
15+ 5       3.6512      6.58  |          |           |     Q   | V        |
15+10       3.6956      6.45  |          |           |    Q    | V        |
15+15       3.7393      6.34  |          |           |    Q    | V        |
15+20       3.7826      6.28  |          |           |    Q    |  V       |
15+25       3.8248      6.13  |          |           |   Q     |  V       |
15+30       3.8662      6.02  |          |           |   Q     |   V      |
15+35       3.9065      5.85  |          |           |  Q      |   V      |
15+40       3.9432      5.33  |          |           |Q        |   V      |
15+45       3.9770      4.90  |          |         Q|         |    V     |
15+50       4.0096      4.73  |          |        Q |         |    V     |
15+55       4.0415      4.64  |          |        Q |         |    V     |
16+ 0       4.0730      4.58  |          |        Q |         |    V     |
16+ 5       4.1023      4.25  |          |      Q   |         |     V    |
16+10       4.1231      3.02  |        Q |          |         |     V    |
16+15       4.1369      2.00  |       Q  |          |         |     V    |
16+20       4.1479      1.60  |     Q    |          |         |     V    |
16+25       4.1572      1.36  |    Q     |          |         |     V    |
16+30       4.1655      1.20  |   Q      |          |         |     V    |
16+35       4.1728      1.06  |   Q      |          |         |     V    |
16+40       4.1791      0.91  |  Q       |          |         |     V    |
16+45       4.1846      0.80  |  Q       |          |         |     V    |
16+50       4.1896      0.73  | Q        |          |         |     V    |
16+55       4.1943      0.68  | Q        |          |         |     V    |
17+ 0       4.1987      0.65  | Q        |          |         |      V   |
17+ 5       4.2032      0.65  | Q        |          |         |      V   |
17+10       4.2083      0.75  | Q        |          |         |      V   |
17+15       4.2142      0.85  |  Q       |          |         |      V   |
17+20       4.2203      0.89  |  Q       |          |         |      V   |
17+25       4.2265      0.91  |  Q       |          |         |      V   |
17+30       4.2329      0.92  |  Q       |          |         |      V   |
17+35       4.2393      0.93  |  Q       |          |         |      V   |
17+40       4.2458      0.94  |  Q       |          |         |      V   |
17+45       4.2523      0.95  |  Q       |          |         |      V   |
17+50       4.2588      0.94  |  Q       |          |         |      V   |
17+55       4.2648      0.88  |  Q       |          |         |      V   |
18+ 0       4.2705      0.83  |  Q       |          |         |      V   |
18+ 5       4.2761      0.81  |  Q       |          |         |      V   |
18+10       4.2816      0.80  |  Q       |          |         |      V   |
18+15       4.2871      0.79  |  Q       |          |         |      V   |
18+20       4.2925      0.79  |  Q       |          |         |      V   |
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18+25       4.2979      0.78  |  Q      |         |         |      V  |
18+30       4.3033      0.78  |  Q      |         |         |      V  |
18+35       4.3085      0.76  |  Q      |         |         |      V  |
18+40       4.3133      0.70  | Q       |         |         |       V |
18+45       4.3177      0.64  | Q       |         |         |       V |
18+50       4.3219      0.61  | Q       |         |         |       V |
18+55       4.3256      0.53  | Q       |         |         |       V |
19+ 0       4.3288      0.47  |Q        |         |         |       V |
19+ 5       4.3319      0.46  |Q        |         |         |       V |
19+10       4.3354      0.51  | Q       |         |         |       V |
19+15       4.3392      0.55  | Q       |         |         |       V |
19+20       4.3431      0.57  | Q       |         |         |       V |
19+25       4.3476      0.64  | Q       |         |         |       V |
19+30       4.3524      0.70  | Q       |         |         |       V |
19+35       4.3572      0.71  | Q       |         |         |       V |
19+40       4.3617      0.65  | Q       |         |         |       V |
19+45       4.3660      0.61  | Q       |         |         |       V |
19+50       4.3700      0.58  | Q       |         |         |       V |
19+55       4.3735      0.51  | Q       |         |         |       V |
20+ 0       4.3767      0.46  |Q        |         |         |       V |
20+ 5       4.3798      0.45  |Q        |         |         |       V |
20+10       4.3832      0.50  | Q       |         |         |       V |
20+15       4.3870      0.54  | Q       |         |         |       V |
20+20       4.3908      0.56  | Q       |         |         |       V |
20+25       4.3947      0.56  | Q       |         |         |       V |
20+30       4.3986      0.57  | Q       |         |         |       V |
20+35       4.4025      0.57  | Q       |         |         |       V |
20+40       4.4065      0.57  | Q       |         |         |       V |
20+45       4.4104      0.57  | Q       |         |         |       V |
20+50       4.4143      0.56  | Q       |         |         |       V |
20+55       4.4177      0.50  |Q        |         |         |       V |
21+ 0       4.4207      0.45  |Q        |         |         |       V |
21+ 5       4.4238      0.44  |Q        |         |         |        V|
21+10       4.4272      0.49  |Q        |         |         |        V|
21+15       4.4309      0.54  | Q       |         |         |        V|
21+20       4.4346      0.54  | Q       |         |         |        V|
21+25       4.4379      0.48  |Q        |         |         |        V|
21+30       4.4409      0.43  |Q        |         |         |        V|
21+35       4.4439      0.43  |Q        |         |         |        V|
21+40       4.4472      0.49  |Q        |         |         |        V|
21+45       4.4509      0.53  | Q       |         |         |        V|
21+50       4.4546      0.53  | Q       |         |         |        V|
21+55       4.4578      0.48  |Q        |         |         |        V|
22+ 0       4.4608      0.43  |Q        |         |         |        V|
22+ 5       4.4638      0.43  |Q        |         |         |        V|
22+10       4.4671      0.49  |Q        |         |         |        V|
22+15       4.4708      0.53  | Q       |         |         |        V|
22+20       4.4745      0.53  | Q       |         |         |        V|
22+25       4.4778      0.48  |Q        |         |         |        V|
22+30       4.4807      0.43  |Q        |         |         |        V|
22+35       4.4836      0.42  |Q        |         |         |        V|
22+40       4.4864      0.41  |Q        |         |         |        V|
22+45       4.4892      0.40  |Q        |         |         |        V|
22+50       4.4919      0.40  |Q        |         |         |        V|
22+55       4.4946      0.39  |Q        |         |         |        V|
23+ 0       4.4973      0.39  |Q        |         |         |        V|
23+ 5       4.5000      0.39  |Q        |         |         |        V|
23+10       4.5027      0.39  |Q        |         |         |        V|
23+15       4.5053      0.39  |Q        |         |         |        V|
23+20       4.5080      0.39  |Q        |         |         |        V|
23+25       4.5107      0.39  |Q        |         |         |        V|
23+30       4.5133      0.39  |Q        |         |         |        V|
23+35       4.5160      0.39  |Q        |         |         |        V|
23+40       4.5186      0.39  |Q        |         |         |        V|
23+45       4.5213      0.39  |Q        |         |         |        V|
23+50       4.5239      0.39  |Q        |         |         |        V|
23+55       4.5266      0.39  |Q        |         |         |        V|
24+ 0       4.5293      0.39  |Q        |         |         |        V|
24+ 5       4.5317      0.36  |Q        |         |         |        V|
24+10       4.5333      0.23  Q        |         |         |        V|
24+15       4.5341      0.12  Q        |         |         |        V|
```

24+20	4.5347	0.08	Q	|	|	|	V|
24+25	4.5351	0.06	Q	|	|	|	V|
24+30	4.5354	0.04	Q	|	|	|	V|
24+35	4.5356	0.03	Q	|	|	|	V|
24+40	4.5358	0.02	Q	|	|	|	V|
24+45	4.5359	0.02	Q	|	|	|	V|
24+50	4.5360	0.01	Q	|	|	|	V|
24+55	4.5360	0.01	Q	|	|	|	V|
25+ 0	4.5361	0.00	Q	|	|	|	V|
25+ 5	4.5361	0.00	Q	|	|	|	V|

Basin “A” Discharge/Storage Curve and Routing Calculations

Extended Detention Basin A Storm Event Summary								
Storm Event	Existing		Proposed		Routed			Flow Differential
	Volume (ac.ft.)	cfs	Volume (ac.ft.)	cfs	Volume (ac.ft.)	cfs	Depth (ft)	
2yr1hr	1.673	68.2	2.115	52.2	2.101	1.3	6.24	-98.1%
2yr3hr	1.509	32.1	2.826	31.0	2.812	1.7	7.39	-94.7%
2yr6hr	1.612	26.7	3.692	27.3	3.686	2.0	8.62	-92.5%
2yr24hr	1.158	2.4	5.686	9.1	5.673	2.3	9.69	-4.2%
5yr1hr	2.785	100.7	3.140	76.4	3.127	1.9	8.04	-98.1%
5yr3hr	2.723	50.1	4.060	46.3	4.047	2.2	9.34	-95.6%
5yr6hr	3.193	44.8	5.513	43.7	5.500	2.6	11.10	-94.2%
5yr24hr	2.427	9.9	8.054	12.8	8.041	9.6	11.44	-3.0%
10yr1hr	4.496	135.2	3.970	95.0	3.957	2.2	9.32	-98.4%
10yr3hr	5.972	73.5	5.096	58.3	5.082	2.5	10.80	-96.6%
10yr6hr	7.537	68.6	5.513	43.7	7.037	48.1	11.65	-29.9%
10yr24hr	8.791	24.3	9.953	17.9	9.940	16.6	11.48	-31.7%
100yr1hr	7.470	217.1	6.914	157.4	6.900	50.3	11.66	-76.8%
100yr3hr	10.416	118.5	8.967	98.6	8.954	95.9	11.91	-19.1%
100yr6hr	14.554	114.6	12.673	99.3	12.660	94.5	11.90	-17.5%
100yr24hr	18.056	43.7	17.988	36.7	17.974	36.5	11.59	-16.5%

Extended Detention Basin A Size and Flow Calculations

Highland Grove 4

	BASIN PARAMETERS						OUTLET					
	Basin Elevation	Depth	Area S.F.	Volume C.F.	Volume AC-FT	Effective Volume AC-FT	Q_1 Orifice Plate (cfs)	Q_2 Orifice Plate (cfs)	Q_3Orifice Plate (cfs)	Q Weir 1 (cfs)	Q Weir 2 (cfs)	Q Total (cfs)
TOP OF BASIN	1190.0	14.3	41,150	331,546	7.611	7.611	0.983	2.142	0.000	950.853	423.840	1377.819
	1189.0	13.3	38,317	291,812	6.699	6.699	0.948	2.017	0.000	504.251	149.850	657.066
EM OVERFLOW	1188.0	12.3	35,558	254,875	5.851	5.851	0.912	1.883	0.000	164.392	0.000	167.187
Q100 OUTLET	1187.1	11.4	33,154	223,954	5.141	5.141	0.878	1.754	0.000	0.000	0.000	2.632
	1186.0	10.3	30,215	189,101	4.341	4.341	0.834	1.582	0.000	0.000	0.000	2.417
STORAGE	1184.0	8.3	25,320	133,567	3.066	3.066	0.749	1.208	0.000	0.000	0.000	1.957
	1182.0	6.3	20,804	87,443	2.007	2.007	0.653	0.646	0.000	0.000	0.000	1.299
VBMP STORAGE	1181.2	5.5	19,184	71,447	1.640	1.640	0.610	0.000	0.000	0.000	0.000	0.610
	1180.0	4.3	16,654	49,049	1.126	1.126	0.536	0.000	0.000	0.000	0.000	0.536
	1179.0	3.3	14,697	33,373	0.766	0.766	0.469	0.000	0.000	0.000	0.000	0.469
STORAGE	1178.0	2.3	12,819	20,303	0.466	0.466	0.394	0.000	0.000	0.000	0.000	0.394
	1177.0	1.3	11,018	8,384	0.192	0.192	0.296	0.000	0.000	0.000	0.000	0.296
	1176.0	0.3	4,039	855	0.020	0.020	0.142	0.000	0.000	0.000	0.000	0.142
BOT STAGE	1175.7	0.0	1,664	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

SUPPORTING DESIGN PARAMETERS

Orifice Coefficient	0.66	Dia of Orifice (in)	3.00	5.00	0.00
Gravimetric Constant	32.2 ft/s^2	Eff Dia of Orifice (ft)	0.2500	0.4167	0.0000
Number of Rows	1	Area of Orifice (sf)	0.0491	0.1364	0.0000
Minimum Orifice Plate Height		Number of Orifeces	1	1	1
Minimum Orifice Plate Width		Centroid Elev	1175.7	1181.2	1184

Sharp Crest Weir Coefficient	3.33		
Length of Weir	57.82	45	
Elev. at Crest of Weir	1187.1	1188.0	
VBMP	70,171	cf	

Orifice Equation

$Q=Cd(1/4\pi D2)\sqrt{2gh}$

Weir Equation

(Q/(Weir Length* Weir Coefficent))^(2/3)

Outlet Weir Calc (Q100)		
Grated Catch Basin		
Crest Elev.	1187.1	
Q100	173.79	cfs
Weir Length	57.82	ft
Weir Coeff.	3.33	
H Weir	0.93	ft
Q100 Elev.	**1188.0**	

Emergency Overflow Weir Calc (Q100)		
Concrete Spillway		
Crest Elev.	1188.0	`
Q100	173.79	cfs
Weir Length	53	ft
Weir Coeff.	3.33	
H Weir	0.99	ft
Q100 WS Elevation	**1189.0**	
Top of Basin	1190.0	
Basin Freeboard	**1.0**	ft

Standard APWA 305-4

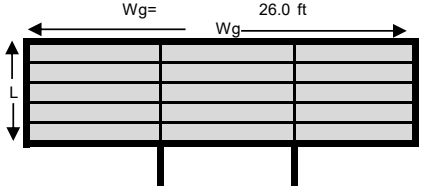
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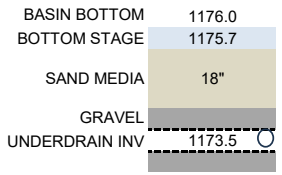
L= 2.95 ft

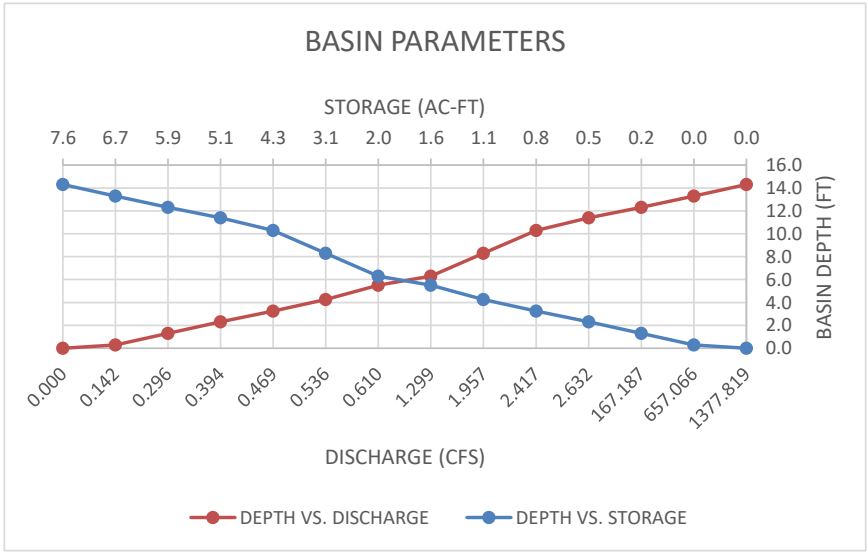
Wg= 26.0 ft

Surface Area 76.5 sf

Perimeter 57.82 ft







FLOOD HYDROGRAPH ROUTING PROGRAM
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Study date: 08/18/25

Program License Serial Number 5006

********** HYDROGRAPH INFORMATION **********

From study/file name: PROA12.rte
**********HYDROGRAPH DATA**********
Number of intervals = 30
Time interval = 5.0 (Min.)
Maximum/Peak flow rate = 52.169 (CFS)
Total volume = 2.115 (Ac.Ft)

Status of hydrographs being held in storage

	Stream 1	Stream 2	Stream 3	Stream 4	Stream 5
Peak (CFS)	0.000	0.000	0.000	0.000	0.000
Vol (Ac.Ft)	0.000	0.000	0.000	0.000	0.000

****

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Process from Point/Station 0.000 to Point/Station 0.000
**** RETARDING BASIN ROUTING ****

User entry of depth-outflow-storage data

Total number of inflow hydrograph intervals = 30
Hydrograph time unit = 5.000 (Min.)
Initial depth in storage basin = 0.00(Ft.)

Initial basin depth = 0.00 (Ft.)
Initial basin storage = 0.00 (Ac.Ft)
Initial basin outflow = 0.00 (CFS)

Depth vs. Storage and Depth vs. Discharge data:

Basin Depth (Ft.)	Storage (Ac.Ft)	Outflow (CFS)	(S-O*dt/2) (Ac.Ft)	(S+O*dt/2) (Ac.Ft)
0.000	0.000	0.000	0.000	0.000
0.300	0.020	0.142	0.020	0.020
1.300	0.192	0.296	0.191	0.193
2.300	0.466	0.394	0.465	0.467
3.300	0.766	0.469	0.764	0.768
4.300	1.126	0.536	1.124	1.128
5.500	1.640	0.610	1.638	1.642
6.300	2.007	1.299	2.003	2.011
8.300	3.066	1.957	3.059	3.073
10.300	4.341	2.417	4.333	4.349
11.400	5.141	2.632	5.132	5.150
12.300	5.851	167.187	5.275	6.427
13.300	6.699	657.066	4.436	8.962
14.300	7.611	1377.819	2.866	12.356

Hydrograph Detention Basin Routing

Graph values: 'I'= unit inflow; 'O'=outflow at time shown

Time (Hours)	Inflow (CFS)	Outflow (CFS)	Storage (Ac.Ft)	.0	13.0	26.08	39.13	52.17	Depth (Ft.)
0.083	0.38	0.01	0.001	O	|	|	|	|	0.02
0.167	2.10	0.07	0.010	OI	|	|	|	|	0.14
0.250	4.72	0.15	0.032	O I	|	|	|	|	0.37
0.333	6.61	0.19	0.070	O I	|	|	|	|	0.59
0.417	7.87	0.23	0.119	O I	|	|	|	|	0.87
0.500	9.05	0.28	0.175	O I	|	|	|	|	1.20
0.583	10.44	0.31	0.240	O I	|	|	|	|	1.48
0.667	12.37	0.34	0.316	O I	|	|	|	|	1.75
0.750	16.59	0.38	0.414	O	I |	|	|	|	2.11
0.833	28.89	0.42	0.568	O	|	I |	|	|	2.64
0.917	48.83	0.48	0.832	O	|	|	| I	|	3.48
1.000	52.17	0.54	1.176	O	|	|	|	I	4.42
1.083	33.15	0.58	1.466	O	|	| I	|	|	5.09
1.167	19.55	0.62	1.644	O	I |	|	|	|	5.51
1.250	12.78	0.82	1.750	O	I |	|	|	|	5.74
1.333	9.19	0.95	1.820	O	I |	|	|	|	5.89
1.417	6.96	1.04	1.868	O	I |	|	|	|	6.00
1.500	5.47	1.11	1.904	O	I |	|	|	|	6.07
1.583	4.29	1.15	1.930	O I	|	|	|	|	6.13
1.667	3.49	1.19	1.948	O I	|	|	|	|	6.17
1.750	2.93	1.21	1.962	OI	|	|	|	|	6.20
1.833	2.33	1.23	1.972	OI	|	|	|	|	6.22
1.917	1.88	1.24	1.978	OI	|	|	|	|	6.24
2.000	1.49	1.25	1.981	O	|	|	|	|	6.24
2.083	1.16	1.25	1.981	O	|	|	|	|	6.24
2.167	0.98	1.25	1.980	O	|	|	|	|	6.24
2.250	0.81	1.24	1.978	O	|	|	|	|	6.24
2.333	0.44	1.24	1.973	O	|	|	|	|	6.23
2.417	0.08	1.22	1.967	O	|	|	|	|	6.21
2.500	0.02	1.21	1.959	O	|	|	|	|	6.19
2.583	0.00	1.19	1.951	O	|	|	|	|	6.18
2.667	0.00	1.18	1.942	O	|	|	|	|	6.16
2.750	0.00	1.16	1.934	O	|	|	|	|	6.14
2.833	0.00	1.15	1.926	O	|	|	|	|	6.12
2.917	0.00	1.13	1.919	O	|	|	|	|	6.11
3.000	0.00	1.12	1.911	O	|	|	|	|	6.09
3.083	0.00	1.10	1.903	O	|	|	|	|	6.07
3.167	0.00	1.09	1.896	O	|	|	|	|	6.06
3.250	0.00	1.08	1.888	O	|	|	|	|	6.04
3.333	0.00	1.06	1.881	O	|	|	|	|	6.02
3.417	0.00	1.05	1.874	O	|	|	|	|	6.01
3.500	0.00	1.03	1.866	O	|	|	|	|	5.99
3.583	0.00	1.02	1.859	O	|	|	|	|	5.98
3.667	0.00	1.01	1.852	O	|	|	|	|	5.96
3.750	0.00	1.00	1.845	O	|	|	|	|	5.95
3.833	0.00	0.98	1.839	O	|	|	|	|	5.93
3.917	0.00	0.97	1.832	O	|	|	|	|	5.92
4.000	0.00	0.96	1.825	O	|	|	|	|	5.90
4.083	0.00	0.95	1.819	O	|	|	|	|	5.89
4.167	0.00	0.93	1.812	O	|	|	|	|	5.88
4.250	0.00	0.92	1.806	O	|	|	|	|	5.86
4.333	0.00	0.91	1.800	O	|	|	|	|	5.85
4.417	0.00	0.90	1.793	O	|	|	|	|	5.83
4.500	0.00	0.89	1.787	O	|	|	|	|	5.82
4.583	0.00	0.87	1.781	O	|	|	|	|	5.81
4.667	0.00	0.86	1.775	O	|	|	|	|	5.79
4.750	0.00	0.85	1.769	O	|	|	|	|	5.78
4.833	0.00	0.84	1.763	O	|	|	|	|	5.77
4.917	0.00	0.83	1.758	O	|	|	|	|	5.76
5.000	0.00	0.82	1.752	O	|	|	|	|	5.74
5.083	0.00	0.81	1.746	O	|	|	|	|	5.73
5.167	0.00	0.80	1.741	O	|	|	|	|	5.72
5.250	0.00	0.79	1.735	O	|	|	|	|	5.71
5.333	0.00	0.78	1.730	O	|	|	|	|	5.70
5.417	0.00	0.77	1.725	O	|	|	|	|	5.68
5.500	0.00	0.76	1.719	O	|	|	|	|	5.67
5.583	0.00	0.75	1.714	O	|	|	|	|	5.66
5.667	0.00	0.74	1.709	O	|	|	|	|	5.65
5.750	0.00	0.73	1.704	O	|	|	|	|	5.64

5.833	0.00	0.72	1.699	O	|	|	|	|	5.63
5.917	0.00	0.71	1.694	O	|	|	|	|	5.62
6.000	0.00	0.70	1.689	O	|	|	|	|	5.61
6.083	0.00	0.69	1.684	O	|	|	|	|	5.60
6.167	0.00	0.68	1.680	O	|	|	|	|	5.59
6.250	0.00	0.68	1.675	O	|	|	|	|	5.58
6.333	0.00	0.67	1.670	O	|	|	|	|	5.57
6.417	0.00	0.66	1.666	O	|	|	|	|	5.56
6.500	0.00	0.65	1.661	O	|	|	|	|	5.55
6.583	0.00	0.64	1.657	O	|	|	|	|	5.54
6.667	0.00	0.63	1.652	O	|	|	|	|	5.53
6.750	0.00	0.63	1.648	O	|	|	|	|	5.52
6.833	0.00	0.62	1.644	O	|	|	|	|	5.51
6.917	0.00	0.61	1.640	O	|	|	|	|	5.50
7.000	0.00	0.61	1.635	O	|	|	|	|	5.49
7.083	0.00	0.61	1.631	O	|	|	|	|	5.48
7.167	0.00	0.61	1.627	O	|	|	|	|	5.47
7.250	0.00	0.61	1.623	O	|	|	|	|	5.46
7.333	0.00	0.61	1.619	O	|	|	|	|	5.45
7.417	0.00	0.61	1.614	O	|	|	|	|	5.44
7.500	0.00	0.61	1.610	O	|	|	|	|	5.43
7.583	0.00	0.61	1.606	O	|	|	|	|	5.42
7.667	0.00	0.60	1.602	O	|	|	|	|	5.41
7.750	0.00	0.60	1.598	O	|	|	|	|	5.40
7.833	0.00	0.60	1.594	O	|	|	|	|	5.39
7.917	0.00	0.60	1.589	O	|	|	|	|	5.38
8.000	0.00	0.60	1.585	O	|	|	|	|	5.37
8.083	0.00	0.60	1.581	O	|	|	|	|	5.36
8.167	0.00	0.60	1.577	O	|	|	|	|	5.35
8.250	0.00	0.60	1.573	O	|	|	|	|	5.34
8.333	0.00	0.60	1.569	O	|	|	|	|	5.33
8.417	0.00	0.60	1.565	O	|	|	|	|	5.32
8.500	0.00	0.60	1.560	O	|	|	|	|	5.31
8.583	0.00	0.60	1.556	O	|	|	|	|	5.30
8.667	0.00	0.60	1.552	O	|	|	|	|	5.30
8.750	0.00	0.60	1.548	O	|	|	|	|	5.29
8.833	0.00	0.60	1.544	O	|	|	|	|	5.28
8.917	0.00	0.60	1.540	O	|	|	|	|	5.27
9.000	0.00	0.59	1.536	O	|	|	|	|	5.26
9.083	0.00	0.59	1.532	O	|	|	|	|	5.25
9.167	0.00	0.59	1.528	O	|	|	|	|	5.24
9.250	0.00	0.59	1.524	O	|	|	|	|	5.23
9.333	0.00	0.59	1.519	O	|	|	|	|	5.22
9.417	0.00	0.59	1.515	O	|	|	|	|	5.21
9.500	0.00	0.59	1.511	O	|	|	|	|	5.20
9.583	0.00	0.59	1.507	O	|	|	|	|	5.19
9.667	0.00	0.59	1.503	O	|	|	|	|	5.18
9.750	0.00	0.59	1.499	O	|	|	|	|	5.17
9.833	0.00	0.59	1.495	O	|	|	|	|	5.16
9.917	0.00	0.59	1.491	O	|	|	|	|	5.15
10.000	0.00	0.59	1.487	O	|	|	|	|	5.14
10.083	0.00	0.59	1.483	O	|	|	|	|	5.13
10.167	0.00	0.59	1.479	O	|	|	|	|	5.12
10.250	0.00	0.59	1.475	O	|	|	|	|	5.11
10.333	0.00	0.59	1.471	O	|	|	|	|	5.10
10.417	0.00	0.59	1.467	O	|	|	|	|	5.10
10.500	0.00	0.58	1.463	O	|	|	|	|	5.09
10.583	0.00	0.58	1.459	O	|	|	|	|	5.08
10.667	0.00	0.58	1.455	O	|	|	|	|	5.07
10.750	0.00	0.58	1.451	O	|	|	|	|	5.06
10.833	0.00	0.58	1.447	O	|	|	|	|	5.05
10.917	0.00	0.58	1.443	O	|	|	|	|	5.04
11.000	0.00	0.58	1.439	O	|	|	|	|	5.03
11.083	0.00	0.58	1.435	O	|	|	|	|	5.02
11.167	0.00	0.58	1.431	O	|	|	|	|	5.01
11.250	0.00	0.58	1.427	O	|	|	|	|	5.00
11.333	0.00	0.58	1.423	O	|	|	|	|	4.99
11.417	0.00	0.58	1.419	O	|	|	|	|	4.98
11.500	0.00	0.58	1.415	O	|	|	|	|	4.97
11.583	0.00	0.58	1.411	O	|	|	|	|	4.96
11.667	0.00	0.58	1.407	O	|	|	|	|	4.96

11.750	0.00	0.58	1.403	O	|	|	|	|	4.95
11.833	0.00	0.58	1.399	O	|	|	|	|	4.94
11.917	0.00	0.57	1.395	O	|	|	|	|	4.93
12.000	0.00	0.57	1.391	O	|	|	|	|	4.92
12.083	0.00	0.57	1.387	O	|	|	|	|	4.91
12.167	0.00	0.57	1.383	O	|	|	|	|	4.90
12.250	0.00	0.57	1.379	O	|	|	|	|	4.89
12.333	0.00	0.57	1.375	O	|	|	|	|	4.88
12.417	0.00	0.57	1.371	O	|	|	|	|	4.87
12.500	0.00	0.57	1.367	O	|	|	|	|	4.86
12.583	0.00	0.57	1.363	O	|	|	|	|	4.85
12.667	0.00	0.57	1.359	O	|	|	|	|	4.84
12.750	0.00	0.57	1.355	O	|	|	|	|	4.84
12.833	0.00	0.57	1.352	O	|	|	|	|	4.83
12.917	0.00	0.57	1.348	O	|	|	|	|	4.82
13.000	0.00	0.57	1.344	O	|	|	|	|	4.81
13.083	0.00	0.57	1.340	O	|	|	|	|	4.80
13.167	0.00	0.57	1.336	O	|	|	|	|	4.79
13.250	0.00	0.57	1.332	O	|	|	|	|	4.78
13.333	0.00	0.57	1.328	O	|	|	|	|	4.77
13.417	0.00	0.56	1.324	O	|	|	|	|	4.76
13.500	0.00	0.56	1.320	O	|	|	|	|	4.75
13.583	0.00	0.56	1.316	O	|	|	|	|	4.74
13.667	0.00	0.56	1.313	O	|	|	|	|	4.74
13.750	0.00	0.56	1.309	O	|	|	|	|	4.73
13.833	0.00	0.56	1.305	O	|	|	|	|	4.72
13.917	0.00	0.56	1.301	O	|	|	|	|	4.71
14.000	0.00	0.56	1.297	O	|	|	|	|	4.70
14.083	0.00	0.56	1.293	O	|	|	|	|	4.69
14.167	0.00	0.56	1.289	O	|	|	|	|	4.68
14.250	0.00	0.56	1.286	O	|	|	|	|	4.67
14.333	0.00	0.56	1.282	O	|	|	|	|	4.66
14.417	0.00	0.56	1.278	O	|	|	|	|	4.65
14.500	0.00	0.56	1.274	O	|	|	|	|	4.65
14.583	0.00	0.56	1.270	O	|	|	|	|	4.64
14.667	0.00	0.56	1.266	O	|	|	|	|	4.63
14.750	0.00	0.56	1.263	O	|	|	|	|	4.62
14.833	0.00	0.56	1.259	O	|	|	|	|	4.61
14.917	0.00	0.55	1.255	O	|	|	|	|	4.60
15.000	0.00	0.55	1.251	O	|	|	|	|	4.59
15.083	0.00	0.55	1.247	O	|	|	|	|	4.58
15.167	0.00	0.55	1.243	O	|	|	|	|	4.57
15.250	0.00	0.55	1.240	O	|	|	|	|	4.57
15.333	0.00	0.55	1.236	O	|	|	|	|	4.56
15.417	0.00	0.55	1.232	O	|	|	|	|	4.55
15.500	0.00	0.55	1.228	O	|	|	|	|	4.54
15.583	0.00	0.55	1.224	O	|	|	|	|	4.53
15.667	0.00	0.55	1.221	O	|	|	|	|	4.52
15.750	0.00	0.55	1.217	O	|	|	|	|	4.51
15.833	0.00	0.55	1.213	O	|	|	|	|	4.50
15.917	0.00	0.55	1.209	O	|	|	|	|	4.49
16.000	0.00	0.55	1.206	O	|	|	|	|	4.49
16.083	0.00	0.55	1.202	O	|	|	|	|	4.48
16.167	0.00	0.55	1.198	O	|	|	|	|	4.47
16.250	0.00	0.55	1.194	O	|	|	|	|	4.46
16.333	0.00	0.55	1.190	O	|	|	|	|	4.45
16.417	0.00	0.54	1.187	O	|	|	|	|	4.44
16.500	0.00	0.54	1.183	O	|	|	|	|	4.43
16.583	0.00	0.54	1.179	O	|	|	|	|	4.42
16.667	0.00	0.54	1.175	O	|	|	|	|	4.42
16.750	0.00	0.54	1.172	O	|	|	|	|	4.41
16.833	0.00	0.54	1.168	O	|	|	|	|	4.40
16.917	0.00	0.54	1.164	O	|	|	|	|	4.39
17.000	0.00	0.54	1.161	O	|	|	|	|	4.38
17.083	0.00	0.54	1.157	O	|	|	|	|	4.37
17.167	0.00	0.54	1.153	O	|	|	|	|	4.36
17.250	0.00	0.54	1.149	O	|	|	|	|	4.35
17.333	0.00	0.54	1.146	O	|	|	|	|	4.35
17.417	0.00	0.54	1.142	O	|	|	|	|	4.34
17.500	0.00	0.54	1.138	O	|	|	|	|	4.33
17.583	0.00	0.54	1.135	O	|	|	|	|	4.32

17.667	0.00	0.54	1.131	O	|	|	|	|	4.31
17.750	0.00	0.54	1.127	O	|	|	|	|	4.30
17.833	0.00	0.54	1.123	O	|	|	|	|	4.29
17.917	0.00	0.53	1.120	O	|	|	|	|	4.28
18.000	0.00	0.53	1.116	O	|	|	|	|	4.27
18.083	0.00	0.53	1.112	O	|	|	|	|	4.26
18.167	0.00	0.53	1.109	O	|	|	|	|	4.25
18.250	0.00	0.53	1.105	O	|	|	|	|	4.24
18.333	0.00	0.53	1.101	O	|	|	|	|	4.23
18.417	0.00	0.53	1.098	O	|	|	|	|	4.22
18.500	0.00	0.53	1.094	O	|	|	|	|	4.21
18.583	0.00	0.53	1.090	O	|	|	|	|	4.20
18.667	0.00	0.53	1.087	O	|	|	|	|	4.19
18.750	0.00	0.53	1.083	O	|	|	|	|	4.18
18.833	0.00	0.53	1.080	O	|	|	|	|	4.17
18.917	0.00	0.53	1.076	O	|	|	|	|	4.16
19.000	0.00	0.53	1.072	O	|	|	|	|	4.15
19.083	0.00	0.53	1.069	O	|	|	|	|	4.14
19.167	0.00	0.52	1.065	O	|	|	|	|	4.13
19.250	0.00	0.52	1.061	O	|	|	|	|	4.12
19.333	0.00	0.52	1.058	O	|	|	|	|	4.11
19.417	0.00	0.52	1.054	O	|	|	|	|	4.10
19.500	0.00	0.52	1.051	O	|	|	|	|	4.09
19.583	0.00	0.52	1.047	O	|	|	|	|	4.08
19.667	0.00	0.52	1.043	O	|	|	|	|	4.07
19.750	0.00	0.52	1.040	O	|	|	|	|	4.06
19.833	0.00	0.52	1.036	O	|	|	|	|	4.05
19.917	0.00	0.52	1.033	O	|	|	|	|	4.04
20.000	0.00	0.52	1.029	O	|	|	|	|	4.03
20.083	0.00	0.52	1.026	O	|	|	|	|	4.02
20.167	0.00	0.52	1.022	O	|	|	|	|	4.01
20.250	0.00	0.52	1.018	O	|	|	|	|	4.00
20.333	0.00	0.52	1.015	O	|	|	|	|	3.99
20.417	0.00	0.51	1.011	O	|	|	|	|	3.98
20.500	0.00	0.51	1.008	O	|	|	|	|	3.97
20.583	0.00	0.51	1.004	O	|	|	|	|	3.96
20.667	0.00	0.51	1.001	O	|	|	|	|	3.95
20.750	0.00	0.51	0.997	O	|	|	|	|	3.94
20.833	0.00	0.51	0.994	O	|	|	|	|	3.93
20.917	0.00	0.51	0.990	O	|	|	|	|	3.92
21.000	0.00	0.51	0.987	O	|	|	|	|	3.91
21.083	0.00	0.51	0.983	O	|	|	|	|	3.90
21.167	0.00	0.51	0.980	O	|	|	|	|	3.89
21.250	0.00	0.51	0.976	O	|	|	|	|	3.88
21.333	0.00	0.51	0.973	O	|	|	|	|	3.87
21.417	0.00	0.51	0.969	O	|	|	|	|	3.86
21.500	0.00	0.51	0.966	O	|	|	|	|	3.85
21.583	0.00	0.51	0.962	O	|	|	|	|	3.85
21.667	0.00	0.50	0.959	O	|	|	|	|	3.84
21.750	0.00	0.50	0.955	O	|	|	|	|	3.83
21.833	0.00	0.50	0.952	O	|	|	|	|	3.82
21.917	0.00	0.50	0.948	O	|	|	|	|	3.81
22.000	0.00	0.50	0.945	O	|	|	|	|	3.80
22.083	0.00	0.50	0.941	O	|	|	|	|	3.79
22.167	0.00	0.50	0.938	O	|	|	|	|	3.78
22.250	0.00	0.50	0.935	O	|	|	|	|	3.77
22.333	0.00	0.50	0.931	O	|	|	|	|	3.76
22.417	0.00	0.50	0.928	O	|	|	|	|	3.75
22.500	0.00	0.50	0.924	O	|	|	|	|	3.74
22.583	0.00	0.50	0.921	O	|	|	|	|	3.73
22.667	0.00	0.50	0.917	O	|	|	|	|	3.72
22.750	0.00	0.50	0.914	O	|	|	|	|	3.71
22.833	0.00	0.50	0.910	O	|	|	|	|	3.70
22.917	0.00	0.50	0.907	O	|	|	|	|	3.69
23.000	0.00	0.49	0.904	O	|	|	|	|	3.68
23.083	0.00	0.49	0.900	O	|	|	|	|	3.67
23.167	0.00	0.49	0.897	O	|	|	|	|	3.66
23.250	0.00	0.49	0.893	O	|	|	|	|	3.65
23.333	0.00	0.49	0.890	O	|	|	|	|	3.64
23.417	0.00	0.49	0.887	O	|	|	|	|	3.64
23.500	0.00	0.49	0.883	O	|	|	|	|	3.63

23.583	0.00	0.49	0.880	O	|	|	|	|	3.62
23.667	0.00	0.49	0.877	O	|	|	|	|	3.61
23.750	0.00	0.49	0.873	O	|	|	|	|	3.60
23.833	0.00	0.49	0.870	O	|	|	|	|	3.59
23.917	0.00	0.49	0.866	O	|	|	|	|	3.58
24.000	0.00	0.49	0.863	O	|	|	|	|	3.57
24.083	0.00	0.49	0.860	O	|	|	|	|	3.56
24.167	0.00	0.49	0.856	O	|	|	|	|	3.55
24.250	0.00	0.49	0.853	O	|	|	|	|	3.54
24.333	0.00	0.48	0.850	O	|	|	|	|	3.53
24.417	0.00	0.48	0.846	O	|	|	|	|	3.52
24.500	0.00	0.48	0.843	O	|	|	|	|	3.51
24.583	0.00	0.48	0.840	O	|	|	|	|	3.50
24.667	0.00	0.48	0.836	O	|	|	|	|	3.50
24.750	0.00	0.48	0.833	O	|	|	|	|	3.49
24.833	0.00	0.48	0.830	O	|	|	|	|	3.48
24.917	0.00	0.48	0.826	O	|	|	|	|	3.47
25.000	0.00	0.48	0.823	O	|	|	|	|	3.46
25.083	0.00	0.48	0.820	O	|	|	|	|	3.45
25.167	0.00	0.48	0.817	O	|	|	|	|	3.44
25.250	0.00	0.48	0.813	O	|	|	|	|	3.43
25.333	0.00	0.48	0.810	O	|	|	|	|	3.42
25.417	0.00	0.48	0.807	O	|	|	|	|	3.41
25.500	0.00	0.48	0.803	O	|	|	|	|	3.40
25.583	0.00	0.48	0.800	O	|	|	|	|	3.39
25.667	0.00	0.47	0.797	O	|	|	|	|	3.39
25.750	0.00	0.47	0.794	O	|	|	|	|	3.38
25.833	0.00	0.47	0.790	O	|	|	|	|	3.37
25.917	0.00	0.47	0.787	O	|	|	|	|	3.36
26.000	0.00	0.47	0.784	O	|	|	|	|	3.35
26.083	0.00	0.47	0.781	O	|	|	|	|	3.34
26.167	0.00	0.47	0.777	O	|	|	|	|	3.33
26.250	0.00	0.47	0.774	O	|	|	|	|	3.32
26.333	0.00	0.47	0.771	O	|	|	|	|	3.31
26.417	0.00	0.47	0.768	O	|	|	|	|	3.30
26.500	0.00	0.47	0.764	O	|	|	|	|	3.29
26.583	0.00	0.47	0.761	O	|	|	|	|	3.28
26.667	0.00	0.47	0.758	O	|	|	|	|	3.27
26.750	0.00	0.47	0.755	O	|	|	|	|	3.26
26.833	0.00	0.47	0.752	O	|	|	|	|	3.25
26.917	0.00	0.46	0.748	O	|	|	|	|	3.24
27.000	0.00	0.46	0.745	O	|	|	|	|	3.23
27.083	0.00	0.46	0.742	O	|	|	|	|	3.22
27.167	0.00	0.46	0.739	O	|	|	|	|	3.21
27.250	0.00	0.46	0.736	O	|	|	|	|	3.20
27.333	0.00	0.46	0.732	O	|	|	|	|	3.19
27.417	0.00	0.46	0.729	O	|	|	|	|	3.18
27.500	0.00	0.46	0.726	O	|	|	|	|	3.17
27.583	0.00	0.46	0.723	O	|	|	|	|	3.16
27.667	0.00	0.46	0.720	O	|	|	|	|	3.15
27.750	0.00	0.46	0.717	O	|	|	|	|	3.14
27.833	0.00	0.46	0.713	O	|	|	|	|	3.12
27.917	0.00	0.46	0.710	O	|	|	|	|	3.11
28.000	0.00	0.45	0.707	O	|	|	|	|	3.10
28.083	0.00	0.45	0.704	O	|	|	|	|	3.09
28.167	0.00	0.45	0.701	O	|	|	|	|	3.08
28.250	0.00	0.45	0.698	O	|	|	|	|	3.07
28.333	0.00	0.45	0.695	O	|	|	|	|	3.06
28.417	0.00	0.45	0.692	O	|	|	|	|	3.05
28.500	0.00	0.45	0.689	O	|	|	|	|	3.04
28.583	0.00	0.45	0.685	O	|	|	|	|	3.03
28.667	0.00	0.45	0.682	O	|	|	|	|	3.02
28.750	0.00	0.45	0.679	O	|	|	|	|	3.01
28.833	0.00	0.45	0.676	O	|	|	|	|	3.00
28.917	0.00	0.45	0.673	O	|	|	|	|	2.99
29.000	0.00	0.45	0.670	O	|	|	|	|	2.98
29.083	0.00	0.44	0.667	O	|	|	|	|	2.97
29.167	0.00	0.44	0.664	O	|	|	|	|	2.96
29.250	0.00	0.44	0.661	O	|	|	|	|	2.95
29.333	0.00	0.44	0.658	O	|	|	|	|	2.94
29.417	0.00	0.44	0.655	O	|	|	|	|	2.93

29.500	0.00	0.44	0.652	O	|	|	|	|	2.92
29.583	0.00	0.44	0.649	O	|	|	|	|	2.91
29.667	0.00	0.44	0.646	O	|	|	|	|	2.90
29.750	0.00	0.44	0.643	O	|	|	|	|	2.89
29.833	0.00	0.44	0.640	O	|	|	|	|	2.88
29.917	0.00	0.44	0.637	O	|	|	|	|	2.87
30.000	0.00	0.44	0.634	O	|	|	|	|	2.86
30.083	0.00	0.44	0.631	O	|	|	|	|	2.85
30.167	0.00	0.43	0.628	O	|	|	|	|	2.84
30.250	0.00	0.43	0.625	O	|	|	|	|	2.83
30.333	0.00	0.43	0.622	O	|	|	|	|	2.82
30.417	0.00	0.43	0.619	O	|	|	|	|	2.81
30.500	0.00	0.43	0.616	O	|	|	|	|	2.80
30.583	0.00	0.43	0.613	O	|	|	|	|	2.79
30.667	0.00	0.43	0.610	O	|	|	|	|	2.78
30.750	0.00	0.43	0.607	O	|	|	|	|	2.77
30.833	0.00	0.43	0.604	O	|	|	|	|	2.76
30.917	0.00	0.43	0.601	O	|	|	|	|	2.75
31.000	0.00	0.43	0.598	O	|	|	|	|	2.74
31.083	0.00	0.43	0.595	O	|	|	|	|	2.73
31.167	0.00	0.43	0.592	O	|	|	|	|	2.72
31.250	0.00	0.42	0.589	O	|	|	|	|	2.71
31.333	0.00	0.42	0.586	O	|	|	|	|	2.70
31.417	0.00	0.42	0.583	O	|	|	|	|	2.69
31.500	0.00	0.42	0.580	O	|	|	|	|	2.68
31.583	0.00	0.42	0.578	O	|	|	|	|	2.67
31.667	0.00	0.42	0.575	O	|	|	|	|	2.66
31.750	0.00	0.42	0.572	O	|	|	|	|	2.65
31.833	0.00	0.42	0.569	O	|	|	|	|	2.64
31.917	0.00	0.42	0.566	O	|	|	|	|	2.63
32.000	0.00	0.42	0.563	O	|	|	|	|	2.62
32.083	0.00	0.42	0.560	O	|	|	|	|	2.61
32.167	0.00	0.42	0.557	O	|	|	|	|	2.60
32.250	0.00	0.42	0.554	O	|	|	|	|	2.59
32.333	0.00	0.42	0.552	O	|	|	|	|	2.59
32.417	0.00	0.41	0.549	O	|	|	|	|	2.58
32.500	0.00	0.41	0.546	O	|	|	|	|	2.57
32.583	0.00	0.41	0.543	O	|	|	|	|	2.56
32.667	0.00	0.41	0.540	O	|	|	|	|	2.55
32.750	0.00	0.41	0.537	O	|	|	|	|	2.54
32.833	0.00	0.41	0.534	O	|	|	|	|	2.53
32.917	0.00	0.41	0.532	O	|	|	|	|	2.52
33.000	0.00	0.41	0.529	O	|	|	|	|	2.51
33.083	0.00	0.41	0.526	O	|	|	|	|	2.50
33.167	0.00	0.41	0.523	O	|	|	|	|	2.49
33.250	0.00	0.41	0.520	O	|	|	|	|	2.48
33.333	0.00	0.41	0.518	O	|	|	|	|	2.47
33.417	0.00	0.41	0.515	O	|	|	|	|	2.46
33.500	0.00	0.41	0.512	O	|	|	|	|	2.45
33.583	0.00	0.40	0.509	O	|	|	|	|	2.44
33.667	0.00	0.40	0.506	O	|	|	|	|	2.43
33.750	0.00	0.40	0.504	O	|	|	|	|	2.43
33.833	0.00	0.40	0.501	O	|	|	|	|	2.42
33.917	0.00	0.40	0.498	O	|	|	|	|	2.41
34.000	0.00	0.40	0.495	O	|	|	|	|	2.40
34.083	0.00	0.40	0.493	O	|	|	|	|	2.39
34.167	0.00	0.40	0.490	O	|	|	|	|	2.38
34.250	0.00	0.40	0.487	O	|	|	|	|	2.37
34.333	0.00	0.40	0.484	O	|	|	|	|	2.36
34.417	0.00	0.40	0.482	O	|	|	|	|	2.35
34.500	0.00	0.40	0.479	O	|	|	|	|	2.34
34.583	0.00	0.40	0.476	O	|	|	|	|	2.33
34.667	0.00	0.40	0.473	O	|	|	|	|	2.32
34.750	0.00	0.40	0.471	O	|	|	|	|	2.32
34.833	0.00	0.39	0.468	O	|	|	|	|	2.31
34.917	0.00	0.39	0.465	O	|	|	|	|	2.30
35.000	0.00	0.39	0.462	O	|	|	|	|	2.29
35.083	0.00	0.39	0.460	O	|	|	|	|	2.28
35.167	0.00	0.39	0.457	O	|	|	|	|	2.27
35.250	0.00	0.39	0.454	O	|	|	|	|	2.26
35.333	0.00	0.39	0.452	O	|	|	|	|	2.25

35.417	0.00	0.39	0.449	O	|	|	|	|	2.24
35.500	0.00	0.39	0.446	O	|	|	|	|	2.23
35.583	0.00	0.39	0.444	O	|	|	|	|	2.22
35.667	0.00	0.39	0.441	O	|	|	|	|	2.21
35.750	0.00	0.38	0.438	O	|	|	|	|	2.20
35.833	0.00	0.38	0.436	O	|	|	|	|	2.19
35.917	0.00	0.38	0.433	O	|	|	|	|	2.18
36.000	0.00	0.38	0.431	O	|	|	|	|	2.17
36.083	0.00	0.38	0.428	O	|	|	|	|	2.16
36.167	0.00	0.38	0.425	O	|	|	|	|	2.15
36.250	0.00	0.38	0.423	O	|	|	|	|	2.14
36.333	0.00	0.38	0.420	O	|	|	|	|	2.13
36.417	0.00	0.38	0.417	O	|	|	|	|	2.12
36.500	0.00	0.38	0.415	O	|	|	|	|	2.11
36.583	0.00	0.37	0.412	O	|	|	|	|	2.10
36.667	0.00	0.37	0.410	O	|	|	|	|	2.09
36.750	0.00	0.37	0.407	O	|	|	|	|	2.09
36.833	0.00	0.37	0.405	O	|	|	|	|	2.08
36.917	0.00	0.37	0.402	O	|	|	|	|	2.07
37.000	0.00	0.37	0.399	O	|	|	|	|	2.06
37.083	0.00	0.37	0.397	O	|	|	|	|	2.05
37.167	0.00	0.37	0.394	O	|	|	|	|	2.04
37.250	0.00	0.37	0.392	O	|	|	|	|	2.03
37.333	0.00	0.37	0.389	O	|	|	|	|	2.02
37.417	0.00	0.37	0.387	O	|	|	|	|	2.01
37.500	0.00	0.36	0.384	O	|	|	|	|	2.00
37.583	0.00	0.36	0.382	O	|	|	|	|	1.99
37.667	0.00	0.36	0.379	O	|	|	|	|	1.98
37.750	0.00	0.36	0.377	O	|	|	|	|	1.97
37.833	0.00	0.36	0.374	O	|	|	|	|	1.97
37.917	0.00	0.36	0.372	O	|	|	|	|	1.96
38.000	0.00	0.36	0.369	O	|	|	|	|	1.95
38.083	0.00	0.36	0.367	O	|	|	|	|	1.94
38.167	0.00	0.36	0.364	O	|	|	|	|	1.93
38.250	0.00	0.36	0.362	O	|	|	|	|	1.92
38.333	0.00	0.36	0.359	O	|	|	|	|	1.91
38.417	0.00	0.36	0.357	O	|	|	|	|	1.90
38.500	0.00	0.35	0.355	O	|	|	|	|	1.89
38.583	0.00	0.35	0.352	O	|	|	|	|	1.88
38.667	0.00	0.35	0.350	O	|	|	|	|	1.88
38.750	0.00	0.35	0.347	O	|	|	|	|	1.87
38.833	0.00	0.35	0.345	O	|	|	|	|	1.86
38.917	0.00	0.35	0.342	O	|	|	|	|	1.85
39.000	0.00	0.35	0.340	O	|	|	|	|	1.84
39.083	0.00	0.35	0.338	O	|	|	|	|	1.83
39.167	0.00	0.35	0.335	O	|	|	|	|	1.82
39.250	0.00	0.35	0.333	O	|	|	|	|	1.81
39.333	0.00	0.35	0.330	O	|	|	|	|	1.81
39.417	0.00	0.34	0.328	O	|	|	|	|	1.80
39.500	0.00	0.34	0.326	O	|	|	|	|	1.79
39.583	0.00	0.34	0.323	O	|	|	|	|	1.78
39.667	0.00	0.34	0.321	O	|	|	|	|	1.77
39.750	0.00	0.34	0.319	O	|	|	|	|	1.76
39.833	0.00	0.34	0.316	O	|	|	|	|	1.75
39.917	0.00	0.34	0.314	O	|	|	|	|	1.75
40.000	0.00	0.34	0.312	O	|	|	|	|	1.74
40.083	0.00	0.34	0.309	O	|	|	|	|	1.73
40.167	0.00	0.34	0.307	O	|	|	|	|	1.72
40.250	0.00	0.34	0.305	O	|	|	|	|	1.71
40.333	0.00	0.34	0.302	O	|	|	|	|	1.70
40.417	0.00	0.33	0.300	O	|	|	|	|	1.69
40.500	0.00	0.33	0.298	O	|	|	|	|	1.69
40.583	0.00	0.33	0.295	O	|	|	|	|	1.68
40.667	0.00	0.33	0.293	O	|	|	|	|	1.67
40.750	0.00	0.33	0.291	O	|	|	|	|	1.66
40.833	0.00	0.33	0.289	O	|	|	|	|	1.65
40.917	0.00	0.33	0.286	O	|	|	|	|	1.64
41.000	0.00	0.33	0.284	O	|	|	|	|	1.64
41.083	0.00	0.33	0.282	O	|	|	|	|	1.63
41.167	0.00	0.33	0.280	O	|	|	|	|	1.62
41.250	0.00	0.33	0.277	O	|	|	|	|	1.61

41.333	0.00	0.33	0.275	O	|	|	|	|	1.60
41.417	0.00	0.32	0.273	O	|	|	|	|	1.59
41.500	0.00	0.32	0.271	O	|	|	|	|	1.59
41.583	0.00	0.32	0.268	O	|	|	|	|	1.58
41.667	0.00	0.32	0.266	O	|	|	|	|	1.57
41.750	0.00	0.32	0.264	O	|	|	|	|	1.56
41.833	0.00	0.32	0.262	O	|	|	|	|	1.55
41.917	0.00	0.32	0.259	O	|	|	|	|	1.55
42.000	0.00	0.32	0.257	O	|	|	|	|	1.54
42.083	0.00	0.32	0.255	O	|	|	|	|	1.53
42.167	0.00	0.32	0.253	O	|	|	|	|	1.52
42.250	0.00	0.32	0.251	O	|	|	|	|	1.51
42.333	0.00	0.32	0.248	O	|	|	|	|	1.51
42.417	0.00	0.32	0.246	O	|	|	|	|	1.50
42.500	0.00	0.31	0.244	O	|	|	|	|	1.49
42.583	0.00	0.31	0.242	O	|	|	|	|	1.48
42.667	0.00	0.31	0.240	O	|	|	|	|	1.47
42.750	0.00	0.31	0.238	O	|	|	|	|	1.47
42.833	0.00	0.31	0.236	O	|	|	|	|	1.46
42.917	0.00	0.31	0.233	O	|	|	|	|	1.45
43.000	0.00	0.31	0.231	O	|	|	|	|	1.44
43.083	0.00	0.31	0.229	O	|	|	|	|	1.44
43.167	0.00	0.31	0.227	O	|	|	|	|	1.43
43.250	0.00	0.31	0.225	O	|	|	|	|	1.42
43.333	0.00	0.31	0.223	O	|	|	|	|	1.41
43.417	0.00	0.31	0.221	O	|	|	|	|	1.40
43.500	0.00	0.31	0.219	O	|	|	|	|	1.40
43.583	0.00	0.30	0.216	O	|	|	|	|	1.39
43.667	0.00	0.30	0.214	O	|	|	|	|	1.38
43.750	0.00	0.30	0.212	O	|	|	|	|	1.37
43.833	0.00	0.30	0.210	O	|	|	|	|	1.37
43.917	0.00	0.30	0.208	O	|	|	|	|	1.36
44.000	0.00	0.30	0.206	O	|	|	|	|	1.35
44.083	0.00	0.30	0.204	O	|	|	|	|	1.34
44.167	0.00	0.30	0.202	O	|	|	|	|	1.34
44.250	0.00	0.30	0.200	O	|	|	|	|	1.33
44.333	0.00	0.30	0.198	O	|	|	|	|	1.32
44.417	0.00	0.30	0.196	O	|	|	|	|	1.31
44.500	0.00	0.30	0.194	O	|	|	|	|	1.31
44.583	0.00	0.30	0.192	O	|	|	|	|	1.30
44.667	0.00	0.29	0.190	O	|	|	|	|	1.29
44.750	0.00	0.29	0.188	O	|	|	|	|	1.27
44.833	0.00	0.29	0.186	O	|	|	|	|	1.26
44.917	0.00	0.29	0.184	O	|	|	|	|	1.25
45.000	0.00	0.29	0.182	O	|	|	|	|	1.24
45.083	0.00	0.28	0.180	O	|	|	|	|	1.23
45.167	0.00	0.28	0.178	O	|	|	|	|	1.22
45.250	0.00	0.28	0.176	O	|	|	|	|	1.21
45.333	0.00	0.28	0.174	O	|	|	|	|	1.19
45.417	0.00	0.28	0.172	O	|	|	|	|	1.18
45.500	0.00	0.28	0.170	O	|	|	|	|	1.17
45.583	0.00	0.27	0.168	O	|	|	|	|	1.16
45.667	0.00	0.27	0.166	O	|	|	|	|	1.15
45.750	0.00	0.27	0.164	O	|	|	|	|	1.14
45.833	0.00	0.27	0.162	O	|	|	|	|	1.13
45.917	0.00	0.27	0.161	O	|	|	|	|	1.12
46.000	0.00	0.27	0.159	O	|	|	|	|	1.11
46.083	0.00	0.26	0.157	O	|	|	|	|	1.10
46.167	0.00	0.26	0.155	O	|	|	|	|	1.09
46.250	0.00	0.26	0.153	O	|	|	|	|	1.07
46.333	0.00	0.26	0.151	O	|	|	|	|	1.06
46.417	0.00	0.26	0.150	O	|	|	|	|	1.05
46.500	0.00	0.26	0.148	O	|	|	|	|	1.04
46.583	0.00	0.25	0.146	O	|	|	|	|	1.03
46.667	0.00	0.25	0.144	O	|	|	|	|	1.02
46.750	0.00	0.25	0.143	O	|	|	|	|	1.01
46.833	0.00	0.25	0.141	O	|	|	|	|	1.00
46.917	0.00	0.25	0.139	O	|	|	|	|	0.99
47.000	0.00	0.25	0.138	O	|	|	|	|	0.98
47.083	0.00	0.25	0.136	O	|	|	|	|	0.97
47.167	0.00	0.24	0.134	O	|	|	|	|	0.96

47.250	0.00	0.24	0.132	O	|	|	|	|	0.95
47.333	0.00	0.24	0.131	O	|	|	|	|	0.94
47.417	0.00	0.24	0.129	O	|	|	|	|	0.93
47.500	0.00	0.24	0.128	O	|	|	|	|	0.93
47.583	0.00	0.24	0.126	O	|	|	|	|	0.92
47.667	0.00	0.24	0.124	O	|	|	|	|	0.91
47.750	0.00	0.23	0.123	O	|	|	|	|	0.90
47.833	0.00	0.23	0.121	O	|	|	|	|	0.89
47.917	0.00	0.23	0.119	O	|	|	|	|	0.88
48.000	0.00	0.23	0.118	O	|	|	|	|	0.87
48.083	0.00	0.23	0.116	O	|	|	|	|	0.86
48.167	0.00	0.23	0.115	O	|	|	|	|	0.85
48.250	0.00	0.23	0.113	O	|	|	|	|	0.84
48.333	0.00	0.22	0.112	O	|	|	|	|	0.83
48.417	0.00	0.22	0.110	O	|	|	|	|	0.82
48.500	0.00	0.22	0.109	O	|	|	|	|	0.81
48.583	0.00	0.22	0.107	O	|	|	|	|	0.81
48.667	0.00	0.22	0.105	O	|	|	|	|	0.80
48.750	0.00	0.22	0.104	O	|	|	|	|	0.79
48.833	0.00	0.22	0.103	O	|	|	|	|	0.78
48.917	0.00	0.21	0.101	O	|	|	|	|	0.77
49.000	0.00	0.21	0.100	O	|	|	|	|	0.76
49.083	0.00	0.21	0.098	O	|	|	|	|	0.75
49.167	0.00	0.21	0.097	O	|	|	|	|	0.75
49.250	0.00	0.21	0.095	O	|	|	|	|	0.74
49.333	0.00	0.21	0.094	O	|	|	|	|	0.73
49.417	0.00	0.21	0.092	O	|	|	|	|	0.72
49.500	0.00	0.21	0.091	O	|	|	|	|	0.71
49.583	0.00	0.20	0.089	O	|	|	|	|	0.70
49.667	0.00	0.20	0.088	O	|	|	|	|	0.70
49.750	0.00	0.20	0.087	O	|	|	|	|	0.69
49.833	0.00	0.20	0.085	O	|	|	|	|	0.68
49.917	0.00	0.20	0.084	O	|	|	|	|	0.67
50.000	0.00	0.20	0.083	O	|	|	|	|	0.66
50.083	0.00	0.20	0.081	O	|	|	|	|	0.66
50.167	0.00	0.20	0.080	O	|	|	|	|	0.65
50.250	0.00	0.19	0.079	O	|	|	|	|	0.64
50.333	0.00	0.19	0.077	O	|	|	|	|	0.63
50.417	0.00	0.19	0.076	O	|	|	|	|	0.62
50.500	0.00	0.19	0.075	O	|	|	|	|	0.62
50.583	0.00	0.19	0.073	O	|	|	|	|	0.61
50.667	0.00	0.19	0.072	O	|	|	|	|	0.60
50.750	0.00	0.19	0.071	O	|	|	|	|	0.59
50.833	0.00	0.19	0.069	O	|	|	|	|	0.59
50.917	0.00	0.19	0.068	O	|	|	|	|	0.58
51.000	0.00	0.18	0.067	O	|	|	|	|	0.57
51.083	0.00	0.18	0.066	O	|	|	|	|	0.56
51.167	0.00	0.18	0.064	O	|	|	|	|	0.56
51.250	0.00	0.18	0.063	O	|	|	|	|	0.55
51.333	0.00	0.18	0.062	O	|	|	|	|	0.54
51.417	0.00	0.18	0.061	O	|	|	|	|	0.54
51.500	0.00	0.18	0.059	O	|	|	|	|	0.53
51.583	0.00	0.18	0.058	O	|	|	|	|	0.52
51.667	0.00	0.18	0.057	O	|	|	|	|	0.51
51.750	0.00	0.17	0.056	O	|	|	|	|	0.51
51.833	0.00	0.17	0.055	O	|	|	|	|	0.50
51.917	0.00	0.17	0.053	O	|	|	|	|	0.49
52.000	0.00	0.17	0.052	O	|	|	|	|	0.49
52.083	0.00	0.17	0.051	O	|	|	|	|	0.48
52.167	0.00	0.17	0.050	O	|	|	|	|	0.47
52.250	0.00	0.17	0.049	O	|	|	|	|	0.47
52.333	0.00	0.17	0.047	O	|	|	|	|	0.46
52.417	0.00	0.17	0.046	O	|	|	|	|	0.45
52.500	0.00	0.16	0.045	O	|	|	|	|	0.45
52.583	0.00	0.16	0.044	O	|	|	|	|	0.44
52.667	0.00	0.16	0.043	O	|	|	|	|	0.43
52.750	0.00	0.16	0.042	O	|	|	|	|	0.43
52.833	0.00	0.16	0.041	O	|	|	|	|	0.42
52.917	0.00	0.16	0.040	O	|	|	|	|	0.41
53.000	0.00	0.16	0.039	O	|	|	|	|	0.41
53.083	0.00	0.16	0.037	O	|	|	|	|	0.40

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53.167    0.00    0.16      0.036  O       |       |       |       |     0.40
53.250    0.00    0.16      0.035  O       |       |       |       |     0.39
53.333    0.00    0.15      0.034  O       |       |       |       |     0.38
53.417    0.00    0.15      0.033  O       |       |       |       |     0.38
53.500    0.00    0.15      0.032  O       |       |       |       |     0.37
53.583    0.00    0.15      0.031  O       |       |       |       |     0.36
53.667    0.00    0.15      0.030  O       |       |       |       |     0.36
53.750    0.00    0.15      0.029  O       |       |       |       |     0.35
53.833    0.00    0.15      0.028  O       |       |       |       |     0.35
53.917    0.00    0.15      0.027  O       |       |       |       |     0.34
54.000    0.00    0.15      0.026  O       |       |       |       |     0.33
54.083    0.00    0.15      0.025  O       |       |       |       |     0.33
54.167    0.00    0.15      0.024  O       |       |       |       |     0.32
54.250    0.00    0.14      0.023  O       |       |       |       |     0.32
54.333    0.00    0.14      0.022  O       |       |       |       |     0.31
54.417    0.00    0.14      0.021  O       |       |       |       |     0.31
54.500    0.00    0.14      0.020  O       |       |       |       |     0.30
54.583    0.00    0.13      0.019  O       |       |       |       |     0.28
54.667    0.00    0.13      0.018  O       |       |       |       |     0.27
54.750    0.00    0.12      0.017  O       |       |       |       |     0.26
54.833    0.00    0.12      0.016  O       |       |       |       |     0.25
54.917    0.00    0.11      0.016  O       |       |       |       |     0.23
55.000    0.00    0.11      0.015  O       |       |       |       |     0.22
55.083    0.00    0.10      0.014  O       |       |       |       |     0.21
55.167    0.00    0.10      0.013  O       |       |       |       |     0.20

      Remaining water in basin =    0.01 (Ac.Ft)

      ****************************HYDROGRAPH DATA****************************
                    Number of intervals =   662
                    Time interval =    5.0 (Min.)
                    Maximum/Peak flow rate =        1.251 (CFS)
                    Total volume =       2.101 (Ac.Ft)
             Status of hydrographs being held in storage
                         Stream 1  Stream 2  Stream 3  Stream 4  Stream 5
             Peak (CFS)      0.000     0.000     0.000     0.000     0.000
             Vol (Ac.Ft)      0.000     0.000     0.000     0.000     0.000
      ************************************************************************

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FLOOD HYDROGRAPH ROUTING PROGRAM
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Study date: 08/18/25

Program License Serial Number 5006

********** HYDROGRAPH INFORMATION **********

From study/file name: PROA32.rte
**********HYDROGRAPH DATA**********
Number of intervals = 54
Time interval = 5.0 (Min.)
Maximum/Peak flow rate = 30.958 (CFS)
Total volume = 2.826 (Ac.Ft)

Status of hydrographs being held in storage

	Stream 1	Stream 2	Stream 3	Stream 4	Stream 5
Peak (CFS)	0.000	0.000	0.000	0.000	0.000
Vol (Ac.Ft)	0.000	0.000	0.000	0.000	0.000

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Process from Point/Station 0.000 to Point/Station 0.000
**** RETARDING BASIN ROUTING ****

User entry of depth-outflow-storage data

Total number of inflow hydrograph intervals = 54
Hydrograph time unit = 5.000 (Min.)
Initial depth in storage basin = 0.00(Ft.)

Initial basin depth = 0.00 (Ft.)
Initial basin storage = 0.00 (Ac.Ft)
Initial basin outflow = 0.00 (CFS)

Depth vs. Storage and Depth vs. Discharge data:

Basin Depth (Ft.)	Storage (Ac.Ft)	Outflow (CFS)	(S-O*dt/2) (Ac.Ft)	(S+O*dt/2) (Ac.Ft)
0.000	0.000	0.000	0.000	0.000
0.300	0.020	0.142	0.020	0.020
1.300	0.192	0.296	0.191	0.193
2.300	0.466	0.394	0.465	0.467
3.300	0.766	0.469	0.764	0.768
4.300	1.126	0.536	1.124	1.128
5.500	1.640	0.610	1.638	1.642
6.300	2.007	1.299	2.003	2.011
8.300	3.066	1.957	3.059	3.073
10.300	4.341	2.417	4.333	4.349
11.400	5.141	2.632	5.132	5.150
12.300	5.851	167.187	5.275	6.427
13.300	6.699	657.066	4.436	8.962
14.300	7.611	1377.819	2.866	12.356

Hydrograph Detention Basin Routing

Graph values: 'I'= unit inflow; 'O'=outflow at time shown

Time (Hours)	Inflow (CFS)	Outflow (CFS)	Storage (Ac.Ft)	.0	7.7	15.48	23.22	30.96	Depth (Ft.)
0.083	0.24	0.01	0.001	O	|	|	|	|	0.01
0.167	1.26	0.04	0.006	OI	|	|	|	|	0.09
0.250	2.58	0.13	0.018	O I	|	|	|	|	0.28
0.333	3.23	0.16	0.037	O I	|	|	|	|	0.40
0.417	3.69	0.18	0.060	O I	|	|	|	|	0.53
0.500	4.29	0.20	0.086	O I	|	|	|	|	0.69
0.583	4.82	0.23	0.116	O I	|	|	|	|	0.86
0.667	5.17	0.26	0.149	O I	|	|	|	|	1.05
0.750	5.41	0.29	0.184	O I	|	|	|	|	1.25
0.833	5.70	0.31	0.220	O I	|	|	|	|	1.40
0.917	5.72	0.32	0.257	O I	|	|	|	|	1.54
1.000	5.67	0.33	0.294	O I	|	|	|	|	1.67
1.083	5.94	0.35	0.331	O I	|	|	|	|	1.81
1.167	6.52	0.36	0.372	O I	|	|	|	|	1.96
1.250	7.09	0.38	0.416	O I	|	|	|	|	2.12
1.333	7.36	0.39	0.463	O I	|	|	|	|	2.29
1.417	7.49	0.41	0.512	O I	|	|	|	|	2.45
1.500	7.90	0.42	0.562	O I	|	|	|	|	2.62
1.583	8.53	0.43	0.615	O I	|	|	|	|	2.80
1.667	8.80	0.45	0.672	O I	|	|	|	|	2.99
1.750	9.06	0.46	0.730	O I	|	|	|	|	3.18
1.833	9.79	0.47	0.792	O I	|	|	|	|	3.37
1.917	10.42	0.49	0.858	O I	|	|	|	|	3.56
2.000	10.52	0.50	0.927	O I	|	|	|	|	3.75
2.083	10.54	0.51	0.996	O I	|	|	|	|	3.94
2.167	10.94	0.52	1.067	O I	|	|	|	|	4.13
2.250	12.28	0.54	1.143	O I	|	|	|	|	4.34
2.333	14.32	0.55	1.231	O I	|	|	|	|	4.54
2.417	15.96	0.57	1.331	O I	|	|	|	|	4.78
2.500	19.61	0.58	1.450	O I	|	|	|	|	5.06
2.583	26.22	0.60	1.603	O I	|	|	|	|	5.41
2.667	30.96	0.90	1.795	O I	|	|	|	|	5.84
2.750	30.32	1.28	1.999	|O I	|	|	|	|	6.28
2.833	23.50	1.40	2.175	|O I	|	|	|	|	6.62
2.917	16.45	1.48	2.302	|O I	|	|	|	|	6.86
3.000	12.69	1.54	2.392	|O I	|	|	|	|	7.03
3.083	9.98	1.58	2.460	|O I	|	|	|	|	7.15
3.167	7.17	1.61	2.508	|O I	|	|	|	|	7.25
3.250	5.08	1.63	2.539	|O I	|	|	|	|	7.30
3.333	3.85	1.64	2.558	|O I	|	|	|	|	7.34
3.417	3.04	1.65	2.571	|O I	|	|	|	|	7.36
3.500	2.44	1.65	2.578	|OI	|	|	|	|	7.38
3.583	1.97	1.66	2.582	|OI	|	|	|	|	7.39
3.667	1.56	1.66	2.583	|O	|	|	|	|	7.39
3.750	1.23	1.66	2.581	|O	|	|	|	|	7.38
3.833	0.98	1.65	2.577	|O	|	|	|	|	7.38
3.917	0.78	1.65	2.572	IO	|	|	|	|	7.37
4.000	0.57	1.65	2.565	IO	|	|	|	|	7.35
4.083	0.36	1.64	2.557	IO	|	|	|	|	7.34
4.167	0.18	1.63	2.547	IO	|	|	|	|	7.32
4.250	0.09	1.63	2.537	IO	|	|	|	|	7.30
4.333	0.06	1.62	2.526	IO	|	|	|	|	7.28
4.417	0.03	1.61	2.516	IO	|	|	|	|	7.26
4.500	0.01	1.61	2.505	IO	|	|	|	|	7.24
4.583	0.00	1.60	2.494	IO	|	|	|	|	7.22
4.667	0.00	1.59	2.482	IO	|	|	|	|	7.20
4.750	0.00	1.59	2.472	IO	|	|	|	|	7.18
4.833	0.00	1.58	2.461	IO	|	|	|	|	7.16
4.917	0.00	1.57	2.450	IO	|	|	|	|	7.14
5.000	0.00	1.57	2.439	IO	|	|	|	|	7.12
5.083	0.00	1.56	2.428	IO	|	|	|	|	7.10
5.167	0.00	1.55	2.417	IO	|	|	|	|	7.08
5.250	0.00	1.55	2.407	IO	|	|	|	|	7.05
5.333	0.00	1.54	2.396	IO	|	|	|	|	7.03
5.417	0.00	1.53	2.386	IO	|	|	|	|	7.01
5.500	0.00	1.53	2.375	IO	|	|	|	|	7.00
5.583	0.00	1.52	2.365	IO	|	|	|	|	6.98
5.667	0.00	1.51	2.354	IO	|	|	|	|	6.96
5.750	0.00	1.51	2.344	IO	|	|	|	|	6.94

5.833	0.00	1.50	2.333	IO					6.92
5.917	0.00	1.50	2.323	IO					6.90
6.000	0.00	1.49	2.313	IO					6.88
6.083	0.00	1.48	2.302	IO					6.86
6.167	0.00	1.48	2.292	IO					6.84
6.250	0.00	1.47	2.282	IO					6.82
6.333	0.00	1.46	2.272	IO					6.80
6.417	0.00	1.46	2.262	IO					6.78
6.500	0.00	1.45	2.252	IO					6.76
6.583	0.00	1.44	2.242	IO					6.74
6.667	0.00	1.44	2.232	IO					6.72
6.750	0.00	1.43	2.222	IO					6.71
6.833	0.00	1.43	2.212	IO					6.69
6.917	0.00	1.42	2.202	IO					6.67
7.000	0.00	1.41	2.193	IO					6.65
7.083	0.00	1.41	2.183	IO					6.63
7.167	0.00	1.40	2.173	IO					6.61
7.250	0.00	1.40	2.164	IO					6.60
7.333	0.00	1.39	2.154	IO					6.58
7.417	0.00	1.38	2.145	IO					6.56
7.500	0.00	1.38	2.135	IO					6.54
7.583	0.00	1.37	2.126	IO					6.52
7.667	0.00	1.37	2.116	IO					6.51
7.750	0.00	1.36	2.107	IO					6.49
7.833	0.00	1.36	2.097	IO					6.47
7.917	0.00	1.35	2.088	IO					6.45
8.000	0.00	1.34	2.079	IO					6.44
8.083	0.00	1.34	2.070	IO					6.42
8.167	0.00	1.33	2.060	IO					6.40
8.250	0.00	1.33	2.051	IO					6.38
8.333	0.00	1.32	2.042	IO					6.37
8.417	0.00	1.32	2.033	IO					6.35
8.500	0.00	1.31	2.024	IO					6.33
8.583	0.00	1.30	2.015	IO					6.32
8.667	0.00	1.30	2.006	IO					6.30
8.750	0.00	1.28	1.997	IO					6.28
8.833	0.00	1.26	1.988	IO					6.26
8.917	0.00	1.25	1.980	IO					6.24
9.000	0.00	1.23	1.971	IO					6.22
9.083	0.00	1.22	1.963	IO					6.20
9.167	0.00	1.20	1.954	IO					6.19
9.250	0.00	1.18	1.946	IO					6.17
9.333	0.00	1.17	1.938	IO					6.15
9.417	0.00	1.15	1.930	IO					6.13
9.500	0.00	1.14	1.922	IO					6.12
9.583	0.00	1.13	1.914	IO					6.10
9.667	0.00	1.11	1.907	IO					6.08
9.750	0.00	1.10	1.899	IO					6.06
9.833	0.00	1.08	1.892	IO					6.05
9.917	0.00	1.07	1.884	IO					6.03
10.000	0.00	1.05	1.877	IO					6.02
10.083	0.00	1.04	1.870	IO					6.00
10.167	0.00	1.03	1.863	IO					5.99
10.250	0.00	1.01	1.856	IO					5.97
10.333	0.00	1.00	1.849	IO					5.95
10.417	0.00	0.99	1.842	IO					5.94
10.500	0.00	0.98	1.835	IO					5.92
10.583	0.00	0.96	1.828	O					5.91
10.667	0.00	0.95	1.822	O					5.90
10.750	0.00	0.94	1.815	O					5.88
10.833	0.00	0.93	1.809	O					5.87
10.917	0.00	0.91	1.802	O					5.85
11.000	0.00	0.90	1.796	O					5.84
11.083	0.00	0.89	1.790	O					5.83
11.167	0.00	0.88	1.784	O					5.81
11.250	0.00	0.87	1.778	O					5.80
11.333	0.00	0.86	1.772	O					5.79
11.417	0.00	0.85	1.766	O					5.77
11.500	0.00	0.84	1.760	O					5.76
11.583	0.00	0.83	1.755	O					5.75
11.667	0.00	0.81	1.749	O					5.74

11.750	0.00	0.80	1.743	O	|	|	|	|	5.73
11.833	0.00	0.79	1.738	O	|	|	|	|	5.71
11.917	0.00	0.78	1.732	O	|	|	|	|	5.70
12.000	0.00	0.77	1.727	O	|	|	|	|	5.69
12.083	0.00	0.76	1.722	O	|	|	|	|	5.68
12.167	0.00	0.75	1.716	O	|	|	|	|	5.67
12.250	0.00	0.74	1.711	O	|	|	|	|	5.66
12.333	0.00	0.73	1.706	O	|	|	|	|	5.64
12.417	0.00	0.72	1.701	O	|	|	|	|	5.63
12.500	0.00	0.72	1.696	O	|	|	|	|	5.62
12.583	0.00	0.71	1.691	O	|	|	|	|	5.61
12.667	0.00	0.70	1.687	O	|	|	|	|	5.60
12.750	0.00	0.69	1.682	O	|	|	|	|	5.59
12.833	0.00	0.68	1.677	O	|	|	|	|	5.58
12.917	0.00	0.67	1.672	O	|	|	|	|	5.57
13.000	0.00	0.66	1.668	O	|	|	|	|	5.56
13.083	0.00	0.65	1.663	O	|	|	|	|	5.55
13.167	0.00	0.65	1.659	O	|	|	|	|	5.54
13.250	0.00	0.64	1.654	O	|	|	|	|	5.53
13.333	0.00	0.63	1.650	O	|	|	|	|	5.52
13.417	0.00	0.62	1.646	O	|	|	|	|	5.51
13.500	0.00	0.61	1.641	O	|	|	|	|	5.50
13.583	0.00	0.61	1.637	O	|	|	|	|	5.49
13.667	0.00	0.61	1.633	O	|	|	|	|	5.48
13.750	0.00	0.61	1.629	O	|	|	|	|	5.47
13.833	0.00	0.61	1.625	O	|	|	|	|	5.46
13.917	0.00	0.61	1.621	O	|	|	|	|	5.45
14.000	0.00	0.61	1.616	O	|	|	|	|	5.44
14.083	0.00	0.61	1.612	O	|	|	|	|	5.43
14.167	0.00	0.61	1.608	O	|	|	|	|	5.43
14.250	0.00	0.60	1.604	O	|	|	|	|	5.42
14.333	0.00	0.60	1.600	O	|	|	|	|	5.41
14.417	0.00	0.60	1.595	O	|	|	|	|	5.40
14.500	0.00	0.60	1.591	O	|	|	|	|	5.39
14.583	0.00	0.60	1.587	O	|	|	|	|	5.38
14.667	0.00	0.60	1.583	O	|	|	|	|	5.37
14.750	0.00	0.60	1.579	O	|	|	|	|	5.36
14.833	0.00	0.60	1.575	O	|	|	|	|	5.35
14.917	0.00	0.60	1.571	O	|	|	|	|	5.34
15.000	0.00	0.60	1.566	O	|	|	|	|	5.33
15.083	0.00	0.60	1.562	O	|	|	|	|	5.32
15.167	0.00	0.60	1.558	O	|	|	|	|	5.31
15.250	0.00	0.60	1.554	O	|	|	|	|	5.30
15.333	0.00	0.60	1.550	O	|	|	|	|	5.29
15.417	0.00	0.60	1.546	O	|	|	|	|	5.28
15.500	0.00	0.60	1.542	O	|	|	|	|	5.27
15.583	0.00	0.60	1.538	O	|	|	|	|	5.26
15.667	0.00	0.59	1.534	O	|	|	|	|	5.25
15.750	0.00	0.59	1.530	O	|	|	|	|	5.24
15.833	0.00	0.59	1.525	O	|	|	|	|	5.23
15.917	0.00	0.59	1.521	O	|	|	|	|	5.22
16.000	0.00	0.59	1.517	O	|	|	|	|	5.21
16.083	0.00	0.59	1.513	O	|	|	|	|	5.20
16.167	0.00	0.59	1.509	O	|	|	|	|	5.19
16.250	0.00	0.59	1.505	O	|	|	|	|	5.18
16.333	0.00	0.59	1.501	O	|	|	|	|	5.18
16.417	0.00	0.59	1.497	O	|	|	|	|	5.17
16.500	0.00	0.59	1.493	O	|	|	|	|	5.16
16.583	0.00	0.59	1.489	O	|	|	|	|	5.15
16.667	0.00	0.59	1.485	O	|	|	|	|	5.14
16.750	0.00	0.59	1.481	O	|	|	|	|	5.13
16.833	0.00	0.59	1.477	O	|	|	|	|	5.12
16.917	0.00	0.59	1.473	O	|	|	|	|	5.11
17.000	0.00	0.59	1.469	O	|	|	|	|	5.10
17.083	0.00	0.58	1.465	O	|	|	|	|	5.09
17.167	0.00	0.58	1.461	O	|	|	|	|	5.08
17.250	0.00	0.58	1.457	O	|	|	|	|	5.07
17.333	0.00	0.58	1.452	O	|	|	|	|	5.06
17.417	0.00	0.58	1.448	O	|	|	|	|	5.05
17.500	0.00	0.58	1.444	O	|	|	|	|	5.04
17.583	0.00	0.58	1.440	O	|	|	|	|	5.03

17.667	0.00	0.58	1.436	O	|	|	|	|	5.02
17.750	0.00	0.58	1.432	O	|	|	|	|	5.02
17.833	0.00	0.58	1.428	O	|	|	|	|	5.01
17.917	0.00	0.58	1.424	O	|	|	|	|	5.00
18.000	0.00	0.58	1.421	O	|	|	|	|	4.99
18.083	0.00	0.58	1.417	O	|	|	|	|	4.98
18.167	0.00	0.58	1.413	O	|	|	|	|	4.97
18.250	0.00	0.58	1.409	O	|	|	|	|	4.96
18.333	0.00	0.58	1.405	O	|	|	|	|	4.95
18.417	0.00	0.58	1.401	O	|	|	|	|	4.94
18.500	0.00	0.57	1.397	O	|	|	|	|	4.93
18.583	0.00	0.57	1.393	O	|	|	|	|	4.92
18.667	0.00	0.57	1.389	O	|	|	|	|	4.91
18.750	0.00	0.57	1.385	O	|	|	|	|	4.90
18.833	0.00	0.57	1.381	O	|	|	|	|	4.90
18.917	0.00	0.57	1.377	O	|	|	|	|	4.89
19.000	0.00	0.57	1.373	O	|	|	|	|	4.88
19.083	0.00	0.57	1.369	O	|	|	|	|	4.87
19.167	0.00	0.57	1.365	O	|	|	|	|	4.86
19.250	0.00	0.57	1.361	O	|	|	|	|	4.85
19.333	0.00	0.57	1.357	O	|	|	|	|	4.84
19.417	0.00	0.57	1.353	O	|	|	|	|	4.83
19.500	0.00	0.57	1.349	O	|	|	|	|	4.82
19.583	0.00	0.57	1.346	O	|	|	|	|	4.81
19.667	0.00	0.57	1.342	O	|	|	|	|	4.80
19.750	0.00	0.57	1.338	O	|	|	|	|	4.79
19.833	0.00	0.57	1.334	O	|	|	|	|	4.79
19.917	0.00	0.57	1.330	O	|	|	|	|	4.78
20.000	0.00	0.56	1.326	O	|	|	|	|	4.77
20.083	0.00	0.56	1.322	O	|	|	|	|	4.76
20.167	0.00	0.56	1.318	O	|	|	|	|	4.75
20.250	0.00	0.56	1.314	O	|	|	|	|	4.74
20.333	0.00	0.56	1.310	O	|	|	|	|	4.73
20.417	0.00	0.56	1.307	O	|	|	|	|	4.72
20.500	0.00	0.56	1.303	O	|	|	|	|	4.71
20.583	0.00	0.56	1.299	O	|	|	|	|	4.70
20.667	0.00	0.56	1.295	O	|	|	|	|	4.69
20.750	0.00	0.56	1.291	O	|	|	|	|	4.69
20.833	0.00	0.56	1.287	O	|	|	|	|	4.68
20.917	0.00	0.56	1.283	O	|	|	|	|	4.67
21.000	0.00	0.56	1.280	O	|	|	|	|	4.66
21.083	0.00	0.56	1.276	O	|	|	|	|	4.65
21.167	0.00	0.56	1.272	O	|	|	|	|	4.64
21.250	0.00	0.56	1.268	O	|	|	|	|	4.63
21.333	0.00	0.56	1.264	O	|	|	|	|	4.62
21.417	0.00	0.56	1.260	O	|	|	|	|	4.61
21.500	0.00	0.55	1.257	O	|	|	|	|	4.60
21.583	0.00	0.55	1.253	O	|	|	|	|	4.60
21.667	0.00	0.55	1.249	O	|	|	|	|	4.59
21.750	0.00	0.55	1.245	O	|	|	|	|	4.58
21.833	0.00	0.55	1.241	O	|	|	|	|	4.57
21.917	0.00	0.55	1.238	O	|	|	|	|	4.56
22.000	0.00	0.55	1.234	O	|	|	|	|	4.55
22.083	0.00	0.55	1.230	O	|	|	|	|	4.54
22.167	0.00	0.55	1.226	O	|	|	|	|	4.53
22.250	0.00	0.55	1.222	O	|	|	|	|	4.53
22.333	0.00	0.55	1.219	O	|	|	|	|	4.52
22.417	0.00	0.55	1.215	O	|	|	|	|	4.51
22.500	0.00	0.55	1.211	O	|	|	|	|	4.50
22.583	0.00	0.55	1.207	O	|	|	|	|	4.49
22.667	0.00	0.55	1.204	O	|	|	|	|	4.48
22.750	0.00	0.55	1.200	O	|	|	|	|	4.47
22.833	0.00	0.55	1.196	O	|	|	|	|	4.46
22.917	0.00	0.55	1.192	O	|	|	|	|	4.45
23.000	0.00	0.54	1.188	O	|	|	|	|	4.45
23.083	0.00	0.54	1.185	O	|	|	|	|	4.44
23.167	0.00	0.54	1.181	O	|	|	|	|	4.43
23.250	0.00	0.54	1.177	O	|	|	|	|	4.42
23.333	0.00	0.54	1.173	O	|	|	|	|	4.41
23.417	0.00	0.54	1.170	O	|	|	|	|	4.40
23.500	0.00	0.54	1.166	O	|	|	|	|	4.39

23.583	0.00	0.54	1.162	O	|	|	|	|	4.38
23.667	0.00	0.54	1.159	O	|	|	|	|	4.38
23.750	0.00	0.54	1.155	O	|	|	|	|	4.37
23.833	0.00	0.54	1.151	O	|	|	|	|	4.36
23.917	0.00	0.54	1.147	O	|	|	|	|	4.35
24.000	0.00	0.54	1.144	O	|	|	|	|	4.34
24.083	0.00	0.54	1.140	O	|	|	|	|	4.33
24.167	0.00	0.54	1.136	O	|	|	|	|	4.32
24.250	0.00	0.54	1.133	O	|	|	|	|	4.32
24.333	0.00	0.54	1.129	O	|	|	|	|	4.31
24.417	0.00	0.54	1.125	O	|	|	|	|	4.30
24.500	0.00	0.54	1.122	O	|	|	|	|	4.29
24.583	0.00	0.53	1.118	O	|	|	|	|	4.28
24.667	0.00	0.53	1.114	O	|	|	|	|	4.27
24.750	0.00	0.53	1.110	O	|	|	|	|	4.26
24.833	0.00	0.53	1.107	O	|	|	|	|	4.25
24.917	0.00	0.53	1.103	O	|	|	|	|	4.24
25.000	0.00	0.53	1.099	O	|	|	|	|	4.23
25.083	0.00	0.53	1.096	O	|	|	|	|	4.22
25.167	0.00	0.53	1.092	O	|	|	|	|	4.21
25.250	0.00	0.53	1.089	O	|	|	|	|	4.20
25.333	0.00	0.53	1.085	O	|	|	|	|	4.19
25.417	0.00	0.53	1.081	O	|	|	|	|	4.18
25.500	0.00	0.53	1.078	O	|	|	|	|	4.17
25.583	0.00	0.53	1.074	O	|	|	|	|	4.16
25.667	0.00	0.53	1.070	O	|	|	|	|	4.15
25.750	0.00	0.52	1.067	O	|	|	|	|	4.14
25.833	0.00	0.52	1.063	O	|	|	|	|	4.13
25.917	0.00	0.52	1.060	O	|	|	|	|	4.12
26.000	0.00	0.52	1.056	O	|	|	|	|	4.11
26.083	0.00	0.52	1.052	O	|	|	|	|	4.10
26.167	0.00	0.52	1.049	O	|	|	|	|	4.09
26.250	0.00	0.52	1.045	O	|	|	|	|	4.08
26.333	0.00	0.52	1.042	O	|	|	|	|	4.07
26.417	0.00	0.52	1.038	O	|	|	|	|	4.06
26.500	0.00	0.52	1.034	O	|	|	|	|	4.05
26.583	0.00	0.52	1.031	O	|	|	|	|	4.04
26.667	0.00	0.52	1.027	O	|	|	|	|	4.03
26.750	0.00	0.52	1.024	O	|	|	|	|	4.02
26.833	0.00	0.52	1.020	O	|	|	|	|	4.01
26.917	0.00	0.52	1.017	O	|	|	|	|	4.00
27.000	0.00	0.51	1.013	O	|	|	|	|	3.99
27.083	0.00	0.51	1.009	O	|	|	|	|	3.98
27.167	0.00	0.51	1.006	O	|	|	|	|	3.97
27.250	0.00	0.51	1.002	O	|	|	|	|	3.96
27.333	0.00	0.51	0.999	O	|	|	|	|	3.95
27.417	0.00	0.51	0.995	O	|	|	|	|	3.94
27.500	0.00	0.51	0.992	O	|	|	|	|	3.93
27.583	0.00	0.51	0.988	O	|	|	|	|	3.92
27.667	0.00	0.51	0.985	O	|	|	|	|	3.91
27.750	0.00	0.51	0.981	O	|	|	|	|	3.90
27.833	0.00	0.51	0.978	O	|	|	|	|	3.89
27.917	0.00	0.51	0.974	O	|	|	|	|	3.88
28.000	0.00	0.51	0.971	O	|	|	|	|	3.87
28.083	0.00	0.51	0.967	O	|	|	|	|	3.86
28.167	0.00	0.51	0.964	O	|	|	|	|	3.85
28.250	0.00	0.51	0.960	O	|	|	|	|	3.84
28.333	0.00	0.50	0.957	O	|	|	|	|	3.83
28.417	0.00	0.50	0.953	O	|	|	|	|	3.82
28.500	0.00	0.50	0.950	O	|	|	|	|	3.81
28.583	0.00	0.50	0.946	O	|	|	|	|	3.80
28.667	0.00	0.50	0.943	O	|	|	|	|	3.79
28.750	0.00	0.50	0.940	O	|	|	|	|	3.78
28.833	0.00	0.50	0.936	O	|	|	|	|	3.77
28.917	0.00	0.50	0.933	O	|	|	|	|	3.76
29.000	0.00	0.50	0.929	O	|	|	|	|	3.75
29.083	0.00	0.50	0.926	O	|	|	|	|	3.74
29.167	0.00	0.50	0.922	O	|	|	|	|	3.73
29.250	0.00	0.50	0.919	O	|	|	|	|	3.72
29.333	0.00	0.50	0.915	O	|	|	|	|	3.72
29.417	0.00	0.50	0.912	O	|	|	|	|	3.71

29.500	0.00	0.50	0.909	O					3.70
29.583	0.00	0.49	0.905	O					3.69
29.667	0.00	0.49	0.902	O					3.68
29.750	0.00	0.49	0.898	O					3.67
29.833	0.00	0.49	0.895	O					3.66
29.917	0.00	0.49	0.892	O					3.65
30.000	0.00	0.49	0.888	O					3.64
30.083	0.00	0.49	0.885	O					3.63
30.167	0.00	0.49	0.881	O					3.62
30.250	0.00	0.49	0.878	O					3.61
30.333	0.00	0.49	0.875	O					3.60
30.417	0.00	0.49	0.871	O					3.59
30.500	0.00	0.49	0.868	O					3.58
30.583	0.00	0.49	0.865	O					3.57
30.667	0.00	0.49	0.861	O					3.56
30.750	0.00	0.49	0.858	O					3.56
30.833	0.00	0.49	0.855	O					3.55
30.917	0.00	0.48	0.851	O					3.54
31.000	0.00	0.48	0.848	O					3.53
31.083	0.00	0.48	0.845	O					3.52
31.167	0.00	0.48	0.841	O					3.51
31.250	0.00	0.48	0.838	O					3.50
31.333	0.00	0.48	0.835	O					3.49
31.417	0.00	0.48	0.831	O					3.48
31.500	0.00	0.48	0.828	O					3.47
31.583	0.00	0.48	0.825	O					3.46
31.667	0.00	0.48	0.821	O					3.45
31.750	0.00	0.48	0.818	O					3.44
31.833	0.00	0.48	0.815	O					3.44
31.917	0.00	0.48	0.811	O					3.43
32.000	0.00	0.48	0.808	O					3.42
32.083	0.00	0.48	0.805	O					3.41
32.167	0.00	0.48	0.802	O					3.40
32.250	0.00	0.48	0.798	O					3.39
32.333	0.00	0.47	0.795	O					3.38
32.417	0.00	0.47	0.792	O					3.37
32.500	0.00	0.47	0.789	O					3.36
32.583	0.00	0.47	0.785	O					3.35
32.667	0.00	0.47	0.782	O					3.34
32.750	0.00	0.47	0.779	O					3.34
32.833	0.00	0.47	0.776	O					3.33
32.917	0.00	0.47	0.772	O					3.32
33.000	0.00	0.47	0.769	O					3.31
33.083	0.00	0.47	0.766	O					3.30
33.167	0.00	0.47	0.763	O					3.29
33.250	0.00	0.47	0.759	O					3.28
33.333	0.00	0.47	0.756	O					3.27
33.417	0.00	0.47	0.753	O					3.26
33.500	0.00	0.46	0.750	O					3.25
33.583	0.00	0.46	0.747	O					3.24
33.667	0.00	0.46	0.743	O					3.22
33.750	0.00	0.46	0.740	O					3.21
33.833	0.00	0.46	0.737	O					3.20
33.917	0.00	0.46	0.734	O					3.19
34.000	0.00	0.46	0.731	O					3.18
34.083	0.00	0.46	0.728	O					3.17
34.167	0.00	0.46	0.724	O					3.16
34.250	0.00	0.46	0.721	O					3.15
34.333	0.00	0.46	0.718	O					3.14
34.417	0.00	0.46	0.715	O					3.13
34.500	0.00	0.46	0.712	O					3.12
34.583	0.00	0.45	0.709	O					3.11
34.667	0.00	0.45	0.705	O					3.10
34.750	0.00	0.45	0.702	O					3.09
34.833	0.00	0.45	0.699	O					3.08
34.917	0.00	0.45	0.696	O					3.07
35.000	0.00	0.45	0.693	O					3.06
35.083	0.00	0.45	0.690	O					3.05
35.167	0.00	0.45	0.687	O					3.04
35.250	0.00	0.45	0.684	O					3.03
35.333	0.00	0.45	0.681	O					3.02

35.417	0.00	0.45	0.678	O	|	|	|	|	3.01
35.500	0.00	0.45	0.675	O	|	|	|	|	3.00
35.583	0.00	0.45	0.671	O	|	|	|	|	2.98
35.667	0.00	0.44	0.668	O	|	|	|	|	2.97
35.750	0.00	0.44	0.665	O	|	|	|	|	2.96
35.833	0.00	0.44	0.662	O	|	|	|	|	2.95
35.917	0.00	0.44	0.659	O	|	|	|	|	2.94
36.000	0.00	0.44	0.656	O	|	|	|	|	2.93
36.083	0.00	0.44	0.653	O	|	|	|	|	2.92
36.167	0.00	0.44	0.650	O	|	|	|	|	2.91
36.250	0.00	0.44	0.647	O	|	|	|	|	2.90
36.333	0.00	0.44	0.644	O	|	|	|	|	2.89
36.417	0.00	0.44	0.641	O	|	|	|	|	2.88
36.500	0.00	0.44	0.638	O	|	|	|	|	2.87
36.583	0.00	0.44	0.635	O	|	|	|	|	2.86
36.667	0.00	0.44	0.632	O	|	|	|	|	2.85
36.750	0.00	0.43	0.629	O	|	|	|	|	2.84
36.833	0.00	0.43	0.626	O	|	|	|	|	2.83
36.917	0.00	0.43	0.623	O	|	|	|	|	2.82
37.000	0.00	0.43	0.620	O	|	|	|	|	2.81
37.083	0.00	0.43	0.617	O	|	|	|	|	2.80
37.167	0.00	0.43	0.614	O	|	|	|	|	2.79
37.250	0.00	0.43	0.611	O	|	|	|	|	2.78
37.333	0.00	0.43	0.608	O	|	|	|	|	2.77
37.417	0.00	0.43	0.605	O	|	|	|	|	2.76
37.500	0.00	0.43	0.602	O	|	|	|	|	2.75
37.583	0.00	0.43	0.599	O	|	|	|	|	2.74
37.667	0.00	0.43	0.596	O	|	|	|	|	2.73
37.750	0.00	0.43	0.593	O	|	|	|	|	2.72
37.833	0.00	0.43	0.591	O	|	|	|	|	2.72
37.917	0.00	0.42	0.588	O	|	|	|	|	2.71
38.000	0.00	0.42	0.585	O	|	|	|	|	2.70
38.083	0.00	0.42	0.582	O	|	|	|	|	2.69
38.167	0.00	0.42	0.579	O	|	|	|	|	2.68
38.250	0.00	0.42	0.576	O	|	|	|	|	2.67
38.333	0.00	0.42	0.573	O	|	|	|	|	2.66
38.417	0.00	0.42	0.570	O	|	|	|	|	2.65
38.500	0.00	0.42	0.567	O	|	|	|	|	2.64
38.583	0.00	0.42	0.564	O	|	|	|	|	2.63
38.667	0.00	0.42	0.561	O	|	|	|	|	2.62
38.750	0.00	0.42	0.559	O	|	|	|	|	2.61
38.833	0.00	0.42	0.556	O	|	|	|	|	2.60
38.917	0.00	0.42	0.553	O	|	|	|	|	2.59
39.000	0.00	0.42	0.550	O	|	|	|	|	2.58
39.083	0.00	0.41	0.547	O	|	|	|	|	2.57
39.167	0.00	0.41	0.544	O	|	|	|	|	2.56
39.250	0.00	0.41	0.541	O	|	|	|	|	2.55
39.333	0.00	0.41	0.539	O	|	|	|	|	2.54
39.417	0.00	0.41	0.536	O	|	|	|	|	2.53
39.500	0.00	0.41	0.533	O	|	|	|	|	2.52
39.583	0.00	0.41	0.530	O	|	|	|	|	2.51
39.667	0.00	0.41	0.527	O	|	|	|	|	2.50
39.750	0.00	0.41	0.524	O	|	|	|	|	2.49
39.833	0.00	0.41	0.522	O	|	|	|	|	2.49
39.917	0.00	0.41	0.519	O	|	|	|	|	2.48
40.000	0.00	0.41	0.516	O	|	|	|	|	2.47
40.083	0.00	0.41	0.513	O	|	|	|	|	2.46
40.167	0.00	0.41	0.510	O	|	|	|	|	2.45
40.250	0.00	0.40	0.508	O	|	|	|	|	2.44
40.333	0.00	0.40	0.505	O	|	|	|	|	2.43
40.417	0.00	0.40	0.502	O	|	|	|	|	2.42
40.500	0.00	0.40	0.499	O	|	|	|	|	2.41
40.583	0.00	0.40	0.497	O	|	|	|	|	2.40
40.667	0.00	0.40	0.494	O	|	|	|	|	2.39
40.750	0.00	0.40	0.491	O	|	|	|	|	2.38
40.833	0.00	0.40	0.488	O	|	|	|	|	2.37
40.917	0.00	0.40	0.486	O	|	|	|	|	2.37
41.000	0.00	0.40	0.483	O	|	|	|	|	2.36
41.083	0.00	0.40	0.480	O	|	|	|	|	2.35
41.167	0.00	0.40	0.477	O	|	|	|	|	2.34
41.250	0.00	0.40	0.475	O	|	|	|	|	2.33

41.333	0.00	0.40	0.472	O	|	|	|	|	2.32
41.417	0.00	0.39	0.469	O	|	|	|	|	2.31
41.500	0.00	0.39	0.466	O	|	|	|	|	2.30
41.583	0.00	0.39	0.464	O	|	|	|	|	2.29
41.667	0.00	0.39	0.461	O	|	|	|	|	2.28
41.750	0.00	0.39	0.458	O	|	|	|	|	2.27
41.833	0.00	0.39	0.456	O	|	|	|	|	2.26
41.917	0.00	0.39	0.453	O	|	|	|	|	2.25
42.000	0.00	0.39	0.450	O	|	|	|	|	2.24
42.083	0.00	0.39	0.448	O	|	|	|	|	2.23
42.167	0.00	0.39	0.445	O	|	|	|	|	2.22
42.250	0.00	0.39	0.442	O	|	|	|	|	2.21
42.333	0.00	0.38	0.440	O	|	|	|	|	2.20
42.417	0.00	0.38	0.437	O	|	|	|	|	2.19
42.500	0.00	0.38	0.434	O	|	|	|	|	2.18
42.583	0.00	0.38	0.432	O	|	|	|	|	2.17
42.667	0.00	0.38	0.429	O	|	|	|	|	2.17
42.750	0.00	0.38	0.426	O	|	|	|	|	2.16
42.833	0.00	0.38	0.424	O	|	|	|	|	2.15
42.917	0.00	0.38	0.421	O	|	|	|	|	2.14
43.000	0.00	0.38	0.419	O	|	|	|	|	2.13
43.083	0.00	0.38	0.416	O	|	|	|	|	2.12
43.167	0.00	0.38	0.413	O	|	|	|	|	2.11
43.250	0.00	0.37	0.411	O	|	|	|	|	2.10
43.333	0.00	0.37	0.408	O	|	|	|	|	2.09
43.417	0.00	0.37	0.406	O	|	|	|	|	2.08
43.500	0.00	0.37	0.403	O	|	|	|	|	2.07
43.583	0.00	0.37	0.401	O	|	|	|	|	2.06
43.667	0.00	0.37	0.398	O	|	|	|	|	2.05
43.750	0.00	0.37	0.396	O	|	|	|	|	2.04
43.833	0.00	0.37	0.393	O	|	|	|	|	2.03
43.917	0.00	0.37	0.390	O	|	|	|	|	2.02
44.000	0.00	0.37	0.388	O	|	|	|	|	2.02
44.083	0.00	0.37	0.385	O	|	|	|	|	2.01
44.167	0.00	0.36	0.383	O	|	|	|	|	2.00
44.250	0.00	0.36	0.380	O	|	|	|	|	1.99
44.333	0.00	0.36	0.378	O	|	|	|	|	1.98
44.417	0.00	0.36	0.375	O	|	|	|	|	1.97
44.500	0.00	0.36	0.373	O	|	|	|	|	1.96
44.583	0.00	0.36	0.370	O	|	|	|	|	1.95
44.667	0.00	0.36	0.368	O	|	|	|	|	1.94
44.750	0.00	0.36	0.366	O	|	|	|	|	1.93
44.833	0.00	0.36	0.363	O	|	|	|	|	1.92
44.917	0.00	0.36	0.361	O	|	|	|	|	1.92
45.000	0.00	0.36	0.358	O	|	|	|	|	1.91
45.083	0.00	0.35	0.356	O	|	|	|	|	1.90
45.167	0.00	0.35	0.353	O	|	|	|	|	1.89
45.250	0.00	0.35	0.351	O	|	|	|	|	1.88
45.333	0.00	0.35	0.348	O	|	|	|	|	1.87
45.417	0.00	0.35	0.346	O	|	|	|	|	1.86
45.500	0.00	0.35	0.344	O	|	|	|	|	1.85
45.583	0.00	0.35	0.341	O	|	|	|	|	1.84
45.667	0.00	0.35	0.339	O	|	|	|	|	1.84
45.750	0.00	0.35	0.336	O	|	|	|	|	1.83
45.833	0.00	0.35	0.334	O	|	|	|	|	1.82
45.917	0.00	0.35	0.332	O	|	|	|	|	1.81
46.000	0.00	0.35	0.329	O	|	|	|	|	1.80
46.083	0.00	0.34	0.327	O	|	|	|	|	1.79
46.167	0.00	0.34	0.324	O	|	|	|	|	1.78
46.250	0.00	0.34	0.322	O	|	|	|	|	1.77
46.333	0.00	0.34	0.320	O	|	|	|	|	1.77
46.417	0.00	0.34	0.317	O	|	|	|	|	1.76
46.500	0.00	0.34	0.315	O	|	|	|	|	1.75
46.583	0.00	0.34	0.313	O	|	|	|	|	1.74
46.667	0.00	0.34	0.310	O	|	|	|	|	1.73
46.750	0.00	0.34	0.308	O	|	|	|	|	1.72
46.833	0.00	0.34	0.306	O	|	|	|	|	1.72
46.917	0.00	0.34	0.303	O	|	|	|	|	1.71
47.000	0.00	0.34	0.301	O	|	|	|	|	1.70
47.083	0.00	0.33	0.299	O	|	|	|	|	1.69
47.167	0.00	0.33	0.296	O	|	|	|	|	1.68

47.250	0.00	0.33	0.294	O					1.67
47.333	0.00	0.33	0.292	O					1.66
47.417	0.00	0.33	0.290	O					1.66
47.500	0.00	0.33	0.287	O					1.65
47.583	0.00	0.33	0.285	O					1.64
47.667	0.00	0.33	0.283	O					1.63
47.750	0.00	0.33	0.281	O					1.62
47.833	0.00	0.33	0.278	O					1.61
47.917	0.00	0.33	0.276	O					1.61
48.000	0.00	0.33	0.274	O					1.60
48.083	0.00	0.32	0.272	O					1.59
48.167	0.00	0.32	0.269	O					1.58
48.250	0.00	0.32	0.267	O					1.57
48.333	0.00	0.32	0.265	O					1.57
48.417	0.00	0.32	0.263	O					1.56
48.500	0.00	0.32	0.260	O					1.55
48.583	0.00	0.32	0.258	O					1.54
48.667	0.00	0.32	0.256	O					1.53
48.750	0.00	0.32	0.254	O					1.53
48.833	0.00	0.32	0.252	O					1.52
48.917	0.00	0.32	0.249	O					1.51
49.000	0.00	0.32	0.247	O					1.50
49.083	0.00	0.32	0.245	O					1.49
49.167	0.00	0.31	0.243	O					1.49
49.250	0.00	0.31	0.241	O					1.48
49.333	0.00	0.31	0.239	O					1.47
49.417	0.00	0.31	0.237	O					1.46
49.500	0.00	0.31	0.234	O					1.45
49.583	0.00	0.31	0.232	O					1.45
49.667	0.00	0.31	0.230	O					1.44
49.750	0.00	0.31	0.228	O					1.43
49.833	0.00	0.31	0.226	O					1.42
49.917	0.00	0.31	0.224	O					1.42
50.000	0.00	0.31	0.222	O					1.41
50.083	0.00	0.31	0.219	O					1.40
50.167	0.00	0.31	0.217	O					1.39
50.250	0.00	0.30	0.215	O					1.39
50.333	0.00	0.30	0.213	O					1.38
50.417	0.00	0.30	0.211	O					1.37
50.500	0.00	0.30	0.209	O					1.36
50.583	0.00	0.30	0.207	O					1.35
50.667	0.00	0.30	0.205	O					1.35
50.750	0.00	0.30	0.203	O					1.34
50.833	0.00	0.30	0.201	O					1.33
50.917	0.00	0.30	0.199	O					1.32
51.000	0.00	0.30	0.197	O					1.32
51.083	0.00	0.30	0.195	O					1.31
51.167	0.00	0.30	0.193	O					1.30
51.250	0.00	0.29	0.191	O					1.29
51.333	0.00	0.29	0.188	O					1.28
51.417	0.00	0.29	0.186	O					1.27
51.500	0.00	0.29	0.184	O					1.26
51.583	0.00	0.29	0.182	O					1.24
51.667	0.00	0.29	0.181	O					1.23
51.750	0.00	0.28	0.179	O					1.22
51.833	0.00	0.28	0.177	O					1.21
51.917	0.00	0.28	0.175	O					1.20
52.000	0.00	0.28	0.173	O					1.19
52.083	0.00	0.28	0.171	O					1.18
52.167	0.00	0.28	0.169	O					1.17
52.250	0.00	0.27	0.167	O					1.15
52.333	0.00	0.27	0.165	O					1.14
52.417	0.00	0.27	0.163	O					1.13
52.500	0.00	0.27	0.161	O					1.12
52.583	0.00	0.27	0.160	O					1.11
52.667	0.00	0.27	0.158	O					1.10
52.750	0.00	0.26	0.156	O					1.09
52.833	0.00	0.26	0.154	O					1.08
52.917	0.00	0.26	0.152	O					1.07
53.000	0.00	0.26	0.151	O					1.06
53.083	0.00	0.26	0.149	O					1.05

53.167	0.00	0.26	0.147	O	|	|	|	|	1.04
53.250	0.00	0.25	0.145	O	|	|	|	|	1.03
53.333	0.00	0.25	0.143	O	|	|	|	|	1.02
53.417	0.00	0.25	0.142	O	|	|	|	|	1.01
53.500	0.00	0.25	0.140	O	|	|	|	|	1.00
53.583	0.00	0.25	0.138	O	|	|	|	|	0.99
53.667	0.00	0.25	0.137	O	|	|	|	|	0.98
53.750	0.00	0.24	0.135	O	|	|	|	|	0.97
53.833	0.00	0.24	0.133	O	|	|	|	|	0.96
53.917	0.00	0.24	0.132	O	|	|	|	|	0.95
54.000	0.00	0.24	0.130	O	|	|	|	|	0.94
54.083	0.00	0.24	0.128	O	|	|	|	|	0.93
54.167	0.00	0.24	0.127	O	|	|	|	|	0.92
54.250	0.00	0.24	0.125	O	|	|	|	|	0.91
54.333	0.00	0.23	0.123	O	|	|	|	|	0.90
54.417	0.00	0.23	0.122	O	|	|	|	|	0.89
54.500	0.00	0.23	0.120	O	|	|	|	|	0.88
54.583	0.00	0.23	0.119	O	|	|	|	|	0.87
54.667	0.00	0.23	0.117	O	|	|	|	|	0.86
54.750	0.00	0.23	0.115	O	|	|	|	|	0.85
54.833	0.00	0.23	0.114	O	|	|	|	|	0.85
54.917	0.00	0.22	0.112	O	|	|	|	|	0.84
55.000	0.00	0.22	0.111	O	|	|	|	|	0.83
55.083	0.00	0.22	0.109	O	|	|	|	|	0.82
55.167	0.00	0.22	0.108	O	|	|	|	|	0.81
55.250	0.00	0.22	0.106	O	|	|	|	|	0.80
55.333	0.00	0.22	0.105	O	|	|	|	|	0.79
55.417	0.00	0.22	0.103	O	|	|	|	|	0.78
55.500	0.00	0.22	0.102	O	|	|	|	|	0.78
55.583	0.00	0.21	0.100	O	|	|	|	|	0.77
55.667	0.00	0.21	0.099	O	|	|	|	|	0.76
55.750	0.00	0.21	0.097	O	|	|	|	|	0.75
55.833	0.00	0.21	0.096	O	|	|	|	|	0.74
55.917	0.00	0.21	0.094	O	|	|	|	|	0.73
56.000	0.00	0.21	0.093	O	|	|	|	|	0.72
56.083	0.00	0.21	0.092	O	|	|	|	|	0.72
56.167	0.00	0.20	0.090	O	|	|	|	|	0.71
56.250	0.00	0.20	0.089	O	|	|	|	|	0.70
56.333	0.00	0.20	0.087	O	|	|	|	|	0.69
56.417	0.00	0.20	0.086	O	|	|	|	|	0.68
56.500	0.00	0.20	0.085	O	|	|	|	|	0.68
56.583	0.00	0.20	0.083	O	|	|	|	|	0.67
56.667	0.00	0.20	0.082	O	|	|	|	|	0.66
56.750	0.00	0.20	0.080	O	|	|	|	|	0.65
56.833	0.00	0.19	0.079	O	|	|	|	|	0.64
56.917	0.00	0.19	0.078	O	|	|	|	|	0.64
57.000	0.00	0.19	0.076	O	|	|	|	|	0.63
57.083	0.00	0.19	0.075	O	|	|	|	|	0.62
57.167	0.00	0.19	0.074	O	|	|	|	|	0.61
57.250	0.00	0.19	0.073	O	|	|	|	|	0.61
57.333	0.00	0.19	0.071	O	|	|	|	|	0.60
57.417	0.00	0.19	0.070	O	|	|	|	|	0.59
57.500	0.00	0.19	0.069	O	|	|	|	|	0.58
57.583	0.00	0.18	0.067	O	|	|	|	|	0.58
57.667	0.00	0.18	0.066	O	|	|	|	|	0.57
57.750	0.00	0.18	0.065	O	|	|	|	|	0.56
57.833	0.00	0.18	0.064	O	|	|	|	|	0.55
57.917	0.00	0.18	0.062	O	|	|	|	|	0.55
58.000	0.00	0.18	0.061	O	|	|	|	|	0.54
58.083	0.00	0.18	0.060	O	|	|	|	|	0.53
58.167	0.00	0.18	0.059	O	|	|	|	|	0.52
58.250	0.00	0.18	0.057	O	|	|	|	|	0.52
58.333	0.00	0.17	0.056	O	|	|	|	|	0.51
58.417	0.00	0.17	0.055	O	|	|	|	|	0.50
58.500	0.00	0.17	0.054	O	|	|	|	|	0.50
58.583	0.00	0.17	0.053	O	|	|	|	|	0.49
58.667	0.00	0.17	0.052	O	|	|	|	|	0.48
58.750	0.00	0.17	0.050	O	|	|	|	|	0.48
58.833	0.00	0.17	0.049	O	|	|	|	|	0.47
58.917	0.00	0.17	0.048	O	|	|	|	|	0.46
59.000	0.00	0.17	0.047	O	|	|	|	|	0.46

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59.083    0.00    0.17      0.046  O       |       |       |       |      0.45
59.167    0.00    0.16      0.045  O       |       |       |       |      0.44
59.250    0.00    0.16      0.043  O       |       |       |       |      0.44
59.333    0.00    0.16      0.042  O       |       |       |       |      0.43
59.417    0.00    0.16      0.041  O       |       |       |       |      0.42
59.500    0.00    0.16      0.040  O       |       |       |       |      0.42
59.583    0.00    0.16      0.039  O       |       |       |       |      0.41
59.667    0.00    0.16      0.038  O       |       |       |       |      0.40
59.750    0.00    0.16      0.037  O       |       |       |       |      0.40
59.833    0.00    0.16      0.036  O       |       |       |       |      0.39
59.917    0.00    0.16      0.035  O       |       |       |       |      0.39
60.000    0.00    0.15      0.034  O       |       |       |       |      0.38
60.083    0.00    0.15      0.033  O       |       |       |       |      0.37
60.167    0.00    0.15      0.032  O       |       |       |       |      0.37
60.250    0.00    0.15      0.030  O       |       |       |       |      0.36
60.333    0.00    0.15      0.029  O       |       |       |       |      0.35
60.417    0.00    0.15      0.028  O       |       |       |       |      0.35
60.500    0.00    0.15      0.027  O       |       |       |       |      0.34
60.583    0.00    0.15      0.026  O       |       |       |       |      0.34
60.667    0.00    0.15      0.025  O       |       |       |       |      0.33
60.750    0.00    0.15      0.024  O       |       |       |       |      0.33
60.833    0.00    0.14      0.023  O       |       |       |       |      0.32
60.917    0.00    0.14      0.022  O       |       |       |       |      0.31
61.000    0.00    0.14      0.021  O       |       |       |       |      0.31
61.083    0.00    0.14      0.020  O       |       |       |       |      0.30
61.167    0.00    0.14      0.019  O       |       |       |       |      0.29
61.250    0.00    0.13      0.018  O       |       |       |       |      0.28
61.333    0.00    0.13      0.018  O       |       |       |       |      0.26
61.417    0.00    0.12      0.017  O       |       |       |       |      0.25
61.500    0.00    0.11      0.016  O       |       |       |       |      0.24
61.583    0.00    0.11      0.015  O       |       |       |       |      0.23
61.667    0.00    0.10      0.014  O       |       |       |       |      0.22
61.750    0.00    0.10      0.014  O       |       |       |       |      0.21

  Remaining water in basin =    0.01 (Ac.Ft)

  ****************************HYDROGRAPH DATA****************************
                Number of intervals =   741
                Time interval =    5.0 (Min.)
                Maximum/Peak flow rate =        1.657 (CFS)
                Total volume =       2.812 (Ac.Ft)
         Status of hydrographs being held in storage
                     Stream 1  Stream 2  Stream 3  Stream 4  Stream 5
         Peak (CFS)      0.000     0.000     0.000     0.000     0.000
         Vol (Ac.Ft)      0.000     0.000     0.000     0.000     0.000
  ***********************************************************************

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FLOOD HYDROGRAPH ROUTING PROGRAM
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Study date: 08/18/25

Program License Serial Number 5006

********** HYDROGRAPH INFORMATION **********

From study/file name: PROA62.rte
**********HYDROGRAPH DATA**********
Number of intervals = 90
Time interval = 5.0 (Min.)
Maximum/Peak flow rate = 27.326 (CFS)
Total volume = 3.699 (Ac.Ft)

Status of hydrographs being held in storage

	Stream 1	Stream 2	Stream 3	Stream 4	Stream 5
Peak (CFS)	0.000	0.000	0.000	0.000	0.000
Vol (Ac.Ft)	0.000	0.000	0.000	0.000	0.000

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Process from Point/Station 0.000 to Point/Station 0.000
**** RETARDING BASIN ROUTING ****

User entry of depth-outflow-storage data

Total number of inflow hydrograph intervals = 90
Hydrograph time unit = 5.000 (Min.)
Initial depth in storage basin = 0.00(Ft.)

Initial basin depth = 0.00 (Ft.)
Initial basin storage = 0.00 (Ac.Ft)
Initial basin outflow = 0.00 (CFS)

Depth vs. Storage and Depth vs. Discharge data:

Basin Depth (Ft.)	Storage (Ac.Ft)	Outflow (CFS)	(S-O*dt/2) (Ac.Ft)	(S+O*dt/2) (Ac.Ft)
0.000	0.000	0.000	0.000	0.000
0.300	0.020	0.142	0.020	0.020
1.300	0.192	0.296	0.191	0.193
2.300	0.466	0.394	0.465	0.467
3.300	0.766	0.469	0.764	0.768
4.300	1.126	0.536	1.124	1.128
5.500	1.640	0.610	1.638	1.642
6.300	2.007	1.299	2.003	2.011
8.300	3.066	1.957	3.059	3.073
10.300	4.341	2.417	4.333	4.349
11.400	5.141	2.632	5.132	5.150
12.300	5.851	167.187	5.275	6.427
13.300	6.699	657.066	4.436	8.962
14.300	7.611	1377.819	2.866	12.356

Hydrograph Detention Basin Routing

Graph values: 'I'= unit inflow; 'O'=outflow at time shown

Time (Hours)	Inflow (CFS)	Outflow (CFS)	Storage (Ac.Ft)	.0	6.8	13.66	20.49	27.33	Depth (Ft.)
0.083	0.13	0.00	0.000	O	|	|	|	|	0.01
0.167	0.69	0.02	0.003	O	|	|	|	|	0.05
0.250	1.52	0.07	0.010	OI	|	|	|	|	0.16
0.333	2.05	0.14	0.022	O I	|	|	|	|	0.31
0.417	2.32	0.16	0.036	O I	|	|	|	|	0.39
0.500	2.51	0.17	0.051	O I	|	|	|	|	0.48
0.583	2.74	0.19	0.068	O I	|	|	|	|	0.58
0.667	2.97	0.20	0.087	O I	|	|	|	|	0.69
0.750	3.12	0.22	0.106	O I	|	|	|	|	0.80
0.833	3.21	0.24	0.126	O I	|	|	|	|	0.92
0.917	3.28	0.26	0.147	O I	|	|	|	|	1.04
1.000	3.36	0.27	0.168	O I	|	|	|	|	1.16
1.083	3.51	0.29	0.190	O I	|	|	|	|	1.29
1.167	3.69	0.30	0.212	O I	|	|	|	|	1.37
1.250	3.80	0.31	0.236	O I	|	|	|	|	1.46
1.333	3.86	0.32	0.260	O I	|	|	|	|	1.55
1.417	3.91	0.33	0.285	O I	|	|	|	|	1.64
1.500	3.94	0.34	0.310	O I	|	|	|	|	1.73
1.583	3.97	0.35	0.334	O I	|	|	|	|	1.82
1.667	3.99	0.36	0.359	O I	|	|	|	|	1.91
1.750	4.00	0.36	0.384	O I	|	|	|	|	2.00
1.833	4.01	0.37	0.409	O I	|	|	|	|	2.09
1.917	4.01	0.38	0.434	O I	|	|	|	|	2.18
2.000	4.05	0.39	0.460	O I	|	|	|	|	2.28
2.083	4.13	0.40	0.485	O I	|	|	|	|	2.36
2.167	4.20	0.41	0.511	O I	|	|	|	|	2.45
2.250	4.24	0.41	0.537	O I	|	|	|	|	2.54
2.333	4.35	0.42	0.564	O I	|	|	|	|	2.63
2.417	4.41	0.43	0.591	O I	|	|	|	|	2.72
2.500	4.45	0.43	0.619	O I	|	|	|	|	2.81
2.583	4.47	0.44	0.646	O I	|	|	|	|	2.90
2.667	4.48	0.45	0.674	O I	|	|	|	|	2.99
2.750	4.52	0.45	0.702	O I	|	|	|	|	3.09
2.833	4.64	0.46	0.731	O I	|	|	|	|	3.18
2.917	4.79	0.47	0.760	O I	|	|	|	|	3.28
3.000	4.87	0.47	0.790	O I	|	|	|	|	3.37
3.083	4.92	0.48	0.820	O I	|	|	|	|	3.45
3.167	4.97	0.48	0.851	O I	|	|	|	|	3.54
3.250	5.10	0.49	0.882	O I	|	|	|	|	3.62
3.333	5.26	0.50	0.915	O I	|	|	|	|	3.71
3.417	5.38	0.50	0.948	O I	|	|	|	|	3.81
3.500	5.56	0.51	0.982	O I	|	|	|	|	3.90
3.583	5.87	0.52	1.018	O I	|	|	|	|	4.00
3.667	6.23	0.52	1.056	O I	|	|	|	|	4.11
3.750	6.53	0.53	1.096	O I	|	|	|	|	4.22
3.833	6.79	0.54	1.138	O I	|	|	|	|	4.33
3.917	7.06	0.54	1.182	O I	|	|	|	|	4.43
4.000	7.31	0.55	1.228	O I	|	|	|	|	4.54
4.083	7.57	0.56	1.275	O I	|	|	|	|	4.65
4.167	7.85	0.56	1.325	O	I |	|	|	|	4.76
4.250	8.21	0.57	1.376	O	I |	|	|	|	4.88
4.333	8.63	0.58	1.430	O	| I	|	|	|	5.01
4.417	9.08	0.59	1.487	O	| I	|	|	|	5.14
4.500	9.51	0.60	1.547	O	| I	|	|	|	5.28
4.583	9.87	0.61	1.610	O	| I	|	|	|	5.43
4.667	10.20	0.67	1.674	O	| I	|	|	|	5.57
4.750	10.61	0.80	1.741	O	| I	|	|	|	5.72
4.833	11.03	0.93	1.810	|O	| I	|	|	|	5.87
4.917	11.39	1.06	1.880	|O	| I	|	|	|	6.02
5.000	11.72	1.20	1.952	|O	| I	|	|	|	6.18
5.083	12.23	1.31	2.026	|O	| I	|	|	|	6.34
5.167	13.34	1.36	2.104	|O	| I	|	|	|	6.48
5.250	15.47	1.42	2.194	|O	| | I	|	|	|	6.65
5.333	18.20	1.48	2.300	|O	| | I	|	|	|	6.85
5.417	21.01	1.56	2.425	|O	| | I	|	|	|	7.09
5.500	24.45	1.65	2.570	|O	| | I	|	|	|	7.36
5.583	27.33	1.75	2.737	| O	| | I	|	|	|	7.68
5.667	24.45	1.86	2.902	| O	| | I	|	|	|	7.99
5.750	16.69	1.94	3.031	| O	| | I	|	|	|	8.23

5.833	11.43	1.97	3.114	| O |	I	|	|	|	8.38
5.917	8.66	1.99	3.170	| O	I |	|	|	|	8.46
6.000	6.80	2.01	3.209	| O	I|	|	|	|	8.52
6.083	5.29	2.02	3.237	| O	I |	|	|	|	8.57
6.167	4.03	2.03	3.255	| O I	|	|	|	|	8.60
6.250	3.02	2.03	3.266	| OI	|	|	|	|	8.61
6.333	2.36	2.03	3.270	| O	|	|	|	|	8.62
6.417	1.89	2.03	3.271	| O	|	|	|	|	8.62
6.500	1.49	2.03	3.268	|IO	|	|	|	|	8.62
6.583	1.19	2.03	3.264	|IO	|	|	|	|	8.61
6.667	0.93	2.03	3.257	|IO	|	|	|	|	8.60
6.750	0.71	2.02	3.249	I O	|	|	|	|	8.59
6.833	0.55	2.02	3.239	I O	|	|	|	|	8.57
6.917	0.39	2.02	3.228	I O	|	|	|	|	8.55
7.000	0.22	2.01	3.217	I O	|	|	|	|	8.54
7.083	0.09	2.01	3.204	I O	|	|	|	|	8.52
7.167	0.05	2.00	3.191	I O	|	|	|	|	8.50
7.250	0.03	2.00	3.177	I O	|	|	|	|	8.47
7.333	0.02	1.99	3.164	I O	|	|	|	|	8.45
7.417	0.01	1.99	3.150	I O	|	|	|	|	8.43
7.500	0.00	1.98	3.136	I O	|	|	|	|	8.41
7.583	0.00	1.98	3.123	I O	|	|	|	|	8.39
7.667	0.00	1.97	3.109	I O	|	|	|	|	8.37
7.750	0.00	1.97	3.095	I O	|	|	|	|	8.35
7.833	0.00	1.96	3.082	I O	|	|	|	|	8.33
7.917	0.00	1.96	3.068	I O	|	|	|	|	8.30
8.000	0.00	1.95	3.055	I O	|	|	|	|	8.28
8.083	0.00	1.94	3.042	I O	|	|	|	|	8.25
8.167	0.00	1.93	3.028	I O	|	|	|	|	8.23
8.250	0.00	1.93	3.015	I O	|	|	|	|	8.20
8.333	0.00	1.92	3.002	I O	|	|	|	|	8.18
8.417	0.00	1.91	2.989	I O	|	|	|	|	8.15
8.500	0.00	1.90	2.975	I O	|	|	|	|	8.13
8.583	0.00	1.89	2.962	I O	|	|	|	|	8.10
8.667	0.00	1.88	2.949	I O	|	|	|	|	8.08
8.750	0.00	1.88	2.936	I O	|	|	|	|	8.06
8.833	0.00	1.87	2.924	I O	|	|	|	|	8.03
8.917	0.00	1.86	2.911	I O	|	|	|	|	8.01
9.000	0.00	1.85	2.898	I O	|	|	|	|	7.98
9.083	0.00	1.84	2.885	I O	|	|	|	|	7.96
9.167	0.00	1.84	2.872	I O	|	|	|	|	7.93
9.250	0.00	1.83	2.860	I O	|	|	|	|	7.91
9.333	0.00	1.82	2.847	I O	|	|	|	|	7.89
9.417	0.00	1.81	2.835	I O	|	|	|	|	7.86
9.500	0.00	1.81	2.822	I O	|	|	|	|	7.84
9.583	0.00	1.80	2.810	I O	|	|	|	|	7.82
9.667	0.00	1.79	2.798	I O	|	|	|	|	7.79
9.750	0.00	1.78	2.785	I O	|	|	|	|	7.77
9.833	0.00	1.77	2.773	I O	|	|	|	|	7.75
9.917	0.00	1.77	2.761	I O	|	|	|	|	7.72
10.000	0.00	1.76	2.749	I O	|	|	|	|	7.70
10.083	0.00	1.75	2.737	I O	|	|	|	|	7.68
10.167	0.00	1.74	2.725	I O	|	|	|	|	7.66
10.250	0.00	1.74	2.713	I O	|	|	|	|	7.63
10.333	0.00	1.73	2.701	I O	|	|	|	|	7.61
10.417	0.00	1.72	2.689	I O	|	|	|	|	7.59
10.500	0.00	1.72	2.677	I O	|	|	|	|	7.57
10.583	0.00	1.71	2.665	IO	|	|	|	|	7.54
10.667	0.00	1.70	2.653	IO	|	|	|	|	7.52
10.750	0.00	1.69	2.642	IO	|	|	|	|	7.50
10.833	0.00	1.69	2.630	IO	|	|	|	|	7.48
10.917	0.00	1.68	2.618	IO	|	|	|	|	7.45
11.000	0.00	1.67	2.607	IO	|	|	|	|	7.43
11.083	0.00	1.66	2.595	IO	|	|	|	|	7.41
11.167	0.00	1.66	2.584	IO	|	|	|	|	7.39
11.250	0.00	1.65	2.573	IO	|	|	|	|	7.37
11.333	0.00	1.64	2.561	IO	|	|	|	|	7.35
11.417	0.00	1.64	2.550	IO	|	|	|	|	7.33
11.500	0.00	1.63	2.539	IO	|	|	|	|	7.30
11.583	0.00	1.62	2.527	IO	|	|	|	|	7.28
11.667	0.00	1.62	2.516	IO	|	|	|	|	7.26

11.750	0.00	1.61	2.505	IO	|	|	|	|	7.24
11.833	0.00	1.60	2.494	IO	|	|	|	|	7.22
11.917	0.00	1.59	2.483	IO	|	|	|	|	7.20
12.000	0.00	1.59	2.472	IO	|	|	|	|	7.18
12.083	0.00	1.58	2.461	IO	|	|	|	|	7.16
12.167	0.00	1.57	2.450	IO	|	|	|	|	7.14
12.250	0.00	1.57	2.440	IO	|	|	|	|	7.12
12.333	0.00	1.56	2.429	IO	|	|	|	|	7.10
12.417	0.00	1.55	2.418	IO	|	|	|	|	7.08
12.500	0.00	1.55	2.407	IO	|	|	|	|	7.06
12.583	0.00	1.54	2.397	IO	|	|	|	|	7.04
12.667	0.00	1.53	2.386	IO	|	|	|	|	7.02
12.750	0.00	1.53	2.376	IO	|	|	|	|	7.00
12.833	0.00	1.52	2.365	IO	|	|	|	|	6.98
12.917	0.00	1.52	2.355	IO	|	|	|	|	6.96
13.000	0.00	1.51	2.344	IO	|	|	|	|	6.94
13.083	0.00	1.50	2.334	IO	|	|	|	|	6.92
13.167	0.00	1.50	2.324	IO	|	|	|	|	6.90
13.250	0.00	1.49	2.313	IO	|	|	|	|	6.88
13.333	0.00	1.48	2.303	IO	|	|	|	|	6.86
13.417	0.00	1.48	2.293	IO	|	|	|	|	6.84
13.500	0.00	1.47	2.283	IO	|	|	|	|	6.82
13.583	0.00	1.46	2.273	IO	|	|	|	|	6.80
13.667	0.00	1.46	2.263	IO	|	|	|	|	6.78
13.750	0.00	1.45	2.253	IO	|	|	|	|	6.76
13.833	0.00	1.45	2.243	IO	|	|	|	|	6.74
13.917	0.00	1.44	2.233	IO	|	|	|	|	6.73
14.000	0.00	1.43	2.223	IO	|	|	|	|	6.71
14.083	0.00	1.43	2.213	IO	|	|	|	|	6.69
14.167	0.00	1.42	2.203	IO	|	|	|	|	6.67
14.250	0.00	1.41	2.193	IO	|	|	|	|	6.65
14.333	0.00	1.41	2.184	IO	|	|	|	|	6.63
14.417	0.00	1.40	2.174	IO	|	|	|	|	6.62
14.500	0.00	1.40	2.164	IO	|	|	|	|	6.60
14.583	0.00	1.39	2.155	IO	|	|	|	|	6.58
14.667	0.00	1.38	2.145	IO	|	|	|	|	6.56
14.750	0.00	1.38	2.136	IO	|	|	|	|	6.54
14.833	0.00	1.37	2.126	IO	|	|	|	|	6.53
14.917	0.00	1.37	2.117	IO	|	|	|	|	6.51
15.000	0.00	1.36	2.107	IO	|	|	|	|	6.49
15.083	0.00	1.36	2.098	IO	|	|	|	|	6.47
15.167	0.00	1.35	2.089	IO	|	|	|	|	6.45
15.250	0.00	1.34	2.079	IO	|	|	|	|	6.44
15.333	0.00	1.34	2.070	IO	|	|	|	|	6.42
15.417	0.00	1.33	2.061	IO	|	|	|	|	6.40
15.500	0.00	1.33	2.052	IO	|	|	|	|	6.38
15.583	0.00	1.32	2.043	IO	|	|	|	|	6.37
15.667	0.00	1.32	2.034	IO	|	|	|	|	6.35
15.750	0.00	1.31	2.025	IO	|	|	|	|	6.33
15.833	0.00	1.30	2.016	IO	|	|	|	|	6.32
15.917	0.00	1.30	2.007	IO	|	|	|	|	6.30
16.000	0.00	1.28	1.998	IO	|	|	|	|	6.28
16.083	0.00	1.27	1.989	IO	|	|	|	|	6.26
16.167	0.00	1.25	1.980	IO	|	|	|	|	6.24
16.250	0.00	1.23	1.972	IO	|	|	|	|	6.22
16.333	0.00	1.22	1.963	IO	|	|	|	|	6.20
16.417	0.00	1.20	1.955	IO	|	|	|	|	6.19
16.500	0.00	1.19	1.947	IO	|	|	|	|	6.17
16.583	0.00	1.17	1.939	IO	|	|	|	|	6.15
16.667	0.00	1.16	1.931	IO	|	|	|	|	6.13
16.750	0.00	1.14	1.923	IO	|	|	|	|	6.12
16.833	0.00	1.13	1.915	IO	|	|	|	|	6.10
16.917	0.00	1.11	1.907	IO	|	|	|	|	6.08
17.000	0.00	1.10	1.900	IO	|	|	|	|	6.07
17.083	0.00	1.08	1.892	IO	|	|	|	|	6.05
17.167	0.00	1.07	1.885	IO	|	|	|	|	6.03
17.250	0.00	1.06	1.877	IO	|	|	|	|	6.02
17.333	0.00	1.04	1.870	IO	|	|	|	|	6.00
17.417	0.00	1.03	1.863	IO	|	|	|	|	5.99
17.500	0.00	1.02	1.856	IO	|	|	|	|	5.97
17.583	0.00	1.00	1.849	IO	|	|	|	|	5.96

17.667	0.00	0.99	1.842	IO					5.94
17.750	0.00	0.98	1.835	IO					5.93
17.833	0.00	0.96	1.829	IO					5.91
17.917	0.00	0.95	1.822	IO					5.90
18.000	0.00	0.94	1.816	IO					5.88
18.083	0.00	0.93	1.809	IO					5.87
18.167	0.00	0.92	1.803	IO					5.85
18.250	0.00	0.90	1.797	IO					5.84
18.333	0.00	0.89	1.790	IO					5.83
18.417	0.00	0.88	1.784	IO					5.81
18.500	0.00	0.87	1.778	IO					5.80
18.583	0.00	0.86	1.772	IO					5.79
18.667	0.00	0.85	1.766	O					5.78
18.750	0.00	0.84	1.761	O					5.76
18.833	0.00	0.83	1.755	O					5.75
18.917	0.00	0.82	1.749	O					5.74
19.000	0.00	0.80	1.744	O					5.73
19.083	0.00	0.79	1.738	O					5.71
19.167	0.00	0.78	1.733	O					5.70
19.250	0.00	0.77	1.727	O					5.69
19.333	0.00	0.76	1.722	O					5.68
19.417	0.00	0.75	1.717	O					5.67
19.500	0.00	0.74	1.712	O					5.66
19.583	0.00	0.73	1.707	O					5.65
19.667	0.00	0.73	1.702	O					5.63
19.750	0.00	0.72	1.697	O					5.62
19.833	0.00	0.71	1.692	O					5.61
19.917	0.00	0.70	1.687	O					5.60
20.000	0.00	0.69	1.682	O					5.59
20.083	0.00	0.68	1.677	O					5.58
20.167	0.00	0.67	1.673	O					5.57
20.250	0.00	0.66	1.668	O					5.56
20.333	0.00	0.65	1.664	O					5.55
20.417	0.00	0.65	1.659	O					5.54
20.500	0.00	0.64	1.655	O					5.53
20.583	0.00	0.63	1.650	O					5.52
20.667	0.00	0.62	1.646	O					5.51
20.750	0.00	0.61	1.642	O					5.50
20.833	0.00	0.61	1.638	O					5.49
20.917	0.00	0.61	1.633	O					5.48
21.000	0.00	0.61	1.629	O					5.47
21.083	0.00	0.61	1.625	O					5.46
21.167	0.00	0.61	1.621	O					5.46
21.250	0.00	0.61	1.617	O					5.45
21.333	0.00	0.61	1.612	O					5.44
21.417	0.00	0.61	1.608	O					5.43
21.500	0.00	0.60	1.604	O					5.42
21.583	0.00	0.60	1.600	O					5.41
21.667	0.00	0.60	1.596	O					5.40
21.750	0.00	0.60	1.592	O					5.39
21.833	0.00	0.60	1.587	O					5.38
21.917	0.00	0.60	1.583	O					5.37
22.000	0.00	0.60	1.579	O					5.36
22.083	0.00	0.60	1.575	O					5.35
22.167	0.00	0.60	1.571	O					5.34
22.250	0.00	0.60	1.567	O					5.33
22.333	0.00	0.60	1.563	O					5.32
22.417	0.00	0.60	1.558	O					5.31
22.500	0.00	0.60	1.554	O					5.30
22.583	0.00	0.60	1.550	O					5.29
22.667	0.00	0.60	1.546	O					5.28
22.750	0.00	0.60	1.542	O					5.27
22.833	0.00	0.60	1.538	O					5.26
22.917	0.00	0.59	1.534	O					5.25
23.000	0.00	0.59	1.530	O					5.24
23.083	0.00	0.59	1.526	O					5.23
23.167	0.00	0.59	1.522	O					5.22
23.250	0.00	0.59	1.518	O					5.21
23.333	0.00	0.59	1.513	O					5.20
23.417	0.00	0.59	1.509	O					5.19
23.500	0.00	0.59	1.505	O					5.19

23.583	0.00	0.59	1.501	O	|	|	|	|	5.18
23.667	0.00	0.59	1.497	O	|	|	|	|	5.17
23.750	0.00	0.59	1.493	O	|	|	|	|	5.16
23.833	0.00	0.59	1.489	O	|	|	|	|	5.15
23.917	0.00	0.59	1.485	O	|	|	|	|	5.14
24.000	0.00	0.59	1.481	O	|	|	|	|	5.13
24.083	0.00	0.59	1.477	O	|	|	|	|	5.12
24.167	0.00	0.59	1.473	O	|	|	|	|	5.11
24.250	0.00	0.59	1.469	O	|	|	|	|	5.10
24.333	0.00	0.58	1.465	O	|	|	|	|	5.09
24.417	0.00	0.58	1.461	O	|	|	|	|	5.08
24.500	0.00	0.58	1.457	O	|	|	|	|	5.07
24.583	0.00	0.58	1.453	O	|	|	|	|	5.06
24.667	0.00	0.58	1.449	O	|	|	|	|	5.05
24.750	0.00	0.58	1.445	O	|	|	|	|	5.04
24.833	0.00	0.58	1.441	O	|	|	|	|	5.03
24.917	0.00	0.58	1.437	O	|	|	|	|	5.03
25.000	0.00	0.58	1.433	O	|	|	|	|	5.02
25.083	0.00	0.58	1.429	O	|	|	|	|	5.01
25.167	0.00	0.58	1.425	O	|	|	|	|	5.00
25.250	0.00	0.58	1.421	O	|	|	|	|	4.99
25.333	0.00	0.58	1.417	O	|	|	|	|	4.98
25.417	0.00	0.58	1.413	O	|	|	|	|	4.97
25.500	0.00	0.58	1.409	O	|	|	|	|	4.96
25.583	0.00	0.58	1.405	O	|	|	|	|	4.95
25.667	0.00	0.58	1.401	O	|	|	|	|	4.94
25.750	0.00	0.58	1.397	O	|	|	|	|	4.93
25.833	0.00	0.57	1.393	O	|	|	|	|	4.92
25.917	0.00	0.57	1.389	O	|	|	|	|	4.91
26.000	0.00	0.57	1.385	O	|	|	|	|	4.90
26.083	0.00	0.57	1.381	O	|	|	|	|	4.90
26.167	0.00	0.57	1.377	O	|	|	|	|	4.89
26.250	0.00	0.57	1.373	O	|	|	|	|	4.88
26.333	0.00	0.57	1.369	O	|	|	|	|	4.87
26.417	0.00	0.57	1.365	O	|	|	|	|	4.86
26.500	0.00	0.57	1.361	O	|	|	|	|	4.85
26.583	0.00	0.57	1.358	O	|	|	|	|	4.84
26.667	0.00	0.57	1.354	O	|	|	|	|	4.83
26.750	0.00	0.57	1.350	O	|	|	|	|	4.82
26.833	0.00	0.57	1.346	O	|	|	|	|	4.81
26.917	0.00	0.57	1.342	O	|	|	|	|	4.80
27.000	0.00	0.57	1.338	O	|	|	|	|	4.79
27.083	0.00	0.57	1.334	O	|	|	|	|	4.79
27.167	0.00	0.57	1.330	O	|	|	|	|	4.78
27.250	0.00	0.56	1.326	O	|	|	|	|	4.77
27.333	0.00	0.56	1.322	O	|	|	|	|	4.76
27.417	0.00	0.56	1.318	O	|	|	|	|	4.75
27.500	0.00	0.56	1.315	O	|	|	|	|	4.74
27.583	0.00	0.56	1.311	O	|	|	|	|	4.73
27.667	0.00	0.56	1.307	O	|	|	|	|	4.72
27.750	0.00	0.56	1.303	O	|	|	|	|	4.71
27.833	0.00	0.56	1.299	O	|	|	|	|	4.70
27.917	0.00	0.56	1.295	O	|	|	|	|	4.70
28.000	0.00	0.56	1.291	O	|	|	|	|	4.69
28.083	0.00	0.56	1.288	O	|	|	|	|	4.68
28.167	0.00	0.56	1.284	O	|	|	|	|	4.67
28.250	0.00	0.56	1.280	O	|	|	|	|	4.66
28.333	0.00	0.56	1.276	O	|	|	|	|	4.65
28.417	0.00	0.56	1.272	O	|	|	|	|	4.64
28.500	0.00	0.56	1.268	O	|	|	|	|	4.63
28.583	0.00	0.56	1.265	O	|	|	|	|	4.62
28.667	0.00	0.56	1.261	O	|	|	|	|	4.61
28.750	0.00	0.55	1.257	O	|	|	|	|	4.61
28.833	0.00	0.55	1.253	O	|	|	|	|	4.60
28.917	0.00	0.55	1.249	O	|	|	|	|	4.59
29.000	0.00	0.55	1.245	O	|	|	|	|	4.58
29.083	0.00	0.55	1.242	O	|	|	|	|	4.57
29.167	0.00	0.55	1.238	O	|	|	|	|	4.56
29.250	0.00	0.55	1.234	O	|	|	|	|	4.55
29.333	0.00	0.55	1.230	O	|	|	|	|	4.54
29.417	0.00	0.55	1.226	O	|	|	|	|	4.53

29.500	0.00	0.55	1.223	O	|	|	|	|	4.53
29.583	0.00	0.55	1.219	O	|	|	|	|	4.52
29.667	0.00	0.55	1.215	O	|	|	|	|	4.51
29.750	0.00	0.55	1.211	O	|	|	|	|	4.50
29.833	0.00	0.55	1.208	O	|	|	|	|	4.49
29.917	0.00	0.55	1.204	O	|	|	|	|	4.48
30.000	0.00	0.55	1.200	O	|	|	|	|	4.47
30.083	0.00	0.55	1.196	O	|	|	|	|	4.46
30.167	0.00	0.55	1.192	O	|	|	|	|	4.46
30.250	0.00	0.55	1.189	O	|	|	|	|	4.45
30.333	0.00	0.54	1.185	O	|	|	|	|	4.44
30.417	0.00	0.54	1.181	O	|	|	|	|	4.43
30.500	0.00	0.54	1.177	O	|	|	|	|	4.42
30.583	0.00	0.54	1.174	O	|	|	|	|	4.41
30.667	0.00	0.54	1.170	O	|	|	|	|	4.40
30.750	0.00	0.54	1.166	O	|	|	|	|	4.39
30.833	0.00	0.54	1.163	O	|	|	|	|	4.39
30.917	0.00	0.54	1.159	O	|	|	|	|	4.38
31.000	0.00	0.54	1.155	O	|	|	|	|	4.37
31.083	0.00	0.54	1.151	O	|	|	|	|	4.36
31.167	0.00	0.54	1.148	O	|	|	|	|	4.35
31.250	0.00	0.54	1.144	O	|	|	|	|	4.34
31.333	0.00	0.54	1.140	O	|	|	|	|	4.33
31.417	0.00	0.54	1.137	O	|	|	|	|	4.32
31.500	0.00	0.54	1.133	O	|	|	|	|	4.32
31.583	0.00	0.54	1.129	O	|	|	|	|	4.31
31.667	0.00	0.54	1.125	O	|	|	|	|	4.30
31.750	0.00	0.54	1.122	O	|	|	|	|	4.29
31.833	0.00	0.53	1.118	O	|	|	|	|	4.28
31.917	0.00	0.53	1.114	O	|	|	|	|	4.27
32.000	0.00	0.53	1.111	O	|	|	|	|	4.26
32.083	0.00	0.53	1.107	O	|	|	|	|	4.25
32.167	0.00	0.53	1.103	O	|	|	|	|	4.24
32.250	0.00	0.53	1.100	O	|	|	|	|	4.23
32.333	0.00	0.53	1.096	O	|	|	|	|	4.22
32.417	0.00	0.53	1.092	O	|	|	|	|	4.21
32.500	0.00	0.53	1.089	O	|	|	|	|	4.20
32.583	0.00	0.53	1.085	O	|	|	|	|	4.19
32.667	0.00	0.53	1.081	O	|	|	|	|	4.18
32.750	0.00	0.53	1.078	O	|	|	|	|	4.17
32.833	0.00	0.53	1.074	O	|	|	|	|	4.16
32.917	0.00	0.53	1.071	O	|	|	|	|	4.15
33.000	0.00	0.53	1.067	O	|	|	|	|	4.14
33.083	0.00	0.52	1.063	O	|	|	|	|	4.13
33.167	0.00	0.52	1.060	O	|	|	|	|	4.12
33.250	0.00	0.52	1.056	O	|	|	|	|	4.11
33.333	0.00	0.52	1.053	O	|	|	|	|	4.10
33.417	0.00	0.52	1.049	O	|	|	|	|	4.09
33.500	0.00	0.52	1.045	O	|	|	|	|	4.08
33.583	0.00	0.52	1.042	O	|	|	|	|	4.07
33.667	0.00	0.52	1.038	O	|	|	|	|	4.06
33.750	0.00	0.52	1.035	O	|	|	|	|	4.05
33.833	0.00	0.52	1.031	O	|	|	|	|	4.04
33.917	0.00	0.52	1.027	O	|	|	|	|	4.03
34.000	0.00	0.52	1.024	O	|	|	|	|	4.02
34.083	0.00	0.52	1.020	O	|	|	|	|	4.01
34.167	0.00	0.52	1.017	O	|	|	|	|	4.00
34.250	0.00	0.52	1.013	O	|	|	|	|	3.99
34.333	0.00	0.51	1.010	O	|	|	|	|	3.98
34.417	0.00	0.51	1.006	O	|	|	|	|	3.97
34.500	0.00	0.51	1.003	O	|	|	|	|	3.96
34.583	0.00	0.51	0.999	O	|	|	|	|	3.95
34.667	0.00	0.51	0.996	O	|	|	|	|	3.94
34.750	0.00	0.51	0.992	O	|	|	|	|	3.93
34.833	0.00	0.51	0.989	O	|	|	|	|	3.92
34.917	0.00	0.51	0.985	O	|	|	|	|	3.91
35.000	0.00	0.51	0.982	O	|	|	|	|	3.90
35.083	0.00	0.51	0.978	O	|	|	|	|	3.89
35.167	0.00	0.51	0.975	O	|	|	|	|	3.88
35.250	0.00	0.51	0.971	O	|	|	|	|	3.87
35.333	0.00	0.51	0.968	O	|	|	|	|	3.86

35.417	0.00	0.51	0.964	O	|	|	|	|	3.85
35.500	0.00	0.51	0.961	O	|	|	|	|	3.84
35.583	0.00	0.50	0.957	O	|	|	|	|	3.83
35.667	0.00	0.50	0.954	O	|	|	|	|	3.82
35.750	0.00	0.50	0.950	O	|	|	|	|	3.81
35.833	0.00	0.50	0.947	O	|	|	|	|	3.80
35.917	0.00	0.50	0.943	O	|	|	|	|	3.79
36.000	0.00	0.50	0.940	O	|	|	|	|	3.78
36.083	0.00	0.50	0.936	O	|	|	|	|	3.77
36.167	0.00	0.50	0.933	O	|	|	|	|	3.76
36.250	0.00	0.50	0.929	O	|	|	|	|	3.75
36.333	0.00	0.50	0.926	O	|	|	|	|	3.74
36.417	0.00	0.50	0.923	O	|	|	|	|	3.73
36.500	0.00	0.50	0.919	O	|	|	|	|	3.73
36.583	0.00	0.50	0.916	O	|	|	|	|	3.72
36.667	0.00	0.50	0.912	O	|	|	|	|	3.71
36.750	0.00	0.50	0.909	O	|	|	|	|	3.70
36.833	0.00	0.49	0.905	O	|	|	|	|	3.69
36.917	0.00	0.49	0.902	O	|	|	|	|	3.68
37.000	0.00	0.49	0.899	O	|	|	|	|	3.67
37.083	0.00	0.49	0.895	O	|	|	|	|	3.66
37.167	0.00	0.49	0.892	O	|	|	|	|	3.65
37.250	0.00	0.49	0.888	O	|	|	|	|	3.64
37.333	0.00	0.49	0.885	O	|	|	|	|	3.63
37.417	0.00	0.49	0.882	O	|	|	|	|	3.62
37.500	0.00	0.49	0.878	O	|	|	|	|	3.61
37.583	0.00	0.49	0.875	O	|	|	|	|	3.60
37.667	0.00	0.49	0.872	O	|	|	|	|	3.59
37.750	0.00	0.49	0.868	O	|	|	|	|	3.58
37.833	0.00	0.49	0.865	O	|	|	|	|	3.57
37.917	0.00	0.49	0.862	O	|	|	|	|	3.57
38.000	0.00	0.49	0.858	O	|	|	|	|	3.56
38.083	0.00	0.49	0.855	O	|	|	|	|	3.55
38.167	0.00	0.48	0.851	O	|	|	|	|	3.54
38.250	0.00	0.48	0.848	O	|	|	|	|	3.53
38.333	0.00	0.48	0.845	O	|	|	|	|	3.52
38.417	0.00	0.48	0.841	O	|	|	|	|	3.51
38.500	0.00	0.48	0.838	O	|	|	|	|	3.50
38.583	0.00	0.48	0.835	O	|	|	|	|	3.49
38.667	0.00	0.48	0.832	O	|	|	|	|	3.48
38.750	0.00	0.48	0.828	O	|	|	|	|	3.47
38.833	0.00	0.48	0.825	O	|	|	|	|	3.46
38.917	0.00	0.48	0.822	O	|	|	|	|	3.45
39.000	0.00	0.48	0.818	O	|	|	|	|	3.45
39.083	0.00	0.48	0.815	O	|	|	|	|	3.44
39.167	0.00	0.48	0.812	O	|	|	|	|	3.43
39.250	0.00	0.48	0.808	O	|	|	|	|	3.42
39.333	0.00	0.48	0.805	O	|	|	|	|	3.41
39.417	0.00	0.48	0.802	O	|	|	|	|	3.40
39.500	0.00	0.48	0.799	O	|	|	|	|	3.39
39.583	0.00	0.47	0.795	O	|	|	|	|	3.38
39.667	0.00	0.47	0.792	O	|	|	|	|	3.37
39.750	0.00	0.47	0.789	O	|	|	|	|	3.36
39.833	0.00	0.47	0.786	O	|	|	|	|	3.35
39.917	0.00	0.47	0.782	O	|	|	|	|	3.35
40.000	0.00	0.47	0.779	O	|	|	|	|	3.34
40.083	0.00	0.47	0.776	O	|	|	|	|	3.33
40.167	0.00	0.47	0.773	O	|	|	|	|	3.32
40.250	0.00	0.47	0.769	O	|	|	|	|	3.31
40.333	0.00	0.47	0.766	O	|	|	|	|	3.30
40.417	0.00	0.47	0.763	O	|	|	|	|	3.29
40.500	0.00	0.47	0.760	O	|	|	|	|	3.28
40.583	0.00	0.47	0.756	O	|	|	|	|	3.27
40.667	0.00	0.47	0.753	O	|	|	|	|	3.26
40.750	0.00	0.46	0.750	O	|	|	|	|	3.25
40.833	0.00	0.46	0.747	O	|	|	|	|	3.24
40.917	0.00	0.46	0.744	O	|	|	|	|	3.23
41.000	0.00	0.46	0.740	O	|	|	|	|	3.21
41.083	0.00	0.46	0.737	O	|	|	|	|	3.20
41.167	0.00	0.46	0.734	O	|	|	|	|	3.19
41.250	0.00	0.46	0.731	O	|	|	|	|	3.18

41.333	0.00	0.46	0.728	O					3.17
41.417	0.00	0.46	0.725	O					3.16
41.500	0.00	0.46	0.721	O					3.15
41.583	0.00	0.46	0.718	O					3.14
41.667	0.00	0.46	0.715	O					3.13
41.750	0.00	0.46	0.712	O					3.12
41.833	0.00	0.45	0.709	O					3.11
41.917	0.00	0.45	0.706	O					3.10
42.000	0.00	0.45	0.703	O					3.09
42.083	0.00	0.45	0.699	O					3.08
42.167	0.00	0.45	0.696	O					3.07
42.250	0.00	0.45	0.693	O					3.06
42.333	0.00	0.45	0.690	O					3.05
42.417	0.00	0.45	0.687	O					3.04
42.500	0.00	0.45	0.684	O					3.03
42.583	0.00	0.45	0.681	O					3.02
42.667	0.00	0.45	0.678	O					3.01
42.750	0.00	0.45	0.675	O					3.00
42.833	0.00	0.45	0.672	O					2.99
42.917	0.00	0.44	0.669	O					2.98
43.000	0.00	0.44	0.665	O					2.96
43.083	0.00	0.44	0.662	O					2.95
43.167	0.00	0.44	0.659	O					2.94
43.250	0.00	0.44	0.656	O					2.93
43.333	0.00	0.44	0.653	O					2.92
43.417	0.00	0.44	0.650	O					2.91
43.500	0.00	0.44	0.647	O					2.90
43.583	0.00	0.44	0.644	O					2.89
43.667	0.00	0.44	0.641	O					2.88
43.750	0.00	0.44	0.638	O					2.87
43.833	0.00	0.44	0.635	O					2.86
43.917	0.00	0.44	0.632	O					2.85
44.000	0.00	0.43	0.629	O					2.84
44.083	0.00	0.43	0.626	O					2.83
44.167	0.00	0.43	0.623	O					2.82
44.250	0.00	0.43	0.620	O					2.81
44.333	0.00	0.43	0.617	O					2.80
44.417	0.00	0.43	0.614	O					2.79
44.500	0.00	0.43	0.611	O					2.78
44.583	0.00	0.43	0.608	O					2.77
44.667	0.00	0.43	0.605	O					2.76
44.750	0.00	0.43	0.602	O					2.75
44.833	0.00	0.43	0.600	O					2.75
44.917	0.00	0.43	0.597	O					2.74
45.000	0.00	0.43	0.594	O					2.73
45.083	0.00	0.43	0.591	O					2.72
45.167	0.00	0.42	0.588	O					2.71
45.250	0.00	0.42	0.585	O					2.70
45.333	0.00	0.42	0.582	O					2.69
45.417	0.00	0.42	0.579	O					2.68
45.500	0.00	0.42	0.576	O					2.67
45.583	0.00	0.42	0.573	O					2.66
45.667	0.00	0.42	0.570	O					2.65
45.750	0.00	0.42	0.567	O					2.64
45.833	0.00	0.42	0.565	O					2.63
45.917	0.00	0.42	0.562	O					2.62
46.000	0.00	0.42	0.559	O					2.61
46.083	0.00	0.42	0.556	O					2.60
46.167	0.00	0.42	0.553	O					2.59
46.250	0.00	0.42	0.550	O					2.58
46.333	0.00	0.41	0.547	O					2.57
46.417	0.00	0.41	0.544	O					2.56
46.500	0.00	0.41	0.542	O					2.55
46.583	0.00	0.41	0.539	O					2.54
46.667	0.00	0.41	0.536	O					2.53
46.750	0.00	0.41	0.533	O					2.52
46.833	0.00	0.41	0.530	O					2.51
46.917	0.00	0.41	0.527	O					2.50
47.000	0.00	0.41	0.525	O					2.50
47.083	0.00	0.41	0.522	O					2.49
47.167	0.00	0.41	0.519	O					2.48

47.250	0.00	0.41	0.516	O	|	|	|	|	2.47
47.333	0.00	0.41	0.513	O	|	|	|	|	2.46
47.417	0.00	0.41	0.511	O	|	|	|	|	2.45
47.500	0.00	0.40	0.508	O	|	|	|	|	2.44
47.583	0.00	0.40	0.505	O	|	|	|	|	2.43
47.667	0.00	0.40	0.502	O	|	|	|	|	2.42
47.750	0.00	0.40	0.500	O	|	|	|	|	2.41
47.833	0.00	0.40	0.497	O	|	|	|	|	2.40
47.917	0.00	0.40	0.494	O	|	|	|	|	2.39
48.000	0.00	0.40	0.491	O	|	|	|	|	2.38
48.083	0.00	0.40	0.488	O	|	|	|	|	2.37
48.167	0.00	0.40	0.486	O	|	|	|	|	2.37
48.250	0.00	0.40	0.483	O	|	|	|	|	2.36
48.333	0.00	0.40	0.480	O	|	|	|	|	2.35
48.417	0.00	0.40	0.478	O	|	|	|	|	2.34
48.500	0.00	0.40	0.475	O	|	|	|	|	2.33
48.583	0.00	0.40	0.472	O	|	|	|	|	2.32
48.667	0.00	0.39	0.469	O	|	|	|	|	2.31
48.750	0.00	0.39	0.467	O	|	|	|	|	2.30
48.833	0.00	0.39	0.464	O	|	|	|	|	2.29
48.917	0.00	0.39	0.461	O	|	|	|	|	2.28
49.000	0.00	0.39	0.458	O	|	|	|	|	2.27
49.083	0.00	0.39	0.456	O	|	|	|	|	2.26
49.167	0.00	0.39	0.453	O	|	|	|	|	2.25
49.250	0.00	0.39	0.450	O	|	|	|	|	2.24
49.333	0.00	0.39	0.448	O	|	|	|	|	2.23
49.417	0.00	0.39	0.445	O	|	|	|	|	2.22
49.500	0.00	0.39	0.442	O	|	|	|	|	2.21
49.583	0.00	0.38	0.440	O	|	|	|	|	2.20
49.667	0.00	0.38	0.437	O	|	|	|	|	2.19
49.750	0.00	0.38	0.435	O	|	|	|	|	2.19
49.833	0.00	0.38	0.432	O	|	|	|	|	2.18
49.917	0.00	0.38	0.429	O	|	|	|	|	2.17
50.000	0.00	0.38	0.427	O	|	|	|	|	2.16
50.083	0.00	0.38	0.424	O	|	|	|	|	2.15
50.167	0.00	0.38	0.421	O	|	|	|	|	2.14
50.250	0.00	0.38	0.419	O	|	|	|	|	2.13
50.333	0.00	0.38	0.416	O	|	|	|	|	2.12
50.417	0.00	0.38	0.414	O	|	|	|	|	2.11
50.500	0.00	0.37	0.411	O	|	|	|	|	2.10
50.583	0.00	0.37	0.408	O	|	|	|	|	2.09
50.667	0.00	0.37	0.406	O	|	|	|	|	2.08
50.750	0.00	0.37	0.403	O	|	|	|	|	2.07
50.833	0.00	0.37	0.401	O	|	|	|	|	2.06
50.917	0.00	0.37	0.398	O	|	|	|	|	2.05
51.000	0.00	0.37	0.396	O	|	|	|	|	2.04
51.083	0.00	0.37	0.393	O	|	|	|	|	2.03
51.167	0.00	0.37	0.391	O	|	|	|	|	2.02
51.250	0.00	0.37	0.388	O	|	|	|	|	2.02
51.333	0.00	0.37	0.386	O	|	|	|	|	2.01
51.417	0.00	0.36	0.383	O	|	|	|	|	2.00
51.500	0.00	0.36	0.381	O	|	|	|	|	1.99
51.583	0.00	0.36	0.378	O	|	|	|	|	1.98
51.667	0.00	0.36	0.376	O	|	|	|	|	1.97
51.750	0.00	0.36	0.373	O	|	|	|	|	1.96
51.833	0.00	0.36	0.371	O	|	|	|	|	1.95
51.917	0.00	0.36	0.368	O	|	|	|	|	1.94
52.000	0.00	0.36	0.366	O	|	|	|	|	1.93
52.083	0.00	0.36	0.363	O	|	|	|	|	1.92
52.167	0.00	0.36	0.361	O	|	|	|	|	1.92
52.250	0.00	0.36	0.358	O	|	|	|	|	1.91
52.333	0.00	0.35	0.356	O	|	|	|	|	1.90
52.417	0.00	0.35	0.353	O	|	|	|	|	1.89
52.500	0.00	0.35	0.351	O	|	|	|	|	1.88
52.583	0.00	0.35	0.349	O	|	|	|	|	1.87
52.667	0.00	0.35	0.346	O	|	|	|	|	1.86
52.750	0.00	0.35	0.344	O	|	|	|	|	1.85
52.833	0.00	0.35	0.341	O	|	|	|	|	1.84
52.917	0.00	0.35	0.339	O	|	|	|	|	1.84
53.000	0.00	0.35	0.336	O	|	|	|	|	1.83
53.083	0.00	0.35	0.334	O	|	|	|	|	1.82

53.167	0.00	0.35	0.332	O	|	|	|	|	1.81
53.250	0.00	0.35	0.329	O	|	|	|	|	1.80
53.333	0.00	0.34	0.327	O	|	|	|	|	1.79
53.417	0.00	0.34	0.325	O	|	|	|	|	1.78
53.500	0.00	0.34	0.322	O	|	|	|	|	1.78
53.583	0.00	0.34	0.320	O	|	|	|	|	1.77
53.667	0.00	0.34	0.318	O	|	|	|	|	1.76
53.750	0.00	0.34	0.315	O	|	|	|	|	1.75
53.833	0.00	0.34	0.313	O	|	|	|	|	1.74
53.917	0.00	0.34	0.311	O	|	|	|	|	1.73
54.000	0.00	0.34	0.308	O	|	|	|	|	1.72
54.083	0.00	0.34	0.306	O	|	|	|	|	1.72
54.167	0.00	0.34	0.304	O	|	|	|	|	1.71
54.250	0.00	0.34	0.301	O	|	|	|	|	1.70
54.333	0.00	0.33	0.299	O	|	|	|	|	1.69
54.417	0.00	0.33	0.297	O	|	|	|	|	1.68
54.500	0.00	0.33	0.294	O	|	|	|	|	1.67
54.583	0.00	0.33	0.292	O	|	|	|	|	1.67
54.667	0.00	0.33	0.290	O	|	|	|	|	1.66
54.750	0.00	0.33	0.287	O	|	|	|	|	1.65
54.833	0.00	0.33	0.285	O	|	|	|	|	1.64
54.917	0.00	0.33	0.283	O	|	|	|	|	1.63
55.000	0.00	0.33	0.281	O	|	|	|	|	1.62
55.083	0.00	0.33	0.278	O	|	|	|	|	1.62
55.167	0.00	0.33	0.276	O	|	|	|	|	1.61
55.250	0.00	0.33	0.274	O	|	|	|	|	1.60
55.333	0.00	0.32	0.272	O	|	|	|	|	1.59
55.417	0.00	0.32	0.269	O	|	|	|	|	1.58
55.500	0.00	0.32	0.267	O	|	|	|	|	1.57
55.583	0.00	0.32	0.265	O	|	|	|	|	1.57
55.667	0.00	0.32	0.263	O	|	|	|	|	1.56
55.750	0.00	0.32	0.261	O	|	|	|	|	1.55
55.833	0.00	0.32	0.258	O	|	|	|	|	1.54
55.917	0.00	0.32	0.256	O	|	|	|	|	1.53
56.000	0.00	0.32	0.254	O	|	|	|	|	1.53
56.083	0.00	0.32	0.252	O	|	|	|	|	1.52
56.167	0.00	0.32	0.250	O	|	|	|	|	1.51
56.250	0.00	0.32	0.247	O	|	|	|	|	1.50
56.333	0.00	0.32	0.245	O	|	|	|	|	1.49
56.417	0.00	0.31	0.243	O	|	|	|	|	1.49
56.500	0.00	0.31	0.241	O	|	|	|	|	1.48
56.583	0.00	0.31	0.239	O	|	|	|	|	1.47
56.667	0.00	0.31	0.237	O	|	|	|	|	1.46
56.750	0.00	0.31	0.234	O	|	|	|	|	1.46
56.833	0.00	0.31	0.232	O	|	|	|	|	1.45
56.917	0.00	0.31	0.230	O	|	|	|	|	1.44
57.000	0.00	0.31	0.228	O	|	|	|	|	1.43
57.083	0.00	0.31	0.226	O	|	|	|	|	1.42
57.167	0.00	0.31	0.224	O	|	|	|	|	1.42
57.250	0.00	0.31	0.222	O	|	|	|	|	1.41
57.333	0.00	0.31	0.220	O	|	|	|	|	1.40
57.417	0.00	0.31	0.218	O	|	|	|	|	1.39
57.500	0.00	0.30	0.215	O	|	|	|	|	1.39
57.583	0.00	0.30	0.213	O	|	|	|	|	1.38
57.667	0.00	0.30	0.211	O	|	|	|	|	1.37
57.750	0.00	0.30	0.209	O	|	|	|	|	1.36
57.833	0.00	0.30	0.207	O	|	|	|	|	1.36
57.917	0.00	0.30	0.205	O	|	|	|	|	1.35
58.000	0.00	0.30	0.203	O	|	|	|	|	1.34
58.083	0.00	0.30	0.201	O	|	|	|	|	1.33
58.167	0.00	0.30	0.199	O	|	|	|	|	1.32
58.250	0.00	0.30	0.197	O	|	|	|	|	1.32
58.333	0.00	0.30	0.195	O	|	|	|	|	1.31
58.417	0.00	0.30	0.193	O	|	|	|	|	1.30
58.500	0.00	0.29	0.191	O	|	|	|	|	1.29
58.583	0.00	0.29	0.189	O	|	|	|	|	1.28
58.667	0.00	0.29	0.187	O	|	|	|	|	1.27
58.750	0.00	0.29	0.185	O	|	|	|	|	1.26
58.833	0.00	0.29	0.183	O	|	|	|	|	1.25
58.917	0.00	0.29	0.181	O	|	|	|	|	1.23
59.000	0.00	0.28	0.179	O	|	|	|	|	1.22

59.083	0.00	0.28	0.177	O					1.21
59.167	0.00	0.28	0.175	O					1.20
59.250	0.00	0.28	0.173	O					1.19
59.333	0.00	0.28	0.171	O					1.18
59.417	0.00	0.28	0.169	O					1.17
59.500	0.00	0.27	0.167	O					1.16
59.583	0.00	0.27	0.165	O					1.14
59.667	0.00	0.27	0.163	O					1.13
59.750	0.00	0.27	0.162	O					1.12
59.833	0.00	0.27	0.160	O					1.11
59.917	0.00	0.27	0.158	O					1.10
60.000	0.00	0.26	0.156	O					1.09
60.083	0.00	0.26	0.154	O					1.08
60.167	0.00	0.26	0.152	O					1.07
60.250	0.00	0.26	0.151	O					1.06
60.333	0.00	0.26	0.149	O					1.05
60.417	0.00	0.26	0.147	O					1.04
60.500	0.00	0.25	0.145	O					1.03
60.583	0.00	0.25	0.144	O					1.02
60.667	0.00	0.25	0.142	O					1.01
60.750	0.00	0.25	0.140	O					1.00
60.833	0.00	0.25	0.138	O					0.99
60.917	0.00	0.25	0.137	O					0.98
61.000	0.00	0.24	0.135	O					0.97
61.083	0.00	0.24	0.133	O					0.96
61.167	0.00	0.24	0.132	O					0.95
61.250	0.00	0.24	0.130	O					0.94
61.333	0.00	0.24	0.128	O					0.93
61.417	0.00	0.24	0.127	O					0.92
61.500	0.00	0.24	0.125	O					0.91
61.583	0.00	0.23	0.123	O					0.90
61.667	0.00	0.23	0.122	O					0.89
61.750	0.00	0.23	0.120	O					0.88
61.833	0.00	0.23	0.119	O					0.87
61.917	0.00	0.23	0.117	O					0.86
62.000	0.00	0.23	0.116	O					0.86
62.083	0.00	0.23	0.114	O					0.85
62.167	0.00	0.22	0.112	O					0.84
62.250	0.00	0.22	0.111	O					0.83
62.333	0.00	0.22	0.109	O					0.82
62.417	0.00	0.22	0.108	O					0.81
62.500	0.00	0.22	0.106	O					0.80
62.583	0.00	0.22	0.105	O					0.79
62.667	0.00	0.22	0.103	O					0.78
62.750	0.00	0.22	0.102	O					0.78
62.833	0.00	0.21	0.100	O					0.77
62.917	0.00	0.21	0.099	O					0.76
63.000	0.00	0.21	0.097	O					0.75
63.083	0.00	0.21	0.096	O					0.74
63.167	0.00	0.21	0.094	O					0.73
63.250	0.00	0.21	0.093	O					0.72
63.333	0.00	0.21	0.092	O					0.72
63.417	0.00	0.20	0.090	O					0.71
63.500	0.00	0.20	0.089	O					0.70
63.583	0.00	0.20	0.087	O					0.69
63.667	0.00	0.20	0.086	O					0.68
63.750	0.00	0.20	0.085	O					0.68
63.833	0.00	0.20	0.083	O					0.67
63.917	0.00	0.20	0.082	O					0.66
64.000	0.00	0.20	0.081	O					0.65
64.083	0.00	0.20	0.079	O					0.64
64.167	0.00	0.19	0.078	O					0.64
64.250	0.00	0.19	0.077	O					0.63
64.333	0.00	0.19	0.075	O					0.62
64.417	0.00	0.19	0.074	O					0.61
64.500	0.00	0.19	0.073	O					0.61
64.583	0.00	0.19	0.071	O					0.60
64.667	0.00	0.19	0.070	O					0.59
64.750	0.00	0.19	0.069	O					0.58
64.833	0.00	0.18	0.067	O					0.58
64.917	0.00	0.18	0.066	O					0.57

65.000	0.00	0.18	0.065	O	|	|	|	|	0.56
65.083	0.00	0.18	0.064	O	|	|	|	|	0.55
65.167	0.00	0.18	0.062	O	|	|	|	|	0.55
65.250	0.00	0.18	0.061	O	|	|	|	|	0.54
65.333	0.00	0.18	0.060	O	|	|	|	|	0.53
65.417	0.00	0.18	0.059	O	|	|	|	|	0.53
65.500	0.00	0.18	0.058	O	|	|	|	|	0.52
65.583	0.00	0.17	0.056	O	|	|	|	|	0.51
65.667	0.00	0.17	0.055	O	|	|	|	|	0.50
65.750	0.00	0.17	0.054	O	|	|	|	|	0.50
65.833	0.00	0.17	0.053	O	|	|	|	|	0.49
65.917	0.00	0.17	0.052	O	|	|	|	|	0.48
66.000	0.00	0.17	0.050	O	|	|	|	|	0.48
66.083	0.00	0.17	0.049	O	|	|	|	|	0.47
66.167	0.00	0.17	0.048	O	|	|	|	|	0.46
66.250	0.00	0.17	0.047	O	|	|	|	|	0.46
66.333	0.00	0.17	0.046	O	|	|	|	|	0.45
66.417	0.00	0.16	0.045	O	|	|	|	|	0.44
66.500	0.00	0.16	0.044	O	|	|	|	|	0.44
66.583	0.00	0.16	0.042	O	|	|	|	|	0.43
66.667	0.00	0.16	0.041	O	|	|	|	|	0.42
66.750	0.00	0.16	0.040	O	|	|	|	|	0.42
66.833	0.00	0.16	0.039	O	|	|	|	|	0.41
66.917	0.00	0.16	0.038	O	|	|	|	|	0.40
67.000	0.00	0.16	0.037	O	|	|	|	|	0.40
67.083	0.00	0.16	0.036	O	|	|	|	|	0.39
67.167	0.00	0.16	0.035	O	|	|	|	|	0.39
67.250	0.00	0.15	0.034	O	|	|	|	|	0.38
67.333	0.00	0.15	0.033	O	|	|	|	|	0.37
67.417	0.00	0.15	0.032	O	|	|	|	|	0.37
67.500	0.00	0.15	0.031	O	|	|	|	|	0.36
67.583	0.00	0.15	0.030	O	|	|	|	|	0.36
67.667	0.00	0.15	0.028	O	|	|	|	|	0.35
67.750	0.00	0.15	0.027	O	|	|	|	|	0.34
67.833	0.00	0.15	0.026	O	|	|	|	|	0.34
67.917	0.00	0.15	0.025	O	|	|	|	|	0.33
68.000	0.00	0.15	0.024	O	|	|	|	|	0.33
68.083	0.00	0.15	0.023	O	|	|	|	|	0.32
68.167	0.00	0.14	0.022	O	|	|	|	|	0.31
68.250	0.00	0.14	0.021	O	|	|	|	|	0.31
68.333	0.00	0.14	0.020	O	|	|	|	|	0.30
68.417	0.00	0.14	0.019	O	|	|	|	|	0.29
68.500	0.00	0.13	0.019	O	|	|	|	|	0.28
68.583	0.00	0.13	0.018	O	|	|	|	|	0.26
68.667	0.00	0.12	0.017	O	|	|	|	|	0.25
68.750	0.00	0.11	0.016	O	|	|	|	|	0.24
68.833	0.00	0.11	0.015	O	|	|	|	|	0.23
68.917	0.00	0.10	0.015	O	|	|	|	|	0.22
69.000	0.00	0.10	0.014	O	|	|	|	|	0.21

Remaining water in basin = 0.01 (Ac.Ft)

**********HYDROGRAPH DATA**********

Number of intervals = 828
Time interval = 5.0 (Min.)
Maximum/Peak flow rate = 2.031 (CFS)
Total volume = 3.686 (Ac.Ft)

Status of hydrographs being held in storage

	Stream 1	Stream 2	Stream 3	Stream 4	Stream 5
Peak (CFS)	0.000	0.000	0.000	0.000	0.000
Vol (Ac.Ft)	0.000	0.000	0.000	0.000	0.000

****

FLOOD HYDROGRAPH ROUTING PROGRAM
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Program License Serial Number 5006

********** HYDROGRAPH INFORMATION **********

From study/file name: PROA242.rte
**********HYDROGRAPH DATA**********
Number of intervals = 306
Time interval = 5.0 (Min.)
Maximum/Peak flow rate = 9.066 (CFS)
Total volume = 5.686 (Ac.Ft)

Status of hydrographs being held in storage

	Stream 1	Stream 2	Stream 3	Stream 4	Stream 5
Peak (CFS)	0.000	0.000	0.000	0.000	0.000
Vol (Ac.Ft)	0.000	0.000	0.000	0.000	0.000

****

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Process from Point/Station 0.000 to Point/Station 0.000
**** RETARDING BASIN ROUTING ****

User entry of depth-outflow-storage data

Total number of inflow hydrograph intervals = 306
Hydrograph time unit = 5.000 (Min.)
Initial depth in storage basin = 0.00(Ft.)

Initial basin depth = 0.00 (Ft.)
Initial basin storage = 0.00 (Ac.Ft)
Initial basin outflow = 0.00 (CFS)

Depth vs. Storage and Depth vs. Discharge data:

Basin Depth (Ft.)	Storage (Ac.Ft)	Outflow (CFS)	(S-O*dt/2) (Ac.Ft)	(S+O*dt/2) (Ac.Ft)
0.000	0.000	0.000	0.000	0.000
0.300	0.020	0.142	0.020	0.020
1.300	0.192	0.296	0.191	0.193
2.300	0.466	0.394	0.465	0.467
3.300	0.766	0.469	0.764	0.768
4.300	1.126	0.536	1.124	1.128
5.500	1.640	0.610	1.638	1.642
6.300	2.007	1.299	2.003	2.011
8.300	3.066	1.957	3.059	3.073
10.300	4.341	2.417	4.333	4.349
11.400	5.141	2.632	5.132	5.150
12.300	5.851	167.187	5.275	6.427
13.300	6.699	657.066	4.436	8.962
14.300	7.611	1377.819	2.866	12.356

Hydrograph Detention Basin Routing

Graph values: 'I'= unit inflow; 'O'=outflow at time shown

Time (Hours)	Inflow (CFS)	Outflow (CFS)	Storage (Ac.Ft)	.0	2.3	4.53	6.80	9.07	Depth (Ft.)
0.083	0.03	0.00	0.000	O	|	|	|	|	0.00
0.167	0.15	0.00	0.001	O	|	|	|	|	0.01
0.250	0.30	0.02	0.002	OI	|	|	|	|	0.03
0.333	0.40	0.03	0.004	OI	|	|	|	|	0.07
0.417	0.50	0.05	0.007	OI	|	|	|	|	0.11
0.500	0.61	0.08	0.011	O I	|	|	|	|	0.16
0.583	0.67	0.10	0.014	O I	|	|	|	|	0.22
0.667	0.71	0.13	0.018	O I	|	|	|	|	0.27
0.750	0.73	0.14	0.022	O I	|	|	|	|	0.31
0.833	0.77	0.15	0.026	O I	|	|	|	|	0.34
0.917	0.84	0.15	0.031	O I	|	|	|	|	0.36
1.000	0.93	0.16	0.036	O I	|	|	|	|	0.39
1.083	0.97	0.16	0.041	O I	|	|	|	|	0.42
1.167	0.94	0.17	0.047	O I	|	|	|	|	0.46
1.250	0.88	0.17	0.052	O I	|	|	|	|	0.49
1.333	0.86	0.17	0.057	O I	|	|	|	|	0.51
1.417	0.85	0.18	0.061	O I	|	|	|	|	0.54
1.500	0.84	0.18	0.066	O I	|	|	|	|	0.57
1.583	0.84	0.19	0.071	O I	|	|	|	|	0.59
1.667	0.84	0.19	0.075	O I	|	|	|	|	0.62
1.750	0.84	0.20	0.080	O I	|	|	|	|	0.65
1.833	0.85	0.20	0.084	O I	|	|	|	|	0.67
1.917	0.91	0.20	0.089	O I	|	|	|	|	0.70
2.000	0.98	0.21	0.094	O I	|	|	|	|	0.73
2.083	1.02	0.21	0.099	O I	|	|	|	|	0.76
2.167	1.04	0.22	0.105	O I	|	|	|	|	0.79
2.250	1.06	0.22	0.111	O I	|	|	|	|	0.83
2.333	1.07	0.23	0.116	O I	|	|	|	|	0.86
2.417	1.07	0.23	0.122	O I	|	|	|	|	0.89
2.500	1.08	0.24	0.128	O I	|	|	|	|	0.93
2.583	1.10	0.24	0.134	O I	|	|	|	|	0.96
2.667	1.16	0.25	0.140	O I	|	|	|	|	1.00
2.750	1.24	0.26	0.146	O I	|	|	|	|	1.03
2.833	1.29	0.26	0.153	O I	|	|	|	|	1.07
2.917	1.31	0.27	0.160	O I	|	|	|	|	1.12
3.000	1.32	0.27	0.168	O I	|	|	|	|	1.16
3.083	1.34	0.28	0.175	O I	|	|	|	|	1.20
3.167	1.35	0.29	0.182	|O I	|	|	|	|	1.24
3.250	1.35	0.29	0.189	|O I	|	|	|	|	1.28
3.333	1.36	0.30	0.197	|O I	|	|	|	|	1.32
3.417	1.36	0.30	0.204	|O I	|	|	|	|	1.34
3.500	1.37	0.30	0.211	|O I	|	|	|	|	1.37
3.583	1.37	0.31	0.219	|O I	|	|	|	|	1.40
3.667	1.37	0.31	0.226	|O I	|	|	|	|	1.42
3.750	1.37	0.31	0.233	|O I	|	|	|	|	1.45
3.833	1.39	0.31	0.241	|O I	|	|	|	|	1.48
3.917	1.45	0.32	0.248	|O I	|	|	|	|	1.50
4.000	1.53	0.32	0.256	|O I	|	|	|	|	1.53
4.083	1.57	0.32	0.265	|O I	|	|	|	|	1.57
4.167	1.59	0.33	0.273	|O I	|	|	|	|	1.60
4.250	1.60	0.33	0.282	|O I	|	|	|	|	1.63
4.333	1.63	0.33	0.291	|O I	|	|	|	|	1.66
4.417	1.69	0.33	0.300	|O I	|	|	|	|	1.69
4.500	1.78	0.34	0.310	|O I |	|	|	|	1.73
4.583	1.83	0.34	0.320	|O I |	|	|	|	1.77
4.667	1.85	0.35	0.330	|O I |	|	|	|	1.80
4.750	1.87	0.35	0.340	|O I |	|	|	|	1.84
4.833	1.90	0.35	0.351	|O I |	|	|	|	1.88
4.917	1.96	0.36	0.362	|O I |	|	|	|	1.92
5.000	2.05	0.36	0.373	|O I|	|	|	|	1.96
5.083	2.07	0.36	0.385	|O I|	|	|	|	2.00
5.167	1.98	0.37	0.396	|O I |	|	|	|	2.05
5.250	1.84	0.37	0.407	|O I |	|	|	|	2.08
5.333	1.78	0.38	0.417	|O I |	|	|	|	2.12
5.417	1.81	0.38	0.427	|O I |	|	|	|	2.16
5.500	1.87	0.38	0.437	|O I |	|	|	|	2.19
5.583	1.91	0.39	0.447	|O I |	|	|	|	2.23
5.667	1.98	0.39	0.458	|O I |	|	|	|	2.27
5.750	2.06	0.39	0.469	|O I|	|	|	|	2.31

5.833	2.11	0.40	0.481	O	I				2.35
5.917	2.13	0.40	0.492	O	I				2.39
6.000	2.15	0.40	0.504	O	I				2.43
6.083	2.17	0.41	0.517	O	I				2.47
6.167	2.24	0.41	0.529	O	I				2.51
6.250	2.33	0.41	0.542	O	I				2.55
6.333	2.37	0.42	0.555	O	I				2.60
6.417	2.40	0.42	0.569	O	I				2.64
6.500	2.42	0.42	0.582	O	I				2.69
6.583	2.44	0.43	0.596	O	I				2.73
6.667	2.51	0.43	0.610	O	I				2.78
6.750	2.60	0.43	0.625	O	I				2.83
6.833	2.65	0.44	0.640	O	I				2.88
6.917	2.67	0.44	0.655	O	I				2.93
7.000	2.69	0.45	0.671	O	I				2.98
7.083	2.71	0.45	0.686	O	I				3.03
7.167	2.72	0.45	0.702	O	I				3.09
7.250	2.72	0.46	0.717	O	I				3.14
7.333	2.74	0.46	0.733	O	I				3.19
7.417	2.81	0.46	0.749	O	I				3.24
7.500	2.89	0.47	0.765	O	I				3.30
7.583	2.95	0.47	0.782	O	I				3.35
7.667	3.03	0.48	0.800	O	I				3.39
7.750	3.13	0.48	0.818	O	I				3.44
7.833	3.19	0.48	0.836	O	I				3.49
7.917	3.28	0.49	0.855	O	I				3.55
8.000	3.38	0.49	0.875	O	I				3.60
8.083	3.47	0.49	0.895	O	I				3.66
8.167	3.62	0.50	0.916	O	I				3.72
8.250	3.80	0.50	0.938	O	I				3.78
8.333	3.90	0.51	0.961	O	I				3.84
8.417	3.96	0.51	0.985	O	I				3.91
8.500	4.00	0.51	1.008	O	I				3.97
8.583	4.04	0.52	1.033	O	I				4.04
8.667	4.12	0.52	1.057	O	I				4.11
8.750	4.22	0.53	1.082	O	I				4.18
8.833	4.29	0.53	1.108	O	I				4.25
8.917	4.38	0.54	1.134	O	I				4.32
9.000	4.48	0.54	1.161	O	I				4.38
9.083	4.57	0.54	1.188	O	I				4.45
9.167	4.72	0.55	1.216	O	I				4.51
9.250	4.90	0.55	1.246	O	I				4.58
9.333	5.02	0.56	1.276	O	I				4.65
9.417	5.13	0.56	1.307	O	I				4.72
9.500	5.25	0.57	1.339	O	I				4.80
9.583	5.34	0.57	1.371	O	I				4.87
9.667	5.44	0.58	1.405	O	I				4.95
9.750	5.55	0.58	1.438	O	I				5.03
9.833	5.63	0.59	1.473	O	I				5.11
9.917	5.72	0.59	1.508	O	I				5.19
10.000	5.83	0.60	1.544	O	I				5.28
10.083	5.80	0.60	1.580	O	I				5.36
10.167	5.43	0.61	1.614	O	I				5.44
10.250	4.91	0.62	1.645	O	I				5.51
10.333	4.63	0.67	1.674	O	I				5.57
10.417	4.50	0.72	1.701	O	I				5.63
10.500	4.42	0.77	1.726	O	I				5.69
10.583	4.43	0.82	1.751	O	I				5.74
10.667	4.67	0.87	1.777	O	I				5.80
10.750	5.03	0.92	1.804	O	I				5.86
10.833	5.21	0.97	1.833	O	I				5.92
10.917	5.29	1.03	1.862	O	I				5.98
11.000	5.34	1.08	1.891	O	I				6.05
11.083	5.36	1.14	1.920	O	I				6.11
11.167	5.33	1.19	1.949	O	I				6.17
11.250	5.27	1.24	1.977	O	I				6.24
11.333	5.24	1.29	2.005	O	I				6.30
11.417	5.23	1.31	2.032	O	I				6.35
11.500	5.23	1.33	2.059	O	I				6.40
11.583	5.20	1.35	2.085	O	I				6.45
11.667	5.08	1.36	2.112	O	I				6.50

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11.750    4.93    1.38      2.137  |   O   |       |I      |       |     6.54
11.833    4.86    1.39      2.161  |   O   |       |I      |       |     6.59
11.917    4.88    1.41      2.185  |   O   |       |I      |       |     6.64
12.000    4.93    1.42      2.209  |    O  |       |I      |       |     6.68
12.083    5.05    1.44      2.233  |    O  |       |I      |       |     6.73
12.167    5.47    1.46      2.259  |    O  |       |  I    |       |     6.78
12.250    6.01    1.47      2.289  |    O  |       |    I  |       |     6.83
12.333    6.32    1.49      2.321  |    O  |       |     I |       |     6.89
12.417    6.53    1.52      2.355  |    O  |       |      I|       |     6.96
12.500    6.70    1.54      2.390  |    O  |       |      I|       |     7.02
12.583    6.84    1.56      2.426  |    O  |       |       I       |     7.09
12.667    7.03    1.58      2.463  |    O  |       |       I       |     7.16
12.750    7.25    1.61      2.501  |    O  |       |       |I      |     7.23
12.833    7.39    1.63      2.540  |    O  |       |       | I     |     7.31
12.917    7.52    1.66      2.580  |    O  |       |       | I     |     7.38
13.000    7.66    1.68      2.621  |    O  |       |       |  I    |     7.46
13.083    7.82    1.71      2.663  |     O |       |       |  I    |     7.54
13.167    8.17    1.73      2.706  |     O |       |       |   I   |     7.62
13.250    8.60    1.76      2.752  |     O |       |       |     I |     7.71
13.333    8.84    1.79      2.800  |     O |       |       |      I|     7.80
13.417    8.97    1.82      2.848  |     O |       |       |      I|     7.89
13.500    9.07    1.85      2.898  |     O |       |       |       I     7.98
13.583    8.98    1.88      2.947  |     O |       |       |      I|     8.08
13.667    8.38    1.91      2.994  |     O |       |       |    I  |     8.16
13.750    7.56    1.94      3.036  |     O |       |       | I     |     8.24
13.833    7.13    1.96      3.073  |     O |       |       |I      |     8.31
13.917    6.92    1.97      3.108  |     O |       |       I       |     8.37
14.000    6.79    1.98      3.141  |      O|       |      I|       |     8.42
14.083    6.75    2.00      3.174  |      O|       |      I|       |     8.47
14.167    6.91    2.01      3.207  |      O|       |       I       |     8.52
14.250    7.16    2.02      3.242  |      O|       |       |I      |     8.58
14.333    7.27    2.03      3.278  |      O|       |       |I      |     8.63
14.417    7.26    2.05      3.314  |      O|       |       |I      |     8.69
14.500    7.21    2.06      3.349  |      O|       |       |I      |     8.74
14.583    7.18    2.07      3.385  |      O|       |       |I      |     8.80
14.667    7.17    2.08      3.420  |      O|       |       |I      |     8.85
14.750    7.16    2.10      3.455  |      O|       |       |I      |     8.91
14.833    7.14    2.11      3.489  |      O|       |       |I      |     8.96
14.917    7.08    2.12      3.524  |      O|       |       I       |     9.02
15.000    6.99    2.13      3.558  |      O|       |       I       |     9.07
15.083    6.93    2.15      3.591  |      O|       |       I       |     9.12
15.167    6.86    2.16      3.624  |      O|       |       I       |     9.17
15.250    6.77    2.17      3.656  |      O|       |      I|       |     9.22
15.333    6.71    2.18      3.687  |      O|       |      I|       |     9.27
15.417    6.62    2.19      3.718  |      O|       |      I|       |     9.32
15.500    6.53    2.20      3.748  |      O|       |      I|       |     9.37
15.583    6.41    2.21      3.777  |      O|       |     I |       |     9.42
15.667    6.15    2.22      3.805  |      O|       |    I  |       |     9.46
15.750    5.81    2.23      3.831  |      O|       |   I   |       |     9.50
15.833    5.62    2.24      3.855  |      O|       |  I    |       |     9.54
15.917    5.52    2.25      3.878  |      O|       |  I    |       |     9.57
16.000    5.46    2.26      3.900  |      O|       |  I    |       |     9.61
16.083    5.20    2.27      3.921  |      O|       | I     |       |     9.64
16.167    4.28    2.27      3.938  |       O      I|       |       |     9.67
16.250    3.07    2.28      3.948  |       O I     |       |       |     9.68
16.333    2.42    2.28      3.951  |       O       |       |       |     9.69
16.417    2.09    2.28      3.951  |      IO       |       |       |     9.69
16.500    1.86    2.28      3.949  |     I O       |       |       |     9.69
16.583    1.68    2.27      3.946  |    I  O       |       |       |     9.68
16.667    1.49    2.27      3.941  |    I  O       |       |       |     9.67
16.750    1.31    2.27      3.935  |   I   O       |       |       |     9.66
16.833    1.19    2.27      3.928  |   I   O       |       |       |     9.65
16.917    1.11    2.27      3.920  |  I    O|      |       |       |     9.64
17.000    1.04    2.26      3.912  |  I    O|      |       |       |     9.63
17.083    1.02    2.26      3.903  |  I    O|      |       |       |     9.61
17.167    1.09    2.26      3.895  |  I    O|      |       |       |     9.60
17.250    1.22    2.25      3.888  |   I   O|      |       |       |     9.59
17.333    1.28    2.25      3.881  |   I   O|      |       |       |     9.58
17.417    1.30    2.25      3.874  |   I   O|      |       |       |     9.57
17.500    1.30    2.25      3.868  |   I   O|      |       |       |     9.56
17.583    1.31    2.24      3.861  |   I   O|      |       |       |     9.55
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17.667	1.32	2.24	3.855	I O				9.54
17.750	1.33	2.24	3.848	I O				9.53
17.833	1.33	2.24	3.842	I O				9.52
17.917	1.28	2.23	3.836	I O				9.51
18.000	1.20	2.23	3.829	I O				9.50
18.083	1.17	2.23	3.822	I O				9.49
18.167	1.15	2.23	3.814	I O				9.47
18.250	1.14	2.22	3.807	I O				9.46
18.333	1.13	2.22	3.799	I O				9.45
18.417	1.13	2.22	3.792	I O				9.44
18.500	1.12	2.22	3.784	I O				9.43
18.583	1.11	2.21	3.777	I O				9.41
18.667	1.04	2.21	3.769	I O				9.40
18.750	0.96	2.21	3.761	I O				9.39
18.833	0.90	2.20	3.752	I O				9.38
18.917	0.82	2.20	3.743	I O				9.36
19.000	0.73	2.20	3.733	I O				9.35
19.083	0.69	2.19	3.723	I O				9.33
19.167	0.72	2.19	3.712	I O				9.31
19.250	0.77	2.19	3.702	I O				9.30
19.333	0.81	2.18	3.693	I O				9.28
19.417	0.88	2.18	3.684	I O				9.27
19.500	0.96	2.18	3.675	I O				9.26
19.583	0.99	2.17	3.667	I O				9.24
19.667	0.96	2.17	3.658	I O				9.23
19.750	0.90	2.17	3.650	I O				9.22
19.833	0.85	2.16	3.641	I O				9.20
19.917	0.78	2.16	3.632	I O				9.19
20.000	0.69	2.16	3.622	I O				9.17
20.083	0.66	2.15	3.612	I O				9.16
20.167	0.69	2.15	3.602	I O				9.14
20.250	0.76	2.15	3.592	I O				9.12
20.333	0.79	2.14	3.582	I O				9.11
20.417	0.80	2.14	3.573	I O				9.10
20.500	0.81	2.14	3.564	I O				9.08
20.583	0.81	2.13	3.555	I O				9.07
20.667	0.82	2.13	3.546	I O				9.05
20.750	0.82	2.13	3.537	I O				9.04
20.833	0.80	2.12	3.528	I O				9.02
20.917	0.75	2.12	3.518	I O				9.01
21.000	0.67	2.12	3.509	I O				8.99
21.083	0.64	2.11	3.498	I O				8.98
21.167	0.68	2.11	3.488	I O				8.96
21.250	0.74	2.11	3.479	I O				8.95
21.333	0.76	2.10	3.470	I O				8.93
21.417	0.72	2.10	3.460	I O				8.92
21.500	0.65	2.10	3.450	I O				8.90
21.583	0.63	2.09	3.440	I O				8.89
21.667	0.67	2.09	3.431	I O				8.87
21.750	0.74	2.09	3.421	I O				8.86
21.833	0.76	2.08	3.412	I O				8.84
21.917	0.71	2.08	3.403	I O				8.83
22.000	0.64	2.07	3.393	I O				8.81
22.083	0.62	2.07	3.383	I O				8.80
22.167	0.67	2.07	3.373	I O				8.78
22.250	0.73	2.06	3.364	I O				8.77
22.333	0.75	2.06	3.355	I O				8.75
22.417	0.71	2.06	3.346	I O				8.74
22.500	0.64	2.05	3.336	I O				8.72
22.583	0.61	2.05	3.326	I O				8.71
22.667	0.59	2.05	3.316	I O				8.69
22.750	0.58	2.04	3.306	I O				8.68
22.833	0.57	2.04	3.296	I O				8.66
22.917	0.57	2.04	3.286	I O				8.65
23.000	0.57	2.03	3.276	I O				8.63
23.083	0.56	2.03	3.266	I O				8.61
23.167	0.56	2.03	3.256	I O				8.60
23.250	0.56	2.02	3.246	I O				8.58
23.333	0.56	2.02	3.236	I O				8.57
23.417	0.55	2.01	3.225	I O				8.55
23.500	0.55	2.01	3.215	I O				8.53

23.583	0.55	2.01	3.205	|I O|	|	|	|	8.52
23.667	0.55	2.00	3.195	|I O|	|	|	|	8.50
23.750	0.55	2.00	3.185	|I O|	|	|	|	8.49
23.833	0.55	2.00	3.175	|I O|	|	|	|	8.47
23.917	0.55	1.99	3.166	|I O|	|	|	|	8.46
24.000	0.55	1.99	3.156	|I O|	|	|	|	8.44
24.083	0.52	1.99	3.146	|I O|	|	|	|	8.42
24.167	0.41	1.98	3.135	|I O |	|	|	|	8.41
24.250	0.25	1.98	3.124	I O |	|	|	|	8.39
24.333	0.16	1.97	3.112	I O |	|	|	|	8.37
24.417	0.12	1.97	3.099	I O |	|	|	|	8.35
24.500	0.09	1.96	3.086	I O |	|	|	|	8.33
24.583	0.07	1.96	3.073	I O |	|	|	|	8.31
24.667	0.06	1.95	3.060	I O |	|	|	|	8.29
24.750	0.05	1.95	3.047	I O |	|	|	|	8.26
24.833	0.04	1.94	3.034	I O |	|	|	|	8.24
24.917	0.03	1.93	3.021	I O |	|	|	|	8.21
25.000	0.02	1.92	3.008	I O |	|	|	|	8.19
25.083	0.02	1.91	2.995	I O |	|	|	|	8.17
25.167	0.01	1.90	2.982	I O |	|	|	|	8.14
25.250	0.01	1.90	2.969	I O |	|	|	|	8.12
25.333	0.01	1.89	2.956	I O |	|	|	|	8.09
25.417	0.00	1.88	2.943	I O |	|	|	|	8.07
25.500	0.00	1.87	2.930	I O |	|	|	|	8.04
25.583	0.00	1.86	2.917	I O |	|	|	|	8.02
25.667	0.00	1.86	2.904	I O |	|	|	|	7.99
25.750	0.00	1.85	2.892	I O |	|	|	|	7.97
25.833	0.00	1.84	2.879	I O |	|	|	|	7.95
25.917	0.00	1.83	2.866	I O |	|	|	|	7.92
26.000	0.00	1.82	2.854	I O |	|	|	|	7.90
26.083	0.00	1.82	2.841	I O |	|	|	|	7.88
26.167	0.00	1.81	2.829	I O |	|	|	|	7.85
26.250	0.00	1.80	2.816	I O |	|	|	|	7.83
26.333	0.00	1.79	2.804	I O |	|	|	|	7.80
26.417	0.00	1.79	2.791	I O |	|	|	|	7.78
26.500	0.00	1.78	2.779	I O |	|	|	|	7.76
26.583	0.00	1.77	2.767	I O |	|	|	|	7.74
26.667	0.00	1.76	2.755	I O |	|	|	|	7.71
26.750	0.00	1.76	2.743	I O |	|	|	|	7.69
26.833	0.00	1.75	2.731	I O |	|	|	|	7.67
26.917	0.00	1.74	2.719	I O |	|	|	|	7.64
27.000	0.00	1.73	2.707	I O |	|	|	|	7.62
27.083	0.00	1.73	2.695	I O |	|	|	|	7.60
27.167	0.00	1.72	2.683	I O |	|	|	|	7.58
27.250	0.00	1.71	2.671	I O |	|	|	|	7.55
27.333	0.00	1.70	2.659	I O |	|	|	|	7.53
27.417	0.00	1.70	2.647	I O |	|	|	|	7.51
27.500	0.00	1.69	2.636	I O |	|	|	|	7.49
27.583	0.00	1.68	2.624	I O |	|	|	|	7.47
27.667	0.00	1.68	2.613	I O |	|	|	|	7.44
27.750	0.00	1.67	2.601	I O |	|	|	|	7.42
27.833	0.00	1.66	2.590	I O |	|	|	|	7.40
27.917	0.00	1.65	2.578	I O |	|	|	|	7.38
28.000	0.00	1.65	2.567	I O |	|	|	|	7.36
28.083	0.00	1.64	2.556	I O |	|	|	|	7.34
28.167	0.00	1.63	2.544	I O |	|	|	|	7.31
28.250	0.00	1.63	2.533	I O |	|	|	|	7.29
28.333	0.00	1.62	2.522	I O |	|	|	|	7.27
28.417	0.00	1.61	2.511	I O |	|	|	|	7.25
28.500	0.00	1.61	2.500	I O |	|	|	|	7.23
28.583	0.00	1.60	2.489	I O |	|	|	|	7.21
28.667	0.00	1.59	2.478	I O |	|	|	|	7.19
28.750	0.00	1.58	2.467	I O |	|	|	|	7.17
28.833	0.00	1.58	2.456	I O |	|	|	|	7.15
28.917	0.00	1.57	2.445	I O |	|	|	|	7.13
29.000	0.00	1.56	2.434	I O |	|	|	|	7.11
29.083	0.00	1.56	2.423	I O |	|	|	|	7.09
29.167	0.00	1.55	2.413	I O |	|	|	|	7.07
29.250	0.00	1.54	2.402	I O |	|	|	|	7.05
29.333	0.00	1.54	2.391	I O |	|	|	|	7.03
29.417	0.00	1.53	2.381	I O |	|	|	|	7.01

29.500	0.00	1.52	2.370	I	O					6.99
29.583	0.00	1.52	2.360	I	O					6.97
29.667	0.00	1.51	2.349	I	O					6.95
29.750	0.00	1.51	2.339	I	O					6.93
29.833	0.00	1.50	2.329	I	O					6.91
29.917	0.00	1.49	2.318	I	O					6.89
30.000	0.00	1.49	2.308	I	O					6.87
30.083	0.00	1.48	2.298	I	O					6.85
30.167	0.00	1.47	2.288	I	O					6.83
30.250	0.00	1.47	2.278	I	O					6.81
30.333	0.00	1.46	2.268	I	O					6.79
30.417	0.00	1.45	2.258	I	O					6.77
30.500	0.00	1.45	2.248	I	O					6.75
30.583	0.00	1.44	2.238	I	O					6.74
30.667	0.00	1.44	2.228	I	O					6.72
30.750	0.00	1.43	2.218	I	O					6.70
30.833	0.00	1.42	2.208	I	O					6.68
30.917	0.00	1.42	2.198	I	O					6.66
31.000	0.00	1.41	2.188	I	O					6.64
31.083	0.00	1.41	2.179	I	O					6.62
31.167	0.00	1.40	2.169	I	O					6.61
31.250	0.00	1.39	2.159	I	O					6.59
31.333	0.00	1.39	2.150	I	O					6.57
31.417	0.00	1.38	2.140	I	O					6.55
31.500	0.00	1.38	2.131	I	O					6.53
31.583	0.00	1.37	2.121	I	O					6.52
31.667	0.00	1.36	2.112	I	O					6.50
31.750	0.00	1.36	2.103	I	O					6.48
31.833	0.00	1.35	2.093	I	O					6.46
31.917	0.00	1.35	2.084	I	O					6.45
32.000	0.00	1.34	2.075	I	O					6.43
32.083	0.00	1.34	2.066	I	O					6.41
32.167	0.00	1.33	2.056	I	O					6.39
32.250	0.00	1.32	2.047	I	O					6.38
32.333	0.00	1.32	2.038	I	O					6.36
32.417	0.00	1.31	2.029	I	O					6.34
32.500	0.00	1.31	2.020	I	O					6.32
32.583	0.00	1.30	2.011	I	O					6.31
32.667	0.00	1.29	2.002	I	O					6.29
32.750	0.00	1.27	1.993	I	O					6.27
32.833	0.00	1.26	1.985	I	O					6.25
32.917	0.00	1.24	1.976	I	O					6.23
33.000	0.00	1.22	1.967	I	O					6.21
33.083	0.00	1.21	1.959	I	O					6.20
33.167	0.00	1.19	1.951	I	O					6.18
33.250	0.00	1.18	1.943	I	O					6.16
33.333	0.00	1.16	1.935	I	O					6.14
33.417	0.00	1.15	1.927	I	O					6.12
33.500	0.00	1.13	1.919	I	O					6.11
33.583	0.00	1.12	1.911	I	O					6.09
33.667	0.00	1.10	1.903	I	O					6.07
33.750	0.00	1.09	1.896	I	O					6.06
33.833	0.00	1.08	1.888	I	O					6.04
33.917	0.00	1.06	1.881	I	O					6.03
34.000	0.00	1.05	1.874	I	O					6.01
34.083	0.00	1.04	1.867	I	O					5.99
34.167	0.00	1.02	1.859	I	O					5.98
34.250	0.00	1.01	1.852	I	O					5.96
34.333	0.00	1.00	1.846	I	O					5.95
34.417	0.00	0.98	1.839	I	O					5.93
34.500	0.00	0.97	1.832	I	O					5.92
34.583	0.00	0.96	1.825	I	O					5.90
34.667	0.00	0.95	1.819	I	O					5.89
34.750	0.00	0.93	1.812	I	O					5.88
34.833	0.00	0.92	1.806	I	O					5.86
34.917	0.00	0.91	1.800	I	O					5.85
35.000	0.00	0.90	1.793	I	O					5.83
35.083	0.00	0.89	1.787	I	O					5.82
35.167	0.00	0.88	1.781	I	O					5.81
35.250	0.00	0.86	1.775	I	O					5.79
35.333	0.00	0.85	1.769	I	O					5.78

35.417	0.00	0.84	1.763	I	O	|	|	|	| 5.77
35.500	0.00	0.83	1.758	I	O	|	|	|	| 5.76
35.583	0.00	0.82	1.752	I	O	|	|	|	| 5.74
35.667	0.00	0.81	1.746	I	O	|	|	|	| 5.73
35.750	0.00	0.80	1.741	I	O	|	|	|	| 5.72
35.833	0.00	0.79	1.735	I	O	|	|	|	| 5.71
35.917	0.00	0.78	1.730	I	O	|	|	|	| 5.70
36.000	0.00	0.77	1.725	I	O	|	|	|	| 5.68
36.083	0.00	0.76	1.719	I	O	|	|	|	| 5.67
36.167	0.00	0.75	1.714	I	O	|	|	|	| 5.66
36.250	0.00	0.74	1.709	I	O	|	|	|	| 5.65
36.333	0.00	0.73	1.704	I	O	|	|	|	| 5.64
36.417	0.00	0.72	1.699	I	O	|	|	|	| 5.63
36.500	0.00	0.71	1.694	I	O	|	|	|	| 5.62
36.583	0.00	0.70	1.689	I	O	|	|	|	| 5.61
36.667	0.00	0.69	1.684	I	O	|	|	|	| 5.60
36.750	0.00	0.68	1.680	I	O	|	|	|	| 5.59
36.833	0.00	0.68	1.675	I	O	|	|	|	| 5.58
36.917	0.00	0.67	1.670	I	O	|	|	|	| 5.57
37.000	0.00	0.66	1.666	I	O	|	|	|	| 5.56
37.083	0.00	0.65	1.661	I	O	|	|	|	| 5.55
37.167	0.00	0.64	1.657	I	O	|	|	|	| 5.54
37.250	0.00	0.63	1.652	I	O	|	|	|	| 5.53
37.333	0.00	0.63	1.648	I	O	|	|	|	| 5.52
37.417	0.00	0.62	1.644	I	O	|	|	|	| 5.51
37.500	0.00	0.61	1.640	I	O	|	|	|	| 5.50
37.583	0.00	0.61	1.635	I	O	|	|	|	| 5.49
37.667	0.00	0.61	1.631	I	O	|	|	|	| 5.48
37.750	0.00	0.61	1.627	I	O	|	|	|	| 5.47
37.833	0.00	0.61	1.623	I	O	|	|	|	| 5.46
37.917	0.00	0.61	1.619	I	O	|	|	|	| 5.45
38.000	0.00	0.61	1.615	I	O	|	|	|	| 5.44
38.083	0.00	0.61	1.610	I	O	|	|	|	| 5.43
38.167	0.00	0.61	1.606	I	O	|	|	|	| 5.42
38.250	0.00	0.60	1.602	I	O	|	|	|	| 5.41
38.333	0.00	0.60	1.598	I	O	|	|	|	| 5.40
38.417	0.00	0.60	1.594	I	O	|	|	|	| 5.39
38.500	0.00	0.60	1.590	I	O	|	|	|	| 5.38
38.583	0.00	0.60	1.585	I	O	|	|	|	| 5.37
38.667	0.00	0.60	1.581	I	O	|	|	|	| 5.36
38.750	0.00	0.60	1.577	I	O	|	|	|	| 5.35
38.833	0.00	0.60	1.573	I	O	|	|	|	| 5.34
38.917	0.00	0.60	1.569	I	O	|	|	|	| 5.33
39.000	0.00	0.60	1.565	I	O	|	|	|	| 5.32
39.083	0.00	0.60	1.561	I	O	|	|	|	| 5.31
39.167	0.00	0.60	1.556	I	O	|	|	|	| 5.30
39.250	0.00	0.60	1.552	I	O	|	|	|	| 5.30
39.333	0.00	0.60	1.548	I	O	|	|	|	| 5.29
39.417	0.00	0.60	1.544	I	O	|	|	|	| 5.28
39.500	0.00	0.60	1.540	I	O	|	|	|	| 5.27
39.583	0.00	0.60	1.536	I	O	|	|	|	| 5.26
39.667	0.00	0.59	1.532	I	O	|	|	|	| 5.25
39.750	0.00	0.59	1.528	I	O	|	|	|	| 5.24
39.833	0.00	0.59	1.524	I	O	|	|	|	| 5.23
39.917	0.00	0.59	1.520	I	O	|	|	|	| 5.22
40.000	0.00	0.59	1.515	I	O	|	|	|	| 5.21
40.083	0.00	0.59	1.511	I	O	|	|	|	| 5.20
40.167	0.00	0.59	1.507	I	O	|	|	|	| 5.19
40.250	0.00	0.59	1.503	I	O	|	|	|	| 5.18
40.333	0.00	0.59	1.499	I	O	|	|	|	| 5.17
40.417	0.00	0.59	1.495	I	O	|	|	|	| 5.16
40.500	0.00	0.59	1.491	I	O	|	|	|	| 5.15
40.583	0.00	0.59	1.487	I	O	|	|	|	| 5.14
40.667	0.00	0.59	1.483	I	O	|	|	|	| 5.13
40.750	0.00	0.59	1.479	I	O	|	|	|	| 5.12
40.833	0.00	0.59	1.475	I	O	|	|	|	| 5.11
40.917	0.00	0.59	1.471	I	O	|	|	|	| 5.11
41.000	0.00	0.59	1.467	I	O	|	|	|	| 5.10
41.083	0.00	0.58	1.463	I	O	|	|	|	| 5.09
41.167	0.00	0.58	1.459	I	O	|	|	|	| 5.08
41.250	0.00	0.58	1.455	I	O	|	|	|	| 5.07

41.333	0.00	0.58	1.451	I O				5.06
41.417	0.00	0.58	1.447	I O				5.05
41.500	0.00	0.58	1.443	I O				5.04
41.583	0.00	0.58	1.439	I O				5.03
41.667	0.00	0.58	1.435	I O				5.02
41.750	0.00	0.58	1.431	I O				5.01
41.833	0.00	0.58	1.427	I O				5.00
41.917	0.00	0.58	1.423	I O				4.99
42.000	0.00	0.58	1.419	I O				4.98
42.083	0.00	0.58	1.415	I O				4.97
42.167	0.00	0.58	1.411	I O				4.96
42.250	0.00	0.58	1.407	I O				4.96
42.333	0.00	0.58	1.403	I O				4.95
42.417	0.00	0.58	1.399	I O				4.94
42.500	0.00	0.57	1.395	I O				4.93
42.583	0.00	0.57	1.391	I O				4.92
42.667	0.00	0.57	1.387	I O				4.91
42.750	0.00	0.57	1.383	I O				4.90
42.833	0.00	0.57	1.379	I O				4.89
42.917	0.00	0.57	1.375	I O				4.88
43.000	0.00	0.57	1.371	I O				4.87
43.083	0.00	0.57	1.367	I O				4.86
43.167	0.00	0.57	1.363	I O				4.85
43.250	0.00	0.57	1.359	I O				4.85
43.333	0.00	0.57	1.356	I O				4.84
43.417	0.00	0.57	1.352	I O				4.83
43.500	0.00	0.57	1.348	I O				4.82
43.583	0.00	0.57	1.344	I O				4.81
43.667	0.00	0.57	1.340	I O				4.80
43.750	0.00	0.57	1.336	IO				4.79
43.833	0.00	0.57	1.332	IO				4.78
43.917	0.00	0.57	1.328	IO				4.77
44.000	0.00	0.56	1.324	IO				4.76
44.083	0.00	0.56	1.320	IO				4.75
44.167	0.00	0.56	1.317	IO				4.74
44.250	0.00	0.56	1.313	IO				4.74
44.333	0.00	0.56	1.309	IO				4.73
44.417	0.00	0.56	1.305	IO				4.72
44.500	0.00	0.56	1.301	IO				4.71
44.583	0.00	0.56	1.297	IO				4.70
44.667	0.00	0.56	1.293	IO				4.69
44.750	0.00	0.56	1.289	IO				4.68
44.833	0.00	0.56	1.286	IO				4.67
44.917	0.00	0.56	1.282	IO				4.66
45.000	0.00	0.56	1.278	IO				4.65
45.083	0.00	0.56	1.274	IO				4.65
45.167	0.00	0.56	1.270	IO				4.64
45.250	0.00	0.56	1.266	IO				4.63
45.333	0.00	0.56	1.263	IO				4.62
45.417	0.00	0.56	1.259	IO				4.61
45.500	0.00	0.55	1.255	IO				4.60
45.583	0.00	0.55	1.251	IO				4.59
45.667	0.00	0.55	1.247	IO				4.58
45.750	0.00	0.55	1.244	IO				4.57
45.833	0.00	0.55	1.240	IO				4.57
45.917	0.00	0.55	1.236	IO				4.56
46.000	0.00	0.55	1.232	IO				4.55
46.083	0.00	0.55	1.228	IO				4.54
46.167	0.00	0.55	1.225	IO				4.53
46.250	0.00	0.55	1.221	IO				4.52
46.333	0.00	0.55	1.217	IO				4.51
46.417	0.00	0.55	1.213	IO				4.50
46.500	0.00	0.55	1.209	IO				4.49
46.583	0.00	0.55	1.206	IO				4.49
46.667	0.00	0.55	1.202	IO				4.48
46.750	0.00	0.55	1.198	IO				4.47
46.833	0.00	0.55	1.194	IO				4.46
46.917	0.00	0.55	1.191	IO				4.45
47.000	0.00	0.54	1.187	IO				4.44
47.083	0.00	0.54	1.183	IO				4.43
47.167	0.00	0.54	1.179	IO				4.42

47.250	0.00	0.54	1.176	IO					4.42
47.333	0.00	0.54	1.172	IO					4.41
47.417	0.00	0.54	1.168	IO					4.40
47.500	0.00	0.54	1.164	IO					4.39
47.583	0.00	0.54	1.161	IO					4.38
47.667	0.00	0.54	1.157	IO					4.37
47.750	0.00	0.54	1.153	IO					4.36
47.833	0.00	0.54	1.149	IO					4.35
47.917	0.00	0.54	1.146	IO					4.35
48.000	0.00	0.54	1.142	IO					4.34
48.083	0.00	0.54	1.138	IO					4.33
48.167	0.00	0.54	1.135	IO					4.32
48.250	0.00	0.54	1.131	IO					4.31
48.333	0.00	0.54	1.127	IO					4.30
48.417	0.00	0.54	1.124	IO					4.29
48.500	0.00	0.53	1.120	IO					4.28
48.583	0.00	0.53	1.116	IO					4.27
48.667	0.00	0.53	1.113	IO					4.26
48.750	0.00	0.53	1.109	IO					4.25
48.833	0.00	0.53	1.105	IO					4.24
48.917	0.00	0.53	1.102	IO					4.23
49.000	0.00	0.53	1.098	IO					4.22
49.083	0.00	0.53	1.094	IO					4.21
49.167	0.00	0.53	1.091	IO					4.20
49.250	0.00	0.53	1.087	IO					4.19
49.333	0.00	0.53	1.083	IO					4.18
49.417	0.00	0.53	1.080	IO					4.17
49.500	0.00	0.53	1.076	IO					4.16
49.583	0.00	0.53	1.072	IO					4.15
49.667	0.00	0.53	1.069	IO					4.14
49.750	0.00	0.52	1.065	IO					4.13
49.833	0.00	0.52	1.062	IO					4.12
49.917	0.00	0.52	1.058	IO					4.11
50.000	0.00	0.52	1.054	IO					4.10
50.083	0.00	0.52	1.051	IO					4.09
50.167	0.00	0.52	1.047	IO					4.08
50.250	0.00	0.52	1.044	IO					4.07
50.333	0.00	0.52	1.040	IO					4.06
50.417	0.00	0.52	1.036	IO					4.05
50.500	0.00	0.52	1.033	IO					4.04
50.583	0.00	0.52	1.029	IO					4.03
50.667	0.00	0.52	1.026	IO					4.02
50.750	0.00	0.52	1.022	IO					4.01
50.833	0.00	0.52	1.019	IO					4.00
50.917	0.00	0.52	1.015	IO					3.99
51.000	0.00	0.51	1.011	IO					3.98
51.083	0.00	0.51	1.008	IO					3.97
51.167	0.00	0.51	1.004	IO					3.96
51.250	0.00	0.51	1.001	IO					3.95
51.333	0.00	0.51	0.997	IO					3.94
51.417	0.00	0.51	0.994	IO					3.93
51.500	0.00	0.51	0.990	IO					3.92
51.583	0.00	0.51	0.987	IO					3.91
51.667	0.00	0.51	0.983	IO					3.90
51.750	0.00	0.51	0.980	IO					3.89
51.833	0.00	0.51	0.976	IO					3.88
51.917	0.00	0.51	0.973	IO					3.87
52.000	0.00	0.51	0.969	IO					3.86
52.083	0.00	0.51	0.966	IO					3.85
52.167	0.00	0.51	0.962	IO					3.85
52.250	0.00	0.50	0.959	IO					3.84
52.333	0.00	0.50	0.955	IO					3.83
52.417	0.00	0.50	0.952	IO					3.82
52.500	0.00	0.50	0.948	IO					3.81
52.583	0.00	0.50	0.945	IO					3.80
52.667	0.00	0.50	0.941	IO					3.79
52.750	0.00	0.50	0.938	IO					3.78
52.833	0.00	0.50	0.935	IO					3.77
52.917	0.00	0.50	0.931	IO					3.76
53.000	0.00	0.50	0.928	IO					3.75
53.083	0.00	0.50	0.924	IO					3.74

53.167	0.00	0.50	0.921	IO					3.73
53.250	0.00	0.50	0.917	IO					3.72
53.333	0.00	0.50	0.914	IO					3.71
53.417	0.00	0.50	0.911	IO					3.70
53.500	0.00	0.50	0.907	IO					3.69
53.583	0.00	0.49	0.904	IO					3.68
53.667	0.00	0.49	0.900	IO					3.67
53.750	0.00	0.49	0.897	IO					3.66
53.833	0.00	0.49	0.894	IO					3.65
53.917	0.00	0.49	0.890	IO					3.64
54.000	0.00	0.49	0.887	IO					3.64
54.083	0.00	0.49	0.883	IO					3.63
54.167	0.00	0.49	0.880	IO					3.62
54.250	0.00	0.49	0.877	IO					3.61
54.333	0.00	0.49	0.873	IO					3.60
54.417	0.00	0.49	0.870	IO					3.59
54.500	0.00	0.49	0.867	IO					3.58
54.583	0.00	0.49	0.863	IO					3.57
54.667	0.00	0.49	0.860	IO					3.56
54.750	0.00	0.49	0.856	IO					3.55
54.833	0.00	0.49	0.853	IO					3.54
54.917	0.00	0.48	0.850	IO					3.53
55.000	0.00	0.48	0.846	IO					3.52
55.083	0.00	0.48	0.843	IO					3.51
55.167	0.00	0.48	0.840	IO					3.51
55.250	0.00	0.48	0.836	IO					3.50
55.333	0.00	0.48	0.833	IO					3.49
55.417	0.00	0.48	0.830	IO					3.48
55.500	0.00	0.48	0.827	IO					3.47
55.583	0.00	0.48	0.823	IO					3.46
55.667	0.00	0.48	0.820	IO					3.45
55.750	0.00	0.48	0.817	IO					3.44
55.833	0.00	0.48	0.813	IO					3.43
55.917	0.00	0.48	0.810	IO					3.42
56.000	0.00	0.48	0.807	IO					3.41
56.083	0.00	0.48	0.803	IO					3.40
56.167	0.00	0.48	0.800	IO					3.40
56.250	0.00	0.47	0.797	IO					3.39
56.333	0.00	0.47	0.794	IO					3.38
56.417	0.00	0.47	0.790	IO					3.37
56.500	0.00	0.47	0.787	IO					3.36
56.583	0.00	0.47	0.784	IO					3.35
56.667	0.00	0.47	0.781	IO					3.34
56.750	0.00	0.47	0.777	IO					3.33
56.833	0.00	0.47	0.774	IO					3.32
56.917	0.00	0.47	0.771	IO					3.31
57.000	0.00	0.47	0.768	IO					3.30
57.083	0.00	0.47	0.764	IO					3.29
57.167	0.00	0.47	0.761	IO					3.28
57.250	0.00	0.47	0.758	IO					3.27
57.333	0.00	0.47	0.755	IO					3.26
57.417	0.00	0.47	0.752	IO					3.25
57.500	0.00	0.46	0.748	IO					3.24
57.583	0.00	0.46	0.745	IO					3.23
57.667	0.00	0.46	0.742	IO					3.22
57.750	0.00	0.46	0.739	IO					3.21
57.833	0.00	0.46	0.736	IO					3.20
57.917	0.00	0.46	0.732	IO					3.19
58.000	0.00	0.46	0.729	IO					3.18
58.083	0.00	0.46	0.726	IO					3.17
58.167	0.00	0.46	0.723	IO					3.16
58.250	0.00	0.46	0.720	IO					3.15
58.333	0.00	0.46	0.717	IO					3.14
58.417	0.00	0.46	0.714	IO					3.13
58.500	0.00	0.46	0.710	IO					3.11
58.583	0.00	0.45	0.707	IO					3.10
58.667	0.00	0.45	0.704	IO					3.09
58.750	0.00	0.45	0.701	IO					3.08
58.833	0.00	0.45	0.698	IO					3.07
58.917	0.00	0.45	0.695	IO					3.06
59.000	0.00	0.45	0.692	IO					3.05

59.083	0.00	0.45	0.689	IO				3.04
59.167	0.00	0.45	0.685	IO				3.03
59.250	0.00	0.45	0.682	IO				3.02
59.333	0.00	0.45	0.679	IO				3.01
59.417	0.00	0.45	0.676	IO				3.00
59.500	0.00	0.45	0.673	IO				2.99
59.583	0.00	0.45	0.670	IO				2.98
59.667	0.00	0.44	0.667	IO				2.97
59.750	0.00	0.44	0.664	IO				2.96
59.833	0.00	0.44	0.661	IO				2.95
59.917	0.00	0.44	0.658	IO				2.94
60.000	0.00	0.44	0.655	IO				2.93
60.083	0.00	0.44	0.652	IO				2.92
60.167	0.00	0.44	0.649	IO				2.91
60.250	0.00	0.44	0.646	IO				2.90
60.333	0.00	0.44	0.643	IO				2.89
60.417	0.00	0.44	0.640	IO				2.88
60.500	0.00	0.44	0.637	IO				2.87
60.583	0.00	0.44	0.634	IO				2.86
60.667	0.00	0.44	0.631	IO				2.85
60.750	0.00	0.43	0.628	IO				2.84
60.833	0.00	0.43	0.625	IO				2.83
60.917	0.00	0.43	0.622	IO				2.82
61.000	0.00	0.43	0.619	IO				2.81
61.083	0.00	0.43	0.616	IO				2.80
61.167	0.00	0.43	0.613	IO				2.79
61.250	0.00	0.43	0.610	IO				2.78
61.333	0.00	0.43	0.607	IO				2.77
61.417	0.00	0.43	0.604	IO				2.76
61.500	0.00	0.43	0.601	IO				2.75
61.583	0.00	0.43	0.598	IO				2.74
61.667	0.00	0.43	0.595	IO				2.73
61.750	0.00	0.43	0.592	IO				2.72
61.833	0.00	0.42	0.589	IO				2.71
61.917	0.00	0.42	0.586	IO				2.70
62.000	0.00	0.42	0.583	IO				2.69
62.083	0.00	0.42	0.580	IO				2.68
62.167	0.00	0.42	0.578	IO				2.67
62.250	0.00	0.42	0.575	IO				2.66
62.333	0.00	0.42	0.572	IO				2.65
62.417	0.00	0.42	0.569	IO				2.64
62.500	0.00	0.42	0.566	IO				2.63
62.583	0.00	0.42	0.563	IO				2.62
62.667	0.00	0.42	0.560	IO				2.61
62.750	0.00	0.42	0.557	IO				2.60
62.833	0.00	0.42	0.554	IO				2.59
62.917	0.00	0.42	0.552	IO				2.59
63.000	0.00	0.41	0.549	IO				2.58
63.083	0.00	0.41	0.546	IO				2.57
63.167	0.00	0.41	0.543	IO				2.56
63.250	0.00	0.41	0.540	IO				2.55
63.333	0.00	0.41	0.537	IO				2.54
63.417	0.00	0.41	0.535	IO				2.53
63.500	0.00	0.41	0.532	IO				2.52
63.583	0.00	0.41	0.529	IO				2.51
63.667	0.00	0.41	0.526	IO				2.50
63.750	0.00	0.41	0.523	IO				2.49
63.833	0.00	0.41	0.520	IO				2.48
63.917	0.00	0.41	0.518	IO				2.47
64.000	0.00	0.41	0.515	IO				2.46
64.083	0.00	0.41	0.512	IO				2.45
64.167	0.00	0.40	0.509	IO				2.44
64.250	0.00	0.40	0.506	IO				2.43
64.333	0.00	0.40	0.504	IO				2.43
64.417	0.00	0.40	0.501	IO				2.42
64.500	0.00	0.40	0.498	IO				2.41
64.583	0.00	0.40	0.495	IO				2.40
64.667	0.00	0.40	0.493	IO				2.39
64.750	0.00	0.40	0.490	IO				2.38
64.833	0.00	0.40	0.487	IO				2.37
64.917	0.00	0.40	0.484	IO				2.36

65.000	0.00	0.40	0.482	IO				2.35
65.083	0.00	0.40	0.479	IO				2.34
65.167	0.00	0.40	0.476	IO				2.33
65.250	0.00	0.40	0.473	IO				2.32
65.333	0.00	0.40	0.471	IO				2.32
65.417	0.00	0.39	0.468	IO				2.31
65.500	0.00	0.39	0.465	IO				2.30
65.583	0.00	0.39	0.463	IO				2.29
65.667	0.00	0.39	0.460	IO				2.28
65.750	0.00	0.39	0.457	IO				2.27
65.833	0.00	0.39	0.454	IO				2.26
65.917	0.00	0.39	0.452	IO				2.25
66.000	0.00	0.39	0.449	IO				2.24
66.083	0.00	0.39	0.446	IO				2.23
66.167	0.00	0.39	0.444	IO				2.22
66.250	0.00	0.39	0.441	IO				2.21
66.333	0.00	0.38	0.438	IO				2.20
66.417	0.00	0.38	0.436	IO				2.19
66.500	0.00	0.38	0.433	IO				2.18
66.583	0.00	0.38	0.431	IO				2.17
66.667	0.00	0.38	0.428	IO				2.16
66.750	0.00	0.38	0.425	IO				2.15
66.833	0.00	0.38	0.423	IO				2.14
66.917	0.00	0.38	0.420	IO				2.13
67.000	0.00	0.38	0.418	IO				2.12
67.083	0.00	0.38	0.415	IO				2.11
67.167	0.00	0.37	0.412	IO				2.10
67.250	0.00	0.37	0.410	IO				2.09
67.333	0.00	0.37	0.407	IO				2.09
67.417	0.00	0.37	0.405	IO				2.08
67.500	0.00	0.37	0.402	IO				2.07
67.583	0.00	0.37	0.400	IO				2.06
67.667	0.00	0.37	0.397	IO				2.05
67.750	0.00	0.37	0.394	IO				2.04
67.833	0.00	0.37	0.392	IO				2.03
67.917	0.00	0.37	0.389	IO				2.02
68.000	0.00	0.37	0.387	IO				2.01
68.083	0.00	0.36	0.384	IO				2.00
68.167	0.00	0.36	0.382	IO				1.99
68.250	0.00	0.36	0.379	IO				1.98
68.333	0.00	0.36	0.377	IO				1.97
68.417	0.00	0.36	0.374	IO				1.97
68.500	0.00	0.36	0.372	IO				1.96
68.583	0.00	0.36	0.369	IO				1.95
68.667	0.00	0.36	0.367	IO				1.94
68.750	0.00	0.36	0.364	IO				1.93
68.833	0.00	0.36	0.362	IO				1.92
68.917	0.00	0.36	0.360	IO				1.91
69.000	0.00	0.36	0.357	IO				1.90
69.083	0.00	0.35	0.355	IO				1.89
69.167	0.00	0.35	0.352	IO				1.88
69.250	0.00	0.35	0.350	IO				1.88
69.333	0.00	0.35	0.347	IO				1.87
69.417	0.00	0.35	0.345	IO				1.86
69.500	0.00	0.35	0.342	IO				1.85
69.583	0.00	0.35	0.340	IO				1.84
69.667	0.00	0.35	0.338	IO				1.83
69.750	0.00	0.35	0.335	IO				1.82
69.833	0.00	0.35	0.333	IO				1.81
69.917	0.00	0.35	0.331	IO				1.81
70.000	0.00	0.34	0.328	IO				1.80
70.083	0.00	0.34	0.326	IO				1.79
70.167	0.00	0.34	0.323	IO				1.78
70.250	0.00	0.34	0.321	IO				1.77
70.333	0.00	0.34	0.319	IO				1.76
70.417	0.00	0.34	0.316	IO				1.75
70.500	0.00	0.34	0.314	IO				1.75
70.583	0.00	0.34	0.312	IO				1.74
70.667	0.00	0.34	0.309	IO				1.73
70.750	0.00	0.34	0.307	IO				1.72
70.833	0.00	0.34	0.305	IO				1.71

70.917	0.00	0.34	0.302	IO				1.70
71.000	0.00	0.33	0.300	IO				1.69
71.083	0.00	0.33	0.298	IO				1.69
71.167	0.00	0.33	0.295	IO				1.68
71.250	0.00	0.33	0.293	IO				1.67
71.333	0.00	0.33	0.291	IO				1.66
71.417	0.00	0.33	0.289	IO				1.65
71.500	0.00	0.33	0.286	IO				1.64
71.583	0.00	0.33	0.284	IO				1.64
71.667	0.00	0.33	0.282	IO				1.63
71.750	0.00	0.33	0.280	IO				1.62
71.833	0.00	0.33	0.277	IO				1.61
71.917	0.00	0.33	0.275	IO				1.60
72.000	0.00	0.32	0.273	IO				1.59
72.083	0.00	0.32	0.271	IO				1.59
72.167	0.00	0.32	0.268	IO				1.58
72.250	0.00	0.32	0.266	IO				1.57
72.333	0.00	0.32	0.264	IO				1.56
72.417	0.00	0.32	0.262	IO				1.55
72.500	0.00	0.32	0.259	IO				1.55
72.583	0.00	0.32	0.257	IO				1.54
72.667	0.00	0.32	0.255	IO				1.53
72.750	0.00	0.32	0.253	IO				1.52
72.833	0.00	0.32	0.251	IO				1.51
72.917	0.00	0.32	0.249	IO				1.51
73.000	0.00	0.32	0.246	IO				1.50
73.083	0.00	0.31	0.244	IO				1.49
73.167	0.00	0.31	0.242	IO				1.48
73.250	0.00	0.31	0.240	IO				1.47
73.333	0.00	0.31	0.238	IO				1.47
73.417	0.00	0.31	0.236	IO				1.46
73.500	0.00	0.31	0.233	IO				1.45
73.583	0.00	0.31	0.231	IO				1.44
73.667	0.00	0.31	0.229	IO				1.44
73.750	0.00	0.31	0.227	IO				1.43
73.833	0.00	0.31	0.225	IO				1.42
73.917	0.00	0.31	0.223	IO				1.41
74.000	0.00	0.31	0.221	IO				1.40
74.083	0.00	0.31	0.219	IO				1.40
74.167	0.00	0.30	0.216	IO				1.39
74.250	0.00	0.30	0.214	IO				1.38
74.333	0.00	0.30	0.212	IO				1.37
74.417	0.00	0.30	0.210	IO				1.37
74.500	0.00	0.30	0.208	IO				1.36
74.583	0.00	0.30	0.206	IO				1.35
74.667	0.00	0.30	0.204	IO				1.34
74.750	0.00	0.30	0.202	IO				1.34
74.833	0.00	0.30	0.200	IO				1.33
74.917	0.00	0.30	0.198	IO				1.32
75.000	0.00	0.30	0.196	IO				1.31
75.083	0.00	0.30	0.194	IO				1.31
75.167	0.00	0.30	0.192	IO				1.30
75.250	0.00	0.29	0.190	IO				1.29
75.333	0.00	0.29	0.188	IO				1.27
75.417	0.00	0.29	0.186	IO				1.26
75.500	0.00	0.29	0.184	IO				1.25
75.583	0.00	0.29	0.182	IO				1.24
75.667	0.00	0.28	0.180	IO				1.23
75.750	0.00	0.28	0.178	O				1.22
75.833	0.00	0.28	0.176	O				1.21
75.917	0.00	0.28	0.174	O				1.19
76.000	0.00	0.28	0.172	O				1.18
76.083	0.00	0.28	0.170	O				1.17
76.167	0.00	0.27	0.168	O				1.16
76.250	0.00	0.27	0.166	O				1.15
76.333	0.00	0.27	0.164	O				1.14
76.417	0.00	0.27	0.162	O				1.13
76.500	0.00	0.27	0.161	O				1.12
76.583	0.00	0.27	0.159	O				1.11
76.667	0.00	0.26	0.157	O				1.10
76.750	0.00	0.26	0.155	O				1.09

76.833	0.00	0.26	0.153	O	|	|	|	|	1.08
76.917	0.00	0.26	0.152	O	|	|	|	|	1.06
77.000	0.00	0.26	0.150	O	|	|	|	|	1.05
77.083	0.00	0.26	0.148	O	|	|	|	|	1.04
77.167	0.00	0.26	0.146	O	|	|	|	|	1.03
77.250	0.00	0.25	0.144	O	|	|	|	|	1.02
77.333	0.00	0.25	0.143	O	|	|	|	|	1.01
77.417	0.00	0.25	0.141	O	|	|	|	|	1.00
77.500	0.00	0.25	0.139	O	|	|	|	|	0.99
77.583	0.00	0.25	0.138	O	|	|	|	|	0.98
77.667	0.00	0.25	0.136	O	|	|	|	|	0.97
77.750	0.00	0.24	0.134	O	|	|	|	|	0.96
77.833	0.00	0.24	0.133	O	|	|	|	|	0.95
77.917	0.00	0.24	0.131	O	|	|	|	|	0.94
78.000	0.00	0.24	0.129	O	|	|	|	|	0.93
78.083	0.00	0.24	0.128	O	|	|	|	|	0.93
78.167	0.00	0.24	0.126	O	|	|	|	|	0.92
78.250	0.00	0.24	0.124	O	|	|	|	|	0.91
78.333	0.00	0.23	0.123	O	|	|	|	|	0.90
78.417	0.00	0.23	0.121	O	|	|	|	|	0.89
78.500	0.00	0.23	0.119	O	|	|	|	|	0.88
78.583	0.00	0.23	0.118	O	|	|	|	|	0.87
78.667	0.00	0.23	0.116	O	|	|	|	|	0.86
78.750	0.00	0.23	0.115	O	|	|	|	|	0.85
78.833	0.00	0.23	0.113	O	|	|	|	|	0.84
78.917	0.00	0.22	0.112	O	|	|	|	|	0.83
79.000	0.00	0.22	0.110	O	|	|	|	|	0.82
79.083	0.00	0.22	0.109	O	|	|	|	|	0.81
79.167	0.00	0.22	0.107	O	|	|	|	|	0.81
79.250	0.00	0.22	0.106	O	|	|	|	|	0.80
79.333	0.00	0.22	0.104	O	|	|	|	|	0.79
79.417	0.00	0.22	0.103	O	|	|	|	|	0.78
79.500	0.00	0.21	0.101	O	|	|	|	|	0.77
79.583	0.00	0.21	0.100	O	|	|	|	|	0.76
79.667	0.00	0.21	0.098	O	|	|	|	|	0.75
79.750	0.00	0.21	0.097	O	|	|	|	|	0.75
79.833	0.00	0.21	0.095	O	|	|	|	|	0.74
79.917	0.00	0.21	0.094	O	|	|	|	|	0.73
80.000	0.00	0.21	0.092	O	|	|	|	|	0.72
80.083	0.00	0.21	0.091	O	|	|	|	|	0.71
80.167	0.00	0.20	0.090	O	|	|	|	|	0.70
80.250	0.00	0.20	0.088	O	|	|	|	|	0.70
80.333	0.00	0.20	0.087	O	|	|	|	|	0.69
80.417	0.00	0.20	0.085	O	|	|	|	|	0.68
80.500	0.00	0.20	0.084	O	|	|	|	|	0.67
80.583	0.00	0.20	0.083	O	|	|	|	|	0.66
80.667	0.00	0.20	0.081	O	|	|	|	|	0.66
80.750	0.00	0.20	0.080	O	|	|	|	|	0.65
80.833	0.00	0.19	0.079	O	|	|	|	|	0.64
80.917	0.00	0.19	0.077	O	|	|	|	|	0.63
81.000	0.00	0.19	0.076	O	|	|	|	|	0.62
81.083	0.00	0.19	0.075	O	|	|	|	|	0.62
81.167	0.00	0.19	0.073	O	|	|	|	|	0.61
81.250	0.00	0.19	0.072	O	|	|	|	|	0.60
81.333	0.00	0.19	0.071	O	|	|	|	|	0.59
81.417	0.00	0.19	0.069	O	|	|	|	|	0.59
81.500	0.00	0.19	0.068	O	|	|	|	|	0.58
81.583	0.00	0.18	0.067	O	|	|	|	|	0.57
81.667	0.00	0.18	0.066	O	|	|	|	|	0.56
81.750	0.00	0.18	0.064	O	|	|	|	|	0.56
81.833	0.00	0.18	0.063	O	|	|	|	|	0.55
81.917	0.00	0.18	0.062	O	|	|	|	|	0.54
82.000	0.00	0.18	0.061	O	|	|	|	|	0.54
82.083	0.00	0.18	0.059	O	|	|	|	|	0.53
82.167	0.00	0.18	0.058	O	|	|	|	|	0.52
82.250	0.00	0.18	0.057	O	|	|	|	|	0.51
82.333	0.00	0.17	0.056	O	|	|	|	|	0.51
82.417	0.00	0.17	0.055	O	|	|	|	|	0.50
82.500	0.00	0.17	0.053	O	|	|	|	|	0.49
82.583	0.00	0.17	0.052	O	|	|	|	|	0.49
82.667	0.00	0.17	0.051	O	|	|	|	|	0.48

82.750	0.00	0.17	0.050	O	|	|	|	|	0.47
82.833	0.00	0.17	0.049	O	|	|	|	|	0.47
82.917	0.00	0.17	0.048	O	|	|	|	|	0.46
83.000	0.00	0.17	0.046	O	|	|	|	|	0.45
83.083	0.00	0.16	0.045	O	|	|	|	|	0.45
83.167	0.00	0.16	0.044	O	|	|	|	|	0.44
83.250	0.00	0.16	0.043	O	|	|	|	|	0.43
83.333	0.00	0.16	0.042	O	|	|	|	|	0.43
83.417	0.00	0.16	0.041	O	|	|	|	|	0.42
83.500	0.00	0.16	0.040	O	|	|	|	|	0.41
83.583	0.00	0.16	0.039	O	|	|	|	|	0.41
83.667	0.00	0.16	0.037	O	|	|	|	|	0.40
83.750	0.00	0.16	0.036	O	|	|	|	|	0.40
83.833	0.00	0.16	0.035	O	|	|	|	|	0.39
83.917	0.00	0.15	0.034	O	|	|	|	|	0.38
84.000	0.00	0.15	0.033	O	|	|	|	|	0.38
84.083	0.00	0.15	0.032	O	|	|	|	|	0.37
84.167	0.00	0.15	0.031	O	|	|	|	|	0.36
84.250	0.00	0.15	0.030	O	|	|	|	|	0.36
84.333	0.00	0.15	0.029	O	|	|	|	|	0.35
84.417	0.00	0.15	0.028	O	|	|	|	|	0.35
84.500	0.00	0.15	0.027	O	|	|	|	|	0.34
84.583	0.00	0.15	0.026	O	|	|	|	|	0.33
84.667	0.00	0.15	0.025	O	|	|	|	|	0.33
84.750	0.00	0.15	0.024	O	|	|	|	|	0.32
84.833	0.00	0.14	0.023	O	|	|	|	|	0.32
84.917	0.00	0.14	0.022	O	|	|	|	|	0.31
85.000	0.00	0.14	0.021	O	|	|	|	|	0.31
85.083	0.00	0.14	0.020	O	|	|	|	|	0.30
85.167	0.00	0.13	0.019	O	|	|	|	|	0.28
85.250	0.00	0.13	0.018	O	|	|	|	|	0.27
85.333	0.00	0.12	0.017	O	|	|	|	|	0.26
85.417	0.00	0.12	0.016	O	|	|	|	|	0.25
85.500	0.00	0.11	0.016	O	|	|	|	|	0.23
85.583	0.00	0.11	0.015	O	|	|	|	|	0.22
85.667	0.00	0.10	0.014	O	|	|	|	|	0.21
85.750	0.00	0.10	0.013	O	|	|	|	|	0.20

Remaining water in basin = 0.01 (Ac.Ft)

**********HYDROGRAPH DATA**********

Number of intervals = 1029
Time interval = 5.0 (Min.)
Maximum/Peak flow rate = 2.276 (CFS)
Total volume = 5.673 (Ac.Ft)

Status of hydrographs being held in storage

	Stream 1	Stream 2	Stream 3	Stream 4	Stream 5
Peak (CFS)	0.000	0.000	0.000	0.000	0.000
Vol (Ac.Ft)	0.000	0.000	0.000	0.000	0.000

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                FLOOD HYDROGRAPH ROUTING PROGRAM
          Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2004
                      Study date: 08/18/25

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Program License Serial Number 5006

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********************* HYDROGRAPH INFORMATION **********************

               From study/file name: PROA15.rte
****************************HYDROGRAPH DATA****************************
               Number of intervals =    30
               Time interval =    5.0 (Min.)
               Maximum/Peak flow rate =       76.447 (CFS)
               Total volume =       3.140 (Ac.Ft)
       Status of hydrographs being held in storage
                  Stream 1  Stream 2  Stream 3  Stream 4  Stream 5
       Peak (CFS)      0.000     0.000     0.000     0.000     0.000
       Vol (Ac.Ft)      0.000     0.000     0.000     0.000     0.000
************************************************************************



++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station        0.000 to Point/Station        0.000
**** RETARDING BASIN ROUTING ****
________________________________________________________________________

User entry of depth-outflow-storage data
------------------------------------------------------------------------
Total number of inflow hydrograph intervals = 30
Hydrograph time unit =  5.000 (Min.)
Initial depth in storage basin =   0.00(Ft.)
------------------------------------------------------------------------
------------------------------------------------------------------------
Initial basin depth =   0.00 (Ft.)
Initial basin storage =      0.00 (Ac.Ft)
Initial basin outflow =   0.00 (CFS)
------------------------------------------------------------------------
------------------------------------------------------------------------
Depth vs. Storage and Depth vs. Discharge data:
 Basin Depth  Storage    Outflow   (S-O*dt/2)   (S+O*dt/2)
     (Ft.)    (Ac.Ft)    (CFS)     (Ac.Ft)    (Ac.Ft)
------------------------------------------------------------------------
   0.000      0.000      0.000      0.000        0.000
   0.300      0.020      0.142      0.020        0.020
   1.300      0.192      0.296      0.191        0.193
   2.300      0.466      0.394      0.465        0.467
   3.300      0.766      0.469      0.764        0.768
   4.300      1.126      0.536      1.124        1.128
   5.500      1.640      0.610      1.638        1.642
   6.300      2.007      1.299      2.003        2.011
   8.300      3.066      1.957      3.059        3.073
  10.300      4.341      2.417      4.333        4.349
  11.400      5.141      2.632      5.132        5.150
  12.300      5.851    167.187      5.275        6.427
  13.300      6.699    657.066      4.436        8.962
  14.300      7.611   1377.819      2.866       12.356
------------------------------------------------------------------------
               Hydrograph Detention Basin Routing
------------------------------------------------------------------------

Graph values: 'I'= unit inflow; 'O'=outflow at time shown
------------------------------------------------------------------------
```

Time (Hours)	Inflow (CFS)	Outflow (CFS)	Storage (Ac.Ft)	.0	19.1	38.22	57.33	76.45	Depth (Ft.)
0.083	0.53	0.01	0.002	O	|	|	|	|	0.03
0.167	2.89	0.09	0.013	OI	|	|	|	|	0.20
0.250	6.48	0.16	0.045	O I	|	|	|	|	0.44
0.333	9.09	0.21	0.097	O I	|	|	|	|	0.75
0.417	10.85	0.27	0.164	O I	|	|	|	|	1.14
0.500	12.79	0.31	0.243	O I	|	|	|	|	1.49
0.583	15.66	0.35	0.339	O I	|	|	|	|	1.84
0.667	19.73	0.39	0.458	O I	|	|	|	|	2.27
0.750	26.65	0.43	0.615	O | I	|	|	|	|	2.80
0.833	44.15	0.49	0.856	O |	I |	|	|	|	3.55
0.917	71.91	0.55	1.252	O |	|	|	| I	|	4.59
1.000	76.45	0.83	1.758	O |	|	|	| I		5.76
1.083	49.23	1.41	2.183	O |	| I	|	|	|	6.63
1.167	29.01	1.57	2.442	O | I	|	|	|	|	7.12
1.250	18.90	1.66	2.596	O I|	|	|	|	|	7.41
1.333	13.61	1.73	2.696	O I	|	|	|	|	7.60
1.417	10.32	1.77	2.767	O I	|	|	|	|	7.73
1.500	8.12	1.80	2.818	O I	|	|	|	|	7.83
1.583	6.37	1.83	2.855	O I	|	|	|	|	7.90
1.667	5.19	1.84	2.882	O I	|	|	|	|	7.95
1.750	4.35	1.86	2.903	OI	|	|	|	|	7.99
1.833	3.46	1.86	2.917	OI	|	|	|	|	8.02
1.917	2.80	1.87	2.925	OI	|	|	|	|	8.03
2.000	2.22	1.87	2.930	O	|	|	|	|	8.04
2.083	1.73	1.87	2.930	O	|	|	|	|	8.04
2.167	1.45	1.87	2.928	O	|	|	|	|	8.04
2.250	1.18	1.87	2.925	O	|	|	|	|	8.03
2.333	0.65	1.87	2.918	O	|	|	|	|	8.02
2.417	0.13	1.86	2.908	O	|	|	|	|	8.00
2.500	0.03	1.85	2.896	O	|	|	|	|	7.98
2.583	0.00	1.84	2.883	O	|	|	|	|	7.95
2.667	0.00	1.84	2.870	O	|	|	|	|	7.93
2.750	0.00	1.83	2.858	O	|	|	|	|	7.91
2.833	0.00	1.82	2.845	O	|	|	|	|	7.88
2.917	0.00	1.81	2.833	O	|	|	|	|	7.86
3.000	0.00	1.80	2.820	O	|	|	|	|	7.84
3.083	0.00	1.80	2.808	O	|	|	|	|	7.81
3.167	0.00	1.79	2.796	O	|	|	|	|	7.79
3.250	0.00	1.78	2.783	O	|	|	|	|	7.77
3.333	0.00	1.77	2.771	O	|	|	|	|	7.74
3.417	0.00	1.77	2.759	O	|	|	|	|	7.72
3.500	0.00	1.76	2.747	O	|	|	|	|	7.70
3.583	0.00	1.75	2.735	O	|	|	|	|	7.67
3.667	0.00	1.74	2.723	O	|	|	|	|	7.65
3.750	0.00	1.74	2.711	O	|	|	|	|	7.63
3.833	0.00	1.73	2.699	O	|	|	|	|	7.61
3.917	0.00	1.72	2.687	O	|	|	|	|	7.58
4.000	0.00	1.71	2.675	O	|	|	|	|	7.56
4.083	0.00	1.71	2.663	O	|	|	|	|	7.54
4.167	0.00	1.70	2.651	O	|	|	|	|	7.52
4.250	0.00	1.69	2.640	O	|	|	|	|	7.50
4.333	0.00	1.68	2.628	O	|	|	|	|	7.47
4.417	0.00	1.68	2.617	O	|	|	|	|	7.45
4.500	0.00	1.67	2.605	O	|	|	|	|	7.43
4.583	0.00	1.66	2.594	O	|	|	|	|	7.41
4.667	0.00	1.66	2.582	O	|	|	|	|	7.39
4.750	0.00	1.65	2.571	O	|	|	|	|	7.36
4.833	0.00	1.64	2.559	O	|	|	|	|	7.34
4.917	0.00	1.64	2.548	O	|	|	|	|	7.32
5.000	0.00	1.63	2.537	O	|	|	|	|	7.30
5.083	0.00	1.62	2.526	O	|	|	|	|	7.28
5.167	0.00	1.61	2.515	O	|	|	|	|	7.26
5.250	0.00	1.61	2.503	O	|	|	|	|	7.24
5.333	0.00	1.60	2.492	O	|	|	|	|	7.22
5.417	0.00	1.59	2.481	O	|	|	|	|	7.20
5.500	0.00	1.59	2.470	O	|	|	|	|	7.18
5.583	0.00	1.58	2.460	O	|	|	|	|	7.15
5.667	0.00	1.57	2.449	O	|	|	|	|	7.13
5.750	0.00	1.57	2.438	O	|	|	|	|	7.11

5.833	0.00	1.56	2.427	O	|	|	|	|	7.09
5.917	0.00	1.55	2.416	O	|	|	|	|	7.07
6.000	0.00	1.55	2.406	O	|	|	|	|	7.05
6.083	0.00	1.54	2.395	O	|	|	|	|	7.03
6.167	0.00	1.53	2.384	O	|	|	|	|	7.01
6.250	0.00	1.53	2.374	O	|	|	|	|	6.99
6.333	0.00	1.52	2.363	O	|	|	|	|	6.97
6.417	0.00	1.51	2.353	O	|	|	|	|	6.95
6.500	0.00	1.51	2.343	O	|	|	|	|	6.93
6.583	0.00	1.50	2.332	O	|	|	|	|	6.91
6.667	0.00	1.49	2.322	O	|	|	|	|	6.89
6.750	0.00	1.49	2.312	O	|	|	|	|	6.88
6.833	0.00	1.48	2.301	O	|	|	|	|	6.86
6.917	0.00	1.48	2.291	O	|	|	|	|	6.84
7.000	0.00	1.47	2.281	O	|	|	|	|	6.82
7.083	0.00	1.46	2.271	O	|	|	|	|	6.80
7.167	0.00	1.46	2.261	O	|	|	|	|	6.78
7.250	0.00	1.45	2.251	O	|	|	|	|	6.76
7.333	0.00	1.44	2.241	O	|	|	|	|	6.74
7.417	0.00	1.44	2.231	O	|	|	|	|	6.72
7.500	0.00	1.43	2.221	O	|	|	|	|	6.70
7.583	0.00	1.43	2.211	O	|	|	|	|	6.69
7.667	0.00	1.42	2.202	O	|	|	|	|	6.67
7.750	0.00	1.41	2.192	O	|	|	|	|	6.65
7.833	0.00	1.41	2.182	O	|	|	|	|	6.63
7.917	0.00	1.40	2.172	O	|	|	|	|	6.61
8.000	0.00	1.40	2.163	O	|	|	|	|	6.59
8.083	0.00	1.39	2.153	O	|	|	|	|	6.58
8.167	0.00	1.38	2.144	O	|	|	|	|	6.56
8.250	0.00	1.38	2.134	O	|	|	|	|	6.54
8.333	0.00	1.37	2.125	O	|	|	|	|	6.52
8.417	0.00	1.37	2.115	O	|	|	|	|	6.50
8.500	0.00	1.36	2.106	O	|	|	|	|	6.49
8.583	0.00	1.35	2.096	O	|	|	|	|	6.47
8.667	0.00	1.35	2.087	O	|	|	|	|	6.45
8.750	0.00	1.34	2.078	O	|	|	|	|	6.43
8.833	0.00	1.34	2.069	O	|	|	|	|	6.42
8.917	0.00	1.33	2.059	O	|	|	|	|	6.40
9.000	0.00	1.33	2.050	O	|	|	|	|	6.38
9.083	0.00	1.32	2.041	O	|	|	|	|	6.36
9.167	0.00	1.31	2.032	O	|	|	|	|	6.35
9.250	0.00	1.31	2.023	O	|	|	|	|	6.33
9.333	0.00	1.30	2.014	O	|	|	|	|	6.31
9.417	0.00	1.30	2.005	O	|	|	|	|	6.30
9.500	0.00	1.28	1.996	O	|	|	|	|	6.28
9.583	0.00	1.26	1.988	O	|	|	|	|	6.26
9.667	0.00	1.25	1.979	O	|	|	|	|	6.24
9.750	0.00	1.23	1.970	O	|	|	|	|	6.22
9.833	0.00	1.21	1.962	O	|	|	|	|	6.20
9.917	0.00	1.20	1.954	O	|	|	|	|	6.18
10.000	0.00	1.18	1.945	O	|	|	|	|	6.17
10.083	0.00	1.17	1.937	O	|	|	|	|	6.15
10.167	0.00	1.15	1.929	O	|	|	|	|	6.13
10.250	0.00	1.14	1.921	O	|	|	|	|	6.11
10.333	0.00	1.12	1.914	O	|	|	|	|	6.10
10.417	0.00	1.11	1.906	O	|	|	|	|	6.08
10.500	0.00	1.10	1.898	O	|	|	|	|	6.06
10.583	0.00	1.08	1.891	O	|	|	|	|	6.05
10.667	0.00	1.07	1.883	O	|	|	|	|	6.03
10.750	0.00	1.05	1.876	O	|	|	|	|	6.01
10.833	0.00	1.04	1.869	O	|	|	|	|	6.00
10.917	0.00	1.03	1.862	O	|	|	|	|	5.98
11.000	0.00	1.01	1.855	O	|	|	|	|	5.97
11.083	0.00	1.00	1.848	O	|	|	|	|	5.95
11.167	0.00	0.99	1.841	O	|	|	|	|	5.94
11.250	0.00	0.97	1.834	O	|	|	|	|	5.92
11.333	0.00	0.96	1.828	O	|	|	|	|	5.91
11.417	0.00	0.95	1.821	O	|	|	|	|	5.89
11.500	0.00	0.94	1.815	O	|	|	|	|	5.88
11.583	0.00	0.93	1.808	O	|	|	|	|	5.87
11.667	0.00	0.91	1.802	O	|	|	|	|	5.85

11.750	0.00	0.90	1.796	O	|	|	|	|	5.84
11.833	0.00	0.89	1.789	O	|	|	|	|	5.83
11.917	0.00	0.88	1.783	O	|	|	|	|	5.81
12.000	0.00	0.87	1.777	O	|	|	|	|	5.80
12.083	0.00	0.86	1.771	O	|	|	|	|	5.79
12.167	0.00	0.85	1.765	O	|	|	|	|	5.77
12.250	0.00	0.83	1.760	O	|	|	|	|	5.76
12.333	0.00	0.82	1.754	O	|	|	|	|	5.75
12.417	0.00	0.81	1.748	O	|	|	|	|	5.74
12.500	0.00	0.80	1.743	O	|	|	|	|	5.72
12.583	0.00	0.79	1.737	O	|	|	|	|	5.71
12.667	0.00	0.78	1.732	O	|	|	|	|	5.70
12.750	0.00	0.77	1.726	O	|	|	|	|	5.69
12.833	0.00	0.76	1.721	O	|	|	|	|	5.68
12.917	0.00	0.75	1.716	O	|	|	|	|	5.67
13.000	0.00	0.74	1.711	O	|	|	|	|	5.65
13.083	0.00	0.73	1.706	O	|	|	|	|	5.64
13.167	0.00	0.72	1.701	O	|	|	|	|	5.63
13.250	0.00	0.71	1.696	O	|	|	|	|	5.62
13.333	0.00	0.71	1.691	O	|	|	|	|	5.61
13.417	0.00	0.70	1.686	O	|	|	|	|	5.60
13.500	0.00	0.69	1.681	O	|	|	|	|	5.59
13.583	0.00	0.68	1.677	O	|	|	|	|	5.58
13.667	0.00	0.67	1.672	O	|	|	|	|	5.57
13.750	0.00	0.66	1.667	O	|	|	|	|	5.56
13.833	0.00	0.65	1.663	O	|	|	|	|	5.55
13.917	0.00	0.64	1.658	O	|	|	|	|	5.54
14.000	0.00	0.64	1.654	O	|	|	|	|	5.53
14.083	0.00	0.63	1.650	O	|	|	|	|	5.52
14.167	0.00	0.62	1.645	O	|	|	|	|	5.51
14.250	0.00	0.61	1.641	O	|	|	|	|	5.50
14.333	0.00	0.61	1.637	O	|	|	|	|	5.49
14.417	0.00	0.61	1.633	O	|	|	|	|	5.48
14.500	0.00	0.61	1.628	O	|	|	|	|	5.47
14.583	0.00	0.61	1.624	O	|	|	|	|	5.46
14.667	0.00	0.61	1.620	O	|	|	|	|	5.45
14.750	0.00	0.61	1.616	O	|	|	|	|	5.44
14.833	0.00	0.61	1.612	O	|	|	|	|	5.43
14.917	0.00	0.61	1.608	O	|	|	|	|	5.42
15.000	0.00	0.60	1.603	O	|	|	|	|	5.41
15.083	0.00	0.60	1.599	O	|	|	|	|	5.40
15.167	0.00	0.60	1.595	O	|	|	|	|	5.40
15.250	0.00	0.60	1.591	O	|	|	|	|	5.39
15.333	0.00	0.60	1.587	O	|	|	|	|	5.38
15.417	0.00	0.60	1.583	O	|	|	|	|	5.37
15.500	0.00	0.60	1.578	O	|	|	|	|	5.36
15.583	0.00	0.60	1.574	O	|	|	|	|	5.35
15.667	0.00	0.60	1.570	O	|	|	|	|	5.34
15.750	0.00	0.60	1.566	O	|	|	|	|	5.33
15.833	0.00	0.60	1.562	O	|	|	|	|	5.32
15.917	0.00	0.60	1.558	O	|	|	|	|	5.31
16.000	0.00	0.60	1.554	O	|	|	|	|	5.30
16.083	0.00	0.60	1.550	O	|	|	|	|	5.29
16.167	0.00	0.60	1.545	O	|	|	|	|	5.28
16.250	0.00	0.60	1.541	O	|	|	|	|	5.27
16.333	0.00	0.60	1.537	O	|	|	|	|	5.26
16.417	0.00	0.59	1.533	O	|	|	|	|	5.25
16.500	0.00	0.59	1.529	O	|	|	|	|	5.24
16.583	0.00	0.59	1.525	O	|	|	|	|	5.23
16.667	0.00	0.59	1.521	O	|	|	|	|	5.22
16.750	0.00	0.59	1.517	O	|	|	|	|	5.21
16.833	0.00	0.59	1.513	O	|	|	|	|	5.20
16.917	0.00	0.59	1.509	O	|	|	|	|	5.19
17.000	0.00	0.59	1.505	O	|	|	|	|	5.18
17.083	0.00	0.59	1.501	O	|	|	|	|	5.17
17.167	0.00	0.59	1.496	O	|	|	|	|	5.16
17.250	0.00	0.59	1.492	O	|	|	|	|	5.16
17.333	0.00	0.59	1.488	O	|	|	|	|	5.15
17.417	0.00	0.59	1.484	O	|	|	|	|	5.14
17.500	0.00	0.59	1.480	O	|	|	|	|	5.13
17.583	0.00	0.59	1.476	O	|	|	|	|	5.12

17.667	0.00	0.59	1.472	O	|	|	|	|	5.11
17.750	0.00	0.59	1.468	O	|	|	|	|	5.10
17.833	0.00	0.58	1.464	O	|	|	|	|	5.09
17.917	0.00	0.58	1.460	O	|	|	|	|	5.08
18.000	0.00	0.58	1.456	O	|	|	|	|	5.07
18.083	0.00	0.58	1.452	O	|	|	|	|	5.06
18.167	0.00	0.58	1.448	O	|	|	|	|	5.05
18.250	0.00	0.58	1.444	O	|	|	|	|	5.04
18.333	0.00	0.58	1.440	O	|	|	|	|	5.03
18.417	0.00	0.58	1.436	O	|	|	|	|	5.02
18.500	0.00	0.58	1.432	O	|	|	|	|	5.01
18.583	0.00	0.58	1.428	O	|	|	|	|	5.01
18.667	0.00	0.58	1.424	O	|	|	|	|	5.00
18.750	0.00	0.58	1.420	O	|	|	|	|	4.99
18.833	0.00	0.58	1.416	O	|	|	|	|	4.98
18.917	0.00	0.58	1.412	O	|	|	|	|	4.97
19.000	0.00	0.58	1.408	O	|	|	|	|	4.96
19.083	0.00	0.58	1.404	O	|	|	|	|	4.95
19.167	0.00	0.58	1.400	O	|	|	|	|	4.94
19.250	0.00	0.57	1.396	O	|	|	|	|	4.93
19.333	0.00	0.57	1.392	O	|	|	|	|	4.92
19.417	0.00	0.57	1.388	O	|	|	|	|	4.91
19.500	0.00	0.57	1.384	O	|	|	|	|	4.90
19.583	0.00	0.57	1.380	O	|	|	|	|	4.89
19.667	0.00	0.57	1.377	O	|	|	|	|	4.88
19.750	0.00	0.57	1.373	O	|	|	|	|	4.88
19.833	0.00	0.57	1.369	O	|	|	|	|	4.87
19.917	0.00	0.57	1.365	O	|	|	|	|	4.86
20.000	0.00	0.57	1.361	O	|	|	|	|	4.85
20.083	0.00	0.57	1.357	O	|	|	|	|	4.84
20.167	0.00	0.57	1.353	O	|	|	|	|	4.83
20.250	0.00	0.57	1.349	O	|	|	|	|	4.82
20.333	0.00	0.57	1.345	O	|	|	|	|	4.81
20.417	0.00	0.57	1.341	O	|	|	|	|	4.80
20.500	0.00	0.57	1.337	O	|	|	|	|	4.79
20.583	0.00	0.57	1.333	O	|	|	|	|	4.78
20.667	0.00	0.57	1.330	O	|	|	|	|	4.78
20.750	0.00	0.56	1.326	O	|	|	|	|	4.77
20.833	0.00	0.56	1.322	O	|	|	|	|	4.76
20.917	0.00	0.56	1.318	O	|	|	|	|	4.75
21.000	0.00	0.56	1.314	O	|	|	|	|	4.74
21.083	0.00	0.56	1.310	O	|	|	|	|	4.73
21.167	0.00	0.56	1.306	O	|	|	|	|	4.72
21.250	0.00	0.56	1.302	O	|	|	|	|	4.71
21.333	0.00	0.56	1.299	O	|	|	|	|	4.70
21.417	0.00	0.56	1.295	O	|	|	|	|	4.69
21.500	0.00	0.56	1.291	O	|	|	|	|	4.68
21.583	0.00	0.56	1.287	O	|	|	|	|	4.68
21.667	0.00	0.56	1.283	O	|	|	|	|	4.67
21.750	0.00	0.56	1.279	O	|	|	|	|	4.66
21.833	0.00	0.56	1.275	O	|	|	|	|	4.65
21.917	0.00	0.56	1.272	O	|	|	|	|	4.64
22.000	0.00	0.56	1.268	O	|	|	|	|	4.63
22.083	0.00	0.56	1.264	O	|	|	|	|	4.62
22.167	0.00	0.56	1.260	O	|	|	|	|	4.61
22.250	0.00	0.55	1.256	O	|	|	|	|	4.60
22.333	0.00	0.55	1.252	O	|	|	|	|	4.60
22.417	0.00	0.55	1.249	O	|	|	|	|	4.59
22.500	0.00	0.55	1.245	O	|	|	|	|	4.58
22.583	0.00	0.55	1.241	O	|	|	|	|	4.57
22.667	0.00	0.55	1.237	O	|	|	|	|	4.56
22.750	0.00	0.55	1.233	O	|	|	|	|	4.55
22.833	0.00	0.55	1.230	O	|	|	|	|	4.54
22.917	0.00	0.55	1.226	O	|	|	|	|	4.53
23.000	0.00	0.55	1.222	O	|	|	|	|	4.52
23.083	0.00	0.55	1.218	O	|	|	|	|	4.52
23.167	0.00	0.55	1.214	O	|	|	|	|	4.51
23.250	0.00	0.55	1.211	O	|	|	|	|	4.50
23.333	0.00	0.55	1.207	O	|	|	|	|	4.49
23.417	0.00	0.55	1.203	O	|	|	|	|	4.48
23.500	0.00	0.55	1.199	O	|	|	|	|	4.47

23.583	0.00	0.55	1.196	O	|	|	|	|	4.46
23.667	0.00	0.55	1.192	O	|	|	|	|	4.45
23.750	0.00	0.54	1.188	O	|	|	|	|	4.44
23.833	0.00	0.54	1.184	O	|	|	|	|	4.44
23.917	0.00	0.54	1.181	O	|	|	|	|	4.43
24.000	0.00	0.54	1.177	O	|	|	|	|	4.42
24.083	0.00	0.54	1.173	O	|	|	|	|	4.41
24.167	0.00	0.54	1.169	O	|	|	|	|	4.40
24.250	0.00	0.54	1.166	O	|	|	|	|	4.39
24.333	0.00	0.54	1.162	O	|	|	|	|	4.38
24.417	0.00	0.54	1.158	O	|	|	|	|	4.38
24.500	0.00	0.54	1.154	O	|	|	|	|	4.37
24.583	0.00	0.54	1.151	O	|	|	|	|	4.36
24.667	0.00	0.54	1.147	O	|	|	|	|	4.35
24.750	0.00	0.54	1.143	O	|	|	|	|	4.34
24.833	0.00	0.54	1.140	O	|	|	|	|	4.33
24.917	0.00	0.54	1.136	O	|	|	|	|	4.32
25.000	0.00	0.54	1.132	O	|	|	|	|	4.31
25.083	0.00	0.54	1.129	O	|	|	|	|	4.31
25.167	0.00	0.54	1.125	O	|	|	|	|	4.30
25.250	0.00	0.54	1.121	O	|	|	|	|	4.29
25.333	0.00	0.53	1.117	O	|	|	|	|	4.28
25.417	0.00	0.53	1.114	O	|	|	|	|	4.27
25.500	0.00	0.53	1.110	O	|	|	|	|	4.26
25.583	0.00	0.53	1.106	O	|	|	|	|	4.25
25.667	0.00	0.53	1.103	O	|	|	|	|	4.24
25.750	0.00	0.53	1.099	O	|	|	|	|	4.23
25.833	0.00	0.53	1.095	O	|	|	|	|	4.22
25.917	0.00	0.53	1.092	O	|	|	|	|	4.21
26.000	0.00	0.53	1.088	O	|	|	|	|	4.19
26.083	0.00	0.53	1.085	O	|	|	|	|	4.18
26.167	0.00	0.53	1.081	O	|	|	|	|	4.17
26.250	0.00	0.53	1.077	O	|	|	|	|	4.16
26.333	0.00	0.53	1.074	O	|	|	|	|	4.15
26.417	0.00	0.53	1.070	O	|	|	|	|	4.14
26.500	0.00	0.52	1.066	O	|	|	|	|	4.13
26.583	0.00	0.52	1.063	O	|	|	|	|	4.12
26.667	0.00	0.52	1.059	O	|	|	|	|	4.11
26.750	0.00	0.52	1.056	O	|	|	|	|	4.10
26.833	0.00	0.52	1.052	O	|	|	|	|	4.09
26.917	0.00	0.52	1.048	O	|	|	|	|	4.08
27.000	0.00	0.52	1.045	O	|	|	|	|	4.07
27.083	0.00	0.52	1.041	O	|	|	|	|	4.06
27.167	0.00	0.52	1.038	O	|	|	|	|	4.05
27.250	0.00	0.52	1.034	O	|	|	|	|	4.04
27.333	0.00	0.52	1.030	O	|	|	|	|	4.03
27.417	0.00	0.52	1.027	O	|	|	|	|	4.02
27.500	0.00	0.52	1.023	O	|	|	|	|	4.01
27.583	0.00	0.52	1.020	O	|	|	|	|	4.00
27.667	0.00	0.52	1.016	O	|	|	|	|	4.00
27.750	0.00	0.51	1.013	O	|	|	|	|	3.99
27.833	0.00	0.51	1.009	O	|	|	|	|	3.98
27.917	0.00	0.51	1.006	O	|	|	|	|	3.97
28.000	0.00	0.51	1.002	O	|	|	|	|	3.96
28.083	0.00	0.51	0.999	O	|	|	|	|	3.95
28.167	0.00	0.51	0.995	O	|	|	|	|	3.94
28.250	0.00	0.51	0.991	O	|	|	|	|	3.93
28.333	0.00	0.51	0.988	O	|	|	|	|	3.92
28.417	0.00	0.51	0.984	O	|	|	|	|	3.91
28.500	0.00	0.51	0.981	O	|	|	|	|	3.90
28.583	0.00	0.51	0.977	O	|	|	|	|	3.89
28.667	0.00	0.51	0.974	O	|	|	|	|	3.88
28.750	0.00	0.51	0.970	O	|	|	|	|	3.87
28.833	0.00	0.51	0.967	O	|	|	|	|	3.86
28.917	0.00	0.51	0.963	O	|	|	|	|	3.85
29.000	0.00	0.51	0.960	O	|	|	|	|	3.84
29.083	0.00	0.50	0.957	O	|	|	|	|	3.83
29.167	0.00	0.50	0.953	O	|	|	|	|	3.82
29.250	0.00	0.50	0.950	O	|	|	|	|	3.81
29.333	0.00	0.50	0.946	O	|	|	|	|	3.80
29.417	0.00	0.50	0.943	O	|	|	|	|	3.79

29.500	0.00	0.50	0.939	O	|	|	|	|	3.78
29.583	0.00	0.50	0.936	O	|	|	|	|	3.77
29.667	0.00	0.50	0.932	O	|	|	|	|	3.76
29.750	0.00	0.50	0.929	O	|	|	|	|	3.75
29.833	0.00	0.50	0.925	O	|	|	|	|	3.74
29.917	0.00	0.50	0.922	O	|	|	|	|	3.73
30.000	0.00	0.50	0.919	O	|	|	|	|	3.72
30.083	0.00	0.50	0.915	O	|	|	|	|	3.71
30.167	0.00	0.50	0.912	O	|	|	|	|	3.70
30.250	0.00	0.50	0.908	O	|	|	|	|	3.70
30.333	0.00	0.49	0.905	O	|	|	|	|	3.69
30.417	0.00	0.49	0.901	O	|	|	|	|	3.68
30.500	0.00	0.49	0.898	O	|	|	|	|	3.67
30.583	0.00	0.49	0.895	O	|	|	|	|	3.66
30.667	0.00	0.49	0.891	O	|	|	|	|	3.65
30.750	0.00	0.49	0.888	O	|	|	|	|	3.64
30.833	0.00	0.49	0.885	O	|	|	|	|	3.63
30.917	0.00	0.49	0.881	O	|	|	|	|	3.62
31.000	0.00	0.49	0.878	O	|	|	|	|	3.61
31.083	0.00	0.49	0.874	O	|	|	|	|	3.60
31.167	0.00	0.49	0.871	O	|	|	|	|	3.59
31.250	0.00	0.49	0.868	O	|	|	|	|	3.58
31.333	0.00	0.49	0.864	O	|	|	|	|	3.57
31.417	0.00	0.49	0.861	O	|	|	|	|	3.56
31.500	0.00	0.49	0.858	O	|	|	|	|	3.55
31.583	0.00	0.49	0.854	O	|	|	|	|	3.55
31.667	0.00	0.48	0.851	O	|	|	|	|	3.54
31.750	0.00	0.48	0.848	O	|	|	|	|	3.53
31.833	0.00	0.48	0.844	O	|	|	|	|	3.52
31.917	0.00	0.48	0.841	O	|	|	|	|	3.51
32.000	0.00	0.48	0.838	O	|	|	|	|	3.50
32.083	0.00	0.48	0.834	O	|	|	|	|	3.49
32.167	0.00	0.48	0.831	O	|	|	|	|	3.48
32.250	0.00	0.48	0.828	O	|	|	|	|	3.47
32.333	0.00	0.48	0.824	O	|	|	|	|	3.46
32.417	0.00	0.48	0.821	O	|	|	|	|	3.45
32.500	0.00	0.48	0.818	O	|	|	|	|	3.44
32.583	0.00	0.48	0.814	O	|	|	|	|	3.43
32.667	0.00	0.48	0.811	O	|	|	|	|	3.43
32.750	0.00	0.48	0.808	O	|	|	|	|	3.42
32.833	0.00	0.48	0.805	O	|	|	|	|	3.41
32.917	0.00	0.48	0.801	O	|	|	|	|	3.40
33.000	0.00	0.47	0.798	O	|	|	|	|	3.39
33.083	0.00	0.47	0.795	O	|	|	|	|	3.38
33.167	0.00	0.47	0.792	O	|	|	|	|	3.37
33.250	0.00	0.47	0.788	O	|	|	|	|	3.36
33.333	0.00	0.47	0.785	O	|	|	|	|	3.35
33.417	0.00	0.47	0.782	O	|	|	|	|	3.34
33.500	0.00	0.47	0.778	O	|	|	|	|	3.33
33.583	0.00	0.47	0.775	O	|	|	|	|	3.33
33.667	0.00	0.47	0.772	O	|	|	|	|	3.32
33.750	0.00	0.47	0.769	O	|	|	|	|	3.31
33.833	0.00	0.47	0.766	O	|	|	|	|	3.30
33.917	0.00	0.47	0.762	O	|	|	|	|	3.29
34.000	0.00	0.47	0.759	O	|	|	|	|	3.28
34.083	0.00	0.47	0.756	O	|	|	|	|	3.27
34.167	0.00	0.47	0.753	O	|	|	|	|	3.26
34.250	0.00	0.46	0.749	O	|	|	|	|	3.24
34.333	0.00	0.46	0.746	O	|	|	|	|	3.23
34.417	0.00	0.46	0.743	O	|	|	|	|	3.22
34.500	0.00	0.46	0.740	O	|	|	|	|	3.21
34.583	0.00	0.46	0.737	O	|	|	|	|	3.20
34.667	0.00	0.46	0.734	O	|	|	|	|	3.19
34.750	0.00	0.46	0.730	O	|	|	|	|	3.18
34.833	0.00	0.46	0.727	O	|	|	|	|	3.17
34.917	0.00	0.46	0.724	O	|	|	|	|	3.16
35.000	0.00	0.46	0.721	O	|	|	|	|	3.15
35.083	0.00	0.46	0.718	O	|	|	|	|	3.14
35.167	0.00	0.46	0.715	O	|	|	|	|	3.13
35.250	0.00	0.46	0.711	O	|	|	|	|	3.12
35.333	0.00	0.45	0.708	O	|	|	|	|	3.11

35.417	0.00	0.45	0.705	O					3.10
35.500	0.00	0.45	0.702	O					3.09
35.583	0.00	0.45	0.699	O					3.08
35.667	0.00	0.45	0.696	O					3.07
35.750	0.00	0.45	0.693	O					3.06
35.833	0.00	0.45	0.690	O					3.05
35.917	0.00	0.45	0.687	O					3.04
36.000	0.00	0.45	0.683	O					3.02
36.083	0.00	0.45	0.680	O					3.01
36.167	0.00	0.45	0.677	O					3.00
36.250	0.00	0.45	0.674	O					2.99
36.333	0.00	0.45	0.671	O					2.98
36.417	0.00	0.44	0.668	O					2.97
36.500	0.00	0.44	0.665	O					2.96
36.583	0.00	0.44	0.662	O					2.95
36.667	0.00	0.44	0.659	O					2.94
36.750	0.00	0.44	0.656	O					2.93
36.833	0.00	0.44	0.653	O					2.92
36.917	0.00	0.44	0.650	O					2.91
37.000	0.00	0.44	0.647	O					2.90
37.083	0.00	0.44	0.644	O					2.89
37.167	0.00	0.44	0.641	O					2.88
37.250	0.00	0.44	0.638	O					2.87
37.333	0.00	0.44	0.635	O					2.86
37.417	0.00	0.44	0.632	O					2.85
37.500	0.00	0.43	0.629	O					2.84
37.583	0.00	0.43	0.626	O					2.83
37.667	0.00	0.43	0.623	O					2.82
37.750	0.00	0.43	0.620	O					2.81
37.833	0.00	0.43	0.617	O					2.80
37.917	0.00	0.43	0.614	O					2.79
38.000	0.00	0.43	0.611	O					2.78
38.083	0.00	0.43	0.608	O					2.77
38.167	0.00	0.43	0.605	O					2.76
38.250	0.00	0.43	0.602	O					2.75
38.333	0.00	0.43	0.599	O					2.74
38.417	0.00	0.43	0.596	O					2.73
38.500	0.00	0.43	0.593	O					2.72
38.583	0.00	0.43	0.590	O					2.71
38.667	0.00	0.42	0.587	O					2.70
38.750	0.00	0.42	0.584	O					2.69
38.833	0.00	0.42	0.581	O					2.68
38.917	0.00	0.42	0.579	O					2.68
39.000	0.00	0.42	0.576	O					2.67
39.083	0.00	0.42	0.573	O					2.66
39.167	0.00	0.42	0.570	O					2.65
39.250	0.00	0.42	0.567	O					2.64
39.333	0.00	0.42	0.564	O					2.63
39.417	0.00	0.42	0.561	O					2.62
39.500	0.00	0.42	0.558	O					2.61
39.583	0.00	0.42	0.555	O					2.60
39.667	0.00	0.42	0.553	O					2.59
39.750	0.00	0.41	0.550	O					2.58
39.833	0.00	0.41	0.547	O					2.57
39.917	0.00	0.41	0.544	O					2.56
40.000	0.00	0.41	0.541	O					2.55
40.083	0.00	0.41	0.538	O					2.54
40.167	0.00	0.41	0.536	O					2.53
40.250	0.00	0.41	0.533	O					2.52
40.333	0.00	0.41	0.530	O					2.51
40.417	0.00	0.41	0.527	O					2.50
40.500	0.00	0.41	0.524	O					2.49
40.583	0.00	0.41	0.521	O					2.48
40.667	0.00	0.41	0.519	O					2.48
40.750	0.00	0.41	0.516	O					2.47
40.833	0.00	0.41	0.513	O					2.46
40.917	0.00	0.41	0.510	O					2.45
41.000	0.00	0.40	0.507	O					2.44
41.083	0.00	0.40	0.505	O					2.43
41.167	0.00	0.40	0.502	O					2.42
41.250	0.00	0.40	0.499	O					2.41

41.333	0.00	0.40	0.496	O	|	|	|	|	2.40
41.417	0.00	0.40	0.494	O	|	|	|	|	2.39
41.500	0.00	0.40	0.491	O	|	|	|	|	2.38
41.583	0.00	0.40	0.488	O	|	|	|	|	2.37
41.667	0.00	0.40	0.485	O	|	|	|	|	2.36
41.750	0.00	0.40	0.483	O	|	|	|	|	2.36
41.833	0.00	0.40	0.480	O	|	|	|	|	2.35
41.917	0.00	0.40	0.477	O	|	|	|	|	2.34
42.000	0.00	0.40	0.474	O	|	|	|	|	2.33
42.083	0.00	0.40	0.472	O	|	|	|	|	2.32
42.167	0.00	0.39	0.469	O	|	|	|	|	2.31
42.250	0.00	0.39	0.466	O	|	|	|	|	2.30
42.333	0.00	0.39	0.463	O	|	|	|	|	2.29
42.417	0.00	0.39	0.461	O	|	|	|	|	2.28
42.500	0.00	0.39	0.458	O	|	|	|	|	2.27
42.583	0.00	0.39	0.455	O	|	|	|	|	2.26
42.667	0.00	0.39	0.453	O	|	|	|	|	2.25
42.750	0.00	0.39	0.450	O	|	|	|	|	2.24
42.833	0.00	0.39	0.447	O	|	|	|	|	2.23
42.917	0.00	0.39	0.445	O	|	|	|	|	2.22
43.000	0.00	0.39	0.442	O	|	|	|	|	2.21
43.083	0.00	0.38	0.439	O	|	|	|	|	2.20
43.167	0.00	0.38	0.437	O	|	|	|	|	2.19
43.250	0.00	0.38	0.434	O	|	|	|	|	2.18
43.333	0.00	0.38	0.431	O	|	|	|	|	2.17
43.417	0.00	0.38	0.429	O	|	|	|	|	2.16
43.500	0.00	0.38	0.426	O	|	|	|	|	2.15
43.583	0.00	0.38	0.424	O	|	|	|	|	2.15
43.667	0.00	0.38	0.421	O	|	|	|	|	2.14
43.750	0.00	0.38	0.418	O	|	|	|	|	2.13
43.833	0.00	0.38	0.416	O	|	|	|	|	2.12
43.917	0.00	0.38	0.413	O	|	|	|	|	2.11
44.000	0.00	0.37	0.411	O	|	|	|	|	2.10
44.083	0.00	0.37	0.408	O	|	|	|	|	2.09
44.167	0.00	0.37	0.405	O	|	|	|	|	2.08
44.250	0.00	0.37	0.403	O	|	|	|	|	2.07
44.333	0.00	0.37	0.400	O	|	|	|	|	2.06
44.417	0.00	0.37	0.398	O	|	|	|	|	2.05
44.500	0.00	0.37	0.395	O	|	|	|	|	2.04
44.583	0.00	0.37	0.393	O	|	|	|	|	2.03
44.667	0.00	0.37	0.390	O	|	|	|	|	2.02
44.750	0.00	0.37	0.388	O	|	|	|	|	2.01
44.833	0.00	0.37	0.385	O	|	|	|	|	2.01
44.917	0.00	0.36	0.383	O	|	|	|	|	2.00
45.000	0.00	0.36	0.380	O	|	|	|	|	1.99
45.083	0.00	0.36	0.378	O	|	|	|	|	1.98
45.167	0.00	0.36	0.375	O	|	|	|	|	1.97
45.250	0.00	0.36	0.373	O	|	|	|	|	1.96
45.333	0.00	0.36	0.370	O	|	|	|	|	1.95
45.417	0.00	0.36	0.368	O	|	|	|	|	1.94
45.500	0.00	0.36	0.365	O	|	|	|	|	1.93
45.583	0.00	0.36	0.363	O	|	|	|	|	1.92
45.667	0.00	0.36	0.360	O	|	|	|	|	1.91
45.750	0.00	0.36	0.358	O	|	|	|	|	1.91
45.833	0.00	0.35	0.355	O	|	|	|	|	1.90
45.917	0.00	0.35	0.353	O	|	|	|	|	1.89
46.000	0.00	0.35	0.351	O	|	|	|	|	1.88
46.083	0.00	0.35	0.348	O	|	|	|	|	1.87
46.167	0.00	0.35	0.346	O	|	|	|	|	1.86
46.250	0.00	0.35	0.343	O	|	|	|	|	1.85
46.333	0.00	0.35	0.341	O	|	|	|	|	1.84
46.417	0.00	0.35	0.339	O	|	|	|	|	1.83
46.500	0.00	0.35	0.336	O	|	|	|	|	1.83
46.583	0.00	0.35	0.334	O	|	|	|	|	1.82
46.667	0.00	0.35	0.331	O	|	|	|	|	1.81
46.750	0.00	0.34	0.329	O	|	|	|	|	1.80
46.833	0.00	0.34	0.327	O	|	|	|	|	1.79
46.917	0.00	0.34	0.324	O	|	|	|	|	1.78
47.000	0.00	0.34	0.322	O	|	|	|	|	1.77
47.083	0.00	0.34	0.319	O	|	|	|	|	1.77
47.167	0.00	0.34	0.317	O	|	|	|	|	1.76

47.250	0.00	0.34	0.315	O	|	|	|	|	1.75
47.333	0.00	0.34	0.312	O	|	|	|	|	1.74
47.417	0.00	0.34	0.310	O	|	|	|	|	1.73
47.500	0.00	0.34	0.308	O	|	|	|	|	1.72
47.583	0.00	0.34	0.305	O	|	|	|	|	1.71
47.667	0.00	0.34	0.303	O	|	|	|	|	1.71
47.750	0.00	0.33	0.301	O	|	|	|	|	1.70
47.833	0.00	0.33	0.299	O	|	|	|	|	1.69
47.917	0.00	0.33	0.296	O	|	|	|	|	1.68
48.000	0.00	0.33	0.294	O	|	|	|	|	1.67
48.083	0.00	0.33	0.292	O	|	|	|	|	1.66
48.167	0.00	0.33	0.289	O	|	|	|	|	1.66
48.250	0.00	0.33	0.287	O	|	|	|	|	1.65
48.333	0.00	0.33	0.285	O	|	|	|	|	1.64
48.417	0.00	0.33	0.283	O	|	|	|	|	1.63
48.500	0.00	0.33	0.280	O	|	|	|	|	1.62
48.583	0.00	0.33	0.278	O	|	|	|	|	1.61
48.667	0.00	0.33	0.276	O	|	|	|	|	1.61
48.750	0.00	0.33	0.274	O	|	|	|	|	1.60
48.833	0.00	0.32	0.271	O	|	|	|	|	1.59
48.917	0.00	0.32	0.269	O	|	|	|	|	1.58
49.000	0.00	0.32	0.267	O	|	|	|	|	1.57
49.083	0.00	0.32	0.265	O	|	|	|	|	1.57
49.167	0.00	0.32	0.262	O	|	|	|	|	1.56
49.250	0.00	0.32	0.260	O	|	|	|	|	1.55
49.333	0.00	0.32	0.258	O	|	|	|	|	1.54
49.417	0.00	0.32	0.256	O	|	|	|	|	1.53
49.500	0.00	0.32	0.254	O	|	|	|	|	1.52
49.583	0.00	0.32	0.251	O	|	|	|	|	1.52
49.667	0.00	0.32	0.249	O	|	|	|	|	1.51
49.750	0.00	0.32	0.247	O	|	|	|	|	1.50
49.833	0.00	0.31	0.245	O	|	|	|	|	1.49
49.917	0.00	0.31	0.243	O	|	|	|	|	1.49
50.000	0.00	0.31	0.241	O	|	|	|	|	1.48
50.083	0.00	0.31	0.238	O	|	|	|	|	1.47
50.167	0.00	0.31	0.236	O	|	|	|	|	1.46
50.250	0.00	0.31	0.234	O	|	|	|	|	1.45
50.333	0.00	0.31	0.232	O	|	|	|	|	1.45
50.417	0.00	0.31	0.230	O	|	|	|	|	1.44
50.500	0.00	0.31	0.228	O	|	|	|	|	1.43
50.583	0.00	0.31	0.226	O	|	|	|	|	1.42
50.667	0.00	0.31	0.224	O	|	|	|	|	1.41
50.750	0.00	0.31	0.221	O	|	|	|	|	1.41
50.833	0.00	0.31	0.219	O	|	|	|	|	1.40
50.917	0.00	0.31	0.217	O	|	|	|	|	1.39
51.000	0.00	0.30	0.215	O	|	|	|	|	1.38
51.083	0.00	0.30	0.213	O	|	|	|	|	1.38
51.167	0.00	0.30	0.211	O	|	|	|	|	1.37
51.250	0.00	0.30	0.209	O	|	|	|	|	1.36
51.333	0.00	0.30	0.207	O	|	|	|	|	1.35
51.417	0.00	0.30	0.205	O	|	|	|	|	1.35
51.500	0.00	0.30	0.203	O	|	|	|	|	1.34
51.583	0.00	0.30	0.201	O	|	|	|	|	1.33
51.667	0.00	0.30	0.198	O	|	|	|	|	1.32
51.750	0.00	0.30	0.196	O	|	|	|	|	1.32
51.833	0.00	0.30	0.194	O	|	|	|	|	1.31
51.917	0.00	0.30	0.192	O	|	|	|	|	1.30
52.000	0.00	0.29	0.190	O	|	|	|	|	1.29
52.083	0.00	0.29	0.188	O	|	|	|	|	1.28
52.167	0.00	0.29	0.186	O	|	|	|	|	1.27
52.250	0.00	0.29	0.184	O	|	|	|	|	1.26
52.333	0.00	0.29	0.182	O	|	|	|	|	1.24
52.417	0.00	0.29	0.180	O	|	|	|	|	1.23
52.500	0.00	0.28	0.178	O	|	|	|	|	1.22
52.583	0.00	0.28	0.176	O	|	|	|	|	1.21
52.667	0.00	0.28	0.174	O	|	|	|	|	1.20
52.750	0.00	0.28	0.173	O	|	|	|	|	1.19
52.833	0.00	0.28	0.171	O	|	|	|	|	1.18
52.917	0.00	0.28	0.169	O	|	|	|	|	1.16
53.000	0.00	0.27	0.167	O	|	|	|	|	1.15
53.083	0.00	0.27	0.165	O	|	|	|	|	1.14

53.167	0.00	0.27	0.163	O					1.13
53.250	0.00	0.27	0.161	O					1.12
53.333	0.00	0.27	0.159	O					1.11
53.417	0.00	0.27	0.158	O					1.10
53.500	0.00	0.26	0.156	O					1.09
53.583	0.00	0.26	0.154	O					1.08
53.667	0.00	0.26	0.152	O					1.07
53.750	0.00	0.26	0.150	O					1.06
53.833	0.00	0.26	0.149	O					1.05
53.917	0.00	0.26	0.147	O					1.04
54.000	0.00	0.25	0.145	O					1.03
54.083	0.00	0.25	0.143	O					1.02
54.167	0.00	0.25	0.142	O					1.01
54.250	0.00	0.25	0.140	O					1.00
54.333	0.00	0.25	0.138	O					0.99
54.417	0.00	0.25	0.136	O					0.98
54.500	0.00	0.24	0.135	O					0.97
54.583	0.00	0.24	0.133	O					0.96
54.667	0.00	0.24	0.131	O					0.95
54.750	0.00	0.24	0.130	O					0.94
54.833	0.00	0.24	0.128	O					0.93
54.917	0.00	0.24	0.126	O					0.92
55.000	0.00	0.24	0.125	O					0.91
55.083	0.00	0.23	0.123	O					0.90
55.167	0.00	0.23	0.122	O					0.89
55.250	0.00	0.23	0.120	O					0.88
55.333	0.00	0.23	0.118	O					0.87
55.417	0.00	0.23	0.117	O					0.86
55.500	0.00	0.23	0.115	O					0.85
55.583	0.00	0.23	0.114	O					0.84
55.667	0.00	0.22	0.112	O					0.84
55.750	0.00	0.22	0.111	O					0.83
55.833	0.00	0.22	0.109	O					0.82
55.917	0.00	0.22	0.108	O					0.81
56.000	0.00	0.22	0.106	O					0.80
56.083	0.00	0.22	0.105	O					0.79
56.167	0.00	0.22	0.103	O					0.78
56.250	0.00	0.22	0.102	O					0.77
56.333	0.00	0.21	0.100	O					0.77
56.417	0.00	0.21	0.099	O					0.76
56.500	0.00	0.21	0.097	O					0.75
56.583	0.00	0.21	0.096	O					0.74
56.667	0.00	0.21	0.094	O					0.73
56.750	0.00	0.21	0.093	O					0.72
56.833	0.00	0.21	0.091	O					0.72
56.917	0.00	0.20	0.090	O					0.71
57.000	0.00	0.20	0.089	O					0.70
57.083	0.00	0.20	0.087	O					0.69
57.167	0.00	0.20	0.086	O					0.68
57.250	0.00	0.20	0.084	O					0.67
57.333	0.00	0.20	0.083	O					0.67
57.417	0.00	0.20	0.082	O					0.66
57.500	0.00	0.20	0.080	O					0.65
57.583	0.00	0.19	0.079	O					0.64
57.667	0.00	0.19	0.078	O					0.64
57.750	0.00	0.19	0.076	O					0.63
57.833	0.00	0.19	0.075	O					0.62
57.917	0.00	0.19	0.074	O					0.61
58.000	0.00	0.19	0.072	O					0.60
58.083	0.00	0.19	0.071	O					0.60
58.167	0.00	0.19	0.070	O					0.59
58.250	0.00	0.19	0.069	O					0.58
58.333	0.00	0.18	0.067	O					0.57
58.417	0.00	0.18	0.066	O					0.57
58.500	0.00	0.18	0.065	O					0.56
58.583	0.00	0.18	0.063	O					0.55
58.667	0.00	0.18	0.062	O					0.55
58.750	0.00	0.18	0.061	O					0.54
58.833	0.00	0.18	0.060	O					0.53
58.917	0.00	0.18	0.059	O					0.52
59.000	0.00	0.18	0.057	O					0.52

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59.083    0.00    0.17      0.056  O       |       |       |       |     0.51
59.167    0.00    0.17      0.055  O       |       |       |       |     0.50
59.250    0.00    0.17      0.054  O       |       |       |       |     0.50
59.333    0.00    0.17      0.053  O       |       |       |       |     0.49
59.417    0.00    0.17      0.051  O       |       |       |       |     0.48
59.500    0.00    0.17      0.050  O       |       |       |       |     0.48
59.583    0.00    0.17      0.049  O       |       |       |       |     0.47
59.667    0.00    0.17      0.048  O       |       |       |       |     0.46
59.750    0.00    0.17      0.047  O       |       |       |       |     0.46
59.833    0.00    0.16      0.046  O       |       |       |       |     0.45
59.917    0.00    0.16      0.044  O       |       |       |       |     0.44
60.000    0.00    0.16      0.043  O       |       |       |       |     0.44
60.083    0.00    0.16      0.042  O       |       |       |       |     0.43
60.167    0.00    0.16      0.041  O       |       |       |       |     0.42
60.250    0.00    0.16      0.040  O       |       |       |       |     0.42
60.333    0.00    0.16      0.039  O       |       |       |       |     0.41
60.417    0.00    0.16      0.038  O       |       |       |       |     0.40
60.500    0.00    0.16      0.037  O       |       |       |       |     0.40
60.583    0.00    0.16      0.036  O       |       |       |       |     0.39
60.667    0.00    0.16      0.035  O       |       |       |       |     0.38
60.750    0.00    0.15      0.034  O       |       |       |       |     0.38
60.833    0.00    0.15      0.032  O       |       |       |       |     0.37
60.917    0.00    0.15      0.031  O       |       |       |       |     0.37
61.000    0.00    0.15      0.030  O       |       |       |       |     0.36
61.083    0.00    0.15      0.029  O       |       |       |       |     0.35
61.167    0.00    0.15      0.028  O       |       |       |       |     0.35
61.250    0.00    0.15      0.027  O       |       |       |       |     0.34
61.333    0.00    0.15      0.026  O       |       |       |       |     0.34
61.417    0.00    0.15      0.025  O       |       |       |       |     0.33
61.500    0.00    0.15      0.024  O       |       |       |       |     0.32
61.583    0.00    0.14      0.023  O       |       |       |       |     0.32
61.667    0.00    0.14      0.022  O       |       |       |       |     0.31
61.750    0.00    0.14      0.021  O       |       |       |       |     0.31
61.833    0.00    0.14      0.020  O       |       |       |       |     0.30
61.917    0.00    0.14      0.019  O       |       |       |       |     0.29
62.000    0.00    0.13      0.018  O       |       |       |       |     0.28
62.083    0.00    0.12      0.018  O       |       |       |       |     0.26
62.167    0.00    0.12      0.017  O       |       |       |       |     0.25
62.250    0.00    0.11      0.016  O       |       |       |       |     0.24
62.333    0.00    0.11      0.015  O       |       |       |       |     0.23
62.417    0.00    0.10      0.014  O       |       |       |       |     0.22
62.500    0.00    0.10      0.014  O       |       |       |       |     0.21

 Remaining water in basin =    0.01 (Ac.Ft)


 ****************************HYDROGRAPH DATA****************************
               Number of intervals =   750
               Time interval =    5.0 (Min.)
               Maximum/Peak flow rate =        1.873 (CFS)
               Total volume =       3.127 (Ac.Ft)
        Status of hydrographs being held in storage
                     Stream 1  Stream 2  Stream 3  Stream 4  Stream 5
        Peak (CFS)      0.000     0.000     0.000     0.000     0.000
        Vol (Ac.Ft)      0.000     0.000     0.000     0.000     0.000
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FLOOD HYDROGRAPH ROUTING PROGRAM
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Study date: 08/18/25

Program License Serial Number 5006

********** HYDROGRAPH INFORMATION **********

From study/file name: PROA35.rte
**********HYDROGRAPH DATA**********
Number of intervals = 54
Time interval = 5.0 (Min.)
Maximum/Peak flow rate = 46.310 (CFS)
Total volume = 4.060 (Ac.Ft)

Status of hydrographs being held in storage

	Stream 1	Stream 2	Stream 3	Stream 4	Stream 5
Peak (CFS)	0.000	0.000	0.000	0.000	0.000
Vol (Ac.Ft)	0.000	0.000	0.000	0.000	0.000

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Process from Point/Station 0.000 to Point/Station 0.000
**** RETARDING BASIN ROUTING ****

User entry of depth-outflow-storage data

Total number of inflow hydrograph intervals = 54
Hydrograph time unit = 5.000 (Min.)
Initial depth in storage basin = 0.00(Ft.)

Initial basin depth = 0.00 (Ft.)
Initial basin storage = 0.00 (Ac.Ft)
Initial basin outflow = 0.00 (CFS)

Depth vs. Storage and Depth vs. Discharge data:

Basin Depth (Ft.)	Storage (Ac.Ft)	Outflow (CFS)	(S-O*dt/2) (Ac.Ft)	(S+O*dt/2) (Ac.Ft)
0.000	0.000	0.000	0.000	0.000
0.300	0.020	0.142	0.020	0.020
1.300	0.192	0.296	0.191	0.193
2.300	0.466	0.394	0.465	0.467
3.300	0.766	0.469	0.764	0.768
4.300	1.126	0.536	1.124	1.128
5.500	1.640	0.610	1.638	1.642
6.300	2.007	1.299	2.003	2.011
8.300	3.066	1.957	3.059	3.073
10.300	4.341	2.417	4.333	4.349
11.400	5.141	2.632	5.132	5.150
12.300	5.851	167.187	5.275	6.427
13.300	6.699	657.066	4.436	8.962
14.300	7.611	1377.819	2.866	12.356

Hydrograph Detention Basin Routing

Graph values: 'I'= unit inflow; 'O'=outflow at time shown

Time (Hours)	Inflow (CFS)	Outflow (CFS)	Storage (Ac.Ft)	.0	11.6	23.16	34.73	46.31	Depth (Ft.)
0.083	0.33	0.01	0.001	O	|	|	|	|	0.02
0.167	1.70	0.06	0.008	OI	|	|	|	|	0.12
0.250	3.48	0.15	0.025	O I	|	|	|	|	0.33
0.333	4.36	0.17	0.051	O I	|	|	|	|	0.48
0.417	4.99	0.20	0.082	O I	|	|	|	|	0.66
0.500	5.80	0.23	0.118	O I	|	|	|	|	0.87
0.583	6.52	0.27	0.158	O I	|	|	|	|	1.10
0.667	6.98	0.30	0.203	O I	|	|	|	|	1.34
0.750	7.31	0.32	0.250	O I	|	|	|	|	1.51
0.833	7.70	0.33	0.299	O I	|	|	|	|	1.69
0.917	7.72	0.35	0.350	O I	|	|	|	|	1.88
1.000	7.66	0.37	0.401	O I	|	|	|	|	2.06
1.083	8.02	0.39	0.452	O I	|	|	|	|	2.25
1.167	8.81	0.40	0.507	O I	|	|	|	|	2.44
1.250	9.58	0.42	0.568	O I	|	|	|	|	2.64
1.333	9.94	0.44	0.632	O I	|	|	|	|	2.85
1.417	10.12	0.45	0.698	O I	|	|	|	|	3.07
1.500	10.67	0.47	0.766	O I	|	|	|	|	3.30
1.583	11.52	0.48	0.840	O I	|	|	|	|	3.50
1.667	11.89	0.50	0.917	O I	|	|	|	|	3.72
1.750	12.28	0.51	0.997	O I	|	|	|	|	3.94
1.833	13.37	0.53	1.081	O I	|	|	|	|	4.18
1.917	14.27	0.54	1.173	O I	|	|	|	|	4.41
2.000	14.32	0.56	1.268	O I	|	|	|	|	4.63
2.083	14.30	0.57	1.362	O I	|	|	|	|	4.85
2.167	15.07	0.58	1.459	O I	|	|	|	|	5.08
2.250	17.99	0.60	1.569	O I	|	|	|	|	5.33
2.333	22.10	0.73	1.703	O I	|	|	|	|	5.64
2.417	24.58	1.02	1.857	O I	|	|	|	|	5.97
2.500	29.67	1.32	2.036	O I	|	|	|	|	6.36
2.583	39.40	1.46	2.264	|O I	|	|	|	|	6.79
2.667	46.31	1.64	2.549	|O I	|	|	|	|	7.32
2.750	45.42	1.82	2.853	|O I	|	|	|	|	7.90
2.833	35.20	1.98	3.117	|O I	|	|	|	|	8.38
2.917	24.24	2.04	3.308	|O I	|	|	|	|	8.68
3.000	18.41	2.09	3.441	|O I	|	|	|	|	8.89
3.083	14.42	2.13	3.539	|O I	|	|	|	|	9.04
3.167	10.42	2.15	3.610	|O I	|	|	|	|	9.15
3.250	7.43	2.17	3.657	|O I	|	|	|	|	9.23
3.333	5.66	2.18	3.687	|O I	|	|	|	|	9.27
3.417	4.47	2.19	3.707	|O I	|	|	|	|	9.31
3.500	3.61	2.19	3.719	|OI	|	|	|	|	9.32
3.583	2.91	2.20	3.727	|OI	|	|	|	|	9.34
3.667	2.31	2.20	3.730	|O	|	|	|	|	9.34
3.750	1.81	2.20	3.729	|O	|	|	|	|	9.34
3.833	1.44	2.19	3.725	IO	|	|	|	|	9.33
3.917	1.14	2.19	3.719	IO	|	|	|	|	9.32
4.000	0.83	2.19	3.710	IO	|	|	|	|	9.31
4.083	0.52	2.19	3.700	IO	|	|	|	|	9.29
4.167	0.26	2.18	3.687	IO	|	|	|	|	9.27
4.250	0.12	2.18	3.674	IO	|	|	|	|	9.25
4.333	0.08	2.17	3.659	IO	|	|	|	|	9.23
4.417	0.04	2.17	3.645	IO	|	|	|	|	9.21
4.500	0.01	2.16	3.630	IO	|	|	|	|	9.18
4.583	0.00	2.16	3.615	IO	|	|	|	|	9.16
4.667	0.00	2.15	3.600	IO	|	|	|	|	9.14
4.750	0.00	2.14	3.586	IO	|	|	|	|	9.12
4.833	0.00	2.14	3.571	IO	|	|	|	|	9.09
4.917	0.00	2.13	3.556	IO	|	|	|	|	9.07
5.000	0.00	2.13	3.542	IO	|	|	|	|	9.05
5.083	0.00	2.12	3.527	IO	|	|	|	|	9.02
5.167	0.00	2.12	3.512	IO	|	|	|	|	9.00
5.250	0.00	2.11	3.498	IO	|	|	|	|	8.98
5.333	0.00	2.11	3.483	IO	|	|	|	|	8.95
5.417	0.00	2.10	3.469	IO	|	|	|	|	8.93
5.500	0.00	2.10	3.454	IO	|	|	|	|	8.91
5.583	0.00	2.09	3.440	IO	|	|	|	|	8.89
5.667	0.00	2.09	3.425	IO	|	|	|	|	8.86
5.750	0.00	2.08	3.411	IO	|	|	|	|	8.84

5.833	0.00	2.08	3.397	IO					8.82
5.917	0.00	2.07	3.382	IO					8.80
6.000	0.00	2.07	3.368	IO					8.77
6.083	0.00	2.06	3.354	IO					8.75
6.167	0.00	2.06	3.340	IO					8.73
6.250	0.00	2.05	3.326	IO					8.71
6.333	0.00	2.05	3.312	IO					8.69
6.417	0.00	2.04	3.298	IO					8.66
6.500	0.00	2.04	3.283	IO					8.64
6.583	0.00	2.03	3.269	IO					8.62
6.667	0.00	2.03	3.256	IO					8.60
6.750	0.00	2.02	3.242	IO					8.58
6.833	0.00	2.02	3.228	IO					8.55
6.917	0.00	2.01	3.214	IO					8.53
7.000	0.00	2.01	3.200	IO					8.51
7.083	0.00	2.00	3.186	IO					8.49
7.167	0.00	2.00	3.172	IO					8.47
7.250	0.00	1.99	3.159	IO					8.45
7.333	0.00	1.99	3.145	IO					8.42
7.417	0.00	1.98	3.131	IO					8.40
7.500	0.00	1.98	3.118	IO					8.38
7.583	0.00	1.97	3.104	IO					8.36
7.667	0.00	1.97	3.091	IO					8.34
7.750	0.00	1.96	3.077	IO					8.32
7.833	0.00	1.96	3.064	IO					8.30
7.917	0.00	1.95	3.050	IO					8.27
8.000	0.00	1.94	3.037	IO					8.24
8.083	0.00	1.93	3.023	IO					8.22
8.167	0.00	1.92	3.010	IO					8.19
8.250	0.00	1.91	2.997	IO					8.17
8.333	0.00	1.91	2.984	IO					8.14
8.417	0.00	1.90	2.971	IO					8.12
8.500	0.00	1.89	2.958	IO					8.10
8.583	0.00	1.88	2.945	IO					8.07
8.667	0.00	1.87	2.932	IO					8.05
8.750	0.00	1.87	2.919	IO					8.02
8.833	0.00	1.86	2.906	IO					8.00
8.917	0.00	1.85	2.893	IO					7.97
9.000	0.00	1.84	2.881	IO					7.95
9.083	0.00	1.83	2.868	IO					7.93
9.167	0.00	1.83	2.855	IO					7.90
9.250	0.00	1.82	2.843	IO					7.88
9.333	0.00	1.81	2.830	IO					7.85
9.417	0.00	1.80	2.818	IO					7.83
9.500	0.00	1.80	2.805	IO					7.81
9.583	0.00	1.79	2.793	IO					7.78
9.667	0.00	1.78	2.781	IO					7.76
9.750	0.00	1.77	2.769	IO					7.74
9.833	0.00	1.76	2.756	IO					7.72
9.917	0.00	1.76	2.744	IO					7.69
10.000	0.00	1.75	2.732	IO					7.67
10.083	0.00	1.74	2.720	IO					7.65
10.167	0.00	1.73	2.708	IO					7.62
10.250	0.00	1.73	2.696	IO					7.60
10.333	0.00	1.72	2.684	IO					7.58
10.417	0.00	1.71	2.673	IO					7.56
10.500	0.00	1.71	2.661	IO					7.53
10.583	0.00	1.70	2.649	IO					7.51
10.667	0.00	1.69	2.637	IO					7.49
10.750	0.00	1.68	2.626	IO					7.47
10.833	0.00	1.68	2.614	IO					7.45
10.917	0.00	1.67	2.603	IO					7.43
11.000	0.00	1.66	2.591	IO					7.40
11.083	0.00	1.65	2.580	IO					7.38
11.167	0.00	1.65	2.568	IO					7.36
11.250	0.00	1.64	2.557	IO					7.34
11.333	0.00	1.63	2.546	IO					7.32
11.417	0.00	1.63	2.535	IO					7.30
11.500	0.00	1.62	2.523	IO					7.28
11.583	0.00	1.61	2.512	IO					7.25
11.667	0.00	1.61	2.501	IO					7.23

11.750	0.00	1.60	2.490	IO					7.21
11.833	0.00	1.59	2.479	IO					7.19
11.917	0.00	1.59	2.468	IO					7.17
12.000	0.00	1.58	2.457	IO					7.15
12.083	0.00	1.57	2.447	IO					7.13
12.167	0.00	1.57	2.436	IO					7.11
12.250	0.00	1.56	2.425	IO					7.09
12.333	0.00	1.55	2.414	IO					7.07
12.417	0.00	1.55	2.404	IO					7.05
12.500	0.00	1.54	2.393	IO					7.03
12.583	0.00	1.53	2.382	IO					7.01
12.667	0.00	1.53	2.372	IO					6.99
12.750	0.00	1.52	2.361	IO					6.97
12.833	0.00	1.51	2.351	IO					6.95
12.917	0.00	1.51	2.341	IO					6.93
13.000	0.00	1.50	2.330	IO					6.91
13.083	0.00	1.49	2.320	IO					6.89
13.167	0.00	1.49	2.310	IO					6.87
13.250	0.00	1.48	2.299	IO					6.85
13.333	0.00	1.47	2.289	IO					6.83
13.417	0.00	1.47	2.279	IO					6.81
13.500	0.00	1.46	2.269	IO					6.79
13.583	0.00	1.46	2.259	IO					6.78
13.667	0.00	1.45	2.249	IO					6.76
13.750	0.00	1.44	2.239	O					6.74
13.833	0.00	1.44	2.229	O					6.72
13.917	0.00	1.43	2.219	O					6.70
14.000	0.00	1.42	2.209	O					6.68
14.083	0.00	1.42	2.200	O					6.66
14.167	0.00	1.41	2.190	O					6.65
14.250	0.00	1.41	2.180	O					6.63
14.333	0.00	1.40	2.170	O					6.61
14.417	0.00	1.39	2.161	O					6.59
14.500	0.00	1.39	2.151	O					6.57
14.583	0.00	1.38	2.142	O					6.55
14.667	0.00	1.38	2.132	O					6.54
14.750	0.00	1.37	2.123	O					6.52
14.833	0.00	1.37	2.113	O					6.50
14.917	0.00	1.36	2.104	O					6.48
15.000	0.00	1.35	2.095	O					6.47
15.083	0.00	1.35	2.085	O					6.45
15.167	0.00	1.34	2.076	O					6.43
15.250	0.00	1.34	2.067	O					6.41
15.333	0.00	1.33	2.058	O					6.40
15.417	0.00	1.32	2.048	O					6.38
15.500	0.00	1.32	2.039	O					6.36
15.583	0.00	1.31	2.030	O					6.34
15.667	0.00	1.31	2.021	O					6.33
15.750	0.00	1.30	2.012	O					6.31
15.833	0.00	1.29	2.003	O					6.29
15.917	0.00	1.28	1.995	O					6.27
16.000	0.00	1.26	1.986	O					6.25
16.083	0.00	1.24	1.977	O					6.23
16.167	0.00	1.23	1.969	O					6.22
16.250	0.00	1.21	1.960	O					6.20
16.333	0.00	1.20	1.952	O					6.18
16.417	0.00	1.18	1.944	O					6.16
16.500	0.00	1.17	1.936	O					6.14
16.583	0.00	1.15	1.928	O					6.13
16.667	0.00	1.14	1.920	O					6.11
16.750	0.00	1.12	1.912	O					6.09
16.833	0.00	1.11	1.904	O					6.08
16.917	0.00	1.09	1.897	O					6.06
17.000	0.00	1.08	1.889	O					6.04
17.083	0.00	1.06	1.882	O					6.03
17.167	0.00	1.05	1.875	O					6.01
17.250	0.00	1.04	1.868	O					6.00
17.333	0.00	1.02	1.860	O					5.98
17.417	0.00	1.01	1.853	O					5.97
17.500	0.00	1.00	1.847	O					5.95
17.583	0.00	0.98	1.840	O					5.94

17.667	0.00	0.97	1.833	O	|	|	|	|	5.92
17.750	0.00	0.96	1.826	O	|	|	|	|	5.91
17.833	0.00	0.95	1.820	O	|	|	|	|	5.89
17.917	0.00	0.94	1.813	O	|	|	|	|	5.88
18.000	0.00	0.92	1.807	O	|	|	|	|	5.86
18.083	0.00	0.91	1.801	O	|	|	|	|	5.85
18.167	0.00	0.90	1.794	O	|	|	|	|	5.84
18.250	0.00	0.89	1.788	O	|	|	|	|	5.82
18.333	0.00	0.88	1.782	O	|	|	|	|	5.81
18.417	0.00	0.87	1.776	O	|	|	|	|	5.80
18.500	0.00	0.85	1.770	O	|	|	|	|	5.78
18.583	0.00	0.84	1.764	O	|	|	|	|	5.77
18.667	0.00	0.83	1.759	O	|	|	|	|	5.76
18.750	0.00	0.82	1.753	O	|	|	|	|	5.75
18.833	0.00	0.81	1.747	O	|	|	|	|	5.73
18.917	0.00	0.80	1.742	O	|	|	|	|	5.72
19.000	0.00	0.79	1.736	O	|	|	|	|	5.71
19.083	0.00	0.78	1.731	O	|	|	|	|	5.70
19.167	0.00	0.77	1.725	O	|	|	|	|	5.69
19.250	0.00	0.76	1.720	O	|	|	|	|	5.67
19.333	0.00	0.75	1.715	O	|	|	|	|	5.66
19.417	0.00	0.74	1.710	O	|	|	|	|	5.65
19.500	0.00	0.73	1.705	O	|	|	|	|	5.64
19.583	0.00	0.72	1.700	O	|	|	|	|	5.63
19.667	0.00	0.71	1.695	O	|	|	|	|	5.62
19.750	0.00	0.70	1.690	O	|	|	|	|	5.61
19.833	0.00	0.69	1.685	O	|	|	|	|	5.60
19.917	0.00	0.69	1.680	O	|	|	|	|	5.59
20.000	0.00	0.68	1.676	O	|	|	|	|	5.58
20.083	0.00	0.67	1.671	O	|	|	|	|	5.57
20.167	0.00	0.66	1.666	O	|	|	|	|	5.56
20.250	0.00	0.65	1.662	O	|	|	|	|	5.55
20.333	0.00	0.64	1.657	O	|	|	|	|	5.54
20.417	0.00	0.63	1.653	O	|	|	|	|	5.53
20.500	0.00	0.63	1.649	O	|	|	|	|	5.52
20.583	0.00	0.62	1.644	O	|	|	|	|	5.51
20.667	0.00	0.61	1.640	O	|	|	|	|	5.50
20.750	0.00	0.61	1.636	O	|	|	|	|	5.49
20.833	0.00	0.61	1.632	O	|	|	|	|	5.48
20.917	0.00	0.61	1.628	O	|	|	|	|	5.47
21.000	0.00	0.61	1.623	O	|	|	|	|	5.46
21.083	0.00	0.61	1.619	O	|	|	|	|	5.45
21.167	0.00	0.61	1.615	O	|	|	|	|	5.44
21.250	0.00	0.61	1.611	O	|	|	|	|	5.43
21.333	0.00	0.61	1.607	O	|	|	|	|	5.42
21.417	0.00	0.60	1.603	O	|	|	|	|	5.41
21.500	0.00	0.60	1.598	O	|	|	|	|	5.40
21.583	0.00	0.60	1.594	O	|	|	|	|	5.39
21.667	0.00	0.60	1.590	O	|	|	|	|	5.38
21.750	0.00	0.60	1.586	O	|	|	|	|	5.37
21.833	0.00	0.60	1.582	O	|	|	|	|	5.36
21.917	0.00	0.60	1.578	O	|	|	|	|	5.35
22.000	0.00	0.60	1.574	O	|	|	|	|	5.34
22.083	0.00	0.60	1.569	O	|	|	|	|	5.34
22.167	0.00	0.60	1.565	O	|	|	|	|	5.33
22.250	0.00	0.60	1.561	O	|	|	|	|	5.32
22.333	0.00	0.60	1.557	O	|	|	|	|	5.31
22.417	0.00	0.60	1.553	O	|	|	|	|	5.30
22.500	0.00	0.60	1.549	O	|	|	|	|	5.29
22.583	0.00	0.60	1.545	O	|	|	|	|	5.28
22.667	0.00	0.60	1.541	O	|	|	|	|	5.27
22.750	0.00	0.60	1.536	O	|	|	|	|	5.26
22.833	0.00	0.59	1.532	O	|	|	|	|	5.25
22.917	0.00	0.59	1.528	O	|	|	|	|	5.24
23.000	0.00	0.59	1.524	O	|	|	|	|	5.23
23.083	0.00	0.59	1.520	O	|	|	|	|	5.22
23.167	0.00	0.59	1.516	O	|	|	|	|	5.21
23.250	0.00	0.59	1.512	O	|	|	|	|	5.20
23.333	0.00	0.59	1.508	O	|	|	|	|	5.19
23.417	0.00	0.59	1.504	O	|	|	|	|	5.18
23.500	0.00	0.59	1.500	O	|	|	|	|	5.17

23.583	0.00	0.59	1.496	O	|	|	|	|	5.16
23.667	0.00	0.59	1.492	O	|	|	|	|	5.15
23.750	0.00	0.59	1.488	O	|	|	|	|	5.14
23.833	0.00	0.59	1.484	O	|	|	|	|	5.13
23.917	0.00	0.59	1.479	O	|	|	|	|	5.13
24.000	0.00	0.59	1.475	O	|	|	|	|	5.12
24.083	0.00	0.59	1.471	O	|	|	|	|	5.11
24.167	0.00	0.59	1.467	O	|	|	|	|	5.10
24.250	0.00	0.58	1.463	O	|	|	|	|	5.09
24.333	0.00	0.58	1.459	O	|	|	|	|	5.08
24.417	0.00	0.58	1.455	O	|	|	|	|	5.07
24.500	0.00	0.58	1.451	O	|	|	|	|	5.06
24.583	0.00	0.58	1.447	O	|	|	|	|	5.05
24.667	0.00	0.58	1.443	O	|	|	|	|	5.04
24.750	0.00	0.58	1.439	O	|	|	|	|	5.03
24.833	0.00	0.58	1.435	O	|	|	|	|	5.02
24.917	0.00	0.58	1.431	O	|	|	|	|	5.01
25.000	0.00	0.58	1.427	O	|	|	|	|	5.00
25.083	0.00	0.58	1.423	O	|	|	|	|	4.99
25.167	0.00	0.58	1.419	O	|	|	|	|	4.98
25.250	0.00	0.58	1.415	O	|	|	|	|	4.98
25.333	0.00	0.58	1.411	O	|	|	|	|	4.97
25.417	0.00	0.58	1.407	O	|	|	|	|	4.96
25.500	0.00	0.58	1.403	O	|	|	|	|	4.95
25.583	0.00	0.58	1.399	O	|	|	|	|	4.94
25.667	0.00	0.57	1.395	O	|	|	|	|	4.93
25.750	0.00	0.57	1.392	O	|	|	|	|	4.92
25.833	0.00	0.57	1.388	O	|	|	|	|	4.91
25.917	0.00	0.57	1.384	O	|	|	|	|	4.90
26.000	0.00	0.57	1.380	O	|	|	|	|	4.89
26.083	0.00	0.57	1.376	O	|	|	|	|	4.88
26.167	0.00	0.57	1.372	O	|	|	|	|	4.87
26.250	0.00	0.57	1.368	O	|	|	|	|	4.86
26.333	0.00	0.57	1.364	O	|	|	|	|	4.86
26.417	0.00	0.57	1.360	O	|	|	|	|	4.85
26.500	0.00	0.57	1.356	O	|	|	|	|	4.84
26.583	0.00	0.57	1.352	O	|	|	|	|	4.83
26.667	0.00	0.57	1.348	O	|	|	|	|	4.82
26.750	0.00	0.57	1.344	O	|	|	|	|	4.81
26.833	0.00	0.57	1.340	O	|	|	|	|	4.80
26.917	0.00	0.57	1.337	O	|	|	|	|	4.79
27.000	0.00	0.57	1.333	O	|	|	|	|	4.78
27.083	0.00	0.57	1.329	O	|	|	|	|	4.77
27.167	0.00	0.56	1.325	O	|	|	|	|	4.76
27.250	0.00	0.56	1.321	O	|	|	|	|	4.76
27.333	0.00	0.56	1.317	O	|	|	|	|	4.75
27.417	0.00	0.56	1.313	O	|	|	|	|	4.74
27.500	0.00	0.56	1.309	O	|	|	|	|	4.73
27.583	0.00	0.56	1.305	O	|	|	|	|	4.72
27.667	0.00	0.56	1.302	O	|	|	|	|	4.71
27.750	0.00	0.56	1.298	O	|	|	|	|	4.70
27.833	0.00	0.56	1.294	O	|	|	|	|	4.69
27.917	0.00	0.56	1.290	O	|	|	|	|	4.68
28.000	0.00	0.56	1.286	O	|	|	|	|	4.67
28.083	0.00	0.56	1.282	O	|	|	|	|	4.66
28.167	0.00	0.56	1.278	O	|	|	|	|	4.66
28.250	0.00	0.56	1.275	O	|	|	|	|	4.65
28.333	0.00	0.56	1.271	O	|	|	|	|	4.64
28.417	0.00	0.56	1.267	O	|	|	|	|	4.63
28.500	0.00	0.56	1.263	O	|	|	|	|	4.62
28.583	0.00	0.56	1.259	O	|	|	|	|	4.61
28.667	0.00	0.55	1.255	O	|	|	|	|	4.60
28.750	0.00	0.55	1.252	O	|	|	|	|	4.59
28.833	0.00	0.55	1.248	O	|	|	|	|	4.58
28.917	0.00	0.55	1.244	O	|	|	|	|	4.58
29.000	0.00	0.55	1.240	O	|	|	|	|	4.57
29.083	0.00	0.55	1.236	O	|	|	|	|	4.56
29.167	0.00	0.55	1.233	O	|	|	|	|	4.55
29.250	0.00	0.55	1.229	O	|	|	|	|	4.54
29.333	0.00	0.55	1.225	O	|	|	|	|	4.53
29.417	0.00	0.55	1.221	O	|	|	|	|	4.52

29.500	0.00	0.55	1.217	O	|	|	|	|	4.51
29.583	0.00	0.55	1.214	O	|	|	|	|	4.50
29.667	0.00	0.55	1.210	O	|	|	|	|	4.50
29.750	0.00	0.55	1.206	O	|	|	|	|	4.49
29.833	0.00	0.55	1.202	O	|	|	|	|	4.48
29.917	0.00	0.55	1.199	O	|	|	|	|	4.47
30.000	0.00	0.55	1.195	O	|	|	|	|	4.46
30.083	0.00	0.55	1.191	O	|	|	|	|	4.45
30.167	0.00	0.54	1.187	O	|	|	|	|	4.44
30.250	0.00	0.54	1.184	O	|	|	|	|	4.43
30.333	0.00	0.54	1.180	O	|	|	|	|	4.43
30.417	0.00	0.54	1.176	O	|	|	|	|	4.42
30.500	0.00	0.54	1.172	O	|	|	|	|	4.41
30.583	0.00	0.54	1.169	O	|	|	|	|	4.40
30.667	0.00	0.54	1.165	O	|	|	|	|	4.39
30.750	0.00	0.54	1.161	O	|	|	|	|	4.38
30.833	0.00	0.54	1.157	O	|	|	|	|	4.37
30.917	0.00	0.54	1.154	O	|	|	|	|	4.36
31.000	0.00	0.54	1.150	O	|	|	|	|	4.36
31.083	0.00	0.54	1.146	O	|	|	|	|	4.35
31.167	0.00	0.54	1.143	O	|	|	|	|	4.34
31.250	0.00	0.54	1.139	O	|	|	|	|	4.33
31.333	0.00	0.54	1.135	O	|	|	|	|	4.32
31.417	0.00	0.54	1.131	O	|	|	|	|	4.31
31.500	0.00	0.54	1.128	O	|	|	|	|	4.30
31.583	0.00	0.54	1.124	O	|	|	|	|	4.29
31.667	0.00	0.53	1.120	O	|	|	|	|	4.28
31.750	0.00	0.53	1.117	O	|	|	|	|	4.27
31.833	0.00	0.53	1.113	O	|	|	|	|	4.26
31.917	0.00	0.53	1.109	O	|	|	|	|	4.25
32.000	0.00	0.53	1.106	O	|	|	|	|	4.24
32.083	0.00	0.53	1.102	O	|	|	|	|	4.23
32.167	0.00	0.53	1.098	O	|	|	|	|	4.22
32.250	0.00	0.53	1.095	O	|	|	|	|	4.21
32.333	0.00	0.53	1.091	O	|	|	|	|	4.20
32.417	0.00	0.53	1.087	O	|	|	|	|	4.19
32.500	0.00	0.53	1.084	O	|	|	|	|	4.18
32.583	0.00	0.53	1.080	O	|	|	|	|	4.17
32.667	0.00	0.53	1.077	O	|	|	|	|	4.16
32.750	0.00	0.53	1.073	O	|	|	|	|	4.15
32.833	0.00	0.53	1.069	O	|	|	|	|	4.14
32.917	0.00	0.52	1.066	O	|	|	|	|	4.13
33.000	0.00	0.52	1.062	O	|	|	|	|	4.12
33.083	0.00	0.52	1.058	O	|	|	|	|	4.11
33.167	0.00	0.52	1.055	O	|	|	|	|	4.10
33.250	0.00	0.52	1.051	O	|	|	|	|	4.09
33.333	0.00	0.52	1.048	O	|	|	|	|	4.08
33.417	0.00	0.52	1.044	O	|	|	|	|	4.07
33.500	0.00	0.52	1.040	O	|	|	|	|	4.06
33.583	0.00	0.52	1.037	O	|	|	|	|	4.05
33.667	0.00	0.52	1.033	O	|	|	|	|	4.04
33.750	0.00	0.52	1.030	O	|	|	|	|	4.03
33.833	0.00	0.52	1.026	O	|	|	|	|	4.02
33.917	0.00	0.52	1.023	O	|	|	|	|	4.01
34.000	0.00	0.52	1.019	O	|	|	|	|	4.00
34.083	0.00	0.52	1.016	O	|	|	|	|	3.99
34.167	0.00	0.51	1.012	O	|	|	|	|	3.98
34.250	0.00	0.51	1.008	O	|	|	|	|	3.97
34.333	0.00	0.51	1.005	O	|	|	|	|	3.96
34.417	0.00	0.51	1.001	O	|	|	|	|	3.95
34.500	0.00	0.51	0.998	O	|	|	|	|	3.94
34.583	0.00	0.51	0.994	O	|	|	|	|	3.93
34.667	0.00	0.51	0.991	O	|	|	|	|	3.92
34.750	0.00	0.51	0.987	O	|	|	|	|	3.91
34.833	0.00	0.51	0.984	O	|	|	|	|	3.90
34.917	0.00	0.51	0.980	O	|	|	|	|	3.90
35.000	0.00	0.51	0.977	O	|	|	|	|	3.89
35.083	0.00	0.51	0.973	O	|	|	|	|	3.88
35.167	0.00	0.51	0.970	O	|	|	|	|	3.87
35.250	0.00	0.51	0.966	O	|	|	|	|	3.86
35.333	0.00	0.51	0.963	O	|	|	|	|	3.85

35.417	0.00	0.50	0.959	O	|	|	|	|	3.84
35.500	0.00	0.50	0.956	O	|	|	|	|	3.83
35.583	0.00	0.50	0.952	O	|	|	|	|	3.82
35.667	0.00	0.50	0.949	O	|	|	|	|	3.81
35.750	0.00	0.50	0.945	O	|	|	|	|	3.80
35.833	0.00	0.50	0.942	O	|	|	|	|	3.79
35.917	0.00	0.50	0.939	O	|	|	|	|	3.78
36.000	0.00	0.50	0.935	O	|	|	|	|	3.77
36.083	0.00	0.50	0.932	O	|	|	|	|	3.76
36.167	0.00	0.50	0.928	O	|	|	|	|	3.75
36.250	0.00	0.50	0.925	O	|	|	|	|	3.74
36.333	0.00	0.50	0.921	O	|	|	|	|	3.73
36.417	0.00	0.50	0.918	O	|	|	|	|	3.72
36.500	0.00	0.50	0.914	O	|	|	|	|	3.71
36.583	0.00	0.50	0.911	O	|	|	|	|	3.70
36.667	0.00	0.50	0.908	O	|	|	|	|	3.69
36.750	0.00	0.49	0.904	O	|	|	|	|	3.68
36.833	0.00	0.49	0.901	O	|	|	|	|	3.67
36.917	0.00	0.49	0.897	O	|	|	|	|	3.67
37.000	0.00	0.49	0.894	O	|	|	|	|	3.66
37.083	0.00	0.49	0.891	O	|	|	|	|	3.65
37.167	0.00	0.49	0.887	O	|	|	|	|	3.64
37.250	0.00	0.49	0.884	O	|	|	|	|	3.63
37.333	0.00	0.49	0.880	O	|	|	|	|	3.62
37.417	0.00	0.49	0.877	O	|	|	|	|	3.61
37.500	0.00	0.49	0.874	O	|	|	|	|	3.60
37.583	0.00	0.49	0.870	O	|	|	|	|	3.59
37.667	0.00	0.49	0.867	O	|	|	|	|	3.58
37.750	0.00	0.49	0.864	O	|	|	|	|	3.57
37.833	0.00	0.49	0.860	O	|	|	|	|	3.56
37.917	0.00	0.49	0.857	O	|	|	|	|	3.55
38.000	0.00	0.49	0.854	O	|	|	|	|	3.54
38.083	0.00	0.48	0.850	O	|	|	|	|	3.53
38.167	0.00	0.48	0.847	O	|	|	|	|	3.52
38.250	0.00	0.48	0.844	O	|	|	|	|	3.52
38.333	0.00	0.48	0.840	O	|	|	|	|	3.51
38.417	0.00	0.48	0.837	O	|	|	|	|	3.50
38.500	0.00	0.48	0.834	O	|	|	|	|	3.49
38.583	0.00	0.48	0.830	O	|	|	|	|	3.48
38.667	0.00	0.48	0.827	O	|	|	|	|	3.47
38.750	0.00	0.48	0.824	O	|	|	|	|	3.46
38.833	0.00	0.48	0.820	O	|	|	|	|	3.45
38.917	0.00	0.48	0.817	O	|	|	|	|	3.44
39.000	0.00	0.48	0.814	O	|	|	|	|	3.43
39.083	0.00	0.48	0.811	O	|	|	|	|	3.42
39.167	0.00	0.48	0.807	O	|	|	|	|	3.41
39.250	0.00	0.48	0.804	O	|	|	|	|	3.41
39.333	0.00	0.48	0.801	O	|	|	|	|	3.40
39.417	0.00	0.47	0.797	O	|	|	|	|	3.39
39.500	0.00	0.47	0.794	O	|	|	|	|	3.38
39.583	0.00	0.47	0.791	O	|	|	|	|	3.37
39.667	0.00	0.47	0.788	O	|	|	|	|	3.36
39.750	0.00	0.47	0.784	O	|	|	|	|	3.35
39.833	0.00	0.47	0.781	O	|	|	|	|	3.34
39.917	0.00	0.47	0.778	O	|	|	|	|	3.33
40.000	0.00	0.47	0.775	O	|	|	|	|	3.32
40.083	0.00	0.47	0.771	O	|	|	|	|	3.31
40.167	0.00	0.47	0.768	O	|	|	|	|	3.31
40.250	0.00	0.47	0.765	O	|	|	|	|	3.30
40.333	0.00	0.47	0.762	O	|	|	|	|	3.29
40.417	0.00	0.47	0.758	O	|	|	|	|	3.27
40.500	0.00	0.47	0.755	O	|	|	|	|	3.26
40.583	0.00	0.47	0.752	O	|	|	|	|	3.25
40.667	0.00	0.46	0.749	O	|	|	|	|	3.24
40.750	0.00	0.46	0.746	O	|	|	|	|	3.23
40.833	0.00	0.46	0.742	O	|	|	|	|	3.22
40.917	0.00	0.46	0.739	O	|	|	|	|	3.21
41.000	0.00	0.46	0.736	O	|	|	|	|	3.20
41.083	0.00	0.46	0.733	O	|	|	|	|	3.19
41.167	0.00	0.46	0.730	O	|	|	|	|	3.18
41.250	0.00	0.46	0.727	O	|	|	|	|	3.17

41.333	0.00	0.46	0.723	O					3.16
41.417	0.00	0.46	0.720	O					3.15
41.500	0.00	0.46	0.717	O					3.14
41.583	0.00	0.46	0.714	O					3.13
41.667	0.00	0.46	0.711	O					3.12
41.750	0.00	0.45	0.708	O					3.11
41.833	0.00	0.45	0.705	O					3.10
41.917	0.00	0.45	0.701	O					3.08
42.000	0.00	0.45	0.698	O					3.07
42.083	0.00	0.45	0.695	O					3.06
42.167	0.00	0.45	0.692	O					3.05
42.250	0.00	0.45	0.689	O					3.04
42.333	0.00	0.45	0.686	O					3.03
42.417	0.00	0.45	0.683	O					3.02
42.500	0.00	0.45	0.680	O					3.01
42.583	0.00	0.45	0.677	O					3.00
42.667	0.00	0.45	0.674	O					2.99
42.750	0.00	0.45	0.671	O					2.98
42.833	0.00	0.44	0.667	O					2.97
42.917	0.00	0.44	0.664	O					2.96
43.000	0.00	0.44	0.661	O					2.95
43.083	0.00	0.44	0.658	O					2.94
43.167	0.00	0.44	0.655	O					2.93
43.250	0.00	0.44	0.652	O					2.92
43.333	0.00	0.44	0.649	O					2.91
43.417	0.00	0.44	0.646	O					2.90
43.500	0.00	0.44	0.643	O					2.89
43.583	0.00	0.44	0.640	O					2.88
43.667	0.00	0.44	0.637	O					2.87
43.750	0.00	0.44	0.634	O					2.86
43.833	0.00	0.44	0.631	O					2.85
43.917	0.00	0.43	0.628	O					2.84
44.000	0.00	0.43	0.625	O					2.83
44.083	0.00	0.43	0.622	O					2.82
44.167	0.00	0.43	0.619	O					2.81
44.250	0.00	0.43	0.616	O					2.80
44.333	0.00	0.43	0.613	O					2.79
44.417	0.00	0.43	0.610	O					2.78
44.500	0.00	0.43	0.607	O					2.77
44.583	0.00	0.43	0.604	O					2.76
44.667	0.00	0.43	0.601	O					2.75
44.750	0.00	0.43	0.598	O					2.74
44.833	0.00	0.43	0.596	O					2.73
44.917	0.00	0.43	0.593	O					2.72
45.000	0.00	0.42	0.590	O					2.71
45.083	0.00	0.42	0.587	O					2.70
45.167	0.00	0.42	0.584	O					2.69
45.250	0.00	0.42	0.581	O					2.68
45.333	0.00	0.42	0.578	O					2.67
45.417	0.00	0.42	0.575	O					2.66
45.500	0.00	0.42	0.572	O					2.65
45.583	0.00	0.42	0.569	O					2.64
45.667	0.00	0.42	0.566	O					2.63
45.750	0.00	0.42	0.564	O					2.63
45.833	0.00	0.42	0.561	O					2.62
45.917	0.00	0.42	0.558	O					2.61
46.000	0.00	0.42	0.555	O					2.60
46.083	0.00	0.42	0.552	O					2.59
46.167	0.00	0.41	0.549	O					2.58
46.250	0.00	0.41	0.546	O					2.57
46.333	0.00	0.41	0.543	O					2.56
46.417	0.00	0.41	0.541	O					2.55
46.500	0.00	0.41	0.538	O					2.54
46.583	0.00	0.41	0.535	O					2.53
46.667	0.00	0.41	0.532	O					2.52
46.750	0.00	0.41	0.529	O					2.51
46.833	0.00	0.41	0.526	O					2.50
46.917	0.00	0.41	0.524	O					2.49
47.000	0.00	0.41	0.521	O					2.48
47.083	0.00	0.41	0.518	O					2.47
47.167	0.00	0.41	0.515	O					2.46

47.250	0.00	0.41	0.512	O	|	|	|	|	2.45
47.333	0.00	0.40	0.510	O	|	|	|	|	2.45
47.417	0.00	0.40	0.507	O	|	|	|	|	2.44
47.500	0.00	0.40	0.504	O	|	|	|	|	2.43
47.583	0.00	0.40	0.501	O	|	|	|	|	2.42
47.667	0.00	0.40	0.499	O	|	|	|	|	2.41
47.750	0.00	0.40	0.496	O	|	|	|	|	2.40
47.833	0.00	0.40	0.493	O	|	|	|	|	2.39
47.917	0.00	0.40	0.490	O	|	|	|	|	2.38
48.000	0.00	0.40	0.487	O	|	|	|	|	2.37
48.083	0.00	0.40	0.485	O	|	|	|	|	2.36
48.167	0.00	0.40	0.482	O	|	|	|	|	2.35
48.250	0.00	0.40	0.479	O	|	|	|	|	2.34
48.333	0.00	0.40	0.477	O	|	|	|	|	2.34
48.417	0.00	0.40	0.474	O	|	|	|	|	2.33
48.500	0.00	0.40	0.471	O	|	|	|	|	2.32
48.583	0.00	0.39	0.468	O	|	|	|	|	2.31
48.667	0.00	0.39	0.466	O	|	|	|	|	2.30
48.750	0.00	0.39	0.463	O	|	|	|	|	2.29
48.833	0.00	0.39	0.460	O	|	|	|	|	2.28
48.917	0.00	0.39	0.458	O	|	|	|	|	2.27
49.000	0.00	0.39	0.455	O	|	|	|	|	2.26
49.083	0.00	0.39	0.452	O	|	|	|	|	2.25
49.167	0.00	0.39	0.449	O	|	|	|	|	2.24
49.250	0.00	0.39	0.447	O	|	|	|	|	2.23
49.333	0.00	0.39	0.444	O	|	|	|	|	2.22
49.417	0.00	0.39	0.441	O	|	|	|	|	2.21
49.500	0.00	0.38	0.439	O	|	|	|	|	2.20
49.583	0.00	0.38	0.436	O	|	|	|	|	2.19
49.667	0.00	0.38	0.434	O	|	|	|	|	2.18
49.750	0.00	0.38	0.431	O	|	|	|	|	2.17
49.833	0.00	0.38	0.428	O	|	|	|	|	2.16
49.917	0.00	0.38	0.426	O	|	|	|	|	2.15
50.000	0.00	0.38	0.423	O	|	|	|	|	2.14
50.083	0.00	0.38	0.420	O	|	|	|	|	2.13
50.167	0.00	0.38	0.418	O	|	|	|	|	2.12
50.250	0.00	0.38	0.415	O	|	|	|	|	2.11
50.333	0.00	0.37	0.413	O	|	|	|	|	2.11
50.417	0.00	0.37	0.410	O	|	|	|	|	2.10
50.500	0.00	0.37	0.408	O	|	|	|	|	2.09
50.583	0.00	0.37	0.405	O	|	|	|	|	2.08
50.667	0.00	0.37	0.402	O	|	|	|	|	2.07
50.750	0.00	0.37	0.400	O	|	|	|	|	2.06
50.833	0.00	0.37	0.397	O	|	|	|	|	2.05
50.917	0.00	0.37	0.395	O	|	|	|	|	2.04
51.000	0.00	0.37	0.392	O	|	|	|	|	2.03
51.083	0.00	0.37	0.390	O	|	|	|	|	2.02
51.167	0.00	0.37	0.387	O	|	|	|	|	2.01
51.250	0.00	0.36	0.385	O	|	|	|	|	2.00
51.333	0.00	0.36	0.382	O	|	|	|	|	1.99
51.417	0.00	0.36	0.380	O	|	|	|	|	1.98
51.500	0.00	0.36	0.377	O	|	|	|	|	1.98
51.583	0.00	0.36	0.375	O	|	|	|	|	1.97
51.667	0.00	0.36	0.372	O	|	|	|	|	1.96
51.750	0.00	0.36	0.370	O	|	|	|	|	1.95
51.833	0.00	0.36	0.367	O	|	|	|	|	1.94
51.917	0.00	0.36	0.365	O	|	|	|	|	1.93
52.000	0.00	0.36	0.362	O	|	|	|	|	1.92
52.083	0.00	0.36	0.360	O	|	|	|	|	1.91
52.167	0.00	0.36	0.357	O	|	|	|	|	1.90
52.250	0.00	0.35	0.355	O	|	|	|	|	1.89
52.333	0.00	0.35	0.353	O	|	|	|	|	1.89
52.417	0.00	0.35	0.350	O	|	|	|	|	1.88
52.500	0.00	0.35	0.348	O	|	|	|	|	1.87
52.583	0.00	0.35	0.345	O	|	|	|	|	1.86
52.667	0.00	0.35	0.343	O	|	|	|	|	1.85
52.750	0.00	0.35	0.340	O	|	|	|	|	1.84
52.833	0.00	0.35	0.338	O	|	|	|	|	1.83
52.917	0.00	0.35	0.336	O	|	|	|	|	1.82
53.000	0.00	0.35	0.333	O	|	|	|	|	1.82
53.083	0.00	0.35	0.331	O	|	|	|	|	1.81

53.167	0.00	0.34	0.328	O	|	|	|	|	1.80
53.250	0.00	0.34	0.326	O	|	|	|	|	1.79
53.333	0.00	0.34	0.324	O	|	|	|	|	1.78
53.417	0.00	0.34	0.321	O	|	|	|	|	1.77
53.500	0.00	0.34	0.319	O	|	|	|	|	1.76
53.583	0.00	0.34	0.317	O	|	|	|	|	1.76
53.667	0.00	0.34	0.314	O	|	|	|	|	1.75
53.750	0.00	0.34	0.312	O	|	|	|	|	1.74
53.833	0.00	0.34	0.310	O	|	|	|	|	1.73
53.917	0.00	0.34	0.307	O	|	|	|	|	1.72
54.000	0.00	0.34	0.305	O	|	|	|	|	1.71
54.083	0.00	0.34	0.303	O	|	|	|	|	1.70
54.167	0.00	0.33	0.300	O	|	|	|	|	1.70
54.250	0.00	0.33	0.298	O	|	|	|	|	1.69
54.333	0.00	0.33	0.296	O	|	|	|	|	1.68
54.417	0.00	0.33	0.294	O	|	|	|	|	1.67
54.500	0.00	0.33	0.291	O	|	|	|	|	1.66
54.583	0.00	0.33	0.289	O	|	|	|	|	1.65
54.667	0.00	0.33	0.287	O	|	|	|	|	1.65
54.750	0.00	0.33	0.284	O	|	|	|	|	1.64
54.833	0.00	0.33	0.282	O	|	|	|	|	1.63
54.917	0.00	0.33	0.280	O	|	|	|	|	1.62
55.000	0.00	0.33	0.278	O	|	|	|	|	1.61
55.083	0.00	0.33	0.275	O	|	|	|	|	1.60
55.167	0.00	0.33	0.273	O	|	|	|	|	1.60
55.250	0.00	0.32	0.271	O	|	|	|	|	1.59
55.333	0.00	0.32	0.269	O	|	|	|	|	1.58
55.417	0.00	0.32	0.266	O	|	|	|	|	1.57
55.500	0.00	0.32	0.264	O	|	|	|	|	1.56
55.583	0.00	0.32	0.262	O	|	|	|	|	1.56
55.667	0.00	0.32	0.260	O	|	|	|	|	1.55
55.750	0.00	0.32	0.258	O	|	|	|	|	1.54
55.833	0.00	0.32	0.255	O	|	|	|	|	1.53
55.917	0.00	0.32	0.253	O	|	|	|	|	1.52
56.000	0.00	0.32	0.251	O	|	|	|	|	1.52
56.083	0.00	0.32	0.249	O	|	|	|	|	1.51
56.167	0.00	0.32	0.247	O	|	|	|	|	1.50
56.250	0.00	0.31	0.245	O	|	|	|	|	1.49
56.333	0.00	0.31	0.242	O	|	|	|	|	1.48
56.417	0.00	0.31	0.240	O	|	|	|	|	1.48
56.500	0.00	0.31	0.238	O	|	|	|	|	1.47
56.583	0.00	0.31	0.236	O	|	|	|	|	1.46
56.667	0.00	0.31	0.234	O	|	|	|	|	1.45
56.750	0.00	0.31	0.232	O	|	|	|	|	1.44
56.833	0.00	0.31	0.229	O	|	|	|	|	1.44
56.917	0.00	0.31	0.227	O	|	|	|	|	1.43
57.000	0.00	0.31	0.225	O	|	|	|	|	1.42
57.083	0.00	0.31	0.223	O	|	|	|	|	1.41
57.167	0.00	0.31	0.221	O	|	|	|	|	1.41
57.250	0.00	0.31	0.219	O	|	|	|	|	1.40
57.333	0.00	0.30	0.217	O	|	|	|	|	1.39
57.417	0.00	0.30	0.215	O	|	|	|	|	1.38
57.500	0.00	0.30	0.213	O	|	|	|	|	1.38
57.583	0.00	0.30	0.210	O	|	|	|	|	1.37
57.667	0.00	0.30	0.208	O	|	|	|	|	1.36
57.750	0.00	0.30	0.206	O	|	|	|	|	1.35
57.833	0.00	0.30	0.204	O	|	|	|	|	1.34
57.917	0.00	0.30	0.202	O	|	|	|	|	1.34
58.000	0.00	0.30	0.200	O	|	|	|	|	1.33
58.083	0.00	0.30	0.198	O	|	|	|	|	1.32
58.167	0.00	0.30	0.196	O	|	|	|	|	1.31
58.250	0.00	0.30	0.194	O	|	|	|	|	1.31
58.333	0.00	0.30	0.192	O	|	|	|	|	1.30
58.417	0.00	0.29	0.190	O	|	|	|	|	1.29
58.500	0.00	0.29	0.188	O	|	|	|	|	1.28
58.583	0.00	0.29	0.186	O	|	|	|	|	1.26
58.667	0.00	0.29	0.184	O	|	|	|	|	1.25
58.750	0.00	0.29	0.182	O	|	|	|	|	1.24
58.833	0.00	0.29	0.180	O	|	|	|	|	1.23
58.917	0.00	0.28	0.178	O	|	|	|	|	1.22
59.000	0.00	0.28	0.176	O	|	|	|	|	1.21

59.083	0.00	0.28	0.174	O					1.20
59.167	0.00	0.28	0.172	O					1.18
59.250	0.00	0.28	0.170	O					1.17
59.333	0.00	0.27	0.168	O					1.16
59.417	0.00	0.27	0.166	O					1.15
59.500	0.00	0.27	0.165	O					1.14
59.583	0.00	0.27	0.163	O					1.13
59.667	0.00	0.27	0.161	O					1.12
59.750	0.00	0.27	0.159	O					1.11
59.833	0.00	0.26	0.157	O					1.10
59.917	0.00	0.26	0.155	O					1.09
60.000	0.00	0.26	0.154	O					1.08
60.083	0.00	0.26	0.152	O					1.07
60.167	0.00	0.26	0.150	O					1.06
60.250	0.00	0.26	0.148	O					1.05
60.333	0.00	0.26	0.146	O					1.04
60.417	0.00	0.25	0.145	O					1.03
60.500	0.00	0.25	0.143	O					1.01
60.583	0.00	0.25	0.141	O					1.00
60.667	0.00	0.25	0.140	O					0.99
60.750	0.00	0.25	0.138	O					0.98
60.833	0.00	0.25	0.136	O					0.98
60.917	0.00	0.24	0.134	O					0.97
61.000	0.00	0.24	0.133	O					0.96
61.083	0.00	0.24	0.131	O					0.95
61.167	0.00	0.24	0.129	O					0.94
61.250	0.00	0.24	0.128	O					0.93
61.333	0.00	0.24	0.126	O					0.92
61.417	0.00	0.24	0.125	O					0.91
61.500	0.00	0.23	0.123	O					0.90
61.583	0.00	0.23	0.121	O					0.89
61.667	0.00	0.23	0.120	O					0.88
61.750	0.00	0.23	0.118	O					0.87
61.833	0.00	0.23	0.117	O					0.86
61.917	0.00	0.23	0.115	O					0.85
62.000	0.00	0.23	0.113	O					0.84
62.083	0.00	0.22	0.112	O					0.83
62.167	0.00	0.22	0.110	O					0.83
62.250	0.00	0.22	0.109	O					0.82
62.333	0.00	0.22	0.107	O					0.81
62.417	0.00	0.22	0.106	O					0.80
62.500	0.00	0.22	0.104	O					0.79
62.583	0.00	0.22	0.103	O					0.78
62.667	0.00	0.21	0.101	O					0.77
62.750	0.00	0.21	0.100	O					0.76
62.833	0.00	0.21	0.098	O					0.76
62.917	0.00	0.21	0.097	O					0.75
63.000	0.00	0.21	0.095	O					0.74
63.083	0.00	0.21	0.094	O					0.73
63.167	0.00	0.21	0.093	O					0.72
63.250	0.00	0.21	0.091	O					0.71
63.333	0.00	0.20	0.090	O					0.71
63.417	0.00	0.20	0.088	O					0.70
63.500	0.00	0.20	0.087	O					0.69
63.583	0.00	0.20	0.086	O					0.68
63.667	0.00	0.20	0.084	O					0.67
63.750	0.00	0.20	0.083	O					0.67
63.833	0.00	0.20	0.081	O					0.66
63.917	0.00	0.20	0.080	O					0.65
64.000	0.00	0.19	0.079	O					0.64
64.083	0.00	0.19	0.077	O					0.63
64.167	0.00	0.19	0.076	O					0.63
64.250	0.00	0.19	0.075	O					0.62
64.333	0.00	0.19	0.073	O					0.61
64.417	0.00	0.19	0.072	O					0.60
64.500	0.00	0.19	0.071	O					0.60
64.583	0.00	0.19	0.070	O					0.59
64.667	0.00	0.19	0.068	O					0.58
64.750	0.00	0.18	0.067	O					0.57
64.833	0.00	0.18	0.066	O					0.57
64.917	0.00	0.18	0.064	O					0.56

```
65.000    0.00    0.18      0.063  O       |       |       |       |     0.55
65.083    0.00    0.18      0.062  O       |       |       |       |     0.54
65.167    0.00    0.18      0.061  O       |       |       |       |     0.54
65.250    0.00    0.18      0.060  O       |       |       |       |     0.53
65.333    0.00    0.18      0.058  O       |       |       |       |     0.52
65.417    0.00    0.18      0.057  O       |       |       |       |     0.52
65.500    0.00    0.17      0.056  O       |       |       |       |     0.51
65.583    0.00    0.17      0.055  O       |       |       |       |     0.50
65.667    0.00    0.17      0.054  O       |       |       |       |     0.49
65.750    0.00    0.17      0.052  O       |       |       |       |     0.49
65.833    0.00    0.17      0.051  O       |       |       |       |     0.48
65.917    0.00    0.17      0.050  O       |       |       |       |     0.47
66.000    0.00    0.17      0.049  O       |       |       |       |     0.47
66.083    0.00    0.17      0.048  O       |       |       |       |     0.46
66.167    0.00    0.17      0.047  O       |       |       |       |     0.45
66.250    0.00    0.16      0.045  O       |       |       |       |     0.45
66.333    0.00    0.16      0.044  O       |       |       |       |     0.44
66.417    0.00    0.16      0.043  O       |       |       |       |     0.43
66.500    0.00    0.16      0.042  O       |       |       |       |     0.43
66.583    0.00    0.16      0.041  O       |       |       |       |     0.42
66.667    0.00    0.16      0.040  O       |       |       |       |     0.42
66.750    0.00    0.16      0.039  O       |       |       |       |     0.41
66.833    0.00    0.16      0.038  O       |       |       |       |     0.40
66.917    0.00    0.16      0.037  O       |       |       |       |     0.40
67.000    0.00    0.16      0.035  O       |       |       |       |     0.39
67.083    0.00    0.15      0.034  O       |       |       |       |     0.38
67.167    0.00    0.15      0.033  O       |       |       |       |     0.38
67.250    0.00    0.15      0.032  O       |       |       |       |     0.37
67.333    0.00    0.15      0.031  O       |       |       |       |     0.37
67.417    0.00    0.15      0.030  O       |       |       |       |     0.36
67.500    0.00    0.15      0.029  O       |       |       |       |     0.35
67.583    0.00    0.15      0.028  O       |       |       |       |     0.35
67.667    0.00    0.15      0.027  O       |       |       |       |     0.34
67.750    0.00    0.15      0.026  O       |       |       |       |     0.34
67.833    0.00    0.15      0.025  O       |       |       |       |     0.33
67.917    0.00    0.15      0.024  O       |       |       |       |     0.32
68.000    0.00    0.14      0.023  O       |       |       |       |     0.32
68.083    0.00    0.14      0.022  O       |       |       |       |     0.31
68.167    0.00    0.14      0.021  O       |       |       |       |     0.31
68.250    0.00    0.14      0.020  O       |       |       |       |     0.30
68.333    0.00    0.14      0.019  O       |       |       |       |     0.29
68.417    0.00    0.13      0.018  O       |       |       |       |     0.27
68.500    0.00    0.12      0.017  O       |       |       |       |     0.26
68.583    0.00    0.12      0.017  O       |       |       |       |     0.25
68.667    0.00    0.11      0.016  O       |       |       |       |     0.24
68.750    0.00    0.11      0.015  O       |       |       |       |     0.22
68.833    0.00    0.10      0.014  O       |       |       |       |     0.21
68.917    0.00    0.10      0.014  O       |       |       |       |     0.20

  Remaining water in basin =    0.01 (Ac.Ft)

  ****************************HYDROGRAPH DATA****************************
               Number of intervals =   827
               Time interval =    5.0 (Min.)
               Maximum/Peak flow rate =        2.196 (CFS)
               Total volume =       4.047 (Ac.Ft)
       Status of hydrographs being held in storage
                 Stream 1  Stream 2  Stream 3  Stream 4  Stream 5
       Peak (CFS)      0.000     0.000     0.000     0.000     0.000
       Vol (Ac.Ft)      0.000     0.000     0.000     0.000     0.000
  ***********************************************************************

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                FLOOD HYDROGRAPH ROUTING PROGRAM
          Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2004
                      Study date: 08/18/25

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Program License Serial Number 5006

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********************* HYDROGRAPH INFORMATION **********************

               From study/file name: PROA65.rte
****************************HYDROGRAPH DATA****************************
               Number of intervals =    90
               Time interval =    5.0 (Min.)
               Maximum/Peak flow rate =       43.721 (CFS)
               Total volume =       5.513 (Ac.Ft)
       Status of hydrographs being held in storage
                  Stream 1  Stream 2  Stream 3  Stream 4  Stream 5
       Peak (CFS)      0.000     0.000     0.000     0.000     0.000
       Vol (Ac.Ft)      0.000     0.000     0.000     0.000     0.000
************************************************************************



++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station        0.000 to Point/Station        0.000
**** RETARDING BASIN ROUTING ****
________________________________________________________________________

User entry of depth-outflow-storage data
------------------------------------------------------------------------
Total number of inflow hydrograph intervals = 90
Hydrograph time unit =  5.000 (Min.)
Initial depth in storage basin =   0.00(Ft.)
------------------------------------------------------------------------
------------------------------------------------------------------------
Initial basin depth =   0.00 (Ft.)
Initial basin storage =      0.00 (Ac.Ft)
Initial basin outflow =   0.00 (CFS)
------------------------------------------------------------------------
------------------------------------------------------------------------
Depth vs. Storage and Depth vs. Discharge data:
 Basin Depth  Storage    Outflow   (S-O*dt/2)   (S+O*dt/2)
     (Ft.)    (Ac.Ft)    (CFS)     (Ac.Ft)    (Ac.Ft)
------------------------------------------------------------------------
   0.000      0.000      0.000      0.000        0.000
   0.300      0.020      0.142      0.020        0.020
   1.300      0.192      0.296      0.191        0.193
   2.300      0.466      0.394      0.465        0.467
   3.300      0.766      0.469      0.764        0.768
   4.300      1.126      0.536      1.124        1.128
   5.500      1.640      0.610      1.638        1.642
   6.300      2.007      1.299      2.003        2.011
   8.300      3.066      1.957      3.059        3.073
  10.300      4.341      2.417      4.333        4.349
  11.400      5.141      2.632      5.132        5.150
  12.300      5.851    167.187      5.275        6.427
  13.300      6.699    657.066      4.436        8.962
  14.300      7.611   1377.819      2.866       12.356
------------------------------------------------------------------------
               Hydrograph Detention Basin Routing
------------------------------------------------------------------------

Graph values: 'I'= unit inflow; 'O'=outflow at time shown
------------------------------------------------------------------------
```

Time (Hours)	Inflow (CFS)	Outflow (CFS)	Storage (Ac.Ft)	.0	10.9	21.86	32.79	43.72	Depth (Ft.)
0.083	0.18	0.00	0.001	O	|	|	|	|	0.01
0.167	0.97	0.03	0.004	O	|	|	|	|	0.07
0.250	2.13	0.10	0.015	OI	|	|	|	|	0.22
0.333	2.88	0.15	0.031	O I	|	|	|	|	0.36
0.417	3.25	0.17	0.051	O I	|	|	|	|	0.48
0.500	3.52	0.19	0.073	O I	|	|	|	|	0.61
0.583	3.84	0.21	0.097	O I	|	|	|	|	0.75
0.667	4.17	0.23	0.123	O I	|	|	|	|	0.90
0.750	4.38	0.26	0.151	O I	|	|	|	|	1.06
0.833	4.51	0.28	0.180	O I	|	|	|	|	1.23
0.917	4.61	0.30	0.209	O I	|	|	|	|	1.36
1.000	4.72	0.31	0.239	O I	|	|	|	|	1.47
1.083	4.94	0.32	0.270	O I	|	|	|	|	1.58
1.167	5.19	0.34	0.303	O I	|	|	|	|	1.70
1.250	5.34	0.35	0.336	O I	|	|	|	|	1.83
1.333	5.42	0.36	0.371	O I	|	|	|	|	1.95
1.417	5.49	0.37	0.406	O I	|	|	|	|	2.08
1.500	5.54	0.39	0.441	O I	|	|	|	|	2.21
1.583	5.58	0.40	0.477	O I	|	|	|	|	2.34
1.667	5.60	0.41	0.513	O I	|	|	|	|	2.46
1.750	5.61	0.41	0.549	O I	|	|	|	|	2.58
1.833	5.63	0.42	0.584	O I	|	|	|	|	2.69
1.917	5.64	0.43	0.620	O I	|	|	|	|	2.81
2.000	5.68	0.44	0.656	O I	|	|	|	|	2.93
2.083	5.80	0.45	0.693	O I	|	|	|	|	3.06
2.167	5.90	0.46	0.730	O I	|	|	|	|	3.18
2.250	5.96	0.47	0.767	O I	|	|	|	|	3.30
2.333	6.11	0.48	0.806	O I	|	|	|	|	3.41
2.417	6.20	0.48	0.845	O I	|	|	|	|	3.52
2.500	6.25	0.49	0.884	O I	|	|	|	|	3.63
2.583	6.28	0.50	0.924	O I	|	|	|	|	3.74
2.667	6.30	0.51	0.964	O I	|	|	|	|	3.85
2.750	6.35	0.51	1.004	O I	|	|	|	|	3.96
2.833	6.52	0.52	1.045	O I	|	|	|	|	4.07
2.917	6.73	0.53	1.087	O I	|	|	|	|	4.19
3.000	6.84	0.54	1.130	O I	|	|	|	|	4.31
3.083	6.91	0.54	1.173	O I	|	|	|	|	4.41
3.167	6.98	0.55	1.217	O I	|	|	|	|	4.51
3.250	7.17	0.56	1.262	O I	|	|	|	|	4.62
3.333	7.39	0.56	1.309	O I	|	|	|	|	4.73
3.417	7.56	0.57	1.356	O I	|	|	|	|	4.84
3.500	7.81	0.58	1.405	O I	|	|	|	|	4.95
3.583	8.25	0.58	1.456	O I	|	|	|	|	5.07
3.667	8.74	0.59	1.511	O I	|	|	|	|	5.20
3.750	9.17	0.60	1.569	O I	|	|	|	|	5.33
3.833	9.54	0.61	1.629	O I	|	|	|	|	5.47
3.917	9.91	0.71	1.691	O I	|	|	|	|	5.61
4.000	10.27	0.83	1.755	O I	|	|	|	|	5.75
4.083	10.63	0.95	1.821	O I	|	|	|	|	5.90
4.167	11.02	1.08	1.889	O I	|	|	|	|	6.04
4.250	11.54	1.21	1.959	O I	|	|	|	|	6.19
4.333	12.13	1.31	2.032	O I	|	|	|	|	6.35
4.417	12.75	1.36	2.108	O I	|	|	|	|	6.49
4.500	13.36	1.41	2.188	| O I	|	|	|	|	6.64
4.583	13.86	1.46	2.272	| O I	|	|	|	|	6.80
4.667	14.36	1.52	2.359	| O I	|	|	|	|	6.96
4.750	15.10	1.57	2.450	| O I	|	|	|	|	7.14
4.833	16.02	1.63	2.546	| O I	|	|	|	|	7.32
4.917	16.86	1.70	2.648	| O I	|	|	|	|	7.51
5.000	17.67	1.76	2.755	| O I	|	|	|	|	7.71
5.083	19.00	1.83	2.869	| O I	|	|	|	|	7.93
5.167	21.68	1.91	2.996	| O I	|	|	|	|	8.17
5.250	25.90	1.99	3.146	| O	| I	|	|	|	8.43
5.333	30.42	2.05	3.326	| O	| I	|	|	|	8.71
5.417	34.73	2.13	3.536	| O	| I	|	|	|	9.04
5.500	39.81	2.21	3.778	| O	| I	|	|	|	9.42
5.583	43.72	2.31	4.050	| O	| I	|	|	|	9.84
5.667	38.48	2.41	4.317	| O	| I	|	|	|	10.26
5.750	25.89	2.47	4.522	| O	| I	|	|	|	10.55

5.833	17.61	2.50	4.654	|O	| I	|	|	|	10.73
5.917	13.31	2.53	4.743	|O	|I	|	|	|	10.85
6.000	10.44	2.54	4.808	|O	I|	|	|	|	10.94
6.083	8.13	2.55	4.854	|O I	|	|	|	|	11.01
6.167	6.23	2.56	4.886	|O I	|	|	|	|	11.05
6.250	4.69	2.57	4.906	|O I	|	|	|	|	11.08
6.333	3.68	2.57	4.917	|OI	|	|	|	|	11.09
6.417	2.96	2.57	4.922	|OI	|	|	|	|	11.10
6.500	2.35	2.57	4.923	|O	|	|	|	|	11.10
6.583	1.86	2.57	4.920	|O	|	|	|	|	11.10
6.667	1.45	2.57	4.913	|O	|	|	|	|	11.09
6.750	1.10	2.57	4.904	IO	|	|	|	|	11.07
6.833	0.84	2.57	4.893	IO	|	|	|	|	11.06
6.917	0.60	2.56	4.881	IO	|	|	|	|	11.04
7.000	0.32	2.56	4.866	IO	|	|	|	|	11.02
7.083	0.12	2.55	4.850	IO	|	|	|	|	11.00
7.167	0.07	2.55	4.833	IO	|	|	|	|	10.98
7.250	0.04	2.54	4.816	IO	|	|	|	|	10.95
7.333	0.02	2.54	4.799	IO	|	|	|	|	10.93
7.417	0.01	2.54	4.781	IO	|	|	|	|	10.91
7.500	0.00	2.53	4.764	IO	|	|	|	|	10.88
7.583	0.00	2.53	4.747	IO	|	|	|	|	10.86
7.667	0.00	2.52	4.729	IO	|	|	|	|	10.83
7.750	0.00	2.52	4.712	IO	|	|	|	|	10.81
7.833	0.00	2.51	4.695	IO	|	|	|	|	10.79
7.917	0.00	2.51	4.677	IO	|	|	|	|	10.76
8.000	0.00	2.50	4.660	IO	|	|	|	|	10.74
8.083	0.00	2.50	4.643	IO	|	|	|	|	10.72
8.167	0.00	2.49	4.626	IO	|	|	|	|	10.69
8.250	0.00	2.49	4.609	IO	|	|	|	|	10.67
8.333	0.00	2.48	4.591	IO	|	|	|	|	10.64
8.417	0.00	2.48	4.574	IO	|	|	|	|	10.62
8.500	0.00	2.48	4.557	IO	|	|	|	|	10.60
8.583	0.00	2.47	4.540	IO	|	|	|	|	10.57
8.667	0.00	2.47	4.523	IO	|	|	|	|	10.55
8.750	0.00	2.46	4.506	IO	|	|	|	|	10.53
8.833	0.00	2.46	4.489	IO	|	|	|	|	10.50
8.917	0.00	2.45	4.472	IO	|	|	|	|	10.48
9.000	0.00	2.45	4.456	IO	|	|	|	|	10.46
9.083	0.00	2.44	4.439	IO	|	|	|	|	10.43
9.167	0.00	2.44	4.422	IO	|	|	|	|	10.41
9.250	0.00	2.43	4.405	IO	|	|	|	|	10.39
9.333	0.00	2.43	4.388	IO	|	|	|	|	10.37
9.417	0.00	2.43	4.372	IO	|	|	|	|	10.34
9.500	0.00	2.42	4.355	IO	|	|	|	|	10.32
9.583	0.00	2.42	4.338	IO	|	|	|	|	10.30
9.667	0.00	2.41	4.322	IO	|	|	|	|	10.27
9.750	0.00	2.40	4.305	IO	|	|	|	|	10.24
9.833	0.00	2.40	4.289	IO	|	|	|	|	10.22
9.917	0.00	2.39	4.272	IO	|	|	|	|	10.19
10.000	0.00	2.39	4.256	IO	|	|	|	|	10.17
10.083	0.00	2.38	4.239	IO	|	|	|	|	10.14
10.167	0.00	2.37	4.223	IO	|	|	|	|	10.11
10.250	0.00	2.37	4.206	IO	|	|	|	|	10.09
10.333	0.00	2.36	4.190	IO	|	|	|	|	10.06
10.417	0.00	2.36	4.174	IO	|	|	|	|	10.04
10.500	0.00	2.35	4.158	IO	|	|	|	|	10.01
10.583	0.00	2.35	4.142	IO	|	|	|	|	9.99
10.667	0.00	2.34	4.125	IO	|	|	|	|	9.96
10.750	0.00	2.33	4.109	IO	|	|	|	|	9.94
10.833	0.00	2.33	4.093	IO	|	|	|	|	9.91
10.917	0.00	2.32	4.077	IO	|	|	|	|	9.89
11.000	0.00	2.32	4.061	IO	|	|	|	|	9.86
11.083	0.00	2.31	4.045	IO	|	|	|	|	9.84
11.167	0.00	2.30	4.029	IO	|	|	|	|	9.81
11.250	0.00	2.30	4.014	IO	|	|	|	|	9.79
11.333	0.00	2.29	3.998	IO	|	|	|	|	9.76
11.417	0.00	2.29	3.982	IO	|	|	|	|	9.74
11.500	0.00	2.28	3.966	IO	|	|	|	|	9.71
11.583	0.00	2.28	3.951	IO	|	|	|	|	9.69
11.667	0.00	2.27	3.935	IO	|	|	|	|	9.66

11.750	0.00	2.26	3.919	IO				9.64
11.833	0.00	2.26	3.904	IO				9.61
11.917	0.00	2.25	3.888	IO				9.59
12.000	0.00	2.25	3.873	IO				9.57
12.083	0.00	2.24	3.857	IO				9.54
12.167	0.00	2.24	3.842	IO				9.52
12.250	0.00	2.23	3.826	IO				9.49
12.333	0.00	2.23	3.811	IO				9.47
12.417	0.00	2.22	3.796	IO				9.44
12.500	0.00	2.21	3.781	IO				9.42
12.583	0.00	2.21	3.765	IO				9.40
12.667	0.00	2.20	3.750	IO				9.37
12.750	0.00	2.20	3.735	IO				9.35
12.833	0.00	2.19	3.720	IO				9.33
12.917	0.00	2.19	3.705	IO				9.30
13.000	0.00	2.18	3.690	IO				9.28
13.083	0.00	2.18	3.675	IO				9.25
13.167	0.00	2.17	3.660	IO				9.23
13.250	0.00	2.17	3.645	IO				9.21
13.333	0.00	2.16	3.630	IO				9.18
13.417	0.00	2.16	3.615	IO				9.16
13.500	0.00	2.15	3.600	IO				9.14
13.583	0.00	2.14	3.585	IO				9.11
13.667	0.00	2.14	3.571	IO				9.09
13.750	0.00	2.13	3.556	IO				9.07
13.833	0.00	2.13	3.541	IO				9.05
13.917	0.00	2.12	3.527	IO				9.02
14.000	0.00	2.12	3.512	IO				9.00
14.083	0.00	2.11	3.497	IO				8.98
14.167	0.00	2.11	3.483	IO				8.95
14.250	0.00	2.10	3.468	IO				8.93
14.333	0.00	2.10	3.454	IO				8.91
14.417	0.00	2.09	3.440	IO				8.89
14.500	0.00	2.09	3.425	IO				8.86
14.583	0.00	2.08	3.411	IO				8.84
14.667	0.00	2.08	3.396	IO				8.82
14.750	0.00	2.07	3.382	IO				8.80
14.833	0.00	2.07	3.368	IO				8.77
14.917	0.00	2.06	3.354	IO				8.75
15.000	0.00	2.06	3.340	IO				8.73
15.083	0.00	2.05	3.325	IO				8.71
15.167	0.00	2.05	3.311	IO				8.68
15.250	0.00	2.04	3.297	IO				8.66
15.333	0.00	2.04	3.283	IO				8.64
15.417	0.00	2.03	3.269	IO				8.62
15.500	0.00	2.03	3.255	IO				8.60
15.583	0.00	2.02	3.241	IO				8.58
15.667	0.00	2.02	3.227	IO				8.55
15.750	0.00	2.01	3.214	IO				8.53
15.833	0.00	2.01	3.200	IO				8.51
15.917	0.00	2.00	3.186	IO				8.49
16.000	0.00	2.00	3.172	IO				8.47
16.083	0.00	1.99	3.158	IO				8.45
16.167	0.00	1.99	3.145	IO				8.42
16.250	0.00	1.98	3.131	IO				8.40
16.333	0.00	1.98	3.117	IO				8.38
16.417	0.00	1.97	3.104	IO				8.36
16.500	0.00	1.97	3.090	IO				8.34
16.583	0.00	1.96	3.077	IO				8.32
16.667	0.00	1.96	3.063	IO				8.29
16.750	0.00	1.95	3.050	IO				8.27
16.833	0.00	1.94	3.037	IO				8.24
16.917	0.00	1.93	3.023	IO				8.22
17.000	0.00	1.92	3.010	IO				8.19
17.083	0.00	1.91	2.997	IO				8.17
17.167	0.00	1.91	2.984	IO				8.14
17.250	0.00	1.90	2.970	IO				8.12
17.333	0.00	1.89	2.957	IO				8.09
17.417	0.00	1.88	2.944	IO				8.07
17.500	0.00	1.87	2.932	IO				8.05
17.583	0.00	1.87	2.919	IO				8.02

17.667	0.00	1.86	2.906	IO					8.00
17.750	0.00	1.85	2.893	IO					7.97
17.833	0.00	1.84	2.880	IO					7.95
17.917	0.00	1.83	2.868	IO					7.93
18.000	0.00	1.83	2.855	IO					7.90
18.083	0.00	1.82	2.843	IO					7.88
18.167	0.00	1.81	2.830	IO					7.85
18.250	0.00	1.80	2.818	IO					7.83
18.333	0.00	1.79	2.805	IO					7.81
18.417	0.00	1.79	2.793	IO					7.78
18.500	0.00	1.78	2.781	IO					7.76
18.583	0.00	1.77	2.768	IO					7.74
18.667	0.00	1.76	2.756	IO					7.71
18.750	0.00	1.76	2.744	IO					7.69
18.833	0.00	1.75	2.732	IO					7.67
18.917	0.00	1.74	2.720	IO					7.65
19.000	0.00	1.73	2.708	IO					7.62
19.083	0.00	1.73	2.696	IO					7.60
19.167	0.00	1.72	2.684	IO					7.58
19.250	0.00	1.71	2.672	IO					7.56
19.333	0.00	1.71	2.661	IO					7.53
19.417	0.00	1.70	2.649	IO					7.51
19.500	0.00	1.69	2.637	IO					7.49
19.583	0.00	1.68	2.626	IO					7.47
19.667	0.00	1.68	2.614	IO					7.45
19.750	0.00	1.67	2.603	IO					7.42
19.833	0.00	1.66	2.591	IO					7.40
19.917	0.00	1.65	2.580	IO					7.38
20.000	0.00	1.65	2.568	IO					7.36
20.083	0.00	1.64	2.557	IO					7.34
20.167	0.00	1.63	2.546	IO					7.32
20.250	0.00	1.63	2.534	IO					7.30
20.333	0.00	1.62	2.523	IO					7.27
20.417	0.00	1.61	2.512	IO					7.25
20.500	0.00	1.61	2.501	IO					7.23
20.583	0.00	1.60	2.490	IO					7.21
20.667	0.00	1.59	2.479	IO					7.19
20.750	0.00	1.59	2.468	IO					7.17
20.833	0.00	1.58	2.457	IO					7.15
20.917	0.00	1.57	2.446	IO					7.13
21.000	0.00	1.57	2.436	IO					7.11
21.083	0.00	1.56	2.425	IO					7.09
21.167	0.00	1.55	2.414	IO					7.07
21.250	0.00	1.55	2.403	IO					7.05
21.333	0.00	1.54	2.393	IO					7.03
21.417	0.00	1.53	2.382	IO					7.01
21.500	0.00	1.53	2.372	IO					6.99
21.583	0.00	1.52	2.361	IO					6.97
21.667	0.00	1.51	2.351	IO					6.95
21.750	0.00	1.51	2.340	IO					6.93
21.833	0.00	1.50	2.330	IO					6.91
21.917	0.00	1.49	2.320	IO					6.89
22.000	0.00	1.49	2.309	IO					6.87
22.083	0.00	1.48	2.299	IO					6.85
22.167	0.00	1.47	2.289	IO					6.83
22.250	0.00	1.47	2.279	IO					6.81
22.333	0.00	1.46	2.269	IO					6.79
22.417	0.00	1.46	2.259	IO					6.78
22.500	0.00	1.45	2.249	IO					6.76
22.583	0.00	1.44	2.239	IO					6.74
22.667	0.00	1.44	2.229	IO					6.72
22.750	0.00	1.43	2.219	IO					6.70
22.833	0.00	1.42	2.209	IO					6.68
22.917	0.00	1.42	2.199	IO					6.66
23.000	0.00	1.41	2.190	IO					6.64
23.083	0.00	1.41	2.180	IO					6.63
23.167	0.00	1.40	2.170	IO					6.61
23.250	0.00	1.39	2.161	IO					6.59
23.333	0.00	1.39	2.151	IO					6.57
23.417	0.00	1.38	2.142	IO					6.55
23.500	0.00	1.38	2.132	IO					6.54

23.583	0.00	1.37	2.123	IO	|	|	|	|	6.52
23.667	0.00	1.36	2.113	O	|	|	|	|	6.50
23.750	0.00	1.36	2.104	O	|	|	|	|	6.48
23.833	0.00	1.35	2.094	O	|	|	|	|	6.47
23.917	0.00	1.35	2.085	O	|	|	|	|	6.45
24.000	0.00	1.34	2.076	O	|	|	|	|	6.43
24.083	0.00	1.34	2.067	O	|	|	|	|	6.41
24.167	0.00	1.33	2.057	O	|	|	|	|	6.40
24.250	0.00	1.32	2.048	O	|	|	|	|	6.38
24.333	0.00	1.32	2.039	O	|	|	|	|	6.36
24.417	0.00	1.31	2.030	O	|	|	|	|	6.34
24.500	0.00	1.31	2.021	O	|	|	|	|	6.33
24.583	0.00	1.30	2.012	O	|	|	|	|	6.31
24.667	0.00	1.29	2.003	O	|	|	|	|	6.29
24.750	0.00	1.28	1.994	O	|	|	|	|	6.27
24.833	0.00	1.26	1.986	O	|	|	|	|	6.25
24.917	0.00	1.24	1.977	O	|	|	|	|	6.23
25.000	0.00	1.23	1.969	O	|	|	|	|	6.22
25.083	0.00	1.21	1.960	O	|	|	|	|	6.20
25.167	0.00	1.20	1.952	O	|	|	|	|	6.18
25.250	0.00	1.18	1.944	O	|	|	|	|	6.16
25.333	0.00	1.16	1.936	O	|	|	|	|	6.14
25.417	0.00	1.15	1.928	O	|	|	|	|	6.13
25.500	0.00	1.14	1.920	O	|	|	|	|	6.11
25.583	0.00	1.12	1.912	O	|	|	|	|	6.09
25.667	0.00	1.11	1.904	O	|	|	|	|	6.08
25.750	0.00	1.09	1.897	O	|	|	|	|	6.06
25.833	0.00	1.08	1.889	O	|	|	|	|	6.04
25.917	0.00	1.06	1.882	O	|	|	|	|	6.03
26.000	0.00	1.05	1.875	O	|	|	|	|	6.01
26.083	0.00	1.04	1.867	O	|	|	|	|	6.00
26.167	0.00	1.02	1.860	O	|	|	|	|	5.98
26.250	0.00	1.01	1.853	O	|	|	|	|	5.96
26.333	0.00	1.00	1.846	O	|	|	|	|	5.95
26.417	0.00	0.98	1.840	O	|	|	|	|	5.94
26.500	0.00	0.97	1.833	O	|	|	|	|	5.92
26.583	0.00	0.96	1.826	O	|	|	|	|	5.91
26.667	0.00	0.95	1.820	O	|	|	|	|	5.89
26.750	0.00	0.94	1.813	O	|	|	|	|	5.88
26.833	0.00	0.92	1.807	O	|	|	|	|	5.86
26.917	0.00	0.91	1.800	O	|	|	|	|	5.85
27.000	0.00	0.90	1.794	O	|	|	|	|	5.84
27.083	0.00	0.89	1.788	O	|	|	|	|	5.82
27.167	0.00	0.88	1.782	O	|	|	|	|	5.81
27.250	0.00	0.87	1.776	O	|	|	|	|	5.80
27.333	0.00	0.85	1.770	O	|	|	|	|	5.78
27.417	0.00	0.84	1.764	O	|	|	|	|	5.77
27.500	0.00	0.83	1.758	O	|	|	|	|	5.76
27.583	0.00	0.82	1.753	O	|	|	|	|	5.75
27.667	0.00	0.81	1.747	O	|	|	|	|	5.73
27.750	0.00	0.80	1.742	O	|	|	|	|	5.72
27.833	0.00	0.79	1.736	O	|	|	|	|	5.71
27.917	0.00	0.78	1.731	O	|	|	|	|	5.70
28.000	0.00	0.77	1.725	O	|	|	|	|	5.69
28.083	0.00	0.76	1.720	O	|	|	|	|	5.67
28.167	0.00	0.75	1.715	O	|	|	|	|	5.66
28.250	0.00	0.74	1.710	O	|	|	|	|	5.65
28.333	0.00	0.73	1.705	O	|	|	|	|	5.64
28.417	0.00	0.72	1.700	O	|	|	|	|	5.63
28.500	0.00	0.71	1.695	O	|	|	|	|	5.62
28.583	0.00	0.70	1.690	O	|	|	|	|	5.61
28.667	0.00	0.69	1.685	O	|	|	|	|	5.60
28.750	0.00	0.69	1.680	O	|	|	|	|	5.59
28.833	0.00	0.68	1.676	O	|	|	|	|	5.58
28.917	0.00	0.67	1.671	O	|	|	|	|	5.57
29.000	0.00	0.66	1.666	O	|	|	|	|	5.56
29.083	0.00	0.65	1.662	O	|	|	|	|	5.55
29.167	0.00	0.64	1.657	O	|	|	|	|	5.54
29.250	0.00	0.63	1.653	O	|	|	|	|	5.53
29.333	0.00	0.63	1.649	O	|	|	|	|	5.52
29.417	0.00	0.62	1.644	O	|	|	|	|	5.51

29.500	0.00	0.61	1.640	O	|	|	|	|	5.50
29.583	0.00	0.61	1.636	O	|	|	|	|	5.49
29.667	0.00	0.61	1.632	O	|	|	|	|	5.48
29.750	0.00	0.61	1.628	O	|	|	|	|	5.47
29.833	0.00	0.61	1.623	O	|	|	|	|	5.46
29.917	0.00	0.61	1.619	O	|	|	|	|	5.45
30.000	0.00	0.61	1.615	O	|	|	|	|	5.44
30.083	0.00	0.61	1.611	O	|	|	|	|	5.43
30.167	0.00	0.61	1.607	O	|	|	|	|	5.42
30.250	0.00	0.60	1.602	O	|	|	|	|	5.41
30.333	0.00	0.60	1.598	O	|	|	|	|	5.40
30.417	0.00	0.60	1.594	O	|	|	|	|	5.39
30.500	0.00	0.60	1.590	O	|	|	|	|	5.38
30.583	0.00	0.60	1.586	O	|	|	|	|	5.37
30.667	0.00	0.60	1.582	O	|	|	|	|	5.36
30.750	0.00	0.60	1.578	O	|	|	|	|	5.35
30.833	0.00	0.60	1.573	O	|	|	|	|	5.34
30.917	0.00	0.60	1.569	O	|	|	|	|	5.33
31.000	0.00	0.60	1.565	O	|	|	|	|	5.33
31.083	0.00	0.60	1.561	O	|	|	|	|	5.32
31.167	0.00	0.60	1.557	O	|	|	|	|	5.31
31.250	0.00	0.60	1.553	O	|	|	|	|	5.30
31.333	0.00	0.60	1.549	O	|	|	|	|	5.29
31.417	0.00	0.60	1.545	O	|	|	|	|	5.28
31.500	0.00	0.60	1.540	O	|	|	|	|	5.27
31.583	0.00	0.60	1.536	O	|	|	|	|	5.26
31.667	0.00	0.59	1.532	O	|	|	|	|	5.25
31.750	0.00	0.59	1.528	O	|	|	|	|	5.24
31.833	0.00	0.59	1.524	O	|	|	|	|	5.23
31.917	0.00	0.59	1.520	O	|	|	|	|	5.22
32.000	0.00	0.59	1.516	O	|	|	|	|	5.21
32.083	0.00	0.59	1.512	O	|	|	|	|	5.20
32.167	0.00	0.59	1.508	O	|	|	|	|	5.19
32.250	0.00	0.59	1.504	O	|	|	|	|	5.18
32.333	0.00	0.59	1.500	O	|	|	|	|	5.17
32.417	0.00	0.59	1.496	O	|	|	|	|	5.16
32.500	0.00	0.59	1.492	O	|	|	|	|	5.15
32.583	0.00	0.59	1.488	O	|	|	|	|	5.14
32.667	0.00	0.59	1.483	O	|	|	|	|	5.13
32.750	0.00	0.59	1.479	O	|	|	|	|	5.13
32.833	0.00	0.59	1.475	O	|	|	|	|	5.12
32.917	0.00	0.59	1.471	O	|	|	|	|	5.11
33.000	0.00	0.59	1.467	O	|	|	|	|	5.10
33.083	0.00	0.58	1.463	O	|	|	|	|	5.09
33.167	0.00	0.58	1.459	O	|	|	|	|	5.08
33.250	0.00	0.58	1.455	O	|	|	|	|	5.07
33.333	0.00	0.58	1.451	O	|	|	|	|	5.06
33.417	0.00	0.58	1.447	O	|	|	|	|	5.05
33.500	0.00	0.58	1.443	O	|	|	|	|	5.04
33.583	0.00	0.58	1.439	O	|	|	|	|	5.03
33.667	0.00	0.58	1.435	O	|	|	|	|	5.02
33.750	0.00	0.58	1.431	O	|	|	|	|	5.01
33.833	0.00	0.58	1.427	O	|	|	|	|	5.00
33.917	0.00	0.58	1.423	O	|	|	|	|	4.99
34.000	0.00	0.58	1.419	O	|	|	|	|	4.98
34.083	0.00	0.58	1.415	O	|	|	|	|	4.98
34.167	0.00	0.58	1.411	O	|	|	|	|	4.97
34.250	0.00	0.58	1.407	O	|	|	|	|	4.96
34.333	0.00	0.58	1.403	O	|	|	|	|	4.95
34.417	0.00	0.58	1.399	O	|	|	|	|	4.94
34.500	0.00	0.57	1.395	O	|	|	|	|	4.93
34.583	0.00	0.57	1.391	O	|	|	|	|	4.92
34.667	0.00	0.57	1.388	O	|	|	|	|	4.91
34.750	0.00	0.57	1.384	O	|	|	|	|	4.90
34.833	0.00	0.57	1.380	O	|	|	|	|	4.89
34.917	0.00	0.57	1.376	O	|	|	|	|	4.88
35.000	0.00	0.57	1.372	O	|	|	|	|	4.87
35.083	0.00	0.57	1.368	O	|	|	|	|	4.86
35.167	0.00	0.57	1.364	O	|	|	|	|	4.86
35.250	0.00	0.57	1.360	O	|	|	|	|	4.85
35.333	0.00	0.57	1.356	O	|	|	|	|	4.84

35.417	0.00	0.57	1.352	O	|	|	|	|	4.83
35.500	0.00	0.57	1.348	O	|	|	|	|	4.82
35.583	0.00	0.57	1.344	O	|	|	|	|	4.81
35.667	0.00	0.57	1.340	O	|	|	|	|	4.80
35.750	0.00	0.57	1.336	O	|	|	|	|	4.79
35.833	0.00	0.57	1.333	O	|	|	|	|	4.78
35.917	0.00	0.57	1.329	O	|	|	|	|	4.77
36.000	0.00	0.56	1.325	O	|	|	|	|	4.76
36.083	0.00	0.56	1.321	O	|	|	|	|	4.76
36.167	0.00	0.56	1.317	O	|	|	|	|	4.75
36.250	0.00	0.56	1.313	O	|	|	|	|	4.74
36.333	0.00	0.56	1.309	O	|	|	|	|	4.73
36.417	0.00	0.56	1.305	O	|	|	|	|	4.72
36.500	0.00	0.56	1.302	O	|	|	|	|	4.71
36.583	0.00	0.56	1.298	O	|	|	|	|	4.70
36.667	0.00	0.56	1.294	O	|	|	|	|	4.69
36.750	0.00	0.56	1.290	O	|	|	|	|	4.68
36.833	0.00	0.56	1.286	O	|	|	|	|	4.67
36.917	0.00	0.56	1.282	O	|	|	|	|	4.66
37.000	0.00	0.56	1.278	O	|	|	|	|	4.66
37.083	0.00	0.56	1.275	O	|	|	|	|	4.65
37.167	0.00	0.56	1.271	O	|	|	|	|	4.64
37.250	0.00	0.56	1.267	O	|	|	|	|	4.63
37.333	0.00	0.56	1.263	O	|	|	|	|	4.62
37.417	0.00	0.56	1.259	O	|	|	|	|	4.61
37.500	0.00	0.55	1.255	O	|	|	|	|	4.60
37.583	0.00	0.55	1.252	O	|	|	|	|	4.59
37.667	0.00	0.55	1.248	O	|	|	|	|	4.58
37.750	0.00	0.55	1.244	O	|	|	|	|	4.58
37.833	0.00	0.55	1.240	O	|	|	|	|	4.57
37.917	0.00	0.55	1.236	O	|	|	|	|	4.56
38.000	0.00	0.55	1.233	O	|	|	|	|	4.55
38.083	0.00	0.55	1.229	O	|	|	|	|	4.54
38.167	0.00	0.55	1.225	O	|	|	|	|	4.53
38.250	0.00	0.55	1.221	O	|	|	|	|	4.52
38.333	0.00	0.55	1.217	O	|	|	|	|	4.51
38.417	0.00	0.55	1.214	O	|	|	|	|	4.50
38.500	0.00	0.55	1.210	O	|	|	|	|	4.50
38.583	0.00	0.55	1.206	O	|	|	|	|	4.49
38.667	0.00	0.55	1.202	O	|	|	|	|	4.48
38.750	0.00	0.55	1.199	O	|	|	|	|	4.47
38.833	0.00	0.55	1.195	O	|	|	|	|	4.46
38.917	0.00	0.55	1.191	O	|	|	|	|	4.45
39.000	0.00	0.54	1.187	O	|	|	|	|	4.44
39.083	0.00	0.54	1.184	O	|	|	|	|	4.43
39.167	0.00	0.54	1.180	O	|	|	|	|	4.43
39.250	0.00	0.54	1.176	O	|	|	|	|	4.42
39.333	0.00	0.54	1.172	O	|	|	|	|	4.41
39.417	0.00	0.54	1.169	O	|	|	|	|	4.40
39.500	0.00	0.54	1.165	O	|	|	|	|	4.39
39.583	0.00	0.54	1.161	O	|	|	|	|	4.38
39.667	0.00	0.54	1.157	O	|	|	|	|	4.37
39.750	0.00	0.54	1.154	O	|	|	|	|	4.36
39.833	0.00	0.54	1.150	O	|	|	|	|	4.36
39.917	0.00	0.54	1.146	O	|	|	|	|	4.35
40.000	0.00	0.54	1.143	O	|	|	|	|	4.34
40.083	0.00	0.54	1.139	O	|	|	|	|	4.33
40.167	0.00	0.54	1.135	O	|	|	|	|	4.32
40.250	0.00	0.54	1.131	O	|	|	|	|	4.31
40.333	0.00	0.54	1.128	O	|	|	|	|	4.30
40.417	0.00	0.54	1.124	O	|	|	|	|	4.29
40.500	0.00	0.53	1.120	O	|	|	|	|	4.28
40.583	0.00	0.53	1.117	O	|	|	|	|	4.27
40.667	0.00	0.53	1.113	O	|	|	|	|	4.26
40.750	0.00	0.53	1.109	O	|	|	|	|	4.25
40.833	0.00	0.53	1.106	O	|	|	|	|	4.24
40.917	0.00	0.53	1.102	O	|	|	|	|	4.23
41.000	0.00	0.53	1.098	O	|	|	|	|	4.22
41.083	0.00	0.53	1.095	O	|	|	|	|	4.21
41.167	0.00	0.53	1.091	O	|	|	|	|	4.20
41.250	0.00	0.53	1.087	O	|	|	|	|	4.19

41.333	0.00	0.53	1.084	O	|	|	|	|	4.18
41.417	0.00	0.53	1.080	O	|	|	|	|	4.17
41.500	0.00	0.53	1.076	O	|	|	|	|	4.16
41.583	0.00	0.53	1.073	O	|	|	|	|	4.15
41.667	0.00	0.53	1.069	O	|	|	|	|	4.14
41.750	0.00	0.52	1.066	O	|	|	|	|	4.13
41.833	0.00	0.52	1.062	O	|	|	|	|	4.12
41.917	0.00	0.52	1.058	O	|	|	|	|	4.11
42.000	0.00	0.52	1.055	O	|	|	|	|	4.10
42.083	0.00	0.52	1.051	O	|	|	|	|	4.09
42.167	0.00	0.52	1.048	O	|	|	|	|	4.08
42.250	0.00	0.52	1.044	O	|	|	|	|	4.07
42.333	0.00	0.52	1.040	O	|	|	|	|	4.06
42.417	0.00	0.52	1.037	O	|	|	|	|	4.05
42.500	0.00	0.52	1.033	O	|	|	|	|	4.04
42.583	0.00	0.52	1.030	O	|	|	|	|	4.03
42.667	0.00	0.52	1.026	O	|	|	|	|	4.02
42.750	0.00	0.52	1.023	O	|	|	|	|	4.01
42.833	0.00	0.52	1.019	O	|	|	|	|	4.00
42.917	0.00	0.52	1.015	O	|	|	|	|	3.99
43.000	0.00	0.51	1.012	O	|	|	|	|	3.98
43.083	0.00	0.51	1.008	O	|	|	|	|	3.97
43.167	0.00	0.51	1.005	O	|	|	|	|	3.96
43.250	0.00	0.51	1.001	O	|	|	|	|	3.95
43.333	0.00	0.51	0.998	O	|	|	|	|	3.94
43.417	0.00	0.51	0.994	O	|	|	|	|	3.93
43.500	0.00	0.51	0.991	O	|	|	|	|	3.92
43.583	0.00	0.51	0.987	O	|	|	|	|	3.91
43.667	0.00	0.51	0.984	O	|	|	|	|	3.90
43.750	0.00	0.51	0.980	O	|	|	|	|	3.89
43.833	0.00	0.51	0.977	O	|	|	|	|	3.89
43.917	0.00	0.51	0.973	O	|	|	|	|	3.88
44.000	0.00	0.51	0.970	O	|	|	|	|	3.87
44.083	0.00	0.51	0.966	O	|	|	|	|	3.86
44.167	0.00	0.51	0.963	O	|	|	|	|	3.85
44.250	0.00	0.50	0.959	O	|	|	|	|	3.84
44.333	0.00	0.50	0.956	O	|	|	|	|	3.83
44.417	0.00	0.50	0.952	O	|	|	|	|	3.82
44.500	0.00	0.50	0.949	O	|	|	|	|	3.81
44.583	0.00	0.50	0.945	O	|	|	|	|	3.80
44.667	0.00	0.50	0.942	O	|	|	|	|	3.79
44.750	0.00	0.50	0.938	O	|	|	|	|	3.78
44.833	0.00	0.50	0.935	O	|	|	|	|	3.77
44.917	0.00	0.50	0.932	O	|	|	|	|	3.76
45.000	0.00	0.50	0.928	O	|	|	|	|	3.75
45.083	0.00	0.50	0.925	O	|	|	|	|	3.74
45.167	0.00	0.50	0.921	O	|	|	|	|	3.73
45.250	0.00	0.50	0.918	O	|	|	|	|	3.72
45.333	0.00	0.50	0.914	O	|	|	|	|	3.71
45.417	0.00	0.50	0.911	O	|	|	|	|	3.70
45.500	0.00	0.50	0.908	O	|	|	|	|	3.69
45.583	0.00	0.49	0.904	O	|	|	|	|	3.68
45.667	0.00	0.49	0.901	O	|	|	|	|	3.67
45.750	0.00	0.49	0.897	O	|	|	|	|	3.66
45.833	0.00	0.49	0.894	O	|	|	|	|	3.66
45.917	0.00	0.49	0.891	O	|	|	|	|	3.65
46.000	0.00	0.49	0.887	O	|	|	|	|	3.64
46.083	0.00	0.49	0.884	O	|	|	|	|	3.63
46.167	0.00	0.49	0.880	O	|	|	|	|	3.62
46.250	0.00	0.49	0.877	O	|	|	|	|	3.61
46.333	0.00	0.49	0.874	O	|	|	|	|	3.60
46.417	0.00	0.49	0.870	O	|	|	|	|	3.59
46.500	0.00	0.49	0.867	O	|	|	|	|	3.58
46.583	0.00	0.49	0.864	O	|	|	|	|	3.57
46.667	0.00	0.49	0.860	O	|	|	|	|	3.56
46.750	0.00	0.49	0.857	O	|	|	|	|	3.55
46.833	0.00	0.49	0.854	O	|	|	|	|	3.54
46.917	0.00	0.48	0.850	O	|	|	|	|	3.53
47.000	0.00	0.48	0.847	O	|	|	|	|	3.52
47.083	0.00	0.48	0.844	O	|	|	|	|	3.52
47.167	0.00	0.48	0.840	O	|	|	|	|	3.51

47.250	0.00	0.48	0.837	O					3.50
47.333	0.00	0.48	0.834	O					3.49
47.417	0.00	0.48	0.830	O					3.48
47.500	0.00	0.48	0.827	O					3.47
47.583	0.00	0.48	0.824	O					3.46
47.667	0.00	0.48	0.820	O					3.45
47.750	0.00	0.48	0.817	O					3.44
47.833	0.00	0.48	0.814	O					3.43
47.917	0.00	0.48	0.810	O					3.42
48.000	0.00	0.48	0.807	O					3.41
48.083	0.00	0.48	0.804	O					3.41
48.167	0.00	0.48	0.801	O					3.40
48.250	0.00	0.47	0.797	O					3.39
48.333	0.00	0.47	0.794	O					3.38
48.417	0.00	0.47	0.791	O					3.37
48.500	0.00	0.47	0.788	O					3.36
48.583	0.00	0.47	0.784	O					3.35
48.667	0.00	0.47	0.781	O					3.34
48.750	0.00	0.47	0.778	O					3.33
48.833	0.00	0.47	0.775	O					3.32
48.917	0.00	0.47	0.771	O					3.31
49.000	0.00	0.47	0.768	O					3.31
49.083	0.00	0.47	0.765	O					3.30
49.167	0.00	0.47	0.762	O					3.29
49.250	0.00	0.47	0.758	O					3.27
49.333	0.00	0.47	0.755	O					3.26
49.417	0.00	0.47	0.752	O					3.25
49.500	0.00	0.46	0.749	O					3.24
49.583	0.00	0.46	0.746	O					3.23
49.667	0.00	0.46	0.742	O					3.22
49.750	0.00	0.46	0.739	O					3.21
49.833	0.00	0.46	0.736	O					3.20
49.917	0.00	0.46	0.733	O					3.19
50.000	0.00	0.46	0.730	O					3.18
50.083	0.00	0.46	0.727	O					3.17
50.167	0.00	0.46	0.723	O					3.16
50.250	0.00	0.46	0.720	O					3.15
50.333	0.00	0.46	0.717	O					3.14
50.417	0.00	0.46	0.714	O					3.13
50.500	0.00	0.46	0.711	O					3.12
50.583	0.00	0.45	0.708	O					3.11
50.667	0.00	0.45	0.705	O					3.10
50.750	0.00	0.45	0.701	O					3.08
50.833	0.00	0.45	0.698	O					3.07
50.917	0.00	0.45	0.695	O					3.06
51.000	0.00	0.45	0.692	O					3.05
51.083	0.00	0.45	0.689	O					3.04
51.167	0.00	0.45	0.686	O					3.03
51.250	0.00	0.45	0.683	O					3.02
51.333	0.00	0.45	0.680	O					3.01
51.417	0.00	0.45	0.677	O					3.00
51.500	0.00	0.45	0.674	O					2.99
51.583	0.00	0.45	0.670	O					2.98
51.667	0.00	0.44	0.667	O					2.97
51.750	0.00	0.44	0.664	O					2.96
51.833	0.00	0.44	0.661	O					2.95
51.917	0.00	0.44	0.658	O					2.94
52.000	0.00	0.44	0.655	O					2.93
52.083	0.00	0.44	0.652	O					2.92
52.167	0.00	0.44	0.649	O					2.91
52.250	0.00	0.44	0.646	O					2.90
52.333	0.00	0.44	0.643	O					2.89
52.417	0.00	0.44	0.640	O					2.88
52.500	0.00	0.44	0.637	O					2.87
52.583	0.00	0.44	0.634	O					2.86
52.667	0.00	0.44	0.631	O					2.85
52.750	0.00	0.43	0.628	O					2.84
52.833	0.00	0.43	0.625	O					2.83
52.917	0.00	0.43	0.622	O					2.82
53.000	0.00	0.43	0.619	O					2.81
53.083	0.00	0.43	0.616	O					2.80

53.167	0.00	0.43	0.613	O	|	|	|	|	2.79
53.250	0.00	0.43	0.610	O	|	|	|	|	2.78
53.333	0.00	0.43	0.607	O	|	|	|	|	2.77
53.417	0.00	0.43	0.604	O	|	|	|	|	2.76
53.500	0.00	0.43	0.601	O	|	|	|	|	2.75
53.583	0.00	0.43	0.598	O	|	|	|	|	2.74
53.667	0.00	0.43	0.595	O	|	|	|	|	2.73
53.750	0.00	0.43	0.593	O	|	|	|	|	2.72
53.833	0.00	0.42	0.590	O	|	|	|	|	2.71
53.917	0.00	0.42	0.587	O	|	|	|	|	2.70
54.000	0.00	0.42	0.584	O	|	|	|	|	2.69
54.083	0.00	0.42	0.581	O	|	|	|	|	2.68
54.167	0.00	0.42	0.578	O	|	|	|	|	2.67
54.250	0.00	0.42	0.575	O	|	|	|	|	2.66
54.333	0.00	0.42	0.572	O	|	|	|	|	2.65
54.417	0.00	0.42	0.569	O	|	|	|	|	2.64
54.500	0.00	0.42	0.566	O	|	|	|	|	2.63
54.583	0.00	0.42	0.563	O	|	|	|	|	2.62
54.667	0.00	0.42	0.561	O	|	|	|	|	2.62
54.750	0.00	0.42	0.558	O	|	|	|	|	2.61
54.833	0.00	0.42	0.555	O	|	|	|	|	2.60
54.917	0.00	0.42	0.552	O	|	|	|	|	2.59
55.000	0.00	0.41	0.549	O	|	|	|	|	2.58
55.083	0.00	0.41	0.546	O	|	|	|	|	2.57
55.167	0.00	0.41	0.543	O	|	|	|	|	2.56
55.250	0.00	0.41	0.541	O	|	|	|	|	2.55
55.333	0.00	0.41	0.538	O	|	|	|	|	2.54
55.417	0.00	0.41	0.535	O	|	|	|	|	2.53
55.500	0.00	0.41	0.532	O	|	|	|	|	2.52
55.583	0.00	0.41	0.529	O	|	|	|	|	2.51
55.667	0.00	0.41	0.526	O	|	|	|	|	2.50
55.750	0.00	0.41	0.524	O	|	|	|	|	2.49
55.833	0.00	0.41	0.521	O	|	|	|	|	2.48
55.917	0.00	0.41	0.518	O	|	|	|	|	2.47
56.000	0.00	0.41	0.515	O	|	|	|	|	2.46
56.083	0.00	0.41	0.512	O	|	|	|	|	2.45
56.167	0.00	0.40	0.510	O	|	|	|	|	2.45
56.250	0.00	0.40	0.507	O	|	|	|	|	2.44
56.333	0.00	0.40	0.504	O	|	|	|	|	2.43
56.417	0.00	0.40	0.501	O	|	|	|	|	2.42
56.500	0.00	0.40	0.498	O	|	|	|	|	2.41
56.583	0.00	0.40	0.496	O	|	|	|	|	2.40
56.667	0.00	0.40	0.493	O	|	|	|	|	2.39
56.750	0.00	0.40	0.490	O	|	|	|	|	2.38
56.833	0.00	0.40	0.487	O	|	|	|	|	2.37
56.917	0.00	0.40	0.485	O	|	|	|	|	2.36
57.000	0.00	0.40	0.482	O	|	|	|	|	2.35
57.083	0.00	0.40	0.479	O	|	|	|	|	2.34
57.167	0.00	0.40	0.476	O	|	|	|	|	2.33
57.250	0.00	0.40	0.474	O	|	|	|	|	2.33
57.333	0.00	0.40	0.471	O	|	|	|	|	2.32
57.417	0.00	0.39	0.468	O	|	|	|	|	2.31
57.500	0.00	0.39	0.466	O	|	|	|	|	2.30
57.583	0.00	0.39	0.463	O	|	|	|	|	2.29
57.667	0.00	0.39	0.460	O	|	|	|	|	2.28
57.750	0.00	0.39	0.457	O	|	|	|	|	2.27
57.833	0.00	0.39	0.455	O	|	|	|	|	2.26
57.917	0.00	0.39	0.452	O	|	|	|	|	2.25
58.000	0.00	0.39	0.449	O	|	|	|	|	2.24
58.083	0.00	0.39	0.447	O	|	|	|	|	2.23
58.167	0.00	0.39	0.444	O	|	|	|	|	2.22
58.250	0.00	0.39	0.441	O	|	|	|	|	2.21
58.333	0.00	0.38	0.439	O	|	|	|	|	2.20
58.417	0.00	0.38	0.436	O	|	|	|	|	2.19
58.500	0.00	0.38	0.434	O	|	|	|	|	2.18
58.583	0.00	0.38	0.431	O	|	|	|	|	2.17
58.667	0.00	0.38	0.428	O	|	|	|	|	2.16
58.750	0.00	0.38	0.426	O	|	|	|	|	2.15
58.833	0.00	0.38	0.423	O	|	|	|	|	2.14
58.917	0.00	0.38	0.420	O	|	|	|	|	2.13
59.000	0.00	0.38	0.418	O	|	|	|	|	2.12

59.083	0.00	0.38	0.415	O					2.11
59.167	0.00	0.37	0.413	O					2.11
59.250	0.00	0.37	0.410	O					2.10
59.333	0.00	0.37	0.408	O					2.09
59.417	0.00	0.37	0.405	O					2.08
59.500	0.00	0.37	0.402	O					2.07
59.583	0.00	0.37	0.400	O					2.06
59.667	0.00	0.37	0.397	O					2.05
59.750	0.00	0.37	0.395	O					2.04
59.833	0.00	0.37	0.392	O					2.03
59.917	0.00	0.37	0.390	O					2.02
60.000	0.00	0.37	0.387	O					2.01
60.083	0.00	0.36	0.385	O					2.00
60.167	0.00	0.36	0.382	O					1.99
60.250	0.00	0.36	0.380	O					1.98
60.333	0.00	0.36	0.377	O					1.98
60.417	0.00	0.36	0.375	O					1.97
60.500	0.00	0.36	0.372	O					1.96
60.583	0.00	0.36	0.370	O					1.95
60.667	0.00	0.36	0.367	O					1.94
60.750	0.00	0.36	0.365	O					1.93
60.833	0.00	0.36	0.362	O					1.92
60.917	0.00	0.36	0.360	O					1.91
61.000	0.00	0.36	0.357	O					1.90
61.083	0.00	0.35	0.355	O					1.89
61.167	0.00	0.35	0.352	O					1.89
61.250	0.00	0.35	0.350	O					1.88
61.333	0.00	0.35	0.348	O					1.87
61.417	0.00	0.35	0.345	O					1.86
61.500	0.00	0.35	0.343	O					1.85
61.583	0.00	0.35	0.340	O					1.84
61.667	0.00	0.35	0.338	O					1.83
61.750	0.00	0.35	0.336	O					1.82
61.833	0.00	0.35	0.333	O					1.82
61.917	0.00	0.35	0.331	O					1.81
62.000	0.00	0.34	0.328	O					1.80
62.083	0.00	0.34	0.326	O					1.79
62.167	0.00	0.34	0.324	O					1.78
62.250	0.00	0.34	0.321	O					1.77
62.333	0.00	0.34	0.319	O					1.76
62.417	0.00	0.34	0.317	O					1.75
62.500	0.00	0.34	0.314	O					1.75
62.583	0.00	0.34	0.312	O					1.74
62.667	0.00	0.34	0.310	O					1.73
62.750	0.00	0.34	0.307	O					1.72
62.833	0.00	0.34	0.305	O					1.71
62.917	0.00	0.34	0.303	O					1.70
63.000	0.00	0.33	0.300	O					1.70
63.083	0.00	0.33	0.298	O					1.69
63.167	0.00	0.33	0.296	O					1.68
63.250	0.00	0.33	0.293	O					1.67
63.333	0.00	0.33	0.291	O					1.66
63.417	0.00	0.33	0.289	O					1.65
63.500	0.00	0.33	0.287	O					1.65
63.583	0.00	0.33	0.284	O					1.64
63.667	0.00	0.33	0.282	O					1.63
63.750	0.00	0.33	0.280	O					1.62
63.833	0.00	0.33	0.278	O					1.61
63.917	0.00	0.33	0.275	O					1.60
64.000	0.00	0.33	0.273	O					1.60
64.083	0.00	0.32	0.271	O					1.59
64.167	0.00	0.32	0.269	O					1.58
64.250	0.00	0.32	0.266	O					1.57
64.333	0.00	0.32	0.264	O					1.56
64.417	0.00	0.32	0.262	O					1.56
64.500	0.00	0.32	0.260	O					1.55
64.583	0.00	0.32	0.258	O					1.54
64.667	0.00	0.32	0.255	O					1.53
64.750	0.00	0.32	0.253	O					1.52
64.833	0.00	0.32	0.251	O					1.52
64.917	0.00	0.32	0.249	O					1.51

65.000	0.00	0.32	0.247	O					1.50
65.083	0.00	0.31	0.244	O					1.49
65.167	0.00	0.31	0.242	O					1.48
65.250	0.00	0.31	0.240	O					1.48
65.333	0.00	0.31	0.238	O					1.47
65.417	0.00	0.31	0.236	O					1.46
65.500	0.00	0.31	0.234	O					1.45
65.583	0.00	0.31	0.232	O					1.44
65.667	0.00	0.31	0.229	O					1.44
65.750	0.00	0.31	0.227	O					1.43
65.833	0.00	0.31	0.225	O					1.42
65.917	0.00	0.31	0.223	O					1.41
66.000	0.00	0.31	0.221	O					1.41
66.083	0.00	0.31	0.219	O					1.40
66.167	0.00	0.30	0.217	O					1.39
66.250	0.00	0.30	0.215	O					1.38
66.333	0.00	0.30	0.213	O					1.37
66.417	0.00	0.30	0.210	O					1.37
66.500	0.00	0.30	0.208	O					1.36
66.583	0.00	0.30	0.206	O					1.35
66.667	0.00	0.30	0.204	O					1.34
66.750	0.00	0.30	0.202	O					1.34
66.833	0.00	0.30	0.200	O					1.33
66.917	0.00	0.30	0.198	O					1.32
67.000	0.00	0.30	0.196	O					1.31
67.083	0.00	0.30	0.194	O					1.31
67.167	0.00	0.30	0.192	O					1.30
67.250	0.00	0.29	0.190	O					1.29
67.333	0.00	0.29	0.188	O					1.28
67.417	0.00	0.29	0.186	O					1.26
67.500	0.00	0.29	0.184	O					1.25
67.583	0.00	0.29	0.182	O					1.24
67.667	0.00	0.29	0.180	O					1.23
67.750	0.00	0.28	0.178	O					1.22
67.833	0.00	0.28	0.176	O					1.21
67.917	0.00	0.28	0.174	O					1.20
68.000	0.00	0.28	0.172	O					1.18
68.083	0.00	0.28	0.170	O					1.17
68.167	0.00	0.27	0.168	O					1.16
68.250	0.00	0.27	0.166	O					1.15
68.333	0.00	0.27	0.165	O					1.14
68.417	0.00	0.27	0.163	O					1.13
68.500	0.00	0.27	0.161	O					1.12
68.583	0.00	0.27	0.159	O					1.11
68.667	0.00	0.26	0.157	O					1.10
68.750	0.00	0.26	0.155	O					1.09
68.833	0.00	0.26	0.154	O					1.08
68.917	0.00	0.26	0.152	O					1.07
69.000	0.00	0.26	0.150	O					1.06
69.083	0.00	0.26	0.148	O					1.05
69.167	0.00	0.26	0.146	O					1.04
69.250	0.00	0.25	0.145	O					1.02
69.333	0.00	0.25	0.143	O					1.01
69.417	0.00	0.25	0.141	O					1.00
69.500	0.00	0.25	0.139	O					0.99
69.583	0.00	0.25	0.138	O					0.98
69.667	0.00	0.25	0.136	O					0.97
69.750	0.00	0.24	0.134	O					0.97
69.833	0.00	0.24	0.133	O					0.96
69.917	0.00	0.24	0.131	O					0.95
70.000	0.00	0.24	0.129	O					0.94
70.083	0.00	0.24	0.128	O					0.93
70.167	0.00	0.24	0.126	O					0.92
70.250	0.00	0.24	0.124	O					0.91
70.333	0.00	0.23	0.123	O					0.90
70.417	0.00	0.23	0.121	O					0.89
70.500	0.00	0.23	0.120	O					0.88
70.583	0.00	0.23	0.118	O					0.87
70.667	0.00	0.23	0.116	O					0.86
70.750	0.00	0.23	0.115	O					0.85
70.833	0.00	0.23	0.113	O					0.84

70.917	0.00	0.22	0.112	O	|	|	|	|	0.83
71.000	0.00	0.22	0.110	O	|	|	|	|	0.82
71.083	0.00	0.22	0.109	O	|	|	|	|	0.82
71.167	0.00	0.22	0.107	O	|	|	|	|	0.81
71.250	0.00	0.22	0.106	O	|	|	|	|	0.80
71.333	0.00	0.22	0.104	O	|	|	|	|	0.79
71.417	0.00	0.22	0.103	O	|	|	|	|	0.78
71.500	0.00	0.21	0.101	O	|	|	|	|	0.77
71.583	0.00	0.21	0.100	O	|	|	|	|	0.76
71.667	0.00	0.21	0.098	O	|	|	|	|	0.76
71.750	0.00	0.21	0.097	O	|	|	|	|	0.75
71.833	0.00	0.21	0.095	O	|	|	|	|	0.74
71.917	0.00	0.21	0.094	O	|	|	|	|	0.73
72.000	0.00	0.21	0.093	O	|	|	|	|	0.72
72.083	0.00	0.21	0.091	O	|	|	|	|	0.71
72.167	0.00	0.20	0.090	O	|	|	|	|	0.71
72.250	0.00	0.20	0.088	O	|	|	|	|	0.70
72.333	0.00	0.20	0.087	O	|	|	|	|	0.69
72.417	0.00	0.20	0.086	O	|	|	|	|	0.68
72.500	0.00	0.20	0.084	O	|	|	|	|	0.67
72.583	0.00	0.20	0.083	O	|	|	|	|	0.66
72.667	0.00	0.20	0.081	O	|	|	|	|	0.66
72.750	0.00	0.20	0.080	O	|	|	|	|	0.65
72.833	0.00	0.19	0.079	O	|	|	|	|	0.64
72.917	0.00	0.19	0.077	O	|	|	|	|	0.63
73.000	0.00	0.19	0.076	O	|	|	|	|	0.63
73.083	0.00	0.19	0.075	O	|	|	|	|	0.62
73.167	0.00	0.19	0.073	O	|	|	|	|	0.61
73.250	0.00	0.19	0.072	O	|	|	|	|	0.60
73.333	0.00	0.19	0.071	O	|	|	|	|	0.60
73.417	0.00	0.19	0.070	O	|	|	|	|	0.59
73.500	0.00	0.19	0.068	O	|	|	|	|	0.58
73.583	0.00	0.18	0.067	O	|	|	|	|	0.57
73.667	0.00	0.18	0.066	O	|	|	|	|	0.57
73.750	0.00	0.18	0.064	O	|	|	|	|	0.56
73.833	0.00	0.18	0.063	O	|	|	|	|	0.55
73.917	0.00	0.18	0.062	O	|	|	|	|	0.54
74.000	0.00	0.18	0.061	O	|	|	|	|	0.54
74.083	0.00	0.18	0.060	O	|	|	|	|	0.53
74.167	0.00	0.18	0.058	O	|	|	|	|	0.52
74.250	0.00	0.18	0.057	O	|	|	|	|	0.52
74.333	0.00	0.17	0.056	O	|	|	|	|	0.51
74.417	0.00	0.17	0.055	O	|	|	|	|	0.50
74.500	0.00	0.17	0.053	O	|	|	|	|	0.49
74.583	0.00	0.17	0.052	O	|	|	|	|	0.49
74.667	0.00	0.17	0.051	O	|	|	|	|	0.48
74.750	0.00	0.17	0.050	O	|	|	|	|	0.47
74.833	0.00	0.17	0.049	O	|	|	|	|	0.47
74.917	0.00	0.17	0.048	O	|	|	|	|	0.46
75.000	0.00	0.17	0.047	O	|	|	|	|	0.45
75.083	0.00	0.16	0.045	O	|	|	|	|	0.45
75.167	0.00	0.16	0.044	O	|	|	|	|	0.44
75.250	0.00	0.16	0.043	O	|	|	|	|	0.43
75.333	0.00	0.16	0.042	O	|	|	|	|	0.43
75.417	0.00	0.16	0.041	O	|	|	|	|	0.42
75.500	0.00	0.16	0.040	O	|	|	|	|	0.42
75.583	0.00	0.16	0.039	O	|	|	|	|	0.41
75.667	0.00	0.16	0.038	O	|	|	|	|	0.40
75.750	0.00	0.16	0.037	O	|	|	|	|	0.40
75.833	0.00	0.16	0.035	O	|	|	|	|	0.39
75.917	0.00	0.15	0.034	O	|	|	|	|	0.38
76.000	0.00	0.15	0.033	O	|	|	|	|	0.38
76.083	0.00	0.15	0.032	O	|	|	|	|	0.37
76.167	0.00	0.15	0.031	O	|	|	|	|	0.37
76.250	0.00	0.15	0.030	O	|	|	|	|	0.36
76.333	0.00	0.15	0.029	O	|	|	|	|	0.35
76.417	0.00	0.15	0.028	O	|	|	|	|	0.35
76.500	0.00	0.15	0.027	O	|	|	|	|	0.34
76.583	0.00	0.15	0.026	O	|	|	|	|	0.34
76.667	0.00	0.15	0.025	O	|	|	|	|	0.33
76.750	0.00	0.15	0.024	O	|	|	|	|	0.32

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76.833    0.00    0.14      0.023  O       |       |       |       |     0.32
76.917    0.00    0.14      0.022  O       |       |       |       |     0.31
77.000    0.00    0.14      0.021  O       |       |       |       |     0.31
77.083    0.00    0.14      0.020  O       |       |       |       |     0.30
77.167    0.00    0.14      0.019  O       |       |       |       |     0.29
77.250    0.00    0.13      0.018  O       |       |       |       |     0.27
77.333    0.00    0.12      0.017  O       |       |       |       |     0.26
77.417    0.00    0.12      0.017  O       |       |       |       |     0.25
77.500    0.00    0.11      0.016  O       |       |       |       |     0.24
77.583    0.00    0.11      0.015  O       |       |       |       |     0.22
77.667    0.00    0.10      0.014  O       |       |       |       |     0.21
77.750    0.00    0.10      0.014  O       |       |       |       |     0.20

      Remaining water in basin =    0.01 (Ac.Ft)


      ****************************HYDROGRAPH DATA****************************
                  Number of intervals =   933
                  Time interval =    5.0 (Min.)
                  Maximum/Peak flow rate =        2.573 (CFS)
                  Total volume =       5.500 (Ac.Ft)
            Status of hydrographs being held in storage
                        Stream 1  Stream 2  Stream 3  Stream 4  Stream 5
            Peak (CFS)      0.000     0.000     0.000     0.000     0.000
            Vol (Ac.Ft)      0.000     0.000     0.000     0.000     0.000
      ************************************************************************

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FLOOD HYDROGRAPH ROUTING PROGRAM
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Study date: 08/18/25

Program License Serial Number 5006

********** HYDROGRAPH INFORMATION **********

From study/file name: PROA245.rte
**********HYDROGRAPH DATA**********
Number of intervals = 306
Time interval = 5.0 (Min.)
Maximum/Peak flow rate = 12.842 (CFS)
Total volume = 8.054 (Ac.Ft)

Status of hydrographs being held in storage

	Stream 1	Stream 2	Stream 3	Stream 4	Stream 5
Peak (CFS)	0.000	0.000	0.000	0.000	0.000
Vol (Ac.Ft)	0.000	0.000	0.000	0.000	0.000

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Process from Point/Station 0.000 to Point/Station 0.000
**** RETARDING BASIN ROUTING ****

User entry of depth-outflow-storage data

Total number of inflow hydrograph intervals = 306
Hydrograph time unit = 5.000 (Min.)
Initial depth in storage basin = 0.00(Ft.)

Initial basin depth = 0.00 (Ft.)
Initial basin storage = 0.00 (Ac.Ft)
Initial basin outflow = 0.00 (CFS)

Depth vs. Storage and Depth vs. Discharge data:

Basin Depth (Ft.)	Storage (Ac.Ft)	Outflow (CFS)	(S-O*dt/2) (Ac.Ft)	(S+O*dt/2) (Ac.Ft)
0.000	0.000	0.000	0.000	0.000
0.300	0.020	0.142	0.020	0.020
1.300	0.192	0.296	0.191	0.193
2.300	0.466	0.394	0.465	0.467
3.300	0.766	0.469	0.764	0.768
4.300	1.126	0.536	1.124	1.128
5.500	1.640	0.610	1.638	1.642
6.300	2.007	1.299	2.003	2.011
8.300	3.066	1.957	3.059	3.073
10.300	4.341	2.417	4.333	4.349
11.400	5.141	2.632	5.132	5.150
12.300	5.851	167.187	5.275	6.427
13.300	6.699	657.066	4.436	8.962
14.300	7.611	1377.819	2.866	12.356

Hydrograph Detention Basin Routing

Graph values: 'I'= unit inflow; 'O'=outflow at time shown

Time (Hours)	Inflow (CFS)	Outflow (CFS)	Storage (Ac.Ft)	.0 3.2 6.42 9.63 12.84	Depth (Ft.)
0.083	0.04	0.00	0.000	O	0.00
0.167	0.21	0.01	0.001	O	0.01
0.250	0.43	0.02	0.003	OI	0.05
0.333	0.57	0.04	0.006	OI	0.09
0.417	0.71	0.07	0.010	OI	0.15
0.500	0.86	0.11	0.015	O I	0.23
0.583	0.95	0.14	0.020	O I	0.30
0.667	1.00	0.15	0.026	O I	0.34
0.750	1.04	0.15	0.032	O I	0.37
0.833	1.09	0.16	0.038	O I	0.41
0.917	1.19	0.16	0.045	O I	0.45
1.000	1.32	0.17	0.053	O I	0.49
1.083	1.37	0.18	0.061	O I	0.54
1.167	1.33	0.19	0.069	O I	0.58
1.250	1.25	0.19	0.076	O I	0.63
1.333	1.21	0.20	0.083	O I	0.67
1.417	1.20	0.20	0.090	O I	0.71
1.500	1.20	0.21	0.097	O I	0.75
1.583	1.19	0.22	0.104	O I	0.79
1.667	1.19	0.22	0.111	O I	0.83
1.750	1.19	0.23	0.117	O I	0.86
1.833	1.20	0.23	0.124	O I	0.90
1.917	1.28	0.24	0.131	O I	0.94
2.000	1.39	0.25	0.138	O I	0.99
2.083	1.45	0.26	0.146	O I	1.03
2.167	1.48	0.26	0.155	O I	1.08
2.250	1.50	0.27	0.163	O I	1.13
2.333	1.51	0.28	0.171	O I	1.18
2.417	1.52	0.29	0.180	O I	1.23
2.500	1.53	0.29	0.188	O I	1.28
2.583	1.55	0.30	0.197	O I	1.32
2.667	1.64	0.30	0.206	O I	1.35
2.750	1.76	0.30	0.216	O I	1.39
2.833	1.82	0.31	0.226	O I	1.42
2.917	1.85	0.31	0.236	O I	1.46
3.000	1.88	0.32	0.247	O I	1.50
3.083	1.89	0.32	0.258	O I	1.54
3.167	1.91	0.32	0.269	O I	1.58
3.250	1.92	0.33	0.280	O I	1.62
3.333	1.92	0.33	0.291	O I	1.66
3.417	1.93	0.34	0.302	O I	1.70
3.500	1.93	0.34	0.313	O I	1.74
3.583	1.94	0.34	0.323	O I	1.78
3.667	1.94	0.35	0.334	O I	1.82
3.750	1.94	0.35	0.345	O I	1.86
3.833	1.96	0.35	0.356	O I	1.90
3.917	2.05	0.36	0.368	O I	1.94
4.000	2.16	0.36	0.380	O I	1.99
4.083	2.22	0.37	0.392	O I	2.03
4.167	2.25	0.37	0.405	O I	2.08
4.250	2.27	0.38	0.418	O I	2.13
4.333	2.31	0.38	0.431	O I	2.17
4.417	2.40	0.39	0.445	O I	2.22
4.500	2.52	0.39	0.459	O I	2.28
4.583	2.59	0.40	0.474	O I	2.33
4.667	2.62	0.40	0.489	O I	2.38
4.750	2.65	0.40	0.505	|O I	2.43
4.833	2.68	0.41	0.520	|O I	2.48
4.917	2.78	0.41	0.536	|O I	2.53
5.000	2.90	0.42	0.553	|O I|	2.59
5.083	2.93	0.42	0.570	|O I|	2.65
5.167	2.80	0.42	0.587	|O I	2.70
5.250	2.61	0.43	0.603	|O I	2.76
5.333	2.53	0.43	0.617	|O I	2.80
5.417	2.57	0.44	0.632	|O I	2.85
5.500	2.65	0.44	0.647	|O I	2.90
5.583	2.71	0.44	0.662	|O I	2.95
5.667	2.80	0.45	0.678	|O I	3.01
5.750	2.92	0.45	0.695	|O I|	3.06

5.833	2.99	0.46	0.712	O	I				3.12
5.917	3.02	0.46	0.730	O	I				3.18
6.000	3.04	0.46	0.747	O	I				3.24
6.083	3.08	0.47	0.765	O	I				3.30
6.167	3.17	0.47	0.784	O	I				3.35
6.250	3.30	0.48	0.803	O	I				3.40
6.333	3.36	0.48	0.822	O	I				3.46
6.417	3.40	0.48	0.842	O	I				3.51
6.500	3.42	0.49	0.862	O	I				3.57
6.583	3.46	0.49	0.883	O	I				3.62
6.667	3.56	0.49	0.903	O	I				3.68
6.750	3.68	0.50	0.925	O	I				3.74
6.833	3.75	0.50	0.947	O	I				3.80
6.917	3.79	0.51	0.970	O	I				3.87
7.000	3.81	0.51	0.992	O	I				3.93
7.083	3.83	0.52	1.015	O	I				3.99
7.167	3.85	0.52	1.038	O	I				4.06
7.250	3.86	0.52	1.061	O	I				4.12
7.333	3.89	0.53	1.084	O	I				4.18
7.417	3.98	0.53	1.107	O	I				4.25
7.500	4.10	0.54	1.132	O	I				4.31
7.583	4.18	0.54	1.156	O	I				4.37
7.667	4.30	0.54	1.182	O	I				4.43
7.750	4.43	0.55	1.208	O	I				4.49
7.833	4.52	0.55	1.235	O	I				4.55
7.917	4.65	0.56	1.263	O	I				4.62
8.000	4.79	0.56	1.292	O	I				4.69
8.083	4.91	0.56	1.321	O	I				4.76
8.167	5.12	0.57	1.352	O	I				4.83
8.250	5.38	0.57	1.384	O	I				4.90
8.333	5.52	0.58	1.418	O	I				4.98
8.417	5.60	0.58	1.452	O	I				5.06
8.500	5.66	0.59	1.487	O	I				5.14
8.583	5.72	0.59	1.522	O	I				5.22
8.667	5.84	0.60	1.557	O	I				5.31
8.750	5.97	0.60	1.594	O	I				5.39
8.833	6.07	0.61	1.631	O	I				5.48
8.917	6.20	0.66	1.669	O	I				5.56
9.000	6.35	0.74	1.708	O	I				5.65
9.083	6.47	0.81	1.746	O	I				5.73
9.167	6.68	0.88	1.786	O	I				5.82
9.250	6.94	0.96	1.826	O	I				5.91
9.333	7.11	1.04	1.868	O	I				6.00
9.417	7.27	1.12	1.910	O	I				6.09
9.500	7.44	1.20	1.953	O	I				6.18
9.583	7.56	1.28	1.996	O	I				6.28
9.667	7.70	1.32	2.039	O	I				6.36
9.750	7.86	1.35	2.084	O	I				6.44
9.833	7.97	1.37	2.129	O	I				6.53
9.917	8.11	1.40	2.175	O	I				6.62
10.000	8.26	1.43	2.221	O	I				6.70
10.083	8.21	1.46	2.268	O	I				6.79
10.167	7.69	1.49	2.313	O	I				6.88
10.250	6.95	1.51	2.353	O	I				6.95
10.333	6.56	1.54	2.389	O	I				7.02
10.417	6.38	1.56	2.423	O	I				7.08
10.500	6.26	1.58	2.455	O	I				7.15
10.583	6.27	1.60	2.488	O	I				7.21
10.667	6.62	1.62	2.521	O	I				7.27
10.750	7.12	1.64	2.557	O	I				7.34
10.833	7.38	1.66	2.596	O	I				7.41
10.917	7.49	1.69	2.635	O	I				7.49
11.000	7.56	1.71	2.675	O	I				7.56
11.083	7.59	1.74	2.716	O	I				7.64
11.167	7.55	1.76	2.756	O	I				7.71
11.250	7.46	1.79	2.795	O	I				7.79
11.333	7.42	1.81	2.834	O	I				7.86
11.417	7.41	1.84	2.873	O	I				7.93
11.500	7.40	1.86	2.911	O	I				8.01
11.583	7.36	1.88	2.949	O	I				8.08
11.667	7.20	1.91	2.986	O	I				8.15

11.750	6.98	1.93	3.021	O	|	I |	|	8.22
11.833	6.88	1.95	3.056	O	|	I |	|	8.28
11.917	6.91	1.97	3.090	O	|	I |	|	8.34
12.000	6.99	1.98	3.124	O	|	I |	|	8.39
12.083	7.16	1.99	3.159	O	|	I |	|	8.45
12.167	7.74	2.00	3.197	O	|	| I |	|	8.50
12.250	8.52	2.02	3.239	O |	|	| I |	|	8.57
12.333	8.96	2.04	3.285	O |	|	| I |	|	8.64
12.417	9.24	2.05	3.334	O |	|	I |	|	8.72
12.500	9.49	2.07	3.384	O |	|	I |	|	8.80
12.583	9.69	2.09	3.436	O |	|	I |	|	8.88
12.667	9.96	2.11	3.489	O |	|	I |	|	8.96
12.750	10.27	2.13	3.544	O |	|	| I |	|	9.05
12.833	10.47	2.15	3.601	O |	|	| I |	|	9.14
12.917	10.66	2.17	3.658	O |	|	| I |	|	9.23
13.000	10.85	2.19	3.717	O |	|	| I |	|	9.32
13.083	11.07	2.21	3.778	O |	|	| I |	|	9.42
13.167	11.57	2.24	3.840	O |	|	| I |	|	9.51
13.250	12.18	2.26	3.907	O |	|	| I |	|	9.62
13.333	12.53	2.29	3.976	O |	|	| I |	|	9.73
13.417	12.71	2.31	4.047	O |	|	| I |	|	9.84
13.500	12.84	2.34	4.119	O |	|	| I |	|	9.95
13.583	12.72	2.36	4.191	O |	|	| I |	|	10.06
13.667	11.87	2.39	4.259	O |	|	| I |	|	10.17
13.750	10.71	2.41	4.321	O |	|	| I |	|	10.27
13.833	10.09	2.43	4.376	O |	|	| I |	|	10.35
13.917	9.80	2.44	4.427	O |	|	| I |	|	10.42
14.000	9.62	2.45	4.477	O |	|	| I |	|	10.49
14.083	9.56	2.47	4.526	O |	|	| I |	|	10.55
14.167	9.78	2.48	4.576	O |	|	| I |	|	10.62
14.250	10.15	2.49	4.627	O |	|	| I |	|	10.69
14.333	10.30	2.51	4.681	O |	|	| I |	|	10.77
14.417	10.29	2.52	4.734	O |	|	| I |	|	10.84
14.500	10.21	2.54	4.787	O |	|	| I |	|	10.91
14.583	10.17	2.55	4.840	O |	|	| I |	|	10.99
14.667	10.15	2.57	4.892	O |	|	| I |	|	11.06
14.750	10.14	2.58	4.945	O |	|	| I |	|	11.13
14.833	10.11	2.59	4.997	O |	|	| I |	|	11.20
14.917	10.02	2.61	5.048	O |	|	| I |	|	11.27
15.000	9.90	2.62	5.099	O |	|	| I |	|	11.34
15.083	9.82	3.59	5.145	O |	|	| I |	|	11.41
15.167	9.71	9.07	5.169	|	|	O I |	|	11.44
15.250	9.59	9.59	5.171	|	|	O |	|	11.44
15.333	9.50	9.55	5.171	|	|	O |	|	11.44
15.417	9.38	9.45	5.170	|	|	O |	|	11.44
15.500	9.24	9.33	5.170	|	|	O |	|	11.44
15.583	9.09	9.18	5.169	|	|	O |	|	11.44
15.667	8.71	8.93	5.168	|	|	IO |	|	11.43
15.750	8.23	8.52	5.166	|	|	IO |	|	11.43
15.833	7.96	8.14	5.165	|	|	IO |	|	11.43
15.917	7.82	7.92	5.164	|	|	O |	|	11.43
16.000	7.73	7.79	5.163	|	|	O |	|	11.43
16.083	7.36	7.57	5.162	|	|	O |	|	11.43
16.167	6.06	6.81	5.159	|	| IO	|	|	11.42
16.250	4.35	5.39	5.153	|	I O |	|	|	11.42
16.333	3.42	4.06	5.147	|	I O |	|	|	11.41
16.417	2.96	3.29	5.144	|	IO |	|	|	11.40
16.500	2.63	2.85	5.142	|	IO |	|	|	11.40
16.583	2.38	2.63	5.140	|	IO |	|	|	11.40
16.667	2.11	2.63	5.138	|	IO |	|	|	11.40
16.750	1.86	2.63	5.133	|	I O |	|	|	11.39
16.833	1.69	2.63	5.127	|	I O |	|	|	11.38
16.917	1.57	2.63	5.121	|	I O |	|	|	11.37
17.000	1.48	2.62	5.113	|	I O |	|	|	11.36
17.083	1.44	2.62	5.105	|	I O |	|	|	11.35
17.167	1.55	2.62	5.097	|	I O |	|	|	11.34
17.250	1.72	2.62	5.090	|	I O |	|	|	11.33
17.333	1.81	2.62	5.085	|	I O |	|	|	11.32
17.417	1.84	2.62	5.079	|	I O |	|	|	11.31
17.500	1.85	2.61	5.074	|	I O |	|	|	11.31
17.583	1.86	2.61	5.068	|	I O |	|	|	11.30

17.667	1.88	2.61	5.063	| I O |	|	|	|	11.29
17.750	1.89	2.61	5.058	| I O |	|	|	|	11.29
17.833	1.88	2.61	5.053	| I O |	|	|	|	11.28
17.917	1.81	2.61	5.048	| I O |	|	|	|	11.27
18.000	1.71	2.61	5.042	| I O |	|	|	|	11.26
18.083	1.65	2.60	5.036	| I O |	|	|	|	11.26
18.167	1.63	2.60	5.029	| I O |	|	|	|	11.25
18.250	1.61	2.60	5.022	| I O |	|	|	|	11.24
18.333	1.60	2.60	5.016	| I O |	|	|	|	11.23
18.417	1.60	2.60	5.009	| I O |	|	|	|	11.22
18.500	1.59	2.59	5.002	| I O |	|	|	|	11.21
18.583	1.57	2.59	4.995	| I O |	|	|	|	11.20
18.667	1.48	2.59	4.988	| I O |	|	|	|	11.19
18.750	1.36	2.59	4.979	| I O |	|	|	|	11.18
18.833	1.28	2.59	4.971	| I O |	|	|	|	11.17
18.917	1.16	2.58	4.961	| I O |	|	|	|	11.15
19.000	1.03	2.58	4.951	| I O |	|	|	|	11.14
19.083	0.97	2.58	4.940	| I O |	|	|	|	11.12
19.167	1.01	2.58	4.929	| I O |	|	|	|	11.11
19.250	1.09	2.57	4.919	| I O |	|	|	|	11.09
19.333	1.15	2.57	4.909	| I O |	|	|	|	11.08
19.417	1.25	2.57	4.899	| I O |	|	|	|	11.07
19.500	1.36	2.56	4.891	| I O |	|	|	|	11.06
19.583	1.41	2.56	4.883	| I O |	|	|	|	11.04
19.667	1.36	2.56	4.875	| I O |	|	|	|	11.03
19.750	1.27	2.56	4.866	| I O |	|	|	|	11.02
19.833	1.20	2.56	4.857	| I O |	|	|	|	11.01
19.917	1.10	2.55	4.847	| I O |	|	|	|	11.00
20.000	0.98	2.55	4.837	| I O |	|	|	|	10.98
20.083	0.93	2.55	4.826	| I O |	|	|	|	10.97
20.167	0.98	2.54	4.815	| I O |	|	|	|	10.95
20.250	1.07	2.54	4.804	| I O |	|	|	|	10.94
20.333	1.12	2.54	4.795	| I O |	|	|	|	10.92
20.417	1.13	2.54	4.785	| I O |	|	|	|	10.91
20.500	1.14	2.53	4.775	| I O |	|	|	|	10.90
20.583	1.15	2.53	4.766	| I O |	|	|	|	10.88
20.667	1.15	2.53	4.756	| I O |	|	|	|	10.87
20.750	1.16	2.53	4.747	| I O |	|	|	|	10.86
20.833	1.14	2.52	4.737	| I O |	|	|	|	10.84
20.917	1.06	2.52	4.727	| I O |	|	|	|	10.83
21.000	0.95	2.52	4.717	| I O |	|	|	|	10.82
21.083	0.91	2.52	4.706	| I O |	|	|	|	10.80
21.167	0.96	2.51	4.695	| I O |	|	|	|	10.79
21.250	1.06	2.51	4.685	| I O |	|	|	|	10.77
21.333	1.08	2.51	4.675	| I O |	|	|	|	10.76
21.417	1.02	2.50	4.665	| I O |	|	|	|	10.75
21.500	0.92	2.50	4.654	| I O |	|	|	|	10.73
21.583	0.89	2.50	4.643	| I O |	|	|	|	10.72
21.667	0.95	2.50	4.632	| I O |	|	|	|	10.70
21.750	1.04	2.49	4.622	| I O |	|	|	|	10.69
21.833	1.07	2.49	4.612	| I O |	|	|	|	10.67
21.917	1.01	2.49	4.602	| I O |	|	|	|	10.66
22.000	0.91	2.48	4.592	| I O |	|	|	|	10.64
22.083	0.88	2.48	4.581	| I O |	|	|	|	10.63
22.167	0.94	2.48	4.570	| I O |	|	|	|	10.61
22.250	1.04	2.48	4.560	| I O |	|	|	|	10.60
22.333	1.07	2.47	4.550	| I O |	|	|	|	10.59
22.417	1.01	2.47	4.540	| I O |	|	|	|	10.57
22.500	0.91	2.47	4.530	| I O |	|	|	|	10.56
22.583	0.86	2.46	4.519	| I O |	|	|	|	10.54
22.667	0.84	2.46	4.508	| I O |	|	|	|	10.53
22.750	0.82	2.46	4.497	| I O |	|	|	|	10.51
22.833	0.81	2.46	4.485	| I O |	|	|	|	10.50
22.917	0.81	2.45	4.474	| I O |	|	|	|	10.48
23.000	0.80	2.45	4.463	|I O |	|	|	|	10.47
23.083	0.80	2.45	4.451	|I O |	|	|	|	10.45
23.167	0.79	2.44	4.440	|I O |	|	|	|	10.44
23.250	0.79	2.44	4.429	|I O |	|	|	|	10.42
23.333	0.79	2.44	4.417	|I O |	|	|	|	10.40
23.417	0.79	2.43	4.406	|I O |	|	|	|	10.39
23.500	0.78	2.43	4.394	|I O |	|	|	|	10.37

23.583	0.78	2.43	4.383	|I O |	|	|	|	10.36
23.667	0.78	2.43	4.372	|I O |	|	|	|	10.34
23.750	0.78	2.42	4.361	|I O |	|	|	|	10.33
23.833	0.78	2.42	4.349	|I O |	|	|	|	10.31
23.917	0.78	2.42	4.338	|I O |	|	|	|	10.30
24.000	0.78	2.41	4.327	|I O |	|	|	|	10.28
24.083	0.74	2.41	4.315	|I O |	|	|	|	10.26
24.167	0.57	2.40	4.303	|I O |	|	|	|	10.24
24.250	0.35	2.40	4.290	I O |	|	|	|	10.22
24.333	0.23	2.39	4.275	I O |	|	|	|	10.20
24.417	0.17	2.39	4.260	I O |	|	|	|	10.17
24.500	0.13	2.38	4.245	I O |	|	|	|	10.15
24.583	0.10	2.38	4.229	I O |	|	|	|	10.12
24.667	0.08	2.37	4.214	I O |	|	|	|	10.10
24.750	0.07	2.37	4.198	I O |	|	|	|	10.08
24.833	0.05	2.36	4.182	I O |	|	|	|	10.05
24.917	0.04	2.35	4.166	I O |	|	|	|	10.03
25.000	0.03	2.35	4.150	I O |	|	|	|	10.00
25.083	0.02	2.34	4.134	I O |	|	|	|	9.98
25.167	0.02	2.34	4.118	I O |	|	|	|	9.95
25.250	0.01	2.33	4.102	I O |	|	|	|	9.93
25.333	0.01	2.33	4.086	I O |	|	|	|	9.90
25.417	0.01	2.32	4.070	I O |	|	|	|	9.88
25.500	0.00	2.31	4.054	I O |	|	|	|	9.85
25.583	0.00	2.31	4.039	I O |	|	|	|	9.83
25.667	0.00	2.30	4.023	I O |	|	|	|	9.80
25.750	0.00	2.30	4.007	I O |	|	|	|	9.78
25.833	0.00	2.29	3.991	I O |	|	|	|	9.75
25.917	0.00	2.29	3.975	I O |	|	|	|	9.73
26.000	0.00	2.28	3.960	I O |	|	|	|	9.70
26.083	0.00	2.27	3.944	I O |	|	|	|	9.68
26.167	0.00	2.27	3.928	I O |	|	|	|	9.65
26.250	0.00	2.26	3.913	I O |	|	|	|	9.63
26.333	0.00	2.26	3.897	I O |	|	|	|	9.60
26.417	0.00	2.25	3.882	I O |	|	|	|	9.58
26.500	0.00	2.25	3.866	I O |	|	|	|	9.56
26.583	0.00	2.24	3.851	I O |	|	|	|	9.53
26.667	0.00	2.23	3.835	I O |	|	|	|	9.51
26.750	0.00	2.23	3.820	I O |	|	|	|	9.48
26.833	0.00	2.22	3.805	I O |	|	|	|	9.46
26.917	0.00	2.22	3.789	I O |	|	|	|	9.43
27.000	0.00	2.21	3.774	I O |	|	|	|	9.41
27.083	0.00	2.21	3.759	I O |	|	|	|	9.39
27.167	0.00	2.20	3.744	I O |	|	|	|	9.36
27.250	0.00	2.20	3.728	I O |	|	|	|	9.34
27.333	0.00	2.19	3.713	I O |	|	|	|	9.32
27.417	0.00	2.19	3.698	I O |	|	|	|	9.29
27.500	0.00	2.18	3.683	I O |	|	|	|	9.27
27.583	0.00	2.17	3.668	I O |	|	|	|	9.24
27.667	0.00	2.17	3.653	I O |	|	|	|	9.22
27.750	0.00	2.16	3.638	I O |	|	|	|	9.20
27.833	0.00	2.16	3.623	I O |	|	|	|	9.17
27.917	0.00	2.15	3.609	I O |	|	|	|	9.15
28.000	0.00	2.15	3.594	I O |	|	|	|	9.13
28.083	0.00	2.14	3.579	I O |	|	|	|	9.10
28.167	0.00	2.14	3.564	I O |	|	|	|	9.08
28.250	0.00	2.13	3.550	I O |	|	|	|	9.06
28.333	0.00	2.13	3.535	I O |	|	|	|	9.04
28.417	0.00	2.12	3.520	I O |	|	|	|	9.01
28.500	0.00	2.12	3.506	I O |	|	|	|	8.99
28.583	0.00	2.11	3.491	I O |	|	|	|	8.97
28.667	0.00	2.11	3.477	I O |	|	|	|	8.94
28.750	0.00	2.10	3.462	I O |	|	|	|	8.92
28.833	0.00	2.09	3.448	I O |	|	|	|	8.90
28.917	0.00	2.09	3.433	I O |	|	|	|	8.88
29.000	0.00	2.08	3.419	I O |	|	|	|	8.85
29.083	0.00	2.08	3.405	I O |	|	|	|	8.83
29.167	0.00	2.07	3.390	I O |	|	|	|	8.81
29.250	0.00	2.07	3.376	I O |	|	|	|	8.79
29.333	0.00	2.06	3.362	I O |	|	|	|	8.76
29.417	0.00	2.06	3.348	I O |	|	|	|	8.74

29.500	0.00	2.05	3.333	I	O	|	|	|	8.72
29.583	0.00	2.05	3.319	I	O	|	|	|	8.70
29.667	0.00	2.04	3.305	I	O	|	|	|	8.68
29.750	0.00	2.04	3.291	I	O	|	|	|	8.65
29.833	0.00	2.03	3.277	I	O	|	|	|	8.63
29.917	0.00	2.03	3.263	I	O	|	|	|	8.61
30.000	0.00	2.02	3.249	I	O	|	|	|	8.59
30.083	0.00	2.02	3.235	I	O	|	|	|	8.57
30.167	0.00	2.01	3.221	I	O	|	|	|	8.54
30.250	0.00	2.01	3.208	I	O	|	|	|	8.52
30.333	0.00	2.00	3.194	I	O	|	|	|	8.50
30.417	0.00	2.00	3.180	I	O	|	|	|	8.48
30.500	0.00	1.99	3.166	I	O	|	|	|	8.46
30.583	0.00	1.99	3.153	I	O	|	|	|	8.44
30.667	0.00	1.98	3.139	I	O	|	|	|	8.41
30.750	0.00	1.98	3.125	I	O	|	|	|	8.39
30.833	0.00	1.97	3.112	I	O	|	|	|	8.37
30.917	0.00	1.97	3.098	I	O	|	|	|	8.35
31.000	0.00	1.96	3.085	I	O	|	|	|	8.33
31.083	0.00	1.96	3.071	I	O	|	|	|	8.31
31.167	0.00	1.95	3.058	I	O	|	|	|	8.28
31.250	0.00	1.94	3.044	I	O	|	|	|	8.26
31.333	0.00	1.94	3.031	I	O	|	|	|	8.23
31.417	0.00	1.93	3.017	I	O	|	|	|	8.21
31.500	0.00	1.92	3.004	I	O	|	|	|	8.18
31.583	0.00	1.91	2.991	I	O	|	|	|	8.16
31.667	0.00	1.90	2.978	I	O	|	|	|	8.13
31.750	0.00	1.89	2.965	I	O	|	|	|	8.11
31.833	0.00	1.89	2.952	I	O	|	|	|	8.08
31.917	0.00	1.88	2.939	I	O	|	|	|	8.06
32.000	0.00	1.87	2.926	I	O	|	|	|	8.04
32.083	0.00	1.86	2.913	I	O	|	|	|	8.01
32.167	0.00	1.85	2.900	I	O	|	|	|	7.99
32.250	0.00	1.85	2.888	I	O	|	|	|	7.96
32.333	0.00	1.84	2.875	I	O	|	|	|	7.94
32.417	0.00	1.83	2.862	I	O	|	|	|	7.92
32.500	0.00	1.82	2.850	I	O	|	|	|	7.89
32.583	0.00	1.81	2.837	I	O	|	|	|	7.87
32.667	0.00	1.81	2.825	I	O	|	|	|	7.84
32.750	0.00	1.80	2.812	I	O	|	|	|	7.82
32.833	0.00	1.79	2.800	I	O	|	|	|	7.80
32.917	0.00	1.78	2.788	I	O	|	|	|	7.77
33.000	0.00	1.78	2.775	I	O	|	|	|	7.75
33.083	0.00	1.77	2.763	I	O	|	|	|	7.73
33.167	0.00	1.76	2.751	I	O	|	|	|	7.71
33.250	0.00	1.75	2.739	I	O	|	|	|	7.68
33.333	0.00	1.75	2.727	I	O	|	|	|	7.66
33.417	0.00	1.74	2.715	I	O	|	|	|	7.64
33.500	0.00	1.73	2.703	I	O	|	|	|	7.61
33.583	0.00	1.72	2.691	I	O	|	|	|	7.59
33.667	0.00	1.72	2.679	I	O	|	|	|	7.57
33.750	0.00	1.71	2.667	I	O	|	|	|	7.55
33.833	0.00	1.70	2.656	I	O	|	|	|	7.52
33.917	0.00	1.69	2.644	I	O	|	|	|	7.50
34.000	0.00	1.69	2.632	I	O	|	|	|	7.48
34.083	0.00	1.68	2.621	I	O	|	|	|	7.46
34.167	0.00	1.67	2.609	I	O	|	|	|	7.44
34.250	0.00	1.67	2.598	I	O	|	|	|	7.42
34.333	0.00	1.66	2.586	I	O	|	|	|	7.39
34.417	0.00	1.65	2.575	I	O	|	|	|	7.37
34.500	0.00	1.64	2.563	I	O	|	|	|	7.35
34.583	0.00	1.64	2.552	I	O	|	|	|	7.33
34.667	0.00	1.63	2.541	I	O	|	|	|	7.31
34.750	0.00	1.62	2.530	I	O	|	|	|	7.29
34.833	0.00	1.62	2.518	I	O	|	|	|	7.27
34.917	0.00	1.61	2.507	I	O	|	|	|	7.24
35.000	0.00	1.60	2.496	I	O	|	|	|	7.22
35.083	0.00	1.60	2.485	I	O	|	|	|	7.20
35.167	0.00	1.59	2.474	I	O	|	|	|	7.18
35.250	0.00	1.58	2.463	I	O	|	|	|	7.16
35.333	0.00	1.58	2.453	I	O	|	|	|	7.14

35.417	0.00	1.57	2.442	I	O	|	|	|	| 7.12
35.500	0.00	1.56	2.431	I	O	|	|	|	| 7.10
35.583	0.00	1.56	2.420	I	O	|	|	|	| 7.08
35.667	0.00	1.55	2.409	I	O	|	|	|	| 7.06
35.750	0.00	1.54	2.399	I	O	|	|	|	| 7.04
35.833	0.00	1.54	2.388	I	O	|	|	|	| 7.02
35.917	0.00	1.53	2.378	I	O	|	|	|	| 7.00
36.000	0.00	1.52	2.367	I	O	|	|	|	| 6.98
36.083	0.00	1.52	2.357	I	O	|	|	|	| 6.96
36.167	0.00	1.51	2.346	I	O	|	|	|	| 6.94
36.250	0.00	1.50	2.336	I	O	|	|	|	| 6.92
36.333	0.00	1.50	2.326	I	O	|	|	|	| 6.90
36.417	0.00	1.49	2.315	I	O	|	|	|	| 6.88
36.500	0.00	1.48	2.305	I	O	|	|	|	| 6.86
36.583	0.00	1.48	2.295	I	O	|	|	|	| 6.84
36.667	0.00	1.47	2.285	I	O	|	|	|	| 6.82
36.750	0.00	1.47	2.275	I	O	|	|	|	| 6.81
36.833	0.00	1.46	2.264	I	O	|	|	|	| 6.79
36.917	0.00	1.45	2.254	I	O	|	|	|	| 6.77
37.000	0.00	1.45	2.244	I	O	|	|	|	| 6.75
37.083	0.00	1.44	2.235	I	O	|	|	|	| 6.73
37.167	0.00	1.43	2.225	I	O	|	|	|	| 6.71
37.250	0.00	1.43	2.215	I	O	|	|	|	| 6.69
37.333	0.00	1.42	2.205	I	O	|	|	|	| 6.67
37.417	0.00	1.42	2.195	I	O	|	|	|	| 6.66
37.500	0.00	1.41	2.185	I	O	|	|	|	| 6.64
37.583	0.00	1.40	2.176	I	O	|	|	|	| 6.62
37.667	0.00	1.40	2.166	I	O	|	|	|	| 6.60
37.750	0.00	1.39	2.157	I	O	|	|	|	| 6.58
37.833	0.00	1.39	2.147	I	O	|	|	|	| 6.56
37.917	0.00	1.38	2.137	I	O	|	|	|	| 6.55
38.000	0.00	1.37	2.128	I	O	|	|	|	| 6.53
38.083	0.00	1.37	2.119	I	O	|	|	|	| 6.51
38.167	0.00	1.36	2.109	I	O	|	|	|	| 6.49
38.250	0.00	1.36	2.100	I	O	|	|	|	| 6.48
38.333	0.00	1.35	2.090	I	O	|	|	|	| 6.46
38.417	0.00	1.35	2.081	I	O	|	|	|	| 6.44
38.500	0.00	1.34	2.072	I	O	|	|	|	| 6.42
38.583	0.00	1.33	2.063	I	O	|	|	|	| 6.41
38.667	0.00	1.33	2.054	I	O	|	|	|	| 6.39
38.750	0.00	1.32	2.044	I	O	|	|	|	| 6.37
38.833	0.00	1.32	2.035	I	O	|	|	|	| 6.35
38.917	0.00	1.31	2.026	I	O	|	|	|	| 6.34
39.000	0.00	1.31	2.017	I	O	|	|	|	| 6.32
39.083	0.00	1.30	2.008	I	O	|	|	|	| 6.30
39.167	0.00	1.28	1.999	I	O	|	|	|	| 6.28
39.250	0.00	1.27	1.991	I	O	|	|	|	| 6.26
39.333	0.00	1.25	1.982	I	O	|	|	|	| 6.25
39.417	0.00	1.24	1.973	I	O	|	|	|	| 6.23
39.500	0.00	1.22	1.965	I	O	|	|	|	| 6.21
39.583	0.00	1.20	1.957	I	O	|	|	|	| 6.19
39.667	0.00	1.19	1.948	I	O	|	|	|	| 6.17
39.750	0.00	1.17	1.940	I	O	|	|	|	| 6.15
39.833	0.00	1.16	1.932	I	O	|	|	|	| 6.14
39.917	0.00	1.14	1.924	I	O	|	|	|	| 6.12
40.000	0.00	1.13	1.916	I	O	|	|	|	| 6.10
40.083	0.00	1.11	1.909	I	O	|	|	|	| 6.09
40.167	0.00	1.10	1.901	I	O	|	|	|	| 6.07
40.250	0.00	1.09	1.894	I	O	|	|	|	| 6.05
40.333	0.00	1.07	1.886	I	O	|	|	|	| 6.04
40.417	0.00	1.06	1.879	I	O	|	|	|	| 6.02
40.500	0.00	1.04	1.871	I	O	|	|	|	| 6.00
40.583	0.00	1.03	1.864	I	O	|	|	|	| 5.99
40.667	0.00	1.02	1.857	I	O	|	|	|	| 5.97
40.750	0.00	1.00	1.850	I	O	|	|	|	| 5.96
40.833	0.00	0.99	1.843	I	O	|	|	|	| 5.94
40.917	0.00	0.98	1.837	I	O	|	|	|	| 5.93
41.000	0.00	0.97	1.830	I	O	|	|	|	| 5.91
41.083	0.00	0.95	1.823	I	O	|	|	|	| 5.90
41.167	0.00	0.94	1.817	I	O	|	|	|	| 5.89
41.250	0.00	0.93	1.810	I	O	|	|	|	| 5.87

41.333	0.00	0.92	1.804	I O					5.86
41.417	0.00	0.91	1.798	I O					5.84
41.500	0.00	0.89	1.792	I O					5.83
41.583	0.00	0.88	1.785	I O					5.82
41.667	0.00	0.87	1.779	I O					5.80
41.750	0.00	0.86	1.773	I O					5.79
41.833	0.00	0.85	1.768	I O					5.78
41.917	0.00	0.84	1.762	I O					5.77
42.000	0.00	0.83	1.756	I O					5.75
42.083	0.00	0.82	1.750	I O					5.74
42.167	0.00	0.81	1.745	I O					5.73
42.250	0.00	0.80	1.739	IO					5.72
42.333	0.00	0.79	1.734	IO					5.70
42.417	0.00	0.78	1.728	IO					5.69
42.500	0.00	0.77	1.723	IO					5.68
42.583	0.00	0.76	1.718	IO					5.67
42.667	0.00	0.75	1.713	IO					5.66
42.750	0.00	0.74	1.708	IO					5.65
42.833	0.00	0.73	1.702	IO					5.64
42.917	0.00	0.72	1.698	IO					5.63
43.000	0.00	0.71	1.693	IO					5.61
43.083	0.00	0.70	1.688	IO					5.60
43.167	0.00	0.69	1.683	IO					5.59
43.250	0.00	0.68	1.678	IO					5.58
43.333	0.00	0.67	1.674	IO					5.57
43.417	0.00	0.66	1.669	IO					5.56
43.500	0.00	0.66	1.664	IO					5.55
43.583	0.00	0.65	1.660	IO					5.54
43.667	0.00	0.64	1.656	IO					5.53
43.750	0.00	0.63	1.651	IO					5.52
43.833	0.00	0.62	1.647	IO					5.51
43.917	0.00	0.61	1.643	IO					5.51
44.000	0.00	0.61	1.638	IO					5.50
44.083	0.00	0.61	1.634	IO					5.49
44.167	0.00	0.61	1.630	IO					5.48
44.250	0.00	0.61	1.626	IO					5.47
44.333	0.00	0.61	1.622	IO					5.46
44.417	0.00	0.61	1.617	IO					5.45
44.500	0.00	0.61	1.613	IO					5.44
44.583	0.00	0.61	1.609	IO					5.43
44.667	0.00	0.60	1.605	IO					5.42
44.750	0.00	0.60	1.601	IO					5.41
44.833	0.00	0.60	1.597	IO					5.40
44.917	0.00	0.60	1.592	IO					5.39
45.000	0.00	0.60	1.588	IO					5.38
45.083	0.00	0.60	1.584	IO					5.37
45.167	0.00	0.60	1.580	IO					5.36
45.250	0.00	0.60	1.576	IO					5.35
45.333	0.00	0.60	1.572	IO					5.34
45.417	0.00	0.60	1.568	IO					5.33
45.500	0.00	0.60	1.563	IO					5.32
45.583	0.00	0.60	1.559	IO					5.31
45.667	0.00	0.60	1.555	IO					5.30
45.750	0.00	0.60	1.551	IO					5.29
45.833	0.00	0.60	1.547	IO					5.28
45.917	0.00	0.60	1.543	IO					5.27
46.000	0.00	0.60	1.539	IO					5.26
46.083	0.00	0.59	1.535	IO					5.25
46.167	0.00	0.59	1.531	IO					5.24
46.250	0.00	0.59	1.526	IO					5.23
46.333	0.00	0.59	1.522	IO					5.23
46.417	0.00	0.59	1.518	IO					5.22
46.500	0.00	0.59	1.514	IO					5.21
46.583	0.00	0.59	1.510	IO					5.20
46.667	0.00	0.59	1.506	IO					5.19
46.750	0.00	0.59	1.502	IO					5.18
46.833	0.00	0.59	1.498	IO					5.17
46.917	0.00	0.59	1.494	IO					5.16
47.000	0.00	0.59	1.490	IO					5.15
47.083	0.00	0.59	1.486	IO					5.14
47.167	0.00	0.59	1.482	IO					5.13

47.250	0.00	0.59	1.478	IO					5.12
47.333	0.00	0.59	1.474	IO					5.11
47.417	0.00	0.59	1.470	IO					5.10
47.500	0.00	0.58	1.466	IO					5.09
47.583	0.00	0.58	1.462	IO					5.08
47.667	0.00	0.58	1.458	IO					5.07
47.750	0.00	0.58	1.454	IO					5.06
47.833	0.00	0.58	1.449	IO					5.06
47.917	0.00	0.58	1.445	IO					5.05
48.000	0.00	0.58	1.441	IO					5.04
48.083	0.00	0.58	1.437	IO					5.03
48.167	0.00	0.58	1.433	IO					5.02
48.250	0.00	0.58	1.429	IO					5.01
48.333	0.00	0.58	1.425	IO					5.00
48.417	0.00	0.58	1.422	IO					4.99
48.500	0.00	0.58	1.418	IO					4.98
48.583	0.00	0.58	1.414	IO					4.97
48.667	0.00	0.58	1.410	IO					4.96
48.750	0.00	0.58	1.406	IO					4.95
48.833	0.00	0.58	1.402	IO					4.94
48.917	0.00	0.58	1.398	IO					4.93
49.000	0.00	0.57	1.394	IO					4.93
49.083	0.00	0.57	1.390	IO					4.92
49.167	0.00	0.57	1.386	IO					4.91
49.250	0.00	0.57	1.382	IO					4.90
49.333	0.00	0.57	1.378	IO					4.89
49.417	0.00	0.57	1.374	IO					4.88
49.500	0.00	0.57	1.370	IO					4.87
49.583	0.00	0.57	1.366	IO					4.86
49.667	0.00	0.57	1.362	IO					4.85
49.750	0.00	0.57	1.358	IO					4.84
49.833	0.00	0.57	1.354	IO					4.83
49.917	0.00	0.57	1.350	IO					4.82
50.000	0.00	0.57	1.347	IO					4.81
50.083	0.00	0.57	1.343	IO					4.81
50.167	0.00	0.57	1.339	IO					4.80
50.250	0.00	0.57	1.335	IO					4.79
50.333	0.00	0.57	1.331	IO					4.78
50.417	0.00	0.56	1.327	IO					4.77
50.500	0.00	0.56	1.323	IO					4.76
50.583	0.00	0.56	1.319	IO					4.75
50.667	0.00	0.56	1.315	IO					4.74
50.750	0.00	0.56	1.311	IO					4.73
50.833	0.00	0.56	1.308	IO					4.72
50.917	0.00	0.56	1.304	IO					4.71
51.000	0.00	0.56	1.300	IO					4.71
51.083	0.00	0.56	1.296	IO					4.70
51.167	0.00	0.56	1.292	IO					4.69
51.250	0.00	0.56	1.288	IO					4.68
51.333	0.00	0.56	1.284	IO					4.67
51.417	0.00	0.56	1.281	IO					4.66
51.500	0.00	0.56	1.277	IO					4.65
51.583	0.00	0.56	1.273	IO					4.64
51.667	0.00	0.56	1.269	IO					4.63
51.750	0.00	0.56	1.265	IO					4.63
51.833	0.00	0.56	1.261	IO					4.62
51.917	0.00	0.55	1.258	IO					4.61
52.000	0.00	0.55	1.254	IO					4.60
52.083	0.00	0.55	1.250	IO					4.59
52.167	0.00	0.55	1.246	IO					4.58
52.250	0.00	0.55	1.242	IO					4.57
52.333	0.00	0.55	1.239	IO					4.56
52.417	0.00	0.55	1.235	IO					4.55
52.500	0.00	0.55	1.231	IO					4.54
52.583	0.00	0.55	1.227	IO					4.54
52.667	0.00	0.55	1.223	IO					4.53
52.750	0.00	0.55	1.220	IO					4.52
52.833	0.00	0.55	1.216	IO					4.51
52.917	0.00	0.55	1.212	IO					4.50
53.000	0.00	0.55	1.208	IO					4.49
53.083	0.00	0.55	1.204	IO					4.48

53.167	0.00	0.55	1.201	IO				4.47
53.250	0.00	0.55	1.197	IO				4.47
53.333	0.00	0.55	1.193	IO				4.46
53.417	0.00	0.55	1.189	IO				4.45
53.500	0.00	0.54	1.186	IO				4.44
53.583	0.00	0.54	1.182	IO				4.43
53.667	0.00	0.54	1.178	IO				4.42
53.750	0.00	0.54	1.174	IO				4.41
53.833	0.00	0.54	1.171	IO				4.40
53.917	0.00	0.54	1.167	IO				4.40
54.000	0.00	0.54	1.163	IO				4.39
54.083	0.00	0.54	1.159	IO				4.38
54.167	0.00	0.54	1.156	IO				4.37
54.250	0.00	0.54	1.152	IO				4.36
54.333	0.00	0.54	1.148	IO				4.35
54.417	0.00	0.54	1.145	IO				4.34
54.500	0.00	0.54	1.141	IO				4.33
54.583	0.00	0.54	1.137	IO				4.33
54.667	0.00	0.54	1.134	IO				4.32
54.750	0.00	0.54	1.130	IO				4.31
54.833	0.00	0.54	1.126	IO				4.30
54.917	0.00	0.54	1.122	IO				4.29
55.000	0.00	0.53	1.119	IO				4.28
55.083	0.00	0.53	1.115	IO				4.27
55.167	0.00	0.53	1.111	IO				4.26
55.250	0.00	0.53	1.108	IO				4.25
55.333	0.00	0.53	1.104	IO				4.24
55.417	0.00	0.53	1.100	IO				4.23
55.500	0.00	0.53	1.097	IO				4.22
55.583	0.00	0.53	1.093	IO				4.21
55.667	0.00	0.53	1.089	IO				4.20
55.750	0.00	0.53	1.086	IO				4.19
55.833	0.00	0.53	1.082	IO				4.18
55.917	0.00	0.53	1.079	IO				4.17
56.000	0.00	0.53	1.075	IO				4.16
56.083	0.00	0.53	1.071	IO				4.15
56.167	0.00	0.53	1.068	IO				4.14
56.250	0.00	0.52	1.064	IO				4.13
56.333	0.00	0.52	1.060	IO				4.12
56.417	0.00	0.52	1.057	IO				4.11
56.500	0.00	0.52	1.053	IO				4.10
56.583	0.00	0.52	1.050	IO				4.09
56.667	0.00	0.52	1.046	IO				4.08
56.750	0.00	0.52	1.042	IO				4.07
56.833	0.00	0.52	1.039	IO				4.06
56.917	0.00	0.52	1.035	IO				4.05
57.000	0.00	0.52	1.032	IO				4.04
57.083	0.00	0.52	1.028	IO				4.03
57.167	0.00	0.52	1.025	IO				4.02
57.250	0.00	0.52	1.021	IO				4.01
57.333	0.00	0.52	1.017	IO				4.00
57.417	0.00	0.52	1.014	IO				3.99
57.500	0.00	0.51	1.010	IO				3.98
57.583	0.00	0.51	1.007	IO				3.97
57.667	0.00	0.51	1.003	IO				3.96
57.750	0.00	0.51	1.000	IO				3.95
57.833	0.00	0.51	0.996	IO				3.94
57.917	0.00	0.51	0.993	IO				3.93
58.000	0.00	0.51	0.989	IO				3.92
58.083	0.00	0.51	0.986	IO				3.91
58.167	0.00	0.51	0.982	IO				3.90
58.250	0.00	0.51	0.979	IO				3.89
58.333	0.00	0.51	0.975	IO				3.88
58.417	0.00	0.51	0.972	IO				3.87
58.500	0.00	0.51	0.968	IO				3.86
58.583	0.00	0.51	0.965	IO				3.85
58.667	0.00	0.51	0.961	IO				3.84
58.750	0.00	0.50	0.958	IO				3.83
58.833	0.00	0.50	0.954	IO				3.82
58.917	0.00	0.50	0.951	IO				3.81
59.000	0.00	0.50	0.947	IO				3.80

59.083	0.00	0.50	0.944	IO				3.79
59.167	0.00	0.50	0.940	IO				3.78
59.250	0.00	0.50	0.937	IO				3.77
59.333	0.00	0.50	0.934	IO				3.77
59.417	0.00	0.50	0.930	IO				3.76
59.500	0.00	0.50	0.927	IO				3.75
59.583	0.00	0.50	0.923	IO				3.74
59.667	0.00	0.50	0.920	IO				3.73
59.750	0.00	0.50	0.916	IO				3.72
59.833	0.00	0.50	0.913	IO				3.71
59.917	0.00	0.50	0.910	IO				3.70
60.000	0.00	0.50	0.906	IO				3.69
60.083	0.00	0.49	0.903	IO				3.68
60.167	0.00	0.49	0.899	IO				3.67
60.250	0.00	0.49	0.896	IO				3.66
60.333	0.00	0.49	0.892	IO				3.65
60.417	0.00	0.49	0.889	IO				3.64
60.500	0.00	0.49	0.886	IO				3.63
60.583	0.00	0.49	0.882	IO				3.62
60.667	0.00	0.49	0.879	IO				3.61
60.750	0.00	0.49	0.876	IO				3.60
60.833	0.00	0.49	0.872	IO				3.60
60.917	0.00	0.49	0.869	IO				3.59
61.000	0.00	0.49	0.865	IO				3.58
61.083	0.00	0.49	0.862	IO				3.57
61.167	0.00	0.49	0.859	IO				3.56
61.250	0.00	0.49	0.855	IO				3.55
61.333	0.00	0.49	0.852	IO				3.54
61.417	0.00	0.48	0.849	IO				3.53
61.500	0.00	0.48	0.845	IO				3.52
61.583	0.00	0.48	0.842	IO				3.51
61.667	0.00	0.48	0.839	IO				3.50
61.750	0.00	0.48	0.835	IO				3.49
61.833	0.00	0.48	0.832	IO				3.48
61.917	0.00	0.48	0.829	IO				3.47
62.000	0.00	0.48	0.826	IO				3.47
62.083	0.00	0.48	0.822	IO				3.46
62.167	0.00	0.48	0.819	IO				3.45
62.250	0.00	0.48	0.816	IO				3.44
62.333	0.00	0.48	0.812	IO				3.43
62.417	0.00	0.48	0.809	IO				3.42
62.500	0.00	0.48	0.806	IO				3.41
62.583	0.00	0.48	0.802	IO				3.40
62.667	0.00	0.48	0.799	IO				3.39
62.750	0.00	0.47	0.796	IO				3.38
62.833	0.00	0.47	0.793	IO				3.37
62.917	0.00	0.47	0.789	IO				3.37
63.000	0.00	0.47	0.786	IO				3.36
63.083	0.00	0.47	0.783	IO				3.35
63.167	0.00	0.47	0.780	IO				3.34
63.250	0.00	0.47	0.776	IO				3.33
63.333	0.00	0.47	0.773	IO				3.32
63.417	0.00	0.47	0.770	IO				3.31
63.500	0.00	0.47	0.767	IO				3.30
63.583	0.00	0.47	0.763	IO				3.29
63.667	0.00	0.47	0.760	IO				3.28
63.750	0.00	0.47	0.757	IO				3.27
63.833	0.00	0.47	0.754	IO				3.26
63.917	0.00	0.47	0.751	IO				3.25
64.000	0.00	0.46	0.747	IO				3.24
64.083	0.00	0.46	0.744	IO				3.23
64.167	0.00	0.46	0.741	IO				3.22
64.250	0.00	0.46	0.738	IO				3.21
64.333	0.00	0.46	0.735	IO				3.20
64.417	0.00	0.46	0.731	IO				3.18
64.500	0.00	0.46	0.728	IO				3.17
64.583	0.00	0.46	0.725	IO				3.16
64.667	0.00	0.46	0.722	IO				3.15
64.750	0.00	0.46	0.719	IO				3.14
64.833	0.00	0.46	0.716	IO				3.13
64.917	0.00	0.46	0.713	IO				3.12

65.000	0.00	0.45	0.709	IO				3.11
65.083	0.00	0.45	0.706	IO				3.10
65.167	0.00	0.45	0.703	IO				3.09
65.250	0.00	0.45	0.700	IO				3.08
65.333	0.00	0.45	0.697	IO				3.07
65.417	0.00	0.45	0.694	IO				3.06
65.500	0.00	0.45	0.691	IO				3.05
65.583	0.00	0.45	0.688	IO				3.04
65.667	0.00	0.45	0.685	IO				3.03
65.750	0.00	0.45	0.681	IO				3.02
65.833	0.00	0.45	0.678	IO				3.01
65.917	0.00	0.45	0.675	IO				3.00
66.000	0.00	0.45	0.672	IO				2.99
66.083	0.00	0.44	0.669	IO				2.98
66.167	0.00	0.44	0.666	IO				2.97
66.250	0.00	0.44	0.663	IO				2.96
66.333	0.00	0.44	0.660	IO				2.95
66.417	0.00	0.44	0.657	IO				2.94
66.500	0.00	0.44	0.654	IO				2.93
66.583	0.00	0.44	0.651	IO				2.92
66.667	0.00	0.44	0.648	IO				2.91
66.750	0.00	0.44	0.645	IO				2.90
66.833	0.00	0.44	0.642	IO				2.89
66.917	0.00	0.44	0.639	IO				2.88
67.000	0.00	0.44	0.636	IO				2.87
67.083	0.00	0.44	0.633	IO				2.86
67.167	0.00	0.43	0.630	IO				2.85
67.250	0.00	0.43	0.627	IO				2.84
67.333	0.00	0.43	0.624	IO				2.83
67.417	0.00	0.43	0.621	IO				2.82
67.500	0.00	0.43	0.618	IO				2.81
67.583	0.00	0.43	0.615	IO				2.80
67.667	0.00	0.43	0.612	IO				2.79
67.750	0.00	0.43	0.609	IO				2.78
67.833	0.00	0.43	0.606	IO				2.77
67.917	0.00	0.43	0.603	IO				2.76
68.000	0.00	0.43	0.600	IO				2.75
68.083	0.00	0.43	0.597	IO				2.74
68.167	0.00	0.43	0.594	IO				2.73
68.250	0.00	0.43	0.591	IO				2.72
68.333	0.00	0.42	0.588	IO				2.71
68.417	0.00	0.42	0.585	IO				2.70
68.500	0.00	0.42	0.582	IO				2.69
68.583	0.00	0.42	0.580	IO				2.68
68.667	0.00	0.42	0.577	IO				2.67
68.750	0.00	0.42	0.574	IO				2.66
68.833	0.00	0.42	0.571	IO				2.65
68.917	0.00	0.42	0.568	IO				2.64
69.000	0.00	0.42	0.565	IO				2.63
69.083	0.00	0.42	0.562	IO				2.62
69.167	0.00	0.42	0.559	IO				2.61
69.250	0.00	0.42	0.556	IO				2.60
69.333	0.00	0.42	0.554	IO				2.59
69.417	0.00	0.42	0.551	IO				2.58
69.500	0.00	0.41	0.548	IO				2.57
69.583	0.00	0.41	0.545	IO				2.56
69.667	0.00	0.41	0.542	IO				2.55
69.750	0.00	0.41	0.539	IO				2.54
69.833	0.00	0.41	0.537	IO				2.54
69.917	0.00	0.41	0.534	IO				2.53
70.000	0.00	0.41	0.531	IO				2.52
70.083	0.00	0.41	0.528	IO				2.51
70.167	0.00	0.41	0.525	IO				2.50
70.250	0.00	0.41	0.522	IO				2.49
70.333	0.00	0.41	0.520	IO				2.48
70.417	0.00	0.41	0.517	IO				2.47
70.500	0.00	0.41	0.514	IO				2.46
70.583	0.00	0.41	0.511	IO				2.45
70.667	0.00	0.40	0.508	IO				2.44
70.750	0.00	0.40	0.506	IO				2.43
70.833	0.00	0.40	0.503	IO				2.42

70.917	0.00	0.40	0.500	IO					2.41
71.000	0.00	0.40	0.497	IO					2.40
71.083	0.00	0.40	0.495	O					2.40
71.167	0.00	0.40	0.492	O					2.39
71.250	0.00	0.40	0.489	O					2.38
71.333	0.00	0.40	0.486	O					2.37
71.417	0.00	0.40	0.484	O					2.36
71.500	0.00	0.40	0.481	O					2.35
71.583	0.00	0.40	0.478	O					2.34
71.667	0.00	0.40	0.475	O					2.33
71.750	0.00	0.40	0.473	O					2.32
71.833	0.00	0.39	0.470	O					2.31
71.917	0.00	0.39	0.467	O					2.30
72.000	0.00	0.39	0.464	O					2.29
72.083	0.00	0.39	0.462	O					2.28
72.167	0.00	0.39	0.459	O					2.27
72.250	0.00	0.39	0.456	O					2.26
72.333	0.00	0.39	0.454	O					2.25
72.417	0.00	0.39	0.451	O					2.25
72.500	0.00	0.39	0.448	O					2.24
72.583	0.00	0.39	0.446	O					2.23
72.667	0.00	0.39	0.443	O					2.22
72.750	0.00	0.38	0.440	O					2.21
72.833	0.00	0.38	0.438	O					2.20
72.917	0.00	0.38	0.435	O					2.19
73.000	0.00	0.38	0.432	O					2.18
73.083	0.00	0.38	0.430	O					2.17
73.167	0.00	0.38	0.427	O					2.16
73.250	0.00	0.38	0.425	O					2.15
73.333	0.00	0.38	0.422	O					2.14
73.417	0.00	0.38	0.419	O					2.13
73.500	0.00	0.38	0.417	O					2.12
73.583	0.00	0.38	0.414	O					2.11
73.667	0.00	0.37	0.412	O					2.10
73.750	0.00	0.37	0.409	O					2.09
73.833	0.00	0.37	0.406	O					2.08
73.917	0.00	0.37	0.404	O					2.07
74.000	0.00	0.37	0.401	O					2.06
74.083	0.00	0.37	0.399	O					2.05
74.167	0.00	0.37	0.396	O					2.05
74.250	0.00	0.37	0.394	O					2.04
74.333	0.00	0.37	0.391	O					2.03
74.417	0.00	0.37	0.389	O					2.02
74.500	0.00	0.37	0.386	O					2.01
74.583	0.00	0.36	0.384	O					2.00
74.667	0.00	0.36	0.381	O					1.99
74.750	0.00	0.36	0.379	O					1.98
74.833	0.00	0.36	0.376	O					1.97
74.917	0.00	0.36	0.374	O					1.96
75.000	0.00	0.36	0.371	O					1.95
75.083	0.00	0.36	0.369	O					1.94
75.167	0.00	0.36	0.366	O					1.94
75.250	0.00	0.36	0.364	O					1.93
75.333	0.00	0.36	0.361	O					1.92
75.417	0.00	0.36	0.359	O					1.91
75.500	0.00	0.35	0.356	O					1.90
75.583	0.00	0.35	0.354	O					1.89
75.667	0.00	0.35	0.351	O					1.88
75.750	0.00	0.35	0.349	O					1.87
75.833	0.00	0.35	0.347	O					1.86
75.917	0.00	0.35	0.344	O					1.86
76.000	0.00	0.35	0.342	O					1.85
76.083	0.00	0.35	0.339	O					1.84
76.167	0.00	0.35	0.337	O					1.83
76.250	0.00	0.35	0.335	O					1.82
76.333	0.00	0.35	0.332	O					1.81
76.417	0.00	0.35	0.330	O					1.80
76.500	0.00	0.34	0.327	O					1.79
76.583	0.00	0.34	0.325	O					1.79
76.667	0.00	0.34	0.323	O					1.78
76.750	0.00	0.34	0.320	O					1.77

76.833	0.00	0.34	0.318	O					1.76
76.917	0.00	0.34	0.316	O					1.75
77.000	0.00	0.34	0.313	O					1.74
77.083	0.00	0.34	0.311	O					1.73
77.167	0.00	0.34	0.309	O					1.73
77.250	0.00	0.34	0.306	O					1.72
77.333	0.00	0.34	0.304	O					1.71
77.417	0.00	0.34	0.302	O					1.70
77.500	0.00	0.33	0.299	O					1.69
77.583	0.00	0.33	0.297	O					1.68
77.667	0.00	0.33	0.295	O					1.68
77.750	0.00	0.33	0.292	O					1.67
77.833	0.00	0.33	0.290	O					1.66
77.917	0.00	0.33	0.288	O					1.65
78.000	0.00	0.33	0.286	O					1.64
78.083	0.00	0.33	0.283	O					1.63
78.167	0.00	0.33	0.281	O					1.63
78.250	0.00	0.33	0.279	O					1.62
78.333	0.00	0.33	0.277	O					1.61
78.417	0.00	0.33	0.274	O					1.60
78.500	0.00	0.32	0.272	O					1.59
78.583	0.00	0.32	0.270	O					1.58
78.667	0.00	0.32	0.268	O					1.58
78.750	0.00	0.32	0.265	O					1.57
78.833	0.00	0.32	0.263	O					1.56
78.917	0.00	0.32	0.261	O					1.55
79.000	0.00	0.32	0.259	O					1.54
79.083	0.00	0.32	0.257	O					1.54
79.167	0.00	0.32	0.254	O					1.53
79.250	0.00	0.32	0.252	O					1.52
79.333	0.00	0.32	0.250	O					1.51
79.417	0.00	0.32	0.248	O					1.50
79.500	0.00	0.32	0.246	O					1.50
79.583	0.00	0.31	0.244	O					1.49
79.667	0.00	0.31	0.241	O					1.48
79.750	0.00	0.31	0.239	O					1.47
79.833	0.00	0.31	0.237	O					1.46
79.917	0.00	0.31	0.235	O					1.46
80.000	0.00	0.31	0.233	O					1.45
80.083	0.00	0.31	0.231	O					1.44
80.167	0.00	0.31	0.228	O					1.43
80.250	0.00	0.31	0.226	O					1.43
80.333	0.00	0.31	0.224	O					1.42
80.417	0.00	0.31	0.222	O					1.41
80.500	0.00	0.31	0.220	O					1.40
80.583	0.00	0.31	0.218	O					1.39
80.667	0.00	0.30	0.216	O					1.39
80.750	0.00	0.30	0.214	O					1.38
80.833	0.00	0.30	0.212	O					1.37
80.917	0.00	0.30	0.210	O					1.36
81.000	0.00	0.30	0.207	O					1.36
81.083	0.00	0.30	0.205	O					1.35
81.167	0.00	0.30	0.203	O					1.34
81.250	0.00	0.30	0.201	O					1.33
81.333	0.00	0.30	0.199	O					1.33
81.417	0.00	0.30	0.197	O					1.32
81.500	0.00	0.30	0.195	O					1.31
81.583	0.00	0.30	0.193	O					1.30
81.667	0.00	0.30	0.191	O					1.29
81.750	0.00	0.29	0.189	O					1.28
81.833	0.00	0.29	0.187	O					1.27
81.917	0.00	0.29	0.185	O					1.26
82.000	0.00	0.29	0.183	O					1.25
82.083	0.00	0.29	0.181	O					1.24
82.167	0.00	0.28	0.179	O					1.22
82.250	0.00	0.28	0.177	O					1.21
82.333	0.00	0.28	0.175	O					1.20
82.417	0.00	0.28	0.173	O					1.19
82.500	0.00	0.28	0.171	O					1.18
82.583	0.00	0.28	0.169	O					1.17
82.667	0.00	0.27	0.168	O					1.16

82.750	0.00	0.27	0.166	O					1.15
82.833	0.00	0.27	0.164	O					1.14
82.917	0.00	0.27	0.162	O					1.13
83.000	0.00	0.27	0.160	O					1.11
83.083	0.00	0.27	0.158	O					1.10
83.167	0.00	0.26	0.156	O					1.09
83.250	0.00	0.26	0.155	O					1.08
83.333	0.00	0.26	0.153	O					1.07
83.417	0.00	0.26	0.151	O					1.06
83.500	0.00	0.26	0.149	O					1.05
83.583	0.00	0.26	0.147	O					1.04
83.667	0.00	0.25	0.146	O					1.03
83.750	0.00	0.25	0.144	O					1.02
83.833	0.00	0.25	0.142	O					1.01
83.917	0.00	0.25	0.140	O					1.00
84.000	0.00	0.25	0.139	O					0.99
84.083	0.00	0.25	0.137	O					0.98
84.167	0.00	0.25	0.135	O					0.97
84.250	0.00	0.24	0.134	O					0.96
84.333	0.00	0.24	0.132	O					0.95
84.417	0.00	0.24	0.130	O					0.94
84.500	0.00	0.24	0.129	O					0.93
84.583	0.00	0.24	0.127	O					0.92
84.667	0.00	0.24	0.125	O					0.91
84.750	0.00	0.23	0.124	O					0.90
84.833	0.00	0.23	0.122	O					0.89
84.917	0.00	0.23	0.121	O					0.88
85.000	0.00	0.23	0.119	O					0.88
85.083	0.00	0.23	0.117	O					0.87
85.167	0.00	0.23	0.116	O					0.86
85.250	0.00	0.23	0.114	O					0.85
85.333	0.00	0.22	0.113	O					0.84
85.417	0.00	0.22	0.111	O					0.83
85.500	0.00	0.22	0.110	O					0.82
85.583	0.00	0.22	0.108	O					0.81
85.667	0.00	0.22	0.107	O					0.80
85.750	0.00	0.22	0.105	O					0.79
85.833	0.00	0.22	0.104	O					0.79
85.917	0.00	0.22	0.102	O					0.78
86.000	0.00	0.21	0.101	O					0.77
86.083	0.00	0.21	0.099	O					0.76
86.167	0.00	0.21	0.098	O					0.75
86.250	0.00	0.21	0.096	O					0.74
86.333	0.00	0.21	0.095	O					0.73
86.417	0.00	0.21	0.093	O					0.73
86.500	0.00	0.21	0.092	O					0.72
86.583	0.00	0.21	0.090	O					0.71
86.667	0.00	0.20	0.089	O					0.70
86.750	0.00	0.20	0.088	O					0.69
86.833	0.00	0.20	0.086	O					0.69
86.917	0.00	0.20	0.085	O					0.68
87.000	0.00	0.20	0.084	O					0.67
87.083	0.00	0.20	0.082	O					0.66
87.167	0.00	0.20	0.081	O					0.65
87.250	0.00	0.20	0.079	O					0.65
87.333	0.00	0.19	0.078	O					0.64
87.417	0.00	0.19	0.077	O					0.63
87.500	0.00	0.19	0.075	O					0.62
87.583	0.00	0.19	0.074	O					0.61
87.667	0.00	0.19	0.073	O					0.61
87.750	0.00	0.19	0.072	O					0.60
87.833	0.00	0.19	0.070	O					0.59
87.917	0.00	0.19	0.069	O					0.58
88.000	0.00	0.18	0.068	O					0.58
88.083	0.00	0.18	0.066	O					0.57
88.167	0.00	0.18	0.065	O					0.56
88.250	0.00	0.18	0.064	O					0.56
88.333	0.00	0.18	0.063	O					0.55
88.417	0.00	0.18	0.061	O					0.54
88.500	0.00	0.18	0.060	O					0.53
88.583	0.00	0.18	0.059	O					0.53

88.667	0.00	0.18	0.058	O	|	|	|	|	0.52
88.750	0.00	0.17	0.057	O	|	|	|	|	0.51
88.833	0.00	0.17	0.055	O	|	|	|	|	0.51
88.917	0.00	0.17	0.054	O	|	|	|	|	0.50
89.000	0.00	0.17	0.053	O	|	|	|	|	0.49
89.083	0.00	0.17	0.052	O	|	|	|	|	0.48
89.167	0.00	0.17	0.051	O	|	|	|	|	0.48
89.250	0.00	0.17	0.049	O	|	|	|	|	0.47
89.333	0.00	0.17	0.048	O	|	|	|	|	0.46
89.417	0.00	0.17	0.047	O	|	|	|	|	0.46
89.500	0.00	0.17	0.046	O	|	|	|	|	0.45
89.583	0.00	0.16	0.045	O	|	|	|	|	0.44
89.667	0.00	0.16	0.044	O	|	|	|	|	0.44
89.750	0.00	0.16	0.043	O	|	|	|	|	0.43
89.833	0.00	0.16	0.042	O	|	|	|	|	0.43
89.917	0.00	0.16	0.040	O	|	|	|	|	0.42
90.000	0.00	0.16	0.039	O	|	|	|	|	0.41
90.083	0.00	0.16	0.038	O	|	|	|	|	0.41
90.167	0.00	0.16	0.037	O	|	|	|	|	0.40
90.250	0.00	0.16	0.036	O	|	|	|	|	0.39
90.333	0.00	0.16	0.035	O	|	|	|	|	0.39
90.417	0.00	0.15	0.034	O	|	|	|	|	0.38
90.500	0.00	0.15	0.033	O	|	|	|	|	0.37
90.583	0.00	0.15	0.032	O	|	|	|	|	0.37
90.667	0.00	0.15	0.031	O	|	|	|	|	0.36
90.750	0.00	0.15	0.030	O	|	|	|	|	0.36
90.833	0.00	0.15	0.029	O	|	|	|	|	0.35
90.917	0.00	0.15	0.028	O	|	|	|	|	0.34
91.000	0.00	0.15	0.027	O	|	|	|	|	0.34
91.083	0.00	0.15	0.026	O	|	|	|	|	0.33
91.167	0.00	0.15	0.025	O	|	|	|	|	0.33
91.250	0.00	0.15	0.024	O	|	|	|	|	0.32
91.333	0.00	0.14	0.023	O	|	|	|	|	0.32
91.417	0.00	0.14	0.022	O	|	|	|	|	0.31
91.500	0.00	0.14	0.021	O	|	|	|	|	0.30
91.583	0.00	0.14	0.020	O	|	|	|	|	0.29
91.667	0.00	0.13	0.019	O	|	|	|	|	0.28
91.750	0.00	0.13	0.018	O	|	|	|	|	0.27
91.833	0.00	0.12	0.017	O	|	|	|	|	0.25
91.917	0.00	0.11	0.016	O	|	|	|	|	0.24
92.000	0.00	0.11	0.015	O	|	|	|	|	0.23
92.083	0.00	0.10	0.015	O	|	|	|	|	0.22
92.167	0.00	0.10	0.014	O	|	|	|	|	0.21

Remaining water in basin = 0.01 (Ac.Ft)

**********HYDROGRAPH DATA**********

Number of intervals = 1106
Time interval = 5.0 (Min.)
Maximum/Peak flow rate = 9.587 (CFS)
Total volume = 8.041 (Ac.Ft)

Status of hydrographs being held in storage

	Stream 1	Stream 2	Stream 3	Stream 4	Stream 5
Peak (CFS)	0.000	0.000	0.000	0.000	0.000
Vol (Ac.Ft)	0.000	0.000	0.000	0.000	0.000

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FLOOD HYDROGRAPH ROUTING PROGRAM
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Study date: 08/18/25

Program License Serial Number 5006

********** HYDROGRAPH INFORMATION **********

From study/file name: PROA110.rte
**********HYDROGRAPH DATA**********
Number of intervals = 30
Time interval = 5.0 (Min.)
Maximum/Peak flow rate = 95.017 (CFS)
Total volume = 3.970 (Ac.Ft)

Status of hydrographs being held in storage

	Stream 1	Stream 2	Stream 3	Stream 4	Stream 5
Peak (CFS)	0.000	0.000	0.000	0.000	0.000
Vol (Ac.Ft)	0.000	0.000	0.000	0.000	0.000

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Process from Point/Station 0.000 to Point/Station 0.000
**** RETARDING BASIN ROUTING ****

User entry of depth-outflow-storage data

Total number of inflow hydrograph intervals = 30
Hydrograph time unit = 5.000 (Min.)
Initial depth in storage basin = 0.00(Ft.)

Initial basin depth = 0.00 (Ft.)
Initial basin storage = 0.00 (Ac.Ft)
Initial basin outflow = 0.00 (CFS)

Depth vs. Storage and Depth vs. Discharge data:

Basin Depth (Ft.)	Storage (Ac.Ft)	Outflow (CFS)	(S-O*dt/2) (Ac.Ft)	(S+O*dt/2) (Ac.Ft)
0.000	0.000	0.000	0.000	0.000
0.300	0.020	0.142	0.020	0.020
1.300	0.192	0.296	0.191	0.193
2.300	0.466	0.394	0.465	0.467
3.300	0.766	0.469	0.764	0.768
4.300	1.126	0.536	1.124	1.128
5.500	1.640	0.610	1.638	1.642
6.300	2.007	1.299	2.003	2.011
8.300	3.066	1.957	3.059	3.073
10.300	4.341	2.417	4.333	4.349
11.400	5.141	2.632	5.132	5.150
12.300	5.851	167.187	5.275	6.427
13.300	6.699	657.066	4.436	8.962
14.300	7.611	1377.819	2.866	12.356

Hydrograph Detention Basin Routing

Graph values: 'I'= unit inflow; 'O'=outflow at time shown

Time (Hours)	Inflow (CFS)	Outflow (CFS)	Storage (Ac.Ft)	.0	23.8	47.51	71.26	95.02	Depth (Ft.)
0.083	0.64	0.02	0.002	O					0.03
0.167	3.50	0.11	0.016	OI					0.24
0.250	7.93	0.17	0.054	O I					0.50
0.333	11.40	0.23	0.120	O I					0.88
0.417	14.14	0.30	0.206	O I					1.35
0.500	17.19	0.34	0.311	O I					1.74
0.583	21.15	0.39	0.441	O I					2.21
0.667	26.33	0.43	0.602	O I					2.75
0.750	34.83	0.48	0.809	O I					3.42
0.833	56.06	0.53	1.119	O	I				4.28
0.917	89.64	0.61	1.616	O			I		5.44
1.000	95.02	1.45	2.245	O			I		6.75
1.083	61.55	1.78	2.773	O		I			7.75
1.167	36.29	1.97	3.097	O	I				8.35
1.250	23.64	2.04	3.290	O	I				8.65
1.333	17.04	2.08	3.416	O I					8.85
1.417	12.94	2.12	3.504	O I					8.99
1.500	10.17	2.14	3.569	O I					9.09
1.583	7.99	2.16	3.617	O I					9.16
1.667	6.50	2.17	3.652	O I					9.22
1.750	5.45	2.18	3.678	OI					9.26
1.833	4.34	2.18	3.697	OI					9.29
1.917	3.51	2.19	3.709	OI					9.31
2.000	2.78	2.19	3.716	O					9.32
2.083	2.16	2.19	3.718	O					9.32
2.167	1.80	2.19	3.716	O					9.32
2.250	1.46	2.19	3.712	O					9.31
2.333	0.81	2.19	3.705	O					9.30
2.417	0.16	2.18	3.693	O					9.28
2.500	0.04	2.18	3.679	O					9.26
2.583	0.00	2.17	3.664	O					9.24
2.667	0.00	2.17	3.649	O					9.21
2.750	0.00	2.16	3.634	O					9.19
2.833	0.00	2.16	3.619	O					9.17
2.917	0.00	2.15	3.605	O					9.14
3.000	0.00	2.15	3.590	O					9.12
3.083	0.00	2.14	3.575	O					9.10
3.167	0.00	2.14	3.560	O					9.08
3.250	0.00	2.13	3.546	O					9.05
3.333	0.00	2.12	3.531	O					9.03
3.417	0.00	2.12	3.516	O					9.01
3.500	0.00	2.11	3.502	O					8.98
3.583	0.00	2.11	3.487	O					8.96
3.667	0.00	2.10	3.473	O					8.94
3.750	0.00	2.10	3.458	O					8.92
3.833	0.00	2.09	3.444	O					8.89
3.917	0.00	2.09	3.429	O					8.87
4.000	0.00	2.08	3.415	O					8.85
4.083	0.00	2.08	3.401	O					8.82
4.167	0.00	2.07	3.386	O					8.80
4.250	0.00	2.07	3.372	O					8.78
4.333	0.00	2.06	3.358	O					8.76
4.417	0.00	2.06	3.344	O					8.74
4.500	0.00	2.05	3.330	O					8.71
4.583	0.00	2.05	3.315	O					8.69
4.667	0.00	2.04	3.301	O					8.67
4.750	0.00	2.04	3.287	O					8.65
4.833	0.00	2.03	3.273	O					8.63
4.917	0.00	2.03	3.259	O					8.60
5.000	0.00	2.02	3.245	O					8.58
5.083	0.00	2.02	3.231	O					8.56
5.167	0.00	2.01	3.218	O					8.54
5.250	0.00	2.01	3.204	O					8.52
5.333	0.00	2.00	3.190	O					8.49
5.417	0.00	2.00	3.176	O					8.47
5.500	0.00	1.99	3.162	O					8.45
5.583	0.00	1.99	3.149	O					8.43
5.667	0.00	1.98	3.135	O					8.41
5.750	0.00	1.98	3.121	O					8.39

5.833	0.00	1.97	3.108	O	|	|	|	|	8.37
5.917	0.00	1.97	3.094	O	|	|	|	|	8.34
6.000	0.00	1.96	3.081	O	|	|	|	|	8.32
6.083	0.00	1.96	3.067	O	|	|	|	|	8.30
6.167	0.00	1.95	3.054	O	|	|	|	|	8.28
6.250	0.00	1.94	3.040	O	|	|	|	|	8.25
6.333	0.00	1.93	3.027	O	|	|	|	|	8.23
6.417	0.00	1.92	3.014	O	|	|	|	|	8.20
6.500	0.00	1.92	3.001	O	|	|	|	|	8.18
6.583	0.00	1.91	2.987	O	|	|	|	|	8.15
6.667	0.00	1.90	2.974	O	|	|	|	|	8.13
6.750	0.00	1.89	2.961	O	|	|	|	|	8.10
6.833	0.00	1.88	2.948	O	|	|	|	|	8.08
6.917	0.00	1.88	2.935	O	|	|	|	|	8.05
7.000	0.00	1.87	2.922	O	|	|	|	|	8.03
7.083	0.00	1.86	2.910	O	|	|	|	|	8.00
7.167	0.00	1.85	2.897	O	|	|	|	|	7.98
7.250	0.00	1.84	2.884	O	|	|	|	|	7.96
7.333	0.00	1.84	2.871	O	|	|	|	|	7.93
7.417	0.00	1.83	2.859	O	|	|	|	|	7.91
7.500	0.00	1.82	2.846	O	|	|	|	|	7.88
7.583	0.00	1.81	2.834	O	|	|	|	|	7.86
7.667	0.00	1.80	2.821	O	|	|	|	|	7.84
7.750	0.00	1.80	2.809	O	|	|	|	|	7.81
7.833	0.00	1.79	2.796	O	|	|	|	|	7.79
7.917	0.00	1.78	2.784	O	|	|	|	|	7.77
8.000	0.00	1.77	2.772	O	|	|	|	|	7.74
8.083	0.00	1.77	2.760	O	|	|	|	|	7.72
8.167	0.00	1.76	2.748	O	|	|	|	|	7.70
8.250	0.00	1.75	2.736	O	|	|	|	|	7.68
8.333	0.00	1.74	2.723	O	|	|	|	|	7.65
8.417	0.00	1.74	2.711	O	|	|	|	|	7.63
8.500	0.00	1.73	2.700	O	|	|	|	|	7.61
8.583	0.00	1.72	2.688	O	|	|	|	|	7.59
8.667	0.00	1.71	2.676	O	|	|	|	|	7.56
8.750	0.00	1.71	2.664	O	|	|	|	|	7.54
8.833	0.00	1.70	2.652	O	|	|	|	|	7.52
8.917	0.00	1.69	2.641	O	|	|	|	|	7.50
9.000	0.00	1.69	2.629	O	|	|	|	|	7.47
9.083	0.00	1.68	2.617	O	|	|	|	|	7.45
9.167	0.00	1.67	2.606	O	|	|	|	|	7.43
9.250	0.00	1.66	2.594	O	|	|	|	|	7.41
9.333	0.00	1.66	2.583	O	|	|	|	|	7.39
9.417	0.00	1.65	2.572	O	|	|	|	|	7.37
9.500	0.00	1.64	2.560	O	|	|	|	|	7.34
9.583	0.00	1.64	2.549	O	|	|	|	|	7.32
9.667	0.00	1.63	2.538	O	|	|	|	|	7.30
9.750	0.00	1.62	2.527	O	|	|	|	|	7.28
9.833	0.00	1.61	2.515	O	|	|	|	|	7.26
9.917	0.00	1.61	2.504	O	|	|	|	|	7.24
10.000	0.00	1.60	2.493	O	|	|	|	|	7.22
10.083	0.00	1.59	2.482	O	|	|	|	|	7.20
10.167	0.00	1.59	2.471	O	|	|	|	|	7.18
10.250	0.00	1.58	2.460	O	|	|	|	|	7.16
10.333	0.00	1.57	2.449	O	|	|	|	|	7.14
10.417	0.00	1.57	2.439	O	|	|	|	|	7.12
10.500	0.00	1.56	2.428	O	|	|	|	|	7.09
10.583	0.00	1.55	2.417	O	|	|	|	|	7.07
10.667	0.00	1.55	2.406	O	|	|	|	|	7.05
10.750	0.00	1.54	2.396	O	|	|	|	|	7.03
10.833	0.00	1.53	2.385	O	|	|	|	|	7.01
10.917	0.00	1.53	2.375	O	|	|	|	|	6.99
11.000	0.00	1.52	2.364	O	|	|	|	|	6.97
11.083	0.00	1.51	2.354	O	|	|	|	|	6.95
11.167	0.00	1.51	2.343	O	|	|	|	|	6.94
11.250	0.00	1.50	2.333	O	|	|	|	|	6.92
11.333	0.00	1.50	2.323	O	|	|	|	|	6.90
11.417	0.00	1.49	2.312	O	|	|	|	|	6.88
11.500	0.00	1.48	2.302	O	|	|	|	|	6.86
11.583	0.00	1.48	2.292	O	|	|	|	|	6.84
11.667	0.00	1.47	2.282	O	|	|	|	|	6.82

11.750	0.00	1.46	2.272	O	|	|	|	|	6.80
11.833	0.00	1.46	2.262	O	|	|	|	|	6.78
11.917	0.00	1.45	2.252	O	|	|	|	|	6.76
12.000	0.00	1.44	2.242	O	|	|	|	|	6.74
12.083	0.00	1.44	2.232	O	|	|	|	|	6.72
12.167	0.00	1.43	2.222	O	|	|	|	|	6.71
12.250	0.00	1.43	2.212	O	|	|	|	|	6.69
12.333	0.00	1.42	2.202	O	|	|	|	|	6.67
12.417	0.00	1.41	2.192	O	|	|	|	|	6.65
12.500	0.00	1.41	2.183	O	|	|	|	|	6.63
12.583	0.00	1.40	2.173	O	|	|	|	|	6.61
12.667	0.00	1.40	2.163	O	|	|	|	|	6.60
12.750	0.00	1.39	2.154	O	|	|	|	|	6.58
12.833	0.00	1.38	2.144	O	|	|	|	|	6.56
12.917	0.00	1.38	2.135	O	|	|	|	|	6.54
13.000	0.00	1.37	2.125	O	|	|	|	|	6.52
13.083	0.00	1.37	2.116	O	|	|	|	|	6.51
13.167	0.00	1.36	2.106	O	|	|	|	|	6.49
13.250	0.00	1.36	2.097	O	|	|	|	|	6.47
13.333	0.00	1.35	2.088	O	|	|	|	|	6.45
13.417	0.00	1.34	2.079	O	|	|	|	|	6.44
13.500	0.00	1.34	2.069	O	|	|	|	|	6.42
13.583	0.00	1.33	2.060	O	|	|	|	|	6.40
13.667	0.00	1.33	2.051	O	|	|	|	|	6.38
13.750	0.00	1.32	2.042	O	|	|	|	|	6.37
13.833	0.00	1.32	2.033	O	|	|	|	|	6.35
13.917	0.00	1.31	2.024	O	|	|	|	|	6.33
14.000	0.00	1.30	2.015	O	|	|	|	|	6.31
14.083	0.00	1.30	2.006	O	|	|	|	|	6.30
14.167	0.00	1.28	1.997	O	|	|	|	|	6.28
14.250	0.00	1.26	1.988	O	|	|	|	|	6.26
14.333	0.00	1.25	1.980	O	|	|	|	|	6.24
14.417	0.00	1.23	1.971	O	|	|	|	|	6.22
14.500	0.00	1.22	1.963	O	|	|	|	|	6.20
14.583	0.00	1.20	1.954	O	|	|	|	|	6.18
14.667	0.00	1.18	1.946	O	|	|	|	|	6.17
14.750	0.00	1.17	1.938	O	|	|	|	|	6.15
14.833	0.00	1.15	1.930	O	|	|	|	|	6.13
14.917	0.00	1.14	1.922	O	|	|	|	|	6.11
15.000	0.00	1.12	1.914	O	|	|	|	|	6.10
15.083	0.00	1.11	1.907	O	|	|	|	|	6.08
15.167	0.00	1.10	1.899	O	|	|	|	|	6.06
15.250	0.00	1.08	1.891	O	|	|	|	|	6.05
15.333	0.00	1.07	1.884	O	|	|	|	|	6.03
15.417	0.00	1.05	1.877	O	|	|	|	|	6.02
15.500	0.00	1.04	1.869	O	|	|	|	|	6.00
15.583	0.00	1.03	1.862	O	|	|	|	|	5.98
15.667	0.00	1.01	1.855	O	|	|	|	|	5.97
15.750	0.00	1.00	1.848	O	|	|	|	|	5.95
15.833	0.00	0.99	1.842	O	|	|	|	|	5.94
15.917	0.00	0.98	1.835	O	|	|	|	|	5.92
16.000	0.00	0.96	1.828	O	|	|	|	|	5.91
16.083	0.00	0.95	1.822	O	|	|	|	|	5.90
16.167	0.00	0.94	1.815	O	|	|	|	|	5.88
16.250	0.00	0.93	1.809	O	|	|	|	|	5.87
16.333	0.00	0.91	1.802	O	|	|	|	|	5.85
16.417	0.00	0.90	1.796	O	|	|	|	|	5.84
16.500	0.00	0.89	1.790	O	|	|	|	|	5.83
16.583	0.00	0.88	1.784	O	|	|	|	|	5.81
16.667	0.00	0.87	1.778	O	|	|	|	|	5.80
16.750	0.00	0.86	1.772	O	|	|	|	|	5.79
16.833	0.00	0.85	1.766	O	|	|	|	|	5.77
16.917	0.00	0.84	1.760	O	|	|	|	|	5.76
17.000	0.00	0.82	1.754	O	|	|	|	|	5.75
17.083	0.00	0.81	1.749	O	|	|	|	|	5.74
17.167	0.00	0.80	1.743	O	|	|	|	|	5.72
17.250	0.00	0.79	1.738	O	|	|	|	|	5.71
17.333	0.00	0.78	1.732	O	|	|	|	|	5.70
17.417	0.00	0.77	1.727	O	|	|	|	|	5.69
17.500	0.00	0.76	1.722	O	|	|	|	|	5.68
17.583	0.00	0.75	1.716	O	|	|	|	|	5.67

17.667	0.00	0.74	1.711	O	|	|	|	|	5.66
17.750	0.00	0.73	1.706	O	|	|	|	|	5.64
17.833	0.00	0.72	1.701	O	|	|	|	|	5.63
17.917	0.00	0.72	1.696	O	|	|	|	|	5.62
18.000	0.00	0.71	1.691	O	|	|	|	|	5.61
18.083	0.00	0.70	1.686	O	|	|	|	|	5.60
18.167	0.00	0.69	1.682	O	|	|	|	|	5.59
18.250	0.00	0.68	1.677	O	|	|	|	|	5.58
18.333	0.00	0.67	1.672	O	|	|	|	|	5.57
18.417	0.00	0.66	1.668	O	|	|	|	|	5.56
18.500	0.00	0.65	1.663	O	|	|	|	|	5.55
18.583	0.00	0.65	1.659	O	|	|	|	|	5.54
18.667	0.00	0.64	1.654	O	|	|	|	|	5.53
18.750	0.00	0.63	1.650	O	|	|	|	|	5.52
18.833	0.00	0.62	1.646	O	|	|	|	|	5.51
18.917	0.00	0.61	1.641	O	|	|	|	|	5.50
19.000	0.00	0.61	1.637	O	|	|	|	|	5.49
19.083	0.00	0.61	1.633	O	|	|	|	|	5.48
19.167	0.00	0.61	1.629	O	|	|	|	|	5.47
19.250	0.00	0.61	1.625	O	|	|	|	|	5.46
19.333	0.00	0.61	1.620	O	|	|	|	|	5.45
19.417	0.00	0.61	1.616	O	|	|	|	|	5.44
19.500	0.00	0.61	1.612	O	|	|	|	|	5.43
19.583	0.00	0.61	1.608	O	|	|	|	|	5.43
19.667	0.00	0.60	1.604	O	|	|	|	|	5.42
19.750	0.00	0.60	1.600	O	|	|	|	|	5.41
19.833	0.00	0.60	1.595	O	|	|	|	|	5.40
19.917	0.00	0.60	1.591	O	|	|	|	|	5.39
20.000	0.00	0.60	1.587	O	|	|	|	|	5.38
20.083	0.00	0.60	1.583	O	|	|	|	|	5.37
20.167	0.00	0.60	1.579	O	|	|	|	|	5.36
20.250	0.00	0.60	1.575	O	|	|	|	|	5.35
20.333	0.00	0.60	1.571	O	|	|	|	|	5.34
20.417	0.00	0.60	1.566	O	|	|	|	|	5.33
20.500	0.00	0.60	1.562	O	|	|	|	|	5.32
20.583	0.00	0.60	1.558	O	|	|	|	|	5.31
20.667	0.00	0.60	1.554	O	|	|	|	|	5.30
20.750	0.00	0.60	1.550	O	|	|	|	|	5.29
20.833	0.00	0.60	1.546	O	|	|	|	|	5.28
20.917	0.00	0.60	1.542	O	|	|	|	|	5.27
21.000	0.00	0.60	1.538	O	|	|	|	|	5.26
21.083	0.00	0.59	1.533	O	|	|	|	|	5.25
21.167	0.00	0.59	1.529	O	|	|	|	|	5.24
21.250	0.00	0.59	1.525	O	|	|	|	|	5.23
21.333	0.00	0.59	1.521	O	|	|	|	|	5.22
21.417	0.00	0.59	1.517	O	|	|	|	|	5.21
21.500	0.00	0.59	1.513	O	|	|	|	|	5.20
21.583	0.00	0.59	1.509	O	|	|	|	|	5.19
21.667	0.00	0.59	1.505	O	|	|	|	|	5.18
21.750	0.00	0.59	1.501	O	|	|	|	|	5.18
21.833	0.00	0.59	1.497	O	|	|	|	|	5.17
21.917	0.00	0.59	1.493	O	|	|	|	|	5.16
22.000	0.00	0.59	1.489	O	|	|	|	|	5.15
22.083	0.00	0.59	1.485	O	|	|	|	|	5.14
22.167	0.00	0.59	1.481	O	|	|	|	|	5.13
22.250	0.00	0.59	1.477	O	|	|	|	|	5.12
22.333	0.00	0.59	1.473	O	|	|	|	|	5.11
22.417	0.00	0.59	1.468	O	|	|	|	|	5.10
22.500	0.00	0.58	1.464	O	|	|	|	|	5.09
22.583	0.00	0.58	1.460	O	|	|	|	|	5.08
22.667	0.00	0.58	1.456	O	|	|	|	|	5.07
22.750	0.00	0.58	1.452	O	|	|	|	|	5.06
22.833	0.00	0.58	1.448	O	|	|	|	|	5.05
22.917	0.00	0.58	1.444	O	|	|	|	|	5.04
23.000	0.00	0.58	1.440	O	|	|	|	|	5.03
23.083	0.00	0.58	1.436	O	|	|	|	|	5.02
23.167	0.00	0.58	1.432	O	|	|	|	|	5.02
23.250	0.00	0.58	1.428	O	|	|	|	|	5.01
23.333	0.00	0.58	1.424	O	|	|	|	|	5.00
23.417	0.00	0.58	1.420	O	|	|	|	|	4.99
23.500	0.00	0.58	1.416	O	|	|	|	|	4.98

23.583	0.00	0.58	1.412	O	|	|	|	|	4.97
23.667	0.00	0.58	1.408	O	|	|	|	|	4.96
23.750	0.00	0.58	1.404	O	|	|	|	|	4.95
23.833	0.00	0.58	1.401	O	|	|	|	|	4.94
23.917	0.00	0.57	1.397	O	|	|	|	|	4.93
24.000	0.00	0.57	1.393	O	|	|	|	|	4.92
24.083	0.00	0.57	1.389	O	|	|	|	|	4.91
24.167	0.00	0.57	1.385	O	|	|	|	|	4.90
24.250	0.00	0.57	1.381	O	|	|	|	|	4.89
24.333	0.00	0.57	1.377	O	|	|	|	|	4.89
24.417	0.00	0.57	1.373	O	|	|	|	|	4.88
24.500	0.00	0.57	1.369	O	|	|	|	|	4.87
24.583	0.00	0.57	1.365	O	|	|	|	|	4.86
24.667	0.00	0.57	1.361	O	|	|	|	|	4.85
24.750	0.00	0.57	1.357	O	|	|	|	|	4.84
24.833	0.00	0.57	1.353	O	|	|	|	|	4.83
24.917	0.00	0.57	1.349	O	|	|	|	|	4.82
25.000	0.00	0.57	1.345	O	|	|	|	|	4.81
25.083	0.00	0.57	1.342	O	|	|	|	|	4.80
25.167	0.00	0.57	1.338	O	|	|	|	|	4.79
25.250	0.00	0.57	1.334	O	|	|	|	|	4.78
25.333	0.00	0.57	1.330	O	|	|	|	|	4.78
25.417	0.00	0.56	1.326	O	|	|	|	|	4.77
25.500	0.00	0.56	1.322	O	|	|	|	|	4.76
25.583	0.00	0.56	1.318	O	|	|	|	|	4.75
25.667	0.00	0.56	1.314	O	|	|	|	|	4.74
25.750	0.00	0.56	1.310	O	|	|	|	|	4.73
25.833	0.00	0.56	1.307	O	|	|	|	|	4.72
25.917	0.00	0.56	1.303	O	|	|	|	|	4.71
26.000	0.00	0.56	1.299	O	|	|	|	|	4.70
26.083	0.00	0.56	1.295	O	|	|	|	|	4.69
26.167	0.00	0.56	1.291	O	|	|	|	|	4.69
26.250	0.00	0.56	1.287	O	|	|	|	|	4.68
26.333	0.00	0.56	1.283	O	|	|	|	|	4.67
26.417	0.00	0.56	1.280	O	|	|	|	|	4.66
26.500	0.00	0.56	1.276	O	|	|	|	|	4.65
26.583	0.00	0.56	1.272	O	|	|	|	|	4.64
26.667	0.00	0.56	1.268	O	|	|	|	|	4.63
26.750	0.00	0.56	1.264	O	|	|	|	|	4.62
26.833	0.00	0.56	1.260	O	|	|	|	|	4.61
26.917	0.00	0.55	1.257	O	|	|	|	|	4.60
27.000	0.00	0.55	1.253	O	|	|	|	|	4.60
27.083	0.00	0.55	1.249	O	|	|	|	|	4.59
27.167	0.00	0.55	1.245	O	|	|	|	|	4.58
27.250	0.00	0.55	1.241	O	|	|	|	|	4.57
27.333	0.00	0.55	1.237	O	|	|	|	|	4.56
27.417	0.00	0.55	1.234	O	|	|	|	|	4.55
27.500	0.00	0.55	1.230	O	|	|	|	|	4.54
27.583	0.00	0.55	1.226	O	|	|	|	|	4.53
27.667	0.00	0.55	1.222	O	|	|	|	|	4.52
27.750	0.00	0.55	1.219	O	|	|	|	|	4.52
27.833	0.00	0.55	1.215	O	|	|	|	|	4.51
27.917	0.00	0.55	1.211	O	|	|	|	|	4.50
28.000	0.00	0.55	1.207	O	|	|	|	|	4.49
28.083	0.00	0.55	1.203	O	|	|	|	|	4.48
28.167	0.00	0.55	1.200	O	|	|	|	|	4.47
28.250	0.00	0.55	1.196	O	|	|	|	|	4.46
28.333	0.00	0.55	1.192	O	|	|	|	|	4.45
28.417	0.00	0.54	1.188	O	|	|	|	|	4.45
28.500	0.00	0.54	1.185	O	|	|	|	|	4.44
28.583	0.00	0.54	1.181	O	|	|	|	|	4.43
28.667	0.00	0.54	1.177	O	|	|	|	|	4.42
28.750	0.00	0.54	1.173	O	|	|	|	|	4.41
28.833	0.00	0.54	1.170	O	|	|	|	|	4.40
28.917	0.00	0.54	1.166	O	|	|	|	|	4.39
29.000	0.00	0.54	1.162	O	|	|	|	|	4.38
29.083	0.00	0.54	1.158	O	|	|	|	|	4.38
29.167	0.00	0.54	1.155	O	|	|	|	|	4.37
29.250	0.00	0.54	1.151	O	|	|	|	|	4.36
29.333	0.00	0.54	1.147	O	|	|	|	|	4.35
29.417	0.00	0.54	1.144	O	|	|	|	|	4.34

29.500	0.00	0.54	1.140	O	|	|	|	|	4.33
29.583	0.00	0.54	1.136	O	|	|	|	|	4.32
29.667	0.00	0.54	1.132	O	|	|	|	|	4.32
29.750	0.00	0.54	1.129	O	|	|	|	|	4.31
29.833	0.00	0.54	1.125	O	|	|	|	|	4.30
29.917	0.00	0.54	1.121	O	|	|	|	|	4.29
30.000	0.00	0.53	1.118	O	|	|	|	|	4.28
30.083	0.00	0.53	1.114	O	|	|	|	|	4.27
30.167	0.00	0.53	1.110	O	|	|	|	|	4.26
30.250	0.00	0.53	1.107	O	|	|	|	|	4.25
30.333	0.00	0.53	1.103	O	|	|	|	|	4.24
30.417	0.00	0.53	1.099	O	|	|	|	|	4.23
30.500	0.00	0.53	1.096	O	|	|	|	|	4.22
30.583	0.00	0.53	1.092	O	|	|	|	|	4.21
30.667	0.00	0.53	1.088	O	|	|	|	|	4.20
30.750	0.00	0.53	1.085	O	|	|	|	|	4.19
30.833	0.00	0.53	1.081	O	|	|	|	|	4.18
30.917	0.00	0.53	1.078	O	|	|	|	|	4.17
31.000	0.00	0.53	1.074	O	|	|	|	|	4.16
31.083	0.00	0.53	1.070	O	|	|	|	|	4.15
31.167	0.00	0.52	1.067	O	|	|	|	|	4.14
31.250	0.00	0.52	1.063	O	|	|	|	|	4.13
31.333	0.00	0.52	1.059	O	|	|	|	|	4.12
31.417	0.00	0.52	1.056	O	|	|	|	|	4.11
31.500	0.00	0.52	1.052	O	|	|	|	|	4.10
31.583	0.00	0.52	1.049	O	|	|	|	|	4.09
31.667	0.00	0.52	1.045	O	|	|	|	|	4.08
31.750	0.00	0.52	1.041	O	|	|	|	|	4.07
31.833	0.00	0.52	1.038	O	|	|	|	|	4.06
31.917	0.00	0.52	1.034	O	|	|	|	|	4.05
32.000	0.00	0.52	1.031	O	|	|	|	|	4.04
32.083	0.00	0.52	1.027	O	|	|	|	|	4.03
32.167	0.00	0.52	1.024	O	|	|	|	|	4.02
32.250	0.00	0.52	1.020	O	|	|	|	|	4.01
32.333	0.00	0.52	1.016	O	|	|	|	|	4.00
32.417	0.00	0.51	1.013	O	|	|	|	|	3.99
32.500	0.00	0.51	1.009	O	|	|	|	|	3.98
32.583	0.00	0.51	1.006	O	|	|	|	|	3.97
32.667	0.00	0.51	1.002	O	|	|	|	|	3.96
32.750	0.00	0.51	0.999	O	|	|	|	|	3.95
32.833	0.00	0.51	0.995	O	|	|	|	|	3.94
32.917	0.00	0.51	0.992	O	|	|	|	|	3.93
33.000	0.00	0.51	0.988	O	|	|	|	|	3.92
33.083	0.00	0.51	0.985	O	|	|	|	|	3.91
33.167	0.00	0.51	0.981	O	|	|	|	|	3.90
33.250	0.00	0.51	0.978	O	|	|	|	|	3.89
33.333	0.00	0.51	0.974	O	|	|	|	|	3.88
33.417	0.00	0.51	0.971	O	|	|	|	|	3.87
33.500	0.00	0.51	0.967	O	|	|	|	|	3.86
33.583	0.00	0.51	0.964	O	|	|	|	|	3.85
33.667	0.00	0.51	0.960	O	|	|	|	|	3.84
33.750	0.00	0.50	0.957	O	|	|	|	|	3.83
33.833	0.00	0.50	0.953	O	|	|	|	|	3.82
33.917	0.00	0.50	0.950	O	|	|	|	|	3.81
34.000	0.00	0.50	0.946	O	|	|	|	|	3.80
34.083	0.00	0.50	0.943	O	|	|	|	|	3.79
34.167	0.00	0.50	0.939	O	|	|	|	|	3.78
34.250	0.00	0.50	0.936	O	|	|	|	|	3.77
34.333	0.00	0.50	0.933	O	|	|	|	|	3.76
34.417	0.00	0.50	0.929	O	|	|	|	|	3.75
34.500	0.00	0.50	0.926	O	|	|	|	|	3.74
34.583	0.00	0.50	0.922	O	|	|	|	|	3.73
34.667	0.00	0.50	0.919	O	|	|	|	|	3.72
34.750	0.00	0.50	0.915	O	|	|	|	|	3.71
34.833	0.00	0.50	0.912	O	|	|	|	|	3.71
34.917	0.00	0.50	0.909	O	|	|	|	|	3.70
35.000	0.00	0.49	0.905	O	|	|	|	|	3.69
35.083	0.00	0.49	0.902	O	|	|	|	|	3.68
35.167	0.00	0.49	0.898	O	|	|	|	|	3.67
35.250	0.00	0.49	0.895	O	|	|	|	|	3.66
35.333	0.00	0.49	0.892	O	|	|	|	|	3.65

35.417	0.00	0.49	0.888	O	|	|	|	|	3.64
35.500	0.00	0.49	0.885	O	|	|	|	|	3.63
35.583	0.00	0.49	0.881	O	|	|	|	|	3.62
35.667	0.00	0.49	0.878	O	|	|	|	|	3.61
35.750	0.00	0.49	0.875	O	|	|	|	|	3.60
35.833	0.00	0.49	0.871	O	|	|	|	|	3.59
35.917	0.00	0.49	0.868	O	|	|	|	|	3.58
36.000	0.00	0.49	0.865	O	|	|	|	|	3.57
36.083	0.00	0.49	0.861	O	|	|	|	|	3.56
36.167	0.00	0.49	0.858	O	|	|	|	|	3.56
36.250	0.00	0.49	0.855	O	|	|	|	|	3.55
36.333	0.00	0.48	0.851	O	|	|	|	|	3.54
36.417	0.00	0.48	0.848	O	|	|	|	|	3.53
36.500	0.00	0.48	0.845	O	|	|	|	|	3.52
36.583	0.00	0.48	0.841	O	|	|	|	|	3.51
36.667	0.00	0.48	0.838	O	|	|	|	|	3.50
36.750	0.00	0.48	0.835	O	|	|	|	|	3.49
36.833	0.00	0.48	0.831	O	|	|	|	|	3.48
36.917	0.00	0.48	0.828	O	|	|	|	|	3.47
37.000	0.00	0.48	0.825	O	|	|	|	|	3.46
37.083	0.00	0.48	0.821	O	|	|	|	|	3.45
37.167	0.00	0.48	0.818	O	|	|	|	|	3.44
37.250	0.00	0.48	0.815	O	|	|	|	|	3.44
37.333	0.00	0.48	0.811	O	|	|	|	|	3.43
37.417	0.00	0.48	0.808	O	|	|	|	|	3.42
37.500	0.00	0.48	0.805	O	|	|	|	|	3.41
37.583	0.00	0.48	0.802	O	|	|	|	|	3.40
37.667	0.00	0.48	0.798	O	|	|	|	|	3.39
37.750	0.00	0.47	0.795	O	|	|	|	|	3.38
37.833	0.00	0.47	0.792	O	|	|	|	|	3.37
37.917	0.00	0.47	0.788	O	|	|	|	|	3.36
38.000	0.00	0.47	0.785	O	|	|	|	|	3.35
38.083	0.00	0.47	0.782	O	|	|	|	|	3.34
38.167	0.00	0.47	0.779	O	|	|	|	|	3.34
38.250	0.00	0.47	0.775	O	|	|	|	|	3.33
38.333	0.00	0.47	0.772	O	|	|	|	|	3.32
38.417	0.00	0.47	0.769	O	|	|	|	|	3.31
38.500	0.00	0.47	0.766	O	|	|	|	|	3.30
38.583	0.00	0.47	0.763	O	|	|	|	|	3.29
38.667	0.00	0.47	0.759	O	|	|	|	|	3.28
38.750	0.00	0.47	0.756	O	|	|	|	|	3.27
38.833	0.00	0.47	0.753	O	|	|	|	|	3.26
38.917	0.00	0.46	0.750	O	|	|	|	|	3.25
39.000	0.00	0.46	0.747	O	|	|	|	|	3.24
39.083	0.00	0.46	0.743	O	|	|	|	|	3.22
39.167	0.00	0.46	0.740	O	|	|	|	|	3.21
39.250	0.00	0.46	0.737	O	|	|	|	|	3.20
39.333	0.00	0.46	0.734	O	|	|	|	|	3.19
39.417	0.00	0.46	0.731	O	|	|	|	|	3.18
39.500	0.00	0.46	0.727	O	|	|	|	|	3.17
39.583	0.00	0.46	0.724	O	|	|	|	|	3.16
39.667	0.00	0.46	0.721	O	|	|	|	|	3.15
39.750	0.00	0.46	0.718	O	|	|	|	|	3.14
39.833	0.00	0.46	0.715	O	|	|	|	|	3.13
39.917	0.00	0.46	0.712	O	|	|	|	|	3.12
40.000	0.00	0.45	0.709	O	|	|	|	|	3.11
40.083	0.00	0.45	0.705	O	|	|	|	|	3.10
40.167	0.00	0.45	0.702	O	|	|	|	|	3.09
40.250	0.00	0.45	0.699	O	|	|	|	|	3.08
40.333	0.00	0.45	0.696	O	|	|	|	|	3.07
40.417	0.00	0.45	0.693	O	|	|	|	|	3.06
40.500	0.00	0.45	0.690	O	|	|	|	|	3.05
40.583	0.00	0.45	0.687	O	|	|	|	|	3.04
40.667	0.00	0.45	0.684	O	|	|	|	|	3.03
40.750	0.00	0.45	0.681	O	|	|	|	|	3.02
40.833	0.00	0.45	0.678	O	|	|	|	|	3.01
40.917	0.00	0.45	0.674	O	|	|	|	|	2.99
41.000	0.00	0.45	0.671	O	|	|	|	|	2.98
41.083	0.00	0.44	0.668	O	|	|	|	|	2.97
41.167	0.00	0.44	0.665	O	|	|	|	|	2.96
41.250	0.00	0.44	0.662	O	|	|	|	|	2.95

41.333	0.00	0.44	0.659	O	|	|	|	|	2.94
41.417	0.00	0.44	0.656	O	|	|	|	|	2.93
41.500	0.00	0.44	0.653	O	|	|	|	|	2.92
41.583	0.00	0.44	0.650	O	|	|	|	|	2.91
41.667	0.00	0.44	0.647	O	|	|	|	|	2.90
41.750	0.00	0.44	0.644	O	|	|	|	|	2.89
41.833	0.00	0.44	0.641	O	|	|	|	|	2.88
41.917	0.00	0.44	0.638	O	|	|	|	|	2.87
42.000	0.00	0.44	0.635	O	|	|	|	|	2.86
42.083	0.00	0.44	0.632	O	|	|	|	|	2.85
42.167	0.00	0.43	0.629	O	|	|	|	|	2.84
42.250	0.00	0.43	0.626	O	|	|	|	|	2.83
42.333	0.00	0.43	0.623	O	|	|	|	|	2.82
42.417	0.00	0.43	0.620	O	|	|	|	|	2.81
42.500	0.00	0.43	0.617	O	|	|	|	|	2.80
42.583	0.00	0.43	0.614	O	|	|	|	|	2.79
42.667	0.00	0.43	0.611	O	|	|	|	|	2.78
42.750	0.00	0.43	0.608	O	|	|	|	|	2.77
42.833	0.00	0.43	0.605	O	|	|	|	|	2.76
42.917	0.00	0.43	0.602	O	|	|	|	|	2.75
43.000	0.00	0.43	0.599	O	|	|	|	|	2.74
43.083	0.00	0.43	0.596	O	|	|	|	|	2.73
43.167	0.00	0.43	0.593	O	|	|	|	|	2.72
43.250	0.00	0.43	0.590	O	|	|	|	|	2.71
43.333	0.00	0.42	0.588	O	|	|	|	|	2.71
43.417	0.00	0.42	0.585	O	|	|	|	|	2.70
43.500	0.00	0.42	0.582	O	|	|	|	|	2.69
43.583	0.00	0.42	0.579	O	|	|	|	|	2.68
43.667	0.00	0.42	0.576	O	|	|	|	|	2.67
43.750	0.00	0.42	0.573	O	|	|	|	|	2.66
43.833	0.00	0.42	0.570	O	|	|	|	|	2.65
43.917	0.00	0.42	0.567	O	|	|	|	|	2.64
44.000	0.00	0.42	0.564	O	|	|	|	|	2.63
44.083	0.00	0.42	0.561	O	|	|	|	|	2.62
44.167	0.00	0.42	0.559	O	|	|	|	|	2.61
44.250	0.00	0.42	0.556	O	|	|	|	|	2.60
44.333	0.00	0.42	0.553	O	|	|	|	|	2.59
44.417	0.00	0.41	0.550	O	|	|	|	|	2.58
44.500	0.00	0.41	0.547	O	|	|	|	|	2.57
44.583	0.00	0.41	0.544	O	|	|	|	|	2.56
44.667	0.00	0.41	0.541	O	|	|	|	|	2.55
44.750	0.00	0.41	0.539	O	|	|	|	|	2.54
44.833	0.00	0.41	0.536	O	|	|	|	|	2.53
44.917	0.00	0.41	0.533	O	|	|	|	|	2.52
45.000	0.00	0.41	0.530	O	|	|	|	|	2.51
45.083	0.00	0.41	0.527	O	|	|	|	|	2.50
45.167	0.00	0.41	0.524	O	|	|	|	|	2.49
45.250	0.00	0.41	0.522	O	|	|	|	|	2.49
45.333	0.00	0.41	0.519	O	|	|	|	|	2.48
45.417	0.00	0.41	0.516	O	|	|	|	|	2.47
45.500	0.00	0.41	0.513	O	|	|	|	|	2.46
45.583	0.00	0.41	0.510	O	|	|	|	|	2.45
45.667	0.00	0.40	0.508	O	|	|	|	|	2.44
45.750	0.00	0.40	0.505	O	|	|	|	|	2.43
45.833	0.00	0.40	0.502	O	|	|	|	|	2.42
45.917	0.00	0.40	0.499	O	|	|	|	|	2.41
46.000	0.00	0.40	0.497	O	|	|	|	|	2.40
46.083	0.00	0.40	0.494	O	|	|	|	|	2.39
46.167	0.00	0.40	0.491	O	|	|	|	|	2.38
46.250	0.00	0.40	0.488	O	|	|	|	|	2.37
46.333	0.00	0.40	0.485	O	|	|	|	|	2.36
46.417	0.00	0.40	0.483	O	|	|	|	|	2.36
46.500	0.00	0.40	0.480	O	|	|	|	|	2.35
46.583	0.00	0.40	0.477	O	|	|	|	|	2.34
46.667	0.00	0.40	0.475	O	|	|	|	|	2.33
46.750	0.00	0.40	0.472	O	|	|	|	|	2.32
46.833	0.00	0.39	0.469	O	|	|	|	|	2.31
46.917	0.00	0.39	0.466	O	|	|	|	|	2.30
47.000	0.00	0.39	0.464	O	|	|	|	|	2.29
47.083	0.00	0.39	0.461	O	|	|	|	|	2.28
47.167	0.00	0.39	0.458	O	|	|	|	|	2.27

47.250	0.00	0.39	0.456	O	|	|	|	|	2.26
47.333	0.00	0.39	0.453	O	|	|	|	|	2.25
47.417	0.00	0.39	0.450	O	|	|	|	|	2.24
47.500	0.00	0.39	0.448	O	|	|	|	|	2.23
47.583	0.00	0.39	0.445	O	|	|	|	|	2.22
47.667	0.00	0.39	0.442	O	|	|	|	|	2.21
47.750	0.00	0.38	0.440	O	|	|	|	|	2.20
47.833	0.00	0.38	0.437	O	|	|	|	|	2.19
47.917	0.00	0.38	0.434	O	|	|	|	|	2.18
48.000	0.00	0.38	0.432	O	|	|	|	|	2.17
48.083	0.00	0.38	0.429	O	|	|	|	|	2.17
48.167	0.00	0.38	0.426	O	|	|	|	|	2.16
48.250	0.00	0.38	0.424	O	|	|	|	|	2.15
48.333	0.00	0.38	0.421	O	|	|	|	|	2.14
48.417	0.00	0.38	0.419	O	|	|	|	|	2.13
48.500	0.00	0.38	0.416	O	|	|	|	|	2.12
48.583	0.00	0.38	0.413	O	|	|	|	|	2.11
48.667	0.00	0.37	0.411	O	|	|	|	|	2.10
48.750	0.00	0.37	0.408	O	|	|	|	|	2.09
48.833	0.00	0.37	0.406	O	|	|	|	|	2.08
48.917	0.00	0.37	0.403	O	|	|	|	|	2.07
49.000	0.00	0.37	0.401	O	|	|	|	|	2.06
49.083	0.00	0.37	0.398	O	|	|	|	|	2.05
49.167	0.00	0.37	0.395	O	|	|	|	|	2.04
49.250	0.00	0.37	0.393	O	|	|	|	|	2.03
49.333	0.00	0.37	0.390	O	|	|	|	|	2.02
49.417	0.00	0.37	0.388	O	|	|	|	|	2.01
49.500	0.00	0.37	0.385	O	|	|	|	|	2.01
49.583	0.00	0.36	0.383	O	|	|	|	|	2.00
49.667	0.00	0.36	0.380	O	|	|	|	|	1.99
49.750	0.00	0.36	0.378	O	|	|	|	|	1.98
49.833	0.00	0.36	0.375	O	|	|	|	|	1.97
49.917	0.00	0.36	0.373	O	|	|	|	|	1.96
50.000	0.00	0.36	0.370	O	|	|	|	|	1.95
50.083	0.00	0.36	0.368	O	|	|	|	|	1.94
50.167	0.00	0.36	0.365	O	|	|	|	|	1.93
50.250	0.00	0.36	0.363	O	|	|	|	|	1.92
50.333	0.00	0.36	0.361	O	|	|	|	|	1.92
50.417	0.00	0.36	0.358	O	|	|	|	|	1.91
50.500	0.00	0.35	0.356	O	|	|	|	|	1.90
50.583	0.00	0.35	0.353	O	|	|	|	|	1.89
50.667	0.00	0.35	0.351	O	|	|	|	|	1.88
50.750	0.00	0.35	0.348	O	|	|	|	|	1.87
50.833	0.00	0.35	0.346	O	|	|	|	|	1.86
50.917	0.00	0.35	0.343	O	|	|	|	|	1.85
51.000	0.00	0.35	0.341	O	|	|	|	|	1.84
51.083	0.00	0.35	0.339	O	|	|	|	|	1.84
51.167	0.00	0.35	0.336	O	|	|	|	|	1.83
51.250	0.00	0.35	0.334	O	|	|	|	|	1.82
51.333	0.00	0.35	0.332	O	|	|	|	|	1.81
51.417	0.00	0.35	0.329	O	|	|	|	|	1.80
51.500	0.00	0.34	0.327	O	|	|	|	|	1.79
51.583	0.00	0.34	0.324	O	|	|	|	|	1.78
51.667	0.00	0.34	0.322	O	|	|	|	|	1.77
51.750	0.00	0.34	0.320	O	|	|	|	|	1.77
51.833	0.00	0.34	0.317	O	|	|	|	|	1.76
51.917	0.00	0.34	0.315	O	|	|	|	|	1.75
52.000	0.00	0.34	0.313	O	|	|	|	|	1.74
52.083	0.00	0.34	0.310	O	|	|	|	|	1.73
52.167	0.00	0.34	0.308	O	|	|	|	|	1.72
52.250	0.00	0.34	0.306	O	|	|	|	|	1.71
52.333	0.00	0.34	0.303	O	|	|	|	|	1.71
52.417	0.00	0.33	0.301	O	|	|	|	|	1.70
52.500	0.00	0.33	0.299	O	|	|	|	|	1.69
52.583	0.00	0.33	0.296	O	|	|	|	|	1.68
52.667	0.00	0.33	0.294	O	|	|	|	|	1.67
52.750	0.00	0.33	0.292	O	|	|	|	|	1.66
52.833	0.00	0.33	0.290	O	|	|	|	|	1.66
52.917	0.00	0.33	0.287	O	|	|	|	|	1.65
53.000	0.00	0.33	0.285	O	|	|	|	|	1.64
53.083	0.00	0.33	0.283	O	|	|	|	|	1.63

53.167	0.00	0.33	0.280	O					1.62
53.250	0.00	0.33	0.278	O					1.61
53.333	0.00	0.33	0.276	O					1.61
53.417	0.00	0.33	0.274	O					1.60
53.500	0.00	0.32	0.272	O					1.59
53.583	0.00	0.32	0.269	O					1.58
53.667	0.00	0.32	0.267	O					1.57
53.750	0.00	0.32	0.265	O					1.57
53.833	0.00	0.32	0.263	O					1.56
53.917	0.00	0.32	0.260	O					1.55
54.000	0.00	0.32	0.258	O					1.54
54.083	0.00	0.32	0.256	O					1.53
54.167	0.00	0.32	0.254	O					1.53
54.250	0.00	0.32	0.252	O					1.52
54.333	0.00	0.32	0.249	O					1.51
54.417	0.00	0.32	0.247	O					1.50
54.500	0.00	0.31	0.245	O					1.49
54.583	0.00	0.31	0.243	O					1.49
54.667	0.00	0.31	0.241	O					1.48
54.750	0.00	0.31	0.239	O					1.47
54.833	0.00	0.31	0.236	O					1.46
54.917	0.00	0.31	0.234	O					1.45
55.000	0.00	0.31	0.232	O					1.45
55.083	0.00	0.31	0.230	O					1.44
55.167	0.00	0.31	0.228	O					1.43
55.250	0.00	0.31	0.226	O					1.42
55.333	0.00	0.31	0.224	O					1.42
55.417	0.00	0.31	0.222	O					1.41
55.500	0.00	0.31	0.219	O					1.40
55.583	0.00	0.31	0.217	O					1.39
55.667	0.00	0.30	0.215	O					1.38
55.750	0.00	0.30	0.213	O					1.38
55.833	0.00	0.30	0.211	O					1.37
55.917	0.00	0.30	0.209	O					1.36
56.000	0.00	0.30	0.207	O					1.35
56.083	0.00	0.30	0.205	O					1.35
56.167	0.00	0.30	0.203	O					1.34
56.250	0.00	0.30	0.201	O					1.33
56.333	0.00	0.30	0.199	O					1.32
56.417	0.00	0.30	0.197	O					1.32
56.500	0.00	0.30	0.195	O					1.31
56.583	0.00	0.30	0.192	O					1.30
56.667	0.00	0.29	0.190	O					1.29
56.750	0.00	0.29	0.188	O					1.28
56.833	0.00	0.29	0.186	O					1.27
56.917	0.00	0.29	0.184	O					1.26
57.000	0.00	0.29	0.182	O					1.24
57.083	0.00	0.29	0.180	O					1.23
57.167	0.00	0.28	0.179	O					1.22
57.250	0.00	0.28	0.177	O					1.21
57.333	0.00	0.28	0.175	O					1.20
57.417	0.00	0.28	0.173	O					1.19
57.500	0.00	0.28	0.171	O					1.18
57.583	0.00	0.28	0.169	O					1.17
57.667	0.00	0.27	0.167	O					1.15
57.750	0.00	0.27	0.165	O					1.14
57.833	0.00	0.27	0.163	O					1.13
57.917	0.00	0.27	0.161	O					1.12
58.000	0.00	0.27	0.160	O					1.11
58.083	0.00	0.27	0.158	O					1.10
58.167	0.00	0.26	0.156	O					1.09
58.250	0.00	0.26	0.154	O					1.08
58.333	0.00	0.26	0.152	O					1.07
58.417	0.00	0.26	0.150	O					1.06
58.500	0.00	0.26	0.149	O					1.05
58.583	0.00	0.26	0.147	O					1.04
58.667	0.00	0.25	0.145	O					1.03
58.750	0.00	0.25	0.143	O					1.02
58.833	0.00	0.25	0.142	O					1.01
58.917	0.00	0.25	0.140	O					1.00
59.000	0.00	0.25	0.138	O					0.99

59.083	0.00	0.25	0.137	O	|	|	|	|	0.98
59.167	0.00	0.24	0.135	O	|	|	|	|	0.97
59.250	0.00	0.24	0.133	O	|	|	|	|	0.96
59.333	0.00	0.24	0.132	O	|	|	|	|	0.95
59.417	0.00	0.24	0.130	O	|	|	|	|	0.94
59.500	0.00	0.24	0.128	O	|	|	|	|	0.93
59.583	0.00	0.24	0.127	O	|	|	|	|	0.92
59.667	0.00	0.24	0.125	O	|	|	|	|	0.91
59.750	0.00	0.23	0.123	O	|	|	|	|	0.90
59.833	0.00	0.23	0.122	O	|	|	|	|	0.89
59.917	0.00	0.23	0.120	O	|	|	|	|	0.88
60.000	0.00	0.23	0.119	O	|	|	|	|	0.87
60.083	0.00	0.23	0.117	O	|	|	|	|	0.86
60.167	0.00	0.23	0.115	O	|	|	|	|	0.85
60.250	0.00	0.23	0.114	O	|	|	|	|	0.85
60.333	0.00	0.22	0.112	O	|	|	|	|	0.84
60.417	0.00	0.22	0.111	O	|	|	|	|	0.83
60.500	0.00	0.22	0.109	O	|	|	|	|	0.82
60.583	0.00	0.22	0.108	O	|	|	|	|	0.81
60.667	0.00	0.22	0.106	O	|	|	|	|	0.80
60.750	0.00	0.22	0.105	O	|	|	|	|	0.79
60.833	0.00	0.22	0.103	O	|	|	|	|	0.78
60.917	0.00	0.22	0.102	O	|	|	|	|	0.77
61.000	0.00	0.21	0.100	O	|	|	|	|	0.77
61.083	0.00	0.21	0.099	O	|	|	|	|	0.76
61.167	0.00	0.21	0.097	O	|	|	|	|	0.75
61.250	0.00	0.21	0.096	O	|	|	|	|	0.74
61.333	0.00	0.21	0.094	O	|	|	|	|	0.73
61.417	0.00	0.21	0.093	O	|	|	|	|	0.72
61.500	0.00	0.21	0.092	O	|	|	|	|	0.72
61.583	0.00	0.20	0.090	O	|	|	|	|	0.71
61.667	0.00	0.20	0.089	O	|	|	|	|	0.70
61.750	0.00	0.20	0.087	O	|	|	|	|	0.69
61.833	0.00	0.20	0.086	O	|	|	|	|	0.68
61.917	0.00	0.20	0.085	O	|	|	|	|	0.68
62.000	0.00	0.20	0.083	O	|	|	|	|	0.67
62.083	0.00	0.20	0.082	O	|	|	|	|	0.66
62.167	0.00	0.20	0.080	O	|	|	|	|	0.65
62.250	0.00	0.19	0.079	O	|	|	|	|	0.64
62.333	0.00	0.19	0.078	O	|	|	|	|	0.64
62.417	0.00	0.19	0.076	O	|	|	|	|	0.63
62.500	0.00	0.19	0.075	O	|	|	|	|	0.62
62.583	0.00	0.19	0.074	O	|	|	|	|	0.61
62.667	0.00	0.19	0.072	O	|	|	|	|	0.61
62.750	0.00	0.19	0.071	O	|	|	|	|	0.60
62.833	0.00	0.19	0.070	O	|	|	|	|	0.59
62.917	0.00	0.19	0.069	O	|	|	|	|	0.58
63.000	0.00	0.18	0.067	O	|	|	|	|	0.58
63.083	0.00	0.18	0.066	O	|	|	|	|	0.57
63.167	0.00	0.18	0.065	O	|	|	|	|	0.56
63.250	0.00	0.18	0.064	O	|	|	|	|	0.55
63.333	0.00	0.18	0.062	O	|	|	|	|	0.55
63.417	0.00	0.18	0.061	O	|	|	|	|	0.54
63.500	0.00	0.18	0.060	O	|	|	|	|	0.53
63.583	0.00	0.18	0.059	O	|	|	|	|	0.52
63.667	0.00	0.18	0.057	O	|	|	|	|	0.52
63.750	0.00	0.17	0.056	O	|	|	|	|	0.51
63.833	0.00	0.17	0.055	O	|	|	|	|	0.50
63.917	0.00	0.17	0.054	O	|	|	|	|	0.50
64.000	0.00	0.17	0.053	O	|	|	|	|	0.49
64.083	0.00	0.17	0.051	O	|	|	|	|	0.48
64.167	0.00	0.17	0.050	O	|	|	|	|	0.48
64.250	0.00	0.17	0.049	O	|	|	|	|	0.47
64.333	0.00	0.17	0.048	O	|	|	|	|	0.46
64.417	0.00	0.17	0.047	O	|	|	|	|	0.46
64.500	0.00	0.17	0.046	O	|	|	|	|	0.45
64.583	0.00	0.16	0.045	O	|	|	|	|	0.44
64.667	0.00	0.16	0.043	O	|	|	|	|	0.44
64.750	0.00	0.16	0.042	O	|	|	|	|	0.43
64.833	0.00	0.16	0.041	O	|	|	|	|	0.42
64.917	0.00	0.16	0.040	O	|	|	|	|	0.42

65.000	0.00	0.16	0.039	O	|	|	|	|	0.41
65.083	0.00	0.16	0.038	O	|	|	|	|	0.40
65.167	0.00	0.16	0.037	O	|	|	|	|	0.40
65.250	0.00	0.16	0.036	O	|	|	|	|	0.39
65.333	0.00	0.16	0.035	O	|	|	|	|	0.39
65.417	0.00	0.15	0.034	O	|	|	|	|	0.38
65.500	0.00	0.15	0.033	O	|	|	|	|	0.37
65.583	0.00	0.15	0.032	O	|	|	|	|	0.37
65.667	0.00	0.15	0.030	O	|	|	|	|	0.36
65.750	0.00	0.15	0.029	O	|	|	|	|	0.35
65.833	0.00	0.15	0.028	O	|	|	|	|	0.35
65.917	0.00	0.15	0.027	O	|	|	|	|	0.34
66.000	0.00	0.15	0.026	O	|	|	|	|	0.34
66.083	0.00	0.15	0.025	O	|	|	|	|	0.33
66.167	0.00	0.15	0.024	O	|	|	|	|	0.33
66.250	0.00	0.14	0.023	O	|	|	|	|	0.32
66.333	0.00	0.14	0.022	O	|	|	|	|	0.31
66.417	0.00	0.14	0.021	O	|	|	|	|	0.31
66.500	0.00	0.14	0.020	O	|	|	|	|	0.30
66.583	0.00	0.14	0.019	O	|	|	|	|	0.29
66.667	0.00	0.13	0.018	O	|	|	|	|	0.28
66.750	0.00	0.12	0.018	O	|	|	|	|	0.26
66.833	0.00	0.12	0.017	O	|	|	|	|	0.25
66.917	0.00	0.11	0.016	O	|	|	|	|	0.24
67.000	0.00	0.11	0.015	O	|	|	|	|	0.23
67.083	0.00	0.10	0.014	O	|	|	|	|	0.22
67.167	0.00	0.10	0.014	O	|	|	|	|	0.21

Remaining water in basin = 0.01 (Ac.Ft)

**********HYDROGRAPH DATA**********

Number of intervals = 806
Time interval = 5.0 (Min.)
Maximum/Peak flow rate = 2.192 (CFS)
Total volume = 3.957 (Ac.Ft)

Status of hydrographs being held in storage

	Stream 1	Stream 2	Stream 3	Stream 4	Stream 5
Peak (CFS)	0.000	0.000	0.000	0.000	0.000
Vol (Ac.Ft)	0.000	0.000	0.000	0.000	0.000

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FLOOD HYDROGRAPH ROUTING PROGRAM
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Study date: 08/18/25

Program License Serial Number 5006

********** HYDROGRAPH INFORMATION **********

From study/file name: PROA310.rte
**********HYDROGRAPH DATA**********
Number of intervals = 54
Time interval = 5.0 (Min.)
Maximum/Peak flow rate = 58.320 (CFS)
Total volume = 5.096 (Ac.Ft)

Status of hydrographs being held in storage

	Stream 1	Stream 2	Stream 3	Stream 4	Stream 5
Peak (CFS)	0.000	0.000	0.000	0.000	0.000
Vol (Ac.Ft)	0.000	0.000	0.000	0.000	0.000

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Process from Point/Station 0.000 to Point/Station 0.000
**** RETARDING BASIN ROUTING ****

User entry of depth-outflow-storage data

Total number of inflow hydrograph intervals = 54
Hydrograph time unit = 5.000 (Min.)
Initial depth in storage basin = 0.00(Ft.)

Initial basin depth = 0.00 (Ft.)
Initial basin storage = 0.00 (Ac.Ft)
Initial basin outflow = 0.00 (CFS)

Depth vs. Storage and Depth vs. Discharge data:

Basin Depth (Ft.)	Storage (Ac.Ft)	Outflow (CFS)	(S-O*dt/2) (Ac.Ft)	(S+O*dt/2) (Ac.Ft)
0.000	0.000	0.000	0.000	0.000
0.300	0.020	0.142	0.020	0.020
1.300	0.192	0.296	0.191	0.193
2.300	0.466	0.394	0.465	0.467
3.300	0.766	0.469	0.764	0.768
4.300	1.126	0.536	1.124	1.128
5.500	1.640	0.610	1.638	1.642
6.300	2.007	1.299	2.003	2.011
8.300	3.066	1.957	3.059	3.073
10.300	4.341	2.417	4.333	4.349
11.400	5.141	2.632	5.132	5.150
12.300	5.851	167.187	5.275	6.427
13.300	6.699	657.066	4.436	8.962
14.300	7.611	1377.819	2.866	12.356

Hydrograph Detention Basin Routing

Graph values: 'I'= unit inflow; 'O'=outflow at time shown

Time (Hours)	Inflow (CFS)	Outflow (CFS)	Storage (Ac.Ft)	.0	14.6	29.16	43.74	58.32	Depth (Ft.)
0.083	0.39	0.01	0.001	O	|	|	|	|	0.02
0.167	2.04	0.07	0.009	OI	|	|	|	|	0.14
0.250	4.17	0.15	0.030	O I	|	|	|	|	0.36
0.333	5.22	0.18	0.061	O I	|	|	|	|	0.54
0.417	5.97	0.21	0.098	O I	|	|	|	|	0.76
0.500	6.95	0.25	0.141	O I	|	|	|	|	1.01
0.583	7.80	0.29	0.190	O I	|	|	|	|	1.29
0.667	8.36	0.31	0.244	O I	|	|	|	|	1.49
0.750	8.75	0.33	0.300	O I	|	|	|	|	1.70
0.833	9.21	0.36	0.360	O I	|	|	|	|	1.91
0.917	9.24	0.38	0.421	O I	|	|	|	|	2.14
1.000	9.16	0.40	0.482	O I	|	|	|	|	2.35
1.083	9.60	0.41	0.543	O I	|	|	|	|	2.56
1.167	10.54	0.43	0.610	O I	|	|	|	|	2.78
1.250	11.46	0.45	0.683	O I	|	|	|	|	3.02
1.333	11.90	0.47	0.760	O I	|	|	|	|	3.28
1.417	12.11	0.48	0.839	O I	|	|	|	|	3.50
1.500	12.79	0.50	0.922	O I	|	|	|	|	3.73
1.583	13.86	0.51	1.010	O I	|	|	|	|	3.98
1.667	14.34	0.53	1.103	O I	|	|	|	|	4.24
1.750	14.98	0.55	1.201	O I	|	|	|	|	4.47
1.833	16.92	0.56	1.307	O	I |	|	|	|	4.72
1.917	18.68	0.58	1.425	O	I |	|	|	|	5.00
2.000	18.86	0.60	1.551	O	I |	|	|	|	5.29
2.083	18.81	0.68	1.676	O	I |	|	|	|	5.58
2.167	19.99	0.92	1.804	O	I |	|	|	|	5.86
2.250	23.83	1.19	1.948	O	| I	|	|	|	6.17
2.333	28.99	1.37	2.121	O	| I	|	|	|	6.51
2.417	32.11	1.49	2.321	O	| I	|	|	|	6.89
2.500	38.29	1.64	2.553	O	| I	|	|	|	7.33
2.583	49.99	1.82	2.845	O	| I	|	|	|	7.88
2.667	58.32	2.01	3.205	|O	| I	|	|	|	8.52
2.750	57.14	2.15	3.588	|O	| I	|	|	|	9.12
2.833	44.29	2.27	3.922	|O	| I	|	|	|	9.64
2.917	30.32	2.35	4.163	|O	| I	|	|	|	10.02
3.000	22.89	2.41	4.330	|O	| I	|	|	|	10.28
3.083	17.90	2.45	4.454	|O	I |	|	|	|	10.45
3.167	12.97	2.47	4.543	|O	I |	|	|	|	10.58
3.250	9.29	2.49	4.603	|O	I |	|	|	|	10.66
3.333	7.09	2.50	4.642	|O I	|	|	|	|	10.71
3.417	5.59	2.50	4.668	|O I	|	|	|	|	10.75
3.500	4.51	2.51	4.686	|OI	|	|	|	|	10.77
3.583	3.65	2.51	4.697	|OI	|	|	|	|	10.79
3.667	2.89	2.51	4.702	|O	|	|	|	|	10.80
3.750	2.27	2.51	4.702	|O	|	|	|	|	10.80
3.833	1.79	2.51	4.699	IO	|	|	|	|	10.79
3.917	1.41	2.51	4.693	IO	|	|	|	|	10.78
4.000	1.03	2.51	4.684	IO	|	|	|	|	10.77
4.083	0.65	2.51	4.672	IO	|	|	|	|	10.76
4.167	0.31	2.50	4.658	IO	|	|	|	|	10.74
4.250	0.14	2.50	4.643	IO	|	|	|	|	10.71
4.333	0.09	2.49	4.626	IO	|	|	|	|	10.69
4.417	0.04	2.49	4.610	IO	|	|	|	|	10.67
4.500	0.01	2.48	4.593	IO	|	|	|	|	10.65
4.583	0.00	2.48	4.576	IO	|	|	|	|	10.62
4.667	0.00	2.48	4.559	IO	|	|	|	|	10.60
4.750	0.00	2.47	4.542	IO	|	|	|	|	10.58
4.833	0.00	2.47	4.525	IO	|	|	|	|	10.55
4.917	0.00	2.46	4.508	IO	|	|	|	|	10.53
5.000	0.00	2.46	4.491	IO	|	|	|	|	10.51
5.083	0.00	2.45	4.474	IO	|	|	|	|	10.48
5.167	0.00	2.45	4.457	IO	|	|	|	|	10.46
5.250	0.00	2.44	4.440	IO	|	|	|	|	10.44
5.333	0.00	2.44	4.423	IO	|	|	|	|	10.41
5.417	0.00	2.43	4.406	IO	|	|	|	|	10.39
5.500	0.00	2.43	4.390	IO	|	|	|	|	10.37
5.583	0.00	2.43	4.373	IO	|	|	|	|	10.34
5.667	0.00	2.42	4.356	IO	|	|	|	|	10.32
5.750	0.00	2.42	4.340	IO	|	|	|	|	10.30

5.833	0.00	2.41	4.323	IO				10.27
5.917	0.00	2.40	4.306	IO				10.25
6.000	0.00	2.40	4.290	IO				10.22
6.083	0.00	2.39	4.273	IO				10.19
6.167	0.00	2.39	4.257	IO				10.17
6.250	0.00	2.38	4.240	IO				10.14
6.333	0.00	2.37	4.224	IO				10.12
6.417	0.00	2.37	4.208	IO				10.09
6.500	0.00	2.36	4.191	IO				10.07
6.583	0.00	2.36	4.175	IO				10.04
6.667	0.00	2.35	4.159	IO				10.01
6.750	0.00	2.35	4.143	IO				9.99
6.833	0.00	2.34	4.127	IO				9.96
6.917	0.00	2.33	4.111	IO				9.94
7.000	0.00	2.33	4.095	IO				9.91
7.083	0.00	2.32	4.079	IO				9.89
7.167	0.00	2.32	4.063	IO				9.86
7.250	0.00	2.31	4.047	IO				9.84
7.333	0.00	2.31	4.031	IO				9.81
7.417	0.00	2.30	4.015	IO				9.79
7.500	0.00	2.29	3.999	IO				9.76
7.583	0.00	2.29	3.983	IO				9.74
7.667	0.00	2.28	3.968	IO				9.71
7.750	0.00	2.28	3.952	IO				9.69
7.833	0.00	2.27	3.936	IO				9.67
7.917	0.00	2.27	3.921	IO				9.64
8.000	0.00	2.26	3.905	IO				9.62
8.083	0.00	2.25	3.889	IO				9.59
8.167	0.00	2.25	3.874	IO				9.57
8.250	0.00	2.24	3.858	IO				9.54
8.333	0.00	2.24	3.843	IO				9.52
8.417	0.00	2.23	3.828	IO				9.49
8.500	0.00	2.23	3.812	IO				9.47
8.583	0.00	2.22	3.797	IO				9.45
8.667	0.00	2.22	3.782	IO				9.42
8.750	0.00	2.21	3.766	IO				9.40
8.833	0.00	2.20	3.751	IO				9.37
8.917	0.00	2.20	3.736	IO				9.35
9.000	0.00	2.19	3.721	IO				9.33
9.083	0.00	2.19	3.706	IO				9.30
9.167	0.00	2.18	3.691	IO				9.28
9.250	0.00	2.18	3.676	IO				9.26
9.333	0.00	2.17	3.661	IO				9.23
9.417	0.00	2.17	3.646	IO				9.21
9.500	0.00	2.16	3.631	IO				9.19
9.583	0.00	2.16	3.616	IO				9.16
9.667	0.00	2.15	3.601	IO				9.14
9.750	0.00	2.14	3.587	IO				9.12
9.833	0.00	2.14	3.572	IO				9.09
9.917	0.00	2.13	3.557	IO				9.07
10.000	0.00	2.13	3.542	IO				9.05
10.083	0.00	2.12	3.528	IO				9.02
10.167	0.00	2.12	3.513	IO				9.00
10.250	0.00	2.11	3.499	IO				8.98
10.333	0.00	2.11	3.484	IO				8.96
10.417	0.00	2.10	3.470	IO				8.93
10.500	0.00	2.10	3.455	IO				8.91
10.583	0.00	2.09	3.441	IO				8.89
10.667	0.00	2.09	3.426	IO				8.87
10.750	0.00	2.08	3.412	IO				8.84
10.833	0.00	2.08	3.398	IO				8.82
10.917	0.00	2.07	3.383	IO				8.80
11.000	0.00	2.07	3.369	IO				8.78
11.083	0.00	2.06	3.355	IO				8.75
11.167	0.00	2.06	3.341	IO				8.73
11.250	0.00	2.05	3.327	IO				8.71
11.333	0.00	2.05	3.312	IO				8.69
11.417	0.00	2.04	3.298	IO				8.66
11.500	0.00	2.04	3.284	IO				8.64
11.583	0.00	2.03	3.270	IO				8.62
11.667	0.00	2.03	3.256	IO				8.60

11.750	0.00	2.02	3.242	IO				8.58
11.833	0.00	2.02	3.229	IO				8.55
11.917	0.00	2.01	3.215	IO				8.53
12.000	0.00	2.01	3.201	IO				8.51
12.083	0.00	2.00	3.187	IO				8.49
12.167	0.00	2.00	3.173	IO				8.47
12.250	0.00	1.99	3.160	IO				8.45
12.333	0.00	1.99	3.146	IO				8.43
12.417	0.00	1.98	3.132	IO				8.40
12.500	0.00	1.98	3.119	IO				8.38
12.583	0.00	1.97	3.105	IO				8.36
12.667	0.00	1.97	3.091	IO				8.34
12.750	0.00	1.96	3.078	IO				8.32
12.833	0.00	1.96	3.064	IO				8.30
12.917	0.00	1.95	3.051	IO				8.27
13.000	0.00	1.94	3.038	IO				8.25
13.083	0.00	1.93	3.024	IO				8.22
13.167	0.00	1.92	3.011	IO				8.20
13.250	0.00	1.91	2.998	IO				8.17
13.333	0.00	1.91	2.985	IO				8.15
13.417	0.00	1.90	2.971	IO				8.12
13.500	0.00	1.89	2.958	IO				8.10
13.583	0.00	1.88	2.945	IO				8.07
13.667	0.00	1.87	2.933	IO				8.05
13.750	0.00	1.87	2.920	IO				8.02
13.833	0.00	1.86	2.907	IO				8.00
13.917	0.00	1.85	2.894	IO				7.98
14.000	0.00	1.84	2.881	IO				7.95
14.083	0.00	1.83	2.869	IO				7.93
14.167	0.00	1.83	2.856	IO				7.90
14.250	0.00	1.82	2.844	O				7.88
14.333	0.00	1.81	2.831	O				7.86
14.417	0.00	1.80	2.819	O				7.83
14.500	0.00	1.80	2.806	O				7.81
14.583	0.00	1.79	2.794	O				7.79
14.667	0.00	1.78	2.782	O				7.76
14.750	0.00	1.77	2.769	O				7.74
14.833	0.00	1.77	2.757	O				7.72
14.917	0.00	1.76	2.745	O				7.69
15.000	0.00	1.75	2.733	O				7.67
15.083	0.00	1.74	2.721	O				7.65
15.167	0.00	1.74	2.709	O				7.63
15.250	0.00	1.73	2.697	O				7.60
15.333	0.00	1.72	2.685	O				7.58
15.417	0.00	1.71	2.673	O				7.56
15.500	0.00	1.71	2.662	O				7.54
15.583	0.00	1.70	2.650	O				7.51
15.667	0.00	1.69	2.638	O				7.49
15.750	0.00	1.68	2.627	O				7.47
15.833	0.00	1.68	2.615	O				7.45
15.917	0.00	1.67	2.603	O				7.43
16.000	0.00	1.66	2.592	O				7.40
16.083	0.00	1.66	2.581	O				7.38
16.167	0.00	1.65	2.569	O				7.36
16.250	0.00	1.64	2.558	O				7.34
16.333	0.00	1.63	2.547	O				7.32
16.417	0.00	1.63	2.535	O				7.30
16.500	0.00	1.62	2.524	O				7.28
16.583	0.00	1.61	2.513	O				7.26
16.667	0.00	1.61	2.502	O				7.23
16.750	0.00	1.60	2.491	O				7.21
16.833	0.00	1.59	2.480	O				7.19
16.917	0.00	1.59	2.469	O				7.17
17.000	0.00	1.58	2.458	O				7.15
17.083	0.00	1.57	2.447	O				7.13
17.167	0.00	1.57	2.436	O				7.11
17.250	0.00	1.56	2.426	O				7.09
17.333	0.00	1.55	2.415	O				7.07
17.417	0.00	1.55	2.404	O				7.05
17.500	0.00	1.54	2.394	O				7.03
17.583	0.00	1.53	2.383	O				7.01

17.667	0.00	1.53	2.372	O	|	|	|	|	6.99
17.750	0.00	1.52	2.362	O	|	|	|	|	6.97
17.833	0.00	1.51	2.352	O	|	|	|	|	6.95
17.917	0.00	1.51	2.341	O	|	|	|	|	6.93
18.000	0.00	1.50	2.331	O	|	|	|	|	6.91
18.083	0.00	1.49	2.320	O	|	|	|	|	6.89
18.167	0.00	1.49	2.310	O	|	|	|	|	6.87
18.250	0.00	1.48	2.300	O	|	|	|	|	6.85
18.333	0.00	1.47	2.290	O	|	|	|	|	6.83
18.417	0.00	1.47	2.280	O	|	|	|	|	6.81
18.500	0.00	1.46	2.270	O	|	|	|	|	6.80
18.583	0.00	1.46	2.260	O	|	|	|	|	6.78
18.667	0.00	1.45	2.250	O	|	|	|	|	6.76
18.750	0.00	1.44	2.240	O	|	|	|	|	6.74
18.833	0.00	1.44	2.230	O	|	|	|	|	6.72
18.917	0.00	1.43	2.220	O	|	|	|	|	6.70
19.000	0.00	1.43	2.210	O	|	|	|	|	6.68
19.083	0.00	1.42	2.200	O	|	|	|	|	6.66
19.167	0.00	1.41	2.190	O	|	|	|	|	6.65
19.250	0.00	1.41	2.181	O	|	|	|	|	6.63
19.333	0.00	1.40	2.171	O	|	|	|	|	6.61
19.417	0.00	1.39	2.161	O	|	|	|	|	6.59
19.500	0.00	1.39	2.152	O	|	|	|	|	6.57
19.583	0.00	1.38	2.142	O	|	|	|	|	6.56
19.667	0.00	1.38	2.133	O	|	|	|	|	6.54
19.750	0.00	1.37	2.123	O	|	|	|	|	6.52
19.833	0.00	1.37	2.114	O	|	|	|	|	6.50
19.917	0.00	1.36	2.104	O	|	|	|	|	6.48
20.000	0.00	1.35	2.095	O	|	|	|	|	6.47
20.083	0.00	1.35	2.086	O	|	|	|	|	6.45
20.167	0.00	1.34	2.077	O	|	|	|	|	6.43
20.250	0.00	1.34	2.067	O	|	|	|	|	6.41
20.333	0.00	1.33	2.058	O	|	|	|	|	6.40
20.417	0.00	1.33	2.049	O	|	|	|	|	6.38
20.500	0.00	1.32	2.040	O	|	|	|	|	6.36
20.583	0.00	1.31	2.031	O	|	|	|	|	6.35
20.667	0.00	1.31	2.022	O	|	|	|	|	6.33
20.750	0.00	1.30	2.013	O	|	|	|	|	6.31
20.833	0.00	1.29	2.004	O	|	|	|	|	6.29
20.917	0.00	1.28	1.995	O	|	|	|	|	6.27
21.000	0.00	1.26	1.986	O	|	|	|	|	6.25
21.083	0.00	1.24	1.978	O	|	|	|	|	6.24
21.167	0.00	1.23	1.969	O	|	|	|	|	6.22
21.250	0.00	1.21	1.961	O	|	|	|	|	6.20
21.333	0.00	1.20	1.952	O	|	|	|	|	6.18
21.417	0.00	1.18	1.944	O	|	|	|	|	6.16
21.500	0.00	1.17	1.936	O	|	|	|	|	6.15
21.583	0.00	1.15	1.928	O	|	|	|	|	6.13
21.667	0.00	1.14	1.920	O	|	|	|	|	6.11
21.750	0.00	1.12	1.913	O	|	|	|	|	6.09
21.833	0.00	1.11	1.905	O	|	|	|	|	6.08
21.917	0.00	1.09	1.897	O	|	|	|	|	6.06
22.000	0.00	1.08	1.890	O	|	|	|	|	6.04
22.083	0.00	1.07	1.882	O	|	|	|	|	6.03
22.167	0.00	1.05	1.875	O	|	|	|	|	6.01
22.250	0.00	1.04	1.868	O	|	|	|	|	6.00
22.333	0.00	1.02	1.861	O	|	|	|	|	5.98
22.417	0.00	1.01	1.854	O	|	|	|	|	5.97
22.500	0.00	1.00	1.847	O	|	|	|	|	5.95
22.583	0.00	0.99	1.840	O	|	|	|	|	5.94
22.667	0.00	0.97	1.833	O	|	|	|	|	5.92
22.750	0.00	0.96	1.827	O	|	|	|	|	5.91
22.833	0.00	0.95	1.820	O	|	|	|	|	5.89
22.917	0.00	0.94	1.814	O	|	|	|	|	5.88
23.000	0.00	0.92	1.807	O	|	|	|	|	5.86
23.083	0.00	0.91	1.801	O	|	|	|	|	5.85
23.167	0.00	0.90	1.795	O	|	|	|	|	5.84
23.250	0.00	0.89	1.789	O	|	|	|	|	5.82
23.333	0.00	0.88	1.782	O	|	|	|	|	5.81
23.417	0.00	0.87	1.776	O	|	|	|	|	5.80
23.500	0.00	0.85	1.770	O	|	|	|	|	5.78

23.583	0.00	0.84	1.765	O	|	|	|	|	5.77
23.667	0.00	0.83	1.759	O	|	|	|	|	5.76
23.750	0.00	0.82	1.753	O	|	|	|	|	5.75
23.833	0.00	0.81	1.748	O	|	|	|	|	5.73
23.917	0.00	0.80	1.742	O	|	|	|	|	5.72
24.000	0.00	0.79	1.736	O	|	|	|	|	5.71
24.083	0.00	0.78	1.731	O	|	|	|	|	5.70
24.167	0.00	0.77	1.726	O	|	|	|	|	5.69
24.250	0.00	0.76	1.720	O	|	|	|	|	5.68
24.333	0.00	0.75	1.715	O	|	|	|	|	5.66
24.417	0.00	0.74	1.710	O	|	|	|	|	5.65
24.500	0.00	0.73	1.705	O	|	|	|	|	5.64
24.583	0.00	0.72	1.700	O	|	|	|	|	5.63
24.667	0.00	0.71	1.695	O	|	|	|	|	5.62
24.750	0.00	0.70	1.690	O	|	|	|	|	5.61
24.833	0.00	0.70	1.685	O	|	|	|	|	5.60
24.917	0.00	0.69	1.681	O	|	|	|	|	5.59
25.000	0.00	0.68	1.676	O	|	|	|	|	5.58
25.083	0.00	0.67	1.671	O	|	|	|	|	5.57
25.167	0.00	0.66	1.667	O	|	|	|	|	5.56
25.250	0.00	0.65	1.662	O	|	|	|	|	5.55
25.333	0.00	0.64	1.658	O	|	|	|	|	5.54
25.417	0.00	0.64	1.653	O	|	|	|	|	5.53
25.500	0.00	0.63	1.649	O	|	|	|	|	5.52
25.583	0.00	0.62	1.645	O	|	|	|	|	5.51
25.667	0.00	0.61	1.640	O	|	|	|	|	5.50
25.750	0.00	0.61	1.636	O	|	|	|	|	5.49
25.833	0.00	0.61	1.632	O	|	|	|	|	5.48
25.917	0.00	0.61	1.628	O	|	|	|	|	5.47
26.000	0.00	0.61	1.624	O	|	|	|	|	5.46
26.083	0.00	0.61	1.620	O	|	|	|	|	5.45
26.167	0.00	0.61	1.615	O	|	|	|	|	5.44
26.250	0.00	0.61	1.611	O	|	|	|	|	5.43
26.333	0.00	0.61	1.607	O	|	|	|	|	5.42
26.417	0.00	0.60	1.603	O	|	|	|	|	5.41
26.500	0.00	0.60	1.599	O	|	|	|	|	5.40
26.583	0.00	0.60	1.594	O	|	|	|	|	5.39
26.667	0.00	0.60	1.590	O	|	|	|	|	5.38
26.750	0.00	0.60	1.586	O	|	|	|	|	5.37
26.833	0.00	0.60	1.582	O	|	|	|	|	5.36
26.917	0.00	0.60	1.578	O	|	|	|	|	5.36
27.000	0.00	0.60	1.574	O	|	|	|	|	5.35
27.083	0.00	0.60	1.570	O	|	|	|	|	5.34
27.167	0.00	0.60	1.566	O	|	|	|	|	5.33
27.250	0.00	0.60	1.561	O	|	|	|	|	5.32
27.333	0.00	0.60	1.557	O	|	|	|	|	5.31
27.417	0.00	0.60	1.553	O	|	|	|	|	5.30
27.500	0.00	0.60	1.549	O	|	|	|	|	5.29
27.583	0.00	0.60	1.545	O	|	|	|	|	5.28
27.667	0.00	0.60	1.541	O	|	|	|	|	5.27
27.750	0.00	0.60	1.537	O	|	|	|	|	5.26
27.833	0.00	0.59	1.533	O	|	|	|	|	5.25
27.917	0.00	0.59	1.529	O	|	|	|	|	5.24
28.000	0.00	0.59	1.524	O	|	|	|	|	5.23
28.083	0.00	0.59	1.520	O	|	|	|	|	5.22
28.167	0.00	0.59	1.516	O	|	|	|	|	5.21
28.250	0.00	0.59	1.512	O	|	|	|	|	5.20
28.333	0.00	0.59	1.508	O	|	|	|	|	5.19
28.417	0.00	0.59	1.504	O	|	|	|	|	5.18
28.500	0.00	0.59	1.500	O	|	|	|	|	5.17
28.583	0.00	0.59	1.496	O	|	|	|	|	5.16
28.667	0.00	0.59	1.492	O	|	|	|	|	5.15
28.750	0.00	0.59	1.488	O	|	|	|	|	5.14
28.833	0.00	0.59	1.484	O	|	|	|	|	5.14
28.917	0.00	0.59	1.480	O	|	|	|	|	5.13
29.000	0.00	0.59	1.476	O	|	|	|	|	5.12
29.083	0.00	0.59	1.472	O	|	|	|	|	5.11
29.167	0.00	0.59	1.468	O	|	|	|	|	5.10
29.250	0.00	0.58	1.464	O	|	|	|	|	5.09
29.333	0.00	0.58	1.460	O	|	|	|	|	5.08
29.417	0.00	0.58	1.456	O	|	|	|	|	5.07

29.500	0.00	0.58	1.452	O					5.06
29.583	0.00	0.58	1.448	O					5.05
29.667	0.00	0.58	1.444	O					5.04
29.750	0.00	0.58	1.440	O					5.03
29.833	0.00	0.58	1.436	O					5.02
29.917	0.00	0.58	1.432	O					5.01
30.000	0.00	0.58	1.428	O					5.00
30.083	0.00	0.58	1.424	O					4.99
30.167	0.00	0.58	1.420	O					4.99
30.250	0.00	0.58	1.416	O					4.98
30.333	0.00	0.58	1.412	O					4.97
30.417	0.00	0.58	1.408	O					4.96
30.500	0.00	0.58	1.404	O					4.95
30.583	0.00	0.58	1.400	O					4.94
30.667	0.00	0.57	1.396	O					4.93
30.750	0.00	0.57	1.392	O					4.92
30.833	0.00	0.57	1.388	O					4.91
30.917	0.00	0.57	1.384	O					4.90
31.000	0.00	0.57	1.380	O					4.89
31.083	0.00	0.57	1.376	O					4.88
31.167	0.00	0.57	1.372	O					4.87
31.250	0.00	0.57	1.368	O					4.87
31.333	0.00	0.57	1.364	O					4.86
31.417	0.00	0.57	1.360	O					4.85
31.500	0.00	0.57	1.356	O					4.84
31.583	0.00	0.57	1.352	O					4.83
31.667	0.00	0.57	1.348	O					4.82
31.750	0.00	0.57	1.345	O					4.81
31.833	0.00	0.57	1.341	O					4.80
31.917	0.00	0.57	1.337	O					4.79
32.000	0.00	0.57	1.333	O					4.78
32.083	0.00	0.57	1.329	O					4.77
32.167	0.00	0.56	1.325	O					4.76
32.250	0.00	0.56	1.321	O					4.76
32.333	0.00	0.56	1.317	O					4.75
32.417	0.00	0.56	1.313	O					4.74
32.500	0.00	0.56	1.310	O					4.73
32.583	0.00	0.56	1.306	O					4.72
32.667	0.00	0.56	1.302	O					4.71
32.750	0.00	0.56	1.298	O					4.70
32.833	0.00	0.56	1.294	O					4.69
32.917	0.00	0.56	1.290	O					4.68
33.000	0.00	0.56	1.286	O					4.67
33.083	0.00	0.56	1.283	O					4.67
33.167	0.00	0.56	1.279	O					4.66
33.250	0.00	0.56	1.275	O					4.65
33.333	0.00	0.56	1.271	O					4.64
33.417	0.00	0.56	1.267	O					4.63
33.500	0.00	0.56	1.263	O					4.62
33.583	0.00	0.56	1.260	O					4.61
33.667	0.00	0.55	1.256	O					4.60
33.750	0.00	0.55	1.252	O					4.59
33.833	0.00	0.55	1.248	O					4.59
33.917	0.00	0.55	1.244	O					4.58
34.000	0.00	0.55	1.240	O					4.57
34.083	0.00	0.55	1.237	O					4.56
34.167	0.00	0.55	1.233	O					4.55
34.250	0.00	0.55	1.229	O					4.54
34.333	0.00	0.55	1.225	O					4.53
34.417	0.00	0.55	1.221	O					4.52
34.500	0.00	0.55	1.218	O					4.51
34.583	0.00	0.55	1.214	O					4.51
34.667	0.00	0.55	1.210	O					4.50
34.750	0.00	0.55	1.206	O					4.49
34.833	0.00	0.55	1.203	O					4.48
34.917	0.00	0.55	1.199	O					4.47
35.000	0.00	0.55	1.195	O					4.46
35.083	0.00	0.55	1.191	O					4.45
35.167	0.00	0.54	1.188	O					4.44
35.250	0.00	0.54	1.184	O					4.43
35.333	0.00	0.54	1.180	O					4.43

35.417	0.00	0.54	1.176	O	|	|	|	|	4.42
35.500	0.00	0.54	1.173	O	|	|	|	|	4.41
35.583	0.00	0.54	1.169	O	|	|	|	|	4.40
35.667	0.00	0.54	1.165	O	|	|	|	|	4.39
35.750	0.00	0.54	1.161	O	|	|	|	|	4.38
35.833	0.00	0.54	1.158	O	|	|	|	|	4.37
35.917	0.00	0.54	1.154	O	|	|	|	|	4.37
36.000	0.00	0.54	1.150	O	|	|	|	|	4.36
36.083	0.00	0.54	1.147	O	|	|	|	|	4.35
36.167	0.00	0.54	1.143	O	|	|	|	|	4.34
36.250	0.00	0.54	1.139	O	|	|	|	|	4.33
36.333	0.00	0.54	1.135	O	|	|	|	|	4.32
36.417	0.00	0.54	1.132	O	|	|	|	|	4.31
36.500	0.00	0.54	1.128	O	|	|	|	|	4.30
36.583	0.00	0.54	1.124	O	|	|	|	|	4.30
36.667	0.00	0.53	1.121	O	|	|	|	|	4.29
36.750	0.00	0.53	1.117	O	|	|	|	|	4.27
36.833	0.00	0.53	1.113	O	|	|	|	|	4.26
36.917	0.00	0.53	1.110	O	|	|	|	|	4.25
37.000	0.00	0.53	1.106	O	|	|	|	|	4.24
37.083	0.00	0.53	1.102	O	|	|	|	|	4.23
37.167	0.00	0.53	1.099	O	|	|	|	|	4.22
37.250	0.00	0.53	1.095	O	|	|	|	|	4.21
37.333	0.00	0.53	1.091	O	|	|	|	|	4.20
37.417	0.00	0.53	1.088	O	|	|	|	|	4.19
37.500	0.00	0.53	1.084	O	|	|	|	|	4.18
37.583	0.00	0.53	1.080	O	|	|	|	|	4.17
37.667	0.00	0.53	1.077	O	|	|	|	|	4.16
37.750	0.00	0.53	1.073	O	|	|	|	|	4.15
37.833	0.00	0.53	1.069	O	|	|	|	|	4.14
37.917	0.00	0.52	1.066	O	|	|	|	|	4.13
38.000	0.00	0.52	1.062	O	|	|	|	|	4.12
38.083	0.00	0.52	1.059	O	|	|	|	|	4.11
38.167	0.00	0.52	1.055	O	|	|	|	|	4.10
38.250	0.00	0.52	1.051	O	|	|	|	|	4.09
38.333	0.00	0.52	1.048	O	|	|	|	|	4.08
38.417	0.00	0.52	1.044	O	|	|	|	|	4.07
38.500	0.00	0.52	1.041	O	|	|	|	|	4.06
38.583	0.00	0.52	1.037	O	|	|	|	|	4.05
38.667	0.00	0.52	1.034	O	|	|	|	|	4.04
38.750	0.00	0.52	1.030	O	|	|	|	|	4.03
38.833	0.00	0.52	1.026	O	|	|	|	|	4.02
38.917	0.00	0.52	1.023	O	|	|	|	|	4.01
39.000	0.00	0.52	1.019	O	|	|	|	|	4.00
39.083	0.00	0.52	1.016	O	|	|	|	|	3.99
39.167	0.00	0.51	1.012	O	|	|	|	|	3.98
39.250	0.00	0.51	1.009	O	|	|	|	|	3.97
39.333	0.00	0.51	1.005	O	|	|	|	|	3.96
39.417	0.00	0.51	1.002	O	|	|	|	|	3.95
39.500	0.00	0.51	0.998	O	|	|	|	|	3.94
39.583	0.00	0.51	0.995	O	|	|	|	|	3.93
39.667	0.00	0.51	0.991	O	|	|	|	|	3.92
39.750	0.00	0.51	0.987	O	|	|	|	|	3.92
39.833	0.00	0.51	0.984	O	|	|	|	|	3.91
39.917	0.00	0.51	0.980	O	|	|	|	|	3.90
40.000	0.00	0.51	0.977	O	|	|	|	|	3.89
40.083	0.00	0.51	0.973	O	|	|	|	|	3.88
40.167	0.00	0.51	0.970	O	|	|	|	|	3.87
40.250	0.00	0.51	0.966	O	|	|	|	|	3.86
40.333	0.00	0.51	0.963	O	|	|	|	|	3.85
40.417	0.00	0.51	0.960	O	|	|	|	|	3.84
40.500	0.00	0.50	0.956	O	|	|	|	|	3.83
40.583	0.00	0.50	0.953	O	|	|	|	|	3.82
40.667	0.00	0.50	0.949	O	|	|	|	|	3.81
40.750	0.00	0.50	0.946	O	|	|	|	|	3.80
40.833	0.00	0.50	0.942	O	|	|	|	|	3.79
40.917	0.00	0.50	0.939	O	|	|	|	|	3.78
41.000	0.00	0.50	0.935	O	|	|	|	|	3.77
41.083	0.00	0.50	0.932	O	|	|	|	|	3.76
41.167	0.00	0.50	0.928	O	|	|	|	|	3.75
41.250	0.00	0.50	0.925	O	|	|	|	|	3.74

41.333	0.00	0.50	0.922	O					3.73
41.417	0.00	0.50	0.918	O					3.72
41.500	0.00	0.50	0.915	O					3.71
41.583	0.00	0.50	0.911	O					3.70
41.667	0.00	0.50	0.908	O					3.69
41.750	0.00	0.49	0.904	O					3.68
41.833	0.00	0.49	0.901	O					3.68
41.917	0.00	0.49	0.898	O					3.67
42.000	0.00	0.49	0.894	O					3.66
42.083	0.00	0.49	0.891	O					3.65
42.167	0.00	0.49	0.887	O					3.64
42.250	0.00	0.49	0.884	O					3.63
42.333	0.00	0.49	0.881	O					3.62
42.417	0.00	0.49	0.877	O					3.61
42.500	0.00	0.49	0.874	O					3.60
42.583	0.00	0.49	0.871	O					3.59
42.667	0.00	0.49	0.867	O					3.58
42.750	0.00	0.49	0.864	O					3.57
42.833	0.00	0.49	0.860	O					3.56
42.917	0.00	0.49	0.857	O					3.55
43.000	0.00	0.49	0.854	O					3.54
43.083	0.00	0.48	0.850	O					3.53
43.167	0.00	0.48	0.847	O					3.53
43.250	0.00	0.48	0.844	O					3.52
43.333	0.00	0.48	0.840	O					3.51
43.417	0.00	0.48	0.837	O					3.50
43.500	0.00	0.48	0.834	O					3.49
43.583	0.00	0.48	0.831	O					3.48
43.667	0.00	0.48	0.827	O					3.47
43.750	0.00	0.48	0.824	O					3.46
43.833	0.00	0.48	0.821	O					3.45
43.917	0.00	0.48	0.817	O					3.44
44.000	0.00	0.48	0.814	O					3.43
44.083	0.00	0.48	0.811	O					3.42
44.167	0.00	0.48	0.807	O					3.42
44.250	0.00	0.48	0.804	O					3.41
44.333	0.00	0.48	0.801	O					3.40
44.417	0.00	0.47	0.798	O					3.39
44.500	0.00	0.47	0.794	O					3.38
44.583	0.00	0.47	0.791	O					3.37
44.667	0.00	0.47	0.788	O					3.36
44.750	0.00	0.47	0.785	O					3.35
44.833	0.00	0.47	0.781	O					3.34
44.917	0.00	0.47	0.778	O					3.33
45.000	0.00	0.47	0.775	O					3.32
45.083	0.00	0.47	0.772	O					3.32
45.167	0.00	0.47	0.768	O					3.31
45.250	0.00	0.47	0.765	O					3.30
45.333	0.00	0.47	0.762	O					3.29
45.417	0.00	0.47	0.759	O					3.28
45.500	0.00	0.47	0.755	O					3.26
45.583	0.00	0.47	0.752	O					3.25
45.667	0.00	0.46	0.749	O					3.24
45.750	0.00	0.46	0.746	O					3.23
45.833	0.00	0.46	0.743	O					3.22
45.917	0.00	0.46	0.739	O					3.21
46.000	0.00	0.46	0.736	O					3.20
46.083	0.00	0.46	0.733	O					3.19
46.167	0.00	0.46	0.730	O					3.18
46.250	0.00	0.46	0.727	O					3.17
46.333	0.00	0.46	0.724	O					3.16
46.417	0.00	0.46	0.720	O					3.15
46.500	0.00	0.46	0.717	O					3.14
46.583	0.00	0.46	0.714	O					3.13
46.667	0.00	0.46	0.711	O					3.12
46.750	0.00	0.45	0.708	O					3.11
46.833	0.00	0.45	0.705	O					3.10
46.917	0.00	0.45	0.702	O					3.09
47.000	0.00	0.45	0.699	O					3.08
47.083	0.00	0.45	0.695	O					3.06
47.167	0.00	0.45	0.692	O					3.05

47.250	0.00	0.45	0.689	O					3.04
47.333	0.00	0.45	0.686	O					3.03
47.417	0.00	0.45	0.683	O					3.02
47.500	0.00	0.45	0.680	O					3.01
47.583	0.00	0.45	0.677	O					3.00
47.667	0.00	0.45	0.674	O					2.99
47.750	0.00	0.45	0.671	O					2.98
47.833	0.00	0.44	0.668	O					2.97
47.917	0.00	0.44	0.665	O					2.96
48.000	0.00	0.44	0.662	O					2.95
48.083	0.00	0.44	0.658	O					2.94
48.167	0.00	0.44	0.655	O					2.93
48.250	0.00	0.44	0.652	O					2.92
48.333	0.00	0.44	0.649	O					2.91
48.417	0.00	0.44	0.646	O					2.90
48.500	0.00	0.44	0.643	O					2.89
48.583	0.00	0.44	0.640	O					2.88
48.667	0.00	0.44	0.637	O					2.87
48.750	0.00	0.44	0.634	O					2.86
48.833	0.00	0.44	0.631	O					2.85
48.917	0.00	0.43	0.628	O					2.84
49.000	0.00	0.43	0.625	O					2.83
49.083	0.00	0.43	0.622	O					2.82
49.167	0.00	0.43	0.619	O					2.81
49.250	0.00	0.43	0.616	O					2.80
49.333	0.00	0.43	0.613	O					2.79
49.417	0.00	0.43	0.610	O					2.78
49.500	0.00	0.43	0.607	O					2.77
49.583	0.00	0.43	0.605	O					2.76
49.667	0.00	0.43	0.602	O					2.75
49.750	0.00	0.43	0.599	O					2.74
49.833	0.00	0.43	0.596	O					2.73
49.917	0.00	0.43	0.593	O					2.72
50.000	0.00	0.42	0.590	O					2.71
50.083	0.00	0.42	0.587	O					2.70
50.167	0.00	0.42	0.584	O					2.69
50.250	0.00	0.42	0.581	O					2.68
50.333	0.00	0.42	0.578	O					2.67
50.417	0.00	0.42	0.575	O					2.66
50.500	0.00	0.42	0.572	O					2.65
50.583	0.00	0.42	0.569	O					2.64
50.667	0.00	0.42	0.567	O					2.64
50.750	0.00	0.42	0.564	O					2.63
50.833	0.00	0.42	0.561	O					2.62
50.917	0.00	0.42	0.558	O					2.61
51.000	0.00	0.42	0.555	O					2.60
51.083	0.00	0.42	0.552	O					2.59
51.167	0.00	0.41	0.549	O					2.58
51.250	0.00	0.41	0.546	O					2.57
51.333	0.00	0.41	0.544	O					2.56
51.417	0.00	0.41	0.541	O					2.55
51.500	0.00	0.41	0.538	O					2.54
51.583	0.00	0.41	0.535	O					2.53
51.667	0.00	0.41	0.532	O					2.52
51.750	0.00	0.41	0.529	O					2.51
51.833	0.00	0.41	0.527	O					2.50
51.917	0.00	0.41	0.524	O					2.49
52.000	0.00	0.41	0.521	O					2.48
52.083	0.00	0.41	0.518	O					2.47
52.167	0.00	0.41	0.515	O					2.46
52.250	0.00	0.41	0.513	O					2.46
52.333	0.00	0.40	0.510	O					2.45
52.417	0.00	0.40	0.507	O					2.44
52.500	0.00	0.40	0.504	O					2.43
52.583	0.00	0.40	0.501	O					2.42
52.667	0.00	0.40	0.499	O					2.41
52.750	0.00	0.40	0.496	O					2.40
52.833	0.00	0.40	0.493	O					2.39
52.917	0.00	0.40	0.490	O					2.38
53.000	0.00	0.40	0.488	O					2.37
53.083	0.00	0.40	0.485	O					2.36

53.167	0.00	0.40	0.482	O					2.35
53.250	0.00	0.40	0.479	O					2.34
53.333	0.00	0.40	0.477	O					2.34
53.417	0.00	0.40	0.474	O					2.33
53.500	0.00	0.40	0.471	O					2.32
53.583	0.00	0.39	0.469	O					2.31
53.667	0.00	0.39	0.466	O					2.30
53.750	0.00	0.39	0.463	O					2.29
53.833	0.00	0.39	0.460	O					2.28
53.917	0.00	0.39	0.458	O					2.27
54.000	0.00	0.39	0.455	O					2.26
54.083	0.00	0.39	0.452	O					2.25
54.167	0.00	0.39	0.450	O					2.24
54.250	0.00	0.39	0.447	O					2.23
54.333	0.00	0.39	0.444	O					2.22
54.417	0.00	0.39	0.442	O					2.21
54.500	0.00	0.38	0.439	O					2.20
54.583	0.00	0.38	0.436	O					2.19
54.667	0.00	0.38	0.434	O					2.18
54.750	0.00	0.38	0.431	O					2.17
54.833	0.00	0.38	0.428	O					2.16
54.917	0.00	0.38	0.426	O					2.15
55.000	0.00	0.38	0.423	O					2.14
55.083	0.00	0.38	0.421	O					2.13
55.167	0.00	0.38	0.418	O					2.12
55.250	0.00	0.38	0.415	O					2.12
55.333	0.00	0.37	0.413	O					2.11
55.417	0.00	0.37	0.410	O					2.10
55.500	0.00	0.37	0.408	O					2.09
55.583	0.00	0.37	0.405	O					2.08
55.667	0.00	0.37	0.403	O					2.07
55.750	0.00	0.37	0.400	O					2.06
55.833	0.00	0.37	0.397	O					2.05
55.917	0.00	0.37	0.395	O					2.04
56.000	0.00	0.37	0.392	O					2.03
56.083	0.00	0.37	0.390	O					2.02
56.167	0.00	0.37	0.387	O					2.01
56.250	0.00	0.36	0.385	O					2.00
56.333	0.00	0.36	0.382	O					1.99
56.417	0.00	0.36	0.380	O					1.99
56.500	0.00	0.36	0.377	O					1.98
56.583	0.00	0.36	0.375	O					1.97
56.667	0.00	0.36	0.372	O					1.96
56.750	0.00	0.36	0.370	O					1.95
56.833	0.00	0.36	0.367	O					1.94
56.917	0.00	0.36	0.365	O					1.93
57.000	0.00	0.36	0.362	O					1.92
57.083	0.00	0.36	0.360	O					1.91
57.167	0.00	0.36	0.358	O					1.90
57.250	0.00	0.35	0.355	O					1.90
57.333	0.00	0.35	0.353	O					1.89
57.417	0.00	0.35	0.350	O					1.88
57.500	0.00	0.35	0.348	O					1.87
57.583	0.00	0.35	0.345	O					1.86
57.667	0.00	0.35	0.343	O					1.85
57.750	0.00	0.35	0.341	O					1.84
57.833	0.00	0.35	0.338	O					1.83
57.917	0.00	0.35	0.336	O					1.82
58.000	0.00	0.35	0.333	O					1.82
58.083	0.00	0.35	0.331	O					1.81
58.167	0.00	0.34	0.329	O					1.80
58.250	0.00	0.34	0.326	O					1.79
58.333	0.00	0.34	0.324	O					1.78
58.417	0.00	0.34	0.322	O					1.77
58.500	0.00	0.34	0.319	O					1.76
58.583	0.00	0.34	0.317	O					1.76
58.667	0.00	0.34	0.314	O					1.75
58.750	0.00	0.34	0.312	O					1.74
58.833	0.00	0.34	0.310	O					1.73
58.917	0.00	0.34	0.307	O					1.72
59.000	0.00	0.34	0.305	O					1.71

59.083	0.00	0.34	0.303	O					1.70
59.167	0.00	0.33	0.301	O					1.70
59.250	0.00	0.33	0.298	O					1.69
59.333	0.00	0.33	0.296	O					1.68
59.417	0.00	0.33	0.294	O					1.67
59.500	0.00	0.33	0.291	O					1.66
59.583	0.00	0.33	0.289	O					1.65
59.667	0.00	0.33	0.287	O					1.65
59.750	0.00	0.33	0.285	O					1.64
59.833	0.00	0.33	0.282	O					1.63
59.917	0.00	0.33	0.280	O					1.62
60.000	0.00	0.33	0.278	O					1.61
60.083	0.00	0.33	0.276	O					1.60
60.167	0.00	0.33	0.273	O					1.60
60.250	0.00	0.32	0.271	O					1.59
60.333	0.00	0.32	0.269	O					1.58
60.417	0.00	0.32	0.267	O					1.57
60.500	0.00	0.32	0.264	O					1.56
60.583	0.00	0.32	0.262	O					1.56
60.667	0.00	0.32	0.260	O					1.55
60.750	0.00	0.32	0.258	O					1.54
60.833	0.00	0.32	0.256	O					1.53
60.917	0.00	0.32	0.253	O					1.52
61.000	0.00	0.32	0.251	O					1.52
61.083	0.00	0.32	0.249	O					1.51
61.167	0.00	0.32	0.247	O					1.50
61.250	0.00	0.31	0.245	O					1.49
61.333	0.00	0.31	0.242	O					1.48
61.417	0.00	0.31	0.240	O					1.48
61.500	0.00	0.31	0.238	O					1.47
61.583	0.00	0.31	0.236	O					1.46
61.667	0.00	0.31	0.234	O					1.45
61.750	0.00	0.31	0.232	O					1.44
61.833	0.00	0.31	0.230	O					1.44
61.917	0.00	0.31	0.227	O					1.43
62.000	0.00	0.31	0.225	O					1.42
62.083	0.00	0.31	0.223	O					1.41
62.167	0.00	0.31	0.221	O					1.41
62.250	0.00	0.31	0.219	O					1.40
62.333	0.00	0.30	0.217	O					1.39
62.417	0.00	0.30	0.215	O					1.38
62.500	0.00	0.30	0.213	O					1.38
62.583	0.00	0.30	0.211	O					1.37
62.667	0.00	0.30	0.209	O					1.36
62.750	0.00	0.30	0.206	O					1.35
62.833	0.00	0.30	0.204	O					1.35
62.917	0.00	0.30	0.202	O					1.34
63.000	0.00	0.30	0.200	O					1.33
63.083	0.00	0.30	0.198	O					1.32
63.167	0.00	0.30	0.196	O					1.32
63.250	0.00	0.30	0.194	O					1.31
63.333	0.00	0.30	0.192	O					1.30
63.417	0.00	0.29	0.190	O					1.29
63.500	0.00	0.29	0.188	O					1.28
63.583	0.00	0.29	0.186	O					1.27
63.667	0.00	0.29	0.184	O					1.25
63.750	0.00	0.29	0.182	O					1.24
63.833	0.00	0.29	0.180	O					1.23
63.917	0.00	0.28	0.178	O					1.22
64.000	0.00	0.28	0.176	O					1.21
64.083	0.00	0.28	0.174	O					1.20
64.167	0.00	0.28	0.172	O					1.19
64.250	0.00	0.28	0.170	O					1.17
64.333	0.00	0.27	0.168	O					1.16
64.417	0.00	0.27	0.167	O					1.15
64.500	0.00	0.27	0.165	O					1.14
64.583	0.00	0.27	0.163	O					1.13
64.667	0.00	0.27	0.161	O					1.12
64.750	0.00	0.27	0.159	O					1.11
64.833	0.00	0.26	0.157	O					1.10
64.917	0.00	0.26	0.156	O					1.09

65.000	0.00	0.26	0.154	O	|	|	|	|	1.08
65.083	0.00	0.26	0.152	O	|	|	|	|	1.07
65.167	0.00	0.26	0.150	O	|	|	|	|	1.06
65.250	0.00	0.26	0.148	O	|	|	|	|	1.05
65.333	0.00	0.26	0.147	O	|	|	|	|	1.04
65.417	0.00	0.25	0.145	O	|	|	|	|	1.03
65.500	0.00	0.25	0.143	O	|	|	|	|	1.02
65.583	0.00	0.25	0.141	O	|	|	|	|	1.01
65.667	0.00	0.25	0.140	O	|	|	|	|	1.00
65.750	0.00	0.25	0.138	O	|	|	|	|	0.99
65.833	0.00	0.25	0.136	O	|	|	|	|	0.98
65.917	0.00	0.24	0.135	O	|	|	|	|	0.97
66.000	0.00	0.24	0.133	O	|	|	|	|	0.96
66.083	0.00	0.24	0.131	O	|	|	|	|	0.95
66.167	0.00	0.24	0.130	O	|	|	|	|	0.94
66.250	0.00	0.24	0.128	O	|	|	|	|	0.93
66.333	0.00	0.24	0.126	O	|	|	|	|	0.92
66.417	0.00	0.24	0.125	O	|	|	|	|	0.91
66.500	0.00	0.23	0.123	O	|	|	|	|	0.90
66.583	0.00	0.23	0.121	O	|	|	|	|	0.89
66.667	0.00	0.23	0.120	O	|	|	|	|	0.88
66.750	0.00	0.23	0.118	O	|	|	|	|	0.87
66.833	0.00	0.23	0.117	O	|	|	|	|	0.86
66.917	0.00	0.23	0.115	O	|	|	|	|	0.85
67.000	0.00	0.23	0.113	O	|	|	|	|	0.84
67.083	0.00	0.22	0.112	O	|	|	|	|	0.83
67.167	0.00	0.22	0.110	O	|	|	|	|	0.83
67.250	0.00	0.22	0.109	O	|	|	|	|	0.82
67.333	0.00	0.22	0.107	O	|	|	|	|	0.81
67.417	0.00	0.22	0.106	O	|	|	|	|	0.80
67.500	0.00	0.22	0.104	O	|	|	|	|	0.79
67.583	0.00	0.22	0.103	O	|	|	|	|	0.78
67.667	0.00	0.21	0.101	O	|	|	|	|	0.77
67.750	0.00	0.21	0.100	O	|	|	|	|	0.76
67.833	0.00	0.21	0.098	O	|	|	|	|	0.76
67.917	0.00	0.21	0.097	O	|	|	|	|	0.75
68.000	0.00	0.21	0.096	O	|	|	|	|	0.74
68.083	0.00	0.21	0.094	O	|	|	|	|	0.73
68.167	0.00	0.21	0.093	O	|	|	|	|	0.72
68.250	0.00	0.21	0.091	O	|	|	|	|	0.71
68.333	0.00	0.20	0.090	O	|	|	|	|	0.71
68.417	0.00	0.20	0.088	O	|	|	|	|	0.70
68.500	0.00	0.20	0.087	O	|	|	|	|	0.69
68.583	0.00	0.20	0.086	O	|	|	|	|	0.68
68.667	0.00	0.20	0.084	O	|	|	|	|	0.67
68.750	0.00	0.20	0.083	O	|	|	|	|	0.67
68.833	0.00	0.20	0.082	O	|	|	|	|	0.66
68.917	0.00	0.20	0.080	O	|	|	|	|	0.65
69.000	0.00	0.19	0.079	O	|	|	|	|	0.64
69.083	0.00	0.19	0.077	O	|	|	|	|	0.63
69.167	0.00	0.19	0.076	O	|	|	|	|	0.63
69.250	0.00	0.19	0.075	O	|	|	|	|	0.62
69.333	0.00	0.19	0.074	O	|	|	|	|	0.61
69.417	0.00	0.19	0.072	O	|	|	|	|	0.60
69.500	0.00	0.19	0.071	O	|	|	|	|	0.60
69.583	0.00	0.19	0.070	O	|	|	|	|	0.59
69.667	0.00	0.19	0.068	O	|	|	|	|	0.58
69.750	0.00	0.18	0.067	O	|	|	|	|	0.57
69.833	0.00	0.18	0.066	O	|	|	|	|	0.57
69.917	0.00	0.18	0.065	O	|	|	|	|	0.56
70.000	0.00	0.18	0.063	O	|	|	|	|	0.55
70.083	0.00	0.18	0.062	O	|	|	|	|	0.54
70.167	0.00	0.18	0.061	O	|	|	|	|	0.54
70.250	0.00	0.18	0.060	O	|	|	|	|	0.53
70.333	0.00	0.18	0.058	O	|	|	|	|	0.52
70.417	0.00	0.18	0.057	O	|	|	|	|	0.52
70.500	0.00	0.17	0.056	O	|	|	|	|	0.51
70.583	0.00	0.17	0.055	O	|	|	|	|	0.50
70.667	0.00	0.17	0.054	O	|	|	|	|	0.50
70.750	0.00	0.17	0.052	O	|	|	|	|	0.49
70.833	0.00	0.17	0.051	O	|	|	|	|	0.48

70.917	0.00	0.17	0.050	O	|	|	|	|	0.47
71.000	0.00	0.17	0.049	O	|	|	|	|	0.47
71.083	0.00	0.17	0.048	O	|	|	|	|	0.46
71.167	0.00	0.17	0.047	O	|	|	|	|	0.45
71.250	0.00	0.16	0.045	O	|	|	|	|	0.45
71.333	0.00	0.16	0.044	O	|	|	|	|	0.44
71.417	0.00	0.16	0.043	O	|	|	|	|	0.43
71.500	0.00	0.16	0.042	O	|	|	|	|	0.43
71.583	0.00	0.16	0.041	O	|	|	|	|	0.42
71.667	0.00	0.16	0.040	O	|	|	|	|	0.42
71.750	0.00	0.16	0.039	O	|	|	|	|	0.41
71.833	0.00	0.16	0.038	O	|	|	|	|	0.40
71.917	0.00	0.16	0.037	O	|	|	|	|	0.40
72.000	0.00	0.16	0.036	O	|	|	|	|	0.39
72.083	0.00	0.15	0.034	O	|	|	|	|	0.38
72.167	0.00	0.15	0.033	O	|	|	|	|	0.38
72.250	0.00	0.15	0.032	O	|	|	|	|	0.37
72.333	0.00	0.15	0.031	O	|	|	|	|	0.37
72.417	0.00	0.15	0.030	O	|	|	|	|	0.36
72.500	0.00	0.15	0.029	O	|	|	|	|	0.35
72.583	0.00	0.15	0.028	O	|	|	|	|	0.35
72.667	0.00	0.15	0.027	O	|	|	|	|	0.34
72.750	0.00	0.15	0.026	O	|	|	|	|	0.34
72.833	0.00	0.15	0.025	O	|	|	|	|	0.33
72.917	0.00	0.15	0.024	O	|	|	|	|	0.32
73.000	0.00	0.14	0.023	O	|	|	|	|	0.32
73.083	0.00	0.14	0.022	O	|	|	|	|	0.31
73.167	0.00	0.14	0.021	O	|	|	|	|	0.31
73.250	0.00	0.14	0.020	O	|	|	|	|	0.30
73.333	0.00	0.14	0.019	O	|	|	|	|	0.29
73.417	0.00	0.13	0.018	O	|	|	|	|	0.27
73.500	0.00	0.12	0.017	O	|	|	|	|	0.26
73.583	0.00	0.12	0.017	O	|	|	|	|	0.25
73.667	0.00	0.11	0.016	O	|	|	|	|	0.24
73.750	0.00	0.11	0.015	O	|	|	|	|	0.23
73.833	0.00	0.10	0.014	O	|	|	|	|	0.21
73.917	0.00	0.10	0.014	O	|	|	|	|	0.20

Remaining water in basin = 0.01 (Ac.Ft)

**********HYDROGRAPH DATA**********

Number of intervals = 887
Time interval = 5.0 (Min.)
Maximum/Peak flow rate = 2.514 (CFS)
Total volume = 5.082 (Ac.Ft)

Status of hydrographs being held in storage

	Stream 1	Stream 2	Stream 3	Stream 4	Stream 5
Peak (CFS)	0.000	0.000	0.000	0.000	0.000
Vol (Ac.Ft)	0.000	0.000	0.000	0.000	0.000

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FLOOD HYDROGRAPH ROUTING PROGRAM
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Study date: 08/18/25

Program License Serial Number 5006

********** HYDROGRAPH INFORMATION **********

From study/file name: PROA610.rte
**********HYDROGRAPH DATA**********
Number of intervals = 90
Time interval = 5.0 (Min.)
Maximum/Peak flow rate = 56.468 (CFS)
Total volume = 7.050 (Ac.Ft)

Status of hydrographs being held in storage

	Stream 1	Stream 2	Stream 3	Stream 4	Stream 5
Peak (CFS)	0.000	0.000	0.000	0.000	0.000
Vol (Ac.Ft)	0.000	0.000	0.000	0.000	0.000

****

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Process from Point/Station 0.000 to Point/Station 0.000
**** RETARDING BASIN ROUTING ****

User entry of depth-outflow-storage data

Total number of inflow hydrograph intervals = 90
Hydrograph time unit = 5.000 (Min.)
Initial depth in storage basin = 0.00(Ft.)

Initial basin depth = 0.00 (Ft.)
Initial basin storage = 0.00 (Ac.Ft)
Initial basin outflow = 0.00 (CFS)

Depth vs. Storage and Depth vs. Discharge data:

Basin Depth (Ft.)	Storage (Ac.Ft)	Outflow (CFS)	(S-O*dt/2) (Ac.Ft)	(S+O*dt/2) (Ac.Ft)
0.000	0.000	0.000	0.000	0.000
0.300	0.020	0.142	0.020	0.020
1.300	0.192	0.296	0.191	0.193
2.300	0.466	0.394	0.465	0.467
3.300	0.766	0.469	0.764	0.768
4.300	1.126	0.536	1.124	1.128
5.500	1.640	0.610	1.638	1.642
6.300	2.007	1.299	2.003	2.011
8.300	3.066	1.957	3.059	3.073
10.300	4.341	2.417	4.333	4.349
11.400	5.141	2.632	5.132	5.150
12.300	5.851	167.187	5.275	6.427
13.300	6.699	657.066	4.436	8.962
14.300	7.611	1377.819	2.866	12.356

Hydrograph Detention Basin Routing

Graph values: 'I'= unit inflow; 'O'=outflow at time shown

Time (Hours)	Inflow (CFS)	Outflow (CFS)	Storage (Ac.Ft)	.0	14.1	28.23	42.35	56.47	Depth (Ft.)
0.083	0.22	0.01	0.001	O	|	|	|	|	0.01
0.167	1.18	0.04	0.005	O	|	|	|	|	0.08
0.250	2.59	0.13	0.018	OI	|	|	|	|	0.27
0.333	3.50	0.16	0.038	OI	|	|	|	|	0.40
0.417	3.96	0.18	0.062	O I	|	|	|	|	0.55
0.500	4.29	0.20	0.089	O I	|	|	|	|	0.70
0.583	4.68	0.23	0.119	O I	|	|	|	|	0.87
0.667	5.08	0.26	0.151	O I	|	|	|	|	1.06
0.750	5.33	0.29	0.185	O I	|	|	|	|	1.26
0.833	5.49	0.31	0.220	O I	|	|	|	|	1.40
0.917	5.61	0.32	0.256	O I	|	|	|	|	1.53
1.000	5.75	0.33	0.293	O I	|	|	|	|	1.67
1.083	6.01	0.35	0.331	O I	|	|	|	|	1.81
1.167	6.32	0.36	0.371	O I	|	|	|	|	1.95
1.250	6.50	0.37	0.413	O I	|	|	|	|	2.11
1.333	6.60	0.39	0.455	O I	|	|	|	|	2.26
1.417	6.68	0.40	0.498	O I	|	|	|	|	2.41
1.500	6.75	0.41	0.542	O I	|	|	|	|	2.55
1.583	6.79	0.42	0.585	O I	|	|	|	|	2.70
1.667	6.82	0.43	0.629	O I	|	|	|	|	2.84
1.750	6.84	0.45	0.673	O I	|	|	|	|	2.99
1.833	6.85	0.46	0.717	O I	|	|	|	|	3.14
1.917	6.87	0.47	0.761	O I	|	|	|	|	3.28
2.000	6.92	0.48	0.806	O I	|	|	|	|	3.41
2.083	7.07	0.48	0.850	O I	|	|	|	|	3.53
2.167	7.18	0.49	0.896	O I	|	|	|	|	3.66
2.250	7.25	0.50	0.942	O I	|	|	|	|	3.79
2.333	7.44	0.51	0.990	O I	|	|	|	|	3.92
2.417	7.55	0.52	1.038	O I	|	|	|	|	4.05
2.500	7.61	0.53	1.086	O I	|	|	|	|	4.19
2.583	7.64	0.54	1.135	O I	|	|	|	|	4.32
2.667	7.67	0.54	1.184	O I	|	|	|	|	4.44
2.750	7.73	0.55	1.233	O I	|	|	|	|	4.55
2.833	7.94	0.56	1.283	O I	|	|	|	|	4.67
2.917	8.19	0.57	1.335	O I	|	|	|	|	4.79
3.000	8.34	0.57	1.388	O I	|	|	|	|	4.91
3.083	8.41	0.58	1.442	O I	|	|	|	|	5.04
3.167	8.50	0.59	1.496	O I	|	|	|	|	5.16
3.250	8.73	0.60	1.551	O I	|	|	|	|	5.29
3.333	9.00	0.61	1.608	O I	|	|	|	|	5.43
3.417	9.20	0.66	1.667	O I	|	|	|	|	5.56
3.500	9.51	0.77	1.726	O I	|	|	|	|	5.69
3.583	10.04	0.89	1.788	O I	|	|	|	|	5.82
3.667	10.65	1.01	1.852	O I	|	|	|	|	5.96
3.750	11.17	1.14	1.920	O I	|	|	|	|	6.11
3.833	11.62	1.27	1.990	O I	|	|	|	|	6.26
3.917	12.07	1.33	2.063	O I	|	|	|	|	6.41
4.000	12.51	1.38	2.138	O I|	|	|	|	6.55
4.083	12.95	1.43	2.216	O I|	|	|	|	6.70
4.167	13.43	1.48	2.297	O I|	|	|	|	6.85
4.250	14.09	1.53	2.381	O I|	|	|	|	7.01
4.333	15.00	1.59	2.471	O I	|	|	|	7.18
4.417	16.19	1.65	2.567	O |I	|	|	|	7.36
4.500	17.47	1.71	2.671	O |I	|	|	|	7.55
4.583	18.57	1.78	2.784	|O | I	|	|	|	7.77
4.667	19.60	1.86	2.902	|O | I	|	|	|	7.99
4.750	20.90	1.93	3.029	|O | I	|	|	|	8.23
4.833	22.29	1.99	3.164	|O | I	|	|	|	8.45
4.917	23.46	2.04	3.308	|O | I	|	|	|	8.68
5.000	24.55	2.10	3.459	|O | I	|	|	|	8.92
5.083	26.25	2.16	3.619	|O | I	|	|	|	9.17
5.167	29.58	2.22	3.796	|O | I	|	|	|	9.45
5.250	34.77	2.29	4.002	|O | I	|	|	|	9.77
5.333	40.31	2.38	4.245	|O | I	|	|	|	10.15
5.417	45.60	2.47	4.524	|O | I	|	|	|	10.55
5.500	51.81	2.55	4.842	|O | I	|	|	|	10.99
5.583	56.47	9.86	5.172	| O | I	|	|	|	11.44
5.667	49.49	48.14	5.337	| | I	|	|	|	11.65
5.750	33.25	42.13	5.311	| | I	|	|	|	11.62

5.833	22.56	29.50	5.257	|	| I O	|	|	11.55
5.917	17.02	20.88	5.220	|	|I O	|	|	11.50
6.000	13.34	15.82	5.198	|	IO	|	|	11.47
6.083	10.39	12.31	5.183	| IO	|	|	|	11.45
6.167	7.97	9.53	5.171	| IO	|	|	|	11.44
6.250	6.02	7.28	5.161	| IO	|	|	|	11.43
6.333	4.72	5.59	5.154	| IO	|	|	|	11.42
6.417	3.80	4.41	5.149	| O	|	|	|	11.41
6.500	3.00	3.51	5.145	|O	|	|	|	11.40
6.583	2.38	2.78	5.142	|O	|	|	|	11.40
6.667	1.85	2.63	5.138	|O	|	|	|	11.40
6.750	1.40	2.63	5.131	IO	|	|	|	11.39
6.833	1.06	2.63	5.121	IO	|	|	|	11.37
6.917	0.75	2.62	5.109	IO	|	|	|	11.36
7.000	0.41	2.62	5.095	IO	|	|	|	11.34
7.083	0.15	2.62	5.079	IO	|	|	|	11.31
7.167	0.09	2.61	5.062	IO	|	|	|	11.29
7.250	0.05	2.61	5.044	IO	|	|	|	11.27
7.333	0.03	2.60	5.027	IO	|	|	|	11.24
7.417	0.01	2.60	5.009	IO	|	|	|	11.22
7.500	0.00	2.59	4.991	IO	|	|	|	11.19
7.583	0.00	2.59	4.973	IO	|	|	|	11.17
7.667	0.00	2.58	4.956	IO	|	|	|	11.15
7.750	0.00	2.58	4.938	IO	|	|	|	11.12
7.833	0.00	2.57	4.920	IO	|	|	|	11.10
7.917	0.00	2.57	4.902	IO	|	|	|	11.07
8.000	0.00	2.56	4.885	IO	|	|	|	11.05
8.083	0.00	2.56	4.867	IO	|	|	|	11.02
8.167	0.00	2.55	4.850	IO	|	|	|	11.00
8.250	0.00	2.55	4.832	IO	|	|	|	10.98
8.333	0.00	2.54	4.814	IO	|	|	|	10.95
8.417	0.00	2.54	4.797	IO	|	|	|	10.93
8.500	0.00	2.53	4.779	IO	|	|	|	10.90
8.583	0.00	2.53	4.762	IO	|	|	|	10.88
8.667	0.00	2.53	4.745	IO	|	|	|	10.85
8.750	0.00	2.52	4.727	IO	|	|	|	10.83
8.833	0.00	2.52	4.710	IO	|	|	|	10.81
8.917	0.00	2.51	4.693	IO	|	|	|	10.78
9.000	0.00	2.51	4.675	IO	|	|	|	10.76
9.083	0.00	2.50	4.658	IO	|	|	|	10.74
9.167	0.00	2.50	4.641	IO	|	|	|	10.71
9.250	0.00	2.49	4.624	IO	|	|	|	10.69
9.333	0.00	2.49	4.606	IO	|	|	|	10.66
9.417	0.00	2.48	4.589	IO	|	|	|	10.64
9.500	0.00	2.48	4.572	IO	|	|	|	10.62
9.583	0.00	2.47	4.555	IO	|	|	|	10.59
9.667	0.00	2.47	4.538	IO	|	|	|	10.57
9.750	0.00	2.47	4.521	IO	|	|	|	10.55
9.833	0.00	2.46	4.504	IO	|	|	|	10.52
9.917	0.00	2.46	4.487	IO	|	|	|	10.50
10.000	0.00	2.45	4.470	IO	|	|	|	10.48
10.083	0.00	2.45	4.453	IO	|	|	|	10.45
10.167	0.00	2.44	4.437	IO	|	|	|	10.43
10.250	0.00	2.44	4.420	IO	|	|	|	10.41
10.333	0.00	2.43	4.403	IO	|	|	|	10.39
10.417	0.00	2.43	4.386	IO	|	|	|	10.36
10.500	0.00	2.42	4.370	IO	|	|	|	10.34
10.583	0.00	2.42	4.353	IO	|	|	|	10.32
10.667	0.00	2.42	4.336	IO	|	|	|	10.29
10.750	0.00	2.41	4.320	IO	|	|	|	10.27
10.833	0.00	2.40	4.303	IO	|	|	|	10.24
10.917	0.00	2.40	4.287	IO	|	|	|	10.21
11.000	0.00	2.39	4.270	IO	|	|	|	10.19
11.083	0.00	2.39	4.254	IO	|	|	|	10.16
11.167	0.00	2.38	4.237	IO	|	|	|	10.14
11.250	0.00	2.37	4.221	IO	|	|	|	10.11
11.333	0.00	2.37	4.205	IO	|	|	|	10.09
11.417	0.00	2.36	4.188	IO	|	|	|	10.06
11.500	0.00	2.36	4.172	IO	|	|	|	10.03
11.583	0.00	2.35	4.156	IO	|	|	|	10.01
11.667	0.00	2.34	4.140	IO	|	|	|	9.98

11.750	0.00	2.34	4.123	IO				9.96
11.833	0.00	2.33	4.107	IO				9.93
11.917	0.00	2.33	4.091	IO				9.91
12.000	0.00	2.32	4.075	IO				9.88
12.083	0.00	2.32	4.059	IO				9.86
12.167	0.00	2.31	4.043	IO				9.83
12.250	0.00	2.30	4.028	IO				9.81
12.333	0.00	2.30	4.012	IO				9.78
12.417	0.00	2.29	3.996	IO				9.76
12.500	0.00	2.29	3.980	IO				9.73
12.583	0.00	2.28	3.964	IO				9.71
12.667	0.00	2.28	3.949	IO				9.68
12.750	0.00	2.27	3.933	IO				9.66
12.833	0.00	2.26	3.917	IO				9.64
12.917	0.00	2.26	3.902	IO				9.61
13.000	0.00	2.25	3.886	IO				9.59
13.083	0.00	2.25	3.871	IO				9.56
13.167	0.00	2.24	3.855	IO				9.54
13.250	0.00	2.24	3.840	IO				9.51
13.333	0.00	2.23	3.825	IO				9.49
13.417	0.00	2.23	3.809	IO				9.47
13.500	0.00	2.22	3.794	IO				9.44
13.583	0.00	2.21	3.779	IO				9.42
13.667	0.00	2.21	3.763	IO				9.39
13.750	0.00	2.20	3.748	IO				9.37
13.833	0.00	2.20	3.733	IO				9.35
13.917	0.00	2.19	3.718	IO				9.32
14.000	0.00	2.19	3.703	IO				9.30
14.083	0.00	2.18	3.688	IO				9.28
14.167	0.00	2.18	3.673	IO				9.25
14.250	0.00	2.17	3.658	IO				9.23
14.333	0.00	2.17	3.643	IO				9.21
14.417	0.00	2.16	3.628	IO				9.18
14.500	0.00	2.15	3.613	IO				9.16
14.583	0.00	2.15	3.598	IO				9.14
14.667	0.00	2.14	3.584	IO				9.11
14.750	0.00	2.14	3.569	IO				9.09
14.833	0.00	2.13	3.554	IO				9.07
14.917	0.00	2.13	3.539	IO				9.04
15.000	0.00	2.12	3.525	IO				9.02
15.083	0.00	2.12	3.510	IO				9.00
15.167	0.00	2.11	3.496	IO				8.97
15.250	0.00	2.11	3.481	IO				8.95
15.333	0.00	2.10	3.467	IO				8.93
15.417	0.00	2.10	3.452	IO				8.91
15.500	0.00	2.09	3.438	IO				8.88
15.583	0.00	2.09	3.423	IO				8.86
15.667	0.00	2.08	3.409	IO				8.84
15.750	0.00	2.08	3.395	IO				8.82
15.833	0.00	2.07	3.380	IO				8.79
15.917	0.00	2.07	3.366	IO				8.77
16.000	0.00	2.06	3.352	IO				8.75
16.083	0.00	2.06	3.338	IO				8.73
16.167	0.00	2.05	3.324	IO				8.70
16.250	0.00	2.04	3.310	IO				8.68
16.333	0.00	2.04	3.296	IO				8.66
16.417	0.00	2.03	3.282	IO				8.64
16.500	0.00	2.03	3.268	IO				8.62
16.583	0.00	2.02	3.254	IO				8.59
16.667	0.00	2.02	3.240	IO				8.57
16.750	0.00	2.01	3.226	IO				8.55
16.833	0.00	2.01	3.212	IO				8.53
16.917	0.00	2.00	3.198	IO				8.51
17.000	0.00	2.00	3.184	IO				8.49
17.083	0.00	1.99	3.171	IO				8.46
17.167	0.00	1.99	3.157	IO				8.44
17.250	0.00	1.98	3.143	IO				8.42
17.333	0.00	1.98	3.129	IO				8.40
17.417	0.00	1.97	3.116	IO				8.38
17.500	0.00	1.97	3.102	IO				8.36
17.583	0.00	1.97	3.089	IO				8.34

17.667	0.00	1.96	3.075	IO					8.31
17.750	0.00	1.95	3.062	IO					8.29
17.833	0.00	1.95	3.048	IO					8.27
17.917	0.00	1.94	3.035	IO					8.24
18.000	0.00	1.93	3.022	IO					8.22
18.083	0.00	1.92	3.008	IO					8.19
18.167	0.00	1.91	2.995	IO					8.17
18.250	0.00	1.90	2.982	IO					8.14
18.333	0.00	1.90	2.969	IO					8.12
18.417	0.00	1.89	2.956	IO					8.09
18.500	0.00	1.88	2.943	IO					8.07
18.583	0.00	1.87	2.930	IO					8.04
18.667	0.00	1.86	2.917	IO					8.02
18.750	0.00	1.86	2.904	IO					7.99
18.833	0.00	1.85	2.891	IO					7.97
18.917	0.00	1.84	2.879	IO					7.95
19.000	0.00	1.83	2.866	IO					7.92
19.083	0.00	1.82	2.854	IO					7.90
19.167	0.00	1.82	2.841	IO					7.88
19.250	0.00	1.81	2.829	IO					7.85
19.333	0.00	1.80	2.816	IO					7.83
19.417	0.00	1.79	2.804	IO					7.80
19.500	0.00	1.79	2.791	IO					7.78
19.583	0.00	1.78	2.779	IO					7.76
19.667	0.00	1.77	2.767	IO					7.74
19.750	0.00	1.76	2.755	O					7.71
19.833	0.00	1.76	2.743	O					7.69
19.917	0.00	1.75	2.731	O					7.67
20.000	0.00	1.74	2.718	O					7.64
20.083	0.00	1.73	2.707	O					7.62
20.167	0.00	1.73	2.695	O					7.60
20.250	0.00	1.72	2.683	O					7.58
20.333	0.00	1.71	2.671	O					7.55
20.417	0.00	1.70	2.659	O					7.53
20.500	0.00	1.70	2.647	O					7.51
20.583	0.00	1.69	2.636	O					7.49
20.667	0.00	1.68	2.624	O					7.47
20.750	0.00	1.68	2.613	O					7.44
20.833	0.00	1.67	2.601	O					7.42
20.917	0.00	1.66	2.590	O					7.40
21.000	0.00	1.65	2.578	O					7.38
21.083	0.00	1.65	2.567	O					7.36
21.167	0.00	1.64	2.556	O					7.34
21.250	0.00	1.63	2.544	O					7.31
21.333	0.00	1.63	2.533	O					7.29
21.417	0.00	1.62	2.522	O					7.27
21.500	0.00	1.61	2.511	O					7.25
21.583	0.00	1.61	2.500	O					7.23
21.667	0.00	1.60	2.489	O					7.21
21.750	0.00	1.59	2.478	O					7.19
21.833	0.00	1.58	2.467	O					7.17
21.917	0.00	1.58	2.456	O					7.15
22.000	0.00	1.57	2.445	O					7.13
22.083	0.00	1.56	2.434	O					7.11
22.167	0.00	1.56	2.423	O					7.09
22.250	0.00	1.55	2.413	O					7.07
22.333	0.00	1.54	2.402	O					7.05
22.417	0.00	1.54	2.391	O					7.03
22.500	0.00	1.53	2.381	O					7.01
22.583	0.00	1.52	2.370	O					6.99
22.667	0.00	1.52	2.360	O					6.97
22.750	0.00	1.51	2.349	O					6.95
22.833	0.00	1.51	2.339	O					6.93
22.917	0.00	1.50	2.329	O					6.91
23.000	0.00	1.49	2.318	O					6.89
23.083	0.00	1.49	2.308	O					6.87
23.167	0.00	1.48	2.298	O					6.85
23.250	0.00	1.47	2.288	O					6.83
23.333	0.00	1.47	2.278	O					6.81
23.417	0.00	1.46	2.268	O					6.79
23.500	0.00	1.45	2.258	O					6.77

23.583	0.00	1.45	2.248	O	|	|	|	|	6.75
23.667	0.00	1.44	2.238	O	|	|	|	|	6.74
23.750	0.00	1.44	2.228	O	|	|	|	|	6.72
23.833	0.00	1.43	2.218	O	|	|	|	|	6.70
23.917	0.00	1.42	2.208	O	|	|	|	|	6.68
24.000	0.00	1.42	2.198	O	|	|	|	|	6.66
24.083	0.00	1.41	2.188	O	|	|	|	|	6.64
24.167	0.00	1.41	2.179	O	|	|	|	|	6.62
24.250	0.00	1.40	2.169	O	|	|	|	|	6.61
24.333	0.00	1.39	2.159	O	|	|	|	|	6.59
24.417	0.00	1.39	2.150	O	|	|	|	|	6.57
24.500	0.00	1.38	2.140	O	|	|	|	|	6.55
24.583	0.00	1.38	2.131	O	|	|	|	|	6.53
24.667	0.00	1.37	2.121	O	|	|	|	|	6.52
24.750	0.00	1.36	2.112	O	|	|	|	|	6.50
24.833	0.00	1.36	2.103	O	|	|	|	|	6.48
24.917	0.00	1.35	2.093	O	|	|	|	|	6.46
25.000	0.00	1.35	2.084	O	|	|	|	|	6.45
25.083	0.00	1.34	2.075	O	|	|	|	|	6.43
25.167	0.00	1.34	2.066	O	|	|	|	|	6.41
25.250	0.00	1.33	2.056	O	|	|	|	|	6.39
25.333	0.00	1.32	2.047	O	|	|	|	|	6.38
25.417	0.00	1.32	2.038	O	|	|	|	|	6.36
25.500	0.00	1.31	2.029	O	|	|	|	|	6.34
25.583	0.00	1.31	2.020	O	|	|	|	|	6.32
25.667	0.00	1.30	2.011	O	|	|	|	|	6.31
25.750	0.00	1.29	2.002	O	|	|	|	|	6.29
25.833	0.00	1.27	1.993	O	|	|	|	|	6.27
25.917	0.00	1.26	1.985	O	|	|	|	|	6.25
26.000	0.00	1.24	1.976	O	|	|	|	|	6.23
26.083	0.00	1.22	1.967	O	|	|	|	|	6.21
26.167	0.00	1.21	1.959	O	|	|	|	|	6.20
26.250	0.00	1.19	1.951	O	|	|	|	|	6.18
26.333	0.00	1.18	1.943	O	|	|	|	|	6.16
26.417	0.00	1.16	1.935	O	|	|	|	|	6.14
26.500	0.00	1.15	1.927	O	|	|	|	|	6.12
26.583	0.00	1.13	1.919	O	|	|	|	|	6.11
26.667	0.00	1.12	1.911	O	|	|	|	|	6.09
26.750	0.00	1.10	1.903	O	|	|	|	|	6.07
26.833	0.00	1.09	1.896	O	|	|	|	|	6.06
26.917	0.00	1.08	1.888	O	|	|	|	|	6.04
27.000	0.00	1.06	1.881	O	|	|	|	|	6.03
27.083	0.00	1.05	1.874	O	|	|	|	|	6.01
27.167	0.00	1.04	1.867	O	|	|	|	|	5.99
27.250	0.00	1.02	1.859	O	|	|	|	|	5.98
27.333	0.00	1.01	1.852	O	|	|	|	|	5.96
27.417	0.00	1.00	1.846	O	|	|	|	|	5.95
27.500	0.00	0.98	1.839	O	|	|	|	|	5.93
27.583	0.00	0.97	1.832	O	|	|	|	|	5.92
27.667	0.00	0.96	1.825	O	|	|	|	|	5.90
27.750	0.00	0.95	1.819	O	|	|	|	|	5.89
27.833	0.00	0.93	1.812	O	|	|	|	|	5.88
27.917	0.00	0.92	1.806	O	|	|	|	|	5.86
28.000	0.00	0.91	1.800	O	|	|	|	|	5.85
28.083	0.00	0.90	1.793	O	|	|	|	|	5.83
28.167	0.00	0.89	1.787	O	|	|	|	|	5.82
28.250	0.00	0.88	1.781	O	|	|	|	|	5.81
28.333	0.00	0.86	1.775	O	|	|	|	|	5.79
28.417	0.00	0.85	1.769	O	|	|	|	|	5.78
28.500	0.00	0.84	1.763	O	|	|	|	|	5.77
28.583	0.00	0.83	1.758	O	|	|	|	|	5.76
28.667	0.00	0.82	1.752	O	|	|	|	|	5.74
28.750	0.00	0.81	1.746	O	|	|	|	|	5.73
28.833	0.00	0.80	1.741	O	|	|	|	|	5.72
28.917	0.00	0.79	1.735	O	|	|	|	|	5.71
29.000	0.00	0.78	1.730	O	|	|	|	|	5.70
29.083	0.00	0.77	1.725	O	|	|	|	|	5.68
29.167	0.00	0.76	1.719	O	|	|	|	|	5.67
29.250	0.00	0.75	1.714	O	|	|	|	|	5.66
29.333	0.00	0.74	1.709	O	|	|	|	|	5.65
29.417	0.00	0.73	1.704	O	|	|	|	|	5.64

29.500	0.00	0.72	1.699	O					5.63
29.583	0.00	0.71	1.694	O					5.62
29.667	0.00	0.70	1.689	O					5.61
29.750	0.00	0.69	1.684	O					5.60
29.833	0.00	0.68	1.680	O					5.59
29.917	0.00	0.68	1.675	O					5.58
30.000	0.00	0.67	1.670	O					5.57
30.083	0.00	0.66	1.666	O					5.56
30.167	0.00	0.65	1.661	O					5.55
30.250	0.00	0.64	1.657	O					5.54
30.333	0.00	0.63	1.652	O					5.53
30.417	0.00	0.63	1.648	O					5.52
30.500	0.00	0.62	1.644	O					5.51
30.583	0.00	0.61	1.640	O					5.50
30.667	0.00	0.61	1.635	O					5.49
30.750	0.00	0.61	1.631	O					5.48
30.833	0.00	0.61	1.627	O					5.47
30.917	0.00	0.61	1.623	O					5.46
31.000	0.00	0.61	1.619	O					5.45
31.083	0.00	0.61	1.614	O					5.44
31.167	0.00	0.61	1.610	O					5.43
31.250	0.00	0.61	1.606	O					5.42
31.333	0.00	0.60	1.602	O					5.41
31.417	0.00	0.60	1.598	O					5.40
31.500	0.00	0.60	1.594	O					5.39
31.583	0.00	0.60	1.590	O					5.38
31.667	0.00	0.60	1.585	O					5.37
31.750	0.00	0.60	1.581	O					5.36
31.833	0.00	0.60	1.577	O					5.35
31.917	0.00	0.60	1.573	O					5.34
32.000	0.00	0.60	1.569	O					5.33
32.083	0.00	0.60	1.565	O					5.32
32.167	0.00	0.60	1.561	O					5.31
32.250	0.00	0.60	1.556	O					5.30
32.333	0.00	0.60	1.552	O					5.30
32.417	0.00	0.60	1.548	O					5.29
32.500	0.00	0.60	1.544	O					5.28
32.583	0.00	0.60	1.540	O					5.27
32.667	0.00	0.60	1.536	O					5.26
32.750	0.00	0.59	1.532	O					5.25
32.833	0.00	0.59	1.528	O					5.24
32.917	0.00	0.59	1.524	O					5.23
33.000	0.00	0.59	1.520	O					5.22
33.083	0.00	0.59	1.515	O					5.21
33.167	0.00	0.59	1.511	O					5.20
33.250	0.00	0.59	1.507	O					5.19
33.333	0.00	0.59	1.503	O					5.18
33.417	0.00	0.59	1.499	O					5.17
33.500	0.00	0.59	1.495	O					5.16
33.583	0.00	0.59	1.491	O					5.15
33.667	0.00	0.59	1.487	O					5.14
33.750	0.00	0.59	1.483	O					5.13
33.833	0.00	0.59	1.479	O					5.12
33.917	0.00	0.59	1.475	O					5.11
34.000	0.00	0.59	1.471	O					5.11
34.083	0.00	0.59	1.467	O					5.10
34.167	0.00	0.58	1.463	O					5.09
34.250	0.00	0.58	1.459	O					5.08
34.333	0.00	0.58	1.455	O					5.07
34.417	0.00	0.58	1.451	O					5.06
34.500	0.00	0.58	1.447	O					5.05
34.583	0.00	0.58	1.443	O					5.04
34.667	0.00	0.58	1.439	O					5.03
34.750	0.00	0.58	1.435	O					5.02
34.833	0.00	0.58	1.431	O					5.01
34.917	0.00	0.58	1.427	O					5.00
35.000	0.00	0.58	1.423	O					4.99
35.083	0.00	0.58	1.419	O					4.98
35.167	0.00	0.58	1.415	O					4.97
35.250	0.00	0.58	1.411	O					4.96
35.333	0.00	0.58	1.407	O					4.96

35.417	0.00	0.58	1.403	O	|	|	|	|	4.95
35.500	0.00	0.58	1.399	O	|	|	|	|	4.94
35.583	0.00	0.57	1.395	O	|	|	|	|	4.93
35.667	0.00	0.57	1.391	O	|	|	|	|	4.92
35.750	0.00	0.57	1.387	O	|	|	|	|	4.91
35.833	0.00	0.57	1.383	O	|	|	|	|	4.90
35.917	0.00	0.57	1.379	O	|	|	|	|	4.89
36.000	0.00	0.57	1.375	O	|	|	|	|	4.88
36.083	0.00	0.57	1.371	O	|	|	|	|	4.87
36.167	0.00	0.57	1.367	O	|	|	|	|	4.86
36.250	0.00	0.57	1.363	O	|	|	|	|	4.85
36.333	0.00	0.57	1.359	O	|	|	|	|	4.85
36.417	0.00	0.57	1.356	O	|	|	|	|	4.84
36.500	0.00	0.57	1.352	O	|	|	|	|	4.83
36.583	0.00	0.57	1.348	O	|	|	|	|	4.82
36.667	0.00	0.57	1.344	O	|	|	|	|	4.81
36.750	0.00	0.57	1.340	O	|	|	|	|	4.80
36.833	0.00	0.57	1.336	O	|	|	|	|	4.79
36.917	0.00	0.57	1.332	O	|	|	|	|	4.78
37.000	0.00	0.57	1.328	O	|	|	|	|	4.77
37.083	0.00	0.56	1.324	O	|	|	|	|	4.76
37.167	0.00	0.56	1.320	O	|	|	|	|	4.75
37.250	0.00	0.56	1.317	O	|	|	|	|	4.74
37.333	0.00	0.56	1.313	O	|	|	|	|	4.74
37.417	0.00	0.56	1.309	O	|	|	|	|	4.73
37.500	0.00	0.56	1.305	O	|	|	|	|	4.72
37.583	0.00	0.56	1.301	O	|	|	|	|	4.71
37.667	0.00	0.56	1.297	O	|	|	|	|	4.70
37.750	0.00	0.56	1.293	O	|	|	|	|	4.69
37.833	0.00	0.56	1.289	O	|	|	|	|	4.68
37.917	0.00	0.56	1.286	O	|	|	|	|	4.67
38.000	0.00	0.56	1.282	O	|	|	|	|	4.66
38.083	0.00	0.56	1.278	O	|	|	|	|	4.65
38.167	0.00	0.56	1.274	O	|	|	|	|	4.65
38.250	0.00	0.56	1.270	O	|	|	|	|	4.64
38.333	0.00	0.56	1.266	O	|	|	|	|	4.63
38.417	0.00	0.56	1.263	O	|	|	|	|	4.62
38.500	0.00	0.56	1.259	O	|	|	|	|	4.61
38.583	0.00	0.55	1.255	O	|	|	|	|	4.60
38.667	0.00	0.55	1.251	O	|	|	|	|	4.59
38.750	0.00	0.55	1.247	O	|	|	|	|	4.58
38.833	0.00	0.55	1.244	O	|	|	|	|	4.57
38.917	0.00	0.55	1.240	O	|	|	|	|	4.57
39.000	0.00	0.55	1.236	O	|	|	|	|	4.56
39.083	0.00	0.55	1.232	O	|	|	|	|	4.55
39.167	0.00	0.55	1.228	O	|	|	|	|	4.54
39.250	0.00	0.55	1.225	O	|	|	|	|	4.53
39.333	0.00	0.55	1.221	O	|	|	|	|	4.52
39.417	0.00	0.55	1.217	O	|	|	|	|	4.51
39.500	0.00	0.55	1.213	O	|	|	|	|	4.50
39.583	0.00	0.55	1.209	O	|	|	|	|	4.49
39.667	0.00	0.55	1.206	O	|	|	|	|	4.49
39.750	0.00	0.55	1.202	O	|	|	|	|	4.48
39.833	0.00	0.55	1.198	O	|	|	|	|	4.47
39.917	0.00	0.55	1.194	O	|	|	|	|	4.46
40.000	0.00	0.55	1.191	O	|	|	|	|	4.45
40.083	0.00	0.54	1.187	O	|	|	|	|	4.44
40.167	0.00	0.54	1.183	O	|	|	|	|	4.43
40.250	0.00	0.54	1.179	O	|	|	|	|	4.42
40.333	0.00	0.54	1.176	O	|	|	|	|	4.42
40.417	0.00	0.54	1.172	O	|	|	|	|	4.41
40.500	0.00	0.54	1.168	O	|	|	|	|	4.40
40.583	0.00	0.54	1.164	O	|	|	|	|	4.39
40.667	0.00	0.54	1.161	O	|	|	|	|	4.38
40.750	0.00	0.54	1.157	O	|	|	|	|	4.37
40.833	0.00	0.54	1.153	O	|	|	|	|	4.36
40.917	0.00	0.54	1.149	O	|	|	|	|	4.35
41.000	0.00	0.54	1.146	O	|	|	|	|	4.35
41.083	0.00	0.54	1.142	O	|	|	|	|	4.34
41.167	0.00	0.54	1.138	O	|	|	|	|	4.33
41.250	0.00	0.54	1.135	O	|	|	|	|	4.32

41.333	0.00	0.54	1.131	O	|	|	|	|	4.31
41.417	0.00	0.54	1.127	O	|	|	|	|	4.30
41.500	0.00	0.54	1.124	O	|	|	|	|	4.29
41.583	0.00	0.53	1.120	O	|	|	|	|	4.28
41.667	0.00	0.53	1.116	O	|	|	|	|	4.27
41.750	0.00	0.53	1.113	O	|	|	|	|	4.26
41.833	0.00	0.53	1.109	O	|	|	|	|	4.25
41.917	0.00	0.53	1.105	O	|	|	|	|	4.24
42.000	0.00	0.53	1.102	O	|	|	|	|	4.23
42.083	0.00	0.53	1.098	O	|	|	|	|	4.22
42.167	0.00	0.53	1.094	O	|	|	|	|	4.21
42.250	0.00	0.53	1.091	O	|	|	|	|	4.20
42.333	0.00	0.53	1.087	O	|	|	|	|	4.19
42.417	0.00	0.53	1.083	O	|	|	|	|	4.18
42.500	0.00	0.53	1.080	O	|	|	|	|	4.17
42.583	0.00	0.53	1.076	O	|	|	|	|	4.16
42.667	0.00	0.53	1.072	O	|	|	|	|	4.15
42.750	0.00	0.53	1.069	O	|	|	|	|	4.14
42.833	0.00	0.52	1.065	O	|	|	|	|	4.13
42.917	0.00	0.52	1.062	O	|	|	|	|	4.12
43.000	0.00	0.52	1.058	O	|	|	|	|	4.11
43.083	0.00	0.52	1.054	O	|	|	|	|	4.10
43.167	0.00	0.52	1.051	O	|	|	|	|	4.09
43.250	0.00	0.52	1.047	O	|	|	|	|	4.08
43.333	0.00	0.52	1.044	O	|	|	|	|	4.07
43.417	0.00	0.52	1.040	O	|	|	|	|	4.06
43.500	0.00	0.52	1.036	O	|	|	|	|	4.05
43.583	0.00	0.52	1.033	O	|	|	|	|	4.04
43.667	0.00	0.52	1.029	O	|	|	|	|	4.03
43.750	0.00	0.52	1.026	O	|	|	|	|	4.02
43.833	0.00	0.52	1.022	O	|	|	|	|	4.01
43.917	0.00	0.52	1.019	O	|	|	|	|	4.00
44.000	0.00	0.52	1.015	O	|	|	|	|	3.99
44.083	0.00	0.51	1.011	O	|	|	|	|	3.98
44.167	0.00	0.51	1.008	O	|	|	|	|	3.97
44.250	0.00	0.51	1.004	O	|	|	|	|	3.96
44.333	0.00	0.51	1.001	O	|	|	|	|	3.95
44.417	0.00	0.51	0.997	O	|	|	|	|	3.94
44.500	0.00	0.51	0.994	O	|	|	|	|	3.93
44.583	0.00	0.51	0.990	O	|	|	|	|	3.92
44.667	0.00	0.51	0.987	O	|	|	|	|	3.91
44.750	0.00	0.51	0.983	O	|	|	|	|	3.90
44.833	0.00	0.51	0.980	O	|	|	|	|	3.89
44.917	0.00	0.51	0.976	O	|	|	|	|	3.88
45.000	0.00	0.51	0.973	O	|	|	|	|	3.87
45.083	0.00	0.51	0.969	O	|	|	|	|	3.86
45.167	0.00	0.51	0.966	O	|	|	|	|	3.85
45.250	0.00	0.51	0.962	O	|	|	|	|	3.85
45.333	0.00	0.50	0.959	O	|	|	|	|	3.84
45.417	0.00	0.50	0.955	O	|	|	|	|	3.83
45.500	0.00	0.50	0.952	O	|	|	|	|	3.82
45.583	0.00	0.50	0.948	O	|	|	|	|	3.81
45.667	0.00	0.50	0.945	O	|	|	|	|	3.80
45.750	0.00	0.50	0.941	O	|	|	|	|	3.79
45.833	0.00	0.50	0.938	O	|	|	|	|	3.78
45.917	0.00	0.50	0.935	O	|	|	|	|	3.77
46.000	0.00	0.50	0.931	O	|	|	|	|	3.76
46.083	0.00	0.50	0.928	O	|	|	|	|	3.75
46.167	0.00	0.50	0.924	O	|	|	|	|	3.74
46.250	0.00	0.50	0.921	O	|	|	|	|	3.73
46.333	0.00	0.50	0.917	O	|	|	|	|	3.72
46.417	0.00	0.50	0.914	O	|	|	|	|	3.71
46.500	0.00	0.50	0.911	O	|	|	|	|	3.70
46.583	0.00	0.50	0.907	O	|	|	|	|	3.69
46.667	0.00	0.49	0.904	O	|	|	|	|	3.68
46.750	0.00	0.49	0.900	O	|	|	|	|	3.67
46.833	0.00	0.49	0.897	O	|	|	|	|	3.66
46.917	0.00	0.49	0.894	O	|	|	|	|	3.65
47.000	0.00	0.49	0.890	O	|	|	|	|	3.64
47.083	0.00	0.49	0.887	O	|	|	|	|	3.64
47.167	0.00	0.49	0.883	O	|	|	|	|	3.63

47.250	0.00	0.49	0.880	O	|	|	|	|	3.62
47.333	0.00	0.49	0.877	O	|	|	|	|	3.61
47.417	0.00	0.49	0.873	O	|	|	|	|	3.60
47.500	0.00	0.49	0.870	O	|	|	|	|	3.59
47.583	0.00	0.49	0.867	O	|	|	|	|	3.58
47.667	0.00	0.49	0.863	O	|	|	|	|	3.57
47.750	0.00	0.49	0.860	O	|	|	|	|	3.56
47.833	0.00	0.49	0.856	O	|	|	|	|	3.55
47.917	0.00	0.49	0.853	O	|	|	|	|	3.54
48.000	0.00	0.48	0.850	O	|	|	|	|	3.53
48.083	0.00	0.48	0.846	O	|	|	|	|	3.52
48.167	0.00	0.48	0.843	O	|	|	|	|	3.51
48.250	0.00	0.48	0.840	O	|	|	|	|	3.51
48.333	0.00	0.48	0.836	O	|	|	|	|	3.50
48.417	0.00	0.48	0.833	O	|	|	|	|	3.49
48.500	0.00	0.48	0.830	O	|	|	|	|	3.48
48.583	0.00	0.48	0.827	O	|	|	|	|	3.47
48.667	0.00	0.48	0.823	O	|	|	|	|	3.46
48.750	0.00	0.48	0.820	O	|	|	|	|	3.45
48.833	0.00	0.48	0.817	O	|	|	|	|	3.44
48.917	0.00	0.48	0.813	O	|	|	|	|	3.43
49.000	0.00	0.48	0.810	O	|	|	|	|	3.42
49.083	0.00	0.48	0.807	O	|	|	|	|	3.41
49.167	0.00	0.48	0.803	O	|	|	|	|	3.40
49.250	0.00	0.48	0.800	O	|	|	|	|	3.40
49.333	0.00	0.47	0.797	O	|	|	|	|	3.39
49.417	0.00	0.47	0.794	O	|	|	|	|	3.38
49.500	0.00	0.47	0.790	O	|	|	|	|	3.37
49.583	0.00	0.47	0.787	O	|	|	|	|	3.36
49.667	0.00	0.47	0.784	O	|	|	|	|	3.35
49.750	0.00	0.47	0.781	O	|	|	|	|	3.34
49.833	0.00	0.47	0.777	O	|	|	|	|	3.33
49.917	0.00	0.47	0.774	O	|	|	|	|	3.32
50.000	0.00	0.47	0.771	O	|	|	|	|	3.31
50.083	0.00	0.47	0.768	O	|	|	|	|	3.30
50.167	0.00	0.47	0.764	O	|	|	|	|	3.29
50.250	0.00	0.47	0.761	O	|	|	|	|	3.28
50.333	0.00	0.47	0.758	O	|	|	|	|	3.27
50.417	0.00	0.47	0.755	O	|	|	|	|	3.26
50.500	0.00	0.47	0.752	O	|	|	|	|	3.25
50.583	0.00	0.46	0.748	O	|	|	|	|	3.24
50.667	0.00	0.46	0.745	O	|	|	|	|	3.23
50.750	0.00	0.46	0.742	O	|	|	|	|	3.22
50.833	0.00	0.46	0.739	O	|	|	|	|	3.21
50.917	0.00	0.46	0.736	O	|	|	|	|	3.20
51.000	0.00	0.46	0.732	O	|	|	|	|	3.19
51.083	0.00	0.46	0.729	O	|	|	|	|	3.18
51.167	0.00	0.46	0.726	O	|	|	|	|	3.17
51.250	0.00	0.46	0.723	O	|	|	|	|	3.16
51.333	0.00	0.46	0.720	O	|	|	|	|	3.15
51.417	0.00	0.46	0.717	O	|	|	|	|	3.14
51.500	0.00	0.46	0.714	O	|	|	|	|	3.13
51.583	0.00	0.46	0.710	O	|	|	|	|	3.11
51.667	0.00	0.45	0.707	O	|	|	|	|	3.10
51.750	0.00	0.45	0.704	O	|	|	|	|	3.09
51.833	0.00	0.45	0.701	O	|	|	|	|	3.08
51.917	0.00	0.45	0.698	O	|	|	|	|	3.07
52.000	0.00	0.45	0.695	O	|	|	|	|	3.06
52.083	0.00	0.45	0.692	O	|	|	|	|	3.05
52.167	0.00	0.45	0.689	O	|	|	|	|	3.04
52.250	0.00	0.45	0.685	O	|	|	|	|	3.03
52.333	0.00	0.45	0.682	O	|	|	|	|	3.02
52.417	0.00	0.45	0.679	O	|	|	|	|	3.01
52.500	0.00	0.45	0.676	O	|	|	|	|	3.00
52.583	0.00	0.45	0.673	O	|	|	|	|	2.99
52.667	0.00	0.45	0.670	O	|	|	|	|	2.98
52.750	0.00	0.44	0.667	O	|	|	|	|	2.97
52.833	0.00	0.44	0.664	O	|	|	|	|	2.96
52.917	0.00	0.44	0.661	O	|	|	|	|	2.95
53.000	0.00	0.44	0.658	O	|	|	|	|	2.94
53.083	0.00	0.44	0.655	O	|	|	|	|	2.93

53.167	0.00	0.44	0.652	O	|	|	|	|	2.92
53.250	0.00	0.44	0.649	O	|	|	|	|	2.91
53.333	0.00	0.44	0.646	O	|	|	|	|	2.90
53.417	0.00	0.44	0.643	O	|	|	|	|	2.89
53.500	0.00	0.44	0.640	O	|	|	|	|	2.88
53.583	0.00	0.44	0.637	O	|	|	|	|	2.87
53.667	0.00	0.44	0.634	O	|	|	|	|	2.86
53.750	0.00	0.44	0.631	O	|	|	|	|	2.85
53.833	0.00	0.43	0.628	O	|	|	|	|	2.84
53.917	0.00	0.43	0.625	O	|	|	|	|	2.83
54.000	0.00	0.43	0.622	O	|	|	|	|	2.82
54.083	0.00	0.43	0.619	O	|	|	|	|	2.81
54.167	0.00	0.43	0.616	O	|	|	|	|	2.80
54.250	0.00	0.43	0.613	O	|	|	|	|	2.79
54.333	0.00	0.43	0.610	O	|	|	|	|	2.78
54.417	0.00	0.43	0.607	O	|	|	|	|	2.77
54.500	0.00	0.43	0.604	O	|	|	|	|	2.76
54.583	0.00	0.43	0.601	O	|	|	|	|	2.75
54.667	0.00	0.43	0.598	O	|	|	|	|	2.74
54.750	0.00	0.43	0.595	O	|	|	|	|	2.73
54.833	0.00	0.43	0.592	O	|	|	|	|	2.72
54.917	0.00	0.42	0.589	O	|	|	|	|	2.71
55.000	0.00	0.42	0.586	O	|	|	|	|	2.70
55.083	0.00	0.42	0.583	O	|	|	|	|	2.69
55.167	0.00	0.42	0.580	O	|	|	|	|	2.68
55.250	0.00	0.42	0.578	O	|	|	|	|	2.67
55.333	0.00	0.42	0.575	O	|	|	|	|	2.66
55.417	0.00	0.42	0.572	O	|	|	|	|	2.65
55.500	0.00	0.42	0.569	O	|	|	|	|	2.64
55.583	0.00	0.42	0.566	O	|	|	|	|	2.63
55.667	0.00	0.42	0.563	O	|	|	|	|	2.62
55.750	0.00	0.42	0.560	O	|	|	|	|	2.61
55.833	0.00	0.42	0.557	O	|	|	|	|	2.60
55.917	0.00	0.42	0.554	O	|	|	|	|	2.59
56.000	0.00	0.42	0.552	O	|	|	|	|	2.59
56.083	0.00	0.41	0.549	O	|	|	|	|	2.58
56.167	0.00	0.41	0.546	O	|	|	|	|	2.57
56.250	0.00	0.41	0.543	O	|	|	|	|	2.56
56.333	0.00	0.41	0.540	O	|	|	|	|	2.55
56.417	0.00	0.41	0.537	O	|	|	|	|	2.54
56.500	0.00	0.41	0.535	O	|	|	|	|	2.53
56.583	0.00	0.41	0.532	O	|	|	|	|	2.52
56.667	0.00	0.41	0.529	O	|	|	|	|	2.51
56.750	0.00	0.41	0.526	O	|	|	|	|	2.50
56.833	0.00	0.41	0.523	O	|	|	|	|	2.49
56.917	0.00	0.41	0.520	O	|	|	|	|	2.48
57.000	0.00	0.41	0.518	O	|	|	|	|	2.47
57.083	0.00	0.41	0.515	O	|	|	|	|	2.46
57.167	0.00	0.41	0.512	O	|	|	|	|	2.45
57.250	0.00	0.40	0.509	O	|	|	|	|	2.44
57.333	0.00	0.40	0.506	O	|	|	|	|	2.43
57.417	0.00	0.40	0.504	O	|	|	|	|	2.43
57.500	0.00	0.40	0.501	O	|	|	|	|	2.42
57.583	0.00	0.40	0.498	O	|	|	|	|	2.41
57.667	0.00	0.40	0.495	O	|	|	|	|	2.40
57.750	0.00	0.40	0.493	O	|	|	|	|	2.39
57.833	0.00	0.40	0.490	O	|	|	|	|	2.38
57.917	0.00	0.40	0.487	O	|	|	|	|	2.37
58.000	0.00	0.40	0.484	O	|	|	|	|	2.36
58.083	0.00	0.40	0.482	O	|	|	|	|	2.35
58.167	0.00	0.40	0.479	O	|	|	|	|	2.34
58.250	0.00	0.40	0.476	O	|	|	|	|	2.33
58.333	0.00	0.40	0.473	O	|	|	|	|	2.32
58.417	0.00	0.40	0.471	O	|	|	|	|	2.32
58.500	0.00	0.39	0.468	O	|	|	|	|	2.31
58.583	0.00	0.39	0.465	O	|	|	|	|	2.30
58.667	0.00	0.39	0.463	O	|	|	|	|	2.29
58.750	0.00	0.39	0.460	O	|	|	|	|	2.28
58.833	0.00	0.39	0.457	O	|	|	|	|	2.27
58.917	0.00	0.39	0.454	O	|	|	|	|	2.26
59.000	0.00	0.39	0.452	O	|	|	|	|	2.25

59.083	0.00	0.39	0.449	O	|	|	|	|	2.24
59.167	0.00	0.39	0.446	O	|	|	|	|	2.23
59.250	0.00	0.39	0.444	O	|	|	|	|	2.22
59.333	0.00	0.39	0.441	O	|	|	|	|	2.21
59.417	0.00	0.38	0.438	O	|	|	|	|	2.20
59.500	0.00	0.38	0.436	O	|	|	|	|	2.19
59.583	0.00	0.38	0.433	O	|	|	|	|	2.18
59.667	0.00	0.38	0.431	O	|	|	|	|	2.17
59.750	0.00	0.38	0.428	O	|	|	|	|	2.16
59.833	0.00	0.38	0.425	O	|	|	|	|	2.15
59.917	0.00	0.38	0.423	O	|	|	|	|	2.14
60.000	0.00	0.38	0.420	O	|	|	|	|	2.13
60.083	0.00	0.38	0.418	O	|	|	|	|	2.12
60.167	0.00	0.38	0.415	O	|	|	|	|	2.11
60.250	0.00	0.37	0.412	O	|	|	|	|	2.10
60.333	0.00	0.37	0.410	O	|	|	|	|	2.09
60.417	0.00	0.37	0.407	O	|	|	|	|	2.09
60.500	0.00	0.37	0.405	O	|	|	|	|	2.08
60.583	0.00	0.37	0.402	O	|	|	|	|	2.07
60.667	0.00	0.37	0.400	O	|	|	|	|	2.06
60.750	0.00	0.37	0.397	O	|	|	|	|	2.05
60.833	0.00	0.37	0.394	O	|	|	|	|	2.04
60.917	0.00	0.37	0.392	O	|	|	|	|	2.03
61.000	0.00	0.37	0.389	O	|	|	|	|	2.02
61.083	0.00	0.37	0.387	O	|	|	|	|	2.01
61.167	0.00	0.36	0.384	O	|	|	|	|	2.00
61.250	0.00	0.36	0.382	O	|	|	|	|	1.99
61.333	0.00	0.36	0.379	O	|	|	|	|	1.98
61.417	0.00	0.36	0.377	O	|	|	|	|	1.97
61.500	0.00	0.36	0.374	O	|	|	|	|	1.97
61.583	0.00	0.36	0.372	O	|	|	|	|	1.96
61.667	0.00	0.36	0.369	O	|	|	|	|	1.95
61.750	0.00	0.36	0.367	O	|	|	|	|	1.94
61.833	0.00	0.36	0.364	O	|	|	|	|	1.93
61.917	0.00	0.36	0.362	O	|	|	|	|	1.92
62.000	0.00	0.36	0.360	O	|	|	|	|	1.91
62.083	0.00	0.36	0.357	O	|	|	|	|	1.90
62.167	0.00	0.35	0.355	O	|	|	|	|	1.89
62.250	0.00	0.35	0.352	O	|	|	|	|	1.88
62.333	0.00	0.35	0.350	O	|	|	|	|	1.88
62.417	0.00	0.35	0.347	O	|	|	|	|	1.87
62.500	0.00	0.35	0.345	O	|	|	|	|	1.86
62.583	0.00	0.35	0.342	O	|	|	|	|	1.85
62.667	0.00	0.35	0.340	O	|	|	|	|	1.84
62.750	0.00	0.35	0.338	O	|	|	|	|	1.83
62.833	0.00	0.35	0.335	O	|	|	|	|	1.82
62.917	0.00	0.35	0.333	O	|	|	|	|	1.81
63.000	0.00	0.35	0.331	O	|	|	|	|	1.81
63.083	0.00	0.34	0.328	O	|	|	|	|	1.80
63.167	0.00	0.34	0.326	O	|	|	|	|	1.79
63.250	0.00	0.34	0.323	O	|	|	|	|	1.78
63.333	0.00	0.34	0.321	O	|	|	|	|	1.77
63.417	0.00	0.34	0.319	O	|	|	|	|	1.76
63.500	0.00	0.34	0.316	O	|	|	|	|	1.75
63.583	0.00	0.34	0.314	O	|	|	|	|	1.75
63.667	0.00	0.34	0.312	O	|	|	|	|	1.74
63.750	0.00	0.34	0.309	O	|	|	|	|	1.73
63.833	0.00	0.34	0.307	O	|	|	|	|	1.72
63.917	0.00	0.34	0.305	O	|	|	|	|	1.71
64.000	0.00	0.34	0.302	O	|	|	|	|	1.70
64.083	0.00	0.33	0.300	O	|	|	|	|	1.69
64.167	0.00	0.33	0.298	O	|	|	|	|	1.69
64.250	0.00	0.33	0.295	O	|	|	|	|	1.68
64.333	0.00	0.33	0.293	O	|	|	|	|	1.67
64.417	0.00	0.33	0.291	O	|	|	|	|	1.66
64.500	0.00	0.33	0.289	O	|	|	|	|	1.65
64.583	0.00	0.33	0.286	O	|	|	|	|	1.64
64.667	0.00	0.33	0.284	O	|	|	|	|	1.64
64.750	0.00	0.33	0.282	O	|	|	|	|	1.63
64.833	0.00	0.33	0.280	O	|	|	|	|	1.62
64.917	0.00	0.33	0.277	O	|	|	|	|	1.61

65.000	0.00	0.33	0.275	O					1.60
65.083	0.00	0.32	0.273	O					1.59
65.167	0.00	0.32	0.271	O					1.59
65.250	0.00	0.32	0.268	O					1.58
65.333	0.00	0.32	0.266	O					1.57
65.417	0.00	0.32	0.264	O					1.56
65.500	0.00	0.32	0.262	O					1.55
65.583	0.00	0.32	0.259	O					1.55
65.667	0.00	0.32	0.257	O					1.54
65.750	0.00	0.32	0.255	O					1.53
65.833	0.00	0.32	0.253	O					1.52
65.917	0.00	0.32	0.251	O					1.51
66.000	0.00	0.32	0.249	O					1.51
66.083	0.00	0.32	0.246	O					1.50
66.167	0.00	0.31	0.244	O					1.49
66.250	0.00	0.31	0.242	O					1.48
66.333	0.00	0.31	0.240	O					1.47
66.417	0.00	0.31	0.238	O					1.47
66.500	0.00	0.31	0.236	O					1.46
66.583	0.00	0.31	0.233	O					1.45
66.667	0.00	0.31	0.231	O					1.44
66.750	0.00	0.31	0.229	O					1.44
66.833	0.00	0.31	0.227	O					1.43
66.917	0.00	0.31	0.225	O					1.42
67.000	0.00	0.31	0.223	O					1.41
67.083	0.00	0.31	0.221	O					1.40
67.167	0.00	0.31	0.219	O					1.40
67.250	0.00	0.30	0.216	O					1.39
67.333	0.00	0.30	0.214	O					1.38
67.417	0.00	0.30	0.212	O					1.37
67.500	0.00	0.30	0.210	O					1.37
67.583	0.00	0.30	0.208	O					1.36
67.667	0.00	0.30	0.206	O					1.35
67.750	0.00	0.30	0.204	O					1.34
67.833	0.00	0.30	0.202	O					1.34
67.917	0.00	0.30	0.200	O					1.33
68.000	0.00	0.30	0.198	O					1.32
68.083	0.00	0.30	0.196	O					1.31
68.167	0.00	0.30	0.194	O					1.31
68.250	0.00	0.30	0.192	O					1.30
68.333	0.00	0.29	0.190	O					1.29
68.417	0.00	0.29	0.188	O					1.27
68.500	0.00	0.29	0.186	O					1.26
68.583	0.00	0.29	0.184	O					1.25
68.667	0.00	0.29	0.182	O					1.24
68.750	0.00	0.28	0.180	O					1.23
68.833	0.00	0.28	0.178	O					1.22
68.917	0.00	0.28	0.176	O					1.21
69.000	0.00	0.28	0.174	O					1.19
69.083	0.00	0.28	0.172	O					1.18
69.167	0.00	0.28	0.170	O					1.17
69.250	0.00	0.27	0.168	O					1.16
69.333	0.00	0.27	0.166	O					1.15
69.417	0.00	0.27	0.164	O					1.14
69.500	0.00	0.27	0.162	O					1.13
69.583	0.00	0.27	0.161	O					1.12
69.667	0.00	0.27	0.159	O					1.11
69.750	0.00	0.26	0.157	O					1.10
69.833	0.00	0.26	0.155	O					1.09
69.917	0.00	0.26	0.153	O					1.08
70.000	0.00	0.26	0.152	O					1.06
70.083	0.00	0.26	0.150	O					1.05
70.167	0.00	0.26	0.148	O					1.04
70.250	0.00	0.26	0.146	O					1.03
70.333	0.00	0.25	0.144	O					1.02
70.417	0.00	0.25	0.143	O					1.01
70.500	0.00	0.25	0.141	O					1.00
70.583	0.00	0.25	0.139	O					0.99
70.667	0.00	0.25	0.138	O					0.98
70.750	0.00	0.25	0.136	O					0.97
70.833	0.00	0.24	0.134	O					0.96

70.917	0.00	0.24	0.133	O	|	|	|	|	0.95
71.000	0.00	0.24	0.131	O	|	|	|	|	0.94
71.083	0.00	0.24	0.129	O	|	|	|	|	0.93
71.167	0.00	0.24	0.128	O	|	|	|	|	0.93
71.250	0.00	0.24	0.126	O	|	|	|	|	0.92
71.333	0.00	0.24	0.124	O	|	|	|	|	0.91
71.417	0.00	0.23	0.123	O	|	|	|	|	0.90
71.500	0.00	0.23	0.121	O	|	|	|	|	0.89
71.583	0.00	0.23	0.119	O	|	|	|	|	0.88
71.667	0.00	0.23	0.118	O	|	|	|	|	0.87
71.750	0.00	0.23	0.116	O	|	|	|	|	0.86
71.833	0.00	0.23	0.115	O	|	|	|	|	0.85
71.917	0.00	0.23	0.113	O	|	|	|	|	0.84
72.000	0.00	0.22	0.112	O	|	|	|	|	0.83
72.083	0.00	0.22	0.110	O	|	|	|	|	0.82
72.167	0.00	0.22	0.109	O	|	|	|	|	0.81
72.250	0.00	0.22	0.107	O	|	|	|	|	0.81
72.333	0.00	0.22	0.106	O	|	|	|	|	0.80
72.417	0.00	0.22	0.104	O	|	|	|	|	0.79
72.500	0.00	0.22	0.103	O	|	|	|	|	0.78
72.583	0.00	0.21	0.101	O	|	|	|	|	0.77
72.667	0.00	0.21	0.100	O	|	|	|	|	0.76
72.750	0.00	0.21	0.098	O	|	|	|	|	0.75
72.833	0.00	0.21	0.097	O	|	|	|	|	0.75
72.917	0.00	0.21	0.095	O	|	|	|	|	0.74
73.000	0.00	0.21	0.094	O	|	|	|	|	0.73
73.083	0.00	0.21	0.092	O	|	|	|	|	0.72
73.167	0.00	0.21	0.091	O	|	|	|	|	0.71
73.250	0.00	0.20	0.090	O	|	|	|	|	0.70
73.333	0.00	0.20	0.088	O	|	|	|	|	0.70
73.417	0.00	0.20	0.087	O	|	|	|	|	0.69
73.500	0.00	0.20	0.085	O	|	|	|	|	0.68
73.583	0.00	0.20	0.084	O	|	|	|	|	0.67
73.667	0.00	0.20	0.083	O	|	|	|	|	0.66
73.750	0.00	0.20	0.081	O	|	|	|	|	0.66
73.833	0.00	0.20	0.080	O	|	|	|	|	0.65
73.917	0.00	0.19	0.079	O	|	|	|	|	0.64
74.000	0.00	0.19	0.077	O	|	|	|	|	0.63
74.083	0.00	0.19	0.076	O	|	|	|	|	0.62
74.167	0.00	0.19	0.075	O	|	|	|	|	0.62
74.250	0.00	0.19	0.073	O	|	|	|	|	0.61
74.333	0.00	0.19	0.072	O	|	|	|	|	0.60
74.417	0.00	0.19	0.071	O	|	|	|	|	0.59
74.500	0.00	0.19	0.069	O	|	|	|	|	0.59
74.583	0.00	0.19	0.068	O	|	|	|	|	0.58
74.667	0.00	0.18	0.067	O	|	|	|	|	0.57
74.750	0.00	0.18	0.066	O	|	|	|	|	0.56
74.833	0.00	0.18	0.064	O	|	|	|	|	0.56
74.917	0.00	0.18	0.063	O	|	|	|	|	0.55
75.000	0.00	0.18	0.062	O	|	|	|	|	0.54
75.083	0.00	0.18	0.061	O	|	|	|	|	0.54
75.167	0.00	0.18	0.059	O	|	|	|	|	0.53
75.250	0.00	0.18	0.058	O	|	|	|	|	0.52
75.333	0.00	0.18	0.057	O	|	|	|	|	0.51
75.417	0.00	0.17	0.056	O	|	|	|	|	0.51
75.500	0.00	0.17	0.055	O	|	|	|	|	0.50
75.583	0.00	0.17	0.053	O	|	|	|	|	0.49
75.667	0.00	0.17	0.052	O	|	|	|	|	0.49
75.750	0.00	0.17	0.051	O	|	|	|	|	0.48
75.833	0.00	0.17	0.050	O	|	|	|	|	0.47
75.917	0.00	0.17	0.049	O	|	|	|	|	0.47
76.000	0.00	0.17	0.048	O	|	|	|	|	0.46
76.083	0.00	0.17	0.046	O	|	|	|	|	0.45
76.167	0.00	0.16	0.045	O	|	|	|	|	0.45
76.250	0.00	0.16	0.044	O	|	|	|	|	0.44
76.333	0.00	0.16	0.043	O	|	|	|	|	0.43
76.417	0.00	0.16	0.042	O	|	|	|	|	0.43
76.500	0.00	0.16	0.041	O	|	|	|	|	0.42
76.583	0.00	0.16	0.040	O	|	|	|	|	0.41
76.667	0.00	0.16	0.039	O	|	|	|	|	0.41
76.750	0.00	0.16	0.037	O	|	|	|	|	0.40

76.833	0.00	0.16	0.036	O	|	|	|	|	0.40
76.917	0.00	0.16	0.035	O	|	|	|	|	0.39
77.000	0.00	0.15	0.034	O	|	|	|	|	0.38
77.083	0.00	0.15	0.033	O	|	|	|	|	0.38
77.167	0.00	0.15	0.032	O	|	|	|	|	0.37
77.250	0.00	0.15	0.031	O	|	|	|	|	0.36
77.333	0.00	0.15	0.030	O	|	|	|	|	0.36
77.417	0.00	0.15	0.029	O	|	|	|	|	0.35
77.500	0.00	0.15	0.028	O	|	|	|	|	0.35
77.583	0.00	0.15	0.027	O	|	|	|	|	0.34
77.667	0.00	0.15	0.026	O	|	|	|	|	0.33
77.750	0.00	0.15	0.025	O	|	|	|	|	0.33
77.833	0.00	0.15	0.024	O	|	|	|	|	0.32
77.917	0.00	0.14	0.023	O	|	|	|	|	0.32
78.000	0.00	0.14	0.022	O	|	|	|	|	0.31
78.083	0.00	0.14	0.021	O	|	|	|	|	0.31
78.167	0.00	0.14	0.020	O	|	|	|	|	0.30
78.250	0.00	0.13	0.019	O	|	|	|	|	0.28
78.333	0.00	0.13	0.018	O	|	|	|	|	0.27
78.417	0.00	0.12	0.017	O	|	|	|	|	0.26
78.500	0.00	0.12	0.016	O	|	|	|	|	0.25
78.583	0.00	0.11	0.016	O	|	|	|	|	0.23
78.667	0.00	0.11	0.015	O	|	|	|	|	0.22
78.750	0.00	0.10	0.014	O	|	|	|	|	0.21
78.833	0.00	0.10	0.013	O	|	|	|	|	0.20

Remaining water in basin = 0.01 (Ac.Ft)

**********HYDROGRAPH DATA**********

Number of intervals = 946
Time interval = 5.0 (Min.)
Maximum/Peak flow rate = 48.137 (CFS)
Total volume = 7.037 (Ac.Ft)

Status of hydrographs being held in storage

	Stream 1	Stream 2	Stream 3	Stream 4	Stream 5
Peak (CFS)	0.000	0.000	0.000	0.000	0.000
Vol (Ac.Ft)	0.000	0.000	0.000	0.000	0.000

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FLOOD HYDROGRAPH ROUTING PROGRAM
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Study date: 08/18/25

Program License Serial Number 5006

********** HYDROGRAPH INFORMATION **********

From study/file name: PROA2410.rte
**********HYDROGRAPH DATA**********
Number of intervals = 306
Time interval = 5.0 (Min.)
Maximum/Peak flow rate = 17.870 (CFS)
Total volume = 9.953 (Ac.Ft)

Status of hydrographs being held in storage

	Stream 1	Stream 2	Stream 3	Stream 4	Stream 5
Peak (CFS)	0.000	0.000	0.000	0.000	0.000
Vol (Ac.Ft)	0.000	0.000	0.000	0.000	0.000

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Process from Point/Station 0.000 to Point/Station 0.000
**** RETARDING BASIN ROUTING ****

User entry of depth-outflow-storage data

Total number of inflow hydrograph intervals = 306
Hydrograph time unit = 5.000 (Min.)
Initial depth in storage basin = 0.00(Ft.)

Initial basin depth = 0.00 (Ft.)
Initial basin storage = 0.00 (Ac.Ft)
Initial basin outflow = 0.00 (CFS)

Depth vs. Storage and Depth vs. Discharge data:

Basin Depth (Ft.)	Storage (Ac.Ft)	Outflow (CFS)	(S-O*dt/2) (Ac.Ft)	(S+O*dt/2) (Ac.Ft)
0.000	0.000	0.000	0.000	0.000
0.300	0.020	0.142	0.020	0.020
1.300	0.192	0.296	0.191	0.193
2.300	0.466	0.394	0.465	0.467
3.300	0.766	0.469	0.764	0.768
4.300	1.126	0.536	1.124	1.128
5.500	1.640	0.610	1.638	1.642
6.300	2.007	1.299	2.003	2.011
8.300	3.066	1.957	3.059	3.073
10.300	4.341	2.417	4.333	4.349
11.400	5.141	2.632	5.132	5.150
12.300	5.851	167.187	5.275	6.427
13.300	6.699	657.066	4.436	8.962
14.300	7.611	1377.819	2.866	12.356

Hydrograph Detention Basin Routing

Graph values: 'I'= unit inflow; 'O'=outflow at time shown

Time (Hours)	Inflow (CFS)	Outflow (CFS)	Storage (Ac.Ft)	.0	4.5	8.94	13.40	17.87	Depth (Ft.)
0.083	0.05	0.00	0.000	O	|	|	|	|	0.00
0.167	0.25	0.01	0.001	O	|	|	|	|	0.02
0.250	0.52	0.03	0.004	O	|	|	|	|	0.06
0.333	0.69	0.05	0.008	OI	|	|	|	|	0.11
0.417	0.87	0.09	0.012	OI	|	|	|	|	0.19
0.500	1.05	0.13	0.018	OI	|	|	|	|	0.28
0.583	1.16	0.15	0.025	O I	|	|	|	|	0.33
0.667	1.22	0.15	0.032	O I	|	|	|	|	0.37
0.750	1.27	0.16	0.040	O I	|	|	|	|	0.41
0.833	1.33	0.17	0.047	O I	|	|	|	|	0.46
0.917	1.45	0.17	0.056	O I	|	|	|	|	0.51
1.000	1.61	0.18	0.065	O I	|	|	|	|	0.56
1.083	1.68	0.19	0.075	O I	|	|	|	|	0.62
1.167	1.63	0.20	0.085	O I	|	|	|	|	0.68
1.250	1.53	0.21	0.095	O I	|	|	|	|	0.73
1.333	1.48	0.22	0.104	O I	|	|	|	|	0.79
1.417	1.47	0.22	0.112	O I	|	|	|	|	0.84
1.500	1.46	0.23	0.121	O I	|	|	|	|	0.89
1.583	1.46	0.24	0.129	O I	|	|	|	|	0.94
1.667	1.45	0.25	0.138	O I	|	|	|	|	0.98
1.750	1.45	0.25	0.146	O I	|	|	|	|	1.03
1.833	1.47	0.26	0.154	O I	|	|	|	|	1.08
1.917	1.57	0.27	0.163	O I	|	|	|	|	1.13
2.000	1.70	0.28	0.172	O I	|	|	|	|	1.18
2.083	1.77	0.29	0.182	O I	|	|	|	|	1.24
2.167	1.81	0.30	0.192	O I	|	|	|	|	1.30
2.250	1.83	0.30	0.203	O I	|	|	|	|	1.34
2.333	1.85	0.30	0.214	O I	|	|	|	|	1.38
2.417	1.86	0.31	0.224	O I	|	|	|	|	1.42
2.500	1.87	0.31	0.235	O I	|	|	|	|	1.46
2.583	1.90	0.32	0.246	O I	|	|	|	|	1.50
2.667	2.01	0.32	0.257	O I	|	|	|	|	1.54
2.750	2.15	0.32	0.269	O I	|	|	|	|	1.58
2.833	2.23	0.33	0.282	O I	|	|	|	|	1.63
2.917	2.27	0.33	0.295	O I	|	|	|	|	1.68
3.000	2.29	0.34	0.308	O I	|	|	|	|	1.73
3.083	2.31	0.34	0.322	O I	|	|	|	|	1.77
3.167	2.33	0.35	0.336	O I	|	|	|	|	1.82
3.250	2.34	0.35	0.349	O I	|	|	|	|	1.87
3.333	2.35	0.36	0.363	O I	|	|	|	|	1.92
3.417	2.36	0.36	0.377	O I	|	|	|	|	1.97
3.500	2.36	0.37	0.390	O I	|	|	|	|	2.02
3.583	2.37	0.37	0.404	O I	|	|	|	|	2.07
3.667	2.37	0.38	0.418	O I	|	|	|	|	2.12
3.750	2.37	0.38	0.432	O I	|	|	|	|	2.17
3.833	2.40	0.39	0.445	O I	|	|	|	|	2.23
3.917	2.51	0.39	0.460	O I	|	|	|	|	2.28
4.000	2.64	0.40	0.475	O I	|	|	|	|	2.33
4.083	2.72	0.40	0.490	O I	|	|	|	|	2.38
4.167	2.75	0.40	0.506	O I	|	|	|	|	2.43
4.250	2.78	0.41	0.523	O I	|	|	|	|	2.49
4.333	2.82	0.41	0.539	O I	|	|	|	|	2.54
4.417	2.93	0.42	0.556	O I	|	|	|	|	2.60
4.500	3.08	0.42	0.574	O I	|	|	|	|	2.66
4.583	3.16	0.43	0.593	O I	|	|	|	|	2.72
4.667	3.20	0.43	0.612	O I	|	|	|	|	2.79
4.750	3.23	0.44	0.631	O I	|	|	|	|	2.85
4.833	3.28	0.44	0.650	O I	|	|	|	|	2.91
4.917	3.40	0.45	0.670	O I	|	|	|	|	2.98
5.000	3.55	0.45	0.691	O I	|	|	|	|	3.05
5.083	3.58	0.46	0.712	O I	|	|	|	|	3.12
5.167	3.43	0.46	0.733	O I	|	|	|	|	3.19
5.250	3.19	0.47	0.753	O I	|	|	|	|	3.26
5.333	3.09	0.47	0.771	O I	|	|	|	|	3.31
5.417	3.14	0.47	0.790	O I	|	|	|	|	3.37
5.500	3.24	0.48	0.808	O I	|	|	|	|	3.42
5.583	3.31	0.48	0.827	O I	|	|	|	|	3.47
5.667	3.43	0.48	0.847	O I	|	|	|	|	3.53
5.750	3.57	0.49	0.868	O I	|	|	|	|	3.58

5.833	3.66	0.49	0.890	O	I	|	|	|	3.64
5.917	3.69	0.50	0.912	O	I	|	|	|	3.70
6.000	3.72	0.50	0.934	O	I	|	|	|	3.77
6.083	3.76	0.50	0.956	O	I	|	|	|	3.83
6.167	3.88	0.51	0.979	O	I	|	|	|	3.89
6.250	4.03	0.51	1.003	O	I|	|	|	|	3.96
6.333	4.11	0.52	1.027	O	I|	|	|	|	4.02
6.417	4.15	0.52	1.052	O	I|	|	|	|	4.09
6.500	4.18	0.53	1.077	O	I|	|	|	|	4.16
6.583	4.23	0.53	1.102	O	I|	|	|	|	4.23
6.667	4.35	0.54	1.128	O	I|	|	|	|	4.31
6.750	4.50	0.54	1.155	O	I	|	|	|	4.37
6.833	4.59	0.54	1.182	O	I	|	|	|	4.43
6.917	4.63	0.55	1.210	O	I	|	|	|	4.50
7.000	4.66	0.55	1.239	O	I	|	|	|	4.56
7.083	4.69	0.56	1.267	O	I	|	|	|	4.63
7.167	4.70	0.56	1.296	|O	I	|	|	|	4.70
7.250	4.72	0.56	1.324	|O	I	|	|	|	4.76
7.333	4.75	0.57	1.353	|O	I	|	|	|	4.83
7.417	4.86	0.57	1.382	|O	I	|	|	|	4.90
7.500	5.01	0.58	1.412	|O	I	|	|	|	4.97
7.583	5.11	0.58	1.443	|O	|I	|	|	|	5.04
7.667	5.25	0.59	1.475	|O	|I	|	|	|	5.11
7.750	5.41	0.59	1.507	|O	|I	|	|	|	5.19
7.833	5.53	0.60	1.541	|O	|I	|	|	|	5.27
7.917	5.68	0.60	1.575	|O	| I	|	|	|	5.35
8.000	5.86	0.61	1.611	|O	| I	|	|	|	5.43
8.083	6.01	0.62	1.647	|O	| I	|	|	|	5.52
8.167	6.26	0.69	1.685	|O	| I	|	|	|	5.60
8.250	6.58	0.77	1.724	|O	| I	|	|	|	5.68
8.333	6.75	0.84	1.765	|O	| I	|	|	|	5.77
8.417	6.85	0.92	1.805	|O	| I	|	|	|	5.86
8.500	6.92	1.00	1.846	|O	| I	|	|	|	5.95
8.583	6.99	1.07	1.887	|O	| I	|	|	|	6.04
8.667	7.13	1.15	1.928	| O	| I	|	|	|	6.13
8.750	7.30	1.23	1.970	| O	| I	|	|	|	6.22
8.833	7.42	1.30	2.012	| O	| I	|	|	|	6.31
8.917	7.58	1.33	2.054	| O	| I	|	|	|	6.39
9.000	7.76	1.36	2.098	| O	| I	|	|	|	6.47
9.083	7.91	1.38	2.142	| O	| I	|	|	|	6.56
9.167	8.17	1.41	2.188	| O	| I	|	|	|	6.64
9.250	8.48	1.44	2.236	| O	| I	|	|	|	6.73
9.333	8.69	1.47	2.285	| O	| I	|	|	|	6.82
9.417	8.89	1.50	2.335	| O	| I	|	|	|	6.92
9.500	9.09	1.53	2.386	| O	| I	|	|	|	7.02
9.583	9.24	1.57	2.439	| O	| I	|	|	|	7.12
9.667	9.41	1.60	2.492	| O	| I	|	|	|	7.22
9.750	9.60	1.63	2.546	| O	| I	|	|	|	7.32
9.833	9.74	1.67	2.602	| O	| I	|	|	|	7.42
9.917	9.91	1.70	2.658	| O	| I	|	|	|	7.53
10.000	10.10	1.74	2.715	| O	| I	|	|	|	7.64
10.083	10.04	1.77	2.772	| O	| I	|	|	|	7.74
10.167	9.40	1.81	2.827	| O	| I	|	|	|	7.85
10.250	8.50	1.84	2.876	| O	| I	|	|	|	7.94
10.333	8.02	1.87	2.920	| O	| I	|	|	|	8.02
10.417	7.80	1.89	2.961	| O	| I	|	|	|	8.10
10.500	7.65	1.92	3.001	| O	| I	|	|	|	8.18
10.583	7.66	1.94	3.041	| O	| I	|	|	|	8.25
10.667	8.09	1.96	3.082	| O	| I	|	|	|	8.32
10.750	8.70	1.98	3.126	| O	| I	|	|	|	8.39
10.833	9.02	2.00	3.173	| O	| I	|	|	|	8.47
10.917	9.16	2.01	3.222	| O	| I	|	|	|	8.54
11.000	9.25	2.03	3.272	| O	| I	|	|	|	8.62
11.083	9.28	2.05	3.321	| O	| I	|	|	|	8.70
11.167	9.22	2.07	3.371	| O	| I	|	|	|	8.78
11.250	9.12	2.08	3.420	| O	| I	|	|	|	8.85
11.333	9.08	2.10	3.468	| O	| I	|	|	|	8.93
11.417	9.06	2.12	3.516	| O	| I	|	|	|	9.01
11.500	9.05	2.14	3.564	| O	| I	|	|	|	9.08
11.583	9.00	2.15	3.611	| O	| I	|	|	|	9.15
11.667	8.80	2.17	3.657	| O	| I	|	|	|	9.23

11.750	8.53	2.19	3.702	O		I			9.30
11.833	8.41	2.20	3.745	O		I			9.37
11.917	8.45	2.22	3.788	O		I			9.43
12.000	8.54	2.23	3.831	O		I			9.50
12.083	8.75	2.25	3.875	O		I			9.57
12.167	9.46	2.27	3.923	O		I			9.64
12.250	10.41	2.29	3.975	O		I			9.73
12.333	10.95	2.31	4.033	O		I			9.82
12.417	11.30	2.33	4.094	O		I			9.91
12.500	11.60	2.35	4.156	O		I			10.01
12.583	11.85	2.37	4.221	O		I			10.11
12.667	12.18	2.40	4.287	O		I			10.22
12.750	12.55	2.42	4.356	O		I			10.32
12.833	12.79	2.44	4.426	O		I			10.42
12.917	13.03	2.46	4.498	O		I			10.52
13.000	13.26	2.48	4.572	O		I			10.62
13.083	13.65	2.50	4.647	O		I			10.72
13.167	14.78	2.52	4.728	O		I			10.83
13.250	16.24	2.55	4.817	O		I			10.96
13.333	17.08	2.57	4.915	O		I			11.09
13.417	17.53	2.60	5.016	O		I			11.23
13.500	17.87	2.63	5.120	O		I			11.37
13.583	17.73	13.37	5.187			O		I	11.46
13.667	16.21	16.56	5.201				O		11.48
13.750	14.08	15.30	5.196			I O			11.47
13.833	12.95	13.72	5.189			IO			11.46
13.917	12.44	12.81	5.185			O			11.46
14.000	12.10	12.33	5.183			IO			11.45
14.083	11.96	12.06	5.182			O			11.45
14.167	12.18	12.07	5.182			O			11.45
14.250	12.58	12.35	5.183			O			11.45
14.333	12.75	12.63	5.184			O			11.45
14.417	12.71	12.72	5.185			O			11.46
14.500	12.59	12.66	5.184			O			11.45
14.583	12.52	12.56	5.184			O			11.45
14.667	12.47	12.50	5.184			O			11.45
14.750	12.44	12.46	5.183			O			11.45
14.833	12.39	12.42	5.183			O			11.45
14.917	12.27	12.34	5.183			IO			11.45
15.000	12.11	12.21	5.182			O			11.45
15.083	12.00	12.08	5.182			O			11.45
15.167	11.88	11.96	5.181			O			11.45
15.250	11.72	11.82	5.181			IO			11.45
15.333	11.61	11.68	5.180			O			11.45
15.417	11.46	11.55	5.179			O			11.45
15.500	11.30	11.40	5.179			O			11.45
15.583	11.11	11.23	5.178			IO			11.45
15.667	10.64	10.91	5.177			O			11.45
15.750	10.06	10.41	5.175			O			11.44
15.833	9.73	9.95	5.173			O			11.44
15.917	9.56	9.68	5.171			O			11.44
16.000	9.45	9.53	5.171			IO			11.44
16.083	9.00	9.26	5.170			O			11.44
16.167	7.41	8.32	5.166		IO				11.43
16.250	5.32	6.58	5.158		I O				11.42
16.333	4.18	4.96	5.151		IO				11.41
16.417	3.61	4.02	5.147		IO				11.41
16.500	3.22	3.48	5.145		IO				11.40
16.583	2.90	3.11	5.143		O				11.40
16.667	2.58	2.79	5.142	O					11.40
16.750	2.27	2.63	5.140	O					11.40
16.833	2.07	2.63	5.137	IO					11.39
16.917	1.93	2.63	5.132	IO					11.39
17.000	1.80	2.63	5.127	IO					11.38
17.083	1.76	2.63	5.121	IO					11.37
17.167	1.89	2.63	5.116	IO					11.37
17.250	2.11	2.62	5.111	IO					11.36
17.333	2.21	2.62	5.108	IO					11.35
17.417	2.25	2.62	5.105	O					11.35
17.500	2.26	2.62	5.103	O					11.35
17.583	2.27	2.62	5.100	O					11.34

17.667	2.29	2.62	5.098	| O |	|	|	|	11.34
17.750	2.31	2.62	5.096	| O |	|	|	|	11.34
17.833	2.30	2.62	5.094	| O |	|	|	|	11.33
17.917	2.21	2.62	5.091	| IO |	|	|	|	11.33
18.000	2.08	2.62	5.088	| IO |	|	|	|	11.33
18.083	2.02	2.62	5.084	| IO |	|	|	|	11.32
18.167	1.99	2.62	5.080	| IO |	|	|	|	11.32
18.250	1.97	2.61	5.075	| IO |	|	|	|	11.31
18.333	1.96	2.61	5.071	| IO |	|	|	|	11.30
18.417	1.95	2.61	5.066	| IO |	|	|	|	11.30
18.500	1.94	2.61	5.062	| IO |	|	|	|	11.29
18.583	1.91	2.61	5.057	| IO |	|	|	|	11.28
18.667	1.81	2.61	5.052	| IO |	|	|	|	11.28
18.750	1.66	2.61	5.046	| I O |	|	|	|	11.27
18.833	1.56	2.60	5.039	| I O |	|	|	|	11.26
18.917	1.42	2.60	5.032	| I O |	|	|	|	11.25
19.000	1.26	2.60	5.023	| I O |	|	|	|	11.24
19.083	1.19	2.60	5.013	| I O |	|	|	|	11.22
19.167	1.24	2.60	5.004	| I O |	|	|	|	11.21
19.250	1.34	2.59	4.995	| I O |	|	|	|	11.20
19.333	1.41	2.59	4.986	| I O |	|	|	|	11.19
19.417	1.52	2.59	4.979	| I O |	|	|	|	11.18
19.500	1.67	2.59	4.972	| I O |	|	|	|	11.17
19.583	1.72	2.58	4.966	| IO |	|	|	|	11.16
19.667	1.66	2.58	4.960	| I O |	|	|	|	11.15
19.750	1.55	2.58	4.953	| I O |	|	|	|	11.14
19.833	1.47	2.58	4.946	| I O |	|	|	|	11.13
19.917	1.35	2.58	4.937	| I O |	|	|	|	11.12
20.000	1.20	2.57	4.928	| I O |	|	|	|	11.11
20.083	1.14	2.57	4.919	| I O |	|	|	|	11.09
20.167	1.20	2.57	4.909	| I O |	|	|	|	11.08
20.250	1.31	2.57	4.900	| I O |	|	|	|	11.07
20.333	1.36	2.57	4.892	| I O |	|	|	|	11.06
20.417	1.38	2.56	4.884	| I O |	|	|	|	11.05
20.500	1.40	2.56	4.875	| I O |	|	|	|	11.03
20.583	1.41	2.56	4.867	| I O |	|	|	|	11.02
20.667	1.41	2.56	4.860	| I O |	|	|	|	11.01
20.750	1.42	2.55	4.852	| I O |	|	|	|	11.00
20.833	1.39	2.55	4.844	| I O |	|	|	|	10.99
20.917	1.29	2.55	4.835	| I O |	|	|	|	10.98
21.000	1.16	2.55	4.826	| I O |	|	|	|	10.97
21.083	1.11	2.54	4.817	|I O |	|	|	|	10.95
21.167	1.18	2.54	4.807	| I O |	|	|	|	10.94
21.250	1.29	2.54	4.798	| I O |	|	|	|	10.93
21.333	1.32	2.54	4.789	| I O |	|	|	|	10.92
21.417	1.24	2.54	4.781	| I O |	|	|	|	10.90
21.500	1.12	2.53	4.772	| I O |	|	|	|	10.89
21.583	1.09	2.53	4.762	|I O |	|	|	|	10.88
21.667	1.16	2.53	4.752	| I O |	|	|	|	10.87
21.750	1.28	2.53	4.743	| I O |	|	|	|	10.85
21.833	1.31	2.52	4.735	| I O |	|	|	|	10.84
21.917	1.23	2.52	4.726	| I O |	|	|	|	10.83
22.000	1.11	2.52	4.717	|I O |	|	|	|	10.82
22.083	1.08	2.52	4.707	|I O |	|	|	|	10.80
22.167	1.15	2.51	4.697	| I O |	|	|	|	10.79
22.250	1.27	2.51	4.688	| I O |	|	|	|	10.78
22.333	1.30	2.51	4.680	| I O |	|	|	|	10.77
22.417	1.23	2.51	4.671	| I O |	|	|	|	10.75
22.500	1.11	2.50	4.662	|I O |	|	|	|	10.74
22.583	1.05	2.50	4.652	|I O |	|	|	|	10.73
22.667	1.03	2.50	4.642	|I O |	|	|	|	10.71
22.750	1.01	2.50	4.632	|I O |	|	|	|	10.70
22.833	0.99	2.49	4.622	|I O |	|	|	|	10.69
22.917	0.99	2.49	4.612	|I O |	|	|	|	10.67
23.000	0.98	2.49	4.601	|I O |	|	|	|	10.66
23.083	0.98	2.48	4.591	|I O |	|	|	|	10.64
23.167	0.97	2.48	4.580	|I O |	|	|	|	10.63
23.250	0.97	2.48	4.570	|I O |	|	|	|	10.61
23.333	0.96	2.48	4.560	|I O |	|	|	|	10.60
23.417	0.96	2.47	4.549	|I O |	|	|	|	10.59
23.500	0.96	2.47	4.539	|I O |	|	|	|	10.57

23.583	0.96	2.47	4.528	|I O	|	|	|	10.56
23.667	0.96	2.46	4.518	|I O	|	|	|	10.54
23.750	0.95	2.46	4.508	|I O	|	|	|	10.53
23.833	0.95	2.46	4.497	|I O	|	|	|	10.51
23.917	0.95	2.46	4.487	|I O	|	|	|	10.50
24.000	0.95	2.45	4.477	|I O	|	|	|	10.49
24.083	0.90	2.45	4.466	|I O	|	|	|	10.47
24.167	0.70	2.45	4.455	|I O	|	|	|	10.46
24.250	0.43	2.44	4.442	I O	|	|	|	10.44
24.333	0.28	2.44	4.427	I O	|	|	|	10.42
24.417	0.21	2.44	4.412	I O	|	|	|	10.40
24.500	0.16	2.43	4.397	I O	|	|	|	10.38
24.583	0.13	2.43	4.381	I O	|	|	|	10.36
24.667	0.10	2.42	4.365	I O	|	|	|	10.33
24.750	0.08	2.42	4.349	I O	|	|	|	10.31
24.833	0.06	2.41	4.333	I O	|	|	|	10.29
24.917	0.05	2.41	4.317	I O	|	|	|	10.26
25.000	0.04	2.40	4.301	I O	|	|	|	10.24
25.083	0.03	2.40	4.284	I O	|	|	|	10.21
25.167	0.02	2.39	4.268	I O	|	|	|	10.19
25.250	0.02	2.38	4.252	I O	|	|	|	10.16
25.333	0.01	2.38	4.235	I O	|	|	|	10.13
25.417	0.01	2.37	4.219	I O	|	|	|	10.11
25.500	0.00	2.37	4.203	I O	|	|	|	10.08
25.583	0.00	2.36	4.186	I O	|	|	|	10.06
25.667	0.00	2.36	4.170	I O	|	|	|	10.03
25.750	0.00	2.35	4.154	I O	|	|	|	10.01
25.833	0.00	2.34	4.138	I O	|	|	|	9.98
25.917	0.00	2.34	4.122	I O	|	|	|	9.96
26.000	0.00	2.33	4.106	I O	|	|	|	9.93
26.083	0.00	2.33	4.090	I O	|	|	|	9.91
26.167	0.00	2.32	4.074	I O	|	|	|	9.88
26.250	0.00	2.31	4.058	I O	|	|	|	9.86
26.333	0.00	2.31	4.042	I O	|	|	|	9.83
26.417	0.00	2.30	4.026	I O	|	|	|	9.81
26.500	0.00	2.30	4.010	I O	|	|	|	9.78
26.583	0.00	2.29	3.994	I O	|	|	|	9.76
26.667	0.00	2.29	3.978	I O	|	|	|	9.73
26.750	0.00	2.28	3.963	I O	|	|	|	9.71
26.833	0.00	2.27	3.947	I O	|	|	|	9.68
26.917	0.00	2.27	3.931	I O	|	|	|	9.66
27.000	0.00	2.26	3.916	I O	|	|	|	9.63
27.083	0.00	2.26	3.900	I O	|	|	|	9.61
27.167	0.00	2.25	3.885	I O	|	|	|	9.58
27.250	0.00	2.25	3.869	I O	|	|	|	9.56
27.333	0.00	2.24	3.854	I O	|	|	|	9.54
27.417	0.00	2.24	3.838	I O	|	|	|	9.51
27.500	0.00	2.23	3.823	I O	|	|	|	9.49
27.583	0.00	2.22	3.808	I O	|	|	|	9.46
27.667	0.00	2.22	3.792	I O	|	|	|	9.44
27.750	0.00	2.21	3.777	I O	|	|	|	9.42
27.833	0.00	2.21	3.762	I O	|	|	|	9.39
27.917	0.00	2.20	3.747	I O	|	|	|	9.37
28.000	0.00	2.20	3.731	I O	|	|	|	9.34
28.083	0.00	2.19	3.716	I O	|	|	|	9.32
28.167	0.00	2.19	3.701	I O	|	|	|	9.30
28.250	0.00	2.18	3.686	I O	|	|	|	9.27
28.333	0.00	2.18	3.671	I O	|	|	|	9.25
28.417	0.00	2.17	3.656	I O	|	|	|	9.23
28.500	0.00	2.16	3.641	I O	|	|	|	9.20
28.583	0.00	2.16	3.626	I O	|	|	|	9.18
28.667	0.00	2.15	3.612	I O	|	|	|	9.16
28.750	0.00	2.15	3.597	I O	|	|	|	9.13
28.833	0.00	2.14	3.582	I O	|	|	|	9.11
28.917	0.00	2.14	3.567	I O	|	|	|	9.09
29.000	0.00	2.13	3.553	I O	|	|	|	9.06
29.083	0.00	2.13	3.538	I O	|	|	|	9.04
29.167	0.00	2.12	3.523	I O	|	|	|	9.02
29.250	0.00	2.12	3.509	I O	|	|	|	8.99
29.333	0.00	2.11	3.494	I O	|	|	|	8.97
29.417	0.00	2.11	3.480	I O	|	|	|	8.95

29.500	0.00	2.10	3.465	I	O	|	|	|	| 8.93
29.583	0.00	2.10	3.451	I	O	|	|	|	| 8.90
29.667	0.00	2.09	3.436	I	O	|	|	|	| 8.88
29.750	0.00	2.09	3.422	I	O	|	|	|	| 8.86
29.833	0.00	2.08	3.407	I	O	|	|	|	| 8.84
29.917	0.00	2.08	3.393	I	O	|	|	|	| 8.81
30.000	0.00	2.07	3.379	I	O	|	|	|	| 8.79
30.083	0.00	2.06	3.365	I	O	|	|	|	| 8.77
30.167	0.00	2.06	3.350	I	O	|	|	|	| 8.75
30.250	0.00	2.05	3.336	I	O	|	|	|	| 8.72
30.333	0.00	2.05	3.322	I	O	|	|	|	| 8.70
30.417	0.00	2.04	3.308	I	O	|	|	|	| 8.68
30.500	0.00	2.04	3.294	I	O	|	|	|	| 8.66
30.583	0.00	2.03	3.280	I	O	|	|	|	| 8.64
30.667	0.00	2.03	3.266	I	O	|	|	|	| 8.61
30.750	0.00	2.02	3.252	I	O	|	|	|	| 8.59
30.833	0.00	2.02	3.238	I	O	|	|	|	| 8.57
30.917	0.00	2.01	3.224	I	O	|	|	|	| 8.55
31.000	0.00	2.01	3.210	I	O	|	|	|	| 8.53
31.083	0.00	2.00	3.197	I	O	|	|	|	| 8.50
31.167	0.00	2.00	3.183	I	O	|	|	|	| 8.48
31.250	0.00	1.99	3.169	I	O	|	|	|	| 8.46
31.333	0.00	1.99	3.155	I	O	|	|	|	| 8.44
31.417	0.00	1.98	3.142	I	O	|	|	|	| 8.42
31.500	0.00	1.98	3.128	I	O	|	|	|	| 8.40
31.583	0.00	1.97	3.114	I	O	|	|	|	| 8.38
31.667	0.00	1.97	3.101	I	O	|	|	|	| 8.35
31.750	0.00	1.96	3.087	I	O	|	|	|	| 8.33
31.833	0.00	1.96	3.074	I	O	|	|	|	| 8.31
31.917	0.00	1.95	3.060	I	O	|	|	|	| 8.29
32.000	0.00	1.95	3.047	I	O	|	|	|	| 8.26
32.083	0.00	1.94	3.033	I	O	|	|	|	| 8.24
32.167	0.00	1.93	3.020	I	O	|	|	|	| 8.21
32.250	0.00	1.92	3.007	I	O	|	|	|	| 8.19
32.333	0.00	1.91	2.994	I	O	|	|	|	| 8.16
32.417	0.00	1.90	2.980	I	O	|	|	|	| 8.14
32.500	0.00	1.90	2.967	I	O	|	|	|	| 8.11
32.583	0.00	1.89	2.954	I	O	|	|	|	| 8.09
32.667	0.00	1.88	2.941	I	O	|	|	|	| 8.06
32.750	0.00	1.87	2.928	I	O	|	|	|	| 8.04
32.833	0.00	1.86	2.916	I	O	|	|	|	| 8.02
32.917	0.00	1.86	2.903	I	O	|	|	|	| 7.99
33.000	0.00	1.85	2.890	I	O	|	|	|	| 7.97
33.083	0.00	1.84	2.877	I	O	|	|	|	| 7.94
33.167	0.00	1.83	2.865	I	O	|	|	|	| 7.92
33.250	0.00	1.82	2.852	I	O	|	|	|	| 7.90
33.333	0.00	1.82	2.840	I	O	|	|	|	| 7.87
33.417	0.00	1.81	2.827	I	O	|	|	|	| 7.85
33.500	0.00	1.80	2.815	I	O	|	|	|	| 7.83
33.583	0.00	1.79	2.802	I	O	|	|	|	| 7.80
33.667	0.00	1.79	2.790	I	O	|	|	|	| 7.78
33.750	0.00	1.78	2.778	I	O	|	|	|	| 7.76
33.833	0.00	1.77	2.766	I	O	|	|	|	| 7.73
33.917	0.00	1.76	2.753	I	O	|	|	|	| 7.71
34.000	0.00	1.76	2.741	I	O	|	|	|	| 7.69
34.083	0.00	1.75	2.729	I	O	|	|	|	| 7.66
34.167	0.00	1.74	2.717	I	O	|	|	|	| 7.64
34.250	0.00	1.73	2.705	I	O	|	|	|	| 7.62
34.333	0.00	1.73	2.693	I	O	|	|	|	| 7.60
34.417	0.00	1.72	2.681	I	O	|	|	|	| 7.57
34.500	0.00	1.71	2.670	I	O	|	|	|	| 7.55
34.583	0.00	1.70	2.658	I	O	|	|	|	| 7.53
34.667	0.00	1.70	2.646	I	O	|	|	|	| 7.51
34.750	0.00	1.69	2.635	I	O	|	|	|	| 7.49
34.833	0.00	1.68	2.623	I	O	|	|	|	| 7.46
34.917	0.00	1.67	2.611	I	O	|	|	|	| 7.44
35.000	0.00	1.67	2.600	I	O	|	|	|	| 7.42
35.083	0.00	1.66	2.588	I	O	|	|	|	| 7.40
35.167	0.00	1.65	2.577	I	O	|	|	|	| 7.38
35.250	0.00	1.65	2.566	I	O	|	|	|	| 7.35
35.333	0.00	1.64	2.554	I	O	|	|	|	| 7.33

35.417	0.00	1.63	2.543	I O	|	|	|	| 7.31
35.500	0.00	1.63	2.532	I O	|	|	|	| 7.29
35.583	0.00	1.62	2.521	I O	|	|	|	| 7.27
35.667	0.00	1.61	2.510	I O	|	|	|	| 7.25
35.750	0.00	1.60	2.498	I O	|	|	|	| 7.23
35.833	0.00	1.60	2.487	I O	|	|	|	| 7.21
35.917	0.00	1.59	2.476	I O	|	|	|	| 7.19
36.000	0.00	1.58	2.466	I O	|	|	|	| 7.17
36.083	0.00	1.58	2.455	I O	|	|	|	| 7.15
36.167	0.00	1.57	2.444	I O	|	|	|	| 7.12
36.250	0.00	1.56	2.433	I O	|	|	|	| 7.10
36.333	0.00	1.56	2.422	I O	|	|	|	| 7.08
36.417	0.00	1.55	2.412	I O	|	|	|	| 7.06
36.500	0.00	1.54	2.401	I O	|	|	|	| 7.04
36.583	0.00	1.54	2.390	I O	|	|	|	| 7.02
36.667	0.00	1.53	2.380	I O	|	|	|	| 7.00
36.750	0.00	1.52	2.369	I O	|	|	|	| 6.98
36.833	0.00	1.52	2.359	I O	|	|	|	| 6.96
36.917	0.00	1.51	2.348	I O	|	|	|	| 6.94
37.000	0.00	1.50	2.338	I O	|	|	|	| 6.92
37.083	0.00	1.50	2.328	I O	|	|	|	| 6.91
37.167	0.00	1.49	2.317	I O	|	|	|	| 6.89
37.250	0.00	1.49	2.307	I O	|	|	|	| 6.87
37.333	0.00	1.48	2.297	I O	|	|	|	| 6.85
37.417	0.00	1.47	2.287	I O	|	|	|	| 6.83
37.500	0.00	1.47	2.277	I O	|	|	|	| 6.81
37.583	0.00	1.46	2.266	I O	|	|	|	| 6.79
37.667	0.00	1.45	2.256	I O	|	|	|	| 6.77
37.750	0.00	1.45	2.246	I O	|	|	|	| 6.75
37.833	0.00	1.44	2.236	I O	|	|	|	| 6.73
37.917	0.00	1.44	2.227	I O	|	|	|	| 6.71
38.000	0.00	1.43	2.217	I O	|	|	|	| 6.70
38.083	0.00	1.42	2.207	I O	|	|	|	| 6.68
38.167	0.00	1.42	2.197	I O	|	|	|	| 6.66
38.250	0.00	1.41	2.187	I O	|	|	|	| 6.64
38.333	0.00	1.41	2.178	I O	|	|	|	| 6.62
38.417	0.00	1.40	2.168	I O	|	|	|	| 6.60
38.500	0.00	1.39	2.158	I O	|	|	|	| 6.59
38.583	0.00	1.39	2.149	I O	|	|	|	| 6.57
38.667	0.00	1.38	2.139	I O	|	|	|	| 6.55
38.750	0.00	1.38	2.130	I O	|	|	|	| 6.53
38.833	0.00	1.37	2.120	I O	|	|	|	| 6.51
38.917	0.00	1.36	2.111	I O	|	|	|	| 6.50
39.000	0.00	1.36	2.102	I O	|	|	|	| 6.48
39.083	0.00	1.35	2.092	I O	|	|	|	| 6.46
39.167	0.00	1.35	2.083	I O	|	|	|	| 6.44
39.250	0.00	1.34	2.074	I O	|	|	|	| 6.43
39.333	0.00	1.33	2.064	I O	|	|	|	| 6.41
39.417	0.00	1.33	2.055	I O	|	|	|	| 6.39
39.500	0.00	1.32	2.046	I O	|	|	|	| 6.37
39.583	0.00	1.32	2.037	I O	|	|	|	| 6.36
39.667	0.00	1.31	2.028	I O	|	|	|	| 6.34
39.750	0.00	1.31	2.019	I O	|	|	|	| 6.32
39.833	0.00	1.30	2.010	I O	|	|	|	| 6.31
39.917	0.00	1.29	2.001	I O	|	|	|	| 6.29
40.000	0.00	1.27	1.992	I O	|	|	|	| 6.27
40.083	0.00	1.26	1.984	I O	|	|	|	| 6.25
40.167	0.00	1.24	1.975	I O	|	|	|	| 6.23
40.250	0.00	1.22	1.967	I O	|	|	|	| 6.21
40.333	0.00	1.21	1.958	I O	|	|	|	| 6.19
40.417	0.00	1.19	1.950	I O	|	|	|	| 6.18
40.500	0.00	1.18	1.942	I O	|	|	|	| 6.16
40.583	0.00	1.16	1.934	I O	|	|	|	| 6.14
40.667	0.00	1.15	1.926	I O	|	|	|	| 6.12
40.750	0.00	1.13	1.918	I O	|	|	|	| 6.11
40.833	0.00	1.12	1.910	I O	|	|	|	| 6.09
40.917	0.00	1.10	1.903	IO	|	|	|	| 6.07
41.000	0.00	1.09	1.895	IO	|	|	|	| 6.06
41.083	0.00	1.07	1.888	IO	|	|	|	| 6.04
41.167	0.00	1.06	1.880	IO	|	|	|	| 6.02
41.250	0.00	1.05	1.873	IO	|	|	|	| 6.01

41.333	0.00	1.03	1.866	IO					5.99
41.417	0.00	1.02	1.859	IO					5.98
41.500	0.00	1.01	1.852	IO					5.96
41.583	0.00	0.99	1.845	IO					5.95
41.667	0.00	0.98	1.838	IO					5.93
41.750	0.00	0.97	1.831	IO					5.92
41.833	0.00	0.96	1.825	IO					5.90
41.917	0.00	0.94	1.818	IO					5.89
42.000	0.00	0.93	1.812	IO					5.87
42.083	0.00	0.92	1.805	IO					5.86
42.167	0.00	0.91	1.799	IO					5.85
42.250	0.00	0.90	1.793	IO					5.83
42.333	0.00	0.89	1.787	IO					5.82
42.417	0.00	0.87	1.781	IO					5.81
42.500	0.00	0.86	1.775	IO					5.79
42.583	0.00	0.85	1.769	IO					5.78
42.667	0.00	0.84	1.763	IO					5.77
42.750	0.00	0.83	1.757	IO					5.76
42.833	0.00	0.82	1.751	IO					5.74
42.917	0.00	0.81	1.746	IO					5.73
43.000	0.00	0.80	1.740	IO					5.72
43.083	0.00	0.79	1.735	IO					5.71
43.167	0.00	0.78	1.729	IO					5.69
43.250	0.00	0.77	1.724	IO					5.68
43.333	0.00	0.76	1.719	IO					5.67
43.417	0.00	0.75	1.714	IO					5.66
43.500	0.00	0.74	1.709	IO					5.65
43.583	0.00	0.73	1.703	IO					5.64
43.667	0.00	0.72	1.698	IO					5.63
43.750	0.00	0.71	1.694	IO					5.62
43.833	0.00	0.70	1.689	IO					5.61
43.917	0.00	0.69	1.684	IO					5.60
44.000	0.00	0.68	1.679	IO					5.59
44.083	0.00	0.67	1.674	IO					5.58
44.167	0.00	0.67	1.670	IO					5.57
44.250	0.00	0.66	1.665	IO					5.56
44.333	0.00	0.65	1.661	IO					5.55
44.417	0.00	0.64	1.656	IO					5.54
44.500	0.00	0.63	1.652	IO					5.53
44.583	0.00	0.62	1.648	IO					5.52
44.667	0.00	0.62	1.643	IO					5.51
44.750	0.00	0.61	1.639	IO					5.50
44.833	0.00	0.61	1.635	IO					5.49
44.917	0.00	0.61	1.631	IO					5.48
45.000	0.00	0.61	1.627	IO					5.47
45.083	0.00	0.61	1.622	IO					5.46
45.167	0.00	0.61	1.618	IO					5.45
45.250	0.00	0.61	1.614	IO					5.44
45.333	0.00	0.61	1.610	IO					5.43
45.417	0.00	0.61	1.606	IO					5.42
45.500	0.00	0.60	1.602	IO					5.41
45.583	0.00	0.60	1.597	IO					5.40
45.667	0.00	0.60	1.593	IO					5.39
45.750	0.00	0.60	1.589	IO					5.38
45.833	0.00	0.60	1.585	IO					5.37
45.917	0.00	0.60	1.581	IO					5.36
46.000	0.00	0.60	1.577	IO					5.35
46.083	0.00	0.60	1.572	IO					5.34
46.167	0.00	0.60	1.568	IO					5.33
46.250	0.00	0.60	1.564	IO					5.32
46.333	0.00	0.60	1.560	IO					5.31
46.417	0.00	0.60	1.556	IO					5.30
46.500	0.00	0.60	1.552	IO					5.29
46.583	0.00	0.60	1.548	IO					5.28
46.667	0.00	0.60	1.544	IO					5.28
46.750	0.00	0.60	1.540	IO					5.27
46.833	0.00	0.59	1.535	IO					5.26
46.917	0.00	0.59	1.531	IO					5.25
47.000	0.00	0.59	1.527	IO					5.24
47.083	0.00	0.59	1.523	IO					5.23
47.167	0.00	0.59	1.519	IO					5.22

47.250	0.00	0.59	1.515	IO					5.21
47.333	0.00	0.59	1.511	IO					5.20
47.417	0.00	0.59	1.507	IO					5.19
47.500	0.00	0.59	1.503	IO					5.18
47.583	0.00	0.59	1.499	IO					5.17
47.667	0.00	0.59	1.495	IO					5.16
47.750	0.00	0.59	1.491	IO					5.15
47.833	0.00	0.59	1.487	IO					5.14
47.917	0.00	0.59	1.483	IO					5.13
48.000	0.00	0.59	1.478	IO					5.12
48.083	0.00	0.59	1.474	IO					5.11
48.167	0.00	0.59	1.470	IO					5.10
48.250	0.00	0.59	1.466	IO					5.09
48.333	0.00	0.58	1.462	IO					5.09
48.417	0.00	0.58	1.458	IO					5.08
48.500	0.00	0.58	1.454	IO					5.07
48.583	0.00	0.58	1.450	IO					5.06
48.667	0.00	0.58	1.446	IO					5.05
48.750	0.00	0.58	1.442	IO					5.04
48.833	0.00	0.58	1.438	IO					5.03
48.917	0.00	0.58	1.434	IO					5.02
49.000	0.00	0.58	1.430	IO					5.01
49.083	0.00	0.58	1.426	IO					5.00
49.167	0.00	0.58	1.422	IO					4.99
49.250	0.00	0.58	1.418	IO					4.98
49.333	0.00	0.58	1.414	IO					4.97
49.417	0.00	0.58	1.410	IO					4.96
49.500	0.00	0.58	1.406	IO					4.95
49.583	0.00	0.58	1.402	IO					4.95
49.667	0.00	0.58	1.398	IO					4.94
49.750	0.00	0.57	1.394	IO					4.93
49.833	0.00	0.57	1.391	IO					4.92
49.917	0.00	0.57	1.387	IO					4.91
50.000	0.00	0.57	1.383	IO					4.90
50.083	0.00	0.57	1.379	IO					4.89
50.167	0.00	0.57	1.375	IO					4.88
50.250	0.00	0.57	1.371	IO					4.87
50.333	0.00	0.57	1.367	IO					4.86
50.417	0.00	0.57	1.363	IO					4.85
50.500	0.00	0.57	1.359	IO					4.84
50.583	0.00	0.57	1.355	IO					4.83
50.667	0.00	0.57	1.351	IO					4.83
50.750	0.00	0.57	1.347	IO					4.82
50.833	0.00	0.57	1.343	IO					4.81
50.917	0.00	0.57	1.339	IO					4.80
51.000	0.00	0.57	1.336	IO					4.79
51.083	0.00	0.57	1.332	IO					4.78
51.167	0.00	0.57	1.328	IO					4.77
51.250	0.00	0.56	1.324	IO					4.76
51.333	0.00	0.56	1.320	IO					4.75
51.417	0.00	0.56	1.316	IO					4.74
51.500	0.00	0.56	1.312	IO					4.73
51.583	0.00	0.56	1.308	IO					4.73
51.667	0.00	0.56	1.304	IO					4.72
51.750	0.00	0.56	1.301	IO					4.71
51.833	0.00	0.56	1.297	IO					4.70
51.917	0.00	0.56	1.293	IO					4.69
52.000	0.00	0.56	1.289	IO					4.68
52.083	0.00	0.56	1.285	IO					4.67
52.167	0.00	0.56	1.281	O					4.66
52.250	0.00	0.56	1.278	O					4.65
52.333	0.00	0.56	1.274	O					4.64
52.417	0.00	0.56	1.270	O					4.64
52.500	0.00	0.56	1.266	O					4.63
52.583	0.00	0.56	1.262	O					4.62
52.667	0.00	0.56	1.258	O					4.61
52.750	0.00	0.55	1.255	O					4.60
52.833	0.00	0.55	1.251	O					4.59
52.917	0.00	0.55	1.247	O					4.58
53.000	0.00	0.55	1.243	O					4.57
53.083	0.00	0.55	1.239	O					4.56

53.167	0.00	0.55	1.235	O	|	|	|	|	4.56
53.250	0.00	0.55	1.232	O	|	|	|	|	4.55
53.333	0.00	0.55	1.228	O	|	|	|	|	4.54
53.417	0.00	0.55	1.224	O	|	|	|	|	4.53
53.500	0.00	0.55	1.220	O	|	|	|	|	4.52
53.583	0.00	0.55	1.217	O	|	|	|	|	4.51
53.667	0.00	0.55	1.213	O	|	|	|	|	4.50
53.750	0.00	0.55	1.209	O	|	|	|	|	4.49
53.833	0.00	0.55	1.205	O	|	|	|	|	4.48
53.917	0.00	0.55	1.201	O	|	|	|	|	4.48
54.000	0.00	0.55	1.198	O	|	|	|	|	4.47
54.083	0.00	0.55	1.194	O	|	|	|	|	4.46
54.167	0.00	0.55	1.190	O	|	|	|	|	4.45
54.250	0.00	0.54	1.186	O	|	|	|	|	4.44
54.333	0.00	0.54	1.183	O	|	|	|	|	4.43
54.417	0.00	0.54	1.179	O	|	|	|	|	4.42
54.500	0.00	0.54	1.175	O	|	|	|	|	4.41
54.583	0.00	0.54	1.171	O	|	|	|	|	4.41
54.667	0.00	0.54	1.168	O	|	|	|	|	4.40
54.750	0.00	0.54	1.164	O	|	|	|	|	4.39
54.833	0.00	0.54	1.160	O	|	|	|	|	4.38
54.917	0.00	0.54	1.157	O	|	|	|	|	4.37
55.000	0.00	0.54	1.153	O	|	|	|	|	4.36
55.083	0.00	0.54	1.149	O	|	|	|	|	4.35
55.167	0.00	0.54	1.145	O	|	|	|	|	4.35
55.250	0.00	0.54	1.142	O	|	|	|	|	4.34
55.333	0.00	0.54	1.138	O	|	|	|	|	4.33
55.417	0.00	0.54	1.134	O	|	|	|	|	4.32
55.500	0.00	0.54	1.131	O	|	|	|	|	4.31
55.583	0.00	0.54	1.127	O	|	|	|	|	4.30
55.667	0.00	0.54	1.123	O	|	|	|	|	4.29
55.750	0.00	0.53	1.119	O	|	|	|	|	4.28
55.833	0.00	0.53	1.116	O	|	|	|	|	4.27
55.917	0.00	0.53	1.112	O	|	|	|	|	4.26
56.000	0.00	0.53	1.108	O	|	|	|	|	4.25
56.083	0.00	0.53	1.105	O	|	|	|	|	4.24
56.167	0.00	0.53	1.101	O	|	|	|	|	4.23
56.250	0.00	0.53	1.097	O	|	|	|	|	4.22
56.333	0.00	0.53	1.094	O	|	|	|	|	4.21
56.417	0.00	0.53	1.090	O	|	|	|	|	4.20
56.500	0.00	0.53	1.087	O	|	|	|	|	4.19
56.583	0.00	0.53	1.083	O	|	|	|	|	4.18
56.667	0.00	0.53	1.079	O	|	|	|	|	4.17
56.750	0.00	0.53	1.076	O	|	|	|	|	4.16
56.833	0.00	0.53	1.072	O	|	|	|	|	4.15
56.917	0.00	0.53	1.068	O	|	|	|	|	4.14
57.000	0.00	0.52	1.065	O	|	|	|	|	4.13
57.083	0.00	0.52	1.061	O	|	|	|	|	4.12
57.167	0.00	0.52	1.058	O	|	|	|	|	4.11
57.250	0.00	0.52	1.054	O	|	|	|	|	4.10
57.333	0.00	0.52	1.050	O	|	|	|	|	4.09
57.417	0.00	0.52	1.047	O	|	|	|	|	4.08
57.500	0.00	0.52	1.043	O	|	|	|	|	4.07
57.583	0.00	0.52	1.040	O	|	|	|	|	4.06
57.667	0.00	0.52	1.036	O	|	|	|	|	4.05
57.750	0.00	0.52	1.032	O	|	|	|	|	4.04
57.833	0.00	0.52	1.029	O	|	|	|	|	4.03
57.917	0.00	0.52	1.025	O	|	|	|	|	4.02
58.000	0.00	0.52	1.022	O	|	|	|	|	4.01
58.083	0.00	0.52	1.018	O	|	|	|	|	4.00
58.167	0.00	0.52	1.015	O	|	|	|	|	3.99
58.250	0.00	0.51	1.011	O	|	|	|	|	3.98
58.333	0.00	0.51	1.008	O	|	|	|	|	3.97
58.417	0.00	0.51	1.004	O	|	|	|	|	3.96
58.500	0.00	0.51	1.000	O	|	|	|	|	3.95
58.583	0.00	0.51	0.997	O	|	|	|	|	3.94
58.667	0.00	0.51	0.993	O	|	|	|	|	3.93
58.750	0.00	0.51	0.990	O	|	|	|	|	3.92
58.833	0.00	0.51	0.986	O	|	|	|	|	3.91
58.917	0.00	0.51	0.983	O	|	|	|	|	3.90
59.000	0.00	0.51	0.979	O	|	|	|	|	3.89

59.083	0.00	0.51	0.976	O	|	|	|	|	3.88
59.167	0.00	0.51	0.972	O	|	|	|	|	3.87
59.250	0.00	0.51	0.969	O	|	|	|	|	3.86
59.333	0.00	0.51	0.965	O	|	|	|	|	3.85
59.417	0.00	0.51	0.962	O	|	|	|	|	3.84
59.500	0.00	0.50	0.958	O	|	|	|	|	3.83
59.583	0.00	0.50	0.955	O	|	|	|	|	3.82
59.667	0.00	0.50	0.951	O	|	|	|	|	3.82
59.750	0.00	0.50	0.948	O	|	|	|	|	3.81
59.833	0.00	0.50	0.945	O	|	|	|	|	3.80
59.917	0.00	0.50	0.941	O	|	|	|	|	3.79
60.000	0.00	0.50	0.938	O	|	|	|	|	3.78
60.083	0.00	0.50	0.934	O	|	|	|	|	3.77
60.167	0.00	0.50	0.931	O	|	|	|	|	3.76
60.250	0.00	0.50	0.927	O	|	|	|	|	3.75
60.333	0.00	0.50	0.924	O	|	|	|	|	3.74
60.417	0.00	0.50	0.920	O	|	|	|	|	3.73
60.500	0.00	0.50	0.917	O	|	|	|	|	3.72
60.583	0.00	0.50	0.914	O	|	|	|	|	3.71
60.667	0.00	0.50	0.910	O	|	|	|	|	3.70
60.750	0.00	0.50	0.907	O	|	|	|	|	3.69
60.833	0.00	0.49	0.903	O	|	|	|	|	3.68
60.917	0.00	0.49	0.900	O	|	|	|	|	3.67
61.000	0.00	0.49	0.897	O	|	|	|	|	3.66
61.083	0.00	0.49	0.893	O	|	|	|	|	3.65
61.167	0.00	0.49	0.890	O	|	|	|	|	3.64
61.250	0.00	0.49	0.886	O	|	|	|	|	3.63
61.333	0.00	0.49	0.883	O	|	|	|	|	3.63
61.417	0.00	0.49	0.880	O	|	|	|	|	3.62
61.500	0.00	0.49	0.876	O	|	|	|	|	3.61
61.583	0.00	0.49	0.873	O	|	|	|	|	3.60
61.667	0.00	0.49	0.870	O	|	|	|	|	3.59
61.750	0.00	0.49	0.866	O	|	|	|	|	3.58
61.833	0.00	0.49	0.863	O	|	|	|	|	3.57
61.917	0.00	0.49	0.859	O	|	|	|	|	3.56
62.000	0.00	0.49	0.856	O	|	|	|	|	3.55
62.083	0.00	0.49	0.853	O	|	|	|	|	3.54
62.167	0.00	0.48	0.849	O	|	|	|	|	3.53
62.250	0.00	0.48	0.846	O	|	|	|	|	3.52
62.333	0.00	0.48	0.843	O	|	|	|	|	3.51
62.417	0.00	0.48	0.839	O	|	|	|	|	3.50
62.500	0.00	0.48	0.836	O	|	|	|	|	3.49
62.583	0.00	0.48	0.833	O	|	|	|	|	3.49
62.667	0.00	0.48	0.829	O	|	|	|	|	3.48
62.750	0.00	0.48	0.826	O	|	|	|	|	3.47
62.833	0.00	0.48	0.823	O	|	|	|	|	3.46
62.917	0.00	0.48	0.820	O	|	|	|	|	3.45
63.000	0.00	0.48	0.816	O	|	|	|	|	3.44
63.083	0.00	0.48	0.813	O	|	|	|	|	3.43
63.167	0.00	0.48	0.810	O	|	|	|	|	3.42
63.250	0.00	0.48	0.806	O	|	|	|	|	3.41
63.333	0.00	0.48	0.803	O	|	|	|	|	3.40
63.417	0.00	0.48	0.800	O	|	|	|	|	3.39
63.500	0.00	0.47	0.797	O	|	|	|	|	3.38
63.583	0.00	0.47	0.793	O	|	|	|	|	3.38
63.667	0.00	0.47	0.790	O	|	|	|	|	3.37
63.750	0.00	0.47	0.787	O	|	|	|	|	3.36
63.833	0.00	0.47	0.784	O	|	|	|	|	3.35
63.917	0.00	0.47	0.780	O	|	|	|	|	3.34
64.000	0.00	0.47	0.777	O	|	|	|	|	3.33
64.083	0.00	0.47	0.774	O	|	|	|	|	3.32
64.167	0.00	0.47	0.771	O	|	|	|	|	3.31
64.250	0.00	0.47	0.767	O	|	|	|	|	3.30
64.333	0.00	0.47	0.764	O	|	|	|	|	3.29
64.417	0.00	0.47	0.761	O	|	|	|	|	3.28
64.500	0.00	0.47	0.758	O	|	|	|	|	3.27
64.583	0.00	0.47	0.754	O	|	|	|	|	3.26
64.667	0.00	0.47	0.751	O	|	|	|	|	3.25
64.750	0.00	0.46	0.748	O	|	|	|	|	3.24
64.833	0.00	0.46	0.745	O	|	|	|	|	3.23
64.917	0.00	0.46	0.742	O	|	|	|	|	3.22

65.000	0.00	0.46	0.738	O	|	|	|	|	3.21
65.083	0.00	0.46	0.735	O	|	|	|	|	3.20
65.167	0.00	0.46	0.732	O	|	|	|	|	3.19
65.250	0.00	0.46	0.729	O	|	|	|	|	3.18
65.333	0.00	0.46	0.726	O	|	|	|	|	3.17
65.417	0.00	0.46	0.723	O	|	|	|	|	3.16
65.500	0.00	0.46	0.719	O	|	|	|	|	3.14
65.583	0.00	0.46	0.716	O	|	|	|	|	3.13
65.667	0.00	0.46	0.713	O	|	|	|	|	3.12
65.750	0.00	0.46	0.710	O	|	|	|	|	3.11
65.833	0.00	0.45	0.707	O	|	|	|	|	3.10
65.917	0.00	0.45	0.704	O	|	|	|	|	3.09
66.000	0.00	0.45	0.701	O	|	|	|	|	3.08
66.083	0.00	0.45	0.698	O	|	|	|	|	3.07
66.167	0.00	0.45	0.694	O	|	|	|	|	3.06
66.250	0.00	0.45	0.691	O	|	|	|	|	3.05
66.333	0.00	0.45	0.688	O	|	|	|	|	3.04
66.417	0.00	0.45	0.685	O	|	|	|	|	3.03
66.500	0.00	0.45	0.682	O	|	|	|	|	3.02
66.583	0.00	0.45	0.679	O	|	|	|	|	3.01
66.667	0.00	0.45	0.676	O	|	|	|	|	3.00
66.750	0.00	0.45	0.673	O	|	|	|	|	2.99
66.833	0.00	0.44	0.670	O	|	|	|	|	2.98
66.917	0.00	0.44	0.667	O	|	|	|	|	2.97
67.000	0.00	0.44	0.664	O	|	|	|	|	2.96
67.083	0.00	0.44	0.661	O	|	|	|	|	2.95
67.167	0.00	0.44	0.658	O	|	|	|	|	2.94
67.250	0.00	0.44	0.654	O	|	|	|	|	2.93
67.333	0.00	0.44	0.651	O	|	|	|	|	2.92
67.417	0.00	0.44	0.648	O	|	|	|	|	2.91
67.500	0.00	0.44	0.645	O	|	|	|	|	2.90
67.583	0.00	0.44	0.642	O	|	|	|	|	2.89
67.667	0.00	0.44	0.639	O	|	|	|	|	2.88
67.750	0.00	0.44	0.636	O	|	|	|	|	2.87
67.833	0.00	0.44	0.633	O	|	|	|	|	2.86
67.917	0.00	0.44	0.630	O	|	|	|	|	2.85
68.000	0.00	0.43	0.627	O	|	|	|	|	2.84
68.083	0.00	0.43	0.624	O	|	|	|	|	2.83
68.167	0.00	0.43	0.621	O	|	|	|	|	2.82
68.250	0.00	0.43	0.618	O	|	|	|	|	2.81
68.333	0.00	0.43	0.615	O	|	|	|	|	2.80
68.417	0.00	0.43	0.612	O	|	|	|	|	2.79
68.500	0.00	0.43	0.610	O	|	|	|	|	2.78
68.583	0.00	0.43	0.607	O	|	|	|	|	2.77
68.667	0.00	0.43	0.604	O	|	|	|	|	2.76
68.750	0.00	0.43	0.601	O	|	|	|	|	2.75
68.833	0.00	0.43	0.598	O	|	|	|	|	2.74
68.917	0.00	0.43	0.595	O	|	|	|	|	2.73
69.000	0.00	0.43	0.592	O	|	|	|	|	2.72
69.083	0.00	0.42	0.589	O	|	|	|	|	2.71
69.167	0.00	0.42	0.586	O	|	|	|	|	2.70
69.250	0.00	0.42	0.583	O	|	|	|	|	2.69
69.333	0.00	0.42	0.580	O	|	|	|	|	2.68
69.417	0.00	0.42	0.577	O	|	|	|	|	2.67
69.500	0.00	0.42	0.574	O	|	|	|	|	2.66
69.583	0.00	0.42	0.571	O	|	|	|	|	2.65
69.667	0.00	0.42	0.569	O	|	|	|	|	2.64
69.750	0.00	0.42	0.566	O	|	|	|	|	2.63
69.833	0.00	0.42	0.563	O	|	|	|	|	2.62
69.917	0.00	0.42	0.560	O	|	|	|	|	2.61
70.000	0.00	0.42	0.557	O	|	|	|	|	2.60
70.083	0.00	0.42	0.554	O	|	|	|	|	2.59
70.167	0.00	0.42	0.551	O	|	|	|	|	2.58
70.250	0.00	0.41	0.548	O	|	|	|	|	2.57
70.333	0.00	0.41	0.546	O	|	|	|	|	2.57
70.417	0.00	0.41	0.543	O	|	|	|	|	2.56
70.500	0.00	0.41	0.540	O	|	|	|	|	2.55
70.583	0.00	0.41	0.537	O	|	|	|	|	2.54
70.667	0.00	0.41	0.534	O	|	|	|	|	2.53
70.750	0.00	0.41	0.531	O	|	|	|	|	2.52
70.833	0.00	0.41	0.529	O	|	|	|	|	2.51

70.917	0.00	0.41	0.526	O					2.50
71.000	0.00	0.41	0.523	O					2.49
71.083	0.00	0.41	0.520	O					2.48
71.167	0.00	0.41	0.517	O					2.47
71.250	0.00	0.41	0.515	O					2.46
71.333	0.00	0.41	0.512	O					2.45
71.417	0.00	0.40	0.509	O					2.44
71.500	0.00	0.40	0.506	O					2.43
71.583	0.00	0.40	0.503	O					2.42
71.667	0.00	0.40	0.501	O					2.42
71.750	0.00	0.40	0.498	O					2.41
71.833	0.00	0.40	0.495	O					2.40
71.917	0.00	0.40	0.492	O					2.39
72.000	0.00	0.40	0.490	O					2.38
72.083	0.00	0.40	0.487	O					2.37
72.167	0.00	0.40	0.484	O					2.36
72.250	0.00	0.40	0.481	O					2.35
72.333	0.00	0.40	0.479	O					2.34
72.417	0.00	0.40	0.476	O					2.33
72.500	0.00	0.40	0.473	O					2.32
72.583	0.00	0.40	0.470	O					2.31
72.667	0.00	0.39	0.468	O					2.31
72.750	0.00	0.39	0.465	O					2.30
72.833	0.00	0.39	0.462	O					2.29
72.917	0.00	0.39	0.460	O					2.28
73.000	0.00	0.39	0.457	O					2.27
73.083	0.00	0.39	0.454	O					2.26
73.167	0.00	0.39	0.451	O					2.25
73.250	0.00	0.39	0.449	O					2.24
73.333	0.00	0.39	0.446	O					2.23
73.417	0.00	0.39	0.443	O					2.22
73.500	0.00	0.38	0.441	O					2.21
73.583	0.00	0.38	0.438	O					2.20
73.667	0.00	0.38	0.436	O					2.19
73.750	0.00	0.38	0.433	O					2.18
73.833	0.00	0.38	0.430	O					2.17
73.917	0.00	0.38	0.428	O					2.16
74.000	0.00	0.38	0.425	O					2.15
74.083	0.00	0.38	0.422	O					2.14
74.167	0.00	0.38	0.420	O					2.13
74.250	0.00	0.38	0.417	O					2.12
74.333	0.00	0.38	0.415	O					2.11
74.417	0.00	0.37	0.412	O					2.10
74.500	0.00	0.37	0.409	O					2.09
74.583	0.00	0.37	0.407	O					2.08
74.667	0.00	0.37	0.404	O					2.07
74.750	0.00	0.37	0.402	O					2.07
74.833	0.00	0.37	0.399	O					2.06
74.917	0.00	0.37	0.397	O					2.05
75.000	0.00	0.37	0.394	O					2.04
75.083	0.00	0.37	0.392	O					2.03
75.167	0.00	0.37	0.389	O					2.02
75.250	0.00	0.37	0.387	O					2.01
75.333	0.00	0.36	0.384	O					2.00
75.417	0.00	0.36	0.382	O					1.99
75.500	0.00	0.36	0.379	O					1.98
75.583	0.00	0.36	0.377	O					1.97
75.667	0.00	0.36	0.374	O					1.96
75.750	0.00	0.36	0.372	O					1.96
75.833	0.00	0.36	0.369	O					1.95
75.917	0.00	0.36	0.367	O					1.94
76.000	0.00	0.36	0.364	O					1.93
76.083	0.00	0.36	0.362	O					1.92
76.167	0.00	0.36	0.359	O					1.91
76.250	0.00	0.35	0.357	O					1.90
76.333	0.00	0.35	0.354	O					1.89
76.417	0.00	0.35	0.352	O					1.88
76.500	0.00	0.35	0.349	O					1.87
76.583	0.00	0.35	0.347	O					1.87
76.667	0.00	0.35	0.345	O					1.86
76.750	0.00	0.35	0.342	O					1.85

76.833	0.00	0.35	0.340	O					1.84
76.917	0.00	0.35	0.337	O					1.83
77.000	0.00	0.35	0.335	O					1.82
77.083	0.00	0.35	0.333	O					1.81
77.167	0.00	0.35	0.330	O					1.80
77.250	0.00	0.34	0.328	O					1.80
77.333	0.00	0.34	0.326	O					1.79
77.417	0.00	0.34	0.323	O					1.78
77.500	0.00	0.34	0.321	O					1.77
77.583	0.00	0.34	0.318	O					1.76
77.667	0.00	0.34	0.316	O					1.75
77.750	0.00	0.34	0.314	O					1.74
77.833	0.00	0.34	0.311	O					1.74
77.917	0.00	0.34	0.309	O					1.73
78.000	0.00	0.34	0.307	O					1.72
78.083	0.00	0.34	0.304	O					1.71
78.167	0.00	0.34	0.302	O					1.70
78.250	0.00	0.33	0.300	O					1.69
78.333	0.00	0.33	0.298	O					1.69
78.417	0.00	0.33	0.295	O					1.68
78.500	0.00	0.33	0.293	O					1.67
78.583	0.00	0.33	0.291	O					1.66
78.667	0.00	0.33	0.288	O					1.65
78.750	0.00	0.33	0.286	O					1.64
78.833	0.00	0.33	0.284	O					1.64
78.917	0.00	0.33	0.282	O					1.63
79.000	0.00	0.33	0.279	O					1.62
79.083	0.00	0.33	0.277	O					1.61
79.167	0.00	0.33	0.275	O					1.60
79.250	0.00	0.32	0.273	O					1.59
79.333	0.00	0.32	0.270	O					1.59
79.417	0.00	0.32	0.268	O					1.58
79.500	0.00	0.32	0.266	O					1.57
79.583	0.00	0.32	0.264	O					1.56
79.667	0.00	0.32	0.261	O					1.55
79.750	0.00	0.32	0.259	O					1.55
79.833	0.00	0.32	0.257	O					1.54
79.917	0.00	0.32	0.255	O					1.53
80.000	0.00	0.32	0.253	O					1.52
80.083	0.00	0.32	0.250	O					1.51
80.167	0.00	0.32	0.248	O					1.51
80.250	0.00	0.32	0.246	O					1.50
80.333	0.00	0.31	0.244	O					1.49
80.417	0.00	0.31	0.242	O					1.48
80.500	0.00	0.31	0.240	O					1.47
80.583	0.00	0.31	0.237	O					1.47
80.667	0.00	0.31	0.235	O					1.46
80.750	0.00	0.31	0.233	O					1.45
80.833	0.00	0.31	0.231	O					1.44
80.917	0.00	0.31	0.229	O					1.43
81.000	0.00	0.31	0.227	O					1.43
81.083	0.00	0.31	0.225	O					1.42
81.167	0.00	0.31	0.223	O					1.41
81.250	0.00	0.31	0.220	O					1.40
81.333	0.00	0.31	0.218	O					1.40
81.417	0.00	0.30	0.216	O					1.39
81.500	0.00	0.30	0.214	O					1.38
81.583	0.00	0.30	0.212	O					1.37
81.667	0.00	0.30	0.210	O					1.37
81.750	0.00	0.30	0.208	O					1.36
81.833	0.00	0.30	0.206	O					1.35
81.917	0.00	0.30	0.204	O					1.34
82.000	0.00	0.30	0.202	O					1.34
82.083	0.00	0.30	0.200	O					1.33
82.167	0.00	0.30	0.198	O					1.32
82.250	0.00	0.30	0.196	O					1.31
82.333	0.00	0.30	0.193	O					1.31
82.417	0.00	0.30	0.191	O					1.30
82.500	0.00	0.29	0.189	O					1.28
82.583	0.00	0.29	0.187	O					1.27
82.667	0.00	0.29	0.185	O					1.26

82.750	0.00	0.29	0.183	O					1.25
82.833	0.00	0.29	0.181	O					1.24
82.917	0.00	0.28	0.179	O					1.23
83.000	0.00	0.28	0.177	O					1.22
83.083	0.00	0.28	0.176	O					1.20
83.167	0.00	0.28	0.174	O					1.19
83.250	0.00	0.28	0.172	O					1.18
83.333	0.00	0.28	0.170	O					1.17
83.417	0.00	0.27	0.168	O					1.16
83.500	0.00	0.27	0.166	O					1.15
83.583	0.00	0.27	0.164	O					1.14
83.667	0.00	0.27	0.162	O					1.13
83.750	0.00	0.27	0.160	O					1.12
83.833	0.00	0.27	0.159	O					1.11
83.917	0.00	0.26	0.157	O					1.10
84.000	0.00	0.26	0.155	O					1.08
84.083	0.00	0.26	0.153	O					1.07
84.167	0.00	0.26	0.151	O					1.06
84.250	0.00	0.26	0.150	O					1.05
84.333	0.00	0.26	0.148	O					1.04
84.417	0.00	0.25	0.146	O					1.03
84.500	0.00	0.25	0.144	O					1.02
84.583	0.00	0.25	0.143	O					1.01
84.667	0.00	0.25	0.141	O					1.00
84.750	0.00	0.25	0.139	O					0.99
84.833	0.00	0.25	0.137	O					0.98
84.917	0.00	0.25	0.136	O					0.97
85.000	0.00	0.24	0.134	O					0.96
85.083	0.00	0.24	0.132	O					0.95
85.167	0.00	0.24	0.131	O					0.94
85.250	0.00	0.24	0.129	O					0.93
85.333	0.00	0.24	0.127	O					0.92
85.417	0.00	0.24	0.126	O					0.91
85.500	0.00	0.24	0.124	O					0.91
85.583	0.00	0.23	0.122	O					0.90
85.667	0.00	0.23	0.121	O					0.89
85.750	0.00	0.23	0.119	O					0.88
85.833	0.00	0.23	0.118	O					0.87
85.917	0.00	0.23	0.116	O					0.86
86.000	0.00	0.23	0.115	O					0.85
86.083	0.00	0.23	0.113	O					0.84
86.167	0.00	0.22	0.111	O					0.83
86.250	0.00	0.22	0.110	O					0.82
86.333	0.00	0.22	0.108	O					0.81
86.417	0.00	0.22	0.107	O					0.81
86.500	0.00	0.22	0.105	O					0.80
86.583	0.00	0.22	0.104	O					0.79
86.667	0.00	0.22	0.102	O					0.78
86.750	0.00	0.21	0.101	O					0.77
86.833	0.00	0.21	0.099	O					0.76
86.917	0.00	0.21	0.098	O					0.75
87.000	0.00	0.21	0.097	O					0.74
87.083	0.00	0.21	0.095	O					0.74
87.167	0.00	0.21	0.094	O					0.73
87.250	0.00	0.21	0.092	O					0.72
87.333	0.00	0.21	0.091	O					0.71
87.417	0.00	0.20	0.089	O					0.70
87.500	0.00	0.20	0.088	O					0.70
87.583	0.00	0.20	0.087	O					0.69
87.667	0.00	0.20	0.085	O					0.68
87.750	0.00	0.20	0.084	O					0.67
87.833	0.00	0.20	0.082	O					0.66
87.917	0.00	0.20	0.081	O					0.66
88.000	0.00	0.20	0.080	O					0.65
88.083	0.00	0.19	0.078	O					0.64
88.167	0.00	0.19	0.077	O					0.63
88.250	0.00	0.19	0.076	O					0.62
88.333	0.00	0.19	0.074	O					0.62
88.417	0.00	0.19	0.073	O					0.61
88.500	0.00	0.19	0.072	O					0.60
88.583	0.00	0.19	0.071	O					0.59

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88.667    0.00    0.19      0.069  O       |       |       |       |     0.59
88.750    0.00    0.18      0.068  O       |       |       |       |     0.58
88.833    0.00    0.18      0.067  O       |       |       |       |     0.57
88.917    0.00    0.18      0.065  O       |       |       |       |     0.56
89.000    0.00    0.18      0.064  O       |       |       |       |     0.56
89.083    0.00    0.18      0.063  O       |       |       |       |     0.55
89.167    0.00    0.18      0.062  O       |       |       |       |     0.54
89.250    0.00    0.18      0.060  O       |       |       |       |     0.54
89.333    0.00    0.18      0.059  O       |       |       |       |     0.53
89.417    0.00    0.18      0.058  O       |       |       |       |     0.52
89.500    0.00    0.17      0.057  O       |       |       |       |     0.51
89.583    0.00    0.17      0.056  O       |       |       |       |     0.51
89.667    0.00    0.17      0.054  O       |       |       |       |     0.50
89.750    0.00    0.17      0.053  O       |       |       |       |     0.49
89.833    0.00    0.17      0.052  O       |       |       |       |     0.49
89.917    0.00    0.17      0.051  O       |       |       |       |     0.48
90.000    0.00    0.17      0.050  O       |       |       |       |     0.47
90.083    0.00    0.17      0.049  O       |       |       |       |     0.47
90.167    0.00    0.17      0.047  O       |       |       |       |     0.46
90.250    0.00    0.17      0.046  O       |       |       |       |     0.45
90.333    0.00    0.16      0.045  O       |       |       |       |     0.45
90.417    0.00    0.16      0.044  O       |       |       |       |     0.44
90.500    0.00    0.16      0.043  O       |       |       |       |     0.43
90.583    0.00    0.16      0.042  O       |       |       |       |     0.43
90.667    0.00    0.16      0.041  O       |       |       |       |     0.42
90.750    0.00    0.16      0.040  O       |       |       |       |     0.41
90.833    0.00    0.16      0.038  O       |       |       |       |     0.41
90.917    0.00    0.16      0.037  O       |       |       |       |     0.40
91.000    0.00    0.16      0.036  O       |       |       |       |     0.39
91.083    0.00    0.16      0.035  O       |       |       |       |     0.39
91.167    0.00    0.15      0.034  O       |       |       |       |     0.38
91.250    0.00    0.15      0.033  O       |       |       |       |     0.38
91.333    0.00    0.15      0.032  O       |       |       |       |     0.37
91.417    0.00    0.15      0.031  O       |       |       |       |     0.36
91.500    0.00    0.15      0.030  O       |       |       |       |     0.36
91.583    0.00    0.15      0.029  O       |       |       |       |     0.35
91.667    0.00    0.15      0.028  O       |       |       |       |     0.35
91.750    0.00    0.15      0.027  O       |       |       |       |     0.34
91.833    0.00    0.15      0.026  O       |       |       |       |     0.33
91.917    0.00    0.15      0.025  O       |       |       |       |     0.33
92.000    0.00    0.15      0.024  O       |       |       |       |     0.32
92.083    0.00    0.14      0.023  O       |       |       |       |     0.32
92.167    0.00    0.14      0.022  O       |       |       |       |     0.31
92.250    0.00    0.14      0.021  O       |       |       |       |     0.30
92.333    0.00    0.14      0.020  O       |       |       |       |     0.30
92.417    0.00    0.13      0.019  O       |       |       |       |     0.28
92.500    0.00    0.13      0.018  O       |       |       |       |     0.27
92.583    0.00    0.12      0.017  O       |       |       |       |     0.26
92.667    0.00    0.12      0.016  O       |       |       |       |     0.24
92.750    0.00    0.11      0.016  O       |       |       |       |     0.23
92.833    0.00    0.11      0.015  O       |       |       |       |     0.22
92.917    0.00    0.10      0.014  O       |       |       |       |     0.21
93.000    0.00    0.10      0.013  O       |       |       |       |     0.20

       Remaining water in basin =    0.01 (Ac.Ft)

       ****************************HYDROGRAPH DATA****************************
                     Number of intervals =  1116
                     Time interval =    5.0 (Min.)
                     Maximum/Peak flow rate =       16.565 (CFS)
                     Total volume =       9.940 (Ac.Ft)
              Status of hydrographs being held in storage
                        Stream 1  Stream 2  Stream 3  Stream 4  Stream 5
              Peak (CFS)      0.000     0.000     0.000     0.000     0.000
              Vol (Ac.Ft)     0.000     0.000     0.000     0.000     0.000
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FLOOD HYDROGRAPH ROUTING PROGRAM
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Study date: 08/18/25

Program License Serial Number 5006

********** HYDROGRAPH INFORMATION **********

From study/file name: PROA1100.rte
**********HYDROGRAPH DATA**********
Number of intervals = 30
Time interval = 5.0 (Min.)
Maximum/Peak flow rate = 157.365 (CFS)
Total volume = 6.914 (Ac.Ft)

Status of hydrographs being held in storage

	Stream 1	Stream 2	Stream 3	Stream 4	Stream 5
Peak (CFS)	0.000	0.000	0.000	0.000	0.000
Vol (Ac.Ft)	0.000	0.000	0.000	0.000	0.000

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Process from Point/Station 0.000 to Point/Station 0.000
**** RETARDING BASIN ROUTING ****

User entry of depth-outflow-storage data

Total number of inflow hydrograph intervals = 30
Hydrograph time unit = 5.000 (Min.)
Initial depth in storage basin = 0.00(Ft.)

Initial basin depth = 0.00 (Ft.)
Initial basin storage = 0.00 (Ac.Ft)
Initial basin outflow = 0.00 (CFS)

Depth vs. Storage and Depth vs. Discharge data:

Basin Depth (Ft.)	Storage (Ac.Ft)	Outflow (CFS)	(S-O*dt/2) (Ac.Ft)	(S+O*dt/2) (Ac.Ft)
0.000	0.000	0.000	0.000	0.000
0.300	0.020	0.142	0.020	0.020
1.300	0.192	0.296	0.191	0.193
2.300	0.466	0.394	0.465	0.467
3.300	0.766	0.469	0.764	0.768
4.300	1.126	0.536	1.124	1.128
5.500	1.640	0.610	1.638	1.642
6.300	2.007	1.299	2.003	2.011
8.300	3.066	1.957	3.059	3.073
10.300	4.341	2.417	4.333	4.349
11.400	5.141	2.632	5.132	5.150
12.300	5.851	167.187	5.275	6.427
13.300	6.699	657.066	4.436	8.962
14.300	7.611	1377.819	2.866	12.356

Hydrograph Detention Basin Routing

Graph values: 'I'= unit inflow; 'O'=outflow at time shown

Time (Hours)	Inflow (CFS)	Outflow (CFS)	Storage (Ac.Ft)	.0	39.3	78.68	118.02	157.36	Depth (Ft.)
0.083	1.20	0.03	0.004	O	|	|	|	|	0.06
0.167	6.79	0.15	0.031	OI	|	|	|	|	0.36
0.250	15.93	0.22	0.108	O I	|	|	|	|	0.81
0.333	23.36	0.31	0.241	O I	|	|	|	|	1.48
0.417	28.73	0.38	0.418	O I	|	|	|	|	2.13
0.500	34.08	0.44	0.632	O I	|	|	|	|	2.85
0.583	40.69	0.49	0.886	O I	|	|	|	|	3.63
0.667	49.10	0.55	1.192	O	I|	|	|	|	4.45
0.750	62.66	0.60	1.573	O	| I	|	|	|	5.34
0.833	96.13	1.36	2.113	O	|	| I	|	|	6.50
0.917	148.92	1.88	2.945	O	|	|	|	I |	8.07
1.000	157.36	2.29	3.986	O	|	|	|	I	9.74
1.083	104.22	2.56	4.870	O	|	|	I |	|	11.03
1.167	62.66	39.44	5.300	|	O I	|	|	|	11.60
1.250	40.61	50.26	5.347	|	I O	|	|	|	11.66
1.333	29.10	36.58	5.287	|	I O|	|	|	|	11.59
1.417	22.09	26.83	5.245	|	IO |	|	|	|	11.53
1.500	17.36	20.52	5.218	|	IO |	|	|	|	11.50
1.583	13.66	16.08	5.199	|	IO |	|	|	|	11.47
1.667	11.10	12.79	5.185	|	O |	|	|	|	11.46
1.750	9.26	10.47	5.175	|	IO |	|	|	|	11.44
1.833	7.37	8.56	5.167	|	O |	|	|	|	11.43
1.917	5.95	6.87	5.159	|	O |	|	|	|	11.42
2.000	4.69	5.50	5.153	I	O |	|	|	|	11.42
2.083	3.65	4.32	5.148	O	|	|	|	|	11.41
2.167	3.01	3.44	5.144	O	|	|	|	|	11.40
2.250	2.42	2.80	5.142	O	|	|	|	|	11.40
2.333	1.36	2.63	5.136	O	|	|	|	|	11.39
2.417	0.31	2.63	5.124	O	|	|	|	|	11.38
2.500	0.08	2.62	5.107	O	|	|	|	|	11.35
2.583	0.00	2.62	5.089	O	|	|	|	|	11.33
2.667	0.00	2.61	5.071	O	|	|	|	|	11.30
2.750	0.00	2.61	5.053	O	|	|	|	|	11.28
2.833	0.00	2.60	5.035	O	|	|	|	|	11.25
2.917	0.00	2.60	5.017	O	|	|	|	|	11.23
3.000	0.00	2.59	4.999	O	|	|	|	|	11.21
3.083	0.00	2.59	4.982	O	|	|	|	|	11.18
3.167	0.00	2.58	4.964	O	|	|	|	|	11.16
3.250	0.00	2.58	4.946	O	|	|	|	|	11.13
3.333	0.00	2.57	4.928	O	|	|	|	|	11.11
3.417	0.00	2.57	4.910	O	|	|	|	|	11.08
3.500	0.00	2.57	4.893	O	|	|	|	|	11.06
3.583	0.00	2.56	4.875	O	|	|	|	|	11.03
3.667	0.00	2.56	4.858	O	|	|	|	|	11.01
3.750	0.00	2.55	4.840	O	|	|	|	|	10.99
3.833	0.00	2.55	4.822	O	|	|	|	|	10.96
3.917	0.00	2.54	4.805	O	|	|	|	|	10.94
4.000	0.00	2.54	4.787	O	|	|	|	|	10.91
4.083	0.00	2.53	4.770	O	|	|	|	|	10.89
4.167	0.00	2.53	4.753	O	|	|	|	|	10.87
4.250	0.00	2.52	4.735	O	|	|	|	|	10.84
4.333	0.00	2.52	4.718	O	|	|	|	|	10.82
4.417	0.00	2.51	4.700	O	|	|	|	|	10.79
4.500	0.00	2.51	4.683	O	|	|	|	|	10.77
4.583	0.00	2.50	4.666	O	|	|	|	|	10.75
4.667	0.00	2.50	4.649	O	|	|	|	|	10.72
4.750	0.00	2.50	4.631	O	|	|	|	|	10.70
4.833	0.00	2.49	4.614	O	|	|	|	|	10.68
4.917	0.00	2.49	4.597	O	|	|	|	|	10.65
5.000	0.00	2.48	4.580	O	|	|	|	|	10.63
5.083	0.00	2.48	4.563	O	|	|	|	|	10.61
5.167	0.00	2.47	4.546	O	|	|	|	|	10.58
5.250	0.00	2.47	4.529	O	|	|	|	|	10.56
5.333	0.00	2.46	4.512	O	|	|	|	|	10.54
5.417	0.00	2.46	4.495	O	|	|	|	|	10.51
5.500	0.00	2.45	4.478	O	|	|	|	|	10.49
5.583	0.00	2.45	4.461	O	|	|	|	|	10.47
5.667	0.00	2.44	4.444	O	|	|	|	|	10.44
5.750	0.00	2.44	4.428	O	|	|	|	|	10.42

5.833	0.00	2.44	4.411	O	|	|	|	|	10.40
5.917	0.00	2.43	4.394	O	|	|	|	|	10.37
6.000	0.00	2.43	4.377	O	|	|	|	|	10.35
6.083	0.00	2.42	4.361	O	|	|	|	|	10.33
6.167	0.00	2.42	4.344	O	|	|	|	|	10.30
6.250	0.00	2.41	4.327	O	|	|	|	|	10.28
6.333	0.00	2.41	4.311	O	|	|	|	|	10.25
6.417	0.00	2.40	4.294	O	|	|	|	|	10.23
6.500	0.00	2.39	4.278	O	|	|	|	|	10.20
6.583	0.00	2.39	4.261	O	|	|	|	|	10.17
6.667	0.00	2.38	4.245	O	|	|	|	|	10.15
6.750	0.00	2.38	4.228	O	|	|	|	|	10.12
6.833	0.00	2.37	4.212	O	|	|	|	|	10.10
6.917	0.00	2.36	4.196	O	|	|	|	|	10.07
7.000	0.00	2.36	4.179	O	|	|	|	|	10.05
7.083	0.00	2.35	4.163	O	|	|	|	|	10.02
7.167	0.00	2.35	4.147	O	|	|	|	|	10.00
7.250	0.00	2.34	4.131	O	|	|	|	|	9.97
7.333	0.00	2.34	4.115	O	|	|	|	|	9.95
7.417	0.00	2.33	4.099	O	|	|	|	|	9.92
7.500	0.00	2.32	4.083	O	|	|	|	|	9.89
7.583	0.00	2.32	4.067	O	|	|	|	|	9.87
7.667	0.00	2.31	4.051	O	|	|	|	|	9.84
7.750	0.00	2.31	4.035	O	|	|	|	|	9.82
7.833	0.00	2.30	4.019	O	|	|	|	|	9.79
7.917	0.00	2.30	4.003	O	|	|	|	|	9.77
8.000	0.00	2.29	3.987	O	|	|	|	|	9.75
8.083	0.00	2.28	3.972	O	|	|	|	|	9.72
8.167	0.00	2.28	3.956	O	|	|	|	|	9.70
8.250	0.00	2.27	3.940	O	|	|	|	|	9.67
8.333	0.00	2.27	3.925	O	|	|	|	|	9.65
8.417	0.00	2.26	3.909	O	|	|	|	|	9.62
8.500	0.00	2.26	3.893	O	|	|	|	|	9.60
8.583	0.00	2.25	3.878	O	|	|	|	|	9.57
8.667	0.00	2.24	3.862	O	|	|	|	|	9.55
8.750	0.00	2.24	3.847	O	|	|	|	|	9.53
8.833	0.00	2.23	3.832	O	|	|	|	|	9.50
8.917	0.00	2.23	3.816	O	|	|	|	|	9.48
9.000	0.00	2.22	3.801	O	|	|	|	|	9.45
9.083	0.00	2.22	3.786	O	|	|	|	|	9.43
9.167	0.00	2.21	3.770	O	|	|	|	|	9.40
9.250	0.00	2.21	3.755	O	|	|	|	|	9.38
9.333	0.00	2.20	3.740	O	|	|	|	|	9.36
9.417	0.00	2.19	3.725	O	|	|	|	|	9.33
9.500	0.00	2.19	3.710	O	|	|	|	|	9.31
9.583	0.00	2.18	3.695	O	|	|	|	|	9.29
9.667	0.00	2.18	3.680	O	|	|	|	|	9.26
9.750	0.00	2.17	3.665	O	|	|	|	|	9.24
9.833	0.00	2.17	3.650	O	|	|	|	|	9.22
9.917	0.00	2.16	3.635	O	|	|	|	|	9.19
10.000	0.00	2.16	3.620	O	|	|	|	|	9.17
10.083	0.00	2.15	3.605	O	|	|	|	|	9.15
10.167	0.00	2.15	3.590	O	|	|	|	|	9.12
10.250	0.00	2.14	3.576	O	|	|	|	|	9.10
10.333	0.00	2.14	3.561	O	|	|	|	|	9.08
10.417	0.00	2.13	3.546	O	|	|	|	|	9.05
10.500	0.00	2.12	3.532	O	|	|	|	|	9.03
10.583	0.00	2.12	3.517	O	|	|	|	|	9.01
10.667	0.00	2.11	3.502	O	|	|	|	|	8.98
10.750	0.00	2.11	3.488	O	|	|	|	|	8.96
10.833	0.00	2.10	3.473	O	|	|	|	|	8.94
10.917	0.00	2.10	3.459	O	|	|	|	|	8.92
11.000	0.00	2.09	3.444	O	|	|	|	|	8.89
11.083	0.00	2.09	3.430	O	|	|	|	|	8.87
11.167	0.00	2.08	3.416	O	|	|	|	|	8.85
11.250	0.00	2.08	3.401	O	|	|	|	|	8.83
11.333	0.00	2.07	3.387	O	|	|	|	|	8.80
11.417	0.00	2.07	3.373	O	|	|	|	|	8.78
11.500	0.00	2.06	3.358	O	|	|	|	|	8.76
11.583	0.00	2.06	3.344	O	|	|	|	|	8.74
11.667	0.00	2.05	3.330	O	|	|	|	|	8.71

11.750	0.00	2.05	3.316	O	|	|	|	|	8.69
11.833	0.00	2.04	3.302	O	|	|	|	|	8.67
11.917	0.00	2.04	3.288	O	|	|	|	|	8.65
12.000	0.00	2.03	3.274	O	|	|	|	|	8.63
12.083	0.00	2.03	3.260	O	|	|	|	|	8.60
12.167	0.00	2.02	3.246	O	|	|	|	|	8.58
12.250	0.00	2.02	3.232	O	|	|	|	|	8.56
12.333	0.00	2.01	3.218	O	|	|	|	|	8.54
12.417	0.00	2.01	3.204	O	|	|	|	|	8.52
12.500	0.00	2.00	3.191	O	|	|	|	|	8.50
12.583	0.00	2.00	3.177	O	|	|	|	|	8.47
12.667	0.00	1.99	3.163	O	|	|	|	|	8.45
12.750	0.00	1.99	3.149	O	|	|	|	|	8.43
12.833	0.00	1.98	3.136	O	|	|	|	|	8.41
12.917	0.00	1.98	3.122	O	|	|	|	|	8.39
13.000	0.00	1.97	3.108	O	|	|	|	|	8.37
13.083	0.00	1.97	3.095	O	|	|	|	|	8.35
13.167	0.00	1.96	3.081	O	|	|	|	|	8.32
13.250	0.00	1.96	3.068	O	|	|	|	|	8.30
13.333	0.00	1.95	3.054	O	|	|	|	|	8.28
13.417	0.00	1.94	3.041	O	|	|	|	|	8.25
13.500	0.00	1.93	3.028	O	|	|	|	|	8.23
13.583	0.00	1.92	3.014	O	|	|	|	|	8.20
13.667	0.00	1.92	3.001	O	|	|	|	|	8.18
13.750	0.00	1.91	2.988	O	|	|	|	|	8.15
13.833	0.00	1.90	2.975	O	|	|	|	|	8.13
13.917	0.00	1.89	2.962	O	|	|	|	|	8.10
14.000	0.00	1.88	2.949	O	|	|	|	|	8.08
14.083	0.00	1.88	2.936	O	|	|	|	|	8.05
14.167	0.00	1.87	2.923	O	|	|	|	|	8.03
14.250	0.00	1.86	2.910	O	|	|	|	|	8.01
14.333	0.00	1.85	2.897	O	|	|	|	|	7.98
14.417	0.00	1.84	2.885	O	|	|	|	|	7.96
14.500	0.00	1.84	2.872	O	|	|	|	|	7.93
14.583	0.00	1.83	2.859	O	|	|	|	|	7.91
14.667	0.00	1.82	2.847	O	|	|	|	|	7.89
14.750	0.00	1.81	2.834	O	|	|	|	|	7.86
14.833	0.00	1.81	2.822	O	|	|	|	|	7.84
14.917	0.00	1.80	2.809	O	|	|	|	|	7.82
15.000	0.00	1.79	2.797	O	|	|	|	|	7.79
15.083	0.00	1.78	2.785	O	|	|	|	|	7.77
15.167	0.00	1.77	2.772	O	|	|	|	|	7.75
15.250	0.00	1.77	2.760	O	|	|	|	|	7.72
15.333	0.00	1.76	2.748	O	|	|	|	|	7.70
15.417	0.00	1.75	2.736	O	|	|	|	|	7.68
15.500	0.00	1.74	2.724	O	|	|	|	|	7.65
15.583	0.00	1.74	2.712	O	|	|	|	|	7.63
15.667	0.00	1.73	2.700	O	|	|	|	|	7.61
15.750	0.00	1.72	2.688	O	|	|	|	|	7.59
15.833	0.00	1.71	2.676	O	|	|	|	|	7.56
15.917	0.00	1.71	2.665	O	|	|	|	|	7.54
16.000	0.00	1.70	2.653	O	|	|	|	|	7.52
16.083	0.00	1.69	2.641	O	|	|	|	|	7.50
16.167	0.00	1.69	2.629	O	|	|	|	|	7.48
16.250	0.00	1.68	2.618	O	|	|	|	|	7.45
16.333	0.00	1.67	2.606	O	|	|	|	|	7.43
16.417	0.00	1.66	2.595	O	|	|	|	|	7.41
16.500	0.00	1.66	2.583	O	|	|	|	|	7.39
16.583	0.00	1.65	2.572	O	|	|	|	|	7.37
16.667	0.00	1.64	2.561	O	|	|	|	|	7.35
16.750	0.00	1.64	2.549	O	|	|	|	|	7.32
16.833	0.00	1.63	2.538	O	|	|	|	|	7.30
16.917	0.00	1.62	2.527	O	|	|	|	|	7.28
17.000	0.00	1.62	2.516	O	|	|	|	|	7.26
17.083	0.00	1.61	2.505	O	|	|	|	|	7.24
17.167	0.00	1.60	2.494	O	|	|	|	|	7.22
17.250	0.00	1.59	2.483	O	|	|	|	|	7.20
17.333	0.00	1.59	2.472	O	|	|	|	|	7.18
17.417	0.00	1.58	2.461	O	|	|	|	|	7.16
17.500	0.00	1.57	2.450	O	|	|	|	|	7.14
17.583	0.00	1.57	2.439	O	|	|	|	|	7.12

17.667	0.00	1.56	2.428	O	|	|	|	|	7.10
17.750	0.00	1.55	2.418	O	|	|	|	|	7.08
17.833	0.00	1.55	2.407	O	|	|	|	|	7.06
17.917	0.00	1.54	2.396	O	|	|	|	|	7.04
18.000	0.00	1.53	2.386	O	|	|	|	|	7.02
18.083	0.00	1.53	2.375	O	|	|	|	|	7.00
18.167	0.00	1.52	2.365	O	|	|	|	|	6.98
18.250	0.00	1.51	2.354	O	|	|	|	|	6.96
18.333	0.00	1.51	2.344	O	|	|	|	|	6.94
18.417	0.00	1.50	2.333	O	|	|	|	|	6.92
18.500	0.00	1.50	2.323	O	|	|	|	|	6.90
18.583	0.00	1.49	2.313	O	|	|	|	|	6.88
18.667	0.00	1.48	2.303	O	|	|	|	|	6.86
18.750	0.00	1.48	2.292	O	|	|	|	|	6.84
18.833	0.00	1.47	2.282	O	|	|	|	|	6.82
18.917	0.00	1.46	2.272	O	|	|	|	|	6.80
19.000	0.00	1.46	2.262	O	|	|	|	|	6.78
19.083	0.00	1.45	2.252	O	|	|	|	|	6.76
19.167	0.00	1.45	2.242	O	|	|	|	|	6.74
19.250	0.00	1.44	2.232	O	|	|	|	|	6.73
19.333	0.00	1.43	2.222	O	|	|	|	|	6.71
19.417	0.00	1.43	2.212	O	|	|	|	|	6.69
19.500	0.00	1.42	2.203	O	|	|	|	|	6.67
19.583	0.00	1.41	2.193	O	|	|	|	|	6.65
19.667	0.00	1.41	2.183	O	|	|	|	|	6.63
19.750	0.00	1.40	2.173	O	|	|	|	|	6.61
19.833	0.00	1.40	2.164	O	|	|	|	|	6.60
19.917	0.00	1.39	2.154	O	|	|	|	|	6.58
20.000	0.00	1.38	2.145	O	|	|	|	|	6.56
20.083	0.00	1.38	2.135	O	|	|	|	|	6.54
20.167	0.00	1.37	2.126	O	|	|	|	|	6.52
20.250	0.00	1.37	2.116	O	|	|	|	|	6.51
20.333	0.00	1.36	2.107	O	|	|	|	|	6.49
20.417	0.00	1.36	2.098	O	|	|	|	|	6.47
20.500	0.00	1.35	2.088	O	|	|	|	|	6.45
20.583	0.00	1.34	2.079	O	|	|	|	|	6.44
20.667	0.00	1.34	2.070	O	|	|	|	|	6.42
20.750	0.00	1.33	2.061	O	|	|	|	|	6.40
20.833	0.00	1.33	2.051	O	|	|	|	|	6.38
20.917	0.00	1.32	2.042	O	|	|	|	|	6.37
21.000	0.00	1.32	2.033	O	|	|	|	|	6.35
21.083	0.00	1.31	2.024	O	|	|	|	|	6.33
21.167	0.00	1.30	2.015	O	|	|	|	|	6.32
21.250	0.00	1.30	2.006	O	|	|	|	|	6.30
21.333	0.00	1.28	1.997	O	|	|	|	|	6.28
21.417	0.00	1.26	1.989	O	|	|	|	|	6.26
21.500	0.00	1.25	1.980	O	|	|	|	|	6.24
21.583	0.00	1.23	1.971	O	|	|	|	|	6.22
21.667	0.00	1.22	1.963	O	|	|	|	|	6.20
21.750	0.00	1.20	1.955	O	|	|	|	|	6.19
21.833	0.00	1.19	1.946	O	|	|	|	|	6.17
21.917	0.00	1.17	1.938	O	|	|	|	|	6.15
22.000	0.00	1.15	1.930	O	|	|	|	|	6.13
22.083	0.00	1.14	1.922	O	|	|	|	|	6.12
22.167	0.00	1.13	1.915	O	|	|	|	|	6.10
22.250	0.00	1.11	1.907	O	|	|	|	|	6.08
22.333	0.00	1.10	1.899	O	|	|	|	|	6.07
22.417	0.00	1.08	1.892	O	|	|	|	|	6.05
22.500	0.00	1.07	1.884	O	|	|	|	|	6.03
22.583	0.00	1.05	1.877	O	|	|	|	|	6.02
22.667	0.00	1.04	1.870	O	|	|	|	|	6.00
22.750	0.00	1.03	1.863	O	|	|	|	|	5.99
22.833	0.00	1.01	1.856	O	|	|	|	|	5.97
22.917	0.00	1.00	1.849	O	|	|	|	|	5.95
23.000	0.00	0.99	1.842	O	|	|	|	|	5.94
23.083	0.00	0.98	1.835	O	|	|	|	|	5.93
23.167	0.00	0.96	1.828	O	|	|	|	|	5.91
23.250	0.00	0.95	1.822	O	|	|	|	|	5.90
23.333	0.00	0.94	1.815	O	|	|	|	|	5.88
23.417	0.00	0.93	1.809	O	|	|	|	|	5.87
23.500	0.00	0.92	1.803	O	|	|	|	|	5.85

23.583	0.00	0.90	1.796	O	|	|	|	|	5.84
23.667	0.00	0.89	1.790	O	|	|	|	|	5.83
23.750	0.00	0.88	1.784	O	|	|	|	|	5.81
23.833	0.00	0.87	1.778	O	|	|	|	|	5.80
23.917	0.00	0.86	1.772	O	|	|	|	|	5.79
24.000	0.00	0.85	1.766	O	|	|	|	|	5.77
24.083	0.00	0.84	1.760	O	|	|	|	|	5.76
24.167	0.00	0.83	1.755	O	|	|	|	|	5.75
24.250	0.00	0.81	1.749	O	|	|	|	|	5.74
24.333	0.00	0.80	1.743	O	|	|	|	|	5.73
24.417	0.00	0.79	1.738	O	|	|	|	|	5.71
24.500	0.00	0.78	1.732	O	|	|	|	|	5.70
24.583	0.00	0.77	1.727	O	|	|	|	|	5.69
24.667	0.00	0.76	1.722	O	|	|	|	|	5.68
24.750	0.00	0.75	1.717	O	|	|	|	|	5.67
24.833	0.00	0.74	1.711	O	|	|	|	|	5.66
24.917	0.00	0.73	1.706	O	|	|	|	|	5.64
25.000	0.00	0.73	1.701	O	|	|	|	|	5.63
25.083	0.00	0.72	1.696	O	|	|	|	|	5.62
25.167	0.00	0.71	1.691	O	|	|	|	|	5.61
25.250	0.00	0.70	1.687	O	|	|	|	|	5.60
25.333	0.00	0.69	1.682	O	|	|	|	|	5.59
25.417	0.00	0.68	1.677	O	|	|	|	|	5.58
25.500	0.00	0.67	1.672	O	|	|	|	|	5.57
25.583	0.00	0.66	1.668	O	|	|	|	|	5.56
25.667	0.00	0.65	1.663	O	|	|	|	|	5.55
25.750	0.00	0.65	1.659	O	|	|	|	|	5.54
25.833	0.00	0.64	1.654	O	|	|	|	|	5.53
25.917	0.00	0.63	1.650	O	|	|	|	|	5.52
26.000	0.00	0.62	1.646	O	|	|	|	|	5.51
26.083	0.00	0.61	1.642	O	|	|	|	|	5.50
26.167	0.00	0.61	1.637	O	|	|	|	|	5.49
26.250	0.00	0.61	1.633	O	|	|	|	|	5.48
26.333	0.00	0.61	1.629	O	|	|	|	|	5.47
26.417	0.00	0.61	1.625	O	|	|	|	|	5.46
26.500	0.00	0.61	1.621	O	|	|	|	|	5.45
26.583	0.00	0.61	1.616	O	|	|	|	|	5.44
26.667	0.00	0.61	1.612	O	|	|	|	|	5.44
26.750	0.00	0.61	1.608	O	|	|	|	|	5.43
26.833	0.00	0.60	1.604	O	|	|	|	|	5.42
26.917	0.00	0.60	1.600	O	|	|	|	|	5.41
27.000	0.00	0.60	1.596	O	|	|	|	|	5.40
27.083	0.00	0.60	1.591	O	|	|	|	|	5.39
27.167	0.00	0.60	1.587	O	|	|	|	|	5.38
27.250	0.00	0.60	1.583	O	|	|	|	|	5.37
27.333	0.00	0.60	1.579	O	|	|	|	|	5.36
27.417	0.00	0.60	1.575	O	|	|	|	|	5.35
27.500	0.00	0.60	1.571	O	|	|	|	|	5.34
27.583	0.00	0.60	1.567	O	|	|	|	|	5.33
27.667	0.00	0.60	1.562	O	|	|	|	|	5.32
27.750	0.00	0.60	1.558	O	|	|	|	|	5.31
27.833	0.00	0.60	1.554	O	|	|	|	|	5.30
27.917	0.00	0.60	1.550	O	|	|	|	|	5.29
28.000	0.00	0.60	1.546	O	|	|	|	|	5.28
28.083	0.00	0.60	1.542	O	|	|	|	|	5.27
28.167	0.00	0.60	1.538	O	|	|	|	|	5.26
28.250	0.00	0.59	1.534	O	|	|	|	|	5.25
28.333	0.00	0.59	1.530	O	|	|	|	|	5.24
28.417	0.00	0.59	1.525	O	|	|	|	|	5.23
28.500	0.00	0.59	1.521	O	|	|	|	|	5.22
28.583	0.00	0.59	1.517	O	|	|	|	|	5.21
28.667	0.00	0.59	1.513	O	|	|	|	|	5.20
28.750	0.00	0.59	1.509	O	|	|	|	|	5.19
28.833	0.00	0.59	1.505	O	|	|	|	|	5.19
28.917	0.00	0.59	1.501	O	|	|	|	|	5.18
29.000	0.00	0.59	1.497	O	|	|	|	|	5.17
29.083	0.00	0.59	1.493	O	|	|	|	|	5.16
29.167	0.00	0.59	1.489	O	|	|	|	|	5.15
29.250	0.00	0.59	1.485	O	|	|	|	|	5.14
29.333	0.00	0.59	1.481	O	|	|	|	|	5.13
29.417	0.00	0.59	1.477	O	|	|	|	|	5.12

29.500	0.00	0.59	1.473	O	|	|	|	|	5.11
29.583	0.00	0.59	1.469	O	|	|	|	|	5.10
29.667	0.00	0.58	1.465	O	|	|	|	|	5.09
29.750	0.00	0.58	1.461	O	|	|	|	|	5.08
29.833	0.00	0.58	1.457	O	|	|	|	|	5.07
29.917	0.00	0.58	1.453	O	|	|	|	|	5.06
30.000	0.00	0.58	1.449	O	|	|	|	|	5.05
30.083	0.00	0.58	1.445	O	|	|	|	|	5.04
30.167	0.00	0.58	1.441	O	|	|	|	|	5.03
30.250	0.00	0.58	1.437	O	|	|	|	|	5.02
30.333	0.00	0.58	1.433	O	|	|	|	|	5.02
30.417	0.00	0.58	1.429	O	|	|	|	|	5.01
30.500	0.00	0.58	1.425	O	|	|	|	|	5.00
30.583	0.00	0.58	1.421	O	|	|	|	|	4.99
30.667	0.00	0.58	1.417	O	|	|	|	|	4.98
30.750	0.00	0.58	1.413	O	|	|	|	|	4.97
30.833	0.00	0.58	1.409	O	|	|	|	|	4.96
30.917	0.00	0.58	1.405	O	|	|	|	|	4.95
31.000	0.00	0.58	1.401	O	|	|	|	|	4.94
31.083	0.00	0.57	1.397	O	|	|	|	|	4.93
31.167	0.00	0.57	1.393	O	|	|	|	|	4.92
31.250	0.00	0.57	1.389	O	|	|	|	|	4.91
31.333	0.00	0.57	1.385	O	|	|	|	|	4.90
31.417	0.00	0.57	1.381	O	|	|	|	|	4.90
31.500	0.00	0.57	1.377	O	|	|	|	|	4.89
31.583	0.00	0.57	1.373	O	|	|	|	|	4.88
31.667	0.00	0.57	1.369	O	|	|	|	|	4.87
31.750	0.00	0.57	1.365	O	|	|	|	|	4.86
31.833	0.00	0.57	1.361	O	|	|	|	|	4.85
31.917	0.00	0.57	1.357	O	|	|	|	|	4.84
32.000	0.00	0.57	1.353	O	|	|	|	|	4.83
32.083	0.00	0.57	1.349	O	|	|	|	|	4.82
32.167	0.00	0.57	1.346	O	|	|	|	|	4.81
32.250	0.00	0.57	1.342	O	|	|	|	|	4.80
32.333	0.00	0.57	1.338	O	|	|	|	|	4.79
32.417	0.00	0.57	1.334	O	|	|	|	|	4.79
32.500	0.00	0.57	1.330	O	|	|	|	|	4.78
32.583	0.00	0.56	1.326	O	|	|	|	|	4.77
32.667	0.00	0.56	1.322	O	|	|	|	|	4.76
32.750	0.00	0.56	1.318	O	|	|	|	|	4.75
32.833	0.00	0.56	1.314	O	|	|	|	|	4.74
32.917	0.00	0.56	1.311	O	|	|	|	|	4.73
33.000	0.00	0.56	1.307	O	|	|	|	|	4.72
33.083	0.00	0.56	1.303	O	|	|	|	|	4.71
33.167	0.00	0.56	1.299	O	|	|	|	|	4.70
33.250	0.00	0.56	1.295	O	|	|	|	|	4.69
33.333	0.00	0.56	1.291	O	|	|	|	|	4.69
33.417	0.00	0.56	1.287	O	|	|	|	|	4.68
33.500	0.00	0.56	1.284	O	|	|	|	|	4.67
33.583	0.00	0.56	1.280	O	|	|	|	|	4.66
33.667	0.00	0.56	1.276	O	|	|	|	|	4.65
33.750	0.00	0.56	1.272	O	|	|	|	|	4.64
33.833	0.00	0.56	1.268	O	|	|	|	|	4.63
33.917	0.00	0.56	1.264	O	|	|	|	|	4.62
34.000	0.00	0.56	1.261	O	|	|	|	|	4.61
34.083	0.00	0.55	1.257	O	|	|	|	|	4.61
34.167	0.00	0.55	1.253	O	|	|	|	|	4.60
34.250	0.00	0.55	1.249	O	|	|	|	|	4.59
34.333	0.00	0.55	1.245	O	|	|	|	|	4.58
34.417	0.00	0.55	1.241	O	|	|	|	|	4.57
34.500	0.00	0.55	1.238	O	|	|	|	|	4.56
34.583	0.00	0.55	1.234	O	|	|	|	|	4.55
34.667	0.00	0.55	1.230	O	|	|	|	|	4.54
34.750	0.00	0.55	1.226	O	|	|	|	|	4.53
34.833	0.00	0.55	1.222	O	|	|	|	|	4.53
34.917	0.00	0.55	1.219	O	|	|	|	|	4.52
35.000	0.00	0.55	1.215	O	|	|	|	|	4.51
35.083	0.00	0.55	1.211	O	|	|	|	|	4.50
35.167	0.00	0.55	1.207	O	|	|	|	|	4.49
35.250	0.00	0.55	1.204	O	|	|	|	|	4.48
35.333	0.00	0.55	1.200	O	|	|	|	|	4.47

35.417	0.00	0.55	1.196	O	|	|	|	|	4.46
35.500	0.00	0.55	1.192	O	|	|	|	|	4.45
35.583	0.00	0.55	1.189	O	|	|	|	|	4.45
35.667	0.00	0.54	1.185	O	|	|	|	|	4.44
35.750	0.00	0.54	1.181	O	|	|	|	|	4.43
35.833	0.00	0.54	1.177	O	|	|	|	|	4.42
35.917	0.00	0.54	1.174	O	|	|	|	|	4.41
36.000	0.00	0.54	1.170	O	|	|	|	|	4.40
36.083	0.00	0.54	1.166	O	|	|	|	|	4.39
36.167	0.00	0.54	1.162	O	|	|	|	|	4.38
36.250	0.00	0.54	1.159	O	|	|	|	|	4.38
36.333	0.00	0.54	1.155	O	|	|	|	|	4.37
36.417	0.00	0.54	1.151	O	|	|	|	|	4.36
36.500	0.00	0.54	1.147	O	|	|	|	|	4.35
36.583	0.00	0.54	1.144	O	|	|	|	|	4.34
36.667	0.00	0.54	1.140	O	|	|	|	|	4.33
36.750	0.00	0.54	1.136	O	|	|	|	|	4.32
36.833	0.00	0.54	1.133	O	|	|	|	|	4.32
36.917	0.00	0.54	1.129	O	|	|	|	|	4.31
37.000	0.00	0.54	1.125	O	|	|	|	|	4.30
37.083	0.00	0.54	1.122	O	|	|	|	|	4.29
37.167	0.00	0.53	1.118	O	|	|	|	|	4.28
37.250	0.00	0.53	1.114	O	|	|	|	|	4.27
37.333	0.00	0.53	1.111	O	|	|	|	|	4.26
37.417	0.00	0.53	1.107	O	|	|	|	|	4.25
37.500	0.00	0.53	1.103	O	|	|	|	|	4.24
37.583	0.00	0.53	1.100	O	|	|	|	|	4.23
37.667	0.00	0.53	1.096	O	|	|	|	|	4.22
37.750	0.00	0.53	1.092	O	|	|	|	|	4.21
37.833	0.00	0.53	1.089	O	|	|	|	|	4.20
37.917	0.00	0.53	1.085	O	|	|	|	|	4.19
38.000	0.00	0.53	1.081	O	|	|	|	|	4.18
38.083	0.00	0.53	1.078	O	|	|	|	|	4.17
38.167	0.00	0.53	1.074	O	|	|	|	|	4.16
38.250	0.00	0.53	1.070	O	|	|	|	|	4.15
38.333	0.00	0.52	1.067	O	|	|	|	|	4.14
38.417	0.00	0.52	1.063	O	|	|	|	|	4.13
38.500	0.00	0.52	1.060	O	|	|	|	|	4.12
38.583	0.00	0.52	1.056	O	|	|	|	|	4.11
38.667	0.00	0.52	1.052	O	|	|	|	|	4.10
38.750	0.00	0.52	1.049	O	|	|	|	|	4.09
38.833	0.00	0.52	1.045	O	|	|	|	|	4.08
38.917	0.00	0.52	1.042	O	|	|	|	|	4.07
39.000	0.00	0.52	1.038	O	|	|	|	|	4.06
39.083	0.00	0.52	1.034	O	|	|	|	|	4.05
39.167	0.00	0.52	1.031	O	|	|	|	|	4.04
39.250	0.00	0.52	1.027	O	|	|	|	|	4.03
39.333	0.00	0.52	1.024	O	|	|	|	|	4.02
39.417	0.00	0.52	1.020	O	|	|	|	|	4.01
39.500	0.00	0.52	1.017	O	|	|	|	|	4.00
39.583	0.00	0.51	1.013	O	|	|	|	|	3.99
39.667	0.00	0.51	1.010	O	|	|	|	|	3.98
39.750	0.00	0.51	1.006	O	|	|	|	|	3.97
39.833	0.00	0.51	1.002	O	|	|	|	|	3.96
39.917	0.00	0.51	0.999	O	|	|	|	|	3.95
40.000	0.00	0.51	0.995	O	|	|	|	|	3.94
40.083	0.00	0.51	0.992	O	|	|	|	|	3.93
40.167	0.00	0.51	0.988	O	|	|	|	|	3.92
40.250	0.00	0.51	0.985	O	|	|	|	|	3.91
40.333	0.00	0.51	0.981	O	|	|	|	|	3.90
40.417	0.00	0.51	0.978	O	|	|	|	|	3.89
40.500	0.00	0.51	0.974	O	|	|	|	|	3.88
40.583	0.00	0.51	0.971	O	|	|	|	|	3.87
40.667	0.00	0.51	0.967	O	|	|	|	|	3.86
40.750	0.00	0.51	0.964	O	|	|	|	|	3.85
40.833	0.00	0.51	0.960	O	|	|	|	|	3.84
40.917	0.00	0.50	0.957	O	|	|	|	|	3.83
41.000	0.00	0.50	0.953	O	|	|	|	|	3.82
41.083	0.00	0.50	0.950	O	|	|	|	|	3.81
41.167	0.00	0.50	0.947	O	|	|	|	|	3.80
41.250	0.00	0.50	0.943	O	|	|	|	|	3.79

41.333	0.00	0.50	0.940	O	|	|	|	|	3.78
41.417	0.00	0.50	0.936	O	|	|	|	|	3.77
41.500	0.00	0.50	0.933	O	|	|	|	|	3.76
41.583	0.00	0.50	0.929	O	|	|	|	|	3.75
41.667	0.00	0.50	0.926	O	|	|	|	|	3.74
41.750	0.00	0.50	0.922	O	|	|	|	|	3.73
41.833	0.00	0.50	0.919	O	|	|	|	|	3.72
41.917	0.00	0.50	0.916	O	|	|	|	|	3.72
42.000	0.00	0.50	0.912	O	|	|	|	|	3.71
42.083	0.00	0.50	0.909	O	|	|	|	|	3.70
42.167	0.00	0.49	0.905	O	|	|	|	|	3.69
42.250	0.00	0.49	0.902	O	|	|	|	|	3.68
42.333	0.00	0.49	0.898	O	|	|	|	|	3.67
42.417	0.00	0.49	0.895	O	|	|	|	|	3.66
42.500	0.00	0.49	0.892	O	|	|	|	|	3.65
42.583	0.00	0.49	0.888	O	|	|	|	|	3.64
42.667	0.00	0.49	0.885	O	|	|	|	|	3.63
42.750	0.00	0.49	0.882	O	|	|	|	|	3.62
42.833	0.00	0.49	0.878	O	|	|	|	|	3.61
42.917	0.00	0.49	0.875	O	|	|	|	|	3.60
43.000	0.00	0.49	0.871	O	|	|	|	|	3.59
43.083	0.00	0.49	0.868	O	|	|	|	|	3.58
43.167	0.00	0.49	0.865	O	|	|	|	|	3.57
43.250	0.00	0.49	0.861	O	|	|	|	|	3.56
43.333	0.00	0.49	0.858	O	|	|	|	|	3.56
43.417	0.00	0.49	0.855	O	|	|	|	|	3.55
43.500	0.00	0.48	0.851	O	|	|	|	|	3.54
43.583	0.00	0.48	0.848	O	|	|	|	|	3.53
43.667	0.00	0.48	0.845	O	|	|	|	|	3.52
43.750	0.00	0.48	0.841	O	|	|	|	|	3.51
43.833	0.00	0.48	0.838	O	|	|	|	|	3.50
43.917	0.00	0.48	0.835	O	|	|	|	|	3.49
44.000	0.00	0.48	0.831	O	|	|	|	|	3.48
44.083	0.00	0.48	0.828	O	|	|	|	|	3.47
44.167	0.00	0.48	0.825	O	|	|	|	|	3.46
44.250	0.00	0.48	0.821	O	|	|	|	|	3.45
44.333	0.00	0.48	0.818	O	|	|	|	|	3.44
44.417	0.00	0.48	0.815	O	|	|	|	|	3.44
44.500	0.00	0.48	0.812	O	|	|	|	|	3.43
44.583	0.00	0.48	0.808	O	|	|	|	|	3.42
44.667	0.00	0.48	0.805	O	|	|	|	|	3.41
44.750	0.00	0.48	0.802	O	|	|	|	|	3.40
44.833	0.00	0.48	0.798	O	|	|	|	|	3.39
44.917	0.00	0.47	0.795	O	|	|	|	|	3.38
45.000	0.00	0.47	0.792	O	|	|	|	|	3.37
45.083	0.00	0.47	0.789	O	|	|	|	|	3.36
45.167	0.00	0.47	0.785	O	|	|	|	|	3.35
45.250	0.00	0.47	0.782	O	|	|	|	|	3.34
45.333	0.00	0.47	0.779	O	|	|	|	|	3.34
45.417	0.00	0.47	0.776	O	|	|	|	|	3.33
45.500	0.00	0.47	0.772	O	|	|	|	|	3.32
45.583	0.00	0.47	0.769	O	|	|	|	|	3.31
45.667	0.00	0.47	0.766	O	|	|	|	|	3.30
45.750	0.00	0.47	0.763	O	|	|	|	|	3.29
45.833	0.00	0.47	0.759	O	|	|	|	|	3.28
45.917	0.00	0.47	0.756	O	|	|	|	|	3.27
46.000	0.00	0.47	0.753	O	|	|	|	|	3.26
46.083	0.00	0.46	0.750	O	|	|	|	|	3.25
46.167	0.00	0.46	0.747	O	|	|	|	|	3.24
46.250	0.00	0.46	0.743	O	|	|	|	|	3.22
46.333	0.00	0.46	0.740	O	|	|	|	|	3.21
46.417	0.00	0.46	0.737	O	|	|	|	|	3.20
46.500	0.00	0.46	0.734	O	|	|	|	|	3.19
46.583	0.00	0.46	0.731	O	|	|	|	|	3.18
46.667	0.00	0.46	0.728	O	|	|	|	|	3.17
46.750	0.00	0.46	0.724	O	|	|	|	|	3.16
46.833	0.00	0.46	0.721	O	|	|	|	|	3.15
46.917	0.00	0.46	0.718	O	|	|	|	|	3.14
47.000	0.00	0.46	0.715	O	|	|	|	|	3.13
47.083	0.00	0.46	0.712	O	|	|	|	|	3.12
47.167	0.00	0.45	0.709	O	|	|	|	|	3.11

47.250	0.00	0.45	0.706	O					3.10
47.333	0.00	0.45	0.702	O					3.09
47.417	0.00	0.45	0.699	O					3.08
47.500	0.00	0.45	0.696	O					3.07
47.583	0.00	0.45	0.693	O					3.06
47.667	0.00	0.45	0.690	O					3.05
47.750	0.00	0.45	0.687	O					3.04
47.833	0.00	0.45	0.684	O					3.03
47.917	0.00	0.45	0.681	O					3.02
48.000	0.00	0.45	0.678	O					3.01
48.083	0.00	0.45	0.675	O					3.00
48.167	0.00	0.45	0.671	O					2.98
48.250	0.00	0.44	0.668	O					2.97
48.333	0.00	0.44	0.665	O					2.96
48.417	0.00	0.44	0.662	O					2.95
48.500	0.00	0.44	0.659	O					2.94
48.583	0.00	0.44	0.656	O					2.93
48.667	0.00	0.44	0.653	O					2.92
48.750	0.00	0.44	0.650	O					2.91
48.833	0.00	0.44	0.647	O					2.90
48.917	0.00	0.44	0.644	O					2.89
49.000	0.00	0.44	0.641	O					2.88
49.083	0.00	0.44	0.638	O					2.87
49.167	0.00	0.44	0.635	O					2.86
49.250	0.00	0.44	0.632	O					2.85
49.333	0.00	0.43	0.629	O					2.84
49.417	0.00	0.43	0.626	O					2.83
49.500	0.00	0.43	0.623	O					2.82
49.583	0.00	0.43	0.620	O					2.81
49.667	0.00	0.43	0.617	O					2.80
49.750	0.00	0.43	0.614	O					2.79
49.833	0.00	0.43	0.611	O					2.78
49.917	0.00	0.43	0.608	O					2.77
50.000	0.00	0.43	0.605	O					2.76
50.083	0.00	0.43	0.602	O					2.75
50.167	0.00	0.43	0.599	O					2.74
50.250	0.00	0.43	0.596	O					2.73
50.333	0.00	0.43	0.593	O					2.72
50.417	0.00	0.43	0.591	O					2.72
50.500	0.00	0.42	0.588	O					2.71
50.583	0.00	0.42	0.585	O					2.70
50.667	0.00	0.42	0.582	O					2.69
50.750	0.00	0.42	0.579	O					2.68
50.833	0.00	0.42	0.576	O					2.67
50.917	0.00	0.42	0.573	O					2.66
51.000	0.00	0.42	0.570	O					2.65
51.083	0.00	0.42	0.567	O					2.64
51.167	0.00	0.42	0.564	O					2.63
51.250	0.00	0.42	0.562	O					2.62
51.333	0.00	0.42	0.559	O					2.61
51.417	0.00	0.42	0.556	O					2.60
51.500	0.00	0.42	0.553	O					2.59
51.583	0.00	0.42	0.550	O					2.58
51.667	0.00	0.41	0.547	O					2.57
51.750	0.00	0.41	0.544	O					2.56
51.833	0.00	0.41	0.542	O					2.55
51.917	0.00	0.41	0.539	O					2.54
52.000	0.00	0.41	0.536	O					2.53
52.083	0.00	0.41	0.533	O					2.52
52.167	0.00	0.41	0.530	O					2.51
52.250	0.00	0.41	0.527	O					2.50
52.333	0.00	0.41	0.525	O					2.50
52.417	0.00	0.41	0.522	O					2.49
52.500	0.00	0.41	0.519	O					2.48
52.583	0.00	0.41	0.516	O					2.47
52.667	0.00	0.41	0.513	O					2.46
52.750	0.00	0.41	0.511	O					2.45
52.833	0.00	0.40	0.508	O					2.44
52.917	0.00	0.40	0.505	O					2.43
53.000	0.00	0.40	0.502	O					2.42
53.083	0.00	0.40	0.499	O					2.41

53.167	0.00	0.40	0.497	O					2.40
53.250	0.00	0.40	0.494	O					2.39
53.333	0.00	0.40	0.491	O					2.38
53.417	0.00	0.40	0.488	O					2.37
53.500	0.00	0.40	0.486	O					2.37
53.583	0.00	0.40	0.483	O					2.36
53.667	0.00	0.40	0.480	O					2.35
53.750	0.00	0.40	0.477	O					2.34
53.833	0.00	0.40	0.475	O					2.33
53.917	0.00	0.40	0.472	O					2.32
54.000	0.00	0.39	0.469	O					2.31
54.083	0.00	0.39	0.466	O					2.30
54.167	0.00	0.39	0.464	O					2.29
54.250	0.00	0.39	0.461	O					2.28
54.333	0.00	0.39	0.458	O					2.27
54.417	0.00	0.39	0.456	O					2.26
54.500	0.00	0.39	0.453	O					2.25
54.583	0.00	0.39	0.450	O					2.24
54.667	0.00	0.39	0.448	O					2.23
54.750	0.00	0.39	0.445	O					2.22
54.833	0.00	0.39	0.442	O					2.21
54.917	0.00	0.38	0.440	O					2.20
55.000	0.00	0.38	0.437	O					2.19
55.083	0.00	0.38	0.434	O					2.18
55.167	0.00	0.38	0.432	O					2.18
55.250	0.00	0.38	0.429	O					2.17
55.333	0.00	0.38	0.427	O					2.16
55.417	0.00	0.38	0.424	O					2.15
55.500	0.00	0.38	0.421	O					2.14
55.583	0.00	0.38	0.419	O					2.13
55.667	0.00	0.38	0.416	O					2.12
55.750	0.00	0.38	0.414	O					2.11
55.833	0.00	0.37	0.411	O					2.10
55.917	0.00	0.37	0.408	O					2.09
56.000	0.00	0.37	0.406	O					2.08
56.083	0.00	0.37	0.403	O					2.07
56.167	0.00	0.37	0.401	O					2.06
56.250	0.00	0.37	0.398	O					2.05
56.333	0.00	0.37	0.396	O					2.04
56.417	0.00	0.37	0.393	O					2.03
56.500	0.00	0.37	0.391	O					2.02
56.583	0.00	0.37	0.388	O					2.02
56.667	0.00	0.37	0.385	O					2.01
56.750	0.00	0.36	0.383	O					2.00
56.833	0.00	0.36	0.380	O					1.99
56.917	0.00	0.36	0.378	O					1.98
57.000	0.00	0.36	0.375	O					1.97
57.083	0.00	0.36	0.373	O					1.96
57.167	0.00	0.36	0.370	O					1.95
57.250	0.00	0.36	0.368	O					1.94
57.333	0.00	0.36	0.366	O					1.93
57.417	0.00	0.36	0.363	O					1.92
57.500	0.00	0.36	0.361	O					1.92
57.583	0.00	0.36	0.358	O					1.91
57.667	0.00	0.35	0.356	O					1.90
57.750	0.00	0.35	0.353	O					1.89
57.833	0.00	0.35	0.351	O					1.88
57.917	0.00	0.35	0.348	O					1.87
58.000	0.00	0.35	0.346	O					1.86
58.083	0.00	0.35	0.344	O					1.85
58.167	0.00	0.35	0.341	O					1.84
58.250	0.00	0.35	0.339	O					1.84
58.333	0.00	0.35	0.336	O					1.83
58.417	0.00	0.35	0.334	O					1.82
58.500	0.00	0.35	0.332	O					1.81
58.583	0.00	0.35	0.329	O					1.80
58.667	0.00	0.34	0.327	O					1.79
58.750	0.00	0.34	0.324	O					1.78
58.833	0.00	0.34	0.322	O					1.77
58.917	0.00	0.34	0.320	O					1.77
59.000	0.00	0.34	0.317	O					1.76

59.083	0.00	0.34	0.315	O	|	|	|	|	1.75
59.167	0.00	0.34	0.313	O	|	|	|	|	1.74
59.250	0.00	0.34	0.310	O	|	|	|	|	1.73
59.333	0.00	0.34	0.308	O	|	|	|	|	1.72
59.417	0.00	0.34	0.306	O	|	|	|	|	1.72
59.500	0.00	0.34	0.303	O	|	|	|	|	1.71
59.583	0.00	0.34	0.301	O	|	|	|	|	1.70
59.667	0.00	0.33	0.299	O	|	|	|	|	1.69
59.750	0.00	0.33	0.297	O	|	|	|	|	1.68
59.833	0.00	0.33	0.294	O	|	|	|	|	1.67
59.917	0.00	0.33	0.292	O	|	|	|	|	1.66
60.000	0.00	0.33	0.290	O	|	|	|	|	1.66
60.083	0.00	0.33	0.287	O	|	|	|	|	1.65
60.167	0.00	0.33	0.285	O	|	|	|	|	1.64
60.250	0.00	0.33	0.283	O	|	|	|	|	1.63
60.333	0.00	0.33	0.281	O	|	|	|	|	1.62
60.417	0.00	0.33	0.278	O	|	|	|	|	1.62
60.500	0.00	0.33	0.276	O	|	|	|	|	1.61
60.583	0.00	0.33	0.274	O	|	|	|	|	1.60
60.667	0.00	0.32	0.272	O	|	|	|	|	1.59
60.750	0.00	0.32	0.269	O	|	|	|	|	1.58
60.833	0.00	0.32	0.267	O	|	|	|	|	1.57
60.917	0.00	0.32	0.265	O	|	|	|	|	1.57
61.000	0.00	0.32	0.263	O	|	|	|	|	1.56
61.083	0.00	0.32	0.261	O	|	|	|	|	1.55
61.167	0.00	0.32	0.258	O	|	|	|	|	1.54
61.250	0.00	0.32	0.256	O	|	|	|	|	1.53
61.333	0.00	0.32	0.254	O	|	|	|	|	1.53
61.417	0.00	0.32	0.252	O	|	|	|	|	1.52
61.500	0.00	0.32	0.250	O	|	|	|	|	1.51
61.583	0.00	0.32	0.247	O	|	|	|	|	1.50
61.667	0.00	0.32	0.245	O	|	|	|	|	1.49
61.750	0.00	0.31	0.243	O	|	|	|	|	1.49
61.833	0.00	0.31	0.241	O	|	|	|	|	1.48
61.917	0.00	0.31	0.239	O	|	|	|	|	1.47
62.000	0.00	0.31	0.237	O	|	|	|	|	1.46
62.083	0.00	0.31	0.234	O	|	|	|	|	1.45
62.167	0.00	0.31	0.232	O	|	|	|	|	1.45
62.250	0.00	0.31	0.230	O	|	|	|	|	1.44
62.333	0.00	0.31	0.228	O	|	|	|	|	1.43
62.417	0.00	0.31	0.226	O	|	|	|	|	1.42
62.500	0.00	0.31	0.224	O	|	|	|	|	1.42
62.583	0.00	0.31	0.222	O	|	|	|	|	1.41
62.667	0.00	0.31	0.220	O	|	|	|	|	1.40
62.750	0.00	0.31	0.217	O	|	|	|	|	1.39
62.833	0.00	0.30	0.215	O	|	|	|	|	1.39
62.917	0.00	0.30	0.213	O	|	|	|	|	1.38
63.000	0.00	0.30	0.211	O	|	|	|	|	1.37
63.083	0.00	0.30	0.209	O	|	|	|	|	1.36
63.167	0.00	0.30	0.207	O	|	|	|	|	1.35
63.250	0.00	0.30	0.205	O	|	|	|	|	1.35
63.333	0.00	0.30	0.203	O	|	|	|	|	1.34
63.417	0.00	0.30	0.201	O	|	|	|	|	1.33
63.500	0.00	0.30	0.199	O	|	|	|	|	1.32
63.583	0.00	0.30	0.197	O	|	|	|	|	1.32
63.667	0.00	0.30	0.195	O	|	|	|	|	1.31
63.750	0.00	0.30	0.193	O	|	|	|	|	1.30
63.833	0.00	0.29	0.191	O	|	|	|	|	1.29
63.917	0.00	0.29	0.189	O	|	|	|	|	1.28
64.000	0.00	0.29	0.187	O	|	|	|	|	1.27
64.083	0.00	0.29	0.185	O	|	|	|	|	1.26
64.167	0.00	0.29	0.183	O	|	|	|	|	1.24
64.250	0.00	0.29	0.181	O	|	|	|	|	1.23
64.333	0.00	0.28	0.179	O	|	|	|	|	1.22
64.417	0.00	0.28	0.177	O	|	|	|	|	1.21
64.500	0.00	0.28	0.175	O	|	|	|	|	1.20
64.583	0.00	0.28	0.173	O	|	|	|	|	1.19
64.667	0.00	0.28	0.171	O	|	|	|	|	1.18
64.750	0.00	0.28	0.169	O	|	|	|	|	1.17
64.833	0.00	0.27	0.167	O	|	|	|	|	1.16
64.917	0.00	0.27	0.165	O	|	|	|	|	1.14

65.000	0.00	0.27	0.163	O	|	|	|	|	1.13
65.083	0.00	0.27	0.161	O	|	|	|	|	1.12
65.167	0.00	0.27	0.160	O	|	|	|	|	1.11
65.250	0.00	0.27	0.158	O	|	|	|	|	1.10
65.333	0.00	0.26	0.156	O	|	|	|	|	1.09
65.417	0.00	0.26	0.154	O	|	|	|	|	1.08
65.500	0.00	0.26	0.152	O	|	|	|	|	1.07
65.583	0.00	0.26	0.151	O	|	|	|	|	1.06
65.667	0.00	0.26	0.149	O	|	|	|	|	1.05
65.750	0.00	0.26	0.147	O	|	|	|	|	1.04
65.833	0.00	0.25	0.145	O	|	|	|	|	1.03
65.917	0.00	0.25	0.144	O	|	|	|	|	1.02
66.000	0.00	0.25	0.142	O	|	|	|	|	1.01
66.083	0.00	0.25	0.140	O	|	|	|	|	1.00
66.167	0.00	0.25	0.138	O	|	|	|	|	0.99
66.250	0.00	0.25	0.137	O	|	|	|	|	0.98
66.333	0.00	0.24	0.135	O	|	|	|	|	0.97
66.417	0.00	0.24	0.133	O	|	|	|	|	0.96
66.500	0.00	0.24	0.132	O	|	|	|	|	0.95
66.583	0.00	0.24	0.130	O	|	|	|	|	0.94
66.667	0.00	0.24	0.128	O	|	|	|	|	0.93
66.750	0.00	0.24	0.127	O	|	|	|	|	0.92
66.833	0.00	0.24	0.125	O	|	|	|	|	0.91
66.917	0.00	0.23	0.123	O	|	|	|	|	0.90
67.000	0.00	0.23	0.122	O	|	|	|	|	0.89
67.083	0.00	0.23	0.120	O	|	|	|	|	0.88
67.167	0.00	0.23	0.119	O	|	|	|	|	0.87
67.250	0.00	0.23	0.117	O	|	|	|	|	0.86
67.333	0.00	0.23	0.115	O	|	|	|	|	0.85
67.417	0.00	0.23	0.114	O	|	|	|	|	0.85
67.500	0.00	0.22	0.112	O	|	|	|	|	0.84
67.583	0.00	0.22	0.111	O	|	|	|	|	0.83
67.667	0.00	0.22	0.109	O	|	|	|	|	0.82
67.750	0.00	0.22	0.108	O	|	|	|	|	0.81
67.833	0.00	0.22	0.106	O	|	|	|	|	0.80
67.917	0.00	0.22	0.105	O	|	|	|	|	0.79
68.000	0.00	0.22	0.103	O	|	|	|	|	0.78
68.083	0.00	0.22	0.102	O	|	|	|	|	0.78
68.167	0.00	0.21	0.100	O	|	|	|	|	0.77
68.250	0.00	0.21	0.099	O	|	|	|	|	0.76
68.333	0.00	0.21	0.097	O	|	|	|	|	0.75
68.417	0.00	0.21	0.096	O	|	|	|	|	0.74
68.500	0.00	0.21	0.094	O	|	|	|	|	0.73
68.583	0.00	0.21	0.093	O	|	|	|	|	0.72
68.667	0.00	0.21	0.092	O	|	|	|	|	0.72
68.750	0.00	0.20	0.090	O	|	|	|	|	0.71
68.833	0.00	0.20	0.089	O	|	|	|	|	0.70
68.917	0.00	0.20	0.087	O	|	|	|	|	0.69
69.000	0.00	0.20	0.086	O	|	|	|	|	0.68
69.083	0.00	0.20	0.085	O	|	|	|	|	0.68
69.167	0.00	0.20	0.083	O	|	|	|	|	0.67
69.250	0.00	0.20	0.082	O	|	|	|	|	0.66
69.333	0.00	0.20	0.080	O	|	|	|	|	0.65
69.417	0.00	0.19	0.079	O	|	|	|	|	0.64
69.500	0.00	0.19	0.078	O	|	|	|	|	0.64
69.583	0.00	0.19	0.076	O	|	|	|	|	0.63
69.667	0.00	0.19	0.075	O	|	|	|	|	0.62
69.750	0.00	0.19	0.074	O	|	|	|	|	0.61
69.833	0.00	0.19	0.073	O	|	|	|	|	0.61
69.917	0.00	0.19	0.071	O	|	|	|	|	0.60
70.000	0.00	0.19	0.070	O	|	|	|	|	0.59
70.083	0.00	0.19	0.069	O	|	|	|	|	0.58
70.167	0.00	0.18	0.067	O	|	|	|	|	0.58
70.250	0.00	0.18	0.066	O	|	|	|	|	0.57
70.333	0.00	0.18	0.065	O	|	|	|	|	0.56
70.417	0.00	0.18	0.064	O	|	|	|	|	0.55
70.500	0.00	0.18	0.062	O	|	|	|	|	0.55
70.583	0.00	0.18	0.061	O	|	|	|	|	0.54
70.667	0.00	0.18	0.060	O	|	|	|	|	0.53
70.750	0.00	0.18	0.059	O	|	|	|	|	0.52
70.833	0.00	0.18	0.057	O	|	|	|	|	0.52

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70.917    0.00    0.17      0.056  O       |       |       |       |     0.51
71.000    0.00    0.17      0.055  O       |       |       |       |     0.50
71.083    0.00    0.17      0.054  O       |       |       |       |     0.50
71.167    0.00    0.17      0.053  O       |       |       |       |     0.49
71.250    0.00    0.17      0.052  O       |       |       |       |     0.48
71.333    0.00    0.17      0.050  O       |       |       |       |     0.48
71.417    0.00    0.17      0.049  O       |       |       |       |     0.47
71.500    0.00    0.17      0.048  O       |       |       |       |     0.46
71.583    0.00    0.17      0.047  O       |       |       |       |     0.46
71.667    0.00    0.17      0.046  O       |       |       |       |     0.45
71.750    0.00    0.16      0.045  O       |       |       |       |     0.44
71.833    0.00    0.16      0.043  O       |       |       |       |     0.44
71.917    0.00    0.16      0.042  O       |       |       |       |     0.43
72.000    0.00    0.16      0.041  O       |       |       |       |     0.42
72.083    0.00    0.16      0.040  O       |       |       |       |     0.42
72.167    0.00    0.16      0.039  O       |       |       |       |     0.41
72.250    0.00    0.16      0.038  O       |       |       |       |     0.40
72.333    0.00    0.16      0.037  O       |       |       |       |     0.40
72.417    0.00    0.16      0.036  O       |       |       |       |     0.39
72.500    0.00    0.16      0.035  O       |       |       |       |     0.39
72.583    0.00    0.15      0.034  O       |       |       |       |     0.38
72.667    0.00    0.15      0.033  O       |       |       |       |     0.37
72.750    0.00    0.15      0.032  O       |       |       |       |     0.37
72.833    0.00    0.15      0.031  O       |       |       |       |     0.36
72.917    0.00    0.15      0.029  O       |       |       |       |     0.36
73.000    0.00    0.15      0.028  O       |       |       |       |     0.35
73.083    0.00    0.15      0.027  O       |       |       |       |     0.34
73.167    0.00    0.15      0.026  O       |       |       |       |     0.34
73.250    0.00    0.15      0.025  O       |       |       |       |     0.33
73.333    0.00    0.15      0.024  O       |       |       |       |     0.33
73.417    0.00    0.15      0.023  O       |       |       |       |     0.32
73.500    0.00    0.14      0.022  O       |       |       |       |     0.31
73.583    0.00    0.14      0.021  O       |       |       |       |     0.31
73.667    0.00    0.14      0.020  O       |       |       |       |     0.30
73.750    0.00    0.14      0.019  O       |       |       |       |     0.29
73.833    0.00    0.13      0.019  O       |       |       |       |     0.28
73.917    0.00    0.13      0.018  O       |       |       |       |     0.26
74.000    0.00    0.12      0.017  O       |       |       |       |     0.25
74.083    0.00    0.11      0.016  O       |       |       |       |     0.24
74.167    0.00    0.11      0.015  O       |       |       |       |     0.23
74.250    0.00    0.10      0.014  O       |       |       |       |     0.22
74.333    0.00    0.10      0.014  O       |       |       |       |     0.21

Remaining water in basin =    0.01 (Ac.Ft)


****************************HYDROGRAPH DATA****************************
               Number of intervals =   892
               Time interval =    5.0 (Min.)
               Maximum/Peak flow rate =       50.262 (CFS)
               Total volume =       6.900 (Ac.Ft)
       Status of hydrographs being held in storage
                    Stream 1  Stream 2  Stream 3  Stream 4  Stream 5
       Peak (CFS)      0.000     0.000     0.000     0.000     0.000
       Vol (Ac.Ft)      0.000     0.000     0.000     0.000     0.000
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FLOOD HYDROGRAPH ROUTING PROGRAM
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Study date: 08/18/25

Program License Serial Number 5006

********** HYDROGRAPH INFORMATION **********

From study/file name: PROA3100.rte
**********HYDROGRAPH DATA**********
Number of intervals = 54
Time interval = 5.0 (Min.)
Maximum/Peak flow rate = 98.646 (CFS)
Total volume = 8.967 (Ac.Ft)

Status of hydrographs being held in storage

	Stream 1	Stream 2	Stream 3	Stream 4	Stream 5
Peak (CFS)	0.000	0.000	0.000	0.000	0.000
Vol (Ac.Ft)	0.000	0.000	0.000	0.000	0.000

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Process from Point/Station 0.000 to Point/Station 0.000
**** RETARDING BASIN ROUTING ****

User entry of depth-outflow-storage data

Total number of inflow hydrograph intervals = 54
Hydrograph time unit = 5.000 (Min.)
Initial depth in storage basin = 0.00(Ft.)

Initial basin depth = 0.00 (Ft.)
Initial basin storage = 0.00 (Ac.Ft)
Initial basin outflow = 0.00 (CFS)

Depth vs. Storage and Depth vs. Discharge data:

Basin Depth (Ft.)	Storage (Ac.Ft)	Outflow (CFS)	(S-O*dt/2) (Ac.Ft)	(S+O*dt/2) (Ac.Ft)
0.000	0.000	0.000	0.000	0.000
0.300	0.020	0.142	0.020	0.020
1.300	0.192	0.296	0.191	0.193
2.300	0.466	0.394	0.465	0.467
3.300	0.766	0.469	0.764	0.768
4.300	1.126	0.536	1.124	1.128
5.500	1.640	0.610	1.638	1.642
6.300	2.007	1.299	2.003	2.011
8.300	3.066	1.957	3.059	3.073
10.300	4.341	2.417	4.333	4.349
11.400	5.141	2.632	5.132	5.150
12.300	5.851	167.187	5.275	6.427
13.300	6.699	657.066	4.436	8.962
14.300	7.611	1377.819	2.866	12.356

Hydrograph Detention Basin Routing

Graph values: 'I'= unit inflow; 'O'=outflow at time shown

Time (Hours)	Inflow (CFS)	Outflow (CFS)	Storage (Ac.Ft)	.0	24.7	49.32	73.98	98.65	Depth (Ft.)
0.083	0.61	0.01	0.002	O	|	|	|	|	0.03
0.167	3.15	0.10	0.015	OI	|	|	|	|	0.22
0.250	6.45	0.17	0.047	O I	|	|	|	|	0.46
0.333	8.07	0.21	0.095	O I	|	|	|	|	0.74
0.417	9.23	0.26	0.153	O I	|	|	|	|	1.08
0.500	10.78	0.31	0.220	O I	|	|	|	|	1.40
0.583	12.24	0.33	0.297	O I	|	|	|	|	1.68
0.667	13.20	0.36	0.383	O I	|	|	|	|	2.00
0.750	13.88	0.40	0.473	O I	|	|	|	|	2.32
0.833	14.72	0.42	0.569	O I	|	|	|	|	2.64
0.917	14.69	0.44	0.667	O I	|	|	|	|	2.97
1.000	14.43	0.47	0.764	O I	|	|	|	|	3.29
1.083	15.38	0.49	0.864	O I	|	|	|	|	3.57
1.167	17.81	0.51	0.974	O I	|	|	|	|	3.88
1.250	20.38	0.53	1.102	O I	|	|	|	|	4.23
1.333	21.58	0.55	1.243	O I	|	|	|	|	4.57
1.417	22.10	0.57	1.390	O I	|	|	|	|	4.92
1.500	24.03	0.60	1.545	O I	|	|	|	|	5.28
1.583	27.10	0.75	1.716	O I	|	|	|	|	5.67
1.667	28.41	1.10	1.901	O I	|	|	|	|	6.07
1.750	29.71	1.35	2.092	O I	|	|	|	|	6.46
1.833	33.32	1.48	2.300	O I	|	|	|	|	6.85
1.917	36.45	1.62	2.529	O I	|	|	|	|	7.29
2.000	36.95	1.77	2.770	O I	|	|	|	|	7.74
2.083	37.05	1.92	3.012	O I	|	|	|	|	8.20
2.167	39.01	2.03	3.261	O I	|	|	|	|	8.61
2.250	45.04	2.13	3.536	O I	|	|	|	|	9.04
2.333	53.11	2.24	3.859	O I	|	|	|	|	9.54
2.417	57.99	2.38	4.226	O I	|	|	|	|	10.12
2.500	67.61	2.50	4.641	O I	|	|	|	|	10.71
2.583	85.74	4.00	5.147	O I	|	|	|	|	11.41
2.667	98.65	82.29	5.485	| O	|	|	| I	|	11.84
2.750	96.54	95.87	5.543	|	| O	|	|	|	11.91
2.833	75.35	87.06	5.505	|	|	| I	O |	|	11.86
2.917	51.71	66.17	5.415	|	| I	O |	|	|	11.75
3.000	38.75	47.58	5.335	|	| I	O |	|	|	11.65
3.083	30.14	35.92	5.285	|	| I O |	|	|	|	11.58
3.167	21.85	27.11	5.247	|	I O |	|	|	|	11.53
3.250	15.72	19.72	5.215	|	I O |	|	|	|	11.49
3.333	12.01	14.52	5.192	|	I O |	|	|	|	11.47
3.417	9.48	11.17	5.178	|	O |	|	|	|	11.45
3.500	7.64	8.85	5.168	|	O |	|	|	|	11.43
3.583	6.16	7.12	5.160	|	I O |	|	|	|	11.42
3.667	4.87	5.70	5.154	|	O |	|	|	|	11.42
3.750	3.81	4.49	5.149	|	O |	|	|	|	11.41
3.833	3.00	3.53	5.145	|	I O |	|	|	|	11.40
3.917	2.35	2.77	5.142	|	O |	|	|	|	11.40
4.000	1.71	2.63	5.137	|	O |	|	|	|	11.39
4.083	1.09	2.63	5.129	|	O |	|	|	|	11.38
4.167	0.53	2.63	5.116	|	O |	|	|	|	11.37
4.250	0.23	2.62	5.101	|	O |	|	|	|	11.34
4.333	0.15	2.62	5.084	|	O |	|	|	|	11.32
4.417	0.07	2.61	5.067	|	O |	|	|	|	11.30
4.500	0.01	2.61	5.049	|	O |	|	|	|	11.27
4.583	0.00	2.60	5.031	|	O |	|	|	|	11.25
4.667	0.00	2.60	5.013	|	O |	|	|	|	11.22
4.750	0.00	2.59	4.995	|	O |	|	|	|	11.20
4.833	0.00	2.59	4.977	|	O |	|	|	|	11.17
4.917	0.00	2.58	4.960	|	O |	|	|	|	11.15
5.000	0.00	2.58	4.942	|	O |	|	|	|	11.13
5.083	0.00	2.57	4.924	|	O |	|	|	|	11.10
5.167	0.00	2.57	4.906	|	O |	|	|	|	11.08
5.250	0.00	2.56	4.889	|	O |	|	|	|	11.05
5.333	0.00	2.56	4.871	|	O |	|	|	|	11.03
5.417	0.00	2.55	4.853	|	O |	|	|	|	11.00
5.500	0.00	2.55	4.836	|	O |	|	|	|	10.98
5.583	0.00	2.55	4.818	|	O |	|	|	|	10.96
5.667	0.00	2.54	4.801	|	O |	|	|	|	10.93
5.750	0.00	2.54	4.783	|	O |	|	|	|	10.91

5.833	0.00	2.53	4.766	O	|	|	|	|	10.88
5.917	0.00	2.53	4.748	O	|	|	|	|	10.86
6.000	0.00	2.52	4.731	O	|	|	|	|	10.84
6.083	0.00	2.52	4.714	O	|	|	|	|	10.81
6.167	0.00	2.51	4.696	O	|	|	|	|	10.79
6.250	0.00	2.51	4.679	O	|	|	|	|	10.76
6.333	0.00	2.50	4.662	O	|	|	|	|	10.74
6.417	0.00	2.50	4.645	O	|	|	|	|	10.72
6.500	0.00	2.49	4.627	O	|	|	|	|	10.69
6.583	0.00	2.49	4.610	O	|	|	|	|	10.67
6.667	0.00	2.48	4.593	O	|	|	|	|	10.65
6.750	0.00	2.48	4.576	O	|	|	|	|	10.62
6.833	0.00	2.48	4.559	O	|	|	|	|	10.60
6.917	0.00	2.47	4.542	O	|	|	|	|	10.58
7.000	0.00	2.47	4.525	O	|	|	|	|	10.55
7.083	0.00	2.46	4.508	O	|	|	|	|	10.53
7.167	0.00	2.46	4.491	O	|	|	|	|	10.51
7.250	0.00	2.45	4.474	O	|	|	|	|	10.48
7.333	0.00	2.45	4.457	O	|	|	|	|	10.46
7.417	0.00	2.44	4.440	O	|	|	|	|	10.44
7.500	0.00	2.44	4.424	O	|	|	|	|	10.41
7.583	0.00	2.43	4.407	O	|	|	|	|	10.39
7.667	0.00	2.43	4.390	O	|	|	|	|	10.37
7.750	0.00	2.43	4.373	O	|	|	|	|	10.34
7.833	0.00	2.42	4.357	O	|	|	|	|	10.32
7.917	0.00	2.42	4.340	O	|	|	|	|	10.30
8.000	0.00	2.41	4.323	O	|	|	|	|	10.27
8.083	0.00	2.40	4.307	O	|	|	|	|	10.25
8.167	0.00	2.40	4.290	O	|	|	|	|	10.22
8.250	0.00	2.39	4.274	O	|	|	|	|	10.19
8.333	0.00	2.39	4.257	O	|	|	|	|	10.17
8.417	0.00	2.38	4.241	O	|	|	|	|	10.14
8.500	0.00	2.37	4.224	O	|	|	|	|	10.12
8.583	0.00	2.37	4.208	O	|	|	|	|	10.09
8.667	0.00	2.36	4.192	O	|	|	|	|	10.07
8.750	0.00	2.36	4.176	O	|	|	|	|	10.04
8.833	0.00	2.35	4.159	O	|	|	|	|	10.02
8.917	0.00	2.35	4.143	O	|	|	|	|	9.99
9.000	0.00	2.34	4.127	O	|	|	|	|	9.96
9.083	0.00	2.33	4.111	O	|	|	|	|	9.94
9.167	0.00	2.33	4.095	O	|	|	|	|	9.91
9.250	0.00	2.32	4.079	O	|	|	|	|	9.89
9.333	0.00	2.32	4.063	O	|	|	|	|	9.86
9.417	0.00	2.31	4.047	O	|	|	|	|	9.84
9.500	0.00	2.31	4.031	O	|	|	|	|	9.81
9.583	0.00	2.30	4.015	O	|	|	|	|	9.79
9.667	0.00	2.29	3.999	O	|	|	|	|	9.76
9.750	0.00	2.29	3.984	O	|	|	|	|	9.74
9.833	0.00	2.28	3.968	O	|	|	|	|	9.71
9.917	0.00	2.28	3.952	O	|	|	|	|	9.69
10.000	0.00	2.27	3.936	O	|	|	|	|	9.67
10.083	0.00	2.27	3.921	O	|	|	|	|	9.64
10.167	0.00	2.26	3.905	O	|	|	|	|	9.62
10.250	0.00	2.25	3.890	O	|	|	|	|	9.59
10.333	0.00	2.25	3.874	O	|	|	|	|	9.57
10.417	0.00	2.24	3.859	O	|	|	|	|	9.54
10.500	0.00	2.24	3.843	O	|	|	|	|	9.52
10.583	0.00	2.23	3.828	O	|	|	|	|	9.50
10.667	0.00	2.23	3.813	O	|	|	|	|	9.47
10.750	0.00	2.22	3.797	O	|	|	|	|	9.45
10.833	0.00	2.22	3.782	O	|	|	|	|	9.42
10.917	0.00	2.21	3.767	O	|	|	|	|	9.40
11.000	0.00	2.20	3.752	O	|	|	|	|	9.38
11.083	0.00	2.20	3.736	O	|	|	|	|	9.35
11.167	0.00	2.19	3.721	O	|	|	|	|	9.33
11.250	0.00	2.19	3.706	O	|	|	|	|	9.30
11.333	0.00	2.18	3.691	O	|	|	|	|	9.28
11.417	0.00	2.18	3.676	O	|	|	|	|	9.26
11.500	0.00	2.17	3.661	O	|	|	|	|	9.23
11.583	0.00	2.17	3.646	O	|	|	|	|	9.21
11.667	0.00	2.16	3.631	O	|	|	|	|	9.19

11.750	0.00	2.16	3.616	O	|	|	|	|	9.16
11.833	0.00	2.15	3.602	O	|	|	|	|	9.14
11.917	0.00	2.14	3.587	O	|	|	|	|	9.12
12.000	0.00	2.14	3.572	O	|	|	|	|	9.09
12.083	0.00	2.13	3.557	O	|	|	|	|	9.07
12.167	0.00	2.13	3.543	O	|	|	|	|	9.05
12.250	0.00	2.12	3.528	O	|	|	|	|	9.02
12.333	0.00	2.12	3.513	O	|	|	|	|	9.00
12.417	0.00	2.11	3.499	O	|	|	|	|	8.98
12.500	0.00	2.11	3.484	O	|	|	|	|	8.96
12.583	0.00	2.10	3.470	O	|	|	|	|	8.93
12.667	0.00	2.10	3.455	O	|	|	|	|	8.91
12.750	0.00	2.09	3.441	O	|	|	|	|	8.89
12.833	0.00	2.09	3.427	O	|	|	|	|	8.87
12.917	0.00	2.08	3.412	O	|	|	|	|	8.84
13.000	0.00	2.08	3.398	O	|	|	|	|	8.82
13.083	0.00	2.07	3.384	O	|	|	|	|	8.80
13.167	0.00	2.07	3.369	O	|	|	|	|	8.78
13.250	0.00	2.06	3.355	O	|	|	|	|	8.75
13.333	0.00	2.06	3.341	O	|	|	|	|	8.73
13.417	0.00	2.05	3.327	O	|	|	|	|	8.71
13.500	0.00	2.05	3.313	O	|	|	|	|	8.69
13.583	0.00	2.04	3.299	O	|	|	|	|	8.66
13.667	0.00	2.04	3.285	O	|	|	|	|	8.64
13.750	0.00	2.03	3.271	O	|	|	|	|	8.62
13.833	0.00	2.03	3.257	O	|	|	|	|	8.60
13.917	0.00	2.02	3.243	O	|	|	|	|	8.58
14.000	0.00	2.02	3.229	O	|	|	|	|	8.56
14.083	0.00	2.01	3.215	O	|	|	|	|	8.53
14.167	0.00	2.01	3.201	O	|	|	|	|	8.51
14.250	0.00	2.00	3.187	O	|	|	|	|	8.49
14.333	0.00	2.00	3.174	O	|	|	|	|	8.47
14.417	0.00	1.99	3.160	O	|	|	|	|	8.45
14.500	0.00	1.99	3.146	O	|	|	|	|	8.43
14.583	0.00	1.98	3.132	O	|	|	|	|	8.40
14.667	0.00	1.98	3.119	O	|	|	|	|	8.38
14.750	0.00	1.97	3.105	O	|	|	|	|	8.36
14.833	0.00	1.97	3.092	O	|	|	|	|	8.34
14.917	0.00	1.96	3.078	O	|	|	|	|	8.32
15.000	0.00	1.96	3.065	O	|	|	|	|	8.30
15.083	0.00	1.95	3.051	O	|	|	|	|	8.27
15.167	0.00	1.94	3.038	O	|	|	|	|	8.25
15.250	0.00	1.93	3.024	O	|	|	|	|	8.22
15.333	0.00	1.92	3.011	O	|	|	|	|	8.20
15.417	0.00	1.91	2.998	O	|	|	|	|	8.17
15.500	0.00	1.91	2.985	O	|	|	|	|	8.15
15.583	0.00	1.90	2.972	O	|	|	|	|	8.12
15.667	0.00	1.89	2.959	O	|	|	|	|	8.10
15.750	0.00	1.88	2.946	O	|	|	|	|	8.07
15.833	0.00	1.87	2.933	O	|	|	|	|	8.05
15.917	0.00	1.87	2.920	O	|	|	|	|	8.02
16.000	0.00	1.86	2.907	O	|	|	|	|	8.00
16.083	0.00	1.85	2.894	O	|	|	|	|	7.98
16.167	0.00	1.84	2.882	O	|	|	|	|	7.95
16.250	0.00	1.83	2.869	O	|	|	|	|	7.93
16.333	0.00	1.83	2.856	O	|	|	|	|	7.90
16.417	0.00	1.82	2.844	O	|	|	|	|	7.88
16.500	0.00	1.81	2.831	O	|	|	|	|	7.86
16.583	0.00	1.80	2.819	O	|	|	|	|	7.83
16.667	0.00	1.80	2.806	O	|	|	|	|	7.81
16.750	0.00	1.79	2.794	O	|	|	|	|	7.79
16.833	0.00	1.78	2.782	O	|	|	|	|	7.76
16.917	0.00	1.77	2.770	O	|	|	|	|	7.74
17.000	0.00	1.77	2.757	O	|	|	|	|	7.72
17.083	0.00	1.76	2.745	O	|	|	|	|	7.69
17.167	0.00	1.75	2.733	O	|	|	|	|	7.67
17.250	0.00	1.74	2.721	O	|	|	|	|	7.65
17.333	0.00	1.74	2.709	O	|	|	|	|	7.63
17.417	0.00	1.73	2.697	O	|	|	|	|	7.60
17.500	0.00	1.72	2.685	O	|	|	|	|	7.58
17.583	0.00	1.71	2.674	O	|	|	|	|	7.56

17.667	0.00	1.71	2.662	O	|	|	|	|	7.54
17.750	0.00	1.70	2.650	O	|	|	|	|	7.51
17.833	0.00	1.69	2.638	O	|	|	|	|	7.49
17.917	0.00	1.68	2.627	O	|	|	|	|	7.47
18.000	0.00	1.68	2.615	O	|	|	|	|	7.45
18.083	0.00	1.67	2.604	O	|	|	|	|	7.43
18.167	0.00	1.66	2.592	O	|	|	|	|	7.41
18.250	0.00	1.66	2.581	O	|	|	|	|	7.38
18.333	0.00	1.65	2.569	O	|	|	|	|	7.36
18.417	0.00	1.64	2.558	O	|	|	|	|	7.34
18.500	0.00	1.63	2.547	O	|	|	|	|	7.32
18.583	0.00	1.63	2.536	O	|	|	|	|	7.30
18.667	0.00	1.62	2.524	O	|	|	|	|	7.28
18.750	0.00	1.61	2.513	O	|	|	|	|	7.26
18.833	0.00	1.61	2.502	O	|	|	|	|	7.24
18.917	0.00	1.60	2.491	O	|	|	|	|	7.21
19.000	0.00	1.59	2.480	O	|	|	|	|	7.19
19.083	0.00	1.59	2.469	O	|	|	|	|	7.17
19.167	0.00	1.58	2.458	O	|	|	|	|	7.15
19.250	0.00	1.57	2.447	O	|	|	|	|	7.13
19.333	0.00	1.57	2.437	O	|	|	|	|	7.11
19.417	0.00	1.56	2.426	O	|	|	|	|	7.09
19.500	0.00	1.55	2.415	O	|	|	|	|	7.07
19.583	0.00	1.55	2.404	O	|	|	|	|	7.05
19.667	0.00	1.54	2.394	O	|	|	|	|	7.03
19.750	0.00	1.53	2.383	O	|	|	|	|	7.01
19.833	0.00	1.53	2.373	O	|	|	|	|	6.99
19.917	0.00	1.52	2.362	O	|	|	|	|	6.97
20.000	0.00	1.51	2.352	O	|	|	|	|	6.95
20.083	0.00	1.51	2.341	O	|	|	|	|	6.93
20.167	0.00	1.50	2.331	O	|	|	|	|	6.91
20.250	0.00	1.49	2.321	O	|	|	|	|	6.89
20.333	0.00	1.49	2.310	O	|	|	|	|	6.87
20.417	0.00	1.48	2.300	O	|	|	|	|	6.85
20.500	0.00	1.47	2.290	O	|	|	|	|	6.83
20.583	0.00	1.47	2.280	O	|	|	|	|	6.82
20.667	0.00	1.46	2.270	O	|	|	|	|	6.80
20.750	0.00	1.46	2.260	O	|	|	|	|	6.78
20.833	0.00	1.45	2.250	O	|	|	|	|	6.76
20.917	0.00	1.44	2.240	O	|	|	|	|	6.74
21.000	0.00	1.44	2.230	O	|	|	|	|	6.72
21.083	0.00	1.43	2.220	O	|	|	|	|	6.70
21.167	0.00	1.43	2.210	O	|	|	|	|	6.68
21.250	0.00	1.42	2.200	O	|	|	|	|	6.67
21.333	0.00	1.41	2.191	O	|	|	|	|	6.65
21.417	0.00	1.41	2.181	O	|	|	|	|	6.63
21.500	0.00	1.40	2.171	O	|	|	|	|	6.61
21.583	0.00	1.40	2.162	O	|	|	|	|	6.59
21.667	0.00	1.39	2.152	O	|	|	|	|	6.57
21.750	0.00	1.38	2.142	O	|	|	|	|	6.56
21.833	0.00	1.38	2.133	O	|	|	|	|	6.54
21.917	0.00	1.37	2.123	O	|	|	|	|	6.52
22.000	0.00	1.37	2.114	O	|	|	|	|	6.50
22.083	0.00	1.36	2.105	O	|	|	|	|	6.48
22.167	0.00	1.35	2.095	O	|	|	|	|	6.47
22.250	0.00	1.35	2.086	O	|	|	|	|	6.45
22.333	0.00	1.34	2.077	O	|	|	|	|	6.43
22.417	0.00	1.34	2.068	O	|	|	|	|	6.41
22.500	0.00	1.33	2.058	O	|	|	|	|	6.40
22.583	0.00	1.33	2.049	O	|	|	|	|	6.38
22.667	0.00	1.32	2.040	O	|	|	|	|	6.36
22.750	0.00	1.31	2.031	O	|	|	|	|	6.35
22.833	0.00	1.31	2.022	O	|	|	|	|	6.33
22.917	0.00	1.30	2.013	O	|	|	|	|	6.31
23.000	0.00	1.29	2.004	O	|	|	|	|	6.29
23.083	0.00	1.28	1.995	O	|	|	|	|	6.27
23.167	0.00	1.26	1.986	O	|	|	|	|	6.26
23.250	0.00	1.24	1.978	O	|	|	|	|	6.24
23.333	0.00	1.23	1.969	O	|	|	|	|	6.22
23.417	0.00	1.21	1.961	O	|	|	|	|	6.20
23.500	0.00	1.20	1.953	O	|	|	|	|	6.18

23.583	0.00	1.18	1.944	O	|	|	|	|	6.16
23.667	0.00	1.17	1.936	O	|	|	|	|	6.15
23.750	0.00	1.15	1.928	O	|	|	|	|	6.13
23.833	0.00	1.14	1.920	O	|	|	|	|	6.11
23.917	0.00	1.12	1.913	O	|	|	|	|	6.09
24.000	0.00	1.11	1.905	O	|	|	|	|	6.08
24.083	0.00	1.09	1.897	O	|	|	|	|	6.06
24.167	0.00	1.08	1.890	O	|	|	|	|	6.04
24.250	0.00	1.07	1.883	O	|	|	|	|	6.03
24.333	0.00	1.05	1.875	O	|	|	|	|	6.01
24.417	0.00	1.04	1.868	O	|	|	|	|	6.00
24.500	0.00	1.02	1.861	O	|	|	|	|	5.98
24.583	0.00	1.01	1.854	O	|	|	|	|	5.97
24.667	0.00	1.00	1.847	O	|	|	|	|	5.95
24.750	0.00	0.99	1.840	O	|	|	|	|	5.94
24.833	0.00	0.97	1.833	O	|	|	|	|	5.92
24.917	0.00	0.96	1.827	O	|	|	|	|	5.91
25.000	0.00	0.95	1.820	O	|	|	|	|	5.89
25.083	0.00	0.94	1.814	O	|	|	|	|	5.88
25.167	0.00	0.92	1.807	O	|	|	|	|	5.86
25.250	0.00	0.91	1.801	O	|	|	|	|	5.85
25.333	0.00	0.90	1.795	O	|	|	|	|	5.84
25.417	0.00	0.89	1.789	O	|	|	|	|	5.82
25.500	0.00	0.88	1.783	O	|	|	|	|	5.81
25.583	0.00	0.87	1.777	O	|	|	|	|	5.80
25.667	0.00	0.86	1.771	O	|	|	|	|	5.78
25.750	0.00	0.84	1.765	O	|	|	|	|	5.77
25.833	0.00	0.83	1.759	O	|	|	|	|	5.76
25.917	0.00	0.82	1.753	O	|	|	|	|	5.75
26.000	0.00	0.81	1.748	O	|	|	|	|	5.73
26.083	0.00	0.80	1.742	O	|	|	|	|	5.72
26.167	0.00	0.79	1.737	O	|	|	|	|	5.71
26.250	0.00	0.78	1.731	O	|	|	|	|	5.70
26.333	0.00	0.77	1.726	O	|	|	|	|	5.69
26.417	0.00	0.76	1.721	O	|	|	|	|	5.68
26.500	0.00	0.75	1.715	O	|	|	|	|	5.66
26.583	0.00	0.74	1.710	O	|	|	|	|	5.65
26.667	0.00	0.73	1.705	O	|	|	|	|	5.64
26.750	0.00	0.72	1.700	O	|	|	|	|	5.63
26.833	0.00	0.71	1.695	O	|	|	|	|	5.62
26.917	0.00	0.70	1.690	O	|	|	|	|	5.61
27.000	0.00	0.70	1.685	O	|	|	|	|	5.60
27.083	0.00	0.69	1.681	O	|	|	|	|	5.59
27.167	0.00	0.68	1.676	O	|	|	|	|	5.58
27.250	0.00	0.67	1.671	O	|	|	|	|	5.57
27.333	0.00	0.66	1.667	O	|	|	|	|	5.56
27.417	0.00	0.65	1.662	O	|	|	|	|	5.55
27.500	0.00	0.64	1.658	O	|	|	|	|	5.54
27.583	0.00	0.64	1.653	O	|	|	|	|	5.53
27.667	0.00	0.63	1.649	O	|	|	|	|	5.52
27.750	0.00	0.62	1.645	O	|	|	|	|	5.51
27.833	0.00	0.61	1.641	O	|	|	|	|	5.50
27.917	0.00	0.61	1.636	O	|	|	|	|	5.49
28.000	0.00	0.61	1.632	O	|	|	|	|	5.48
28.083	0.00	0.61	1.628	O	|	|	|	|	5.47
28.167	0.00	0.61	1.624	O	|	|	|	|	5.46
28.250	0.00	0.61	1.620	O	|	|	|	|	5.45
28.333	0.00	0.61	1.615	O	|	|	|	|	5.44
28.417	0.00	0.61	1.611	O	|	|	|	|	5.43
28.500	0.00	0.61	1.607	O	|	|	|	|	5.42
28.583	0.00	0.60	1.603	O	|	|	|	|	5.41
28.667	0.00	0.60	1.599	O	|	|	|	|	5.40
28.750	0.00	0.60	1.595	O	|	|	|	|	5.39
28.833	0.00	0.60	1.590	O	|	|	|	|	5.38
28.917	0.00	0.60	1.586	O	|	|	|	|	5.37
29.000	0.00	0.60	1.582	O	|	|	|	|	5.36
29.083	0.00	0.60	1.578	O	|	|	|	|	5.36
29.167	0.00	0.60	1.574	O	|	|	|	|	5.35
29.250	0.00	0.60	1.570	O	|	|	|	|	5.34
29.333	0.00	0.60	1.566	O	|	|	|	|	5.33
29.417	0.00	0.60	1.561	O	|	|	|	|	5.32

29.500	0.00	0.60	1.557	O	|	|	|	|	5.31
29.583	0.00	0.60	1.553	O	|	|	|	|	5.30
29.667	0.00	0.60	1.549	O	|	|	|	|	5.29
29.750	0.00	0.60	1.545	O	|	|	|	|	5.28
29.833	0.00	0.60	1.541	O	|	|	|	|	5.27
29.917	0.00	0.60	1.537	O	|	|	|	|	5.26
30.000	0.00	0.59	1.533	O	|	|	|	|	5.25
30.083	0.00	0.59	1.529	O	|	|	|	|	5.24
30.167	0.00	0.59	1.525	O	|	|	|	|	5.23
30.250	0.00	0.59	1.520	O	|	|	|	|	5.22
30.333	0.00	0.59	1.516	O	|	|	|	|	5.21
30.417	0.00	0.59	1.512	O	|	|	|	|	5.20
30.500	0.00	0.59	1.508	O	|	|	|	|	5.19
30.583	0.00	0.59	1.504	O	|	|	|	|	5.18
30.667	0.00	0.59	1.500	O	|	|	|	|	5.17
30.750	0.00	0.59	1.496	O	|	|	|	|	5.16
30.833	0.00	0.59	1.492	O	|	|	|	|	5.15
30.917	0.00	0.59	1.488	O	|	|	|	|	5.14
31.000	0.00	0.59	1.484	O	|	|	|	|	5.14
31.083	0.00	0.59	1.480	O	|	|	|	|	5.13
31.167	0.00	0.59	1.476	O	|	|	|	|	5.12
31.250	0.00	0.59	1.472	O	|	|	|	|	5.11
31.333	0.00	0.59	1.468	O	|	|	|	|	5.10
31.417	0.00	0.58	1.464	O	|	|	|	|	5.09
31.500	0.00	0.58	1.460	O	|	|	|	|	5.08
31.583	0.00	0.58	1.456	O	|	|	|	|	5.07
31.667	0.00	0.58	1.452	O	|	|	|	|	5.06
31.750	0.00	0.58	1.448	O	|	|	|	|	5.05
31.833	0.00	0.58	1.444	O	|	|	|	|	5.04
31.917	0.00	0.58	1.440	O	|	|	|	|	5.03
32.000	0.00	0.58	1.436	O	|	|	|	|	5.02
32.083	0.00	0.58	1.432	O	|	|	|	|	5.01
32.167	0.00	0.58	1.428	O	|	|	|	|	5.00
32.250	0.00	0.58	1.424	O	|	|	|	|	4.99
32.333	0.00	0.58	1.420	O	|	|	|	|	4.99
32.417	0.00	0.58	1.416	O	|	|	|	|	4.98
32.500	0.00	0.58	1.412	O	|	|	|	|	4.97
32.583	0.00	0.58	1.408	O	|	|	|	|	4.96
32.667	0.00	0.58	1.404	O	|	|	|	|	4.95
32.750	0.00	0.58	1.400	O	|	|	|	|	4.94
32.833	0.00	0.57	1.396	O	|	|	|	|	4.93
32.917	0.00	0.57	1.392	O	|	|	|	|	4.92
33.000	0.00	0.57	1.388	O	|	|	|	|	4.91
33.083	0.00	0.57	1.384	O	|	|	|	|	4.90
33.167	0.00	0.57	1.380	O	|	|	|	|	4.89
33.250	0.00	0.57	1.376	O	|	|	|	|	4.88
33.333	0.00	0.57	1.372	O	|	|	|	|	4.87
33.417	0.00	0.57	1.368	O	|	|	|	|	4.87
33.500	0.00	0.57	1.364	O	|	|	|	|	4.86
33.583	0.00	0.57	1.360	O	|	|	|	|	4.85
33.667	0.00	0.57	1.356	O	|	|	|	|	4.84
33.750	0.00	0.57	1.352	O	|	|	|	|	4.83
33.833	0.00	0.57	1.349	O	|	|	|	|	4.82
33.917	0.00	0.57	1.345	O	|	|	|	|	4.81
34.000	0.00	0.57	1.341	O	|	|	|	|	4.80
34.083	0.00	0.57	1.337	O	|	|	|	|	4.79
34.167	0.00	0.57	1.333	O	|	|	|	|	4.78
34.250	0.00	0.57	1.329	O	|	|	|	|	4.77
34.333	0.00	0.56	1.325	O	|	|	|	|	4.76
34.417	0.00	0.56	1.321	O	|	|	|	|	4.76
34.500	0.00	0.56	1.317	O	|	|	|	|	4.75
34.583	0.00	0.56	1.314	O	|	|	|	|	4.74
34.667	0.00	0.56	1.310	O	|	|	|	|	4.73
34.750	0.00	0.56	1.306	O	|	|	|	|	4.72
34.833	0.00	0.56	1.302	O	|	|	|	|	4.71
34.917	0.00	0.56	1.298	O	|	|	|	|	4.70
35.000	0.00	0.56	1.294	O	|	|	|	|	4.69
35.083	0.00	0.56	1.290	O	|	|	|	|	4.68
35.167	0.00	0.56	1.286	O	|	|	|	|	4.67
35.250	0.00	0.56	1.283	O	|	|	|	|	4.67
35.333	0.00	0.56	1.279	O	|	|	|	|	4.66

35.417	0.00	0.56	1.275	O					4.65
35.500	0.00	0.56	1.271	O					4.64
35.583	0.00	0.56	1.267	O					4.63
35.667	0.00	0.56	1.263	O					4.62
35.750	0.00	0.56	1.260	O					4.61
35.833	0.00	0.55	1.256	O					4.60
35.917	0.00	0.55	1.252	O					4.59
36.000	0.00	0.55	1.248	O					4.59
36.083	0.00	0.55	1.244	O					4.58
36.167	0.00	0.55	1.241	O					4.57
36.250	0.00	0.55	1.237	O					4.56
36.333	0.00	0.55	1.233	O					4.55
36.417	0.00	0.55	1.229	O					4.54
36.500	0.00	0.55	1.225	O					4.53
36.583	0.00	0.55	1.222	O					4.52
36.667	0.00	0.55	1.218	O					4.51
36.750	0.00	0.55	1.214	O					4.51
36.833	0.00	0.55	1.210	O					4.50
36.917	0.00	0.55	1.206	O					4.49
37.000	0.00	0.55	1.203	O					4.48
37.083	0.00	0.55	1.199	O					4.47
37.167	0.00	0.55	1.195	O					4.46
37.250	0.00	0.55	1.191	O					4.45
37.333	0.00	0.54	1.188	O					4.44
37.417	0.00	0.54	1.184	O					4.44
37.500	0.00	0.54	1.180	O					4.43
37.583	0.00	0.54	1.176	O					4.42
37.667	0.00	0.54	1.173	O					4.41
37.750	0.00	0.54	1.169	O					4.40
37.833	0.00	0.54	1.165	O					4.39
37.917	0.00	0.54	1.161	O					4.38
38.000	0.00	0.54	1.158	O					4.37
38.083	0.00	0.54	1.154	O					4.37
38.167	0.00	0.54	1.150	O					4.36
38.250	0.00	0.54	1.147	O					4.35
38.333	0.00	0.54	1.143	O					4.34
38.417	0.00	0.54	1.139	O					4.33
38.500	0.00	0.54	1.135	O					4.32
38.583	0.00	0.54	1.132	O					4.31
38.667	0.00	0.54	1.128	O					4.30
38.750	0.00	0.54	1.124	O					4.30
38.833	0.00	0.54	1.121	O					4.29
38.917	0.00	0.53	1.117	O					4.28
39.000	0.00	0.53	1.113	O					4.26
39.083	0.00	0.53	1.110	O					4.25
39.167	0.00	0.53	1.106	O					4.24
39.250	0.00	0.53	1.102	O					4.23
39.333	0.00	0.53	1.099	O					4.22
39.417	0.00	0.53	1.095	O					4.21
39.500	0.00	0.53	1.091	O					4.20
39.583	0.00	0.53	1.088	O					4.19
39.667	0.00	0.53	1.084	O					4.18
39.750	0.00	0.53	1.080	O					4.17
39.833	0.00	0.53	1.077	O					4.16
39.917	0.00	0.53	1.073	O					4.15
40.000	0.00	0.53	1.070	O					4.14
40.083	0.00	0.52	1.066	O					4.13
40.167	0.00	0.52	1.062	O					4.12
40.250	0.00	0.52	1.059	O					4.11
40.333	0.00	0.52	1.055	O					4.10
40.417	0.00	0.52	1.052	O					4.09
40.500	0.00	0.52	1.048	O					4.08
40.583	0.00	0.52	1.044	O					4.07
40.667	0.00	0.52	1.041	O					4.06
40.750	0.00	0.52	1.037	O					4.05
40.833	0.00	0.52	1.034	O					4.04
40.917	0.00	0.52	1.030	O					4.03
41.000	0.00	0.52	1.026	O					4.02
41.083	0.00	0.52	1.023	O					4.01
41.167	0.00	0.52	1.019	O					4.00
41.250	0.00	0.52	1.016	O					3.99

41.333	0.00	0.51	1.012	O	|	|	|	|	3.98
41.417	0.00	0.51	1.009	O	|	|	|	|	3.97
41.500	0.00	0.51	1.005	O	|	|	|	|	3.96
41.583	0.00	0.51	1.002	O	|	|	|	|	3.95
41.667	0.00	0.51	0.998	O	|	|	|	|	3.94
41.750	0.00	0.51	0.995	O	|	|	|	|	3.93
41.833	0.00	0.51	0.991	O	|	|	|	|	3.93
41.917	0.00	0.51	0.988	O	|	|	|	|	3.92
42.000	0.00	0.51	0.984	O	|	|	|	|	3.91
42.083	0.00	0.51	0.981	O	|	|	|	|	3.90
42.167	0.00	0.51	0.977	O	|	|	|	|	3.89
42.250	0.00	0.51	0.974	O	|	|	|	|	3.88
42.333	0.00	0.51	0.970	O	|	|	|	|	3.87
42.417	0.00	0.51	0.967	O	|	|	|	|	3.86
42.500	0.00	0.51	0.963	O	|	|	|	|	3.85
42.583	0.00	0.51	0.960	O	|	|	|	|	3.84
42.667	0.00	0.50	0.956	O	|	|	|	|	3.83
42.750	0.00	0.50	0.953	O	|	|	|	|	3.82
42.833	0.00	0.50	0.949	O	|	|	|	|	3.81
42.917	0.00	0.50	0.946	O	|	|	|	|	3.80
43.000	0.00	0.50	0.942	O	|	|	|	|	3.79
43.083	0.00	0.50	0.939	O	|	|	|	|	3.78
43.167	0.00	0.50	0.935	O	|	|	|	|	3.77
43.250	0.00	0.50	0.932	O	|	|	|	|	3.76
43.333	0.00	0.50	0.928	O	|	|	|	|	3.75
43.417	0.00	0.50	0.925	O	|	|	|	|	3.74
43.500	0.00	0.50	0.922	O	|	|	|	|	3.73
43.583	0.00	0.50	0.918	O	|	|	|	|	3.72
43.667	0.00	0.50	0.915	O	|	|	|	|	3.71
43.750	0.00	0.50	0.911	O	|	|	|	|	3.70
43.833	0.00	0.50	0.908	O	|	|	|	|	3.69
43.917	0.00	0.49	0.904	O	|	|	|	|	3.68
44.000	0.00	0.49	0.901	O	|	|	|	|	3.68
44.083	0.00	0.49	0.898	O	|	|	|	|	3.67
44.167	0.00	0.49	0.894	O	|	|	|	|	3.66
44.250	0.00	0.49	0.891	O	|	|	|	|	3.65
44.333	0.00	0.49	0.888	O	|	|	|	|	3.64
44.417	0.00	0.49	0.884	O	|	|	|	|	3.63
44.500	0.00	0.49	0.881	O	|	|	|	|	3.62
44.583	0.00	0.49	0.877	O	|	|	|	|	3.61
44.667	0.00	0.49	0.874	O	|	|	|	|	3.60
44.750	0.00	0.49	0.871	O	|	|	|	|	3.59
44.833	0.00	0.49	0.867	O	|	|	|	|	3.58
44.917	0.00	0.49	0.864	O	|	|	|	|	3.57
45.000	0.00	0.49	0.861	O	|	|	|	|	3.56
45.083	0.00	0.49	0.857	O	|	|	|	|	3.55
45.167	0.00	0.49	0.854	O	|	|	|	|	3.54
45.250	0.00	0.48	0.851	O	|	|	|	|	3.53
45.333	0.00	0.48	0.847	O	|	|	|	|	3.53
45.417	0.00	0.48	0.844	O	|	|	|	|	3.52
45.500	0.00	0.48	0.841	O	|	|	|	|	3.51
45.583	0.00	0.48	0.837	O	|	|	|	|	3.50
45.667	0.00	0.48	0.834	O	|	|	|	|	3.49
45.750	0.00	0.48	0.831	O	|	|	|	|	3.48
45.833	0.00	0.48	0.827	O	|	|	|	|	3.47
45.917	0.00	0.48	0.824	O	|	|	|	|	3.46
46.000	0.00	0.48	0.821	O	|	|	|	|	3.45
46.083	0.00	0.48	0.817	O	|	|	|	|	3.44
46.167	0.00	0.48	0.814	O	|	|	|	|	3.43
46.250	0.00	0.48	0.811	O	|	|	|	|	3.42
46.333	0.00	0.48	0.807	O	|	|	|	|	3.42
46.417	0.00	0.48	0.804	O	|	|	|	|	3.41
46.500	0.00	0.48	0.801	O	|	|	|	|	3.40
46.583	0.00	0.47	0.798	O	|	|	|	|	3.39
46.667	0.00	0.47	0.794	O	|	|	|	|	3.38
46.750	0.00	0.47	0.791	O	|	|	|	|	3.37
46.833	0.00	0.47	0.788	O	|	|	|	|	3.36
46.917	0.00	0.47	0.785	O	|	|	|	|	3.35
47.000	0.00	0.47	0.781	O	|	|	|	|	3.34
47.083	0.00	0.47	0.778	O	|	|	|	|	3.33
47.167	0.00	0.47	0.775	O	|	|	|	|	3.32

47.250	0.00	0.47	0.772	O					3.32
47.333	0.00	0.47	0.768	O					3.31
47.417	0.00	0.47	0.765	O					3.30
47.500	0.00	0.47	0.762	O					3.29
47.583	0.00	0.47	0.759	O					3.28
47.667	0.00	0.47	0.755	O					3.26
47.750	0.00	0.47	0.752	O					3.25
47.833	0.00	0.46	0.749	O					3.24
47.917	0.00	0.46	0.746	O					3.23
48.000	0.00	0.46	0.743	O					3.22
48.083	0.00	0.46	0.740	O					3.21
48.167	0.00	0.46	0.736	O					3.20
48.250	0.00	0.46	0.733	O					3.19
48.333	0.00	0.46	0.730	O					3.18
48.417	0.00	0.46	0.727	O					3.17
48.500	0.00	0.46	0.724	O					3.16
48.583	0.00	0.46	0.720	O					3.15
48.667	0.00	0.46	0.717	O					3.14
48.750	0.00	0.46	0.714	O					3.13
48.833	0.00	0.46	0.711	O					3.12
48.917	0.00	0.45	0.708	O					3.11
49.000	0.00	0.45	0.705	O					3.10
49.083	0.00	0.45	0.702	O					3.09
49.167	0.00	0.45	0.699	O					3.08
49.250	0.00	0.45	0.695	O					3.06
49.333	0.00	0.45	0.692	O					3.05
49.417	0.00	0.45	0.689	O					3.04
49.500	0.00	0.45	0.686	O					3.03
49.583	0.00	0.45	0.683	O					3.02
49.667	0.00	0.45	0.680	O					3.01
49.750	0.00	0.45	0.677	O					3.00
49.833	0.00	0.45	0.674	O					2.99
49.917	0.00	0.45	0.671	O					2.98
50.000	0.00	0.44	0.668	O					2.97
50.083	0.00	0.44	0.665	O					2.96
50.167	0.00	0.44	0.662	O					2.95
50.250	0.00	0.44	0.659	O					2.94
50.333	0.00	0.44	0.655	O					2.93
50.417	0.00	0.44	0.652	O					2.92
50.500	0.00	0.44	0.649	O					2.91
50.583	0.00	0.44	0.646	O					2.90
50.667	0.00	0.44	0.643	O					2.89
50.750	0.00	0.44	0.640	O					2.88
50.833	0.00	0.44	0.637	O					2.87
50.917	0.00	0.44	0.634	O					2.86
51.000	0.00	0.44	0.631	O					2.85
51.083	0.00	0.43	0.628	O					2.84
51.167	0.00	0.43	0.625	O					2.83
51.250	0.00	0.43	0.622	O					2.82
51.333	0.00	0.43	0.619	O					2.81
51.417	0.00	0.43	0.616	O					2.80
51.500	0.00	0.43	0.613	O					2.79
51.583	0.00	0.43	0.610	O					2.78
51.667	0.00	0.43	0.608	O					2.77
51.750	0.00	0.43	0.605	O					2.76
51.833	0.00	0.43	0.602	O					2.75
51.917	0.00	0.43	0.599	O					2.74
52.000	0.00	0.43	0.596	O					2.73
52.083	0.00	0.43	0.593	O					2.72
52.167	0.00	0.42	0.590	O					2.71
52.250	0.00	0.42	0.587	O					2.70
52.333	0.00	0.42	0.584	O					2.69
52.417	0.00	0.42	0.581	O					2.68
52.500	0.00	0.42	0.578	O					2.67
52.583	0.00	0.42	0.575	O					2.66
52.667	0.00	0.42	0.572	O					2.65
52.750	0.00	0.42	0.570	O					2.65
52.833	0.00	0.42	0.567	O					2.64
52.917	0.00	0.42	0.564	O					2.63
53.000	0.00	0.42	0.561	O					2.62
53.083	0.00	0.42	0.558	O					2.61

53.167	0.00	0.42	0.555	O	|	|	|	|	2.60
53.250	0.00	0.42	0.552	O	|	|	|	|	2.59
53.333	0.00	0.41	0.549	O	|	|	|	|	2.58
53.417	0.00	0.41	0.547	O	|	|	|	|	2.57
53.500	0.00	0.41	0.544	O	|	|	|	|	2.56
53.583	0.00	0.41	0.541	O	|	|	|	|	2.55
53.667	0.00	0.41	0.538	O	|	|	|	|	2.54
53.750	0.00	0.41	0.535	O	|	|	|	|	2.53
53.833	0.00	0.41	0.532	O	|	|	|	|	2.52
53.917	0.00	0.41	0.530	O	|	|	|	|	2.51
54.000	0.00	0.41	0.527	O	|	|	|	|	2.50
54.083	0.00	0.41	0.524	O	|	|	|	|	2.49
54.167	0.00	0.41	0.521	O	|	|	|	|	2.48
54.250	0.00	0.41	0.518	O	|	|	|	|	2.47
54.333	0.00	0.41	0.515	O	|	|	|	|	2.46
54.417	0.00	0.41	0.513	O	|	|	|	|	2.46
54.500	0.00	0.40	0.510	O	|	|	|	|	2.45
54.583	0.00	0.40	0.507	O	|	|	|	|	2.44
54.667	0.00	0.40	0.504	O	|	|	|	|	2.43
54.750	0.00	0.40	0.502	O	|	|	|	|	2.42
54.833	0.00	0.40	0.499	O	|	|	|	|	2.41
54.917	0.00	0.40	0.496	O	|	|	|	|	2.40
55.000	0.00	0.40	0.493	O	|	|	|	|	2.39
55.083	0.00	0.40	0.490	O	|	|	|	|	2.38
55.167	0.00	0.40	0.488	O	|	|	|	|	2.37
55.250	0.00	0.40	0.485	O	|	|	|	|	2.36
55.333	0.00	0.40	0.482	O	|	|	|	|	2.35
55.417	0.00	0.40	0.479	O	|	|	|	|	2.34
55.500	0.00	0.40	0.477	O	|	|	|	|	2.34
55.583	0.00	0.40	0.474	O	|	|	|	|	2.33
55.667	0.00	0.40	0.471	O	|	|	|	|	2.32
55.750	0.00	0.39	0.469	O	|	|	|	|	2.31
55.833	0.00	0.39	0.466	O	|	|	|	|	2.30
55.917	0.00	0.39	0.463	O	|	|	|	|	2.29
56.000	0.00	0.39	0.460	O	|	|	|	|	2.28
56.083	0.00	0.39	0.458	O	|	|	|	|	2.27
56.167	0.00	0.39	0.455	O	|	|	|	|	2.26
56.250	0.00	0.39	0.452	O	|	|	|	|	2.25
56.333	0.00	0.39	0.450	O	|	|	|	|	2.24
56.417	0.00	0.39	0.447	O	|	|	|	|	2.23
56.500	0.00	0.39	0.444	O	|	|	|	|	2.22
56.583	0.00	0.39	0.442	O	|	|	|	|	2.21
56.667	0.00	0.38	0.439	O	|	|	|	|	2.20
56.750	0.00	0.38	0.436	O	|	|	|	|	2.19
56.833	0.00	0.38	0.434	O	|	|	|	|	2.18
56.917	0.00	0.38	0.431	O	|	|	|	|	2.17
57.000	0.00	0.38	0.429	O	|	|	|	|	2.16
57.083	0.00	0.38	0.426	O	|	|	|	|	2.15
57.167	0.00	0.38	0.423	O	|	|	|	|	2.14
57.250	0.00	0.38	0.421	O	|	|	|	|	2.13
57.333	0.00	0.38	0.418	O	|	|	|	|	2.13
57.417	0.00	0.38	0.415	O	|	|	|	|	2.12
57.500	0.00	0.38	0.413	O	|	|	|	|	2.11
57.583	0.00	0.37	0.410	O	|	|	|	|	2.10
57.667	0.00	0.37	0.408	O	|	|	|	|	2.09
57.750	0.00	0.37	0.405	O	|	|	|	|	2.08
57.833	0.00	0.37	0.403	O	|	|	|	|	2.07
57.917	0.00	0.37	0.400	O	|	|	|	|	2.06
58.000	0.00	0.37	0.398	O	|	|	|	|	2.05
58.083	0.00	0.37	0.395	O	|	|	|	|	2.04
58.167	0.00	0.37	0.392	O	|	|	|	|	2.03
58.250	0.00	0.37	0.390	O	|	|	|	|	2.02
58.333	0.00	0.37	0.387	O	|	|	|	|	2.01
58.417	0.00	0.36	0.385	O	|	|	|	|	2.00
58.500	0.00	0.36	0.382	O	|	|	|	|	1.99
58.583	0.00	0.36	0.380	O	|	|	|	|	1.99
58.667	0.00	0.36	0.377	O	|	|	|	|	1.98
58.750	0.00	0.36	0.375	O	|	|	|	|	1.97
58.833	0.00	0.36	0.372	O	|	|	|	|	1.96
58.917	0.00	0.36	0.370	O	|	|	|	|	1.95
59.000	0.00	0.36	0.367	O	|	|	|	|	1.94

59.083	0.00	0.36	0.365	O	|	|	|	|	1.93
59.167	0.00	0.36	0.363	O	|	|	|	|	1.92
59.250	0.00	0.36	0.360	O	|	|	|	|	1.91
59.333	0.00	0.36	0.358	O	|	|	|	|	1.90
59.417	0.00	0.35	0.355	O	|	|	|	|	1.90
59.500	0.00	0.35	0.353	O	|	|	|	|	1.89
59.583	0.00	0.35	0.350	O	|	|	|	|	1.88
59.667	0.00	0.35	0.348	O	|	|	|	|	1.87
59.750	0.00	0.35	0.345	O	|	|	|	|	1.86
59.833	0.00	0.35	0.343	O	|	|	|	|	1.85
59.917	0.00	0.35	0.341	O	|	|	|	|	1.84
60.000	0.00	0.35	0.338	O	|	|	|	|	1.83
60.083	0.00	0.35	0.336	O	|	|	|	|	1.82
60.167	0.00	0.35	0.333	O	|	|	|	|	1.82
60.250	0.00	0.35	0.331	O	|	|	|	|	1.81
60.333	0.00	0.34	0.329	O	|	|	|	|	1.80
60.417	0.00	0.34	0.326	O	|	|	|	|	1.79
60.500	0.00	0.34	0.324	O	|	|	|	|	1.78
60.583	0.00	0.34	0.322	O	|	|	|	|	1.77
60.667	0.00	0.34	0.319	O	|	|	|	|	1.76
60.750	0.00	0.34	0.317	O	|	|	|	|	1.76
60.833	0.00	0.34	0.315	O	|	|	|	|	1.75
60.917	0.00	0.34	0.312	O	|	|	|	|	1.74
61.000	0.00	0.34	0.310	O	|	|	|	|	1.73
61.083	0.00	0.34	0.308	O	|	|	|	|	1.72
61.167	0.00	0.34	0.305	O	|	|	|	|	1.71
61.250	0.00	0.34	0.303	O	|	|	|	|	1.70
61.333	0.00	0.33	0.301	O	|	|	|	|	1.70
61.417	0.00	0.33	0.298	O	|	|	|	|	1.69
61.500	0.00	0.33	0.296	O	|	|	|	|	1.68
61.583	0.00	0.33	0.294	O	|	|	|	|	1.67
61.667	0.00	0.33	0.291	O	|	|	|	|	1.66
61.750	0.00	0.33	0.289	O	|	|	|	|	1.65
61.833	0.00	0.33	0.287	O	|	|	|	|	1.65
61.917	0.00	0.33	0.285	O	|	|	|	|	1.64
62.000	0.00	0.33	0.282	O	|	|	|	|	1.63
62.083	0.00	0.33	0.280	O	|	|	|	|	1.62
62.167	0.00	0.33	0.278	O	|	|	|	|	1.61
62.250	0.00	0.33	0.276	O	|	|	|	|	1.60
62.333	0.00	0.33	0.273	O	|	|	|	|	1.60
62.417	0.00	0.32	0.271	O	|	|	|	|	1.59
62.500	0.00	0.32	0.269	O	|	|	|	|	1.58
62.583	0.00	0.32	0.267	O	|	|	|	|	1.57
62.667	0.00	0.32	0.264	O	|	|	|	|	1.56
62.750	0.00	0.32	0.262	O	|	|	|	|	1.56
62.833	0.00	0.32	0.260	O	|	|	|	|	1.55
62.917	0.00	0.32	0.258	O	|	|	|	|	1.54
63.000	0.00	0.32	0.256	O	|	|	|	|	1.53
63.083	0.00	0.32	0.253	O	|	|	|	|	1.52
63.167	0.00	0.32	0.251	O	|	|	|	|	1.52
63.250	0.00	0.32	0.249	O	|	|	|	|	1.51
63.333	0.00	0.32	0.247	O	|	|	|	|	1.50
63.417	0.00	0.31	0.245	O	|	|	|	|	1.49
63.500	0.00	0.31	0.243	O	|	|	|	|	1.48
63.583	0.00	0.31	0.240	O	|	|	|	|	1.48
63.667	0.00	0.31	0.238	O	|	|	|	|	1.47
63.750	0.00	0.31	0.236	O	|	|	|	|	1.46
63.833	0.00	0.31	0.234	O	|	|	|	|	1.45
63.917	0.00	0.31	0.232	O	|	|	|	|	1.45
64.000	0.00	0.31	0.230	O	|	|	|	|	1.44
64.083	0.00	0.31	0.227	O	|	|	|	|	1.43
64.167	0.00	0.31	0.225	O	|	|	|	|	1.42
64.250	0.00	0.31	0.223	O	|	|	|	|	1.41
64.333	0.00	0.31	0.221	O	|	|	|	|	1.41
64.417	0.00	0.31	0.219	O	|	|	|	|	1.40
64.500	0.00	0.30	0.217	O	|	|	|	|	1.39
64.583	0.00	0.30	0.215	O	|	|	|	|	1.38
64.667	0.00	0.30	0.213	O	|	|	|	|	1.38
64.750	0.00	0.30	0.211	O	|	|	|	|	1.37
64.833	0.00	0.30	0.209	O	|	|	|	|	1.36
64.917	0.00	0.30	0.206	O	|	|	|	|	1.35

65.000	0.00	0.30	0.204	O					1.35
65.083	0.00	0.30	0.202	O					1.34
65.167	0.00	0.30	0.200	O					1.33
65.250	0.00	0.30	0.198	O					1.32
65.333	0.00	0.30	0.196	O					1.32
65.417	0.00	0.30	0.194	O					1.31
65.500	0.00	0.30	0.192	O					1.30
65.583	0.00	0.29	0.190	O					1.29
65.667	0.00	0.29	0.188	O					1.28
65.750	0.00	0.29	0.186	O					1.27
65.833	0.00	0.29	0.184	O					1.25
65.917	0.00	0.29	0.182	O					1.24
66.000	0.00	0.29	0.180	O					1.23
66.083	0.00	0.28	0.178	O					1.22
66.167	0.00	0.28	0.176	O					1.21
66.250	0.00	0.28	0.174	O					1.20
66.333	0.00	0.28	0.172	O					1.19
66.417	0.00	0.28	0.170	O					1.17
66.500	0.00	0.27	0.169	O					1.16
66.583	0.00	0.27	0.167	O					1.15
66.667	0.00	0.27	0.165	O					1.14
66.750	0.00	0.27	0.163	O					1.13
66.833	0.00	0.27	0.161	O					1.12
66.917	0.00	0.27	0.159	O					1.11
67.000	0.00	0.26	0.157	O					1.10
67.083	0.00	0.26	0.156	O					1.09
67.167	0.00	0.26	0.154	O					1.08
67.250	0.00	0.26	0.152	O					1.07
67.333	0.00	0.26	0.150	O					1.06
67.417	0.00	0.26	0.148	O					1.05
67.500	0.00	0.26	0.147	O					1.04
67.583	0.00	0.25	0.145	O					1.03
67.667	0.00	0.25	0.143	O					1.02
67.750	0.00	0.25	0.141	O					1.01
67.833	0.00	0.25	0.140	O					1.00
67.917	0.00	0.25	0.138	O					0.99
68.000	0.00	0.25	0.136	O					0.98
68.083	0.00	0.24	0.135	O					0.97
68.167	0.00	0.24	0.133	O					0.96
68.250	0.00	0.24	0.131	O					0.95
68.333	0.00	0.24	0.130	O					0.94
68.417	0.00	0.24	0.128	O					0.93
68.500	0.00	0.24	0.126	O					0.92
68.583	0.00	0.24	0.125	O					0.91
68.667	0.00	0.23	0.123	O					0.90
68.750	0.00	0.23	0.121	O					0.89
68.833	0.00	0.23	0.120	O					0.88
68.917	0.00	0.23	0.118	O					0.87
69.000	0.00	0.23	0.117	O					0.86
69.083	0.00	0.23	0.115	O					0.85
69.167	0.00	0.23	0.114	O					0.84
69.250	0.00	0.22	0.112	O					0.83
69.333	0.00	0.22	0.110	O					0.83
69.417	0.00	0.22	0.109	O					0.82
69.500	0.00	0.22	0.107	O					0.81
69.583	0.00	0.22	0.106	O					0.80
69.667	0.00	0.22	0.104	O					0.79
69.750	0.00	0.22	0.103	O					0.78
69.833	0.00	0.21	0.101	O					0.77
69.917	0.00	0.21	0.100	O					0.76
70.000	0.00	0.21	0.098	O					0.76
70.083	0.00	0.21	0.097	O					0.75
70.167	0.00	0.21	0.096	O					0.74
70.250	0.00	0.21	0.094	O					0.73
70.333	0.00	0.21	0.093	O					0.72
70.417	0.00	0.21	0.091	O					0.71
70.500	0.00	0.20	0.090	O					0.71
70.583	0.00	0.20	0.088	O					0.70
70.667	0.00	0.20	0.087	O					0.69
70.750	0.00	0.20	0.086	O					0.68
70.833	0.00	0.20	0.084	O					0.67

70.917	0.00	0.20	0.083	O	|	|	|	|	0.67
71.000	0.00	0.20	0.082	O	|	|	|	|	0.66
71.083	0.00	0.20	0.080	O	|	|	|	|	0.65
71.167	0.00	0.19	0.079	O	|	|	|	|	0.64
71.250	0.00	0.19	0.077	O	|	|	|	|	0.63
71.333	0.00	0.19	0.076	O	|	|	|	|	0.63
71.417	0.00	0.19	0.075	O	|	|	|	|	0.62
71.500	0.00	0.19	0.074	O	|	|	|	|	0.61
71.583	0.00	0.19	0.072	O	|	|	|	|	0.60
71.667	0.00	0.19	0.071	O	|	|	|	|	0.60
71.750	0.00	0.19	0.070	O	|	|	|	|	0.59
71.833	0.00	0.19	0.068	O	|	|	|	|	0.58
71.917	0.00	0.18	0.067	O	|	|	|	|	0.57
72.000	0.00	0.18	0.066	O	|	|	|	|	0.57
72.083	0.00	0.18	0.065	O	|	|	|	|	0.56
72.167	0.00	0.18	0.063	O	|	|	|	|	0.55
72.250	0.00	0.18	0.062	O	|	|	|	|	0.54
72.333	0.00	0.18	0.061	O	|	|	|	|	0.54
72.417	0.00	0.18	0.060	O	|	|	|	|	0.53
72.500	0.00	0.18	0.058	O	|	|	|	|	0.52
72.583	0.00	0.18	0.057	O	|	|	|	|	0.52
72.667	0.00	0.17	0.056	O	|	|	|	|	0.51
72.750	0.00	0.17	0.055	O	|	|	|	|	0.50
72.833	0.00	0.17	0.054	O	|	|	|	|	0.50
72.917	0.00	0.17	0.052	O	|	|	|	|	0.49
73.000	0.00	0.17	0.051	O	|	|	|	|	0.48
73.083	0.00	0.17	0.050	O	|	|	|	|	0.47
73.167	0.00	0.17	0.049	O	|	|	|	|	0.47
73.250	0.00	0.17	0.048	O	|	|	|	|	0.46
73.333	0.00	0.17	0.047	O	|	|	|	|	0.45
73.417	0.00	0.16	0.045	O	|	|	|	|	0.45
73.500	0.00	0.16	0.044	O	|	|	|	|	0.44
73.583	0.00	0.16	0.043	O	|	|	|	|	0.44
73.667	0.00	0.16	0.042	O	|	|	|	|	0.43
73.750	0.00	0.16	0.041	O	|	|	|	|	0.42
73.833	0.00	0.16	0.040	O	|	|	|	|	0.42
73.917	0.00	0.16	0.039	O	|	|	|	|	0.41
74.000	0.00	0.16	0.038	O	|	|	|	|	0.40
74.083	0.00	0.16	0.037	O	|	|	|	|	0.40
74.167	0.00	0.16	0.036	O	|	|	|	|	0.39
74.250	0.00	0.15	0.034	O	|	|	|	|	0.38
74.333	0.00	0.15	0.033	O	|	|	|	|	0.38
74.417	0.00	0.15	0.032	O	|	|	|	|	0.37
74.500	0.00	0.15	0.031	O	|	|	|	|	0.37
74.583	0.00	0.15	0.030	O	|	|	|	|	0.36
74.667	0.00	0.15	0.029	O	|	|	|	|	0.35
74.750	0.00	0.15	0.028	O	|	|	|	|	0.35
74.833	0.00	0.15	0.027	O	|	|	|	|	0.34
74.917	0.00	0.15	0.026	O	|	|	|	|	0.34
75.000	0.00	0.15	0.025	O	|	|	|	|	0.33
75.083	0.00	0.15	0.024	O	|	|	|	|	0.32
75.167	0.00	0.14	0.023	O	|	|	|	|	0.32
75.250	0.00	0.14	0.022	O	|	|	|	|	0.31
75.333	0.00	0.14	0.021	O	|	|	|	|	0.31
75.417	0.00	0.14	0.020	O	|	|	|	|	0.30
75.500	0.00	0.14	0.019	O	|	|	|	|	0.29
75.583	0.00	0.13	0.018	O	|	|	|	|	0.27
75.667	0.00	0.12	0.017	O	|	|	|	|	0.26
75.750	0.00	0.12	0.017	O	|	|	|	|	0.25
75.833	0.00	0.11	0.016	O	|	|	|	|	0.24
75.917	0.00	0.11	0.015	O	|	|	|	|	0.23
76.000	0.00	0.10	0.014	O	|	|	|	|	0.21
76.083	0.00	0.10	0.014	O	|	|	|	|	0.20

Remaining water in basin = 0.01 (Ac.Ft)

**********HYDROGRAPH DATA**********

Number of intervals = 913

Time interval = 5.0 (Min.)

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               Maximum/Peak flow rate =       95.874 (CFS)
               Total volume =       8.954 (Ac.Ft)
          Status of hydrographs being held in storage
                     Stream 1  Stream 2  Stream 3  Stream 4  Stream 5
          Peak (CFS)      0.000     0.000     0.000     0.000     0.000
          Vol (Ac.Ft)     0.000     0.000     0.000     0.000     0.000
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FLOOD HYDROGRAPH ROUTING PROGRAM
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Study date: 08/18/25

Program License Serial Number 5006

********** HYDROGRAPH INFORMATION **********

From study/file name: PROA6100.rte
**********HYDROGRAPH DATA**********
Number of intervals = 90
Time interval = 5.0 (Min.)
Maximum/Peak flow rate = 99.340 (CFS)
Total volume = 12.673 (Ac.Ft)

Status of hydrographs being held in storage

	Stream 1	Stream 2	Stream 3	Stream 4	Stream 5
Peak (CFS)	0.000	0.000	0.000	0.000	0.000
Vol (Ac.Ft)	0.000	0.000	0.000	0.000	0.000

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Process from Point/Station 0.000 to Point/Station 0.000
**** RETARDING BASIN ROUTING ****

User entry of depth-outflow-storage data

Total number of inflow hydrograph intervals = 90
Hydrograph time unit = 5.000 (Min.)
Initial depth in storage basin = 0.00(Ft.)

Initial basin depth = 0.00 (Ft.)
Initial basin storage = 0.00 (Ac.Ft)
Initial basin outflow = 0.00 (CFS)

Depth vs. Storage and Depth vs. Discharge data:

Basin Depth (Ft.)	Storage (Ac.Ft)	Outflow (CFS)	(S-O*dt/2) (Ac.Ft)	(S+O*dt/2) (Ac.Ft)
0.000	0.000	0.000	0.000	0.000
0.300	0.020	0.142	0.020	0.020
1.300	0.192	0.296	0.191	0.193
2.300	0.466	0.394	0.465	0.467
3.300	0.766	0.469	0.764	0.768
4.300	1.126	0.536	1.124	1.128
5.500	1.640	0.610	1.638	1.642
6.300	2.007	1.299	2.003	2.011
8.300	3.066	1.957	3.059	3.073
10.300	4.341	2.417	4.333	4.349
11.400	5.141	2.632	5.132	5.150
12.300	5.851	167.187	5.275	6.427
13.300	6.699	657.066	4.436	8.962
14.300	7.611	1377.819	2.866	12.356

Hydrograph Detention Basin Routing

Graph values: 'I'= unit inflow; 'O'=outflow at time shown

Time (Hours)	Inflow (CFS)	Outflow (CFS)	Storage (Ac.Ft)	.0	24.8	49.67	74.51	99.34	Depth (Ft.)
0.083	0.35	0.01	0.001	O	|	|	|	|	0.02
0.167	1.89	0.06	0.009	O	|	|	|	|	0.13
0.250	4.14	0.15	0.029	OI	|	|	|	|	0.35
0.333	5.58	0.18	0.061	OI	|	|	|	|	0.54
0.417	6.31	0.21	0.101	O I	|	|	|	|	0.77
0.500	6.84	0.25	0.144	O I	|	|	|	|	1.02
0.583	7.46	0.30	0.192	O I	|	|	|	|	1.30
0.667	8.10	0.31	0.243	O I	|	|	|	|	1.49
0.750	8.50	0.33	0.298	O I	|	|	|	|	1.69
0.833	8.75	0.35	0.355	O I	|	|	|	|	1.90
0.917	8.94	0.38	0.413	O I	|	|	|	|	2.11
1.000	9.17	0.40	0.473	O I	|	|	|	|	2.32
1.083	9.58	0.41	0.535	O I	|	|	|	|	2.53
1.167	10.07	0.43	0.600	O I	|	|	|	|	2.75
1.250	10.36	0.44	0.667	O I	|	|	|	|	2.97
1.333	10.53	0.46	0.736	O I	|	|	|	|	3.20
1.417	10.65	0.48	0.806	O I	|	|	|	|	3.41
1.500	10.75	0.49	0.876	O I	|	|	|	|	3.61
1.583	10.83	0.50	0.947	O I	|	|	|	|	3.80
1.667	10.87	0.52	1.018	O I	|	|	|	|	4.00
1.750	10.90	0.53	1.090	O I	|	|	|	|	4.20
1.833	10.93	0.54	1.161	O I	|	|	|	|	4.38
1.917	10.95	0.55	1.233	O I	|	|	|	|	4.55
2.000	11.04	0.56	1.304	O I	|	|	|	|	4.72
2.083	11.27	0.57	1.377	O I	|	|	|	|	4.89
2.167	11.45	0.58	1.452	O I	|	|	|	|	5.06
2.250	11.57	0.59	1.527	O I	|	|	|	|	5.24
2.333	11.86	0.60	1.603	O I	|	|	|	|	5.41
2.417	12.04	0.69	1.681	O I	|	|	|	|	5.59
2.500	12.13	0.83	1.759	O I	|	|	|	|	5.76
2.583	12.19	0.98	1.837	O I	|	|	|	|	5.93
2.667	12.23	1.12	1.913	O I	|	|	|	|	6.10
2.750	12.33	1.27	1.990	O I	|	|	|	|	6.26
2.833	12.65	1.34	2.067	O I	|	|	|	|	6.41
2.917	13.06	1.39	2.146	O I	|	|	|	|	6.56
3.000	13.29	1.44	2.227	O I	|	|	|	|	6.72
3.083	13.41	1.49	2.309	O I	|	|	|	|	6.87
3.167	13.56	1.54	2.391	O I	|	|	|	|	7.03
3.250	13.91	1.59	2.475	O I	|	|	|	|	7.18
3.333	14.35	1.64	2.561	O I	|	|	|	|	7.35
3.417	14.71	1.70	2.650	O I	|	|	|	|	7.51
3.500	15.45	1.76	2.742	O I	|	|	|	|	7.69
3.583	16.90	1.82	2.841	O I	|	|	|	|	7.88
3.667	18.68	1.89	2.951	O I	|	|	|	|	8.08
3.750	20.25	1.96	3.072	O I	|	|	|	|	8.31
3.833	21.62	2.01	3.202	O I	|	|	|	|	8.51
3.917	23.00	2.06	3.342	O I	|	|	|	|	8.73
4.000	24.34	2.11	3.491	O I	|	|	|	|	8.97
4.083	25.73	2.17	3.648	O I	|	|	|	|	9.21
4.167	27.21	2.23	3.815	O I	|	|	|	|	9.48
4.250	29.19	2.29	3.994	O I	|	|	|	|	9.76
4.333	31.46	2.36	4.187	O I	|	|	|	|	10.06
4.417	33.86	2.43	4.395	O I	|	|	|	|	10.37
4.500	36.21	2.49	4.620	O I	|	|	|	|	10.68
4.583	38.17	2.56	4.858	O I	|	|	|	|	11.01
4.667	39.99	2.62	5.110	O I	|	|	|	|	11.36
4.750	42.19	32.74	5.271	|	O I	|	|	|	11.56
4.833	44.50	42.16	5.312	|	OI	|	|	|	11.62
4.917	46.46	45.11	5.324	|	O	|	|	|	11.63
5.000	48.27	47.11	5.333	|	O	|	|	|	11.64
5.083	51.03	49.36	5.343	|	OI	|	|	|	11.66
5.167	56.38	53.22	5.359	|	OI	|	|	|	11.68
5.250	64.68	59.71	5.387	|	OI	|	|	|	11.71
5.333	73.55	68.06	5.423	|	O I	|	|	|	11.76
5.417	81.99	76.68	5.460	|	O I	|	|	|	11.80
5.500	91.91	85.80	5.500	|	O I	|	|	|	11.85
5.583	99.34	94.52	5.537	|	O I	|	|	|	11.90
5.667	87.75	93.65	5.534	|	I O	|	|	|	11.90
5.750	59.87	76.04	5.458	|	I	O	|	|	11.80

5.833	40.17	52.94	5.358	|	| I	|O	|	|	11.68
5.917	29.91	37.05	5.290	|	|I O	|	|	|	11.59
6.000	23.34	27.80	5.250	|	IO	|	|	|	11.54
6.083	18.16	21.54	5.223	|	IO |	|	|	|	11.50
6.167	13.95	16.67	5.202	|	IO |	|	|	|	11.48
6.250	10.58	12.76	5.185	|	IO |	|	|	|	11.46
6.333	8.31	9.82	5.172	|	IO |	|	|	|	11.44
6.417	6.68	7.76	5.163	|	O |	|	|	|	11.43
6.500	5.28	6.18	5.156	|	O |	|	|	|	11.42
6.583	4.17	4.89	5.151	|	O |	|	|	|	11.41
6.667	3.24	3.84	5.146	|	O |	|	|	|	11.41
6.750	2.45	2.95	5.142	|	O |	|	|	|	11.40
6.833	1.85	2.63	5.138	|	O |	|	|	|	11.40
6.917	1.31	2.63	5.131	|	O |	|	|	|	11.39
7.000	0.71	2.63	5.120	|	O |	|	|	|	11.37
7.083	0.27	2.62	5.105	|	O |	|	|	|	11.35
7.167	0.14	2.62	5.088	|	O |	|	|	|	11.33
7.250	0.08	2.61	5.071	|	O |	|	|	|	11.30
7.333	0.05	2.61	5.053	|	O |	|	|	|	11.28
7.417	0.02	2.60	5.036	|	O |	|	|	|	11.26
7.500	0.01	2.60	5.018	|	O |	|	|	|	11.23
7.583	0.00	2.59	5.000	|	O |	|	|	|	11.21
7.667	0.00	2.59	4.982	|	O |	|	|	|	11.18
7.750	0.00	2.58	4.964	|	O |	|	|	|	11.16
7.833	0.00	2.58	4.947	|	O |	|	|	|	11.13
7.917	0.00	2.57	4.929	|	O |	|	|	|	11.11
8.000	0.00	2.57	4.911	|	O |	|	|	|	11.08
8.083	0.00	2.57	4.893	|	O |	|	|	|	11.06
8.167	0.00	2.56	4.876	|	O |	|	|	|	11.04
8.250	0.00	2.56	4.858	|	O |	|	|	|	11.01
8.333	0.00	2.55	4.841	|	O |	|	|	|	10.99
8.417	0.00	2.55	4.823	|	O |	|	|	|	10.96
8.500	0.00	2.54	4.806	|	O |	|	|	|	10.94
8.583	0.00	2.54	4.788	|	O |	|	|	|	10.91
8.667	0.00	2.53	4.771	|	O |	|	|	|	10.89
8.750	0.00	2.53	4.753	|	O |	|	|	|	10.87
8.833	0.00	2.52	4.736	|	O |	|	|	|	10.84
8.917	0.00	2.52	4.718	|	O |	|	|	|	10.82
9.000	0.00	2.51	4.701	|	O |	|	|	|	10.80
9.083	0.00	2.51	4.684	|	O |	|	|	|	10.77
9.167	0.00	2.50	4.666	|	O |	|	|	|	10.75
9.250	0.00	2.50	4.649	|	O |	|	|	|	10.72
9.333	0.00	2.50	4.632	|	O |	|	|	|	10.70
9.417	0.00	2.49	4.615	|	O |	|	|	|	10.68
9.500	0.00	2.49	4.598	|	O |	|	|	|	10.65
9.583	0.00	2.48	4.581	|	O |	|	|	|	10.63
9.667	0.00	2.48	4.564	|	O |	|	|	|	10.61
9.750	0.00	2.47	4.547	|	O |	|	|	|	10.58
9.833	0.00	2.47	4.530	|	O |	|	|	|	10.56
9.917	0.00	2.46	4.513	|	O |	|	|	|	10.54
10.000	0.00	2.46	4.496	|	O |	|	|	|	10.51
10.083	0.00	2.45	4.479	|	O |	|	|	|	10.49
10.167	0.00	2.45	4.462	|	O |	|	|	|	10.47
10.250	0.00	2.44	4.445	|	O |	|	|	|	10.44
10.333	0.00	2.44	4.428	|	O |	|	|	|	10.42
10.417	0.00	2.44	4.411	|	O |	|	|	|	10.40
10.500	0.00	2.43	4.395	|	O |	|	|	|	10.37
10.583	0.00	2.43	4.378	|	O |	|	|	|	10.35
10.667	0.00	2.42	4.361	|	O |	|	|	|	10.33
10.750	0.00	2.42	4.344	|	O |	|	|	|	10.30
10.833	0.00	2.41	4.328	|	O |	|	|	|	10.28
10.917	0.00	2.41	4.311	|	O |	|	|	|	10.25
11.000	0.00	2.40	4.295	|	O |	|	|	|	10.23
11.083	0.00	2.39	4.278	|	O |	|	|	|	10.20
11.167	0.00	2.39	4.262	|	O |	|	|	|	10.18
11.250	0.00	2.38	4.245	|	O |	|	|	|	10.15
11.333	0.00	2.38	4.229	|	O |	|	|	|	10.12
11.417	0.00	2.37	4.213	|	O |	|	|	|	10.10
11.500	0.00	2.36	4.196	|	O |	|	|	|	10.07
11.583	0.00	2.36	4.180	|	O |	|	|	|	10.05
11.667	0.00	2.35	4.164	|	O |	|	|	|	10.02

11.750	0.00	2.35	4.148	O	|	|	|	|	10.00
11.833	0.00	2.34	4.131	O	|	|	|	|	9.97
11.917	0.00	2.34	4.115	O	|	|	|	|	9.95
12.000	0.00	2.33	4.099	O	|	|	|	|	9.92
12.083	0.00	2.32	4.083	O	|	|	|	|	9.90
12.167	0.00	2.32	4.067	O	|	|	|	|	9.87
12.250	0.00	2.31	4.051	O	|	|	|	|	9.85
12.333	0.00	2.31	4.035	O	|	|	|	|	9.82
12.417	0.00	2.30	4.020	O	|	|	|	|	9.80
12.500	0.00	2.30	4.004	O	|	|	|	|	9.77
12.583	0.00	2.29	3.988	O	|	|	|	|	9.75
12.667	0.00	2.28	3.972	O	|	|	|	|	9.72
12.750	0.00	2.28	3.956	O	|	|	|	|	9.70
12.833	0.00	2.27	3.941	O	|	|	|	|	9.67
12.917	0.00	2.27	3.925	O	|	|	|	|	9.65
13.000	0.00	2.26	3.910	O	|	|	|	|	9.62
13.083	0.00	2.26	3.894	O	|	|	|	|	9.60
13.167	0.00	2.25	3.878	O	|	|	|	|	9.57
13.250	0.00	2.24	3.863	O	|	|	|	|	9.55
13.333	0.00	2.24	3.848	O	|	|	|	|	9.53
13.417	0.00	2.23	3.832	O	|	|	|	|	9.50
13.500	0.00	2.23	3.817	O	|	|	|	|	9.48
13.583	0.00	2.22	3.801	O	|	|	|	|	9.45
13.667	0.00	2.22	3.786	O	|	|	|	|	9.43
13.750	0.00	2.21	3.771	O	|	|	|	|	9.41
13.833	0.00	2.21	3.756	O	|	|	|	|	9.38
13.917	0.00	2.20	3.741	O	|	|	|	|	9.36
14.000	0.00	2.19	3.725	O	|	|	|	|	9.33
14.083	0.00	2.19	3.710	O	|	|	|	|	9.31
14.167	0.00	2.18	3.695	O	|	|	|	|	9.29
14.250	0.00	2.18	3.680	O	|	|	|	|	9.26
14.333	0.00	2.17	3.665	O	|	|	|	|	9.24
14.417	0.00	2.17	3.650	O	|	|	|	|	9.22
14.500	0.00	2.16	3.635	O	|	|	|	|	9.19
14.583	0.00	2.16	3.621	O	|	|	|	|	9.17
14.667	0.00	2.15	3.606	O	|	|	|	|	9.15
14.750	0.00	2.15	3.591	O	|	|	|	|	9.12
14.833	0.00	2.14	3.576	O	|	|	|	|	9.10
14.917	0.00	2.14	3.561	O	|	|	|	|	9.08
15.000	0.00	2.13	3.547	O	|	|	|	|	9.05
15.083	0.00	2.13	3.532	O	|	|	|	|	9.03
15.167	0.00	2.12	3.517	O	|	|	|	|	9.01
15.250	0.00	2.11	3.503	O	|	|	|	|	8.99
15.333	0.00	2.11	3.488	O	|	|	|	|	8.96
15.417	0.00	2.10	3.474	O	|	|	|	|	8.94
15.500	0.00	2.10	3.459	O	|	|	|	|	8.92
15.583	0.00	2.09	3.445	O	|	|	|	|	8.89
15.667	0.00	2.09	3.430	O	|	|	|	|	8.87
15.750	0.00	2.08	3.416	O	|	|	|	|	8.85
15.833	0.00	2.08	3.402	O	|	|	|	|	8.83
15.917	0.00	2.07	3.387	O	|	|	|	|	8.80
16.000	0.00	2.07	3.373	O	|	|	|	|	8.78
16.083	0.00	2.06	3.359	O	|	|	|	|	8.76
16.167	0.00	2.06	3.345	O	|	|	|	|	8.74
16.250	0.00	2.05	3.331	O	|	|	|	|	8.72
16.333	0.00	2.05	3.317	O	|	|	|	|	8.69
16.417	0.00	2.04	3.302	O	|	|	|	|	8.67
16.500	0.00	2.04	3.288	O	|	|	|	|	8.65
16.583	0.00	2.03	3.274	O	|	|	|	|	8.63
16.667	0.00	2.03	3.260	O	|	|	|	|	8.60
16.750	0.00	2.02	3.246	O	|	|	|	|	8.58
16.833	0.00	2.02	3.233	O	|	|	|	|	8.56
16.917	0.00	2.01	3.219	O	|	|	|	|	8.54
17.000	0.00	2.01	3.205	O	|	|	|	|	8.52
17.083	0.00	2.00	3.191	O	|	|	|	|	8.50
17.167	0.00	2.00	3.177	O	|	|	|	|	8.47
17.250	0.00	1.99	3.164	O	|	|	|	|	8.45
17.333	0.00	1.99	3.150	O	|	|	|	|	8.43
17.417	0.00	1.98	3.136	O	|	|	|	|	8.41
17.500	0.00	1.98	3.123	O	|	|	|	|	8.39
17.583	0.00	1.97	3.109	O	|	|	|	|	8.37

17.667	0.00	1.97	3.095	O	|	|	|	|	8.35
17.750	0.00	1.96	3.082	O	|	|	|	|	8.32
17.833	0.00	1.96	3.068	O	|	|	|	|	8.30
17.917	0.00	1.95	3.055	O	|	|	|	|	8.28
18.000	0.00	1.94	3.041	O	|	|	|	|	8.25
18.083	0.00	1.93	3.028	O	|	|	|	|	8.23
18.167	0.00	1.93	3.015	O	|	|	|	|	8.20
18.250	0.00	1.92	3.002	O	|	|	|	|	8.18
18.333	0.00	1.91	2.988	O	|	|	|	|	8.15
18.417	0.00	1.90	2.975	O	|	|	|	|	8.13
18.500	0.00	1.89	2.962	O	|	|	|	|	8.10
18.583	0.00	1.88	2.949	O	|	|	|	|	8.08
18.667	0.00	1.88	2.936	O	|	|	|	|	8.06
18.750	0.00	1.87	2.923	O	|	|	|	|	8.03
18.833	0.00	1.86	2.911	O	|	|	|	|	8.01
18.917	0.00	1.85	2.898	O	|	|	|	|	7.98
19.000	0.00	1.84	2.885	O	|	|	|	|	7.96
19.083	0.00	1.84	2.872	O	|	|	|	|	7.93
19.167	0.00	1.83	2.860	O	|	|	|	|	7.91
19.250	0.00	1.82	2.847	O	|	|	|	|	7.89
19.333	0.00	1.81	2.835	O	|	|	|	|	7.86
19.417	0.00	1.81	2.822	O	|	|	|	|	7.84
19.500	0.00	1.80	2.810	O	|	|	|	|	7.82
19.583	0.00	1.79	2.797	O	|	|	|	|	7.79
19.667	0.00	1.78	2.785	O	|	|	|	|	7.77
19.750	0.00	1.77	2.773	O	|	|	|	|	7.75
19.833	0.00	1.77	2.761	O	|	|	|	|	7.72
19.917	0.00	1.76	2.749	O	|	|	|	|	7.70
20.000	0.00	1.75	2.736	O	|	|	|	|	7.68
20.083	0.00	1.74	2.724	O	|	|	|	|	7.65
20.167	0.00	1.74	2.712	O	|	|	|	|	7.63
20.250	0.00	1.73	2.700	O	|	|	|	|	7.61
20.333	0.00	1.72	2.689	O	|	|	|	|	7.59
20.417	0.00	1.72	2.677	O	|	|	|	|	7.56
20.500	0.00	1.71	2.665	O	|	|	|	|	7.54
20.583	0.00	1.70	2.653	O	|	|	|	|	7.52
20.667	0.00	1.69	2.642	O	|	|	|	|	7.50
20.750	0.00	1.69	2.630	O	|	|	|	|	7.48
20.833	0.00	1.68	2.618	O	|	|	|	|	7.45
20.917	0.00	1.67	2.607	O	|	|	|	|	7.43
21.000	0.00	1.66	2.595	O	|	|	|	|	7.41
21.083	0.00	1.66	2.584	O	|	|	|	|	7.39
21.167	0.00	1.65	2.572	O	|	|	|	|	7.37
21.250	0.00	1.64	2.561	O	|	|	|	|	7.35
21.333	0.00	1.64	2.550	O	|	|	|	|	7.33
21.417	0.00	1.63	2.539	O	|	|	|	|	7.30
21.500	0.00	1.62	2.527	O	|	|	|	|	7.28
21.583	0.00	1.62	2.516	O	|	|	|	|	7.26
21.667	0.00	1.61	2.505	O	|	|	|	|	7.24
21.750	0.00	1.60	2.494	O	|	|	|	|	7.22
21.833	0.00	1.59	2.483	O	|	|	|	|	7.20
21.917	0.00	1.59	2.472	O	|	|	|	|	7.18
22.000	0.00	1.58	2.461	O	|	|	|	|	7.16
22.083	0.00	1.57	2.450	O	|	|	|	|	7.14
22.167	0.00	1.57	2.440	O	|	|	|	|	7.12
22.250	0.00	1.56	2.429	O	|	|	|	|	7.10
22.333	0.00	1.55	2.418	O	|	|	|	|	7.08
22.417	0.00	1.55	2.407	O	|	|	|	|	7.06
22.500	0.00	1.54	2.397	O	|	|	|	|	7.04
22.583	0.00	1.53	2.386	O	|	|	|	|	7.02
22.667	0.00	1.53	2.376	O	|	|	|	|	7.00
22.750	0.00	1.52	2.365	O	|	|	|	|	6.98
22.833	0.00	1.51	2.355	O	|	|	|	|	6.96
22.917	0.00	1.51	2.344	O	|	|	|	|	6.94
23.000	0.00	1.50	2.334	O	|	|	|	|	6.92
23.083	0.00	1.50	2.323	O	|	|	|	|	6.90
23.167	0.00	1.49	2.313	O	|	|	|	|	6.88
23.250	0.00	1.48	2.303	O	|	|	|	|	6.86
23.333	0.00	1.48	2.293	O	|	|	|	|	6.84
23.417	0.00	1.47	2.283	O	|	|	|	|	6.82
23.500	0.00	1.46	2.273	O	|	|	|	|	6.80

23.583	0.00	1.46	2.262	O	|	|	|	|	6.78
23.667	0.00	1.45	2.252	O	|	|	|	|	6.76
23.750	0.00	1.45	2.242	O	|	|	|	|	6.74
23.833	0.00	1.44	2.233	O	|	|	|	|	6.73
23.917	0.00	1.43	2.223	O	|	|	|	|	6.71
24.000	0.00	1.43	2.213	O	|	|	|	|	6.69
24.083	0.00	1.42	2.203	O	|	|	|	|	6.67
24.167	0.00	1.41	2.193	O	|	|	|	|	6.65
24.250	0.00	1.41	2.184	O	|	|	|	|	6.63
24.333	0.00	1.40	2.174	O	|	|	|	|	6.62
24.417	0.00	1.40	2.164	O	|	|	|	|	6.60
24.500	0.00	1.39	2.155	O	|	|	|	|	6.58
24.583	0.00	1.38	2.145	O	|	|	|	|	6.56
24.667	0.00	1.38	2.136	O	|	|	|	|	6.54
24.750	0.00	1.37	2.126	O	|	|	|	|	6.52
24.833	0.00	1.37	2.117	O	|	|	|	|	6.51
24.917	0.00	1.36	2.107	O	|	|	|	|	6.49
25.000	0.00	1.36	2.098	O	|	|	|	|	6.47
25.083	0.00	1.35	2.089	O	|	|	|	|	6.45
25.167	0.00	1.34	2.079	O	|	|	|	|	6.44
25.250	0.00	1.34	2.070	O	|	|	|	|	6.42
25.333	0.00	1.33	2.061	O	|	|	|	|	6.40
25.417	0.00	1.33	2.052	O	|	|	|	|	6.38
25.500	0.00	1.32	2.043	O	|	|	|	|	6.37
25.583	0.00	1.32	2.033	O	|	|	|	|	6.35
25.667	0.00	1.31	2.024	O	|	|	|	|	6.33
25.750	0.00	1.30	2.015	O	|	|	|	|	6.32
25.833	0.00	1.30	2.006	O	|	|	|	|	6.30
25.917	0.00	1.28	1.998	O	|	|	|	|	6.28
26.000	0.00	1.26	1.989	O	|	|	|	|	6.26
26.083	0.00	1.25	1.980	O	|	|	|	|	6.24
26.167	0.00	1.23	1.972	O	|	|	|	|	6.22
26.250	0.00	1.22	1.963	O	|	|	|	|	6.20
26.333	0.00	1.20	1.955	O	|	|	|	|	6.19
26.417	0.00	1.19	1.947	O	|	|	|	|	6.17
26.500	0.00	1.17	1.939	O	|	|	|	|	6.15
26.583	0.00	1.16	1.931	O	|	|	|	|	6.13
26.667	0.00	1.14	1.923	O	|	|	|	|	6.12
26.750	0.00	1.13	1.915	O	|	|	|	|	6.10
26.833	0.00	1.11	1.907	O	|	|	|	|	6.08
26.917	0.00	1.10	1.900	O	|	|	|	|	6.07
27.000	0.00	1.08	1.892	O	|	|	|	|	6.05
27.083	0.00	1.07	1.885	O	|	|	|	|	6.03
27.167	0.00	1.06	1.877	O	|	|	|	|	6.02
27.250	0.00	1.04	1.870	O	|	|	|	|	6.00
27.333	0.00	1.03	1.863	O	|	|	|	|	5.99
27.417	0.00	1.02	1.856	O	|	|	|	|	5.97
27.500	0.00	1.00	1.849	O	|	|	|	|	5.96
27.583	0.00	0.99	1.842	O	|	|	|	|	5.94
27.667	0.00	0.98	1.835	O	|	|	|	|	5.93
27.750	0.00	0.96	1.829	O	|	|	|	|	5.91
27.833	0.00	0.95	1.822	O	|	|	|	|	5.90
27.917	0.00	0.94	1.816	O	|	|	|	|	5.88
28.000	0.00	0.93	1.809	O	|	|	|	|	5.87
28.083	0.00	0.92	1.803	O	|	|	|	|	5.85
28.167	0.00	0.90	1.796	O	|	|	|	|	5.84
28.250	0.00	0.89	1.790	O	|	|	|	|	5.83
28.333	0.00	0.88	1.784	O	|	|	|	|	5.81
28.417	0.00	0.87	1.778	O	|	|	|	|	5.80
28.500	0.00	0.86	1.772	O	|	|	|	|	5.79
28.583	0.00	0.85	1.766	O	|	|	|	|	5.78
28.667	0.00	0.84	1.761	O	|	|	|	|	5.76
28.750	0.00	0.83	1.755	O	|	|	|	|	5.75
28.833	0.00	0.81	1.749	O	|	|	|	|	5.74
28.917	0.00	0.80	1.744	O	|	|	|	|	5.73
29.000	0.00	0.79	1.738	O	|	|	|	|	5.71
29.083	0.00	0.78	1.733	O	|	|	|	|	5.70
29.167	0.00	0.77	1.727	O	|	|	|	|	5.69
29.250	0.00	0.76	1.722	O	|	|	|	|	5.68
29.333	0.00	0.75	1.717	O	|	|	|	|	5.67
29.417	0.00	0.74	1.712	O	|	|	|	|	5.66

29.500	0.00	0.73	1.707	O	|	|	|	|	5.64
29.583	0.00	0.73	1.701	O	|	|	|	|	5.63
29.667	0.00	0.72	1.697	O	|	|	|	|	5.62
29.750	0.00	0.71	1.692	O	|	|	|	|	5.61
29.833	0.00	0.70	1.687	O	|	|	|	|	5.60
29.917	0.00	0.69	1.682	O	|	|	|	|	5.59
30.000	0.00	0.68	1.677	O	|	|	|	|	5.58
30.083	0.00	0.67	1.673	O	|	|	|	|	5.57
30.167	0.00	0.66	1.668	O	|	|	|	|	5.56
30.250	0.00	0.65	1.664	O	|	|	|	|	5.55
30.333	0.00	0.65	1.659	O	|	|	|	|	5.54
30.417	0.00	0.64	1.655	O	|	|	|	|	5.53
30.500	0.00	0.63	1.650	O	|	|	|	|	5.52
30.583	0.00	0.62	1.646	O	|	|	|	|	5.51
30.667	0.00	0.61	1.642	O	|	|	|	|	5.50
30.750	0.00	0.61	1.637	O	|	|	|	|	5.49
30.833	0.00	0.61	1.633	O	|	|	|	|	5.48
30.917	0.00	0.61	1.629	O	|	|	|	|	5.47
31.000	0.00	0.61	1.625	O	|	|	|	|	5.46
31.083	0.00	0.61	1.621	O	|	|	|	|	5.46
31.167	0.00	0.61	1.617	O	|	|	|	|	5.45
31.250	0.00	0.61	1.612	O	|	|	|	|	5.44
31.333	0.00	0.61	1.608	O	|	|	|	|	5.43
31.417	0.00	0.60	1.604	O	|	|	|	|	5.42
31.500	0.00	0.60	1.600	O	|	|	|	|	5.41
31.583	0.00	0.60	1.596	O	|	|	|	|	5.40
31.667	0.00	0.60	1.592	O	|	|	|	|	5.39
31.750	0.00	0.60	1.587	O	|	|	|	|	5.38
31.833	0.00	0.60	1.583	O	|	|	|	|	5.37
31.917	0.00	0.60	1.579	O	|	|	|	|	5.36
32.000	0.00	0.60	1.575	O	|	|	|	|	5.35
32.083	0.00	0.60	1.571	O	|	|	|	|	5.34
32.167	0.00	0.60	1.567	O	|	|	|	|	5.33
32.250	0.00	0.60	1.563	O	|	|	|	|	5.32
32.333	0.00	0.60	1.558	O	|	|	|	|	5.31
32.417	0.00	0.60	1.554	O	|	|	|	|	5.30
32.500	0.00	0.60	1.550	O	|	|	|	|	5.29
32.583	0.00	0.60	1.546	O	|	|	|	|	5.28
32.667	0.00	0.60	1.542	O	|	|	|	|	5.27
32.750	0.00	0.60	1.538	O	|	|	|	|	5.26
32.833	0.00	0.59	1.534	O	|	|	|	|	5.25
32.917	0.00	0.59	1.530	O	|	|	|	|	5.24
33.000	0.00	0.59	1.526	O	|	|	|	|	5.23
33.083	0.00	0.59	1.522	O	|	|	|	|	5.22
33.167	0.00	0.59	1.517	O	|	|	|	|	5.21
33.250	0.00	0.59	1.513	O	|	|	|	|	5.20
33.333	0.00	0.59	1.509	O	|	|	|	|	5.19
33.417	0.00	0.59	1.505	O	|	|	|	|	5.19
33.500	0.00	0.59	1.501	O	|	|	|	|	5.18
33.583	0.00	0.59	1.497	O	|	|	|	|	5.17
33.667	0.00	0.59	1.493	O	|	|	|	|	5.16
33.750	0.00	0.59	1.489	O	|	|	|	|	5.15
33.833	0.00	0.59	1.485	O	|	|	|	|	5.14
33.917	0.00	0.59	1.481	O	|	|	|	|	5.13
34.000	0.00	0.59	1.477	O	|	|	|	|	5.12
34.083	0.00	0.59	1.473	O	|	|	|	|	5.11
34.167	0.00	0.59	1.469	O	|	|	|	|	5.10
34.250	0.00	0.58	1.465	O	|	|	|	|	5.09
34.333	0.00	0.58	1.461	O	|	|	|	|	5.08
34.417	0.00	0.58	1.457	O	|	|	|	|	5.07
34.500	0.00	0.58	1.453	O	|	|	|	|	5.06
34.583	0.00	0.58	1.449	O	|	|	|	|	5.05
34.667	0.00	0.58	1.445	O	|	|	|	|	5.04
34.750	0.00	0.58	1.441	O	|	|	|	|	5.03
34.833	0.00	0.58	1.437	O	|	|	|	|	5.03
34.917	0.00	0.58	1.433	O	|	|	|	|	5.02
35.000	0.00	0.58	1.429	O	|	|	|	|	5.01
35.083	0.00	0.58	1.425	O	|	|	|	|	5.00
35.167	0.00	0.58	1.421	O	|	|	|	|	4.99
35.250	0.00	0.58	1.417	O	|	|	|	|	4.98
35.333	0.00	0.58	1.413	O	|	|	|	|	4.97

35.417	0.00	0.58	1.409	O	|	|	|	|	4.96
35.500	0.00	0.58	1.405	O	|	|	|	|	4.95
35.583	0.00	0.58	1.401	O	|	|	|	|	4.94
35.667	0.00	0.57	1.397	O	|	|	|	|	4.93
35.750	0.00	0.57	1.393	O	|	|	|	|	4.92
35.833	0.00	0.57	1.389	O	|	|	|	|	4.91
35.917	0.00	0.57	1.385	O	|	|	|	|	4.90
36.000	0.00	0.57	1.381	O	|	|	|	|	4.90
36.083	0.00	0.57	1.377	O	|	|	|	|	4.89
36.167	0.00	0.57	1.373	O	|	|	|	|	4.88
36.250	0.00	0.57	1.369	O	|	|	|	|	4.87
36.333	0.00	0.57	1.365	O	|	|	|	|	4.86
36.417	0.00	0.57	1.361	O	|	|	|	|	4.85
36.500	0.00	0.57	1.357	O	|	|	|	|	4.84
36.583	0.00	0.57	1.354	O	|	|	|	|	4.83
36.667	0.00	0.57	1.350	O	|	|	|	|	4.82
36.750	0.00	0.57	1.346	O	|	|	|	|	4.81
36.833	0.00	0.57	1.342	O	|	|	|	|	4.80
36.917	0.00	0.57	1.338	O	|	|	|	|	4.79
37.000	0.00	0.57	1.334	O	|	|	|	|	4.79
37.083	0.00	0.57	1.330	O	|	|	|	|	4.78
37.167	0.00	0.56	1.326	O	|	|	|	|	4.77
37.250	0.00	0.56	1.322	O	|	|	|	|	4.76
37.333	0.00	0.56	1.318	O	|	|	|	|	4.75
37.417	0.00	0.56	1.315	O	|	|	|	|	4.74
37.500	0.00	0.56	1.311	O	|	|	|	|	4.73
37.583	0.00	0.56	1.307	O	|	|	|	|	4.72
37.667	0.00	0.56	1.303	O	|	|	|	|	4.71
37.750	0.00	0.56	1.299	O	|	|	|	|	4.70
37.833	0.00	0.56	1.295	O	|	|	|	|	4.70
37.917	0.00	0.56	1.291	O	|	|	|	|	4.69
38.000	0.00	0.56	1.288	O	|	|	|	|	4.68
38.083	0.00	0.56	1.284	O	|	|	|	|	4.67
38.167	0.00	0.56	1.280	O	|	|	|	|	4.66
38.250	0.00	0.56	1.276	O	|	|	|	|	4.65
38.333	0.00	0.56	1.272	O	|	|	|	|	4.64
38.417	0.00	0.56	1.268	O	|	|	|	|	4.63
38.500	0.00	0.56	1.264	O	|	|	|	|	4.62
38.583	0.00	0.56	1.261	O	|	|	|	|	4.61
38.667	0.00	0.55	1.257	O	|	|	|	|	4.61
38.750	0.00	0.55	1.253	O	|	|	|	|	4.60
38.833	0.00	0.55	1.249	O	|	|	|	|	4.59
38.917	0.00	0.55	1.245	O	|	|	|	|	4.58
39.000	0.00	0.55	1.242	O	|	|	|	|	4.57
39.083	0.00	0.55	1.238	O	|	|	|	|	4.56
39.167	0.00	0.55	1.234	O	|	|	|	|	4.55
39.250	0.00	0.55	1.230	O	|	|	|	|	4.54
39.333	0.00	0.55	1.226	O	|	|	|	|	4.53
39.417	0.00	0.55	1.223	O	|	|	|	|	4.53
39.500	0.00	0.55	1.219	O	|	|	|	|	4.52
39.583	0.00	0.55	1.215	O	|	|	|	|	4.51
39.667	0.00	0.55	1.211	O	|	|	|	|	4.50
39.750	0.00	0.55	1.207	O	|	|	|	|	4.49
39.833	0.00	0.55	1.204	O	|	|	|	|	4.48
39.917	0.00	0.55	1.200	O	|	|	|	|	4.47
40.000	0.00	0.55	1.196	O	|	|	|	|	4.46
40.083	0.00	0.55	1.192	O	|	|	|	|	4.46
40.167	0.00	0.55	1.189	O	|	|	|	|	4.45
40.250	0.00	0.54	1.185	O	|	|	|	|	4.44
40.333	0.00	0.54	1.181	O	|	|	|	|	4.43
40.417	0.00	0.54	1.177	O	|	|	|	|	4.42
40.500	0.00	0.54	1.174	O	|	|	|	|	4.41
40.583	0.00	0.54	1.170	O	|	|	|	|	4.40
40.667	0.00	0.54	1.166	O	|	|	|	|	4.39
40.750	0.00	0.54	1.162	O	|	|	|	|	4.39
40.833	0.00	0.54	1.159	O	|	|	|	|	4.38
40.917	0.00	0.54	1.155	O	|	|	|	|	4.37
41.000	0.00	0.54	1.151	O	|	|	|	|	4.36
41.083	0.00	0.54	1.148	O	|	|	|	|	4.35
41.167	0.00	0.54	1.144	O	|	|	|	|	4.34
41.250	0.00	0.54	1.140	O	|	|	|	|	4.33

41.333	0.00	0.54	1.136	O	|	|	|	|	4.32
41.417	0.00	0.54	1.133	O	|	|	|	|	4.32
41.500	0.00	0.54	1.129	O	|	|	|	|	4.31
41.583	0.00	0.54	1.125	O	|	|	|	|	4.30
41.667	0.00	0.54	1.122	O	|	|	|	|	4.29
41.750	0.00	0.53	1.118	O	|	|	|	|	4.28
41.833	0.00	0.53	1.114	O	|	|	|	|	4.27
41.917	0.00	0.53	1.111	O	|	|	|	|	4.26
42.000	0.00	0.53	1.107	O	|	|	|	|	4.25
42.083	0.00	0.53	1.103	O	|	|	|	|	4.24
42.167	0.00	0.53	1.100	O	|	|	|	|	4.23
42.250	0.00	0.53	1.096	O	|	|	|	|	4.22
42.333	0.00	0.53	1.092	O	|	|	|	|	4.21
42.417	0.00	0.53	1.089	O	|	|	|	|	4.20
42.500	0.00	0.53	1.085	O	|	|	|	|	4.19
42.583	0.00	0.53	1.081	O	|	|	|	|	4.18
42.667	0.00	0.53	1.078	O	|	|	|	|	4.17
42.750	0.00	0.53	1.074	O	|	|	|	|	4.16
42.833	0.00	0.53	1.071	O	|	|	|	|	4.15
42.917	0.00	0.53	1.067	O	|	|	|	|	4.14
43.000	0.00	0.52	1.063	O	|	|	|	|	4.13
43.083	0.00	0.52	1.060	O	|	|	|	|	4.12
43.167	0.00	0.52	1.056	O	|	|	|	|	4.11
43.250	0.00	0.52	1.053	O	|	|	|	|	4.10
43.333	0.00	0.52	1.049	O	|	|	|	|	4.09
43.417	0.00	0.52	1.045	O	|	|	|	|	4.08
43.500	0.00	0.52	1.042	O	|	|	|	|	4.07
43.583	0.00	0.52	1.038	O	|	|	|	|	4.06
43.667	0.00	0.52	1.035	O	|	|	|	|	4.05
43.750	0.00	0.52	1.031	O	|	|	|	|	4.04
43.833	0.00	0.52	1.027	O	|	|	|	|	4.03
43.917	0.00	0.52	1.024	O	|	|	|	|	4.02
44.000	0.00	0.52	1.020	O	|	|	|	|	4.01
44.083	0.00	0.52	1.017	O	|	|	|	|	4.00
44.167	0.00	0.52	1.013	O	|	|	|	|	3.99
44.250	0.00	0.51	1.010	O	|	|	|	|	3.98
44.333	0.00	0.51	1.006	O	|	|	|	|	3.97
44.417	0.00	0.51	1.003	O	|	|	|	|	3.96
44.500	0.00	0.51	0.999	O	|	|	|	|	3.95
44.583	0.00	0.51	0.996	O	|	|	|	|	3.94
44.667	0.00	0.51	0.992	O	|	|	|	|	3.93
44.750	0.00	0.51	0.988	O	|	|	|	|	3.92
44.833	0.00	0.51	0.985	O	|	|	|	|	3.91
44.917	0.00	0.51	0.981	O	|	|	|	|	3.90
45.000	0.00	0.51	0.978	O	|	|	|	|	3.89
45.083	0.00	0.51	0.974	O	|	|	|	|	3.88
45.167	0.00	0.51	0.971	O	|	|	|	|	3.87
45.250	0.00	0.51	0.967	O	|	|	|	|	3.86
45.333	0.00	0.51	0.964	O	|	|	|	|	3.85
45.417	0.00	0.51	0.961	O	|	|	|	|	3.84
45.500	0.00	0.50	0.957	O	|	|	|	|	3.83
45.583	0.00	0.50	0.954	O	|	|	|	|	3.82
45.667	0.00	0.50	0.950	O	|	|	|	|	3.81
45.750	0.00	0.50	0.947	O	|	|	|	|	3.80
45.833	0.00	0.50	0.943	O	|	|	|	|	3.79
45.917	0.00	0.50	0.940	O	|	|	|	|	3.78
46.000	0.00	0.50	0.936	O	|	|	|	|	3.77
46.083	0.00	0.50	0.933	O	|	|	|	|	3.76
46.167	0.00	0.50	0.929	O	|	|	|	|	3.75
46.250	0.00	0.50	0.926	O	|	|	|	|	3.74
46.333	0.00	0.50	0.923	O	|	|	|	|	3.73
46.417	0.00	0.50	0.919	O	|	|	|	|	3.73
46.500	0.00	0.50	0.916	O	|	|	|	|	3.72
46.583	0.00	0.50	0.912	O	|	|	|	|	3.71
46.667	0.00	0.50	0.909	O	|	|	|	|	3.70
46.750	0.00	0.49	0.905	O	|	|	|	|	3.69
46.833	0.00	0.49	0.902	O	|	|	|	|	3.68
46.917	0.00	0.49	0.899	O	|	|	|	|	3.67
47.000	0.00	0.49	0.895	O	|	|	|	|	3.66
47.083	0.00	0.49	0.892	O	|	|	|	|	3.65
47.167	0.00	0.49	0.888	O	|	|	|	|	3.64

47.250	0.00	0.49	0.885	O					3.63
47.333	0.00	0.49	0.882	O					3.62
47.417	0.00	0.49	0.878	O					3.61
47.500	0.00	0.49	0.875	O					3.60
47.583	0.00	0.49	0.872	O					3.59
47.667	0.00	0.49	0.868	O					3.58
47.750	0.00	0.49	0.865	O					3.57
47.833	0.00	0.49	0.861	O					3.57
47.917	0.00	0.49	0.858	O					3.56
48.000	0.00	0.49	0.855	O					3.55
48.083	0.00	0.48	0.851	O					3.54
48.167	0.00	0.48	0.848	O					3.53
48.250	0.00	0.48	0.845	O					3.52
48.333	0.00	0.48	0.841	O					3.51
48.417	0.00	0.48	0.838	O					3.50
48.500	0.00	0.48	0.835	O					3.49
48.583	0.00	0.48	0.831	O					3.48
48.667	0.00	0.48	0.828	O					3.47
48.750	0.00	0.48	0.825	O					3.46
48.833	0.00	0.48	0.822	O					3.45
48.917	0.00	0.48	0.818	O					3.45
49.000	0.00	0.48	0.815	O					3.44
49.083	0.00	0.48	0.812	O					3.43
49.167	0.00	0.48	0.808	O					3.42
49.250	0.00	0.48	0.805	O					3.41
49.333	0.00	0.48	0.802	O					3.40
49.417	0.00	0.48	0.799	O					3.39
49.500	0.00	0.47	0.795	O					3.38
49.583	0.00	0.47	0.792	O					3.37
49.667	0.00	0.47	0.789	O					3.36
49.750	0.00	0.47	0.785	O					3.35
49.833	0.00	0.47	0.782	O					3.35
49.917	0.00	0.47	0.779	O					3.34
50.000	0.00	0.47	0.776	O					3.33
50.083	0.00	0.47	0.773	O					3.32
50.167	0.00	0.47	0.769	O					3.31
50.250	0.00	0.47	0.766	O					3.30
50.333	0.00	0.47	0.763	O					3.29
50.417	0.00	0.47	0.760	O					3.28
50.500	0.00	0.47	0.756	O					3.27
50.583	0.00	0.47	0.753	O					3.26
50.667	0.00	0.46	0.750	O					3.25
50.750	0.00	0.46	0.747	O					3.24
50.833	0.00	0.46	0.744	O					3.23
50.917	0.00	0.46	0.740	O					3.21
51.000	0.00	0.46	0.737	O					3.20
51.083	0.00	0.46	0.734	O					3.19
51.167	0.00	0.46	0.731	O					3.18
51.250	0.00	0.46	0.728	O					3.17
51.333	0.00	0.46	0.725	O					3.16
51.417	0.00	0.46	0.721	O					3.15
51.500	0.00	0.46	0.718	O					3.14
51.583	0.00	0.46	0.715	O					3.13
51.667	0.00	0.46	0.712	O					3.12
51.750	0.00	0.45	0.709	O					3.11
51.833	0.00	0.45	0.706	O					3.10
51.917	0.00	0.45	0.703	O					3.09
52.000	0.00	0.45	0.699	O					3.08
52.083	0.00	0.45	0.696	O					3.07
52.167	0.00	0.45	0.693	O					3.06
52.250	0.00	0.45	0.690	O					3.05
52.333	0.00	0.45	0.687	O					3.04
52.417	0.00	0.45	0.684	O					3.03
52.500	0.00	0.45	0.681	O					3.02
52.583	0.00	0.45	0.678	O					3.01
52.667	0.00	0.45	0.675	O					3.00
52.750	0.00	0.45	0.672	O					2.99
52.833	0.00	0.44	0.669	O					2.98
52.917	0.00	0.44	0.665	O					2.96
53.000	0.00	0.44	0.662	O					2.95
53.083	0.00	0.44	0.659	O					2.94

53.167	0.00	0.44	0.656	O	|	|	|	|	2.93
53.250	0.00	0.44	0.653	O	|	|	|	|	2.92
53.333	0.00	0.44	0.650	O	|	|	|	|	2.91
53.417	0.00	0.44	0.647	O	|	|	|	|	2.90
53.500	0.00	0.44	0.644	O	|	|	|	|	2.89
53.583	0.00	0.44	0.641	O	|	|	|	|	2.88
53.667	0.00	0.44	0.638	O	|	|	|	|	2.87
53.750	0.00	0.44	0.635	O	|	|	|	|	2.86
53.833	0.00	0.44	0.632	O	|	|	|	|	2.85
53.917	0.00	0.43	0.629	O	|	|	|	|	2.84
54.000	0.00	0.43	0.626	O	|	|	|	|	2.83
54.083	0.00	0.43	0.623	O	|	|	|	|	2.82
54.167	0.00	0.43	0.620	O	|	|	|	|	2.81
54.250	0.00	0.43	0.617	O	|	|	|	|	2.80
54.333	0.00	0.43	0.614	O	|	|	|	|	2.79
54.417	0.00	0.43	0.611	O	|	|	|	|	2.78
54.500	0.00	0.43	0.608	O	|	|	|	|	2.77
54.583	0.00	0.43	0.605	O	|	|	|	|	2.76
54.667	0.00	0.43	0.602	O	|	|	|	|	2.75
54.750	0.00	0.43	0.599	O	|	|	|	|	2.74
54.833	0.00	0.43	0.597	O	|	|	|	|	2.74
54.917	0.00	0.43	0.594	O	|	|	|	|	2.73
55.000	0.00	0.43	0.591	O	|	|	|	|	2.72
55.083	0.00	0.42	0.588	O	|	|	|	|	2.71
55.167	0.00	0.42	0.585	O	|	|	|	|	2.70
55.250	0.00	0.42	0.582	O	|	|	|	|	2.69
55.333	0.00	0.42	0.579	O	|	|	|	|	2.68
55.417	0.00	0.42	0.576	O	|	|	|	|	2.67
55.500	0.00	0.42	0.573	O	|	|	|	|	2.66
55.583	0.00	0.42	0.570	O	|	|	|	|	2.65
55.667	0.00	0.42	0.567	O	|	|	|	|	2.64
55.750	0.00	0.42	0.565	O	|	|	|	|	2.63
55.833	0.00	0.42	0.562	O	|	|	|	|	2.62
55.917	0.00	0.42	0.559	O	|	|	|	|	2.61
56.000	0.00	0.42	0.556	O	|	|	|	|	2.60
56.083	0.00	0.42	0.553	O	|	|	|	|	2.59
56.167	0.00	0.42	0.550	O	|	|	|	|	2.58
56.250	0.00	0.41	0.547	O	|	|	|	|	2.57
56.333	0.00	0.41	0.544	O	|	|	|	|	2.56
56.417	0.00	0.41	0.542	O	|	|	|	|	2.55
56.500	0.00	0.41	0.539	O	|	|	|	|	2.54
56.583	0.00	0.41	0.536	O	|	|	|	|	2.53
56.667	0.00	0.41	0.533	O	|	|	|	|	2.52
56.750	0.00	0.41	0.530	O	|	|	|	|	2.51
56.833	0.00	0.41	0.527	O	|	|	|	|	2.50
56.917	0.00	0.41	0.525	O	|	|	|	|	2.50
57.000	0.00	0.41	0.522	O	|	|	|	|	2.49
57.083	0.00	0.41	0.519	O	|	|	|	|	2.48
57.167	0.00	0.41	0.516	O	|	|	|	|	2.47
57.250	0.00	0.41	0.513	O	|	|	|	|	2.46
57.333	0.00	0.41	0.511	O	|	|	|	|	2.45
57.417	0.00	0.40	0.508	O	|	|	|	|	2.44
57.500	0.00	0.40	0.505	O	|	|	|	|	2.43
57.583	0.00	0.40	0.502	O	|	|	|	|	2.42
57.667	0.00	0.40	0.500	O	|	|	|	|	2.41
57.750	0.00	0.40	0.497	O	|	|	|	|	2.40
57.833	0.00	0.40	0.494	O	|	|	|	|	2.39
57.917	0.00	0.40	0.491	O	|	|	|	|	2.38
58.000	0.00	0.40	0.488	O	|	|	|	|	2.37
58.083	0.00	0.40	0.486	O	|	|	|	|	2.37
58.167	0.00	0.40	0.483	O	|	|	|	|	2.36
58.250	0.00	0.40	0.480	O	|	|	|	|	2.35
58.333	0.00	0.40	0.477	O	|	|	|	|	2.34
58.417	0.00	0.40	0.475	O	|	|	|	|	2.33
58.500	0.00	0.40	0.472	O	|	|	|	|	2.32
58.583	0.00	0.39	0.469	O	|	|	|	|	2.31
58.667	0.00	0.39	0.467	O	|	|	|	|	2.30
58.750	0.00	0.39	0.464	O	|	|	|	|	2.29
58.833	0.00	0.39	0.461	O	|	|	|	|	2.28
58.917	0.00	0.39	0.458	O	|	|	|	|	2.27
59.000	0.00	0.39	0.456	O	|	|	|	|	2.26

59.083	0.00	0.39	0.453	O	|	|	|	|	2.25
59.167	0.00	0.39	0.450	O	|	|	|	|	2.24
59.250	0.00	0.39	0.448	O	|	|	|	|	2.23
59.333	0.00	0.39	0.445	O	|	|	|	|	2.22
59.417	0.00	0.39	0.442	O	|	|	|	|	2.21
59.500	0.00	0.38	0.440	O	|	|	|	|	2.20
59.583	0.00	0.38	0.437	O	|	|	|	|	2.19
59.667	0.00	0.38	0.434	O	|	|	|	|	2.18
59.750	0.00	0.38	0.432	O	|	|	|	|	2.18
59.833	0.00	0.38	0.429	O	|	|	|	|	2.17
59.917	0.00	0.38	0.427	O	|	|	|	|	2.16
60.000	0.00	0.38	0.424	O	|	|	|	|	2.15
60.083	0.00	0.38	0.421	O	|	|	|	|	2.14
60.167	0.00	0.38	0.419	O	|	|	|	|	2.13
60.250	0.00	0.38	0.416	O	|	|	|	|	2.12
60.333	0.00	0.38	0.414	O	|	|	|	|	2.11
60.417	0.00	0.37	0.411	O	|	|	|	|	2.10
60.500	0.00	0.37	0.408	O	|	|	|	|	2.09
60.583	0.00	0.37	0.406	O	|	|	|	|	2.08
60.667	0.00	0.37	0.403	O	|	|	|	|	2.07
60.750	0.00	0.37	0.401	O	|	|	|	|	2.06
60.833	0.00	0.37	0.398	O	|	|	|	|	2.05
60.917	0.00	0.37	0.396	O	|	|	|	|	2.04
61.000	0.00	0.37	0.393	O	|	|	|	|	2.03
61.083	0.00	0.37	0.391	O	|	|	|	|	2.02
61.167	0.00	0.37	0.388	O	|	|	|	|	2.02
61.250	0.00	0.37	0.386	O	|	|	|	|	2.01
61.333	0.00	0.36	0.383	O	|	|	|	|	2.00
61.417	0.00	0.36	0.381	O	|	|	|	|	1.99
61.500	0.00	0.36	0.378	O	|	|	|	|	1.98
61.583	0.00	0.36	0.376	O	|	|	|	|	1.97
61.667	0.00	0.36	0.373	O	|	|	|	|	1.96
61.750	0.00	0.36	0.371	O	|	|	|	|	1.95
61.833	0.00	0.36	0.368	O	|	|	|	|	1.94
61.917	0.00	0.36	0.366	O	|	|	|	|	1.93
62.000	0.00	0.36	0.363	O	|	|	|	|	1.92
62.083	0.00	0.36	0.361	O	|	|	|	|	1.92
62.167	0.00	0.36	0.358	O	|	|	|	|	1.91
62.250	0.00	0.35	0.356	O	|	|	|	|	1.90
62.333	0.00	0.35	0.353	O	|	|	|	|	1.89
62.417	0.00	0.35	0.351	O	|	|	|	|	1.88
62.500	0.00	0.35	0.349	O	|	|	|	|	1.87
62.583	0.00	0.35	0.346	O	|	|	|	|	1.86
62.667	0.00	0.35	0.344	O	|	|	|	|	1.85
62.750	0.00	0.35	0.341	O	|	|	|	|	1.84
62.833	0.00	0.35	0.339	O	|	|	|	|	1.84
62.917	0.00	0.35	0.336	O	|	|	|	|	1.83
63.000	0.00	0.35	0.334	O	|	|	|	|	1.82
63.083	0.00	0.35	0.332	O	|	|	|	|	1.81
63.167	0.00	0.35	0.329	O	|	|	|	|	1.80
63.250	0.00	0.34	0.327	O	|	|	|	|	1.79
63.333	0.00	0.34	0.325	O	|	|	|	|	1.78
63.417	0.00	0.34	0.322	O	|	|	|	|	1.78
63.500	0.00	0.34	0.320	O	|	|	|	|	1.77
63.583	0.00	0.34	0.318	O	|	|	|	|	1.76
63.667	0.00	0.34	0.315	O	|	|	|	|	1.75
63.750	0.00	0.34	0.313	O	|	|	|	|	1.74
63.833	0.00	0.34	0.310	O	|	|	|	|	1.73
63.917	0.00	0.34	0.308	O	|	|	|	|	1.72
64.000	0.00	0.34	0.306	O	|	|	|	|	1.72
64.083	0.00	0.34	0.304	O	|	|	|	|	1.71
64.167	0.00	0.34	0.301	O	|	|	|	|	1.70
64.250	0.00	0.33	0.299	O	|	|	|	|	1.69
64.333	0.00	0.33	0.297	O	|	|	|	|	1.68
64.417	0.00	0.33	0.294	O	|	|	|	|	1.67
64.500	0.00	0.33	0.292	O	|	|	|	|	1.67
64.583	0.00	0.33	0.290	O	|	|	|	|	1.66
64.667	0.00	0.33	0.287	O	|	|	|	|	1.65
64.750	0.00	0.33	0.285	O	|	|	|	|	1.64
64.833	0.00	0.33	0.283	O	|	|	|	|	1.63
64.917	0.00	0.33	0.281	O	|	|	|	|	1.62

65.000	0.00	0.33	0.278	O					1.62
65.083	0.00	0.33	0.276	O					1.61
65.167	0.00	0.33	0.274	O					1.60
65.250	0.00	0.32	0.272	O					1.59
65.333	0.00	0.32	0.269	O					1.58
65.417	0.00	0.32	0.267	O					1.57
65.500	0.00	0.32	0.265	O					1.57
65.583	0.00	0.32	0.263	O					1.56
65.667	0.00	0.32	0.261	O					1.55
65.750	0.00	0.32	0.258	O					1.54
65.833	0.00	0.32	0.256	O					1.53
65.917	0.00	0.32	0.254	O					1.53
66.000	0.00	0.32	0.252	O					1.52
66.083	0.00	0.32	0.250	O					1.51
66.167	0.00	0.32	0.247	O					1.50
66.250	0.00	0.32	0.245	O					1.49
66.333	0.00	0.31	0.243	O					1.49
66.417	0.00	0.31	0.241	O					1.48
66.500	0.00	0.31	0.239	O					1.47
66.583	0.00	0.31	0.237	O					1.46
66.667	0.00	0.31	0.234	O					1.46
66.750	0.00	0.31	0.232	O					1.45
66.833	0.00	0.31	0.230	O					1.44
66.917	0.00	0.31	0.228	O					1.43
67.000	0.00	0.31	0.226	O					1.42
67.083	0.00	0.31	0.224	O					1.42
67.167	0.00	0.31	0.222	O					1.41
67.250	0.00	0.31	0.220	O					1.40
67.333	0.00	0.31	0.218	O					1.39
67.417	0.00	0.30	0.215	O					1.39
67.500	0.00	0.30	0.213	O					1.38
67.583	0.00	0.30	0.211	O					1.37
67.667	0.00	0.30	0.209	O					1.36
67.750	0.00	0.30	0.207	O					1.35
67.833	0.00	0.30	0.205	O					1.35
67.917	0.00	0.30	0.203	O					1.34
68.000	0.00	0.30	0.201	O					1.33
68.083	0.00	0.30	0.199	O					1.32
68.167	0.00	0.30	0.197	O					1.32
68.250	0.00	0.30	0.195	O					1.31
68.333	0.00	0.30	0.193	O					1.30
68.417	0.00	0.29	0.191	O					1.29
68.500	0.00	0.29	0.189	O					1.28
68.583	0.00	0.29	0.187	O					1.27
68.667	0.00	0.29	0.185	O					1.26
68.750	0.00	0.29	0.183	O					1.25
68.833	0.00	0.29	0.181	O					1.23
68.917	0.00	0.28	0.179	O					1.22
69.000	0.00	0.28	0.177	O					1.21
69.083	0.00	0.28	0.175	O					1.20
69.167	0.00	0.28	0.173	O					1.19
69.250	0.00	0.28	0.171	O					1.18
69.333	0.00	0.28	0.169	O					1.17
69.417	0.00	0.27	0.167	O					1.16
69.500	0.00	0.27	0.165	O					1.14
69.583	0.00	0.27	0.163	O					1.13
69.667	0.00	0.27	0.162	O					1.12
69.750	0.00	0.27	0.160	O					1.11
69.833	0.00	0.27	0.158	O					1.10
69.917	0.00	0.26	0.156	O					1.09
70.000	0.00	0.26	0.154	O					1.08
70.083	0.00	0.26	0.152	O					1.07
70.167	0.00	0.26	0.151	O					1.06
70.250	0.00	0.26	0.149	O					1.05
70.333	0.00	0.26	0.147	O					1.04
70.417	0.00	0.25	0.145	O					1.03
70.500	0.00	0.25	0.144	O					1.02
70.583	0.00	0.25	0.142	O					1.01
70.667	0.00	0.25	0.140	O					1.00
70.750	0.00	0.25	0.138	O					0.99
70.833	0.00	0.25	0.137	O					0.98

70.917	0.00	0.24	0.135	O	|	|	|	|	0.97
71.000	0.00	0.24	0.133	O	|	|	|	|	0.96
71.083	0.00	0.24	0.132	O	|	|	|	|	0.95
71.167	0.00	0.24	0.130	O	|	|	|	|	0.94
71.250	0.00	0.24	0.128	O	|	|	|	|	0.93
71.333	0.00	0.24	0.127	O	|	|	|	|	0.92
71.417	0.00	0.24	0.125	O	|	|	|	|	0.91
71.500	0.00	0.23	0.123	O	|	|	|	|	0.90
71.583	0.00	0.23	0.122	O	|	|	|	|	0.89
71.667	0.00	0.23	0.120	O	|	|	|	|	0.88
71.750	0.00	0.23	0.119	O	|	|	|	|	0.87
71.833	0.00	0.23	0.117	O	|	|	|	|	0.86
71.917	0.00	0.23	0.116	O	|	|	|	|	0.86
72.000	0.00	0.23	0.114	O	|	|	|	|	0.85
72.083	0.00	0.22	0.112	O	|	|	|	|	0.84
72.167	0.00	0.22	0.111	O	|	|	|	|	0.83
72.250	0.00	0.22	0.109	O	|	|	|	|	0.82
72.333	0.00	0.22	0.108	O	|	|	|	|	0.81
72.417	0.00	0.22	0.106	O	|	|	|	|	0.80
72.500	0.00	0.22	0.105	O	|	|	|	|	0.79
72.583	0.00	0.22	0.103	O	|	|	|	|	0.78
72.667	0.00	0.22	0.102	O	|	|	|	|	0.78
72.750	0.00	0.21	0.100	O	|	|	|	|	0.77
72.833	0.00	0.21	0.099	O	|	|	|	|	0.76
72.917	0.00	0.21	0.097	O	|	|	|	|	0.75
73.000	0.00	0.21	0.096	O	|	|	|	|	0.74
73.083	0.00	0.21	0.094	O	|	|	|	|	0.73
73.167	0.00	0.21	0.093	O	|	|	|	|	0.72
73.250	0.00	0.21	0.092	O	|	|	|	|	0.72
73.333	0.00	0.20	0.090	O	|	|	|	|	0.71
73.417	0.00	0.20	0.089	O	|	|	|	|	0.70
73.500	0.00	0.20	0.087	O	|	|	|	|	0.69
73.583	0.00	0.20	0.086	O	|	|	|	|	0.68
73.667	0.00	0.20	0.085	O	|	|	|	|	0.68
73.750	0.00	0.20	0.083	O	|	|	|	|	0.67
73.833	0.00	0.20	0.082	O	|	|	|	|	0.66
73.917	0.00	0.20	0.081	O	|	|	|	|	0.65
74.000	0.00	0.20	0.079	O	|	|	|	|	0.64
74.083	0.00	0.19	0.078	O	|	|	|	|	0.64
74.167	0.00	0.19	0.077	O	|	|	|	|	0.63
74.250	0.00	0.19	0.075	O	|	|	|	|	0.62
74.333	0.00	0.19	0.074	O	|	|	|	|	0.61
74.417	0.00	0.19	0.073	O	|	|	|	|	0.61
74.500	0.00	0.19	0.071	O	|	|	|	|	0.60
74.583	0.00	0.19	0.070	O	|	|	|	|	0.59
74.667	0.00	0.19	0.069	O	|	|	|	|	0.58
74.750	0.00	0.18	0.067	O	|	|	|	|	0.58
74.833	0.00	0.18	0.066	O	|	|	|	|	0.57
74.917	0.00	0.18	0.065	O	|	|	|	|	0.56
75.000	0.00	0.18	0.064	O	|	|	|	|	0.55
75.083	0.00	0.18	0.062	O	|	|	|	|	0.55
75.167	0.00	0.18	0.061	O	|	|	|	|	0.54
75.250	0.00	0.18	0.060	O	|	|	|	|	0.53
75.333	0.00	0.18	0.059	O	|	|	|	|	0.53
75.417	0.00	0.18	0.058	O	|	|	|	|	0.52
75.500	0.00	0.17	0.056	O	|	|	|	|	0.51
75.583	0.00	0.17	0.055	O	|	|	|	|	0.50
75.667	0.00	0.17	0.054	O	|	|	|	|	0.50
75.750	0.00	0.17	0.053	O	|	|	|	|	0.49
75.833	0.00	0.17	0.052	O	|	|	|	|	0.48
75.917	0.00	0.17	0.050	O	|	|	|	|	0.48
76.000	0.00	0.17	0.049	O	|	|	|	|	0.47
76.083	0.00	0.17	0.048	O	|	|	|	|	0.46
76.167	0.00	0.17	0.047	O	|	|	|	|	0.46
76.250	0.00	0.17	0.046	O	|	|	|	|	0.45
76.333	0.00	0.16	0.045	O	|	|	|	|	0.44
76.417	0.00	0.16	0.044	O	|	|	|	|	0.44
76.500	0.00	0.16	0.042	O	|	|	|	|	0.43
76.583	0.00	0.16	0.041	O	|	|	|	|	0.42
76.667	0.00	0.16	0.040	O	|	|	|	|	0.42
76.750	0.00	0.16	0.039	O	|	|	|	|	0.41

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76.833    0.00    0.16      0.038  O       |       |       |       |     0.40
76.917    0.00    0.16      0.037  O       |       |       |       |     0.40
77.000    0.00    0.16      0.036  O       |       |       |       |     0.39
77.083    0.00    0.16      0.035  O       |       |       |       |     0.39
77.167    0.00    0.15      0.034  O       |       |       |       |     0.38
77.250    0.00    0.15      0.033  O       |       |       |       |     0.37
77.333    0.00    0.15      0.032  O       |       |       |       |     0.37
77.417    0.00    0.15      0.031  O       |       |       |       |     0.36
77.500    0.00    0.15      0.030  O       |       |       |       |     0.36
77.583    0.00    0.15      0.028  O       |       |       |       |     0.35
77.667    0.00    0.15      0.027  O       |       |       |       |     0.34
77.750    0.00    0.15      0.026  O       |       |       |       |     0.34
77.833    0.00    0.15      0.025  O       |       |       |       |     0.33
77.917    0.00    0.15      0.024  O       |       |       |       |     0.33
78.000    0.00    0.15      0.023  O       |       |       |       |     0.32
78.083    0.00    0.14      0.022  O       |       |       |       |     0.31
78.167    0.00    0.14      0.021  O       |       |       |       |     0.31
78.250    0.00    0.14      0.020  O       |       |       |       |     0.30
78.333    0.00    0.14      0.019  O       |       |       |       |     0.29
78.417    0.00    0.13      0.019  O       |       |       |       |     0.28
78.500    0.00    0.13      0.018  O       |       |       |       |     0.26
78.583    0.00    0.12      0.017  O       |       |       |       |     0.25
78.667    0.00    0.11      0.016  O       |       |       |       |     0.24
78.750    0.00    0.11      0.015  O       |       |       |       |     0.23
78.833    0.00    0.10      0.015  O       |       |       |       |     0.22
78.917    0.00    0.10      0.014  O       |       |       |       |     0.21

Remaining water in basin =    0.01 (Ac.Ft)

****************************HYDROGRAPH DATA****************************
              Number of intervals =   947
              Time interval =    5.0 (Min.)
              Maximum/Peak flow rate =       94.522 (CFS)
              Total volume =      12.660 (Ac.Ft)
       Status of hydrographs being held in storage
                 Stream 1  Stream 2  Stream 3  Stream 4  Stream 5
       Peak (CFS)      0.000     0.000     0.000     0.000     0.000
       Vol (Ac.Ft)      0.000     0.000     0.000     0.000     0.000
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FLOOD HYDROGRAPH ROUTING PROGRAM
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Study date: 08/18/25

Program License Serial Number 5006

********** HYDROGRAPH INFORMATION **********

From study/file name: PROA24100.rte
**********HYDROGRAPH DATA**********
Number of intervals = 306
Time interval = 5.0 (Min.)
Maximum/Peak flow rate = 36.707 (CFS)
Total volume = 17.988 (Ac.Ft)

Status of hydrographs being held in storage

	Stream 1	Stream 2	Stream 3	Stream 4	Stream 5
Peak (CFS)	0.000	0.000	0.000	0.000	0.000
Vol (Ac.Ft)	0.000	0.000	0.000	0.000	0.000

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Process from Point/Station 0.000 to Point/Station 0.000
**** RETARDING BASIN ROUTING ****

User entry of depth-outflow-storage data

Total number of inflow hydrograph intervals = 306
Hydrograph time unit = 5.000 (Min.)
Initial depth in storage basin = 0.00(Ft.)

Initial basin depth = 0.00 (Ft.)
Initial basin storage = 0.00 (Ac.Ft)
Initial basin outflow = 0.00 (CFS)

Depth vs. Storage and Depth vs. Discharge data:

Basin Depth (Ft.)	Storage (Ac.Ft)	Outflow (CFS)	(S-O*dt/2) (Ac.Ft)	(S+O*dt/2) (Ac.Ft)
0.000	0.000	0.000	0.000	0.000
0.300	0.020	0.142	0.020	0.020
1.300	0.192	0.296	0.191	0.193
2.300	0.466	0.394	0.465	0.467
3.300	0.766	0.469	0.764	0.768
4.300	1.126	0.536	1.124	1.128
5.500	1.640	0.610	1.638	1.642
6.300	2.007	1.299	2.003	2.011
8.300	3.066	1.957	3.059	3.073
10.300	4.341	2.417	4.333	4.349
11.400	5.141	2.632	5.132	5.150
12.300	5.851	167.187	5.275	6.427
13.300	6.699	657.066	4.436	8.962
14.300	7.611	1377.819	2.866	12.356

Hydrograph Detention Basin Routing

Graph values: 'I'= unit inflow; 'O'=outflow at time shown

Time (Hours)	Inflow (CFS)	Outflow (CFS)	Storage (Ac.Ft)	.0	9.2	18.35	27.53	36.71	Depth (Ft.)
0.083	0.08	0.00	0.000	O	|	|	|	|	0.00
0.167	0.40	0.01	0.002	O	|	|	|	|	0.03
0.250	0.84	0.04	0.006	O	|	|	|	|	0.09
0.333	1.11	0.09	0.012	O	|	|	|	|	0.18
0.417	1.39	0.14	0.020	OI	|	|	|	|	0.30
0.500	1.69	0.15	0.030	OI	|	|	|	|	0.36
0.583	1.86	0.16	0.041	OI	|	|	|	|	0.42
0.667	1.96	0.17	0.053	OI	|	|	|	|	0.49
0.750	2.03	0.18	0.065	OI	|	|	|	|	0.56
0.833	2.13	0.19	0.078	OI	|	|	|	|	0.64
0.917	2.33	0.21	0.092	O I	|	|	|	|	0.72
1.000	2.59	0.22	0.108	O I	|	|	|	|	0.81
1.083	2.69	0.24	0.124	O I	|	|	|	|	0.91
1.167	2.61	0.25	0.141	O I	|	|	|	|	1.00
1.250	2.45	0.26	0.157	O I	|	|	|	|	1.09
1.333	2.38	0.28	0.171	O I	|	|	|	|	1.18
1.417	2.35	0.29	0.186	O I	|	|	|	|	1.26
1.500	2.34	0.30	0.200	O I	|	|	|	|	1.33
1.583	2.34	0.30	0.214	O I	|	|	|	|	1.38
1.667	2.33	0.31	0.228	O I	|	|	|	|	1.43
1.750	2.32	0.31	0.242	O I	|	|	|	|	1.48
1.833	2.36	0.32	0.256	O I	|	|	|	|	1.53
1.917	2.52	0.32	0.270	O I	|	|	|	|	1.59
2.000	2.73	0.33	0.286	O I	|	|	|	|	1.64
2.083	2.84	0.34	0.303	O I	|	|	|	|	1.71
2.167	2.90	0.34	0.321	O I	|	|	|	|	1.77
2.250	2.94	0.35	0.338	O I	|	|	|	|	1.83
2.333	2.96	0.35	0.356	O I	|	|	|	|	1.90
2.417	2.98	0.36	0.374	O I	|	|	|	|	1.96
2.500	3.00	0.37	0.392	O I	|	|	|	|	2.03
2.583	3.05	0.37	0.411	O I	|	|	|	|	2.10
2.667	3.22	0.38	0.430	O I	|	|	|	|	2.17
2.750	3.45	0.39	0.450	O I	|	|	|	|	2.24
2.833	3.57	0.40	0.471	O I	|	|	|	|	2.32
2.917	3.63	0.40	0.493	O I	|	|	|	|	2.39
3.000	3.68	0.41	0.516	O I	|	|	|	|	2.47
3.083	3.71	0.41	0.538	O I	|	|	|	|	2.54
3.167	3.74	0.42	0.561	O I	|	|	|	|	2.62
3.250	3.76	0.42	0.584	O I	|	|	|	|	2.69
3.333	3.77	0.43	0.607	O I	|	|	|	|	2.77
3.417	3.78	0.44	0.630	O I	|	|	|	|	2.85
3.500	3.79	0.44	0.653	O I	|	|	|	|	2.92
3.583	3.80	0.45	0.676	O I	|	|	|	|	3.00
3.667	3.81	0.45	0.699	O I	|	|	|	|	3.08
3.750	3.81	0.46	0.722	O I	|	|	|	|	3.15
3.833	3.85	0.46	0.746	O I	|	|	|	|	3.23
3.917	4.02	0.47	0.770	O I	|	|	|	|	3.31
4.000	4.24	0.47	0.795	O I	|	|	|	|	3.38
4.083	4.36	0.48	0.821	O I	|	|	|	|	3.45
4.167	4.42	0.48	0.848	O I	|	|	|	|	3.53
4.250	4.46	0.49	0.875	O I	|	|	|	|	3.60
4.333	4.52	0.49	0.903	O I	|	|	|	|	3.68
4.417	4.71	0.50	0.931	O I	|	|	|	|	3.76
4.500	4.94	0.51	0.961	O I	|	|	|	|	3.84
4.583	5.07	0.51	0.992	O I	|	|	|	|	3.93
4.667	5.14	0.52	1.023	O I	|	|	|	|	4.02
4.750	5.19	0.52	1.055	O I	|	|	|	|	4.10
4.833	5.26	0.53	1.088	O I	|	|	|	|	4.19
4.917	5.46	0.54	1.121	O I	|	|	|	|	4.29
5.000	5.69	0.54	1.156	O I	|	|	|	|	4.37
5.083	5.75	0.55	1.191	O I	|	|	|	|	4.45
5.167	5.50	0.55	1.226	O I	|	|	|	|	4.53
5.250	5.11	0.56	1.259	O I	|	|	|	|	4.61
5.333	4.96	0.56	1.290	O I	|	|	|	|	4.68
5.417	5.03	0.56	1.320	O I	|	|	|	|	4.75
5.500	5.19	0.57	1.352	O I	|	|	|	|	4.83
5.583	5.31	0.57	1.384	O I	|	|	|	|	4.90
5.667	5.50	0.58	1.417	O I	|	|	|	|	4.98
5.750	5.73	0.58	1.452	O I	|	|	|	|	5.06

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 5.833    5.86    0.59      1.488  O    I  |        |        |        |     5.14
 5.917    5.93    0.59      1.524  O    I  |        |        |        |     5.23
 6.000    5.97    0.60      1.561  O    I  |        |        |        |     5.32
 6.083    6.04    0.60      1.598  O    I  |        |        |        |     5.40
 6.167    6.23    0.61      1.637  O    I  |        |        |        |     5.49
 6.250    6.46    0.68      1.676  O    I  |        |        |        |     5.58
 6.333    6.60    0.75      1.716  O    I  |        |        |        |     5.67
 6.417    6.66    0.83      1.756  O    I  |        |        |        |     5.75
 6.500    6.71    0.90      1.796  O    I  |        |        |        |     5.84
 6.583    6.78    0.98      1.836  O    I  |        |        |        |     5.93
 6.667    6.98    1.05      1.877  O     I |        |        |        |     6.02
 6.750    7.22    1.13      1.918  O     I |        |        |        |     6.11
 6.833    7.36    1.21      1.960  |O    I |        |        |        |     6.20
 6.917    7.43    1.29      2.002  |O    I |        |        |        |     6.29
 7.000    7.48    1.32      2.045  |O    I |        |        |        |     6.37
 7.083    7.52    1.35      2.087  |O    I |        |        |        |     6.45
 7.167    7.55    1.38      2.130  |O    I |        |        |        |     6.53
 7.250    7.57    1.40      2.172  |O    I |        |        |        |     6.61
 7.333    7.62    1.43      2.215  |O    I |        |        |        |     6.69
 7.417    7.80    1.45      2.258  |O    I |        |        |        |     6.77
 7.500    8.03    1.48      2.302  |O     I|        |        |        |     6.86
 7.583    8.20    1.51      2.348  |O     I|        |        |        |     6.94
 7.667    8.42    1.54      2.395  |O     I|        |        |        |     7.03
 7.750    8.68    1.57      2.443  |O     I|        |        |        |     7.12
 7.833    8.87    1.60      2.492  |O     I|        |        |        |     7.22
 7.917    9.12    1.63      2.543  |O     I|        |        |        |     7.31
 8.000    9.40    1.66      2.596  |O      I        |        |        |     7.41
 8.083    9.64    1.70      2.650  |O      I        |        |        |     7.51
 8.167   10.05    1.73      2.706  |O      I        |        |        |     7.62
 8.250   10.55    1.77      2.764  |O      |I       |        |        |     7.73
 8.333   10.84    1.81      2.826  |O      |I       |        |        |     7.85
 8.417   10.99    1.85      2.888  |O      |I       |        |        |     7.96
 8.500   11.10    1.89      2.952  |O      |I       |        |        |     8.08
 8.583   11.22    1.93      3.015  |O      |I       |        |        |     8.20
 8.667   11.44    1.96      3.080  |O      |I       |        |        |     8.32
 8.750   11.71    1.99      3.146  |O      | I      |        |        |     8.43
 8.833   11.91    2.01      3.214  |O      | I      |        |        |     8.53
 8.917   12.16    2.04      3.283  |O      | I      |        |        |     8.64
 9.000   12.44    2.06      3.353  |O      | I      |        |        |     8.75
 9.083   12.69    2.09      3.425  |O      |  I     |        |        |     8.86
 9.167   13.11    2.11      3.500  |O      |  I     |        |        |     8.98
 9.250   13.61    2.14      3.577  |O      |  I     |        |        |     9.10
 9.333   13.94    2.17      3.657  |O      |   I    |        |        |     9.23
 9.417   14.26    2.20      3.739  |O      |   I    |        |        |     9.36
 9.500   14.58    2.23      3.823  |O      |   I    |        |        |     9.49
 9.583   14.82    2.26      3.909  |O      |   I    |        |        |     9.62
 9.667   15.10    2.29      3.996  |O      |    I   |        |        |     9.76
 9.750   15.41    2.32      4.086  | O     |    I   |        |        |     9.90
 9.833   15.63    2.36      4.176  | O     |    I   |        |        |    10.04
 9.917   15.93    2.39      4.269  | O     |    I   |        |        |    10.19
10.000   16.28    2.42      4.363  | O     |     I  |        |        |    10.33
10.083   16.23    2.45      4.458  | O     |     I  |        |        |    10.46
10.167   15.19    2.47      4.550  | O     |    I   |        |        |    10.59
10.250   13.69    2.50      4.632  | O     |  I     |        |        |    10.70
10.333   12.90    2.52      4.706  | O     |  I     |        |        |    10.80
10.417   12.53    2.53      4.776  | O     | I      |        |        |    10.90
10.500   12.29    2.55      4.844  | O     | I      |        |        |    10.99
10.583   12.31    2.57      4.911  | O     | I      |        |        |    11.08
10.667   12.99    2.59      4.981  | O     |  I     |        |        |    11.18
10.750   13.97    2.61      5.056  | O     |   I    |        |        |    11.28
10.833   14.48    2.63      5.136  | O     |   I    |        |        |    11.39
10.917   14.70   12.57      5.184  |       | O I    |        |        |    11.45
11.000   14.84   14.52      5.192  |       |   O    |        |        |    11.47
11.083   14.90   14.83      5.194  |       |   O    |        |        |    11.47
11.167   14.80   14.85      5.194  |       |   O    |        |        |    11.47
11.250   14.64   14.74      5.193  |       |   O    |        |        |    11.47
11.333   14.56   14.62      5.193  |       |   O    |        |        |    11.47
11.417   14.53   14.56      5.192  |       |   O    |        |        |    11.47
11.500   14.52   14.53      5.192  |       |   O    |        |        |    11.47
11.583   14.43   14.48      5.192  |       |   O    |        |        |    11.46
11.667   14.12   14.30      5.191  |       |   O    |        |        |    11.46
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11.750	13.69	13.95	5.190	|	| IO	|	|	|	11.46
11.833	13.50	13.63	5.188	|	| O	|	|	|	11.46
11.917	13.55	13.54	5.188	|	| O	|	|	|	11.46
12.000	13.70	13.62	5.188	|	| O	|	|	|	11.46
12.083	14.26	13.94	5.190	|	| O	|	|	|	11.46
12.167	16.37	15.16	5.195	|	| OI	|	|	|	11.47
12.250	19.18	17.48	5.205	|	| OI	|	|	|	11.48
12.333	20.81	19.71	5.215	|	| OI	|	|	|	11.49
12.417	21.92	21.18	5.221	|	| OI	|	|	|	11.50
12.500	22.91	22.28	5.226	|	| O	|	|	|	11.51
12.583	23.73	23.20	5.230	|	| O	|	|	|	11.51
12.667	24.83	24.16	5.234	|	| O	|	|	|	11.52
12.750	26.06	25.30	5.239	|	| O	|	|	|	11.52
12.833	26.90	26.35	5.243	|	| OI	|	|	|	11.53
12.917	27.70	27.20	5.247	|	| OI	|	|	|	11.53
13.000	28.52	28.01	5.250	|	| O	|	|	|	11.54
13.083	29.44	28.87	5.254	|	| O	|	|	|	11.54
13.167	31.45	30.27	5.260	|	| OI	|	|	|	11.55
13.250	33.92	32.41	5.269	|	| OI	|	|	|	11.56
13.333	35.34	34.38	5.278	|	| OI	|	|	|	11.57
13.417	36.12	35.58	5.283	|	| O	|	|	|	11.58
13.500	36.71	36.32	5.286	|	| O	|	|	|	11.58
13.583	36.30	36.48	5.287	|	| O	|	|	|	11.59
13.667	33.05	34.88	5.280	|	| I O	|	|	|	11.58
13.750	28.55	31.26	5.265	|	| I O	|	|	|	11.56
13.833	26.20	27.81	5.250	|	| I O	|	|	|	11.54
13.917	25.13	25.91	5.241	|	| IO	|	|	|	11.53
14.000	24.47	24.92	5.237	|	| O	|	|	|	11.52
14.083	24.30	24.44	5.235	|	| O	|	|	|	11.52
14.167	25.26	24.74	5.236	|	| O	|	|	|	11.52
14.250	26.75	25.86	5.241	|	| OI	|	|	|	11.53
14.333	27.43	26.95	5.246	|	| O	|	|	|	11.53
14.417	27.43	27.38	5.248	|	| O	|	|	|	11.54
14.500	27.20	27.32	5.248	|	| O	|	|	|	11.54
14.583	27.12	27.18	5.247	|	| O	|	|	|	11.53
14.667	27.11	27.12	5.247	|	| O	|	|	|	11.53
14.750	27.12	27.12	5.247	|	| O	|	|	|	11.53
14.833	27.08	27.10	5.247	|	| O	|	|	|	11.53
14.917	26.78	26.95	5.246	|	| O	|	|	|	11.53
15.000	26.38	26.62	5.245	|	| IO	|	|	|	11.53
15.083	26.12	26.29	5.243	|	| O	|	|	|	11.53
15.167	25.77	25.98	5.242	|	| O	|	|	|	11.53
15.250	25.34	25.60	5.240	|	| O	|	|	|	11.53
15.333	25.05	25.24	5.239	|	| IO	|	|	|	11.52
15.417	24.64	24.89	5.237	|	| O	|	|	|	11.52
15.500	24.17	24.46	5.235	|	| O	|	|	|	11.52
15.583	23.61	23.96	5.233	|	| O	|	|	|	11.52
15.667	22.19	23.02	5.229	|	| IO	|	|	|	11.51
15.750	20.37	21.47	5.222	|	| IO	|	|	|	11.50
15.833	19.39	20.06	5.216	|	| IO	|	|	|	11.50
15.917	18.91	19.25	5.213	|	| O	|	|	|	11.49
16.000	18.60	18.81	5.211	|	| O	|	|	|	11.49
16.083	17.64	18.20	5.208	|	| O	|	|	|	11.49
16.167	14.39	16.26	5.200	|	| I O	|	|	|	11.47
16.250	10.12	12.70	5.184	|	| I O	|	|	|	11.46
16.333	7.78	9.37	5.170	|	| I O	|	|	|	11.44
16.417	6.60	7.44	5.162	|	| IO	|	|	|	11.43
16.500	5.79	6.34	5.157	|	| O	|	|	|	11.42
16.583	5.14	5.56	5.154	|	| O	|	|	|	11.42
16.667	4.52	4.91	5.151	|	| IO	|	|	|	11.41
16.750	3.94	4.30	5.148	|	| O	|	|	|	11.41
16.833	3.54	3.80	5.146	|	| O	|	|	|	11.41
16.917	3.26	3.45	5.145	|	| IO	|	|	|	11.40
17.000	3.02	3.17	5.143	|	| O	|	|	|	11.40
17.083	2.91	2.99	5.143	|	| O	|	|	|	11.40
17.167	3.10	3.01	5.143	|	| O	|	|	|	11.40
17.250	3.43	3.24	5.144	|	| O	|	|	|	11.40
17.333	3.58	3.48	5.145	|	| O	|	|	|	11.40
17.417	3.62	3.59	5.145	|	| O	|	|	|	11.41
17.500	3.63	3.62	5.145	|	| O	|	|	|	11.41
17.583	3.64	3.63	5.145	|	| O	|	|	|	11.41

17.667	3.68	3.66	5.145	| O	|	|	|	11.41
17.750	3.71	3.69	5.146	| O	|	|	|	11.41
17.833	3.69	3.70	5.146	| O	|	|	|	11.41
17.917	3.55	3.63	5.145	| O	|	|	|	11.41
18.000	3.34	3.47	5.145	| IO	|	|	|	11.40
18.083	3.24	3.31	5.144	| O	|	|	|	11.40
18.167	3.19	3.23	5.144	| O	|	|	|	11.40
18.250	3.16	3.18	5.143	| O	|	|	|	11.40
18.333	3.14	3.16	5.143	| O	|	|	|	11.40
18.417	3.13	3.14	5.143	| O	|	|	|	11.40
18.500	3.12	3.12	5.143	| O	|	|	|	11.40
18.583	3.07	3.10	5.143	| O	|	|	|	11.40
18.667	2.90	3.00	5.143	| O	|	|	|	11.40
18.750	2.67	2.81	5.142	| O	|	|	|	11.40
18.833	2.51	2.63	5.141	| O	|	|	|	11.40
18.917	2.28	2.63	5.139	|IO	|	|	|	11.40
19.000	2.02	2.63	5.136	|IO	|	|	|	11.39
19.083	1.91	2.63	5.131	|IO	|	|	|	11.39
19.167	1.99	2.63	5.127	|IO	|	|	|	11.38
19.250	2.15	2.63	5.123	|IO	|	|	|	11.37
19.333	2.26	2.63	5.120	|IO	|	|	|	11.37
19.417	2.45	2.63	5.118	| O	|	|	|	11.37
19.500	2.68	2.63	5.117	| O	|	|	|	11.37
19.583	2.76	2.63	5.118	| O	|	|	|	11.37
19.667	2.66	2.63	5.119	| O	|	|	|	11.37
19.750	2.49	2.63	5.118	| O	|	|	|	11.37
19.833	2.36	2.63	5.117	| O	|	|	|	11.37
19.917	2.16	2.62	5.114	|IO	|	|	|	11.36
20.000	1.93	2.62	5.110	|IO	|	|	|	11.36
20.083	1.83	2.62	5.105	|IO	|	|	|	11.35
20.167	1.93	2.62	5.100	|IO	|	|	|	11.34
20.250	2.10	2.62	5.096	|IO	|	|	|	11.34
20.333	2.19	2.62	5.093	|IO	|	|	|	11.33
20.417	2.22	2.62	5.090	|IO	|	|	|	11.33
20.500	2.24	2.62	5.087	|IO	|	|	|	11.33
20.583	2.26	2.62	5.085	|IO	|	|	|	11.32
20.667	2.26	2.62	5.082	|IO	|	|	|	11.32
20.750	2.27	2.62	5.080	|IO	|	|	|	11.32
20.833	2.24	2.61	5.077	|IO	|	|	|	11.31
20.917	2.07	2.61	5.074	|IO	|	|	|	11.31
21.000	1.86	2.61	5.070	|IO	|	|	|	11.30
21.083	1.78	2.61	5.064	|IO	|	|	|	11.29
21.167	1.89	2.61	5.059	|IO	|	|	|	11.29
21.250	2.07	2.61	5.055	|IO	|	|	|	11.28
21.333	2.12	2.61	5.051	|IO	|	|	|	11.28
21.417	2.00	2.61	5.047	|IO	|	|	|	11.27
21.500	1.80	2.61	5.042	|IO	|	|	|	11.26
21.583	1.74	2.60	5.037	|IO	|	|	|	11.26
21.667	1.86	2.60	5.031	|IO	|	|	|	11.25
21.750	2.05	2.60	5.027	|IO	|	|	|	11.24
21.833	2.10	2.60	5.023	|IO	|	|	|	11.24
21.917	1.98	2.60	5.019	|IO	|	|	|	11.23
22.000	1.79	2.60	5.014	|IO	|	|	|	11.23
22.083	1.73	2.60	5.009	|IO	|	|	|	11.22
22.167	1.85	2.59	5.003	|IO	|	|	|	11.21
22.250	2.04	2.59	4.999	|IO	|	|	|	11.20
22.333	2.09	2.59	4.995	|IO	|	|	|	11.20
22.417	1.97	2.59	4.991	|IO	|	|	|	11.19
22.500	1.79	2.59	4.986	|IO	|	|	|	11.19
22.583	1.69	2.59	4.980	|IO	|	|	|	11.18
22.667	1.65	2.59	4.974	|IO	|	|	|	11.17
22.750	1.62	2.59	4.967	|IO	|	|	|	11.16
22.833	1.60	2.58	4.961	|IO	|	|	|	11.15
22.917	1.58	2.58	4.954	|IO	|	|	|	11.14
23.000	1.57	2.58	4.947	|IO	|	|	|	11.13
23.083	1.57	2.58	4.940	|IO	|	|	|	11.12
23.167	1.56	2.58	4.933	|IO	|	|	|	11.11
23.250	1.55	2.57	4.926	|IO	|	|	|	11.10
23.333	1.54	2.57	4.919	|IO	|	|	|	11.09
23.417	1.54	2.57	4.912	|IO	|	|	|	11.08
23.500	1.54	2.57	4.905	|IO	|	|	|	11.08

23.583	1.54	2.57	4.898	|IO	|	|	|	11.07
23.667	1.53	2.56	4.891	|IO	|	|	|	11.06
23.750	1.53	2.56	4.883	|IO	|	|	|	11.05
23.833	1.53	2.56	4.876	|IO	|	|	|	11.04
23.917	1.53	2.56	4.869	|IO	|	|	|	11.03
24.000	1.53	2.56	4.862	|IO	|	|	|	11.02
24.083	1.45	2.56	4.855	|IO	|	|	|	11.01
24.167	1.13	2.55	4.846	I O	|	|	|	10.99
24.250	0.69	2.55	4.835	I O	|	|	|	10.98
24.333	0.46	2.55	4.821	I O	|	|	|	10.96
24.417	0.34	2.54	4.806	I O	|	|	|	10.94
24.500	0.26	2.54	4.791	I O	|	|	|	10.92
24.583	0.21	2.53	4.775	I O	|	|	|	10.90
24.667	0.16	2.53	4.759	I O	|	|	|	10.87
24.750	0.13	2.52	4.743	I O	|	|	|	10.85
24.833	0.10	2.52	4.726	I O	|	|	|	10.83
24.917	0.08	2.52	4.709	I O	|	|	|	10.81
25.000	0.06	2.51	4.692	I O	|	|	|	10.78
25.083	0.05	2.51	4.675	I O	|	|	|	10.76
25.167	0.03	2.50	4.659	I O	|	|	|	10.74
25.250	0.02	2.50	4.642	I O	|	|	|	10.71
25.333	0.02	2.49	4.624	I O	|	|	|	10.69
25.417	0.01	2.49	4.607	I O	|	|	|	10.67
25.500	0.00	2.48	4.590	I O	|	|	|	10.64
25.583	0.00	2.48	4.573	I O	|	|	|	10.62
25.667	0.00	2.47	4.556	I O	|	|	|	10.60
25.750	0.00	2.47	4.539	I O	|	|	|	10.57
25.833	0.00	2.47	4.522	I O	|	|	|	10.55
25.917	0.00	2.46	4.505	I O	|	|	|	10.53
26.000	0.00	2.46	4.488	I O	|	|	|	10.50
26.083	0.00	2.45	4.471	I O	|	|	|	10.48
26.167	0.00	2.45	4.454	I O	|	|	|	10.46
26.250	0.00	2.44	4.438	I O	|	|	|	10.43
26.333	0.00	2.44	4.421	I O	|	|	|	10.41
26.417	0.00	2.43	4.404	I O	|	|	|	10.39
26.500	0.00	2.43	4.387	I O	|	|	|	10.36
26.583	0.00	2.42	4.371	I O	|	|	|	10.34
26.667	0.00	2.42	4.354	I O	|	|	|	10.32
26.750	0.00	2.42	4.337	I O	|	|	|	10.29
26.833	0.00	2.41	4.321	I O	|	|	|	10.27
26.917	0.00	2.40	4.304	I O	|	|	|	10.24
27.000	0.00	2.40	4.288	I O	|	|	|	10.22
27.083	0.00	2.39	4.271	I O	|	|	|	10.19
27.167	0.00	2.39	4.255	I O	|	|	|	10.16
27.250	0.00	2.38	4.238	I O	|	|	|	10.14
27.333	0.00	2.37	4.222	I O	|	|	|	10.11
27.417	0.00	2.37	4.205	I O	|	|	|	10.09
27.500	0.00	2.36	4.189	I O	|	|	|	10.06
27.583	0.00	2.36	4.173	I O	|	|	|	10.04
27.667	0.00	2.35	4.157	I O	|	|	|	10.01
27.750	0.00	2.34	4.141	I O	|	|	|	9.99
27.833	0.00	2.34	4.124	I O	|	|	|	9.96
27.917	0.00	2.33	4.108	I O	|	|	|	9.94
28.000	0.00	2.33	4.092	I O	|	|	|	9.91
28.083	0.00	2.32	4.076	I O	|	|	|	9.88
28.167	0.00	2.32	4.060	I O	|	|	|	9.86
28.250	0.00	2.31	4.044	I O	|	|	|	9.83
28.333	0.00	2.30	4.029	I O	|	|	|	9.81
28.417	0.00	2.30	4.013	I O	|	|	|	9.78
28.500	0.00	2.29	3.997	IO	|	|	|	9.76
28.583	0.00	2.29	3.981	IO	|	|	|	9.74
28.667	0.00	2.28	3.965	IO	|	|	|	9.71
28.750	0.00	2.28	3.950	IO	|	|	|	9.69
28.833	0.00	2.27	3.934	IO	|	|	|	9.66
28.917	0.00	2.26	3.918	IO	|	|	|	9.64
29.000	0.00	2.26	3.903	IO	|	|	|	9.61
29.083	0.00	2.25	3.887	IO	|	|	|	9.59
29.167	0.00	2.25	3.872	IO	|	|	|	9.56
29.250	0.00	2.24	3.856	IO	|	|	|	9.54
29.333	0.00	2.24	3.841	IO	|	|	|	9.52
29.417	0.00	2.23	3.826	IO	|	|	|	9.49

29.500	0.00	2.23	3.810	IO				9.47
29.583	0.00	2.22	3.795	IO				9.44
29.667	0.00	2.21	3.780	IO				9.42
29.750	0.00	2.21	3.764	IO				9.40
29.833	0.00	2.20	3.749	IO				9.37
29.917	0.00	2.20	3.734	IO				9.35
30.000	0.00	2.19	3.719	IO				9.32
30.083	0.00	2.19	3.704	IO				9.30
30.167	0.00	2.18	3.689	IO				9.28
30.250	0.00	2.18	3.674	IO				9.25
30.333	0.00	2.17	3.659	IO				9.23
30.417	0.00	2.17	3.644	IO				9.21
30.500	0.00	2.16	3.629	IO				9.18
30.583	0.00	2.15	3.614	IO				9.16
30.667	0.00	2.15	3.599	IO				9.14
30.750	0.00	2.14	3.584	IO				9.11
30.833	0.00	2.14	3.570	IO				9.09
30.917	0.00	2.13	3.555	IO				9.07
31.000	0.00	2.13	3.540	IO				9.04
31.083	0.00	2.12	3.526	IO				9.02
31.167	0.00	2.12	3.511	IO				9.00
31.250	0.00	2.11	3.497	IO				8.98
31.333	0.00	2.11	3.482	IO				8.95
31.417	0.00	2.10	3.468	IO				8.93
31.500	0.00	2.10	3.453	IO				8.91
31.583	0.00	2.09	3.439	IO				8.88
31.667	0.00	2.09	3.424	IO				8.86
31.750	0.00	2.08	3.410	IO				8.84
31.833	0.00	2.08	3.396	IO				8.82
31.917	0.00	2.07	3.381	IO				8.79
32.000	0.00	2.07	3.367	IO				8.77
32.083	0.00	2.06	3.353	IO				8.75
32.167	0.00	2.06	3.339	IO				8.73
32.250	0.00	2.05	3.325	IO				8.71
32.333	0.00	2.05	3.310	IO				8.68
32.417	0.00	2.04	3.296	IO				8.66
32.500	0.00	2.04	3.282	IO				8.64
32.583	0.00	2.03	3.268	IO				8.62
32.667	0.00	2.02	3.254	IO				8.60
32.750	0.00	2.02	3.240	IO				8.57
32.833	0.00	2.01	3.227	IO				8.55
32.917	0.00	2.01	3.213	IO				8.53
33.000	0.00	2.00	3.199	IO				8.51
33.083	0.00	2.00	3.185	IO				8.49
33.167	0.00	2.00	3.171	IO				8.47
33.250	0.00	1.99	3.158	IO				8.44
33.333	0.00	1.99	3.144	IO				8.42
33.417	0.00	1.98	3.130	IO				8.40
33.500	0.00	1.98	3.117	IO				8.38
33.583	0.00	1.97	3.103	IO				8.36
33.667	0.00	1.97	3.090	IO				8.34
33.750	0.00	1.96	3.076	IO				8.32
33.833	0.00	1.95	3.062	IO				8.29
33.917	0.00	1.95	3.049	IO				8.27
34.000	0.00	1.94	3.036	IO				8.24
34.083	0.00	1.93	3.022	IO				8.22
34.167	0.00	1.92	3.009	IO				8.19
34.250	0.00	1.91	2.996	IO				8.17
34.333	0.00	1.91	2.983	IO				8.14
34.417	0.00	1.90	2.970	IO				8.12
34.500	0.00	1.89	2.957	IO				8.09
34.583	0.00	1.88	2.944	IO				8.07
34.667	0.00	1.87	2.931	IO				8.04
34.750	0.00	1.86	2.918	IO				8.02
34.833	0.00	1.86	2.905	IO				8.00
34.917	0.00	1.85	2.892	IO				7.97
35.000	0.00	1.84	2.880	IO				7.95
35.083	0.00	1.83	2.867	IO				7.92
35.167	0.00	1.83	2.854	IO				7.90
35.250	0.00	1.82	2.842	IO				7.88
35.333	0.00	1.81	2.829	IO				7.85

35.417	0.00	1.80	2.817	IO					7.83
35.500	0.00	1.79	2.804	IO					7.81
35.583	0.00	1.79	2.792	IO					7.78
35.667	0.00	1.78	2.780	IO					7.76
35.750	0.00	1.77	2.768	IO					7.74
35.833	0.00	1.76	2.755	IO					7.71
35.917	0.00	1.76	2.743	IO					7.69
36.000	0.00	1.75	2.731	IO					7.67
36.083	0.00	1.74	2.719	IO					7.65
36.167	0.00	1.73	2.707	IO					7.62
36.250	0.00	1.73	2.695	IO					7.60
36.333	0.00	1.72	2.683	IO					7.58
36.417	0.00	1.71	2.672	IO					7.56
36.500	0.00	1.70	2.660	IO					7.53
36.583	0.00	1.70	2.648	IO					7.51
36.667	0.00	1.69	2.636	IO					7.49
36.750	0.00	1.68	2.625	IO					7.47
36.833	0.00	1.68	2.613	IO					7.45
36.917	0.00	1.67	2.602	IO					7.42
37.000	0.00	1.66	2.590	IO					7.40
37.083	0.00	1.65	2.579	IO					7.38
37.167	0.00	1.65	2.568	IO					7.36
37.250	0.00	1.64	2.556	IO					7.34
37.333	0.00	1.63	2.545	IO					7.32
37.417	0.00	1.63	2.534	IO					7.29
37.500	0.00	1.62	2.523	IO					7.27
37.583	0.00	1.61	2.511	IO					7.25
37.667	0.00	1.61	2.500	IO					7.23
37.750	0.00	1.60	2.489	IO					7.21
37.833	0.00	1.59	2.478	IO					7.19
37.917	0.00	1.59	2.467	IO					7.17
38.000	0.00	1.58	2.456	IO					7.15
38.083	0.00	1.57	2.446	IO					7.13
38.167	0.00	1.56	2.435	IO					7.11
38.250	0.00	1.56	2.424	IO					7.09
38.333	0.00	1.55	2.413	IO					7.07
38.417	0.00	1.54	2.403	IO					7.05
38.500	0.00	1.54	2.392	IO					7.03
38.583	0.00	1.53	2.382	IO					7.01
38.667	0.00	1.53	2.371	IO					6.99
38.750	0.00	1.52	2.361	IO					6.97
38.833	0.00	1.51	2.350	IO					6.95
38.917	0.00	1.51	2.340	IO					6.93
39.000	0.00	1.50	2.329	IO					6.91
39.083	0.00	1.49	2.319	IO					6.89
39.167	0.00	1.49	2.309	IO					6.87
39.250	0.00	1.48	2.299	IO					6.85
39.333	0.00	1.47	2.288	IO					6.83
39.417	0.00	1.47	2.278	IO					6.81
39.500	0.00	1.46	2.268	IO					6.79
39.583	0.00	1.46	2.258	IO					6.77
39.667	0.00	1.45	2.248	IO					6.76
39.750	0.00	1.44	2.238	IO					6.74
39.833	0.00	1.44	2.228	IO					6.72
39.917	0.00	1.43	2.218	IO					6.70
40.000	0.00	1.42	2.209	IO					6.68
40.083	0.00	1.42	2.199	IO					6.66
40.167	0.00	1.41	2.189	IO					6.64
40.250	0.00	1.41	2.179	IO					6.63
40.333	0.00	1.40	2.170	IO					6.61
40.417	0.00	1.39	2.160	IO					6.59
40.500	0.00	1.39	2.150	IO					6.57
40.583	0.00	1.38	2.141	IO					6.55
40.667	0.00	1.38	2.131	IO					6.53
40.750	0.00	1.37	2.122	IO					6.52
40.833	0.00	1.36	2.113	IO					6.50
40.917	0.00	1.36	2.103	IO					6.48
41.000	0.00	1.35	2.094	IO					6.46
41.083	0.00	1.35	2.085	IO					6.45
41.167	0.00	1.34	2.075	IO					6.43
41.250	0.00	1.34	2.066	IO					6.41

41.333	0.00	1.33	2.057	IO					6.39
41.417	0.00	1.32	2.048	IO					6.38
41.500	0.00	1.32	2.039	IO					6.36
41.583	0.00	1.31	2.030	IO					6.34
41.667	0.00	1.31	2.021	IO					6.33
41.750	0.00	1.30	2.012	IO					6.31
41.833	0.00	1.29	2.003	IO					6.29
41.917	0.00	1.27	1.994	IO					6.27
42.000	0.00	1.26	1.985	IO					6.25
42.083	0.00	1.24	1.976	IO					6.23
42.167	0.00	1.23	1.968	IO					6.21
42.250	0.00	1.21	1.960	IO					6.20
42.333	0.00	1.19	1.951	IO					6.18
42.417	0.00	1.18	1.943	IO					6.16
42.500	0.00	1.16	1.935	IO					6.14
42.583	0.00	1.15	1.927	IO					6.13
42.667	0.00	1.13	1.919	O					6.11
42.750	0.00	1.12	1.911	O					6.09
42.833	0.00	1.11	1.904	O					6.08
42.917	0.00	1.09	1.896	O					6.06
43.000	0.00	1.08	1.889	O					6.04
43.083	0.00	1.06	1.881	O					6.03
43.167	0.00	1.05	1.874	O					6.01
43.250	0.00	1.04	1.867	O					5.99
43.333	0.00	1.02	1.860	O					5.98
43.417	0.00	1.01	1.853	O					5.96
43.500	0.00	1.00	1.846	O					5.95
43.583	0.00	0.98	1.839	O					5.93
43.667	0.00	0.97	1.832	O					5.92
43.750	0.00	0.96	1.826	O					5.90
43.833	0.00	0.95	1.819	O					5.89
43.917	0.00	0.93	1.813	O					5.88
44.000	0.00	0.92	1.806	O					5.86
44.083	0.00	0.91	1.800	O					5.85
44.167	0.00	0.90	1.794	O					5.84
44.250	0.00	0.89	1.788	O					5.82
44.333	0.00	0.88	1.782	O					5.81
44.417	0.00	0.86	1.776	O					5.80
44.500	0.00	0.85	1.770	O					5.78
44.583	0.00	0.84	1.764	O					5.77
44.667	0.00	0.83	1.758	O					5.76
44.750	0.00	0.82	1.752	O					5.74
44.833	0.00	0.81	1.747	O					5.73
44.917	0.00	0.80	1.741	O					5.72
45.000	0.00	0.79	1.736	O					5.71
45.083	0.00	0.78	1.730	O					5.70
45.167	0.00	0.77	1.725	O					5.69
45.250	0.00	0.76	1.720	O					5.67
45.333	0.00	0.75	1.715	O					5.66
45.417	0.00	0.74	1.709	O					5.65
45.500	0.00	0.73	1.704	O					5.64
45.583	0.00	0.72	1.699	O					5.63
45.667	0.00	0.71	1.694	O					5.62
45.750	0.00	0.70	1.690	O					5.61
45.833	0.00	0.69	1.685	O					5.60
45.917	0.00	0.69	1.680	O					5.59
46.000	0.00	0.68	1.675	O					5.58
46.083	0.00	0.67	1.671	O					5.57
46.167	0.00	0.66	1.666	O					5.56
46.250	0.00	0.65	1.662	O					5.55
46.333	0.00	0.64	1.657	O					5.54
46.417	0.00	0.63	1.653	O					5.53
46.500	0.00	0.63	1.648	O					5.52
46.583	0.00	0.62	1.644	O					5.51
46.667	0.00	0.61	1.640	O					5.50
46.750	0.00	0.61	1.636	O					5.49
46.833	0.00	0.61	1.631	O					5.48
46.917	0.00	0.61	1.627	O					5.47
47.000	0.00	0.61	1.623	O					5.46
47.083	0.00	0.61	1.619	O					5.45
47.167	0.00	0.61	1.615	O					5.44

47.250	0.00	0.61	1.611	O					5.43
47.333	0.00	0.61	1.606	O					5.42
47.417	0.00	0.60	1.602	O					5.41
47.500	0.00	0.60	1.598	O					5.40
47.583	0.00	0.60	1.594	O					5.39
47.667	0.00	0.60	1.590	O					5.38
47.750	0.00	0.60	1.586	O					5.37
47.833	0.00	0.60	1.581	O					5.36
47.917	0.00	0.60	1.577	O					5.35
48.000	0.00	0.60	1.573	O					5.34
48.083	0.00	0.60	1.569	O					5.33
48.167	0.00	0.60	1.565	O					5.32
48.250	0.00	0.60	1.561	O					5.32
48.333	0.00	0.60	1.557	O					5.31
48.417	0.00	0.60	1.553	O					5.30
48.500	0.00	0.60	1.548	O					5.29
48.583	0.00	0.60	1.544	O					5.28
48.667	0.00	0.60	1.540	O					5.27
48.750	0.00	0.60	1.536	O					5.26
48.833	0.00	0.59	1.532	O					5.25
48.917	0.00	0.59	1.528	O					5.24
49.000	0.00	0.59	1.524	O					5.23
49.083	0.00	0.59	1.520	O					5.22
49.167	0.00	0.59	1.516	O					5.21
49.250	0.00	0.59	1.512	O					5.20
49.333	0.00	0.59	1.508	O					5.19
49.417	0.00	0.59	1.503	O					5.18
49.500	0.00	0.59	1.499	O					5.17
49.583	0.00	0.59	1.495	O					5.16
49.667	0.00	0.59	1.491	O					5.15
49.750	0.00	0.59	1.487	O					5.14
49.833	0.00	0.59	1.483	O					5.13
49.917	0.00	0.59	1.479	O					5.12
50.000	0.00	0.59	1.475	O					5.12
50.083	0.00	0.59	1.471	O					5.11
50.167	0.00	0.59	1.467	O					5.10
50.250	0.00	0.58	1.463	O					5.09
50.333	0.00	0.58	1.459	O					5.08
50.417	0.00	0.58	1.455	O					5.07
50.500	0.00	0.58	1.451	O					5.06
50.583	0.00	0.58	1.447	O					5.05
50.667	0.00	0.58	1.443	O					5.04
50.750	0.00	0.58	1.439	O					5.03
50.833	0.00	0.58	1.435	O					5.02
50.917	0.00	0.58	1.431	O					5.01
51.000	0.00	0.58	1.427	O					5.00
51.083	0.00	0.58	1.423	O					4.99
51.167	0.00	0.58	1.419	O					4.98
51.250	0.00	0.58	1.415	O					4.97
51.333	0.00	0.58	1.411	O					4.97
51.417	0.00	0.58	1.407	O					4.96
51.500	0.00	0.58	1.403	O					4.95
51.583	0.00	0.58	1.399	O					4.94
51.667	0.00	0.57	1.395	O					4.93
51.750	0.00	0.57	1.391	O					4.92
51.833	0.00	0.57	1.387	O					4.91
51.917	0.00	0.57	1.383	O					4.90
52.000	0.00	0.57	1.379	O					4.89
52.083	0.00	0.57	1.375	O					4.88
52.167	0.00	0.57	1.371	O					4.87
52.250	0.00	0.57	1.368	O					4.86
52.333	0.00	0.57	1.364	O					4.85
52.417	0.00	0.57	1.360	O					4.85
52.500	0.00	0.57	1.356	O					4.84
52.583	0.00	0.57	1.352	O					4.83
52.667	0.00	0.57	1.348	O					4.82
52.750	0.00	0.57	1.344	O					4.81
52.833	0.00	0.57	1.340	O					4.80
52.917	0.00	0.57	1.336	O					4.79
53.000	0.00	0.57	1.332	O					4.78
53.083	0.00	0.57	1.328	O					4.77

53.167	0.00	0.56	1.325	O	|	|	|	|	4.76
53.250	0.00	0.56	1.321	O	|	|	|	|	4.75
53.333	0.00	0.56	1.317	O	|	|	|	|	4.75
53.417	0.00	0.56	1.313	O	|	|	|	|	4.74
53.500	0.00	0.56	1.309	O	|	|	|	|	4.73
53.583	0.00	0.56	1.305	O	|	|	|	|	4.72
53.667	0.00	0.56	1.301	O	|	|	|	|	4.71
53.750	0.00	0.56	1.297	O	|	|	|	|	4.70
53.833	0.00	0.56	1.294	O	|	|	|	|	4.69
53.917	0.00	0.56	1.290	O	|	|	|	|	4.68
54.000	0.00	0.56	1.286	O	|	|	|	|	4.67
54.083	0.00	0.56	1.282	O	|	|	|	|	4.66
54.167	0.00	0.56	1.278	O	|	|	|	|	4.66
54.250	0.00	0.56	1.274	O	|	|	|	|	4.65
54.333	0.00	0.56	1.270	O	|	|	|	|	4.64
54.417	0.00	0.56	1.267	O	|	|	|	|	4.63
54.500	0.00	0.56	1.263	O	|	|	|	|	4.62
54.583	0.00	0.56	1.259	O	|	|	|	|	4.61
54.667	0.00	0.55	1.255	O	|	|	|	|	4.60
54.750	0.00	0.55	1.251	O	|	|	|	|	4.59
54.833	0.00	0.55	1.248	O	|	|	|	|	4.58
54.917	0.00	0.55	1.244	O	|	|	|	|	4.57
55.000	0.00	0.55	1.240	O	|	|	|	|	4.57
55.083	0.00	0.55	1.236	O	|	|	|	|	4.56
55.167	0.00	0.55	1.232	O	|	|	|	|	4.55
55.250	0.00	0.55	1.229	O	|	|	|	|	4.54
55.333	0.00	0.55	1.225	O	|	|	|	|	4.53
55.417	0.00	0.55	1.221	O	|	|	|	|	4.52
55.500	0.00	0.55	1.217	O	|	|	|	|	4.51
55.583	0.00	0.55	1.213	O	|	|	|	|	4.50
55.667	0.00	0.55	1.210	O	|	|	|	|	4.50
55.750	0.00	0.55	1.206	O	|	|	|	|	4.49
55.833	0.00	0.55	1.202	O	|	|	|	|	4.48
55.917	0.00	0.55	1.198	O	|	|	|	|	4.47
56.000	0.00	0.55	1.195	O	|	|	|	|	4.46
56.083	0.00	0.55	1.191	O	|	|	|	|	4.45
56.167	0.00	0.54	1.187	O	|	|	|	|	4.44
56.250	0.00	0.54	1.183	O	|	|	|	|	4.43
56.333	0.00	0.54	1.180	O	|	|	|	|	4.43
56.417	0.00	0.54	1.176	O	|	|	|	|	4.42
56.500	0.00	0.54	1.172	O	|	|	|	|	4.41
56.583	0.00	0.54	1.168	O	|	|	|	|	4.40
56.667	0.00	0.54	1.165	O	|	|	|	|	4.39
56.750	0.00	0.54	1.161	O	|	|	|	|	4.38
56.833	0.00	0.54	1.157	O	|	|	|	|	4.37
56.917	0.00	0.54	1.153	O	|	|	|	|	4.36
57.000	0.00	0.54	1.150	O	|	|	|	|	4.36
57.083	0.00	0.54	1.146	O	|	|	|	|	4.35
57.167	0.00	0.54	1.142	O	|	|	|	|	4.34
57.250	0.00	0.54	1.139	O	|	|	|	|	4.33
57.333	0.00	0.54	1.135	O	|	|	|	|	4.32
57.417	0.00	0.54	1.131	O	|	|	|	|	4.31
57.500	0.00	0.54	1.127	O	|	|	|	|	4.30
57.583	0.00	0.54	1.124	O	|	|	|	|	4.29
57.667	0.00	0.53	1.120	O	|	|	|	|	4.28
57.750	0.00	0.53	1.116	O	|	|	|	|	4.27
57.833	0.00	0.53	1.113	O	|	|	|	|	4.26
57.917	0.00	0.53	1.109	O	|	|	|	|	4.25
58.000	0.00	0.53	1.105	O	|	|	|	|	4.24
58.083	0.00	0.53	1.102	O	|	|	|	|	4.23
58.167	0.00	0.53	1.098	O	|	|	|	|	4.22
58.250	0.00	0.53	1.094	O	|	|	|	|	4.21
58.333	0.00	0.53	1.091	O	|	|	|	|	4.20
58.417	0.00	0.53	1.087	O	|	|	|	|	4.19
58.500	0.00	0.53	1.084	O	|	|	|	|	4.18
58.583	0.00	0.53	1.080	O	|	|	|	|	4.17
58.667	0.00	0.53	1.076	O	|	|	|	|	4.16
58.750	0.00	0.53	1.073	O	|	|	|	|	4.15
58.833	0.00	0.53	1.069	O	|	|	|	|	4.14
58.917	0.00	0.52	1.065	O	|	|	|	|	4.13
59.000	0.00	0.52	1.062	O	|	|	|	|	4.12

59.083	0.00	0.52	1.058	O	|	|	|	|	4.11
59.167	0.00	0.52	1.055	O	|	|	|	|	4.10
59.250	0.00	0.52	1.051	O	|	|	|	|	4.09
59.333	0.00	0.52	1.047	O	|	|	|	|	4.08
59.417	0.00	0.52	1.044	O	|	|	|	|	4.07
59.500	0.00	0.52	1.040	O	|	|	|	|	4.06
59.583	0.00	0.52	1.037	O	|	|	|	|	4.05
59.667	0.00	0.52	1.033	O	|	|	|	|	4.04
59.750	0.00	0.52	1.029	O	|	|	|	|	4.03
59.833	0.00	0.52	1.026	O	|	|	|	|	4.02
59.917	0.00	0.52	1.022	O	|	|	|	|	4.01
60.000	0.00	0.52	1.019	O	|	|	|	|	4.00
60.083	0.00	0.52	1.015	O	|	|	|	|	3.99
60.167	0.00	0.51	1.012	O	|	|	|	|	3.98
60.250	0.00	0.51	1.008	O	|	|	|	|	3.97
60.333	0.00	0.51	1.005	O	|	|	|	|	3.96
60.417	0.00	0.51	1.001	O	|	|	|	|	3.95
60.500	0.00	0.51	0.998	O	|	|	|	|	3.94
60.583	0.00	0.51	0.994	O	|	|	|	|	3.93
60.667	0.00	0.51	0.991	O	|	|	|	|	3.92
60.750	0.00	0.51	0.987	O	|	|	|	|	3.91
60.833	0.00	0.51	0.983	O	|	|	|	|	3.90
60.917	0.00	0.51	0.980	O	|	|	|	|	3.89
61.000	0.00	0.51	0.976	O	|	|	|	|	3.88
61.083	0.00	0.51	0.973	O	|	|	|	|	3.87
61.167	0.00	0.51	0.969	O	|	|	|	|	3.87
61.250	0.00	0.51	0.966	O	|	|	|	|	3.86
61.333	0.00	0.51	0.963	O	|	|	|	|	3.85
61.417	0.00	0.50	0.959	O	|	|	|	|	3.84
61.500	0.00	0.50	0.956	O	|	|	|	|	3.83
61.583	0.00	0.50	0.952	O	|	|	|	|	3.82
61.667	0.00	0.50	0.949	O	|	|	|	|	3.81
61.750	0.00	0.50	0.945	O	|	|	|	|	3.80
61.833	0.00	0.50	0.942	O	|	|	|	|	3.79
61.917	0.00	0.50	0.938	O	|	|	|	|	3.78
62.000	0.00	0.50	0.935	O	|	|	|	|	3.77
62.083	0.00	0.50	0.931	O	|	|	|	|	3.76
62.167	0.00	0.50	0.928	O	|	|	|	|	3.75
62.250	0.00	0.50	0.924	O	|	|	|	|	3.74
62.333	0.00	0.50	0.921	O	|	|	|	|	3.73
62.417	0.00	0.50	0.918	O	|	|	|	|	3.72
62.500	0.00	0.50	0.914	O	|	|	|	|	3.71
62.583	0.00	0.50	0.911	O	|	|	|	|	3.70
62.667	0.00	0.50	0.907	O	|	|	|	|	3.69
62.750	0.00	0.49	0.904	O	|	|	|	|	3.68
62.833	0.00	0.49	0.901	O	|	|	|	|	3.67
62.917	0.00	0.49	0.897	O	|	|	|	|	3.66
63.000	0.00	0.49	0.894	O	|	|	|	|	3.65
63.083	0.00	0.49	0.890	O	|	|	|	|	3.65
63.167	0.00	0.49	0.887	O	|	|	|	|	3.64
63.250	0.00	0.49	0.884	O	|	|	|	|	3.63
63.333	0.00	0.49	0.880	O	|	|	|	|	3.62
63.417	0.00	0.49	0.877	O	|	|	|	|	3.61
63.500	0.00	0.49	0.873	O	|	|	|	|	3.60
63.583	0.00	0.49	0.870	O	|	|	|	|	3.59
63.667	0.00	0.49	0.867	O	|	|	|	|	3.58
63.750	0.00	0.49	0.863	O	|	|	|	|	3.57
63.833	0.00	0.49	0.860	O	|	|	|	|	3.56
63.917	0.00	0.49	0.857	O	|	|	|	|	3.55
64.000	0.00	0.49	0.853	O	|	|	|	|	3.54
64.083	0.00	0.48	0.850	O	|	|	|	|	3.53
64.167	0.00	0.48	0.847	O	|	|	|	|	3.52
64.250	0.00	0.48	0.843	O	|	|	|	|	3.51
64.333	0.00	0.48	0.840	O	|	|	|	|	3.51
64.417	0.00	0.48	0.837	O	|	|	|	|	3.50
64.500	0.00	0.48	0.833	O	|	|	|	|	3.49
64.583	0.00	0.48	0.830	O	|	|	|	|	3.48
64.667	0.00	0.48	0.827	O	|	|	|	|	3.47
64.750	0.00	0.48	0.823	O	|	|	|	|	3.46
64.833	0.00	0.48	0.820	O	|	|	|	|	3.45
64.917	0.00	0.48	0.817	O	|	|	|	|	3.44

65.000	0.00	0.48	0.814	O	|	|	|	|	3.43
65.083	0.00	0.48	0.810	O	|	|	|	|	3.42
65.167	0.00	0.48	0.807	O	|	|	|	|	3.41
65.250	0.00	0.48	0.804	O	|	|	|	|	3.40
65.333	0.00	0.48	0.800	O	|	|	|	|	3.40
65.417	0.00	0.47	0.797	O	|	|	|	|	3.39
65.500	0.00	0.47	0.794	O	|	|	|	|	3.38
65.583	0.00	0.47	0.791	O	|	|	|	|	3.37
65.667	0.00	0.47	0.787	O	|	|	|	|	3.36
65.750	0.00	0.47	0.784	O	|	|	|	|	3.35
65.833	0.00	0.47	0.781	O	|	|	|	|	3.34
65.917	0.00	0.47	0.778	O	|	|	|	|	3.33
66.000	0.00	0.47	0.774	O	|	|	|	|	3.32
66.083	0.00	0.47	0.771	O	|	|	|	|	3.31
66.167	0.00	0.47	0.768	O	|	|	|	|	3.31
66.250	0.00	0.47	0.765	O	|	|	|	|	3.30
66.333	0.00	0.47	0.761	O	|	|	|	|	3.28
66.417	0.00	0.47	0.758	O	|	|	|	|	3.27
66.500	0.00	0.47	0.755	O	|	|	|	|	3.26
66.583	0.00	0.47	0.752	O	|	|	|	|	3.25
66.667	0.00	0.46	0.749	O	|	|	|	|	3.24
66.750	0.00	0.46	0.745	O	|	|	|	|	3.23
66.833	0.00	0.46	0.742	O	|	|	|	|	3.22
66.917	0.00	0.46	0.739	O	|	|	|	|	3.21
67.000	0.00	0.46	0.736	O	|	|	|	|	3.20
67.083	0.00	0.46	0.733	O	|	|	|	|	3.19
67.167	0.00	0.46	0.729	O	|	|	|	|	3.18
67.250	0.00	0.46	0.726	O	|	|	|	|	3.17
67.333	0.00	0.46	0.723	O	|	|	|	|	3.16
67.417	0.00	0.46	0.720	O	|	|	|	|	3.15
67.500	0.00	0.46	0.717	O	|	|	|	|	3.14
67.583	0.00	0.46	0.714	O	|	|	|	|	3.13
67.667	0.00	0.46	0.711	O	|	|	|	|	3.12
67.750	0.00	0.45	0.707	O	|	|	|	|	3.10
67.833	0.00	0.45	0.704	O	|	|	|	|	3.09
67.917	0.00	0.45	0.701	O	|	|	|	|	3.08
68.000	0.00	0.45	0.698	O	|	|	|	|	3.07
68.083	0.00	0.45	0.695	O	|	|	|	|	3.06
68.167	0.00	0.45	0.692	O	|	|	|	|	3.05
68.250	0.00	0.45	0.689	O	|	|	|	|	3.04
68.333	0.00	0.45	0.686	O	|	|	|	|	3.03
68.417	0.00	0.45	0.683	O	|	|	|	|	3.02
68.500	0.00	0.45	0.679	O	|	|	|	|	3.01
68.583	0.00	0.45	0.676	O	|	|	|	|	3.00
68.667	0.00	0.45	0.673	O	|	|	|	|	2.99
68.750	0.00	0.45	0.670	O	|	|	|	|	2.98
68.833	0.00	0.44	0.667	O	|	|	|	|	2.97
68.917	0.00	0.44	0.664	O	|	|	|	|	2.96
69.000	0.00	0.44	0.661	O	|	|	|	|	2.95
69.083	0.00	0.44	0.658	O	|	|	|	|	2.94
69.167	0.00	0.44	0.655	O	|	|	|	|	2.93
69.250	0.00	0.44	0.652	O	|	|	|	|	2.92
69.333	0.00	0.44	0.649	O	|	|	|	|	2.91
69.417	0.00	0.44	0.646	O	|	|	|	|	2.90
69.500	0.00	0.44	0.643	O	|	|	|	|	2.89
69.583	0.00	0.44	0.640	O	|	|	|	|	2.88
69.667	0.00	0.44	0.637	O	|	|	|	|	2.87
69.750	0.00	0.44	0.634	O	|	|	|	|	2.86
69.833	0.00	0.44	0.631	O	|	|	|	|	2.85
69.917	0.00	0.43	0.628	O	|	|	|	|	2.84
70.000	0.00	0.43	0.625	O	|	|	|	|	2.83
70.083	0.00	0.43	0.622	O	|	|	|	|	2.82
70.167	0.00	0.43	0.619	O	|	|	|	|	2.81
70.250	0.00	0.43	0.616	O	|	|	|	|	2.80
70.333	0.00	0.43	0.613	O	|	|	|	|	2.79
70.417	0.00	0.43	0.610	O	|	|	|	|	2.78
70.500	0.00	0.43	0.607	O	|	|	|	|	2.77
70.583	0.00	0.43	0.604	O	|	|	|	|	2.76
70.667	0.00	0.43	0.601	O	|	|	|	|	2.75
70.750	0.00	0.43	0.598	O	|	|	|	|	2.74
70.833	0.00	0.43	0.595	O	|	|	|	|	2.73

70.917	0.00	0.43	0.592	O	|	|	|	|	2.72
71.000	0.00	0.42	0.589	O	|	|	|	|	2.71
71.083	0.00	0.42	0.586	O	|	|	|	|	2.70
71.167	0.00	0.42	0.584	O	|	|	|	|	2.69
71.250	0.00	0.42	0.581	O	|	|	|	|	2.68
71.333	0.00	0.42	0.578	O	|	|	|	|	2.67
71.417	0.00	0.42	0.575	O	|	|	|	|	2.66
71.500	0.00	0.42	0.572	O	|	|	|	|	2.65
71.583	0.00	0.42	0.569	O	|	|	|	|	2.64
71.667	0.00	0.42	0.566	O	|	|	|	|	2.63
71.750	0.00	0.42	0.563	O	|	|	|	|	2.62
71.833	0.00	0.42	0.560	O	|	|	|	|	2.61
71.917	0.00	0.42	0.558	O	|	|	|	|	2.61
72.000	0.00	0.42	0.555	O	|	|	|	|	2.60
72.083	0.00	0.42	0.552	O	|	|	|	|	2.59
72.167	0.00	0.41	0.549	O	|	|	|	|	2.58
72.250	0.00	0.41	0.546	O	|	|	|	|	2.57
72.333	0.00	0.41	0.543	O	|	|	|	|	2.56
72.417	0.00	0.41	0.540	O	|	|	|	|	2.55
72.500	0.00	0.41	0.538	O	|	|	|	|	2.54
72.583	0.00	0.41	0.535	O	|	|	|	|	2.53
72.667	0.00	0.41	0.532	O	|	|	|	|	2.52
72.750	0.00	0.41	0.529	O	|	|	|	|	2.51
72.833	0.00	0.41	0.526	O	|	|	|	|	2.50
72.917	0.00	0.41	0.523	O	|	|	|	|	2.49
73.000	0.00	0.41	0.521	O	|	|	|	|	2.48
73.083	0.00	0.41	0.518	O	|	|	|	|	2.47
73.167	0.00	0.41	0.515	O	|	|	|	|	2.46
73.250	0.00	0.41	0.512	O	|	|	|	|	2.45
73.333	0.00	0.40	0.509	O	|	|	|	|	2.44
73.417	0.00	0.40	0.507	O	|	|	|	|	2.44
73.500	0.00	0.40	0.504	O	|	|	|	|	2.43
73.583	0.00	0.40	0.501	O	|	|	|	|	2.42
73.667	0.00	0.40	0.498	O	|	|	|	|	2.41
73.750	0.00	0.40	0.496	O	|	|	|	|	2.40
73.833	0.00	0.40	0.493	O	|	|	|	|	2.39
73.917	0.00	0.40	0.490	O	|	|	|	|	2.38
74.000	0.00	0.40	0.487	O	|	|	|	|	2.37
74.083	0.00	0.40	0.485	O	|	|	|	|	2.36
74.167	0.00	0.40	0.482	O	|	|	|	|	2.35
74.250	0.00	0.40	0.479	O	|	|	|	|	2.34
74.333	0.00	0.40	0.476	O	|	|	|	|	2.33
74.417	0.00	0.40	0.474	O	|	|	|	|	2.33
74.500	0.00	0.40	0.471	O	|	|	|	|	2.32
74.583	0.00	0.39	0.468	O	|	|	|	|	2.31
74.667	0.00	0.39	0.465	O	|	|	|	|	2.30
74.750	0.00	0.39	0.463	O	|	|	|	|	2.29
74.833	0.00	0.39	0.460	O	|	|	|	|	2.28
74.917	0.00	0.39	0.457	O	|	|	|	|	2.27
75.000	0.00	0.39	0.455	O	|	|	|	|	2.26
75.083	0.00	0.39	0.452	O	|	|	|	|	2.25
75.167	0.00	0.39	0.449	O	|	|	|	|	2.24
75.250	0.00	0.39	0.447	O	|	|	|	|	2.23
75.333	0.00	0.39	0.444	O	|	|	|	|	2.22
75.417	0.00	0.39	0.441	O	|	|	|	|	2.21
75.500	0.00	0.38	0.439	O	|	|	|	|	2.20
75.583	0.00	0.38	0.436	O	|	|	|	|	2.19
75.667	0.00	0.38	0.433	O	|	|	|	|	2.18
75.750	0.00	0.38	0.431	O	|	|	|	|	2.17
75.833	0.00	0.38	0.428	O	|	|	|	|	2.16
75.917	0.00	0.38	0.425	O	|	|	|	|	2.15
76.000	0.00	0.38	0.423	O	|	|	|	|	2.14
76.083	0.00	0.38	0.420	O	|	|	|	|	2.13
76.167	0.00	0.38	0.418	O	|	|	|	|	2.12
76.250	0.00	0.38	0.415	O	|	|	|	|	2.11
76.333	0.00	0.37	0.412	O	|	|	|	|	2.10
76.417	0.00	0.37	0.410	O	|	|	|	|	2.10
76.500	0.00	0.37	0.407	O	|	|	|	|	2.09
76.583	0.00	0.37	0.405	O	|	|	|	|	2.08
76.667	0.00	0.37	0.402	O	|	|	|	|	2.07
76.750	0.00	0.37	0.400	O	|	|	|	|	2.06

76.833	0.00	0.37	0.397	O					2.05
76.917	0.00	0.37	0.395	O					2.04
77.000	0.00	0.37	0.392	O					2.03
77.083	0.00	0.37	0.390	O					2.02
77.167	0.00	0.37	0.387	O					2.01
77.250	0.00	0.36	0.384	O					2.00
77.333	0.00	0.36	0.382	O					1.99
77.417	0.00	0.36	0.379	O					1.98
77.500	0.00	0.36	0.377	O					1.98
77.583	0.00	0.36	0.374	O					1.97
77.667	0.00	0.36	0.372	O					1.96
77.750	0.00	0.36	0.370	O					1.95
77.833	0.00	0.36	0.367	O					1.94
77.917	0.00	0.36	0.365	O					1.93
78.000	0.00	0.36	0.362	O					1.92
78.083	0.00	0.36	0.360	O					1.91
78.167	0.00	0.36	0.357	O					1.90
78.250	0.00	0.35	0.355	O					1.89
78.333	0.00	0.35	0.352	O					1.89
78.417	0.00	0.35	0.350	O					1.88
78.500	0.00	0.35	0.347	O					1.87
78.583	0.00	0.35	0.345	O					1.86
78.667	0.00	0.35	0.343	O					1.85
78.750	0.00	0.35	0.340	O					1.84
78.833	0.00	0.35	0.338	O					1.83
78.917	0.00	0.35	0.335	O					1.82
79.000	0.00	0.35	0.333	O					1.81
79.083	0.00	0.35	0.331	O					1.81
79.167	0.00	0.34	0.328	O					1.80
79.250	0.00	0.34	0.326	O					1.79
79.333	0.00	0.34	0.324	O					1.78
79.417	0.00	0.34	0.321	O					1.77
79.500	0.00	0.34	0.319	O					1.76
79.583	0.00	0.34	0.316	O					1.75
79.667	0.00	0.34	0.314	O					1.75
79.750	0.00	0.34	0.312	O					1.74
79.833	0.00	0.34	0.309	O					1.73
79.917	0.00	0.34	0.307	O					1.72
80.000	0.00	0.34	0.305	O					1.71
80.083	0.00	0.34	0.303	O					1.70
80.167	0.00	0.33	0.300	O					1.69
80.250	0.00	0.33	0.298	O					1.69
80.333	0.00	0.33	0.296	O					1.68
80.417	0.00	0.33	0.293	O					1.67
80.500	0.00	0.33	0.291	O					1.66
80.583	0.00	0.33	0.289	O					1.65
80.667	0.00	0.33	0.286	O					1.64
80.750	0.00	0.33	0.284	O					1.64
80.833	0.00	0.33	0.282	O					1.63
80.917	0.00	0.33	0.280	O					1.62
81.000	0.00	0.33	0.277	O					1.61
81.083	0.00	0.33	0.275	O					1.60
81.167	0.00	0.32	0.273	O					1.60
81.250	0.00	0.32	0.271	O					1.59
81.333	0.00	0.32	0.268	O					1.58
81.417	0.00	0.32	0.266	O					1.57
81.500	0.00	0.32	0.264	O					1.56
81.583	0.00	0.32	0.262	O					1.55
81.667	0.00	0.32	0.260	O					1.55
81.750	0.00	0.32	0.257	O					1.54
81.833	0.00	0.32	0.255	O					1.53
81.917	0.00	0.32	0.253	O					1.52
82.000	0.00	0.32	0.251	O					1.51
82.083	0.00	0.32	0.249	O					1.51
82.167	0.00	0.32	0.246	O					1.50
82.250	0.00	0.31	0.244	O					1.49
82.333	0.00	0.31	0.242	O					1.48
82.417	0.00	0.31	0.240	O					1.48
82.500	0.00	0.31	0.238	O					1.47
82.583	0.00	0.31	0.236	O					1.46
82.667	0.00	0.31	0.234	O					1.45

82.750	0.00	0.31	0.231	O					1.44
82.833	0.00	0.31	0.229	O					1.44
82.917	0.00	0.31	0.227	O					1.43
83.000	0.00	0.31	0.225	O					1.42
83.083	0.00	0.31	0.223	O					1.41
83.167	0.00	0.31	0.221	O					1.41
83.250	0.00	0.31	0.219	O					1.40
83.333	0.00	0.30	0.217	O					1.39
83.417	0.00	0.30	0.214	O					1.38
83.500	0.00	0.30	0.212	O					1.37
83.583	0.00	0.30	0.210	O					1.37
83.667	0.00	0.30	0.208	O					1.36
83.750	0.00	0.30	0.206	O					1.35
83.833	0.00	0.30	0.204	O					1.34
83.917	0.00	0.30	0.202	O					1.34
84.000	0.00	0.30	0.200	O					1.33
84.083	0.00	0.30	0.198	O					1.32
84.167	0.00	0.30	0.196	O					1.31
84.250	0.00	0.30	0.194	O					1.31
84.333	0.00	0.30	0.192	O					1.30
84.417	0.00	0.29	0.190	O					1.29
84.500	0.00	0.29	0.188	O					1.28
84.583	0.00	0.29	0.186	O					1.26
84.667	0.00	0.29	0.184	O					1.25
84.750	0.00	0.29	0.182	O					1.24
84.833	0.00	0.29	0.180	O					1.23
84.917	0.00	0.28	0.178	O					1.22
85.000	0.00	0.28	0.176	O					1.21
85.083	0.00	0.28	0.174	O					1.19
85.167	0.00	0.28	0.172	O					1.18
85.250	0.00	0.28	0.170	O					1.17
85.333	0.00	0.27	0.168	O					1.16
85.417	0.00	0.27	0.166	O					1.15
85.500	0.00	0.27	0.164	O					1.14
85.583	0.00	0.27	0.163	O					1.13
85.667	0.00	0.27	0.161	O					1.12
85.750	0.00	0.27	0.159	O					1.11
85.833	0.00	0.26	0.157	O					1.10
85.917	0.00	0.26	0.155	O					1.09
86.000	0.00	0.26	0.153	O					1.08
86.083	0.00	0.26	0.152	O					1.07
86.167	0.00	0.26	0.150	O					1.06
86.250	0.00	0.26	0.148	O					1.04
86.333	0.00	0.26	0.146	O					1.03
86.417	0.00	0.25	0.145	O					1.02
86.500	0.00	0.25	0.143	O					1.01
86.583	0.00	0.25	0.141	O					1.00
86.667	0.00	0.25	0.139	O					0.99
86.750	0.00	0.25	0.138	O					0.98
86.833	0.00	0.25	0.136	O					0.97
86.917	0.00	0.24	0.134	O					0.96
87.000	0.00	0.24	0.133	O					0.95
87.083	0.00	0.24	0.131	O					0.95
87.167	0.00	0.24	0.129	O					0.94
87.250	0.00	0.24	0.128	O					0.93
87.333	0.00	0.24	0.126	O					0.92
87.417	0.00	0.24	0.124	O					0.91
87.500	0.00	0.23	0.123	O					0.90
87.583	0.00	0.23	0.121	O					0.89
87.667	0.00	0.23	0.120	O					0.88
87.750	0.00	0.23	0.118	O					0.87
87.833	0.00	0.23	0.116	O					0.86
87.917	0.00	0.23	0.115	O					0.85
88.000	0.00	0.23	0.113	O					0.84
88.083	0.00	0.22	0.112	O					0.83
88.167	0.00	0.22	0.110	O					0.82
88.250	0.00	0.22	0.109	O					0.82
88.333	0.00	0.22	0.107	O					0.81
88.417	0.00	0.22	0.106	O					0.80
88.500	0.00	0.22	0.104	O					0.79
88.583	0.00	0.22	0.103	O					0.78

88.667	0.00	0.21	0.101	O	|	|	|	|	0.77
88.750	0.00	0.21	0.100	O	|	|	|	|	0.76
88.833	0.00	0.21	0.098	O	|	|	|	|	0.75
88.917	0.00	0.21	0.097	O	|	|	|	|	0.75
89.000	0.00	0.21	0.095	O	|	|	|	|	0.74
89.083	0.00	0.21	0.094	O	|	|	|	|	0.73
89.167	0.00	0.21	0.092	O	|	|	|	|	0.72
89.250	0.00	0.21	0.091	O	|	|	|	|	0.71
89.333	0.00	0.20	0.090	O	|	|	|	|	0.70
89.417	0.00	0.20	0.088	O	|	|	|	|	0.70
89.500	0.00	0.20	0.087	O	|	|	|	|	0.69
89.583	0.00	0.20	0.085	O	|	|	|	|	0.68
89.667	0.00	0.20	0.084	O	|	|	|	|	0.67
89.750	0.00	0.20	0.083	O	|	|	|	|	0.66
89.833	0.00	0.20	0.081	O	|	|	|	|	0.66
89.917	0.00	0.20	0.080	O	|	|	|	|	0.65
90.000	0.00	0.19	0.079	O	|	|	|	|	0.64
90.083	0.00	0.19	0.077	O	|	|	|	|	0.63
90.167	0.00	0.19	0.076	O	|	|	|	|	0.63
90.250	0.00	0.19	0.075	O	|	|	|	|	0.62
90.333	0.00	0.19	0.073	O	|	|	|	|	0.61
90.417	0.00	0.19	0.072	O	|	|	|	|	0.60
90.500	0.00	0.19	0.071	O	|	|	|	|	0.59
90.583	0.00	0.19	0.069	O	|	|	|	|	0.59
90.667	0.00	0.19	0.068	O	|	|	|	|	0.58
90.750	0.00	0.18	0.067	O	|	|	|	|	0.57
90.833	0.00	0.18	0.066	O	|	|	|	|	0.57
90.917	0.00	0.18	0.064	O	|	|	|	|	0.56
91.000	0.00	0.18	0.063	O	|	|	|	|	0.55
91.083	0.00	0.18	0.062	O	|	|	|	|	0.54
91.167	0.00	0.18	0.061	O	|	|	|	|	0.54
91.250	0.00	0.18	0.059	O	|	|	|	|	0.53
91.333	0.00	0.18	0.058	O	|	|	|	|	0.52
91.417	0.00	0.18	0.057	O	|	|	|	|	0.52
91.500	0.00	0.17	0.056	O	|	|	|	|	0.51
91.583	0.00	0.17	0.055	O	|	|	|	|	0.50
91.667	0.00	0.17	0.053	O	|	|	|	|	0.49
91.750	0.00	0.17	0.052	O	|	|	|	|	0.49
91.833	0.00	0.17	0.051	O	|	|	|	|	0.48
91.917	0.00	0.17	0.050	O	|	|	|	|	0.47
92.000	0.00	0.17	0.049	O	|	|	|	|	0.47
92.083	0.00	0.17	0.048	O	|	|	|	|	0.46
92.167	0.00	0.17	0.046	O	|	|	|	|	0.45
92.250	0.00	0.16	0.045	O	|	|	|	|	0.45
92.333	0.00	0.16	0.044	O	|	|	|	|	0.44
92.417	0.00	0.16	0.043	O	|	|	|	|	0.43
92.500	0.00	0.16	0.042	O	|	|	|	|	0.43
92.583	0.00	0.16	0.041	O	|	|	|	|	0.42
92.667	0.00	0.16	0.040	O	|	|	|	|	0.41
92.750	0.00	0.16	0.039	O	|	|	|	|	0.41
92.833	0.00	0.16	0.038	O	|	|	|	|	0.40
92.917	0.00	0.16	0.036	O	|	|	|	|	0.40
93.000	0.00	0.16	0.035	O	|	|	|	|	0.39
93.083	0.00	0.15	0.034	O	|	|	|	|	0.38
93.167	0.00	0.15	0.033	O	|	|	|	|	0.38
93.250	0.00	0.15	0.032	O	|	|	|	|	0.37
93.333	0.00	0.15	0.031	O	|	|	|	|	0.36
93.417	0.00	0.15	0.030	O	|	|	|	|	0.36
93.500	0.00	0.15	0.029	O	|	|	|	|	0.35
93.583	0.00	0.15	0.028	O	|	|	|	|	0.35
93.667	0.00	0.15	0.027	O	|	|	|	|	0.34
93.750	0.00	0.15	0.026	O	|	|	|	|	0.33
93.833	0.00	0.15	0.025	O	|	|	|	|	0.33
93.917	0.00	0.15	0.024	O	|	|	|	|	0.32
94.000	0.00	0.14	0.023	O	|	|	|	|	0.32
94.083	0.00	0.14	0.022	O	|	|	|	|	0.31
94.167	0.00	0.14	0.021	O	|	|	|	|	0.31
94.250	0.00	0.14	0.020	O	|	|	|	|	0.30
94.333	0.00	0.14	0.019	O	|	|	|	|	0.29
94.417	0.00	0.13	0.018	O	|	|	|	|	0.27
94.500	0.00	0.12	0.017	O	|	|	|	|	0.26

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94.583    0.00    0.12      0.016  O       |       |       |       |     0.25
94.667    0.00    0.11      0.016  O       |       |       |       |     0.24
94.750    0.00    0.11      0.015  O       |       |       |       |     0.22
94.833    0.00    0.10      0.014  O       |       |       |       |     0.21
94.917    0.00    0.10      0.014  O       |       |       |       |     0.20

       Remaining water in basin =    0.01 (Ac.Ft)


       ****************************HYDROGRAPH DATA****************************
                     Number of intervals =  1139
                     Time interval =    5.0 (Min.)
                     Maximum/Peak flow rate =       36.482 (CFS)
                     Total volume =      17.974 (Ac.Ft)
              Status of hydrographs being held in storage
                         Stream 1  Stream 2  Stream 3  Stream 4  Stream 5
              Peak (CFS)      0.000     0.000     0.000     0.000     0.000
              Vol (Ac.Ft)      0.000     0.000     0.000     0.000     0.000
       ***********************************************************************

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Basin “B” Discharge/Storage Curve and Routing Calculations

Extended Detention Basin B Storm Event Summary								
Storm Event	Existing		Proposed		Routed			Flow Differential
	Volume (ac.ft.)	cfs	Volume (ac.ft.)	cfs	Volume (ac.ft.)	cfs	Depth (ft)	
2yr1hr	0.422	20.3	0.534	15.6	0.497	0.4	2.79	-98.0%
2yr3hr	0.381	9.3	0.713	8.5	0.677	0.5	3.19	-94.6%
2yr6hr	0.407	8.1	0.933	7.4	0.897	0.5	3.62	-93.8%
2yr24hr	0.292	0.6	1.434	2.3	1.398	0.6	3.97	0.0%
5yr1hr	0.703	29.7	0.792	22.7	0.757	0.5	3.46	-98.3%
5yr3hr	0.687	14.2	1.024	12.7	0.988	0.6	3.95	-95.8%
5yr6hr	0.805	13.4	1.390	11.8	1.354	0.6	4.64	-95.5%
5yr24hr	0.612	2.6	2.031	3.3	1.995	0.7	5.01	-73.1%
10yr1hr	1.134	39.3	1.002	28.2	0.966	0.6	3.97	-98.5%
10yr3hr	1.506	20.4	1.285	16.0	1.249	0.6	4.54	-97.1%
10yr6hr	1.901	19.8	1.778	15.2	1.742	0.7	5.41	-96.5%
10yr24hr	2.217	6.2	2.510	4.6	2.474	0.8	5.79	-87.1%
100yr1hr	1.885	62.9	1.744	46.4	1.709	0.7	5.58	-98.9%
100yr3hr	2.627	32.8	2.262	26.8	2.226	1.5	6.39	-95.4%
100yr6hr	3.671	32.9	3.196	26.5	3.160	2.4	7.69	-92.7%
100yr24hr	4.553	11.2	4.536	9.4	4.500	6.2	7.76	-44.6%

Extended Detention Basin B Size and Flow Calculations

Highland Grove 4

	BASIN PARAMETERS						OUTLET					
	Basin Elevation	Depth	Area S.F.	Volume C.F.	Volume AC-FT	Effective Volume AC-FT	Q_1 Orifice Plate (cfs)	Q_2 Orifice Plate (cfs)	Q_3Orifice Plate (cfs)	Q Weir 1 (cfs)	Q Weir 2 (cfs)	Q Total (cfs)
TOP OF BASIN	1225.0	9.7	32,432	183,099	4.203	4.203	0.553	0.488	2.080	218.016	220.646	441.782
	1224.0	8.7	29,672	152,047	3.491	3.491	0.522	0.453	1.801	77.080	33.697	113.554
EM OVERFLOW	1223.6	8.3	28,578	140,397	3.223	3.223	0.510	0.439	1.677	35.824	0.000	38.449
Q100 OUTLET	1223.0	7.7	26,937	123,742	2.841	2.841	0.490	0.416	1.471	0.000	0.000	2.376
	1222.0	6.7	24,326	98,111	2.252	2.252	0.456	0.374	1.040	0.000	0.000	1.870
STORAGE	1221.0	5.7	21,824	75,036	1.723	1.723	0.418	0.328	0.000	0.000	0.000	0.746
	1220.0	4.7	19,431	54,409	1.249	1.249	0.377	0.274	0.000	0.000	0.000	0.651
VBMP	1219.0	3.7	17,137	36,125	0.829	0.829	0.331	0.206	0.000	0.000	0.000	0.537
	1218.0	2.7	14,936	20,088	0.461	0.461	0.278	0.099	0.000	0.000	0.000	0.377
	1217.7	2.4	13,150	15,913	0.365	0.365	0.260	0.009	0.000	0.000	0.000	0.269
STORAGE	1217.0	1.7	8,930	8,155	0.187	0.187	0.211	0.000	0.000	0.000	0.000	0.211
	1216.0	0.7	3,856	1,762	0.040	0.040	0.109	0.000	0.000	0.000	0.000	0.109
BOT STAGE	1215.3	0.0	1,179	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

SUPPORTING DESIGN PARAMETERS

Orifice Coefficient	0.66	Dia of Orifice (in)	2.50	2.50	6.00	
Gravimetric Constant	32.2 ft/s^2	Eff Dia of Orifice (ft)	0.2083	0.2083	0.5000	
Number of Rows	1	Area of Orifice (sf)	0.0341	0.0341	0.1963	
Minimum Orifice Plate Height		Number of Orifeces	1	1	1	
Minimum Orifice Plate Width		Centroid Elev	1215.63	1217.7	1221	

Sharp Crest Weir Coefficient 3.33

Length of Weir	23.15	40
Elev. at Crest of Weir	1223.0	1223.6

VBMP 15,913 cf

Orifice Equation

$Q=Cd(1/4\pi D2)\sqrt{2gh}$

Weir Equation

(Q/(Weir Length* Weir Coefficent))^(2/3)

Outlet Weir Calc (Q100)		
Grated Catch Basin		
Crest Elev.	1223.0	
Q100	38.89	cfs
Weir Length	23.15	ft
Weir Coeff.	3.33	
H Weir	0.63	ft
Q100 Elev.	**1223.6**	

Emergency Overflow Weir Calc (Q100)		
Concrete Spillway		
Crest Elev.	1223.6	`
Q100	38.89	cfs
Weir Length	40	ft
Weir Coeff.	3.33	
H Weir	0.44	ft
Q100 WS Elevation	**1224.0**	
Top of Basin	1225.0	
Basin Freeboard	**1.0**	**ft**

Standard APWA 305-4

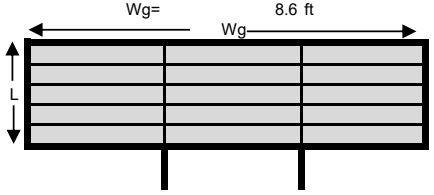
No. of Grates 4

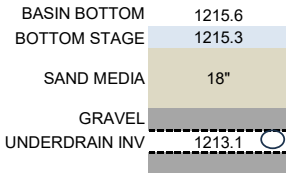
L= 2.95 ft

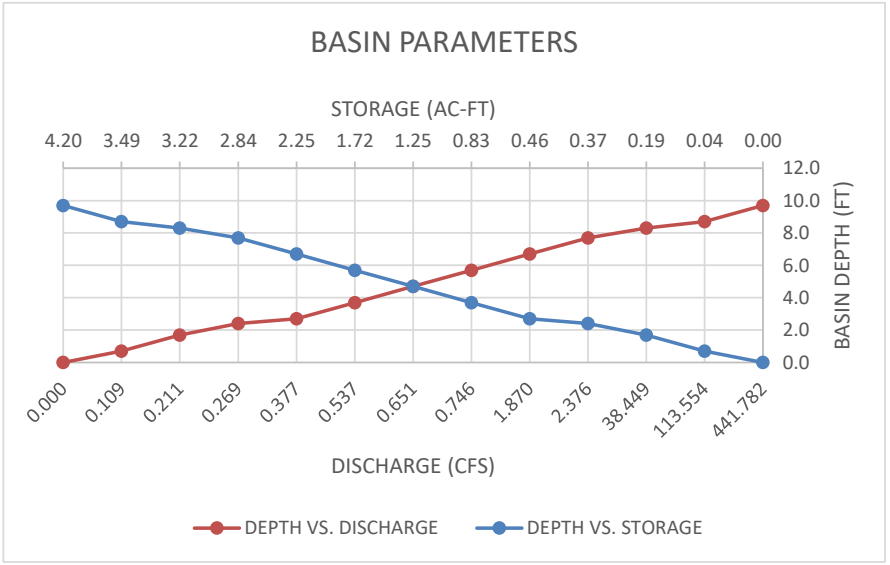
Wg= 8.6 ft

Surface Area 25.4 sf

Perimeter 23.15 ft







FLOOD HYDROGRAPH ROUTING PROGRAM
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Study date: 08/18/25

Program License Serial Number 5006

********** HYDROGRAPH INFORMATION **********

From study/file name: PROB12.rte
**********HYDROGRAPH DATA**********
Number of intervals = 25
Time interval = 5.0 (Min.)
Maximum/Peak flow rate = 15.579 (CFS)
Total volume = 0.534 (Ac.Ft)

Status of hydrographs being held in storage

	Stream 1	Stream 2	Stream 3	Stream 4	Stream 5
Peak (CFS)	0.000	0.000	0.000	0.000	0.000
Vol (Ac.Ft)	0.000	0.000	0.000	0.000	0.000

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Process from Point/Station 0.000 to Point/Station 0.000
**** RETARDING BASIN ROUTING ****

User entry of depth-outflow-storage data

Total number of inflow hydrograph intervals = 25
Hydrograph time unit = 5.000 (Min.)
Initial depth in storage basin = 0.00(Ft.)

Initial basin depth = 0.00 (Ft.)
Initial basin storage = 0.00 (Ac.Ft)
Initial basin outflow = 0.00 (CFS)

Depth vs. Storage and Depth vs. Discharge data:

Basin Depth (Ft.)	Storage (Ac.Ft)	Outflow (CFS)	(S-O*dt/2) (Ac.Ft)	(S+O*dt/2) (Ac.Ft)
0.000	0.000	0.000	0.000	0.000
0.700	0.040	0.109	0.040	0.040
1.700	0.187	0.211	0.186	0.188
2.400	0.365	0.269	0.364	0.366
2.700	0.461	0.377	0.460	0.462
3.700	0.829	0.537	0.827	0.831
4.700	1.249	0.651	1.247	1.251
5.700	1.723	0.746	1.720	1.726
6.700	2.252	1.870	2.246	2.258
7.700	2.841	2.376	2.833	2.849
8.300	3.223	38.499	3.090	3.356
8.700	3.491	113.554	3.100	3.882
9.700	4.203	441.782	2.682	5.724

Hydrograph Detention Basin Routing

Graph values: 'I'= unit inflow; 'O'=outflow at time shown

Time	Inflow	Outflow	Storage	Depth

(Hours)	(CFS)	(CFS)	(Ac.Ft)	.0	3.9	7.79	11.68	15.58	(Ft.)
0.083	0.15	0.00	0.001	O	|	|	|	|	0.01
0.167	0.82	0.01	0.004	OI	|	|	|	|	0.07
0.250	1.52	0.03	0.012	O I	|	|	|	|	0.21
0.333	1.92	0.06	0.023	O I	|	|	|	|	0.41
0.417	2.21	0.10	0.037	O I	|	|	|	|	0.65
0.500	2.52	0.12	0.052	O I	|	|	|	|	0.78
0.583	2.91	0.13	0.070	O I	|	|	|	|	0.91
0.667	3.47	0.14	0.091	O I	|	|	|	|	1.05
0.750	4.91	0.16	0.119	O	I |	|	|	|	1.24
0.833	9.20	0.20	0.166	O	|	I |	|	|	1.56
0.917	15.58	0.23	0.250	O	|	|	|	I	1.95
1.000	12.49	0.26	0.345	O	|	|	I |	|	2.32
1.083	6.68	0.32	0.409	O	| I	|	|	|	2.54
1.167	4.01	0.36	0.444	O	I |	|	|	|	2.65
1.250	2.56	0.38	0.464	O I	|	|	|	|	2.71
1.333	1.80	0.38	0.476	O I	|	|	|	|	2.74
1.417	1.30	0.39	0.484	O I	|	|	|	|	2.76
1.500	1.01	0.39	0.490	O I	|	|	|	|	2.78
1.583	0.76	0.39	0.493	OI	|	|	|	|	2.79
1.667	0.57	0.39	0.495	OI	|	|	|	|	2.79
1.750	0.42	0.39	0.496	O	|	|	|	|	2.79
1.833	0.33	0.39	0.495	O	|	|	|	|	2.79
1.917	0.26	0.39	0.495	O	|	|	|	|	2.79
2.000	0.04	0.39	0.493	O	|	|	|	|	2.79
2.083	0.01	0.39	0.491	O	|	|	|	|	2.78
2.167	0.00	0.39	0.488	O	|	|	|	|	2.77
2.250	0.00	0.39	0.485	O	|	|	|	|	2.77
2.333	0.00	0.39	0.483	O	|	|	|	|	2.76
2.417	0.00	0.39	0.480	O	|	|	|	|	2.75
2.500	0.00	0.38	0.477	O	|	|	|	|	2.74
2.583	0.00	0.38	0.475	O	|	|	|	|	2.74
2.667	0.00	0.38	0.472	O	|	|	|	|	2.73
2.750	0.00	0.38	0.469	O	|	|	|	|	2.72
2.833	0.00	0.38	0.467	O	|	|	|	|	2.72
2.917	0.00	0.38	0.464	O	|	|	|	|	2.71
3.000	0.00	0.38	0.462	O	|	|	|	|	2.70
3.083	0.00	0.37	0.459	O	|	|	|	|	2.69
3.167	0.00	0.37	0.456	O	|	|	|	|	2.69
3.250	0.00	0.37	0.454	O	|	|	|	|	2.68
3.333	0.00	0.37	0.451	O	|	|	|	|	2.67
3.417	0.00	0.36	0.449	O	|	|	|	|	2.66
3.500	0.00	0.36	0.446	O	|	|	|	|	2.65
3.583	0.00	0.36	0.444	O	|	|	|	|	2.65
3.667	0.00	0.36	0.441	O	|	|	|	|	2.64
3.750	0.00	0.35	0.439	O	|	|	|	|	2.63
3.833	0.00	0.35	0.437	O	|	|	|	|	2.62
3.917	0.00	0.35	0.434	O	|	|	|	|	2.62
4.000	0.00	0.34	0.432	O	|	|	|	|	2.61
4.083	0.00	0.34	0.429	O	|	|	|	|	2.60
4.167	0.00	0.34	0.427	O	|	|	|	|	2.59
4.250	0.00	0.34	0.425	O	|	|	|	|	2.59
4.333	0.00	0.33	0.423	O	|	|	|	|	2.58
4.417	0.00	0.33	0.420	O	|	|	|	|	2.57
4.500	0.00	0.33	0.418	O	|	|	|	|	2.57
4.583	0.00	0.33	0.416	O	|	|	|	|	2.56
4.667	0.00	0.32	0.413	O	|	|	|	|	2.55
4.750	0.00	0.32	0.411	O	|	|	|	|	2.54
4.833	0.00	0.32	0.409	O	|	|	|	|	2.54
4.917	0.00	0.32	0.407	O	|	|	|	|	2.53
5.000	0.00	0.31	0.405	O	|	|	|	|	2.52
5.083	0.00	0.31	0.403	O	|	|	|	|	2.52
5.167	0.00	0.31	0.400	O	|	|	|	|	2.51
5.250	0.00	0.31	0.398	O	|	|	|	|	2.50
5.333	0.00	0.30	0.396	O	|	|	|	|	2.50
5.417	0.00	0.30	0.394	O	|	|	|	|	2.49
5.500	0.00	0.30	0.392	O	|	|	|	|	2.48
5.583	0.00	0.30	0.390	O	|	|	|	|	2.48
5.667	0.00	0.29	0.388	O	|	|	|	|	2.47
5.750	0.00	0.29	0.386	O	|	|	|	|	2.47
5.833	0.00	0.29	0.384	O	|	|	|	|	2.46

5.917	0.00	0.29	0.382	O					2.45
6.000	0.00	0.29	0.380	O					2.45
6.083	0.00	0.28	0.378	O					2.44
6.167	0.00	0.28	0.376	O					2.43
6.250	0.00	0.28	0.374	O					2.43
6.333	0.00	0.28	0.372	O					2.42
6.417	0.00	0.27	0.370	O					2.42
6.500	0.00	0.27	0.368	O					2.41
6.583	0.00	0.27	0.367	O					2.40
6.667	0.00	0.27	0.365	O					2.40
6.750	0.00	0.27	0.363	O					2.39
6.833	0.00	0.27	0.361	O					2.38
6.917	0.00	0.27	0.359	O					2.38
7.000	0.00	0.27	0.357	O					2.37
7.083	0.00	0.27	0.355	O					2.36
7.167	0.00	0.27	0.354	O					2.36
7.250	0.00	0.26	0.352	O					2.35
7.333	0.00	0.26	0.350	O					2.34
7.417	0.00	0.26	0.348	O					2.33
7.500	0.00	0.26	0.346	O					2.33
7.583	0.00	0.26	0.345	O					2.32
7.667	0.00	0.26	0.343	O					2.31
7.750	0.00	0.26	0.341	O					2.31
7.833	0.00	0.26	0.339	O					2.30
7.917	0.00	0.26	0.337	O					2.29
8.000	0.00	0.26	0.336	O					2.28
8.083	0.00	0.26	0.334	O					2.28
8.167	0.00	0.26	0.332	O					2.27
8.250	0.00	0.26	0.330	O					2.26
8.333	0.00	0.26	0.328	O					2.26
8.417	0.00	0.26	0.327	O					2.25
8.500	0.00	0.26	0.325	O					2.24
8.583	0.00	0.26	0.323	O					2.24
8.667	0.00	0.25	0.321	O					2.23
8.750	0.00	0.25	0.320	O					2.22
8.833	0.00	0.25	0.318	O					2.21
8.917	0.00	0.25	0.316	O					2.21
9.000	0.00	0.25	0.314	O					2.20
9.083	0.00	0.25	0.313	O					2.19
9.167	0.00	0.25	0.311	O					2.19
9.250	0.00	0.25	0.309	O					2.18
9.333	0.00	0.25	0.307	O					2.17
9.417	0.00	0.25	0.306	O					2.17
9.500	0.00	0.25	0.304	O					2.16
9.583	0.00	0.25	0.302	O					2.15
9.667	0.00	0.25	0.301	O					2.15
9.750	0.00	0.25	0.299	O					2.14
9.833	0.00	0.25	0.297	O					2.13
9.917	0.00	0.25	0.296	O					2.13
10.000	0.00	0.25	0.294	O					2.12
10.083	0.00	0.25	0.292	O					2.11
10.167	0.00	0.24	0.290	O					2.11
10.250	0.00	0.24	0.289	O					2.10
10.333	0.00	0.24	0.287	O					2.09
10.417	0.00	0.24	0.285	O					2.09
10.500	0.00	0.24	0.284	O					2.08
10.583	0.00	0.24	0.282	O					2.07
10.667	0.00	0.24	0.280	O					2.07
10.750	0.00	0.24	0.279	O					2.06
10.833	0.00	0.24	0.277	O					2.05
10.917	0.00	0.24	0.275	O					2.05
11.000	0.00	0.24	0.274	O					2.04
11.083	0.00	0.24	0.272	O					2.03
11.167	0.00	0.24	0.270	O					2.03
11.250	0.00	0.24	0.269	O					2.02
11.333	0.00	0.24	0.267	O					2.02
11.417	0.00	0.24	0.266	O					2.01
11.500	0.00	0.24	0.264	O					2.00
11.583	0.00	0.24	0.262	O					2.00
11.667	0.00	0.24	0.261	O					1.99
11.750	0.00	0.23	0.259	O					1.98

11.833	0.00	0.23	0.257	O	|	|	|	|	1.98
11.917	0.00	0.23	0.256	O	|	|	|	|	1.97
12.000	0.00	0.23	0.254	O	|	|	|	|	1.96
12.083	0.00	0.23	0.253	O	|	|	|	|	1.96
12.167	0.00	0.23	0.251	O	|	|	|	|	1.95
12.250	0.00	0.23	0.249	O	|	|	|	|	1.95
12.333	0.00	0.23	0.248	O	|	|	|	|	1.94
12.417	0.00	0.23	0.246	O	|	|	|	|	1.93
12.500	0.00	0.23	0.245	O	|	|	|	|	1.93
12.583	0.00	0.23	0.243	O	|	|	|	|	1.92
12.667	0.00	0.23	0.242	O	|	|	|	|	1.91
12.750	0.00	0.23	0.240	O	|	|	|	|	1.91
12.833	0.00	0.23	0.238	O	|	|	|	|	1.90
12.917	0.00	0.23	0.237	O	|	|	|	|	1.90
13.000	0.00	0.23	0.235	O	|	|	|	|	1.89
13.083	0.00	0.23	0.234	O	|	|	|	|	1.88
13.167	0.00	0.23	0.232	O	|	|	|	|	1.88
13.250	0.00	0.23	0.231	O	|	|	|	|	1.87
13.333	0.00	0.22	0.229	O	|	|	|	|	1.87
13.417	0.00	0.22	0.228	O	|	|	|	|	1.86
13.500	0.00	0.22	0.226	O	|	|	|	|	1.85
13.583	0.00	0.22	0.224	O	|	|	|	|	1.85
13.667	0.00	0.22	0.223	O	|	|	|	|	1.84
13.750	0.00	0.22	0.221	O	|	|	|	|	1.84
13.833	0.00	0.22	0.220	O	|	|	|	|	1.83
13.917	0.00	0.22	0.218	O	|	|	|	|	1.82
14.000	0.00	0.22	0.217	O	|	|	|	|	1.82
14.083	0.00	0.22	0.215	O	|	|	|	|	1.81
14.167	0.00	0.22	0.214	O	|	|	|	|	1.81
14.250	0.00	0.22	0.212	O	|	|	|	|	1.80
14.333	0.00	0.22	0.211	O	|	|	|	|	1.79
14.417	0.00	0.22	0.209	O	|	|	|	|	1.79
14.500	0.00	0.22	0.208	O	|	|	|	|	1.78
14.583	0.00	0.22	0.206	O	|	|	|	|	1.78
14.667	0.00	0.22	0.205	O	|	|	|	|	1.77
14.750	0.00	0.22	0.203	O	|	|	|	|	1.76
14.833	0.00	0.22	0.202	O	|	|	|	|	1.76
14.917	0.00	0.22	0.200	O	|	|	|	|	1.75
15.000	0.00	0.21	0.199	O	|	|	|	|	1.75
15.083	0.00	0.21	0.197	O	|	|	|	|	1.74
15.167	0.00	0.21	0.196	O	|	|	|	|	1.73
15.250	0.00	0.21	0.194	O	|	|	|	|	1.73
15.333	0.00	0.21	0.193	O	|	|	|	|	1.72
15.417	0.00	0.21	0.191	O	|	|	|	|	1.72
15.500	0.00	0.21	0.190	O	|	|	|	|	1.71
15.583	0.00	0.21	0.189	O	|	|	|	|	1.71
15.667	0.00	0.21	0.187	O	|	|	|	|	1.70
15.750	0.00	0.21	0.186	O	|	|	|	|	1.69
15.833	0.00	0.21	0.184	O	|	|	|	|	1.68
15.917	0.00	0.21	0.183	O	|	|	|	|	1.67
16.000	0.00	0.21	0.181	O	|	|	|	|	1.66
16.083	0.00	0.21	0.180	O	|	|	|	|	1.65
16.167	0.00	0.21	0.178	O	|	|	|	|	1.64
16.250	0.00	0.20	0.177	O	|	|	|	|	1.63
16.333	0.00	0.20	0.176	O	|	|	|	|	1.62
16.417	0.00	0.20	0.174	O	|	|	|	|	1.61
16.500	0.00	0.20	0.173	O	|	|	|	|	1.60
16.583	0.00	0.20	0.171	O	|	|	|	|	1.59
16.667	0.00	0.20	0.170	O	|	|	|	|	1.59
16.750	0.00	0.20	0.169	O	|	|	|	|	1.58
16.833	0.00	0.20	0.167	O	|	|	|	|	1.57
16.917	0.00	0.20	0.166	O	|	|	|	|	1.56
17.000	0.00	0.20	0.165	O	|	|	|	|	1.55
17.083	0.00	0.19	0.163	O	|	|	|	|	1.54
17.167	0.00	0.19	0.162	O	|	|	|	|	1.53
17.250	0.00	0.19	0.161	O	|	|	|	|	1.52
17.333	0.00	0.19	0.159	O	|	|	|	|	1.51
17.417	0.00	0.19	0.158	O	|	|	|	|	1.50
17.500	0.00	0.19	0.157	O	|	|	|	|	1.49
17.583	0.00	0.19	0.155	O	|	|	|	|	1.48
17.667	0.00	0.19	0.154	O	|	|	|	|	1.48

17.750	0.00	0.19	0.153	O	|	|	|	|	1.47
17.833	0.00	0.19	0.152	O	|	|	|	|	1.46
17.917	0.00	0.19	0.150	O	|	|	|	|	1.45
18.000	0.00	0.18	0.149	O	|	|	|	|	1.44
18.083	0.00	0.18	0.148	O	|	|	|	|	1.43
18.167	0.00	0.18	0.146	O	|	|	|	|	1.42
18.250	0.00	0.18	0.145	O	|	|	|	|	1.42
18.333	0.00	0.18	0.144	O	|	|	|	|	1.41
18.417	0.00	0.18	0.143	O	|	|	|	|	1.40
18.500	0.00	0.18	0.141	O	|	|	|	|	1.39
18.583	0.00	0.18	0.140	O	|	|	|	|	1.38
18.667	0.00	0.18	0.139	O	|	|	|	|	1.37
18.750	0.00	0.18	0.138	O	|	|	|	|	1.37
18.833	0.00	0.18	0.137	O	|	|	|	|	1.36
18.917	0.00	0.18	0.135	O	|	|	|	|	1.35
19.000	0.00	0.17	0.134	O	|	|	|	|	1.34
19.083	0.00	0.17	0.133	O	|	|	|	|	1.33
19.167	0.00	0.17	0.132	O	|	|	|	|	1.32
19.250	0.00	0.17	0.131	O	|	|	|	|	1.32
19.333	0.00	0.17	0.129	O	|	|	|	|	1.31
19.417	0.00	0.17	0.128	O	|	|	|	|	1.30
19.500	0.00	0.17	0.127	O	|	|	|	|	1.29
19.583	0.00	0.17	0.126	O	|	|	|	|	1.28
19.667	0.00	0.17	0.125	O	|	|	|	|	1.28
19.750	0.00	0.17	0.124	O	|	|	|	|	1.27
19.833	0.00	0.17	0.122	O	|	|	|	|	1.26
19.917	0.00	0.17	0.121	O	|	|	|	|	1.25
20.000	0.00	0.16	0.120	O	|	|	|	|	1.25
20.083	0.00	0.16	0.119	O	|	|	|	|	1.24
20.167	0.00	0.16	0.118	O	|	|	|	|	1.23
20.250	0.00	0.16	0.117	O	|	|	|	|	1.22
20.333	0.00	0.16	0.116	O	|	|	|	|	1.21
20.417	0.00	0.16	0.115	O	|	|	|	|	1.21
20.500	0.00	0.16	0.113	O	|	|	|	|	1.20
20.583	0.00	0.16	0.112	O	|	|	|	|	1.19
20.667	0.00	0.16	0.111	O	|	|	|	|	1.18
20.750	0.00	0.16	0.110	O	|	|	|	|	1.18
20.833	0.00	0.16	0.109	O	|	|	|	|	1.17
20.917	0.00	0.16	0.108	O	|	|	|	|	1.16
21.000	0.00	0.16	0.107	O	|	|	|	|	1.16
21.083	0.00	0.15	0.106	O	|	|	|	|	1.15
21.167	0.00	0.15	0.105	O	|	|	|	|	1.14
21.250	0.00	0.15	0.104	O	|	|	|	|	1.13
21.333	0.00	0.15	0.103	O	|	|	|	|	1.13
21.417	0.00	0.15	0.102	O	|	|	|	|	1.12
21.500	0.00	0.15	0.101	O	|	|	|	|	1.11
21.583	0.00	0.15	0.100	O	|	|	|	|	1.11
21.667	0.00	0.15	0.099	O	|	|	|	|	1.10
21.750	0.00	0.15	0.097	O	|	|	|	|	1.09
21.833	0.00	0.15	0.096	O	|	|	|	|	1.08
21.917	0.00	0.15	0.095	O	|	|	|	|	1.08
22.000	0.00	0.15	0.094	O	|	|	|	|	1.07
22.083	0.00	0.15	0.093	O	|	|	|	|	1.06
22.167	0.00	0.15	0.092	O	|	|	|	|	1.06
22.250	0.00	0.14	0.091	O	|	|	|	|	1.05
22.333	0.00	0.14	0.090	O	|	|	|	|	1.04
22.417	0.00	0.14	0.089	O	|	|	|	|	1.04
22.500	0.00	0.14	0.088	O	|	|	|	|	1.03
22.583	0.00	0.14	0.087	O	|	|	|	|	1.02
22.667	0.00	0.14	0.086	O	|	|	|	|	1.02
22.750	0.00	0.14	0.086	O	|	|	|	|	1.01
22.833	0.00	0.14	0.085	O	|	|	|	|	1.00
22.917	0.00	0.14	0.084	O	|	|	|	|	1.00
23.000	0.00	0.14	0.083	O	|	|	|	|	0.99
23.083	0.00	0.14	0.082	O	|	|	|	|	0.98
23.167	0.00	0.14	0.081	O	|	|	|	|	0.98
23.250	0.00	0.14	0.080	O	|	|	|	|	0.97
23.333	0.00	0.14	0.079	O	|	|	|	|	0.96
23.417	0.00	0.14	0.078	O	|	|	|	|	0.96
23.500	0.00	0.13	0.077	O	|	|	|	|	0.95
23.583	0.00	0.13	0.076	O	|	|	|	|	0.95

23.667	0.00	0.13	0.075	O	|	|	|	|	0.94
23.750	0.00	0.13	0.074	O	|	|	|	|	0.93
23.833	0.00	0.13	0.073	O	|	|	|	|	0.93
23.917	0.00	0.13	0.072	O	|	|	|	|	0.92
24.000	0.00	0.13	0.072	O	|	|	|	|	0.91
24.083	0.00	0.13	0.071	O	|	|	|	|	0.91
24.167	0.00	0.13	0.070	O	|	|	|	|	0.90
24.250	0.00	0.13	0.069	O	|	|	|	|	0.90
24.333	0.00	0.13	0.068	O	|	|	|	|	0.89
24.417	0.00	0.13	0.067	O	|	|	|	|	0.88
24.500	0.00	0.13	0.066	O	|	|	|	|	0.88
24.583	0.00	0.13	0.065	O	|	|	|	|	0.87
24.667	0.00	0.13	0.064	O	|	|	|	|	0.87
24.750	0.00	0.13	0.064	O	|	|	|	|	0.86
24.833	0.00	0.12	0.063	O	|	|	|	|	0.85
24.917	0.00	0.12	0.062	O	|	|	|	|	0.85
25.000	0.00	0.12	0.061	O	|	|	|	|	0.84
25.083	0.00	0.12	0.060	O	|	|	|	|	0.84
25.167	0.00	0.12	0.059	O	|	|	|	|	0.83
25.250	0.00	0.12	0.058	O	|	|	|	|	0.83
25.333	0.00	0.12	0.058	O	|	|	|	|	0.82
25.417	0.00	0.12	0.057	O	|	|	|	|	0.81
25.500	0.00	0.12	0.056	O	|	|	|	|	0.81
25.583	0.00	0.12	0.055	O	|	|	|	|	0.80
25.667	0.00	0.12	0.054	O	|	|	|	|	0.80
25.750	0.00	0.12	0.053	O	|	|	|	|	0.79
25.833	0.00	0.12	0.053	O	|	|	|	|	0.79
25.917	0.00	0.12	0.052	O	|	|	|	|	0.78
26.000	0.00	0.12	0.051	O	|	|	|	|	0.78
26.083	0.00	0.12	0.050	O	|	|	|	|	0.77
26.167	0.00	0.12	0.049	O	|	|	|	|	0.76
26.250	0.00	0.12	0.049	O	|	|	|	|	0.76
26.333	0.00	0.11	0.048	O	|	|	|	|	0.75
26.417	0.00	0.11	0.047	O	|	|	|	|	0.75
26.500	0.00	0.11	0.046	O	|	|	|	|	0.74
26.583	0.00	0.11	0.046	O	|	|	|	|	0.74
26.667	0.00	0.11	0.045	O	|	|	|	|	0.73
26.750	0.00	0.11	0.044	O	|	|	|	|	0.73
26.833	0.00	0.11	0.043	O	|	|	|	|	0.72
26.917	0.00	0.11	0.042	O	|	|	|	|	0.72
27.000	0.00	0.11	0.042	O	|	|	|	|	0.71
27.083	0.00	0.11	0.041	O	|	|	|	|	0.71
27.167	0.00	0.11	0.040	O	|	|	|	|	0.70
27.250	0.00	0.11	0.039	O	|	|	|	|	0.69
27.333	0.00	0.11	0.039	O	|	|	|	|	0.68
27.417	0.00	0.10	0.038	O	|	|	|	|	0.66
27.500	0.00	0.10	0.037	O	|	|	|	|	0.65
27.583	0.00	0.10	0.037	O	|	|	|	|	0.64

Remaining water in basin = 0.04 (Ac.Ft)

**********HYDROGRAPH DATA**********

Number of intervals = 331
Time interval = 5.0 (Min.)
Maximum/Peak flow rate = 0.392 (CFS)
Total volume = 0.497 (Ac.Ft)

Status of hydrographs being held in storage

	Stream 1	Stream 2	Stream 3	Stream 4	Stream 5
Peak (CFS)	0.000	0.000	0.000	0.000	0.000
Vol (Ac.Ft)	0.000	0.000	0.000	0.000	0.000

****

FLOOD HYDROGRAPH ROUTING PROGRAM
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********** HYDROGRAPH INFORMATION **********

From study/file name: PROB32.rte
**********HYDROGRAPH DATA**********
Number of intervals = 49
Time interval = 5.0 (Min.)
Maximum/Peak flow rate = 8.508 (CFS)
Total volume = 0.713 (Ac.Ft)

Status of hydrographs being held in storage

	Stream 1	Stream 2	Stream 3	Stream 4	Stream 5
Peak (CFS)	0.000	0.000	0.000	0.000	0.000
Vol (Ac.Ft)	0.000	0.000	0.000	0.000	0.000

****

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Process from Point/Station 0.000 to Point/Station 0.000
**** RETARDING BASIN ROUTING ****

User entry of depth-outflow-storage data

Total number of inflow hydrograph intervals = 49
Hydrograph time unit = 5.000 (Min.)
Initial depth in storage basin = 0.00(Ft.)

Initial basin depth = 0.00 (Ft.)
Initial basin storage = 0.00 (Ac.Ft)
Initial basin outflow = 0.00 (CFS)

Depth vs. Storage and Depth vs. Discharge data:

Basin Depth (Ft.)	Storage (Ac.Ft)	Outflow (CFS)	(S-O*dt/2) (Ac.Ft)	(S+O*dt/2) (Ac.Ft)
0.000	0.000	0.000	0.000	0.000
0.700	0.040	0.109	0.040	0.040
1.700	0.187	0.211	0.186	0.188
2.400	0.365	0.269	0.364	0.366
2.700	0.461	0.377	0.460	0.462
3.700	0.829	0.537	0.827	0.831
4.700	1.249	0.651	1.247	1.251
5.700	1.723	0.746	1.720	1.726
6.700	2.252	1.870	2.246	2.258
7.700	2.841	2.376	2.833	2.849
8.300	3.223	38.499	3.090	3.356
8.700	3.491	113.554	3.100	3.882
9.700	4.203	441.782	2.682	5.724

Hydrograph Detention Basin Routing

Graph values: 'I'= unit inflow; 'O'=outflow at time shown

Time Inflow Outflow Storage Depth

(Hours)	(CFS)	(CFS)	(Ac.Ft)	.0	2.1	4.25	6.38	8.51	(Ft.)
0.083	0.09	0.00	0.000	O					0.01
0.167	0.49	0.01	0.002	OI					0.04
0.250	0.80	0.02	0.007	O I					0.12
0.333	0.90	0.03	0.012	O I					0.22
0.417	1.04	0.05	0.019	O I					0.33
0.500	1.20	0.07	0.026	O I					0.46
0.583	1.33	0.09	0.034	O I					0.60
0.667	1.38	0.11	0.043	O I					0.72
0.750	1.45	0.12	0.052	O I					0.78
0.833	1.52	0.12	0.061	O I					0.84
0.917	1.47	0.13	0.071	O I					0.91
1.000	1.47	0.14	0.080	O I					0.97
1.083	1.57	0.14	0.089	O I					1.04
1.167	1.76	0.15	0.100	O I					1.11
1.250	1.88	0.16	0.111	O I					1.18
1.333	1.91	0.17	0.123	O I					1.27
1.417	1.93	0.18	0.135	O I					1.35
1.500	2.09	0.18	0.148	O I					1.43
1.583	2.24	0.19	0.161	O I					1.53
1.667	2.26	0.20	0.176	O I					1.62
1.750	2.36	0.21	0.190	O I					1.71
1.833	2.61	0.22	0.206	O I					1.77
1.917	2.71	0.22	0.222	O I					1.84
2.000	2.69	0.23	0.240	O I					1.91
2.083	2.71	0.23	0.257	O I					1.97
2.167	2.85	0.24	0.274	O I					2.04
2.250	3.33	0.25	0.294	O I					2.12
2.333	3.93	0.25	0.317	O I					2.21
2.417	4.18	0.26	0.343	O I					2.31
2.500	5.70	0.28	0.375	O	I				2.43
2.583	7.51	0.33	0.419	O			I		2.57
2.667	8.51	0.38	0.471	O				I	2.73
2.750	7.57	0.40	0.524	O			I		2.87
2.833	5.16	0.42	0.565	O	I				2.98
2.917	3.57	0.43	0.592	O	I				3.06
3.000	2.83	0.44	0.611	O	I				3.11
3.083	2.07	0.45	0.625	O	I				3.15
3.167	1.35	0.45	0.634	O I					3.17
3.250	0.92	0.45	0.638	O I					3.18
3.333	0.68	0.46	0.641	OI					3.19
3.417	0.49	0.46	0.641	O					3.19
3.500	0.37	0.46	0.641	O					3.19
3.583	0.26	0.45	0.640	IO					3.19
3.667	0.18	0.45	0.639	IO					3.18
3.750	0.09	0.45	0.637	IO					3.18
3.833	0.04	0.45	0.634	IO					3.17
3.917	0.03	0.45	0.631	IO					3.16
4.000	0.01	0.45	0.628	IO					3.15
4.083	0.00	0.45	0.625	IO					3.15
4.167	0.00	0.45	0.622	IO					3.14
4.250	0.00	0.45	0.619	IO					3.13
4.333	0.00	0.44	0.616	IO					3.12
4.417	0.00	0.44	0.613	IO					3.11
4.500	0.00	0.44	0.610	IO					3.10
4.583	0.00	0.44	0.607	IO					3.10
4.667	0.00	0.44	0.604	IO					3.09
4.750	0.00	0.44	0.601	IO					3.08
4.833	0.00	0.44	0.598	IO					3.07
4.917	0.00	0.44	0.595	IO					3.06
5.000	0.00	0.43	0.592	IO					3.05
5.083	0.00	0.43	0.589	IO					3.05
5.167	0.00	0.43	0.586	IO					3.04
5.250	0.00	0.43	0.583	IO					3.03
5.333	0.00	0.43	0.580	IO					3.02
5.417	0.00	0.43	0.577	IO					3.01
5.500	0.00	0.43	0.574	IO					3.01
5.583	0.00	0.42	0.571	IO					3.00
5.667	0.00	0.42	0.568	IO					2.99
5.750	0.00	0.42	0.565	IO					2.98
5.833	0.00	0.42	0.562	IO					2.97

5.917	0.00	0.42	0.559	IO				2.97
6.000	0.00	0.42	0.556	IO				2.96
6.083	0.00	0.42	0.554	IO				2.95
6.167	0.00	0.42	0.551	IO				2.94
6.250	0.00	0.41	0.548	IO				2.94
6.333	0.00	0.41	0.545	IO				2.93
6.417	0.00	0.41	0.542	IO				2.92
6.500	0.00	0.41	0.539	IO				2.91
6.583	0.00	0.41	0.536	IO				2.91
6.667	0.00	0.41	0.534	IO				2.90
6.750	0.00	0.41	0.531	IO				2.89
6.833	0.00	0.41	0.528	IO				2.88
6.917	0.00	0.40	0.525	IO				2.87
7.000	0.00	0.40	0.522	IO				2.87
7.083	0.00	0.40	0.520	IO				2.86
7.167	0.00	0.40	0.517	IO				2.85
7.250	0.00	0.40	0.514	IO				2.84
7.333	0.00	0.40	0.511	IO				2.84
7.417	0.00	0.40	0.509	IO				2.83
7.500	0.00	0.40	0.506	IO				2.82
7.583	0.00	0.40	0.503	IO				2.81
7.667	0.00	0.39	0.500	IO				2.81
7.750	0.00	0.39	0.498	IO				2.80
7.833	0.00	0.39	0.495	IO				2.79
7.917	0.00	0.39	0.492	IO				2.79
8.000	0.00	0.39	0.490	IO				2.78
8.083	0.00	0.39	0.487	IO				2.77
8.167	0.00	0.39	0.484	IO				2.76
8.250	0.00	0.39	0.482	IO				2.76
8.333	0.00	0.38	0.479	IO				2.75
8.417	0.00	0.38	0.476	IO				2.74
8.500	0.00	0.38	0.474	IO				2.73
8.583	0.00	0.38	0.471	IO				2.73
8.667	0.00	0.38	0.468	IO				2.72
8.750	0.00	0.38	0.466	IO				2.71
8.833	0.00	0.38	0.463	IO				2.71
8.917	0.00	0.38	0.461	IO				2.70
9.000	0.00	0.37	0.458	IO				2.69
9.083	0.00	0.37	0.455	IO				2.68
9.167	0.00	0.37	0.453	IO				2.67
9.250	0.00	0.37	0.450	IO				2.67
9.333	0.00	0.36	0.448	IO				2.66
9.417	0.00	0.36	0.445	IO				2.65
9.500	0.00	0.36	0.443	IO				2.64
9.583	0.00	0.35	0.441	IO				2.64
9.667	0.00	0.35	0.438	IO				2.63
9.750	0.00	0.35	0.436	IO				2.62
9.833	0.00	0.35	0.433	IO				2.61
9.917	0.00	0.34	0.431	IO				2.61
10.000	0.00	0.34	0.429	IO				2.60
10.083	0.00	0.34	0.426	IO				2.59
10.167	0.00	0.34	0.424	IO				2.58
10.250	0.00	0.33	0.422	IO				2.58
10.333	0.00	0.33	0.419	IO				2.57
10.417	0.00	0.33	0.417	IO				2.56
10.500	0.00	0.33	0.415	IO				2.56
10.583	0.00	0.32	0.413	IO				2.55
10.667	0.00	0.32	0.410	IO				2.54
10.750	0.00	0.32	0.408	IO				2.53
10.833	0.00	0.32	0.406	IO				2.53
10.917	0.00	0.31	0.404	IO				2.52
11.000	0.00	0.31	0.402	IO				2.51
11.083	0.00	0.31	0.400	IO				2.51
11.167	0.00	0.31	0.397	IO				2.50
11.250	0.00	0.30	0.395	IO				2.49
11.333	0.00	0.30	0.393	IO				2.49
11.417	0.00	0.30	0.391	IO				2.48
11.500	0.00	0.30	0.389	IO				2.48
11.583	0.00	0.29	0.387	IO				2.47
11.667	0.00	0.29	0.385	IO				2.46
11.750	0.00	0.29	0.383	IO				2.46

11.833	0.00	0.29	0.381	IO				2.45
11.917	0.00	0.28	0.379	IO				2.44
12.000	0.00	0.28	0.377	IO				2.44
12.083	0.00	0.28	0.375	IO				2.43
12.167	0.00	0.28	0.373	IO				2.43
12.250	0.00	0.28	0.371	IO				2.42
12.333	0.00	0.27	0.370	IO				2.41
12.417	0.00	0.27	0.368	IO				2.41
12.500	0.00	0.27	0.366	IO				2.40
12.583	0.00	0.27	0.364	IO				2.40
12.667	0.00	0.27	0.362	IO				2.39
12.750	0.00	0.27	0.360	IO				2.38
12.833	0.00	0.27	0.358	IO				2.37
12.917	0.00	0.27	0.357	IO				2.37
13.000	0.00	0.27	0.355	O				2.36
13.083	0.00	0.27	0.353	O				2.35
13.167	0.00	0.26	0.351	O				2.35
13.250	0.00	0.26	0.349	O				2.34
13.333	0.00	0.26	0.347	O				2.33
13.417	0.00	0.26	0.346	O				2.32
13.500	0.00	0.26	0.344	O				2.32
13.583	0.00	0.26	0.342	O				2.31
13.667	0.00	0.26	0.340	O				2.30
13.750	0.00	0.26	0.338	O				2.30
13.833	0.00	0.26	0.337	O				2.29
13.917	0.00	0.26	0.335	O				2.28
14.000	0.00	0.26	0.333	O				2.27
14.083	0.00	0.26	0.331	O				2.27
14.167	0.00	0.26	0.330	O				2.26
14.250	0.00	0.26	0.328	O				2.25
14.333	0.00	0.26	0.326	O				2.25
14.417	0.00	0.26	0.324	O				2.24
14.500	0.00	0.26	0.322	O				2.23
14.583	0.00	0.25	0.321	O				2.23
14.667	0.00	0.25	0.319	O				2.22
14.750	0.00	0.25	0.317	O				2.21
14.833	0.00	0.25	0.315	O				2.21
14.917	0.00	0.25	0.314	O				2.20
15.000	0.00	0.25	0.312	O				2.19
15.083	0.00	0.25	0.310	O				2.18
15.167	0.00	0.25	0.309	O				2.18
15.250	0.00	0.25	0.307	O				2.17
15.333	0.00	0.25	0.305	O				2.16
15.417	0.00	0.25	0.303	O				2.16
15.500	0.00	0.25	0.302	O				2.15
15.583	0.00	0.25	0.300	O				2.14
15.667	0.00	0.25	0.298	O				2.14
15.750	0.00	0.25	0.297	O				2.13
15.833	0.00	0.25	0.295	O				2.12
15.917	0.00	0.25	0.293	O				2.12
16.000	0.00	0.25	0.291	O				2.11
16.083	0.00	0.24	0.290	O				2.10
16.167	0.00	0.24	0.288	O				2.10
16.250	0.00	0.24	0.286	O				2.09
16.333	0.00	0.24	0.285	O				2.08
16.417	0.00	0.24	0.283	O				2.08
16.500	0.00	0.24	0.281	O				2.07
16.583	0.00	0.24	0.280	O				2.06
16.667	0.00	0.24	0.278	O				2.06
16.750	0.00	0.24	0.276	O				2.05
16.833	0.00	0.24	0.275	O				2.05
16.917	0.00	0.24	0.273	O				2.04
17.000	0.00	0.24	0.271	O				2.03
17.083	0.00	0.24	0.270	O				2.03
17.167	0.00	0.24	0.268	O				2.02
17.250	0.00	0.24	0.267	O				2.01
17.333	0.00	0.24	0.265	O				2.01
17.417	0.00	0.24	0.263	O				2.00
17.500	0.00	0.24	0.262	O				1.99
17.583	0.00	0.23	0.260	O				1.99
17.667	0.00	0.23	0.258	O				1.98

17.750	0.00	0.23	0.257	O	|	|	|	|	1.97
17.833	0.00	0.23	0.255	O	|	|	|	|	1.97
17.917	0.00	0.23	0.254	O	|	|	|	|	1.96
18.000	0.00	0.23	0.252	O	|	|	|	|	1.96
18.083	0.00	0.23	0.250	O	|	|	|	|	1.95
18.167	0.00	0.23	0.249	O	|	|	|	|	1.94
18.250	0.00	0.23	0.247	O	|	|	|	|	1.94
18.333	0.00	0.23	0.246	O	|	|	|	|	1.93
18.417	0.00	0.23	0.244	O	|	|	|	|	1.92
18.500	0.00	0.23	0.243	O	|	|	|	|	1.92
18.583	0.00	0.23	0.241	O	|	|	|	|	1.91
18.667	0.00	0.23	0.239	O	|	|	|	|	1.91
18.750	0.00	0.23	0.238	O	|	|	|	|	1.90
18.833	0.00	0.23	0.236	O	|	|	|	|	1.89
18.917	0.00	0.23	0.235	O	|	|	|	|	1.89
19.000	0.00	0.23	0.233	O	|	|	|	|	1.88
19.083	0.00	0.23	0.232	O	|	|	|	|	1.88
19.167	0.00	0.23	0.230	O	|	|	|	|	1.87
19.250	0.00	0.22	0.228	O	|	|	|	|	1.86
19.333	0.00	0.22	0.227	O	|	|	|	|	1.86
19.417	0.00	0.22	0.225	O	|	|	|	|	1.85
19.500	0.00	0.22	0.224	O	|	|	|	|	1.84
19.583	0.00	0.22	0.222	O	|	|	|	|	1.84
19.667	0.00	0.22	0.221	O	|	|	|	|	1.83
19.750	0.00	0.22	0.219	O	|	|	|	|	1.83
19.833	0.00	0.22	0.218	O	|	|	|	|	1.82
19.917	0.00	0.22	0.216	O	|	|	|	|	1.81
20.000	0.00	0.22	0.215	O	|	|	|	|	1.81
20.083	0.00	0.22	0.213	O	|	|	|	|	1.80
20.167	0.00	0.22	0.212	O	|	|	|	|	1.80
20.250	0.00	0.22	0.210	O	|	|	|	|	1.79
20.333	0.00	0.22	0.209	O	|	|	|	|	1.79
20.417	0.00	0.22	0.207	O	|	|	|	|	1.78
20.500	0.00	0.22	0.206	O	|	|	|	|	1.77
20.583	0.00	0.22	0.204	O	|	|	|	|	1.77
20.667	0.00	0.22	0.203	O	|	|	|	|	1.76
20.750	0.00	0.22	0.201	O	|	|	|	|	1.76
20.833	0.00	0.22	0.200	O	|	|	|	|	1.75
20.917	0.00	0.21	0.198	O	|	|	|	|	1.74
21.000	0.00	0.21	0.197	O	|	|	|	|	1.74
21.083	0.00	0.21	0.195	O	|	|	|	|	1.73
21.167	0.00	0.21	0.194	O	|	|	|	|	1.73
21.250	0.00	0.21	0.192	O	|	|	|	|	1.72
21.333	0.00	0.21	0.191	O	|	|	|	|	1.72
21.417	0.00	0.21	0.189	O	|	|	|	|	1.71
21.500	0.00	0.21	0.188	O	|	|	|	|	1.70
21.583	0.00	0.21	0.186	O	|	|	|	|	1.70
21.667	0.00	0.21	0.185	O	|	|	|	|	1.69
21.750	0.00	0.21	0.184	O	|	|	|	|	1.68
21.833	0.00	0.21	0.182	O	|	|	|	|	1.67
21.917	0.00	0.21	0.181	O	|	|	|	|	1.66
22.000	0.00	0.21	0.179	O	|	|	|	|	1.65
22.083	0.00	0.20	0.178	O	|	|	|	|	1.64
22.167	0.00	0.20	0.176	O	|	|	|	|	1.63
22.250	0.00	0.20	0.175	O	|	|	|	|	1.62
22.333	0.00	0.20	0.174	O	|	|	|	|	1.61
22.417	0.00	0.20	0.172	O	|	|	|	|	1.60
22.500	0.00	0.20	0.171	O	|	|	|	|	1.59
22.583	0.00	0.20	0.170	O	|	|	|	|	1.58
22.667	0.00	0.20	0.168	O	|	|	|	|	1.57
22.750	0.00	0.20	0.167	O	|	|	|	|	1.56
22.833	0.00	0.20	0.165	O	|	|	|	|	1.55
22.917	0.00	0.20	0.164	O	|	|	|	|	1.54
23.000	0.00	0.19	0.163	O	|	|	|	|	1.54
23.083	0.00	0.19	0.161	O	|	|	|	|	1.53
23.167	0.00	0.19	0.160	O	|	|	|	|	1.52
23.250	0.00	0.19	0.159	O	|	|	|	|	1.51
23.333	0.00	0.19	0.157	O	|	|	|	|	1.50
23.417	0.00	0.19	0.156	O	|	|	|	|	1.49
23.500	0.00	0.19	0.155	O	|	|	|	|	1.48
23.583	0.00	0.19	0.154	O	|	|	|	|	1.47

23.667	0.00	0.19	0.152	O	|	|	|	|	1.46
23.750	0.00	0.19	0.151	O	|	|	|	|	1.46
23.833	0.00	0.19	0.150	O	|	|	|	|	1.45
23.917	0.00	0.18	0.148	O	|	|	|	|	1.44
24.000	0.00	0.18	0.147	O	|	|	|	|	1.43
24.083	0.00	0.18	0.146	O	|	|	|	|	1.42
24.167	0.00	0.18	0.145	O	|	|	|	|	1.41
24.250	0.00	0.18	0.143	O	|	|	|	|	1.40
24.333	0.00	0.18	0.142	O	|	|	|	|	1.40
24.417	0.00	0.18	0.141	O	|	|	|	|	1.39
24.500	0.00	0.18	0.140	O	|	|	|	|	1.38
24.583	0.00	0.18	0.139	O	|	|	|	|	1.37
24.667	0.00	0.18	0.137	O	|	|	|	|	1.36
24.750	0.00	0.18	0.136	O	|	|	|	|	1.35
24.833	0.00	0.17	0.135	O	|	|	|	|	1.35
24.917	0.00	0.17	0.134	O	|	|	|	|	1.34
25.000	0.00	0.17	0.132	O	|	|	|	|	1.33
25.083	0.00	0.17	0.131	O	|	|	|	|	1.32
25.167	0.00	0.17	0.130	O	|	|	|	|	1.31
25.250	0.00	0.17	0.129	O	|	|	|	|	1.30
25.333	0.00	0.17	0.128	O	|	|	|	|	1.30
25.417	0.00	0.17	0.127	O	|	|	|	|	1.29
25.500	0.00	0.17	0.125	O	|	|	|	|	1.28
25.583	0.00	0.17	0.124	O	|	|	|	|	1.27
25.667	0.00	0.17	0.123	O	|	|	|	|	1.27
25.750	0.00	0.17	0.122	O	|	|	|	|	1.26
25.833	0.00	0.17	0.121	O	|	|	|	|	1.25
25.917	0.00	0.16	0.120	O	|	|	|	|	1.24
26.000	0.00	0.16	0.119	O	|	|	|	|	1.23
26.083	0.00	0.16	0.117	O	|	|	|	|	1.23
26.167	0.00	0.16	0.116	O	|	|	|	|	1.22
26.250	0.00	0.16	0.115	O	|	|	|	|	1.21
26.333	0.00	0.16	0.114	O	|	|	|	|	1.20
26.417	0.00	0.16	0.113	O	|	|	|	|	1.20
26.500	0.00	0.16	0.112	O	|	|	|	|	1.19
26.583	0.00	0.16	0.111	O	|	|	|	|	1.18
26.667	0.00	0.16	0.110	O	|	|	|	|	1.17
26.750	0.00	0.16	0.109	O	|	|	|	|	1.17
26.833	0.00	0.16	0.108	O	|	|	|	|	1.16
26.917	0.00	0.16	0.106	O	|	|	|	|	1.15
27.000	0.00	0.15	0.105	O	|	|	|	|	1.15
27.083	0.00	0.15	0.104	O	|	|	|	|	1.14
27.167	0.00	0.15	0.103	O	|	|	|	|	1.13
27.250	0.00	0.15	0.102	O	|	|	|	|	1.12
27.333	0.00	0.15	0.101	O	|	|	|	|	1.12
27.417	0.00	0.15	0.100	O	|	|	|	|	1.11
27.500	0.00	0.15	0.099	O	|	|	|	|	1.10
27.583	0.00	0.15	0.098	O	|	|	|	|	1.10
27.667	0.00	0.15	0.097	O	|	|	|	|	1.09
27.750	0.00	0.15	0.096	O	|	|	|	|	1.08
27.833	0.00	0.15	0.095	O	|	|	|	|	1.07
27.917	0.00	0.15	0.094	O	|	|	|	|	1.07
28.000	0.00	0.15	0.093	O	|	|	|	|	1.06
28.083	0.00	0.15	0.092	O	|	|	|	|	1.05
28.167	0.00	0.14	0.091	O	|	|	|	|	1.05
28.250	0.00	0.14	0.090	O	|	|	|	|	1.04
28.333	0.00	0.14	0.089	O	|	|	|	|	1.03
28.417	0.00	0.14	0.088	O	|	|	|	|	1.03
28.500	0.00	0.14	0.087	O	|	|	|	|	1.02
28.583	0.00	0.14	0.086	O	|	|	|	|	1.01
28.667	0.00	0.14	0.085	O	|	|	|	|	1.01
28.750	0.00	0.14	0.084	O	|	|	|	|	1.00
28.833	0.00	0.14	0.083	O	|	|	|	|	0.99
28.917	0.00	0.14	0.082	O	|	|	|	|	0.99
29.000	0.00	0.14	0.081	O	|	|	|	|	0.98
29.083	0.00	0.14	0.080	O	|	|	|	|	0.97
29.167	0.00	0.14	0.079	O	|	|	|	|	0.97
29.250	0.00	0.14	0.078	O	|	|	|	|	0.96
29.333	0.00	0.14	0.078	O	|	|	|	|	0.96
29.417	0.00	0.13	0.077	O	|	|	|	|	0.95
29.500	0.00	0.13	0.076	O	|	|	|	|	0.94

29.583	0.00	0.13	0.075	O	|	|	|	|	0.94
29.667	0.00	0.13	0.074	O	|	|	|	|	0.93
29.750	0.00	0.13	0.073	O	|	|	|	|	0.92
29.833	0.00	0.13	0.072	O	|	|	|	|	0.92
29.917	0.00	0.13	0.071	O	|	|	|	|	0.91
30.000	0.00	0.13	0.070	O	|	|	|	|	0.91
30.083	0.00	0.13	0.069	O	|	|	|	|	0.90
30.167	0.00	0.13	0.068	O	|	|	|	|	0.89
30.250	0.00	0.13	0.068	O	|	|	|	|	0.89
30.333	0.00	0.13	0.067	O	|	|	|	|	0.88
30.417	0.00	0.13	0.066	O	|	|	|	|	0.88
30.500	0.00	0.13	0.065	O	|	|	|	|	0.87
30.583	0.00	0.13	0.064	O	|	|	|	|	0.86
30.667	0.00	0.13	0.063	O	|	|	|	|	0.86
30.750	0.00	0.12	0.062	O	|	|	|	|	0.85
30.833	0.00	0.12	0.062	O	|	|	|	|	0.85
30.917	0.00	0.12	0.061	O	|	|	|	|	0.84
31.000	0.00	0.12	0.060	O	|	|	|	|	0.83
31.083	0.00	0.12	0.059	O	|	|	|	|	0.83
31.167	0.00	0.12	0.058	O	|	|	|	|	0.82
31.250	0.00	0.12	0.057	O	|	|	|	|	0.82
31.333	0.00	0.12	0.056	O	|	|	|	|	0.81
31.417	0.00	0.12	0.056	O	|	|	|	|	0.81
31.500	0.00	0.12	0.055	O	|	|	|	|	0.80
31.583	0.00	0.12	0.054	O	|	|	|	|	0.80
31.667	0.00	0.12	0.053	O	|	|	|	|	0.79
31.750	0.00	0.12	0.052	O	|	|	|	|	0.78
31.833	0.00	0.12	0.052	O	|	|	|	|	0.78
31.917	0.00	0.12	0.051	O	|	|	|	|	0.77
32.000	0.00	0.12	0.050	O	|	|	|	|	0.77
32.083	0.00	0.12	0.049	O	|	|	|	|	0.76
32.167	0.00	0.11	0.048	O	|	|	|	|	0.76
32.250	0.00	0.11	0.048	O	|	|	|	|	0.75
32.333	0.00	0.11	0.047	O	|	|	|	|	0.75
32.417	0.00	0.11	0.046	O	|	|	|	|	0.74
32.500	0.00	0.11	0.045	O	|	|	|	|	0.74
32.583	0.00	0.11	0.044	O	|	|	|	|	0.73
32.667	0.00	0.11	0.044	O	|	|	|	|	0.73
32.750	0.00	0.11	0.043	O	|	|	|	|	0.72
32.833	0.00	0.11	0.042	O	|	|	|	|	0.71
32.917	0.00	0.11	0.041	O	|	|	|	|	0.71
33.000	0.00	0.11	0.041	O	|	|	|	|	0.70
33.083	0.00	0.11	0.040	O	|	|	|	|	0.70
33.167	0.00	0.11	0.039	O	|	|	|	|	0.69
33.250	0.00	0.10	0.038	O	|	|	|	|	0.67
33.333	0.00	0.10	0.038	O	|	|	|	|	0.66
33.417	0.00	0.10	0.037	O	|	|	|	|	0.65
33.500	0.00	0.10	0.036	O	|	|	|	|	0.64

Remaining water in basin = 0.04 (Ac.Ft)

**********HYDROGRAPH DATA**********

Number of intervals = 402
Time interval = 5.0 (Min.)
Maximum/Peak flow rate = 0.455 (CFS)
Total volume = 0.677 (Ac.Ft)

Status of hydrographs being held in storage

	Stream 1	Stream 2	Stream 3	Stream 4	Stream 5
Peak (CFS)	0.000	0.000	0.000	0.000	0.000
Vol (Ac.Ft)	0.000	0.000	0.000	0.000	0.000

****

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                    FLOOD HYDROGRAPH ROUTING PROGRAM
                Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2004
                            Study date: 08/18/25

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Program License Serial Number 5006

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********************* HYDROGRAPH INFORMATION **********************

                From study/file name: PROB62.rte
****************************HYDROGRAPH DATA****************************
                Number of intervals =    85
                Time interval =    5.0 (Min.)
                Maximum/Peak flow rate =        7.418 (CFS)
                Total volume =       0.933 (Ac.Ft)
        Status of hydrographs being held in storage
                    Stream 1  Stream 2  Stream 3  Stream 4  Stream 5
        Peak (CFS)      0.000     0.000     0.000     0.000     0.000
        Vol (Ac.Ft)      0.000     0.000     0.000     0.000     0.000
*************************************************************************



++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station        0.000 to Point/Station        0.000
**** RETARDING BASIN ROUTING ****
_________________________________________________________________________

User entry of depth-outflow-storage data
-------------------------------------------------------------------------
Total number of inflow hydrograph intervals = 85
Hydrograph time unit =  5.000 (Min.)
Initial depth in storage basin =   0.00(Ft.)
-------------------------------------------------------------------------
-------------------------------------------------------------------------
Initial basin depth =   0.00 (Ft.)
Initial basin storage =      0.00 (Ac.Ft)
Initial basin outflow =   0.00 (CFS)
-------------------------------------------------------------------------
-------------------------------------------------------------------------
Depth vs. Storage and Depth vs. Discharge data:
 Basin Depth  Storage    Outflow   (S-O*dt/2)   (S+O*dt/2)
     (Ft.)    (Ac.Ft)    (CFS)     (Ac.Ft)    (Ac.Ft)
-------------------------------------------------------------------------
   0.000      0.000      0.000      0.000        0.000
   0.700      0.040      0.109      0.040        0.040
   1.700      0.187      0.211      0.186        0.188
   2.400      0.365      0.269      0.364        0.366
   2.700      0.461      0.377      0.460        0.462
   3.700      0.829      0.537      0.827        0.831
   4.700      1.249      0.651      1.247        1.251
   5.700      1.723      0.746      1.720        1.726
   6.700      2.252      1.870      2.246        2.258
   7.700      2.841      2.376      2.833        2.849
   8.300      3.223     38.499      3.090        3.356
   8.700      3.491    113.554      3.100        3.882
   9.700      4.203    441.782      2.682        5.724
-------------------------------------------------------------------------
                Hydrograph Detention Basin Routing
-------------------------------------------------------------------------

Graph values: 'I'= unit inflow; 'O'=outflow at time shown
-------------------------------------------------------------------------
  Time   Inflow  Outflow    Storage                                  Depth
```

(Hours)	(CFS)	(CFS)	(Ac.Ft)	.0	1.9	3.71	5.56	7.42	(Ft.)
0.083	0.05	0.00	0.000	O	|	|	|	|	0.00
0.167	0.27	0.00	0.001	OI	|	|	|	|	0.02
0.250	0.48	0.01	0.004	O I	|	|	|	|	0.07
0.333	0.59	0.02	0.007	O I	|	|	|	|	0.13
0.417	0.64	0.03	0.011	O I	|	|	|	|	0.20
0.500	0.68	0.04	0.016	O I	|	|	|	|	0.27
0.583	0.75	0.06	0.020	O I	|	|	|	|	0.36
0.667	0.80	0.07	0.025	O I	|	|	|	|	0.44
0.750	0.83	0.08	0.030	O I	|	|	|	|	0.53
0.833	0.85	0.10	0.035	O I	|	|	|	|	0.62
0.917	0.86	0.11	0.041	O I	|	|	|	|	0.70
1.000	0.88	0.11	0.046	O I	|	|	|	|	0.74
1.083	0.93	0.12	0.051	O I	|	|	|	|	0.78
1.167	0.97	0.12	0.057	O I	|	|	|	|	0.82
1.250	0.99	0.12	0.063	O I	|	|	|	|	0.86
1.333	1.00	0.13	0.069	O I	|	|	|	|	0.90
1.417	1.00	0.13	0.075	O I	|	|	|	|	0.94
1.500	1.01	0.14	0.081	O I	|	|	|	|	0.98
1.583	1.01	0.14	0.087	O I	|	|	|	|	1.02
1.667	1.01	0.15	0.093	O I	|	|	|	|	1.06
1.750	1.01	0.15	0.099	O I	|	|	|	|	1.10
1.833	1.02	0.15	0.105	O I	|	|	|	|	1.14
1.917	1.02	0.16	0.111	O I	|	|	|	|	1.18
2.000	1.03	0.16	0.117	O I	|	|	|	|	1.22
2.083	1.06	0.17	0.123	O I	|	|	|	|	1.26
2.167	1.06	0.17	0.129	O I	|	|	|	|	1.30
2.250	1.08	0.17	0.135	O I	|	|	|	|	1.35
2.333	1.11	0.18	0.141	O I	|	|	|	|	1.39
2.417	1.12	0.18	0.148	O I	|	|	|	|	1.43
2.500	1.13	0.19	0.154	O I	|	|	|	|	1.48
2.583	1.13	0.19	0.161	O I	|	|	|	|	1.52
2.667	1.14	0.20	0.167	O I	|	|	|	|	1.56
2.750	1.15	0.20	0.174	O I	|	|	|	|	1.61
2.833	1.19	0.21	0.180	O I	|	|	|	|	1.65
2.917	1.23	0.21	0.187	O I	|	|	|	|	1.70
3.000	1.24	0.21	0.194	O I	|	|	|	|	1.73
3.083	1.25	0.22	0.201	O I	|	|	|	|	1.76
3.167	1.27	0.22	0.209	O I	|	|	|	|	1.78
3.250	1.31	0.22	0.216	O I	|	|	|	|	1.81
3.333	1.35	0.22	0.224	O I	|	|	|	|	1.84
3.417	1.38	0.23	0.231	O I	|	|	|	|	1.87
3.500	1.44	0.23	0.240	O I	|	|	|	|	1.91
3.583	1.53	0.23	0.248	O I	|	|	|	|	1.94
3.667	1.63	0.23	0.257	|O I	|	|	|	|	1.98
3.750	1.69	0.24	0.267	|O I	|	|	|	|	2.02
3.833	1.77	0.24	0.278	|O I	|	|	|	|	2.06
3.917	1.83	0.24	0.288	|O I	|	|	|	|	2.10
4.000	1.90	0.25	0.299	|O I	|	|	|	|	2.14
4.083	1.96	0.25	0.311	|O I	|	|	|	|	2.19
4.167	2.04	0.26	0.323	|O I	|	|	|	|	2.23
4.250	2.14	0.26	0.336	|O |I	|	|	|	|	2.28
4.333	2.25	0.26	0.349	|O |I	|	|	|	|	2.34
4.417	2.37	0.27	0.363	|O | I	|	|	|	|	2.39
4.500	2.48	0.28	0.378	|O | I	|	|	|	|	2.44
4.583	2.56	0.30	0.393	|O | I	|	|	|	|	2.49
4.667	2.65	0.32	0.409	|O | I	|	|	|	|	2.54
4.750	2.76	0.34	0.425	|O | I	|	|	|	|	2.59
4.833	2.87	0.36	0.442	|O | I	|	|	|	|	2.64
4.917	2.95	0.38	0.460	|O | I	|	|	|	|	2.70
5.000	3.03	0.38	0.478	|O | I	|	|	|	|	2.75
5.083	3.18	0.39	0.497	|O | I	|	|	|	|	2.80
5.167	3.56	0.40	0.517	|O | I	|	|	|	|	2.85
5.250	4.24	0.41	0.541	|O | I	|	|	|	|	2.92
5.333	4.98	0.42	0.570	|O | I	|	|	|	|	3.00
5.417	5.73	0.44	0.604	|O | I	|	|	|	|	3.09
5.500	6.73	0.46	0.644	|O | I	|	|	|	|	3.20
5.583	7.42	0.48	0.689	| O | I	|	|	|	|	3.32
5.667	5.61	0.49	0.731	| O | I	|	|	|	|	3.43
5.750	3.45	0.51	0.759	| O | I	|	|	|	|	3.51
5.833	2.41	0.51	0.775	| O | I	|	|	|	|	3.55

5.917	1.81	0.52	0.786	| O I|	|	|	|	3.58
6.000	1.37	0.52	0.794	| O I |	|	|	|	3.60
6.083	1.01	0.52	0.798	| O I |	|	|	|	3.62
6.167	0.72	0.52	0.800	| OI |	|	|	|	3.62
6.250	0.50	0.52	0.801	| O |	|	|	|	3.62
6.333	0.36	0.52	0.800	|IO |	|	|	|	3.62
6.417	0.26	0.52	0.799	|IO |	|	|	|	3.62
6.500	0.18	0.52	0.797	I O |	|	|	|	3.61
6.583	0.12	0.52	0.794	I O |	|	|	|	3.61
6.667	0.04	0.52	0.791	I O |	|	|	|	3.60
6.750	0.02	0.52	0.788	I O |	|	|	|	3.59
6.833	0.01	0.52	0.784	I O |	|	|	|	3.58
6.917	0.01	0.52	0.781	I O |	|	|	|	3.57
7.000	0.00	0.51	0.778	I O |	|	|	|	3.56
7.083	0.00	0.51	0.774	I O |	|	|	|	3.55
7.167	0.00	0.51	0.770	I O |	|	|	|	3.54
7.250	0.00	0.51	0.767	I O |	|	|	|	3.53
7.333	0.00	0.51	0.763	I O |	|	|	|	3.52
7.417	0.00	0.51	0.760	I O |	|	|	|	3.51
7.500	0.00	0.51	0.756	I O |	|	|	|	3.50
7.583	0.00	0.50	0.753	I O |	|	|	|	3.49
7.667	0.00	0.50	0.750	I O |	|	|	|	3.48
7.750	0.00	0.50	0.746	I O |	|	|	|	3.47
7.833	0.00	0.50	0.743	I O |	|	|	|	3.47
7.917	0.00	0.50	0.739	I O |	|	|	|	3.46
8.000	0.00	0.50	0.736	I O |	|	|	|	3.45
8.083	0.00	0.49	0.732	I O |	|	|	|	3.44
8.167	0.00	0.49	0.729	I O |	|	|	|	3.43
8.250	0.00	0.49	0.726	I O |	|	|	|	3.42
8.333	0.00	0.49	0.722	I O |	|	|	|	3.41
8.417	0.00	0.49	0.719	I O |	|	|	|	3.40
8.500	0.00	0.49	0.715	I O |	|	|	|	3.39
8.583	0.00	0.49	0.712	I O |	|	|	|	3.38
8.667	0.00	0.48	0.709	I O |	|	|	|	3.37
8.750	0.00	0.48	0.705	I O |	|	|	|	3.36
8.833	0.00	0.48	0.702	I O |	|	|	|	3.36
8.917	0.00	0.48	0.699	I O |	|	|	|	3.35
9.000	0.00	0.48	0.695	I O |	|	|	|	3.34
9.083	0.00	0.48	0.692	I O |	|	|	|	3.33
9.167	0.00	0.48	0.689	I O |	|	|	|	3.32
9.250	0.00	0.47	0.686	I O |	|	|	|	3.31
9.333	0.00	0.47	0.682	I O |	|	|	|	3.30
9.417	0.00	0.47	0.679	I O |	|	|	|	3.29
9.500	0.00	0.47	0.676	I O |	|	|	|	3.28
9.583	0.00	0.47	0.673	I O |	|	|	|	3.28
9.667	0.00	0.47	0.669	I O |	|	|	|	3.27
9.750	0.00	0.47	0.666	I O |	|	|	|	3.26
9.833	0.00	0.46	0.663	I O |	|	|	|	3.25
9.917	0.00	0.46	0.660	IO |	|	|	|	3.24
10.000	0.00	0.46	0.657	IO |	|	|	|	3.23
10.083	0.00	0.46	0.653	IO |	|	|	|	3.22
10.167	0.00	0.46	0.650	IO |	|	|	|	3.21
10.250	0.00	0.46	0.647	IO |	|	|	|	3.21
10.333	0.00	0.46	0.644	IO |	|	|	|	3.20
10.417	0.00	0.46	0.641	IO |	|	|	|	3.19
10.500	0.00	0.45	0.638	IO |	|	|	|	3.18
10.583	0.00	0.45	0.635	IO |	|	|	|	3.17
10.667	0.00	0.45	0.631	IO |	|	|	|	3.16
10.750	0.00	0.45	0.628	IO |	|	|	|	3.15
10.833	0.00	0.45	0.625	IO |	|	|	|	3.15
10.917	0.00	0.45	0.622	IO |	|	|	|	3.14
11.000	0.00	0.45	0.619	IO |	|	|	|	3.13
11.083	0.00	0.44	0.616	IO |	|	|	|	3.12
11.167	0.00	0.44	0.613	IO |	|	|	|	3.11
11.250	0.00	0.44	0.610	IO |	|	|	|	3.10
11.333	0.00	0.44	0.607	IO |	|	|	|	3.10
11.417	0.00	0.44	0.604	IO |	|	|	|	3.09
11.500	0.00	0.44	0.601	IO |	|	|	|	3.08
11.583	0.00	0.44	0.598	IO |	|	|	|	3.07
11.667	0.00	0.44	0.595	IO |	|	|	|	3.06
11.750	0.00	0.43	0.592	IO |	|	|	|	3.06

11.833	0.00	0.43	0.589	IO	|	|	|	3.05
11.917	0.00	0.43	0.586	IO	|	|	|	3.04
12.000	0.00	0.43	0.583	IO	|	|	|	3.03
12.083	0.00	0.43	0.580	IO	|	|	|	3.02
12.167	0.00	0.43	0.577	IO	|	|	|	3.02
12.250	0.00	0.43	0.574	IO	|	|	|	3.01
12.333	0.00	0.42	0.571	IO	|	|	|	3.00
12.417	0.00	0.42	0.568	IO	|	|	|	2.99
12.500	0.00	0.42	0.565	IO	|	|	|	2.98
12.583	0.00	0.42	0.562	IO	|	|	|	2.98
12.667	0.00	0.42	0.559	IO	|	|	|	2.97
12.750	0.00	0.42	0.557	IO	|	|	|	2.96
12.833	0.00	0.42	0.554	IO	|	|	|	2.95
12.917	0.00	0.42	0.551	IO	|	|	|	2.94
13.000	0.00	0.41	0.548	IO	|	|	|	2.94
13.083	0.00	0.41	0.545	IO	|	|	|	2.93
13.167	0.00	0.41	0.542	IO	|	|	|	2.92
13.250	0.00	0.41	0.539	IO	|	|	|	2.91
13.333	0.00	0.41	0.537	IO	|	|	|	2.91
13.417	0.00	0.41	0.534	IO	|	|	|	2.90
13.500	0.00	0.41	0.531	IO	|	|	|	2.89
13.583	0.00	0.41	0.528	IO	|	|	|	2.88
13.667	0.00	0.40	0.525	IO	|	|	|	2.87
13.750	0.00	0.40	0.523	IO	|	|	|	2.87
13.833	0.00	0.40	0.520	IO	|	|	|	2.86
13.917	0.00	0.40	0.517	IO	|	|	|	2.85
14.000	0.00	0.40	0.514	IO	|	|	|	2.84
14.083	0.00	0.40	0.512	IO	|	|	|	2.84
14.167	0.00	0.40	0.509	IO	|	|	|	2.83
14.250	0.00	0.40	0.506	IO	|	|	|	2.82
14.333	0.00	0.40	0.503	IO	|	|	|	2.82
14.417	0.00	0.39	0.501	IO	|	|	|	2.81
14.500	0.00	0.39	0.498	IO	|	|	|	2.80
14.583	0.00	0.39	0.495	IO	|	|	|	2.79
14.667	0.00	0.39	0.493	IO	|	|	|	2.79
14.750	0.00	0.39	0.490	IO	|	|	|	2.78
14.833	0.00	0.39	0.487	IO	|	|	|	2.77
14.917	0.00	0.39	0.484	IO	|	|	|	2.76
15.000	0.00	0.39	0.482	IO	|	|	|	2.76
15.083	0.00	0.38	0.479	IO	|	|	|	2.75
15.167	0.00	0.38	0.477	IO	|	|	|	2.74
15.250	0.00	0.38	0.474	IO	|	|	|	2.73
15.333	0.00	0.38	0.471	IO	|	|	|	2.73
15.417	0.00	0.38	0.469	IO	|	|	|	2.72
15.500	0.00	0.38	0.466	IO	|	|	|	2.71
15.583	0.00	0.38	0.463	IO	|	|	|	2.71
15.667	0.00	0.38	0.461	IO	|	|	|	2.70
15.750	0.00	0.37	0.458	IO	|	|	|	2.69
15.833	0.00	0.37	0.456	IO	|	|	|	2.68
15.917	0.00	0.37	0.453	IO	|	|	|	2.68
16.000	0.00	0.37	0.451	IO	|	|	|	2.67
16.083	0.00	0.36	0.448	IO	|	|	|	2.66
16.167	0.00	0.36	0.446	IO	|	|	|	2.65
16.250	0.00	0.36	0.443	IO	|	|	|	2.64
16.333	0.00	0.35	0.441	IO	|	|	|	2.64
16.417	0.00	0.35	0.438	IO	|	|	|	2.63
16.500	0.00	0.35	0.436	IO	|	|	|	2.62
16.583	0.00	0.35	0.433	IO	|	|	|	2.61
16.667	0.00	0.34	0.431	IO	|	|	|	2.61
16.750	0.00	0.34	0.429	IO	|	|	|	2.60
16.833	0.00	0.34	0.426	IO	|	|	|	2.59
16.917	0.00	0.34	0.424	IO	|	|	|	2.58
17.000	0.00	0.33	0.422	IO	|	|	|	2.58
17.083	0.00	0.33	0.419	IO	|	|	|	2.57
17.167	0.00	0.33	0.417	IO	|	|	|	2.56
17.250	0.00	0.33	0.415	IO	|	|	|	2.56
17.333	0.00	0.32	0.413	IO	|	|	|	2.55
17.417	0.00	0.32	0.411	IO	|	|	|	2.54
17.500	0.00	0.32	0.408	IO	|	|	|	2.54
17.583	0.00	0.32	0.406	IO	|	|	|	2.53
17.667	0.00	0.31	0.404	IO	|	|	|	2.52

17.750	0.00	0.31	0.402	IO				2.52
17.833	0.00	0.31	0.400	IO				2.51
17.917	0.00	0.31	0.398	IO				2.50
18.000	0.00	0.30	0.395	IO				2.50
18.083	0.00	0.30	0.393	IO				2.49
18.167	0.00	0.30	0.391	IO				2.48
18.250	0.00	0.30	0.389	IO				2.48
18.333	0.00	0.29	0.387	IO				2.47
18.417	0.00	0.29	0.385	IO				2.46
18.500	0.00	0.29	0.383	IO				2.46
18.583	0.00	0.29	0.381	IO				2.45
18.667	0.00	0.29	0.379	IO				2.44
18.750	0.00	0.28	0.377	IO				2.44
18.833	0.00	0.28	0.375	IO				2.43
18.917	0.00	0.28	0.373	IO				2.43
19.000	0.00	0.28	0.372	IO				2.42
19.083	0.00	0.27	0.370	IO				2.41
19.167	0.00	0.27	0.368	IO				2.41
19.250	0.00	0.27	0.366	IO				2.40
19.333	0.00	0.27	0.364	IO				2.40
19.417	0.00	0.27	0.362	IO				2.39
19.500	0.00	0.27	0.360	IO				2.38
19.583	0.00	0.27	0.359	IO				2.37
19.667	0.00	0.27	0.357	IO				2.37
19.750	0.00	0.27	0.355	IO				2.36
19.833	0.00	0.27	0.353	IO				2.35
19.917	0.00	0.26	0.351	IO				2.35
20.000	0.00	0.26	0.349	IO				2.34
20.083	0.00	0.26	0.348	IO				2.33
20.167	0.00	0.26	0.346	IO				2.32
20.250	0.00	0.26	0.344	IO				2.32
20.333	0.00	0.26	0.342	IO				2.31
20.417	0.00	0.26	0.340	IO				2.30
20.500	0.00	0.26	0.339	IO				2.30
20.583	0.00	0.26	0.337	IO				2.29
20.667	0.00	0.26	0.335	IO				2.28
20.750	0.00	0.26	0.333	IO				2.27
20.833	0.00	0.26	0.331	IO				2.27
20.917	0.00	0.26	0.330	IO				2.26
21.000	0.00	0.26	0.328	IO				2.25
21.083	0.00	0.26	0.326	IO				2.25
21.167	0.00	0.26	0.324	IO				2.24
21.250	0.00	0.26	0.323	IO				2.23
21.333	0.00	0.25	0.321	IO				2.23
21.417	0.00	0.25	0.319	IO				2.22
21.500	0.00	0.25	0.317	IO				2.21
21.583	0.00	0.25	0.316	IO				2.21
21.667	0.00	0.25	0.314	IO				2.20
21.750	0.00	0.25	0.312	IO				2.19
21.833	0.00	0.25	0.310	IO				2.19
21.917	0.00	0.25	0.309	IO				2.18
22.000	0.00	0.25	0.307	IO				2.17
22.083	0.00	0.25	0.305	IO				2.16
22.167	0.00	0.25	0.303	IO				2.16
22.250	0.00	0.25	0.302	IO				2.15
22.333	0.00	0.25	0.300	IO				2.14
22.417	0.00	0.25	0.298	IO				2.14
22.500	0.00	0.25	0.297	IO				2.13
22.583	0.00	0.25	0.295	IO				2.12
22.667	0.00	0.25	0.293	IO				2.12
22.750	0.00	0.25	0.292	IO				2.11
22.833	0.00	0.24	0.290	IO				2.10
22.917	0.00	0.24	0.288	IO				2.10
23.000	0.00	0.24	0.287	IO				2.09
23.083	0.00	0.24	0.285	IO				2.08
23.167	0.00	0.24	0.283	IO				2.08
23.250	0.00	0.24	0.282	IO				2.07
23.333	0.00	0.24	0.280	IO				2.07
23.417	0.00	0.24	0.278	IO				2.06
23.500	0.00	0.24	0.277	IO				2.05
23.583	0.00	0.24	0.275	IO				2.05

23.667	0.00	0.24	0.273	IO				2.04
23.750	0.00	0.24	0.272	IO				2.03
23.833	0.00	0.24	0.270	IO				2.03
23.917	0.00	0.24	0.268	IO				2.02
24.000	0.00	0.24	0.267	IO				2.01
24.083	0.00	0.24	0.265	IO				2.01
24.167	0.00	0.24	0.263	IO				2.00
24.250	0.00	0.24	0.262	IO				1.99
24.333	0.00	0.23	0.260	IO				1.99
24.417	0.00	0.23	0.259	IO				1.98
24.500	0.00	0.23	0.257	IO				1.98
24.583	0.00	0.23	0.255	IO				1.97
24.667	0.00	0.23	0.254	IO				1.96
24.750	0.00	0.23	0.252	IO				1.96
24.833	0.00	0.23	0.251	O				1.95
24.917	0.00	0.23	0.249	O				1.94
25.000	0.00	0.23	0.247	O				1.94
25.083	0.00	0.23	0.246	O				1.93
25.167	0.00	0.23	0.244	O				1.92
25.250	0.00	0.23	0.243	O				1.92
25.333	0.00	0.23	0.241	O				1.91
25.417	0.00	0.23	0.239	O				1.91
25.500	0.00	0.23	0.238	O				1.90
25.583	0.00	0.23	0.236	O				1.89
25.667	0.00	0.23	0.235	O				1.89
25.750	0.00	0.23	0.233	O				1.88
25.833	0.00	0.23	0.232	O				1.88
25.917	0.00	0.23	0.230	O				1.87
26.000	0.00	0.22	0.229	O				1.86
26.083	0.00	0.22	0.227	O				1.86
26.167	0.00	0.22	0.225	O				1.85
26.250	0.00	0.22	0.224	O				1.85
26.333	0.00	0.22	0.222	O				1.84
26.417	0.00	0.22	0.221	O				1.83
26.500	0.00	0.22	0.219	O				1.83
26.583	0.00	0.22	0.218	O				1.82
26.667	0.00	0.22	0.216	O				1.82
26.750	0.00	0.22	0.215	O				1.81
26.833	0.00	0.22	0.213	O				1.80
26.917	0.00	0.22	0.212	O				1.80
27.000	0.00	0.22	0.210	O				1.79
27.083	0.00	0.22	0.209	O				1.79
27.167	0.00	0.22	0.207	O				1.78
27.250	0.00	0.22	0.206	O				1.77
27.333	0.00	0.22	0.204	O				1.77
27.417	0.00	0.22	0.203	O				1.76
27.500	0.00	0.22	0.201	O				1.76
27.583	0.00	0.22	0.200	O				1.75
27.667	0.00	0.21	0.198	O				1.74
27.750	0.00	0.21	0.197	O				1.74
27.833	0.00	0.21	0.195	O				1.73
27.917	0.00	0.21	0.194	O				1.73
28.000	0.00	0.21	0.192	O				1.72
28.083	0.00	0.21	0.191	O				1.72
28.167	0.00	0.21	0.189	O				1.71
28.250	0.00	0.21	0.188	O				1.70
28.333	0.00	0.21	0.187	O				1.70
28.417	0.00	0.21	0.185	O				1.69
28.500	0.00	0.21	0.184	O				1.68
28.583	0.00	0.21	0.182	O				1.67
28.667	0.00	0.21	0.181	O				1.66
28.750	0.00	0.21	0.179	O				1.65
28.833	0.00	0.20	0.178	O				1.64
28.917	0.00	0.20	0.177	O				1.63
29.000	0.00	0.20	0.175	O				1.62
29.083	0.00	0.20	0.174	O				1.61
29.167	0.00	0.20	0.172	O				1.60
29.250	0.00	0.20	0.171	O				1.59
29.333	0.00	0.20	0.170	O				1.58
29.417	0.00	0.20	0.168	O				1.57
29.500	0.00	0.20	0.167	O				1.56

29.583	0.00	0.20	0.166	O	|	|	|	|	1.55
29.667	0.00	0.20	0.164	O	|	|	|	|	1.55
29.750	0.00	0.19	0.163	O	|	|	|	|	1.54
29.833	0.00	0.19	0.162	O	|	|	|	|	1.53
29.917	0.00	0.19	0.160	O	|	|	|	|	1.52
30.000	0.00	0.19	0.159	O	|	|	|	|	1.51
30.083	0.00	0.19	0.158	O	|	|	|	|	1.50
30.167	0.00	0.19	0.156	O	|	|	|	|	1.49
30.250	0.00	0.19	0.155	O	|	|	|	|	1.48
30.333	0.00	0.19	0.154	O	|	|	|	|	1.47
30.417	0.00	0.19	0.152	O	|	|	|	|	1.46
30.500	0.00	0.19	0.151	O	|	|	|	|	1.46
30.583	0.00	0.19	0.150	O	|	|	|	|	1.45
30.667	0.00	0.18	0.149	O	|	|	|	|	1.44
30.750	0.00	0.18	0.147	O	|	|	|	|	1.43
30.833	0.00	0.18	0.146	O	|	|	|	|	1.42
30.917	0.00	0.18	0.145	O	|	|	|	|	1.41
31.000	0.00	0.18	0.144	O	|	|	|	|	1.40
31.083	0.00	0.18	0.142	O	|	|	|	|	1.40
31.167	0.00	0.18	0.141	O	|	|	|	|	1.39
31.250	0.00	0.18	0.140	O	|	|	|	|	1.38
31.333	0.00	0.18	0.139	O	|	|	|	|	1.37
31.417	0.00	0.18	0.137	O	|	|	|	|	1.36
31.500	0.00	0.18	0.136	O	|	|	|	|	1.35
31.583	0.00	0.17	0.135	O	|	|	|	|	1.35
31.667	0.00	0.17	0.134	O	|	|	|	|	1.34
31.750	0.00	0.17	0.133	O	|	|	|	|	1.33
31.833	0.00	0.17	0.131	O	|	|	|	|	1.32
31.917	0.00	0.17	0.130	O	|	|	|	|	1.31
32.000	0.00	0.17	0.129	O	|	|	|	|	1.31
32.083	0.00	0.17	0.128	O	|	|	|	|	1.30
32.167	0.00	0.17	0.127	O	|	|	|	|	1.29
32.250	0.00	0.17	0.125	O	|	|	|	|	1.28
32.333	0.00	0.17	0.124	O	|	|	|	|	1.27
32.417	0.00	0.17	0.123	O	|	|	|	|	1.27
32.500	0.00	0.17	0.122	O	|	|	|	|	1.26
32.583	0.00	0.17	0.121	O	|	|	|	|	1.25
32.667	0.00	0.16	0.120	O	|	|	|	|	1.24
32.750	0.00	0.16	0.119	O	|	|	|	|	1.23
32.833	0.00	0.16	0.118	O	|	|	|	|	1.23
32.917	0.00	0.16	0.116	O	|	|	|	|	1.22
33.000	0.00	0.16	0.115	O	|	|	|	|	1.21
33.083	0.00	0.16	0.114	O	|	|	|	|	1.20
33.167	0.00	0.16	0.113	O	|	|	|	|	1.20
33.250	0.00	0.16	0.112	O	|	|	|	|	1.19
33.333	0.00	0.16	0.111	O	|	|	|	|	1.18
33.417	0.00	0.16	0.110	O	|	|	|	|	1.17
33.500	0.00	0.16	0.109	O	|	|	|	|	1.17
33.583	0.00	0.16	0.108	O	|	|	|	|	1.16
33.667	0.00	0.16	0.107	O	|	|	|	|	1.15
33.750	0.00	0.15	0.105	O	|	|	|	|	1.15
33.833	0.00	0.15	0.104	O	|	|	|	|	1.14
33.917	0.00	0.15	0.103	O	|	|	|	|	1.13
34.000	0.00	0.15	0.102	O	|	|	|	|	1.12
34.083	0.00	0.15	0.101	O	|	|	|	|	1.12
34.167	0.00	0.15	0.100	O	|	|	|	|	1.11
34.250	0.00	0.15	0.099	O	|	|	|	|	1.10
34.333	0.00	0.15	0.098	O	|	|	|	|	1.10
34.417	0.00	0.15	0.097	O	|	|	|	|	1.09
34.500	0.00	0.15	0.096	O	|	|	|	|	1.08
34.583	0.00	0.15	0.095	O	|	|	|	|	1.07
34.667	0.00	0.15	0.094	O	|	|	|	|	1.07
34.750	0.00	0.15	0.093	O	|	|	|	|	1.06
34.833	0.00	0.15	0.092	O	|	|	|	|	1.05
34.917	0.00	0.14	0.091	O	|	|	|	|	1.05
35.000	0.00	0.14	0.090	O	|	|	|	|	1.04
35.083	0.00	0.14	0.089	O	|	|	|	|	1.03
35.167	0.00	0.14	0.088	O	|	|	|	|	1.03
35.250	0.00	0.14	0.087	O	|	|	|	|	1.02
35.333	0.00	0.14	0.086	O	|	|	|	|	1.01
35.417	0.00	0.14	0.085	O	|	|	|	|	1.01

35.500	0.00	0.14	0.084	O	|	|	|	|	1.00
35.583	0.00	0.14	0.083	O	|	|	|	|	0.99
35.667	0.00	0.14	0.082	O	|	|	|	|	0.99
35.750	0.00	0.14	0.081	O	|	|	|	|	0.98
35.833	0.00	0.14	0.080	O	|	|	|	|	0.98
35.917	0.00	0.14	0.079	O	|	|	|	|	0.97
36.000	0.00	0.14	0.079	O	|	|	|	|	0.96
36.083	0.00	0.14	0.078	O	|	|	|	|	0.96
36.167	0.00	0.13	0.077	O	|	|	|	|	0.95
36.250	0.00	0.13	0.076	O	|	|	|	|	0.94
36.333	0.00	0.13	0.075	O	|	|	|	|	0.94
36.417	0.00	0.13	0.074	O	|	|	|	|	0.93
36.500	0.00	0.13	0.073	O	|	|	|	|	0.92
36.583	0.00	0.13	0.072	O	|	|	|	|	0.92
36.667	0.00	0.13	0.071	O	|	|	|	|	0.91
36.750	0.00	0.13	0.070	O	|	|	|	|	0.91
36.833	0.00	0.13	0.069	O	|	|	|	|	0.90
36.917	0.00	0.13	0.069	O	|	|	|	|	0.89
37.000	0.00	0.13	0.068	O	|	|	|	|	0.89
37.083	0.00	0.13	0.067	O	|	|	|	|	0.88
37.167	0.00	0.13	0.066	O	|	|	|	|	0.88
37.250	0.00	0.13	0.065	O	|	|	|	|	0.87
37.333	0.00	0.13	0.064	O	|	|	|	|	0.86
37.417	0.00	0.13	0.063	O	|	|	|	|	0.86
37.500	0.00	0.12	0.062	O	|	|	|	|	0.85
37.583	0.00	0.12	0.062	O	|	|	|	|	0.85
37.667	0.00	0.12	0.061	O	|	|	|	|	0.84
37.750	0.00	0.12	0.060	O	|	|	|	|	0.84
37.833	0.00	0.12	0.059	O	|	|	|	|	0.83
37.917	0.00	0.12	0.058	O	|	|	|	|	0.82
38.000	0.00	0.12	0.057	O	|	|	|	|	0.82
38.083	0.00	0.12	0.057	O	|	|	|	|	0.81
38.167	0.00	0.12	0.056	O	|	|	|	|	0.81
38.250	0.00	0.12	0.055	O	|	|	|	|	0.80
38.333	0.00	0.12	0.054	O	|	|	|	|	0.80
38.417	0.00	0.12	0.053	O	|	|	|	|	0.79
38.500	0.00	0.12	0.052	O	|	|	|	|	0.78
38.583	0.00	0.12	0.052	O	|	|	|	|	0.78
38.667	0.00	0.12	0.051	O	|	|	|	|	0.77
38.750	0.00	0.12	0.050	O	|	|	|	|	0.77
38.833	0.00	0.12	0.049	O	|	|	|	|	0.76
38.917	0.00	0.11	0.048	O	|	|	|	|	0.76
39.000	0.00	0.11	0.048	O	|	|	|	|	0.75
39.083	0.00	0.11	0.047	O	|	|	|	|	0.75
39.167	0.00	0.11	0.046	O	|	|	|	|	0.74
39.250	0.00	0.11	0.045	O	|	|	|	|	0.74
39.333	0.00	0.11	0.045	O	|	|	|	|	0.73
39.417	0.00	0.11	0.044	O	|	|	|	|	0.73
39.500	0.00	0.11	0.043	O	|	|	|	|	0.72
39.583	0.00	0.11	0.042	O	|	|	|	|	0.72
39.667	0.00	0.11	0.041	O	|	|	|	|	0.71
39.750	0.00	0.11	0.041	O	|	|	|	|	0.70
39.833	0.00	0.11	0.040	O	|	|	|	|	0.70
39.917	0.00	0.11	0.039	O	|	|	|	|	0.69
40.000	0.00	0.10	0.038	O	|	|	|	|	0.67
40.083	0.00	0.10	0.038	O	|	|	|	|	0.66
40.167	0.00	0.10	0.037	O	|	|	|	|	0.65
40.250	0.00	0.10	0.036	O	|	|	|	|	0.64

Remaining water in basin = 0.04 (Ac.Ft)

**********HYDROGRAPH DATA**********

Number of intervals = 483
Time interval = 5.0 (Min.)
Maximum/Peak flow rate = 0.525 (CFS)
Total volume = 0.897 (Ac.Ft)

Status of hydrographs being held in storage

	Stream 1	Stream 2	Stream 3	Stream 4	Stream 5
Peak (CFS)	0.000	0.000	0.000	0.000	0.000

```
        Vol (Ac.Ft)      0.000     0.000     0.000     0.000     0.000
******************************************************************************

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                    FLOOD HYDROGRAPH ROUTING PROGRAM
                Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2004
                            Study date: 08/18/25

      ----------------------------------------------------------------------



      Program License Serial Number 5006

      ----------------------------------------------------------------------
      ********************* HYDROGRAPH INFORMATION **********************

                    From study/file name: PROB242.rte
      ****************************HYDROGRAPH DATA****************************
                    Number of intervals =   301
                    Time interval =    5.0 (Min.)
                    Maximum/Peak flow rate =        2.316 (CFS)
                    Total volume =       1.434 (Ac.Ft)
             Status of hydrographs being held in storage
                       Stream 1  Stream 2  Stream 3  Stream 4  Stream 5
             Peak (CFS)      0.000     0.000     0.000     0.000     0.000
             Vol (Ac.Ft)     0.000     0.000     0.000     0.000     0.000
      **********************************************************************



      ++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
      Process from Point/Station        0.000 to Point/Station        0.000
      **** RETARDING BASIN ROUTING ****
      ______________________________________________________________________

      User entry of depth-outflow-storage data
      ----------------------------------------------------------------------
      Total number of inflow hydrograph intervals = 301
      Hydrograph time unit =  5.000 (Min.)
      Initial depth in storage basin =   0.00(Ft.)
      ----------------------------------------------------------------------
      ----------------------------------------------------------------------
      Initial basin depth =   0.00 (Ft.)
      Initial basin storage =      0.00 (Ac.Ft)
      Initial basin outflow =   0.00 (CFS)
      ----------------------------------------------------------------------
      ----------------------------------------------------------------------
      Depth vs. Storage and Depth vs. Discharge data:
       Basin Depth  Storage    Outflow   (S-O*dt/2)   (S+O*dt/2)
            (Ft.)    (Ac.Ft)    (CFS)     (Ac.Ft)    (Ac.Ft)
      ----------------------------------------------------------------------
        0.000      0.000      0.000      0.000        0.000
        0.700      0.040      0.109      0.040        0.040
        1.700      0.187      0.211      0.186        0.188
        2.400      0.365      0.269      0.364        0.366
        2.700      0.461      0.377      0.460        0.462
        3.700      0.829      0.537      0.827        0.831
        4.700      1.249      0.651      1.247        1.251
        5.700      1.723      0.746      1.720        1.726
        6.700      2.252      1.870      2.246        2.258
        7.700      2.841      2.376      2.833        2.849
        8.300      3.223     38.499      3.090        3.356
        8.700      3.491    113.554      3.100        3.882
        9.700      4.203    441.782      2.682        5.724
      ----------------------------------------------------------------------
                    Hydrograph Detention Basin Routing
      ----------------------------------------------------------------------

      Graph values: 'I'= unit inflow; 'O'=outflow at time shown
      ----------------------------------------------------------------------
Time   Inflow  Outflow    Storage                                        Depth
```

(Hours)	(CFS)	(CFS)	(Ac.Ft)	.0	0.6	1.16	1.74	2.32	(Ft.)
0.083	0.01	0.00	0.000	O	|	|	|	|	0.00
0.167	0.06	0.00	0.000	O	|	|	|	|	0.00
0.250	0.09	0.00	0.001	OI	|	|	|	|	0.01
0.333	0.11	0.00	0.001	OI	|	|	|	|	0.03
0.417	0.15	0.01	0.002	O I	|	|	|	|	0.04
0.500	0.17	0.01	0.003	O I	|	|	|	|	0.06
0.583	0.18	0.01	0.005	O I	|	|	|	|	0.08
0.667	0.19	0.02	0.006	O I	|	|	|	|	0.10
0.750	0.19	0.02	0.007	O I	|	|	|	|	0.12
0.833	0.20	0.02	0.008	O I	|	|	|	|	0.14
0.917	0.23	0.03	0.009	O I	|	|	|	|	0.17
1.000	0.25	0.03	0.011	O I	|	|	|	|	0.19
1.083	0.25	0.03	0.012	O I	|	|	|	|	0.22
1.167	0.24	0.04	0.014	O I	|	|	|	|	0.24
1.250	0.22	0.04	0.015	O I	|	|	|	|	0.27
1.333	0.22	0.04	0.016	O I	|	|	|	|	0.29
1.417	0.21	0.05	0.018	O I	|	|	|	|	0.31
1.500	0.21	0.05	0.019	O I	|	|	|	|	0.33
1.583	0.21	0.05	0.020	O I	|	|	|	|	0.35
1.667	0.21	0.06	0.021	O I	|	|	|	|	0.37
1.750	0.21	0.06	0.022	O I	|	|	|	|	0.38
1.833	0.22	0.06	0.023	O I	|	|	|	|	0.40
1.917	0.24	0.07	0.024	O I	|	|	|	|	0.42
2.000	0.26	0.07	0.025	O I	|	|	|	|	0.44
2.083	0.26	0.07	0.027	|O I	|	|	|	|	0.47
2.167	0.27	0.08	0.028	|O I	|	|	|	|	0.49
2.250	0.27	0.08	0.029	|O I	|	|	|	|	0.51
2.333	0.27	0.08	0.031	|O I	|	|	|	|	0.53
2.417	0.27	0.09	0.032	|O I	|	|	|	|	0.56
2.500	0.27	0.09	0.033	|O I	|	|	|	|	0.58
2.583	0.28	0.09	0.034	|O I	|	|	|	|	0.60
2.667	0.30	0.10	0.036	|O I	|	|	|	|	0.63
2.750	0.32	0.10	0.037	|O I	|	|	|	|	0.65
2.833	0.33	0.11	0.039	|O I	|	|	|	|	0.68
2.917	0.34	0.11	0.040	|O I	|	|	|	|	0.70
3.000	0.34	0.11	0.042	|O I	|	|	|	|	0.71
3.083	0.34	0.11	0.043	|O I	|	|	|	|	0.72
3.167	0.34	0.11	0.045	|O I	|	|	|	|	0.73
3.250	0.34	0.11	0.047	|O I	|	|	|	|	0.75
3.333	0.34	0.11	0.048	|O I	|	|	|	|	0.76
3.417	0.35	0.12	0.050	|O I	|	|	|	|	0.77
3.500	0.35	0.12	0.051	|O I	|	|	|	|	0.78
3.583	0.35	0.12	0.053	|O I	|	|	|	|	0.79
3.667	0.35	0.12	0.055	|O I	|	|	|	|	0.80
3.750	0.35	0.12	0.056	|O I	|	|	|	|	0.81
3.833	0.35	0.12	0.058	|O I	|	|	|	|	0.82
3.917	0.38	0.12	0.059	|O I	|	|	|	|	0.83
4.000	0.39	0.12	0.061	|O I	|	|	|	|	0.84
4.083	0.40	0.13	0.063	|O I	|	|	|	|	0.86
4.167	0.41	0.13	0.065	|O I	|	|	|	|	0.87
4.250	0.41	0.13	0.067	|O I	|	|	|	|	0.88
4.333	0.42	0.13	0.069	|O I	|	|	|	|	0.90
4.417	0.44	0.13	0.071	|O I |	|	|	|	|	0.91
4.500	0.46	0.13	0.073	|O I |	|	|	|	|	0.93
4.583	0.47	0.13	0.075	|O I |	|	|	|	|	0.94
4.667	0.47	0.14	0.078	|O I |	|	|	|	|	0.96
4.750	0.48	0.14	0.080	|O I |	|	|	|	|	0.97
4.833	0.49	0.14	0.082	|O I |	|	|	|	|	0.99
4.917	0.51	0.14	0.085	|O I|	|	|	|	|	1.01
5.000	0.53	0.14	0.088	|O I|	|	|	|	|	1.02
5.083	0.53	0.14	0.090	|O I|	|	|	|	|	1.04
5.167	0.49	0.15	0.093	| O I |	|	|	|	|	1.06
5.250	0.45	0.15	0.095	| O I |	|	|	|	|	1.07
5.333	0.45	0.15	0.097	| O I |	|	|	|	|	1.09
5.417	0.46	0.15	0.099	| O I |	|	|	|	|	1.10
5.500	0.48	0.15	0.101	| O I |	|	|	|	|	1.12
5.583	0.49	0.15	0.104	| O I |	|	|	|	|	1.13
5.667	0.51	0.15	0.106	| O I|	|	|	|	|	1.15
5.750	0.53	0.16	0.108	| O I|	|	|	|	|	1.17
5.833	0.54	0.16	0.111	| O I|	|	|	|	|	1.18

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 5.917    0.54    0.16      0.114  | O    I|       |       |       |     1.20
 6.000    0.55    0.16      0.116  | O    I|       |       |       |     1.22
 6.083    0.55    0.16      0.119  | O    I|       |       |       |     1.24
 6.167    0.58    0.17      0.122  | O    I|       |       |       |     1.26
 6.250    0.60    0.17      0.125  | O     I       |       |       |     1.28
 6.333    0.61    0.17      0.128  | O     I       |       |       |     1.30
 6.417    0.61    0.17      0.131  | O     I       |       |       |     1.32
 6.500    0.62    0.17      0.134  | O     I       |       |       |     1.34
 6.583    0.62    0.18      0.137  | O     I       |       |       |     1.36
 6.667    0.65    0.18      0.140  | O     I       |       |       |     1.38
 6.750    0.67    0.18      0.143  | O     |I      |       |       |     1.40
 6.833    0.68    0.18      0.147  | O     |I      |       |       |     1.42
 6.917    0.68    0.19      0.150  | O     |I      |       |       |     1.45
 7.000    0.69    0.19      0.153  | O     |I      |       |       |     1.47
 7.083    0.69    0.19      0.157  | O     |I      |       |       |     1.49
 7.167    0.69    0.19      0.160  | O     |I      |       |       |     1.52
 7.250    0.69    0.19      0.164  | O     |I      |       |       |     1.54
 7.333    0.70    0.20      0.167  | O     |I      |       |       |     1.56
 7.417    0.72    0.20      0.171  | O     |I      |       |       |     1.59
 7.500    0.74    0.20      0.174  | O     | I     |       |       |     1.61
 7.583    0.75    0.20      0.178  | O     | I     |       |       |     1.64
 7.667    0.78    0.21      0.182  | O     | I     |       |       |     1.67
 7.750    0.80    0.21      0.186  | O     |  I    |       |       |     1.69
 7.833    0.82    0.21      0.190  | O     |  I    |       |       |     1.71
 7.917    0.85    0.21      0.194  | O     |  I    |       |       |     1.73
 8.000    0.87    0.21      0.199  | O     |   I   |       |       |     1.75
 8.083    0.89    0.22      0.203  | O     |   I   |       |       |     1.76
 8.167    0.94    0.22      0.208  |  O    |    I  |       |       |     1.78
 8.250    0.98    0.22      0.213  |  O    |    I  |       |       |     1.80
 8.333    1.00    0.22      0.219  |  O    |    I  |       |       |     1.82
 8.417    1.01    0.22      0.224  |  O    |     I |       |       |     1.85
 8.500    1.02    0.22      0.229  |  O    |     I |       |       |     1.87
 8.583    1.03    0.23      0.235  |  O    |     I |       |       |     1.89
 8.667    1.06    0.23      0.241  |  O    |     I |       |       |     1.91
 8.750    1.08    0.23      0.246  |  O    |     I |       |       |     1.93
 8.833    1.10    0.23      0.252  |  O    |      I|       |       |     1.96
 8.917    1.13    0.23      0.258  |  O    |      I|       |       |     1.98
 9.000    1.15    0.24      0.265  |  O    |      I|       |       |     2.00
 9.083    1.17    0.24      0.271  |  O    |       I       |       |     2.03
 9.167    1.22    0.24      0.277  |  O    |       I       |       |     2.06
 9.250    1.26    0.24      0.284  |  O    |       |I      |       |     2.08
 9.333    1.29    0.25      0.291  |  O    |       |I      |       |     2.11
 9.417    1.32    0.25      0.299  |  O    |       | I     |       |     2.14
 9.500    1.35    0.25      0.306  |  O    |       | I     |       |     2.17
 9.583    1.36    0.25      0.314  |  O    |       | I     |       |     2.20
 9.667    1.40    0.25      0.322  |  O    |       |  I    |       |     2.23
 9.750    1.42    0.26      0.330  |  O    |       |  I    |       |     2.26
 9.833    1.44    0.26      0.338  |  O    |       |  I    |       |     2.29
 9.917    1.47    0.26      0.346  |  O    |       |   I   |       |     2.32
10.000    1.49    0.27      0.354  |  O    |       |   I   |       |     2.36
10.083    1.46    0.27      0.363  |  O    |       |   I   |       |     2.39
10.167    1.31    0.27      0.370  |  O    |       | I     |       |     2.42
10.250    1.19    0.28      0.377  |  O    |       I       |       |     2.44
10.333    1.14    0.29      0.383  |  O    |      I|       |       |     2.46
10.417    1.11    0.30      0.389  |   O   |      I|       |       |     2.47
10.500    1.09    0.30      0.394  |   O   |      I|       |       |     2.49
10.583    1.11    0.31      0.400  |   O   |      I|       |       |     2.51
10.667    1.21    0.31      0.405  |   O   |       I       |       |     2.53
10.750    1.30    0.32      0.412  |   O   |       |I      |       |     2.55
10.833    1.33    0.33      0.419  |   O   |       | I     |       |     2.57
10.917    1.34    0.34      0.426  |   O   |       | I     |       |     2.59
11.000    1.36    0.34      0.433  |   O   |       | I     |       |     2.61
11.083    1.36    0.35      0.439  |   O   |       | I     |       |     2.63
11.167    1.34    0.36      0.446  |   O   |       | I     |       |     2.65
11.250    1.33    0.37      0.453  |    O  |       | I     |       |     2.67
11.333    1.32    0.38      0.460  |    O  |       | I     |       |     2.70
11.417    1.32    0.38      0.466  |    O  |       | I     |       |     2.71
11.500    1.32    0.38      0.473  |    O  |       | I     |       |     2.73
11.583    1.31    0.38      0.479  |    O  |       | I     |       |     2.75
11.667    1.27    0.39      0.485  |    O  |       |I      |       |     2.77
11.750    1.23    0.39      0.491  |    O  |       I       |       |     2.78
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11.833    1.22    0.39      0.497  |    O  |       I       |       |     2.80
11.917    1.23    0.40      0.503  |    O  |       |I      |       |     2.81
12.000    1.24    0.40      0.508  |    O  |       |I      |       |     2.83
12.083    1.28    0.40      0.514  |    O  |       |I      |       |     2.84
12.167    1.45    0.40      0.521  |    O  |       |  I    |       |     2.86
12.250    1.58    0.41      0.529  |    O  |       |    I  |       |     2.88
12.333    1.63    0.41      0.537  |    O  |       |     I |       |     2.91
12.417    1.69    0.41      0.545  |    O  |       |      I|       |     2.93
12.500    1.73    0.42      0.554  |    O  |       |      I|       |     2.95
12.583    1.76    0.42      0.563  |    O  |       |       I       |     2.98
12.667    1.82    0.43      0.573  |    O  |       |       |I      |     3.00
12.750    1.87    0.43      0.583  |    O  |       |       |I      |     3.03
12.833    1.90    0.43      0.593  |    O  |       |       | I     |     3.06
12.917    1.94    0.44      0.603  |     O |       |       | I     |     3.09
13.000    1.97    0.44      0.613  |     O |       |       |  I    |     3.11
13.083    2.01    0.45      0.624  |     O |       |       |  I    |     3.14
13.167    2.13    0.45      0.635  |     O |       |       |    I  |     3.17
13.250    2.23    0.46      0.647  |     O |       |       |     I |     3.21
13.333    2.27    0.46      0.659  |     O |       |       |      I|     3.24
13.417    2.30    0.47      0.672  |     O |       |       |      I|     3.27
13.500    2.32    0.47      0.684  |     O |       |       |      I|     3.31
13.583    2.27    0.48      0.697  |     O |       |       |      I|     3.34
13.667    2.03    0.48      0.708  |     O |       |       |  I    |     3.37
13.750    1.83    0.49      0.718  |     O |       |       |I      |     3.40
13.833    1.75    0.49      0.727  |     O |       |       I       |     3.42
13.917    1.71    0.50      0.736  |     O |       |      I|       |     3.45
14.000    1.68    0.50      0.744  |     O |       |      I|       |     3.47
14.083    1.68    0.50      0.752  |     O |       |      I|       |     3.49
14.167    1.76    0.51      0.760  |      O|       |       I       |     3.51
14.250    1.82    0.51      0.769  |      O|       |       |I      |     3.54
14.333    1.83    0.51      0.778  |      O|       |       |I      |     3.56
14.417    1.82    0.52      0.787  |      O|       |       |I      |     3.59
14.500    1.81    0.52      0.796  |      O|       |       I       |     3.61
14.583    1.80    0.53      0.805  |      O|       |       I       |     3.63
14.667    1.80    0.53      0.814  |      O|       |       I       |     3.66
14.750    1.80    0.53      0.822  |      O|       |       I       |     3.68
14.833    1.80    0.54      0.831  |      O|       |       I       |     3.70
14.917    1.77    0.54      0.840  |      O|       |       I       |     3.73
15.000    1.76    0.54      0.848  |      O|       |       I       |     3.75
15.083    1.74    0.54      0.856  |      O|       |       I       |     3.77
15.167    1.72    0.55      0.865  |      O|       |      I|       |     3.78
15.250    1.70    0.55      0.873  |      O|       |      I|       |     3.80
15.333    1.68    0.55      0.880  |      O|       |      I|       |     3.82
15.417    1.65    0.55      0.888  |      O|       |     I |       |     3.84
15.500    1.63    0.56      0.896  |      O|       |     I |       |     3.86
15.583    1.60    0.56      0.903  |      O|       |     I |       |     3.88
15.667    1.50    0.56      0.910  |      O|       |   I   |       |     3.89
15.750    1.42    0.56      0.916  |      O|       |  I    |       |     3.91
15.833    1.39    0.56      0.922  |      O|       |  I    |       |     3.92
15.917    1.37    0.56      0.927  |      O|       | I     |       |     3.93
16.000    1.35    0.57      0.933  |      O|       | I     |       |     3.95
16.083    1.26    0.57      0.938  |      O|       |I      |       |     3.96
16.167    0.91    0.57      0.941  |      O|   I   |       |       |     3.97
16.250    0.63    0.57      0.943  |      OI       |       |       |     3.97
16.333    0.51    0.57      0.943  |      O|       |       |       |     3.97
16.417    0.44    0.57      0.942  |     IO|       |       |       |     3.97
16.500    0.40    0.57      0.941  |    I O|       |       |       |     3.97
16.583    0.36    0.57      0.940  |   I  O|       |       |       |     3.96
16.667    0.31    0.57      0.938  |   I  O|       |       |       |     3.96
16.750    0.28    0.57      0.936  |  I   O|       |       |       |     3.96
16.833    0.25    0.57      0.934  |  I   O|       |       |       |     3.95
16.917    0.24    0.57      0.932  |  I   O|       |       |       |     3.95
17.000    0.23    0.56      0.930  |  I   O|       |       |       |     3.94
17.083    0.23    0.56      0.928  |  I   O|       |       |       |     3.93
17.167    0.27    0.56      0.925  |  I   O|       |       |       |     3.93
17.250    0.31    0.56      0.924  |   I  O|       |       |       |     3.93
17.333    0.32    0.56      0.922  |   I  O|       |       |       |     3.92
17.417    0.33    0.56      0.920  |   I  O|       |       |       |     3.92
17.500    0.33    0.56      0.919  |   I  O|       |       |       |     3.91
17.583    0.34    0.56      0.917  |   I  O|       |       |       |     3.91
17.667    0.34    0.56      0.915  |   I  O|       |       |       |     3.91
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17.750	0.34	0.56	0.914	| I O|	|	|	|	3.90
17.833	0.34	0.56	0.912	| I O|	|	|	|	3.90
17.917	0.32	0.56	0.911	| I O|	|	|	|	3.89
18.000	0.30	0.56	0.909	| I O|	|	|	|	3.89
18.083	0.29	0.56	0.907	| I O|	|	|	|	3.89
18.167	0.29	0.56	0.905	| I O|	|	|	|	3.88
18.250	0.29	0.56	0.904	| I O|	|	|	|	3.88
18.333	0.28	0.56	0.902	| I O|	|	|	|	3.87
18.417	0.28	0.56	0.900	| I O|	|	|	|	3.87
18.500	0.28	0.56	0.898	| I O|	|	|	|	3.86
18.583	0.27	0.56	0.896	| I O|	|	|	|	3.86
18.667	0.25	0.55	0.894	| I O|	|	|	|	3.85
18.750	0.23	0.55	0.892	| I O|	|	|	|	3.85
18.833	0.22	0.55	0.890	| I O|	|	|	|	3.84
18.917	0.19	0.55	0.887	| I O|	|	|	|	3.84
19.000	0.17	0.55	0.885	| I O|	|	|	|	3.83
19.083	0.16	0.55	0.882	| I O|	|	|	|	3.83
19.167	0.18	0.55	0.879	| I O|	|	|	|	3.82
19.250	0.20	0.55	0.877	| I O|	|	|	|	3.81
19.333	0.21	0.55	0.874	| I O|	|	|	|	3.81
19.417	0.23	0.55	0.872	| I O|	|	|	|	3.80
19.500	0.25	0.55	0.870	| I O|	|	|	|	3.80
19.583	0.25	0.55	0.868	| I O|	|	|	|	3.79
19.667	0.24	0.55	0.866	| I O|	|	|	|	3.79
19.750	0.22	0.55	0.864	| I O|	|	|	|	3.78
19.833	0.21	0.55	0.861	| I O|	|	|	|	3.78
19.917	0.18	0.55	0.859	| I O|	|	|	|	3.77
20.000	0.16	0.54	0.857	| I O|	|	|	|	3.77
20.083	0.16	0.54	0.854	| I O|	|	|	|	3.76
20.167	0.18	0.54	0.851	| I O|	|	|	|	3.75
20.250	0.20	0.54	0.849	| I O|	|	|	|	3.75
20.333	0.20	0.54	0.847	| I O|	|	|	|	3.74
20.417	0.20	0.54	0.844	| I O|	|	|	|	3.74
20.500	0.20	0.54	0.842	| I O|	|	|	|	3.73
20.583	0.21	0.54	0.840	| I O|	|	|	|	3.73
20.667	0.21	0.54	0.837	| I O|	|	|	|	3.72
20.750	0.21	0.54	0.835	| I O|	|	|	|	3.71
20.833	0.20	0.54	0.833	| I O|	|	|	|	3.71
20.917	0.18	0.54	0.830	| I O|	|	|	|	3.70
21.000	0.16	0.54	0.828	| I O|	|	|	|	3.70
21.083	0.16	0.54	0.825	| I O|	|	|	|	3.69
21.167	0.18	0.53	0.823	| I O|	|	|	|	3.68
21.250	0.19	0.53	0.820	| I O|	|	|	|	3.68
21.333	0.19	0.53	0.818	| I O|	|	|	|	3.67
21.417	0.17	0.53	0.816	| I O|	|	|	|	3.66
21.500	0.16	0.53	0.813	| I O|	|	|	|	3.66
21.583	0.16	0.53	0.810	| I O|	|	|	|	3.65
21.667	0.18	0.53	0.808	| I O|	|	|	|	3.64
21.750	0.19	0.53	0.806	| I O|	|	|	|	3.64
21.833	0.19	0.53	0.803	| I O|	|	|	|	3.63
21.917	0.17	0.52	0.801	| I O|	|	|	|	3.62
22.000	0.16	0.52	0.798	| I O|	|	|	|	3.62
22.083	0.16	0.52	0.796	| I O|	|	|	|	3.61
22.167	0.18	0.52	0.793	| I O|	|	|	|	3.60
22.250	0.19	0.52	0.791	| I O|	|	|	|	3.60
22.333	0.19	0.52	0.789	| I O|	|	|	|	3.59
22.417	0.17	0.52	0.786	| I O|	|	|	|	3.58
22.500	0.16	0.52	0.784	| I O|	|	|	|	3.58
22.583	0.15	0.52	0.782	| I O|	|	|	|	3.57
22.667	0.15	0.52	0.779	| I O|	|	|	|	3.56
22.750	0.14	0.51	0.776	|I O|	|	|	|	3.56
22.833	0.14	0.51	0.774	|I O|	|	|	|	3.55
22.917	0.14	0.51	0.771	|I O|	|	|	|	3.54
23.000	0.14	0.51	0.769	|I O|	|	|	|	3.54
23.083	0.14	0.51	0.766	|I O|	|	|	|	3.53
23.167	0.14	0.51	0.764	|I O|	|	|	|	3.52
23.250	0.14	0.51	0.761	|I O|	|	|	|	3.52
23.333	0.14	0.51	0.759	|I O |	|	|	|	3.51
23.417	0.14	0.51	0.756	|I O |	|	|	|	3.50
23.500	0.14	0.50	0.754	|I O |	|	|	|	3.50
23.583	0.14	0.50	0.751	|I O |	|	|	|	3.49

23.667	0.14	0.50	0.749	|I	O |	|	|	|	3.48
23.750	0.14	0.50	0.746	|I	O |	|	|	|	3.47
23.833	0.14	0.50	0.744	|I	O |	|	|	|	3.47
23.917	0.14	0.50	0.741	|I	O |	|	|	|	3.46
24.000	0.14	0.50	0.739	|I	O |	|	|	|	3.45
24.083	0.13	0.50	0.736	|I	O |	|	|	|	3.45
24.167	0.08	0.50	0.733	|I	O |	|	|	|	3.44
24.250	0.04	0.49	0.730	I	O |	|	|	|	3.43
24.333	0.03	0.49	0.727	I	O |	|	|	|	3.42
24.417	0.02	0.49	0.724	I	O |	|	|	|	3.42
24.500	0.02	0.49	0.721	I	O |	|	|	|	3.41
24.583	0.01	0.49	0.718	I	O |	|	|	|	3.40
24.667	0.01	0.49	0.714	I	O |	|	|	|	3.39
24.750	0.01	0.49	0.711	I	O |	|	|	|	3.38
24.833	0.00	0.48	0.708	I	O |	|	|	|	3.37
24.917	0.00	0.48	0.704	I	O |	|	|	|	3.36
25.000	0.00	0.48	0.701	I	O |	|	|	|	3.35
25.083	0.00	0.48	0.698	I	O |	|	|	|	3.34
25.167	0.00	0.48	0.694	I	O |	|	|	|	3.33
25.250	0.00	0.48	0.691	I	O |	|	|	|	3.33
25.333	0.00	0.48	0.688	I	O |	|	|	|	3.32
25.417	0.00	0.47	0.685	I	O |	|	|	|	3.31
25.500	0.00	0.47	0.681	I	O |	|	|	|	3.30
25.583	0.00	0.47	0.678	I	O |	|	|	|	3.29
25.667	0.00	0.47	0.675	I	O |	|	|	|	3.28
25.750	0.00	0.47	0.672	I	O |	|	|	|	3.27
25.833	0.00	0.47	0.668	I	O |	|	|	|	3.26
25.917	0.00	0.47	0.665	I	O |	|	|	|	3.25
26.000	0.00	0.46	0.662	I	O |	|	|	|	3.25
26.083	0.00	0.46	0.659	I	O |	|	|	|	3.24
26.167	0.00	0.46	0.656	I	O |	|	|	|	3.23
26.250	0.00	0.46	0.652	I	O |	|	|	|	3.22
26.333	0.00	0.46	0.649	I	O |	|	|	|	3.21
26.417	0.00	0.46	0.646	I	O |	|	|	|	3.20
26.500	0.00	0.46	0.643	I	O |	|	|	|	3.19
26.583	0.00	0.45	0.640	I	O |	|	|	|	3.19
26.667	0.00	0.45	0.637	I	O |	|	|	|	3.18
26.750	0.00	0.45	0.634	I	O |	|	|	|	3.17
26.833	0.00	0.45	0.631	I	O |	|	|	|	3.16
26.917	0.00	0.45	0.627	I	O |	|	|	|	3.15
27.000	0.00	0.45	0.624	I	O |	|	|	|	3.14
27.083	0.00	0.45	0.621	I	O |	|	|	|	3.14
27.167	0.00	0.45	0.618	I	O |	|	|	|	3.13
27.250	0.00	0.44	0.615	I	O |	|	|	|	3.12
27.333	0.00	0.44	0.612	I	O |	|	|	|	3.11
27.417	0.00	0.44	0.609	I	O |	|	|	|	3.10
27.500	0.00	0.44	0.606	I	O |	|	|	|	3.09
27.583	0.00	0.44	0.603	I	O |	|	|	|	3.09
27.667	0.00	0.44	0.600	I	O |	|	|	|	3.08
27.750	0.00	0.44	0.597	I	O |	|	|	|	3.07
27.833	0.00	0.43	0.594	I	O |	|	|	|	3.06
27.917	0.00	0.43	0.591	I	O |	|	|	|	3.05
28.000	0.00	0.43	0.588	I	O |	|	|	|	3.04
28.083	0.00	0.43	0.585	I	O |	|	|	|	3.04
28.167	0.00	0.43	0.582	I	O |	|	|	|	3.03
28.250	0.00	0.43	0.579	I	O |	|	|	|	3.02
28.333	0.00	0.43	0.576	I	O |	|	|	|	3.01
28.417	0.00	0.43	0.573	I	O |	|	|	|	3.00
28.500	0.00	0.42	0.570	I	O |	|	|	|	3.00
28.583	0.00	0.42	0.567	I	O |	|	|	|	2.99
28.667	0.00	0.42	0.564	I	O |	|	|	|	2.98
28.750	0.00	0.42	0.562	I	O |	|	|	|	2.97
28.833	0.00	0.42	0.559	I	O |	|	|	|	2.97
28.917	0.00	0.42	0.556	I	O |	|	|	|	2.96
29.000	0.00	0.42	0.553	I	O |	|	|	|	2.95
29.083	0.00	0.42	0.550	I	O |	|	|	|	2.94
29.167	0.00	0.41	0.547	I	O |	|	|	|	2.93
29.250	0.00	0.41	0.544	I	O |	|	|	|	2.93
29.333	0.00	0.41	0.541	I	O |	|	|	|	2.92
29.417	0.00	0.41	0.539	I	O |	|	|	|	2.91
29.500	0.00	0.41	0.536	I	O |	|	|	|	2.90

29.583	0.00	0.41	0.533	I	O	|	|	|	|	2.90
29.667	0.00	0.41	0.530	I	O	|	|	|	|	2.89
29.750	0.00	0.41	0.527	I	O	|	|	|	|	2.88
29.833	0.00	0.40	0.525	I	O	|	|	|	|	2.87
29.917	0.00	0.40	0.522	I	O	|	|	|	|	2.87
30.000	0.00	0.40	0.519	I	O	|	|	|	|	2.86
30.083	0.00	0.40	0.516	I	O	|	|	|	|	2.85
30.167	0.00	0.40	0.514	I	O	|	|	|	|	2.84
30.250	0.00	0.40	0.511	I	O	|	|	|	|	2.84
30.333	0.00	0.40	0.508	I	O	|	|	|	|	2.83
30.417	0.00	0.40	0.505	I	O	|	|	|	|	2.82
30.500	0.00	0.40	0.503	I	O	|	|	|	|	2.81
30.583	0.00	0.39	0.500	I	O	|	|	|	|	2.81
30.667	0.00	0.39	0.497	I	O	|	|	|	|	2.80
30.750	0.00	0.39	0.494	I	O	|	|	|	|	2.79
30.833	0.00	0.39	0.492	I	O	|	|	|	|	2.78
30.917	0.00	0.39	0.489	I	O	|	|	|	|	2.78
31.000	0.00	0.39	0.486	I	O	|	|	|	|	2.77
31.083	0.00	0.39	0.484	I	O	|	|	|	|	2.76
31.167	0.00	0.39	0.481	I	O	|	|	|	|	2.75
31.250	0.00	0.38	0.478	I	O	|	|	|	|	2.75
31.333	0.00	0.38	0.476	I	O	|	|	|	|	2.74
31.417	0.00	0.38	0.473	I	O	|	|	|	|	2.73
31.500	0.00	0.38	0.470	I	O	|	|	|	|	2.73
31.583	0.00	0.38	0.468	I	O	|	|	|	|	2.72
31.667	0.00	0.38	0.465	I	O	|	|	|	|	2.71
31.750	0.00	0.38	0.463	I	O	|	|	|	|	2.70
31.833	0.00	0.38	0.460	I	O	|	|	|	|	2.70
31.917	0.00	0.37	0.457	I	O	|	|	|	|	2.69
32.000	0.00	0.37	0.455	I	O	|	|	|	|	2.68
32.083	0.00	0.37	0.452	I	O	|	|	|	|	2.67
32.167	0.00	0.36	0.450	I	O	|	|	|	|	2.67
32.250	0.00	0.36	0.447	I	O	|	|	|	|	2.66
32.333	0.00	0.36	0.445	I	O	|	|	|	|	2.65
32.417	0.00	0.36	0.442	I	O	|	|	|	|	2.64
32.500	0.00	0.35	0.440	I	O	|	|	|	|	2.63
32.583	0.00	0.35	0.438	I	O	|	|	|	|	2.63
32.667	0.00	0.35	0.435	I	O	|	|	|	|	2.62
32.750	0.00	0.35	0.433	I	O	|	|	|	|	2.61
32.833	0.00	0.34	0.430	I	O	|	|	|	|	2.60
32.917	0.00	0.34	0.428	I	O	|	|	|	|	2.60
33.000	0.00	0.34	0.426	I	O	|	|	|	|	2.59
33.083	0.00	0.33	0.423	I	O	|	|	|	|	2.58
33.167	0.00	0.33	0.421	I	O	|	|	|	|	2.58
33.250	0.00	0.33	0.419	I	O	|	|	|	|	2.57
33.333	0.00	0.33	0.417	I	O	|	|	|	|	2.56
33.417	0.00	0.32	0.414	I	O	|	|	|	|	2.55
33.500	0.00	0.32	0.412	I	O	|	|	|	|	2.55
33.583	0.00	0.32	0.410	I	O	|	|	|	|	2.54
33.667	0.00	0.32	0.408	I	O	|	|	|	|	2.53
33.750	0.00	0.31	0.406	I	O	|	|	|	|	2.53
33.833	0.00	0.31	0.403	I	O	|	|	|	|	2.52
33.917	0.00	0.31	0.401	I	O	|	|	|	|	2.51
34.000	0.00	0.31	0.399	I	O	|	|	|	|	2.51
34.083	0.00	0.30	0.397	I	O	|	|	|	|	2.50
34.167	0.00	0.30	0.395	I	O	|	|	|	|	2.49
34.250	0.00	0.30	0.393	I	O	|	|	|	|	2.49
34.333	0.00	0.30	0.391	I	O	|	|	|	|	2.48
34.417	0.00	0.30	0.389	I	O	|	|	|	|	2.47
34.500	0.00	0.29	0.387	I	O	|	|	|	|	2.47
34.583	0.00	0.29	0.385	I	O	|	|	|	|	2.46
34.667	0.00	0.29	0.383	I	O	|	|	|	|	2.46
34.750	0.00	0.29	0.381	I	O	|	|	|	|	2.45
34.833	0.00	0.28	0.379	I	O	|	|	|	|	2.44
34.917	0.00	0.28	0.377	I	O	|	|	|	|	2.44
35.000	0.00	0.28	0.375	I	O	|	|	|	|	2.43
35.083	0.00	0.28	0.373	I	O	|	|	|	|	2.42
35.167	0.00	0.28	0.371	I	O	|	|	|	|	2.42
35.250	0.00	0.27	0.369	I	O	|	|	|	|	2.41
35.333	0.00	0.27	0.367	I	O	|	|	|	|	2.41
35.417	0.00	0.27	0.365	I	O	|	|	|	|	2.40

35.500	0.00	0.27	0.364	I	O	|	|	|	|	2.39
35.583	0.00	0.27	0.362	I	O	|	|	|	|	2.39
35.667	0.00	0.27	0.360	I	O	|	|	|	|	2.38
35.750	0.00	0.27	0.358	I	O	|	|	|	|	2.37
35.833	0.00	0.27	0.356	I	O	|	|	|	|	2.37
35.917	0.00	0.27	0.354	I	O	|	|	|	|	2.36
36.000	0.00	0.26	0.352	I	O	|	|	|	|	2.35
36.083	0.00	0.26	0.351	I	O	|	|	|	|	2.34
36.167	0.00	0.26	0.349	I	O	|	|	|	|	2.34
36.250	0.00	0.26	0.347	I	O	|	|	|	|	2.33
36.333	0.00	0.26	0.345	I	O	|	|	|	|	2.32
36.417	0.00	0.26	0.343	I	O	|	|	|	|	2.32
36.500	0.00	0.26	0.342	I	O	|	|	|	|	2.31
36.583	0.00	0.26	0.340	I	O	|	|	|	|	2.30
36.667	0.00	0.26	0.338	I	O	|	|	|	|	2.29
36.750	0.00	0.26	0.336	I	O	|	|	|	|	2.29
36.833	0.00	0.26	0.334	I	O	|	|	|	|	2.28
36.917	0.00	0.26	0.333	I	O	|	|	|	|	2.27
37.000	0.00	0.26	0.331	I	O	|	|	|	|	2.27
37.083	0.00	0.26	0.329	I	O	|	|	|	|	2.26
37.167	0.00	0.26	0.327	I	O	|	|	|	|	2.25
37.250	0.00	0.26	0.326	I	O	|	|	|	|	2.24
37.333	0.00	0.26	0.324	I	O	|	|	|	|	2.24
37.417	0.00	0.26	0.322	I	O	|	|	|	|	2.23
37.500	0.00	0.25	0.320	I	O	|	|	|	|	2.22
37.583	0.00	0.25	0.319	I	O	|	|	|	|	2.22
37.667	0.00	0.25	0.317	I	O	|	|	|	|	2.21
37.750	0.00	0.25	0.315	I	O	|	|	|	|	2.20
37.833	0.00	0.25	0.313	I	O	|	|	|	|	2.20
37.917	0.00	0.25	0.312	I	O	|	|	|	|	2.19
38.000	0.00	0.25	0.310	I	O	|	|	|	|	2.18
38.083	0.00	0.25	0.308	I	O	|	|	|	|	2.18
38.167	0.00	0.25	0.306	I	O	|	|	|	|	2.17
38.250	0.00	0.25	0.305	I	O	|	|	|	|	2.16
38.333	0.00	0.25	0.303	I	O	|	|	|	|	2.16
38.417	0.00	0.25	0.301	I	O	|	|	|	|	2.15
38.500	0.00	0.25	0.300	I	O	|	|	|	|	2.14
38.583	0.00	0.25	0.298	I	O	|	|	|	|	2.14
38.667	0.00	0.25	0.296	I	O	|	|	|	|	2.13
38.750	0.00	0.25	0.294	I	O	|	|	|	|	2.12
38.833	0.00	0.25	0.293	I	O	|	|	|	|	2.12
38.917	0.00	0.24	0.291	I	O	|	|	|	|	2.11
39.000	0.00	0.24	0.289	I	O	|	|	|	|	2.10
39.083	0.00	0.24	0.288	I	O	|	|	|	|	2.10
39.167	0.00	0.24	0.286	I	O	|	|	|	|	2.09
39.250	0.00	0.24	0.284	I	O	|	|	|	|	2.08
39.333	0.00	0.24	0.283	I	O	|	|	|	|	2.08
39.417	0.00	0.24	0.281	I	O	|	|	|	|	2.07
39.500	0.00	0.24	0.279	I	O	|	|	|	|	2.06
39.583	0.00	0.24	0.278	I	O	|	|	|	|	2.06
39.667	0.00	0.24	0.276	I	O	|	|	|	|	2.05
39.750	0.00	0.24	0.274	I	O	|	|	|	|	2.04
39.833	0.00	0.24	0.273	I	O	|	|	|	|	2.04
39.917	0.00	0.24	0.271	I	O	|	|	|	|	2.03
40.000	0.00	0.24	0.269	I	O	|	|	|	|	2.02
40.083	0.00	0.24	0.268	I	O	|	|	|	|	2.02
40.167	0.00	0.24	0.266	I	O	|	|	|	|	2.01
40.250	0.00	0.24	0.265	I	O	|	|	|	|	2.01
40.333	0.00	0.24	0.263	I	O	|	|	|	|	2.00
40.417	0.00	0.24	0.261	I	O	|	|	|	|	1.99
40.500	0.00	0.23	0.260	I	O	|	|	|	|	1.99
40.583	0.00	0.23	0.258	I	O	|	|	|	|	1.98
40.667	0.00	0.23	0.256	I	O	|	|	|	|	1.97
40.750	0.00	0.23	0.255	I	O	|	|	|	|	1.97
40.833	0.00	0.23	0.253	I	O	|	|	|	|	1.96
40.917	0.00	0.23	0.252	I	O	|	|	|	|	1.95
41.000	0.00	0.23	0.250	I	O	|	|	|	|	1.95
41.083	0.00	0.23	0.248	I	O	|	|	|	|	1.94
41.167	0.00	0.23	0.247	I	O	|	|	|	|	1.94
41.250	0.00	0.23	0.245	I	O	|	|	|	|	1.93
41.333	0.00	0.23	0.244	I	O	|	|	|	|	1.92

41.417	0.00	0.23	0.242	I O	|	|	|	| 1.92
41.500	0.00	0.23	0.241	I O	|	|	|	| 1.91
41.583	0.00	0.23	0.239	I O	|	|	|	| 1.90
41.667	0.00	0.23	0.237	I O	|	|	|	| 1.90
41.750	0.00	0.23	0.236	I O	|	|	|	| 1.89
41.833	0.00	0.23	0.234	I O	|	|	|	| 1.89
41.917	0.00	0.23	0.233	I O	|	|	|	| 1.88
42.000	0.00	0.23	0.231	I O	|	|	|	| 1.87
42.083	0.00	0.22	0.230	I O	|	|	|	| 1.87
42.167	0.00	0.22	0.228	I O	|	|	|	| 1.86
42.250	0.00	0.22	0.227	I O	|	|	|	| 1.86
42.333	0.00	0.22	0.225	I O	|	|	|	| 1.85
42.417	0.00	0.22	0.223	I O	|	|	|	| 1.84
42.500	0.00	0.22	0.222	I O	|	|	|	| 1.84
42.583	0.00	0.22	0.220	I O	|	|	|	| 1.83
42.667	0.00	0.22	0.219	I O	|	|	|	| 1.83
42.750	0.00	0.22	0.217	I O	|	|	|	| 1.82
42.833	0.00	0.22	0.216	I O	|	|	|	| 1.81
42.917	0.00	0.22	0.214	I O	|	|	|	| 1.81
43.000	0.00	0.22	0.213	I O	|	|	|	| 1.80
43.083	0.00	0.22	0.211	I O	|	|	|	| 1.80
43.167	0.00	0.22	0.210	I O	|	|	|	| 1.79
43.250	0.00	0.22	0.208	I O	|	|	|	| 1.78
43.333	0.00	0.22	0.207	I O	|	|	|	| 1.78
43.417	0.00	0.22	0.205	I O	|	|	|	| 1.77
43.500	0.00	0.22	0.204	I O	|	|	|	| 1.77
43.583	0.00	0.22	0.202	I O	|	|	|	| 1.76
43.667	0.00	0.22	0.201	I O	|	|	|	| 1.75
43.750	0.00	0.22	0.199	I O	|	|	|	| 1.75
43.833	0.00	0.21	0.198	I O	|	|	|	| 1.74
43.917	0.00	0.21	0.196	I O	|	|	|	| 1.74
44.000	0.00	0.21	0.195	I O	|	|	|	| 1.73
44.083	0.00	0.21	0.193	I O	|	|	|	| 1.73
44.167	0.00	0.21	0.192	I O	|	|	|	| 1.72
44.250	0.00	0.21	0.191	I O	|	|	|	| 1.71
44.333	0.00	0.21	0.189	I O	|	|	|	| 1.71
44.417	0.00	0.21	0.188	I O	|	|	|	| 1.70
44.500	0.00	0.21	0.186	I O	|	|	|	| 1.69
44.583	0.00	0.21	0.185	I O	|	|	|	| 1.68
44.667	0.00	0.21	0.183	I O	|	|	|	| 1.67
44.750	0.00	0.21	0.182	I O	|	|	|	| 1.66
44.833	0.00	0.21	0.180	I O	|	|	|	| 1.66
44.917	0.00	0.21	0.179	I O	|	|	|	| 1.65
45.000	0.00	0.20	0.178	I O	|	|	|	| 1.64
45.083	0.00	0.20	0.176	I O	|	|	|	| 1.63
45.167	0.00	0.20	0.175	I O	|	|	|	| 1.62
45.250	0.00	0.20	0.173	I O	|	|	|	| 1.61
45.333	0.00	0.20	0.172	I O	|	|	|	| 1.60
45.417	0.00	0.20	0.171	I O	|	|	|	| 1.59
45.500	0.00	0.20	0.169	I O	|	|	|	| 1.58
45.583	0.00	0.20	0.168	I O	|	|	|	| 1.57
45.667	0.00	0.20	0.167	I O	|	|	|	| 1.56
45.750	0.00	0.20	0.165	I O	|	|	|	| 1.55
45.833	0.00	0.19	0.164	I O	|	|	|	| 1.54
45.917	0.00	0.19	0.162	I O	|	|	|	| 1.53
46.000	0.00	0.19	0.161	I O	|	|	|	| 1.52
46.083	0.00	0.19	0.160	I O	|	|	|	| 1.52
46.167	0.00	0.19	0.159	I O	|	|	|	| 1.51
46.250	0.00	0.19	0.157	I O	|	|	|	| 1.50
46.333	0.00	0.19	0.156	I O	|	|	|	| 1.49
46.417	0.00	0.19	0.155	I O	|	|	|	| 1.48
46.500	0.00	0.19	0.153	I O	|	|	|	| 1.47
46.583	0.00	0.19	0.152	I O	|	|	|	| 1.46
46.667	0.00	0.19	0.151	I O	|	|	|	| 1.45
46.750	0.00	0.18	0.149	I O	|	|	|	| 1.44
46.833	0.00	0.18	0.148	I O	|	|	|	| 1.44
46.917	0.00	0.18	0.147	I O	|	|	|	| 1.43
47.000	0.00	0.18	0.146	I O	|	|	|	| 1.42
47.083	0.00	0.18	0.144	I O	|	|	|	| 1.41
47.167	0.00	0.18	0.143	I O	|	|	|	| 1.40
47.250	0.00	0.18	0.142	I O	|	|	|	| 1.39

47.333	0.00	0.18	0.141	I O				1.38
47.417	0.00	0.18	0.139	I O				1.38
47.500	0.00	0.18	0.138	I O				1.37
47.583	0.00	0.18	0.137	I O				1.36
47.667	0.00	0.18	0.136	I O				1.35
47.750	0.00	0.17	0.135	I O				1.34
47.833	0.00	0.17	0.133	I O				1.34
47.917	0.00	0.17	0.132	I O				1.33
48.000	0.00	0.17	0.131	I O				1.32
48.083	0.00	0.17	0.130	I O				1.31
48.167	0.00	0.17	0.129	I O				1.30
48.250	0.00	0.17	0.127	I O				1.30
48.333	0.00	0.17	0.126	I O				1.29
48.417	0.00	0.17	0.125	I O				1.28
48.500	0.00	0.17	0.124	I O				1.27
48.583	0.00	0.17	0.123	I O				1.26
48.667	0.00	0.17	0.122	I O				1.26
48.750	0.00	0.16	0.121	I O				1.25
48.833	0.00	0.16	0.119	I O				1.24
48.917	0.00	0.16	0.118	I O				1.23
49.000	0.00	0.16	0.117	I O				1.23
49.083	0.00	0.16	0.116	I O				1.22
49.167	0.00	0.16	0.115	I O				1.21
49.250	0.00	0.16	0.114	I O				1.20
49.333	0.00	0.16	0.113	I O				1.19
49.417	0.00	0.16	0.112	I O				1.19
49.500	0.00	0.16	0.111	I O				1.18
49.583	0.00	0.16	0.109	I O				1.17
49.667	0.00	0.16	0.108	I O				1.17
49.750	0.00	0.16	0.107	I O				1.16
49.833	0.00	0.15	0.106	I O				1.15
49.917	0.00	0.15	0.105	I O				1.14
50.000	0.00	0.15	0.104	I O				1.14
50.083	0.00	0.15	0.103	I O				1.13
50.167	0.00	0.15	0.102	I O				1.12
50.250	0.00	0.15	0.101	I O				1.11
50.333	0.00	0.15	0.100	I O				1.11
50.417	0.00	0.15	0.099	I O				1.10
50.500	0.00	0.15	0.098	I O				1.09
50.583	0.00	0.15	0.097	I O				1.09
50.667	0.00	0.15	0.096	I O				1.08
50.750	0.00	0.15	0.095	I O				1.07
50.833	0.00	0.15	0.094	I O				1.07
50.917	0.00	0.15	0.093	I O				1.06
51.000	0.00	0.14	0.092	I O				1.05
51.083	0.00	0.14	0.091	IO				1.05
51.167	0.00	0.14	0.090	IO				1.04
51.250	0.00	0.14	0.089	IO				1.03
51.333	0.00	0.14	0.088	IO				1.03
51.417	0.00	0.14	0.087	IO				1.02
51.500	0.00	0.14	0.086	IO				1.01
51.583	0.00	0.14	0.085	IO				1.01
51.667	0.00	0.14	0.084	IO				1.00
51.750	0.00	0.14	0.083	IO				0.99
51.833	0.00	0.14	0.082	IO				0.99
51.917	0.00	0.14	0.081	IO				0.98
52.000	0.00	0.14	0.080	IO				0.97
52.083	0.00	0.14	0.079	IO				0.97
52.167	0.00	0.14	0.078	IO				0.96
52.250	0.00	0.13	0.077	IO				0.95
52.333	0.00	0.13	0.076	IO				0.95
52.417	0.00	0.13	0.075	IO				0.94
52.500	0.00	0.13	0.075	IO				0.94
52.583	0.00	0.13	0.074	IO				0.93
52.667	0.00	0.13	0.073	IO				0.92
52.750	0.00	0.13	0.072	IO				0.92
52.833	0.00	0.13	0.071	IO				0.91
52.917	0.00	0.13	0.070	IO				0.90
53.000	0.00	0.13	0.069	IO				0.90
53.083	0.00	0.13	0.068	IO				0.89
53.167	0.00	0.13	0.067	IO				0.89

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53.250    0.00    0.13      0.067  IO      |       |       |       |     0.88
53.333    0.00    0.13      0.066  IO      |       |       |       |     0.87
53.417    0.00    0.13      0.065  IO      |       |       |       |     0.87
53.500    0.00    0.13      0.064  IO      |       |       |       |     0.86
53.583    0.00    0.12      0.063  IO      |       |       |       |     0.86
53.667    0.00    0.12      0.062  IO      |       |       |       |     0.85
53.750    0.00    0.12      0.061  IO      |       |       |       |     0.85
53.833    0.00    0.12      0.060  IO      |       |       |       |     0.84
53.917    0.00    0.12      0.060  IO      |       |       |       |     0.83
54.000    0.00    0.12      0.059  IO      |       |       |       |     0.83
54.083    0.00    0.12      0.058  IO      |       |       |       |     0.82
54.167    0.00    0.12      0.057  IO      |       |       |       |     0.82
54.250    0.00    0.12      0.056  IO      |       |       |       |     0.81
54.333    0.00    0.12      0.055  IO      |       |       |       |     0.81
54.417    0.00    0.12      0.055  IO      |       |       |       |     0.80
54.500    0.00    0.12      0.054  IO      |       |       |       |     0.79
54.583    0.00    0.12      0.053  IO      |       |       |       |     0.79
54.667    0.00    0.12      0.052  IO      |       |       |       |     0.78
54.750    0.00    0.12      0.051  IO      |       |       |       |     0.78
54.833    0.00    0.12      0.051  IO      |       |       |       |     0.77
54.917    0.00    0.12      0.050  IO      |       |       |       |     0.77
55.000    0.00    0.12      0.049  IO      |       |       |       |     0.76
55.083    0.00    0.11      0.048  IO      |       |       |       |     0.76
55.167    0.00    0.11      0.047  IO      |       |       |       |     0.75
55.250    0.00    0.11      0.047  IO      |       |       |       |     0.75
55.333    0.00    0.11      0.046  IO      |       |       |       |     0.74
55.417    0.00    0.11      0.045  IO      |       |       |       |     0.73
55.500    0.00    0.11      0.044  IO      |       |       |       |     0.73
55.583    0.00    0.11      0.044  IO      |       |       |       |     0.72
55.667    0.00    0.11      0.043  IO      |       |       |       |     0.72
55.750    0.00    0.11      0.042  IO      |       |       |       |     0.71
55.833    0.00    0.11      0.041  IO      |       |       |       |     0.71
55.917    0.00    0.11      0.040  IO      |       |       |       |     0.70
56.000    0.00    0.11      0.040  IO      |       |       |       |     0.70
56.083    0.00    0.11      0.039  IO      |       |       |       |     0.68
56.167    0.00    0.10      0.038  IO      |       |       |       |     0.67
56.250    0.00    0.10      0.038  IO      |       |       |       |     0.66
56.333    0.00    0.10      0.037  IO      |       |       |       |     0.64
56.417    0.00    0.10      0.036  IO      |       |       |       |     0.63

      Remaining water in basin =    0.04 (Ac.Ft)

      ****************************HYDROGRAPH DATA****************************
                   Number of intervals =   677
                   Time interval =    5.0 (Min.)
                   Maximum/Peak flow rate =        0.568 (CFS)
                   Total volume =       1.398 (Ac.Ft)
             Status of hydrographs being held in storage
                        Stream 1  Stream 2  Stream 3  Stream 4  Stream 5
             Peak (CFS)      0.000     0.000     0.000     0.000     0.000
             Vol (Ac.Ft)     0.000     0.000     0.000     0.000     0.000
      ************************************************************************

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                    FLOOD HYDROGRAPH ROUTING PROGRAM
                Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2004
                            Study date: 08/18/25

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 Program License Serial Number 5006

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 ********************* HYDROGRAPH INFORMATION **********************

                From study/file name: PROB15.rte
 ****************************HYDROGRAPH DATA****************************
                Number of intervals =    25
                Time interval =    5.0 (Min.)
                Maximum/Peak flow rate =       22.715 (CFS)
                Total volume =       0.792 (Ac.Ft)
        Status of hydrographs being held in storage
                    Stream 1  Stream 2  Stream 3  Stream 4  Stream 5
        Peak (CFS)      0.000     0.000     0.000     0.000     0.000
        Vol (Ac.Ft)      0.000     0.000     0.000     0.000     0.000
 *********************************************************************



 +++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
 Process from Point/Station        0.000 to Point/Station        0.000
 **** RETARDING BASIN ROUTING ****
 _____________________________________________________________________

 User entry of depth-outflow-storage data
 ---------------------------------------------------------------------
 Total number of inflow hydrograph intervals = 25
 Hydrograph time unit =  5.000 (Min.)
 Initial depth in storage basin =   0.00(Ft.)
 ---------------------------------------------------------------------
 ---------------------------------------------------------------------
 Initial basin depth =   0.00 (Ft.)
 Initial basin storage =      0.00 (Ac.Ft)
 Initial basin outflow =   0.00 (CFS)
 ---------------------------------------------------------------------
 ---------------------------------------------------------------------
 Depth vs. Storage and Depth vs. Discharge data:
  Basin Depth  Storage    Outflow   (S-O*dt/2)   (S+O*dt/2)
       (Ft.)    (Ac.Ft)    (CFS)     (Ac.Ft)    (Ac.Ft)
 ---------------------------------------------------------------------
    0.000      0.000      0.000      0.000        0.000
    0.700      0.040      0.109      0.040        0.040
    1.700      0.187      0.211      0.186        0.188
    2.400      0.365      0.269      0.364        0.366
    2.700      0.461      0.377      0.460        0.462
    3.700      0.829      0.537      0.827        0.831
    4.700      1.249      0.651      1.247        1.251
    5.700      1.723      0.746      1.720        1.726
    6.700      2.252      1.870      2.246        2.258
    7.700      2.841      2.376      2.833        2.849
    8.300      3.223     38.499      3.090        3.356
    8.700      3.491    113.554      3.100        3.882
    9.700      4.203    441.782      2.682        5.724
 ---------------------------------------------------------------------
                 Hydrograph Detention Basin Routing
 ---------------------------------------------------------------------

 Graph values: 'I'= unit inflow; 'O'=outflow at time shown
 ---------------------------------------------------------------------
  Time   Inflow  Outflow    Storage                                    Depth
```

(Hours)	(CFS)	(CFS)	(Ac.Ft)	.0	5.7	11.36	17.04	22.72	(Ft.)
0.083	0.21	0.00	0.001	O					0.01
0.167	1.13	0.01	0.005	OI					0.09
0.250	2.09	0.04	0.016	O I					0.28
0.333	2.63	0.09	0.032	O I					0.56
0.417	3.06	0.12	0.051	O I					0.77
0.500	3.61	0.13	0.073	O I					0.92
0.583	4.49	0.15	0.100	O I					1.11
0.667	5.64	0.17	0.134	O I					1.34
0.750	7.87	0.21	0.179	O	I				1.64
0.833	13.87	0.23	0.252	O		I			1.96
0.917	22.72	0.28	0.376	O				I	2.44
1.000	18.40	0.40	0.516	O			I		2.85
1.083	9.96	0.44	0.610	O	I				3.11
1.167	5.92	0.46	0.662	O I					3.25
1.250	3.78	0.48	0.692	O I					3.33
1.333	2.67	0.49	0.711	O I					3.38
1.417	1.93	0.49	0.723	O I					3.41
1.500	1.50	0.49	0.732	O I					3.44
1.583	1.13	0.50	0.738	OI					3.45
1.667	0.85	0.50	0.741	OI					3.46
1.750	0.63	0.50	0.743	O					3.47
1.833	0.48	0.50	0.743	O					3.47
1.917	0.38	0.50	0.743	O					3.46
2.000	0.07	0.50	0.741	O					3.46
2.083	0.02	0.50	0.737	O					3.45
2.167	0.00	0.50	0.734	O					3.44
2.250	0.00	0.49	0.731	O					3.43
2.333	0.00	0.49	0.727	O					3.42
2.417	0.00	0.49	0.724	O					3.41
2.500	0.00	0.49	0.721	O					3.41
2.583	0.00	0.49	0.717	O					3.40
2.667	0.00	0.49	0.714	O					3.39
2.750	0.00	0.49	0.710	O					3.38
2.833	0.00	0.48	0.707	O					3.37
2.917	0.00	0.48	0.704	O					3.36
3.000	0.00	0.48	0.701	O					3.35
3.083	0.00	0.48	0.697	O					3.34
3.167	0.00	0.48	0.694	O					3.33
3.250	0.00	0.48	0.691	O					3.32
3.333	0.00	0.48	0.687	O					3.32
3.417	0.00	0.47	0.684	O					3.31
3.500	0.00	0.47	0.681	O					3.30
3.583	0.00	0.47	0.678	O					3.29
3.667	0.00	0.47	0.674	O					3.28
3.750	0.00	0.47	0.671	O					3.27
3.833	0.00	0.47	0.668	O					3.26
3.917	0.00	0.47	0.665	O					3.25
4.000	0.00	0.46	0.661	O					3.24
4.083	0.00	0.46	0.658	O					3.24
4.167	0.00	0.46	0.655	O					3.23
4.250	0.00	0.46	0.652	O					3.22
4.333	0.00	0.46	0.649	O					3.21
4.417	0.00	0.46	0.646	O					3.20
4.500	0.00	0.46	0.642	O					3.19
4.583	0.00	0.45	0.639	O					3.18
4.667	0.00	0.45	0.636	O					3.18
4.750	0.00	0.45	0.633	O					3.17
4.833	0.00	0.45	0.630	O					3.16
4.917	0.00	0.45	0.627	O					3.15
5.000	0.00	0.45	0.624	O					3.14
5.083	0.00	0.45	0.621	O					3.13
5.167	0.00	0.45	0.618	O					3.13
5.250	0.00	0.44	0.615	O					3.12
5.333	0.00	0.44	0.612	O					3.11
5.417	0.00	0.44	0.608	O					3.10
5.500	0.00	0.44	0.605	O					3.09
5.583	0.00	0.44	0.602	O					3.08
5.667	0.00	0.44	0.599	O					3.08
5.750	0.00	0.44	0.596	O					3.07
5.833	0.00	0.43	0.593	O					3.06

5.917	0.00	0.43	0.590	O	|	|	|	|	3.05
6.000	0.00	0.43	0.587	O	|	|	|	|	3.04
6.083	0.00	0.43	0.584	O	|	|	|	|	3.04
6.167	0.00	0.43	0.581	O	|	|	|	|	3.03
6.250	0.00	0.43	0.579	O	|	|	|	|	3.02
6.333	0.00	0.43	0.576	O	|	|	|	|	3.01
6.417	0.00	0.43	0.573	O	|	|	|	|	3.00
6.500	0.00	0.42	0.570	O	|	|	|	|	3.00
6.583	0.00	0.42	0.567	O	|	|	|	|	2.99
6.667	0.00	0.42	0.564	O	|	|	|	|	2.98
6.750	0.00	0.42	0.561	O	|	|	|	|	2.97
6.833	0.00	0.42	0.558	O	|	|	|	|	2.96
6.917	0.00	0.42	0.555	O	|	|	|	|	2.96
7.000	0.00	0.42	0.552	O	|	|	|	|	2.95
7.083	0.00	0.42	0.549	O	|	|	|	|	2.94
7.167	0.00	0.41	0.547	O	|	|	|	|	2.93
7.250	0.00	0.41	0.544	O	|	|	|	|	2.92
7.333	0.00	0.41	0.541	O	|	|	|	|	2.92
7.417	0.00	0.41	0.538	O	|	|	|	|	2.91
7.500	0.00	0.41	0.535	O	|	|	|	|	2.90
7.583	0.00	0.41	0.532	O	|	|	|	|	2.89
7.667	0.00	0.41	0.530	O	|	|	|	|	2.89
7.750	0.00	0.41	0.527	O	|	|	|	|	2.88
7.833	0.00	0.40	0.524	O	|	|	|	|	2.87
7.917	0.00	0.40	0.521	O	|	|	|	|	2.86
8.000	0.00	0.40	0.519	O	|	|	|	|	2.86
8.083	0.00	0.40	0.516	O	|	|	|	|	2.85
8.167	0.00	0.40	0.513	O	|	|	|	|	2.84
8.250	0.00	0.40	0.510	O	|	|	|	|	2.83
8.333	0.00	0.40	0.508	O	|	|	|	|	2.83
8.417	0.00	0.40	0.505	O	|	|	|	|	2.82
8.500	0.00	0.39	0.502	O	|	|	|	|	2.81
8.583	0.00	0.39	0.499	O	|	|	|	|	2.80
8.667	0.00	0.39	0.497	O	|	|	|	|	2.80
8.750	0.00	0.39	0.494	O	|	|	|	|	2.79
8.833	0.00	0.39	0.491	O	|	|	|	|	2.78
8.917	0.00	0.39	0.489	O	|	|	|	|	2.77
9.000	0.00	0.39	0.486	O	|	|	|	|	2.77
9.083	0.00	0.39	0.483	O	|	|	|	|	2.76
9.167	0.00	0.39	0.481	O	|	|	|	|	2.75
9.250	0.00	0.38	0.478	O	|	|	|	|	2.75
9.333	0.00	0.38	0.475	O	|	|	|	|	2.74
9.417	0.00	0.38	0.473	O	|	|	|	|	2.73
9.500	0.00	0.38	0.470	O	|	|	|	|	2.72
9.583	0.00	0.38	0.467	O	|	|	|	|	2.72
9.667	0.00	0.38	0.465	O	|	|	|	|	2.71
9.750	0.00	0.38	0.462	O	|	|	|	|	2.70
9.833	0.00	0.38	0.460	O	|	|	|	|	2.70
9.917	0.00	0.37	0.457	O	|	|	|	|	2.69
10.000	0.00	0.37	0.454	O	|	|	|	|	2.68
10.083	0.00	0.37	0.452	O	|	|	|	|	2.67
10.167	0.00	0.36	0.449	O	|	|	|	|	2.66
10.250	0.00	0.36	0.447	O	|	|	|	|	2.66
10.333	0.00	0.36	0.444	O	|	|	|	|	2.65
10.417	0.00	0.36	0.442	O	|	|	|	|	2.64
10.500	0.00	0.35	0.440	O	|	|	|	|	2.63
10.583	0.00	0.35	0.437	O	|	|	|	|	2.63
10.667	0.00	0.35	0.435	O	|	|	|	|	2.62
10.750	0.00	0.34	0.432	O	|	|	|	|	2.61
10.833	0.00	0.34	0.430	O	|	|	|	|	2.60
10.917	0.00	0.34	0.428	O	|	|	|	|	2.60
11.000	0.00	0.34	0.425	O	|	|	|	|	2.59
11.083	0.00	0.33	0.423	O	|	|	|	|	2.58
11.167	0.00	0.33	0.421	O	|	|	|	|	2.57
11.250	0.00	0.33	0.418	O	|	|	|	|	2.57
11.333	0.00	0.33	0.416	O	|	|	|	|	2.56
11.417	0.00	0.32	0.414	O	|	|	|	|	2.55
11.500	0.00	0.32	0.412	O	|	|	|	|	2.55
11.583	0.00	0.32	0.409	O	|	|	|	|	2.54
11.667	0.00	0.32	0.407	O	|	|	|	|	2.53
11.750	0.00	0.31	0.405	O	|	|	|	|	2.53

11.833	0.00	0.31	0.403	O	|	|	|	|	2.52
11.917	0.00	0.31	0.401	O	|	|	|	|	2.51
12.000	0.00	0.31	0.399	O	|	|	|	|	2.51
12.083	0.00	0.30	0.397	O	|	|	|	|	2.50
12.167	0.00	0.30	0.395	O	|	|	|	|	2.49
12.250	0.00	0.30	0.392	O	|	|	|	|	2.49
12.333	0.00	0.30	0.390	O	|	|	|	|	2.48
12.417	0.00	0.30	0.388	O	|	|	|	|	2.47
12.500	0.00	0.29	0.386	O	|	|	|	|	2.47
12.583	0.00	0.29	0.384	O	|	|	|	|	2.46
12.667	0.00	0.29	0.382	O	|	|	|	|	2.45
12.750	0.00	0.29	0.380	O	|	|	|	|	2.45
12.833	0.00	0.28	0.378	O	|	|	|	|	2.44
12.917	0.00	0.28	0.376	O	|	|	|	|	2.44
13.000	0.00	0.28	0.374	O	|	|	|	|	2.43
13.083	0.00	0.28	0.373	O	|	|	|	|	2.42
13.167	0.00	0.28	0.371	O	|	|	|	|	2.42
13.250	0.00	0.27	0.369	O	|	|	|	|	2.41
13.333	0.00	0.27	0.367	O	|	|	|	|	2.41
13.417	0.00	0.27	0.365	O	|	|	|	|	2.40
13.500	0.00	0.27	0.363	O	|	|	|	|	2.39
13.583	0.00	0.27	0.361	O	|	|	|	|	2.39
13.667	0.00	0.27	0.359	O	|	|	|	|	2.38
13.750	0.00	0.27	0.358	O	|	|	|	|	2.37
13.833	0.00	0.27	0.356	O	|	|	|	|	2.36
13.917	0.00	0.27	0.354	O	|	|	|	|	2.36
14.000	0.00	0.26	0.352	O	|	|	|	|	2.35
14.083	0.00	0.26	0.350	O	|	|	|	|	2.34
14.167	0.00	0.26	0.349	O	|	|	|	|	2.34
14.250	0.00	0.26	0.347	O	|	|	|	|	2.33
14.333	0.00	0.26	0.345	O	|	|	|	|	2.32
14.417	0.00	0.26	0.343	O	|	|	|	|	2.31
14.500	0.00	0.26	0.341	O	|	|	|	|	2.31
14.583	0.00	0.26	0.339	O	|	|	|	|	2.30
14.667	0.00	0.26	0.338	O	|	|	|	|	2.29
14.750	0.00	0.26	0.336	O	|	|	|	|	2.29
14.833	0.00	0.26	0.334	O	|	|	|	|	2.28
14.917	0.00	0.26	0.332	O	|	|	|	|	2.27
15.000	0.00	0.26	0.331	O	|	|	|	|	2.26
15.083	0.00	0.26	0.329	O	|	|	|	|	2.26
15.167	0.00	0.26	0.327	O	|	|	|	|	2.25
15.250	0.00	0.26	0.325	O	|	|	|	|	2.24
15.333	0.00	0.26	0.323	O	|	|	|	|	2.24
15.417	0.00	0.25	0.322	O	|	|	|	|	2.23
15.500	0.00	0.25	0.320	O	|	|	|	|	2.22
15.583	0.00	0.25	0.318	O	|	|	|	|	2.22
15.667	0.00	0.25	0.316	O	|	|	|	|	2.21
15.750	0.00	0.25	0.315	O	|	|	|	|	2.20
15.833	0.00	0.25	0.313	O	|	|	|	|	2.20
15.917	0.00	0.25	0.311	O	|	|	|	|	2.19
16.000	0.00	0.25	0.310	O	|	|	|	|	2.18
16.083	0.00	0.25	0.308	O	|	|	|	|	2.18
16.167	0.00	0.25	0.306	O	|	|	|	|	2.17
16.250	0.00	0.25	0.304	O	|	|	|	|	2.16
16.333	0.00	0.25	0.303	O	|	|	|	|	2.15
16.417	0.00	0.25	0.301	O	|	|	|	|	2.15
16.500	0.00	0.25	0.299	O	|	|	|	|	2.14
16.583	0.00	0.25	0.298	O	|	|	|	|	2.13
16.667	0.00	0.25	0.296	O	|	|	|	|	2.13
16.750	0.00	0.25	0.294	O	|	|	|	|	2.12
16.833	0.00	0.25	0.292	O	|	|	|	|	2.11
16.917	0.00	0.24	0.291	O	|	|	|	|	2.11
17.000	0.00	0.24	0.289	O	|	|	|	|	2.10
17.083	0.00	0.24	0.287	O	|	|	|	|	2.09
17.167	0.00	0.24	0.286	O	|	|	|	|	2.09
17.250	0.00	0.24	0.284	O	|	|	|	|	2.08
17.333	0.00	0.24	0.282	O	|	|	|	|	2.08
17.417	0.00	0.24	0.281	O	|	|	|	|	2.07
17.500	0.00	0.24	0.279	O	|	|	|	|	2.06
17.583	0.00	0.24	0.277	O	|	|	|	|	2.06
17.667	0.00	0.24	0.276	O	|	|	|	|	2.05

17.750	0.00	0.24	0.274	O					2.04
17.833	0.00	0.24	0.272	O					2.04
17.917	0.00	0.24	0.271	O					2.03
18.000	0.00	0.24	0.269	O					2.02
18.083	0.00	0.24	0.268	O					2.02
18.167	0.00	0.24	0.266	O					2.01
18.250	0.00	0.24	0.264	O					2.00
18.333	0.00	0.24	0.263	O					2.00
18.417	0.00	0.24	0.261	O					1.99
18.500	0.00	0.23	0.259	O					1.98
18.583	0.00	0.23	0.258	O					1.98
18.667	0.00	0.23	0.256	O					1.97
18.750	0.00	0.23	0.255	O					1.97
18.833	0.00	0.23	0.253	O					1.96
18.917	0.00	0.23	0.251	O					1.95
19.000	0.00	0.23	0.250	O					1.95
19.083	0.00	0.23	0.248	O					1.94
19.167	0.00	0.23	0.247	O					1.93
19.250	0.00	0.23	0.245	O					1.93
19.333	0.00	0.23	0.243	O					1.92
19.417	0.00	0.23	0.242	O					1.92
19.500	0.00	0.23	0.240	O					1.91
19.583	0.00	0.23	0.239	O					1.90
19.667	0.00	0.23	0.237	O					1.90
19.750	0.00	0.23	0.236	O					1.89
19.833	0.00	0.23	0.234	O					1.88
19.917	0.00	0.23	0.232	O					1.88
20.000	0.00	0.23	0.231	O					1.87
20.083	0.00	0.22	0.229	O					1.87
20.167	0.00	0.22	0.228	O					1.86
20.250	0.00	0.22	0.226	O					1.85
20.333	0.00	0.22	0.225	O					1.85
20.417	0.00	0.22	0.223	O					1.84
20.500	0.00	0.22	0.222	O					1.84
20.583	0.00	0.22	0.220	O					1.83
20.667	0.00	0.22	0.219	O					1.82
20.750	0.00	0.22	0.217	O					1.82
20.833	0.00	0.22	0.216	O					1.81
20.917	0.00	0.22	0.214	O					1.81
21.000	0.00	0.22	0.213	O					1.80
21.083	0.00	0.22	0.211	O					1.79
21.167	0.00	0.22	0.210	O					1.79
21.250	0.00	0.22	0.208	O					1.78
21.333	0.00	0.22	0.207	O					1.78
21.417	0.00	0.22	0.205	O					1.77
21.500	0.00	0.22	0.204	O					1.77
21.583	0.00	0.22	0.202	O					1.76
21.667	0.00	0.22	0.201	O					1.75
21.750	0.00	0.21	0.199	O					1.75
21.833	0.00	0.21	0.198	O					1.74
21.917	0.00	0.21	0.196	O					1.74
22.000	0.00	0.21	0.195	O					1.73
22.083	0.00	0.21	0.193	O					1.72
22.167	0.00	0.21	0.192	O					1.72
22.250	0.00	0.21	0.190	O					1.71
22.333	0.00	0.21	0.189	O					1.71
22.417	0.00	0.21	0.187	O					1.70
22.500	0.00	0.21	0.186	O					1.69
22.583	0.00	0.21	0.184	O					1.68
22.667	0.00	0.21	0.183	O					1.67
22.750	0.00	0.21	0.182	O					1.66
22.833	0.00	0.21	0.180	O					1.65
22.917	0.00	0.21	0.179	O					1.64
23.000	0.00	0.20	0.177	O					1.63
23.083	0.00	0.20	0.176	O					1.62
23.167	0.00	0.20	0.175	O					1.62
23.250	0.00	0.20	0.173	O					1.61
23.333	0.00	0.20	0.172	O					1.60
23.417	0.00	0.20	0.170	O					1.59
23.500	0.00	0.20	0.169	O					1.58
23.583	0.00	0.20	0.168	O					1.57

23.667	0.00	0.20	0.166	O	|	|	|	|	1.56
23.750	0.00	0.20	0.165	O	|	|	|	|	1.55
23.833	0.00	0.19	0.164	O	|	|	|	|	1.54
23.917	0.00	0.19	0.162	O	|	|	|	|	1.53
24.000	0.00	0.19	0.161	O	|	|	|	|	1.52
24.083	0.00	0.19	0.160	O	|	|	|	|	1.51
24.167	0.00	0.19	0.158	O	|	|	|	|	1.50
24.250	0.00	0.19	0.157	O	|	|	|	|	1.50
24.333	0.00	0.19	0.156	O	|	|	|	|	1.49
24.417	0.00	0.19	0.154	O	|	|	|	|	1.48
24.500	0.00	0.19	0.153	O	|	|	|	|	1.47
24.583	0.00	0.19	0.152	O	|	|	|	|	1.46
24.667	0.00	0.19	0.150	O	|	|	|	|	1.45
24.750	0.00	0.18	0.149	O	|	|	|	|	1.44
24.833	0.00	0.18	0.148	O	|	|	|	|	1.43
24.917	0.00	0.18	0.147	O	|	|	|	|	1.43
25.000	0.00	0.18	0.145	O	|	|	|	|	1.42
25.083	0.00	0.18	0.144	O	|	|	|	|	1.41
25.167	0.00	0.18	0.143	O	|	|	|	|	1.40
25.250	0.00	0.18	0.142	O	|	|	|	|	1.39
25.333	0.00	0.18	0.140	O	|	|	|	|	1.38
25.417	0.00	0.18	0.139	O	|	|	|	|	1.38
25.500	0.00	0.18	0.138	O	|	|	|	|	1.37
25.583	0.00	0.18	0.137	O	|	|	|	|	1.36
25.667	0.00	0.18	0.136	O	|	|	|	|	1.35
25.750	0.00	0.17	0.134	O	|	|	|	|	1.34
25.833	0.00	0.17	0.133	O	|	|	|	|	1.33
25.917	0.00	0.17	0.132	O	|	|	|	|	1.33
26.000	0.00	0.17	0.131	O	|	|	|	|	1.32
26.083	0.00	0.17	0.130	O	|	|	|	|	1.31
26.167	0.00	0.17	0.128	O	|	|	|	|	1.30
26.250	0.00	0.17	0.127	O	|	|	|	|	1.29
26.333	0.00	0.17	0.126	O	|	|	|	|	1.29
26.417	0.00	0.17	0.125	O	|	|	|	|	1.28
26.500	0.00	0.17	0.124	O	|	|	|	|	1.27
26.583	0.00	0.17	0.123	O	|	|	|	|	1.26
26.667	0.00	0.17	0.121	O	|	|	|	|	1.25
26.750	0.00	0.16	0.120	O	|	|	|	|	1.25
26.833	0.00	0.16	0.119	O	|	|	|	|	1.24
26.917	0.00	0.16	0.118	O	|	|	|	|	1.23
27.000	0.00	0.16	0.117	O	|	|	|	|	1.22
27.083	0.00	0.16	0.116	O	|	|	|	|	1.22
27.167	0.00	0.16	0.115	O	|	|	|	|	1.21
27.250	0.00	0.16	0.114	O	|	|	|	|	1.20
27.333	0.00	0.16	0.113	O	|	|	|	|	1.19
27.417	0.00	0.16	0.111	O	|	|	|	|	1.19
27.500	0.00	0.16	0.110	O	|	|	|	|	1.18
27.583	0.00	0.16	0.109	O	|	|	|	|	1.17
27.667	0.00	0.16	0.108	O	|	|	|	|	1.16
27.750	0.00	0.16	0.107	O	|	|	|	|	1.16
27.833	0.00	0.15	0.106	O	|	|	|	|	1.15
27.917	0.00	0.15	0.105	O	|	|	|	|	1.14
28.000	0.00	0.15	0.104	O	|	|	|	|	1.13
28.083	0.00	0.15	0.103	O	|	|	|	|	1.13
28.167	0.00	0.15	0.102	O	|	|	|	|	1.12
28.250	0.00	0.15	0.101	O	|	|	|	|	1.11
28.333	0.00	0.15	0.100	O	|	|	|	|	1.11
28.417	0.00	0.15	0.099	O	|	|	|	|	1.10
28.500	0.00	0.15	0.098	O	|	|	|	|	1.09
28.583	0.00	0.15	0.097	O	|	|	|	|	1.09
28.667	0.00	0.15	0.096	O	|	|	|	|	1.08
28.750	0.00	0.15	0.095	O	|	|	|	|	1.07
28.833	0.00	0.15	0.094	O	|	|	|	|	1.06
28.917	0.00	0.15	0.093	O	|	|	|	|	1.06
29.000	0.00	0.14	0.092	O	|	|	|	|	1.05
29.083	0.00	0.14	0.091	O	|	|	|	|	1.04
29.167	0.00	0.14	0.090	O	|	|	|	|	1.04
29.250	0.00	0.14	0.089	O	|	|	|	|	1.03
29.333	0.00	0.14	0.088	O	|	|	|	|	1.02
29.417	0.00	0.14	0.087	O	|	|	|	|	1.02
29.500	0.00	0.14	0.086	O	|	|	|	|	1.01

29.583	0.00	0.14	0.085	O	|	|	|	|	1.00
29.667	0.00	0.14	0.084	O	|	|	|	|	1.00
29.750	0.00	0.14	0.083	O	|	|	|	|	0.99
29.833	0.00	0.14	0.082	O	|	|	|	|	0.98
29.917	0.00	0.14	0.081	O	|	|	|	|	0.98
30.000	0.00	0.14	0.080	O	|	|	|	|	0.97
30.083	0.00	0.14	0.079	O	|	|	|	|	0.97
30.167	0.00	0.14	0.078	O	|	|	|	|	0.96
30.250	0.00	0.13	0.077	O	|	|	|	|	0.95
30.333	0.00	0.13	0.076	O	|	|	|	|	0.95
30.417	0.00	0.13	0.075	O	|	|	|	|	0.94
30.500	0.00	0.13	0.074	O	|	|	|	|	0.93
30.583	0.00	0.13	0.074	O	|	|	|	|	0.93
30.667	0.00	0.13	0.073	O	|	|	|	|	0.92
30.750	0.00	0.13	0.072	O	|	|	|	|	0.92
30.833	0.00	0.13	0.071	O	|	|	|	|	0.91
30.917	0.00	0.13	0.070	O	|	|	|	|	0.90
31.000	0.00	0.13	0.069	O	|	|	|	|	0.90
31.083	0.00	0.13	0.068	O	|	|	|	|	0.89
31.167	0.00	0.13	0.067	O	|	|	|	|	0.89
31.250	0.00	0.13	0.066	O	|	|	|	|	0.88
31.333	0.00	0.13	0.065	O	|	|	|	|	0.87
31.417	0.00	0.13	0.065	O	|	|	|	|	0.87
31.500	0.00	0.13	0.064	O	|	|	|	|	0.86
31.583	0.00	0.12	0.063	O	|	|	|	|	0.86
31.667	0.00	0.12	0.062	O	|	|	|	|	0.85
31.750	0.00	0.12	0.061	O	|	|	|	|	0.84
31.833	0.00	0.12	0.060	O	|	|	|	|	0.84
31.917	0.00	0.12	0.059	O	|	|	|	|	0.83
32.000	0.00	0.12	0.059	O	|	|	|	|	0.83
32.083	0.00	0.12	0.058	O	|	|	|	|	0.82
32.167	0.00	0.12	0.057	O	|	|	|	|	0.82
32.250	0.00	0.12	0.056	O	|	|	|	|	0.81
32.333	0.00	0.12	0.055	O	|	|	|	|	0.80
32.417	0.00	0.12	0.054	O	|	|	|	|	0.80
32.500	0.00	0.12	0.054	O	|	|	|	|	0.79
32.583	0.00	0.12	0.053	O	|	|	|	|	0.79
32.667	0.00	0.12	0.052	O	|	|	|	|	0.78
32.750	0.00	0.12	0.051	O	|	|	|	|	0.78
32.833	0.00	0.12	0.050	O	|	|	|	|	0.77
32.917	0.00	0.12	0.050	O	|	|	|	|	0.77
33.000	0.00	0.12	0.049	O	|	|	|	|	0.76
33.083	0.00	0.11	0.048	O	|	|	|	|	0.75
33.167	0.00	0.11	0.047	O	|	|	|	|	0.75
33.250	0.00	0.11	0.046	O	|	|	|	|	0.74
33.333	0.00	0.11	0.046	O	|	|	|	|	0.74
33.417	0.00	0.11	0.045	O	|	|	|	|	0.73
33.500	0.00	0.11	0.044	O	|	|	|	|	0.73
33.583	0.00	0.11	0.043	O	|	|	|	|	0.72
33.667	0.00	0.11	0.043	O	|	|	|	|	0.72
33.750	0.00	0.11	0.042	O	|	|	|	|	0.71
33.833	0.00	0.11	0.041	O	|	|	|	|	0.71
33.917	0.00	0.11	0.040	O	|	|	|	|	0.70
34.000	0.00	0.11	0.040	O	|	|	|	|	0.69
34.083	0.00	0.11	0.039	O	|	|	|	|	0.68
34.167	0.00	0.10	0.038	O	|	|	|	|	0.67
34.250	0.00	0.10	0.037	O	|	|	|	|	0.65
34.333	0.00	0.10	0.037	O	|	|	|	|	0.64
34.417	0.00	0.10	0.036	O	|	|	|	|	0.63

Remaining water in basin = 0.04 (Ac.Ft)

**********HYDROGRAPH DATA**********

Number of intervals = 413
Time interval = 5.0 (Min.)
Maximum/Peak flow rate = 0.500 (CFS)
Total volume = 0.757 (Ac.Ft)

Status of hydrographs being held in storage

Stream 1	Stream 2	Stream 3	Stream 4	Stream 5

Peak (CFS)	0.000	0.000	0.000	0.000	0.000
Vol (Ac.Ft)	0.000	0.000	0.000	0.000	0.000

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                    FLOOD HYDROGRAPH ROUTING PROGRAM
                Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2004
                            Study date: 08/18/25

      ---------------------------------------------------------------------



      Program License Serial Number 5006

      ---------------------------------------------------------------------
      ********************* HYDROGRAPH INFORMATION **********************

                    From study/file name: PROB35.rte
      ****************************HYDROGRAPH DATA****************************
                    Number of intervals =    49
                    Time interval =    5.0 (Min.)
                    Maximum/Peak flow rate =       12.711 (CFS)
                    Total volume =       1.024 (Ac.Ft)
             Status of hydrographs being held in storage
                       Stream 1  Stream 2  Stream 3  Stream 4  Stream 5
             Peak (CFS)      0.000     0.000     0.000     0.000     0.000
             Vol (Ac.Ft)      0.000     0.000     0.000     0.000     0.000
      ***********************************************************************



      +++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
      Process from Point/Station        0.000 to Point/Station        0.000
      **** RETARDING BASIN ROUTING ****
      _______________________________________________________________________

      User entry of depth-outflow-storage data
      ---------------------------------------------------------------------
      Total number of inflow hydrograph intervals = 49
      Hydrograph time unit =  5.000 (Min.)
      Initial depth in storage basin =   0.00(Ft.)
      ---------------------------------------------------------------------
      ---------------------------------------------------------------------
      Initial basin depth =   0.00 (Ft.)
      Initial basin storage =      0.00 (Ac.Ft)
      Initial basin outflow =   0.00 (CFS)
      ---------------------------------------------------------------------
      ---------------------------------------------------------------------
      Depth vs. Storage and Depth vs. Discharge data:
       Basin Depth  Storage    Outflow   (S-O*dt/2)   (S+O*dt/2)
            (Ft.)    (Ac.Ft)    (CFS)     (Ac.Ft)    (Ac.Ft)
      ---------------------------------------------------------------------
        0.000      0.000      0.000      0.000        0.000
        0.700      0.040      0.109      0.040        0.040
        1.700      0.187      0.211      0.186        0.188
        2.400      0.365      0.269      0.364        0.366
        2.700      0.461      0.377      0.460        0.462
        3.700      0.829      0.537      0.827        0.831
        4.700      1.249      0.651      1.247        1.251
        5.700      1.723      0.746      1.720        1.726
        6.700      2.252      1.870      2.246        2.258
        7.700      2.841      2.376      2.833        2.849
        8.300      3.223     38.499      3.090        3.356
        8.700      3.491    113.554      3.100        3.882
        9.700      4.203    441.782      2.682        5.724
      ---------------------------------------------------------------------
                    Hydrograph Detention Basin Routing
      ---------------------------------------------------------------------

      Graph values: 'I'= unit inflow; 'O'=outflow at time shown
      ---------------------------------------------------------------------
Time   Inflow  Outflow    Storage                                        Depth
```

(Hours)	(CFS)	(CFS)	(Ac.Ft)	.0	3.2	6.36	9.53	12.71	(Ft.)
0.083	0.13	0.00	0.000	O					0.01
0.167	0.66	0.01	0.003	OI					0.05
0.250	1.08	0.02	0.009	O I					0.16
0.333	1.21	0.05	0.017	O I					0.29
0.417	1.41	0.07	0.025	O I					0.44
0.500	1.62	0.10	0.035	O I					0.62
0.583	1.80	0.11	0.046	O I					0.74
0.667	1.86	0.12	0.058	O I					0.82
0.750	1.96	0.13	0.070	O I					0.91
0.833	2.05	0.14	0.083	O I					0.99
0.917	1.99	0.15	0.096	O I					1.08
1.000	1.99	0.16	0.109	O I					1.17
1.083	2.13	0.17	0.122	O I					1.26
1.167	2.37	0.18	0.136	O I					1.35
1.250	2.54	0.19	0.152	O I					1.46
1.333	2.59	0.20	0.168	O I					1.57
1.417	2.61	0.21	0.185	O I					1.68
1.500	2.82	0.22	0.202	O I					1.76
1.583	3.03	0.22	0.221	O I					1.83
1.667	3.05	0.23	0.240	O I					1.91
1.750	3.21	0.23	0.260	O I					1.99
1.833	3.58	0.24	0.282	O I					2.07
1.917	3.71	0.25	0.305	O I					2.16
2.000	3.65	0.26	0.329	O I					2.26
2.083	3.67	0.26	0.352	O I					2.35
2.167	3.96	0.28	0.376	O I					2.44
2.250	5.05	0.31	0.405	O I					2.53
2.333	6.16	0.36	0.442	O I					2.64
2.417	6.41	0.39	0.482	O I					2.76
2.500	8.61	0.41	0.531	O	I				2.89
2.583	11.28	0.44	0.597	O			I		3.07
2.667	12.71	0.47	0.676	O				I	3.29
2.750	11.38	0.51	0.756	O			I		3.50
2.833	7.71	0.53	0.818	O	I				3.67
2.917	5.20	0.55	0.859	O	I				3.77
3.000	4.08	0.55	0.887	O	I				3.84
3.083	2.97	0.56	0.908	O	I				3.89
3.167	1.96	0.56	0.921	O I					3.92
3.250	1.35	0.56	0.928	O I					3.94
3.333	0.99	0.57	0.932	OI					3.95
3.417	0.71	0.57	0.934	O					3.95
3.500	0.54	0.57	0.935	O					3.95
3.583	0.38	0.57	0.934	IO					3.95
3.667	0.26	0.57	0.932	IO					3.95
3.750	0.14	0.56	0.930	IO					3.94
3.833	0.05	0.56	0.927	IO					3.93
3.917	0.03	0.56	0.923	IO					3.92
4.000	0.02	0.56	0.919	IO					3.92
4.083	0.01	0.56	0.916	IO					3.91
4.167	0.00	0.56	0.912	IO					3.90
4.250	0.00	0.56	0.908	IO					3.89
4.333	0.00	0.56	0.904	IO					3.88
4.417	0.00	0.56	0.900	IO					3.87
4.500	0.00	0.56	0.896	IO					3.86
4.583	0.00	0.55	0.893	IO					3.85
4.667	0.00	0.55	0.889	IO					3.84
4.750	0.00	0.55	0.885	IO					3.83
4.833	0.00	0.55	0.881	IO					3.82
4.917	0.00	0.55	0.877	IO					3.82
5.000	0.00	0.55	0.874	IO					3.81
5.083	0.00	0.55	0.870	IO					3.80
5.167	0.00	0.55	0.866	IO					3.79
5.250	0.00	0.55	0.862	IO					3.78
5.333	0.00	0.55	0.859	IO					3.77
5.417	0.00	0.54	0.855	IO					3.76
5.500	0.00	0.54	0.851	IO					3.75
5.583	0.00	0.54	0.847	IO					3.74
5.667	0.00	0.54	0.844	IO					3.73
5.750	0.00	0.54	0.840	IO					3.73
5.833	0.00	0.54	0.836	IO					3.72

5.917	0.00	0.54	0.832	IO				3.71
6.000	0.00	0.54	0.829	IO				3.70
6.083	0.00	0.54	0.825	IO				3.69
6.167	0.00	0.53	0.821	IO				3.68
6.250	0.00	0.53	0.818	IO				3.67
6.333	0.00	0.53	0.814	IO				3.66
6.417	0.00	0.53	0.810	IO				3.65
6.500	0.00	0.53	0.807	IO				3.64
6.583	0.00	0.53	0.803	IO				3.63
6.667	0.00	0.52	0.800	IO				3.62
6.750	0.00	0.52	0.796	IO				3.61
6.833	0.00	0.52	0.792	IO				3.60
6.917	0.00	0.52	0.789	IO				3.59
7.000	0.00	0.52	0.785	IO				3.58
7.083	0.00	0.52	0.782	IO				3.57
7.167	0.00	0.51	0.778	IO				3.56
7.250	0.00	0.51	0.775	IO				3.55
7.333	0.00	0.51	0.771	IO				3.54
7.417	0.00	0.51	0.767	IO				3.53
7.500	0.00	0.51	0.764	IO				3.52
7.583	0.00	0.51	0.760	IO				3.51
7.667	0.00	0.51	0.757	IO				3.50
7.750	0.00	0.50	0.754	IO				3.49
7.833	0.00	0.50	0.750	IO				3.49
7.917	0.00	0.50	0.747	IO				3.48
8.000	0.00	0.50	0.743	IO				3.47
8.083	0.00	0.50	0.740	IO				3.46
8.167	0.00	0.50	0.736	IO				3.45
8.250	0.00	0.50	0.733	IO				3.44
8.333	0.00	0.49	0.729	IO				3.43
8.417	0.00	0.49	0.726	IO				3.42
8.500	0.00	0.49	0.723	IO				3.41
8.583	0.00	0.49	0.719	IO				3.40
8.667	0.00	0.49	0.716	IO				3.39
8.750	0.00	0.49	0.713	IO				3.38
8.833	0.00	0.48	0.709	IO				3.37
8.917	0.00	0.48	0.706	IO				3.37
9.000	0.00	0.48	0.703	IO				3.36
9.083	0.00	0.48	0.699	IO				3.35
9.167	0.00	0.48	0.696	IO				3.34
9.250	0.00	0.48	0.693	IO				3.33
9.333	0.00	0.48	0.689	IO				3.32
9.417	0.00	0.47	0.686	IO				3.31
9.500	0.00	0.47	0.683	IO				3.30
9.583	0.00	0.47	0.680	IO				3.29
9.667	0.00	0.47	0.676	IO				3.29
9.750	0.00	0.47	0.673	IO				3.28
9.833	0.00	0.47	0.670	IO				3.27
9.917	0.00	0.47	0.667	IO				3.26
10.000	0.00	0.47	0.663	IO				3.25
10.083	0.00	0.46	0.660	IO				3.24
10.167	0.00	0.46	0.657	IO				3.23
10.250	0.00	0.46	0.654	IO				3.22
10.333	0.00	0.46	0.651	IO				3.22
10.417	0.00	0.46	0.648	IO				3.21
10.500	0.00	0.46	0.644	IO				3.20
10.583	0.00	0.46	0.641	IO				3.19
10.667	0.00	0.45	0.638	IO				3.18
10.750	0.00	0.45	0.635	IO				3.17
10.833	0.00	0.45	0.632	IO				3.16
10.917	0.00	0.45	0.629	IO				3.16
11.000	0.00	0.45	0.626	IO				3.15
11.083	0.00	0.45	0.623	IO				3.14
11.167	0.00	0.45	0.620	IO				3.13
11.250	0.00	0.44	0.616	IO				3.12
11.333	0.00	0.44	0.613	IO				3.11
11.417	0.00	0.44	0.610	IO				3.11
11.500	0.00	0.44	0.607	IO				3.10
11.583	0.00	0.44	0.604	IO				3.09
11.667	0.00	0.44	0.601	IO				3.08
11.750	0.00	0.44	0.598	IO				3.07

11.833	0.00	0.44	0.595	IO	|	|	|	3.06
11.917	0.00	0.43	0.592	IO	|	|	|	3.06
12.000	0.00	0.43	0.589	IO	|	|	|	3.05
12.083	0.00	0.43	0.586	IO	|	|	|	3.04
12.167	0.00	0.43	0.583	IO	|	|	|	3.03
12.250	0.00	0.43	0.580	IO	|	|	|	3.02
12.333	0.00	0.43	0.577	IO	|	|	|	3.02
12.417	0.00	0.43	0.574	IO	|	|	|	3.01
12.500	0.00	0.43	0.572	IO	|	|	|	3.00
12.583	0.00	0.42	0.569	IO	|	|	|	2.99
12.667	0.00	0.42	0.566	IO	|	|	|	2.98
12.750	0.00	0.42	0.563	IO	|	|	|	2.98
12.833	0.00	0.42	0.560	IO	|	|	|	2.97
12.917	0.00	0.42	0.557	IO	|	|	|	2.96
13.000	0.00	0.42	0.554	IO	|	|	|	2.95
13.083	0.00	0.42	0.551	IO	|	|	|	2.95
13.167	0.00	0.42	0.548	IO	|	|	|	2.94
13.250	0.00	0.41	0.546	IO	|	|	|	2.93
13.333	0.00	0.41	0.543	IO	|	|	|	2.92
13.417	0.00	0.41	0.540	IO	|	|	|	2.91
13.500	0.00	0.41	0.537	IO	|	|	|	2.91
13.583	0.00	0.41	0.534	IO	|	|	|	2.90
13.667	0.00	0.41	0.531	IO	|	|	|	2.89
13.750	0.00	0.41	0.529	IO	|	|	|	2.88
13.833	0.00	0.41	0.526	IO	|	|	|	2.88
13.917	0.00	0.40	0.523	IO	|	|	|	2.87
14.000	0.00	0.40	0.520	IO	|	|	|	2.86
14.083	0.00	0.40	0.517	IO	|	|	|	2.85
14.167	0.00	0.40	0.515	IO	|	|	|	2.85
14.250	0.00	0.40	0.512	IO	|	|	|	2.84
14.333	0.00	0.40	0.509	IO	|	|	|	2.83
14.417	0.00	0.40	0.506	O	|	|	|	2.82
14.500	0.00	0.40	0.504	O	|	|	|	2.82
14.583	0.00	0.39	0.501	O	|	|	|	2.81
14.667	0.00	0.39	0.498	O	|	|	|	2.80
14.750	0.00	0.39	0.496	O	|	|	|	2.79
14.833	0.00	0.39	0.493	O	|	|	|	2.79
14.917	0.00	0.39	0.490	O	|	|	|	2.78
15.000	0.00	0.39	0.488	O	|	|	|	2.77
15.083	0.00	0.39	0.485	O	|	|	|	2.76
15.167	0.00	0.39	0.482	O	|	|	|	2.76
15.250	0.00	0.39	0.480	O	|	|	|	2.75
15.333	0.00	0.38	0.477	O	|	|	|	2.74
15.417	0.00	0.38	0.474	O	|	|	|	2.74
15.500	0.00	0.38	0.472	O	|	|	|	2.73
15.583	0.00	0.38	0.469	O	|	|	|	2.72
15.667	0.00	0.38	0.466	O	|	|	|	2.71
15.750	0.00	0.38	0.464	O	|	|	|	2.71
15.833	0.00	0.38	0.461	O	|	|	|	2.70
15.917	0.00	0.37	0.459	O	|	|	|	2.69
16.000	0.00	0.37	0.456	O	|	|	|	2.68
16.083	0.00	0.37	0.453	O	|	|	|	2.68
16.167	0.00	0.37	0.451	O	|	|	|	2.67
16.250	0.00	0.36	0.448	O	|	|	|	2.66
16.333	0.00	0.36	0.446	O	|	|	|	2.65
16.417	0.00	0.36	0.443	O	|	|	|	2.65
16.500	0.00	0.35	0.441	O	|	|	|	2.64
16.583	0.00	0.35	0.439	O	|	|	|	2.63
16.667	0.00	0.35	0.436	O	|	|	|	2.62
16.750	0.00	0.35	0.434	O	|	|	|	2.61
16.833	0.00	0.34	0.431	O	|	|	|	2.61
16.917	0.00	0.34	0.429	O	|	|	|	2.60
17.000	0.00	0.34	0.427	O	|	|	|	2.59
17.083	0.00	0.34	0.424	O	|	|	|	2.59
17.167	0.00	0.33	0.422	O	|	|	|	2.58
17.250	0.00	0.33	0.420	O	|	|	|	2.57
17.333	0.00	0.33	0.418	O	|	|	|	2.56
17.417	0.00	0.33	0.415	O	|	|	|	2.56
17.500	0.00	0.32	0.413	O	|	|	|	2.55
17.583	0.00	0.32	0.411	O	|	|	|	2.54
17.667	0.00	0.32	0.409	O	|	|	|	2.54

17.750	0.00	0.32	0.406	O	|	|	|	|	2.53
17.833	0.00	0.31	0.404	O	|	|	|	|	2.52
17.917	0.00	0.31	0.402	O	|	|	|	|	2.52
18.000	0.00	0.31	0.400	O	|	|	|	|	2.51
18.083	0.00	0.31	0.398	O	|	|	|	|	2.50
18.167	0.00	0.30	0.396	O	|	|	|	|	2.50
18.250	0.00	0.30	0.394	O	|	|	|	|	2.49
18.333	0.00	0.30	0.392	O	|	|	|	|	2.48
18.417	0.00	0.30	0.390	O	|	|	|	|	2.48
18.500	0.00	0.29	0.388	O	|	|	|	|	2.47
18.583	0.00	0.29	0.386	O	|	|	|	|	2.46
18.667	0.00	0.29	0.384	O	|	|	|	|	2.46
18.750	0.00	0.29	0.382	O	|	|	|	|	2.45
18.833	0.00	0.29	0.380	O	|	|	|	|	2.45
18.917	0.00	0.28	0.378	O	|	|	|	|	2.44
19.000	0.00	0.28	0.376	O	|	|	|	|	2.43
19.083	0.00	0.28	0.374	O	|	|	|	|	2.43
19.167	0.00	0.28	0.372	O	|	|	|	|	2.42
19.250	0.00	0.27	0.370	O	|	|	|	|	2.42
19.333	0.00	0.27	0.368	O	|	|	|	|	2.41
19.417	0.00	0.27	0.366	O	|	|	|	|	2.40
19.500	0.00	0.27	0.364	O	|	|	|	|	2.40
19.583	0.00	0.27	0.362	O	|	|	|	|	2.39
19.667	0.00	0.27	0.361	O	|	|	|	|	2.38
19.750	0.00	0.27	0.359	O	|	|	|	|	2.38
19.833	0.00	0.27	0.357	O	|	|	|	|	2.37
19.917	0.00	0.27	0.355	O	|	|	|	|	2.36
20.000	0.00	0.27	0.353	O	|	|	|	|	2.35
20.083	0.00	0.26	0.351	O	|	|	|	|	2.35
20.167	0.00	0.26	0.350	O	|	|	|	|	2.34
20.250	0.00	0.26	0.348	O	|	|	|	|	2.33
20.333	0.00	0.26	0.346	O	|	|	|	|	2.33
20.417	0.00	0.26	0.344	O	|	|	|	|	2.32
20.500	0.00	0.26	0.342	O	|	|	|	|	2.31
20.583	0.00	0.26	0.341	O	|	|	|	|	2.30
20.667	0.00	0.26	0.339	O	|	|	|	|	2.30
20.750	0.00	0.26	0.337	O	|	|	|	|	2.29
20.833	0.00	0.26	0.335	O	|	|	|	|	2.28
20.917	0.00	0.26	0.333	O	|	|	|	|	2.28
21.000	0.00	0.26	0.332	O	|	|	|	|	2.27
21.083	0.00	0.26	0.330	O	|	|	|	|	2.26
21.167	0.00	0.26	0.328	O	|	|	|	|	2.25
21.250	0.00	0.26	0.326	O	|	|	|	|	2.25
21.333	0.00	0.26	0.325	O	|	|	|	|	2.24
21.417	0.00	0.26	0.323	O	|	|	|	|	2.23
21.500	0.00	0.25	0.321	O	|	|	|	|	2.23
21.583	0.00	0.25	0.319	O	|	|	|	|	2.22
21.667	0.00	0.25	0.318	O	|	|	|	|	2.21
21.750	0.00	0.25	0.316	O	|	|	|	|	2.21
21.833	0.00	0.25	0.314	O	|	|	|	|	2.20
21.917	0.00	0.25	0.312	O	|	|	|	|	2.19
22.000	0.00	0.25	0.311	O	|	|	|	|	2.19
22.083	0.00	0.25	0.309	O	|	|	|	|	2.18
22.167	0.00	0.25	0.307	O	|	|	|	|	2.17
22.250	0.00	0.25	0.305	O	|	|	|	|	2.17
22.333	0.00	0.25	0.304	O	|	|	|	|	2.16
22.417	0.00	0.25	0.302	O	|	|	|	|	2.15
22.500	0.00	0.25	0.300	O	|	|	|	|	2.15
22.583	0.00	0.25	0.299	O	|	|	|	|	2.14
22.667	0.00	0.25	0.297	O	|	|	|	|	2.13
22.750	0.00	0.25	0.295	O	|	|	|	|	2.13
22.833	0.00	0.25	0.294	O	|	|	|	|	2.12
22.917	0.00	0.25	0.292	O	|	|	|	|	2.11
23.000	0.00	0.24	0.290	O	|	|	|	|	2.11
23.083	0.00	0.24	0.288	O	|	|	|	|	2.10
23.167	0.00	0.24	0.287	O	|	|	|	|	2.09
23.250	0.00	0.24	0.285	O	|	|	|	|	2.09
23.333	0.00	0.24	0.283	O	|	|	|	|	2.08
23.417	0.00	0.24	0.282	O	|	|	|	|	2.07
23.500	0.00	0.24	0.280	O	|	|	|	|	2.07
23.583	0.00	0.24	0.278	O	|	|	|	|	2.06

23.667	0.00	0.24	0.277	O	|	|	|	|	2.05
23.750	0.00	0.24	0.275	O	|	|	|	|	2.05
23.833	0.00	0.24	0.273	O	|	|	|	|	2.04
23.917	0.00	0.24	0.272	O	|	|	|	|	2.03
24.000	0.00	0.24	0.270	O	|	|	|	|	2.03
24.083	0.00	0.24	0.269	O	|	|	|	|	2.02
24.167	0.00	0.24	0.267	O	|	|	|	|	2.01
24.250	0.00	0.24	0.265	O	|	|	|	|	2.01
24.333	0.00	0.24	0.264	O	|	|	|	|	2.00
24.417	0.00	0.24	0.262	O	|	|	|	|	2.00
24.500	0.00	0.23	0.260	O	|	|	|	|	1.99
24.583	0.00	0.23	0.259	O	|	|	|	|	1.98
24.667	0.00	0.23	0.257	O	|	|	|	|	1.98
24.750	0.00	0.23	0.256	O	|	|	|	|	1.97
24.833	0.00	0.23	0.254	O	|	|	|	|	1.96
24.917	0.00	0.23	0.252	O	|	|	|	|	1.96
25.000	0.00	0.23	0.251	O	|	|	|	|	1.95
25.083	0.00	0.23	0.249	O	|	|	|	|	1.94
25.167	0.00	0.23	0.248	O	|	|	|	|	1.94
25.250	0.00	0.23	0.246	O	|	|	|	|	1.93
25.333	0.00	0.23	0.244	O	|	|	|	|	1.93
25.417	0.00	0.23	0.243	O	|	|	|	|	1.92
25.500	0.00	0.23	0.241	O	|	|	|	|	1.91
25.583	0.00	0.23	0.240	O	|	|	|	|	1.91
25.667	0.00	0.23	0.238	O	|	|	|	|	1.90
25.750	0.00	0.23	0.237	O	|	|	|	|	1.89
25.833	0.00	0.23	0.235	O	|	|	|	|	1.89
25.917	0.00	0.23	0.233	O	|	|	|	|	1.88
26.000	0.00	0.23	0.232	O	|	|	|	|	1.88
26.083	0.00	0.23	0.230	O	|	|	|	|	1.87
26.167	0.00	0.22	0.229	O	|	|	|	|	1.86
26.250	0.00	0.22	0.227	O	|	|	|	|	1.86
26.333	0.00	0.22	0.226	O	|	|	|	|	1.85
26.417	0.00	0.22	0.224	O	|	|	|	|	1.85
26.500	0.00	0.22	0.223	O	|	|	|	|	1.84
26.583	0.00	0.22	0.221	O	|	|	|	|	1.83
26.667	0.00	0.22	0.220	O	|	|	|	|	1.83
26.750	0.00	0.22	0.218	O	|	|	|	|	1.82
26.833	0.00	0.22	0.217	O	|	|	|	|	1.82
26.917	0.00	0.22	0.215	O	|	|	|	|	1.81
27.000	0.00	0.22	0.213	O	|	|	|	|	1.80
27.083	0.00	0.22	0.212	O	|	|	|	|	1.80
27.167	0.00	0.22	0.210	O	|	|	|	|	1.79
27.250	0.00	0.22	0.209	O	|	|	|	|	1.79
27.333	0.00	0.22	0.207	O	|	|	|	|	1.78
27.417	0.00	0.22	0.206	O	|	|	|	|	1.77
27.500	0.00	0.22	0.204	O	|	|	|	|	1.77
27.583	0.00	0.22	0.203	O	|	|	|	|	1.76
27.667	0.00	0.22	0.201	O	|	|	|	|	1.76
27.750	0.00	0.22	0.200	O	|	|	|	|	1.75
27.833	0.00	0.21	0.199	O	|	|	|	|	1.75
27.917	0.00	0.21	0.197	O	|	|	|	|	1.74
28.000	0.00	0.21	0.196	O	|	|	|	|	1.73
28.083	0.00	0.21	0.194	O	|	|	|	|	1.73
28.167	0.00	0.21	0.193	O	|	|	|	|	1.72
28.250	0.00	0.21	0.191	O	|	|	|	|	1.72
28.333	0.00	0.21	0.190	O	|	|	|	|	1.71
28.417	0.00	0.21	0.188	O	|	|	|	|	1.70
28.500	0.00	0.21	0.187	O	|	|	|	|	1.70
28.583	0.00	0.21	0.185	O	|	|	|	|	1.69
28.667	0.00	0.21	0.184	O	|	|	|	|	1.68
28.750	0.00	0.21	0.182	O	|	|	|	|	1.67
28.833	0.00	0.21	0.181	O	|	|	|	|	1.66
28.917	0.00	0.21	0.180	O	|	|	|	|	1.65
29.000	0.00	0.20	0.178	O	|	|	|	|	1.64
29.083	0.00	0.20	0.177	O	|	|	|	|	1.63
29.167	0.00	0.20	0.175	O	|	|	|	|	1.62
29.250	0.00	0.20	0.174	O	|	|	|	|	1.61
29.333	0.00	0.20	0.173	O	|	|	|	|	1.60
29.417	0.00	0.20	0.171	O	|	|	|	|	1.59
29.500	0.00	0.20	0.170	O	|	|	|	|	1.58

29.583	0.00	0.20	0.168	O	|	|	|	|	1.57
29.667	0.00	0.20	0.167	O	|	|	|	|	1.56
29.750	0.00	0.20	0.166	O	|	|	|	|	1.56
29.833	0.00	0.20	0.164	O	|	|	|	|	1.55
29.917	0.00	0.19	0.163	O	|	|	|	|	1.54
30.000	0.00	0.19	0.162	O	|	|	|	|	1.53
30.083	0.00	0.19	0.160	O	|	|	|	|	1.52
30.167	0.00	0.19	0.159	O	|	|	|	|	1.51
30.250	0.00	0.19	0.158	O	|	|	|	|	1.50
30.333	0.00	0.19	0.156	O	|	|	|	|	1.49
30.417	0.00	0.19	0.155	O	|	|	|	|	1.48
30.500	0.00	0.19	0.154	O	|	|	|	|	1.47
30.583	0.00	0.19	0.153	O	|	|	|	|	1.47
30.667	0.00	0.19	0.151	O	|	|	|	|	1.46
30.750	0.00	0.19	0.150	O	|	|	|	|	1.45
30.833	0.00	0.18	0.149	O	|	|	|	|	1.44
30.917	0.00	0.18	0.147	O	|	|	|	|	1.43
31.000	0.00	0.18	0.146	O	|	|	|	|	1.42
31.083	0.00	0.18	0.145	O	|	|	|	|	1.41
31.167	0.00	0.18	0.144	O	|	|	|	|	1.41
31.250	0.00	0.18	0.142	O	|	|	|	|	1.40
31.333	0.00	0.18	0.141	O	|	|	|	|	1.39
31.417	0.00	0.18	0.140	O	|	|	|	|	1.38
31.500	0.00	0.18	0.139	O	|	|	|	|	1.37
31.583	0.00	0.18	0.138	O	|	|	|	|	1.36
31.667	0.00	0.18	0.136	O	|	|	|	|	1.36
31.750	0.00	0.18	0.135	O	|	|	|	|	1.35
31.833	0.00	0.17	0.134	O	|	|	|	|	1.34
31.917	0.00	0.17	0.133	O	|	|	|	|	1.33
32.000	0.00	0.17	0.132	O	|	|	|	|	1.32
32.083	0.00	0.17	0.130	O	|	|	|	|	1.31
32.167	0.00	0.17	0.129	O	|	|	|	|	1.31
32.250	0.00	0.17	0.128	O	|	|	|	|	1.30
32.333	0.00	0.17	0.127	O	|	|	|	|	1.29
32.417	0.00	0.17	0.126	O	|	|	|	|	1.28
32.500	0.00	0.17	0.125	O	|	|	|	|	1.27
32.583	0.00	0.17	0.123	O	|	|	|	|	1.27
32.667	0.00	0.17	0.122	O	|	|	|	|	1.26
32.750	0.00	0.17	0.121	O	|	|	|	|	1.25
32.833	0.00	0.16	0.120	O	|	|	|	|	1.24
32.917	0.00	0.16	0.119	O	|	|	|	|	1.24
33.000	0.00	0.16	0.118	O	|	|	|	|	1.23
33.083	0.00	0.16	0.117	O	|	|	|	|	1.22
33.167	0.00	0.16	0.115	O	|	|	|	|	1.21
33.250	0.00	0.16	0.114	O	|	|	|	|	1.21
33.333	0.00	0.16	0.113	O	|	|	|	|	1.20
33.417	0.00	0.16	0.112	O	|	|	|	|	1.19
33.500	0.00	0.16	0.111	O	|	|	|	|	1.18
33.583	0.00	0.16	0.110	O	|	|	|	|	1.18
33.667	0.00	0.16	0.109	O	|	|	|	|	1.17
33.750	0.00	0.16	0.108	O	|	|	|	|	1.16
33.833	0.00	0.16	0.107	O	|	|	|	|	1.15
33.917	0.00	0.15	0.106	O	|	|	|	|	1.15
34.000	0.00	0.15	0.105	O	|	|	|	|	1.14
34.083	0.00	0.15	0.104	O	|	|	|	|	1.13
34.167	0.00	0.15	0.102	O	|	|	|	|	1.13
34.250	0.00	0.15	0.101	O	|	|	|	|	1.12
34.333	0.00	0.15	0.100	O	|	|	|	|	1.11
34.417	0.00	0.15	0.099	O	|	|	|	|	1.10
34.500	0.00	0.15	0.098	O	|	|	|	|	1.10
34.583	0.00	0.15	0.097	O	|	|	|	|	1.09
34.667	0.00	0.15	0.096	O	|	|	|	|	1.08
34.750	0.00	0.15	0.095	O	|	|	|	|	1.08
34.833	0.00	0.15	0.094	O	|	|	|	|	1.07
34.917	0.00	0.15	0.093	O	|	|	|	|	1.06
35.000	0.00	0.15	0.092	O	|	|	|	|	1.06
35.083	0.00	0.14	0.091	O	|	|	|	|	1.05
35.167	0.00	0.14	0.090	O	|	|	|	|	1.04
35.250	0.00	0.14	0.089	O	|	|	|	|	1.04
35.333	0.00	0.14	0.088	O	|	|	|	|	1.03
35.417	0.00	0.14	0.087	O	|	|	|	|	1.02

35.500	0.00	0.14	0.086	O	|	|	|	|	1.02
35.583	0.00	0.14	0.085	O	|	|	|	|	1.01
35.667	0.00	0.14	0.084	O	|	|	|	|	1.00
35.750	0.00	0.14	0.083	O	|	|	|	|	1.00
35.833	0.00	0.14	0.082	O	|	|	|	|	0.99
35.917	0.00	0.14	0.082	O	|	|	|	|	0.98
36.000	0.00	0.14	0.081	O	|	|	|	|	0.98
36.083	0.00	0.14	0.080	O	|	|	|	|	0.97
36.167	0.00	0.14	0.079	O	|	|	|	|	0.96
36.250	0.00	0.14	0.078	O	|	|	|	|	0.96
36.333	0.00	0.13	0.077	O	|	|	|	|	0.95
36.417	0.00	0.13	0.076	O	|	|	|	|	0.94
36.500	0.00	0.13	0.075	O	|	|	|	|	0.94
36.583	0.00	0.13	0.074	O	|	|	|	|	0.93
36.667	0.00	0.13	0.073	O	|	|	|	|	0.93
36.750	0.00	0.13	0.072	O	|	|	|	|	0.92
36.833	0.00	0.13	0.071	O	|	|	|	|	0.91
36.917	0.00	0.13	0.070	O	|	|	|	|	0.91
37.000	0.00	0.13	0.070	O	|	|	|	|	0.90
37.083	0.00	0.13	0.069	O	|	|	|	|	0.90
37.167	0.00	0.13	0.068	O	|	|	|	|	0.89
37.250	0.00	0.13	0.067	O	|	|	|	|	0.88
37.333	0.00	0.13	0.066	O	|	|	|	|	0.88
37.417	0.00	0.13	0.065	O	|	|	|	|	0.87
37.500	0.00	0.13	0.064	O	|	|	|	|	0.87
37.583	0.00	0.13	0.063	O	|	|	|	|	0.86
37.667	0.00	0.12	0.063	O	|	|	|	|	0.85
37.750	0.00	0.12	0.062	O	|	|	|	|	0.85
37.833	0.00	0.12	0.061	O	|	|	|	|	0.84
37.917	0.00	0.12	0.060	O	|	|	|	|	0.84
38.000	0.00	0.12	0.059	O	|	|	|	|	0.83
38.083	0.00	0.12	0.058	O	|	|	|	|	0.82
38.167	0.00	0.12	0.057	O	|	|	|	|	0.82
38.250	0.00	0.12	0.057	O	|	|	|	|	0.81
38.333	0.00	0.12	0.056	O	|	|	|	|	0.81
38.417	0.00	0.12	0.055	O	|	|	|	|	0.80
38.500	0.00	0.12	0.054	O	|	|	|	|	0.80
38.583	0.00	0.12	0.053	O	|	|	|	|	0.79
38.667	0.00	0.12	0.053	O	|	|	|	|	0.79
38.750	0.00	0.12	0.052	O	|	|	|	|	0.78
38.833	0.00	0.12	0.051	O	|	|	|	|	0.77
38.917	0.00	0.12	0.050	O	|	|	|	|	0.77
39.000	0.00	0.12	0.049	O	|	|	|	|	0.76
39.083	0.00	0.11	0.049	O	|	|	|	|	0.76
39.167	0.00	0.11	0.048	O	|	|	|	|	0.75
39.250	0.00	0.11	0.047	O	|	|	|	|	0.75
39.333	0.00	0.11	0.046	O	|	|	|	|	0.74
39.417	0.00	0.11	0.045	O	|	|	|	|	0.74
39.500	0.00	0.11	0.045	O	|	|	|	|	0.73
39.583	0.00	0.11	0.044	O	|	|	|	|	0.73
39.667	0.00	0.11	0.043	O	|	|	|	|	0.72
39.750	0.00	0.11	0.042	O	|	|	|	|	0.72
39.833	0.00	0.11	0.042	O	|	|	|	|	0.71
39.917	0.00	0.11	0.041	O	|	|	|	|	0.71
40.000	0.00	0.11	0.040	O	|	|	|	|	0.70
40.083	0.00	0.11	0.039	O	|	|	|	|	0.69
40.167	0.00	0.11	0.039	O	|	|	|	|	0.68
40.250	0.00	0.10	0.038	O	|	|	|	|	0.66
40.333	0.00	0.10	0.037	O	|	|	|	|	0.65
40.417	0.00	0.10	0.036	O	|	|	|	|	0.64

Remaining water in basin = 0.04 (Ac.Ft)

**********HYDROGRAPH DATA**********

Number of intervals = 485
Time interval = 5.0 (Min.)
Maximum/Peak flow rate = 0.566 (CFS)
Total volume = 0.988 (Ac.Ft)
Status of hydrographs being held in storage

	Stream 1	Stream 2	Stream 3	Stream 4	Stream 5
Peak (CFS)	0.000	0.000	0.000	0.000	0.000
Vol (Ac.Ft)	0.000	0.000	0.000	0.000	0.000

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                    FLOOD HYDROGRAPH ROUTING PROGRAM
                Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2004
                            Study date: 08/18/25

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 Program License Serial Number 5006

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 ********************* HYDROGRAPH INFORMATION **********************

                From study/file name: PROB65.rte
 ****************************HYDROGRAPH DATA****************************
                Number of intervals =    85
                Time interval =    5.0 (Min.)
                Maximum/Peak flow rate =       11.794 (CFS)
                Total volume =       1.390 (Ac.Ft)
        Status of hydrographs being held in storage
                    Stream 1  Stream 2  Stream 3  Stream 4  Stream 5
        Peak (CFS)      0.000     0.000     0.000     0.000     0.000
        Vol (Ac.Ft)      0.000     0.000     0.000     0.000     0.000
 *********************************************************************



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 Process from Point/Station        0.000 to Point/Station        0.000
 **** RETARDING BASIN ROUTING ****
 _____________________________________________________________________

 User entry of depth-outflow-storage data
 ---------------------------------------------------------------------
 Total number of inflow hydrograph intervals = 85
 Hydrograph time unit =  5.000 (Min.)
 Initial depth in storage basin =   0.00(Ft.)
 ---------------------------------------------------------------------
 ---------------------------------------------------------------------
 Initial basin depth =   0.00 (Ft.)
 Initial basin storage =      0.00 (Ac.Ft)
 Initial basin outflow =   0.00 (CFS)
 ---------------------------------------------------------------------
 ---------------------------------------------------------------------
 Depth vs. Storage and Depth vs. Discharge data:
  Basin Depth  Storage    Outflow   (S-O*dt/2)   (S+O*dt/2)
       (Ft.)    (Ac.Ft)    (CFS)     (Ac.Ft)    (Ac.Ft)
 ---------------------------------------------------------------------
    0.000      0.000      0.000      0.000        0.000
    0.700      0.040      0.109      0.040        0.040
    1.700      0.187      0.211      0.186        0.188
    2.400      0.365      0.269      0.364        0.366
    2.700      0.461      0.377      0.460        0.462
    3.700      0.829      0.537      0.827        0.831
    4.700      1.249      0.651      1.247        1.251
    5.700      1.723      0.746      1.720        1.726
    6.700      2.252      1.870      2.246        2.258
    7.700      2.841      2.376      2.833        2.849
    8.300      3.223     38.499      3.090        3.356
    8.700      3.491    113.554      3.100        3.882
    9.700      4.203    441.782      2.682        5.724
 ---------------------------------------------------------------------
                 Hydrograph Detention Basin Routing
 ---------------------------------------------------------------------

 Graph values: 'I'= unit inflow; 'O'=outflow at time shown
 ---------------------------------------------------------------------
  Time   Inflow  Outflow    Storage                                    Depth
```

(Hours)	(CFS)	(CFS)	(Ac.Ft)	.0	2.9	5.90	8.85	11.79	(Ft.)
0.083	0.07	0.00	0.000	O	|	|	|	|	0.00
0.167	0.38	0.00	0.002	OI	|	|	|	|	0.03
0.250	0.68	0.01	0.005	OI	|	|	|	|	0.09
0.333	0.82	0.03	0.010	O I	|	|	|	|	0.18
0.417	0.90	0.04	0.016	O I	|	|	|	|	0.28
0.500	0.96	0.06	0.022	O I	|	|	|	|	0.39
0.583	1.05	0.08	0.029	O I	|	|	|	|	0.50
0.667	1.12	0.10	0.035	O I	|	|	|	|	0.62
0.750	1.16	0.11	0.043	O I	|	|	|	|	0.72
0.833	1.19	0.12	0.050	O I	|	|	|	|	0.77
0.917	1.21	0.12	0.057	O I	|	|	|	|	0.82
1.000	1.24	0.13	0.065	O I	|	|	|	|	0.87
1.083	1.30	0.13	0.073	O I	|	|	|	|	0.92
1.167	1.36	0.14	0.081	O I	|	|	|	|	0.98
1.250	1.39	0.14	0.090	O I	|	|	|	|	1.04
1.333	1.40	0.15	0.098	O I	|	|	|	|	1.10
1.417	1.41	0.16	0.107	O I	|	|	|	|	1.15
1.500	1.41	0.16	0.115	O I	|	|	|	|	1.21
1.583	1.42	0.17	0.124	O I	|	|	|	|	1.27
1.667	1.42	0.17	0.133	O I	|	|	|	|	1.33
1.750	1.42	0.18	0.141	O I	|	|	|	|	1.39
1.833	1.43	0.19	0.150	O I	|	|	|	|	1.45
1.917	1.43	0.19	0.158	O I	|	|	|	|	1.50
2.000	1.44	0.20	0.167	O I	|	|	|	|	1.56
2.083	1.49	0.20	0.176	O I	|	|	|	|	1.62
2.167	1.49	0.21	0.184	O I	|	|	|	|	1.68
2.250	1.52	0.21	0.193	O I	|	|	|	|	1.72
2.333	1.56	0.22	0.202	O I	|	|	|	|	1.76
2.417	1.58	0.22	0.212	O I	|	|	|	|	1.80
2.500	1.59	0.22	0.221	O I	|	|	|	|	1.83
2.583	1.59	0.23	0.231	O I	|	|	|	|	1.87
2.667	1.60	0.23	0.240	O I	|	|	|	|	1.91
2.750	1.61	0.23	0.249	O I	|	|	|	|	1.95
2.833	1.68	0.23	0.259	O I	|	|	|	|	1.98
2.917	1.73	0.24	0.269	O I	|	|	|	|	2.02
3.000	1.75	0.24	0.280	O I	|	|	|	|	2.06
3.083	1.76	0.24	0.290	O I	|	|	|	|	2.10
3.167	1.78	0.25	0.300	O I	|	|	|	|	2.15
3.250	1.85	0.25	0.311	O I	|	|	|	|	2.19
3.333	1.90	0.26	0.322	O I	|	|	|	|	2.23
3.417	1.93	0.26	0.334	O I	|	|	|	|	2.28
3.500	2.02	0.26	0.346	O I	|	|	|	|	2.32
3.583	2.15	0.27	0.358	O I	|	|	|	|	2.37
3.667	2.28	0.28	0.372	O I	|	|	|	|	2.42
3.750	2.38	0.29	0.386	O I	|	|	|	|	2.46
3.833	2.48	0.31	0.400	O I	|	|	|	|	2.51
3.917	2.57	0.33	0.415	O I	|	|	|	|	2.56
4.000	2.67	0.34	0.431	O I	|	|	|	|	2.61
4.083	2.75	0.36	0.447	O I	|	|	|	|	2.66
4.167	2.86	0.38	0.464	|O I	|	|	|	|	2.71
4.250	3.01	0.39	0.482	|O I	|	|	|	|	2.76
4.333	3.17	0.39	0.500	|O I	|	|	|	|	2.81
4.417	3.33	0.40	0.520	|O I	|	|	|	|	2.86
4.500	3.48	0.41	0.541	|O I	|	|	|	|	2.92
4.583	3.60	0.42	0.562	|O I	|	|	|	|	2.97
4.667	3.73	0.43	0.585	|O I	|	|	|	|	3.04
4.750	3.95	0.44	0.608	|O I	|	|	|	|	3.10
4.833	4.21	0.45	0.633	|O I	|	|	|	|	3.17
4.917	4.40	0.46	0.659	|O I	|	|	|	|	3.24
5.000	4.62	0.48	0.687	|O I	|	|	|	|	3.31
5.083	5.03	0.49	0.717	|O I	|	|	|	|	3.40
5.167	5.93	0.50	0.752	|O I	|	|	|	|	3.49
5.250	7.17	0.52	0.793	|O I	|	|	|	|	3.60
5.333	8.34	0.54	0.843	|O I	|	|	|	|	3.73
5.417	9.46	0.56	0.900	|O I	|	|	|	|	3.87
5.500	10.92	0.57	0.967	|O I	|	|	|	|	4.03
5.583	11.79	0.59	1.041	|O I	|	|	|	|	4.20
5.667	8.76	0.61	1.107	|O I	|	|	|	|	4.36
5.750	5.31	0.62	1.152	|O I	|	|	|	|	4.47
5.833	3.69	0.63	1.178	|O I	|	|	|	|	4.53

5.917	2.76	0.64	1.196	|O I|	|	|	|	4.57
6.000	2.09	0.64	1.208	|O I |	|	|	|	4.60
6.083	1.54	0.64	1.217	|O I |	|	|	|	4.62
6.167	1.11	0.64	1.221	|O I |	|	|	|	4.63
6.250	0.77	0.64	1.223	|OI |	|	|	|	4.64
6.333	0.55	0.64	1.223	|O |	|	|	|	4.64
6.417	0.39	0.64	1.222	|O |	|	|	|	4.64
6.500	0.27	0.64	1.220	IO |	|	|	|	4.63
6.583	0.18	0.64	1.217	IO |	|	|	|	4.62
6.667	0.06	0.64	1.214	IO |	|	|	|	4.62
6.750	0.03	0.64	1.210	IO |	|	|	|	4.61
6.833	0.02	0.64	1.205	IO |	|	|	|	4.60
6.917	0.01	0.64	1.201	IO |	|	|	|	4.59
7.000	0.01	0.64	1.197	IO |	|	|	|	4.58
7.083	0.00	0.64	1.192	IO |	|	|	|	4.57
7.167	0.00	0.63	1.188	IO |	|	|	|	4.55
7.250	0.00	0.63	1.184	IO |	|	|	|	4.54
7.333	0.00	0.63	1.179	IO |	|	|	|	4.53
7.417	0.00	0.63	1.175	IO |	|	|	|	4.52
7.500	0.00	0.63	1.171	IO |	|	|	|	4.51
7.583	0.00	0.63	1.166	IO |	|	|	|	4.50
7.667	0.00	0.63	1.162	IO |	|	|	|	4.49
7.750	0.00	0.63	1.158	IO |	|	|	|	4.48
7.833	0.00	0.63	1.153	IO |	|	|	|	4.47
7.917	0.00	0.62	1.149	IO |	|	|	|	4.46
8.000	0.00	0.62	1.145	IO |	|	|	|	4.45
8.083	0.00	0.62	1.140	IO |	|	|	|	4.44
8.167	0.00	0.62	1.136	IO |	|	|	|	4.43
8.250	0.00	0.62	1.132	IO |	|	|	|	4.42
8.333	0.00	0.62	1.128	IO |	|	|	|	4.41
8.417	0.00	0.62	1.123	IO |	|	|	|	4.40
8.500	0.00	0.62	1.119	IO |	|	|	|	4.39
8.583	0.00	0.61	1.115	IO |	|	|	|	4.38
8.667	0.00	0.61	1.111	IO |	|	|	|	4.37
8.750	0.00	0.61	1.106	IO |	|	|	|	4.36
8.833	0.00	0.61	1.102	IO |	|	|	|	4.35
8.917	0.00	0.61	1.098	IO |	|	|	|	4.34
9.000	0.00	0.61	1.094	IO |	|	|	|	4.33
9.083	0.00	0.61	1.090	IO |	|	|	|	4.32
9.167	0.00	0.61	1.086	IO |	|	|	|	4.31
9.250	0.00	0.61	1.081	IO |	|	|	|	4.30
9.333	0.00	0.60	1.077	IO |	|	|	|	4.29
9.417	0.00	0.60	1.073	IO |	|	|	|	4.28
9.500	0.00	0.60	1.069	IO |	|	|	|	4.27
9.583	0.00	0.60	1.065	IO |	|	|	|	4.26
9.667	0.00	0.60	1.061	IO |	|	|	|	4.25
9.750	0.00	0.60	1.056	IO |	|	|	|	4.24
9.833	0.00	0.60	1.052	IO |	|	|	|	4.23
9.917	0.00	0.60	1.048	IO |	|	|	|	4.22
10.000	0.00	0.60	1.044	IO |	|	|	|	4.21
10.083	0.00	0.59	1.040	IO |	|	|	|	4.20
10.167	0.00	0.59	1.036	IO |	|	|	|	4.19
10.250	0.00	0.59	1.032	IO |	|	|	|	4.18
10.333	0.00	0.59	1.028	IO |	|	|	|	4.17
10.417	0.00	0.59	1.024	IO |	|	|	|	4.16
10.500	0.00	0.59	1.020	IO |	|	|	|	4.15
10.583	0.00	0.59	1.016	IO |	|	|	|	4.14
10.667	0.00	0.59	1.012	IO |	|	|	|	4.13
10.750	0.00	0.59	1.008	IO |	|	|	|	4.13
10.833	0.00	0.58	1.003	IO |	|	|	|	4.12
10.917	0.00	0.58	0.999	IO |	|	|	|	4.11
11.000	0.00	0.58	0.995	IO |	|	|	|	4.10
11.083	0.00	0.58	0.991	IO |	|	|	|	4.09
11.167	0.00	0.58	0.987	IO |	|	|	|	4.08
11.250	0.00	0.58	0.983	IO |	|	|	|	4.07
11.333	0.00	0.58	0.979	IO |	|	|	|	4.06
11.417	0.00	0.58	0.976	IO |	|	|	|	4.05
11.500	0.00	0.58	0.972	IO |	|	|	|	4.04
11.583	0.00	0.57	0.968	IO |	|	|	|	4.03
11.667	0.00	0.57	0.964	IO |	|	|	|	4.02
11.750	0.00	0.57	0.960	IO |	|	|	|	4.01

11.833	0.00	0.57	0.956	IO				4.00
11.917	0.00	0.57	0.952	IO				3.99
12.000	0.00	0.57	0.948	IO				3.98
12.083	0.00	0.57	0.944	IO				3.97
12.167	0.00	0.57	0.940	IO				3.96
12.250	0.00	0.57	0.936	IO				3.96
12.333	0.00	0.57	0.932	IO				3.95
12.417	0.00	0.56	0.928	IO				3.94
12.500	0.00	0.56	0.924	IO				3.93
12.583	0.00	0.56	0.921	IO				3.92
12.667	0.00	0.56	0.917	IO				3.91
12.750	0.00	0.56	0.913	IO				3.90
12.833	0.00	0.56	0.909	IO				3.89
12.917	0.00	0.56	0.905	IO				3.88
13.000	0.00	0.56	0.901	IO				3.87
13.083	0.00	0.56	0.898	IO				3.86
13.167	0.00	0.55	0.894	IO				3.85
13.250	0.00	0.55	0.890	IO				3.84
13.333	0.00	0.55	0.886	IO				3.84
13.417	0.00	0.55	0.882	IO				3.83
13.500	0.00	0.55	0.878	IO				3.82
13.583	0.00	0.55	0.875	IO				3.81
13.667	0.00	0.55	0.871	IO				3.80
13.750	0.00	0.55	0.867	IO				3.79
13.833	0.00	0.55	0.863	IO				3.78
13.917	0.00	0.55	0.860	IO				3.77
14.000	0.00	0.54	0.856	IO				3.76
14.083	0.00	0.54	0.852	IO				3.76
14.167	0.00	0.54	0.848	IO				3.75
14.250	0.00	0.54	0.845	IO				3.74
14.333	0.00	0.54	0.841	IO				3.73
14.417	0.00	0.54	0.837	IO				3.72
14.500	0.00	0.54	0.834	IO				3.71
14.583	0.00	0.54	0.830	IO				3.70
14.667	0.00	0.54	0.826	IO				3.69
14.750	0.00	0.53	0.822	IO				3.68
14.833	0.00	0.53	0.819	IO				3.67
14.917	0.00	0.53	0.815	IO				3.66
15.000	0.00	0.53	0.811	IO				3.65
15.083	0.00	0.53	0.808	IO				3.64
15.167	0.00	0.53	0.804	IO				3.63
15.250	0.00	0.52	0.801	IO				3.62
15.333	0.00	0.52	0.797	IO				3.61
15.417	0.00	0.52	0.793	IO				3.60
15.500	0.00	0.52	0.790	IO				3.59
15.583	0.00	0.52	0.786	IO				3.58
15.667	0.00	0.52	0.783	IO				3.57
15.750	0.00	0.52	0.779	IO				3.56
15.833	0.00	0.51	0.776	IO				3.55
15.917	0.00	0.51	0.772	IO				3.55
16.000	0.00	0.51	0.768	IO				3.54
16.083	0.00	0.51	0.765	IO				3.53
16.167	0.00	0.51	0.761	IO				3.52
16.250	0.00	0.51	0.758	IO				3.51
16.333	0.00	0.50	0.754	IO				3.50
16.417	0.00	0.50	0.751	IO				3.49
16.500	0.00	0.50	0.748	IO				3.48
16.583	0.00	0.50	0.744	IO				3.47
16.667	0.00	0.50	0.741	IO				3.46
16.750	0.00	0.50	0.737	IO				3.45
16.833	0.00	0.50	0.734	IO				3.44
16.917	0.00	0.49	0.730	IO				3.43
17.000	0.00	0.49	0.727	IO				3.42
17.083	0.00	0.49	0.724	IO				3.41
17.167	0.00	0.49	0.720	IO				3.40
17.250	0.00	0.49	0.717	IO				3.40
17.333	0.00	0.49	0.714	IO				3.39
17.417	0.00	0.49	0.710	IO				3.38
17.500	0.00	0.48	0.707	IO				3.37
17.583	0.00	0.48	0.704	IO				3.36
17.667	0.00	0.48	0.700	IO				3.35

17.750	0.00	0.48	0.697	IO					3.34
17.833	0.00	0.48	0.694	IO					3.33
17.917	0.00	0.48	0.690	IO					3.32
18.000	0.00	0.48	0.687	IO					3.31
18.083	0.00	0.47	0.684	IO					3.31
18.167	0.00	0.47	0.680	IO					3.30
18.250	0.00	0.47	0.677	IO					3.29
18.333	0.00	0.47	0.674	IO					3.28
18.417	0.00	0.47	0.671	IO					3.27
18.500	0.00	0.47	0.668	IO					3.26
18.583	0.00	0.47	0.664	IO					3.25
18.667	0.00	0.46	0.661	IO					3.24
18.750	0.00	0.46	0.658	IO					3.24
18.833	0.00	0.46	0.655	IO					3.23
18.917	0.00	0.46	0.652	IO					3.22
19.000	0.00	0.46	0.648	IO					3.21
19.083	0.00	0.46	0.645	IO					3.20
19.167	0.00	0.46	0.642	IO					3.19
19.250	0.00	0.45	0.639	IO					3.18
19.333	0.00	0.45	0.636	IO					3.18
19.417	0.00	0.45	0.633	IO					3.17
19.500	0.00	0.45	0.630	IO					3.16
19.583	0.00	0.45	0.627	IO					3.15
19.667	0.00	0.45	0.623	IO					3.14
19.750	0.00	0.45	0.620	IO					3.13
19.833	0.00	0.44	0.617	IO					3.12
19.917	0.00	0.44	0.614	IO					3.12
20.000	0.00	0.44	0.611	IO					3.11
20.083	0.00	0.44	0.608	IO					3.10
20.167	0.00	0.44	0.605	IO					3.09
20.250	0.00	0.44	0.602	IO					3.08
20.333	0.00	0.44	0.599	IO					3.08
20.417	0.00	0.44	0.596	IO					3.07
20.500	0.00	0.43	0.593	IO					3.06
20.583	0.00	0.43	0.590	IO					3.05
20.667	0.00	0.43	0.587	IO					3.04
20.750	0.00	0.43	0.584	IO					3.03
20.833	0.00	0.43	0.581	IO					3.03
20.917	0.00	0.43	0.578	IO					3.02
21.000	0.00	0.43	0.575	IO					3.01
21.083	0.00	0.43	0.572	IO					3.00
21.167	0.00	0.42	0.569	IO					2.99
21.250	0.00	0.42	0.567	IO					2.99
21.333	0.00	0.42	0.564	IO					2.98
21.417	0.00	0.42	0.561	IO					2.97
21.500	0.00	0.42	0.558	IO					2.96
21.583	0.00	0.42	0.555	IO					2.96
21.667	0.00	0.42	0.552	IO					2.95
21.750	0.00	0.42	0.549	IO					2.94
21.833	0.00	0.41	0.546	IO					2.93
21.917	0.00	0.41	0.544	IO					2.92
22.000	0.00	0.41	0.541	IO					2.92
22.083	0.00	0.41	0.538	IO					2.91
22.167	0.00	0.41	0.535	IO					2.90
22.250	0.00	0.41	0.532	IO					2.89
22.333	0.00	0.41	0.529	IO					2.89
22.417	0.00	0.41	0.527	IO					2.88
22.500	0.00	0.40	0.524	IO					2.87
22.583	0.00	0.40	0.521	IO					2.86
22.667	0.00	0.40	0.518	IO					2.86
22.750	0.00	0.40	0.515	IO					2.85
22.833	0.00	0.40	0.513	IO					2.84
22.917	0.00	0.40	0.510	IO					2.83
23.000	0.00	0.40	0.507	IO					2.83
23.083	0.00	0.40	0.505	IO					2.82
23.167	0.00	0.39	0.502	IO					2.81
23.250	0.00	0.39	0.499	IO					2.80
23.333	0.00	0.39	0.496	IO					2.80
23.417	0.00	0.39	0.494	IO					2.79
23.500	0.00	0.39	0.491	IO					2.78
23.583	0.00	0.39	0.488	IO					2.77

23.667	0.00	0.39	0.486	IO				2.77
23.750	0.00	0.39	0.483	IO				2.76
23.833	0.00	0.39	0.480	IO				2.75
23.917	0.00	0.38	0.478	IO				2.75
24.000	0.00	0.38	0.475	IO				2.74
24.083	0.00	0.38	0.472	IO				2.73
24.167	0.00	0.38	0.470	IO				2.72
24.250	0.00	0.38	0.467	IO				2.72
24.333	0.00	0.38	0.465	IO				2.71
24.417	0.00	0.38	0.462	IO				2.70
24.500	0.00	0.38	0.459	IO				2.69
24.583	0.00	0.37	0.457	IO				2.69
24.667	0.00	0.37	0.454	IO				2.68
24.750	0.00	0.37	0.452	O				2.67
24.833	0.00	0.36	0.449	O				2.66
24.917	0.00	0.36	0.447	O				2.66
25.000	0.00	0.36	0.444	O				2.65
25.083	0.00	0.36	0.442	O				2.64
25.167	0.00	0.35	0.439	O				2.63
25.250	0.00	0.35	0.437	O				2.62
25.333	0.00	0.35	0.434	O				2.62
25.417	0.00	0.34	0.432	O				2.61
25.500	0.00	0.34	0.430	O				2.60
25.583	0.00	0.34	0.427	O				2.59
25.667	0.00	0.34	0.425	O				2.59
25.750	0.00	0.33	0.423	O				2.58
25.833	0.00	0.33	0.420	O				2.57
25.917	0.00	0.33	0.418	O				2.57
26.000	0.00	0.33	0.416	O				2.56
26.083	0.00	0.32	0.414	O				2.55
26.167	0.00	0.32	0.411	O				2.55
26.250	0.00	0.32	0.409	O				2.54
26.333	0.00	0.32	0.407	O				2.53
26.417	0.00	0.31	0.405	O				2.52
26.500	0.00	0.31	0.403	O				2.52
26.583	0.00	0.31	0.401	O				2.51
26.667	0.00	0.31	0.398	O				2.50
26.750	0.00	0.30	0.396	O				2.50
26.833	0.00	0.30	0.394	O				2.49
26.917	0.00	0.30	0.392	O				2.49
27.000	0.00	0.30	0.390	O				2.48
27.083	0.00	0.30	0.388	O				2.47
27.167	0.00	0.29	0.386	O				2.47
27.250	0.00	0.29	0.384	O				2.46
27.333	0.00	0.29	0.382	O				2.45
27.417	0.00	0.29	0.380	O				2.45
27.500	0.00	0.28	0.378	O				2.44
27.583	0.00	0.28	0.376	O				2.44
27.667	0.00	0.28	0.374	O				2.43
27.750	0.00	0.28	0.372	O				2.42
27.833	0.00	0.28	0.370	O				2.42
27.917	0.00	0.27	0.369	O				2.41
28.000	0.00	0.27	0.367	O				2.41
28.083	0.00	0.27	0.365	O				2.40
28.167	0.00	0.27	0.363	O				2.39
28.250	0.00	0.27	0.361	O				2.38
28.333	0.00	0.27	0.359	O				2.38
28.417	0.00	0.27	0.357	O				2.37
28.500	0.00	0.27	0.356	O				2.36
28.583	0.00	0.27	0.354	O				2.36
28.667	0.00	0.26	0.352	O				2.35
28.750	0.00	0.26	0.350	O				2.34
28.833	0.00	0.26	0.348	O				2.33
28.917	0.00	0.26	0.347	O				2.33
29.000	0.00	0.26	0.345	O				2.32
29.083	0.00	0.26	0.343	O				2.31
29.167	0.00	0.26	0.341	O				2.31
29.250	0.00	0.26	0.339	O				2.30
29.333	0.00	0.26	0.338	O				2.29
29.417	0.00	0.26	0.336	O				2.28
29.500	0.00	0.26	0.334	O				2.28

29.583	0.00	0.26	0.332	O	|	|	|	|	2.27
29.667	0.00	0.26	0.330	O	|	|	|	|	2.26
29.750	0.00	0.26	0.329	O	|	|	|	|	2.26
29.833	0.00	0.26	0.327	O	|	|	|	|	2.25
29.917	0.00	0.26	0.325	O	|	|	|	|	2.24
30.000	0.00	0.26	0.323	O	|	|	|	|	2.24
30.083	0.00	0.25	0.322	O	|	|	|	|	2.23
30.167	0.00	0.25	0.320	O	|	|	|	|	2.22
30.250	0.00	0.25	0.318	O	|	|	|	|	2.22
30.333	0.00	0.25	0.316	O	|	|	|	|	2.21
30.417	0.00	0.25	0.315	O	|	|	|	|	2.20
30.500	0.00	0.25	0.313	O	|	|	|	|	2.19
30.583	0.00	0.25	0.311	O	|	|	|	|	2.19
30.667	0.00	0.25	0.309	O	|	|	|	|	2.18
30.750	0.00	0.25	0.308	O	|	|	|	|	2.17
30.833	0.00	0.25	0.306	O	|	|	|	|	2.17
30.917	0.00	0.25	0.304	O	|	|	|	|	2.16
31.000	0.00	0.25	0.303	O	|	|	|	|	2.15
31.083	0.00	0.25	0.301	O	|	|	|	|	2.15
31.167	0.00	0.25	0.299	O	|	|	|	|	2.14
31.250	0.00	0.25	0.297	O	|	|	|	|	2.13
31.333	0.00	0.25	0.296	O	|	|	|	|	2.13
31.417	0.00	0.25	0.294	O	|	|	|	|	2.12
31.500	0.00	0.25	0.292	O	|	|	|	|	2.11
31.583	0.00	0.24	0.291	O	|	|	|	|	2.11
31.667	0.00	0.24	0.289	O	|	|	|	|	2.10
31.750	0.00	0.24	0.287	O	|	|	|	|	2.09
31.833	0.00	0.24	0.286	O	|	|	|	|	2.09
31.917	0.00	0.24	0.284	O	|	|	|	|	2.08
32.000	0.00	0.24	0.282	O	|	|	|	|	2.07
32.083	0.00	0.24	0.281	O	|	|	|	|	2.07
32.167	0.00	0.24	0.279	O	|	|	|	|	2.06
32.250	0.00	0.24	0.277	O	|	|	|	|	2.05
32.333	0.00	0.24	0.276	O	|	|	|	|	2.05
32.417	0.00	0.24	0.274	O	|	|	|	|	2.04
32.500	0.00	0.24	0.272	O	|	|	|	|	2.04
32.583	0.00	0.24	0.271	O	|	|	|	|	2.03
32.667	0.00	0.24	0.269	O	|	|	|	|	2.02
32.750	0.00	0.24	0.267	O	|	|	|	|	2.02
32.833	0.00	0.24	0.266	O	|	|	|	|	2.01
32.917	0.00	0.24	0.264	O	|	|	|	|	2.00
33.000	0.00	0.24	0.262	O	|	|	|	|	2.00
33.083	0.00	0.24	0.261	O	|	|	|	|	1.99
33.167	0.00	0.23	0.259	O	|	|	|	|	1.98
33.250	0.00	0.23	0.258	O	|	|	|	|	1.98
33.333	0.00	0.23	0.256	O	|	|	|	|	1.97
33.417	0.00	0.23	0.254	O	|	|	|	|	1.97
33.500	0.00	0.23	0.253	O	|	|	|	|	1.96
33.583	0.00	0.23	0.251	O	|	|	|	|	1.95
33.667	0.00	0.23	0.250	O	|	|	|	|	1.95
33.750	0.00	0.23	0.248	O	|	|	|	|	1.94
33.833	0.00	0.23	0.246	O	|	|	|	|	1.93
33.917	0.00	0.23	0.245	O	|	|	|	|	1.93
34.000	0.00	0.23	0.243	O	|	|	|	|	1.92
34.083	0.00	0.23	0.242	O	|	|	|	|	1.92
34.167	0.00	0.23	0.240	O	|	|	|	|	1.91
34.250	0.00	0.23	0.239	O	|	|	|	|	1.90
34.333	0.00	0.23	0.237	O	|	|	|	|	1.90
34.417	0.00	0.23	0.235	O	|	|	|	|	1.89
34.500	0.00	0.23	0.234	O	|	|	|	|	1.88
34.583	0.00	0.23	0.232	O	|	|	|	|	1.88
34.667	0.00	0.23	0.231	O	|	|	|	|	1.87
34.750	0.00	0.22	0.229	O	|	|	|	|	1.87
34.833	0.00	0.22	0.228	O	|	|	|	|	1.86
34.917	0.00	0.22	0.226	O	|	|	|	|	1.85
35.000	0.00	0.22	0.225	O	|	|	|	|	1.85
35.083	0.00	0.22	0.223	O	|	|	|	|	1.84
35.167	0.00	0.22	0.222	O	|	|	|	|	1.84
35.250	0.00	0.22	0.220	O	|	|	|	|	1.83
35.333	0.00	0.22	0.218	O	|	|	|	|	1.82
35.417	0.00	0.22	0.217	O	|	|	|	|	1.82

35.500	0.00	0.22	0.215	O	|	|	|	|	1.81
35.583	0.00	0.22	0.214	O	|	|	|	|	1.81
35.667	0.00	0.22	0.212	O	|	|	|	|	1.80
35.750	0.00	0.22	0.211	O	|	|	|	|	1.79
35.833	0.00	0.22	0.209	O	|	|	|	|	1.79
35.917	0.00	0.22	0.208	O	|	|	|	|	1.78
36.000	0.00	0.22	0.206	O	|	|	|	|	1.78
36.083	0.00	0.22	0.205	O	|	|	|	|	1.77
36.167	0.00	0.22	0.203	O	|	|	|	|	1.76
36.250	0.00	0.22	0.202	O	|	|	|	|	1.76
36.333	0.00	0.22	0.200	O	|	|	|	|	1.75
36.417	0.00	0.21	0.199	O	|	|	|	|	1.75
36.500	0.00	0.21	0.197	O	|	|	|	|	1.74
36.583	0.00	0.21	0.196	O	|	|	|	|	1.74
36.667	0.00	0.21	0.195	O	|	|	|	|	1.73
36.750	0.00	0.21	0.193	O	|	|	|	|	1.72
36.833	0.00	0.21	0.192	O	|	|	|	|	1.72
36.917	0.00	0.21	0.190	O	|	|	|	|	1.71
37.000	0.00	0.21	0.189	O	|	|	|	|	1.71
37.083	0.00	0.21	0.187	O	|	|	|	|	1.70
37.167	0.00	0.21	0.186	O	|	|	|	|	1.69
37.250	0.00	0.21	0.184	O	|	|	|	|	1.68
37.333	0.00	0.21	0.183	O	|	|	|	|	1.67
37.417	0.00	0.21	0.181	O	|	|	|	|	1.66
37.500	0.00	0.21	0.180	O	|	|	|	|	1.65
37.583	0.00	0.21	0.179	O	|	|	|	|	1.64
37.667	0.00	0.20	0.177	O	|	|	|	|	1.63
37.750	0.00	0.20	0.176	O	|	|	|	|	1.62
37.833	0.00	0.20	0.174	O	|	|	|	|	1.61
37.917	0.00	0.20	0.173	O	|	|	|	|	1.60
38.000	0.00	0.20	0.172	O	|	|	|	|	1.60
38.083	0.00	0.20	0.170	O	|	|	|	|	1.59
38.167	0.00	0.20	0.169	O	|	|	|	|	1.58
38.250	0.00	0.20	0.168	O	|	|	|	|	1.57
38.333	0.00	0.20	0.166	O	|	|	|	|	1.56
38.417	0.00	0.20	0.165	O	|	|	|	|	1.55
38.500	0.00	0.19	0.163	O	|	|	|	|	1.54
38.583	0.00	0.19	0.162	O	|	|	|	|	1.53
38.667	0.00	0.19	0.161	O	|	|	|	|	1.52
38.750	0.00	0.19	0.159	O	|	|	|	|	1.51
38.833	0.00	0.19	0.158	O	|	|	|	|	1.50
38.917	0.00	0.19	0.157	O	|	|	|	|	1.49
39.000	0.00	0.19	0.156	O	|	|	|	|	1.49
39.083	0.00	0.19	0.154	O	|	|	|	|	1.48
39.167	0.00	0.19	0.153	O	|	|	|	|	1.47
39.250	0.00	0.19	0.152	O	|	|	|	|	1.46
39.333	0.00	0.19	0.150	O	|	|	|	|	1.45
39.417	0.00	0.18	0.149	O	|	|	|	|	1.44
39.500	0.00	0.18	0.148	O	|	|	|	|	1.43
39.583	0.00	0.18	0.147	O	|	|	|	|	1.42
39.667	0.00	0.18	0.145	O	|	|	|	|	1.42
39.750	0.00	0.18	0.144	O	|	|	|	|	1.41
39.833	0.00	0.18	0.143	O	|	|	|	|	1.40
39.917	0.00	0.18	0.142	O	|	|	|	|	1.39
40.000	0.00	0.18	0.140	O	|	|	|	|	1.38
40.083	0.00	0.18	0.139	O	|	|	|	|	1.37
40.167	0.00	0.18	0.138	O	|	|	|	|	1.37
40.250	0.00	0.18	0.137	O	|	|	|	|	1.36
40.333	0.00	0.18	0.135	O	|	|	|	|	1.35
40.417	0.00	0.17	0.134	O	|	|	|	|	1.34
40.500	0.00	0.17	0.133	O	|	|	|	|	1.33
40.583	0.00	0.17	0.132	O	|	|	|	|	1.32
40.667	0.00	0.17	0.131	O	|	|	|	|	1.32
40.750	0.00	0.17	0.129	O	|	|	|	|	1.31
40.833	0.00	0.17	0.128	O	|	|	|	|	1.30
40.917	0.00	0.17	0.127	O	|	|	|	|	1.29
41.000	0.00	0.17	0.126	O	|	|	|	|	1.28
41.083	0.00	0.17	0.125	O	|	|	|	|	1.28
41.167	0.00	0.17	0.124	O	|	|	|	|	1.27
41.250	0.00	0.17	0.123	O	|	|	|	|	1.26
41.333	0.00	0.17	0.121	O	|	|	|	|	1.25

41.417	0.00	0.16	0.120	O	|	|	|	|	1.25
41.500	0.00	0.16	0.119	O	|	|	|	|	1.24
41.583	0.00	0.16	0.118	O	|	|	|	|	1.23
41.667	0.00	0.16	0.117	O	|	|	|	|	1.22
41.750	0.00	0.16	0.116	O	|	|	|	|	1.22
41.833	0.00	0.16	0.115	O	|	|	|	|	1.21
41.917	0.00	0.16	0.114	O	|	|	|	|	1.20
42.000	0.00	0.16	0.112	O	|	|	|	|	1.19
42.083	0.00	0.16	0.111	O	|	|	|	|	1.19
42.167	0.00	0.16	0.110	O	|	|	|	|	1.18
42.250	0.00	0.16	0.109	O	|	|	|	|	1.17
42.333	0.00	0.16	0.108	O	|	|	|	|	1.16
42.417	0.00	0.16	0.107	O	|	|	|	|	1.16
42.500	0.00	0.15	0.106	O	|	|	|	|	1.15
42.583	0.00	0.15	0.105	O	|	|	|	|	1.14
42.667	0.00	0.15	0.104	O	|	|	|	|	1.13
42.750	0.00	0.15	0.103	O	|	|	|	|	1.13
42.833	0.00	0.15	0.102	O	|	|	|	|	1.12
42.917	0.00	0.15	0.101	O	|	|	|	|	1.11
43.000	0.00	0.15	0.100	O	|	|	|	|	1.11
43.083	0.00	0.15	0.099	O	|	|	|	|	1.10
43.167	0.00	0.15	0.098	O	|	|	|	|	1.09
43.250	0.00	0.15	0.097	O	|	|	|	|	1.08
43.333	0.00	0.15	0.096	O	|	|	|	|	1.08
43.417	0.00	0.15	0.095	O	|	|	|	|	1.07
43.500	0.00	0.15	0.094	O	|	|	|	|	1.06
43.583	0.00	0.15	0.093	O	|	|	|	|	1.06
43.667	0.00	0.14	0.092	O	|	|	|	|	1.05
43.750	0.00	0.14	0.091	O	|	|	|	|	1.04
43.833	0.00	0.14	0.090	O	|	|	|	|	1.04
43.917	0.00	0.14	0.089	O	|	|	|	|	1.03
44.000	0.00	0.14	0.088	O	|	|	|	|	1.02
44.083	0.00	0.14	0.087	O	|	|	|	|	1.02
44.167	0.00	0.14	0.086	O	|	|	|	|	1.01
44.250	0.00	0.14	0.085	O	|	|	|	|	1.00
44.333	0.00	0.14	0.084	O	|	|	|	|	1.00
44.417	0.00	0.14	0.083	O	|	|	|	|	0.99
44.500	0.00	0.14	0.082	O	|	|	|	|	0.98
44.583	0.00	0.14	0.081	O	|	|	|	|	0.98
44.667	0.00	0.14	0.080	O	|	|	|	|	0.97
44.750	0.00	0.14	0.079	O	|	|	|	|	0.96
44.833	0.00	0.14	0.078	O	|	|	|	|	0.96
44.917	0.00	0.13	0.077	O	|	|	|	|	0.95
45.000	0.00	0.13	0.076	O	|	|	|	|	0.95
45.083	0.00	0.13	0.075	O	|	|	|	|	0.94
45.167	0.00	0.13	0.074	O	|	|	|	|	0.93
45.250	0.00	0.13	0.073	O	|	|	|	|	0.93
45.333	0.00	0.13	0.073	O	|	|	|	|	0.92
45.417	0.00	0.13	0.072	O	|	|	|	|	0.91
45.500	0.00	0.13	0.071	O	|	|	|	|	0.91
45.583	0.00	0.13	0.070	O	|	|	|	|	0.90
45.667	0.00	0.13	0.069	O	|	|	|	|	0.90
45.750	0.00	0.13	0.068	O	|	|	|	|	0.89
45.833	0.00	0.13	0.067	O	|	|	|	|	0.88
45.917	0.00	0.13	0.066	O	|	|	|	|	0.88
46.000	0.00	0.13	0.065	O	|	|	|	|	0.87
46.083	0.00	0.13	0.065	O	|	|	|	|	0.87
46.167	0.00	0.13	0.064	O	|	|	|	|	0.86
46.250	0.00	0.12	0.063	O	|	|	|	|	0.86
46.333	0.00	0.12	0.062	O	|	|	|	|	0.85
46.417	0.00	0.12	0.061	O	|	|	|	|	0.84
46.500	0.00	0.12	0.060	O	|	|	|	|	0.84
46.583	0.00	0.12	0.059	O	|	|	|	|	0.83
46.667	0.00	0.12	0.059	O	|	|	|	|	0.83
46.750	0.00	0.12	0.058	O	|	|	|	|	0.82
46.833	0.00	0.12	0.057	O	|	|	|	|	0.81
46.917	0.00	0.12	0.056	O	|	|	|	|	0.81
47.000	0.00	0.12	0.055	O	|	|	|	|	0.80
47.083	0.00	0.12	0.054	O	|	|	|	|	0.80
47.167	0.00	0.12	0.054	O	|	|	|	|	0.79
47.250	0.00	0.12	0.053	O	|	|	|	|	0.79

47.333	0.00	0.12	0.052	O	|	|	|	|	0.78
47.417	0.00	0.12	0.051	O	|	|	|	|	0.78
47.500	0.00	0.12	0.050	O	|	|	|	|	0.77
47.583	0.00	0.12	0.050	O	|	|	|	|	0.76
47.667	0.00	0.12	0.049	O	|	|	|	|	0.76
47.750	0.00	0.11	0.048	O	|	|	|	|	0.75
47.833	0.00	0.11	0.047	O	|	|	|	|	0.75
47.917	0.00	0.11	0.046	O	|	|	|	|	0.74
48.000	0.00	0.11	0.046	O	|	|	|	|	0.74
48.083	0.00	0.11	0.045	O	|	|	|	|	0.73
48.167	0.00	0.11	0.044	O	|	|	|	|	0.73
48.250	0.00	0.11	0.043	O	|	|	|	|	0.72
48.333	0.00	0.11	0.043	O	|	|	|	|	0.72
48.417	0.00	0.11	0.042	O	|	|	|	|	0.71
48.500	0.00	0.11	0.041	O	|	|	|	|	0.71
48.583	0.00	0.11	0.040	O	|	|	|	|	0.70
48.667	0.00	0.11	0.040	O	|	|	|	|	0.69
48.750	0.00	0.11	0.039	O	|	|	|	|	0.68
48.833	0.00	0.10	0.038	O	|	|	|	|	0.67
48.917	0.00	0.10	0.037	O	|	|	|	|	0.65
49.000	0.00	0.10	0.037	O	|	|	|	|	0.64

Remaining water in basin = 0.04 (Ac.Ft)

**********HYDROGRAPH DATA**********

Number of intervals = 588
Time interval = 5.0 (Min.)
Maximum/Peak flow rate = 0.644 (CFS)
Total volume = 1.354 (Ac.Ft)

Status of hydrographs being held in storage

	Stream 1	Stream 2	Stream 3	Stream 4	Stream 5
Peak (CFS)	0.000	0.000	0.000	0.000	0.000
Vol (Ac.Ft)	0.000	0.000	0.000	0.000	0.000

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                    FLOOD HYDROGRAPH ROUTING PROGRAM
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                            Study date: 08/18/25

      ---------------------------------------------------------------------



      Program License Serial Number 5006

      ---------------------------------------------------------------------
      ********************* HYDROGRAPH INFORMATION **********************

                    From study/file name: PROB245.rte
      ****************************HYDROGRAPH DATA****************************
                    Number of intervals =   301
                    Time interval =    5.0 (Min.)
                    Maximum/Peak flow rate =        3.281 (CFS)
                    Total volume =       2.031 (Ac.Ft)
             Status of hydrographs being held in storage
                       Stream 1  Stream 2  Stream 3  Stream 4  Stream 5
             Peak (CFS)      0.000     0.000     0.000     0.000     0.000
             Vol (Ac.Ft)      0.000     0.000     0.000     0.000     0.000
      ***********************************************************************



      ++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
      Process from Point/Station        0.000 to Point/Station        0.000
      **** RETARDING BASIN ROUTING ****
      _______________________________________________________________________

      User entry of depth-outflow-storage data
      ---------------------------------------------------------------------
      Total number of inflow hydrograph intervals = 301
      Hydrograph time unit =  5.000 (Min.)
      Initial depth in storage basin =   0.00(Ft.)
      ---------------------------------------------------------------------
      ---------------------------------------------------------------------
      Initial basin depth =   0.00 (Ft.)
      Initial basin storage =      0.00 (Ac.Ft)
      Initial basin outflow =   0.00 (CFS)
      ---------------------------------------------------------------------
      ---------------------------------------------------------------------
      Depth vs. Storage and Depth vs. Discharge data:
       Basin Depth  Storage    Outflow   (S-O*dt/2)   (S+O*dt/2)
            (Ft.)    (Ac.Ft)    (CFS)     (Ac.Ft)    (Ac.Ft)
      ---------------------------------------------------------------------
        0.000      0.000      0.000      0.000        0.000
        0.700      0.040      0.109      0.040        0.040
        1.700      0.187      0.211      0.186        0.188
        2.400      0.365      0.269      0.364        0.366
        2.700      0.461      0.377      0.460        0.462
        3.700      0.829      0.537      0.827        0.831
        4.700      1.249      0.651      1.247        1.251
        5.700      1.723      0.746      1.720        1.726
        6.700      2.252      1.870      2.246        2.258
        7.700      2.841      2.376      2.833        2.849
        8.300      3.223     38.499      3.090        3.356
        8.700      3.491    113.554      3.100        3.882
        9.700      4.203    441.782      2.682        5.724
      ---------------------------------------------------------------------
                    Hydrograph Detention Basin Routing
      ---------------------------------------------------------------------

      Graph values: 'I'= unit inflow; 'O'=outflow at time shown
      ---------------------------------------------------------------------
Time   Inflow  Outflow    Storage                                        Depth
```

(Hours)	(CFS)	(CFS)	(Ac.Ft)	.0	0.8	1.64	2.46	3.28	(Ft.)
0.083	0.02	0.00	0.000	O	|	|	|	|	0.00
0.167	0.08	0.00	0.000	O	|	|	|	|	0.01
0.250	0.13	0.00	0.001	OI	|	|	|	|	0.02
0.333	0.16	0.01	0.002	OI	|	|	|	|	0.04
0.417	0.21	0.01	0.003	O I	|	|	|	|	0.06
0.500	0.24	0.01	0.005	O I	|	|	|	|	0.08
0.583	0.26	0.02	0.006	O I	|	|	|	|	0.11
0.667	0.27	0.02	0.008	O I	|	|	|	|	0.14
0.750	0.28	0.03	0.010	O I	|	|	|	|	0.17
0.833	0.29	0.03	0.012	O I	|	|	|	|	0.20
0.917	0.33	0.04	0.013	O I	|	|	|	|	0.23
1.000	0.35	0.04	0.015	O I	|	|	|	|	0.27
1.083	0.36	0.05	0.018	O I	|	|	|	|	0.31
1.167	0.34	0.05	0.020	O I	|	|	|	|	0.34
1.250	0.31	0.06	0.022	O I	|	|	|	|	0.38
1.333	0.31	0.06	0.023	O I	|	|	|	|	0.41
1.417	0.30	0.07	0.025	O I	|	|	|	|	0.44
1.500	0.30	0.07	0.026	O I	|	|	|	|	0.46
1.583	0.30	0.08	0.028	O I	|	|	|	|	0.49
1.667	0.30	0.08	0.030	O I	|	|	|	|	0.52
1.750	0.30	0.08	0.031	O I	|	|	|	|	0.54
1.833	0.30	0.09	0.033	O I	|	|	|	|	0.57
1.917	0.34	0.09	0.034	O I	|	|	|	|	0.60
2.000	0.36	0.10	0.036	O I	|	|	|	|	0.63
2.083	0.37	0.10	0.038	|O I	|	|	|	|	0.66
2.167	0.38	0.11	0.040	|O I	|	|	|	|	0.69
2.250	0.38	0.11	0.041	|O I	|	|	|	|	0.71
2.333	0.39	0.11	0.043	|O I	|	|	|	|	0.72
2.417	0.39	0.11	0.045	|O I	|	|	|	|	0.74
2.500	0.39	0.11	0.047	|O I	|	|	|	|	0.75
2.583	0.40	0.12	0.049	|O I	|	|	|	|	0.76
2.667	0.43	0.12	0.051	|O I	|	|	|	|	0.78
2.750	0.46	0.12	0.053	|O I	|	|	|	|	0.79
2.833	0.47	0.12	0.056	|O I	|	|	|	|	0.81
2.917	0.48	0.12	0.058	|O I	|	|	|	|	0.82
3.000	0.48	0.12	0.061	|O I	|	|	|	|	0.84
3.083	0.48	0.13	0.063	|O I	|	|	|	|	0.86
3.167	0.49	0.13	0.066	|O I	|	|	|	|	0.87
3.250	0.49	0.13	0.068	|O I	|	|	|	|	0.89
3.333	0.49	0.13	0.070	|O I	|	|	|	|	0.91
3.417	0.49	0.13	0.073	|O I	|	|	|	|	0.92
3.500	0.49	0.13	0.075	|O I	|	|	|	|	0.94
3.583	0.49	0.14	0.078	|O I	|	|	|	|	0.96
3.667	0.49	0.14	0.080	|O I	|	|	|	|	0.97
3.750	0.49	0.14	0.083	|O I	|	|	|	|	0.99
3.833	0.50	0.14	0.085	|O I	|	|	|	|	1.01
3.917	0.53	0.14	0.088	|O I	|	|	|	|	1.02
4.000	0.56	0.14	0.091	|O I	|	|	|	|	1.04
4.083	0.57	0.15	0.093	|O I	|	|	|	|	1.06
4.167	0.57	0.15	0.096	|O I	|	|	|	|	1.08
4.250	0.58	0.15	0.099	|O I	|	|	|	|	1.10
4.333	0.59	0.15	0.102	|O I	|	|	|	|	1.12
4.417	0.62	0.15	0.105	|O I	|	|	|	|	1.14
4.500	0.65	0.16	0.109	|O I	|	|	|	|	1.17
4.583	0.66	0.16	0.112	|O I	|	|	|	|	1.19
4.667	0.67	0.16	0.116	|O I	|	|	|	|	1.21
4.750	0.68	0.16	0.119	|O I	|	|	|	|	1.24
4.833	0.69	0.17	0.123	|O I	|	|	|	|	1.26
4.917	0.72	0.17	0.126	|O I|	|	|	|	|	1.29
5.000	0.75	0.17	0.130	|O I|	|	|	|	|	1.31
5.083	0.75	0.17	0.134	|O I|	|	|	|	|	1.34
5.167	0.69	0.18	0.138	|O I |	|	|	|	|	1.37
5.250	0.64	0.18	0.141	|O I |	|	|	|	|	1.39
5.333	0.63	0.18	0.145	|O I |	|	|	|	|	1.41
5.417	0.65	0.18	0.148	|O I |	|	|	|	|	1.43
5.500	0.67	0.19	0.151	|O I |	|	|	|	|	1.45
5.583	0.69	0.19	0.154	|O I |	|	|	|	|	1.48
5.667	0.72	0.19	0.158	|O I|	|	|	|	|	1.50
5.750	0.75	0.19	0.162	|O I|	|	|	|	|	1.53
5.833	0.76	0.20	0.166	|O I|	|	|	|	|	1.55

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 5.917    0.77    0.20      0.169  |O     I|        |        |        |     1.58
 6.000    0.77    0.20      0.173  |O     I|        |        |        |     1.61
 6.083    0.78    0.20      0.177  |O     I|        |        |        |     1.63
 6.167    0.82    0.21      0.181  | O    I|        |        |        |     1.66
 6.250    0.85    0.21      0.186  | O     I        |        |        |     1.69
 6.333    0.86    0.21      0.190  | O     I        |        |        |     1.71
 6.417    0.87    0.21      0.195  | O     I        |        |        |     1.73
 6.500    0.87    0.21      0.199  | O     I        |        |        |     1.75
 6.583    0.88    0.22      0.204  | O     I        |        |        |     1.77
 6.667    0.92    0.22      0.208  | O     I        |        |        |     1.78
 6.750    0.95    0.22      0.213  | O     |I       |        |        |     1.80
 6.833    0.96    0.22      0.218  | O     |I       |        |        |     1.82
 6.917    0.97    0.22      0.224  | O     |I       |        |        |     1.84
 7.000    0.97    0.22      0.229  | O     |I       |        |        |     1.86
 7.083    0.97    0.23      0.234  | O     |I       |        |        |     1.88
 7.167    0.98    0.23      0.239  | O     |I       |        |        |     1.90
 7.250    0.98    0.23      0.244  | O     |I       |        |        |     1.92
 7.333    0.99    0.23      0.249  | O     |I       |        |        |     1.95
 7.417    1.02    0.23      0.255  | O     |I       |        |        |     1.97
 7.500    1.05    0.23      0.260  | O     | I      |        |        |     1.99
 7.583    1.07    0.24      0.266  | O     | I      |        |        |     2.01
 7.667    1.11    0.24      0.272  | O     | I      |        |        |     2.03
 7.750    1.14    0.24      0.278  | O     |  I     |        |        |     2.06
 7.833    1.16    0.24      0.284  | O     |  I     |        |        |     2.08
 7.917    1.20    0.24      0.290  | O     |  I     |        |        |     2.11
 8.000    1.23    0.25      0.297  | O     |   I    |        |        |     2.13
 8.083    1.26    0.25      0.304  | O     |   I    |        |        |     2.16
 8.167    1.34    0.25      0.311  | O     |    I   |        |        |     2.19
 8.250    1.39    0.25      0.319  | O     |    I   |        |        |     2.22
 8.333    1.42    0.26      0.327  | O     |    I   |        |        |     2.25
 8.417    1.44    0.26      0.335  | O     |     I  |        |        |     2.28
 8.500    1.45    0.26      0.343  | O     |     I  |        |        |     2.31
 8.583    1.46    0.26      0.351  | O     |     I  |        |        |     2.35
 8.667    1.50    0.27      0.360  | O     |     I  |        |        |     2.38
 8.750    1.53    0.27      0.368  | O     |     I  |        |        |     2.41
 8.833    1.55    0.28      0.377  | O     |      I|        |        |     2.44
 8.917    1.59    0.29      0.386  | O     |      I|        |        |     2.46
 9.000    1.63    0.30      0.395  | O     |      I|        |        |     2.49
 9.083    1.66    0.31      0.404  |  O    |       I        |        |     2.52
 9.167    1.73    0.32      0.413  |  O    |       I        |        |     2.55
 9.250    1.79    0.33      0.423  |  O    |       |I       |        |     2.58
 9.333    1.82    0.35      0.433  |  O    |       |I       |        |     2.61
 9.417    1.87    0.36      0.444  |  O    |       | I      |        |     2.65
 9.500    1.91    0.37      0.454  |  O    |       | I      |        |     2.68
 9.583    1.93    0.38      0.465  |  O    |       | I      |        |     2.71
 9.667    1.98    0.38      0.476  |  O    |       |  I     |        |     2.74
 9.750    2.01    0.39      0.487  |  O    |       |  I     |        |     2.77
 9.833    2.04    0.39      0.498  |  O    |       |  I     |        |     2.80
 9.917    2.08    0.40      0.509  |  O    |       |   I    |        |     2.83
10.000    2.11    0.40      0.521  |  O    |       |   I    |        |     2.86
10.083    2.07    0.41      0.533  |  O    |       |   I    |        |     2.89
10.167    1.86    0.41      0.543  |   O   |       | I      |        |     2.92
10.250    1.68    0.42      0.553  |   O   |       I        |        |     2.95
10.333    1.61    0.42      0.561  |   O   |      I|        |        |     2.97
10.417    1.57    0.42      0.569  |   O   |      I|        |        |     2.99
10.500    1.55    0.43      0.577  |   O   |      I|        |        |     3.02
10.583    1.57    0.43      0.585  |   O   |      I|        |        |     3.04
10.667    1.71    0.43      0.593  |   O   |       I        |        |     3.06
10.750    1.84    0.44      0.602  |   O   |       |I       |        |     3.08
10.833    1.88    0.44      0.612  |   O   |       | I      |        |     3.11
10.917    1.90    0.45      0.622  |   O   |       | I      |        |     3.14
11.000    1.92    0.45      0.632  |   O   |       | I      |        |     3.17
11.083    1.92    0.46      0.642  |   O   |       | I      |        |     3.19
11.167    1.90    0.46      0.652  |   O   |       | I      |        |     3.22
11.250    1.88    0.46      0.662  |   O   |       | I      |        |     3.25
11.333    1.87    0.47      0.672  |   O   |       | I      |        |     3.27
11.417    1.87    0.47      0.681  |   O   |       | I      |        |     3.30
11.500    1.87    0.48      0.691  |   O   |       | I      |        |     3.33
11.583    1.86    0.48      0.701  |   O   |       | I      |        |     3.35
11.667    1.79    0.49      0.710  |   O   |       |I       |        |     3.38
11.750    1.74    0.49      0.719  |   O   |       I        |        |     3.40
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11.833	1.72	0.49	0.727	O	I			3.42
11.917	1.74	0.50	0.736	O	I			3.45
12.000	1.76	0.50	0.744	O	I			3.47
12.083	1.82	0.50	0.753	O	I			3.49
12.167	2.05	0.51	0.763	O	I			3.52
12.250	2.23	0.51	0.774	O	I			3.55
12.333	2.31	0.52	0.786	O	I			3.58
12.417	2.39	0.52	0.799	O	I			3.62
12.500	2.45	0.53	0.812	O	I			3.65
12.583	2.49	0.54	0.825	O	I			3.69
12.667	2.58	0.54	0.839	O	I			3.72
12.750	2.65	0.54	0.853	O	I			3.76
12.833	2.69	0.55	0.868	O	I			3.79
12.917	2.74	0.55	0.883	O	I			3.83
13.000	2.78	0.56	0.898	O	I			3.86
13.083	2.84	0.56	0.914	O	I			3.90
13.167	3.02	0.56	0.930	O	I			3.94
13.250	3.16	0.57	0.947	O	I			3.98
13.333	3.22	0.57	0.965	O	I			4.02
13.417	3.26	0.58	0.984	O	I			4.07
13.500	3.28	0.58	1.002	O	I			4.11
13.583	3.21	0.59	1.021	O	I			4.16
13.667	2.87	0.59	1.038	O	I			4.20
13.750	2.59	0.60	1.052	O	I			4.23
13.833	2.48	0.60	1.066	O	I			4.26
13.917	2.42	0.60	1.078	O	I			4.29
14.000	2.38	0.61	1.091	O	I			4.32
14.083	2.38	0.61	1.103	O	I			4.35
14.167	2.49	0.61	1.115	O	I			4.38
14.250	2.57	0.62	1.128	O	I			4.41
14.333	2.59	0.62	1.142	O	I			4.45
14.417	2.58	0.63	1.155	O	I			4.48
14.500	2.56	0.63	1.169	O	I			4.51
14.583	2.55	0.63	1.182	O	I			4.54
14.667	2.55	0.64	1.195	O	I			4.57
14.750	2.55	0.64	1.208	O	I			4.60
14.833	2.54	0.64	1.222	O	I			4.63
14.917	2.51	0.65	1.235	O	I			4.67
15.000	2.49	0.65	1.247	O	I			4.70
15.083	2.47	0.65	1.260	O	I			4.72
15.167	2.43	0.66	1.272	O	I			4.75
15.250	2.40	0.66	1.284	O	I			4.77
15.333	2.38	0.66	1.296	O	I			4.80
15.417	2.34	0.66	1.308	O	I			4.82
15.500	2.31	0.67	1.319	O	I			4.85
15.583	2.26	0.67	1.331	O	I			4.87
15.667	2.12	0.67	1.341	O	I			4.89
15.750	2.01	0.67	1.351	O	I			4.91
15.833	1.96	0.67	1.360	O	I			4.93
15.917	1.94	0.67	1.369	O	I			4.95
16.000	1.92	0.68	1.377	O	I			4.97
16.083	1.79	0.68	1.385	O	I			4.99
16.167	1.29	0.68	1.391	O	I			5.00
16.250	0.89	0.68	1.394	O	I			5.01
16.333	0.72	0.68	1.395	O	I			5.01
16.417	0.63	0.68	1.395	O				5.01
16.500	0.56	0.68	1.394	O	I			5.01
16.583	0.51	0.68	1.393	O	I			5.00
16.667	0.44	0.68	1.392	O	I			5.00
16.750	0.39	0.68	1.390	O	I			5.00
16.833	0.36	0.68	1.388	O	I			4.99
16.917	0.34	0.68	1.386	O	I			4.99
17.000	0.32	0.68	1.383	O	I			4.98
17.083	0.33	0.68	1.381	O	I			4.98
17.167	0.38	0.68	1.379	O	I			4.97
17.250	0.43	0.68	1.377	O	I			4.97
17.333	0.45	0.68	1.375	O	I			4.97
17.417	0.46	0.68	1.374	O	I			4.96
17.500	0.47	0.68	1.372	O	I			4.96
17.583	0.48	0.68	1.371	O	I			4.96
17.667	0.48	0.68	1.369	O	I			4.95

17.750	0.48	0.67	1.368	I O				4.95
17.833	0.48	0.67	1.367	I O				4.95
17.917	0.45	0.67	1.365	I O				4.95
18.000	0.42	0.67	1.364	I O				4.94
18.083	0.41	0.67	1.362	I O				4.94
18.167	0.41	0.67	1.360	I O				4.93
18.250	0.40	0.67	1.358	I O				4.93
18.333	0.40	0.67	1.356	I O				4.93
18.417	0.40	0.67	1.355	I O				4.92
18.500	0.40	0.67	1.353	I O				4.92
18.583	0.39	0.67	1.351	I O				4.91
18.667	0.36	0.67	1.349	I O				4.91
18.750	0.33	0.67	1.346	I O				4.91
18.833	0.31	0.67	1.344	I O				4.90
18.917	0.27	0.67	1.341	I O				4.89
19.000	0.24	0.67	1.339	I O				4.89
19.083	0.23	0.67	1.336	I O				4.88
19.167	0.26	0.67	1.333	I O				4.88
19.250	0.28	0.67	1.330	I O				4.87
19.333	0.29	0.67	1.327	I O				4.87
19.417	0.33	0.67	1.325	I O				4.86
19.500	0.36	0.67	1.323	I O				4.86
19.583	0.36	0.67	1.320	I O				4.85
19.667	0.33	0.66	1.318	I O				4.85
19.750	0.31	0.66	1.316	I O				4.84
19.833	0.30	0.66	1.313	I O				4.84
19.917	0.26	0.66	1.311	I O				4.83
20.000	0.23	0.66	1.308	I O				4.82
20.083	0.23	0.66	1.305	I O				4.82
20.167	0.26	0.66	1.302	I O				4.81
20.250	0.28	0.66	1.299	I O				4.81
20.333	0.28	0.66	1.297	I O				4.80
20.417	0.29	0.66	1.294	I O				4.80
20.500	0.29	0.66	1.292	I O				4.79
20.583	0.29	0.66	1.289	I O				4.78
20.667	0.29	0.66	1.287	I O				4.78
20.750	0.29	0.66	1.284	I O				4.77
20.833	0.28	0.66	1.281	I O				4.77
20.917	0.25	0.66	1.279	I O				4.76
21.000	0.23	0.66	1.276	I O				4.76
21.083	0.22	0.66	1.273	I O				4.75
21.167	0.25	0.66	1.270	I O				4.74
21.250	0.27	0.65	1.267	I O				4.74
21.333	0.27	0.65	1.265	I O				4.73
21.417	0.25	0.65	1.262	I O				4.73
21.500	0.22	0.65	1.259	I O				4.72
21.583	0.22	0.65	1.256	I O				4.72
21.667	0.25	0.65	1.253	I O				4.71
21.750	0.27	0.65	1.251	I O				4.70
21.833	0.27	0.65	1.248	I O				4.70
21.917	0.24	0.65	1.245	I O				4.69
22.000	0.22	0.65	1.242	I O				4.68
22.083	0.22	0.65	1.239	I O				4.68
22.167	0.25	0.65	1.237	I O				4.67
22.250	0.27	0.65	1.234	I O				4.66
22.333	0.27	0.65	1.231	I O				4.66
22.417	0.24	0.65	1.229	I O				4.65
22.500	0.22	0.64	1.226	I O				4.64
22.583	0.21	0.64	1.223	I O				4.64
22.667	0.21	0.64	1.220	I O				4.63
22.750	0.20	0.64	1.217	I O				4.62
22.833	0.20	0.64	1.214	I O				4.62
22.917	0.20	0.64	1.211	I O				4.61
23.000	0.20	0.64	1.208	I O				4.60
23.083	0.20	0.64	1.205	I O				4.59
23.167	0.20	0.64	1.202	I O				4.59
23.250	0.20	0.64	1.199	I O				4.58
23.333	0.20	0.64	1.196	I O				4.57
23.417	0.20	0.64	1.193	I O				4.57
23.500	0.20	0.63	1.190	I O				4.56
23.583	0.20	0.63	1.187	I O				4.55

23.667	0.20	0.63	1.184	|I	O |	|	|	|	4.54
23.750	0.20	0.63	1.181	|I	O |	|	|	|	4.54
23.833	0.20	0.63	1.178	|I	O |	|	|	|	4.53
23.917	0.20	0.63	1.175	|I	O |	|	|	|	4.52
24.000	0.20	0.63	1.172	|I	O |	|	|	|	4.52
24.083	0.18	0.63	1.169	|I	O |	|	|	|	4.51
24.167	0.12	0.63	1.165	|I	O |	|	|	|	4.50
24.250	0.06	0.63	1.162	I	O |	|	|	|	4.49
24.333	0.04	0.63	1.158	I	O |	|	|	|	4.48
24.417	0.03	0.63	1.154	I	O |	|	|	|	4.47
24.500	0.02	0.62	1.149	I	O |	|	|	|	4.46
24.583	0.02	0.62	1.145	I	O |	|	|	|	4.45
24.667	0.01	0.62	1.141	I	O |	|	|	|	4.44
24.750	0.01	0.62	1.137	I	O |	|	|	|	4.43
24.833	0.01	0.62	1.133	I	O |	|	|	|	4.42
24.917	0.00	0.62	1.128	I	O |	|	|	|	4.41
25.000	0.00	0.62	1.124	I	O |	|	|	|	4.40
25.083	0.00	0.62	1.120	I	O |	|	|	|	4.39
25.167	0.00	0.61	1.116	I	O |	|	|	|	4.38
25.250	0.00	0.61	1.112	I	O |	|	|	|	4.37
25.333	0.00	0.61	1.107	I	O |	|	|	|	4.36
25.417	0.00	0.61	1.103	I	O |	|	|	|	4.35
25.500	0.00	0.61	1.099	I	O |	|	|	|	4.34
25.583	0.00	0.61	1.095	I	O |	|	|	|	4.33
25.667	0.00	0.61	1.090	I	O |	|	|	|	4.32
25.750	0.00	0.61	1.086	I	O |	|	|	|	4.31
25.833	0.00	0.61	1.082	I	O |	|	|	|	4.30
25.917	0.00	0.60	1.078	I	O |	|	|	|	4.29
26.000	0.00	0.60	1.074	I	O |	|	|	|	4.28
26.083	0.00	0.60	1.070	I	O |	|	|	|	4.27
26.167	0.00	0.60	1.066	I	O |	|	|	|	4.26
26.250	0.00	0.60	1.061	I	O |	|	|	|	4.25
26.333	0.00	0.60	1.057	I	O |	|	|	|	4.24
26.417	0.00	0.60	1.053	I	O |	|	|	|	4.23
26.500	0.00	0.60	1.049	I	O |	|	|	|	4.22
26.583	0.00	0.60	1.045	I	O |	|	|	|	4.21
26.667	0.00	0.59	1.041	I	O |	|	|	|	4.20
26.750	0.00	0.59	1.037	I	O |	|	|	|	4.19
26.833	0.00	0.59	1.033	I	O |	|	|	|	4.18
26.917	0.00	0.59	1.029	I	O |	|	|	|	4.18
27.000	0.00	0.59	1.024	I	O |	|	|	|	4.17
27.083	0.00	0.59	1.020	I	O |	|	|	|	4.16
27.167	0.00	0.59	1.016	I	O |	|	|	|	4.15
27.250	0.00	0.59	1.012	I	O |	|	|	|	4.14
27.333	0.00	0.59	1.008	I	O |	|	|	|	4.13
27.417	0.00	0.58	1.004	I	O |	|	|	|	4.12
27.500	0.00	0.58	1.000	I	O |	|	|	|	4.11
27.583	0.00	0.58	0.996	I	O |	|	|	|	4.10
27.667	0.00	0.58	0.992	I	O |	|	|	|	4.09
27.750	0.00	0.58	0.988	I	O |	|	|	|	4.08
27.833	0.00	0.58	0.984	I	O |	|	|	|	4.07
27.917	0.00	0.58	0.980	I	O |	|	|	|	4.06
28.000	0.00	0.58	0.976	I	O |	|	|	|	4.05
28.083	0.00	0.58	0.972	I	O |	|	|	|	4.04
28.167	0.00	0.57	0.968	I	O |	|	|	|	4.03
28.250	0.00	0.57	0.964	I	O |	|	|	|	4.02
28.333	0.00	0.57	0.960	I	O |	|	|	|	4.01
28.417	0.00	0.57	0.956	I	O |	|	|	|	4.00
28.500	0.00	0.57	0.953	I	O |	|	|	|	3.99
28.583	0.00	0.57	0.949	I	O |	|	|	|	3.98
28.667	0.00	0.57	0.945	I	O |	|	|	|	3.98
28.750	0.00	0.57	0.941	I	O |	|	|	|	3.97
28.833	0.00	0.57	0.937	I	O |	|	|	|	3.96
28.917	0.00	0.57	0.933	I	O |	|	|	|	3.95
29.000	0.00	0.56	0.929	I	O |	|	|	|	3.94
29.083	0.00	0.56	0.925	I	O |	|	|	|	3.93
29.167	0.00	0.56	0.921	I	O |	|	|	|	3.92
29.250	0.00	0.56	0.917	I	O |	|	|	|	3.91
29.333	0.00	0.56	0.914	I	O |	|	|	|	3.90
29.417	0.00	0.56	0.910	I	O |	|	|	|	3.89
29.500	0.00	0.56	0.906	I	O |	|	|	|	3.88

29.583	0.00	0.56	0.902	I	O	|	|	|	|	3.87
29.667	0.00	0.56	0.898	I	O	|	|	|	|	3.86
29.750	0.00	0.55	0.894	I	O	|	|	|	|	3.86
29.833	0.00	0.55	0.891	I	O	|	|	|	|	3.85
29.917	0.00	0.55	0.887	I	O	|	|	|	|	3.84
30.000	0.00	0.55	0.883	I	O	|	|	|	|	3.83
30.083	0.00	0.55	0.879	I	O	|	|	|	|	3.82
30.167	0.00	0.55	0.875	I	O	|	|	|	|	3.81
30.250	0.00	0.55	0.872	I	O	|	|	|	|	3.80
30.333	0.00	0.55	0.868	I	O	|	|	|	|	3.79
30.417	0.00	0.55	0.864	I	O	|	|	|	|	3.78
30.500	0.00	0.55	0.860	I	O	|	|	|	|	3.77
30.583	0.00	0.54	0.857	I	O	|	|	|	|	3.77
30.667	0.00	0.54	0.853	I	O	|	|	|	|	3.76
30.750	0.00	0.54	0.849	I	O	|	|	|	|	3.75
30.833	0.00	0.54	0.845	I	O	|	|	|	|	3.74
30.917	0.00	0.54	0.842	I	O	|	|	|	|	3.73
31.000	0.00	0.54	0.838	I	O	|	|	|	|	3.72
31.083	0.00	0.54	0.834	I	O	|	|	|	|	3.71
31.167	0.00	0.54	0.831	I	O	|	|	|	|	3.70
31.250	0.00	0.54	0.827	I	O	|	|	|	|	3.69
31.333	0.00	0.53	0.823	I	O	|	|	|	|	3.68
31.417	0.00	0.53	0.819	I	O	|	|	|	|	3.67
31.500	0.00	0.53	0.816	I	O	|	|	|	|	3.66
31.583	0.00	0.53	0.812	I	O	|	|	|	|	3.65
31.667	0.00	0.53	0.808	I	O	|	|	|	|	3.64
31.750	0.00	0.53	0.805	I	O	|	|	|	|	3.63
31.833	0.00	0.52	0.801	I	O	|	|	|	|	3.62
31.917	0.00	0.52	0.798	I	O	|	|	|	|	3.61
32.000	0.00	0.52	0.794	I	O	|	|	|	|	3.60
32.083	0.00	0.52	0.790	I	O	|	|	|	|	3.60
32.167	0.00	0.52	0.787	I	O	|	|	|	|	3.59
32.250	0.00	0.52	0.783	I	O	|	|	|	|	3.58
32.333	0.00	0.52	0.780	I	O	|	|	|	|	3.57
32.417	0.00	0.51	0.776	I	O	|	|	|	|	3.56
32.500	0.00	0.51	0.773	I	O	|	|	|	|	3.55
32.583	0.00	0.51	0.769	I	O	|	|	|	|	3.54
32.667	0.00	0.51	0.766	I	O	|	|	|	|	3.53
32.750	0.00	0.51	0.762	I	O	|	|	|	|	3.52
32.833	0.00	0.51	0.759	I	O	|	|	|	|	3.51
32.917	0.00	0.50	0.755	I	O	|	|	|	|	3.50
33.000	0.00	0.50	0.752	I	O	|	|	|	|	3.49
33.083	0.00	0.50	0.748	I	O	|	|	|	|	3.48
33.167	0.00	0.50	0.745	I	O	|	|	|	|	3.47
33.250	0.00	0.50	0.741	I	O	|	|	|	|	3.46
33.333	0.00	0.50	0.738	I	O	|	|	|	|	3.45
33.417	0.00	0.50	0.734	I	O	|	|	|	|	3.44
33.500	0.00	0.49	0.731	I	O	|	|	|	|	3.43
33.583	0.00	0.49	0.728	I	O	|	|	|	|	3.42
33.667	0.00	0.49	0.724	I	O	|	|	|	|	3.42
33.750	0.00	0.49	0.721	I	O	|	|	|	|	3.41
33.833	0.00	0.49	0.718	I	O	|	|	|	|	3.40
33.917	0.00	0.49	0.714	I	O	|	|	|	|	3.39
34.000	0.00	0.49	0.711	I	O	|	|	|	|	3.38
34.083	0.00	0.48	0.707	I	O	|	|	|	|	3.37
34.167	0.00	0.48	0.704	I	O	|	|	|	|	3.36
34.250	0.00	0.48	0.701	I	O	|	|	|	|	3.35
34.333	0.00	0.48	0.698	I	O	|	|	|	|	3.34
34.417	0.00	0.48	0.694	I	O	|	|	|	|	3.33
34.500	0.00	0.48	0.691	I	O	|	|	|	|	3.32
34.583	0.00	0.48	0.688	I	O	|	|	|	|	3.32
34.667	0.00	0.47	0.684	I	O	|	|	|	|	3.31
34.750	0.00	0.47	0.681	I	O	|	|	|	|	3.30
34.833	0.00	0.47	0.678	I	O	|	|	|	|	3.29
34.917	0.00	0.47	0.675	I	O	|	|	|	|	3.28
35.000	0.00	0.47	0.671	I	O	|	|	|	|	3.27
35.083	0.00	0.47	0.668	I	O	|	|	|	|	3.26
35.167	0.00	0.47	0.665	I	O	|	|	|	|	3.25
35.250	0.00	0.46	0.662	I	O	|	|	|	|	3.25
35.333	0.00	0.46	0.659	I	O	|	|	|	|	3.24
35.417	0.00	0.46	0.655	I	O	|	|	|	|	3.23

35.500	0.00	0.46	0.652	I	O	|	|	|	|	3.22
35.583	0.00	0.46	0.649	I	O	|	|	|	|	3.21
35.667	0.00	0.46	0.646	I	O	|	|	|	|	3.20
35.750	0.00	0.46	0.643	I	O	|	|	|	|	3.19
35.833	0.00	0.45	0.640	I	O	|	|	|	|	3.19
35.917	0.00	0.45	0.636	I	O	|	|	|	|	3.18
36.000	0.00	0.45	0.633	I	O	|	|	|	|	3.17
36.083	0.00	0.45	0.630	I	O	|	|	|	|	3.16
36.167	0.00	0.45	0.627	I	O	|	|	|	|	3.15
36.250	0.00	0.45	0.624	I	O	|	|	|	|	3.14
36.333	0.00	0.45	0.621	I	O	|	|	|	|	3.13
36.417	0.00	0.45	0.618	I	O	|	|	|	|	3.13
36.500	0.00	0.44	0.615	I	O	|	|	|	|	3.12
36.583	0.00	0.44	0.612	I	O	|	|	|	|	3.11
36.667	0.00	0.44	0.609	I	O	|	|	|	|	3.10
36.750	0.00	0.44	0.606	I	O	|	|	|	|	3.09
36.833	0.00	0.44	0.603	I	O	|	|	|	|	3.09
36.917	0.00	0.44	0.600	I	O	|	|	|	|	3.08
37.000	0.00	0.44	0.597	I	O	|	|	|	|	3.07
37.083	0.00	0.43	0.594	I	O	|	|	|	|	3.06
37.167	0.00	0.43	0.591	I	O	|	|	|	|	3.05
37.250	0.00	0.43	0.588	I	O	|	|	|	|	3.04
37.333	0.00	0.43	0.585	I	O	|	|	|	|	3.04
37.417	0.00	0.43	0.582	I	O	|	|	|	|	3.03
37.500	0.00	0.43	0.579	I	O	|	|	|	|	3.02
37.583	0.00	0.43	0.576	I	O	|	|	|	|	3.01
37.667	0.00	0.43	0.573	I	O	|	|	|	|	3.00
37.750	0.00	0.42	0.570	I	O	|	|	|	|	3.00
37.833	0.00	0.42	0.567	I	O	|	|	|	|	2.99
37.917	0.00	0.42	0.564	I	O	|	|	|	|	2.98
38.000	0.00	0.42	0.561	I	O	|	|	|	|	2.97
38.083	0.00	0.42	0.558	I	O	|	|	|	|	2.96
38.167	0.00	0.42	0.556	I	O	|	|	|	|	2.96
38.250	0.00	0.42	0.553	I	O	|	|	|	|	2.95
38.333	0.00	0.42	0.550	I	O	|	|	|	|	2.94
38.417	0.00	0.41	0.547	I	O	|	|	|	|	2.93
38.500	0.00	0.41	0.544	I	O	|	|	|	|	2.93
38.583	0.00	0.41	0.541	I	O	|	|	|	|	2.92
38.667	0.00	0.41	0.538	I	O	|	|	|	|	2.91
38.750	0.00	0.41	0.536	I	O	|	|	|	|	2.90
38.833	0.00	0.41	0.533	I	O	|	|	|	|	2.89
38.917	0.00	0.41	0.530	I	O	|	|	|	|	2.89
39.000	0.00	0.41	0.527	I	O	|	|	|	|	2.88
39.083	0.00	0.40	0.524	I	O	|	|	|	|	2.87
39.167	0.00	0.40	0.522	I	O	|	|	|	|	2.86
39.250	0.00	0.40	0.519	I	O	|	|	|	|	2.86
39.333	0.00	0.40	0.516	I	O	|	|	|	|	2.85
39.417	0.00	0.40	0.513	I	O	|	|	|	|	2.84
39.500	0.00	0.40	0.511	I	O	|	|	|	|	2.83
39.583	0.00	0.40	0.508	I	O	|	|	|	|	2.83
39.667	0.00	0.40	0.505	I	O	|	|	|	|	2.82
39.750	0.00	0.39	0.502	I	O	|	|	|	|	2.81
39.833	0.00	0.39	0.500	I	O	|	|	|	|	2.80
39.917	0.00	0.39	0.497	I	O	|	|	|	|	2.80
40.000	0.00	0.39	0.494	I	O	|	|	|	|	2.79
40.083	0.00	0.39	0.492	I	O	|	|	|	|	2.78
40.167	0.00	0.39	0.489	I	O	|	|	|	|	2.78
40.250	0.00	0.39	0.486	I	O	|	|	|	|	2.77
40.333	0.00	0.39	0.483	I	O	|	|	|	|	2.76
40.417	0.00	0.39	0.481	I	O	|	|	|	|	2.75
40.500	0.00	0.38	0.478	I	O	|	|	|	|	2.75
40.583	0.00	0.38	0.476	I	O	|	|	|	|	2.74
40.667	0.00	0.38	0.473	I	O	|	|	|	|	2.73
40.750	0.00	0.38	0.470	I	O	|	|	|	|	2.73
40.833	0.00	0.38	0.468	I	O	|	|	|	|	2.72
40.917	0.00	0.38	0.465	I	O	|	|	|	|	2.71
41.000	0.00	0.38	0.462	I	O	|	|	|	|	2.70
41.083	0.00	0.38	0.460	I	O	|	|	|	|	2.70
41.167	0.00	0.37	0.457	I	O	|	|	|	|	2.69
41.250	0.00	0.37	0.455	I	O	|	|	|	|	2.68
41.333	0.00	0.37	0.452	I	O	|	|	|	|	2.67

41.417	0.00	0.36	0.450	I O	|	|	|	2.66
41.500	0.00	0.36	0.447	I O	|	|	|	2.66
41.583	0.00	0.36	0.445	I O	|	|	|	2.65
41.667	0.00	0.36	0.442	I O	|	|	|	2.64
41.750	0.00	0.35	0.440	I O	|	|	|	2.63
41.833	0.00	0.35	0.437	I O	|	|	|	2.63
41.917	0.00	0.35	0.435	I O	|	|	|	2.62
42.000	0.00	0.34	0.433	I O	|	|	|	2.61
42.083	0.00	0.34	0.430	I O	|	|	|	2.60
42.167	0.00	0.34	0.428	I O	|	|	|	2.60
42.250	0.00	0.34	0.426	I O	|	|	|	2.59
42.333	0.00	0.33	0.423	I O	|	|	|	2.58
42.417	0.00	0.33	0.421	I O	|	|	|	2.57
42.500	0.00	0.33	0.419	I O	|	|	|	2.57
42.583	0.00	0.33	0.416	I O	|	|	|	2.56
42.667	0.00	0.32	0.414	I O	|	|	|	2.55
42.750	0.00	0.32	0.412	I O	|	|	|	2.55
42.833	0.00	0.32	0.410	I O	|	|	|	2.54
42.917	0.00	0.32	0.407	I O	|	|	|	2.53
43.000	0.00	0.31	0.405	I O	|	|	|	2.53
43.083	0.00	0.31	0.403	I O	|	|	|	2.52
43.167	0.00	0.31	0.401	I O	|	|	|	2.51
43.250	0.00	0.31	0.399	I O	|	|	|	2.51
43.333	0.00	0.30	0.397	I O	|	|	|	2.50
43.417	0.00	0.30	0.395	I O	|	|	|	2.49
43.500	0.00	0.30	0.393	I O	|	|	|	2.49
43.583	0.00	0.30	0.391	I O	|	|	|	2.48
43.667	0.00	0.30	0.389	I O	|	|	|	2.47
43.750	0.00	0.29	0.386	I O	|	|	|	2.47
43.833	0.00	0.29	0.384	I O	|	|	|	2.46
43.917	0.00	0.29	0.382	I O	|	|	|	2.45
44.000	0.00	0.29	0.381	I O	|	|	|	2.45
44.083	0.00	0.28	0.379	I O	|	|	|	2.44
44.167	0.00	0.28	0.377	I O	|	|	|	2.44
44.250	0.00	0.28	0.375	I O	|	|	|	2.43
44.333	0.00	0.28	0.373	I O	|	|	|	2.42
44.417	0.00	0.28	0.371	I O	|	|	|	2.42
44.500	0.00	0.27	0.369	I O	|	|	|	2.41
44.583	0.00	0.27	0.367	I O	|	|	|	2.41
44.667	0.00	0.27	0.365	I O	|	|	|	2.40
44.750	0.00	0.27	0.363	I O	|	|	|	2.39
44.833	0.00	0.27	0.362	I O	|	|	|	2.39
44.917	0.00	0.27	0.360	I O	|	|	|	2.38
45.000	0.00	0.27	0.358	I O	|	|	|	2.37
45.083	0.00	0.27	0.356	I O	|	|	|	2.36
45.167	0.00	0.27	0.354	I O	|	|	|	2.36
45.250	0.00	0.26	0.352	I O	|	|	|	2.35
45.333	0.00	0.26	0.351	I O	|	|	|	2.34
45.417	0.00	0.26	0.349	I O	|	|	|	2.34
45.500	0.00	0.26	0.347	I O	|	|	|	2.33
45.583	0.00	0.26	0.345	I O	|	|	|	2.32
45.667	0.00	0.26	0.343	I O	|	|	|	2.31
45.750	0.00	0.26	0.341	I O	|	|	|	2.31
45.833	0.00	0.26	0.340	I O	|	|	|	2.30
45.917	0.00	0.26	0.338	I O	|	|	|	2.29
46.000	0.00	0.26	0.336	I O	|	|	|	2.29
46.083	0.00	0.26	0.334	I O	|	|	|	2.28
46.167	0.00	0.26	0.333	I O	|	|	|	2.27
46.250	0.00	0.26	0.331	I O	|	|	|	2.27
46.333	0.00	0.26	0.329	I O	|	|	|	2.26
46.417	0.00	0.26	0.327	I O	|	|	|	2.25
46.500	0.00	0.26	0.325	I O	|	|	|	2.24
46.583	0.00	0.26	0.324	I O	|	|	|	2.24
46.667	0.00	0.25	0.322	I O	|	|	|	2.23
46.750	0.00	0.25	0.320	I O	|	|	|	2.22
46.833	0.00	0.25	0.318	I O	|	|	|	2.22
46.917	0.00	0.25	0.317	I O	|	|	|	2.21
47.000	0.00	0.25	0.315	I O	|	|	|	2.20
47.083	0.00	0.25	0.313	I O	|	|	|	2.20
47.167	0.00	0.25	0.311	I O	|	|	|	2.19
47.250	0.00	0.25	0.310	I O	|	|	|	2.18

47.333	0.00	0.25	0.308	I	O	|	|	|	|	2.18
47.417	0.00	0.25	0.306	I	O	|	|	|	|	2.17
47.500	0.00	0.25	0.305	I	O	|	|	|	|	2.16
47.583	0.00	0.25	0.303	I	O	|	|	|	|	2.16
47.667	0.00	0.25	0.301	I	O	|	|	|	|	2.15
47.750	0.00	0.25	0.299	I	O	|	|	|	|	2.14
47.833	0.00	0.25	0.298	I	O	|	|	|	|	2.14
47.917	0.00	0.25	0.296	I	O	|	|	|	|	2.13
48.000	0.00	0.25	0.294	I	O	|	|	|	|	2.12
48.083	0.00	0.25	0.293	I	O	|	|	|	|	2.12
48.167	0.00	0.24	0.291	I	O	|	|	|	|	2.11
48.250	0.00	0.24	0.289	I	O	|	|	|	|	2.10
48.333	0.00	0.24	0.288	I	O	|	|	|	|	2.10
48.417	0.00	0.24	0.286	I	O	|	|	|	|	2.09
48.500	0.00	0.24	0.284	I	O	|	|	|	|	2.08
48.583	0.00	0.24	0.283	I	O	|	|	|	|	2.08
48.667	0.00	0.24	0.281	I	O	|	|	|	|	2.07
48.750	0.00	0.24	0.279	I	O	|	|	|	|	2.06
48.833	0.00	0.24	0.278	I	O	|	|	|	|	2.06
48.917	0.00	0.24	0.276	I	O	|	|	|	|	2.05
49.000	0.00	0.24	0.274	I	O	|	|	|	|	2.04
49.083	0.00	0.24	0.273	I	O	|	|	|	|	2.04
49.167	0.00	0.24	0.271	I	O	|	|	|	|	2.03
49.250	0.00	0.24	0.269	I	O	|	|	|	|	2.02
49.333	0.00	0.24	0.268	I	O	|	|	|	|	2.02
49.417	0.00	0.24	0.266	I	O	|	|	|	|	2.01
49.500	0.00	0.24	0.264	I	O	|	|	|	|	2.00
49.583	0.00	0.24	0.263	I	O	|	|	|	|	2.00
49.667	0.00	0.24	0.261	I	O	|	|	|	|	1.99
49.750	0.00	0.23	0.260	I	O	|	|	|	|	1.99
49.833	0.00	0.23	0.258	I	O	|	|	|	|	1.98
49.917	0.00	0.23	0.256	I	O	|	|	|	|	1.97
50.000	0.00	0.23	0.255	I	O	|	|	|	|	1.97
50.083	0.00	0.23	0.253	I	O	|	|	|	|	1.96
50.167	0.00	0.23	0.252	I	O	|	|	|	|	1.95
50.250	0.00	0.23	0.250	I	O	|	|	|	|	1.95
50.333	0.00	0.23	0.248	I	O	|	|	|	|	1.94
50.417	0.00	0.23	0.247	I	O	|	|	|	|	1.93
50.500	0.00	0.23	0.245	I	O	|	|	|	|	1.93
50.583	0.00	0.23	0.244	I	O	|	|	|	|	1.92
50.667	0.00	0.23	0.242	I	O	|	|	|	|	1.92
50.750	0.00	0.23	0.240	I	O	|	|	|	|	1.91
50.833	0.00	0.23	0.239	I	O	|	|	|	|	1.90
50.917	0.00	0.23	0.237	I	O	|	|	|	|	1.90
51.000	0.00	0.23	0.236	I	O	|	|	|	|	1.89
51.083	0.00	0.23	0.234	I	O	|	|	|	|	1.89
51.167	0.00	0.23	0.233	I	O	|	|	|	|	1.88
51.250	0.00	0.23	0.231	I	O	|	|	|	|	1.87
51.333	0.00	0.22	0.230	I	O	|	|	|	|	1.87
51.417	0.00	0.22	0.228	I	O	|	|	|	|	1.86
51.500	0.00	0.22	0.226	I	O	|	|	|	|	1.86
51.583	0.00	0.22	0.225	I	O	|	|	|	|	1.85
51.667	0.00	0.22	0.223	I	O	|	|	|	|	1.84
51.750	0.00	0.22	0.222	I	O	|	|	|	|	1.84
51.833	0.00	0.22	0.220	I	O	|	|	|	|	1.83
51.917	0.00	0.22	0.219	I	O	|	|	|	|	1.82
52.000	0.00	0.22	0.217	I	O	|	|	|	|	1.82
52.083	0.00	0.22	0.216	I	O	|	|	|	|	1.81
52.167	0.00	0.22	0.214	I	O	|	|	|	|	1.81
52.250	0.00	0.22	0.213	I	O	|	|	|	|	1.80
52.333	0.00	0.22	0.211	I	O	|	|	|	|	1.80
52.417	0.00	0.22	0.210	I	O	|	|	|	|	1.79
52.500	0.00	0.22	0.208	I	O	|	|	|	|	1.78
52.583	0.00	0.22	0.207	I	O	|	|	|	|	1.78
52.667	0.00	0.22	0.205	I	O	|	|	|	|	1.77
52.750	0.00	0.22	0.204	I	O	|	|	|	|	1.77
52.833	0.00	0.22	0.202	I	O	|	|	|	|	1.76
52.917	0.00	0.22	0.201	I	O	|	|	|	|	1.75
53.000	0.00	0.21	0.199	I	O	|	|	|	|	1.75
53.083	0.00	0.21	0.198	I	O	|	|	|	|	1.74
53.167	0.00	0.21	0.196	I	O	|	|	|	|	1.74

53.250	0.00	0.21	0.195	I O	|	|	|	| 1.73
53.333	0.00	0.21	0.193	I O	|	|	|	| 1.72
53.417	0.00	0.21	0.192	I O	|	|	|	| 1.72
53.500	0.00	0.21	0.190	I O	|	|	|	| 1.71
53.583	0.00	0.21	0.189	I O	|	|	|	| 1.71
53.667	0.00	0.21	0.187	I O	|	|	|	| 1.70
53.750	0.00	0.21	0.186	I O	|	|	|	| 1.69
53.833	0.00	0.21	0.185	I O	|	|	|	| 1.68
53.917	0.00	0.21	0.183	I O	|	|	|	| 1.67
54.000	0.00	0.21	0.182	I O	|	|	|	| 1.66
54.083	0.00	0.21	0.180	I O	|	|	|	| 1.65
54.167	0.00	0.21	0.179	I O	|	|	|	| 1.64
54.250	0.00	0.20	0.177	IO	|	|	|	| 1.64
54.333	0.00	0.20	0.176	IO	|	|	|	| 1.63
54.417	0.00	0.20	0.175	IO	|	|	|	| 1.62
54.500	0.00	0.20	0.173	IO	|	|	|	| 1.61
54.583	0.00	0.20	0.172	IO	|	|	|	| 1.60
54.667	0.00	0.20	0.171	IO	|	|	|	| 1.59
54.750	0.00	0.20	0.169	IO	|	|	|	| 1.58
54.833	0.00	0.20	0.168	IO	|	|	|	| 1.57
54.917	0.00	0.20	0.166	IO	|	|	|	| 1.56
55.000	0.00	0.20	0.165	IO	|	|	|	| 1.55
55.083	0.00	0.19	0.164	IO	|	|	|	| 1.54
55.167	0.00	0.19	0.162	IO	|	|	|	| 1.53
55.250	0.00	0.19	0.161	IO	|	|	|	| 1.52
55.333	0.00	0.19	0.160	IO	|	|	|	| 1.51
55.417	0.00	0.19	0.158	IO	|	|	|	| 1.51
55.500	0.00	0.19	0.157	IO	|	|	|	| 1.50
55.583	0.00	0.19	0.156	IO	|	|	|	| 1.49
55.667	0.00	0.19	0.154	IO	|	|	|	| 1.48
55.750	0.00	0.19	0.153	IO	|	|	|	| 1.47
55.833	0.00	0.19	0.152	IO	|	|	|	| 1.46
55.917	0.00	0.19	0.151	IO	|	|	|	| 1.45
56.000	0.00	0.18	0.149	IO	|	|	|	| 1.44
56.083	0.00	0.18	0.148	IO	|	|	|	| 1.44
56.167	0.00	0.18	0.147	IO	|	|	|	| 1.43
56.250	0.00	0.18	0.146	IO	|	|	|	| 1.42
56.333	0.00	0.18	0.144	IO	|	|	|	| 1.41
56.417	0.00	0.18	0.143	IO	|	|	|	| 1.40
56.500	0.00	0.18	0.142	IO	|	|	|	| 1.39
56.583	0.00	0.18	0.141	IO	|	|	|	| 1.38
56.667	0.00	0.18	0.139	IO	|	|	|	| 1.38
56.750	0.00	0.18	0.138	IO	|	|	|	| 1.37
56.833	0.00	0.18	0.137	IO	|	|	|	| 1.36
56.917	0.00	0.18	0.136	IO	|	|	|	| 1.35
57.000	0.00	0.17	0.134	IO	|	|	|	| 1.34
57.083	0.00	0.17	0.133	IO	|	|	|	| 1.33
57.167	0.00	0.17	0.132	IO	|	|	|	| 1.33
57.250	0.00	0.17	0.131	IO	|	|	|	| 1.32
57.333	0.00	0.17	0.130	IO	|	|	|	| 1.31
57.417	0.00	0.17	0.129	IO	|	|	|	| 1.30
57.500	0.00	0.17	0.127	IO	|	|	|	| 1.29
57.583	0.00	0.17	0.126	IO	|	|	|	| 1.29
57.667	0.00	0.17	0.125	IO	|	|	|	| 1.28
57.750	0.00	0.17	0.124	IO	|	|	|	| 1.27
57.833	0.00	0.17	0.123	IO	|	|	|	| 1.26
57.917	0.00	0.17	0.122	IO	|	|	|	| 1.26
58.000	0.00	0.16	0.120	IO	|	|	|	| 1.25
58.083	0.00	0.16	0.119	IO	|	|	|	| 1.24
58.167	0.00	0.16	0.118	IO	|	|	|	| 1.23
58.250	0.00	0.16	0.117	IO	|	|	|	| 1.22
58.333	0.00	0.16	0.116	IO	|	|	|	| 1.22
58.417	0.00	0.16	0.115	IO	|	|	|	| 1.21
58.500	0.00	0.16	0.114	IO	|	|	|	| 1.20
58.583	0.00	0.16	0.113	IO	|	|	|	| 1.19
58.667	0.00	0.16	0.112	IO	|	|	|	| 1.19
58.750	0.00	0.16	0.110	IO	|	|	|	| 1.18
58.833	0.00	0.16	0.109	IO	|	|	|	| 1.17
58.917	0.00	0.16	0.108	IO	|	|	|	| 1.16
59.000	0.00	0.16	0.107	IO	|	|	|	| 1.16
59.083	0.00	0.15	0.106	IO	|	|	|	| 1.15

59.167	0.00	0.15	0.105	IO				1.14
59.250	0.00	0.15	0.104	IO				1.14
59.333	0.00	0.15	0.103	IO				1.13
59.417	0.00	0.15	0.102	IO				1.12
59.500	0.00	0.15	0.101	IO				1.11
59.583	0.00	0.15	0.100	IO				1.11
59.667	0.00	0.15	0.099	IO				1.10
59.750	0.00	0.15	0.098	IO				1.09
59.833	0.00	0.15	0.097	IO				1.09
59.917	0.00	0.15	0.096	IO				1.08
60.000	0.00	0.15	0.095	IO				1.07
60.083	0.00	0.15	0.094	IO				1.07
60.167	0.00	0.15	0.093	IO				1.06
60.250	0.00	0.14	0.092	IO				1.05
60.333	0.00	0.14	0.091	IO				1.05
60.417	0.00	0.14	0.090	IO				1.04
60.500	0.00	0.14	0.089	IO				1.03
60.583	0.00	0.14	0.088	IO				1.02
60.667	0.00	0.14	0.087	IO				1.02
60.750	0.00	0.14	0.086	IO				1.01
60.833	0.00	0.14	0.085	IO				1.01
60.917	0.00	0.14	0.084	IO				1.00
61.000	0.00	0.14	0.083	IO				0.99
61.083	0.00	0.14	0.082	IO				0.99
61.167	0.00	0.14	0.081	IO				0.98
61.250	0.00	0.14	0.080	IO				0.97
61.333	0.00	0.14	0.079	IO				0.97
61.417	0.00	0.14	0.078	IO				0.96
61.500	0.00	0.13	0.077	IO				0.95
61.583	0.00	0.13	0.076	IO				0.95
61.667	0.00	0.13	0.075	IO				0.94
61.750	0.00	0.13	0.075	IO				0.93
61.833	0.00	0.13	0.074	IO				0.93
61.917	0.00	0.13	0.073	IO				0.92
62.000	0.00	0.13	0.072	IO				0.92
62.083	0.00	0.13	0.071	IO				0.91
62.167	0.00	0.13	0.070	IO				0.90
62.250	0.00	0.13	0.069	IO				0.90
62.333	0.00	0.13	0.068	IO				0.89
62.417	0.00	0.13	0.067	IO				0.89
62.500	0.00	0.13	0.066	IO				0.88
62.583	0.00	0.13	0.066	IO				0.87
62.667	0.00	0.13	0.065	IO				0.87
62.750	0.00	0.13	0.064	IO				0.86
62.833	0.00	0.12	0.063	IO				0.86
62.917	0.00	0.12	0.062	IO				0.85
63.000	0.00	0.12	0.061	IO				0.84
63.083	0.00	0.12	0.060	IO				0.84
63.167	0.00	0.12	0.060	IO				0.83
63.250	0.00	0.12	0.059	IO				0.83
63.333	0.00	0.12	0.058	IO				0.82
63.417	0.00	0.12	0.057	IO				0.82
63.500	0.00	0.12	0.056	IO				0.81
63.583	0.00	0.12	0.055	IO				0.80
63.667	0.00	0.12	0.055	IO				0.80
63.750	0.00	0.12	0.054	IO				0.79
63.833	0.00	0.12	0.053	IO				0.79
63.917	0.00	0.12	0.052	IO				0.78
64.000	0.00	0.12	0.051	IO				0.78
64.083	0.00	0.12	0.051	IO				0.77
64.167	0.00	0.12	0.050	IO				0.77
64.250	0.00	0.12	0.049	IO				0.76
64.333	0.00	0.11	0.048	IO				0.76
64.417	0.00	0.11	0.047	IO				0.75
64.500	0.00	0.11	0.047	IO				0.74
64.583	0.00	0.11	0.046	IO				0.74
64.667	0.00	0.11	0.045	IO				0.73
64.750	0.00	0.11	0.044	IO				0.73
64.833	0.00	0.11	0.043	IO				0.72
64.917	0.00	0.11	0.043	IO				0.72
65.000	0.00	0.11	0.042	IO				0.71

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65.083    0.00    0.11      0.041  IO      |       |       |       |     0.71
65.167    0.00    0.11      0.040  IO      |       |       |       |     0.70
65.250    0.00    0.11      0.040  IO      |       |       |       |     0.69
65.333    0.00    0.11      0.039  IO      |       |       |       |     0.68
65.417    0.00    0.10      0.038  IO      |       |       |       |     0.67
65.500    0.00    0.10      0.037  O       |       |       |       |     0.66
65.583    0.00    0.10      0.037  O       |       |       |       |     0.64
65.667    0.00    0.10      0.036  O       |       |       |       |     0.63

      Remaining water in basin =    0.04 (Ac.Ft)

      ****************************HYDROGRAPH DATA****************************
                    Number of intervals =   788
                    Time interval =    5.0 (Min.)
                    Maximum/Peak flow rate =        0.680 (CFS)
                    Total volume =       1.995 (Ac.Ft)
             Status of hydrographs being held in storage
                         Stream 1  Stream 2  Stream 3  Stream 4  Stream 5
             Peak (CFS)      0.000     0.000     0.000     0.000     0.000
             Vol (Ac.Ft)      0.000     0.000     0.000     0.000     0.000
      ************************************************************************

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                    FLOOD HYDROGRAPH ROUTING PROGRAM
                Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2004
                            Study date: 08/18/25

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 Program License Serial Number 5006

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 ********************* HYDROGRAPH INFORMATION **********************

                From study/file name: PROB110.rte
 ****************************HYDROGRAPH DATA****************************
                Number of intervals =    25
                Time interval =    5.0 (Min.)
                Maximum/Peak flow rate =       28.167 (CFS)
                Total volume =       1.002 (Ac.Ft)
        Status of hydrographs being held in storage
                    Stream 1  Stream 2  Stream 3  Stream 4  Stream 5
        Peak (CFS)      0.000     0.000     0.000     0.000     0.000
        Vol (Ac.Ft)      0.000     0.000     0.000     0.000     0.000
 ***********************************************************************



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 Process from Point/Station        0.000 to Point/Station        0.000
 **** RETARDING BASIN ROUTING ****
 _________________________________________________________________________

 User entry of depth-outflow-storage data
 ---------------------------------------------------------------------
 Total number of inflow hydrograph intervals = 25
 Hydrograph time unit =  5.000 (Min.)
 Initial depth in storage basin =   0.00(Ft.)
 ---------------------------------------------------------------------
 ---------------------------------------------------------------------
 Initial basin depth =   0.00 (Ft.)
 Initial basin storage =      0.00 (Ac.Ft)
 Initial basin outflow =   0.00 (CFS)
 ---------------------------------------------------------------------
 ---------------------------------------------------------------------
 Depth vs. Storage and Depth vs. Discharge data:
  Basin Depth  Storage    Outflow   (S-O*dt/2)   (S+O*dt/2)
       (Ft.)    (Ac.Ft)    (CFS)     (Ac.Ft)    (Ac.Ft)
 ---------------------------------------------------------------------
    0.000      0.000      0.000      0.000        0.000
    0.700      0.040      0.109      0.040        0.040
    1.700      0.187      0.211      0.186        0.188
    2.400      0.365      0.269      0.364        0.366
    2.700      0.461      0.377      0.460        0.462
    3.700      0.829      0.537      0.827        0.831
    4.700      1.249      0.651      1.247        1.251
    5.700      1.723      0.746      1.720        1.726
    6.700      2.252      1.870      2.246        2.258
    7.700      2.841      2.376      2.833        2.849
    8.300      3.223     38.499      3.090        3.356
    8.700      3.491    113.554      3.100        3.882
    9.700      4.203    441.782      2.682        5.724
 ---------------------------------------------------------------------
                 Hydrograph Detention Basin Routing
 ---------------------------------------------------------------------

 Graph values: 'I'= unit inflow; 'O'=outflow at time shown
 ---------------------------------------------------------------------
  Time   Inflow  Outflow    Storage                                    Depth
```

(Hours)	(CFS)	(CFS)	(Ac.Ft)	.0	7.0	14.08	21.13	28.17	(Ft.)
0.083	0.25	0.00	0.001	O					0.01
0.167	1.37	0.02	0.006	OI					0.11
0.250	2.56	0.05	0.020	O I					0.34
0.333	3.34	0.11	0.039	O I					0.69
0.417	4.05	0.13	0.064	O I					0.86
0.500	4.89	0.15	0.094	O I					1.07
0.583	6.06	0.17	0.130	O I					1.32
0.667	7.50	0.20	0.176	O I					1.62
0.750	10.21	0.23	0.235	O	I				1.89
0.833	17.48	0.26	0.329	O		I			2.26
0.917	28.17	0.39	0.484	O				I	2.76
1.000	22.91	0.46	0.657	O			I		3.23
1.083	12.47	0.51	0.775	O		I			3.55
1.167	7.39	0.54	0.840	O	I				3.73
1.250	4.73	0.55	0.878	O I					3.82
1.333	3.35	0.56	0.902	O I					3.87
1.417	2.42	0.56	0.918	O I					3.91
1.500	1.88	0.56	0.929	O I					3.94
1.583	1.42	0.57	0.937	OI					3.96
1.667	1.06	0.57	0.941	OI					3.97
1.750	0.78	0.57	0.944	O					3.97
1.833	0.59	0.57	0.944	O					3.97
1.917	0.47	0.57	0.944	O					3.97
2.000	0.09	0.57	0.942	O					3.97
2.083	0.02	0.57	0.939	O					3.96
2.167	0.00	0.57	0.935	O					3.95
2.250	0.00	0.56	0.931	O					3.94
2.333	0.00	0.56	0.927	O					3.93
2.417	0.00	0.56	0.923	O					3.92
2.500	0.00	0.56	0.919	O					3.92
2.583	0.00	0.56	0.915	O					3.91
2.667	0.00	0.56	0.912	O					3.90
2.750	0.00	0.56	0.908	O					3.89
2.833	0.00	0.56	0.904	O					3.88
2.917	0.00	0.56	0.900	O					3.87
3.000	0.00	0.56	0.896	O					3.86
3.083	0.00	0.55	0.892	O					3.85
3.167	0.00	0.55	0.889	O					3.84
3.250	0.00	0.55	0.885	O					3.83
3.333	0.00	0.55	0.881	O					3.82
3.417	0.00	0.55	0.877	O					3.81
3.500	0.00	0.55	0.873	O					3.81
3.583	0.00	0.55	0.870	O					3.80
3.667	0.00	0.55	0.866	O					3.79
3.750	0.00	0.55	0.862	O					3.78
3.833	0.00	0.54	0.858	O					3.77
3.917	0.00	0.54	0.855	O					3.76
4.000	0.00	0.54	0.851	O					3.75
4.083	0.00	0.54	0.847	O					3.74
4.167	0.00	0.54	0.843	O					3.73
4.250	0.00	0.54	0.840	O					3.73
4.333	0.00	0.54	0.836	O					3.72
4.417	0.00	0.54	0.832	O					3.71
4.500	0.00	0.54	0.829	O					3.70
4.583	0.00	0.54	0.825	O					3.69
4.667	0.00	0.53	0.821	O					3.68
4.750	0.00	0.53	0.818	O					3.67
4.833	0.00	0.53	0.814	O					3.66
4.917	0.00	0.53	0.810	O					3.65
5.000	0.00	0.53	0.807	O					3.64
5.083	0.00	0.53	0.803	O					3.63
5.167	0.00	0.52	0.799	O					3.62
5.250	0.00	0.52	0.796	O					3.61
5.333	0.00	0.52	0.792	O					3.60
5.417	0.00	0.52	0.789	O					3.59
5.500	0.00	0.52	0.785	O					3.58
5.583	0.00	0.52	0.781	O					3.57
5.667	0.00	0.51	0.778	O					3.56
5.750	0.00	0.51	0.774	O					3.55
5.833	0.00	0.51	0.771	O					3.54

5.917	0.00	0.51	0.767	O					3.53
6.000	0.00	0.51	0.764	O					3.52
6.083	0.00	0.51	0.760	O					3.51
6.167	0.00	0.51	0.757	O					3.50
6.250	0.00	0.50	0.753	O					3.49
6.333	0.00	0.50	0.750	O					3.48
6.417	0.00	0.50	0.746	O					3.48
6.500	0.00	0.50	0.743	O					3.47
6.583	0.00	0.50	0.740	O					3.46
6.667	0.00	0.50	0.736	O					3.45
6.750	0.00	0.50	0.733	O					3.44
6.833	0.00	0.49	0.729	O					3.43
6.917	0.00	0.49	0.726	O					3.42
7.000	0.00	0.49	0.723	O					3.41
7.083	0.00	0.49	0.719	O					3.40
7.167	0.00	0.49	0.716	O					3.39
7.250	0.00	0.49	0.712	O					3.38
7.333	0.00	0.48	0.709	O					3.37
7.417	0.00	0.48	0.706	O					3.37
7.500	0.00	0.48	0.702	O					3.36
7.583	0.00	0.48	0.699	O					3.35
7.667	0.00	0.48	0.696	O					3.34
7.750	0.00	0.48	0.693	O					3.33
7.833	0.00	0.48	0.689	O					3.32
7.917	0.00	0.47	0.686	O					3.31
8.000	0.00	0.47	0.683	O					3.30
8.083	0.00	0.47	0.679	O					3.29
8.167	0.00	0.47	0.676	O					3.28
8.250	0.00	0.47	0.673	O					3.28
8.333	0.00	0.47	0.670	O					3.27
8.417	0.00	0.47	0.667	O					3.26
8.500	0.00	0.46	0.663	O					3.25
8.583	0.00	0.46	0.660	O					3.24
8.667	0.00	0.46	0.657	O					3.23
8.750	0.00	0.46	0.654	O					3.22
8.833	0.00	0.46	0.651	O					3.22
8.917	0.00	0.46	0.647	O					3.21
9.000	0.00	0.46	0.644	O					3.20
9.083	0.00	0.46	0.641	O					3.19
9.167	0.00	0.45	0.638	O					3.18
9.250	0.00	0.45	0.635	O					3.17
9.333	0.00	0.45	0.632	O					3.16
9.417	0.00	0.45	0.629	O					3.16
9.500	0.00	0.45	0.626	O					3.15
9.583	0.00	0.45	0.622	O					3.14
9.667	0.00	0.45	0.619	O					3.13
9.750	0.00	0.44	0.616	O					3.12
9.833	0.00	0.44	0.613	O					3.11
9.917	0.00	0.44	0.610	O					3.11
10.000	0.00	0.44	0.607	O					3.10
10.083	0.00	0.44	0.604	O					3.09
10.167	0.00	0.44	0.601	O					3.08
10.250	0.00	0.44	0.598	O					3.07
10.333	0.00	0.44	0.595	O					3.06
10.417	0.00	0.43	0.592	O					3.06
10.500	0.00	0.43	0.589	O					3.05
10.583	0.00	0.43	0.586	O					3.04
10.667	0.00	0.43	0.583	O					3.03
10.750	0.00	0.43	0.580	O					3.02
10.833	0.00	0.43	0.577	O					3.02
10.917	0.00	0.43	0.574	O					3.01
11.000	0.00	0.43	0.571	O					3.00
11.083	0.00	0.42	0.568	O					2.99
11.167	0.00	0.42	0.566	O					2.98
11.250	0.00	0.42	0.563	O					2.98
11.333	0.00	0.42	0.560	O					2.97
11.417	0.00	0.42	0.557	O					2.96
11.500	0.00	0.42	0.554	O					2.95
11.583	0.00	0.42	0.551	O					2.94
11.667	0.00	0.41	0.548	O					2.94
11.750	0.00	0.41	0.545	O					2.93

11.833	0.00	0.41	0.543	O	|	|	|	|	2.92
11.917	0.00	0.41	0.540	O	|	|	|	|	2.91
12.000	0.00	0.41	0.537	O	|	|	|	|	2.91
12.083	0.00	0.41	0.534	O	|	|	|	|	2.90
12.167	0.00	0.41	0.531	O	|	|	|	|	2.89
12.250	0.00	0.41	0.528	O	|	|	|	|	2.88
12.333	0.00	0.41	0.526	O	|	|	|	|	2.88
12.417	0.00	0.40	0.523	O	|	|	|	|	2.87
12.500	0.00	0.40	0.520	O	|	|	|	|	2.86
12.583	0.00	0.40	0.517	O	|	|	|	|	2.85
12.667	0.00	0.40	0.515	O	|	|	|	|	2.85
12.750	0.00	0.40	0.512	O	|	|	|	|	2.84
12.833	0.00	0.40	0.509	O	|	|	|	|	2.83
12.917	0.00	0.40	0.506	O	|	|	|	|	2.82
13.000	0.00	0.40	0.504	O	|	|	|	|	2.82
13.083	0.00	0.39	0.501	O	|	|	|	|	2.81
13.167	0.00	0.39	0.498	O	|	|	|	|	2.80
13.250	0.00	0.39	0.495	O	|	|	|	|	2.79
13.333	0.00	0.39	0.493	O	|	|	|	|	2.79
13.417	0.00	0.39	0.490	O	|	|	|	|	2.78
13.500	0.00	0.39	0.487	O	|	|	|	|	2.77
13.583	0.00	0.39	0.485	O	|	|	|	|	2.76
13.667	0.00	0.39	0.482	O	|	|	|	|	2.76
13.750	0.00	0.39	0.479	O	|	|	|	|	2.75
13.833	0.00	0.38	0.477	O	|	|	|	|	2.74
13.917	0.00	0.38	0.474	O	|	|	|	|	2.74
14.000	0.00	0.38	0.472	O	|	|	|	|	2.73
14.083	0.00	0.38	0.469	O	|	|	|	|	2.72
14.167	0.00	0.38	0.466	O	|	|	|	|	2.71
14.250	0.00	0.38	0.464	O	|	|	|	|	2.71
14.333	0.00	0.38	0.461	O	|	|	|	|	2.70
14.417	0.00	0.37	0.458	O	|	|	|	|	2.69
14.500	0.00	0.37	0.456	O	|	|	|	|	2.68
14.583	0.00	0.37	0.453	O	|	|	|	|	2.68
14.667	0.00	0.37	0.451	O	|	|	|	|	2.67
14.750	0.00	0.36	0.448	O	|	|	|	|	2.66
14.833	0.00	0.36	0.446	O	|	|	|	|	2.65
14.917	0.00	0.36	0.443	O	|	|	|	|	2.64
15.000	0.00	0.35	0.441	O	|	|	|	|	2.64
15.083	0.00	0.35	0.438	O	|	|	|	|	2.63
15.167	0.00	0.35	0.436	O	|	|	|	|	2.62
15.250	0.00	0.35	0.434	O	|	|	|	|	2.61
15.333	0.00	0.34	0.431	O	|	|	|	|	2.61
15.417	0.00	0.34	0.429	O	|	|	|	|	2.60
15.500	0.00	0.34	0.427	O	|	|	|	|	2.59
15.583	0.00	0.34	0.424	O	|	|	|	|	2.59
15.667	0.00	0.33	0.422	O	|	|	|	|	2.58
15.750	0.00	0.33	0.420	O	|	|	|	|	2.57
15.833	0.00	0.33	0.417	O	|	|	|	|	2.56
15.917	0.00	0.33	0.415	O	|	|	|	|	2.56
16.000	0.00	0.32	0.413	O	|	|	|	|	2.55
16.083	0.00	0.32	0.411	O	|	|	|	|	2.54
16.167	0.00	0.32	0.409	O	|	|	|	|	2.54
16.250	0.00	0.32	0.406	O	|	|	|	|	2.53
16.333	0.00	0.31	0.404	O	|	|	|	|	2.52
16.417	0.00	0.31	0.402	O	|	|	|	|	2.52
16.500	0.00	0.31	0.400	O	|	|	|	|	2.51
16.583	0.00	0.31	0.398	O	|	|	|	|	2.50
16.667	0.00	0.30	0.396	O	|	|	|	|	2.50
16.750	0.00	0.30	0.394	O	|	|	|	|	2.49
16.833	0.00	0.30	0.392	O	|	|	|	|	2.48
16.917	0.00	0.30	0.390	O	|	|	|	|	2.48
17.000	0.00	0.29	0.387	O	|	|	|	|	2.47
17.083	0.00	0.29	0.385	O	|	|	|	|	2.46
17.167	0.00	0.29	0.383	O	|	|	|	|	2.46
17.250	0.00	0.29	0.381	O	|	|	|	|	2.45
17.333	0.00	0.29	0.379	O	|	|	|	|	2.45
17.417	0.00	0.28	0.378	O	|	|	|	|	2.44
17.500	0.00	0.28	0.376	O	|	|	|	|	2.43
17.583	0.00	0.28	0.374	O	|	|	|	|	2.43
17.667	0.00	0.28	0.372	O	|	|	|	|	2.42

17.750	0.00	0.27	0.370	O					2.42
17.833	0.00	0.27	0.368	O					2.41
17.917	0.00	0.27	0.366	O					2.40
18.000	0.00	0.27	0.364	O					2.40
18.083	0.00	0.27	0.362	O					2.39
18.167	0.00	0.27	0.361	O					2.38
18.250	0.00	0.27	0.359	O					2.38
18.333	0.00	0.27	0.357	O					2.37
18.417	0.00	0.27	0.355	O					2.36
18.500	0.00	0.27	0.353	O					2.35
18.583	0.00	0.26	0.351	O					2.35
18.667	0.00	0.26	0.350	O					2.34
18.750	0.00	0.26	0.348	O					2.33
18.833	0.00	0.26	0.346	O					2.33
18.917	0.00	0.26	0.344	O					2.32
19.000	0.00	0.26	0.342	O					2.31
19.083	0.00	0.26	0.341	O					2.30
19.167	0.00	0.26	0.339	O					2.30
19.250	0.00	0.26	0.337	O					2.29
19.333	0.00	0.26	0.335	O					2.28
19.417	0.00	0.26	0.333	O					2.28
19.500	0.00	0.26	0.332	O					2.27
19.583	0.00	0.26	0.330	O					2.26
19.667	0.00	0.26	0.328	O					2.25
19.750	0.00	0.26	0.326	O					2.25
19.833	0.00	0.26	0.325	O					2.24
19.917	0.00	0.26	0.323	O					2.23
20.000	0.00	0.25	0.321	O					2.23
20.083	0.00	0.25	0.319	O					2.22
20.167	0.00	0.25	0.317	O					2.21
20.250	0.00	0.25	0.316	O					2.21
20.333	0.00	0.25	0.314	O					2.20
20.417	0.00	0.25	0.312	O					2.19
20.500	0.00	0.25	0.311	O					2.19
20.583	0.00	0.25	0.309	O					2.18
20.667	0.00	0.25	0.307	O					2.17
20.750	0.00	0.25	0.305	O					2.17
20.833	0.00	0.25	0.304	O					2.16
20.917	0.00	0.25	0.302	O					2.15
21.000	0.00	0.25	0.300	O					2.15
21.083	0.00	0.25	0.299	O					2.14
21.167	0.00	0.25	0.297	O					2.13
21.250	0.00	0.25	0.295	O					2.13
21.333	0.00	0.25	0.293	O					2.12
21.417	0.00	0.25	0.292	O					2.11
21.500	0.00	0.24	0.290	O					2.11
21.583	0.00	0.24	0.288	O					2.10
21.667	0.00	0.24	0.287	O					2.09
21.750	0.00	0.24	0.285	O					2.09
21.833	0.00	0.24	0.283	O					2.08
21.917	0.00	0.24	0.282	O					2.07
22.000	0.00	0.24	0.280	O					2.07
22.083	0.00	0.24	0.278	O					2.06
22.167	0.00	0.24	0.277	O					2.05
22.250	0.00	0.24	0.275	O					2.05
22.333	0.00	0.24	0.273	O					2.04
22.417	0.00	0.24	0.272	O					2.03
22.500	0.00	0.24	0.270	O					2.03
22.583	0.00	0.24	0.268	O					2.02
22.667	0.00	0.24	0.267	O					2.01
22.750	0.00	0.24	0.265	O					2.01
22.833	0.00	0.24	0.264	O					2.00
22.917	0.00	0.24	0.262	O					1.99
23.000	0.00	0.23	0.260	O					1.99
23.083	0.00	0.23	0.259	O					1.98
23.167	0.00	0.23	0.257	O					1.98
23.250	0.00	0.23	0.256	O					1.97
23.333	0.00	0.23	0.254	O					1.96
23.417	0.00	0.23	0.252	O					1.96
23.500	0.00	0.23	0.251	O					1.95
23.583	0.00	0.23	0.249	O					1.94

23.667	0.00	0.23	0.248	O	|	|	|	|	1.94
23.750	0.00	0.23	0.246	O	|	|	|	|	1.93
23.833	0.00	0.23	0.244	O	|	|	|	|	1.93
23.917	0.00	0.23	0.243	O	|	|	|	|	1.92
24.000	0.00	0.23	0.241	O	|	|	|	|	1.91
24.083	0.00	0.23	0.240	O	|	|	|	|	1.91
24.167	0.00	0.23	0.238	O	|	|	|	|	1.90
24.250	0.00	0.23	0.236	O	|	|	|	|	1.89
24.333	0.00	0.23	0.235	O	|	|	|	|	1.89
24.417	0.00	0.23	0.233	O	|	|	|	|	1.88
24.500	0.00	0.23	0.232	O	|	|	|	|	1.88
24.583	0.00	0.23	0.230	O	|	|	|	|	1.87
24.667	0.00	0.22	0.229	O	|	|	|	|	1.86
24.750	0.00	0.22	0.227	O	|	|	|	|	1.86
24.833	0.00	0.22	0.226	O	|	|	|	|	1.85
24.917	0.00	0.22	0.224	O	|	|	|	|	1.85
25.000	0.00	0.22	0.223	O	|	|	|	|	1.84
25.083	0.00	0.22	0.221	O	|	|	|	|	1.83
25.167	0.00	0.22	0.219	O	|	|	|	|	1.83
25.250	0.00	0.22	0.218	O	|	|	|	|	1.82
25.333	0.00	0.22	0.216	O	|	|	|	|	1.82
25.417	0.00	0.22	0.215	O	|	|	|	|	1.81
25.500	0.00	0.22	0.213	O	|	|	|	|	1.80
25.583	0.00	0.22	0.212	O	|	|	|	|	1.80
25.667	0.00	0.22	0.210	O	|	|	|	|	1.79
25.750	0.00	0.22	0.209	O	|	|	|	|	1.79
25.833	0.00	0.22	0.207	O	|	|	|	|	1.78
25.917	0.00	0.22	0.206	O	|	|	|	|	1.77
26.000	0.00	0.22	0.204	O	|	|	|	|	1.77
26.083	0.00	0.22	0.203	O	|	|	|	|	1.76
26.167	0.00	0.22	0.201	O	|	|	|	|	1.76
26.250	0.00	0.22	0.200	O	|	|	|	|	1.75
26.333	0.00	0.21	0.198	O	|	|	|	|	1.75
26.417	0.00	0.21	0.197	O	|	|	|	|	1.74
26.500	0.00	0.21	0.196	O	|	|	|	|	1.73
26.583	0.00	0.21	0.194	O	|	|	|	|	1.73
26.667	0.00	0.21	0.193	O	|	|	|	|	1.72
26.750	0.00	0.21	0.191	O	|	|	|	|	1.72
26.833	0.00	0.21	0.190	O	|	|	|	|	1.71
26.917	0.00	0.21	0.188	O	|	|	|	|	1.70
27.000	0.00	0.21	0.187	O	|	|	|	|	1.70
27.083	0.00	0.21	0.185	O	|	|	|	|	1.69
27.167	0.00	0.21	0.184	O	|	|	|	|	1.68
27.250	0.00	0.21	0.182	O	|	|	|	|	1.67
27.333	0.00	0.21	0.181	O	|	|	|	|	1.66
27.417	0.00	0.21	0.180	O	|	|	|	|	1.65
27.500	0.00	0.20	0.178	O	|	|	|	|	1.64
27.583	0.00	0.20	0.177	O	|	|	|	|	1.63
27.667	0.00	0.20	0.175	O	|	|	|	|	1.62
27.750	0.00	0.20	0.174	O	|	|	|	|	1.61
27.833	0.00	0.20	0.173	O	|	|	|	|	1.60
27.917	0.00	0.20	0.171	O	|	|	|	|	1.59
28.000	0.00	0.20	0.170	O	|	|	|	|	1.58
28.083	0.00	0.20	0.168	O	|	|	|	|	1.57
28.167	0.00	0.20	0.167	O	|	|	|	|	1.56
28.250	0.00	0.20	0.166	O	|	|	|	|	1.56
28.333	0.00	0.20	0.164	O	|	|	|	|	1.55
28.417	0.00	0.19	0.163	O	|	|	|	|	1.54
28.500	0.00	0.19	0.162	O	|	|	|	|	1.53
28.583	0.00	0.19	0.160	O	|	|	|	|	1.52
28.667	0.00	0.19	0.159	O	|	|	|	|	1.51
28.750	0.00	0.19	0.158	O	|	|	|	|	1.50
28.833	0.00	0.19	0.156	O	|	|	|	|	1.49
28.917	0.00	0.19	0.155	O	|	|	|	|	1.48
29.000	0.00	0.19	0.154	O	|	|	|	|	1.47
29.083	0.00	0.19	0.153	O	|	|	|	|	1.47
29.167	0.00	0.19	0.151	O	|	|	|	|	1.46
29.250	0.00	0.19	0.150	O	|	|	|	|	1.45
29.333	0.00	0.18	0.149	O	|	|	|	|	1.44
29.417	0.00	0.18	0.147	O	|	|	|	|	1.43
29.500	0.00	0.18	0.146	O	|	|	|	|	1.42

29.583	0.00	0.18	0.145	O					1.41
29.667	0.00	0.18	0.144	O					1.41
29.750	0.00	0.18	0.142	O					1.40
29.833	0.00	0.18	0.141	O					1.39
29.917	0.00	0.18	0.140	O					1.38
30.000	0.00	0.18	0.139	O					1.37
30.083	0.00	0.18	0.137	O					1.36
30.167	0.00	0.18	0.136	O					1.35
30.250	0.00	0.17	0.135	O					1.35
30.333	0.00	0.17	0.134	O					1.34
30.417	0.00	0.17	0.133	O					1.33
30.500	0.00	0.17	0.131	O					1.32
30.583	0.00	0.17	0.130	O					1.31
30.667	0.00	0.17	0.129	O					1.31
30.750	0.00	0.17	0.128	O					1.30
30.833	0.00	0.17	0.127	O					1.29
30.917	0.00	0.17	0.126	O					1.28
31.000	0.00	0.17	0.124	O					1.27
31.083	0.00	0.17	0.123	O					1.27
31.167	0.00	0.17	0.122	O					1.26
31.250	0.00	0.17	0.121	O					1.25
31.333	0.00	0.16	0.120	O					1.24
31.417	0.00	0.16	0.119	O					1.24
31.500	0.00	0.16	0.118	O					1.23
31.583	0.00	0.16	0.117	O					1.22
31.667	0.00	0.16	0.115	O					1.21
31.750	0.00	0.16	0.114	O					1.21
31.833	0.00	0.16	0.113	O					1.20
31.917	0.00	0.16	0.112	O					1.19
32.000	0.00	0.16	0.111	O					1.18
32.083	0.00	0.16	0.110	O					1.18
32.167	0.00	0.16	0.109	O					1.17
32.250	0.00	0.16	0.108	O					1.16
32.333	0.00	0.16	0.107	O					1.15
32.417	0.00	0.15	0.106	O					1.15
32.500	0.00	0.15	0.105	O					1.14
32.583	0.00	0.15	0.103	O					1.13
32.667	0.00	0.15	0.102	O					1.12
32.750	0.00	0.15	0.101	O					1.12
32.833	0.00	0.15	0.100	O					1.11
32.917	0.00	0.15	0.099	O					1.10
33.000	0.00	0.15	0.098	O					1.10
33.083	0.00	0.15	0.097	O					1.09
33.167	0.00	0.15	0.096	O					1.08
33.250	0.00	0.15	0.095	O					1.08
33.333	0.00	0.15	0.094	O					1.07
33.417	0.00	0.15	0.093	O					1.06
33.500	0.00	0.15	0.092	O					1.06
33.583	0.00	0.14	0.091	O					1.05
33.667	0.00	0.14	0.090	O					1.04
33.750	0.00	0.14	0.089	O					1.03
33.833	0.00	0.14	0.088	O					1.03
33.917	0.00	0.14	0.087	O					1.02
34.000	0.00	0.14	0.086	O					1.01
34.083	0.00	0.14	0.085	O					1.01
34.167	0.00	0.14	0.084	O					1.00
34.250	0.00	0.14	0.083	O					1.00
34.333	0.00	0.14	0.082	O					0.99
34.417	0.00	0.14	0.081	O					0.98
34.500	0.00	0.14	0.081	O					0.98
34.583	0.00	0.14	0.080	O					0.97
34.667	0.00	0.14	0.079	O					0.96
34.750	0.00	0.14	0.078	O					0.96
34.833	0.00	0.13	0.077	O					0.95
34.917	0.00	0.13	0.076	O					0.94
35.000	0.00	0.13	0.075	O					0.94
35.083	0.00	0.13	0.074	O					0.93
35.167	0.00	0.13	0.073	O					0.93
35.250	0.00	0.13	0.072	O					0.92
35.333	0.00	0.13	0.071	O					0.91
35.417	0.00	0.13	0.070	O					0.91

35.500	0.00	0.13	0.070	O	|	|	|	|	0.90
35.583	0.00	0.13	0.069	O	|	|	|	|	0.89
35.667	0.00	0.13	0.068	O	|	|	|	|	0.89
35.750	0.00	0.13	0.067	O	|	|	|	|	0.88
35.833	0.00	0.13	0.066	O	|	|	|	|	0.88
35.917	0.00	0.13	0.065	O	|	|	|	|	0.87
36.000	0.00	0.13	0.064	O	|	|	|	|	0.86
36.083	0.00	0.13	0.063	O	|	|	|	|	0.86
36.167	0.00	0.12	0.063	O	|	|	|	|	0.85
36.250	0.00	0.12	0.062	O	|	|	|	|	0.85
36.333	0.00	0.12	0.061	O	|	|	|	|	0.84
36.417	0.00	0.12	0.060	O	|	|	|	|	0.84
36.500	0.00	0.12	0.059	O	|	|	|	|	0.83
36.583	0.00	0.12	0.058	O	|	|	|	|	0.82
36.667	0.00	0.12	0.057	O	|	|	|	|	0.82
36.750	0.00	0.12	0.057	O	|	|	|	|	0.81
36.833	0.00	0.12	0.056	O	|	|	|	|	0.81
36.917	0.00	0.12	0.055	O	|	|	|	|	0.80
37.000	0.00	0.12	0.054	O	|	|	|	|	0.80
37.083	0.00	0.12	0.053	O	|	|	|	|	0.79
37.167	0.00	0.12	0.053	O	|	|	|	|	0.79
37.250	0.00	0.12	0.052	O	|	|	|	|	0.78
37.333	0.00	0.12	0.051	O	|	|	|	|	0.77
37.417	0.00	0.12	0.050	O	|	|	|	|	0.77
37.500	0.00	0.12	0.049	O	|	|	|	|	0.76
37.583	0.00	0.11	0.049	O	|	|	|	|	0.76
37.667	0.00	0.11	0.048	O	|	|	|	|	0.75
37.750	0.00	0.11	0.047	O	|	|	|	|	0.75
37.833	0.00	0.11	0.046	O	|	|	|	|	0.74
37.917	0.00	0.11	0.045	O	|	|	|	|	0.74
38.000	0.00	0.11	0.045	O	|	|	|	|	0.73
38.083	0.00	0.11	0.044	O	|	|	|	|	0.73
38.167	0.00	0.11	0.043	O	|	|	|	|	0.72
38.250	0.00	0.11	0.042	O	|	|	|	|	0.72
38.333	0.00	0.11	0.042	O	|	|	|	|	0.71
38.417	0.00	0.11	0.041	O	|	|	|	|	0.71
38.500	0.00	0.11	0.040	O	|	|	|	|	0.70
38.583	0.00	0.11	0.039	O	|	|	|	|	0.69
38.667	0.00	0.11	0.039	O	|	|	|	|	0.67
38.750	0.00	0.10	0.038	O	|	|	|	|	0.66
38.833	0.00	0.10	0.037	O	|	|	|	|	0.65
38.917	0.00	0.10	0.036	O	|	|	|	|	0.64

Remaining water in basin = 0.04 (Ac.Ft)

**********HYDROGRAPH DATA**********

Number of intervals = 467
Time interval = 5.0 (Min.)
Maximum/Peak flow rate = 0.568 (CFS)
Total volume = 0.966 (Ac.Ft)

Status of hydrographs being held in storage

	Stream 1	Stream 2	Stream 3	Stream 4	Stream 5
Peak (CFS)	0.000	0.000	0.000	0.000	0.000
Vol (Ac.Ft)	0.000	0.000	0.000	0.000	0.000

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                    FLOOD HYDROGRAPH ROUTING PROGRAM
                Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2004
                            Study date: 08/18/25

      ---------------------------------------------------------------------



      Program License Serial Number 5006

      ---------------------------------------------------------------------
      ********************* HYDROGRAPH INFORMATION **********************

                    From study/file name: PROB310.rte
      ****************************HYDROGRAPH DATA****************************
                    Number of intervals =    49
                    Time interval =    5.0 (Min.)
                    Maximum/Peak flow rate =       15.967 (CFS)
                    Total volume =       1.285 (Ac.Ft)
             Status of hydrographs being held in storage
                       Stream 1  Stream 2  Stream 3  Stream 4  Stream 5
             Peak (CFS)      0.000     0.000     0.000     0.000     0.000
             Vol (Ac.Ft)      0.000     0.000     0.000     0.000     0.000
      ***********************************************************************



      +++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
      Process from Point/Station        0.000 to Point/Station        0.000
      **** RETARDING BASIN ROUTING ****
      _______________________________________________________________________

      User entry of depth-outflow-storage data
      ---------------------------------------------------------------------
      Total number of inflow hydrograph intervals = 49
      Hydrograph time unit =  5.000 (Min.)
      Initial depth in storage basin =   0.00(Ft.)
      ---------------------------------------------------------------------
      ---------------------------------------------------------------------
      Initial basin depth =   0.00 (Ft.)
      Initial basin storage =      0.00 (Ac.Ft)
      Initial basin outflow =   0.00 (CFS)
      ---------------------------------------------------------------------
      ---------------------------------------------------------------------
      Depth vs. Storage and Depth vs. Discharge data:
       Basin Depth  Storage    Outflow   (S-O*dt/2)   (S+O*dt/2)
            (Ft.)    (Ac.Ft)    (CFS)     (Ac.Ft)    (Ac.Ft)
      ---------------------------------------------------------------------
        0.000      0.000      0.000      0.000        0.000
        0.700      0.040      0.109      0.040        0.040
        1.700      0.187      0.211      0.186        0.188
        2.400      0.365      0.269      0.364        0.366
        2.700      0.461      0.377      0.460        0.462
        3.700      0.829      0.537      0.827        0.831
        4.700      1.249      0.651      1.247        1.251
        5.700      1.723      0.746      1.720        1.726
        6.700      2.252      1.870      2.246        2.258
        7.700      2.841      2.376      2.833        2.849
        8.300      3.223     38.499      3.090        3.356
        8.700      3.491    113.554      3.100        3.882
        9.700      4.203    441.782      2.682        5.724
      ---------------------------------------------------------------------
                    Hydrograph Detention Basin Routing
      ---------------------------------------------------------------------

      Graph values: 'I'= unit inflow; 'O'=outflow at time shown
      ---------------------------------------------------------------------
Time   Inflow  Outflow    Storage                                        Depth
```

(Hours)	(CFS)	(CFS)	(Ac.Ft)	.0	4.0	7.98	11.98	15.97	(Ft.)
0.083	0.15	0.00	0.001	O					0.01
0.167	0.79	0.01	0.004	OI					0.07
0.250	1.30	0.03	0.011	O I					0.19
0.333	1.45	0.05	0.020	O I					0.35
0.417	1.69	0.08	0.030	O I					0.53
0.500	1.93	0.11	0.042	O I					0.71
0.583	2.15	0.12	0.055	O I					0.80
0.667	2.23	0.13	0.070	O I					0.90
0.750	2.35	0.14	0.084	O I					1.00
0.833	2.45	0.15	0.100	O I					1.11
0.917	2.38	0.16	0.116	O I					1.21
1.000	2.38	0.17	0.131	O I					1.32
1.083	2.55	0.18	0.147	O I					1.42
1.167	2.84	0.19	0.164	O I					1.54
1.250	3.04	0.21	0.183	O I					1.67
1.333	3.09	0.22	0.202	O I					1.76
1.417	3.12	0.22	0.222	O I					1.84
1.500	3.39	0.23	0.243	O I					1.92
1.583	3.66	0.24	0.266	O I					2.01
1.667	3.68	0.24	0.289	O I					2.10
1.750	3.94	0.25	0.314	O I					2.20
1.833	4.62	0.26	0.341	O I					2.31
1.917	4.92	0.28	0.372	O I					2.42
2.000	4.82	0.31	0.404	O I					2.52
2.083	4.85	0.35	0.435	O I					2.62
2.167	5.29	0.38	0.467	O I					2.72
2.250	6.68	0.40	0.506	O I					2.82
2.333	8.06	0.42	0.554	O	I				2.95
2.417	8.39	0.44	0.608	O	I				3.10
2.500	11.04	0.47	0.671	O		I			3.27
2.583	14.24	0.50	0.755	O			I		3.50
2.667	15.97	0.54	0.855	O				I	3.76
2.750	14.32	0.57	0.956	O			I		4.00
2.833	9.68	0.59	1.035	O		I			4.19
2.917	6.47	0.61	1.086	O	I				4.31
3.000	5.05	0.62	1.121	O	I				4.40
3.083	3.68	0.62	1.147	O	I				4.46
3.167	2.43	0.63	1.164	O I					4.50
3.250	1.68	0.63	1.174	O I					4.52
3.333	1.23	0.63	1.179	OI					4.53
3.417	0.89	0.63	1.182	O					4.54
3.500	0.67	0.63	1.183	O					4.54
3.583	0.47	0.63	1.183	IO					4.54
3.667	0.32	0.63	1.181	IO					4.54
3.750	0.17	0.63	1.179	IO					4.53
3.833	0.06	0.63	1.175	IO					4.52
3.917	0.04	0.63	1.171	IO					4.51
4.000	0.02	0.63	1.167	IO					4.50
4.083	0.01	0.63	1.163	IO					4.49
4.167	0.00	0.63	1.159	IO					4.48
4.250	0.00	0.63	1.154	IO					4.47
4.333	0.00	0.62	1.150	IO					4.46
4.417	0.00	0.62	1.146	IO					4.45
4.500	0.00	0.62	1.141	IO					4.44
4.583	0.00	0.62	1.137	IO					4.43
4.667	0.00	0.62	1.133	IO					4.42
4.750	0.00	0.62	1.129	IO					4.41
4.833	0.00	0.62	1.124	IO					4.40
4.917	0.00	0.62	1.120	IO					4.39
5.000	0.00	0.61	1.116	IO					4.38
5.083	0.00	0.61	1.112	IO					4.37
5.167	0.00	0.61	1.107	IO					4.36
5.250	0.00	0.61	1.103	IO					4.35
5.333	0.00	0.61	1.099	IO					4.34
5.417	0.00	0.61	1.095	IO					4.33
5.500	0.00	0.61	1.091	IO					4.32
5.583	0.00	0.61	1.086	IO					4.31
5.667	0.00	0.61	1.082	IO					4.30
5.750	0.00	0.60	1.078	IO					4.29
5.833	0.00	0.60	1.074	IO					4.28

5.917	0.00	0.60	1.070	IO				4.27
6.000	0.00	0.60	1.066	IO				4.26
6.083	0.00	0.60	1.061	IO				4.25
6.167	0.00	0.60	1.057	IO				4.24
6.250	0.00	0.60	1.053	IO				4.23
6.333	0.00	0.60	1.049	IO				4.22
6.417	0.00	0.60	1.045	IO				4.21
6.500	0.00	0.59	1.041	IO				4.20
6.583	0.00	0.59	1.037	IO				4.19
6.667	0.00	0.59	1.033	IO				4.18
6.750	0.00	0.59	1.029	IO				4.18
6.833	0.00	0.59	1.025	IO				4.17
6.917	0.00	0.59	1.020	IO				4.16
7.000	0.00	0.59	1.016	IO				4.15
7.083	0.00	0.59	1.012	IO				4.14
7.167	0.00	0.59	1.008	IO				4.13
7.250	0.00	0.58	1.004	IO				4.12
7.333	0.00	0.58	1.000	IO				4.11
7.417	0.00	0.58	0.996	IO				4.10
7.500	0.00	0.58	0.992	IO				4.09
7.583	0.00	0.58	0.988	IO				4.08
7.667	0.00	0.58	0.984	IO				4.07
7.750	0.00	0.58	0.980	IO				4.06
7.833	0.00	0.58	0.976	IO				4.05
7.917	0.00	0.58	0.972	IO				4.04
8.000	0.00	0.57	0.968	IO				4.03
8.083	0.00	0.57	0.964	IO				4.02
8.167	0.00	0.57	0.960	IO				4.01
8.250	0.00	0.57	0.957	IO				4.00
8.333	0.00	0.57	0.953	IO				3.99
8.417	0.00	0.57	0.949	IO				3.98
8.500	0.00	0.57	0.945	IO				3.98
8.583	0.00	0.57	0.941	IO				3.97
8.667	0.00	0.57	0.937	IO				3.96
8.750	0.00	0.57	0.933	IO				3.95
8.833	0.00	0.56	0.929	IO				3.94
8.917	0.00	0.56	0.925	IO				3.93
9.000	0.00	0.56	0.921	IO				3.92
9.083	0.00	0.56	0.918	IO				3.91
9.167	0.00	0.56	0.914	IO				3.90
9.250	0.00	0.56	0.910	IO				3.89
9.333	0.00	0.56	0.906	IO				3.88
9.417	0.00	0.56	0.902	IO				3.87
9.500	0.00	0.56	0.898	IO				3.87
9.583	0.00	0.55	0.894	IO				3.86
9.667	0.00	0.55	0.891	IO				3.85
9.750	0.00	0.55	0.887	IO				3.84
9.833	0.00	0.55	0.883	IO				3.83
9.917	0.00	0.55	0.879	IO				3.82
10.000	0.00	0.55	0.875	IO				3.81
10.083	0.00	0.55	0.872	IO				3.80
10.167	0.00	0.55	0.868	IO				3.79
10.250	0.00	0.55	0.864	IO				3.78
10.333	0.00	0.55	0.860	IO				3.77
10.417	0.00	0.54	0.857	IO				3.77
10.500	0.00	0.54	0.853	IO				3.76
10.583	0.00	0.54	0.849	IO				3.75
10.667	0.00	0.54	0.845	IO				3.74
10.750	0.00	0.54	0.842	IO				3.73
10.833	0.00	0.54	0.838	IO				3.72
10.917	0.00	0.54	0.834	IO				3.71
11.000	0.00	0.54	0.831	IO				3.70
11.083	0.00	0.54	0.827	IO				3.69
11.167	0.00	0.53	0.823	IO				3.68
11.250	0.00	0.53	0.820	IO				3.67
11.333	0.00	0.53	0.816	IO				3.66
11.417	0.00	0.53	0.812	IO				3.65
11.500	0.00	0.53	0.809	IO				3.64
11.583	0.00	0.53	0.805	IO				3.63
11.667	0.00	0.52	0.801	IO				3.62
11.750	0.00	0.52	0.798	IO				3.61

11.833	0.00	0.52	0.794	IO				3.61
11.917	0.00	0.52	0.790	IO				3.60
12.000	0.00	0.52	0.787	IO				3.59
12.083	0.00	0.52	0.783	IO				3.58
12.167	0.00	0.52	0.780	IO				3.57
12.250	0.00	0.51	0.776	IO				3.56
12.333	0.00	0.51	0.773	IO				3.55
12.417	0.00	0.51	0.769	IO				3.54
12.500	0.00	0.51	0.766	IO				3.53
12.583	0.00	0.51	0.762	IO				3.52
12.667	0.00	0.51	0.759	IO				3.51
12.750	0.00	0.50	0.755	IO				3.50
12.833	0.00	0.50	0.752	IO				3.49
12.917	0.00	0.50	0.748	IO				3.48
13.000	0.00	0.50	0.745	IO				3.47
13.083	0.00	0.50	0.741	O				3.46
13.167	0.00	0.50	0.738	O				3.45
13.250	0.00	0.50	0.735	O				3.44
13.333	0.00	0.49	0.731	O				3.43
13.417	0.00	0.49	0.728	O				3.42
13.500	0.00	0.49	0.724	O				3.42
13.583	0.00	0.49	0.721	O				3.41
13.667	0.00	0.49	0.718	O				3.40
13.750	0.00	0.49	0.714	O				3.39
13.833	0.00	0.49	0.711	O				3.38
13.917	0.00	0.48	0.708	O				3.37
14.000	0.00	0.48	0.704	O				3.36
14.083	0.00	0.48	0.701	O				3.35
14.167	0.00	0.48	0.698	O				3.34
14.250	0.00	0.48	0.694	O				3.33
14.333	0.00	0.48	0.691	O				3.32
14.417	0.00	0.48	0.688	O				3.32
14.500	0.00	0.47	0.684	O				3.31
14.583	0.00	0.47	0.681	O				3.30
14.667	0.00	0.47	0.678	O				3.29
14.750	0.00	0.47	0.675	O				3.28
14.833	0.00	0.47	0.671	O				3.27
14.917	0.00	0.47	0.668	O				3.26
15.000	0.00	0.47	0.665	O				3.25
15.083	0.00	0.46	0.662	O				3.25
15.167	0.00	0.46	0.659	O				3.24
15.250	0.00	0.46	0.655	O				3.23
15.333	0.00	0.46	0.652	O				3.22
15.417	0.00	0.46	0.649	O				3.21
15.500	0.00	0.46	0.646	O				3.20
15.583	0.00	0.46	0.643	O				3.19
15.667	0.00	0.45	0.640	O				3.19
15.750	0.00	0.45	0.637	O				3.18
15.833	0.00	0.45	0.633	O				3.17
15.917	0.00	0.45	0.630	O				3.16
16.000	0.00	0.45	0.627	O				3.15
16.083	0.00	0.45	0.624	O				3.14
16.167	0.00	0.45	0.621	O				3.13
16.250	0.00	0.45	0.618	O				3.13
16.333	0.00	0.44	0.615	O				3.12
16.417	0.00	0.44	0.612	O				3.11
16.500	0.00	0.44	0.609	O				3.10
16.583	0.00	0.44	0.606	O				3.09
16.667	0.00	0.44	0.603	O				3.09
16.750	0.00	0.44	0.600	O				3.08
16.833	0.00	0.44	0.597	O				3.07
16.917	0.00	0.43	0.594	O				3.06
17.000	0.00	0.43	0.591	O				3.05
17.083	0.00	0.43	0.588	O				3.04
17.167	0.00	0.43	0.585	O				3.04
17.250	0.00	0.43	0.582	O				3.03
17.333	0.00	0.43	0.579	O				3.02
17.417	0.00	0.43	0.576	O				3.01
17.500	0.00	0.43	0.573	O				3.00
17.583	0.00	0.42	0.570	O				3.00
17.667	0.00	0.42	0.567	O				2.99

17.750	0.00	0.42	0.564	O	|	|	|	|	2.98
17.833	0.00	0.42	0.561	O	|	|	|	|	2.97
17.917	0.00	0.42	0.558	O	|	|	|	|	2.96
18.000	0.00	0.42	0.556	O	|	|	|	|	2.96
18.083	0.00	0.42	0.553	O	|	|	|	|	2.95
18.167	0.00	0.42	0.550	O	|	|	|	|	2.94
18.250	0.00	0.41	0.547	O	|	|	|	|	2.93
18.333	0.00	0.41	0.544	O	|	|	|	|	2.93
18.417	0.00	0.41	0.541	O	|	|	|	|	2.92
18.500	0.00	0.41	0.538	O	|	|	|	|	2.91
18.583	0.00	0.41	0.536	O	|	|	|	|	2.90
18.667	0.00	0.41	0.533	O	|	|	|	|	2.90
18.750	0.00	0.41	0.530	O	|	|	|	|	2.89
18.833	0.00	0.41	0.527	O	|	|	|	|	2.88
18.917	0.00	0.40	0.524	O	|	|	|	|	2.87
19.000	0.00	0.40	0.522	O	|	|	|	|	2.86
19.083	0.00	0.40	0.519	O	|	|	|	|	2.86
19.167	0.00	0.40	0.516	O	|	|	|	|	2.85
19.250	0.00	0.40	0.513	O	|	|	|	|	2.84
19.333	0.00	0.40	0.511	O	|	|	|	|	2.83
19.417	0.00	0.40	0.508	O	|	|	|	|	2.83
19.500	0.00	0.40	0.505	O	|	|	|	|	2.82
19.583	0.00	0.39	0.502	O	|	|	|	|	2.81
19.667	0.00	0.39	0.500	O	|	|	|	|	2.81
19.750	0.00	0.39	0.497	O	|	|	|	|	2.80
19.833	0.00	0.39	0.494	O	|	|	|	|	2.79
19.917	0.00	0.39	0.492	O	|	|	|	|	2.78
20.000	0.00	0.39	0.489	O	|	|	|	|	2.78
20.083	0.00	0.39	0.486	O	|	|	|	|	2.77
20.167	0.00	0.39	0.484	O	|	|	|	|	2.76
20.250	0.00	0.39	0.481	O	|	|	|	|	2.75
20.333	0.00	0.38	0.478	O	|	|	|	|	2.75
20.417	0.00	0.38	0.476	O	|	|	|	|	2.74
20.500	0.00	0.38	0.473	O	|	|	|	|	2.73
20.583	0.00	0.38	0.470	O	|	|	|	|	2.73
20.667	0.00	0.38	0.468	O	|	|	|	|	2.72
20.750	0.00	0.38	0.465	O	|	|	|	|	2.71
20.833	0.00	0.38	0.462	O	|	|	|	|	2.70
20.917	0.00	0.38	0.460	O	|	|	|	|	2.70
21.000	0.00	0.37	0.457	O	|	|	|	|	2.69
21.083	0.00	0.37	0.455	O	|	|	|	|	2.68
21.167	0.00	0.37	0.452	O	|	|	|	|	2.67
21.250	0.00	0.36	0.450	O	|	|	|	|	2.66
21.333	0.00	0.36	0.447	O	|	|	|	|	2.66
21.417	0.00	0.36	0.445	O	|	|	|	|	2.65
21.500	0.00	0.36	0.442	O	|	|	|	|	2.64
21.583	0.00	0.35	0.440	O	|	|	|	|	2.63
21.667	0.00	0.35	0.437	O	|	|	|	|	2.63
21.750	0.00	0.35	0.435	O	|	|	|	|	2.62
21.833	0.00	0.35	0.433	O	|	|	|	|	2.61
21.917	0.00	0.34	0.430	O	|	|	|	|	2.60
22.000	0.00	0.34	0.428	O	|	|	|	|	2.60
22.083	0.00	0.34	0.426	O	|	|	|	|	2.59
22.167	0.00	0.33	0.423	O	|	|	|	|	2.58
22.250	0.00	0.33	0.421	O	|	|	|	|	2.57
22.333	0.00	0.33	0.419	O	|	|	|	|	2.57
22.417	0.00	0.33	0.416	O	|	|	|	|	2.56
22.500	0.00	0.32	0.414	O	|	|	|	|	2.55
22.583	0.00	0.32	0.412	O	|	|	|	|	2.55
22.667	0.00	0.32	0.410	O	|	|	|	|	2.54
22.750	0.00	0.32	0.408	O	|	|	|	|	2.53
22.833	0.00	0.31	0.405	O	|	|	|	|	2.53
22.917	0.00	0.31	0.403	O	|	|	|	|	2.52
23.000	0.00	0.31	0.401	O	|	|	|	|	2.51
23.083	0.00	0.31	0.399	O	|	|	|	|	2.51
23.167	0.00	0.30	0.397	O	|	|	|	|	2.50
23.250	0.00	0.30	0.395	O	|	|	|	|	2.49
23.333	0.00	0.30	0.393	O	|	|	|	|	2.49
23.417	0.00	0.30	0.391	O	|	|	|	|	2.48
23.500	0.00	0.30	0.389	O	|	|	|	|	2.47
23.583	0.00	0.29	0.387	O	|	|	|	|	2.47

23.667	0.00	0.29	0.385	O	|	|	|	|	2.46
23.750	0.00	0.29	0.383	O	|	|	|	|	2.45
23.833	0.00	0.29	0.381	O	|	|	|	|	2.45
23.917	0.00	0.28	0.379	O	|	|	|	|	2.44
24.000	0.00	0.28	0.377	O	|	|	|	|	2.44
24.083	0.00	0.28	0.375	O	|	|	|	|	2.43
24.167	0.00	0.28	0.373	O	|	|	|	|	2.42
24.250	0.00	0.28	0.371	O	|	|	|	|	2.42
24.333	0.00	0.27	0.369	O	|	|	|	|	2.41
24.417	0.00	0.27	0.367	O	|	|	|	|	2.41
24.500	0.00	0.27	0.365	O	|	|	|	|	2.40
24.583	0.00	0.27	0.363	O	|	|	|	|	2.39
24.667	0.00	0.27	0.362	O	|	|	|	|	2.39
24.750	0.00	0.27	0.360	O	|	|	|	|	2.38
24.833	0.00	0.27	0.358	O	|	|	|	|	2.37
24.917	0.00	0.27	0.356	O	|	|	|	|	2.36
25.000	0.00	0.27	0.354	O	|	|	|	|	2.36
25.083	0.00	0.26	0.352	O	|	|	|	|	2.35
25.167	0.00	0.26	0.351	O	|	|	|	|	2.34
25.250	0.00	0.26	0.349	O	|	|	|	|	2.34
25.333	0.00	0.26	0.347	O	|	|	|	|	2.33
25.417	0.00	0.26	0.345	O	|	|	|	|	2.32
25.500	0.00	0.26	0.343	O	|	|	|	|	2.31
25.583	0.00	0.26	0.341	O	|	|	|	|	2.31
25.667	0.00	0.26	0.340	O	|	|	|	|	2.30
25.750	0.00	0.26	0.338	O	|	|	|	|	2.29
25.833	0.00	0.26	0.336	O	|	|	|	|	2.29
25.917	0.00	0.26	0.334	O	|	|	|	|	2.28
26.000	0.00	0.26	0.333	O	|	|	|	|	2.27
26.083	0.00	0.26	0.331	O	|	|	|	|	2.27
26.167	0.00	0.26	0.329	O	|	|	|	|	2.26
26.250	0.00	0.26	0.327	O	|	|	|	|	2.25
26.333	0.00	0.26	0.325	O	|	|	|	|	2.24
26.417	0.00	0.26	0.324	O	|	|	|	|	2.24
26.500	0.00	0.25	0.322	O	|	|	|	|	2.23
26.583	0.00	0.25	0.320	O	|	|	|	|	2.22
26.667	0.00	0.25	0.318	O	|	|	|	|	2.22
26.750	0.00	0.25	0.317	O	|	|	|	|	2.21
26.833	0.00	0.25	0.315	O	|	|	|	|	2.20
26.917	0.00	0.25	0.313	O	|	|	|	|	2.20
27.000	0.00	0.25	0.311	O	|	|	|	|	2.19
27.083	0.00	0.25	0.310	O	|	|	|	|	2.18
27.167	0.00	0.25	0.308	O	|	|	|	|	2.18
27.250	0.00	0.25	0.306	O	|	|	|	|	2.17
27.333	0.00	0.25	0.305	O	|	|	|	|	2.16
27.417	0.00	0.25	0.303	O	|	|	|	|	2.16
27.500	0.00	0.25	0.301	O	|	|	|	|	2.15
27.583	0.00	0.25	0.299	O	|	|	|	|	2.14
27.667	0.00	0.25	0.298	O	|	|	|	|	2.14
27.750	0.00	0.25	0.296	O	|	|	|	|	2.13
27.833	0.00	0.25	0.294	O	|	|	|	|	2.12
27.917	0.00	0.25	0.293	O	|	|	|	|	2.12
28.000	0.00	0.24	0.291	O	|	|	|	|	2.11
28.083	0.00	0.24	0.289	O	|	|	|	|	2.10
28.167	0.00	0.24	0.288	O	|	|	|	|	2.10
28.250	0.00	0.24	0.286	O	|	|	|	|	2.09
28.333	0.00	0.24	0.284	O	|	|	|	|	2.08
28.417	0.00	0.24	0.283	O	|	|	|	|	2.08
28.500	0.00	0.24	0.281	O	|	|	|	|	2.07
28.583	0.00	0.24	0.279	O	|	|	|	|	2.06
28.667	0.00	0.24	0.278	O	|	|	|	|	2.06
28.750	0.00	0.24	0.276	O	|	|	|	|	2.05
28.833	0.00	0.24	0.274	O	|	|	|	|	2.04
28.917	0.00	0.24	0.273	O	|	|	|	|	2.04
29.000	0.00	0.24	0.271	O	|	|	|	|	2.03
29.083	0.00	0.24	0.269	O	|	|	|	|	2.02
29.167	0.00	0.24	0.268	O	|	|	|	|	2.02
29.250	0.00	0.24	0.266	O	|	|	|	|	2.01
29.333	0.00	0.24	0.264	O	|	|	|	|	2.00
29.417	0.00	0.24	0.263	O	|	|	|	|	2.00
29.500	0.00	0.24	0.261	O	|	|	|	|	1.99

29.583	0.00	0.23	0.260	O					1.99
29.667	0.00	0.23	0.258	O					1.98
29.750	0.00	0.23	0.256	O					1.97
29.833	0.00	0.23	0.255	O					1.97
29.917	0.00	0.23	0.253	O					1.96
30.000	0.00	0.23	0.252	O					1.95
30.083	0.00	0.23	0.250	O					1.95
30.167	0.00	0.23	0.248	O					1.94
30.250	0.00	0.23	0.247	O					1.94
30.333	0.00	0.23	0.245	O					1.93
30.417	0.00	0.23	0.244	O					1.92
30.500	0.00	0.23	0.242	O					1.92
30.583	0.00	0.23	0.240	O					1.91
30.667	0.00	0.23	0.239	O					1.90
30.750	0.00	0.23	0.237	O					1.90
30.833	0.00	0.23	0.236	O					1.89
30.917	0.00	0.23	0.234	O					1.89
31.000	0.00	0.23	0.233	O					1.88
31.083	0.00	0.23	0.231	O					1.87
31.167	0.00	0.22	0.230	O					1.87
31.250	0.00	0.22	0.228	O					1.86
31.333	0.00	0.22	0.226	O					1.86
31.417	0.00	0.22	0.225	O					1.85
31.500	0.00	0.22	0.223	O					1.84
31.583	0.00	0.22	0.222	O					1.84
31.667	0.00	0.22	0.220	O					1.83
31.750	0.00	0.22	0.219	O					1.82
31.833	0.00	0.22	0.217	O					1.82
31.917	0.00	0.22	0.216	O					1.81
32.000	0.00	0.22	0.214	O					1.81
32.083	0.00	0.22	0.213	O					1.80
32.167	0.00	0.22	0.211	O					1.80
32.250	0.00	0.22	0.210	O					1.79
32.333	0.00	0.22	0.208	O					1.78
32.417	0.00	0.22	0.207	O					1.78
32.500	0.00	0.22	0.205	O					1.77
32.583	0.00	0.22	0.204	O					1.77
32.667	0.00	0.22	0.202	O					1.76
32.750	0.00	0.22	0.201	O					1.75
32.833	0.00	0.21	0.199	O					1.75
32.917	0.00	0.21	0.198	O					1.74
33.000	0.00	0.21	0.196	O					1.74
33.083	0.00	0.21	0.195	O					1.73
33.167	0.00	0.21	0.193	O					1.72
33.250	0.00	0.21	0.192	O					1.72
33.333	0.00	0.21	0.190	O					1.71
33.417	0.00	0.21	0.189	O					1.71
33.500	0.00	0.21	0.188	O					1.70
33.583	0.00	0.21	0.186	O					1.69
33.667	0.00	0.21	0.185	O					1.68
33.750	0.00	0.21	0.183	O					1.67
33.833	0.00	0.21	0.182	O					1.66
33.917	0.00	0.21	0.180	O					1.65
34.000	0.00	0.21	0.179	O					1.64
34.083	0.00	0.20	0.177	O					1.64
34.167	0.00	0.20	0.176	O					1.63
34.250	0.00	0.20	0.175	O					1.62
34.333	0.00	0.20	0.173	O					1.61
34.417	0.00	0.20	0.172	O					1.60
34.500	0.00	0.20	0.171	O					1.59
34.583	0.00	0.20	0.169	O					1.58
34.667	0.00	0.20	0.168	O					1.57
34.750	0.00	0.20	0.166	O					1.56
34.833	0.00	0.20	0.165	O					1.55
34.917	0.00	0.19	0.164	O					1.54
35.000	0.00	0.19	0.162	O					1.53
35.083	0.00	0.19	0.161	O					1.52
35.167	0.00	0.19	0.160	O					1.51
35.250	0.00	0.19	0.158	O					1.51
35.333	0.00	0.19	0.157	O					1.50
35.417	0.00	0.19	0.156	O					1.49

35.500	0.00	0.19	0.154	O					1.48
35.583	0.00	0.19	0.153	O					1.47
35.667	0.00	0.19	0.152	O					1.46
35.750	0.00	0.19	0.151	O					1.45
35.833	0.00	0.18	0.149	O					1.44
35.917	0.00	0.18	0.148	O					1.44
36.000	0.00	0.18	0.147	O					1.43
36.083	0.00	0.18	0.146	O					1.42
36.167	0.00	0.18	0.144	O					1.41
36.250	0.00	0.18	0.143	O					1.40
36.333	0.00	0.18	0.142	O					1.39
36.417	0.00	0.18	0.141	O					1.38
36.500	0.00	0.18	0.139	O					1.38
36.583	0.00	0.18	0.138	O					1.37
36.667	0.00	0.18	0.137	O					1.36
36.750	0.00	0.18	0.136	O					1.35
36.833	0.00	0.17	0.135	O					1.34
36.917	0.00	0.17	0.133	O					1.33
37.000	0.00	0.17	0.132	O					1.33
37.083	0.00	0.17	0.131	O					1.32
37.167	0.00	0.17	0.130	O					1.31
37.250	0.00	0.17	0.129	O					1.30
37.333	0.00	0.17	0.127	O					1.29
37.417	0.00	0.17	0.126	O					1.29
37.500	0.00	0.17	0.125	O					1.28
37.583	0.00	0.17	0.124	O					1.27
37.667	0.00	0.17	0.123	O					1.26
37.750	0.00	0.17	0.122	O					1.26
37.833	0.00	0.16	0.120	O					1.25
37.917	0.00	0.16	0.119	O					1.24
38.000	0.00	0.16	0.118	O					1.23
38.083	0.00	0.16	0.117	O					1.22
38.167	0.00	0.16	0.116	O					1.22
38.250	0.00	0.16	0.115	O					1.21
38.333	0.00	0.16	0.114	O					1.20
38.417	0.00	0.16	0.113	O					1.19
38.500	0.00	0.16	0.112	O					1.19
38.583	0.00	0.16	0.110	O					1.18
38.667	0.00	0.16	0.109	O					1.17
38.750	0.00	0.16	0.108	O					1.16
38.833	0.00	0.16	0.107	O					1.16
38.917	0.00	0.15	0.106	O					1.15
39.000	0.00	0.15	0.105	O					1.14
39.083	0.00	0.15	0.104	O					1.14
39.167	0.00	0.15	0.103	O					1.13
39.250	0.00	0.15	0.102	O					1.12
39.333	0.00	0.15	0.101	O					1.11
39.417	0.00	0.15	0.100	O					1.11
39.500	0.00	0.15	0.099	O					1.10
39.583	0.00	0.15	0.098	O					1.09
39.667	0.00	0.15	0.097	O					1.09
39.750	0.00	0.15	0.096	O					1.08
39.833	0.00	0.15	0.095	O					1.07
39.917	0.00	0.15	0.094	O					1.07
40.000	0.00	0.15	0.093	O					1.06
40.083	0.00	0.14	0.092	O					1.05
40.167	0.00	0.14	0.091	O					1.05
40.250	0.00	0.14	0.090	O					1.04
40.333	0.00	0.14	0.089	O					1.03
40.417	0.00	0.14	0.088	O					1.02
40.500	0.00	0.14	0.087	O					1.02
40.583	0.00	0.14	0.086	O					1.01
40.667	0.00	0.14	0.085	O					1.01
40.750	0.00	0.14	0.084	O					1.00
40.833	0.00	0.14	0.083	O					0.99
40.917	0.00	0.14	0.082	O					0.99
41.000	0.00	0.14	0.081	O					0.98
41.083	0.00	0.14	0.080	O					0.97
41.167	0.00	0.14	0.079	O					0.97
41.250	0.00	0.14	0.078	O					0.96
41.333	0.00	0.13	0.077	O					0.95

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41.417    0.00    0.13      0.076  O       |       |       |       |     0.95
41.500    0.00    0.13      0.075  O       |       |       |       |     0.94
41.583    0.00    0.13      0.075  O       |       |       |       |     0.93
41.667    0.00    0.13      0.074  O       |       |       |       |     0.93
41.750    0.00    0.13      0.073  O       |       |       |       |     0.92
41.833    0.00    0.13      0.072  O       |       |       |       |     0.92
41.917    0.00    0.13      0.071  O       |       |       |       |     0.91
42.000    0.00    0.13      0.070  O       |       |       |       |     0.90
42.083    0.00    0.13      0.069  O       |       |       |       |     0.90
42.167    0.00    0.13      0.068  O       |       |       |       |     0.89
42.250    0.00    0.13      0.067  O       |       |       |       |     0.89
42.333    0.00    0.13      0.066  O       |       |       |       |     0.88
42.417    0.00    0.13      0.066  O       |       |       |       |     0.87
42.500    0.00    0.13      0.065  O       |       |       |       |     0.87
42.583    0.00    0.13      0.064  O       |       |       |       |     0.86
42.667    0.00    0.12      0.063  O       |       |       |       |     0.86
42.750    0.00    0.12      0.062  O       |       |       |       |     0.85
42.833    0.00    0.12      0.061  O       |       |       |       |     0.84
42.917    0.00    0.12      0.060  O       |       |       |       |     0.84
43.000    0.00    0.12      0.060  O       |       |       |       |     0.83
43.083    0.00    0.12      0.059  O       |       |       |       |     0.83
43.167    0.00    0.12      0.058  O       |       |       |       |     0.82
43.250    0.00    0.12      0.057  O       |       |       |       |     0.82
43.333    0.00    0.12      0.056  O       |       |       |       |     0.81
43.417    0.00    0.12      0.055  O       |       |       |       |     0.80
43.500    0.00    0.12      0.055  O       |       |       |       |     0.80
43.583    0.00    0.12      0.054  O       |       |       |       |     0.79
43.667    0.00    0.12      0.053  O       |       |       |       |     0.79
43.750    0.00    0.12      0.052  O       |       |       |       |     0.78
43.833    0.00    0.12      0.051  O       |       |       |       |     0.78
43.917    0.00    0.12      0.051  O       |       |       |       |     0.77
44.000    0.00    0.12      0.050  O       |       |       |       |     0.77
44.083    0.00    0.12      0.049  O       |       |       |       |     0.76
44.167    0.00    0.11      0.048  O       |       |       |       |     0.76
44.250    0.00    0.11      0.047  O       |       |       |       |     0.75
44.333    0.00    0.11      0.047  O       |       |       |       |     0.74
44.417    0.00    0.11      0.046  O       |       |       |       |     0.74
44.500    0.00    0.11      0.045  O       |       |       |       |     0.73
44.583    0.00    0.11      0.044  O       |       |       |       |     0.73
44.667    0.00    0.11      0.043  O       |       |       |       |     0.72
44.750    0.00    0.11      0.043  O       |       |       |       |     0.72
44.833    0.00    0.11      0.042  O       |       |       |       |     0.71
44.917    0.00    0.11      0.041  O       |       |       |       |     0.71
45.000    0.00    0.11      0.040  O       |       |       |       |     0.70
45.083    0.00    0.11      0.040  O       |       |       |       |     0.69
45.167    0.00    0.11      0.039  O       |       |       |       |     0.68
45.250    0.00    0.10      0.038  O       |       |       |       |     0.67
45.333    0.00    0.10      0.038  O       |       |       |       |     0.66
45.417    0.00    0.10      0.037  O       |       |       |       |     0.64
45.500    0.00    0.10      0.036  O       |       |       |       |     0.63

       Remaining water in basin =    0.04 (Ac.Ft)


       ****************************HYDROGRAPH DATA****************************
                     Number of intervals =   546
                     Time interval =    5.0 (Min.)
                     Maximum/Peak flow rate =        0.633 (CFS)
                     Total volume =       1.249 (Ac.Ft)
              Status of hydrographs being held in storage
                         Stream 1  Stream 2  Stream 3  Stream 4  Stream 5
              Peak (CFS)      0.000     0.000     0.000     0.000     0.000
              Vol (Ac.Ft)      0.000     0.000     0.000     0.000     0.000
       ***********************************************************************

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                    FLOOD HYDROGRAPH ROUTING PROGRAM
                Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2004
                            Study date: 08/18/25

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 Program License Serial Number 5006

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 ******************** HYDROGRAPH INFORMATION **********************

                From study/file name: PROB610.rte
 ****************************HYDROGRAPH DATA****************************
                Number of intervals =    85
                Time interval =    5.0 (Min.)
                Maximum/Peak flow rate =       15.170 (CFS)
                Total volume =       1.778 (Ac.Ft)
        Status of hydrographs being held in storage
                    Stream 1  Stream 2  Stream 3  Stream 4  Stream 5
        Peak (CFS)      0.000     0.000     0.000     0.000     0.000
        Vol (Ac.Ft)      0.000     0.000     0.000     0.000     0.000
 ***********************************************************************



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 Process from Point/Station        0.000 to Point/Station        0.000
 **** RETARDING BASIN ROUTING ****
 _________________________________________________________________________

 User entry of depth-outflow-storage data
 ---------------------------------------------------------------------
 Total number of inflow hydrograph intervals = 85
 Hydrograph time unit =  5.000 (Min.)
 Initial depth in storage basin =   0.00(Ft.)
 ---------------------------------------------------------------------
 ---------------------------------------------------------------------
 Initial basin depth =   0.00 (Ft.)
 Initial basin storage =      0.00 (Ac.Ft)
 Initial basin outflow =   0.00 (CFS)
 ---------------------------------------------------------------------
 ---------------------------------------------------------------------
 Depth vs. Storage and Depth vs. Discharge data:
  Basin Depth  Storage    Outflow   (S-O*dt/2)   (S+O*dt/2)
       (Ft.)    (Ac.Ft)    (CFS)     (Ac.Ft)    (Ac.Ft)
 ---------------------------------------------------------------------
    0.000      0.000      0.000      0.000        0.000
    0.700      0.040      0.109      0.040        0.040
    1.700      0.187      0.211      0.186        0.188
    2.400      0.365      0.269      0.364        0.366
    2.700      0.461      0.377      0.460        0.462
    3.700      0.829      0.537      0.827        0.831
    4.700      1.249      0.651      1.247        1.251
    5.700      1.723      0.746      1.720        1.726
    6.700      2.252      1.870      2.246        2.258
    7.700      2.841      2.376      2.833        2.849
    8.300      3.223     38.499      3.090        3.356
    8.700      3.491    113.554      3.100        3.882
    9.700      4.203    441.782      2.682        5.724
 ---------------------------------------------------------------------
                 Hydrograph Detention Basin Routing
 ---------------------------------------------------------------------

 Graph values: 'I'= unit inflow; 'O'=outflow at time shown
 ---------------------------------------------------------------------
  Time   Inflow  Outflow    Storage                                    Depth
```

(Hours)	(CFS)	(CFS)	(Ac.Ft)	.0	3.8	7.58	11.38	15.17	(Ft.)
0.083	0.09	0.00	0.000	O	|	|	|	|	0.01
0.167	0.46	0.01	0.002	O	|	|	|	|	0.04
0.250	0.83	0.02	0.007	OI	|	|	|	|	0.11
0.333	1.00	0.03	0.013	O I	|	|	|	|	0.22
0.417	1.09	0.05	0.020	O I	|	|	|	|	0.34
0.500	1.17	0.07	0.027	O I	|	|	|	|	0.47
0.583	1.28	0.09	0.035	O I	|	|	|	|	0.61
0.667	1.37	0.11	0.043	O I	|	|	|	|	0.72
0.750	1.42	0.12	0.052	O I	|	|	|	|	0.78
0.833	1.45	0.12	0.061	O I	|	|	|	|	0.84
0.917	1.47	0.13	0.070	O I	|	|	|	|	0.91
1.000	1.50	0.14	0.080	O I	|	|	|	|	0.97
1.083	1.59	0.14	0.089	O I	|	|	|	|	1.03
1.167	1.66	0.15	0.099	O I	|	|	|	|	1.10
1.250	1.69	0.16	0.110	O I	|	|	|	|	1.18
1.333	1.70	0.16	0.120	O I	|	|	|	|	1.25
1.417	1.71	0.17	0.131	O I	|	|	|	|	1.32
1.500	1.72	0.18	0.142	O I	|	|	|	|	1.39
1.583	1.73	0.19	0.152	O I	|	|	|	|	1.46
1.667	1.73	0.19	0.163	O I	|	|	|	|	1.54
1.750	1.73	0.20	0.173	O I	|	|	|	|	1.61
1.833	1.74	0.21	0.184	O I	|	|	|	|	1.68
1.917	1.74	0.21	0.194	O I	|	|	|	|	1.73
2.000	1.76	0.22	0.205	O I	|	|	|	|	1.77
2.083	1.81	0.22	0.216	O I	|	|	|	|	1.81
2.167	1.82	0.22	0.227	O I	|	|	|	|	1.86
2.250	1.85	0.23	0.238	O I	|	|	|	|	1.90
2.333	1.90	0.23	0.249	O I	|	|	|	|	1.94
2.417	1.92	0.24	0.261	O I	|	|	|	|	1.99
2.500	1.93	0.24	0.272	O I	|	|	|	|	2.04
2.583	1.94	0.24	0.284	O I	|	|	|	|	2.08
2.667	1.94	0.25	0.296	O I	|	|	|	|	2.13
2.750	1.97	0.25	0.308	O I	|	|	|	|	2.17
2.833	2.04	0.25	0.320	O I	|	|	|	|	2.22
2.917	2.10	0.26	0.332	O I	|	|	|	|	2.27
3.000	2.13	0.26	0.345	O I	|	|	|	|	2.32
3.083	2.14	0.27	0.358	O I	|	|	|	|	2.37
3.167	2.17	0.28	0.371	O I	|	|	|	|	2.42
3.250	2.25	0.29	0.384	O I	|	|	|	|	2.46
3.333	2.31	0.31	0.398	O I	|	|	|	|	2.50
3.417	2.36	0.32	0.412	O I	|	|	|	|	2.55
3.500	2.46	0.34	0.426	O I	|	|	|	|	2.59
3.583	2.62	0.35	0.441	O I	|	|	|	|	2.64
3.667	2.78	0.37	0.457	O I	|	|	|	|	2.69
3.750	2.90	0.38	0.474	O I	|	|	|	|	2.74
3.833	3.02	0.39	0.492	O I	|	|	|	|	2.78
3.917	3.13	0.40	0.510	O I	|	|	|	|	2.83
4.000	3.25	0.41	0.529	O I	|	|	|	|	2.89
4.083	3.35	0.42	0.549	O I	|	|	|	|	2.94
4.167	3.49	0.42	0.570	O I	|	|	|	|	3.00
4.250	3.68	0.43	0.592	O I	|	|	|	|	3.06
4.333	3.95	0.44	0.615	O I	|	|	|	|	3.12
4.417	4.29	0.45	0.640	O I	|	|	|	|	3.19
4.500	4.62	0.47	0.668	O I	|	|	|	|	3.26
4.583	4.87	0.48	0.697	|O I	|	|	|	|	3.34
4.667	5.15	0.49	0.728	|O I	|	|	|	|	3.43
4.750	5.52	0.51	0.762	|O I	|	|	|	|	3.52
4.833	5.88	0.52	0.797	|O I	|	|	|	|	3.61
4.917	6.14	0.54	0.835	|O I	|	|	|	|	3.71
5.000	6.43	0.55	0.875	|O I	|	|	|	|	3.81
5.083	6.94	0.56	0.917	|O I	|	|	|	|	3.91
5.167	8.05	0.57	0.964	|O I	|	|	|	|	4.02
5.250	9.58	0.59	1.021	|O I	|	|	|	|	4.16
5.333	11.00	0.61	1.088	|O I	|	|	|	|	4.32
5.417	12.38	0.63	1.164	|O I	|	|	|	|	4.50
5.500	14.16	0.65	1.251	|O I	|	|	|	|	4.70
5.583	15.17	0.67	1.348	|O I	|	|	|	|	4.91
5.667	11.24	0.69	1.434	|O I	|	|	|	|	5.09
5.750	6.80	0.70	1.491	|O I	|	|	|	|	5.21
5.833	4.70	0.71	1.526	|O I	|	|	|	|	5.28

5.917	3.51	0.71	1.549	|O I|	|	|	|	5.33
6.000	2.65	0.71	1.566	|O I |	|	|	|	5.37
6.083	1.96	0.72	1.577	|O I |	|	|	|	5.39
6.167	1.40	0.72	1.583	|OI |	|	|	|	5.40
6.250	0.98	0.72	1.586	|OI |	|	|	|	5.41
6.333	0.70	0.72	1.587	|O |	|	|	|	5.41
6.417	0.50	0.72	1.586	|O |	|	|	|	5.41
6.500	0.35	0.72	1.584	IO |	|	|	|	5.41
6.583	0.23	0.72	1.581	IO |	|	|	|	5.40
6.667	0.08	0.72	1.578	IO |	|	|	|	5.39
6.750	0.04	0.72	1.573	IO |	|	|	|	5.38
6.833	0.02	0.71	1.568	IO |	|	|	|	5.37
6.917	0.01	0.71	1.564	IO |	|	|	|	5.36
7.000	0.01	0.71	1.559	IO |	|	|	|	5.35
7.083	0.00	0.71	1.554	IO |	|	|	|	5.34
7.167	0.00	0.71	1.549	IO |	|	|	|	5.33
7.250	0.00	0.71	1.544	IO |	|	|	|	5.32
7.333	0.00	0.71	1.539	IO |	|	|	|	5.31
7.417	0.00	0.71	1.534	IO |	|	|	|	5.30
7.500	0.00	0.71	1.529	IO |	|	|	|	5.29
7.583	0.00	0.71	1.525	IO |	|	|	|	5.28
7.667	0.00	0.71	1.520	IO |	|	|	|	5.27
7.750	0.00	0.70	1.515	IO |	|	|	|	5.26
7.833	0.00	0.70	1.510	IO |	|	|	|	5.25
7.917	0.00	0.70	1.505	IO |	|	|	|	5.24
8.000	0.00	0.70	1.500	IO |	|	|	|	5.23
8.083	0.00	0.70	1.495	IO |	|	|	|	5.22
8.167	0.00	0.70	1.491	IO |	|	|	|	5.21
8.250	0.00	0.70	1.486	IO |	|	|	|	5.20
8.333	0.00	0.70	1.481	IO |	|	|	|	5.19
8.417	0.00	0.70	1.476	IO |	|	|	|	5.18
8.500	0.00	0.70	1.471	IO |	|	|	|	5.17
8.583	0.00	0.69	1.467	IO |	|	|	|	5.16
8.667	0.00	0.69	1.462	IO |	|	|	|	5.15
8.750	0.00	0.69	1.457	IO |	|	|	|	5.14
8.833	0.00	0.69	1.452	IO |	|	|	|	5.13
8.917	0.00	0.69	1.448	IO |	|	|	|	5.12
9.000	0.00	0.69	1.443	IO |	|	|	|	5.11
9.083	0.00	0.69	1.438	IO |	|	|	|	5.10
9.167	0.00	0.69	1.433	IO |	|	|	|	5.09
9.250	0.00	0.69	1.429	IO |	|	|	|	5.08
9.333	0.00	0.69	1.424	IO |	|	|	|	5.07
9.417	0.00	0.69	1.419	IO |	|	|	|	5.06
9.500	0.00	0.68	1.414	IO |	|	|	|	5.05
9.583	0.00	0.68	1.410	IO |	|	|	|	5.04
9.667	0.00	0.68	1.405	IO |	|	|	|	5.03
9.750	0.00	0.68	1.400	IO |	|	|	|	5.02
9.833	0.00	0.68	1.396	IO |	|	|	|	5.01
9.917	0.00	0.68	1.391	IO |	|	|	|	5.00
10.000	0.00	0.68	1.386	IO |	|	|	|	4.99
10.083	0.00	0.68	1.382	IO |	|	|	|	4.98
10.167	0.00	0.68	1.377	IO |	|	|	|	4.97
10.250	0.00	0.68	1.372	IO |	|	|	|	4.96
10.333	0.00	0.67	1.368	IO |	|	|	|	4.95
10.417	0.00	0.67	1.363	IO |	|	|	|	4.94
10.500	0.00	0.67	1.358	IO |	|	|	|	4.93
10.583	0.00	0.67	1.354	IO |	|	|	|	4.92
10.667	0.00	0.67	1.349	IO |	|	|	|	4.91
10.750	0.00	0.67	1.344	IO |	|	|	|	4.90
10.833	0.00	0.67	1.340	IO |	|	|	|	4.89
10.917	0.00	0.67	1.335	IO |	|	|	|	4.88
11.000	0.00	0.67	1.331	IO |	|	|	|	4.87
11.083	0.00	0.67	1.326	IO |	|	|	|	4.86
11.167	0.00	0.67	1.321	IO |	|	|	|	4.85
11.250	0.00	0.66	1.317	IO |	|	|	|	4.84
11.333	0.00	0.66	1.312	IO |	|	|	|	4.83
11.417	0.00	0.66	1.308	IO |	|	|	|	4.82
11.500	0.00	0.66	1.303	IO |	|	|	|	4.81
11.583	0.00	0.66	1.299	IO |	|	|	|	4.80
11.667	0.00	0.66	1.294	IO |	|	|	|	4.80
11.750	0.00	0.66	1.290	IO |	|	|	|	4.79

11.833	0.00	0.66	1.285	IO					4.78
11.917	0.00	0.66	1.280	IO					4.77
12.000	0.00	0.66	1.276	IO					4.76
12.083	0.00	0.66	1.271	IO					4.75
12.167	0.00	0.65	1.267	IO					4.74
12.250	0.00	0.65	1.262	IO					4.73
12.333	0.00	0.65	1.258	IO					4.72
12.417	0.00	0.65	1.253	IO					4.71
12.500	0.00	0.65	1.249	IO					4.70
12.583	0.00	0.65	1.244	IO					4.69
12.667	0.00	0.65	1.240	IO					4.68
12.750	0.00	0.65	1.236	IO					4.67
12.833	0.00	0.65	1.231	IO					4.66
12.917	0.00	0.64	1.227	IO					4.65
13.000	0.00	0.64	1.222	IO					4.64
13.083	0.00	0.64	1.218	IO					4.63
13.167	0.00	0.64	1.213	IO					4.62
13.250	0.00	0.64	1.209	IO					4.60
13.333	0.00	0.64	1.205	IO					4.59
13.417	0.00	0.64	1.200	IO					4.58
13.500	0.00	0.64	1.196	IO					4.57
13.583	0.00	0.64	1.191	IO					4.56
13.667	0.00	0.63	1.187	IO					4.55
13.750	0.00	0.63	1.183	IO					4.54
13.833	0.00	0.63	1.178	IO					4.53
13.917	0.00	0.63	1.174	IO					4.52
14.000	0.00	0.63	1.170	IO					4.51
14.083	0.00	0.63	1.165	IO					4.50
14.167	0.00	0.63	1.161	IO					4.49
14.250	0.00	0.63	1.157	IO					4.48
14.333	0.00	0.62	1.152	IO					4.47
14.417	0.00	0.62	1.148	IO					4.46
14.500	0.00	0.62	1.144	IO					4.45
14.583	0.00	0.62	1.139	IO					4.44
14.667	0.00	0.62	1.135	IO					4.43
14.750	0.00	0.62	1.131	IO					4.42
14.833	0.00	0.62	1.127	IO					4.41
14.917	0.00	0.62	1.122	IO					4.40
15.000	0.00	0.62	1.118	IO					4.39
15.083	0.00	0.61	1.114	IO					4.38
15.167	0.00	0.61	1.110	IO					4.37
15.250	0.00	0.61	1.105	IO					4.36
15.333	0.00	0.61	1.101	IO					4.35
15.417	0.00	0.61	1.097	IO					4.34
15.500	0.00	0.61	1.093	IO					4.33
15.583	0.00	0.61	1.089	IO					4.32
15.667	0.00	0.61	1.084	IO					4.31
15.750	0.00	0.61	1.080	IO					4.30
15.833	0.00	0.60	1.076	IO					4.29
15.917	0.00	0.60	1.072	IO					4.28
16.000	0.00	0.60	1.068	IO					4.27
16.083	0.00	0.60	1.064	IO					4.26
16.167	0.00	0.60	1.060	IO					4.25
16.250	0.00	0.60	1.055	IO					4.24
16.333	0.00	0.60	1.051	IO					4.23
16.417	0.00	0.60	1.047	IO					4.22
16.500	0.00	0.60	1.043	IO					4.21
16.583	0.00	0.59	1.039	IO					4.20
16.667	0.00	0.59	1.035	IO					4.19
16.750	0.00	0.59	1.031	IO					4.18
16.833	0.00	0.59	1.027	IO					4.17
16.917	0.00	0.59	1.023	IO					4.16
17.000	0.00	0.59	1.019	IO					4.15
17.083	0.00	0.59	1.015	IO					4.14
17.167	0.00	0.59	1.011	IO					4.13
17.250	0.00	0.59	1.007	IO					4.12
17.333	0.00	0.58	1.002	IO					4.11
17.417	0.00	0.58	0.998	IO					4.10
17.500	0.00	0.58	0.994	IO					4.09
17.583	0.00	0.58	0.990	IO					4.08
17.667	0.00	0.58	0.986	IO					4.07

17.750	0.00	0.58	0.982	IO				4.07
17.833	0.00	0.58	0.978	IO				4.06
17.917	0.00	0.58	0.975	IO				4.05
18.000	0.00	0.58	0.971	IO				4.04
18.083	0.00	0.57	0.967	IO				4.03
18.167	0.00	0.57	0.963	IO				4.02
18.250	0.00	0.57	0.959	IO				4.01
18.333	0.00	0.57	0.955	IO				4.00
18.417	0.00	0.57	0.951	IO				3.99
18.500	0.00	0.57	0.947	IO				3.98
18.583	0.00	0.57	0.943	IO				3.97
18.667	0.00	0.57	0.939	IO				3.96
18.750	0.00	0.57	0.935	IO				3.95
18.833	0.00	0.56	0.931	IO				3.94
18.917	0.00	0.56	0.927	IO				3.93
19.000	0.00	0.56	0.924	IO				3.93
19.083	0.00	0.56	0.920	IO				3.92
19.167	0.00	0.56	0.916	IO				3.91
19.250	0.00	0.56	0.912	IO				3.90
19.333	0.00	0.56	0.908	IO				3.89
19.417	0.00	0.56	0.904	IO				3.88
19.500	0.00	0.56	0.900	IO				3.87
19.583	0.00	0.56	0.897	IO				3.86
19.667	0.00	0.55	0.893	IO				3.85
19.750	0.00	0.55	0.889	IO				3.84
19.833	0.00	0.55	0.885	IO				3.83
19.917	0.00	0.55	0.881	IO				3.82
20.000	0.00	0.55	0.878	IO				3.82
20.083	0.00	0.55	0.874	IO				3.81
20.167	0.00	0.55	0.870	IO				3.80
20.250	0.00	0.55	0.866	IO				3.79
20.333	0.00	0.55	0.862	IO				3.78
20.417	0.00	0.55	0.859	IO				3.77
20.500	0.00	0.54	0.855	IO				3.76
20.583	0.00	0.54	0.851	IO				3.75
20.667	0.00	0.54	0.847	IO				3.74
20.750	0.00	0.54	0.844	IO				3.74
20.833	0.00	0.54	0.840	IO				3.73
20.917	0.00	0.54	0.836	IO				3.72
21.000	0.00	0.54	0.833	IO				3.71
21.083	0.00	0.54	0.829	IO				3.70
21.167	0.00	0.54	0.825	IO				3.69
21.250	0.00	0.53	0.822	IO				3.68
21.333	0.00	0.53	0.818	IO				3.67
21.417	0.00	0.53	0.814	IO				3.66
21.500	0.00	0.53	0.811	IO				3.65
21.583	0.00	0.53	0.807	IO				3.64
21.667	0.00	0.53	0.803	IO				3.63
21.750	0.00	0.52	0.800	IO				3.62
21.833	0.00	0.52	0.796	IO				3.61
21.917	0.00	0.52	0.792	IO				3.60
22.000	0.00	0.52	0.789	IO				3.59
22.083	0.00	0.52	0.785	IO				3.58
22.167	0.00	0.52	0.782	IO				3.57
22.250	0.00	0.51	0.778	IO				3.56
22.333	0.00	0.51	0.775	IO				3.55
22.417	0.00	0.51	0.771	IO				3.54
22.500	0.00	0.51	0.768	IO				3.53
22.583	0.00	0.51	0.764	IO				3.52
22.667	0.00	0.51	0.761	IO				3.51
22.750	0.00	0.51	0.757	IO				3.50
22.833	0.00	0.50	0.754	IO				3.50
22.917	0.00	0.50	0.750	IO				3.49
23.000	0.00	0.50	0.747	IO				3.48
23.083	0.00	0.50	0.743	IO				3.47
23.167	0.00	0.50	0.740	IO				3.46
23.250	0.00	0.50	0.736	IO				3.45
23.333	0.00	0.50	0.733	IO				3.44
23.417	0.00	0.49	0.730	IO				3.43
23.500	0.00	0.49	0.726	IO				3.42
23.583	0.00	0.49	0.723	IO				3.41

23.667	0.00	0.49	0.719	IO					3.40
23.750	0.00	0.49	0.716	IO					3.39
23.833	0.00	0.49	0.713	IO					3.38
23.917	0.00	0.48	0.709	IO					3.37
24.000	0.00	0.48	0.706	IO					3.37
24.083	0.00	0.48	0.703	IO					3.36
24.167	0.00	0.48	0.699	IO					3.35
24.250	0.00	0.48	0.696	IO					3.34
24.333	0.00	0.48	0.693	IO					3.33
24.417	0.00	0.48	0.689	IO					3.32
24.500	0.00	0.47	0.686	IO					3.31
24.583	0.00	0.47	0.683	O					3.30
24.667	0.00	0.47	0.680	O					3.29
24.750	0.00	0.47	0.676	O					3.29
24.833	0.00	0.47	0.673	O					3.28
24.917	0.00	0.47	0.670	O					3.27
25.000	0.00	0.47	0.667	O					3.26
25.083	0.00	0.47	0.664	O					3.25
25.167	0.00	0.46	0.660	O					3.24
25.250	0.00	0.46	0.657	O					3.23
25.333	0.00	0.46	0.654	O					3.22
25.417	0.00	0.46	0.651	O					3.22
25.500	0.00	0.46	0.648	O					3.21
25.583	0.00	0.46	0.644	O					3.20
25.667	0.00	0.46	0.641	O					3.19
25.750	0.00	0.45	0.638	O					3.18
25.833	0.00	0.45	0.635	O					3.17
25.917	0.00	0.45	0.632	O					3.16
26.000	0.00	0.45	0.629	O					3.16
26.083	0.00	0.45	0.626	O					3.15
26.167	0.00	0.45	0.623	O					3.14
26.250	0.00	0.45	0.620	O					3.13
26.333	0.00	0.44	0.617	O					3.12
26.417	0.00	0.44	0.614	O					3.11
26.500	0.00	0.44	0.610	O					3.11
26.583	0.00	0.44	0.607	O					3.10
26.667	0.00	0.44	0.604	O					3.09
26.750	0.00	0.44	0.601	O					3.08
26.833	0.00	0.44	0.598	O					3.07
26.917	0.00	0.44	0.595	O					3.07
27.000	0.00	0.43	0.592	O					3.06
27.083	0.00	0.43	0.589	O					3.05
27.167	0.00	0.43	0.586	O					3.04
27.250	0.00	0.43	0.583	O					3.03
27.333	0.00	0.43	0.580	O					3.02
27.417	0.00	0.43	0.578	O					3.02
27.500	0.00	0.43	0.575	O					3.01
27.583	0.00	0.43	0.572	O					3.00
27.667	0.00	0.42	0.569	O					2.99
27.750	0.00	0.42	0.566	O					2.98
27.833	0.00	0.42	0.563	O					2.98
27.917	0.00	0.42	0.560	O					2.97
28.000	0.00	0.42	0.557	O					2.96
28.083	0.00	0.42	0.554	O					2.95
28.167	0.00	0.42	0.551	O					2.95
28.250	0.00	0.42	0.549	O					2.94
28.333	0.00	0.41	0.546	O					2.93
28.417	0.00	0.41	0.543	O					2.92
28.500	0.00	0.41	0.540	O					2.91
28.583	0.00	0.41	0.537	O					2.91
28.667	0.00	0.41	0.534	O					2.90
28.750	0.00	0.41	0.532	O					2.89
28.833	0.00	0.41	0.529	O					2.88
28.917	0.00	0.41	0.526	O					2.88
29.000	0.00	0.40	0.523	O					2.87
29.083	0.00	0.40	0.520	O					2.86
29.167	0.00	0.40	0.518	O					2.85
29.250	0.00	0.40	0.515	O					2.85
29.333	0.00	0.40	0.512	O					2.84
29.417	0.00	0.40	0.509	O					2.83
29.500	0.00	0.40	0.507	O					2.82

29.583	0.00	0.40	0.504	O	|	|	|	|	2.82
29.667	0.00	0.39	0.501	O	|	|	|	|	2.81
29.750	0.00	0.39	0.498	O	|	|	|	|	2.80
29.833	0.00	0.39	0.496	O	|	|	|	|	2.79
29.917	0.00	0.39	0.493	O	|	|	|	|	2.79
30.000	0.00	0.39	0.490	O	|	|	|	|	2.78
30.083	0.00	0.39	0.488	O	|	|	|	|	2.77
30.167	0.00	0.39	0.485	O	|	|	|	|	2.77
30.250	0.00	0.39	0.482	O	|	|	|	|	2.76
30.333	0.00	0.39	0.480	O	|	|	|	|	2.75
30.417	0.00	0.38	0.477	O	|	|	|	|	2.74
30.500	0.00	0.38	0.474	O	|	|	|	|	2.74
30.583	0.00	0.38	0.472	O	|	|	|	|	2.73
30.667	0.00	0.38	0.469	O	|	|	|	|	2.72
30.750	0.00	0.38	0.466	O	|	|	|	|	2.71
30.833	0.00	0.38	0.464	O	|	|	|	|	2.71
30.917	0.00	0.38	0.461	O	|	|	|	|	2.70
31.000	0.00	0.37	0.459	O	|	|	|	|	2.69
31.083	0.00	0.37	0.456	O	|	|	|	|	2.68
31.167	0.00	0.37	0.454	O	|	|	|	|	2.68
31.250	0.00	0.37	0.451	O	|	|	|	|	2.67
31.333	0.00	0.36	0.449	O	|	|	|	|	2.66
31.417	0.00	0.36	0.446	O	|	|	|	|	2.65
31.500	0.00	0.36	0.444	O	|	|	|	|	2.65
31.583	0.00	0.35	0.441	O	|	|	|	|	2.64
31.667	0.00	0.35	0.439	O	|	|	|	|	2.63
31.750	0.00	0.35	0.436	O	|	|	|	|	2.62
31.833	0.00	0.35	0.434	O	|	|	|	|	2.62
31.917	0.00	0.34	0.432	O	|	|	|	|	2.61
32.000	0.00	0.34	0.429	O	|	|	|	|	2.60
32.083	0.00	0.34	0.427	O	|	|	|	|	2.59
32.167	0.00	0.34	0.424	O	|	|	|	|	2.59
32.250	0.00	0.33	0.422	O	|	|	|	|	2.58
32.333	0.00	0.33	0.420	O	|	|	|	|	2.57
32.417	0.00	0.33	0.418	O	|	|	|	|	2.56
32.500	0.00	0.33	0.415	O	|	|	|	|	2.56
32.583	0.00	0.32	0.413	O	|	|	|	|	2.55
32.667	0.00	0.32	0.411	O	|	|	|	|	2.54
32.750	0.00	0.32	0.409	O	|	|	|	|	2.54
32.833	0.00	0.32	0.407	O	|	|	|	|	2.53
32.917	0.00	0.31	0.404	O	|	|	|	|	2.52
33.000	0.00	0.31	0.402	O	|	|	|	|	2.52
33.083	0.00	0.31	0.400	O	|	|	|	|	2.51
33.167	0.00	0.31	0.398	O	|	|	|	|	2.50
33.250	0.00	0.30	0.396	O	|	|	|	|	2.50
33.333	0.00	0.30	0.394	O	|	|	|	|	2.49
33.417	0.00	0.30	0.392	O	|	|	|	|	2.48
33.500	0.00	0.30	0.390	O	|	|	|	|	2.48
33.583	0.00	0.29	0.388	O	|	|	|	|	2.47
33.667	0.00	0.29	0.386	O	|	|	|	|	2.46
33.750	0.00	0.29	0.384	O	|	|	|	|	2.46
33.833	0.00	0.29	0.382	O	|	|	|	|	2.45
33.917	0.00	0.29	0.380	O	|	|	|	|	2.45
34.000	0.00	0.28	0.378	O	|	|	|	|	2.44
34.083	0.00	0.28	0.376	O	|	|	|	|	2.43
34.167	0.00	0.28	0.374	O	|	|	|	|	2.43
34.250	0.00	0.28	0.372	O	|	|	|	|	2.42
34.333	0.00	0.27	0.370	O	|	|	|	|	2.42
34.417	0.00	0.27	0.368	O	|	|	|	|	2.41
34.500	0.00	0.27	0.366	O	|	|	|	|	2.40
34.583	0.00	0.27	0.364	O	|	|	|	|	2.40
34.667	0.00	0.27	0.363	O	|	|	|	|	2.39
34.750	0.00	0.27	0.361	O	|	|	|	|	2.38
34.833	0.00	0.27	0.359	O	|	|	|	|	2.38
34.917	0.00	0.27	0.357	O	|	|	|	|	2.37
35.000	0.00	0.27	0.355	O	|	|	|	|	2.36
35.083	0.00	0.27	0.353	O	|	|	|	|	2.35
35.167	0.00	0.26	0.352	O	|	|	|	|	2.35
35.250	0.00	0.26	0.350	O	|	|	|	|	2.34
35.333	0.00	0.26	0.348	O	|	|	|	|	2.33
35.417	0.00	0.26	0.346	O	|	|	|	|	2.33

35.500	0.00	0.26	0.344	O	|	|	|	|	2.32
35.583	0.00	0.26	0.342	O	|	|	|	|	2.31
35.667	0.00	0.26	0.341	O	|	|	|	|	2.30
35.750	0.00	0.26	0.339	O	|	|	|	|	2.30
35.833	0.00	0.26	0.337	O	|	|	|	|	2.29
35.917	0.00	0.26	0.335	O	|	|	|	|	2.28
36.000	0.00	0.26	0.334	O	|	|	|	|	2.28
36.083	0.00	0.26	0.332	O	|	|	|	|	2.27
36.167	0.00	0.26	0.330	O	|	|	|	|	2.26
36.250	0.00	0.26	0.328	O	|	|	|	|	2.26
36.333	0.00	0.26	0.326	O	|	|	|	|	2.25
36.417	0.00	0.26	0.325	O	|	|	|	|	2.24
36.500	0.00	0.26	0.323	O	|	|	|	|	2.23
36.583	0.00	0.25	0.321	O	|	|	|	|	2.23
36.667	0.00	0.25	0.319	O	|	|	|	|	2.22
36.750	0.00	0.25	0.318	O	|	|	|	|	2.21
36.833	0.00	0.25	0.316	O	|	|	|	|	2.21
36.917	0.00	0.25	0.314	O	|	|	|	|	2.20
37.000	0.00	0.25	0.312	O	|	|	|	|	2.19
37.083	0.00	0.25	0.311	O	|	|	|	|	2.19
37.167	0.00	0.25	0.309	O	|	|	|	|	2.18
37.250	0.00	0.25	0.307	O	|	|	|	|	2.17
37.333	0.00	0.25	0.306	O	|	|	|	|	2.17
37.417	0.00	0.25	0.304	O	|	|	|	|	2.16
37.500	0.00	0.25	0.302	O	|	|	|	|	2.15
37.583	0.00	0.25	0.300	O	|	|	|	|	2.15
37.667	0.00	0.25	0.299	O	|	|	|	|	2.14
37.750	0.00	0.25	0.297	O	|	|	|	|	2.13
37.833	0.00	0.25	0.295	O	|	|	|	|	2.13
37.917	0.00	0.25	0.294	O	|	|	|	|	2.12
38.000	0.00	0.25	0.292	O	|	|	|	|	2.11
38.083	0.00	0.24	0.290	O	|	|	|	|	2.11
38.167	0.00	0.24	0.289	O	|	|	|	|	2.10
38.250	0.00	0.24	0.287	O	|	|	|	|	2.09
38.333	0.00	0.24	0.285	O	|	|	|	|	2.09
38.417	0.00	0.24	0.283	O	|	|	|	|	2.08
38.500	0.00	0.24	0.282	O	|	|	|	|	2.07
38.583	0.00	0.24	0.280	O	|	|	|	|	2.07
38.667	0.00	0.24	0.278	O	|	|	|	|	2.06
38.750	0.00	0.24	0.277	O	|	|	|	|	2.05
38.833	0.00	0.24	0.275	O	|	|	|	|	2.05
38.917	0.00	0.24	0.274	O	|	|	|	|	2.04
39.000	0.00	0.24	0.272	O	|	|	|	|	2.03
39.083	0.00	0.24	0.270	O	|	|	|	|	2.03
39.167	0.00	0.24	0.269	O	|	|	|	|	2.02
39.250	0.00	0.24	0.267	O	|	|	|	|	2.01
39.333	0.00	0.24	0.265	O	|	|	|	|	2.01
39.417	0.00	0.24	0.264	O	|	|	|	|	2.00
39.500	0.00	0.24	0.262	O	|	|	|	|	2.00
39.583	0.00	0.23	0.260	O	|	|	|	|	1.99
39.667	0.00	0.23	0.259	O	|	|	|	|	1.98
39.750	0.00	0.23	0.257	O	|	|	|	|	1.98
39.833	0.00	0.23	0.256	O	|	|	|	|	1.97
39.917	0.00	0.23	0.254	O	|	|	|	|	1.96
40.000	0.00	0.23	0.252	O	|	|	|	|	1.96
40.083	0.00	0.23	0.251	O	|	|	|	|	1.95
40.167	0.00	0.23	0.249	O	|	|	|	|	1.94
40.250	0.00	0.23	0.248	O	|	|	|	|	1.94
40.333	0.00	0.23	0.246	O	|	|	|	|	1.93
40.417	0.00	0.23	0.244	O	|	|	|	|	1.93
40.500	0.00	0.23	0.243	O	|	|	|	|	1.92
40.583	0.00	0.23	0.241	O	|	|	|	|	1.91
40.667	0.00	0.23	0.240	O	|	|	|	|	1.91
40.750	0.00	0.23	0.238	O	|	|	|	|	1.90
40.833	0.00	0.23	0.237	O	|	|	|	|	1.90
40.917	0.00	0.23	0.235	O	|	|	|	|	1.89
41.000	0.00	0.23	0.233	O	|	|	|	|	1.88
41.083	0.00	0.23	0.232	O	|	|	|	|	1.88
41.167	0.00	0.23	0.230	O	|	|	|	|	1.87
41.250	0.00	0.22	0.229	O	|	|	|	|	1.86
41.333	0.00	0.22	0.227	O	|	|	|	|	1.86

41.417	0.00	0.22	0.226	O					1.85
41.500	0.00	0.22	0.224	O					1.85
41.583	0.00	0.22	0.223	O					1.84
41.667	0.00	0.22	0.221	O					1.83
41.750	0.00	0.22	0.220	O					1.83
41.833	0.00	0.22	0.218	O					1.82
41.917	0.00	0.22	0.217	O					1.82
42.000	0.00	0.22	0.215	O					1.81
42.083	0.00	0.22	0.214	O					1.80
42.167	0.00	0.22	0.212	O					1.80
42.250	0.00	0.22	0.211	O					1.79
42.333	0.00	0.22	0.209	O					1.79
42.417	0.00	0.22	0.208	O					1.78
42.500	0.00	0.22	0.206	O					1.77
42.583	0.00	0.22	0.205	O					1.77
42.667	0.00	0.22	0.203	O					1.76
42.750	0.00	0.22	0.202	O					1.76
42.833	0.00	0.22	0.200	O					1.75
42.917	0.00	0.21	0.199	O					1.75
43.000	0.00	0.21	0.197	O					1.74
43.083	0.00	0.21	0.196	O					1.73
43.167	0.00	0.21	0.194	O					1.73
43.250	0.00	0.21	0.193	O					1.72
43.333	0.00	0.21	0.191	O					1.72
43.417	0.00	0.21	0.190	O					1.71
43.500	0.00	0.21	0.188	O					1.71
43.583	0.00	0.21	0.187	O					1.70
43.667	0.00	0.21	0.185	O					1.69
43.750	0.00	0.21	0.184	O					1.68
43.833	0.00	0.21	0.183	O					1.67
43.917	0.00	0.21	0.181	O					1.66
44.000	0.00	0.21	0.180	O					1.65
44.083	0.00	0.20	0.178	O					1.64
44.167	0.00	0.20	0.177	O					1.63
44.250	0.00	0.20	0.175	O					1.62
44.333	0.00	0.20	0.174	O					1.61
44.417	0.00	0.20	0.173	O					1.60
44.500	0.00	0.20	0.171	O					1.59
44.583	0.00	0.20	0.170	O					1.58
44.667	0.00	0.20	0.169	O					1.57
44.750	0.00	0.20	0.167	O					1.57
44.833	0.00	0.20	0.166	O					1.56
44.917	0.00	0.20	0.164	O					1.55
45.000	0.00	0.19	0.163	O					1.54
45.083	0.00	0.19	0.162	O					1.53
45.167	0.00	0.19	0.160	O					1.52
45.250	0.00	0.19	0.159	O					1.51
45.333	0.00	0.19	0.158	O					1.50
45.417	0.00	0.19	0.157	O					1.49
45.500	0.00	0.19	0.155	O					1.48
45.583	0.00	0.19	0.154	O					1.47
45.667	0.00	0.19	0.153	O					1.47
45.750	0.00	0.19	0.151	O					1.46
45.833	0.00	0.19	0.150	O					1.45
45.917	0.00	0.18	0.149	O					1.44
46.000	0.00	0.18	0.148	O					1.43
46.083	0.00	0.18	0.146	O					1.42
46.167	0.00	0.18	0.145	O					1.41
46.250	0.00	0.18	0.144	O					1.41
46.333	0.00	0.18	0.142	O					1.40
46.417	0.00	0.18	0.141	O					1.39
46.500	0.00	0.18	0.140	O					1.38
46.583	0.00	0.18	0.139	O					1.37
46.667	0.00	0.18	0.138	O					1.36
46.750	0.00	0.18	0.136	O					1.36
46.833	0.00	0.18	0.135	O					1.35
46.917	0.00	0.17	0.134	O					1.34
47.000	0.00	0.17	0.133	O					1.33
47.083	0.00	0.17	0.132	O					1.32
47.167	0.00	0.17	0.130	O					1.31
47.250	0.00	0.17	0.129	O					1.31

47.333	0.00	0.17	0.128	O	|	|	|	|	1.30
47.417	0.00	0.17	0.127	O	|	|	|	|	1.29
47.500	0.00	0.17	0.126	O	|	|	|	|	1.28
47.583	0.00	0.17	0.125	O	|	|	|	|	1.28
47.667	0.00	0.17	0.123	O	|	|	|	|	1.27
47.750	0.00	0.17	0.122	O	|	|	|	|	1.26
47.833	0.00	0.17	0.121	O	|	|	|	|	1.25
47.917	0.00	0.16	0.120	O	|	|	|	|	1.24
48.000	0.00	0.16	0.119	O	|	|	|	|	1.24
48.083	0.00	0.16	0.118	O	|	|	|	|	1.23
48.167	0.00	0.16	0.117	O	|	|	|	|	1.22
48.250	0.00	0.16	0.115	O	|	|	|	|	1.21
48.333	0.00	0.16	0.114	O	|	|	|	|	1.21
48.417	0.00	0.16	0.113	O	|	|	|	|	1.20
48.500	0.00	0.16	0.112	O	|	|	|	|	1.19
48.583	0.00	0.16	0.111	O	|	|	|	|	1.18
48.667	0.00	0.16	0.110	O	|	|	|	|	1.18
48.750	0.00	0.16	0.109	O	|	|	|	|	1.17
48.833	0.00	0.16	0.108	O	|	|	|	|	1.16
48.917	0.00	0.16	0.107	O	|	|	|	|	1.15
49.000	0.00	0.15	0.106	O	|	|	|	|	1.15
49.083	0.00	0.15	0.105	O	|	|	|	|	1.14
49.167	0.00	0.15	0.104	O	|	|	|	|	1.13
49.250	0.00	0.15	0.103	O	|	|	|	|	1.13
49.333	0.00	0.15	0.101	O	|	|	|	|	1.12
49.417	0.00	0.15	0.100	O	|	|	|	|	1.11
49.500	0.00	0.15	0.099	O	|	|	|	|	1.10
49.583	0.00	0.15	0.098	O	|	|	|	|	1.10
49.667	0.00	0.15	0.097	O	|	|	|	|	1.09
49.750	0.00	0.15	0.096	O	|	|	|	|	1.08
49.833	0.00	0.15	0.095	O	|	|	|	|	1.08
49.917	0.00	0.15	0.094	O	|	|	|	|	1.07
50.000	0.00	0.15	0.093	O	|	|	|	|	1.06
50.083	0.00	0.15	0.092	O	|	|	|	|	1.06
50.167	0.00	0.14	0.091	O	|	|	|	|	1.05
50.250	0.00	0.14	0.090	O	|	|	|	|	1.04
50.333	0.00	0.14	0.089	O	|	|	|	|	1.04
50.417	0.00	0.14	0.088	O	|	|	|	|	1.03
50.500	0.00	0.14	0.087	O	|	|	|	|	1.02
50.583	0.00	0.14	0.086	O	|	|	|	|	1.02
50.667	0.00	0.14	0.085	O	|	|	|	|	1.01
50.750	0.00	0.14	0.084	O	|	|	|	|	1.00
50.833	0.00	0.14	0.083	O	|	|	|	|	1.00
50.917	0.00	0.14	0.083	O	|	|	|	|	0.99
51.000	0.00	0.14	0.082	O	|	|	|	|	0.98
51.083	0.00	0.14	0.081	O	|	|	|	|	0.98
51.167	0.00	0.14	0.080	O	|	|	|	|	0.97
51.250	0.00	0.14	0.079	O	|	|	|	|	0.96
51.333	0.00	0.14	0.078	O	|	|	|	|	0.96
51.417	0.00	0.13	0.077	O	|	|	|	|	0.95
51.500	0.00	0.13	0.076	O	|	|	|	|	0.94
51.583	0.00	0.13	0.075	O	|	|	|	|	0.94
51.667	0.00	0.13	0.074	O	|	|	|	|	0.93
51.750	0.00	0.13	0.073	O	|	|	|	|	0.93
51.833	0.00	0.13	0.072	O	|	|	|	|	0.92
51.917	0.00	0.13	0.071	O	|	|	|	|	0.91
52.000	0.00	0.13	0.070	O	|	|	|	|	0.91
52.083	0.00	0.13	0.070	O	|	|	|	|	0.90
52.167	0.00	0.13	0.069	O	|	|	|	|	0.90
52.250	0.00	0.13	0.068	O	|	|	|	|	0.89
52.333	0.00	0.13	0.067	O	|	|	|	|	0.88
52.417	0.00	0.13	0.066	O	|	|	|	|	0.88
52.500	0.00	0.13	0.065	O	|	|	|	|	0.87
52.583	0.00	0.13	0.064	O	|	|	|	|	0.87
52.667	0.00	0.13	0.063	O	|	|	|	|	0.86
52.750	0.00	0.12	0.063	O	|	|	|	|	0.85
52.833	0.00	0.12	0.062	O	|	|	|	|	0.85
52.917	0.00	0.12	0.061	O	|	|	|	|	0.84
53.000	0.00	0.12	0.060	O	|	|	|	|	0.84
53.083	0.00	0.12	0.059	O	|	|	|	|	0.83
53.167	0.00	0.12	0.058	O	|	|	|	|	0.82

53.250	0.00	0.12	0.058	O	|	|	|	|	0.82
53.333	0.00	0.12	0.057	O	|	|	|	|	0.81
53.417	0.00	0.12	0.056	O	|	|	|	|	0.81
53.500	0.00	0.12	0.055	O	|	|	|	|	0.80
53.583	0.00	0.12	0.054	O	|	|	|	|	0.80
53.667	0.00	0.12	0.053	O	|	|	|	|	0.79
53.750	0.00	0.12	0.053	O	|	|	|	|	0.79
53.833	0.00	0.12	0.052	O	|	|	|	|	0.78
53.917	0.00	0.12	0.051	O	|	|	|	|	0.77
54.000	0.00	0.12	0.050	O	|	|	|	|	0.77
54.083	0.00	0.12	0.049	O	|	|	|	|	0.76
54.167	0.00	0.11	0.049	O	|	|	|	|	0.76
54.250	0.00	0.11	0.048	O	|	|	|	|	0.75
54.333	0.00	0.11	0.047	O	|	|	|	|	0.75
54.417	0.00	0.11	0.046	O	|	|	|	|	0.74
54.500	0.00	0.11	0.045	O	|	|	|	|	0.74
54.583	0.00	0.11	0.045	O	|	|	|	|	0.73
54.667	0.00	0.11	0.044	O	|	|	|	|	0.73
54.750	0.00	0.11	0.043	O	|	|	|	|	0.72
54.833	0.00	0.11	0.042	O	|	|	|	|	0.72
54.917	0.00	0.11	0.042	O	|	|	|	|	0.71
55.000	0.00	0.11	0.041	O	|	|	|	|	0.71
55.083	0.00	0.11	0.040	O	|	|	|	|	0.70
55.167	0.00	0.11	0.039	O	|	|	|	|	0.69
55.250	0.00	0.11	0.039	O	|	|	|	|	0.68
55.333	0.00	0.10	0.038	O	|	|	|	|	0.66
55.417	0.00	0.10	0.037	O	|	|	|	|	0.65
55.500	0.00	0.10	0.036	O	|	|	|	|	0.64

Remaining water in basin = 0.04 (Ac.Ft)

**********HYDROGRAPH DATA**********

Number of intervals = 666
Time interval = 5.0 (Min.)
Maximum/Peak flow rate = 0.719 (CFS)
Total volume = 1.742 (Ac.Ft)

Status of hydrographs being held in storage

	Stream 1	Stream 2	Stream 3	Stream 4	Stream 5
Peak (CFS)	0.000	0.000	0.000	0.000	0.000
Vol (Ac.Ft)	0.000	0.000	0.000	0.000	0.000

****

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                    FLOOD HYDROGRAPH ROUTING PROGRAM
                Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2004
                            Study date: 08/18/25

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 Program License Serial Number 5006

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 ********************* HYDROGRAPH INFORMATION **********************

                From study/file name: PROB2410.rte
 ****************************HYDROGRAPH DATA****************************
                Number of intervals =   301
                Time interval =    5.0 (Min.)
                Maximum/Peak flow rate =        4.603 (CFS)
                Total volume =       2.510 (Ac.Ft)
        Status of hydrographs being held in storage
                    Stream 1  Stream 2  Stream 3  Stream 4  Stream 5
        Peak (CFS)      0.000     0.000     0.000     0.000     0.000
        Vol (Ac.Ft)      0.000     0.000     0.000     0.000     0.000
 ***********************************************************************



 +++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
 Process from Point/Station        0.000 to Point/Station        0.000
 **** RETARDING BASIN ROUTING ****
 _________________________________________________________________________

 User entry of depth-outflow-storage data
 ---------------------------------------------------------------------
 Total number of inflow hydrograph intervals = 301
 Hydrograph time unit =  5.000 (Min.)
 Initial depth in storage basin =   0.00(Ft.)
 ---------------------------------------------------------------------
 ---------------------------------------------------------------------
 Initial basin depth =   0.00 (Ft.)
 Initial basin storage =      0.00 (Ac.Ft)
 Initial basin outflow =   0.00 (CFS)
 ---------------------------------------------------------------------
 ---------------------------------------------------------------------
 Depth vs. Storage and Depth vs. Discharge data:
  Basin Depth  Storage    Outflow   (S-O*dt/2)   (S+O*dt/2)
       (Ft.)    (Ac.Ft)    (CFS)     (Ac.Ft)    (Ac.Ft)
 ---------------------------------------------------------------------
    0.000      0.000      0.000      0.000        0.000
    0.700      0.040      0.109      0.040        0.040
    1.700      0.187      0.211      0.186        0.188
    2.400      0.365      0.269      0.364        0.366
    2.700      0.461      0.377      0.460        0.462
    3.700      0.829      0.537      0.827        0.831
    4.700      1.249      0.651      1.247        1.251
    5.700      1.723      0.746      1.720        1.726
    6.700      2.252      1.870      2.246        2.258
    7.700      2.841      2.376      2.833        2.849
    8.300      3.223     38.499      3.090        3.356
    8.700      3.491    113.554      3.100        3.882
    9.700      4.203    441.782      2.682        5.724
 ---------------------------------------------------------------------
                 Hydrograph Detention Basin Routing
 ---------------------------------------------------------------------

 Graph values: 'I'= unit inflow; 'O'=outflow at time shown
 ---------------------------------------------------------------------
  Time   Inflow  Outflow    Storage                                    Depth
```

(Hours)	(CFS)	(CFS)	(Ac.Ft)	.0	1.2	2.30	3.45	4.60	(Ft.)
0.083	0.02	0.00	0.000	O	|	|	|	|	0.00
0.167	0.10	0.00	0.000	O	|	|	|	|	0.01
0.250	0.16	0.00	0.001	OI	|	|	|	|	0.02
0.333	0.20	0.01	0.003	OI	|	|	|	|	0.04
0.417	0.25	0.01	0.004	OI	|	|	|	|	0.07
0.500	0.30	0.02	0.006	O I	|	|	|	|	0.10
0.583	0.31	0.02	0.008	O I	|	|	|	|	0.14
0.667	0.33	0.03	0.010	O I	|	|	|	|	0.17
0.750	0.34	0.03	0.012	O I	|	|	|	|	0.21
0.833	0.35	0.04	0.014	O I	|	|	|	|	0.25
0.917	0.40	0.04	0.016	O I	|	|	|	|	0.29
1.000	0.43	0.05	0.019	O I	|	|	|	|	0.33
1.083	0.44	0.06	0.022	O I	|	|	|	|	0.38
1.167	0.41	0.07	0.024	O I	|	|	|	|	0.42
1.250	0.38	0.07	0.026	O I	|	|	|	|	0.46
1.333	0.38	0.08	0.028	O I	|	|	|	|	0.50
1.417	0.37	0.08	0.030	O I	|	|	|	|	0.53
1.500	0.37	0.09	0.032	O I	|	|	|	|	0.57
1.583	0.37	0.09	0.034	O I	|	|	|	|	0.60
1.667	0.37	0.10	0.036	O I	|	|	|	|	0.63
1.750	0.36	0.10	0.038	O I	|	|	|	|	0.66
1.833	0.37	0.11	0.040	O I	|	|	|	|	0.70
1.917	0.41	0.11	0.042	O I	|	|	|	|	0.71
2.000	0.44	0.11	0.044	O I	|	|	|	|	0.73
2.083	0.46	0.11	0.046	O I	|	|	|	|	0.74
2.167	0.46	0.11	0.049	O I	|	|	|	|	0.76
2.250	0.47	0.12	0.051	O I	|	|	|	|	0.77
2.333	0.47	0.12	0.053	O I	|	|	|	|	0.79
2.417	0.47	0.12	0.056	O I	|	|	|	|	0.81
2.500	0.48	0.12	0.058	O I	|	|	|	|	0.82
2.583	0.49	0.12	0.061	O I	|	|	|	|	0.84
2.667	0.53	0.13	0.063	O I	|	|	|	|	0.86
2.750	0.56	0.13	0.066	O I	|	|	|	|	0.88
2.833	0.57	0.13	0.069	O I	|	|	|	|	0.90
2.917	0.58	0.13	0.072	O I	|	|	|	|	0.92
3.000	0.59	0.13	0.075	O I	|	|	|	|	0.94
3.083	0.59	0.14	0.079	O I	|	|	|	|	0.96
3.167	0.59	0.14	0.082	O I	|	|	|	|	0.98
3.250	0.60	0.14	0.085	O I	|	|	|	|	1.01
3.333	0.60	0.14	0.088	O I	|	|	|	|	1.03
3.417	0.60	0.14	0.091	|O I	|	|	|	|	1.05
3.500	0.60	0.15	0.094	|O I	|	|	|	|	1.07
3.583	0.60	0.15	0.097	|O I	|	|	|	|	1.09
3.667	0.60	0.15	0.100	|O I	|	|	|	|	1.11
3.750	0.60	0.15	0.104	|O I	|	|	|	|	1.13
3.833	0.61	0.16	0.107	|O I	|	|	|	|	1.15
3.917	0.65	0.16	0.110	|O I	|	|	|	|	1.18
4.000	0.68	0.16	0.113	|O I	|	|	|	|	1.20
4.083	0.70	0.16	0.117	|O I	|	|	|	|	1.22
4.167	0.70	0.17	0.121	|O I	|	|	|	|	1.25
4.250	0.71	0.17	0.124	|O I	|	|	|	|	1.27
4.333	0.72	0.17	0.128	|O I	|	|	|	|	1.30
4.417	0.76	0.17	0.132	|O I	|	|	|	|	1.33
4.500	0.80	0.18	0.136	|O I	|	|	|	|	1.36
4.583	0.81	0.18	0.141	|O I	|	|	|	|	1.38
4.667	0.82	0.18	0.145	|O I	|	|	|	|	1.41
4.750	0.83	0.18	0.149	|O I	|	|	|	|	1.44
4.833	0.84	0.19	0.154	|O I	|	|	|	|	1.47
4.917	0.88	0.19	0.159	|O I	|	|	|	|	1.51
5.000	0.92	0.19	0.163	|O I	|	|	|	|	1.54
5.083	0.91	0.20	0.168	|O I	|	|	|	|	1.57
5.167	0.84	0.20	0.173	|O I	|	|	|	|	1.60
5.250	0.78	0.20	0.177	|O I	|	|	|	|	1.63
5.333	0.77	0.21	0.181	|O I	|	|	|	|	1.66
5.417	0.80	0.21	0.185	|O I	|	|	|	|	1.69
5.500	0.82	0.21	0.189	|O I	|	|	|	|	1.71
5.583	0.84	0.21	0.194	|O I	|	|	|	|	1.73
5.667	0.88	0.21	0.198	|O I	|	|	|	|	1.74
5.750	0.92	0.22	0.203	|O I	|	|	|	|	1.76
5.833	0.93	0.22	0.208	|O I	|	|	|	|	1.78

5.917	0.94	0.22	0.213	O	I			1.80
6.000	0.95	0.22	0.218	O	I			1.82
6.083	0.96	0.22	0.223	O	I			1.84
6.167	1.00	0.22	0.228	O	I			1.86
6.250	1.04	0.23	0.233	O	I			1.88
6.333	1.05	0.23	0.239	O	I			1.90
6.417	1.06	0.23	0.245	O	I			1.93
6.500	1.07	0.23	0.250	O	I			1.95
6.583	1.08	0.23	0.256	O	I			1.97
6.667	1.12	0.24	0.262	O	I			2.00
6.750	1.16	0.24	0.268	O	I			2.02
6.833	1.17	0.24	0.275	O	I			2.04
6.917	1.18	0.24	0.281	O	I			2.07
7.000	1.19	0.24	0.288	O	I			2.10
7.083	1.19	0.25	0.294	O	I			2.12
7.167	1.19	0.25	0.301	O	I			2.15
7.250	1.20	0.25	0.307	O	I			2.17
7.333	1.21	0.25	0.314	O	I			2.20
7.417	1.25	0.25	0.320	O	I			2.22
7.500	1.28	0.26	0.327	O	I			2.25
7.583	1.30	0.26	0.334	O	I			2.28
7.667	1.35	0.26	0.342	O	I			2.31
7.750	1.39	0.26	0.349	O	I			2.34
7.833	1.42	0.27	0.357	O	I			2.37
7.917	1.47	0.27	0.365	O	I			2.40
8.000	1.50	0.28	0.374	O	I			2.43
8.083	1.54	0.29	0.382	O	I			2.45
8.167	1.63	0.30	0.391	O	I			2.48
8.250	1.71	0.31	0.401	O	I			2.51
8.333	1.74	0.32	0.410	O	I			2.54
8.417	1.76	0.33	0.420	O	I			2.57
8.500	1.77	0.34	0.430	O	I			2.60
8.583	1.79	0.35	0.440	O	I			2.63
8.667	1.83	0.36	0.450	O	I			2.66
8.750	1.87	0.38	0.460	O	I			2.70
8.833	1.90	0.38	0.470	O	I			2.73
8.917	1.95	0.39	0.481	O	I			2.75
9.000	1.99	0.39	0.492	O	I			2.78
9.083	2.02	0.40	0.503	O	I			2.81
9.167	2.12	0.40	0.514	O	I			2.85
9.250	2.19	0.41	0.526	O	I			2.88
9.333	2.23	0.41	0.539	O	I			2.91
9.417	2.29	0.42	0.552	O	I			2.95
9.500	2.33	0.42	0.565	O	I			2.98
9.583	2.36	0.43	0.578	O	I			3.02
9.667	2.42	0.43	0.591	O	I			3.05
9.750	2.46	0.44	0.605	O	I			3.09
9.833	2.49	0.45	0.619	O	I			3.13
9.917	2.54	0.45	0.633	O	I			3.17
10.000	2.58	0.46	0.648	O	I			3.21
10.083	2.54	0.46	0.662	O	I			3.25
10.167	2.27	0.47	0.676	O	I			3.28
10.250	2.05	0.48	0.687	O	I			3.31
10.333	1.97	0.48	0.698	O	I			3.34
10.417	1.92	0.48	0.708	O	I			3.37
10.500	1.89	0.49	0.718	O	I			3.40
10.583	1.91	0.49	0.727	O	I			3.42
10.667	2.10	0.50	0.738	O	I			3.45
10.750	2.24	0.50	0.749	O	I			3.48
10.833	2.30	0.51	0.761	O	I			3.52
10.917	2.33	0.51	0.774	O	I			3.55
11.000	2.35	0.52	0.786	O	I			3.58
11.083	2.35	0.52	0.799	O	I			3.62
11.167	2.32	0.53	0.811	O	I			3.65
11.250	2.30	0.53	0.824	O	I			3.69
11.333	2.29	0.54	0.836	O	I			3.72
11.417	2.29	0.54	0.848	O	I			3.74
11.500	2.29	0.55	0.860	O	I			3.77
11.583	2.27	0.55	0.872	O	I			3.80
11.667	2.19	0.55	0.883	O	I			3.83
11.750	2.13	0.55	0.894	O	I			3.86

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11.833    2.11    0.56      0.905  |  O    |     I |       |       |     3.88
11.917    2.13    0.56      0.916  |  O    |     I |       |       |     3.91
12.000    2.15    0.56      0.927  |  O    |     I |       |       |     3.93
12.083    2.22    0.57      0.938  |  O    |      I|       |       |     3.96
12.167    2.50    0.57      0.950  |  O    |       |I      |       |     3.99
12.250    2.73    0.57      0.964  |  O    |       | I     |       |     4.02
12.333    2.83    0.58      0.980  |   O   |       |  I    |       |     4.06
12.417    2.92    0.58      0.995  |   O   |       |   I   |       |     4.10
12.500    2.99    0.59      1.012  |   O   |       |   I   |       |     4.13
12.583    3.05    0.59      1.028  |   O   |       |    I  |       |     4.17
12.667    3.15    0.60      1.046  |   O   |       |    I  |       |     4.22
12.750    3.24    0.60      1.064  |   O   |       |     I |       |     4.26
12.833    3.29    0.61      1.082  |   O   |       |     I |       |     4.30
12.917    3.35    0.61      1.101  |   O   |       |      I|       |     4.35
13.000    3.40    0.62      1.120  |   O   |       |      I|       |     4.39
13.083    3.53    0.62      1.139  |   O   |       |       I       |     4.44
13.167    3.95    0.63      1.161  |   O   |       |       |  I    |     4.49
13.250    4.29    0.63      1.185  |   O   |       |       |    I  |     4.55
13.333    4.44    0.64      1.210  |   O   |       |       |     I |     4.61
13.417    4.53    0.65      1.237  |   O   |       |       |      I|     4.67
13.500    4.60    0.65      1.264  |   O   |       |       |       I     4.73
13.583    4.50    0.66      1.291  |   O   |       |       |      I|     4.79
13.667    3.87    0.66      1.315  |   O   |       |       | I     |     4.84
13.750    3.35    0.67      1.335  |   O   |       |      I|       |     4.88
13.833    3.15    0.67      1.353  |   O   |       |    I  |       |     4.92
13.917    3.04    0.68      1.370  |   O   |       |    I  |       |     4.95
14.000    2.97    0.68      1.386  |   O   |       |   I   |       |     4.99
14.083    2.96    0.68      1.401  |   O   |       |   I   |       |     5.02
14.167    3.08    0.68      1.417  |   O   |       |    I  |       |     5.06
14.250    3.18    0.69      1.434  |   O   |       |     I |       |     5.09
14.333    3.19    0.69      1.451  |   O   |       |     I |       |     5.13
14.417    3.16    0.70      1.469  |   O   |       |    I  |       |     5.16
14.500    3.14    0.70      1.485  |   O   |       |    I  |       |     5.20
14.583    3.13    0.70      1.502  |   O   |       |    I  |       |     5.23
14.667    3.11    0.71      1.519  |   O   |       |    I  |       |     5.27
14.750    3.12    0.71      1.535  |   O   |       |    I  |       |     5.30
14.833    3.11    0.71      1.552  |   O   |       |    I  |       |     5.34
14.917    3.07    0.72      1.568  |   O   |       |    I  |       |     5.37
15.000    3.04    0.72      1.584  |   O   |       |    I  |       |     5.41
15.083    3.02    0.72      1.600  |    O  |       |    I  |       |     5.44
15.167    2.98    0.72      1.616  |    O  |       |   I   |       |     5.47
15.250    2.94    0.73      1.631  |    O  |       |   I   |       |     5.51
15.333    2.91    0.73      1.647  |    O  |       |   I   |       |     5.54
15.417    2.86    0.73      1.661  |    O  |       |  I    |       |     5.57
15.500    2.82    0.74      1.676  |    O  |       |  I    |       |     5.60
15.583    2.77    0.74      1.690  |    O  |       |  I    |       |     5.63
15.667    2.60    0.74      1.703  |    O  |       | I     |       |     5.66
15.750    2.46    0.74      1.716  |    O  |       |I      |       |     5.68
15.833    2.40    0.76      1.727  |    O  |       I       |       |     5.71
15.917    2.37    0.78      1.738  |    O  |       I       |       |     5.73
16.000    2.34    0.80      1.749  |    O  |       I       |       |     5.75
16.083    2.18    0.82      1.759  |    O  |      I|       |       |     5.77
16.167    1.58    0.84      1.766  |    O  | I     |       |       |     5.78
16.250    1.08    0.85      1.770  |    O I|       |       |       |     5.79
16.333    0.88    0.85      1.771  |    OI |       |       |       |     5.79
16.417    0.77    0.85      1.771  |    O  |       |       |       |     5.79
16.500    0.69    0.85      1.770  |   IO  |       |       |       |     5.79
16.583    0.62    0.84      1.768  |   IO  |       |       |       |     5.79
16.667    0.54    0.84      1.767  |  I O  |       |       |       |     5.78
16.750    0.48    0.83      1.764  |  I O  |       |       |       |     5.78
16.833    0.44    0.83      1.762  |  I O  |       |       |       |     5.77
16.917    0.41    0.82      1.759  | I  O  |       |       |       |     5.77
17.000    0.40    0.82      1.756  | I  O  |       |       |       |     5.76
17.083    0.40    0.81      1.753  | I  O  |       |       |       |     5.76
17.167    0.47    0.81      1.751  |  I O  |       |       |       |     5.75
17.250    0.53    0.80      1.749  |  I O  |       |       |       |     5.75
17.333    0.55    0.80      1.747  |  I O  |       |       |       |     5.75
17.417    0.57    0.79      1.745  |  I O  |       |       |       |     5.74
17.500    0.58    0.79      1.744  |   IO  |       |       |       |     5.74
17.583    0.58    0.79      1.742  |   IO  |       |       |       |     5.74
17.667    0.59    0.78      1.741  |   IO  |       |       |       |     5.73
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17.750	0.59	0.78	1.740	| IO |	|	|	|	5.73
17.833	0.58	0.78	1.738	| IO |	|	|	|	5.73
17.917	0.55	0.78	1.737	| I O |	|	|	|	5.73
18.000	0.52	0.77	1.735	| I O |	|	|	|	5.72
18.083	0.50	0.77	1.733	| I O |	|	|	|	5.72
18.167	0.50	0.76	1.732	| I O |	|	|	|	5.72
18.250	0.49	0.76	1.730	| I O |	|	|	|	5.71
18.333	0.49	0.76	1.728	| I O |	|	|	|	5.71
18.417	0.49	0.75	1.726	| I O |	|	|	|	5.71
18.500	0.49	0.75	1.724	| I O |	|	|	|	5.70
18.583	0.47	0.75	1.722	| I O |	|	|	|	5.70
18.667	0.43	0.75	1.720	| I O |	|	|	|	5.69
18.750	0.40	0.75	1.718	| I O |	|	|	|	5.69
18.833	0.38	0.74	1.716	| I O |	|	|	|	5.68
18.917	0.33	0.74	1.713	| I O |	|	|	|	5.68
19.000	0.29	0.74	1.710	| I O |	|	|	|	5.67
19.083	0.29	0.74	1.707	|I O |	|	|	|	5.67
19.167	0.32	0.74	1.704	| I O |	|	|	|	5.66
19.250	0.34	0.74	1.701	| I O |	|	|	|	5.65
19.333	0.36	0.74	1.698	| I O |	|	|	|	5.65
19.417	0.40	0.74	1.696	| I O |	|	|	|	5.64
19.500	0.44	0.74	1.694	| I O |	|	|	|	5.64
19.583	0.44	0.74	1.692	| I O |	|	|	|	5.63
19.667	0.41	0.74	1.689	| I O |	|	|	|	5.63
19.750	0.38	0.74	1.687	| I O |	|	|	|	5.62
19.833	0.36	0.74	1.684	| I O |	|	|	|	5.62
19.917	0.32	0.74	1.682	| I O |	|	|	|	5.61
20.000	0.29	0.74	1.679	|I O |	|	|	|	5.61
20.083	0.28	0.74	1.676	|I O |	|	|	|	5.60
20.167	0.31	0.74	1.673	| I O |	|	|	|	5.59
20.250	0.34	0.74	1.670	| I O |	|	|	|	5.59
20.333	0.35	0.73	1.667	| I O |	|	|	|	5.58
20.417	0.35	0.73	1.664	| I O |	|	|	|	5.58
20.500	0.35	0.73	1.662	| I O |	|	|	|	5.57
20.583	0.36	0.73	1.659	| I O |	|	|	|	5.57
20.667	0.36	0.73	1.657	| I O |	|	|	|	5.56
20.750	0.36	0.73	1.654	| I O |	|	|	|	5.55
20.833	0.35	0.73	1.651	| I O |	|	|	|	5.55
20.917	0.31	0.73	1.649	| I O |	|	|	|	5.54
21.000	0.28	0.73	1.646	|I O |	|	|	|	5.54
21.083	0.27	0.73	1.642	|I O |	|	|	|	5.53
21.167	0.31	0.73	1.639	| I O |	|	|	|	5.52
21.250	0.34	0.73	1.637	| I O |	|	|	|	5.52
21.333	0.33	0.73	1.634	| I O |	|	|	|	5.51
21.417	0.30	0.73	1.631	| I O |	|	|	|	5.51
21.500	0.27	0.73	1.628	|I O |	|	|	|	5.50
21.583	0.27	0.73	1.625	|I O |	|	|	|	5.49
21.667	0.30	0.73	1.622	| I O |	|	|	|	5.49
21.750	0.33	0.73	1.619	| I O |	|	|	|	5.48
21.833	0.33	0.72	1.616	| I O |	|	|	|	5.48
21.917	0.30	0.72	1.614	| I O |	|	|	|	5.47
22.000	0.27	0.72	1.611	|I O |	|	|	|	5.46
22.083	0.27	0.72	1.607	|I O |	|	|	|	5.46
22.167	0.30	0.72	1.604	| I O |	|	|	|	5.45
22.250	0.33	0.72	1.602	| I O |	|	|	|	5.44
22.333	0.33	0.72	1.599	| I O |	|	|	|	5.44
22.417	0.30	0.72	1.596	| I O |	|	|	|	5.43
22.500	0.27	0.72	1.593	|I O |	|	|	|	5.43
22.583	0.26	0.72	1.590	|I O |	|	|	|	5.42
22.667	0.25	0.72	1.587	|I O |	|	|	|	5.41
22.750	0.25	0.72	1.584	|I O |	|	|	|	5.41
22.833	0.25	0.72	1.580	|I O |	|	|	|	5.40
22.917	0.25	0.72	1.577	|I O |	|	|	|	5.39
23.000	0.24	0.72	1.574	|I O |	|	|	|	5.39
23.083	0.24	0.72	1.571	|I O |	|	|	|	5.38
23.167	0.24	0.71	1.567	|I O |	|	|	|	5.37
23.250	0.24	0.71	1.564	|I O |	|	|	|	5.36
23.333	0.24	0.71	1.561	|I O |	|	|	|	5.36
23.417	0.24	0.71	1.558	|I O |	|	|	|	5.35
23.500	0.24	0.71	1.554	|I O |	|	|	|	5.34
23.583	0.24	0.71	1.551	|I O |	|	|	|	5.34

23.667	0.24	0.71	1.548	|I	O	|	|	|	5.33
23.750	0.24	0.71	1.545	|I	O	|	|	|	5.32
23.833	0.24	0.71	1.541	|I	O	|	|	|	5.32
23.917	0.24	0.71	1.538	|I	O	|	|	|	5.31
24.000	0.24	0.71	1.535	|I	O	|	|	|	5.30
24.083	0.22	0.71	1.532	|I	O	|	|	|	5.30
24.167	0.14	0.71	1.528	I	O	|	|	|	5.29
24.250	0.08	0.71	1.524	I	O	|	|	|	5.28
24.333	0.05	0.71	1.519	I	O	|	|	|	5.27
24.417	0.04	0.70	1.515	I	O	|	|	|	5.26
24.500	0.03	0.70	1.510	I	O	|	|	|	5.25
24.583	0.02	0.70	1.506	I	O	|	|	|	5.24
24.667	0.01	0.70	1.501	I	O	|	|	|	5.23
24.750	0.01	0.70	1.496	I	O	|	|	|	5.22
24.833	0.01	0.70	1.491	I	O	|	|	|	5.21
24.917	0.00	0.70	1.487	I	O	|	|	|	5.20
25.000	0.00	0.70	1.482	I	O	|	|	|	5.19
25.083	0.00	0.70	1.477	I	O	|	|	|	5.18
25.167	0.00	0.70	1.472	I	O	|	|	|	5.17
25.250	0.00	0.69	1.467	I	O	|	|	|	5.16
25.333	0.00	0.69	1.463	I	O	|	|	|	5.15
25.417	0.00	0.69	1.458	I	O	|	|	|	5.14
25.500	0.00	0.69	1.453	I	O	|	|	|	5.13
25.583	0.00	0.69	1.448	I	O	|	|	|	5.12
25.667	0.00	0.69	1.444	I	O	|	|	|	5.11
25.750	0.00	0.69	1.439	I	O	|	|	|	5.10
25.833	0.00	0.69	1.434	I	O	|	|	|	5.09
25.917	0.00	0.69	1.429	I	O	|	|	|	5.08
26.000	0.00	0.69	1.425	I	O	|	|	|	5.07
26.083	0.00	0.69	1.420	I	O	|	|	|	5.06
26.167	0.00	0.68	1.415	I	O	|	|	|	5.05
26.250	0.00	0.68	1.411	I	O	|	|	|	5.04
26.333	0.00	0.68	1.406	I	O	|	|	|	5.03
26.417	0.00	0.68	1.401	I	O	|	|	|	5.02
26.500	0.00	0.68	1.396	I	O	|	|	|	5.01
26.583	0.00	0.68	1.392	I	O	|	|	|	5.00
26.667	0.00	0.68	1.387	I	O	|	|	|	4.99
26.750	0.00	0.68	1.382	I	O	|	|	|	4.98
26.833	0.00	0.68	1.378	I	O	|	|	|	4.97
26.917	0.00	0.68	1.373	I	O	|	|	|	4.96
27.000	0.00	0.67	1.368	I	O	|	|	|	4.95
27.083	0.00	0.67	1.364	I	O	|	|	|	4.94
27.167	0.00	0.67	1.359	I	O	|	|	|	4.93
27.250	0.00	0.67	1.355	I	O	|	|	|	4.92
27.333	0.00	0.67	1.350	I	O	|	|	|	4.91
27.417	0.00	0.67	1.345	I	O	|	|	|	4.90
27.500	0.00	0.67	1.341	I	O	|	|	|	4.89
27.583	0.00	0.67	1.336	I	O	|	|	|	4.88
27.667	0.00	0.67	1.331	I	O	|	|	|	4.87
27.750	0.00	0.67	1.327	I	O	|	|	|	4.86
27.833	0.00	0.67	1.322	I	O	|	|	|	4.85
27.917	0.00	0.66	1.318	I	O	|	|	|	4.84
28.000	0.00	0.66	1.313	I	O	|	|	|	4.84
28.083	0.00	0.66	1.309	I	O	|	|	|	4.83
28.167	0.00	0.66	1.304	I	O	|	|	|	4.82
28.250	0.00	0.66	1.299	I	O	|	|	|	4.81
28.333	0.00	0.66	1.295	I	O	|	|	|	4.80
28.417	0.00	0.66	1.290	I	O	|	|	|	4.79
28.500	0.00	0.66	1.286	I	O	|	|	|	4.78
28.583	0.00	0.66	1.281	I	O	|	|	|	4.77
28.667	0.00	0.66	1.277	I	O	|	|	|	4.76
28.750	0.00	0.66	1.272	I	O	|	|	|	4.75
28.833	0.00	0.65	1.268	I	O	|	|	|	4.74
28.917	0.00	0.65	1.263	I	O	|	|	|	4.73
29.000	0.00	0.65	1.259	I	O	|	|	|	4.72
29.083	0.00	0.65	1.254	I	O	|	|	|	4.71
29.167	0.00	0.65	1.250	I	O	|	|	|	4.70
29.250	0.00	0.65	1.245	I	O	|	|	|	4.69
29.333	0.00	0.65	1.241	I	O	|	|	|	4.68
29.417	0.00	0.65	1.236	I	O	|	|	|	4.67
29.500	0.00	0.65	1.232	I	O	|	|	|	4.66

29.583	0.00	0.65	1.227	I	O	|	|	|	|	4.65
29.667	0.00	0.64	1.223	I	O	|	|	|	|	4.64
29.750	0.00	0.64	1.219	I	O	|	|	|	|	4.63
29.833	0.00	0.64	1.214	I	O	|	|	|	|	4.62
29.917	0.00	0.64	1.210	I	O	|	|	|	|	4.61
30.000	0.00	0.64	1.205	I	O	|	|	|	|	4.60
30.083	0.00	0.64	1.201	I	O	|	|	|	|	4.59
30.167	0.00	0.64	1.197	I	O	|	|	|	|	4.58
30.250	0.00	0.64	1.192	I	O	|	|	|	|	4.56
30.333	0.00	0.63	1.188	I	O	|	|	|	|	4.55
30.417	0.00	0.63	1.183	I	O	|	|	|	|	4.54
30.500	0.00	0.63	1.179	I	O	|	|	|	|	4.53
30.583	0.00	0.63	1.175	I	O	|	|	|	|	4.52
30.667	0.00	0.63	1.170	I	O	|	|	|	|	4.51
30.750	0.00	0.63	1.166	I	O	|	|	|	|	4.50
30.833	0.00	0.63	1.162	I	O	|	|	|	|	4.49
30.917	0.00	0.63	1.157	I	O	|	|	|	|	4.48
31.000	0.00	0.62	1.153	I	O	|	|	|	|	4.47
31.083	0.00	0.62	1.149	I	O	|	|	|	|	4.46
31.167	0.00	0.62	1.144	I	O	|	|	|	|	4.45
31.250	0.00	0.62	1.140	I	O	|	|	|	|	4.44
31.333	0.00	0.62	1.136	I	O	|	|	|	|	4.43
31.417	0.00	0.62	1.132	I	O	|	|	|	|	4.42
31.500	0.00	0.62	1.127	I	O	|	|	|	|	4.41
31.583	0.00	0.62	1.123	I	O	|	|	|	|	4.40
31.667	0.00	0.62	1.119	I	O	|	|	|	|	4.39
31.750	0.00	0.61	1.115	I	O	|	|	|	|	4.38
31.833	0.00	0.61	1.110	I	O	|	|	|	|	4.37
31.917	0.00	0.61	1.106	I	O	|	|	|	|	4.36
32.000	0.00	0.61	1.102	I	O	|	|	|	|	4.35
32.083	0.00	0.61	1.098	I	O	|	|	|	|	4.34
32.167	0.00	0.61	1.094	I	O	|	|	|	|	4.33
32.250	0.00	0.61	1.089	I	O	|	|	|	|	4.32
32.333	0.00	0.61	1.085	I	O	|	|	|	|	4.31
32.417	0.00	0.61	1.081	I	O	|	|	|	|	4.30
32.500	0.00	0.60	1.077	I	O	|	|	|	|	4.29
32.583	0.00	0.60	1.073	I	O	|	|	|	|	4.28
32.667	0.00	0.60	1.069	I	O	|	|	|	|	4.27
32.750	0.00	0.60	1.064	I	O	|	|	|	|	4.26
32.833	0.00	0.60	1.060	I	O	|	|	|	|	4.25
32.917	0.00	0.60	1.056	I	O	|	|	|	|	4.24
33.000	0.00	0.60	1.052	I	O	|	|	|	|	4.23
33.083	0.00	0.60	1.048	I	O	|	|	|	|	4.22
33.167	0.00	0.60	1.044	I	O	|	|	|	|	4.21
33.250	0.00	0.59	1.040	I	O	|	|	|	|	4.20
33.333	0.00	0.59	1.036	I	O	|	|	|	|	4.19
33.417	0.00	0.59	1.032	I	O	|	|	|	|	4.18
33.500	0.00	0.59	1.028	I	O	|	|	|	|	4.17
33.583	0.00	0.59	1.023	I	O	|	|	|	|	4.16
33.667	0.00	0.59	1.019	I	O	|	|	|	|	4.15
33.750	0.00	0.59	1.015	I	O	|	|	|	|	4.14
33.833	0.00	0.59	1.011	I	O	|	|	|	|	4.13
33.917	0.00	0.59	1.007	I	O	|	|	|	|	4.12
34.000	0.00	0.58	1.003	I	O	|	|	|	|	4.11
34.083	0.00	0.58	0.999	I	O	|	|	|	|	4.11
34.167	0.00	0.58	0.995	I	O	|	|	|	|	4.10
34.250	0.00	0.58	0.991	I	O	|	|	|	|	4.09
34.333	0.00	0.58	0.987	I	O	|	|	|	|	4.08
34.417	0.00	0.58	0.983	I	O	|	|	|	|	4.07
34.500	0.00	0.58	0.979	I	O	|	|	|	|	4.06
34.583	0.00	0.58	0.975	I	O	|	|	|	|	4.05
34.667	0.00	0.58	0.971	I	O	|	|	|	|	4.04
34.750	0.00	0.57	0.967	I	O	|	|	|	|	4.03
34.833	0.00	0.57	0.963	I	O	|	|	|	|	4.02
34.917	0.00	0.57	0.959	I	O	|	|	|	|	4.01
35.000	0.00	0.57	0.955	I	O	|	|	|	|	4.00
35.083	0.00	0.57	0.952	I	O	|	|	|	|	3.99
35.167	0.00	0.57	0.948	I	O	|	|	|	|	3.98
35.250	0.00	0.57	0.944	I	O	|	|	|	|	3.97
35.333	0.00	0.57	0.940	I	O	|	|	|	|	3.96
35.417	0.00	0.57	0.936	I	O	|	|	|	|	3.95

35.500	0.00	0.56	0.932	I	O	|	|	|	|	3.95
35.583	0.00	0.56	0.928	I	O	|	|	|	|	3.94
35.667	0.00	0.56	0.924	I	O	|	|	|	|	3.93
35.750	0.00	0.56	0.920	I	O	|	|	|	|	3.92
35.833	0.00	0.56	0.916	I	O	|	|	|	|	3.91
35.917	0.00	0.56	0.913	I	O	|	|	|	|	3.90
36.000	0.00	0.56	0.909	I	O	|	|	|	|	3.89
36.083	0.00	0.56	0.905	I	O	|	|	|	|	3.88
36.167	0.00	0.56	0.901	I	O	|	|	|	|	3.87
36.250	0.00	0.56	0.897	I	O	|	|	|	|	3.86
36.333	0.00	0.55	0.893	I	O	|	|	|	|	3.85
36.417	0.00	0.55	0.890	I	O	|	|	|	|	3.84
36.500	0.00	0.55	0.886	I	O	|	|	|	|	3.84
36.583	0.00	0.55	0.882	I	O	|	|	|	|	3.83
36.667	0.00	0.55	0.878	I	O	|	|	|	|	3.82
36.750	0.00	0.55	0.874	I	O	|	|	|	|	3.81
36.833	0.00	0.55	0.871	I	O	|	|	|	|	3.80
36.917	0.00	0.55	0.867	I	O	|	|	|	|	3.79
37.000	0.00	0.55	0.863	I	O	|	|	|	|	3.78
37.083	0.00	0.55	0.859	I	O	|	|	|	|	3.77
37.167	0.00	0.54	0.856	I	O	|	|	|	|	3.76
37.250	0.00	0.54	0.852	I	O	|	|	|	|	3.75
37.333	0.00	0.54	0.848	I	O	|	|	|	|	3.75
37.417	0.00	0.54	0.844	I	O	|	|	|	|	3.74
37.500	0.00	0.54	0.841	I	O	|	|	|	|	3.73
37.583	0.00	0.54	0.837	I	O	|	|	|	|	3.72
37.667	0.00	0.54	0.833	I	O	|	|	|	|	3.71
37.750	0.00	0.54	0.830	I	O	|	|	|	|	3.70
37.833	0.00	0.54	0.826	I	O	|	|	|	|	3.69
37.917	0.00	0.53	0.822	I	O	|	|	|	|	3.68
38.000	0.00	0.53	0.819	I	O	|	|	|	|	3.67
38.083	0.00	0.53	0.815	I	O	|	|	|	|	3.66
38.167	0.00	0.53	0.811	I	O	|	|	|	|	3.65
38.250	0.00	0.53	0.808	I	O	|	|	|	|	3.64
38.333	0.00	0.53	0.804	I	O	|	|	|	|	3.63
38.417	0.00	0.52	0.800	I	O	|	|	|	|	3.62
38.500	0.00	0.52	0.797	I	O	|	|	|	|	3.61
38.583	0.00	0.52	0.793	I	O	|	|	|	|	3.60
38.667	0.00	0.52	0.790	I	O	|	|	|	|	3.59
38.750	0.00	0.52	0.786	I	O	|	|	|	|	3.58
38.833	0.00	0.52	0.782	I	O	|	|	|	|	3.57
38.917	0.00	0.52	0.779	I	O	|	|	|	|	3.56
39.000	0.00	0.51	0.775	I	O	|	|	|	|	3.55
39.083	0.00	0.51	0.772	I	O	|	|	|	|	3.54
39.167	0.00	0.51	0.768	I	O	|	|	|	|	3.53
39.250	0.00	0.51	0.765	I	O	|	|	|	|	3.53
39.333	0.00	0.51	0.761	I	O	|	|	|	|	3.52
39.417	0.00	0.51	0.758	I	O	|	|	|	|	3.51
39.500	0.00	0.50	0.754	I	O	|	|	|	|	3.50
39.583	0.00	0.50	0.751	I	O	|	|	|	|	3.49
39.667	0.00	0.50	0.747	I	O	|	|	|	|	3.48
39.750	0.00	0.50	0.744	I	O	|	|	|	|	3.47
39.833	0.00	0.50	0.740	I	O	|	|	|	|	3.46
39.917	0.00	0.50	0.737	I	O	|	|	|	|	3.45
40.000	0.00	0.50	0.734	I	O	|	|	|	|	3.44
40.083	0.00	0.49	0.730	I	O	|	|	|	|	3.43
40.167	0.00	0.49	0.727	I	O	|	|	|	|	3.42
40.250	0.00	0.49	0.723	I	O	|	|	|	|	3.41
40.333	0.00	0.49	0.720	I	O	|	|	|	|	3.40
40.417	0.00	0.49	0.717	I	O	|	|	|	|	3.39
40.500	0.00	0.49	0.713	I	O	|	|	|	|	3.39
40.583	0.00	0.49	0.710	I	O	|	|	|	|	3.38
40.667	0.00	0.48	0.707	I	O	|	|	|	|	3.37
40.750	0.00	0.48	0.703	I	O	|	|	|	|	3.36
40.833	0.00	0.48	0.700	I	O	|	|	|	|	3.35
40.917	0.00	0.48	0.697	I	O	|	|	|	|	3.34
41.000	0.00	0.48	0.693	I	O	|	|	|	|	3.33
41.083	0.00	0.48	0.690	I	O	|	|	|	|	3.32
41.167	0.00	0.48	0.687	I	O	|	|	|	|	3.31
41.250	0.00	0.47	0.684	I	O	|	|	|	|	3.30
41.333	0.00	0.47	0.680	I	O	|	|	|	|	3.30

41.417	0.00	0.47	0.677	I O				3.29
41.500	0.00	0.47	0.674	I O				3.28
41.583	0.00	0.47	0.671	I O				3.27
41.667	0.00	0.47	0.667	I O				3.26
41.750	0.00	0.47	0.664	I O				3.25
41.833	0.00	0.46	0.661	I O				3.24
41.917	0.00	0.46	0.658	I O				3.23
42.000	0.00	0.46	0.655	I O				3.23
42.083	0.00	0.46	0.651	I O				3.22
42.167	0.00	0.46	0.648	I O				3.21
42.250	0.00	0.46	0.645	I O				3.20
42.333	0.00	0.46	0.642	I O				3.19
42.417	0.00	0.45	0.639	I O				3.18
42.500	0.00	0.45	0.636	I O				3.17
42.583	0.00	0.45	0.633	I O				3.17
42.667	0.00	0.45	0.629	I O				3.16
42.750	0.00	0.45	0.626	I O				3.15
42.833	0.00	0.45	0.623	I O				3.14
42.917	0.00	0.45	0.620	I O				3.13
43.000	0.00	0.44	0.617	I O				3.12
43.083	0.00	0.44	0.614	I O				3.12
43.167	0.00	0.44	0.611	I O				3.11
43.250	0.00	0.44	0.608	I O				3.10
43.333	0.00	0.44	0.605	I O				3.09
43.417	0.00	0.44	0.602	I O				3.08
43.500	0.00	0.44	0.599	I O				3.07
43.583	0.00	0.44	0.596	I O				3.07
43.667	0.00	0.43	0.593	I O				3.06
43.750	0.00	0.43	0.590	I O				3.05
43.833	0.00	0.43	0.587	I O				3.04
43.917	0.00	0.43	0.584	I O				3.03
44.000	0.00	0.43	0.581	I O				3.03
44.083	0.00	0.43	0.578	I O				3.02
44.167	0.00	0.43	0.575	I O				3.01
44.250	0.00	0.43	0.572	I O				3.00
44.333	0.00	0.42	0.569	I O				2.99
44.417	0.00	0.42	0.566	I O				2.99
44.500	0.00	0.42	0.563	I O				2.98
44.583	0.00	0.42	0.561	I O				2.97
44.667	0.00	0.42	0.558	I O				2.96
44.750	0.00	0.42	0.555	I O				2.95
44.833	0.00	0.42	0.552	I O				2.95
44.917	0.00	0.42	0.549	I O				2.94
45.000	0.00	0.41	0.546	I O				2.93
45.083	0.00	0.41	0.543	I O				2.92
45.167	0.00	0.41	0.540	I O				2.92
45.250	0.00	0.41	0.538	I O				2.91
45.333	0.00	0.41	0.535	I O				2.90
45.417	0.00	0.41	0.532	I O				2.89
45.500	0.00	0.41	0.529	I O				2.89
45.583	0.00	0.41	0.526	I O				2.88
45.667	0.00	0.40	0.524	I O				2.87
45.750	0.00	0.40	0.521	I O				2.86
45.833	0.00	0.40	0.518	I O				2.86
45.917	0.00	0.40	0.515	I O				2.85
46.000	0.00	0.40	0.513	I O				2.84
46.083	0.00	0.40	0.510	I O				2.83
46.167	0.00	0.40	0.507	I O				2.83
46.250	0.00	0.40	0.504	I O				2.82
46.333	0.00	0.39	0.502	I O				2.81
46.417	0.00	0.39	0.499	I O				2.80
46.500	0.00	0.39	0.496	I O				2.80
46.583	0.00	0.39	0.493	I O				2.79
46.667	0.00	0.39	0.491	I O				2.78
46.750	0.00	0.39	0.488	I O				2.77
46.833	0.00	0.39	0.485	I O				2.77
46.917	0.00	0.39	0.483	I O				2.76
47.000	0.00	0.39	0.480	I O				2.75
47.083	0.00	0.38	0.477	I O				2.74
47.167	0.00	0.38	0.475	I O				2.74
47.250	0.00	0.38	0.472	I O				2.73

47.333	0.00	0.38	0.470	I O	|	|	|	| 2.72
47.417	0.00	0.38	0.467	I O	|	|	|	| 2.72
47.500	0.00	0.38	0.464	I O	|	|	|	| 2.71
47.583	0.00	0.38	0.462	I O	|	|	|	| 2.70
47.667	0.00	0.37	0.459	I O	|	|	|	| 2.69
47.750	0.00	0.37	0.457	I O	|	|	|	| 2.69
47.833	0.00	0.37	0.454	I O	|	|	|	| 2.68
47.917	0.00	0.37	0.452	I O	|	|	|	| 2.67
48.000	0.00	0.36	0.449	I O	|	|	|	| 2.66
48.083	0.00	0.36	0.446	I O	|	|	|	| 2.65
48.167	0.00	0.36	0.444	I O	|	|	|	| 2.65
48.250	0.00	0.36	0.442	I O	|	|	|	| 2.64
48.333	0.00	0.35	0.439	I O	|	|	|	| 2.63
48.417	0.00	0.35	0.437	I O	|	|	|	| 2.62
48.500	0.00	0.35	0.434	I O	|	|	|	| 2.62
48.583	0.00	0.34	0.432	I O	|	|	|	| 2.61
48.667	0.00	0.34	0.430	I O	|	|	|	| 2.60
48.750	0.00	0.34	0.427	I O	|	|	|	| 2.59
48.833	0.00	0.34	0.425	I O	|	|	|	| 2.59
48.917	0.00	0.33	0.423	I O	|	|	|	| 2.58
49.000	0.00	0.33	0.420	I O	|	|	|	| 2.57
49.083	0.00	0.33	0.418	I O	|	|	|	| 2.57
49.167	0.00	0.33	0.416	I O	|	|	|	| 2.56
49.250	0.00	0.32	0.414	I O	|	|	|	| 2.55
49.333	0.00	0.32	0.411	I O	|	|	|	| 2.54
49.417	0.00	0.32	0.409	I O	|	|	|	| 2.54
49.500	0.00	0.32	0.407	I O	|	|	|	| 2.53
49.583	0.00	0.31	0.405	I O	|	|	|	| 2.52
49.667	0.00	0.31	0.403	I O	|	|	|	| 2.52
49.750	0.00	0.31	0.400	I O	|	|	|	| 2.51
49.833	0.00	0.31	0.398	I O	|	|	|	| 2.50
49.917	0.00	0.30	0.396	I O	|	|	|	| 2.50
50.000	0.00	0.30	0.394	I O	|	|	|	| 2.49
50.083	0.00	0.30	0.392	I O	|	|	|	| 2.48
50.167	0.00	0.30	0.390	I O	|	|	|	| 2.48
50.250	0.00	0.29	0.388	I O	|	|	|	| 2.47
50.333	0.00	0.29	0.386	I O	|	|	|	| 2.47
50.417	0.00	0.29	0.384	I O	|	|	|	| 2.46
50.500	0.00	0.29	0.382	I O	|	|	|	| 2.45
50.583	0.00	0.29	0.380	IO	|	|	|	| 2.45
50.667	0.00	0.28	0.378	IO	|	|	|	| 2.44
50.750	0.00	0.28	0.376	IO	|	|	|	| 2.43
50.833	0.00	0.28	0.374	IO	|	|	|	| 2.43
50.917	0.00	0.28	0.372	IO	|	|	|	| 2.42
51.000	0.00	0.28	0.370	IO	|	|	|	| 2.42
51.083	0.00	0.27	0.368	IO	|	|	|	| 2.41
51.167	0.00	0.27	0.367	IO	|	|	|	| 2.40
51.250	0.00	0.27	0.365	IO	|	|	|	| 2.40
51.333	0.00	0.27	0.363	IO	|	|	|	| 2.39
51.417	0.00	0.27	0.361	IO	|	|	|	| 2.38
51.500	0.00	0.27	0.359	IO	|	|	|	| 2.38
51.583	0.00	0.27	0.357	IO	|	|	|	| 2.37
51.667	0.00	0.27	0.356	IO	|	|	|	| 2.36
51.750	0.00	0.27	0.354	IO	|	|	|	| 2.36
51.833	0.00	0.26	0.352	IO	|	|	|	| 2.35
51.917	0.00	0.26	0.350	IO	|	|	|	| 2.34
52.000	0.00	0.26	0.348	IO	|	|	|	| 2.33
52.083	0.00	0.26	0.346	IO	|	|	|	| 2.33
52.167	0.00	0.26	0.345	IO	|	|	|	| 2.32
52.250	0.00	0.26	0.343	IO	|	|	|	| 2.31
52.333	0.00	0.26	0.341	IO	|	|	|	| 2.31
52.417	0.00	0.26	0.339	IO	|	|	|	| 2.30
52.500	0.00	0.26	0.337	IO	|	|	|	| 2.29
52.583	0.00	0.26	0.336	IO	|	|	|	| 2.28
52.667	0.00	0.26	0.334	IO	|	|	|	| 2.28
52.750	0.00	0.26	0.332	IO	|	|	|	| 2.27
52.833	0.00	0.26	0.330	IO	|	|	|	| 2.26
52.917	0.00	0.26	0.329	IO	|	|	|	| 2.26
53.000	0.00	0.26	0.327	IO	|	|	|	| 2.25
53.083	0.00	0.26	0.325	IO	|	|	|	| 2.24
53.167	0.00	0.26	0.323	IO	|	|	|	| 2.24

53.250	0.00	0.25	0.321	IO				2.23
53.333	0.00	0.25	0.320	IO				2.22
53.417	0.00	0.25	0.318	IO				2.21
53.500	0.00	0.25	0.316	IO				2.21
53.583	0.00	0.25	0.314	IO				2.20
53.667	0.00	0.25	0.313	IO				2.19
53.750	0.00	0.25	0.311	IO				2.19
53.833	0.00	0.25	0.309	IO				2.18
53.917	0.00	0.25	0.308	IO				2.17
54.000	0.00	0.25	0.306	IO				2.17
54.083	0.00	0.25	0.304	IO				2.16
54.167	0.00	0.25	0.302	IO				2.15
54.250	0.00	0.25	0.301	IO				2.15
54.333	0.00	0.25	0.299	IO				2.14
54.417	0.00	0.25	0.297	IO				2.13
54.500	0.00	0.25	0.296	IO				2.13
54.583	0.00	0.25	0.294	IO				2.12
54.667	0.00	0.25	0.292	IO				2.11
54.750	0.00	0.24	0.290	IO				2.11
54.833	0.00	0.24	0.289	IO				2.10
54.917	0.00	0.24	0.287	IO				2.09
55.000	0.00	0.24	0.285	IO				2.09
55.083	0.00	0.24	0.284	IO				2.08
55.167	0.00	0.24	0.282	IO				2.07
55.250	0.00	0.24	0.280	IO				2.07
55.333	0.00	0.24	0.279	IO				2.06
55.417	0.00	0.24	0.277	IO				2.05
55.500	0.00	0.24	0.275	IO				2.05
55.583	0.00	0.24	0.274	IO				2.04
55.667	0.00	0.24	0.272	IO				2.03
55.750	0.00	0.24	0.271	IO				2.03
55.833	0.00	0.24	0.269	IO				2.02
55.917	0.00	0.24	0.267	IO				2.02
56.000	0.00	0.24	0.266	IO				2.01
56.083	0.00	0.24	0.264	IO				2.00
56.167	0.00	0.24	0.262	IO				2.00
56.250	0.00	0.24	0.261	IO				1.99
56.333	0.00	0.23	0.259	IO				1.98
56.417	0.00	0.23	0.258	IO				1.98
56.500	0.00	0.23	0.256	IO				1.97
56.583	0.00	0.23	0.254	IO				1.96
56.667	0.00	0.23	0.253	IO				1.96
56.750	0.00	0.23	0.251	IO				1.95
56.833	0.00	0.23	0.250	IO				1.95
56.917	0.00	0.23	0.248	IO				1.94
57.000	0.00	0.23	0.246	IO				1.93
57.083	0.00	0.23	0.245	IO				1.93
57.167	0.00	0.23	0.243	IO				1.92
57.250	0.00	0.23	0.242	IO				1.91
57.333	0.00	0.23	0.240	IO				1.91
57.417	0.00	0.23	0.238	IO				1.90
57.500	0.00	0.23	0.237	IO				1.90
57.583	0.00	0.23	0.235	IO				1.89
57.667	0.00	0.23	0.234	IO				1.88
57.750	0.00	0.23	0.232	IO				1.88
57.833	0.00	0.23	0.231	IO				1.87
57.917	0.00	0.22	0.229	IO				1.87
58.000	0.00	0.22	0.228	IO				1.86
58.083	0.00	0.22	0.226	IO				1.85
58.167	0.00	0.22	0.224	IO				1.85
58.250	0.00	0.22	0.223	IO				1.84
58.333	0.00	0.22	0.221	IO				1.84
58.417	0.00	0.22	0.220	IO				1.83
58.500	0.00	0.22	0.218	IO				1.82
58.583	0.00	0.22	0.217	IO				1.82
58.667	0.00	0.22	0.215	IO				1.81
58.750	0.00	0.22	0.214	IO				1.81
58.833	0.00	0.22	0.212	IO				1.80
58.917	0.00	0.22	0.211	IO				1.79
59.000	0.00	0.22	0.209	IO				1.79
59.083	0.00	0.22	0.208	IO				1.78

59.167	0.00	0.22	0.206	IO					1.78
59.250	0.00	0.22	0.205	IO					1.77
59.333	0.00	0.22	0.203	IO					1.76
59.417	0.00	0.22	0.202	IO					1.76
59.500	0.00	0.22	0.200	IO					1.75
59.583	0.00	0.21	0.199	IO					1.75
59.667	0.00	0.21	0.197	IO					1.74
59.750	0.00	0.21	0.196	IO					1.73
59.833	0.00	0.21	0.194	IO					1.73
59.917	0.00	0.21	0.193	IO					1.72
60.000	0.00	0.21	0.191	IO					1.72
60.083	0.00	0.21	0.190	IO					1.71
60.167	0.00	0.21	0.189	IO					1.71
60.250	0.00	0.21	0.187	IO					1.70
60.333	0.00	0.21	0.186	IO					1.69
60.417	0.00	0.21	0.184	IO					1.68
60.500	0.00	0.21	0.183	IO					1.67
60.583	0.00	0.21	0.181	IO					1.66
60.667	0.00	0.21	0.180	IO					1.65
60.750	0.00	0.21	0.179	IO					1.64
60.833	0.00	0.20	0.177	IO					1.63
60.917	0.00	0.20	0.176	IO					1.62
61.000	0.00	0.20	0.174	IO					1.61
61.083	0.00	0.20	0.173	IO					1.60
61.167	0.00	0.20	0.172	IO					1.59
61.250	0.00	0.20	0.170	IO					1.59
61.333	0.00	0.20	0.169	IO					1.58
61.417	0.00	0.20	0.167	IO					1.57
61.500	0.00	0.20	0.166	IO					1.56
61.583	0.00	0.20	0.165	IO					1.55
61.667	0.00	0.19	0.163	IO					1.54
61.750	0.00	0.19	0.162	IO					1.53
61.833	0.00	0.19	0.161	IO					1.52
61.917	0.00	0.19	0.159	IO					1.51
62.000	0.00	0.19	0.158	IO					1.50
62.083	0.00	0.19	0.157	IO					1.49
62.167	0.00	0.19	0.155	IO					1.49
62.250	0.00	0.19	0.154	IO					1.48
62.333	0.00	0.19	0.153	IO					1.47
62.417	0.00	0.19	0.152	IO					1.46
62.500	0.00	0.19	0.150	IO					1.45
62.583	0.00	0.18	0.149	IO					1.44
62.667	0.00	0.18	0.148	IO					1.43
62.750	0.00	0.18	0.146	IO					1.42
62.833	0.00	0.18	0.145	IO					1.42
62.917	0.00	0.18	0.144	IO					1.41
63.000	0.00	0.18	0.143	IO					1.40
63.083	0.00	0.18	0.141	IO					1.39
63.167	0.00	0.18	0.140	IO					1.38
63.250	0.00	0.18	0.139	IO					1.37
63.333	0.00	0.18	0.138	IO					1.37
63.417	0.00	0.18	0.137	IO					1.36
63.500	0.00	0.18	0.135	IO					1.35
63.583	0.00	0.17	0.134	IO					1.34
63.667	0.00	0.17	0.133	IO					1.33
63.750	0.00	0.17	0.132	IO					1.32
63.833	0.00	0.17	0.131	IO					1.32
63.917	0.00	0.17	0.129	IO					1.31
64.000	0.00	0.17	0.128	IO					1.30
64.083	0.00	0.17	0.127	IO					1.29
64.167	0.00	0.17	0.126	IO					1.28
64.250	0.00	0.17	0.125	IO					1.28
64.333	0.00	0.17	0.124	IO					1.27
64.417	0.00	0.17	0.122	IO					1.26
64.500	0.00	0.17	0.121	IO					1.25
64.583	0.00	0.16	0.120	IO					1.25
64.667	0.00	0.16	0.119	IO					1.24
64.750	0.00	0.16	0.118	IO					1.23
64.833	0.00	0.16	0.117	IO					1.22
64.917	0.00	0.16	0.116	IO					1.21
65.000	0.00	0.16	0.115	IO					1.21

65.083	0.00	0.16	0.113	IO				1.20
65.167	0.00	0.16	0.112	IO				1.19
65.250	0.00	0.16	0.111	IO				1.18
65.333	0.00	0.16	0.110	IO				1.18
65.417	0.00	0.16	0.109	IO				1.17
65.500	0.00	0.16	0.108	IO				1.16
65.583	0.00	0.16	0.107	IO				1.16
65.667	0.00	0.15	0.106	IO				1.15
65.750	0.00	0.15	0.105	IO				1.14
65.833	0.00	0.15	0.104	IO				1.13
65.917	0.00	0.15	0.103	IO				1.13
66.000	0.00	0.15	0.102	IO				1.12
66.083	0.00	0.15	0.101	IO				1.11
66.167	0.00	0.15	0.100	IO				1.11
66.250	0.00	0.15	0.099	IO				1.10
66.333	0.00	0.15	0.098	IO				1.09
66.417	0.00	0.15	0.096	IO				1.08
66.500	0.00	0.15	0.095	IO				1.08
66.583	0.00	0.15	0.094	IO				1.07
66.667	0.00	0.15	0.093	IO				1.06
66.750	0.00	0.15	0.092	IO				1.06
66.833	0.00	0.14	0.091	IO				1.05
66.917	0.00	0.14	0.090	IO				1.04
67.000	0.00	0.14	0.089	O				1.04
67.083	0.00	0.14	0.088	O				1.03
67.167	0.00	0.14	0.088	O				1.02
67.250	0.00	0.14	0.087	O				1.02
67.333	0.00	0.14	0.086	O				1.01
67.417	0.00	0.14	0.085	O				1.00
67.500	0.00	0.14	0.084	O				1.00
67.583	0.00	0.14	0.083	O				0.99
67.667	0.00	0.14	0.082	O				0.98
67.750	0.00	0.14	0.081	O				0.98
67.833	0.00	0.14	0.080	O				0.97
67.917	0.00	0.14	0.079	O				0.96
68.000	0.00	0.14	0.078	O				0.96
68.083	0.00	0.13	0.077	O				0.95
68.167	0.00	0.13	0.076	O				0.95
68.250	0.00	0.13	0.075	O				0.94
68.333	0.00	0.13	0.074	O				0.93
68.417	0.00	0.13	0.073	O				0.93
68.500	0.00	0.13	0.072	O				0.92
68.583	0.00	0.13	0.072	O				0.91
68.667	0.00	0.13	0.071	O				0.91
68.750	0.00	0.13	0.070	O				0.90
68.833	0.00	0.13	0.069	O				0.90
68.917	0.00	0.13	0.068	O				0.89
69.000	0.00	0.13	0.067	O				0.88
69.083	0.00	0.13	0.066	O				0.88
69.167	0.00	0.13	0.065	O				0.87
69.250	0.00	0.13	0.064	O				0.87
69.333	0.00	0.13	0.064	O				0.86
69.417	0.00	0.12	0.063	O				0.85
69.500	0.00	0.12	0.062	O				0.85
69.583	0.00	0.12	0.061	O				0.84
69.667	0.00	0.12	0.060	O				0.84
69.750	0.00	0.12	0.059	O				0.83
69.833	0.00	0.12	0.058	O				0.83
69.917	0.00	0.12	0.058	O				0.82
70.000	0.00	0.12	0.057	O				0.81
70.083	0.00	0.12	0.056	O				0.81
70.167	0.00	0.12	0.055	O				0.80
70.250	0.00	0.12	0.054	O				0.80
70.333	0.00	0.12	0.054	O				0.79
70.417	0.00	0.12	0.053	O				0.79
70.500	0.00	0.12	0.052	O				0.78
70.583	0.00	0.12	0.051	O				0.78
70.667	0.00	0.12	0.050	O				0.77
70.750	0.00	0.12	0.050	O				0.76
70.833	0.00	0.12	0.049	O				0.76
70.917	0.00	0.11	0.048	O				0.75

```
71.000    0.00    0.11      0.047  O       |       |       |       |     0.75
71.083    0.00    0.11      0.046  O       |       |       |       |     0.74
71.167    0.00    0.11      0.046  O       |       |       |       |     0.74
71.250    0.00    0.11      0.045  O       |       |       |       |     0.73
71.333    0.00    0.11      0.044  O       |       |       |       |     0.73
71.417    0.00    0.11      0.043  O       |       |       |       |     0.72
71.500    0.00    0.11      0.042  O       |       |       |       |     0.72
71.583    0.00    0.11      0.042  O       |       |       |       |     0.71
71.667    0.00    0.11      0.041  O       |       |       |       |     0.71
71.750    0.00    0.11      0.040  O       |       |       |       |     0.70
71.833    0.00    0.11      0.039  O       |       |       |       |     0.69
71.917    0.00    0.11      0.039  O       |       |       |       |     0.68
72.000    0.00    0.10      0.038  O       |       |       |       |     0.67
72.083    0.00    0.10      0.037  O       |       |       |       |     0.65
72.167    0.00    0.10      0.037  O       |       |       |       |     0.64

      Remaining water in basin =    0.04 (Ac.Ft)

      ****************************HYDROGRAPH DATA****************************
                    Number of intervals =   866
                    Time interval =    5.0 (Min.)
                    Maximum/Peak flow rate =        0.847 (CFS)
                    Total volume =       2.474 (Ac.Ft)
             Status of hydrographs being held in storage
                         Stream 1  Stream 2  Stream 3  Stream 4  Stream 5
             Peak (CFS)      0.000     0.000     0.000     0.000     0.000
             Vol (Ac.Ft)     0.000     0.000     0.000     0.000     0.000
      ************************************************************************

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                    FLOOD HYDROGRAPH ROUTING PROGRAM
                Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2004
                            Study date: 08/18/25

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 Program License Serial Number 5006

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 ********************* HYDROGRAPH INFORMATION **********************

                From study/file name: PROB1100.rte
 ****************************HYDROGRAPH DATA****************************
                Number of intervals =    25
                Time interval =    5.0 (Min.)
                Maximum/Peak flow rate =       46.352 (CFS)
                Total volume =       1.744 (Ac.Ft)
        Status of hydrographs being held in storage
                    Stream 1  Stream 2  Stream 3  Stream 4  Stream 5
        Peak (CFS)      0.000     0.000     0.000     0.000     0.000
        Vol (Ac.Ft)      0.000     0.000     0.000     0.000     0.000
 ***********************************************************************



 +++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
 Process from Point/Station        0.000 to Point/Station        0.000
 **** RETARDING BASIN ROUTING ****
 _________________________________________________________________________

 User entry of depth-outflow-storage data
 ---------------------------------------------------------------------
 Total number of inflow hydrograph intervals = 25
 Hydrograph time unit =  5.000 (Min.)
 Initial depth in storage basin =   0.00(Ft.)
 ---------------------------------------------------------------------
 ---------------------------------------------------------------------
 Initial basin depth =   0.00 (Ft.)
 Initial basin storage =      0.00 (Ac.Ft)
 Initial basin outflow =   0.00 (CFS)
 ---------------------------------------------------------------------
 ---------------------------------------------------------------------
 Depth vs. Storage and Depth vs. Discharge data:
  Basin Depth  Storage    Outflow   (S-O*dt/2)   (S+O*dt/2)
       (Ft.)    (Ac.Ft)    (CFS)     (Ac.Ft)    (Ac.Ft)
 ---------------------------------------------------------------------
    0.000      0.000      0.000      0.000        0.000
    0.700      0.040      0.109      0.040        0.040
    1.700      0.187      0.211      0.186        0.188
    2.400      0.365      0.269      0.364        0.366
    2.700      0.461      0.377      0.460        0.462
    3.700      0.829      0.537      0.827        0.831
    4.700      1.249      0.651      1.247        1.251
    5.700      1.723      0.746      1.720        1.726
    6.700      2.252      1.870      2.246        2.258
    7.700      2.841      2.376      2.833        2.849
    8.300      3.223     38.499      3.090        3.356
    8.700      3.491    113.554      3.100        3.882
    9.700      4.203    441.782      2.682        5.724
 ---------------------------------------------------------------------
                 Hydrograph Detention Basin Routing
 ---------------------------------------------------------------------

 Graph values: 'I'= unit inflow; 'O'=outflow at time shown
 ---------------------------------------------------------------------
  Time   Inflow  Outflow    Storage                                    Depth
```

(Hours)	(CFS)	(CFS)	(Ac.Ft)	.0	11.6	23.18	34.76	46.35	(Ft.)
0.083	0.47	0.00	0.002	O	|	|	|	|	0.03
0.167	2.65	0.03	0.012	OI	|	|	|	|	0.21
0.250	5.20	0.11	0.039	O I	|	|	|	|	0.68
0.333	6.86	0.14	0.080	O I	|	|	|	|	0.97
0.417	8.17	0.17	0.130	O I	|	|	|	|	1.31
0.500	9.61	0.21	0.190	O I	|	|	|	|	1.71
0.583	11.53	0.24	0.261	O I	|	|	|	|	1.99
0.667	13.84	0.26	0.347	O |I	|	|	|	|	2.33
0.750	18.14	0.37	0.455	O | I	|	|	|	|	2.68
0.833	29.57	0.44	0.616	O |	| I	|	|	|	3.12
0.917	46.35	0.55	0.874	O |	|	|	|	I	3.81
1.000	38.09	0.63	1.161	O |	|	| I	|	|	4.49
1.083	21.44	0.67	1.362	O |	| I	|	|	|	4.94
1.167	12.77	0.70	1.475	O I	|	|	|	|	5.18
1.250	8.09	0.71	1.542	O I	|	|	|	|	5.32
1.333	5.70	0.72	1.584	O I	|	|	|	|	5.41
1.417	4.12	0.72	1.613	O I	|	|	|	|	5.47
1.500	3.18	0.73	1.633	O I	|	|	|	|	5.51
1.583	2.39	0.73	1.647	OI	|	|	|	|	5.54
1.667	1.79	0.73	1.657	OI	|	|	|	|	5.56
1.750	1.31	0.73	1.663	O	|	|	|	|	5.57
1.833	0.99	0.73	1.665	O	|	|	|	|	5.58
1.917	0.77	0.73	1.666	O	|	|	|	|	5.58
2.000	0.16	0.73	1.665	O	|	|	|	|	5.58
2.083	0.05	0.73	1.660	O	|	|	|	|	5.57
2.167	0.00	0.73	1.655	O	|	|	|	|	5.56
2.250	0.00	0.73	1.650	O	|	|	|	|	5.55
2.333	0.00	0.73	1.645	O	|	|	|	|	5.54
2.417	0.00	0.73	1.640	O	|	|	|	|	5.53
2.500	0.00	0.73	1.635	O	|	|	|	|	5.51
2.583	0.00	0.73	1.630	O	|	|	|	|	5.50
2.667	0.00	0.73	1.625	O	|	|	|	|	5.49
2.750	0.00	0.73	1.620	O	|	|	|	|	5.48
2.833	0.00	0.72	1.615	O	|	|	|	|	5.47
2.917	0.00	0.72	1.610	O	|	|	|	|	5.46
3.000	0.00	0.72	1.605	O	|	|	|	|	5.45
3.083	0.00	0.72	1.600	O	|	|	|	|	5.44
3.167	0.00	0.72	1.595	O	|	|	|	|	5.43
3.250	0.00	0.72	1.590	O	|	|	|	|	5.42
3.333	0.00	0.72	1.585	O	|	|	|	|	5.41
3.417	0.00	0.72	1.581	O	|	|	|	|	5.40
3.500	0.00	0.72	1.576	O	|	|	|	|	5.39
3.583	0.00	0.72	1.571	O	|	|	|	|	5.38
3.667	0.00	0.71	1.566	O	|	|	|	|	5.37
3.750	0.00	0.71	1.561	O	|	|	|	|	5.36
3.833	0.00	0.71	1.556	O	|	|	|	|	5.35
3.917	0.00	0.71	1.551	O	|	|	|	|	5.34
4.000	0.00	0.71	1.546	O	|	|	|	|	5.33
4.083	0.00	0.71	1.541	O	|	|	|	|	5.32
4.167	0.00	0.71	1.536	O	|	|	|	|	5.31
4.250	0.00	0.71	1.531	O	|	|	|	|	5.30
4.333	0.00	0.71	1.527	O	|	|	|	|	5.29
4.417	0.00	0.71	1.522	O	|	|	|	|	5.28
4.500	0.00	0.70	1.517	O	|	|	|	|	5.27
4.583	0.00	0.70	1.512	O	|	|	|	|	5.25
4.667	0.00	0.70	1.507	O	|	|	|	|	5.24
4.750	0.00	0.70	1.502	O	|	|	|	|	5.23
4.833	0.00	0.70	1.498	O	|	|	|	|	5.22
4.917	0.00	0.70	1.493	O	|	|	|	|	5.21
5.000	0.00	0.70	1.488	O	|	|	|	|	5.20
5.083	0.00	0.70	1.483	O	|	|	|	|	5.19
5.167	0.00	0.70	1.478	O	|	|	|	|	5.18
5.250	0.00	0.70	1.473	O	|	|	|	|	5.17
5.333	0.00	0.70	1.469	O	|	|	|	|	5.16
5.417	0.00	0.69	1.464	O	|	|	|	|	5.15
5.500	0.00	0.69	1.459	O	|	|	|	|	5.14
5.583	0.00	0.69	1.454	O	|	|	|	|	5.13
5.667	0.00	0.69	1.450	O	|	|	|	|	5.12
5.750	0.00	0.69	1.445	O	|	|	|	|	5.11
5.833	0.00	0.69	1.440	O	|	|	|	|	5.10

5.917	0.00	0.69	1.435	O	|	|	|	|	5.09
6.000	0.00	0.69	1.431	O	|	|	|	|	5.08
6.083	0.00	0.69	1.426	O	|	|	|	|	5.07
6.167	0.00	0.69	1.421	O	|	|	|	|	5.06
6.250	0.00	0.68	1.416	O	|	|	|	|	5.05
6.333	0.00	0.68	1.412	O	|	|	|	|	5.04
6.417	0.00	0.68	1.407	O	|	|	|	|	5.03
6.500	0.00	0.68	1.402	O	|	|	|	|	5.02
6.583	0.00	0.68	1.398	O	|	|	|	|	5.01
6.667	0.00	0.68	1.393	O	|	|	|	|	5.00
6.750	0.00	0.68	1.388	O	|	|	|	|	4.99
6.833	0.00	0.68	1.384	O	|	|	|	|	4.98
6.917	0.00	0.68	1.379	O	|	|	|	|	4.97
7.000	0.00	0.68	1.374	O	|	|	|	|	4.96
7.083	0.00	0.68	1.370	O	|	|	|	|	4.95
7.167	0.00	0.67	1.365	O	|	|	|	|	4.94
7.250	0.00	0.67	1.360	O	|	|	|	|	4.93
7.333	0.00	0.67	1.356	O	|	|	|	|	4.93
7.417	0.00	0.67	1.351	O	|	|	|	|	4.92
7.500	0.00	0.67	1.346	O	|	|	|	|	4.91
7.583	0.00	0.67	1.342	O	|	|	|	|	4.90
7.667	0.00	0.67	1.337	O	|	|	|	|	4.89
7.750	0.00	0.67	1.333	O	|	|	|	|	4.88
7.833	0.00	0.67	1.328	O	|	|	|	|	4.87
7.917	0.00	0.67	1.323	O	|	|	|	|	4.86
8.000	0.00	0.66	1.319	O	|	|	|	|	4.85
8.083	0.00	0.66	1.314	O	|	|	|	|	4.84
8.167	0.00	0.66	1.310	O	|	|	|	|	4.83
8.250	0.00	0.66	1.305	O	|	|	|	|	4.82
8.333	0.00	0.66	1.301	O	|	|	|	|	4.81
8.417	0.00	0.66	1.296	O	|	|	|	|	4.80
8.500	0.00	0.66	1.291	O	|	|	|	|	4.79
8.583	0.00	0.66	1.287	O	|	|	|	|	4.78
8.667	0.00	0.66	1.282	O	|	|	|	|	4.77
8.750	0.00	0.66	1.278	O	|	|	|	|	4.76
8.833	0.00	0.66	1.273	O	|	|	|	|	4.75
8.917	0.00	0.65	1.269	O	|	|	|	|	4.74
9.000	0.00	0.65	1.264	O	|	|	|	|	4.73
9.083	0.00	0.65	1.260	O	|	|	|	|	4.72
9.167	0.00	0.65	1.255	O	|	|	|	|	4.71
9.250	0.00	0.65	1.251	O	|	|	|	|	4.70
9.333	0.00	0.65	1.246	O	|	|	|	|	4.69
9.417	0.00	0.65	1.242	O	|	|	|	|	4.68
9.500	0.00	0.65	1.237	O	|	|	|	|	4.67
9.583	0.00	0.65	1.233	O	|	|	|	|	4.66
9.667	0.00	0.65	1.229	O	|	|	|	|	4.65
9.750	0.00	0.64	1.224	O	|	|	|	|	4.64
9.833	0.00	0.64	1.220	O	|	|	|	|	4.63
9.917	0.00	0.64	1.215	O	|	|	|	|	4.62
10.000	0.00	0.64	1.211	O	|	|	|	|	4.61
10.083	0.00	0.64	1.206	O	|	|	|	|	4.60
10.167	0.00	0.64	1.202	O	|	|	|	|	4.59
10.250	0.00	0.64	1.198	O	|	|	|	|	4.58
10.333	0.00	0.64	1.193	O	|	|	|	|	4.57
10.417	0.00	0.63	1.189	O	|	|	|	|	4.56
10.500	0.00	0.63	1.184	O	|	|	|	|	4.55
10.583	0.00	0.63	1.180	O	|	|	|	|	4.54
10.667	0.00	0.63	1.176	O	|	|	|	|	4.53
10.750	0.00	0.63	1.171	O	|	|	|	|	4.52
10.833	0.00	0.63	1.167	O	|	|	|	|	4.50
10.917	0.00	0.63	1.163	O	|	|	|	|	4.49
11.000	0.00	0.63	1.158	O	|	|	|	|	4.48
11.083	0.00	0.63	1.154	O	|	|	|	|	4.47
11.167	0.00	0.62	1.150	O	|	|	|	|	4.46
11.250	0.00	0.62	1.146	O	|	|	|	|	4.45
11.333	0.00	0.62	1.141	O	|	|	|	|	4.44
11.417	0.00	0.62	1.137	O	|	|	|	|	4.43
11.500	0.00	0.62	1.133	O	|	|	|	|	4.42
11.583	0.00	0.62	1.128	O	|	|	|	|	4.41
11.667	0.00	0.62	1.124	O	|	|	|	|	4.40
11.750	0.00	0.62	1.120	O	|	|	|	|	4.39

11.833	0.00	0.61	1.116	O	|	|	|	|	4.38
11.917	0.00	0.61	1.111	O	|	|	|	|	4.37
12.000	0.00	0.61	1.107	O	|	|	|	|	4.36
12.083	0.00	0.61	1.103	O	|	|	|	|	4.35
12.167	0.00	0.61	1.099	O	|	|	|	|	4.34
12.250	0.00	0.61	1.095	O	|	|	|	|	4.33
12.333	0.00	0.61	1.090	O	|	|	|	|	4.32
12.417	0.00	0.61	1.086	O	|	|	|	|	4.31
12.500	0.00	0.61	1.082	O	|	|	|	|	4.30
12.583	0.00	0.60	1.078	O	|	|	|	|	4.29
12.667	0.00	0.60	1.074	O	|	|	|	|	4.28
12.750	0.00	0.60	1.070	O	|	|	|	|	4.27
12.833	0.00	0.60	1.065	O	|	|	|	|	4.26
12.917	0.00	0.60	1.061	O	|	|	|	|	4.25
13.000	0.00	0.60	1.057	O	|	|	|	|	4.24
13.083	0.00	0.60	1.053	O	|	|	|	|	4.23
13.167	0.00	0.60	1.049	O	|	|	|	|	4.22
13.250	0.00	0.60	1.045	O	|	|	|	|	4.21
13.333	0.00	0.59	1.041	O	|	|	|	|	4.20
13.417	0.00	0.59	1.037	O	|	|	|	|	4.19
13.500	0.00	0.59	1.033	O	|	|	|	|	4.18
13.583	0.00	0.59	1.028	O	|	|	|	|	4.17
13.667	0.00	0.59	1.024	O	|	|	|	|	4.17
13.750	0.00	0.59	1.020	O	|	|	|	|	4.16
13.833	0.00	0.59	1.016	O	|	|	|	|	4.15
13.917	0.00	0.59	1.012	O	|	|	|	|	4.14
14.000	0.00	0.59	1.008	O	|	|	|	|	4.13
14.083	0.00	0.58	1.004	O	|	|	|	|	4.12
14.167	0.00	0.58	1.000	O	|	|	|	|	4.11
14.250	0.00	0.58	0.996	O	|	|	|	|	4.10
14.333	0.00	0.58	0.992	O	|	|	|	|	4.09
14.417	0.00	0.58	0.988	O	|	|	|	|	4.08
14.500	0.00	0.58	0.984	O	|	|	|	|	4.07
14.583	0.00	0.58	0.980	O	|	|	|	|	4.06
14.667	0.00	0.58	0.976	O	|	|	|	|	4.05
14.750	0.00	0.58	0.972	O	|	|	|	|	4.04
14.833	0.00	0.57	0.968	O	|	|	|	|	4.03
14.917	0.00	0.57	0.964	O	|	|	|	|	4.02
15.000	0.00	0.57	0.960	O	|	|	|	|	4.01
15.083	0.00	0.57	0.956	O	|	|	|	|	4.00
15.167	0.00	0.57	0.952	O	|	|	|	|	3.99
15.250	0.00	0.57	0.949	O	|	|	|	|	3.98
15.333	0.00	0.57	0.945	O	|	|	|	|	3.98
15.417	0.00	0.57	0.941	O	|	|	|	|	3.97
15.500	0.00	0.57	0.937	O	|	|	|	|	3.96
15.583	0.00	0.57	0.933	O	|	|	|	|	3.95
15.667	0.00	0.56	0.929	O	|	|	|	|	3.94
15.750	0.00	0.56	0.925	O	|	|	|	|	3.93
15.833	0.00	0.56	0.921	O	|	|	|	|	3.92
15.917	0.00	0.56	0.917	O	|	|	|	|	3.91
16.000	0.00	0.56	0.914	O	|	|	|	|	3.90
16.083	0.00	0.56	0.910	O	|	|	|	|	3.89
16.167	0.00	0.56	0.906	O	|	|	|	|	3.88
16.250	0.00	0.56	0.902	O	|	|	|	|	3.87
16.333	0.00	0.56	0.898	O	|	|	|	|	3.86
16.417	0.00	0.55	0.894	O	|	|	|	|	3.86
16.500	0.00	0.55	0.891	O	|	|	|	|	3.85
16.583	0.00	0.55	0.887	O	|	|	|	|	3.84
16.667	0.00	0.55	0.883	O	|	|	|	|	3.83
16.750	0.00	0.55	0.879	O	|	|	|	|	3.82
16.833	0.00	0.55	0.875	O	|	|	|	|	3.81
16.917	0.00	0.55	0.872	O	|	|	|	|	3.80
17.000	0.00	0.55	0.868	O	|	|	|	|	3.79
17.083	0.00	0.55	0.864	O	|	|	|	|	3.78
17.167	0.00	0.55	0.860	O	|	|	|	|	3.77
17.250	0.00	0.54	0.857	O	|	|	|	|	3.77
17.333	0.00	0.54	0.853	O	|	|	|	|	3.76
17.417	0.00	0.54	0.849	O	|	|	|	|	3.75
17.500	0.00	0.54	0.845	O	|	|	|	|	3.74
17.583	0.00	0.54	0.842	O	|	|	|	|	3.73
17.667	0.00	0.54	0.838	O	|	|	|	|	3.72

17.750	0.00	0.54	0.834	O	|	|	|	|	3.71
17.833	0.00	0.54	0.830	O	|	|	|	|	3.70
17.917	0.00	0.54	0.827	O	|	|	|	|	3.69
18.000	0.00	0.53	0.823	O	|	|	|	|	3.68
18.083	0.00	0.53	0.819	O	|	|	|	|	3.67
18.167	0.00	0.53	0.816	O	|	|	|	|	3.66
18.250	0.00	0.53	0.812	O	|	|	|	|	3.65
18.333	0.00	0.53	0.808	O	|	|	|	|	3.64
18.417	0.00	0.53	0.805	O	|	|	|	|	3.63
18.500	0.00	0.52	0.801	O	|	|	|	|	3.62
18.583	0.00	0.52	0.798	O	|	|	|	|	3.61
18.667	0.00	0.52	0.794	O	|	|	|	|	3.60
18.750	0.00	0.52	0.790	O	|	|	|	|	3.60
18.833	0.00	0.52	0.787	O	|	|	|	|	3.59
18.917	0.00	0.52	0.783	O	|	|	|	|	3.58
19.000	0.00	0.52	0.780	O	|	|	|	|	3.57
19.083	0.00	0.51	0.776	O	|	|	|	|	3.56
19.167	0.00	0.51	0.773	O	|	|	|	|	3.55
19.250	0.00	0.51	0.769	O	|	|	|	|	3.54
19.333	0.00	0.51	0.766	O	|	|	|	|	3.53
19.417	0.00	0.51	0.762	O	|	|	|	|	3.52
19.500	0.00	0.51	0.759	O	|	|	|	|	3.51
19.583	0.00	0.50	0.755	O	|	|	|	|	3.50
19.667	0.00	0.50	0.752	O	|	|	|	|	3.49
19.750	0.00	0.50	0.748	O	|	|	|	|	3.48
19.833	0.00	0.50	0.745	O	|	|	|	|	3.47
19.917	0.00	0.50	0.741	O	|	|	|	|	3.46
20.000	0.00	0.50	0.738	O	|	|	|	|	3.45
20.083	0.00	0.50	0.734	O	|	|	|	|	3.44
20.167	0.00	0.49	0.731	O	|	|	|	|	3.43
20.250	0.00	0.49	0.728	O	|	|	|	|	3.42
20.333	0.00	0.49	0.724	O	|	|	|	|	3.42
20.417	0.00	0.49	0.721	O	|	|	|	|	3.41
20.500	0.00	0.49	0.717	O	|	|	|	|	3.40
20.583	0.00	0.49	0.714	O	|	|	|	|	3.39
20.667	0.00	0.49	0.711	O	|	|	|	|	3.38
20.750	0.00	0.48	0.707	O	|	|	|	|	3.37
20.833	0.00	0.48	0.704	O	|	|	|	|	3.36
20.917	0.00	0.48	0.701	O	|	|	|	|	3.35
21.000	0.00	0.48	0.697	O	|	|	|	|	3.34
21.083	0.00	0.48	0.694	O	|	|	|	|	3.33
21.167	0.00	0.48	0.691	O	|	|	|	|	3.32
21.250	0.00	0.48	0.688	O	|	|	|	|	3.32
21.333	0.00	0.47	0.684	O	|	|	|	|	3.31
21.417	0.00	0.47	0.681	O	|	|	|	|	3.30
21.500	0.00	0.47	0.678	O	|	|	|	|	3.29
21.583	0.00	0.47	0.675	O	|	|	|	|	3.28
21.667	0.00	0.47	0.671	O	|	|	|	|	3.27
21.750	0.00	0.47	0.668	O	|	|	|	|	3.26
21.833	0.00	0.47	0.665	O	|	|	|	|	3.25
21.917	0.00	0.46	0.662	O	|	|	|	|	3.25
22.000	0.00	0.46	0.659	O	|	|	|	|	3.24
22.083	0.00	0.46	0.655	O	|	|	|	|	3.23
22.167	0.00	0.46	0.652	O	|	|	|	|	3.22
22.250	0.00	0.46	0.649	O	|	|	|	|	3.21
22.333	0.00	0.46	0.646	O	|	|	|	|	3.20
22.417	0.00	0.46	0.643	O	|	|	|	|	3.19
22.500	0.00	0.45	0.640	O	|	|	|	|	3.19
22.583	0.00	0.45	0.636	O	|	|	|	|	3.18
22.667	0.00	0.45	0.633	O	|	|	|	|	3.17
22.750	0.00	0.45	0.630	O	|	|	|	|	3.16
22.833	0.00	0.45	0.627	O	|	|	|	|	3.15
22.917	0.00	0.45	0.624	O	|	|	|	|	3.14
23.000	0.00	0.45	0.621	O	|	|	|	|	3.13
23.083	0.00	0.45	0.618	O	|	|	|	|	3.13
23.167	0.00	0.44	0.615	O	|	|	|	|	3.12
23.250	0.00	0.44	0.612	O	|	|	|	|	3.11
23.333	0.00	0.44	0.609	O	|	|	|	|	3.10
23.417	0.00	0.44	0.606	O	|	|	|	|	3.09
23.500	0.00	0.44	0.603	O	|	|	|	|	3.08
23.583	0.00	0.44	0.600	O	|	|	|	|	3.08

23.667	0.00	0.44	0.597	O	|	|	|	|	3.07
23.750	0.00	0.43	0.594	O	|	|	|	|	3.06
23.833	0.00	0.43	0.591	O	|	|	|	|	3.05
23.917	0.00	0.43	0.588	O	|	|	|	|	3.04
24.000	0.00	0.43	0.585	O	|	|	|	|	3.04
24.083	0.00	0.43	0.582	O	|	|	|	|	3.03
24.167	0.00	0.43	0.579	O	|	|	|	|	3.02
24.250	0.00	0.43	0.576	O	|	|	|	|	3.01
24.333	0.00	0.43	0.573	O	|	|	|	|	3.00
24.417	0.00	0.42	0.570	O	|	|	|	|	3.00
24.500	0.00	0.42	0.567	O	|	|	|	|	2.99
24.583	0.00	0.42	0.564	O	|	|	|	|	2.98
24.667	0.00	0.42	0.561	O	|	|	|	|	2.97
24.750	0.00	0.42	0.558	O	|	|	|	|	2.96
24.833	0.00	0.42	0.555	O	|	|	|	|	2.96
24.917	0.00	0.42	0.553	O	|	|	|	|	2.95
25.000	0.00	0.42	0.550	O	|	|	|	|	2.94
25.083	0.00	0.41	0.547	O	|	|	|	|	2.93
25.167	0.00	0.41	0.544	O	|	|	|	|	2.93
25.250	0.00	0.41	0.541	O	|	|	|	|	2.92
25.333	0.00	0.41	0.538	O	|	|	|	|	2.91
25.417	0.00	0.41	0.536	O	|	|	|	|	2.90
25.500	0.00	0.41	0.533	O	|	|	|	|	2.89
25.583	0.00	0.41	0.530	O	|	|	|	|	2.89
25.667	0.00	0.41	0.527	O	|	|	|	|	2.88
25.750	0.00	0.40	0.524	O	|	|	|	|	2.87
25.833	0.00	0.40	0.522	O	|	|	|	|	2.86
25.917	0.00	0.40	0.519	O	|	|	|	|	2.86
26.000	0.00	0.40	0.516	O	|	|	|	|	2.85
26.083	0.00	0.40	0.513	O	|	|	|	|	2.84
26.167	0.00	0.40	0.510	O	|	|	|	|	2.83
26.250	0.00	0.40	0.508	O	|	|	|	|	2.83
26.333	0.00	0.40	0.505	O	|	|	|	|	2.82
26.417	0.00	0.39	0.502	O	|	|	|	|	2.81
26.500	0.00	0.39	0.500	O	|	|	|	|	2.80
26.583	0.00	0.39	0.497	O	|	|	|	|	2.80
26.667	0.00	0.39	0.494	O	|	|	|	|	2.79
26.750	0.00	0.39	0.491	O	|	|	|	|	2.78
26.833	0.00	0.39	0.489	O	|	|	|	|	2.78
26.917	0.00	0.39	0.486	O	|	|	|	|	2.77
27.000	0.00	0.39	0.483	O	|	|	|	|	2.76
27.083	0.00	0.39	0.481	O	|	|	|	|	2.75
27.167	0.00	0.38	0.478	O	|	|	|	|	2.75
27.250	0.00	0.38	0.475	O	|	|	|	|	2.74
27.333	0.00	0.38	0.473	O	|	|	|	|	2.73
27.417	0.00	0.38	0.470	O	|	|	|	|	2.73
27.500	0.00	0.38	0.468	O	|	|	|	|	2.72
27.583	0.00	0.38	0.465	O	|	|	|	|	2.71
27.667	0.00	0.38	0.462	O	|	|	|	|	2.70
27.750	0.00	0.38	0.460	O	|	|	|	|	2.70
27.833	0.00	0.37	0.457	O	|	|	|	|	2.69
27.917	0.00	0.37	0.455	O	|	|	|	|	2.68
28.000	0.00	0.37	0.452	O	|	|	|	|	2.67
28.083	0.00	0.36	0.450	O	|	|	|	|	2.66
28.167	0.00	0.36	0.447	O	|	|	|	|	2.66
28.250	0.00	0.36	0.445	O	|	|	|	|	2.65
28.333	0.00	0.36	0.442	O	|	|	|	|	2.64
28.417	0.00	0.35	0.440	O	|	|	|	|	2.63
28.500	0.00	0.35	0.437	O	|	|	|	|	2.63
28.583	0.00	0.35	0.435	O	|	|	|	|	2.62
28.667	0.00	0.34	0.433	O	|	|	|	|	2.61
28.750	0.00	0.34	0.430	O	|	|	|	|	2.60
28.833	0.00	0.34	0.428	O	|	|	|	|	2.60
28.917	0.00	0.34	0.425	O	|	|	|	|	2.59
29.000	0.00	0.33	0.423	O	|	|	|	|	2.58
29.083	0.00	0.33	0.421	O	|	|	|	|	2.57
29.167	0.00	0.33	0.419	O	|	|	|	|	2.57
29.250	0.00	0.33	0.416	O	|	|	|	|	2.56
29.333	0.00	0.32	0.414	O	|	|	|	|	2.55
29.417	0.00	0.32	0.412	O	|	|	|	|	2.55
29.500	0.00	0.32	0.410	O	|	|	|	|	2.54

29.583	0.00	0.32	0.407	O	|	|	|	|	2.53
29.667	0.00	0.31	0.405	O	|	|	|	|	2.53
29.750	0.00	0.31	0.403	O	|	|	|	|	2.52
29.833	0.00	0.31	0.401	O	|	|	|	|	2.51
29.917	0.00	0.31	0.399	O	|	|	|	|	2.51
30.000	0.00	0.30	0.397	O	|	|	|	|	2.50
30.083	0.00	0.30	0.395	O	|	|	|	|	2.49
30.167	0.00	0.30	0.393	O	|	|	|	|	2.49
30.250	0.00	0.30	0.391	O	|	|	|	|	2.48
30.333	0.00	0.30	0.388	O	|	|	|	|	2.47
30.417	0.00	0.29	0.386	O	|	|	|	|	2.47
30.500	0.00	0.29	0.384	O	|	|	|	|	2.46
30.583	0.00	0.29	0.382	O	|	|	|	|	2.45
30.667	0.00	0.29	0.380	O	|	|	|	|	2.45
30.750	0.00	0.28	0.379	O	|	|	|	|	2.44
30.833	0.00	0.28	0.377	O	|	|	|	|	2.44
30.917	0.00	0.28	0.375	O	|	|	|	|	2.43
31.000	0.00	0.28	0.373	O	|	|	|	|	2.42
31.083	0.00	0.28	0.371	O	|	|	|	|	2.42
31.167	0.00	0.27	0.369	O	|	|	|	|	2.41
31.250	0.00	0.27	0.367	O	|	|	|	|	2.41
31.333	0.00	0.27	0.365	O	|	|	|	|	2.40
31.417	0.00	0.27	0.363	O	|	|	|	|	2.39
31.500	0.00	0.27	0.361	O	|	|	|	|	2.39
31.583	0.00	0.27	0.360	O	|	|	|	|	2.38
31.667	0.00	0.27	0.358	O	|	|	|	|	2.37
31.750	0.00	0.27	0.356	O	|	|	|	|	2.36
31.833	0.00	0.27	0.354	O	|	|	|	|	2.36
31.917	0.00	0.26	0.352	O	|	|	|	|	2.35
32.000	0.00	0.26	0.350	O	|	|	|	|	2.34
32.083	0.00	0.26	0.349	O	|	|	|	|	2.34
32.167	0.00	0.26	0.347	O	|	|	|	|	2.33
32.250	0.00	0.26	0.345	O	|	|	|	|	2.32
32.333	0.00	0.26	0.343	O	|	|	|	|	2.31
32.417	0.00	0.26	0.341	O	|	|	|	|	2.31
32.500	0.00	0.26	0.340	O	|	|	|	|	2.30
32.583	0.00	0.26	0.338	O	|	|	|	|	2.29
32.667	0.00	0.26	0.336	O	|	|	|	|	2.29
32.750	0.00	0.26	0.334	O	|	|	|	|	2.28
32.833	0.00	0.26	0.332	O	|	|	|	|	2.27
32.917	0.00	0.26	0.331	O	|	|	|	|	2.27
33.000	0.00	0.26	0.329	O	|	|	|	|	2.26
33.083	0.00	0.26	0.327	O	|	|	|	|	2.25
33.167	0.00	0.26	0.325	O	|	|	|	|	2.24
33.250	0.00	0.26	0.324	O	|	|	|	|	2.24
33.333	0.00	0.25	0.322	O	|	|	|	|	2.23
33.417	0.00	0.25	0.320	O	|	|	|	|	2.22
33.500	0.00	0.25	0.318	O	|	|	|	|	2.22
33.583	0.00	0.25	0.317	O	|	|	|	|	2.21
33.667	0.00	0.25	0.315	O	|	|	|	|	2.20
33.750	0.00	0.25	0.313	O	|	|	|	|	2.20
33.833	0.00	0.25	0.311	O	|	|	|	|	2.19
33.917	0.00	0.25	0.310	O	|	|	|	|	2.18
34.000	0.00	0.25	0.308	O	|	|	|	|	2.18
34.083	0.00	0.25	0.306	O	|	|	|	|	2.17
34.167	0.00	0.25	0.305	O	|	|	|	|	2.16
34.250	0.00	0.25	0.303	O	|	|	|	|	2.16
34.333	0.00	0.25	0.301	O	|	|	|	|	2.15
34.417	0.00	0.25	0.299	O	|	|	|	|	2.14
34.500	0.00	0.25	0.298	O	|	|	|	|	2.14
34.583	0.00	0.25	0.296	O	|	|	|	|	2.13
34.667	0.00	0.25	0.294	O	|	|	|	|	2.12
34.750	0.00	0.25	0.293	O	|	|	|	|	2.12
34.833	0.00	0.24	0.291	O	|	|	|	|	2.11
34.917	0.00	0.24	0.289	O	|	|	|	|	2.10
35.000	0.00	0.24	0.288	O	|	|	|	|	2.10
35.083	0.00	0.24	0.286	O	|	|	|	|	2.09
35.167	0.00	0.24	0.284	O	|	|	|	|	2.08
35.250	0.00	0.24	0.283	O	|	|	|	|	2.08
35.333	0.00	0.24	0.281	O	|	|	|	|	2.07
35.417	0.00	0.24	0.279	O	|	|	|	|	2.06

35.500	0.00	0.24	0.278	O					2.06
35.583	0.00	0.24	0.276	O					2.05
35.667	0.00	0.24	0.274	O					2.04
35.750	0.00	0.24	0.273	O					2.04
35.833	0.00	0.24	0.271	O					2.03
35.917	0.00	0.24	0.269	O					2.02
36.000	0.00	0.24	0.268	O					2.02
36.083	0.00	0.24	0.266	O					2.01
36.167	0.00	0.24	0.264	O					2.00
36.250	0.00	0.24	0.263	O					2.00
36.333	0.00	0.24	0.261	O					1.99
36.417	0.00	0.23	0.260	O					1.99
36.500	0.00	0.23	0.258	O					1.98
36.583	0.00	0.23	0.256	O					1.97
36.667	0.00	0.23	0.255	O					1.97
36.750	0.00	0.23	0.253	O					1.96
36.833	0.00	0.23	0.252	O					1.95
36.917	0.00	0.23	0.250	O					1.95
37.000	0.00	0.23	0.248	O					1.94
37.083	0.00	0.23	0.247	O					1.93
37.167	0.00	0.23	0.245	O					1.93
37.250	0.00	0.23	0.244	O					1.92
37.333	0.00	0.23	0.242	O					1.92
37.417	0.00	0.23	0.240	O					1.91
37.500	0.00	0.23	0.239	O					1.90
37.583	0.00	0.23	0.237	O					1.90
37.667	0.00	0.23	0.236	O					1.89
37.750	0.00	0.23	0.234	O					1.89
37.833	0.00	0.23	0.233	O					1.88
37.917	0.00	0.23	0.231	O					1.87
38.000	0.00	0.22	0.229	O					1.87
38.083	0.00	0.22	0.228	O					1.86
38.167	0.00	0.22	0.226	O					1.85
38.250	0.00	0.22	0.225	O					1.85
38.333	0.00	0.22	0.223	O					1.84
38.417	0.00	0.22	0.222	O					1.84
38.500	0.00	0.22	0.220	O					1.83
38.583	0.00	0.22	0.219	O					1.82
38.667	0.00	0.22	0.217	O					1.82
38.750	0.00	0.22	0.216	O					1.81
38.833	0.00	0.22	0.214	O					1.81
38.917	0.00	0.22	0.213	O					1.80
39.000	0.00	0.22	0.211	O					1.79
39.083	0.00	0.22	0.210	O					1.79
39.167	0.00	0.22	0.208	O					1.78
39.250	0.00	0.22	0.207	O					1.78
39.333	0.00	0.22	0.205	O					1.77
39.417	0.00	0.22	0.204	O					1.77
39.500	0.00	0.22	0.202	O					1.76
39.583	0.00	0.22	0.201	O					1.75
39.667	0.00	0.21	0.199	O					1.75
39.750	0.00	0.21	0.198	O					1.74
39.833	0.00	0.21	0.196	O					1.74
39.917	0.00	0.21	0.195	O					1.73
40.000	0.00	0.21	0.193	O					1.72
40.083	0.00	0.21	0.192	O					1.72
40.167	0.00	0.21	0.190	O					1.71
40.250	0.00	0.21	0.189	O					1.71
40.333	0.00	0.21	0.187	O					1.70
40.417	0.00	0.21	0.186	O					1.69
40.500	0.00	0.21	0.185	O					1.68
40.583	0.00	0.21	0.183	O					1.67
40.667	0.00	0.21	0.182	O					1.66
40.750	0.00	0.21	0.180	O					1.65
40.833	0.00	0.21	0.179	O					1.64
40.917	0.00	0.20	0.177	O					1.63
41.000	0.00	0.20	0.176	O					1.63
41.083	0.00	0.20	0.175	O					1.62
41.167	0.00	0.20	0.173	O					1.61
41.250	0.00	0.20	0.172	O					1.60
41.333	0.00	0.20	0.170	O					1.59

41.417	0.00	0.20	0.169	O	|	|	|	|	1.58
41.500	0.00	0.20	0.168	O	|	|	|	|	1.57
41.583	0.00	0.20	0.166	O	|	|	|	|	1.56
41.667	0.00	0.20	0.165	O	|	|	|	|	1.55
41.750	0.00	0.19	0.164	O	|	|	|	|	1.54
41.833	0.00	0.19	0.162	O	|	|	|	|	1.53
41.917	0.00	0.19	0.161	O	|	|	|	|	1.52
42.000	0.00	0.19	0.160	O	|	|	|	|	1.51
42.083	0.00	0.19	0.158	O	|	|	|	|	1.51
42.167	0.00	0.19	0.157	O	|	|	|	|	1.50
42.250	0.00	0.19	0.156	O	|	|	|	|	1.49
42.333	0.00	0.19	0.154	O	|	|	|	|	1.48
42.417	0.00	0.19	0.153	O	|	|	|	|	1.47
42.500	0.00	0.19	0.152	O	|	|	|	|	1.46
42.583	0.00	0.19	0.151	O	|	|	|	|	1.45
42.667	0.00	0.18	0.149	O	|	|	|	|	1.44
42.750	0.00	0.18	0.148	O	|	|	|	|	1.44
42.833	0.00	0.18	0.147	O	|	|	|	|	1.43
42.917	0.00	0.18	0.146	O	|	|	|	|	1.42
43.000	0.00	0.18	0.144	O	|	|	|	|	1.41
43.083	0.00	0.18	0.143	O	|	|	|	|	1.40
43.167	0.00	0.18	0.142	O	|	|	|	|	1.39
43.250	0.00	0.18	0.141	O	|	|	|	|	1.38
43.333	0.00	0.18	0.139	O	|	|	|	|	1.38
43.417	0.00	0.18	0.138	O	|	|	|	|	1.37
43.500	0.00	0.18	0.137	O	|	|	|	|	1.36
43.583	0.00	0.18	0.136	O	|	|	|	|	1.35
43.667	0.00	0.17	0.134	O	|	|	|	|	1.34
43.750	0.00	0.17	0.133	O	|	|	|	|	1.33
43.833	0.00	0.17	0.132	O	|	|	|	|	1.33
43.917	0.00	0.17	0.131	O	|	|	|	|	1.32
44.000	0.00	0.17	0.130	O	|	|	|	|	1.31
44.083	0.00	0.17	0.129	O	|	|	|	|	1.30
44.167	0.00	0.17	0.127	O	|	|	|	|	1.29
44.250	0.00	0.17	0.126	O	|	|	|	|	1.29
44.333	0.00	0.17	0.125	O	|	|	|	|	1.28
44.417	0.00	0.17	0.124	O	|	|	|	|	1.27
44.500	0.00	0.17	0.123	O	|	|	|	|	1.26
44.583	0.00	0.17	0.122	O	|	|	|	|	1.26
44.667	0.00	0.16	0.120	O	|	|	|	|	1.25
44.750	0.00	0.16	0.119	O	|	|	|	|	1.24
44.833	0.00	0.16	0.118	O	|	|	|	|	1.23
44.917	0.00	0.16	0.117	O	|	|	|	|	1.22
45.000	0.00	0.16	0.116	O	|	|	|	|	1.22
45.083	0.00	0.16	0.115	O	|	|	|	|	1.21
45.167	0.00	0.16	0.114	O	|	|	|	|	1.20
45.250	0.00	0.16	0.113	O	|	|	|	|	1.19
45.333	0.00	0.16	0.112	O	|	|	|	|	1.19
45.417	0.00	0.16	0.110	O	|	|	|	|	1.18
45.500	0.00	0.16	0.109	O	|	|	|	|	1.17
45.583	0.00	0.16	0.108	O	|	|	|	|	1.16
45.667	0.00	0.16	0.107	O	|	|	|	|	1.16
45.750	0.00	0.15	0.106	O	|	|	|	|	1.15
45.833	0.00	0.15	0.105	O	|	|	|	|	1.14
45.917	0.00	0.15	0.104	O	|	|	|	|	1.14
46.000	0.00	0.15	0.103	O	|	|	|	|	1.13
46.083	0.00	0.15	0.102	O	|	|	|	|	1.12
46.167	0.00	0.15	0.101	O	|	|	|	|	1.11
46.250	0.00	0.15	0.100	O	|	|	|	|	1.11
46.333	0.00	0.15	0.099	O	|	|	|	|	1.10
46.417	0.00	0.15	0.098	O	|	|	|	|	1.09
46.500	0.00	0.15	0.097	O	|	|	|	|	1.09
46.583	0.00	0.15	0.096	O	|	|	|	|	1.08
46.667	0.00	0.15	0.095	O	|	|	|	|	1.07
46.750	0.00	0.15	0.094	O	|	|	|	|	1.07
46.833	0.00	0.15	0.093	O	|	|	|	|	1.06
46.917	0.00	0.14	0.092	O	|	|	|	|	1.05
47.000	0.00	0.14	0.091	O	|	|	|	|	1.04
47.083	0.00	0.14	0.090	O	|	|	|	|	1.04
47.167	0.00	0.14	0.089	O	|	|	|	|	1.03
47.250	0.00	0.14	0.088	O	|	|	|	|	1.02

47.333	0.00	0.14	0.087	O	|	|	|	|	1.02
47.417	0.00	0.14	0.086	O	|	|	|	|	1.01
47.500	0.00	0.14	0.085	O	|	|	|	|	1.00
47.583	0.00	0.14	0.084	O	|	|	|	|	1.00
47.667	0.00	0.14	0.083	O	|	|	|	|	0.99
47.750	0.00	0.14	0.082	O	|	|	|	|	0.99
47.833	0.00	0.14	0.081	O	|	|	|	|	0.98
47.917	0.00	0.14	0.080	O	|	|	|	|	0.97
48.000	0.00	0.14	0.079	O	|	|	|	|	0.97
48.083	0.00	0.14	0.078	O	|	|	|	|	0.96
48.167	0.00	0.13	0.077	O	|	|	|	|	0.95
48.250	0.00	0.13	0.076	O	|	|	|	|	0.95
48.333	0.00	0.13	0.075	O	|	|	|	|	0.94
48.417	0.00	0.13	0.074	O	|	|	|	|	0.93
48.500	0.00	0.13	0.074	O	|	|	|	|	0.93
48.583	0.00	0.13	0.073	O	|	|	|	|	0.92
48.667	0.00	0.13	0.072	O	|	|	|	|	0.92
48.750	0.00	0.13	0.071	O	|	|	|	|	0.91
48.833	0.00	0.13	0.070	O	|	|	|	|	0.90
48.917	0.00	0.13	0.069	O	|	|	|	|	0.90
49.000	0.00	0.13	0.068	O	|	|	|	|	0.89
49.083	0.00	0.13	0.067	O	|	|	|	|	0.89
49.167	0.00	0.13	0.066	O	|	|	|	|	0.88
49.250	0.00	0.13	0.066	O	|	|	|	|	0.87
49.333	0.00	0.13	0.065	O	|	|	|	|	0.87
49.417	0.00	0.13	0.064	O	|	|	|	|	0.86
49.500	0.00	0.12	0.063	O	|	|	|	|	0.86
49.583	0.00	0.12	0.062	O	|	|	|	|	0.85
49.667	0.00	0.12	0.061	O	|	|	|	|	0.84
49.750	0.00	0.12	0.060	O	|	|	|	|	0.84
49.833	0.00	0.12	0.060	O	|	|	|	|	0.83
49.917	0.00	0.12	0.059	O	|	|	|	|	0.83
50.000	0.00	0.12	0.058	O	|	|	|	|	0.82
50.083	0.00	0.12	0.057	O	|	|	|	|	0.82
50.167	0.00	0.12	0.056	O	|	|	|	|	0.81
50.250	0.00	0.12	0.055	O	|	|	|	|	0.80
50.333	0.00	0.12	0.055	O	|	|	|	|	0.80
50.417	0.00	0.12	0.054	O	|	|	|	|	0.79
50.500	0.00	0.12	0.053	O	|	|	|	|	0.79
50.583	0.00	0.12	0.052	O	|	|	|	|	0.78
50.667	0.00	0.12	0.051	O	|	|	|	|	0.78
50.750	0.00	0.12	0.050	O	|	|	|	|	0.77
50.833	0.00	0.12	0.050	O	|	|	|	|	0.77
50.917	0.00	0.12	0.049	O	|	|	|	|	0.76
51.000	0.00	0.11	0.048	O	|	|	|	|	0.76
51.083	0.00	0.11	0.047	O	|	|	|	|	0.75
51.167	0.00	0.11	0.047	O	|	|	|	|	0.74
51.250	0.00	0.11	0.046	O	|	|	|	|	0.74
51.333	0.00	0.11	0.045	O	|	|	|	|	0.73
51.417	0.00	0.11	0.044	O	|	|	|	|	0.73
51.500	0.00	0.11	0.043	O	|	|	|	|	0.72
51.583	0.00	0.11	0.043	O	|	|	|	|	0.72
51.667	0.00	0.11	0.042	O	|	|	|	|	0.71
51.750	0.00	0.11	0.041	O	|	|	|	|	0.71
51.833	0.00	0.11	0.040	O	|	|	|	|	0.70
51.917	0.00	0.11	0.040	O	|	|	|	|	0.69
52.000	0.00	0.11	0.039	O	|	|	|	|	0.68
52.083	0.00	0.10	0.038	O	|	|	|	|	0.67
52.167	0.00	0.10	0.037	O	|	|	|	|	0.66
52.250	0.00	0.10	0.037	O	|	|	|	|	0.64
52.333	0.00	0.10	0.036	O	|	|	|	|	0.63

Remaining water in basin = 0.04 (Ac.Ft)

**********HYDROGRAPH DATA**********

Number of intervals = 628
Time interval = 5.0 (Min.)
Maximum/Peak flow rate = 0.735 (CFS)
Total volume = 1.709 (Ac.Ft)

```
        Status of hydrographs being held in storage
                   Stream 1  Stream 2  Stream 3  Stream 4  Stream 5
        Peak (CFS)      0.000     0.000     0.000     0.000     0.000
        Vol (Ac.Ft)      0.000     0.000     0.000     0.000     0.000
***************************************************************************

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                    FLOOD HYDROGRAPH ROUTING PROGRAM
                Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2004
                            Study date: 08/18/25

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 Program License Serial Number 5006

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 ******************** HYDROGRAPH INFORMATION **********************

                From study/file name: PROB3100.rte
 ****************************HYDROGRAPH DATA****************************
                Number of intervals =    49
                Time interval =    5.0 (Min.)
                Maximum/Peak flow rate =       26.839 (CFS)
                Total volume =       2.262 (Ac.Ft)
        Status of hydrographs being held in storage
                    Stream 1  Stream 2  Stream 3  Stream 4  Stream 5
        Peak (CFS)      0.000     0.000     0.000     0.000     0.000
        Vol (Ac.Ft)      0.000     0.000     0.000     0.000     0.000
 ***********************************************************************



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 Process from Point/Station        0.000 to Point/Station        0.000
 **** RETARDING BASIN ROUTING ****
 _________________________________________________________________________

 User entry of depth-outflow-storage data
 ---------------------------------------------------------------------
 Total number of inflow hydrograph intervals = 49
 Hydrograph time unit =  5.000 (Min.)
 Initial depth in storage basin =   0.00(Ft.)
 ---------------------------------------------------------------------
 ---------------------------------------------------------------------
 Initial basin depth =   0.00 (Ft.)
 Initial basin storage =      0.00 (Ac.Ft)
 Initial basin outflow =   0.00 (CFS)
 ---------------------------------------------------------------------
 ---------------------------------------------------------------------
 Depth vs. Storage and Depth vs. Discharge data:
  Basin Depth  Storage    Outflow   (S-O*dt/2)   (S+O*dt/2)
       (Ft.)    (Ac.Ft)    (CFS)     (Ac.Ft)    (Ac.Ft)
 ---------------------------------------------------------------------
    0.000      0.000      0.000      0.000        0.000
    0.700      0.040      0.109      0.040        0.040
    1.700      0.187      0.211      0.186        0.188
    2.400      0.365      0.269      0.364        0.366
    2.700      0.461      0.377      0.460        0.462
    3.700      0.829      0.537      0.827        0.831
    4.700      1.249      0.651      1.247        1.251
    5.700      1.723      0.746      1.720        1.726
    6.700      2.252      1.870      2.246        2.258
    7.700      2.841      2.376      2.833        2.849
    8.300      3.223     38.499      3.090        3.356
    8.700      3.491    113.554      3.100        3.882
    9.700      4.203    441.782      2.682        5.724
 ---------------------------------------------------------------------
                 Hydrograph Detention Basin Routing
 ---------------------------------------------------------------------

 Graph values: 'I'= unit inflow; 'O'=outflow at time shown
 ---------------------------------------------------------------------
  Time   Inflow  Outflow    Storage                                    Depth
```

(Hours)	(CFS)	(CFS)	(Ac.Ft)	.0	6.7	13.42	20.13	26.84	(Ft.)
0.083	0.24	0.00	0.001	O	|	|	|	|	0.01
0.167	1.23	0.02	0.006	OI	|	|	|	|	0.10
0.250	2.00	0.05	0.017	O I	|	|	|	|	0.29
0.333	2.24	0.08	0.031	O I	|	|	|	|	0.54
0.417	2.61	0.11	0.047	O I	|	|	|	|	0.75
0.500	3.01	0.13	0.065	O I	|	|	|	|	0.87
0.583	3.39	0.14	0.087	O I	|	|	|	|	1.02
0.667	3.51	0.16	0.109	O I	|	|	|	|	1.17
0.750	3.74	0.17	0.133	O I	|	|	|	|	1.33
0.833	3.93	0.19	0.158	O I	|	|	|	|	1.50
0.917	3.77	0.21	0.183	O I	|	|	|	|	1.68
1.000	3.73	0.22	0.208	O I	|	|	|	|	1.78
1.083	4.12	0.23	0.233	O I	|	|	|	|	1.88
1.167	4.93	0.24	0.263	O I	|	|	|	|	2.00
1.250	5.50	0.25	0.297	O I	|	|	|	|	2.13
1.333	5.66	0.26	0.334	O I	|	|	|	|	2.28
1.417	5.72	0.28	0.371	O I	|	|	|	|	2.42
1.500	6.52	0.32	0.411	O I	|	|	|	|	2.54
1.583	7.28	0.37	0.456	O I	|	|	|	|	2.69
1.667	7.34	0.40	0.504	O I	|	|	|	|	2.82
1.750	7.87	0.42	0.554	O I	|	|	|	|	2.95
1.833	9.08	0.44	0.609	O I	|	|	|	|	3.10
1.917	9.62	0.47	0.670	O I	|	|	|	|	3.27
2.000	9.50	0.50	0.733	O I	|	|	|	|	3.44
2.083	9.59	0.52	0.795	O I	|	|	|	|	3.61
2.167	10.29	0.55	0.860	O I	|	|	|	|	3.77
2.250	12.45	0.57	0.934	O I	|	|	|	|	3.95
2.333	14.59	0.59	1.023	O I	|	|	|	|	4.16
2.417	15.12	0.62	1.122	O I	|	|	|	|	4.40
2.500	19.22	0.65	1.235	O I	|	|	|	|	4.67
2.583	24.17	0.68	1.380	O I	|	|	|	|	4.98
2.667	26.84	0.71	1.551	O I	|	|	|	|	5.34
2.750	24.18	0.75	1.722	O I	|	|	|	|	5.70
2.833	16.48	1.03	1.856	|O I	|	|	|	|	5.95
2.917	10.97	1.21	1.943	|O I	|	|	|	|	6.11
3.000	8.46	1.34	2.001	|O I	|	|	|	|	6.22
3.083	6.14	1.42	2.041	|O I	|	|	|	|	6.30
3.167	4.06	1.48	2.067	|O I	|	|	|	|	6.35
3.250	2.82	1.50	2.080	|O I	|	|	|	|	6.37
3.333	2.07	1.52	2.086	|OI	|	|	|	|	6.39
3.417	1.49	1.52	2.088	|O	|	|	|	|	6.39
3.500	1.13	1.52	2.087	|O	|	|	|	|	6.39
3.583	0.79	1.51	2.083	IO	|	|	|	|	6.38
3.667	0.53	1.50	2.077	IO	|	|	|	|	6.37
3.750	0.28	1.48	2.070	IO	|	|	|	|	6.36
3.833	0.11	1.46	2.061	IO	|	|	|	|	6.34
3.917	0.07	1.44	2.051	IO	|	|	|	|	6.32
4.000	0.04	1.42	2.042	IO	|	|	|	|	6.30
4.083	0.01	1.40	2.032	IO	|	|	|	|	6.28
4.167	0.00	1.38	2.023	IO	|	|	|	|	6.27
4.250	0.00	1.36	2.013	IO	|	|	|	|	6.25
4.333	0.00	1.34	2.004	IO	|	|	|	|	6.23
4.417	0.00	1.32	1.995	IO	|	|	|	|	6.21
4.500	0.00	1.30	1.986	IO	|	|	|	|	6.20
4.583	0.00	1.29	1.977	IO	|	|	|	|	6.18
4.667	0.00	1.27	1.968	IO	|	|	|	|	6.16
4.750	0.00	1.25	1.959	IO	|	|	|	|	6.15
4.833	0.00	1.23	1.951	IO	|	|	|	|	6.13
4.917	0.00	1.21	1.942	IO	|	|	|	|	6.11
5.000	0.00	1.19	1.934	IO	|	|	|	|	6.10
5.083	0.00	1.18	1.926	IO	|	|	|	|	6.08
5.167	0.00	1.16	1.918	IO	|	|	|	|	6.07
5.250	0.00	1.14	1.910	IO	|	|	|	|	6.05
5.333	0.00	1.13	1.902	IO	|	|	|	|	6.04
5.417	0.00	1.11	1.894	IO	|	|	|	|	6.02
5.500	0.00	1.09	1.887	IO	|	|	|	|	6.01
5.583	0.00	1.08	1.879	IO	|	|	|	|	6.00
5.667	0.00	1.06	1.872	IO	|	|	|	|	5.98
5.750	0.00	1.05	1.865	IO	|	|	|	|	5.97
5.833	0.00	1.03	1.858	IO	|	|	|	|	5.95

5.917	0.00	1.02	1.851	IO					5.94
6.000	0.00	1.00	1.844	IO					5.93
6.083	0.00	0.99	1.837	IO					5.91
6.167	0.00	0.97	1.830	IO					5.90
6.250	0.00	0.96	1.823	IO					5.89
6.333	0.00	0.95	1.817	IO					5.88
6.417	0.00	0.93	1.810	IO					5.87
6.500	0.00	0.92	1.804	IO					5.85
6.583	0.00	0.90	1.798	IO					5.84
6.667	0.00	0.89	1.791	IO					5.83
6.750	0.00	0.88	1.785	IO					5.82
6.833	0.00	0.87	1.779	IO					5.81
6.917	0.00	0.85	1.773	IO					5.80
7.000	0.00	0.84	1.768	IO					5.78
7.083	0.00	0.83	1.762	O					5.77
7.167	0.00	0.82	1.756	O					5.76
7.250	0.00	0.80	1.751	O					5.75
7.333	0.00	0.79	1.745	O					5.74
7.417	0.00	0.78	1.740	O					5.73
7.500	0.00	0.77	1.734	O					5.72
7.583	0.00	0.76	1.729	O					5.71
7.667	0.00	0.75	1.724	O					5.70
7.750	0.00	0.75	1.719	O					5.69
7.833	0.00	0.74	1.714	O					5.68
7.917	0.00	0.74	1.708	O					5.67
8.000	0.00	0.74	1.703	O					5.66
8.083	0.00	0.74	1.698	O					5.65
8.167	0.00	0.74	1.693	O					5.64
8.250	0.00	0.74	1.688	O					5.63
8.333	0.00	0.74	1.683	O					5.62
8.417	0.00	0.74	1.678	O					5.60
8.500	0.00	0.74	1.673	O					5.59
8.583	0.00	0.73	1.668	O					5.58
8.667	0.00	0.73	1.663	O					5.57
8.750	0.00	0.73	1.658	O					5.56
8.833	0.00	0.73	1.653	O					5.55
8.917	0.00	0.73	1.648	O					5.54
9.000	0.00	0.73	1.643	O					5.53
9.083	0.00	0.73	1.638	O					5.52
9.167	0.00	0.73	1.633	O					5.51
9.250	0.00	0.73	1.628	O					5.50
9.333	0.00	0.73	1.623	O					5.49
9.417	0.00	0.72	1.618	O					5.48
9.500	0.00	0.72	1.613	O					5.47
9.583	0.00	0.72	1.608	O					5.46
9.667	0.00	0.72	1.603	O					5.45
9.750	0.00	0.72	1.598	O					5.44
9.833	0.00	0.72	1.593	O					5.42
9.917	0.00	0.72	1.588	O					5.41
10.000	0.00	0.72	1.583	O					5.40
10.083	0.00	0.72	1.578	O					5.39
10.167	0.00	0.72	1.573	O					5.38
10.250	0.00	0.71	1.568	O					5.37
10.333	0.00	0.71	1.563	O					5.36
10.417	0.00	0.71	1.558	O					5.35
10.500	0.00	0.71	1.553	O					5.34
10.583	0.00	0.71	1.548	O					5.33
10.667	0.00	0.71	1.543	O					5.32
10.750	0.00	0.71	1.539	O					5.31
10.833	0.00	0.71	1.534	O					5.30
10.917	0.00	0.71	1.529	O					5.29
11.000	0.00	0.71	1.524	O					5.28
11.083	0.00	0.71	1.519	O					5.27
11.167	0.00	0.70	1.514	O					5.26
11.250	0.00	0.70	1.509	O					5.25
11.333	0.00	0.70	1.504	O					5.24
11.417	0.00	0.70	1.500	O					5.23
11.500	0.00	0.70	1.495	O					5.22
11.583	0.00	0.70	1.490	O					5.21
11.667	0.00	0.70	1.485	O					5.20
11.750	0.00	0.70	1.480	O					5.19

11.833	0.00	0.70	1.476	O	|	|	|	|	5.18
11.917	0.00	0.70	1.471	O	|	|	|	|	5.17
12.000	0.00	0.69	1.466	O	|	|	|	|	5.16
12.083	0.00	0.69	1.461	O	|	|	|	|	5.15
12.167	0.00	0.69	1.456	O	|	|	|	|	5.14
12.250	0.00	0.69	1.452	O	|	|	|	|	5.13
12.333	0.00	0.69	1.447	O	|	|	|	|	5.12
12.417	0.00	0.69	1.442	O	|	|	|	|	5.11
12.500	0.00	0.69	1.437	O	|	|	|	|	5.10
12.583	0.00	0.69	1.433	O	|	|	|	|	5.09
12.667	0.00	0.69	1.428	O	|	|	|	|	5.08
12.750	0.00	0.69	1.423	O	|	|	|	|	5.07
12.833	0.00	0.68	1.419	O	|	|	|	|	5.06
12.917	0.00	0.68	1.414	O	|	|	|	|	5.05
13.000	0.00	0.68	1.409	O	|	|	|	|	5.04
13.083	0.00	0.68	1.404	O	|	|	|	|	5.03
13.167	0.00	0.68	1.400	O	|	|	|	|	5.02
13.250	0.00	0.68	1.395	O	|	|	|	|	5.01
13.333	0.00	0.68	1.390	O	|	|	|	|	5.00
13.417	0.00	0.68	1.386	O	|	|	|	|	4.99
13.500	0.00	0.68	1.381	O	|	|	|	|	4.98
13.583	0.00	0.68	1.376	O	|	|	|	|	4.97
13.667	0.00	0.68	1.372	O	|	|	|	|	4.96
13.750	0.00	0.67	1.367	O	|	|	|	|	4.95
13.833	0.00	0.67	1.362	O	|	|	|	|	4.94
13.917	0.00	0.67	1.358	O	|	|	|	|	4.93
14.000	0.00	0.67	1.353	O	|	|	|	|	4.92
14.083	0.00	0.67	1.348	O	|	|	|	|	4.91
14.167	0.00	0.67	1.344	O	|	|	|	|	4.90
14.250	0.00	0.67	1.339	O	|	|	|	|	4.89
14.333	0.00	0.67	1.335	O	|	|	|	|	4.88
14.417	0.00	0.67	1.330	O	|	|	|	|	4.87
14.500	0.00	0.67	1.325	O	|	|	|	|	4.86
14.583	0.00	0.67	1.321	O	|	|	|	|	4.85
14.667	0.00	0.66	1.316	O	|	|	|	|	4.84
14.750	0.00	0.66	1.312	O	|	|	|	|	4.83
14.833	0.00	0.66	1.307	O	|	|	|	|	4.82
14.917	0.00	0.66	1.303	O	|	|	|	|	4.81
15.000	0.00	0.66	1.298	O	|	|	|	|	4.80
15.083	0.00	0.66	1.293	O	|	|	|	|	4.79
15.167	0.00	0.66	1.289	O	|	|	|	|	4.78
15.250	0.00	0.66	1.284	O	|	|	|	|	4.77
15.333	0.00	0.66	1.280	O	|	|	|	|	4.77
15.417	0.00	0.66	1.275	O	|	|	|	|	4.76
15.500	0.00	0.66	1.271	O	|	|	|	|	4.75
15.583	0.00	0.65	1.266	O	|	|	|	|	4.74
15.667	0.00	0.65	1.262	O	|	|	|	|	4.73
15.750	0.00	0.65	1.257	O	|	|	|	|	4.72
15.833	0.00	0.65	1.253	O	|	|	|	|	4.71
15.917	0.00	0.65	1.248	O	|	|	|	|	4.70
16.000	0.00	0.65	1.244	O	|	|	|	|	4.69
16.083	0.00	0.65	1.239	O	|	|	|	|	4.68
16.167	0.00	0.65	1.235	O	|	|	|	|	4.67
16.250	0.00	0.65	1.230	O	|	|	|	|	4.66
16.333	0.00	0.64	1.226	O	|	|	|	|	4.65
16.417	0.00	0.64	1.222	O	|	|	|	|	4.63
16.500	0.00	0.64	1.217	O	|	|	|	|	4.62
16.583	0.00	0.64	1.213	O	|	|	|	|	4.61
16.667	0.00	0.64	1.208	O	|	|	|	|	4.60
16.750	0.00	0.64	1.204	O	|	|	|	|	4.59
16.833	0.00	0.64	1.200	O	|	|	|	|	4.58
16.917	0.00	0.64	1.195	O	|	|	|	|	4.57
17.000	0.00	0.64	1.191	O	|	|	|	|	4.56
17.083	0.00	0.63	1.186	O	|	|	|	|	4.55
17.167	0.00	0.63	1.182	O	|	|	|	|	4.54
17.250	0.00	0.63	1.178	O	|	|	|	|	4.53
17.333	0.00	0.63	1.173	O	|	|	|	|	4.52
17.417	0.00	0.63	1.169	O	|	|	|	|	4.51
17.500	0.00	0.63	1.165	O	|	|	|	|	4.50
17.583	0.00	0.63	1.160	O	|	|	|	|	4.49
17.667	0.00	0.63	1.156	O	|	|	|	|	4.48

17.750	0.00	0.62	1.152	O	|	|	|	|	4.47
17.833	0.00	0.62	1.147	O	|	|	|	|	4.46
17.917	0.00	0.62	1.143	O	|	|	|	|	4.45
18.000	0.00	0.62	1.139	O	|	|	|	|	4.44
18.083	0.00	0.62	1.135	O	|	|	|	|	4.43
18.167	0.00	0.62	1.130	O	|	|	|	|	4.42
18.250	0.00	0.62	1.126	O	|	|	|	|	4.41
18.333	0.00	0.62	1.122	O	|	|	|	|	4.40
18.417	0.00	0.62	1.118	O	|	|	|	|	4.39
18.500	0.00	0.61	1.113	O	|	|	|	|	4.38
18.583	0.00	0.61	1.109	O	|	|	|	|	4.37
18.667	0.00	0.61	1.105	O	|	|	|	|	4.36
18.750	0.00	0.61	1.101	O	|	|	|	|	4.35
18.833	0.00	0.61	1.096	O	|	|	|	|	4.34
18.917	0.00	0.61	1.092	O	|	|	|	|	4.33
19.000	0.00	0.61	1.088	O	|	|	|	|	4.32
19.083	0.00	0.61	1.084	O	|	|	|	|	4.31
19.167	0.00	0.61	1.080	O	|	|	|	|	4.30
19.250	0.00	0.60	1.076	O	|	|	|	|	4.29
19.333	0.00	0.60	1.071	O	|	|	|	|	4.28
19.417	0.00	0.60	1.067	O	|	|	|	|	4.27
19.500	0.00	0.60	1.063	O	|	|	|	|	4.26
19.583	0.00	0.60	1.059	O	|	|	|	|	4.25
19.667	0.00	0.60	1.055	O	|	|	|	|	4.24
19.750	0.00	0.60	1.051	O	|	|	|	|	4.23
19.833	0.00	0.60	1.047	O	|	|	|	|	4.22
19.917	0.00	0.59	1.043	O	|	|	|	|	4.21
20.000	0.00	0.59	1.038	O	|	|	|	|	4.20
20.083	0.00	0.59	1.034	O	|	|	|	|	4.19
20.167	0.00	0.59	1.030	O	|	|	|	|	4.18
20.250	0.00	0.59	1.026	O	|	|	|	|	4.17
20.333	0.00	0.59	1.022	O	|	|	|	|	4.16
20.417	0.00	0.59	1.018	O	|	|	|	|	4.15
20.500	0.00	0.59	1.014	O	|	|	|	|	4.14
20.583	0.00	0.59	1.010	O	|	|	|	|	4.13
20.667	0.00	0.59	1.006	O	|	|	|	|	4.12
20.750	0.00	0.58	1.002	O	|	|	|	|	4.11
20.833	0.00	0.58	0.998	O	|	|	|	|	4.10
20.917	0.00	0.58	0.994	O	|	|	|	|	4.09
21.000	0.00	0.58	0.990	O	|	|	|	|	4.08
21.083	0.00	0.58	0.986	O	|	|	|	|	4.07
21.167	0.00	0.58	0.982	O	|	|	|	|	4.06
21.250	0.00	0.58	0.978	O	|	|	|	|	4.05
21.333	0.00	0.58	0.974	O	|	|	|	|	4.05
21.417	0.00	0.58	0.970	O	|	|	|	|	4.04
21.500	0.00	0.57	0.966	O	|	|	|	|	4.03
21.583	0.00	0.57	0.962	O	|	|	|	|	4.02
21.667	0.00	0.57	0.958	O	|	|	|	|	4.01
21.750	0.00	0.57	0.954	O	|	|	|	|	4.00
21.833	0.00	0.57	0.950	O	|	|	|	|	3.99
21.917	0.00	0.57	0.946	O	|	|	|	|	3.98
22.000	0.00	0.57	0.942	O	|	|	|	|	3.97
22.083	0.00	0.57	0.939	O	|	|	|	|	3.96
22.167	0.00	0.57	0.935	O	|	|	|	|	3.95
22.250	0.00	0.56	0.931	O	|	|	|	|	3.94
22.333	0.00	0.56	0.927	O	|	|	|	|	3.93
22.417	0.00	0.56	0.923	O	|	|	|	|	3.92
22.500	0.00	0.56	0.919	O	|	|	|	|	3.91
22.583	0.00	0.56	0.915	O	|	|	|	|	3.91
22.667	0.00	0.56	0.911	O	|	|	|	|	3.90
22.750	0.00	0.56	0.908	O	|	|	|	|	3.89
22.833	0.00	0.56	0.904	O	|	|	|	|	3.88
22.917	0.00	0.56	0.900	O	|	|	|	|	3.87
23.000	0.00	0.56	0.896	O	|	|	|	|	3.86
23.083	0.00	0.55	0.892	O	|	|	|	|	3.85
23.167	0.00	0.55	0.888	O	|	|	|	|	3.84
23.250	0.00	0.55	0.885	O	|	|	|	|	3.83
23.333	0.00	0.55	0.881	O	|	|	|	|	3.82
23.417	0.00	0.55	0.877	O	|	|	|	|	3.81
23.500	0.00	0.55	0.873	O	|	|	|	|	3.81
23.583	0.00	0.55	0.869	O	|	|	|	|	3.80

23.667	0.00	0.55	0.866	O	|	|	|	|	3.79
23.750	0.00	0.55	0.862	O	|	|	|	|	3.78
23.833	0.00	0.54	0.858	O	|	|	|	|	3.77
23.917	0.00	0.54	0.854	O	|	|	|	|	3.76
24.000	0.00	0.54	0.851	O	|	|	|	|	3.75
24.083	0.00	0.54	0.847	O	|	|	|	|	3.74
24.167	0.00	0.54	0.843	O	|	|	|	|	3.73
24.250	0.00	0.54	0.840	O	|	|	|	|	3.73
24.333	0.00	0.54	0.836	O	|	|	|	|	3.72
24.417	0.00	0.54	0.832	O	|	|	|	|	3.71
24.500	0.00	0.54	0.828	O	|	|	|	|	3.70
24.583	0.00	0.54	0.825	O	|	|	|	|	3.69
24.667	0.00	0.53	0.821	O	|	|	|	|	3.68
24.750	0.00	0.53	0.817	O	|	|	|	|	3.67
24.833	0.00	0.53	0.814	O	|	|	|	|	3.66
24.917	0.00	0.53	0.810	O	|	|	|	|	3.65
25.000	0.00	0.53	0.806	O	|	|	|	|	3.64
25.083	0.00	0.53	0.803	O	|	|	|	|	3.63
25.167	0.00	0.52	0.799	O	|	|	|	|	3.62
25.250	0.00	0.52	0.796	O	|	|	|	|	3.61
25.333	0.00	0.52	0.792	O	|	|	|	|	3.60
25.417	0.00	0.52	0.788	O	|	|	|	|	3.59
25.500	0.00	0.52	0.785	O	|	|	|	|	3.58
25.583	0.00	0.52	0.781	O	|	|	|	|	3.57
25.667	0.00	0.51	0.778	O	|	|	|	|	3.56
25.750	0.00	0.51	0.774	O	|	|	|	|	3.55
25.833	0.00	0.51	0.771	O	|	|	|	|	3.54
25.917	0.00	0.51	0.767	O	|	|	|	|	3.53
26.000	0.00	0.51	0.764	O	|	|	|	|	3.52
26.083	0.00	0.51	0.760	O	|	|	|	|	3.51
26.167	0.00	0.51	0.757	O	|	|	|	|	3.50
26.250	0.00	0.50	0.753	O	|	|	|	|	3.49
26.333	0.00	0.50	0.750	O	|	|	|	|	3.48
26.417	0.00	0.50	0.746	O	|	|	|	|	3.48
26.500	0.00	0.50	0.743	O	|	|	|	|	3.47
26.583	0.00	0.50	0.739	O	|	|	|	|	3.46
26.667	0.00	0.50	0.736	O	|	|	|	|	3.45
26.750	0.00	0.50	0.733	O	|	|	|	|	3.44
26.833	0.00	0.49	0.729	O	|	|	|	|	3.43
26.917	0.00	0.49	0.726	O	|	|	|	|	3.42
27.000	0.00	0.49	0.722	O	|	|	|	|	3.41
27.083	0.00	0.49	0.719	O	|	|	|	|	3.40
27.167	0.00	0.49	0.716	O	|	|	|	|	3.39
27.250	0.00	0.49	0.712	O	|	|	|	|	3.38
27.333	0.00	0.48	0.709	O	|	|	|	|	3.37
27.417	0.00	0.48	0.706	O	|	|	|	|	3.36
27.500	0.00	0.48	0.702	O	|	|	|	|	3.36
27.583	0.00	0.48	0.699	O	|	|	|	|	3.35
27.667	0.00	0.48	0.696	O	|	|	|	|	3.34
27.750	0.00	0.48	0.692	O	|	|	|	|	3.33
27.833	0.00	0.48	0.689	O	|	|	|	|	3.32
27.917	0.00	0.47	0.686	O	|	|	|	|	3.31
28.000	0.00	0.47	0.683	O	|	|	|	|	3.30
28.083	0.00	0.47	0.679	O	|	|	|	|	3.29
28.167	0.00	0.47	0.676	O	|	|	|	|	3.28
28.250	0.00	0.47	0.673	O	|	|	|	|	3.28
28.333	0.00	0.47	0.670	O	|	|	|	|	3.27
28.417	0.00	0.47	0.666	O	|	|	|	|	3.26
28.500	0.00	0.46	0.663	O	|	|	|	|	3.25
28.583	0.00	0.46	0.660	O	|	|	|	|	3.24
28.667	0.00	0.46	0.657	O	|	|	|	|	3.23
28.750	0.00	0.46	0.654	O	|	|	|	|	3.22
28.833	0.00	0.46	0.650	O	|	|	|	|	3.21
28.917	0.00	0.46	0.647	O	|	|	|	|	3.21
29.000	0.00	0.46	0.644	O	|	|	|	|	3.20
29.083	0.00	0.46	0.641	O	|	|	|	|	3.19
29.167	0.00	0.45	0.638	O	|	|	|	|	3.18
29.250	0.00	0.45	0.635	O	|	|	|	|	3.17
29.333	0.00	0.45	0.632	O	|	|	|	|	3.16
29.417	0.00	0.45	0.628	O	|	|	|	|	3.16
29.500	0.00	0.45	0.625	O	|	|	|	|	3.15

29.583	0.00	0.45	0.622	O	|	|	|	|	3.14
29.667	0.00	0.45	0.619	O	|	|	|	|	3.13
29.750	0.00	0.44	0.616	O	|	|	|	|	3.12
29.833	0.00	0.44	0.613	O	|	|	|	|	3.11
29.917	0.00	0.44	0.610	O	|	|	|	|	3.11
30.000	0.00	0.44	0.607	O	|	|	|	|	3.10
30.083	0.00	0.44	0.604	O	|	|	|	|	3.09
30.167	0.00	0.44	0.601	O	|	|	|	|	3.08
30.250	0.00	0.44	0.598	O	|	|	|	|	3.07
30.333	0.00	0.44	0.595	O	|	|	|	|	3.06
30.417	0.00	0.43	0.592	O	|	|	|	|	3.06
30.500	0.00	0.43	0.589	O	|	|	|	|	3.05
30.583	0.00	0.43	0.586	O	|	|	|	|	3.04
30.667	0.00	0.43	0.583	O	|	|	|	|	3.03
30.750	0.00	0.43	0.580	O	|	|	|	|	3.02
30.833	0.00	0.43	0.577	O	|	|	|	|	3.02
30.917	0.00	0.43	0.574	O	|	|	|	|	3.01
31.000	0.00	0.42	0.571	O	|	|	|	|	3.00
31.083	0.00	0.42	0.568	O	|	|	|	|	2.99
31.167	0.00	0.42	0.565	O	|	|	|	|	2.98
31.250	0.00	0.42	0.563	O	|	|	|	|	2.98
31.333	0.00	0.42	0.560	O	|	|	|	|	2.97
31.417	0.00	0.42	0.557	O	|	|	|	|	2.96
31.500	0.00	0.42	0.554	O	|	|	|	|	2.95
31.583	0.00	0.42	0.551	O	|	|	|	|	2.94
31.667	0.00	0.41	0.548	O	|	|	|	|	2.94
31.750	0.00	0.41	0.545	O	|	|	|	|	2.93
31.833	0.00	0.41	0.542	O	|	|	|	|	2.92
31.917	0.00	0.41	0.540	O	|	|	|	|	2.91
32.000	0.00	0.41	0.537	O	|	|	|	|	2.91
32.083	0.00	0.41	0.534	O	|	|	|	|	2.90
32.167	0.00	0.41	0.531	O	|	|	|	|	2.89
32.250	0.00	0.41	0.528	O	|	|	|	|	2.88
32.333	0.00	0.41	0.526	O	|	|	|	|	2.88
32.417	0.00	0.40	0.523	O	|	|	|	|	2.87
32.500	0.00	0.40	0.520	O	|	|	|	|	2.86
32.583	0.00	0.40	0.517	O	|	|	|	|	2.85
32.667	0.00	0.40	0.514	O	|	|	|	|	2.85
32.750	0.00	0.40	0.512	O	|	|	|	|	2.84
32.833	0.00	0.40	0.509	O	|	|	|	|	2.83
32.917	0.00	0.40	0.506	O	|	|	|	|	2.82
33.000	0.00	0.40	0.503	O	|	|	|	|	2.82
33.083	0.00	0.39	0.501	O	|	|	|	|	2.81
33.167	0.00	0.39	0.498	O	|	|	|	|	2.80
33.250	0.00	0.39	0.495	O	|	|	|	|	2.79
33.333	0.00	0.39	0.493	O	|	|	|	|	2.79
33.417	0.00	0.39	0.490	O	|	|	|	|	2.78
33.500	0.00	0.39	0.487	O	|	|	|	|	2.77
33.583	0.00	0.39	0.485	O	|	|	|	|	2.76
33.667	0.00	0.39	0.482	O	|	|	|	|	2.76
33.750	0.00	0.38	0.479	O	|	|	|	|	2.75
33.833	0.00	0.38	0.477	O	|	|	|	|	2.74
33.917	0.00	0.38	0.474	O	|	|	|	|	2.74
34.000	0.00	0.38	0.471	O	|	|	|	|	2.73
34.083	0.00	0.38	0.469	O	|	|	|	|	2.72
34.167	0.00	0.38	0.466	O	|	|	|	|	2.71
34.250	0.00	0.38	0.464	O	|	|	|	|	2.71
34.333	0.00	0.38	0.461	O	|	|	|	|	2.70
34.417	0.00	0.37	0.458	O	|	|	|	|	2.69
34.500	0.00	0.37	0.456	O	|	|	|	|	2.68
34.583	0.00	0.37	0.453	O	|	|	|	|	2.68
34.667	0.00	0.37	0.451	O	|	|	|	|	2.67
34.750	0.00	0.36	0.448	O	|	|	|	|	2.66
34.833	0.00	0.36	0.446	O	|	|	|	|	2.65
34.917	0.00	0.36	0.443	O	|	|	|	|	2.64
35.000	0.00	0.35	0.441	O	|	|	|	|	2.64
35.083	0.00	0.35	0.438	O	|	|	|	|	2.63
35.167	0.00	0.35	0.436	O	|	|	|	|	2.62
35.250	0.00	0.35	0.434	O	|	|	|	|	2.61
35.333	0.00	0.34	0.431	O	|	|	|	|	2.61
35.417	0.00	0.34	0.429	O	|	|	|	|	2.60

35.500	0.00	0.34	0.427	O	|	|	|	|	2.59
35.583	0.00	0.34	0.424	O	|	|	|	|	2.58
35.667	0.00	0.33	0.422	O	|	|	|	|	2.58
35.750	0.00	0.33	0.420	O	|	|	|	|	2.57
35.833	0.00	0.33	0.417	O	|	|	|	|	2.56
35.917	0.00	0.33	0.415	O	|	|	|	|	2.56
36.000	0.00	0.32	0.413	O	|	|	|	|	2.55
36.083	0.00	0.32	0.411	O	|	|	|	|	2.54
36.167	0.00	0.32	0.408	O	|	|	|	|	2.54
36.250	0.00	0.32	0.406	O	|	|	|	|	2.53
36.333	0.00	0.31	0.404	O	|	|	|	|	2.52
36.417	0.00	0.31	0.402	O	|	|	|	|	2.52
36.500	0.00	0.31	0.400	O	|	|	|	|	2.51
36.583	0.00	0.31	0.398	O	|	|	|	|	2.50
36.667	0.00	0.30	0.396	O	|	|	|	|	2.50
36.750	0.00	0.30	0.394	O	|	|	|	|	2.49
36.833	0.00	0.30	0.391	O	|	|	|	|	2.48
36.917	0.00	0.30	0.389	O	|	|	|	|	2.48
37.000	0.00	0.29	0.387	O	|	|	|	|	2.47
37.083	0.00	0.29	0.385	O	|	|	|	|	2.46
37.167	0.00	0.29	0.383	O	|	|	|	|	2.46
37.250	0.00	0.29	0.381	O	|	|	|	|	2.45
37.333	0.00	0.29	0.379	O	|	|	|	|	2.44
37.417	0.00	0.28	0.377	O	|	|	|	|	2.44
37.500	0.00	0.28	0.375	O	|	|	|	|	2.43
37.583	0.00	0.28	0.374	O	|	|	|	|	2.43
37.667	0.00	0.28	0.372	O	|	|	|	|	2.42
37.750	0.00	0.27	0.370	O	|	|	|	|	2.41
37.833	0.00	0.27	0.368	O	|	|	|	|	2.41
37.917	0.00	0.27	0.366	O	|	|	|	|	2.40
38.000	0.00	0.27	0.364	O	|	|	|	|	2.40
38.083	0.00	0.27	0.362	O	|	|	|	|	2.39
38.167	0.00	0.27	0.360	O	|	|	|	|	2.38
38.250	0.00	0.27	0.359	O	|	|	|	|	2.37
38.333	0.00	0.27	0.357	O	|	|	|	|	2.37
38.417	0.00	0.27	0.355	O	|	|	|	|	2.36
38.500	0.00	0.27	0.353	O	|	|	|	|	2.35
38.583	0.00	0.26	0.351	O	|	|	|	|	2.35
38.667	0.00	0.26	0.349	O	|	|	|	|	2.34
38.750	0.00	0.26	0.348	O	|	|	|	|	2.33
38.833	0.00	0.26	0.346	O	|	|	|	|	2.32
38.917	0.00	0.26	0.344	O	|	|	|	|	2.32
39.000	0.00	0.26	0.342	O	|	|	|	|	2.31
39.083	0.00	0.26	0.340	O	|	|	|	|	2.30
39.167	0.00	0.26	0.339	O	|	|	|	|	2.30
39.250	0.00	0.26	0.337	O	|	|	|	|	2.29
39.333	0.00	0.26	0.335	O	|	|	|	|	2.28
39.417	0.00	0.26	0.333	O	|	|	|	|	2.28
39.500	0.00	0.26	0.332	O	|	|	|	|	2.27
39.583	0.00	0.26	0.330	O	|	|	|	|	2.26
39.667	0.00	0.26	0.328	O	|	|	|	|	2.25
39.750	0.00	0.26	0.326	O	|	|	|	|	2.25
39.833	0.00	0.26	0.324	O	|	|	|	|	2.24
39.917	0.00	0.26	0.323	O	|	|	|	|	2.23
40.000	0.00	0.25	0.321	O	|	|	|	|	2.23
40.083	0.00	0.25	0.319	O	|	|	|	|	2.22
40.167	0.00	0.25	0.317	O	|	|	|	|	2.21
40.250	0.00	0.25	0.316	O	|	|	|	|	2.21
40.333	0.00	0.25	0.314	O	|	|	|	|	2.20
40.417	0.00	0.25	0.312	O	|	|	|	|	2.19
40.500	0.00	0.25	0.310	O	|	|	|	|	2.19
40.583	0.00	0.25	0.309	O	|	|	|	|	2.18
40.667	0.00	0.25	0.307	O	|	|	|	|	2.17
40.750	0.00	0.25	0.305	O	|	|	|	|	2.17
40.833	0.00	0.25	0.304	O	|	|	|	|	2.16
40.917	0.00	0.25	0.302	O	|	|	|	|	2.15
41.000	0.00	0.25	0.300	O	|	|	|	|	2.14
41.083	0.00	0.25	0.298	O	|	|	|	|	2.14
41.167	0.00	0.25	0.297	O	|	|	|	|	2.13
41.250	0.00	0.25	0.295	O	|	|	|	|	2.12
41.333	0.00	0.25	0.293	O	|	|	|	|	2.12

41.417	0.00	0.25	0.292	O	|	|	|	|	2.11
41.500	0.00	0.24	0.290	O	|	|	|	|	2.10
41.583	0.00	0.24	0.288	O	|	|	|	|	2.10
41.667	0.00	0.24	0.287	O	|	|	|	|	2.09
41.750	0.00	0.24	0.285	O	|	|	|	|	2.09
41.833	0.00	0.24	0.283	O	|	|	|	|	2.08
41.917	0.00	0.24	0.282	O	|	|	|	|	2.07
42.000	0.00	0.24	0.280	O	|	|	|	|	2.07
42.083	0.00	0.24	0.278	O	|	|	|	|	2.06
42.167	0.00	0.24	0.277	O	|	|	|	|	2.05
42.250	0.00	0.24	0.275	O	|	|	|	|	2.05
42.333	0.00	0.24	0.273	O	|	|	|	|	2.04
42.417	0.00	0.24	0.272	O	|	|	|	|	2.03
42.500	0.00	0.24	0.270	O	|	|	|	|	2.03
42.583	0.00	0.24	0.268	O	|	|	|	|	2.02
42.667	0.00	0.24	0.267	O	|	|	|	|	2.01
42.750	0.00	0.24	0.265	O	|	|	|	|	2.01
42.833	0.00	0.24	0.264	O	|	|	|	|	2.00
42.917	0.00	0.24	0.262	O	|	|	|	|	1.99
43.000	0.00	0.23	0.260	O	|	|	|	|	1.99
43.083	0.00	0.23	0.259	O	|	|	|	|	1.98
43.167	0.00	0.23	0.257	O	|	|	|	|	1.98
43.250	0.00	0.23	0.255	O	|	|	|	|	1.97
43.333	0.00	0.23	0.254	O	|	|	|	|	1.96
43.417	0.00	0.23	0.252	O	|	|	|	|	1.96
43.500	0.00	0.23	0.251	O	|	|	|	|	1.95
43.583	0.00	0.23	0.249	O	|	|	|	|	1.94
43.667	0.00	0.23	0.247	O	|	|	|	|	1.94
43.750	0.00	0.23	0.246	O	|	|	|	|	1.93
43.833	0.00	0.23	0.244	O	|	|	|	|	1.93
43.917	0.00	0.23	0.243	O	|	|	|	|	1.92
44.000	0.00	0.23	0.241	O	|	|	|	|	1.91
44.083	0.00	0.23	0.240	O	|	|	|	|	1.91
44.167	0.00	0.23	0.238	O	|	|	|	|	1.90
44.250	0.00	0.23	0.236	O	|	|	|	|	1.89
44.333	0.00	0.23	0.235	O	|	|	|	|	1.89
44.417	0.00	0.23	0.233	O	|	|	|	|	1.88
44.500	0.00	0.23	0.232	O	|	|	|	|	1.88
44.583	0.00	0.23	0.230	O	|	|	|	|	1.87
44.667	0.00	0.22	0.229	O	|	|	|	|	1.86
44.750	0.00	0.22	0.227	O	|	|	|	|	1.86
44.833	0.00	0.22	0.226	O	|	|	|	|	1.85
44.917	0.00	0.22	0.224	O	|	|	|	|	1.85
45.000	0.00	0.22	0.222	O	|	|	|	|	1.84
45.083	0.00	0.22	0.221	O	|	|	|	|	1.83
45.167	0.00	0.22	0.219	O	|	|	|	|	1.83
45.250	0.00	0.22	0.218	O	|	|	|	|	1.82
45.333	0.00	0.22	0.216	O	|	|	|	|	1.82
45.417	0.00	0.22	0.215	O	|	|	|	|	1.81
45.500	0.00	0.22	0.213	O	|	|	|	|	1.80
45.583	0.00	0.22	0.212	O	|	|	|	|	1.80
45.667	0.00	0.22	0.210	O	|	|	|	|	1.79
45.750	0.00	0.22	0.209	O	|	|	|	|	1.79
45.833	0.00	0.22	0.207	O	|	|	|	|	1.78
45.917	0.00	0.22	0.206	O	|	|	|	|	1.77
46.000	0.00	0.22	0.204	O	|	|	|	|	1.77
46.083	0.00	0.22	0.203	O	|	|	|	|	1.76
46.167	0.00	0.22	0.201	O	|	|	|	|	1.76
46.250	0.00	0.22	0.200	O	|	|	|	|	1.75
46.333	0.00	0.21	0.198	O	|	|	|	|	1.74
46.417	0.00	0.21	0.197	O	|	|	|	|	1.74
46.500	0.00	0.21	0.195	O	|	|	|	|	1.73
46.583	0.00	0.21	0.194	O	|	|	|	|	1.73
46.667	0.00	0.21	0.192	O	|	|	|	|	1.72
46.750	0.00	0.21	0.191	O	|	|	|	|	1.72
46.833	0.00	0.21	0.190	O	|	|	|	|	1.71
46.917	0.00	0.21	0.188	O	|	|	|	|	1.70
47.000	0.00	0.21	0.187	O	|	|	|	|	1.70
47.083	0.00	0.21	0.185	O	|	|	|	|	1.69
47.167	0.00	0.21	0.184	O	|	|	|	|	1.68
47.250	0.00	0.21	0.182	O	|	|	|	|	1.67

47.333	0.00	0.21	0.181	O					1.66
47.417	0.00	0.21	0.179	O					1.65
47.500	0.00	0.20	0.178	O					1.64
47.583	0.00	0.20	0.177	O					1.63
47.667	0.00	0.20	0.175	O					1.62
47.750	0.00	0.20	0.174	O					1.61
47.833	0.00	0.20	0.172	O					1.60
47.917	0.00	0.20	0.171	O					1.59
48.000	0.00	0.20	0.170	O					1.58
48.083	0.00	0.20	0.168	O					1.57
48.167	0.00	0.20	0.167	O					1.56
48.250	0.00	0.20	0.166	O					1.55
48.333	0.00	0.20	0.164	O					1.55
48.417	0.00	0.19	0.163	O					1.54
48.500	0.00	0.19	0.162	O					1.53
48.583	0.00	0.19	0.160	O					1.52
48.667	0.00	0.19	0.159	O					1.51
48.750	0.00	0.19	0.158	O					1.50
48.833	0.00	0.19	0.156	O					1.49
48.917	0.00	0.19	0.155	O					1.48
49.000	0.00	0.19	0.154	O					1.47
49.083	0.00	0.19	0.152	O					1.46
49.167	0.00	0.19	0.151	O					1.46
49.250	0.00	0.19	0.150	O					1.45
49.333	0.00	0.18	0.149	O					1.44
49.417	0.00	0.18	0.147	O					1.43
49.500	0.00	0.18	0.146	O					1.42
49.583	0.00	0.18	0.145	O					1.41
49.667	0.00	0.18	0.144	O					1.40
49.750	0.00	0.18	0.142	O					1.40
49.833	0.00	0.18	0.141	O					1.39
49.917	0.00	0.18	0.140	O					1.38
50.000	0.00	0.18	0.139	O					1.37
50.083	0.00	0.18	0.137	O					1.36
50.167	0.00	0.18	0.136	O					1.35
50.250	0.00	0.17	0.135	O					1.35
50.333	0.00	0.17	0.134	O					1.34
50.417	0.00	0.17	0.133	O					1.33
50.500	0.00	0.17	0.131	O					1.32
50.583	0.00	0.17	0.130	O					1.31
50.667	0.00	0.17	0.129	O					1.31
50.750	0.00	0.17	0.128	O					1.30
50.833	0.00	0.17	0.127	O					1.29
50.917	0.00	0.17	0.126	O					1.28
51.000	0.00	0.17	0.124	O					1.27
51.083	0.00	0.17	0.123	O					1.27
51.167	0.00	0.17	0.122	O					1.26
51.250	0.00	0.17	0.121	O					1.25
51.333	0.00	0.16	0.120	O					1.24
51.417	0.00	0.16	0.119	O					1.24
51.500	0.00	0.16	0.118	O					1.23
51.583	0.00	0.16	0.116	O					1.22
51.667	0.00	0.16	0.115	O					1.21
51.750	0.00	0.16	0.114	O					1.20
51.833	0.00	0.16	0.113	O					1.20
51.917	0.00	0.16	0.112	O					1.19
52.000	0.00	0.16	0.111	O					1.18
52.083	0.00	0.16	0.110	O					1.18
52.167	0.00	0.16	0.109	O					1.17
52.250	0.00	0.16	0.108	O					1.16
52.333	0.00	0.16	0.107	O					1.15
52.417	0.00	0.15	0.106	O					1.15
52.500	0.00	0.15	0.104	O					1.14
52.583	0.00	0.15	0.103	O					1.13
52.667	0.00	0.15	0.102	O					1.12
52.750	0.00	0.15	0.101	O					1.12
52.833	0.00	0.15	0.100	O					1.11
52.917	0.00	0.15	0.099	O					1.10
53.000	0.00	0.15	0.098	O					1.10
53.083	0.00	0.15	0.097	O					1.09
53.167	0.00	0.15	0.096	O					1.08

53.250	0.00	0.15	0.095	O					1.08
53.333	0.00	0.15	0.094	O					1.07
53.417	0.00	0.15	0.093	O					1.06
53.500	0.00	0.15	0.092	O					1.05
53.583	0.00	0.14	0.091	O					1.05
53.667	0.00	0.14	0.090	O					1.04
53.750	0.00	0.14	0.089	O					1.03
53.833	0.00	0.14	0.088	O					1.03
53.917	0.00	0.14	0.087	O					1.02
54.000	0.00	0.14	0.086	O					1.01
54.083	0.00	0.14	0.085	O					1.01
54.167	0.00	0.14	0.084	O					1.00
54.250	0.00	0.14	0.083	O					0.99
54.333	0.00	0.14	0.082	O					0.99
54.417	0.00	0.14	0.081	O					0.98
54.500	0.00	0.14	0.080	O					0.98
54.583	0.00	0.14	0.080	O					0.97
54.667	0.00	0.14	0.079	O					0.96
54.750	0.00	0.14	0.078	O					0.96
54.833	0.00	0.13	0.077	O					0.95
54.917	0.00	0.13	0.076	O					0.94
55.000	0.00	0.13	0.075	O					0.94
55.083	0.00	0.13	0.074	O					0.93
55.167	0.00	0.13	0.073	O					0.92
55.250	0.00	0.13	0.072	O					0.92
55.333	0.00	0.13	0.071	O					0.91
55.417	0.00	0.13	0.070	O					0.91
55.500	0.00	0.13	0.069	O					0.90
55.583	0.00	0.13	0.069	O					0.89
55.667	0.00	0.13	0.068	O					0.89
55.750	0.00	0.13	0.067	O					0.88
55.833	0.00	0.13	0.066	O					0.88
55.917	0.00	0.13	0.065	O					0.87
56.000	0.00	0.13	0.064	O					0.86
56.083	0.00	0.13	0.063	O					0.86
56.167	0.00	0.12	0.062	O					0.85
56.250	0.00	0.12	0.062	O					0.85
56.333	0.00	0.12	0.061	O					0.84
56.417	0.00	0.12	0.060	O					0.84
56.500	0.00	0.12	0.059	O					0.83
56.583	0.00	0.12	0.058	O					0.82
56.667	0.00	0.12	0.057	O					0.82
56.750	0.00	0.12	0.057	O					0.81
56.833	0.00	0.12	0.056	O					0.81
56.917	0.00	0.12	0.055	O					0.80
57.000	0.00	0.12	0.054	O					0.80
57.083	0.00	0.12	0.053	O					0.79
57.167	0.00	0.12	0.052	O					0.78
57.250	0.00	0.12	0.052	O					0.78
57.333	0.00	0.12	0.051	O					0.77
57.417	0.00	0.12	0.050	O					0.77
57.500	0.00	0.12	0.049	O					0.76
57.583	0.00	0.11	0.048	O					0.76
57.667	0.00	0.11	0.048	O					0.75
57.750	0.00	0.11	0.047	O					0.75
57.833	0.00	0.11	0.046	O					0.74
57.917	0.00	0.11	0.045	O					0.74
58.000	0.00	0.11	0.045	O					0.73
58.083	0.00	0.11	0.044	O					0.73
58.167	0.00	0.11	0.043	O					0.72
58.250	0.00	0.11	0.042	O					0.72
58.333	0.00	0.11	0.041	O					0.71
58.417	0.00	0.11	0.041	O					0.71
58.500	0.00	0.11	0.040	O					0.70
58.583	0.00	0.11	0.039	O					0.69
58.667	0.00	0.10	0.039	O					0.67
58.750	0.00	0.10	0.038	O					0.66
58.833	0.00	0.10	0.037	O					0.65
58.917	0.00	0.10	0.036	O					0.64

```
Remaining water in basin =    0.04 (Ac.Ft)


**************************HYDROGRAPH DATA**************************
               Number of intervals =   707
               Time interval =    5.0 (Min.)
               Maximum/Peak flow rate =        1.522 (CFS)
               Total volume =       2.226 (Ac.Ft)
       Status of hydrographs being held in storage
                    Stream 1  Stream 2  Stream 3  Stream 4  Stream 5
       Peak (CFS)      0.000     0.000     0.000     0.000     0.000
       Vol (Ac.Ft)      0.000     0.000     0.000     0.000     0.000
*******************************************************************

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                    FLOOD HYDROGRAPH ROUTING PROGRAM
                Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2004
                            Study date: 08/18/25

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 Program License Serial Number 5006

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 ********************* HYDROGRAPH INFORMATION **********************

                From study/file name: PROB6100.rte
 ****************************HYDROGRAPH DATA****************************
                Number of intervals =    85
                Time interval =    5.0 (Min.)
                Maximum/Peak flow rate =       26.535 (CFS)
                Total volume =       3.196 (Ac.Ft)
        Status of hydrographs being held in storage
                    Stream 1  Stream 2  Stream 3  Stream 4  Stream 5
        Peak (CFS)      0.000     0.000     0.000     0.000     0.000
        Vol (Ac.Ft)      0.000     0.000     0.000     0.000     0.000
 *********************************************************************



 +++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
 Process from Point/Station        0.000 to Point/Station        0.000
 **** RETARDING BASIN ROUTING ****
 _____________________________________________________________________

 User entry of depth-outflow-storage data
 ---------------------------------------------------------------------
 Total number of inflow hydrograph intervals = 85
 Hydrograph time unit =  5.000 (Min.)
 Initial depth in storage basin =   0.00(Ft.)
 ---------------------------------------------------------------------
 ---------------------------------------------------------------------
 Initial basin depth =   0.00 (Ft.)
 Initial basin storage =      0.00 (Ac.Ft)
 Initial basin outflow =   0.00 (CFS)
 ---------------------------------------------------------------------
 ---------------------------------------------------------------------
 Depth vs. Storage and Depth vs. Discharge data:
  Basin Depth  Storage    Outflow   (S-O*dt/2)   (S+O*dt/2)
       (Ft.)    (Ac.Ft)    (CFS)     (Ac.Ft)    (Ac.Ft)
 ---------------------------------------------------------------------
    0.000      0.000      0.000      0.000        0.000
    0.700      0.040      0.109      0.040        0.040
    1.700      0.187      0.211      0.186        0.188
    2.400      0.365      0.269      0.364        0.366
    2.700      0.461      0.377      0.460        0.462
    3.700      0.829      0.537      0.827        0.831
    4.700      1.249      0.651      1.247        1.251
    5.700      1.723      0.746      1.720        1.726
    6.700      2.252      1.870      2.246        2.258
    7.700      2.841      2.376      2.833        2.849
    8.300      3.223     38.499      3.090        3.356
    8.700      3.491    113.554      3.100        3.882
    9.700      4.203    441.782      2.682        5.724
 ---------------------------------------------------------------------
                 Hydrograph Detention Basin Routing
 ---------------------------------------------------------------------

 Graph values: 'I'= unit inflow; 'O'=outflow at time shown
 ---------------------------------------------------------------------
  Time   Inflow  Outflow    Storage                                    Depth
```

(Hours)	(CFS)	(CFS)	(Ac.Ft)	.0	6.6	13.27	19.90	26.53	(Ft.)
0.083	0.14	0.00	0.000	O	|	|	|	|	0.01
0.167	0.74	0.01	0.003	O	|	|	|	|	0.06
0.250	1.32	0.03	0.010	OI	|	|	|	|	0.18
0.333	1.60	0.05	0.020	OI	|	|	|	|	0.35
0.417	1.74	0.08	0.031	O I	|	|	|	|	0.55
0.500	1.86	0.11	0.043	O I	|	|	|	|	0.72
0.583	2.04	0.12	0.056	O I	|	|	|	|	0.81
0.667	2.18	0.13	0.069	O I	|	|	|	|	0.90
0.750	2.26	0.14	0.084	O I	|	|	|	|	1.00
0.833	2.31	0.15	0.098	O I	|	|	|	|	1.10
0.917	2.35	0.16	0.113	O I	|	|	|	|	1.20
1.000	2.40	0.17	0.128	O I	|	|	|	|	1.30
1.083	2.53	0.18	0.144	O I	|	|	|	|	1.41
1.167	2.65	0.19	0.161	O I	|	|	|	|	1.52
1.250	2.69	0.20	0.178	O I	|	|	|	|	1.64
1.333	2.72	0.21	0.195	O I	|	|	|	|	1.73
1.417	2.73	0.22	0.212	O I	|	|	|	|	1.80
1.500	2.75	0.22	0.230	O I	|	|	|	|	1.87
1.583	2.76	0.23	0.247	O I	|	|	|	|	1.94
1.667	2.76	0.24	0.264	O I	|	|	|	|	2.00
1.750	2.77	0.24	0.282	O I	|	|	|	|	2.07
1.833	2.77	0.25	0.299	O I	|	|	|	|	2.14
1.917	2.77	0.25	0.316	O I	|	|	|	|	2.21
2.000	2.80	0.26	0.334	O I	|	|	|	|	2.28
2.083	2.89	0.26	0.352	O I	|	|	|	|	2.35
2.167	2.90	0.27	0.370	O I	|	|	|	|	2.41
2.250	2.95	0.29	0.388	O I	|	|	|	|	2.47
2.333	3.03	0.32	0.406	O I	|	|	|	|	2.53
2.417	3.06	0.34	0.425	O I	|	|	|	|	2.59
2.500	3.08	0.36	0.444	O I	|	|	|	|	2.65
2.583	3.09	0.38	0.463	O I	|	|	|	|	2.70
2.667	3.10	0.39	0.481	O I	|	|	|	|	2.76
2.750	3.13	0.39	0.500	O I	|	|	|	|	2.81
2.833	3.25	0.40	0.519	O I	|	|	|	|	2.86
2.917	3.35	0.41	0.539	O I	|	|	|	|	2.91
3.000	3.39	0.42	0.560	O I	|	|	|	|	2.97
3.083	3.41	0.43	0.580	O I	|	|	|	|	3.02
3.167	3.46	0.44	0.601	O I	|	|	|	|	3.08
3.250	3.58	0.45	0.622	O I	|	|	|	|	3.14
3.333	3.68	0.46	0.644	O I	|	|	|	|	3.20
3.417	3.77	0.47	0.667	O I	|	|	|	|	3.26
3.500	4.04	0.48	0.690	O I	|	|	|	|	3.32
3.583	4.49	0.49	0.716	O I	|	|	|	|	3.39
3.667	4.98	0.50	0.745	O I	|	|	|	|	3.47
3.750	5.34	0.51	0.777	O I	|	|	|	|	3.56
3.833	5.71	0.53	0.812	O I	|	|	|	|	3.65
3.917	6.05	0.54	0.849	O I	|	|	|	|	3.75
4.000	6.42	0.55	0.888	O I	|	|	|	|	3.84
4.083	6.75	0.56	0.929	O I	|	|	|	|	3.94
4.167	7.17	0.58	0.973	O I	|	|	|	|	4.04
4.250	7.73	0.59	1.021	O I	|	|	|	|	4.16
4.333	8.34	0.60	1.072	O I	|	|	|	|	4.28
4.417	8.98	0.62	1.127	O I	|	|	|	|	4.41
4.500	9.58	0.63	1.187	O I	|	|	|	|	4.55
4.583	10.01	0.65	1.250	O I	|	|	|	|	4.70
4.667	10.50	0.66	1.316	O I	|	|	|	|	4.84
4.750	11.10	0.68	1.386	O I	|	|	|	|	4.99
4.833	11.68	0.69	1.460	O I	|	|	|	|	5.14
4.917	12.11	0.71	1.537	O I	|	|	|	|	5.31
5.000	12.59	0.72	1.617	O I	|	|	|	|	5.48
5.083	13.41	0.74	1.701	O I	|	|	|	|	5.65
5.167	15.18	0.90	1.794	O I	|	|	|	|	5.83
5.250	17.62	1.12	1.900	O I	|	|	|	|	6.03
5.333	19.89	1.38	2.021	O I	|	|	|	|	6.26
5.417	22.08	1.66	2.155	O I	|	|	|	|	6.52
5.500	24.92	1.91	2.304	O I	|	|	|	|	6.79
5.583	26.53	2.06	2.468	O I	|	|	|	|	7.07
5.667	20.08	2.18	2.614	O I	|	|	|	|	7.31
5.750	12.23	2.26	2.710	O I	|	|	|	|	7.48
5.833	8.25	2.31	2.764	O I	|	|	|	|	7.57

5.917	6.10	2.34	2.798	| O I|	|	|	|	7.63
6.000	4.58	2.36	2.818	| O I |	|	|	|	7.66
6.083	3.38	2.37	2.830	| O I |	|	|	|	7.68
6.167	2.43	2.37	2.833	| O |	|	|	|	7.69
6.250	1.71	2.37	2.831	| O |	|	|	|	7.68
6.333	1.22	2.36	2.825	|IO |	|	|	|	7.67
6.417	0.86	2.35	2.816	|IO |	|	|	|	7.66
6.500	0.60	2.34	2.805	I O |	|	|	|	7.64
6.583	0.39	2.33	2.792	I O |	|	|	|	7.62
6.667	0.14	2.32	2.778	I O |	|	|	|	7.59
6.750	0.07	2.31	2.763	I O |	|	|	|	7.57
6.833	0.04	2.30	2.747	I O |	|	|	|	7.54
6.917	0.02	2.28	2.732	I O |	|	|	|	7.51
7.000	0.01	2.27	2.716	I O |	|	|	|	7.49
7.083	0.00	2.26	2.701	I O |	|	|	|	7.46
7.167	0.00	2.24	2.685	I O |	|	|	|	7.44
7.250	0.00	2.23	2.670	I O |	|	|	|	7.41
7.333	0.00	2.22	2.654	I O |	|	|	|	7.38
7.417	0.00	2.20	2.639	I O |	|	|	|	7.36
7.500	0.00	2.19	2.624	I O |	|	|	|	7.33
7.583	0.00	2.18	2.609	I O |	|	|	|	7.31
7.667	0.00	2.16	2.594	I O |	|	|	|	7.28
7.750	0.00	2.15	2.579	I O |	|	|	|	7.26
7.833	0.00	2.14	2.564	I O |	|	|	|	7.23
7.917	0.00	2.13	2.550	I O |	|	|	|	7.21
8.000	0.00	2.11	2.535	I O |	|	|	|	7.18
8.083	0.00	2.10	2.521	I O |	|	|	|	7.16
8.167	0.00	2.09	2.506	I O |	|	|	|	7.13
8.250	0.00	2.08	2.492	I O |	|	|	|	7.11
8.333	0.00	2.06	2.478	I O |	|	|	|	7.08
8.417	0.00	2.05	2.463	I O |	|	|	|	7.06
8.500	0.00	2.04	2.449	I O |	|	|	|	7.04
8.583	0.00	2.03	2.435	I O |	|	|	|	7.01
8.667	0.00	2.02	2.421	I O |	|	|	|	6.99
8.750	0.00	2.00	2.408	I O |	|	|	|	6.96
8.833	0.00	1.99	2.394	I O |	|	|	|	6.94
8.917	0.00	1.98	2.380	I O |	|	|	|	6.92
9.000	0.00	1.97	2.367	I O |	|	|	|	6.89
9.083	0.00	1.96	2.353	I O |	|	|	|	6.87
9.167	0.00	1.95	2.340	I O |	|	|	|	6.85
9.250	0.00	1.93	2.326	I O |	|	|	|	6.83
9.333	0.00	1.92	2.313	I O |	|	|	|	6.80
9.417	0.00	1.91	2.300	I O |	|	|	|	6.78
9.500	0.00	1.90	2.287	I O |	|	|	|	6.76
9.583	0.00	1.89	2.274	I O |	|	|	|	6.74
9.667	0.00	1.88	2.261	I O |	|	|	|	6.71
9.750	0.00	1.86	2.248	I O |	|	|	|	6.69
9.833	0.00	1.83	2.235	I O |	|	|	|	6.67
9.917	0.00	1.81	2.222	I O |	|	|	|	6.64
10.000	0.00	1.78	2.210	I O |	|	|	|	6.62
10.083	0.00	1.76	2.198	I O |	|	|	|	6.60
10.167	0.00	1.73	2.186	I O |	|	|	|	6.58
10.250	0.00	1.70	2.174	I O |	|	|	|	6.55
10.333	0.00	1.68	2.162	I O |	|	|	|	6.53
10.417	0.00	1.66	2.151	IO |	|	|	|	6.51
10.500	0.00	1.63	2.140	IO |	|	|	|	6.49
10.583	0.00	1.61	2.129	IO |	|	|	|	6.47
10.667	0.00	1.58	2.118	IO |	|	|	|	6.45
10.750	0.00	1.56	2.107	IO |	|	|	|	6.43
10.833	0.00	1.54	2.096	IO |	|	|	|	6.41
10.917	0.00	1.52	2.086	IO |	|	|	|	6.39
11.000	0.00	1.49	2.075	IO |	|	|	|	6.37
11.083	0.00	1.47	2.065	IO |	|	|	|	6.35
11.167	0.00	1.45	2.055	IO |	|	|	|	6.33
11.250	0.00	1.43	2.045	IO |	|	|	|	6.31
11.333	0.00	1.41	2.035	IO |	|	|	|	6.29
11.417	0.00	1.39	2.026	IO |	|	|	|	6.27
11.500	0.00	1.37	2.016	IO |	|	|	|	6.25
11.583	0.00	1.35	2.007	IO |	|	|	|	6.24
11.667	0.00	1.33	1.997	IO |	|	|	|	6.22
11.750	0.00	1.31	1.988	IO |	|	|	|	6.20

11.833	0.00	1.29	1.979	IO				6.18
11.917	0.00	1.27	1.971	IO				6.17
12.000	0.00	1.25	1.962	IO				6.15
12.083	0.00	1.24	1.953	IO				6.14
12.167	0.00	1.22	1.945	IO				6.12
12.250	0.00	1.20	1.937	IO				6.10
12.333	0.00	1.18	1.928	IO				6.09
12.417	0.00	1.17	1.920	IO				6.07
12.500	0.00	1.15	1.912	IO				6.06
12.583	0.00	1.13	1.904	IO				6.04
12.667	0.00	1.12	1.897	IO				6.03
12.750	0.00	1.10	1.889	IO				6.01
12.833	0.00	1.08	1.882	IO				6.00
12.917	0.00	1.07	1.874	IO				5.99
13.000	0.00	1.05	1.867	IO				5.97
13.083	0.00	1.04	1.860	IO				5.96
13.167	0.00	1.02	1.853	IO				5.94
13.250	0.00	1.01	1.846	IO				5.93
13.333	0.00	0.99	1.839	IO				5.92
13.417	0.00	0.98	1.832	IO				5.91
13.500	0.00	0.96	1.825	IO				5.89
13.583	0.00	0.95	1.819	IO				5.88
13.667	0.00	0.94	1.812	IO				5.87
13.750	0.00	0.92	1.806	IO				5.86
13.833	0.00	0.91	1.799	IO				5.84
13.917	0.00	0.90	1.793	IO				5.83
14.000	0.00	0.88	1.787	IO				5.82
14.083	0.00	0.87	1.781	IO				5.81
14.167	0.00	0.86	1.775	IO				5.80
14.250	0.00	0.84	1.769	IO				5.79
14.333	0.00	0.83	1.764	IO				5.78
14.417	0.00	0.82	1.758	O				5.77
14.500	0.00	0.81	1.752	O				5.76
14.583	0.00	0.80	1.747	O				5.74
14.667	0.00	0.78	1.741	O				5.73
14.750	0.00	0.77	1.736	O				5.72
14.833	0.00	0.76	1.731	O				5.71
14.917	0.00	0.75	1.725	O				5.70
15.000	0.00	0.75	1.720	O				5.69
15.083	0.00	0.74	1.715	O				5.68
15.167	0.00	0.74	1.710	O				5.67
15.250	0.00	0.74	1.705	O				5.66
15.333	0.00	0.74	1.700	O				5.65
15.417	0.00	0.74	1.695	O				5.64
15.500	0.00	0.74	1.690	O				5.63
15.583	0.00	0.74	1.684	O				5.62
15.667	0.00	0.74	1.679	O				5.61
15.750	0.00	0.74	1.674	O				5.60
15.833	0.00	0.74	1.669	O				5.59
15.917	0.00	0.73	1.664	O				5.58
16.000	0.00	0.73	1.659	O				5.57
16.083	0.00	0.73	1.654	O				5.55
16.167	0.00	0.73	1.649	O				5.54
16.250	0.00	0.73	1.644	O				5.53
16.333	0.00	0.73	1.639	O				5.52
16.417	0.00	0.73	1.634	O				5.51
16.500	0.00	0.73	1.629	O				5.50
16.583	0.00	0.73	1.624	O				5.49
16.667	0.00	0.73	1.619	O				5.48
16.750	0.00	0.72	1.614	O				5.47
16.833	0.00	0.72	1.609	O				5.46
16.917	0.00	0.72	1.604	O				5.45
17.000	0.00	0.72	1.599	O				5.44
17.083	0.00	0.72	1.594	O				5.43
17.167	0.00	0.72	1.589	O				5.42
17.250	0.00	0.72	1.584	O				5.41
17.333	0.00	0.72	1.579	O				5.40
17.417	0.00	0.72	1.574	O				5.39
17.500	0.00	0.72	1.569	O				5.38
17.583	0.00	0.71	1.564	O				5.37
17.667	0.00	0.71	1.560	O				5.36

17.750	0.00	0.71	1.555	O	|	|	|	|	5.34
17.833	0.00	0.71	1.550	O	|	|	|	|	5.33
17.917	0.00	0.71	1.545	O	|	|	|	|	5.32
18.000	0.00	0.71	1.540	O	|	|	|	|	5.31
18.083	0.00	0.71	1.535	O	|	|	|	|	5.30
18.167	0.00	0.71	1.530	O	|	|	|	|	5.29
18.250	0.00	0.71	1.525	O	|	|	|	|	5.28
18.333	0.00	0.71	1.520	O	|	|	|	|	5.27
18.417	0.00	0.70	1.516	O	|	|	|	|	5.26
18.500	0.00	0.70	1.511	O	|	|	|	|	5.25
18.583	0.00	0.70	1.506	O	|	|	|	|	5.24
18.667	0.00	0.70	1.501	O	|	|	|	|	5.23
18.750	0.00	0.70	1.496	O	|	|	|	|	5.22
18.833	0.00	0.70	1.491	O	|	|	|	|	5.21
18.917	0.00	0.70	1.487	O	|	|	|	|	5.20
19.000	0.00	0.70	1.482	O	|	|	|	|	5.19
19.083	0.00	0.70	1.477	O	|	|	|	|	5.18
19.167	0.00	0.70	1.472	O	|	|	|	|	5.17
19.250	0.00	0.69	1.467	O	|	|	|	|	5.16
19.333	0.00	0.69	1.463	O	|	|	|	|	5.15
19.417	0.00	0.69	1.458	O	|	|	|	|	5.14
19.500	0.00	0.69	1.453	O	|	|	|	|	5.13
19.583	0.00	0.69	1.448	O	|	|	|	|	5.12
19.667	0.00	0.69	1.444	O	|	|	|	|	5.11
19.750	0.00	0.69	1.439	O	|	|	|	|	5.10
19.833	0.00	0.69	1.434	O	|	|	|	|	5.09
19.917	0.00	0.69	1.429	O	|	|	|	|	5.08
20.000	0.00	0.69	1.425	O	|	|	|	|	5.07
20.083	0.00	0.69	1.420	O	|	|	|	|	5.06
20.167	0.00	0.68	1.415	O	|	|	|	|	5.05
20.250	0.00	0.68	1.410	O	|	|	|	|	5.04
20.333	0.00	0.68	1.406	O	|	|	|	|	5.03
20.417	0.00	0.68	1.401	O	|	|	|	|	5.02
20.500	0.00	0.68	1.396	O	|	|	|	|	5.01
20.583	0.00	0.68	1.392	O	|	|	|	|	5.00
20.667	0.00	0.68	1.387	O	|	|	|	|	4.99
20.750	0.00	0.68	1.382	O	|	|	|	|	4.98
20.833	0.00	0.68	1.378	O	|	|	|	|	4.97
20.917	0.00	0.68	1.373	O	|	|	|	|	4.96
21.000	0.00	0.67	1.368	O	|	|	|	|	4.95
21.083	0.00	0.67	1.364	O	|	|	|	|	4.94
21.167	0.00	0.67	1.359	O	|	|	|	|	4.93
21.250	0.00	0.67	1.354	O	|	|	|	|	4.92
21.333	0.00	0.67	1.350	O	|	|	|	|	4.91
21.417	0.00	0.67	1.345	O	|	|	|	|	4.90
21.500	0.00	0.67	1.341	O	|	|	|	|	4.89
21.583	0.00	0.67	1.336	O	|	|	|	|	4.88
21.667	0.00	0.67	1.331	O	|	|	|	|	4.87
21.750	0.00	0.67	1.327	O	|	|	|	|	4.86
21.833	0.00	0.67	1.322	O	|	|	|	|	4.85
21.917	0.00	0.66	1.318	O	|	|	|	|	4.84
22.000	0.00	0.66	1.313	O	|	|	|	|	4.84
22.083	0.00	0.66	1.308	O	|	|	|	|	4.83
22.167	0.00	0.66	1.304	O	|	|	|	|	4.82
22.250	0.00	0.66	1.299	O	|	|	|	|	4.81
22.333	0.00	0.66	1.295	O	|	|	|	|	4.80
22.417	0.00	0.66	1.290	O	|	|	|	|	4.79
22.500	0.00	0.66	1.286	O	|	|	|	|	4.78
22.583	0.00	0.66	1.281	O	|	|	|	|	4.77
22.667	0.00	0.66	1.277	O	|	|	|	|	4.76
22.750	0.00	0.66	1.272	O	|	|	|	|	4.75
22.833	0.00	0.65	1.268	O	|	|	|	|	4.74
22.917	0.00	0.65	1.263	O	|	|	|	|	4.73
23.000	0.00	0.65	1.259	O	|	|	|	|	4.72
23.083	0.00	0.65	1.254	O	|	|	|	|	4.71
23.167	0.00	0.65	1.250	O	|	|	|	|	4.70
23.250	0.00	0.65	1.245	O	|	|	|	|	4.69
23.333	0.00	0.65	1.241	O	|	|	|	|	4.68
23.417	0.00	0.65	1.236	O	|	|	|	|	4.67
23.500	0.00	0.65	1.232	O	|	|	|	|	4.66
23.583	0.00	0.65	1.227	O	|	|	|	|	4.65

23.667	0.00	0.64	1.223	O	|	|	|	|	4.64
23.750	0.00	0.64	1.218	O	|	|	|	|	4.63
23.833	0.00	0.64	1.214	O	|	|	|	|	4.62
23.917	0.00	0.64	1.210	O	|	|	|	|	4.61
24.000	0.00	0.64	1.205	O	|	|	|	|	4.60
24.083	0.00	0.64	1.201	O	|	|	|	|	4.59
24.167	0.00	0.64	1.196	O	|	|	|	|	4.57
24.250	0.00	0.64	1.192	O	|	|	|	|	4.56
24.333	0.00	0.63	1.188	O	|	|	|	|	4.55
24.417	0.00	0.63	1.183	O	|	|	|	|	4.54
24.500	0.00	0.63	1.179	O	|	|	|	|	4.53
24.583	0.00	0.63	1.175	O	|	|	|	|	4.52
24.667	0.00	0.63	1.170	O	|	|	|	|	4.51
24.750	0.00	0.63	1.166	O	|	|	|	|	4.50
24.833	0.00	0.63	1.162	O	|	|	|	|	4.49
24.917	0.00	0.63	1.157	O	|	|	|	|	4.48
25.000	0.00	0.62	1.153	O	|	|	|	|	4.47
25.083	0.00	0.62	1.149	O	|	|	|	|	4.46
25.167	0.00	0.62	1.144	O	|	|	|	|	4.45
25.250	0.00	0.62	1.140	O	|	|	|	|	4.44
25.333	0.00	0.62	1.136	O	|	|	|	|	4.43
25.417	0.00	0.62	1.132	O	|	|	|	|	4.42
25.500	0.00	0.62	1.127	O	|	|	|	|	4.41
25.583	0.00	0.62	1.123	O	|	|	|	|	4.40
25.667	0.00	0.62	1.119	O	|	|	|	|	4.39
25.750	0.00	0.61	1.115	O	|	|	|	|	4.38
25.833	0.00	0.61	1.110	O	|	|	|	|	4.37
25.917	0.00	0.61	1.106	O	|	|	|	|	4.36
26.000	0.00	0.61	1.102	O	|	|	|	|	4.35
26.083	0.00	0.61	1.098	O	|	|	|	|	4.34
26.167	0.00	0.61	1.094	O	|	|	|	|	4.33
26.250	0.00	0.61	1.089	O	|	|	|	|	4.32
26.333	0.00	0.61	1.085	O	|	|	|	|	4.31
26.417	0.00	0.61	1.081	O	|	|	|	|	4.30
26.500	0.00	0.60	1.077	O	|	|	|	|	4.29
26.583	0.00	0.60	1.073	O	|	|	|	|	4.28
26.667	0.00	0.60	1.069	O	|	|	|	|	4.27
26.750	0.00	0.60	1.064	O	|	|	|	|	4.26
26.833	0.00	0.60	1.060	O	|	|	|	|	4.25
26.917	0.00	0.60	1.056	O	|	|	|	|	4.24
27.000	0.00	0.60	1.052	O	|	|	|	|	4.23
27.083	0.00	0.60	1.048	O	|	|	|	|	4.22
27.167	0.00	0.60	1.044	O	|	|	|	|	4.21
27.250	0.00	0.59	1.040	O	|	|	|	|	4.20
27.333	0.00	0.59	1.036	O	|	|	|	|	4.19
27.417	0.00	0.59	1.032	O	|	|	|	|	4.18
27.500	0.00	0.59	1.027	O	|	|	|	|	4.17
27.583	0.00	0.59	1.023	O	|	|	|	|	4.16
27.667	0.00	0.59	1.019	O	|	|	|	|	4.15
27.750	0.00	0.59	1.015	O	|	|	|	|	4.14
27.833	0.00	0.59	1.011	O	|	|	|	|	4.13
27.917	0.00	0.59	1.007	O	|	|	|	|	4.12
28.000	0.00	0.58	1.003	O	|	|	|	|	4.11
28.083	0.00	0.58	0.999	O	|	|	|	|	4.11
28.167	0.00	0.58	0.995	O	|	|	|	|	4.10
28.250	0.00	0.58	0.991	O	|	|	|	|	4.09
28.333	0.00	0.58	0.987	O	|	|	|	|	4.08
28.417	0.00	0.58	0.983	O	|	|	|	|	4.07
28.500	0.00	0.58	0.979	O	|	|	|	|	4.06
28.583	0.00	0.58	0.975	O	|	|	|	|	4.05
28.667	0.00	0.58	0.971	O	|	|	|	|	4.04
28.750	0.00	0.57	0.967	O	|	|	|	|	4.03
28.833	0.00	0.57	0.963	O	|	|	|	|	4.02
28.917	0.00	0.57	0.959	O	|	|	|	|	4.01
29.000	0.00	0.57	0.955	O	|	|	|	|	4.00
29.083	0.00	0.57	0.951	O	|	|	|	|	3.99
29.167	0.00	0.57	0.948	O	|	|	|	|	3.98
29.250	0.00	0.57	0.944	O	|	|	|	|	3.97
29.333	0.00	0.57	0.940	O	|	|	|	|	3.96
29.417	0.00	0.57	0.936	O	|	|	|	|	3.95
29.500	0.00	0.56	0.932	O	|	|	|	|	3.95

29.583	0.00	0.56	0.928	O	|	|	|	|	3.94
29.667	0.00	0.56	0.924	O	|	|	|	|	3.93
29.750	0.00	0.56	0.920	O	|	|	|	|	3.92
29.833	0.00	0.56	0.916	O	|	|	|	|	3.91
29.917	0.00	0.56	0.913	O	|	|	|	|	3.90
30.000	0.00	0.56	0.909	O	|	|	|	|	3.89
30.083	0.00	0.56	0.905	O	|	|	|	|	3.88
30.167	0.00	0.56	0.901	O	|	|	|	|	3.87
30.250	0.00	0.56	0.897	O	|	|	|	|	3.86
30.333	0.00	0.55	0.893	O	|	|	|	|	3.85
30.417	0.00	0.55	0.890	O	|	|	|	|	3.84
30.500	0.00	0.55	0.886	O	|	|	|	|	3.84
30.583	0.00	0.55	0.882	O	|	|	|	|	3.83
30.667	0.00	0.55	0.878	O	|	|	|	|	3.82
30.750	0.00	0.55	0.874	O	|	|	|	|	3.81
30.833	0.00	0.55	0.871	O	|	|	|	|	3.80
30.917	0.00	0.55	0.867	O	|	|	|	|	3.79
31.000	0.00	0.55	0.863	O	|	|	|	|	3.78
31.083	0.00	0.55	0.859	O	|	|	|	|	3.77
31.167	0.00	0.54	0.856	O	|	|	|	|	3.76
31.250	0.00	0.54	0.852	O	|	|	|	|	3.75
31.333	0.00	0.54	0.848	O	|	|	|	|	3.75
31.417	0.00	0.54	0.844	O	|	|	|	|	3.74
31.500	0.00	0.54	0.841	O	|	|	|	|	3.73
31.583	0.00	0.54	0.837	O	|	|	|	|	3.72
31.667	0.00	0.54	0.833	O	|	|	|	|	3.71
31.750	0.00	0.54	0.829	O	|	|	|	|	3.70
31.833	0.00	0.54	0.826	O	|	|	|	|	3.69
31.917	0.00	0.53	0.822	O	|	|	|	|	3.68
32.000	0.00	0.53	0.818	O	|	|	|	|	3.67
32.083	0.00	0.53	0.815	O	|	|	|	|	3.66
32.167	0.00	0.53	0.811	O	|	|	|	|	3.65
32.250	0.00	0.53	0.807	O	|	|	|	|	3.64
32.333	0.00	0.53	0.804	O	|	|	|	|	3.63
32.417	0.00	0.52	0.800	O	|	|	|	|	3.62
32.500	0.00	0.52	0.797	O	|	|	|	|	3.61
32.583	0.00	0.52	0.793	O	|	|	|	|	3.60
32.667	0.00	0.52	0.789	O	|	|	|	|	3.59
32.750	0.00	0.52	0.786	O	|	|	|	|	3.58
32.833	0.00	0.52	0.782	O	|	|	|	|	3.57
32.917	0.00	0.52	0.779	O	|	|	|	|	3.56
33.000	0.00	0.51	0.775	O	|	|	|	|	3.55
33.083	0.00	0.51	0.772	O	|	|	|	|	3.54
33.167	0.00	0.51	0.768	O	|	|	|	|	3.53
33.250	0.00	0.51	0.765	O	|	|	|	|	3.53
33.333	0.00	0.51	0.761	O	|	|	|	|	3.52
33.417	0.00	0.51	0.758	O	|	|	|	|	3.51
33.500	0.00	0.50	0.754	O	|	|	|	|	3.50
33.583	0.00	0.50	0.751	O	|	|	|	|	3.49
33.667	0.00	0.50	0.747	O	|	|	|	|	3.48
33.750	0.00	0.50	0.744	O	|	|	|	|	3.47
33.833	0.00	0.50	0.740	O	|	|	|	|	3.46
33.917	0.00	0.50	0.737	O	|	|	|	|	3.45
34.000	0.00	0.50	0.734	O	|	|	|	|	3.44
34.083	0.00	0.49	0.730	O	|	|	|	|	3.43
34.167	0.00	0.49	0.727	O	|	|	|	|	3.42
34.250	0.00	0.49	0.723	O	|	|	|	|	3.41
34.333	0.00	0.49	0.720	O	|	|	|	|	3.40
34.417	0.00	0.49	0.717	O	|	|	|	|	3.39
34.500	0.00	0.49	0.713	O	|	|	|	|	3.39
34.583	0.00	0.49	0.710	O	|	|	|	|	3.38
34.667	0.00	0.48	0.707	O	|	|	|	|	3.37
34.750	0.00	0.48	0.703	O	|	|	|	|	3.36
34.833	0.00	0.48	0.700	O	|	|	|	|	3.35
34.917	0.00	0.48	0.697	O	|	|	|	|	3.34
35.000	0.00	0.48	0.693	O	|	|	|	|	3.33
35.083	0.00	0.48	0.690	O	|	|	|	|	3.32
35.167	0.00	0.48	0.687	O	|	|	|	|	3.31
35.250	0.00	0.47	0.683	O	|	|	|	|	3.30
35.333	0.00	0.47	0.680	O	|	|	|	|	3.30
35.417	0.00	0.47	0.677	O	|	|	|	|	3.29

35.500	0.00	0.47	0.674	O	|	|	|	|	3.28
35.583	0.00	0.47	0.671	O	|	|	|	|	3.27
35.667	0.00	0.47	0.667	O	|	|	|	|	3.26
35.750	0.00	0.47	0.664	O	|	|	|	|	3.25
35.833	0.00	0.46	0.661	O	|	|	|	|	3.24
35.917	0.00	0.46	0.658	O	|	|	|	|	3.23
36.000	0.00	0.46	0.655	O	|	|	|	|	3.23
36.083	0.00	0.46	0.651	O	|	|	|	|	3.22
36.167	0.00	0.46	0.648	O	|	|	|	|	3.21
36.250	0.00	0.46	0.645	O	|	|	|	|	3.20
36.333	0.00	0.46	0.642	O	|	|	|	|	3.19
36.417	0.00	0.45	0.639	O	|	|	|	|	3.18
36.500	0.00	0.45	0.636	O	|	|	|	|	3.17
36.583	0.00	0.45	0.633	O	|	|	|	|	3.17
36.667	0.00	0.45	0.629	O	|	|	|	|	3.16
36.750	0.00	0.45	0.626	O	|	|	|	|	3.15
36.833	0.00	0.45	0.623	O	|	|	|	|	3.14
36.917	0.00	0.45	0.620	O	|	|	|	|	3.13
37.000	0.00	0.44	0.617	O	|	|	|	|	3.12
37.083	0.00	0.44	0.614	O	|	|	|	|	3.12
37.167	0.00	0.44	0.611	O	|	|	|	|	3.11
37.250	0.00	0.44	0.608	O	|	|	|	|	3.10
37.333	0.00	0.44	0.605	O	|	|	|	|	3.09
37.417	0.00	0.44	0.602	O	|	|	|	|	3.08
37.500	0.00	0.44	0.599	O	|	|	|	|	3.07
37.583	0.00	0.44	0.596	O	|	|	|	|	3.07
37.667	0.00	0.43	0.593	O	|	|	|	|	3.06
37.750	0.00	0.43	0.590	O	|	|	|	|	3.05
37.833	0.00	0.43	0.587	O	|	|	|	|	3.04
37.917	0.00	0.43	0.584	O	|	|	|	|	3.03
38.000	0.00	0.43	0.581	O	|	|	|	|	3.03
38.083	0.00	0.43	0.578	O	|	|	|	|	3.02
38.167	0.00	0.43	0.575	O	|	|	|	|	3.01
38.250	0.00	0.43	0.572	O	|	|	|	|	3.00
38.333	0.00	0.42	0.569	O	|	|	|	|	2.99
38.417	0.00	0.42	0.566	O	|	|	|	|	2.99
38.500	0.00	0.42	0.563	O	|	|	|	|	2.98
38.583	0.00	0.42	0.560	O	|	|	|	|	2.97
38.667	0.00	0.42	0.558	O	|	|	|	|	2.96
38.750	0.00	0.42	0.555	O	|	|	|	|	2.95
38.833	0.00	0.42	0.552	O	|	|	|	|	2.95
38.917	0.00	0.42	0.549	O	|	|	|	|	2.94
39.000	0.00	0.41	0.546	O	|	|	|	|	2.93
39.083	0.00	0.41	0.543	O	|	|	|	|	2.92
39.167	0.00	0.41	0.540	O	|	|	|	|	2.92
39.250	0.00	0.41	0.538	O	|	|	|	|	2.91
39.333	0.00	0.41	0.535	O	|	|	|	|	2.90
39.417	0.00	0.41	0.532	O	|	|	|	|	2.89
39.500	0.00	0.41	0.529	O	|	|	|	|	2.89
39.583	0.00	0.41	0.526	O	|	|	|	|	2.88
39.667	0.00	0.40	0.524	O	|	|	|	|	2.87
39.750	0.00	0.40	0.521	O	|	|	|	|	2.86
39.833	0.00	0.40	0.518	O	|	|	|	|	2.85
39.917	0.00	0.40	0.515	O	|	|	|	|	2.85
40.000	0.00	0.40	0.513	O	|	|	|	|	2.84
40.083	0.00	0.40	0.510	O	|	|	|	|	2.83
40.167	0.00	0.40	0.507	O	|	|	|	|	2.83
40.250	0.00	0.40	0.504	O	|	|	|	|	2.82
40.333	0.00	0.39	0.502	O	|	|	|	|	2.81
40.417	0.00	0.39	0.499	O	|	|	|	|	2.80
40.500	0.00	0.39	0.496	O	|	|	|	|	2.80
40.583	0.00	0.39	0.493	O	|	|	|	|	2.79
40.667	0.00	0.39	0.491	O	|	|	|	|	2.78
40.750	0.00	0.39	0.488	O	|	|	|	|	2.77
40.833	0.00	0.39	0.485	O	|	|	|	|	2.77
40.917	0.00	0.39	0.483	O	|	|	|	|	2.76
41.000	0.00	0.39	0.480	O	|	|	|	|	2.75
41.083	0.00	0.38	0.477	O	|	|	|	|	2.74
41.167	0.00	0.38	0.475	O	|	|	|	|	2.74
41.250	0.00	0.38	0.472	O	|	|	|	|	2.73
41.333	0.00	0.38	0.470	O	|	|	|	|	2.72

41.417	0.00	0.38	0.467	O	|	|	|	|	2.72
41.500	0.00	0.38	0.464	O	|	|	|	|	2.71
41.583	0.00	0.38	0.462	O	|	|	|	|	2.70
41.667	0.00	0.37	0.459	O	|	|	|	|	2.69
41.750	0.00	0.37	0.457	O	|	|	|	|	2.69
41.833	0.00	0.37	0.454	O	|	|	|	|	2.68
41.917	0.00	0.37	0.451	O	|	|	|	|	2.67
42.000	0.00	0.36	0.449	O	|	|	|	|	2.66
42.083	0.00	0.36	0.446	O	|	|	|	|	2.65
42.167	0.00	0.36	0.444	O	|	|	|	|	2.65
42.250	0.00	0.36	0.442	O	|	|	|	|	2.64
42.333	0.00	0.35	0.439	O	|	|	|	|	2.63
42.417	0.00	0.35	0.437	O	|	|	|	|	2.62
42.500	0.00	0.35	0.434	O	|	|	|	|	2.62
42.583	0.00	0.34	0.432	O	|	|	|	|	2.61
42.667	0.00	0.34	0.430	O	|	|	|	|	2.60
42.750	0.00	0.34	0.427	O	|	|	|	|	2.59
42.833	0.00	0.34	0.425	O	|	|	|	|	2.59
42.917	0.00	0.33	0.423	O	|	|	|	|	2.58
43.000	0.00	0.33	0.420	O	|	|	|	|	2.57
43.083	0.00	0.33	0.418	O	|	|	|	|	2.57
43.167	0.00	0.33	0.416	O	|	|	|	|	2.56
43.250	0.00	0.32	0.414	O	|	|	|	|	2.55
43.333	0.00	0.32	0.411	O	|	|	|	|	2.54
43.417	0.00	0.32	0.409	O	|	|	|	|	2.54
43.500	0.00	0.32	0.407	O	|	|	|	|	2.53
43.583	0.00	0.31	0.405	O	|	|	|	|	2.52
43.667	0.00	0.31	0.403	O	|	|	|	|	2.52
43.750	0.00	0.31	0.400	O	|	|	|	|	2.51
43.833	0.00	0.31	0.398	O	|	|	|	|	2.50
43.917	0.00	0.30	0.396	O	|	|	|	|	2.50
44.000	0.00	0.30	0.394	O	|	|	|	|	2.49
44.083	0.00	0.30	0.392	O	|	|	|	|	2.48
44.167	0.00	0.30	0.390	O	|	|	|	|	2.48
44.250	0.00	0.29	0.388	O	|	|	|	|	2.47
44.333	0.00	0.29	0.386	O	|	|	|	|	2.47
44.417	0.00	0.29	0.384	O	|	|	|	|	2.46
44.500	0.00	0.29	0.382	O	|	|	|	|	2.45
44.583	0.00	0.29	0.380	O	|	|	|	|	2.45
44.667	0.00	0.28	0.378	O	|	|	|	|	2.44
44.750	0.00	0.28	0.376	O	|	|	|	|	2.43
44.833	0.00	0.28	0.374	O	|	|	|	|	2.43
44.917	0.00	0.28	0.372	O	|	|	|	|	2.42
45.000	0.00	0.27	0.370	O	|	|	|	|	2.42
45.083	0.00	0.27	0.368	O	|	|	|	|	2.41
45.167	0.00	0.27	0.367	O	|	|	|	|	2.40
45.250	0.00	0.27	0.365	O	|	|	|	|	2.40
45.333	0.00	0.27	0.363	O	|	|	|	|	2.39
45.417	0.00	0.27	0.361	O	|	|	|	|	2.38
45.500	0.00	0.27	0.359	O	|	|	|	|	2.38
45.583	0.00	0.27	0.357	O	|	|	|	|	2.37
45.667	0.00	0.27	0.355	O	|	|	|	|	2.36
45.750	0.00	0.27	0.354	O	|	|	|	|	2.36
45.833	0.00	0.26	0.352	O	|	|	|	|	2.35
45.917	0.00	0.26	0.350	O	|	|	|	|	2.34
46.000	0.00	0.26	0.348	O	|	|	|	|	2.33
46.083	0.00	0.26	0.346	O	|	|	|	|	2.33
46.167	0.00	0.26	0.345	O	|	|	|	|	2.32
46.250	0.00	0.26	0.343	O	|	|	|	|	2.31
46.333	0.00	0.26	0.341	O	|	|	|	|	2.31
46.417	0.00	0.26	0.339	O	|	|	|	|	2.30
46.500	0.00	0.26	0.337	O	|	|	|	|	2.29
46.583	0.00	0.26	0.336	O	|	|	|	|	2.28
46.667	0.00	0.26	0.334	O	|	|	|	|	2.28
46.750	0.00	0.26	0.332	O	|	|	|	|	2.27
46.833	0.00	0.26	0.330	O	|	|	|	|	2.26
46.917	0.00	0.26	0.328	O	|	|	|	|	2.26
47.000	0.00	0.26	0.327	O	|	|	|	|	2.25
47.083	0.00	0.26	0.325	O	|	|	|	|	2.24
47.167	0.00	0.26	0.323	O	|	|	|	|	2.24
47.250	0.00	0.25	0.321	O	|	|	|	|	2.23

47.333	0.00	0.25	0.320	O	|	|	|	|	2.22
47.417	0.00	0.25	0.318	O	|	|	|	|	2.21
47.500	0.00	0.25	0.316	O	|	|	|	|	2.21
47.583	0.00	0.25	0.314	O	|	|	|	|	2.20
47.667	0.00	0.25	0.313	O	|	|	|	|	2.19
47.750	0.00	0.25	0.311	O	|	|	|	|	2.19
47.833	0.00	0.25	0.309	O	|	|	|	|	2.18
47.917	0.00	0.25	0.308	O	|	|	|	|	2.17
48.000	0.00	0.25	0.306	O	|	|	|	|	2.17
48.083	0.00	0.25	0.304	O	|	|	|	|	2.16
48.167	0.00	0.25	0.302	O	|	|	|	|	2.15
48.250	0.00	0.25	0.301	O	|	|	|	|	2.15
48.333	0.00	0.25	0.299	O	|	|	|	|	2.14
48.417	0.00	0.25	0.297	O	|	|	|	|	2.13
48.500	0.00	0.25	0.296	O	|	|	|	|	2.13
48.583	0.00	0.25	0.294	O	|	|	|	|	2.12
48.667	0.00	0.25	0.292	O	|	|	|	|	2.11
48.750	0.00	0.24	0.290	O	|	|	|	|	2.11
48.833	0.00	0.24	0.289	O	|	|	|	|	2.10
48.917	0.00	0.24	0.287	O	|	|	|	|	2.09
49.000	0.00	0.24	0.285	O	|	|	|	|	2.09
49.083	0.00	0.24	0.284	O	|	|	|	|	2.08
49.167	0.00	0.24	0.282	O	|	|	|	|	2.07
49.250	0.00	0.24	0.280	O	|	|	|	|	2.07
49.333	0.00	0.24	0.279	O	|	|	|	|	2.06
49.417	0.00	0.24	0.277	O	|	|	|	|	2.05
49.500	0.00	0.24	0.275	O	|	|	|	|	2.05
49.583	0.00	0.24	0.274	O	|	|	|	|	2.04
49.667	0.00	0.24	0.272	O	|	|	|	|	2.03
49.750	0.00	0.24	0.271	O	|	|	|	|	2.03
49.833	0.00	0.24	0.269	O	|	|	|	|	2.02
49.917	0.00	0.24	0.267	O	|	|	|	|	2.02
50.000	0.00	0.24	0.266	O	|	|	|	|	2.01
50.083	0.00	0.24	0.264	O	|	|	|	|	2.00
50.167	0.00	0.24	0.262	O	|	|	|	|	2.00
50.250	0.00	0.24	0.261	O	|	|	|	|	1.99
50.333	0.00	0.23	0.259	O	|	|	|	|	1.98
50.417	0.00	0.23	0.258	O	|	|	|	|	1.98
50.500	0.00	0.23	0.256	O	|	|	|	|	1.97
50.583	0.00	0.23	0.254	O	|	|	|	|	1.96
50.667	0.00	0.23	0.253	O	|	|	|	|	1.96
50.750	0.00	0.23	0.251	O	|	|	|	|	1.95
50.833	0.00	0.23	0.249	O	|	|	|	|	1.95
50.917	0.00	0.23	0.248	O	|	|	|	|	1.94
51.000	0.00	0.23	0.246	O	|	|	|	|	1.93
51.083	0.00	0.23	0.245	O	|	|	|	|	1.93
51.167	0.00	0.23	0.243	O	|	|	|	|	1.92
51.250	0.00	0.23	0.242	O	|	|	|	|	1.91
51.333	0.00	0.23	0.240	O	|	|	|	|	1.91
51.417	0.00	0.23	0.238	O	|	|	|	|	1.90
51.500	0.00	0.23	0.237	O	|	|	|	|	1.90
51.583	0.00	0.23	0.235	O	|	|	|	|	1.89
51.667	0.00	0.23	0.234	O	|	|	|	|	1.88
51.750	0.00	0.23	0.232	O	|	|	|	|	1.88
51.833	0.00	0.23	0.231	O	|	|	|	|	1.87
51.917	0.00	0.22	0.229	O	|	|	|	|	1.87
52.000	0.00	0.22	0.228	O	|	|	|	|	1.86
52.083	0.00	0.22	0.226	O	|	|	|	|	1.85
52.167	0.00	0.22	0.224	O	|	|	|	|	1.85
52.250	0.00	0.22	0.223	O	|	|	|	|	1.84
52.333	0.00	0.22	0.221	O	|	|	|	|	1.84
52.417	0.00	0.22	0.220	O	|	|	|	|	1.83
52.500	0.00	0.22	0.218	O	|	|	|	|	1.82
52.583	0.00	0.22	0.217	O	|	|	|	|	1.82
52.667	0.00	0.22	0.215	O	|	|	|	|	1.81
52.750	0.00	0.22	0.214	O	|	|	|	|	1.81
52.833	0.00	0.22	0.212	O	|	|	|	|	1.80
52.917	0.00	0.22	0.211	O	|	|	|	|	1.79
53.000	0.00	0.22	0.209	O	|	|	|	|	1.79
53.083	0.00	0.22	0.208	O	|	|	|	|	1.78
53.167	0.00	0.22	0.206	O	|	|	|	|	1.78

53.250	0.00	0.22	0.205	O	|	|	|	|	1.77
53.333	0.00	0.22	0.203	O	|	|	|	|	1.76
53.417	0.00	0.22	0.202	O	|	|	|	|	1.76
53.500	0.00	0.22	0.200	O	|	|	|	|	1.75
53.583	0.00	0.21	0.199	O	|	|	|	|	1.75
53.667	0.00	0.21	0.197	O	|	|	|	|	1.74
53.750	0.00	0.21	0.196	O	|	|	|	|	1.73
53.833	0.00	0.21	0.194	O	|	|	|	|	1.73
53.917	0.00	0.21	0.193	O	|	|	|	|	1.72
54.000	0.00	0.21	0.191	O	|	|	|	|	1.72
54.083	0.00	0.21	0.190	O	|	|	|	|	1.71
54.167	0.00	0.21	0.189	O	|	|	|	|	1.71
54.250	0.00	0.21	0.187	O	|	|	|	|	1.70
54.333	0.00	0.21	0.186	O	|	|	|	|	1.69
54.417	0.00	0.21	0.184	O	|	|	|	|	1.68
54.500	0.00	0.21	0.183	O	|	|	|	|	1.67
54.583	0.00	0.21	0.181	O	|	|	|	|	1.66
54.667	0.00	0.21	0.180	O	|	|	|	|	1.65
54.750	0.00	0.21	0.178	O	|	|	|	|	1.64
54.833	0.00	0.20	0.177	O	|	|	|	|	1.63
54.917	0.00	0.20	0.176	O	|	|	|	|	1.62
55.000	0.00	0.20	0.174	O	|	|	|	|	1.61
55.083	0.00	0.20	0.173	O	|	|	|	|	1.60
55.167	0.00	0.20	0.172	O	|	|	|	|	1.59
55.250	0.00	0.20	0.170	O	|	|	|	|	1.59
55.333	0.00	0.20	0.169	O	|	|	|	|	1.58
55.417	0.00	0.20	0.167	O	|	|	|	|	1.57
55.500	0.00	0.20	0.166	O	|	|	|	|	1.56
55.583	0.00	0.20	0.165	O	|	|	|	|	1.55
55.667	0.00	0.19	0.163	O	|	|	|	|	1.54
55.750	0.00	0.19	0.162	O	|	|	|	|	1.53
55.833	0.00	0.19	0.161	O	|	|	|	|	1.52
55.917	0.00	0.19	0.159	O	|	|	|	|	1.51
56.000	0.00	0.19	0.158	O	|	|	|	|	1.50
56.083	0.00	0.19	0.157	O	|	|	|	|	1.49
56.167	0.00	0.19	0.155	O	|	|	|	|	1.49
56.250	0.00	0.19	0.154	O	|	|	|	|	1.48
56.333	0.00	0.19	0.153	O	|	|	|	|	1.47
56.417	0.00	0.19	0.152	O	|	|	|	|	1.46
56.500	0.00	0.19	0.150	O	|	|	|	|	1.45
56.583	0.00	0.18	0.149	O	|	|	|	|	1.44
56.667	0.00	0.18	0.148	O	|	|	|	|	1.43
56.750	0.00	0.18	0.146	O	|	|	|	|	1.42
56.833	0.00	0.18	0.145	O	|	|	|	|	1.42
56.917	0.00	0.18	0.144	O	|	|	|	|	1.41
57.000	0.00	0.18	0.143	O	|	|	|	|	1.40
57.083	0.00	0.18	0.141	O	|	|	|	|	1.39
57.167	0.00	0.18	0.140	O	|	|	|	|	1.38
57.250	0.00	0.18	0.139	O	|	|	|	|	1.37
57.333	0.00	0.18	0.138	O	|	|	|	|	1.37
57.417	0.00	0.18	0.137	O	|	|	|	|	1.36
57.500	0.00	0.18	0.135	O	|	|	|	|	1.35
57.583	0.00	0.17	0.134	O	|	|	|	|	1.34
57.667	0.00	0.17	0.133	O	|	|	|	|	1.33
57.750	0.00	0.17	0.132	O	|	|	|	|	1.32
57.833	0.00	0.17	0.131	O	|	|	|	|	1.32
57.917	0.00	0.17	0.129	O	|	|	|	|	1.31
58.000	0.00	0.17	0.128	O	|	|	|	|	1.30
58.083	0.00	0.17	0.127	O	|	|	|	|	1.29
58.167	0.00	0.17	0.126	O	|	|	|	|	1.28
58.250	0.00	0.17	0.125	O	|	|	|	|	1.28
58.333	0.00	0.17	0.124	O	|	|	|	|	1.27
58.417	0.00	0.17	0.122	O	|	|	|	|	1.26
58.500	0.00	0.17	0.121	O	|	|	|	|	1.25
58.583	0.00	0.16	0.120	O	|	|	|	|	1.25
58.667	0.00	0.16	0.119	O	|	|	|	|	1.24
58.750	0.00	0.16	0.118	O	|	|	|	|	1.23
58.833	0.00	0.16	0.117	O	|	|	|	|	1.22
58.917	0.00	0.16	0.116	O	|	|	|	|	1.21
59.000	0.00	0.16	0.115	O	|	|	|	|	1.21
59.083	0.00	0.16	0.113	O	|	|	|	|	1.20

59.167	0.00	0.16	0.112	O	|	|	|	|	1.19
59.250	0.00	0.16	0.111	O	|	|	|	|	1.18
59.333	0.00	0.16	0.110	O	|	|	|	|	1.18
59.417	0.00	0.16	0.109	O	|	|	|	|	1.17
59.500	0.00	0.16	0.108	O	|	|	|	|	1.16
59.583	0.00	0.16	0.107	O	|	|	|	|	1.16
59.667	0.00	0.15	0.106	O	|	|	|	|	1.15
59.750	0.00	0.15	0.105	O	|	|	|	|	1.14
59.833	0.00	0.15	0.104	O	|	|	|	|	1.13
59.917	0.00	0.15	0.103	O	|	|	|	|	1.13
60.000	0.00	0.15	0.102	O	|	|	|	|	1.12
60.083	0.00	0.15	0.101	O	|	|	|	|	1.11
60.167	0.00	0.15	0.100	O	|	|	|	|	1.11
60.250	0.00	0.15	0.099	O	|	|	|	|	1.10
60.333	0.00	0.15	0.098	O	|	|	|	|	1.09
60.417	0.00	0.15	0.096	O	|	|	|	|	1.08
60.500	0.00	0.15	0.095	O	|	|	|	|	1.08
60.583	0.00	0.15	0.094	O	|	|	|	|	1.07
60.667	0.00	0.15	0.093	O	|	|	|	|	1.06
60.750	0.00	0.15	0.092	O	|	|	|	|	1.06
60.833	0.00	0.14	0.091	O	|	|	|	|	1.05
60.917	0.00	0.14	0.090	O	|	|	|	|	1.04
61.000	0.00	0.14	0.089	O	|	|	|	|	1.04
61.083	0.00	0.14	0.088	O	|	|	|	|	1.03
61.167	0.00	0.14	0.087	O	|	|	|	|	1.02
61.250	0.00	0.14	0.087	O	|	|	|	|	1.02
61.333	0.00	0.14	0.086	O	|	|	|	|	1.01
61.417	0.00	0.14	0.085	O	|	|	|	|	1.00
61.500	0.00	0.14	0.084	O	|	|	|	|	1.00
61.583	0.00	0.14	0.083	O	|	|	|	|	0.99
61.667	0.00	0.14	0.082	O	|	|	|	|	0.98
61.750	0.00	0.14	0.081	O	|	|	|	|	0.98
61.833	0.00	0.14	0.080	O	|	|	|	|	0.97
61.917	0.00	0.14	0.079	O	|	|	|	|	0.96
62.000	0.00	0.14	0.078	O	|	|	|	|	0.96
62.083	0.00	0.13	0.077	O	|	|	|	|	0.95
62.167	0.00	0.13	0.076	O	|	|	|	|	0.95
62.250	0.00	0.13	0.075	O	|	|	|	|	0.94
62.333	0.00	0.13	0.074	O	|	|	|	|	0.93
62.417	0.00	0.13	0.073	O	|	|	|	|	0.93
62.500	0.00	0.13	0.072	O	|	|	|	|	0.92
62.583	0.00	0.13	0.072	O	|	|	|	|	0.91
62.667	0.00	0.13	0.071	O	|	|	|	|	0.91
62.750	0.00	0.13	0.070	O	|	|	|	|	0.90
62.833	0.00	0.13	0.069	O	|	|	|	|	0.90
62.917	0.00	0.13	0.068	O	|	|	|	|	0.89
63.000	0.00	0.13	0.067	O	|	|	|	|	0.88
63.083	0.00	0.13	0.066	O	|	|	|	|	0.88
63.167	0.00	0.13	0.065	O	|	|	|	|	0.87
63.250	0.00	0.13	0.064	O	|	|	|	|	0.87
63.333	0.00	0.13	0.064	O	|	|	|	|	0.86
63.417	0.00	0.12	0.063	O	|	|	|	|	0.85
63.500	0.00	0.12	0.062	O	|	|	|	|	0.85
63.583	0.00	0.12	0.061	O	|	|	|	|	0.84
63.667	0.00	0.12	0.060	O	|	|	|	|	0.84
63.750	0.00	0.12	0.059	O	|	|	|	|	0.83
63.833	0.00	0.12	0.058	O	|	|	|	|	0.83
63.917	0.00	0.12	0.058	O	|	|	|	|	0.82
64.000	0.00	0.12	0.057	O	|	|	|	|	0.81
64.083	0.00	0.12	0.056	O	|	|	|	|	0.81
64.167	0.00	0.12	0.055	O	|	|	|	|	0.80
64.250	0.00	0.12	0.054	O	|	|	|	|	0.80
64.333	0.00	0.12	0.054	O	|	|	|	|	0.79
64.417	0.00	0.12	0.053	O	|	|	|	|	0.79
64.500	0.00	0.12	0.052	O	|	|	|	|	0.78
64.583	0.00	0.12	0.051	O	|	|	|	|	0.78
64.667	0.00	0.12	0.050	O	|	|	|	|	0.77
64.750	0.00	0.12	0.049	O	|	|	|	|	0.76
64.833	0.00	0.12	0.049	O	|	|	|	|	0.76
64.917	0.00	0.11	0.048	O	|	|	|	|	0.75
65.000	0.00	0.11	0.047	O	|	|	|	|	0.75

65.083	0.00	0.11	0.046	O	|	|	|	|	0.74
65.167	0.00	0.11	0.046	O	|	|	|	|	0.74
65.250	0.00	0.11	0.045	O	|	|	|	|	0.73
65.333	0.00	0.11	0.044	O	|	|	|	|	0.73
65.417	0.00	0.11	0.043	O	|	|	|	|	0.72
65.500	0.00	0.11	0.042	O	|	|	|	|	0.72
65.583	0.00	0.11	0.042	O	|	|	|	|	0.71
65.667	0.00	0.11	0.041	O	|	|	|	|	0.71
65.750	0.00	0.11	0.040	O	|	|	|	|	0.70
65.833	0.00	0.11	0.039	O	|	|	|	|	0.69
65.917	0.00	0.11	0.039	O	|	|	|	|	0.68
66.000	0.00	0.10	0.038	O	|	|	|	|	0.67
66.083	0.00	0.10	0.037	O	|	|	|	|	0.65
66.167	0.00	0.10	0.037	O	|	|	|	|	0.64

Remaining water in basin = 0.04 (Ac.Ft)

**********HYDROGRAPH DATA**********

Number of intervals = 794
Time interval = 5.0 (Min.)
Maximum/Peak flow rate = 2.369 (CFS)
Total volume = 3.160 (Ac.Ft)

Status of hydrographs being held in storage

	Stream 1	Stream 2	Stream 3	Stream 4	Stream 5
Peak (CFS)	0.000	0.000	0.000	0.000	0.000
Vol (Ac.Ft)	0.000	0.000	0.000	0.000	0.000

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                    FLOOD HYDROGRAPH ROUTING PROGRAM
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                            Study date: 08/18/25

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 Program License Serial Number 5006

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 ********************* HYDROGRAPH INFORMATION **********************

                From study/file name: PROB24100.rte
 ****************************HYDROGRAPH DATA****************************
                Number of intervals =   301
                Time interval =    5.0 (Min.)
                Maximum/Peak flow rate =        9.437 (CFS)
                Total volume =       4.536 (Ac.Ft)
        Status of hydrographs being held in storage
                    Stream 1  Stream 2  Stream 3  Stream 4  Stream 5
        Peak (CFS)      0.000     0.000     0.000     0.000     0.000
        Vol (Ac.Ft)      0.000     0.000     0.000     0.000     0.000
 ***********************************************************************



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 Process from Point/Station        0.000 to Point/Station        0.000
 **** RETARDING BASIN ROUTING ****
 _________________________________________________________________________

 User entry of depth-outflow-storage data
 ---------------------------------------------------------------------
 Total number of inflow hydrograph intervals = 301
 Hydrograph time unit =  5.000 (Min.)
 Initial depth in storage basin =   0.00(Ft.)
 ---------------------------------------------------------------------
 ---------------------------------------------------------------------
 Initial basin depth =   0.00 (Ft.)
 Initial basin storage =      0.00 (Ac.Ft)
 Initial basin outflow =   0.00 (CFS)
 ---------------------------------------------------------------------
 ---------------------------------------------------------------------
 Depth vs. Storage and Depth vs. Discharge data:
  Basin Depth  Storage    Outflow   (S-O*dt/2)   (S+O*dt/2)
       (Ft.)    (Ac.Ft)    (CFS)     (Ac.Ft)    (Ac.Ft)
 ---------------------------------------------------------------------
    0.000      0.000      0.000      0.000        0.000
    0.700      0.040      0.109      0.040        0.040
    1.700      0.187      0.211      0.186        0.188
    2.400      0.365      0.269      0.364        0.366
    2.700      0.461      0.377      0.460        0.462
    3.700      0.829      0.537      0.827        0.831
    4.700      1.249      0.651      1.247        1.251
    5.700      1.723      0.746      1.720        1.726
    6.700      2.252      1.870      2.246        2.258
    7.700      2.841      2.376      2.833        2.849
    8.300      3.223     38.499      3.090        3.356
    8.700      3.491    113.554      3.100        3.882
    9.700      4.203    441.782      2.682        5.724
 ---------------------------------------------------------------------
                 Hydrograph Detention Basin Routing
 ---------------------------------------------------------------------

 Graph values: 'I'= unit inflow; 'O'=outflow at time shown
 ---------------------------------------------------------------------
  Time   Inflow  Outflow    Storage                                    Depth
```

(Hours)	(CFS)	(CFS)	(Ac.Ft)	.0	2.4	4.72	7.08	9.44	(Ft.)
0.083	0.03	0.00	0.000	O	|	|	|	|	0.00
0.167	0.16	0.00	0.001	O	|	|	|	|	0.01
0.250	0.26	0.01	0.002	O	|	|	|	|	0.04
0.333	0.32	0.01	0.004	OI	|	|	|	|	0.07
0.417	0.40	0.02	0.006	OI	|	|	|	|	0.11
0.500	0.47	0.03	0.009	OI	|	|	|	|	0.16
0.583	0.51	0.03	0.013	OI	|	|	|	|	0.22
0.667	0.53	0.04	0.016	OI	|	|	|	|	0.28
0.750	0.54	0.05	0.019	OI	|	|	|	|	0.34
0.833	0.57	0.06	0.023	OI	|	|	|	|	0.39
0.917	0.64	0.07	0.026	O I	|	|	|	|	0.46
1.000	0.70	0.08	0.030	O I	|	|	|	|	0.53
1.083	0.71	0.09	0.035	O I	|	|	|	|	0.60
1.167	0.66	0.11	0.039	O I	|	|	|	|	0.67
1.250	0.62	0.11	0.042	O I	|	|	|	|	0.71
1.333	0.60	0.11	0.046	O I	|	|	|	|	0.74
1.417	0.60	0.12	0.049	O I	|	|	|	|	0.76
1.500	0.59	0.12	0.052	O I	|	|	|	|	0.78
1.583	0.59	0.12	0.056	OI	|	|	|	|	0.81
1.667	0.59	0.12	0.059	OI	|	|	|	|	0.83
1.750	0.58	0.12	0.062	OI	|	|	|	|	0.85
1.833	0.60	0.13	0.065	O I	|	|	|	|	0.87
1.917	0.66	0.13	0.069	O I	|	|	|	|	0.89
2.000	0.71	0.13	0.072	O I	|	|	|	|	0.92
2.083	0.73	0.13	0.076	O I	|	|	|	|	0.95
2.167	0.74	0.14	0.081	O I	|	|	|	|	0.98
2.250	0.75	0.14	0.085	O I	|	|	|	|	1.00
2.333	0.76	0.14	0.089	O I	|	|	|	|	1.03
2.417	0.76	0.15	0.093	O I	|	|	|	|	1.06
2.500	0.76	0.15	0.097	O I	|	|	|	|	1.09
2.583	0.78	0.15	0.102	O I	|	|	|	|	1.12
2.667	0.85	0.15	0.106	O I	|	|	|	|	1.15
2.750	0.90	0.16	0.111	O I	|	|	|	|	1.18
2.833	0.92	0.16	0.116	O I	|	|	|	|	1.22
2.917	0.93	0.17	0.122	O I	|	|	|	|	1.26
3.000	0.94	0.17	0.127	O I	|	|	|	|	1.29
3.083	0.95	0.17	0.132	O I	|	|	|	|	1.33
3.167	0.95	0.18	0.138	O I	|	|	|	|	1.36
3.250	0.96	0.18	0.143	O I	|	|	|	|	1.40
3.333	0.96	0.18	0.148	O I	|	|	|	|	1.44
3.417	0.96	0.19	0.154	O I	|	|	|	|	1.47
3.500	0.96	0.19	0.159	O I	|	|	|	|	1.51
3.583	0.96	0.20	0.164	O I	|	|	|	|	1.54
3.667	0.96	0.20	0.169	O I	|	|	|	|	1.58
3.750	0.96	0.20	0.175	O I	|	|	|	|	1.62
3.833	0.98	0.21	0.180	O I	|	|	|	|	1.65
3.917	1.04	0.21	0.186	O I	|	|	|	|	1.69
4.000	1.09	0.21	0.191	O I	|	|	|	|	1.72
4.083	1.12	0.21	0.198	O I	|	|	|	|	1.74
4.167	1.13	0.22	0.204	O I	|	|	|	|	1.77
4.250	1.14	0.22	0.210	O I	|	|	|	|	1.79
4.333	1.16	0.22	0.216	O I	|	|	|	|	1.82
4.417	1.22	0.22	0.223	O I	|	|	|	|	1.84
4.500	1.28	0.23	0.230	O I	|	|	|	|	1.87
4.583	1.30	0.23	0.238	O I	|	|	|	|	1.90
4.667	1.32	0.23	0.245	O I	|	|	|	|	1.93
4.750	1.33	0.23	0.253	O I	|	|	|	|	1.96
4.833	1.35	0.23	0.260	O I	|	|	|	|	1.99
4.917	1.42	0.24	0.268	O I	|	|	|	|	2.02
5.000	1.47	0.24	0.276	O I	|	|	|	|	2.05
5.083	1.46	0.24	0.285	O I	|	|	|	|	2.08
5.167	1.35	0.25	0.293	O I	|	|	|	|	2.12
5.250	1.26	0.25	0.300	O I	|	|	|	|	2.14
5.333	1.24	0.25	0.307	O I	|	|	|	|	2.17
5.417	1.28	0.25	0.314	O I	|	|	|	|	2.20
5.500	1.32	0.25	0.321	O I	|	|	|	|	2.23
5.583	1.35	0.26	0.329	O I	|	|	|	|	2.26
5.667	1.42	0.26	0.336	O I	|	|	|	|	2.29
5.750	1.47	0.26	0.344	O I	|	|	|	|	2.32
5.833	1.50	0.27	0.353	O I	|	|	|	|	2.35

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 5.917    1.51    0.27      0.361  O    I  |        |        |        |     2.39
 6.000    1.52    0.27      0.370  O    I  |        |        |        |     2.42
 6.083    1.54    0.28      0.379  O    I  |        |        |        |     2.44
 6.167    1.61    0.29      0.387  O    I  |        |        |        |     2.47
 6.250    1.66    0.30      0.397  |O   I  |        |        |        |     2.50
 6.333    1.69    0.32      0.406  |O   I  |        |        |        |     2.53
 6.417    1.70    0.33      0.415  |O   I  |        |        |        |     2.56
 6.500    1.71    0.34      0.425  |O   I  |        |        |        |     2.59
 6.583    1.73    0.35      0.434  |O   I  |        |        |        |     2.62
 6.667    1.80    0.36      0.444  |O    I |        |        |        |     2.65
 6.750    1.86    0.37      0.454  |O    I |        |        |        |     2.68
 6.833    1.88    0.38      0.465  |O    I |        |        |        |     2.71
 6.917    1.89    0.38      0.475  |O    I |        |        |        |     2.74
 7.000    1.90    0.39      0.485  |O    I |        |        |        |     2.77
 7.083    1.91    0.39      0.496  |O    I |        |        |        |     2.79
 7.167    1.92    0.40      0.506  |O    I |        |        |        |     2.82
 7.250    1.92    0.40      0.517  |O    I |        |        |        |     2.85
 7.333    1.94    0.41      0.527  |O    I |        |        |        |     2.88
 7.417    2.00    0.41      0.538  |O    I |        |        |        |     2.91
 7.500    2.06    0.42      0.549  |O    I |        |        |        |     2.94
 7.583    2.09    0.42      0.560  |O     I|        |        |        |     2.97
 7.667    2.17    0.43      0.572  |O     I|        |        |        |     3.00
 7.750    2.23    0.43      0.584  |O     I|        |        |        |     3.04
 7.833    2.27    0.44      0.597  |O     I|        |        |        |     3.07
 7.917    2.35    0.44      0.610  |O     I|        |        |        |     3.10
 8.000    2.41    0.45      0.623  |O      I        |        |        |     3.14
 8.083    2.47    0.45      0.637  |O      I        |        |        |     3.18
 8.167    2.62    0.46      0.651  |O      I        |        |        |     3.22
 8.250    2.74    0.47      0.667  |O      |I       |        |        |     3.26
 8.333    2.79    0.47      0.682  |O      |I       |        |        |     3.30
 8.417    2.82    0.48      0.698  |O      |I       |        |        |     3.35
 8.500    2.84    0.49      0.715  |O      |I       |        |        |     3.39
 8.583    2.87    0.49      0.731  |O      |I       |        |        |     3.43
 8.667    2.94    0.50      0.747  |O      |I       |        |        |     3.48
 8.750    3.00    0.51      0.764  |O      | I      |        |        |     3.52
 8.833    3.05    0.52      0.782  |O      | I      |        |        |     3.57
 8.917    3.13    0.52      0.799  |O      | I      |        |        |     3.62
 9.000    3.19    0.53      0.817  |O      | I      |        |        |     3.67
 9.083    3.25    0.54      0.836  |O      |  I     |        |        |     3.72
 9.167    3.39    0.54      0.855  |O      |  I     |        |        |     3.76
 9.250    3.51    0.55      0.875  |O      |  I     |        |        |     3.81
 9.333    3.57    0.56      0.896  |O      |   I    |        |        |     3.86
 9.417    3.67    0.56      0.917  |O      |   I    |        |        |     3.91
 9.500    3.74    0.57      0.938  |O      |   I    |        |        |     3.96
 9.583    3.79    0.57      0.960  |O      |   I    |        |        |     4.01
 9.667    3.88    0.58      0.983  |O      |    I   |        |        |     4.07
 9.750    3.95    0.58      1.006  |O      |    I   |        |        |     4.12
 9.833    4.00    0.59      1.029  | O     |    I   |        |        |     4.18
 9.917    4.09    0.60      1.053  | O     |    I   |        |        |     4.23
10.000    4.17    0.60      1.077  | O     |     I  |        |        |     4.29
10.083    4.11    0.61      1.101  | O     |    I   |        |        |     4.35
10.167    3.67    0.62      1.124  | O     |   I    |        |        |     4.40
10.250    3.30    0.62      1.144  | O     |  I     |        |        |     4.45
10.333    3.17    0.63      1.162  | O     | I      |        |        |     4.49
10.417    3.09    0.63      1.179  | O     | I      |        |        |     4.53
10.500    3.04    0.64      1.196  | O     | I      |        |        |     4.57
10.583    3.07    0.64      1.212  | O     | I      |        |        |     4.61
10.667    3.37    0.65      1.230  | O     |  I     |        |        |     4.65
10.750    3.60    0.65      1.250  | O     |   I    |        |        |     4.70
10.833    3.69    0.66      1.270  | O     |   I    |        |        |     4.74
10.917    3.74    0.66      1.291  | O     |   I    |        |        |     4.79
11.000    3.77    0.66      1.312  | O     |   I    |        |        |     4.83
11.083    3.77    0.67      1.334  | O     |   I    |        |        |     4.88
11.167    3.72    0.67      1.355  | O     |   I    |        |        |     4.92
11.250    3.68    0.68      1.376  | O     |   I    |        |        |     4.97
11.333    3.68    0.68      1.397  | O     |   I    |        |        |     5.01
11.417    3.67    0.68      1.417  | O     |   I    |        |        |     5.05
11.500    3.67    0.69      1.438  | O     |   I    |        |        |     5.10
11.583    3.64    0.69      1.458  | O     |   I    |        |        |     5.14
11.667    3.52    0.70      1.478  | O     |  I     |        |        |     5.18
11.750    3.41    0.70      1.497  | O     |  I     |        |        |     5.22
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11.833	3.38	0.70	1.516	O	I			5.26
11.917	3.42	0.71	1.534	O	I			5.30
12.000	3.45	0.71	1.553	O	I			5.34
12.083	3.66	0.72	1.572	O	I			5.38
12.167	4.48	0.72	1.596	O	I			5.43
12.250	5.16	0.73	1.624	O	I			5.49
12.333	5.46	0.73	1.655	O	I			5.56
12.417	5.76	0.74	1.689	O	I			5.63
12.500	5.98	0.75	1.724	O	I			5.70
12.583	6.17	0.83	1.761	O	I			5.77
12.667	6.52	0.91	1.798	O	I			5.84
12.750	6.81	0.99	1.838	O	I			5.92
12.833	6.98	1.08	1.878	O	I			5.99
12.917	7.21	1.16	1.919	O	I			6.07
13.000	7.39	1.25	1.961	O	I			6.15
13.083	7.64	1.34	2.004	O	I			6.23
13.167	8.35	1.44	2.049	O	I			6.32
13.250	8.93	1.54	2.099	O	I			6.41
13.333	9.17	1.65	2.150	O	I			6.51
13.417	9.33	1.76	2.202	O	I			6.61
13.500	9.44	1.87	2.254	O	I			6.70
13.583	9.19	1.92	2.305	O	I			6.79
13.667	7.86	1.95	2.350	O	I			6.87
13.750	6.76	1.99	2.387	O	I			6.93
13.833	6.36	2.01	2.419	O	I			6.98
13.917	6.14	2.04	2.448	O	I			7.03
14.000	5.99	2.06	2.475	O	I			7.08
14.083	6.01	2.09	2.502	O	I			7.13
14.167	6.46	2.11	2.531	O	I			7.17
14.250	6.82	2.14	2.562	O	I			7.23
14.333	6.92	2.16	2.595	O	I			7.28
14.417	6.86	2.19	2.627	O	I			7.34
14.500	6.80	2.22	2.659	O	I			7.39
14.583	6.80	2.25	2.690	O	I			7.44
14.667	6.80	2.27	2.722	O	I			7.50
14.750	6.82	2.30	2.753	O	I			7.55
14.833	6.82	2.33	2.784	O	I			7.60
14.917	6.72	2.35	2.814	O	I			7.65
15.000	6.63	2.59	2.843	O	I			7.70
15.083	6.58	4.56	2.864	O	I			7.74
15.167	6.45	5.52	2.874	O	I			7.75
15.250	6.34	5.95	2.879	O	I			7.76
15.333	6.28	6.13	2.881	O	I			7.76
15.417	6.13	6.16	2.881	O	I			7.76
15.500	6.02	6.12	2.881	O	I			7.76
15.583	5.85	6.03	2.880	O	I			7.76
15.667	5.33	5.81	2.877	O	I			7.76
15.750	4.90	5.47	2.874	O	I			7.75
15.833	4.73	5.15	2.870	O	I			7.75
15.917	4.64	4.92	2.868	O	I			7.74
16.000	4.58	4.77	2.866	O	I			7.74
16.083	4.25	4.59	2.864	O	I			7.74
16.167	3.02	4.12	2.859	O	I			7.73
16.250	2.00	3.33	2.851	O	I			7.72
16.333	1.60	2.58	2.843	O	I			7.70
16.417	1.36	2.37	2.836	O	I			7.69
16.500	1.20	2.37	2.829	O	I			7.68
16.583	1.06	2.36	2.820	O	I			7.66
16.667	0.91	2.35	2.811	O	I			7.65
16.750	0.80	2.34	2.801	O	I			7.63
16.833	0.73	2.33	2.790	O	I			7.61
16.917	0.68	2.32	2.779	O	I			7.59
17.000	0.65	2.31	2.767	O	I			7.57
17.083	0.65	2.30	2.756	O	I			7.56
17.167	0.75	2.29	2.745	O	I			7.54
17.250	0.85	2.28	2.734	O	I			7.52
17.333	0.89	2.28	2.725	O	I			7.50
17.417	0.91	2.27	2.715	O	I			7.49
17.500	0.92	2.26	2.706	O	I			7.47
17.583	0.93	2.25	2.697	O	I			7.46
17.667	0.94	2.24	2.688	O	I			7.44

17.750	0.95	2.24	2.679	| I O|	|	|	|	7.42
17.833	0.94	2.23	2.670	| I O|	|	|	|	7.41
17.917	0.88	2.22	2.661	| I O|	|	|	|	7.39
18.000	0.83	2.21	2.652	| I O|	|	|	|	7.38
18.083	0.81	2.20	2.642	| I O|	|	|	|	7.36
18.167	0.80	2.20	2.632	| I O|	|	|	|	7.35
18.250	0.79	2.19	2.623	| I O|	|	|	|	7.33
18.333	0.79	2.18	2.613	| I O|	|	|	|	7.31
18.417	0.78	2.17	2.604	| I O|	|	|	|	7.30
18.500	0.78	2.16	2.594	| I O|	|	|	|	7.28
18.583	0.76	2.16	2.584	| I O|	|	|	|	7.26
18.667	0.70	2.15	2.575	| I O|	|	|	|	7.25
18.750	0.64	2.14	2.564	| I O|	|	|	|	7.23
18.833	0.61	2.13	2.554	| I O|	|	|	|	7.21
18.917	0.53	2.12	2.543	|I O|	|	|	|	7.19
19.000	0.47	2.11	2.532	|I O|	|	|	|	7.18
19.083	0.46	2.10	2.521	|I O|	|	|	|	7.16
19.167	0.51	2.09	2.510	|I O|	|	|	|	7.14
19.250	0.55	2.08	2.499	|I O|	|	|	|	7.12
19.333	0.57	2.07	2.489	|I O|	|	|	|	7.10
19.417	0.64	2.06	2.479	| I O|	|	|	|	7.08
19.500	0.70	2.06	2.469	| I O |	|	|	|	7.07
19.583	0.71	2.05	2.460	| I O |	|	|	|	7.05
19.667	0.65	2.04	2.450	| I O |	|	|	|	7.04
19.750	0.61	2.03	2.441	| I O |	|	|	|	7.02
19.833	0.58	2.02	2.431	|I O |	|	|	|	7.00
19.917	0.51	2.01	2.421	|I O |	|	|	|	6.99
20.000	0.46	2.01	2.410	|I O |	|	|	|	6.97
20.083	0.45	2.00	2.399	|I O |	|	|	|	6.95
20.167	0.50	1.99	2.389	|I O |	|	|	|	6.93
20.250	0.54	1.98	2.379	|I O |	|	|	|	6.92
20.333	0.56	1.97	2.369	|I O |	|	|	|	6.90
20.417	0.56	1.96	2.359	|I O |	|	|	|	6.88
20.500	0.57	1.95	2.350	|I O |	|	|	|	6.87
20.583	0.57	1.95	2.340	|I O |	|	|	|	6.85
20.667	0.57	1.94	2.331	|I O |	|	|	|	6.83
20.750	0.57	1.93	2.322	|I O |	|	|	|	6.82
20.833	0.56	1.92	2.312	|I O |	|	|	|	6.80
20.917	0.50	1.91	2.303	|I O |	|	|	|	6.79
21.000	0.45	1.90	2.293	|I O |	|	|	|	6.77
21.083	0.44	1.90	2.283	|I O |	|	|	|	6.75
21.167	0.49	1.89	2.273	|I O |	|	|	|	6.74
21.250	0.54	1.88	2.263	|I O |	|	|	|	6.72
21.333	0.54	1.87	2.254	|I O |	|	|	|	6.70
21.417	0.48	1.85	2.245	|I O |	|	|	|	6.69
21.500	0.43	1.83	2.235	|I O |	|	|	|	6.67
21.583	0.43	1.81	2.226	|I O |	|	|	|	6.65
21.667	0.49	1.79	2.217	|I O |	|	|	|	6.63
21.750	0.53	1.78	2.208	|I O |	|	|	|	6.62
21.833	0.53	1.76	2.199	|I O |	|	|	|	6.60
21.917	0.48	1.74	2.191	|I O |	|	|	|	6.58
22.000	0.43	1.72	2.182	|I O |	|	|	|	6.57
22.083	0.43	1.70	2.173	|I O |	|	|	|	6.55
22.167	0.49	1.68	2.165	|I O |	|	|	|	6.53
22.250	0.53	1.67	2.157	|I O |	|	|	|	6.52
22.333	0.53	1.65	2.149	|I O |	|	|	|	6.50
22.417	0.48	1.63	2.141	|I O |	|	|	|	6.49
22.500	0.43	1.62	2.133	|I O |	|	|	|	6.47
22.583	0.42	1.60	2.125	|I O |	|	|	|	6.46
22.667	0.41	1.58	2.117	|I O |	|	|	|	6.44
22.750	0.40	1.57	2.109	|I O |	|	|	|	6.43
22.833	0.40	1.55	2.101	|I O |	|	|	|	6.41
22.917	0.39	1.53	2.093	|I O |	|	|	|	6.40
23.000	0.39	1.51	2.085	|I O |	|	|	|	6.38
23.083	0.39	1.50	2.077	|I O |	|	|	|	6.37
23.167	0.39	1.48	2.070	|I O |	|	|	|	6.36
23.250	0.39	1.47	2.062	|I O |	|	|	|	6.34
23.333	0.39	1.45	2.055	|I O |	|	|	|	6.33
23.417	0.39	1.44	2.047	|I O |	|	|	|	6.31
23.500	0.39	1.42	2.040	|I O |	|	|	|	6.30
23.583	0.39	1.41	2.033	|I O |	|	|	|	6.29

23.667	0.39	1.39	2.026	|I O	|	|	|	6.27
23.750	0.39	1.38	2.019	|I O	|	|	|	6.26
23.833	0.39	1.36	2.013	|I O	|	|	|	6.25
23.917	0.39	1.35	2.006	|I O	|	|	|	6.23
24.000	0.39	1.33	1.999	|I O	|	|	|	6.22
24.083	0.36	1.32	1.993	|I O	|	|	|	6.21
24.167	0.23	1.30	1.986	I O	|	|	|	6.20
24.250	0.12	1.29	1.978	I O	|	|	|	6.18
24.333	0.08	1.27	1.970	I O	|	|	|	6.17
24.417	0.06	1.25	1.962	I O	|	|	|	6.15
24.500	0.04	1.24	1.954	I O	|	|	|	6.14
24.583	0.03	1.22	1.945	I O	|	|	|	6.12
24.667	0.02	1.20	1.937	I O	|	|	|	6.10
24.750	0.02	1.18	1.929	I O	|	|	|	6.09
24.833	0.01	1.17	1.921	I O	|	|	|	6.07
24.917	0.01	1.15	1.913	I O	|	|	|	6.06
25.000	0.00	1.13	1.905	I O	|	|	|	6.04
25.083	0.00	1.12	1.898	I O	|	|	|	6.03
25.167	0.00	1.10	1.890	I O	|	|	|	6.02
25.250	0.00	1.08	1.883	I O	|	|	|	6.00
25.333	0.00	1.07	1.875	I O	|	|	|	5.99
25.417	0.00	1.05	1.868	I O	|	|	|	5.97
25.500	0.00	1.04	1.861	I O	|	|	|	5.96
25.583	0.00	1.02	1.853	I O	|	|	|	5.95
25.667	0.00	1.01	1.846	I O	|	|	|	5.93
25.750	0.00	0.99	1.840	I O	|	|	|	5.92
25.833	0.00	0.98	1.833	I O	|	|	|	5.91
25.917	0.00	0.97	1.826	I O	|	|	|	5.89
26.000	0.00	0.95	1.820	I O	|	|	|	5.88
26.083	0.00	0.94	1.813	I O	|	|	|	5.87
26.167	0.00	0.92	1.807	I O	|	|	|	5.86
26.250	0.00	0.91	1.800	I O	|	|	|	5.85
26.333	0.00	0.90	1.794	I O	|	|	|	5.83
26.417	0.00	0.88	1.788	I O	|	|	|	5.82
26.500	0.00	0.87	1.782	I O	|	|	|	5.81
26.583	0.00	0.86	1.776	I O	|	|	|	5.80
26.667	0.00	0.85	1.770	I O	|	|	|	5.79
26.750	0.00	0.83	1.764	I O	|	|	|	5.78
26.833	0.00	0.82	1.759	I O	|	|	|	5.77
26.917	0.00	0.81	1.753	I O	|	|	|	5.76
27.000	0.00	0.80	1.747	I O	|	|	|	5.75
27.083	0.00	0.79	1.742	I O	|	|	|	5.74
27.167	0.00	0.77	1.737	I O	|	|	|	5.73
27.250	0.00	0.76	1.731	I O	|	|	|	5.72
27.333	0.00	0.75	1.726	I O	|	|	|	5.71
27.417	0.00	0.75	1.721	I O	|	|	|	5.70
27.500	0.00	0.74	1.716	I O	|	|	|	5.68
27.583	0.00	0.74	1.711	I O	|	|	|	5.67
27.667	0.00	0.74	1.706	I O	|	|	|	5.66
27.750	0.00	0.74	1.700	I O	|	|	|	5.65
27.833	0.00	0.74	1.695	I O	|	|	|	5.64
27.917	0.00	0.74	1.690	I O	|	|	|	5.63
28.000	0.00	0.74	1.685	I O	|	|	|	5.62
28.083	0.00	0.74	1.680	I O	|	|	|	5.61
28.167	0.00	0.74	1.675	I O	|	|	|	5.60
28.250	0.00	0.74	1.670	I O	|	|	|	5.59
28.333	0.00	0.73	1.665	I O	|	|	|	5.58
28.417	0.00	0.73	1.660	I O	|	|	|	5.57
28.500	0.00	0.73	1.655	I O	|	|	|	5.56
28.583	0.00	0.73	1.650	I O	|	|	|	5.55
28.667	0.00	0.73	1.645	I O	|	|	|	5.53
28.750	0.00	0.73	1.640	I O	|	|	|	5.52
28.833	0.00	0.73	1.635	I O	|	|	|	5.51
28.917	0.00	0.73	1.630	I O	|	|	|	5.50
29.000	0.00	0.73	1.625	I O	|	|	|	5.49
29.083	0.00	0.73	1.620	I O	|	|	|	5.48
29.167	0.00	0.72	1.615	I O	|	|	|	5.47
29.250	0.00	0.72	1.610	I O	|	|	|	5.46
29.333	0.00	0.72	1.605	I O	|	|	|	5.45
29.417	0.00	0.72	1.600	I O	|	|	|	5.44
29.500	0.00	0.72	1.595	I O	|	|	|	5.43

29.583	0.00	0.72	1.590	I	O	|	|	|	|	5.42
29.667	0.00	0.72	1.585	I	O	|	|	|	|	5.41
29.750	0.00	0.72	1.580	I	O	|	|	|	|	5.40
29.833	0.00	0.72	1.575	I	O	|	|	|	|	5.39
29.917	0.00	0.72	1.570	I	O	|	|	|	|	5.38
30.000	0.00	0.71	1.565	I	O	|	|	|	|	5.37
30.083	0.00	0.71	1.560	I	O	|	|	|	|	5.36
30.167	0.00	0.71	1.555	I	O	|	|	|	|	5.35
30.250	0.00	0.71	1.550	I	O	|	|	|	|	5.34
30.333	0.00	0.71	1.545	I	O	|	|	|	|	5.33
30.417	0.00	0.71	1.541	I	O	|	|	|	|	5.32
30.500	0.00	0.71	1.536	I	O	|	|	|	|	5.30
30.583	0.00	0.71	1.531	I	O	|	|	|	|	5.29
30.667	0.00	0.71	1.526	I	O	|	|	|	|	5.28
30.750	0.00	0.71	1.521	I	O	|	|	|	|	5.27
30.833	0.00	0.70	1.516	I	O	|	|	|	|	5.26
30.917	0.00	0.70	1.511	I	O	|	|	|	|	5.25
31.000	0.00	0.70	1.507	I	O	|	|	|	|	5.24
31.083	0.00	0.70	1.502	I	O	|	|	|	|	5.23
31.167	0.00	0.70	1.497	I	O	|	|	|	|	5.22
31.250	0.00	0.70	1.492	I	O	|	|	|	|	5.21
31.333	0.00	0.70	1.487	I	O	|	|	|	|	5.20
31.417	0.00	0.70	1.482	I	O	|	|	|	|	5.19
31.500	0.00	0.70	1.478	I	O	|	|	|	|	5.18
31.583	0.00	0.70	1.473	I	O	|	|	|	|	5.17
31.667	0.00	0.69	1.468	I	O	|	|	|	|	5.16
31.750	0.00	0.69	1.463	I	O	|	|	|	|	5.15
31.833	0.00	0.69	1.458	I	O	|	|	|	|	5.14
31.917	0.00	0.69	1.454	I	O	|	|	|	|	5.13
32.000	0.00	0.69	1.449	I	O	|	|	|	|	5.12
32.083	0.00	0.69	1.444	I	O	|	|	|	|	5.11
32.167	0.00	0.69	1.439	I	O	|	|	|	|	5.10
32.250	0.00	0.69	1.435	I	O	|	|	|	|	5.09
32.333	0.00	0.69	1.430	I	O	|	|	|	|	5.08
32.417	0.00	0.69	1.425	I	O	|	|	|	|	5.07
32.500	0.00	0.69	1.421	I	O	|	|	|	|	5.06
32.583	0.00	0.68	1.416	I	O	|	|	|	|	5.05
32.667	0.00	0.68	1.411	I	O	|	|	|	|	5.04
32.750	0.00	0.68	1.406	I	O	|	|	|	|	5.03
32.833	0.00	0.68	1.402	I	O	|	|	|	|	5.02
32.917	0.00	0.68	1.397	I	O	|	|	|	|	5.01
33.000	0.00	0.68	1.392	I	O	|	|	|	|	5.00
33.083	0.00	0.68	1.388	I	O	|	|	|	|	4.99
33.167	0.00	0.68	1.383	I	O	|	|	|	|	4.98
33.250	0.00	0.68	1.378	I	O	|	|	|	|	4.97
33.333	0.00	0.68	1.374	I	O	|	|	|	|	4.96
33.417	0.00	0.68	1.369	I	O	|	|	|	|	4.95
33.500	0.00	0.67	1.364	I	O	|	|	|	|	4.94
33.583	0.00	0.67	1.360	I	O	|	|	|	|	4.93
33.667	0.00	0.67	1.355	I	O	|	|	|	|	4.92
33.750	0.00	0.67	1.350	I	O	|	|	|	|	4.91
33.833	0.00	0.67	1.346	I	O	|	|	|	|	4.90
33.917	0.00	0.67	1.341	I	O	|	|	|	|	4.89
34.000	0.00	0.67	1.337	I	O	|	|	|	|	4.88
34.083	0.00	0.67	1.332	I	O	|	|	|	|	4.88
34.167	0.00	0.67	1.327	I	O	|	|	|	|	4.87
34.250	0.00	0.67	1.323	I	O	|	|	|	|	4.86
34.333	0.00	0.66	1.318	I	O	|	|	|	|	4.85
34.417	0.00	0.66	1.314	I	O	|	|	|	|	4.84
34.500	0.00	0.66	1.309	I	O	|	|	|	|	4.83
34.583	0.00	0.66	1.305	I	O	|	|	|	|	4.82
34.667	0.00	0.66	1.300	I	O	|	|	|	|	4.81
34.750	0.00	0.66	1.295	I	O	|	|	|	|	4.80
34.833	0.00	0.66	1.291	I	O	|	|	|	|	4.79
34.917	0.00	0.66	1.286	I	O	|	|	|	|	4.78
35.000	0.00	0.66	1.282	I	O	|	|	|	|	4.77
35.083	0.00	0.66	1.277	I	O	|	|	|	|	4.76
35.167	0.00	0.66	1.273	I	O	|	|	|	|	4.75
35.250	0.00	0.65	1.268	I	O	|	|	|	|	4.74
35.333	0.00	0.65	1.264	I	O	|	|	|	|	4.73
35.417	0.00	0.65	1.259	I	O	|	|	|	|	4.72

35.500	0.00	0.65	1.255	I O	|	|	|	| 4.71
35.583	0.00	0.65	1.250	I O	|	|	|	| 4.70
35.667	0.00	0.65	1.246	I O	|	|	|	| 4.69
35.750	0.00	0.65	1.241	I O	|	|	|	| 4.68
35.833	0.00	0.65	1.237	I O	|	|	|	| 4.67
35.917	0.00	0.65	1.232	I O	|	|	|	| 4.66
36.000	0.00	0.65	1.228	I O	|	|	|	| 4.65
36.083	0.00	0.64	1.223	I O	|	|	|	| 4.64
36.167	0.00	0.64	1.219	I O	|	|	|	| 4.63
36.250	0.00	0.64	1.215	I O	|	|	|	| 4.62
36.333	0.00	0.64	1.210	I O	|	|	|	| 4.61
36.417	0.00	0.64	1.206	I O	|	|	|	| 4.60
36.500	0.00	0.64	1.201	I O	|	|	|	| 4.59
36.583	0.00	0.64	1.197	I O	|	|	|	| 4.58
36.667	0.00	0.64	1.193	I O	|	|	|	| 4.57
36.750	0.00	0.63	1.188	I O	|	|	|	| 4.56
36.833	0.00	0.63	1.184	I O	|	|	|	| 4.54
36.917	0.00	0.63	1.180	I O	|	|	|	| 4.53
37.000	0.00	0.63	1.175	I O	|	|	|	| 4.52
37.083	0.00	0.63	1.171	I O	|	|	|	| 4.51
37.167	0.00	0.63	1.167	I O	|	|	|	| 4.50
37.250	0.00	0.63	1.162	I O	|	|	|	| 4.49
37.333	0.00	0.63	1.158	I O	|	|	|	| 4.48
37.417	0.00	0.63	1.154	I O	|	|	|	| 4.47
37.500	0.00	0.62	1.149	I O	|	|	|	| 4.46
37.583	0.00	0.62	1.145	I O	|	|	|	| 4.45
37.667	0.00	0.62	1.141	I O	|	|	|	| 4.44
37.750	0.00	0.62	1.136	I O	|	|	|	| 4.43
37.833	0.00	0.62	1.132	I O	|	|	|	| 4.42
37.917	0.00	0.62	1.128	I O	|	|	|	| 4.41
38.000	0.00	0.62	1.124	I O	|	|	|	| 4.40
38.083	0.00	0.62	1.119	I O	|	|	|	| 4.39
38.167	0.00	0.61	1.115	I O	|	|	|	| 4.38
38.250	0.00	0.61	1.111	I O	|	|	|	| 4.37
38.333	0.00	0.61	1.107	I O	|	|	|	| 4.36
38.417	0.00	0.61	1.102	I O	|	|	|	| 4.35
38.500	0.00	0.61	1.098	I O	|	|	|	| 4.34
38.583	0.00	0.61	1.094	I O	|	|	|	| 4.33
38.667	0.00	0.61	1.090	I O	|	|	|	| 4.32
38.750	0.00	0.61	1.086	I O	|	|	|	| 4.31
38.833	0.00	0.61	1.082	I O	|	|	|	| 4.30
38.917	0.00	0.60	1.077	I O	|	|	|	| 4.29
39.000	0.00	0.60	1.073	I O	|	|	|	| 4.28
39.083	0.00	0.60	1.069	I O	|	|	|	| 4.27
39.167	0.00	0.60	1.065	I O	|	|	|	| 4.26
39.250	0.00	0.60	1.061	I O	|	|	|	| 4.25
39.333	0.00	0.60	1.057	I O	|	|	|	| 4.24
39.417	0.00	0.60	1.053	I O	|	|	|	| 4.23
39.500	0.00	0.60	1.048	I O	|	|	|	| 4.22
39.583	0.00	0.60	1.044	I O	|	|	|	| 4.21
39.667	0.00	0.59	1.040	I O	|	|	|	| 4.20
39.750	0.00	0.59	1.036	I O	|	|	|	| 4.19
39.833	0.00	0.59	1.032	I O	|	|	|	| 4.18
39.917	0.00	0.59	1.028	I O	|	|	|	| 4.17
40.000	0.00	0.59	1.024	I O	|	|	|	| 4.16
40.083	0.00	0.59	1.020	IO	|	|	|	| 4.15
40.167	0.00	0.59	1.016	IO	|	|	|	| 4.14
40.250	0.00	0.59	1.012	IO	|	|	|	| 4.14
40.333	0.00	0.59	1.008	IO	|	|	|	| 4.13
40.417	0.00	0.58	1.004	IO	|	|	|	| 4.12
40.500	0.00	0.58	1.000	IO	|	|	|	| 4.11
40.583	0.00	0.58	0.996	IO	|	|	|	| 4.10
40.667	0.00	0.58	0.992	IO	|	|	|	| 4.09
40.750	0.00	0.58	0.988	IO	|	|	|	| 4.08
40.833	0.00	0.58	0.984	IO	|	|	|	| 4.07
40.917	0.00	0.58	0.980	IO	|	|	|	| 4.06
41.000	0.00	0.58	0.976	IO	|	|	|	| 4.05
41.083	0.00	0.58	0.972	IO	|	|	|	| 4.04
41.167	0.00	0.57	0.968	IO	|	|	|	| 4.03
41.250	0.00	0.57	0.964	IO	|	|	|	| 4.02
41.333	0.00	0.57	0.960	IO	|	|	|	| 4.01

41.417	0.00	0.57	0.956	IO					4.00
41.500	0.00	0.57	0.952	IO					3.99
41.583	0.00	0.57	0.948	IO					3.98
41.667	0.00	0.57	0.944	IO					3.97
41.750	0.00	0.57	0.940	IO					3.96
41.833	0.00	0.57	0.936	IO					3.96
41.917	0.00	0.57	0.932	IO					3.95
42.000	0.00	0.56	0.929	IO					3.94
42.083	0.00	0.56	0.925	IO					3.93
42.167	0.00	0.56	0.921	IO					3.92
42.250	0.00	0.56	0.917	IO					3.91
42.333	0.00	0.56	0.913	IO					3.90
42.417	0.00	0.56	0.909	IO					3.89
42.500	0.00	0.56	0.905	IO					3.88
42.583	0.00	0.56	0.902	IO					3.87
42.667	0.00	0.56	0.898	IO					3.86
42.750	0.00	0.55	0.894	IO					3.85
42.833	0.00	0.55	0.890	IO					3.85
42.917	0.00	0.55	0.886	IO					3.84
43.000	0.00	0.55	0.882	IO					3.83
43.083	0.00	0.55	0.879	IO					3.82
43.167	0.00	0.55	0.875	IO					3.81
43.250	0.00	0.55	0.871	IO					3.80
43.333	0.00	0.55	0.867	IO					3.79
43.417	0.00	0.55	0.864	IO					3.78
43.500	0.00	0.55	0.860	IO					3.77
43.583	0.00	0.54	0.856	IO					3.76
43.667	0.00	0.54	0.852	IO					3.76
43.750	0.00	0.54	0.849	IO					3.75
43.833	0.00	0.54	0.845	IO					3.74
43.917	0.00	0.54	0.841	IO					3.73
44.000	0.00	0.54	0.837	IO					3.72
44.083	0.00	0.54	0.834	IO					3.71
44.167	0.00	0.54	0.830	IO					3.70
44.250	0.00	0.54	0.826	IO					3.69
44.333	0.00	0.53	0.823	IO					3.68
44.417	0.00	0.53	0.819	IO					3.67
44.500	0.00	0.53	0.815	IO					3.66
44.583	0.00	0.53	0.812	IO					3.65
44.667	0.00	0.53	0.808	IO					3.64
44.750	0.00	0.53	0.804	IO					3.63
44.833	0.00	0.52	0.801	IO					3.62
44.917	0.00	0.52	0.797	IO					3.61
45.000	0.00	0.52	0.794	IO					3.60
45.083	0.00	0.52	0.790	IO					3.59
45.167	0.00	0.52	0.786	IO					3.58
45.250	0.00	0.52	0.783	IO					3.57
45.333	0.00	0.52	0.779	IO					3.56
45.417	0.00	0.51	0.776	IO					3.56
45.500	0.00	0.51	0.772	IO					3.55
45.583	0.00	0.51	0.769	IO					3.54
45.667	0.00	0.51	0.765	IO					3.53
45.750	0.00	0.51	0.762	IO					3.52
45.833	0.00	0.51	0.758	IO					3.51
45.917	0.00	0.50	0.755	IO					3.50
46.000	0.00	0.50	0.751	IO					3.49
46.083	0.00	0.50	0.748	IO					3.48
46.167	0.00	0.50	0.744	IO					3.47
46.250	0.00	0.50	0.741	IO					3.46
46.333	0.00	0.50	0.737	IO					3.45
46.417	0.00	0.50	0.734	IO					3.44
46.500	0.00	0.49	0.731	IO					3.43
46.583	0.00	0.49	0.727	IO					3.42
46.667	0.00	0.49	0.724	IO					3.41
46.750	0.00	0.49	0.720	IO					3.40
46.833	0.00	0.49	0.717	IO					3.40
46.917	0.00	0.49	0.714	IO					3.39
47.000	0.00	0.49	0.710	IO					3.38
47.083	0.00	0.48	0.707	IO					3.37
47.167	0.00	0.48	0.704	IO					3.36
47.250	0.00	0.48	0.700	IO					3.35

47.333	0.00	0.48	0.697	IO	|	|	|	| 3.34
47.417	0.00	0.48	0.694	IO	|	|	|	| 3.33
47.500	0.00	0.48	0.690	IO	|	|	|	| 3.32
47.583	0.00	0.48	0.687	IO	|	|	|	| 3.31
47.667	0.00	0.47	0.684	IO	|	|	|	| 3.31
47.750	0.00	0.47	0.681	IO	|	|	|	| 3.30
47.833	0.00	0.47	0.677	IO	|	|	|	| 3.29
47.917	0.00	0.47	0.674	IO	|	|	|	| 3.28
48.000	0.00	0.47	0.671	IO	|	|	|	| 3.27
48.083	0.00	0.47	0.668	IO	|	|	|	| 3.26
48.167	0.00	0.47	0.664	IO	|	|	|	| 3.25
48.250	0.00	0.46	0.661	IO	|	|	|	| 3.24
48.333	0.00	0.46	0.658	IO	|	|	|	| 3.24
48.417	0.00	0.46	0.655	IO	|	|	|	| 3.23
48.500	0.00	0.46	0.652	IO	|	|	|	| 3.22
48.583	0.00	0.46	0.649	IO	|	|	|	| 3.21
48.667	0.00	0.46	0.645	IO	|	|	|	| 3.20
48.750	0.00	0.46	0.642	IO	|	|	|	| 3.19
48.833	0.00	0.45	0.639	IO	|	|	|	| 3.18
48.917	0.00	0.45	0.636	IO	|	|	|	| 3.18
49.000	0.00	0.45	0.633	IO	|	|	|	| 3.17
49.083	0.00	0.45	0.630	IO	|	|	|	| 3.16
49.167	0.00	0.45	0.627	IO	|	|	|	| 3.15
49.250	0.00	0.45	0.624	IO	|	|	|	| 3.14
49.333	0.00	0.45	0.621	IO	|	|	|	| 3.13
49.417	0.00	0.45	0.617	IO	|	|	|	| 3.13
49.500	0.00	0.44	0.614	IO	|	|	|	| 3.12
49.583	0.00	0.44	0.611	IO	|	|	|	| 3.11
49.667	0.00	0.44	0.608	IO	|	|	|	| 3.10
49.750	0.00	0.44	0.605	IO	|	|	|	| 3.09
49.833	0.00	0.44	0.602	IO	|	|	|	| 3.08
49.917	0.00	0.44	0.599	IO	|	|	|	| 3.08
50.000	0.00	0.44	0.596	IO	|	|	|	| 3.07
50.083	0.00	0.43	0.593	IO	|	|	|	| 3.06
50.167	0.00	0.43	0.590	IO	|	|	|	| 3.05
50.250	0.00	0.43	0.587	IO	|	|	|	| 3.04
50.333	0.00	0.43	0.584	IO	|	|	|	| 3.04
50.417	0.00	0.43	0.581	IO	|	|	|	| 3.03
50.500	0.00	0.43	0.578	IO	|	|	|	| 3.02
50.583	0.00	0.43	0.575	IO	|	|	|	| 3.01
50.667	0.00	0.43	0.573	IO	|	|	|	| 3.00
50.750	0.00	0.42	0.570	IO	|	|	|	| 3.00
50.833	0.00	0.42	0.567	IO	|	|	|	| 2.99
50.917	0.00	0.42	0.564	IO	|	|	|	| 2.98
51.000	0.00	0.42	0.561	IO	|	|	|	| 2.97
51.083	0.00	0.42	0.558	IO	|	|	|	| 2.96
51.167	0.00	0.42	0.555	IO	|	|	|	| 2.96
51.250	0.00	0.42	0.552	IO	|	|	|	| 2.95
51.333	0.00	0.42	0.549	IO	|	|	|	| 2.94
51.417	0.00	0.41	0.546	IO	|	|	|	| 2.93
51.500	0.00	0.41	0.544	IO	|	|	|	| 2.92
51.583	0.00	0.41	0.541	IO	|	|	|	| 2.92
51.667	0.00	0.41	0.538	IO	|	|	|	| 2.91
51.750	0.00	0.41	0.535	IO	|	|	|	| 2.90
51.833	0.00	0.41	0.532	IO	|	|	|	| 2.89
51.917	0.00	0.41	0.530	IO	|	|	|	| 2.89
52.000	0.00	0.41	0.527	IO	|	|	|	| 2.88
52.083	0.00	0.40	0.524	IO	|	|	|	| 2.87
52.167	0.00	0.40	0.521	IO	|	|	|	| 2.86
52.250	0.00	0.40	0.518	IO	|	|	|	| 2.86
52.333	0.00	0.40	0.516	IO	|	|	|	| 2.85
52.417	0.00	0.40	0.513	IO	|	|	|	| 2.84
52.500	0.00	0.40	0.510	IO	|	|	|	| 2.83
52.583	0.00	0.40	0.507	IO	|	|	|	| 2.83
52.667	0.00	0.40	0.505	IO	|	|	|	| 2.82
52.750	0.00	0.39	0.502	IO	|	|	|	| 2.81
52.833	0.00	0.39	0.499	IO	|	|	|	| 2.80
52.917	0.00	0.39	0.496	IO	|	|	|	| 2.80
53.000	0.00	0.39	0.494	IO	|	|	|	| 2.79
53.083	0.00	0.39	0.491	IO	|	|	|	| 2.78
53.167	0.00	0.39	0.488	IO	|	|	|	| 2.77

53.250	0.00	0.39	0.486	IO				2.77
53.333	0.00	0.39	0.483	IO				2.76
53.417	0.00	0.39	0.480	IO				2.75
53.500	0.00	0.38	0.478	IO				2.75
53.583	0.00	0.38	0.475	IO				2.74
53.667	0.00	0.38	0.473	IO				2.73
53.750	0.00	0.38	0.470	IO				2.72
53.833	0.00	0.38	0.467	IO				2.72
53.917	0.00	0.38	0.465	IO				2.71
54.000	0.00	0.38	0.462	IO				2.70
54.083	0.00	0.38	0.459	IO				2.70
54.167	0.00	0.37	0.457	IO				2.69
54.250	0.00	0.37	0.454	IO				2.68
54.333	0.00	0.37	0.452	IO				2.67
54.417	0.00	0.36	0.449	IO				2.66
54.500	0.00	0.36	0.447	IO				2.66
54.583	0.00	0.36	0.444	IO				2.65
54.667	0.00	0.36	0.442	IO				2.64
54.750	0.00	0.35	0.439	IO				2.63
54.833	0.00	0.35	0.437	IO				2.62
54.917	0.00	0.35	0.435	IO				2.62
55.000	0.00	0.34	0.432	IO				2.61
55.083	0.00	0.34	0.430	IO				2.60
55.167	0.00	0.34	0.427	IO				2.60
55.250	0.00	0.34	0.425	IO				2.59
55.333	0.00	0.33	0.423	IO				2.58
55.417	0.00	0.33	0.421	IO				2.57
55.500	0.00	0.33	0.418	IO				2.57
55.583	0.00	0.33	0.416	IO				2.56
55.667	0.00	0.32	0.414	IO				2.55
55.750	0.00	0.32	0.412	IO				2.55
55.833	0.00	0.32	0.409	IO				2.54
55.917	0.00	0.32	0.407	IO				2.53
56.000	0.00	0.31	0.405	IO				2.53
56.083	0.00	0.31	0.403	IO				2.52
56.167	0.00	0.31	0.401	IO				2.51
56.250	0.00	0.31	0.399	IO				2.50
56.333	0.00	0.30	0.396	IO				2.50
56.417	0.00	0.30	0.394	IO				2.49
56.500	0.00	0.30	0.392	IO				2.49
56.583	0.00	0.30	0.390	IO				2.48
56.667	0.00	0.30	0.388	IO				2.47
56.750	0.00	0.29	0.386	O				2.47
56.833	0.00	0.29	0.384	O				2.46
56.917	0.00	0.29	0.382	O				2.45
57.000	0.00	0.29	0.380	O				2.45
57.083	0.00	0.28	0.378	O				2.44
57.167	0.00	0.28	0.376	O				2.44
57.250	0.00	0.28	0.374	O				2.43
57.333	0.00	0.28	0.372	O				2.42
57.417	0.00	0.28	0.371	O				2.42
57.500	0.00	0.27	0.369	O				2.41
57.583	0.00	0.27	0.367	O				2.41
57.667	0.00	0.27	0.365	O				2.40
57.750	0.00	0.27	0.363	O				2.39
57.833	0.00	0.27	0.361	O				2.39
57.917	0.00	0.27	0.359	O				2.38
58.000	0.00	0.27	0.358	O				2.37
58.083	0.00	0.27	0.356	O				2.36
58.167	0.00	0.27	0.354	O				2.36
58.250	0.00	0.26	0.352	O				2.35
58.333	0.00	0.26	0.350	O				2.34
58.417	0.00	0.26	0.348	O				2.33
58.500	0.00	0.26	0.347	O				2.33
58.583	0.00	0.26	0.345	O				2.32
58.667	0.00	0.26	0.343	O				2.31
58.750	0.00	0.26	0.341	O				2.31
58.833	0.00	0.26	0.339	O				2.30
58.917	0.00	0.26	0.338	O				2.29
59.000	0.00	0.26	0.336	O				2.29
59.083	0.00	0.26	0.334	O				2.28

59.167	0.00	0.26	0.332	O	|	|	|	|	2.27
59.250	0.00	0.26	0.330	O	|	|	|	|	2.26
59.333	0.00	0.26	0.329	O	|	|	|	|	2.26
59.417	0.00	0.26	0.327	O	|	|	|	|	2.25
59.500	0.00	0.26	0.325	O	|	|	|	|	2.24
59.583	0.00	0.26	0.323	O	|	|	|	|	2.24
59.667	0.00	0.25	0.322	O	|	|	|	|	2.23
59.750	0.00	0.25	0.320	O	|	|	|	|	2.22
59.833	0.00	0.25	0.318	O	|	|	|	|	2.22
59.917	0.00	0.25	0.316	O	|	|	|	|	2.21
60.000	0.00	0.25	0.315	O	|	|	|	|	2.20
60.083	0.00	0.25	0.313	O	|	|	|	|	2.20
60.167	0.00	0.25	0.311	O	|	|	|	|	2.19
60.250	0.00	0.25	0.309	O	|	|	|	|	2.18
60.333	0.00	0.25	0.308	O	|	|	|	|	2.17
60.417	0.00	0.25	0.306	O	|	|	|	|	2.17
60.500	0.00	0.25	0.304	O	|	|	|	|	2.16
60.583	0.00	0.25	0.303	O	|	|	|	|	2.15
60.667	0.00	0.25	0.301	O	|	|	|	|	2.15
60.750	0.00	0.25	0.299	O	|	|	|	|	2.14
60.833	0.00	0.25	0.297	O	|	|	|	|	2.13
60.917	0.00	0.25	0.296	O	|	|	|	|	2.13
61.000	0.00	0.25	0.294	O	|	|	|	|	2.12
61.083	0.00	0.25	0.292	O	|	|	|	|	2.11
61.167	0.00	0.24	0.291	O	|	|	|	|	2.11
61.250	0.00	0.24	0.289	O	|	|	|	|	2.10
61.333	0.00	0.24	0.287	O	|	|	|	|	2.09
61.417	0.00	0.24	0.286	O	|	|	|	|	2.09
61.500	0.00	0.24	0.284	O	|	|	|	|	2.08
61.583	0.00	0.24	0.282	O	|	|	|	|	2.07
61.667	0.00	0.24	0.281	O	|	|	|	|	2.07
61.750	0.00	0.24	0.279	O	|	|	|	|	2.06
61.833	0.00	0.24	0.277	O	|	|	|	|	2.06
61.917	0.00	0.24	0.276	O	|	|	|	|	2.05
62.000	0.00	0.24	0.274	O	|	|	|	|	2.04
62.083	0.00	0.24	0.272	O	|	|	|	|	2.04
62.167	0.00	0.24	0.271	O	|	|	|	|	2.03
62.250	0.00	0.24	0.269	O	|	|	|	|	2.02
62.333	0.00	0.24	0.267	O	|	|	|	|	2.02
62.417	0.00	0.24	0.266	O	|	|	|	|	2.01
62.500	0.00	0.24	0.264	O	|	|	|	|	2.00
62.583	0.00	0.24	0.263	O	|	|	|	|	2.00
62.667	0.00	0.24	0.261	O	|	|	|	|	1.99
62.750	0.00	0.23	0.259	O	|	|	|	|	1.98
62.833	0.00	0.23	0.258	O	|	|	|	|	1.98
62.917	0.00	0.23	0.256	O	|	|	|	|	1.97
63.000	0.00	0.23	0.254	O	|	|	|	|	1.97
63.083	0.00	0.23	0.253	O	|	|	|	|	1.96
63.167	0.00	0.23	0.251	O	|	|	|	|	1.95
63.250	0.00	0.23	0.250	O	|	|	|	|	1.95
63.333	0.00	0.23	0.248	O	|	|	|	|	1.94
63.417	0.00	0.23	0.247	O	|	|	|	|	1.93
63.500	0.00	0.23	0.245	O	|	|	|	|	1.93
63.583	0.00	0.23	0.243	O	|	|	|	|	1.92
63.667	0.00	0.23	0.242	O	|	|	|	|	1.92
63.750	0.00	0.23	0.240	O	|	|	|	|	1.91
63.833	0.00	0.23	0.239	O	|	|	|	|	1.90
63.917	0.00	0.23	0.237	O	|	|	|	|	1.90
64.000	0.00	0.23	0.235	O	|	|	|	|	1.89
64.083	0.00	0.23	0.234	O	|	|	|	|	1.88
64.167	0.00	0.23	0.232	O	|	|	|	|	1.88
64.250	0.00	0.23	0.231	O	|	|	|	|	1.87
64.333	0.00	0.22	0.229	O	|	|	|	|	1.87
64.417	0.00	0.22	0.228	O	|	|	|	|	1.86
64.500	0.00	0.22	0.226	O	|	|	|	|	1.85
64.583	0.00	0.22	0.225	O	|	|	|	|	1.85
64.667	0.00	0.22	0.223	O	|	|	|	|	1.84
64.750	0.00	0.22	0.222	O	|	|	|	|	1.84
64.833	0.00	0.22	0.220	O	|	|	|	|	1.83
64.917	0.00	0.22	0.219	O	|	|	|	|	1.82
65.000	0.00	0.22	0.217	O	|	|	|	|	1.82

65.083	0.00	0.22	0.215	O					1.81
65.167	0.00	0.22	0.214	O					1.81
65.250	0.00	0.22	0.212	O					1.80
65.333	0.00	0.22	0.211	O					1.79
65.417	0.00	0.22	0.209	O					1.79
65.500	0.00	0.22	0.208	O					1.78
65.583	0.00	0.22	0.206	O					1.78
65.667	0.00	0.22	0.205	O					1.77
65.750	0.00	0.22	0.203	O					1.76
65.833	0.00	0.22	0.202	O					1.76
65.917	0.00	0.22	0.200	O					1.75
66.000	0.00	0.21	0.199	O					1.75
66.083	0.00	0.21	0.198	O					1.74
66.167	0.00	0.21	0.196	O					1.74
66.250	0.00	0.21	0.195	O					1.73
66.333	0.00	0.21	0.193	O					1.72
66.417	0.00	0.21	0.192	O					1.72
66.500	0.00	0.21	0.190	O					1.71
66.583	0.00	0.21	0.189	O					1.71
66.667	0.00	0.21	0.187	O					1.70
66.750	0.00	0.21	0.186	O					1.69
66.833	0.00	0.21	0.184	O					1.68
66.917	0.00	0.21	0.183	O					1.67
67.000	0.00	0.21	0.182	O					1.66
67.083	0.00	0.21	0.180	O					1.65
67.167	0.00	0.21	0.179	O					1.64
67.250	0.00	0.20	0.177	O					1.63
67.333	0.00	0.20	0.176	O					1.62
67.417	0.00	0.20	0.174	O					1.61
67.500	0.00	0.20	0.173	O					1.61
67.583	0.00	0.20	0.172	O					1.60
67.667	0.00	0.20	0.170	O					1.59
67.750	0.00	0.20	0.169	O					1.58
67.833	0.00	0.20	0.168	O					1.57
67.917	0.00	0.20	0.166	O					1.56
68.000	0.00	0.20	0.165	O					1.55
68.083	0.00	0.19	0.164	O					1.54
68.167	0.00	0.19	0.162	O					1.53
68.250	0.00	0.19	0.161	O					1.52
68.333	0.00	0.19	0.160	O					1.51
68.417	0.00	0.19	0.158	O					1.50
68.500	0.00	0.19	0.157	O					1.50
68.583	0.00	0.19	0.156	O					1.49
68.667	0.00	0.19	0.154	O					1.48
68.750	0.00	0.19	0.153	O					1.47
68.833	0.00	0.19	0.152	O					1.46
68.917	0.00	0.19	0.150	O					1.45
69.000	0.00	0.18	0.149	O					1.44
69.083	0.00	0.18	0.148	O					1.43
69.167	0.00	0.18	0.147	O					1.43
69.250	0.00	0.18	0.145	O					1.42
69.333	0.00	0.18	0.144	O					1.41
69.417	0.00	0.18	0.143	O					1.40
69.500	0.00	0.18	0.142	O					1.39
69.583	0.00	0.18	0.140	O					1.38
69.667	0.00	0.18	0.139	O					1.37
69.750	0.00	0.18	0.138	O					1.37
69.833	0.00	0.18	0.137	O					1.36
69.917	0.00	0.18	0.136	O					1.35
70.000	0.00	0.17	0.134	O					1.34
70.083	0.00	0.17	0.133	O					1.33
70.167	0.00	0.17	0.132	O					1.33
70.250	0.00	0.17	0.131	O					1.32
70.333	0.00	0.17	0.130	O					1.31
70.417	0.00	0.17	0.128	O					1.30
70.500	0.00	0.17	0.127	O					1.29
70.583	0.00	0.17	0.126	O					1.29
70.667	0.00	0.17	0.125	O					1.28
70.750	0.00	0.17	0.124	O					1.27
70.833	0.00	0.17	0.123	O					1.26
70.917	0.00	0.17	0.121	O					1.25

71.000	0.00	0.16	0.120	O	|	|	|	|	1.25
71.083	0.00	0.16	0.119	O	|	|	|	|	1.24
71.167	0.00	0.16	0.118	O	|	|	|	|	1.23
71.250	0.00	0.16	0.117	O	|	|	|	|	1.22
71.333	0.00	0.16	0.116	O	|	|	|	|	1.22
71.417	0.00	0.16	0.115	O	|	|	|	|	1.21
71.500	0.00	0.16	0.114	O	|	|	|	|	1.20
71.583	0.00	0.16	0.112	O	|	|	|	|	1.19
71.667	0.00	0.16	0.111	O	|	|	|	|	1.19
71.750	0.00	0.16	0.110	O	|	|	|	|	1.18
71.833	0.00	0.16	0.109	O	|	|	|	|	1.17
71.917	0.00	0.16	0.108	O	|	|	|	|	1.16
72.000	0.00	0.16	0.107	O	|	|	|	|	1.16
72.083	0.00	0.15	0.106	O	|	|	|	|	1.15
72.167	0.00	0.15	0.105	O	|	|	|	|	1.14
72.250	0.00	0.15	0.104	O	|	|	|	|	1.13
72.333	0.00	0.15	0.103	O	|	|	|	|	1.13
72.417	0.00	0.15	0.102	O	|	|	|	|	1.12
72.500	0.00	0.15	0.101	O	|	|	|	|	1.11
72.583	0.00	0.15	0.100	O	|	|	|	|	1.11
72.667	0.00	0.15	0.099	O	|	|	|	|	1.10
72.750	0.00	0.15	0.098	O	|	|	|	|	1.09
72.833	0.00	0.15	0.097	O	|	|	|	|	1.09
72.917	0.00	0.15	0.096	O	|	|	|	|	1.08
73.000	0.00	0.15	0.095	O	|	|	|	|	1.07
73.083	0.00	0.15	0.094	O	|	|	|	|	1.06
73.167	0.00	0.15	0.093	O	|	|	|	|	1.06
73.250	0.00	0.14	0.092	O	|	|	|	|	1.05
73.333	0.00	0.14	0.091	O	|	|	|	|	1.04
73.417	0.00	0.14	0.090	O	|	|	|	|	1.04
73.500	0.00	0.14	0.089	O	|	|	|	|	1.03
73.583	0.00	0.14	0.088	O	|	|	|	|	1.02
73.667	0.00	0.14	0.087	O	|	|	|	|	1.02
73.750	0.00	0.14	0.086	O	|	|	|	|	1.01
73.833	0.00	0.14	0.085	O	|	|	|	|	1.00
73.917	0.00	0.14	0.084	O	|	|	|	|	1.00
74.000	0.00	0.14	0.083	O	|	|	|	|	0.99
74.083	0.00	0.14	0.082	O	|	|	|	|	0.98
74.167	0.00	0.14	0.081	O	|	|	|	|	0.98
74.250	0.00	0.14	0.080	O	|	|	|	|	0.97
74.333	0.00	0.14	0.079	O	|	|	|	|	0.97
74.417	0.00	0.14	0.078	O	|	|	|	|	0.96
74.500	0.00	0.13	0.077	O	|	|	|	|	0.95
74.583	0.00	0.13	0.076	O	|	|	|	|	0.95
74.667	0.00	0.13	0.075	O	|	|	|	|	0.94
74.750	0.00	0.13	0.074	O	|	|	|	|	0.93
74.833	0.00	0.13	0.073	O	|	|	|	|	0.93
74.917	0.00	0.13	0.073	O	|	|	|	|	0.92
75.000	0.00	0.13	0.072	O	|	|	|	|	0.92
75.083	0.00	0.13	0.071	O	|	|	|	|	0.91
75.167	0.00	0.13	0.070	O	|	|	|	|	0.90
75.250	0.00	0.13	0.069	O	|	|	|	|	0.90
75.333	0.00	0.13	0.068	O	|	|	|	|	0.89
75.417	0.00	0.13	0.067	O	|	|	|	|	0.88
75.500	0.00	0.13	0.066	O	|	|	|	|	0.88
75.583	0.00	0.13	0.065	O	|	|	|	|	0.87
75.667	0.00	0.13	0.065	O	|	|	|	|	0.87
75.750	0.00	0.13	0.064	O	|	|	|	|	0.86
75.833	0.00	0.12	0.063	O	|	|	|	|	0.86
75.917	0.00	0.12	0.062	O	|	|	|	|	0.85
76.000	0.00	0.12	0.061	O	|	|	|	|	0.84
76.083	0.00	0.12	0.060	O	|	|	|	|	0.84
76.167	0.00	0.12	0.059	O	|	|	|	|	0.83
76.250	0.00	0.12	0.059	O	|	|	|	|	0.83
76.333	0.00	0.12	0.058	O	|	|	|	|	0.82
76.417	0.00	0.12	0.057	O	|	|	|	|	0.82
76.500	0.00	0.12	0.056	O	|	|	|	|	0.81
76.583	0.00	0.12	0.055	O	|	|	|	|	0.80
76.667	0.00	0.12	0.054	O	|	|	|	|	0.80
76.750	0.00	0.12	0.054	O	|	|	|	|	0.79
76.833	0.00	0.12	0.053	O	|	|	|	|	0.79

```
76.917    0.00    0.12      0.052  O       |       |       |       |     0.78
77.000    0.00    0.12      0.051  O       |       |       |       |     0.78
77.083    0.00    0.12      0.050  O       |       |       |       |     0.77
77.167    0.00    0.12      0.050  O       |       |       |       |     0.77
77.250    0.00    0.12      0.049  O       |       |       |       |     0.76
77.333    0.00    0.11      0.048  O       |       |       |       |     0.75
77.417    0.00    0.11      0.047  O       |       |       |       |     0.75
77.500    0.00    0.11      0.046  O       |       |       |       |     0.74
77.583    0.00    0.11      0.046  O       |       |       |       |     0.74
77.667    0.00    0.11      0.045  O       |       |       |       |     0.73
77.750    0.00    0.11      0.044  O       |       |       |       |     0.73
77.833    0.00    0.11      0.043  O       |       |       |       |     0.72
77.917    0.00    0.11      0.043  O       |       |       |       |     0.72
78.000    0.00    0.11      0.042  O       |       |       |       |     0.71
78.083    0.00    0.11      0.041  O       |       |       |       |     0.71
78.167    0.00    0.11      0.040  O       |       |       |       |     0.70
78.250    0.00    0.11      0.040  O       |       |       |       |     0.69
78.333    0.00    0.11      0.039  O       |       |       |       |     0.68
78.417    0.00    0.10      0.038  O       |       |       |       |     0.67
78.500    0.00    0.10      0.037  O       |       |       |       |     0.65
78.583    0.00    0.10      0.037  O       |       |       |       |     0.64

      Remaining water in basin =    0.04 (Ac.Ft)


      ****************************HYDROGRAPH DATA****************************
                   Number of intervals =   943
                   Time interval =    5.0 (Min.)
                   Maximum/Peak flow rate =        6.165 (CFS)
                   Total volume =       4.500 (Ac.Ft)
             Status of hydrographs being held in storage
                        Stream 1  Stream 2  Stream 3  Stream 4  Stream 5
             Peak (CFS)      0.000     0.000     0.000     0.000     0.000
             Vol (Ac.Ft)      0.000     0.000     0.000     0.000     0.000
      ***********************************************************************

      ---------------------------------------------------------------------
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Appendix D – Proposed Rational Method Hydrology

POST DEVELOPMENT RATIONAL HYDROLOGY HIGHLAND GROVE IV



POST DEVELOPMENT
RATIONAL HYDROLOGY MAP
PREPARATION DATE: OCTOBER 2024
REVISION DATE: AUGUST 2025
JOB NUMBER: 10615

adkan ENGINEERS
Civil Engineering • Surveying • Planning
6879 Airport Drive, Riverside, CA 92504
Tel:(951) 688-0241 Fax:(951) 688-0599

PROPOSED 10 YEAR

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                Riverside County Rational Hydrology Program

CIVILCADD/CIVILDESIGN Engineering Software,(c) 1989 - 2004 Version 7.0
        Rational Hydrology Study        Date: 04/02/25  File:pro10.out
------------------------------------------------------------------------
 *********   Hydrology Study Control Information **********

 English (in-lb) Units used in input data file

------------------------------------------------------------------------


Program License Serial Number 5006

------------------------------------------------------------------------
Rational Method Hydrology Program based on
Riverside County Flood Control & Water Conservation District
1978 hydrology manual

Storm event (year) =   10.00 Antecedent Moisture Condition = 2

2 year, 1 hour precipitation =  0.500(In.)
100 year, 1 hour precipitation =  1.300(In.)

Storm event year =  10.0
Calculated rainfall intensity data:
1 hour intensity =  0.829(In/Hr)
Slope of intensity duration curve = 0.5000




++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station        1.000 to Point/Station        2.000
**** INITIAL AREA EVALUATION ****
____________________________________________________________________________
Initial area flow distance =   969.000(Ft.)
Top (of initial area) elevation =  1256.000(Ft.)
Bottom (of initial area) elevation =  1238.000(Ft.)
Difference in elevation =    18.000(Ft.)
Slope =    0.01858  s(percent)=       1.86
TC = k(0.390)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =   13.546 min.
Rainfall intensity =      1.745(In/Hr) for a    10.0 year storm
SINGLE FAMILY (1/4 Acre Lot)
Runoff Coefficient = 0.787
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  69.60
Pervious area fraction =  0.500; Impervious fraction =  0.500
Initial subarea runoff =      1.786(CFS)
Total initial stream area =        1.300(Ac.)
Pervious area fraction = 0.500


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station        2.000 to Point/Station        3.000
**** STREET FLOW TRAVEL TIME + SUBAREA FLOW ADDITION ****
____________________________________________________________________________
Top of street segment elevation =  1238.000(Ft.)
End of street segment elevation =  1220.000(Ft.)
Length of street segment  =   820.000(Ft.)
Height of curb above gutter flowline  =    6.0(In.)
Width of half street (curb to crown)  =  18.000(Ft.)
Distance from crown to crossfall grade break  =  16.000(Ft.)
Slope from gutter to grade break (v/hz) =   0.020
Slope from grade break to crown (v/hz)  =   0.020
Street flow is on [1] side(s) of the street
Distance from curb to property line  =  10.000(Ft.)
Slope from curb to property line (v/hz) =   0.020
Gutter width =   2.000(Ft.)
Gutter hike from flowline =  2.000(In.)
 Manning's N in gutter =  0.0150
 Manning's N from gutter to grade break =  0.0150
 Manning's N from grade break to crown =  0.0150
Estimated mean flow rate at midpoint of street =      4.203(CFS)
Depth of flow =   0.336(Ft.), Average velocity =   3.433(Ft/s)
Streetflow hydraulics at midpoint of street travel:
Halfstreet flow width =  10.476(Ft.)
Flow velocity =   3.43(Ft/s)
Travel time =    3.98 min.     TC =   17.53  min.
 Adding area flow to street
```

```
SINGLE FAMILY (1/4 Acre Lot)
Runoff Coefficient = 0.776
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  69.60
Pervious area fraction =  0.500; Impervious fraction =  0.500
Rainfall intensity =      1.534(In/Hr) for a    10.0 year storm
Subarea runoff =      4.739(CFS) for      3.980(Ac.)
Total runoff =      6.525(CFS)       Total area =       5.280(Ac.)
Street flow at end of street =      6.525(CFS)
Half street flow at end of street =      6.525(CFS)
Depth of flow =   0.379(Ft.), Average velocity =   3.805(Ft/s)
Flow width (from curb towards crown)=  12.602(Ft.)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station        3.000 to Point/Station        3.000
**** CONFLUENCE OF MINOR STREAMS ****
------------------------------------------------------------------------------
Along Main Stream number: 1 in normal stream number 1
Stream flow area =      5.280(Ac.)
Runoff from this stream =      6.525(CFS)
Time of concentration =   17.53 min.
Rainfall intensity =     1.534(In/Hr)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station        4.000 to Point/Station        3.000
**** INITIAL AREA EVALUATION ****
------------------------------------------------------------------------------
Initial area flow distance =   451.000(Ft.)
Top (of initial area) elevation =  1238.000(Ft.)
Bottom (of initial area) elevation =  1220.000(Ft.)
Difference in elevation =    18.000(Ft.)
Slope =    0.03991  s(percent)=       3.99
TC = k(0.390)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =    8.561 min.
Rainfall intensity =      2.195(In/Hr) for a    10.0 year storm
SINGLE FAMILY (1/4 Acre Lot)
Runoff Coefficient = 0.806
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  69.60
Pervious area fraction =  0.500; Impervious fraction =  0.500
Initial subarea runoff =      2.723(CFS)
Total initial stream area =        1.540(Ac.)
Pervious area fraction = 0.500


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Process from Point/Station        3.000 to Point/Station        3.000
**** CONFLUENCE OF MINOR STREAMS ****
------------------------------------------------------------------------------
Along Main Stream number: 1 in normal stream number 2
Stream flow area =      1.540(Ac.)
Runoff from this stream =      2.723(CFS)
Time of concentration =    8.56 min.
Rainfall intensity =     2.195(In/Hr)
Summary of stream data:

Stream   Flow rate      TC            Rainfall Intensity
 No.       (CFS)       (min)                 (In/Hr)


1        6.525     17.53                 1.534
2        2.723      8.56                 2.195
Largest stream flow has longer time of concentration
Qp =      6.525 + sum of
          Qb         Ia/Ib
           2.723 *    0.699 =      1.903
Qp =      8.429

Total of 2 streams to confluence:
Flow rates before confluence point:
       6.525       2.723
Area of streams before confluence:
        5.280        1.540
Results of confluence:
Total flow rate =      8.429(CFS)
Time of concentration =    17.526 min.
Effective stream area after confluence =      6.820(Ac.)
```

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++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station        3.000 to Point/Station        5.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
------------------------------------------------------------------------------
Upstream point/station elevation =  1220.000(Ft.)
Downstream point/station elevation =  1218.000(Ft.)
Pipe length  =    39.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =     8.429(CFS)
Nearest computed pipe diameter  =     15.00(In.)
Calculated individual pipe flow  =     8.429(CFS)
Normal flow depth in pipe =    8.17(In.)
Flow top width inside pipe =   14.94(In.)
Critical Depth =   13.61(In.)
Pipe flow velocity =     12.34(Ft/s)
Travel time through pipe =    0.05 min.
Time of concentration (TC) =    17.58 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station        5.000 to Point/Station        5.000
**** CONFLUENCE OF MAIN STREAMS ****
------------------------------------------------------------------------------
The following data inside Main Stream is listed:
In Main Stream number: 1
Stream flow area =      6.820(Ac.)
Runoff from this stream =      8.429(CFS)
Time of concentration =   17.58 min.
Rainfall intensity =     1.532(In/Hr)
Program is now starting with Main Stream No. 2


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station        6.000 to Point/Station        7.000
**** INITIAL AREA EVALUATION ****
------------------------------------------------------------------------------
Initial area flow distance =   963.000(Ft.)
Top (of initial area) elevation =  1254.000(Ft.)
Bottom (of initial area) elevation =  1234.000(Ft.)
Difference in elevation =    20.000(Ft.)
Slope =    0.02077  s(percent)=       2.08
TC = k(0.390)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =   13.214 min.
Rainfall intensity =      1.767(In/Hr) for a    10.0 year storm
SINGLE FAMILY (1/4 Acre Lot)
Runoff Coefficient = 0.788
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  69.60
Pervious area fraction =  0.500; Impervious fraction =  0.500
Initial subarea runoff =      3.859(CFS)
Total initial stream area =       2.770(Ac.)
Pervious area fraction = 0.500


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station        7.000 to Point/Station        8.000
**** STREET FLOW TRAVEL TIME + SUBAREA FLOW ADDITION ****
------------------------------------------------------------------------------
Top of street segment elevation =  1234.000(Ft.)
End of street segment elevation =  1220.000(Ft.)
Length of street segment  =   780.000(Ft.)
Height of curb above gutter flowline  =    6.0(In.)
Width of half street (curb to crown)  =  18.000(Ft.)
Distance from crown to crossfall grade break  =  16.000(Ft.)
Slope from gutter to grade break (v/hz) =   0.020
Slope from grade break to crown (v/hz)  =   0.020
Street flow is on [1] side(s) of the street
Distance from curb to property line  =  10.000(Ft.)
Slope from curb to property line (v/hz) =   0.020
Gutter width =   2.000(Ft.)
Gutter hike from flowline =  2.000(In.)
 Manning's N in gutter =  0.0150
 Manning's N from gutter to grade break =  0.0150
 Manning's N from grade break to crown =  0.0150
Estimated mean flow rate at midpoint of street =      7.328(CFS)
Depth of flow =   0.402(Ft.), Average velocity =   3.623(Ft/s)
Streetflow hydraulics at midpoint of street travel:
Halfstreet flow width =  13.769(Ft.)
Flow velocity =   3.62(Ft/s)
Travel time =    3.59 min.     TC =   16.80  min.
 Adding area flow to street
SINGLE FAMILY (1/4 Acre Lot)
Runoff Coefficient = 0.778
```

```
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  69.60
Pervious area fraction =  0.500; Impervious fraction =  0.500
Rainfall intensity =      1.567(In/Hr) for a    10.0 year storm
Subarea runoff =      6.876(CFS) for      5.640(Ac.)
Total runoff =     10.734(CFS)        Total area =       8.410(Ac.)
Street flow at end of street =     10.734(CFS)
Half street flow at end of street =     10.734(CFS)
Depth of flow =   0.448(Ft.), Average velocity =   3.972(Ft/s)
Flow width (from curb towards crown)=  16.049(Ft.)


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Process from Point/Station        8.000 to Point/Station        8.000
**** CONFLUENCE OF MINOR STREAMS ****
------------------------------------------------------------------------------
Along Main Stream number: 2 in normal stream number 1
Stream flow area =      8.410(Ac.)
Runoff from this stream =     10.734(CFS)
Time of concentration =   16.80 min.
Rainfall intensity =     1.567(In/Hr)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station        4.000 to Point/Station        8.000
**** INITIAL AREA EVALUATION ****
------------------------------------------------------------------------------
Initial area flow distance =   440.000(Ft.)
Top (of initial area) elevation =  1238.000(Ft.)
Bottom (of initial area) elevation =  1220.000(Ft.)
Difference in elevation =    18.000(Ft.)
Slope =    0.04091  s(percent)=       4.09
TC = k(0.390)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =    8.435 min.
Rainfall intensity =      2.211(In/Hr) for a    10.0 year storm
SINGLE FAMILY (1/4 Acre Lot)
Runoff Coefficient = 0.806
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  69.60
Pervious area fraction =  0.500; Impervious fraction =  0.500
Initial subarea runoff =      1.908(CFS)
Total initial stream area =        1.070(Ac.)
Pervious area fraction = 0.500


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Process from Point/Station        8.000 to Point/Station        8.000
**** CONFLUENCE OF MINOR STREAMS ****
------------------------------------------------------------------------------
Along Main Stream number: 2 in normal stream number 2
Stream flow area =      1.070(Ac.)
Runoff from this stream =      1.908(CFS)
Time of concentration =    8.43 min.
Rainfall intensity =     2.211(In/Hr)
Summary of stream data:

Stream   Flow rate      TC            Rainfall Intensity
 No.       (CFS)       (min)                 (In/Hr)


1       10.734     16.80                  1.567
2        1.908      8.43                  2.211
Largest stream flow has longer time of concentration
Qp =     10.734 + sum of
          Qb         Ia/Ib
           1.908 *    0.709 =      1.352
Qp =     12.086

Total of 2 streams to confluence:
Flow rates before confluence point:
      10.734       1.908
Area of streams before confluence:
        8.410        1.070
Results of confluence:
Total flow rate =     12.086(CFS)
Time of concentration =    16.802 min.
Effective stream area after confluence =      9.480(Ac.)


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Process from Point/Station        8.000 to Point/Station        5.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
------------------------------------------------------------------------
Upstream point/station elevation =  1220.000(Ft.)
Downstream point/station elevation =  1218.000(Ft.)
Pipe length  =    34.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =    12.086(CFS)
Nearest computed pipe diameter  =     15.00(In.)
Calculated individual pipe flow  =    12.086(CFS)
Normal flow depth in pipe =    9.89(In.)
Flow top width inside pipe =   14.22(In.)
Critical depth could not be calculated.
Pipe flow velocity =     14.09(Ft/s)
Travel time through pipe =    0.04 min.
Time of concentration (TC) =    16.84 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station        5.000 to Point/Station        5.000
**** CONFLUENCE OF MAIN STREAMS ****
------------------------------------------------------------------------
The following data inside Main Stream is listed:
In Main Stream number: 2
Stream flow area =      9.480(Ac.)
Runoff from this stream =     12.086(CFS)
Time of concentration =   16.84 min.
Rainfall intensity =     1.565(In/Hr)
Summary of stream data:

Stream   Flow rate      TC            Rainfall Intensity
 No.       (CFS)       (min)                 (In/Hr)


1        8.429     17.58               1.532
2       12.086     16.84               1.565
Largest stream flow has longer or shorter time of concentration
Qp =     12.086 + sum of
          Qa          Tb/Ta
           8.429 *    0.958 =      8.075
Qp =     20.161

Total of 2 main streams to confluence:
Flow rates before confluence point:
       8.429      12.086
Area of streams before confluence:
        6.820        9.480


Results of confluence:
Total flow rate =     20.161(CFS)
Time of concentration =    16.842 min.
Effective stream area after confluence  =     16.300(Ac.)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station        5.000 to Point/Station        9.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
------------------------------------------------------------------------
Upstream point/station elevation =  1218.000(Ft.)
Downstream point/station elevation =  1217.000(Ft.)
Pipe length  =   361.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =    20.161(CFS)
Nearest computed pipe diameter  =     30.00(In.)
Calculated individual pipe flow  =    20.161(CFS)
Normal flow depth in pipe =   22.97(In.)
Flow top width inside pipe =   25.42(In.)
Critical Depth =   18.30(In.)
Pipe flow velocity =      5.00(Ft/s)
Travel time through pipe =    1.20 min.
Time of concentration (TC) =    18.05 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station        9.000 to Point/Station        9.000
**** CONFLUENCE OF MINOR STREAMS ****
------------------------------------------------------------------------
Along Main Stream number: 1 in normal stream number 1
Stream flow area =     16.300(Ac.)
Runoff from this stream =     20.161(CFS)
Time of concentration =   18.05 min.
Rainfall intensity =     1.512(In/Hr)


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Process from Point/Station       10.000 to Point/Station       11.000
**** INITIAL AREA EVALUATION ****
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Initial area flow distance =   317.000(Ft.)
Top (of initial area) elevation =  1288.000(Ft.)
Bottom (of initial area) elevation =  1240.000(Ft.)
Difference in elevation =    48.000(Ft.)
Slope =    0.15142  s(percent)=      15.14
TC = k(0.390)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =    5.694 min.
Rainfall intensity =      2.691(In/Hr) for a    10.0 year storm
SINGLE FAMILY (1/4 Acre Lot)
Runoff Coefficient = 0.820
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  69.60
Pervious area fraction =  0.500; Impervious fraction =  0.500
Initial subarea runoff =      4.149(CFS)
Total initial stream area =        1.880(Ac.)
Pervious area fraction = 0.500


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Process from Point/Station       11.000 to Point/Station        9.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
------------------------------------------------------------------------------
Upstream point/station elevation =  1240.000(Ft.)
Downstream point/station elevation =  1217.000(Ft.)
Pipe length  =   233.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =     4.149(CFS)
Nearest computed pipe diameter  =      9.00(In.)
Calculated individual pipe flow  =     4.149(CFS)
Normal flow depth in pipe =    6.08(In.)
Flow top width inside pipe =    8.43(In.)
Critical depth could not be calculated.
Pipe flow velocity =     13.07(Ft/s)
Travel time through pipe =    0.30 min.
Time of concentration (TC) =     5.99 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station        9.000 to Point/Station        9.000
**** CONFLUENCE OF MINOR STREAMS ****
------------------------------------------------------------------------------
Along Main Stream number: 1 in normal stream number 2
Stream flow area =      1.880(Ac.)
Runoff from this stream =      4.149(CFS)
Time of concentration =    5.99 min.
Rainfall intensity =     2.624(In/Hr)
Summary of stream data:

Stream   Flow rate      TC            Rainfall Intensity
 No.       (CFS)       (min)                  (In/Hr)


1       20.161     18.05                 1.512
2        4.149      5.99                 2.624
Largest stream flow has longer time of concentration
Qp =     20.161 + sum of
          Qb         Ia/Ib
           4.149 *    0.576 =      2.391
Qp =     22.552

Total of 2 streams to confluence:
Flow rates before confluence point:
      20.161       4.149
Area of streams before confluence:
       16.300        1.880
Results of confluence:
Total flow rate =     22.552(CFS)
Time of concentration =    18.046 min.
Effective stream area after confluence =     18.180(Ac.)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station        9.000 to Point/Station       12.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
------------------------------------------------------------------------------
Upstream point/station elevation =  1217.000(Ft.)
Downstream point/station elevation =  1216.200(Ft.)
Pipe length  =   139.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =    22.552(CFS)
Nearest computed pipe diameter  =     27.00(In.)
Calculated individual pipe flow  =    22.552(CFS)
Normal flow depth in pipe =   21.23(In.)
Flow top width inside pipe =   22.13(In.)
```

```
Critical Depth =   19.93(In.)
Pipe flow velocity =      6.73(Ft/s)
Travel time through pipe =    0.34 min.
Time of concentration (TC) =    18.39 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       12.000 to Point/Station       13.000
**** SUBAREA FLOW ADDITION ****
______________________________________________________________________________
UNDEVELOPED (good cover) subarea
Runoff Coefficient = 0.691
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  74.60
Pervious area fraction =  1.000; Impervious fraction =  0.000
Time of concentration =    18.39 min.
Rainfall intensity =      1.498(In/Hr) for a    10.0 year storm
Subarea runoff =      0.972(CFS) for      0.940(Ac.)
Total runoff =     23.524(CFS)       Total area =      19.120(Ac.)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       13.000 to Point/Station       14.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
______________________________________________________________________________
Upstream point/station elevation =  1216.000(Ft.)
Downstream point/station elevation =  1211.000(Ft.)
Pipe length  =   245.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =    23.524(CFS)
Nearest computed pipe diameter  =     24.00(In.)
Calculated individual pipe flow  =    23.524(CFS)
Normal flow depth in pipe =   15.19(In.)
Flow top width inside pipe =   23.14(In.)
Critical Depth =   20.64(In.)
Pipe flow velocity =     11.22(Ft/s)
Travel time through pipe =    0.36 min.
Time of concentration (TC) =    18.75 min.
End of computations, total study area =           19.12 (Ac.)
The following figures may
be used for a unit hydrograph study of the same area.

Area averaged pervious area fraction(Ap) = 0.525
Area averaged RI index number =  69.8
```

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                Riverside County Rational Hydrology Program

CIVILCADD/CIVILDESIGN Engineering Software,(c) 1989 - 2004 Version 7.0
        Rational Hydrology Study        Date: 04/02/25  File:pro110.out
------------------------------------------------------------------------
 *********   Hydrology Study Control Information **********

 English (in-lb) Units used in input data file

------------------------------------------------------------------------


Program License Serial Number 5006

------------------------------------------------------------------------
Rational Method Hydrology Program based on
Riverside County Flood Control & Water Conservation District
1978 hydrology manual

Storm event (year) =   10.00 Antecedent Moisture Condition = 2

2 year, 1 hour precipitation =  0.500(In.)
100 year, 1 hour precipitation =  1.300(In.)

Storm event year =  10.0
Calculated rainfall intensity data:
1 hour intensity =  0.829(In/Hr)
Slope of intensity duration curve = 0.5000




++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      100.000 to Point/Station      101.000
**** INITIAL AREA EVALUATION ****
____________________________________________________________________________
Initial area flow distance =   575.000(Ft.)
Top (of initial area) elevation =  1333.000(Ft.)
Bottom (of initial area) elevation =  1303.000(Ft.)
Difference in elevation =    30.000(Ft.)
Slope =    0.05217  s(percent)=       5.22
TC = k(0.390)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =    8.942 min.
Rainfall intensity =      2.148(In/Hr) for a    10.0 year storm
SINGLE FAMILY (1/4 Acre Lot)
Runoff Coefficient = 0.804
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  69.60
Pervious area fraction =  0.500; Impervious fraction =  0.500
Initial subarea runoff =      5.871(CFS)
Total initial stream area =        3.400(Ac.)
Pervious area fraction = 0.500


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      101.000 to Point/Station      102.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
____________________________________________________________________________
Upstream point/station elevation =  1303.000(Ft.)
Downstream point/station elevation =  1295.000(Ft.)
Pipe length  =    35.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =     5.871(CFS)
Nearest computed pipe diameter  =      9.00(In.)
Calculated individual pipe flow  =     5.871(CFS)
Normal flow depth in pipe =    5.78(In.)
Flow top width inside pipe =    8.63(In.)
Critical depth could not be calculated.
Pipe flow velocity =     19.61(Ft/s)
Travel time through pipe =    0.03 min.
Time of concentration (TC) =     8.97 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      102.000 to Point/Station      102.000
**** CONFLUENCE OF MINOR STREAMS ****
____________________________________________________________________________
Along Main Stream number: 1 in normal stream number 1
Stream flow area =      3.400(Ac.)
Runoff from this stream =      5.871(CFS)
Time of concentration =    8.97 min.
Rainfall intensity =     2.144(In/Hr)
```

```
++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      103.000 to Point/Station      104.000
**** INITIAL AREA EVALUATION ****
------------------------------------------------------------------------------
Initial area flow distance =   589.000(Ft.)
Top (of initial area) elevation =  1333.000(Ft.)
Bottom (of initial area) elevation =  1303.000(Ft.)
Difference in elevation =    30.000(Ft.)
Slope =    0.05093  s(percent)=       5.09
TC = k(0.390)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =    9.072 min.
Rainfall intensity =      2.132(In/Hr) for a    10.0 year storm
SINGLE FAMILY (1/4 Acre Lot)
Runoff Coefficient = 0.803
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  69.60
Pervious area fraction =  0.500; Impervious fraction =  0.500
Initial subarea runoff =      3.563(CFS)
Total initial stream area =        2.080(Ac.)
Pervious area fraction = 0.500


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      104.000 to Point/Station      102.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
------------------------------------------------------------------------------
Upstream point/station elevation =  1303.000(Ft.)
Downstream point/station elevation =  1295.000(Ft.)
Pipe length  =    26.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =     3.563(CFS)
Nearest computed pipe diameter  =      9.00(In.)
Calculated individual pipe flow  =     3.563(CFS)
Normal flow depth in pipe =    3.89(In.)
Flow top width inside pipe =    8.92(In.)
Critical depth could not be calculated.
Pipe flow velocity =     19.46(Ft/s)
Travel time through pipe =    0.02 min.
Time of concentration (TC) =     9.09 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      102.000 to Point/Station      102.000
**** CONFLUENCE OF MINOR STREAMS ****
------------------------------------------------------------------------------
Along Main Stream number: 1 in normal stream number 2
Stream flow area =      2.080(Ac.)
Runoff from this stream =      3.563(CFS)
Time of concentration =    9.09 min.
Rainfall intensity =     2.130(In/Hr)
Summary of stream data:

Stream   Flow rate      TC            Rainfall Intensity
 No.       (CFS)       (min)                 (In/Hr)


1        5.871      8.97                 2.144
2        3.563      9.09                 2.130
Largest stream flow has longer or shorter time of concentration
Qp =      5.871 + sum of
          Qa          Tb/Ta
           3.563 *    0.987 =      3.515
Qp =      9.386

Total of 2 streams to confluence:
Flow rates before confluence point:
       5.871       3.563
Area of streams before confluence:
        3.400        2.080
Results of confluence:
Total flow rate =      9.386(CFS)
Time of concentration =     8.972 min.
Effective stream area after confluence =      5.480(Ac.)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      102.000 to Point/Station      105.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
------------------------------------------------------------------------------
Upstream point/station elevation =  1295.000(Ft.)
Downstream point/station elevation =  1268.000(Ft.)
Pipe length  =   451.00(Ft.)   Manning's N = 0.013
```

```
No. of pipes = 1  Required pipe flow  =     9.386(CFS)
Nearest computed pipe diameter  =     15.00(In.)
Calculated individual pipe flow  =     9.386(CFS)
Normal flow depth in pipe =    8.32(In.)
Flow top width inside pipe =   14.91(In.)
Critical Depth =   14.00(In.)
Pipe flow velocity =     13.43(Ft/s)
Travel time through pipe =    0.56 min.
Time of concentration (TC) =     9.53 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      105.000 to Point/Station      105.000
**** CONFLUENCE OF MAIN STREAMS ****
--------------------------------------------------------------------------------
The following data inside Main Stream is listed:
In Main Stream number: 1
Stream flow area =      5.480(Ac.)
Runoff from this stream =      9.386(CFS)
Time of concentration =    9.53 min.
Rainfall intensity =     2.080(In/Hr)
Program is now starting with Main Stream No. 2


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      106.000 to Point/Station      107.000
**** INITIAL AREA EVALUATION ****
--------------------------------------------------------------------------------
Initial area flow distance =   708.000(Ft.)
Top (of initial area) elevation =  1347.000(Ft.)
Bottom (of initial area) elevation =  1313.000(Ft.)
Difference in elevation =    34.000(Ft.)
Slope =    0.04802  s(percent)=       4.80
TC = k(0.390)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =    9.881 min.
Rainfall intensity =      2.043(In/Hr) for a    10.0 year storm
SINGLE FAMILY (1/4 Acre Lot)
Runoff Coefficient = 0.800
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  69.60
Pervious area fraction =  0.500; Impervious fraction =  0.500
Initial subarea runoff =      4.463(CFS)
Total initial stream area =        2.730(Ac.)
Pervious area fraction = 0.500


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      107.000 to Point/Station      108.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
--------------------------------------------------------------------------------
Upstream point/station elevation =  1313.000(Ft.)
Downstream point/station elevation =  1306.000(Ft.)
Pipe length  =    43.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =     4.463(CFS)
Nearest computed pipe diameter  =      9.00(In.)
Calculated individual pipe flow  =     4.463(CFS)
Normal flow depth in pipe =    5.38(In.)
Flow top width inside pipe =    8.82(In.)
Critical depth could not be calculated.
Pipe flow velocity =     16.19(Ft/s)
Travel time through pipe =    0.04 min.
Time of concentration (TC) =     9.92 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      108.000 to Point/Station      108.000
**** CONFLUENCE OF MINOR STREAMS ****
--------------------------------------------------------------------------------
Along Main Stream number: 2 in normal stream number 1
Stream flow area =      2.730(Ac.)
Runoff from this stream =      4.463(CFS)
Time of concentration =    9.92 min.
Rainfall intensity =     2.039(In/Hr)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      106.000 to Point/Station      109.000
**** INITIAL AREA EVALUATION ****
--------------------------------------------------------------------------------
Initial area flow distance =   636.000(Ft.)
Top (of initial area) elevation =  1347.000(Ft.)
Bottom (of initial area) elevation =  1314.000(Ft.)
Difference in elevation =    33.000(Ft.)
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Slope =    0.05189  s(percent)=       5.19
TC = k(0.390)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =    9.320 min.
Rainfall intensity =      2.104(In/Hr) for a    10.0 year storm
SINGLE FAMILY (1/4 Acre Lot)
Runoff Coefficient = 0.802
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  69.60
Pervious area fraction =  0.500; Impervious fraction =  0.500
Initial subarea runoff =      2.498(CFS)
Total initial stream area =        1.480(Ac.)
Pervious area fraction = 0.500


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      109.000 to Point/Station      108.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
______________________________________________________________________________
Upstream point/station elevation =  1314.000(Ft.)
Downstream point/station elevation =  1306.000(Ft.)
Pipe length  =    60.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =     2.498(CFS)
Nearest computed pipe diameter  =      9.00(In.)
Calculated individual pipe flow  =     2.498(CFS)
Normal flow depth in pipe =    4.03(In.)
Flow top width inside pipe =    8.95(In.)
Critical Depth =    8.30(In.)
Pipe flow velocity =     13.03(Ft/s)
Travel time through pipe =    0.08 min.
Time of concentration (TC) =     9.40 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      108.000 to Point/Station      108.000
**** CONFLUENCE OF MINOR STREAMS ****
______________________________________________________________________________
Along Main Stream number: 2 in normal stream number 2
Stream flow area =      1.480(Ac.)
Runoff from this stream =      2.498(CFS)
Time of concentration =    9.40 min.
Rainfall intensity =     2.095(In/Hr)
Summary of stream data:

Stream   Flow rate      TC            Rainfall Intensity
 No.       (CFS)       (min)                 (In/Hr)


1        4.463      9.92                 2.039
2        2.498      9.40                 2.095
Largest stream flow has longer time of concentration
Qp =      4.463 + sum of
          Qb         Ia/Ib
           2.498 *    0.973 =      2.431
Qp =      6.894

Total of 2 streams to confluence:
Flow rates before confluence point:
       4.463       2.498
Area of streams before confluence:
       2.730       1.480
Results of confluence:
Total flow rate =      6.894(CFS)
Time of concentration =     9.925 min.
Effective stream area after confluence =      4.210(Ac.)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      108.000 to Point/Station      110.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
______________________________________________________________________________
Upstream point/station elevation =  1306.000(Ft.)
Downstream point/station elevation =  1270.000(Ft.)
Pipe length  =   579.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =     6.894(CFS)
Nearest computed pipe diameter  =     12.00(In.)
Calculated individual pipe flow  =     6.894(CFS)
Normal flow depth in pipe =    7.95(In.)
Flow top width inside pipe =   11.35(In.)
Critical depth could not be calculated.
Pipe flow velocity =     12.50(Ft/s)
Travel time through pipe =    0.77 min.
Time of concentration (TC) =    10.70 min.
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++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      110.000 to Point/Station      110.000
**** CONFLUENCE OF MINOR STREAMS ****
____________________________________________________________________________
Along Main Stream number: 2 in normal stream number 1
Stream flow area =      4.210(Ac.)
Runoff from this stream =      6.894(CFS)
Time of concentration =   10.70 min.
Rainfall intensity =     1.964(In/Hr)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      107.000 to Point/Station      111.000
**** INITIAL AREA EVALUATION ****
____________________________________________________________________________
Initial area flow distance =   619.000(Ft.)
Top (of initial area) elevation =  1313.000(Ft.)
Bottom (of initial area) elevation =  1276.000(Ft.)
Difference in elevation =    37.000(Ft.)
Slope =    0.05977  s(percent)=       5.98
TC = k(0.390)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =    8.963 min.
Rainfall intensity =      2.145(In/Hr) for a    10.0 year storm
SINGLE FAMILY (1/4 Acre Lot)
Runoff Coefficient = 0.804
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  69.60
Pervious area fraction =  0.500; Impervious fraction =  0.500
Initial subarea runoff =      4.191(CFS)
Total initial stream area =        2.430(Ac.)
Pervious area fraction = 0.500


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      111.000 to Point/Station      110.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
____________________________________________________________________________
Upstream point/station elevation =  1276.000(Ft.)
Downstream point/station elevation =  1270.000(Ft.)
Pipe length  =    18.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =     4.191(CFS)
Nearest computed pipe diameter  =      9.00(In.)
Calculated individual pipe flow  =     4.191(CFS)
Normal flow depth in pipe =    4.17(In.)
Flow top width inside pipe =    8.98(In.)
Critical depth could not be calculated.
Pipe flow velocity =     20.91(Ft/s)
Travel time through pipe =    0.01 min.
Time of concentration (TC) =     8.98 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      110.000 to Point/Station      110.000
**** CONFLUENCE OF MINOR STREAMS ****
____________________________________________________________________________
Along Main Stream number: 2 in normal stream number 2
Stream flow area =      2.430(Ac.)
Runoff from this stream =      4.191(CFS)
Time of concentration =    8.98 min.
Rainfall intensity =     2.144(In/Hr)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      109.000 to Point/Station      112.000
**** INITIAL AREA EVALUATION ****
____________________________________________________________________________
Initial area flow distance =   582.000(Ft.)
Top (of initial area) elevation =  1314.000(Ft.)
Bottom (of initial area) elevation =  1276.000(Ft.)
Difference in elevation =    38.000(Ft.)
Slope =    0.06529  s(percent)=       6.53
TC = k(0.390)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =    8.591 min.
Rainfall intensity =      2.191(In/Hr) for a    10.0 year storm
SINGLE FAMILY (1/4 Acre Lot)
Runoff Coefficient = 0.806
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  69.60
Pervious area fraction =  0.500; Impervious fraction =  0.500
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Initial subarea runoff =      4.801(CFS)
Total initial stream area =        2.720(Ac.)
Pervious area fraction = 0.500


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      112.000 to Point/Station      110.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
----------------------------------------------------------------------------
Upstream point/station elevation =  1276.000(Ft.)
Downstream point/station elevation =  1270.000(Ft.)
Pipe length  =    30.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =     4.801(CFS)
Nearest computed pipe diameter  =      9.00(In.)
Calculated individual pipe flow  =     4.801(CFS)
Normal flow depth in pipe =    5.28(In.)
Flow top width inside pipe =    8.86(In.)
Critical depth could not be calculated.
Pipe flow velocity =     17.82(Ft/s)
Travel time through pipe =    0.03 min.
Time of concentration (TC) =     8.62 min.


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Process from Point/Station      110.000 to Point/Station      110.000
**** CONFLUENCE OF MINOR STREAMS ****
----------------------------------------------------------------------------
Along Main Stream number: 2 in normal stream number 3
Stream flow area =      2.720(Ac.)
Runoff from this stream =      4.801(CFS)
Time of concentration =    8.62 min.
Rainfall intensity =     2.188(In/Hr)
Summary of stream data:

Stream   Flow rate      TC            Rainfall Intensity
 No.       (CFS)       (min)                  (In/Hr)


1        6.894     10.70                 1.964
2        4.191      8.98                 2.144
3        4.801      8.62                 2.188
Largest stream flow has longer time of concentration
Qp =      6.894 + sum of
          Qb          Ia/Ib
           4.191 *    0.916 =      3.839
          Qb          Ia/Ib
           4.801 *    0.898 =      4.309
Qp =     15.043

Total of 3 streams to confluence:
Flow rates before confluence point:
       6.894       4.191       4.801
Area of streams before confluence:
        4.210        2.430        2.720
Results of confluence:
Total flow rate =     15.043(CFS)
Time of concentration =    10.697 min.
Effective stream area after confluence =      9.360(Ac.)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      110.000 to Point/Station      105.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
----------------------------------------------------------------------------
Upstream point/station elevation =  1270.000(Ft.)
Downstream point/station elevation =  1268.000(Ft.)
Pipe length  =    69.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =    15.043(CFS)
Nearest computed pipe diameter  =     18.00(In.)
Calculated individual pipe flow  =    15.043(CFS)
Normal flow depth in pipe =   12.64(In.)
Flow top width inside pipe =   16.46(In.)
Critical Depth =   16.87(In.)
Pipe flow velocity =     11.34(Ft/s)
Travel time through pipe =    0.10 min.
Time of concentration (TC) =    10.80 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      105.000 to Point/Station      105.000
**** CONFLUENCE OF MAIN STREAMS ****
----------------------------------------------------------------------------
The following data inside Main Stream is listed:
In Main Stream number: 2
Stream flow area =      9.360(Ac.)
Runoff from this stream =     15.043(CFS)
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```
Time of concentration =   10.80 min.
Rainfall intensity =     1.954(In/Hr)
Summary of stream data:

Stream   Flow rate      TC            Rainfall Intensity
 No.       (CFS)       (min)                 (In/Hr)


1        9.386      9.53               2.080
2       15.043     10.80               1.954
Largest stream flow has longer time of concentration
Qp =     15.043 + sum of
          Qb         Ia/Ib
           9.386 *    0.940 =      8.819
Qp =     23.861

Total of 2 main streams to confluence:
Flow rates before confluence point:
        9.386      15.043
Area of streams before confluence:
        5.480        9.360


Results of confluence:
Total flow rate =     23.861(CFS)
Time of concentration =    10.799 min.
Effective stream area after confluence  =     14.840(Ac.)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      105.000 to Point/Station      113.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
______________________________________________________________________________
Upstream point/station elevation =  1268.000(Ft.)
Downstream point/station elevation =  1258.000(Ft.)
Pipe length  =   288.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =    23.861(CFS)
Nearest computed pipe diameter  =     21.00(In.)
Calculated individual pipe flow  =    23.861(CFS)
Normal flow depth in pipe =   14.32(In.)
Flow top width inside pipe =   19.56(In.)
Critical depth could not be calculated.
Pipe flow velocity =     13.66(Ft/s)
Travel time through pipe =    0.35 min.
Time of concentration (TC) =    11.15 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      113.000 to Point/Station      113.000
**** CONFLUENCE OF MINOR STREAMS ****
______________________________________________________________________________
Along Main Stream number: 1 in normal stream number 1
Stream flow area =     14.840(Ac.)
Runoff from this stream =     23.861(CFS)
Time of concentration =   11.15 min.
Rainfall intensity =     1.923(In/Hr)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      114.000 to Point/Station      115.000
**** INITIAL AREA EVALUATION ****
______________________________________________________________________________
Initial area flow distance =  1000.000(Ft.)
Top (of initial area) elevation =  1330.000(Ft.)
Bottom (of initial area) elevation =  1265.000(Ft.)
Difference in elevation =    65.000(Ft.)
Slope =    0.06500  s(percent)=       6.50
TC = k(0.300)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =    8.214 min.
Rainfall intensity =      2.241(In/Hr) for a    10.0 year storm
COMMERCIAL subarea type
Runoff Coefficient = 0.881
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  69.60
Pervious area fraction =  0.100; Impervious fraction =  0.900
Initial subarea runoff =      2.193(CFS)
Total initial stream area =        1.110(Ac.)
Pervious area fraction = 0.100


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      115.000 to Point/Station      113.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
```

```
Upstream point/station elevation =  1265.000(Ft.)
Downstream point/station elevation =  1258.000(Ft.)
Pipe length  =    41.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =     2.193(CFS)
Nearest computed pipe diameter  =      6.00(In.)
Calculated individual pipe flow  =     2.193(CFS)
Normal flow depth in pipe =    4.65(In.)
Flow top width inside pipe =    5.01(In.)
Critical depth could not be calculated.
Pipe flow velocity =     13.43(Ft/s)
Travel time through pipe =    0.05 min.
Time of concentration (TC) =     8.26 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      113.000 to Point/Station      113.000
**** CONFLUENCE OF MINOR STREAMS ****
------------------------------------------------------------------------------
Along Main Stream number: 1 in normal stream number 2
Stream flow area =      1.110(Ac.)
Runoff from this stream =      2.193(CFS)
Time of concentration =    8.26 min.
Rainfall intensity =     2.234(In/Hr)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      116.000 to Point/Station      117.000
**** INITIAL AREA EVALUATION ****
------------------------------------------------------------------------------
Initial area flow distance =  1000.000(Ft.)
Top (of initial area) elevation =  1330.000(Ft.)
Bottom (of initial area) elevation =  1265.000(Ft.)
Difference in elevation =    65.000(Ft.)
Slope =    0.06500  s(percent)=       6.50
TC = k(0.300)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =    8.214 min.
Rainfall intensity =      2.241(In/Hr) for a    10.0 year storm
COMMERCIAL subarea type
Runoff Coefficient = 0.881
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  69.60
Pervious area fraction =  0.100; Impervious fraction =  0.900
Initial subarea runoff =      1.857(CFS)
Total initial stream area =        0.940(Ac.)
Pervious area fraction = 0.100


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Process from Point/Station      117.000 to Point/Station      113.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
------------------------------------------------------------------------------
Upstream point/station elevation =  1265.000(Ft.)
Downstream point/station elevation =  1258.000(Ft.)
Pipe length  =    21.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =     1.857(CFS)
Nearest computed pipe diameter  =      6.00(In.)
Calculated individual pipe flow  =     1.857(CFS)
Normal flow depth in pipe =    3.26(In.)
Flow top width inside pipe =    5.98(In.)
Critical depth could not be calculated.
Pipe flow velocity =     17.06(Ft/s)
Travel time through pipe =    0.02 min.
Time of concentration (TC) =     8.23 min.


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Process from Point/Station      113.000 to Point/Station      113.000
**** CONFLUENCE OF MINOR STREAMS ****
------------------------------------------------------------------------------
Along Main Stream number: 1 in normal stream number 3
Stream flow area =      0.940(Ac.)
Runoff from this stream =      1.857(CFS)
Time of concentration =    8.23 min.
Rainfall intensity =     2.238(In/Hr)
Summary of stream data:

Stream    Flow rate      TC            Rainfall Intensity
 No.        (CFS)       (min)                  (In/Hr)


1        23.861     11.15                1.923
2         2.193      8.26                2.234
```

```
3        1.857      8.23                 2.238
Largest stream flow has longer time of concentration
Qp =     23.861 + sum of
          Qb         Ia/Ib
           2.193 *    0.861 =      1.888
          Qb         Ia/Ib
           1.857 *    0.859 =      1.596
Qp =     27.345

Total of 3 streams to confluence:
Flow rates before confluence point:
      23.861       2.193       1.857
Area of streams before confluence:
       14.840        1.110        0.940
Results of confluence:
Total flow rate =     27.345(CFS)
Time of concentration =    11.150 min.
Effective stream area after confluence =     16.890(Ac.)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      113.000 to Point/Station      118.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
______________________________________________________________________________
Upstream point/station elevation =  1258.000(Ft.)
Downstream point/station elevation =  1256.000(Ft.)
Pipe length  =    68.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =    27.345(CFS)
Nearest computed pipe diameter  =     21.00(In.)
Calculated individual pipe flow  =    27.345(CFS)
Normal flow depth in pipe =   17.34(In.)
Flow top width inside pipe =   15.93(In.)
Critical depth could not be calculated.
Pipe flow velocity =     12.88(Ft/s)
Travel time through pipe =    0.09 min.
Time of concentration (TC) =    11.24 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      118.000 to Point/Station      118.000
**** CONFLUENCE OF MAIN STREAMS ****
______________________________________________________________________________
The following data inside Main Stream is listed:
In Main Stream number: 1
Stream flow area =     16.890(Ac.)
Runoff from this stream =     27.345(CFS)
Time of concentration =   11.24 min.
Rainfall intensity =     1.916(In/Hr)
Program is now starting with Main Stream No. 2


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Process from Point/Station      119.000 to Point/Station      120.000
**** INITIAL AREA EVALUATION ****
______________________________________________________________________________
Initial area flow distance =   502.000(Ft.)
Top (of initial area) elevation =  1291.000(Ft.)
Bottom (of initial area) elevation =  1265.000(Ft.)
Difference in elevation =    26.000(Ft.)
Slope =    0.05179  s(percent)=       5.18
TC = k(0.390)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =    8.482 min.
Rainfall intensity =      2.205(In/Hr) for a    10.0 year storm
SINGLE FAMILY (1/4 Acre Lot)
Runoff Coefficient = 0.806
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  69.60
Pervious area fraction =  0.500; Impervious fraction =  0.500
Initial subarea runoff =      4.337(CFS)
Total initial stream area =        2.440(Ac.)
Pervious area fraction = 0.500


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Process from Point/Station      120.000 to Point/Station      120.500
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
______________________________________________________________________________
Upstream point/station elevation =  1265.000(Ft.)
Downstream point/station elevation =  1257.000(Ft.)
Pipe length  =    42.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =     4.337(CFS)
Nearest computed pipe diameter  =      9.00(In.)
Calculated individual pipe flow  =     4.337(CFS)
```

```
Normal flow depth in pipe =    5.03(In.)
Flow top width inside pipe =    8.94(In.)
Critical depth could not be calculated.
Pipe flow velocity =     17.09(Ft/s)
Travel time through pipe =    0.04 min.
Time of concentration (TC) =     8.52 min.


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Process from Point/Station      120.500 to Point/Station      120.500
**** CONFLUENCE OF MINOR STREAMS ****
----------------------------------------------------------------------------
Along Main Stream number: 2 in normal stream number 1
Stream flow area =      2.440(Ac.)
Runoff from this stream =      4.337(CFS)
Time of concentration =    8.52 min.
Rainfall intensity =     2.200(In/Hr)


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Process from Point/Station      119.000 to Point/Station      121.000
**** INITIAL AREA EVALUATION ****
----------------------------------------------------------------------------
Initial area flow distance =   507.000(Ft.)
Top (of initial area) elevation =  1291.000(Ft.)
Bottom (of initial area) elevation =  1265.000(Ft.)
Difference in elevation =    26.000(Ft.)
Slope =    0.05128  s(percent)=       5.13
TC = k(0.390)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =    8.532 min.
Rainfall intensity =      2.199(In/Hr) for a    10.0 year storm
SINGLE FAMILY (1/4 Acre Lot)
Runoff Coefficient = 0.806
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  69.60
Pervious area fraction =  0.500; Impervious fraction =  0.500
Initial subarea runoff =      3.756(CFS)
Total initial stream area =        2.120(Ac.)
Pervious area fraction = 0.500


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Process from Point/Station      121.000 to Point/Station      120.500
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
----------------------------------------------------------------------------
Upstream point/station elevation =  1265.000(Ft.)
Downstream point/station elevation =  1257.000(Ft.)
Pipe length  =    34.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =     3.756(CFS)
Nearest computed pipe diameter  =      9.00(In.)
Calculated individual pipe flow  =     3.756(CFS)
Normal flow depth in pipe =    4.33(In.)
Flow top width inside pipe =    8.99(In.)
Critical depth could not be calculated.
Pipe flow velocity =     17.86(Ft/s)
Travel time through pipe =    0.03 min.
Time of concentration (TC) =     8.56 min.


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Process from Point/Station      120.500 to Point/Station      120.500
**** CONFLUENCE OF MINOR STREAMS ****
----------------------------------------------------------------------------
Along Main Stream number: 2 in normal stream number 2
Stream flow area =      2.120(Ac.)
Runoff from this stream =      3.756(CFS)
Time of concentration =    8.56 min.
Rainfall intensity =     2.195(In/Hr)
Summary of stream data:

Stream   Flow rate      TC            Rainfall Intensity
 No.       (CFS)       (min)                (In/Hr)


1        4.337      8.52                 2.200
2        3.756      8.56                 2.195
Largest stream flow has longer or shorter time of concentration
Qp =      4.337 + sum of
          Qa          Tb/Ta
           3.756 *    0.995 =      3.738
Qp =      8.074

Total of 2 streams to confluence:
```

```
Flow rates before confluence point:
       4.337       3.756
Area of streams before confluence:
       2.440       2.120
Results of confluence:
Total flow rate =      8.074(CFS)
Time of concentration =     8.523 min.
Effective stream area after confluence =      4.560(Ac.)


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Process from Point/Station      120.500 to Point/Station      118.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
________________________________________________________________________
Upstream point/station elevation =  1257.000(Ft.)
Downstream point/station elevation =  1256.000(Ft.)
Pipe length  =    35.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =     8.074(CFS)
Nearest computed pipe diameter  =     15.00(In.)
Calculated individual pipe flow  =     8.074(CFS)
Normal flow depth in pipe =    9.60(In.)
Flow top width inside pipe =   14.40(In.)
Critical Depth =   13.42(In.)
Pipe flow velocity =      9.74(Ft/s)
Travel time through pipe =    0.06 min.
Time of concentration (TC) =     8.58 min.


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Process from Point/Station      118.000 to Point/Station      118.000
**** CONFLUENCE OF MAIN STREAMS ****
________________________________________________________________________
The following data inside Main Stream is listed:
In Main Stream number: 2
Stream flow area =      4.560(Ac.)
Runoff from this stream =      8.074(CFS)
Time of concentration =    8.58 min.
Rainfall intensity =     2.192(In/Hr)
Summary of stream data:

Stream   Flow rate      TC            Rainfall Intensity
 No.       (CFS)       (min)                 (In/Hr)


1       27.345     11.24               1.916
2        8.074      8.58               2.192
Largest stream flow has longer time of concentration
Qp =     27.345 + sum of
          Qb         Ia/Ib
           8.074 *    0.874 =      7.056
Qp =     34.401

Total of 2 main streams to confluence:
Flow rates before confluence point:
      27.345       8.074
Area of streams before confluence:
       16.890        4.560


Results of confluence:
Total flow rate =     34.401(CFS)
Time of concentration =    11.238 min.
Effective stream area after confluence  =     21.450(Ac.)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      118.000 to Point/Station      122.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
________________________________________________________________________
Upstream point/station elevation =  1256.000(Ft.)
Downstream point/station elevation =  1236.000(Ft.)
Pipe length  =   533.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =    34.401(CFS)
Nearest computed pipe diameter  =     24.00(In.)
Calculated individual pipe flow  =    34.401(CFS)
Normal flow depth in pipe =   16.01(In.)
Flow top width inside pipe =   22.62(In.)
Critical depth could not be calculated.
Pipe flow velocity =     15.44(Ft/s)
Travel time through pipe =    0.58 min.
Time of concentration (TC) =    11.81 min.


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Process from Point/Station      122.000 to Point/Station      122.000
**** CONFLUENCE OF MINOR STREAMS ****
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```
Along Main Stream number: 1 in normal stream number 1
Stream flow area =     21.450(Ac.)
Runoff from this stream =     34.401(CFS)
Time of concentration =   11.81 min.
Rainfall intensity =     1.869(In/Hr)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      115.000 to Point/Station      123.000
**** INITIAL AREA EVALUATION ****
------------------------------------------------------------------------------
Initial area flow distance =   622.000(Ft.)
Top (of initial area) elevation =  1265.000(Ft.)
Bottom (of initial area) elevation =  1242.000(Ft.)
Difference in elevation =    23.000(Ft.)
Slope =    0.03698  s(percent)=       3.70
TC = k(0.390)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =    9.885 min.
Rainfall intensity =      2.043(In/Hr) for a    10.0 year storm
SINGLE FAMILY (1/4 Acre Lot)
Runoff Coefficient = 0.800
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  69.60
Pervious area fraction =  0.500; Impervious fraction =  0.500
Initial subarea runoff =      6.685(CFS)
Total initial stream area =        4.090(Ac.)
Pervious area fraction = 0.500


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Process from Point/Station      123.000 to Point/Station      122.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
------------------------------------------------------------------------------
Upstream point/station elevation =  1242.000(Ft.)
Downstream point/station elevation =  1236.000(Ft.)
Pipe length  =    29.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =     6.685(CFS)
Nearest computed pipe diameter  =      9.00(In.)
Calculated individual pipe flow  =     6.685(CFS)
Normal flow depth in pipe =    6.60(In.)
Flow top width inside pipe =    7.96(In.)
Critical depth could not be calculated.
Pipe flow velocity =     19.24(Ft/s)
Travel time through pipe =    0.03 min.
Time of concentration (TC) =     9.91 min.


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Process from Point/Station      122.000 to Point/Station      122.000
**** CONFLUENCE OF MINOR STREAMS ****
------------------------------------------------------------------------------
Along Main Stream number: 1 in normal stream number 2
Stream flow area =      4.090(Ac.)
Runoff from this stream =      6.685(CFS)
Time of concentration =    9.91 min.
Rainfall intensity =     2.040(In/Hr)
Summary of stream data:

Stream   Flow rate      TC            Rainfall Intensity
 No.       (CFS)       (min)                  (In/Hr)


1       34.401     11.81                 1.869
2        6.685      9.91                 2.040
Largest stream flow has longer time of concentration
Qp =     34.401 + sum of
          Qb         Ia/Ib
           6.685 *    0.916 =      6.123
Qp =     40.524

Total of 2 streams to confluence:
Flow rates before confluence point:
      34.401       6.685
Area of streams before confluence:
       21.450        4.090
Results of confluence:
Total flow rate =     40.524(CFS)
Time of concentration =    11.813 min.
Effective stream area after confluence =     25.540(Ac.)


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Process from Point/Station      122.000 to Point/Station      124.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
------------------------------------------------------------------------
Upstream point/station elevation =  1236.000(Ft.)
Downstream point/station elevation =  1223.000(Ft.)
Pipe length  =   418.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =    40.524(CFS)
Nearest computed pipe diameter  =     24.00(In.)
Calculated individual pipe flow  =    40.524(CFS)
Normal flow depth in pipe =   20.02(In.)
Flow top width inside pipe =   17.86(In.)
Critical depth could not be calculated.
Pipe flow velocity =     14.47(Ft/s)
Travel time through pipe =    0.48 min.
Time of concentration (TC) =    12.29 min.


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Process from Point/Station      124.000 to Point/Station      124.000
**** CONFLUENCE OF MINOR STREAMS ****
------------------------------------------------------------------------
Along Main Stream number: 1 in normal stream number 1
Stream flow area =     25.540(Ac.)
Runoff from this stream =     40.524(CFS)
Time of concentration =   12.29 min.
Rainfall intensity =     1.832(In/Hr)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      123.000 to Point/Station      125.000
**** INITIAL AREA EVALUATION ****
------------------------------------------------------------------------
Initial area flow distance =   383.000(Ft.)
Top (of initial area) elevation =  1242.000(Ft.)
Bottom (of initial area) elevation =  1230.000(Ft.)
Difference in elevation =    12.000(Ft.)
Slope =    0.03133  s(percent)=       3.13
TC = k(0.390)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =    8.417 min.
Rainfall intensity =      2.214(In/Hr) for a    10.0 year storm
SINGLE FAMILY (1/4 Acre Lot)
Runoff Coefficient = 0.806
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  69.60
Pervious area fraction =  0.500; Impervious fraction =  0.500
Initial subarea runoff =      4.891(CFS)
Total initial stream area =        2.740(Ac.)
Pervious area fraction = 0.500


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Process from Point/Station      125.000 to Point/Station      124.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
------------------------------------------------------------------------
Upstream point/station elevation =  1230.000(Ft.)
Downstream point/station elevation =  1223.000(Ft.)
Pipe length  =    33.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =     4.891(CFS)
Nearest computed pipe diameter  =      9.00(In.)
Calculated individual pipe flow  =     4.891(CFS)
Normal flow depth in pipe =    5.24(In.)
Flow top width inside pipe =    8.88(In.)
Critical depth could not be calculated.
Pipe flow velocity =     18.31(Ft/s)
Travel time through pipe =    0.03 min.
Time of concentration (TC) =     8.45 min.


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Process from Point/Station      124.000 to Point/Station      124.000
**** CONFLUENCE OF MINOR STREAMS ****
------------------------------------------------------------------------
Along Main Stream number: 1 in normal stream number 2
Stream flow area =      2.740(Ac.)
Runoff from this stream =      4.891(CFS)
Time of concentration =    8.45 min.
Rainfall intensity =     2.210(In/Hr)


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Process from Point/Station      117.000 to Point/Station      126.000
**** INITIAL AREA EVALUATION ****
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```
Initial area flow distance =  1000.000(Ft.)
Top (of initial area) elevation =  1265.000(Ft.)
Bottom (of initial area) elevation =  1230.000(Ft.)
Difference in elevation =    35.000(Ft.)
Slope =    0.03500  s(percent)=       3.50
TC = k(0.300)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =    9.296 min.
Rainfall intensity =      2.106(In/Hr) for a    10.0 year storm
COMMERCIAL subarea type
Runoff Coefficient = 0.881
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  69.60
Pervious area fraction =  0.100; Impervious fraction =  0.900
Initial subarea runoff =      7.586(CFS)
Total initial stream area =        4.090(Ac.)
Pervious area fraction = 0.100


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Process from Point/Station      126.000 to Point/Station      124.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
------------------------------------------------------------------------------
Upstream point/station elevation =  1230.000(Ft.)
Downstream point/station elevation =  1223.000(Ft.)
Pipe length  =    28.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =     7.586(CFS)
Nearest computed pipe diameter  =      9.00(In.)
Calculated individual pipe flow  =     7.586(CFS)
Normal flow depth in pipe =    6.79(In.)
Flow top width inside pipe =    7.75(In.)
Critical depth could not be calculated.
Pipe flow velocity =     21.24(Ft/s)
Travel time through pipe =    0.02 min.
Time of concentration (TC) =     9.32 min.


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Process from Point/Station      124.000 to Point/Station      124.000
**** CONFLUENCE OF MINOR STREAMS ****
------------------------------------------------------------------------------
Along Main Stream number: 1 in normal stream number 3
Stream flow area =      4.090(Ac.)
Runoff from this stream =      7.586(CFS)
Time of concentration =    9.32 min.
Rainfall intensity =     2.104(In/Hr)
Summary of stream data:

Stream   Flow rate      TC            Rainfall Intensity
 No.       (CFS)       (min)                 (In/Hr)


1       40.524     12.29                 1.832
2        4.891      8.45                 2.210
3        7.586      9.32                 2.104
Largest stream flow has longer time of concentration
Qp =     40.524 + sum of
          Qb         Ia/Ib
           4.891 *    0.829 =      4.054
          Qb         Ia/Ib
           7.586 *    0.871 =      6.604
Qp =     51.182

Total of 3 streams to confluence:
Flow rates before confluence point:
      40.524       4.891       7.586
Area of streams before confluence:
       25.540        2.740        4.090
Results of confluence:
Total flow rate =     51.182(CFS)
Time of concentration =    12.295 min.
Effective stream area after confluence =     32.370(Ac.)


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Process from Point/Station      124.000 to Point/Station      127.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
------------------------------------------------------------------------------
Upstream point/station elevation =  1223.000(Ft.)
Downstream point/station elevation =  1215.000(Ft.)
Pipe length  =   390.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =    51.182(CFS)
Nearest computed pipe diameter  =     30.00(In.)
Calculated individual pipe flow  =    51.182(CFS)
```

```
Normal flow depth in pipe =   21.66(In.)
Flow top width inside pipe =   26.88(In.)
Critical Depth =   27.77(In.)
Pipe flow velocity =     13.48(Ft/s)
Travel time through pipe =    0.48 min.
Time of concentration (TC) =    12.78 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      127.000 to Point/Station      127.000
**** CONFLUENCE OF MINOR STREAMS ****
______________________________________________________________________________
Along Main Stream number: 1 in normal stream number 1
Stream flow area =     32.370(Ac.)
Runoff from this stream =     51.182(CFS)
Time of concentration =   12.78 min.
Rainfall intensity =     1.797(In/Hr)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      128.000 to Point/Station      129.000
**** INITIAL AREA EVALUATION ****
______________________________________________________________________________
Initial area flow distance =   298.000(Ft.)
Top (of initial area) elevation =  1248.000(Ft.)
Bottom (of initial area) elevation =  1227.000(Ft.)
Difference in elevation =    21.000(Ft.)
Slope =    0.07047  s(percent)=       7.05
TC = k(0.940)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =   15.603 min.
Rainfall intensity =      1.626(In/Hr) for a    10.0 year storm
UNDEVELOPED (good cover) subarea
Runoff Coefficient = 0.704
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  74.60
Pervious area fraction =  1.000; Impervious fraction =  0.000
Initial subarea runoff =      1.853(CFS)
Total initial stream area =        1.620(Ac.)
Pervious area fraction = 1.000


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      129.000 to Point/Station      127.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
______________________________________________________________________________
Upstream point/station elevation =  1227.000(Ft.)
Downstream point/station elevation =  1215.000(Ft.)
Pipe length  =    76.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =     1.853(CFS)
Nearest computed pipe diameter  =      6.00(In.)
Calculated individual pipe flow  =     1.853(CFS)
Normal flow depth in pipe =    4.18(In.)
Flow top width inside pipe =    5.52(In.)
Critical depth could not be calculated.
Pipe flow velocity =     12.70(Ft/s)
Travel time through pipe =    0.10 min.
Time of concentration (TC) =    15.70 min.


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Process from Point/Station      127.000 to Point/Station      127.000
**** CONFLUENCE OF MINOR STREAMS ****
______________________________________________________________________________
Along Main Stream number: 1 in normal stream number 2
Stream flow area =      1.620(Ac.)
Runoff from this stream =      1.853(CFS)
Time of concentration =   15.70 min.
Rainfall intensity =     1.621(In/Hr)
Summary of stream data:

Stream   Flow rate      TC            Rainfall Intensity
 No.       (CFS)       (min)                (In/Hr)


1       51.182     12.78                1.797
2        1.853     15.70                1.621
Largest stream flow has longer or shorter time of concentration
Qp =     51.182 + sum of
          Qa           Tb/Ta
           1.853 *    0.814 =      1.508
Qp =     52.689

Total of 2 streams to confluence:
```

```
Flow rates before confluence point:
      51.182       1.853
Area of streams before confluence:
       32.370        1.620
Results of confluence:
Total flow rate =     52.689(CFS)
Time of concentration =    12.777 min.
Effective stream area after confluence =     33.990(Ac.)
End of computations, total study area =           33.99 (Ac.)
The following figures may
be used for a unit hydrograph study of the same area.

Area averaged pervious area fraction(Ap) = 0.452
Area averaged RI index number =  69.8
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                Riverside County Rational Hydrology Program

CIVILCADD/CIVILDESIGN Engineering Software,(c) 1989 - 2004 Version 7.0
        Rational Hydrology Study        Date: 04/02/25  File:pro210.out
------------------------------------------------------------------------
 *********   Hydrology Study Control Information **********

 English (in-lb) Units used in input data file

------------------------------------------------------------------------


Program License Serial Number 5006

------------------------------------------------------------------------
Rational Method Hydrology Program based on
Riverside County Flood Control & Water Conservation District
1978 hydrology manual

Storm event (year) =   10.00 Antecedent Moisture Condition = 2

2 year, 1 hour precipitation =  0.500(In.)
100 year, 1 hour precipitation =  1.300(In.)

Storm event year =  10.0
Calculated rainfall intensity data:
1 hour intensity =  0.829(In/Hr)
Slope of intensity duration curve = 0.5000




++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      200.000 to Point/Station      201.000
**** INITIAL AREA EVALUATION ****
____________________________________________________________________________
Initial area flow distance =   603.000(Ft.)
Top (of initial area) elevation =  1235.000(Ft.)
Bottom (of initial area) elevation =  1231.000(Ft.)
Difference in elevation =     4.000(Ft.)
Slope =    0.00663  s(percent)=       0.66
TC = k(0.390)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =   13.767 min.
Rainfall intensity =      1.731(In/Hr) for a    10.0 year storm
SINGLE FAMILY (1/4 Acre Lot)
Runoff Coefficient = 0.787
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  69.60
Pervious area fraction =  0.500; Impervious fraction =  0.500
Initial subarea runoff =      3.609(CFS)
Total initial stream area =        2.650(Ac.)
Pervious area fraction = 0.500


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      201.000 to Point/Station      201.000
**** CONFLUENCE OF MINOR STREAMS ****
____________________________________________________________________________
Along Main Stream number: 1 in normal stream number 1
Stream flow area =      2.650(Ac.)
Runoff from this stream =      3.609(CFS)
Time of concentration =   13.77 min.
Rainfall intensity =     1.731(In/Hr)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      202.000 to Point/Station      201.000
**** INITIAL AREA EVALUATION ****
____________________________________________________________________________
Initial area flow distance =   723.000(Ft.)
Top (of initial area) elevation =  1268.000(Ft.)
Bottom (of initial area) elevation =  1231.000(Ft.)
Difference in elevation =    37.000(Ft.)
Slope =    0.05118  s(percent)=       5.12
TC = k(0.390)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =    9.838 min.
Rainfall intensity =      2.048(In/Hr) for a    10.0 year storm
SINGLE FAMILY (1/4 Acre Lot)
Runoff Coefficient = 0.800
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
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Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  69.60
Pervious area fraction =  0.500; Impervious fraction =  0.500
Initial subarea runoff =      4.113(CFS)
Total initial stream area =        2.510(Ac.)
Pervious area fraction = 0.500


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      201.000 to Point/Station      201.000
**** CONFLUENCE OF MINOR STREAMS ****
----------------------------------------------------------------------------
Along Main Stream number: 1 in normal stream number 2
Stream flow area =      2.510(Ac.)
Runoff from this stream =      4.113(CFS)
Time of concentration =    9.84 min.
Rainfall intensity =     2.048(In/Hr)
Summary of stream data:

Stream   Flow rate      TC            Rainfall Intensity
 No.       (CFS)       (min)                 (In/Hr)


1        3.609     13.77                 1.731
2        4.113      9.84                 2.048
Largest stream flow has longer or shorter time of concentration
Qp =      4.113 + sum of
          Qa          Tb/Ta
           3.609 *    0.715 =      2.579
Qp =      6.692

Total of 2 streams to confluence:
Flow rates before confluence point:
       3.609       4.113
Area of streams before confluence:
        2.650        2.510
Results of confluence:
Total flow rate =      6.692(CFS)
Time of concentration =     9.838 min.
Effective stream area after confluence =      5.160(Ac.)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      201.000 to Point/Station      203.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
----------------------------------------------------------------------------
Upstream point/station elevation =  1231.000(Ft.)
Downstream point/station elevation =  1225.000(Ft.)
Pipe length  =    68.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =     6.692(CFS)
Nearest computed pipe diameter  =     12.00(In.)
Calculated individual pipe flow  =     6.692(CFS)
Normal flow depth in pipe =    6.93(In.)
Flow top width inside pipe =   11.86(In.)
Critical depth could not be calculated.
Pipe flow velocity =     14.26(Ft/s)
Travel time through pipe =    0.08 min.
Time of concentration (TC) =     9.92 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      203.000 to Point/Station      203.000
**** CONFLUENCE OF MAIN STREAMS ****
----------------------------------------------------------------------------
The following data inside Main Stream is listed:
In Main Stream number: 1
Stream flow area =      5.160(Ac.)
Runoff from this stream =      6.692(CFS)
Time of concentration =    9.92 min.
Rainfall intensity =     2.039(In/Hr)
Program is now starting with Main Stream No. 2


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      204.000 to Point/Station      205.000
**** INITIAL AREA EVALUATION ****
----------------------------------------------------------------------------
Initial area flow distance =   644.000(Ft.)
Top (of initial area) elevation =  1235.000(Ft.)
Bottom (of initial area) elevation =  1231.000(Ft.)
Difference in elevation =     4.000(Ft.)
Slope =    0.00621  s(percent)=       0.62
TC = k(0.390)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =   14.321 min.
Rainfall intensity =      1.697(In/Hr) for a    10.0 year storm
```

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SINGLE FAMILY (1/4 Acre Lot)
Runoff Coefficient = 0.785
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  69.60
Pervious area fraction =  0.500; Impervious fraction =  0.500
Initial subarea runoff =      3.531(CFS)
Total initial stream area =        2.650(Ac.)
Pervious area fraction = 0.500


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      205.000 to Point/Station      205.000
**** CONFLUENCE OF MINOR STREAMS ****
______________________________________________________________________________
Along Main Stream number: 2 in normal stream number 1
Stream flow area =      2.650(Ac.)
Runoff from this stream =      3.531(CFS)
Time of concentration =   14.32 min.
Rainfall intensity =     1.697(In/Hr)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      206.000 to Point/Station      205.000
**** INITIAL AREA EVALUATION ****
______________________________________________________________________________
Initial area flow distance =   757.000(Ft.)
Top (of initial area) elevation =  1266.000(Ft.)
Bottom (of initial area) elevation =  1231.000(Ft.)
Difference in elevation =    35.000(Ft.)
Slope =    0.04624  s(percent)=       4.62
TC = k(0.390)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =   10.226 min.
Rainfall intensity =      2.008(In/Hr) for a    10.0 year storm
SINGLE FAMILY (1/4 Acre Lot)
Runoff Coefficient = 0.799
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  69.60
Pervious area fraction =  0.500; Impervious fraction =  0.500
Initial subarea runoff =      5.118(CFS)
Total initial stream area =        3.190(Ac.)
Pervious area fraction = 0.500


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      205.000 to Point/Station      205.000
**** CONFLUENCE OF MINOR STREAMS ****
______________________________________________________________________________
Along Main Stream number: 2 in normal stream number 2
Stream flow area =      3.190(Ac.)
Runoff from this stream =      5.118(CFS)
Time of concentration =   10.23 min.
Rainfall intensity =     2.008(In/Hr)
Summary of stream data:

Stream   Flow rate      TC            Rainfall Intensity
 No.       (CFS)       (min)                (In/Hr)


1        3.531     14.32                1.697
2        5.118     10.23                2.008
Largest stream flow has longer or shorter time of concentration
Qp =      5.118 + sum of
          Qa          Tb/Ta
           3.531 *    0.714 =      2.521
Qp =      7.639

Total of 2 streams to confluence:
Flow rates before confluence point:
       3.531       5.118
Area of streams before confluence:
        2.650        3.190
Results of confluence:
Total flow rate =      7.639(CFS)
Time of concentration =    10.226 min.
Effective stream area after confluence =      5.840(Ac.)


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Process from Point/Station      205.000 to Point/Station      203.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
```

```
Upstream point/station elevation =  1231.000(Ft.)
Downstream point/station elevation =  1225.000(Ft.)
Pipe length  =    36.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =     7.639(CFS)
Nearest computed pipe diameter  =     12.00(In.)
Calculated individual pipe flow  =     7.639(CFS)
Normal flow depth in pipe =    6.18(In.)
Flow top width inside pipe =   11.99(In.)
Critical depth could not be calculated.
Pipe flow velocity =     18.74(Ft/s)
Travel time through pipe =    0.03 min.
Time of concentration (TC) =    10.26 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      203.000 to Point/Station      203.000
**** CONFLUENCE OF MAIN STREAMS ****
------------------------------------------------------------------------------
The following data inside Main Stream is listed:
In Main Stream number: 2
Stream flow area =      5.840(Ac.)
Runoff from this stream =      7.639(CFS)
Time of concentration =   10.26 min.
Rainfall intensity =     2.005(In/Hr)
Summary of stream data:

Stream   Flow rate      TC            Rainfall Intensity
 No.       (CFS)       (min)                 (In/Hr)


1        6.692      9.92               2.039
2        7.639     10.26               2.005
Largest stream flow has longer time of concentration
Qp =      7.639 + sum of
          Qb          Ia/Ib
           6.692 *    0.983 =      6.580
Qp =     14.219

Total of 2 main streams to confluence:
Flow rates before confluence point:
       6.692       7.639
Area of streams before confluence:
        5.160        5.840


Results of confluence:
Total flow rate =     14.219(CFS)
Time of concentration =    10.258 min.
Effective stream area after confluence  =     11.000(Ac.)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      203.000 to Point/Station      207.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
------------------------------------------------------------------------------
Upstream point/station elevation =  1225.000(Ft.)
Downstream point/station elevation =  1223.000(Ft.)
Pipe length  =    83.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =    14.219(CFS)
Nearest computed pipe diameter  =     18.00(In.)
Calculated individual pipe flow  =    14.219(CFS)
Normal flow depth in pipe =   13.01(In.)
Flow top width inside pipe =   16.12(In.)
Critical Depth =   16.64(In.)
Pipe flow velocity =     10.40(Ft/s)
Travel time through pipe =    0.13 min.
Time of concentration (TC) =    10.39 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      207.000 to Point/Station      207.000
**** CONFLUENCE OF MAIN STREAMS ****
------------------------------------------------------------------------------
The following data inside Main Stream is listed:
In Main Stream number: 1
Stream flow area =     11.000(Ac.)
Runoff from this stream =     14.219(CFS)
Time of concentration =   10.39 min.
Rainfall intensity =     1.992(In/Hr)
Program is now starting with Main Stream No. 2


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      208.000 to Point/Station      209.000
**** INITIAL AREA EVALUATION ****
```

```
Initial area flow distance =   634.000(Ft.)
Top (of initial area) elevation =  1299.000(Ft.)
Bottom (of initial area) elevation =  1282.000(Ft.)
Difference in elevation =    17.000(Ft.)
Slope =    0.02681  s(percent)=       2.68
TC = k(0.390)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =   10.623 min.
Rainfall intensity =      1.971(In/Hr) for a    10.0 year storm
SINGLE FAMILY (1/4 Acre Lot)
Runoff Coefficient = 0.797
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  69.60
Pervious area fraction =  0.500; Impervious fraction =  0.500
Initial subarea runoff =      5.483(CFS)
Total initial stream area =        3.490(Ac.)
Pervious area fraction = 0.500


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      209.000 to Point/Station      210.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
------------------------------------------------------------------------------
Upstream point/station elevation =  1282.000(Ft.)
Downstream point/station elevation =  1260.000(Ft.)
Pipe length  =   535.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =     5.483(CFS)
Nearest computed pipe diameter  =     12.00(In.)
Calculated individual pipe flow  =     5.483(CFS)
Normal flow depth in pipe =    7.82(In.)
Flow top width inside pipe =   11.44(In.)
Critical Depth =   11.26(In.)
Pipe flow velocity =     10.12(Ft/s)
Travel time through pipe =    0.88 min.
Time of concentration (TC) =    11.50 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      210.000 to Point/Station      210.000
**** CONFLUENCE OF MINOR STREAMS ****
------------------------------------------------------------------------------
Along Main Stream number: 2 in normal stream number 1
Stream flow area =      3.490(Ac.)
Runoff from this stream =      5.483(CFS)
Time of concentration =   11.50 min.
Rainfall intensity =     1.894(In/Hr)


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Process from Point/Station      211.000 to Point/Station      212.000
**** INITIAL AREA EVALUATION ****
------------------------------------------------------------------------------
Initial area flow distance =   650.000(Ft.)
Top (of initial area) elevation =  1299.000(Ft.)
Bottom (of initial area) elevation =  1282.000(Ft.)
Difference in elevation =    17.000(Ft.)
Slope =    0.02615  s(percent)=       2.62
TC = k(0.390)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =   10.783 min.
Rainfall intensity =      1.956(In/Hr) for a    10.0 year storm
SINGLE FAMILY (1/4 Acre Lot)
Runoff Coefficient = 0.797
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  69.60
Pervious area fraction =  0.500; Impervious fraction =  0.500
Initial subarea runoff =      2.260(CFS)
Total initial stream area =        1.450(Ac.)
Pervious area fraction = 0.500


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Process from Point/Station      212.000 to Point/Station      202.000
**** STREET FLOW TRAVEL TIME + SUBAREA FLOW ADDITION ****
------------------------------------------------------------------------------
Top of street segment elevation =  1282.000(Ft.)
End of street segment elevation =  1268.000(Ft.)
Length of street segment  =   459.000(Ft.)
Height of curb above gutter flowline  =    6.0(In.)
Width of half street (curb to crown)  =  18.000(Ft.)
Distance from crown to crossfall grade break  =  16.000(Ft.)
```

```
Slope from gutter to grade break (v/hz) =   0.020
Slope from grade break to crown (v/hz)  =   0.020
Street flow is on [1] side(s) of the street
Distance from curb to property line  =  10.000(Ft.)
Slope from curb to property line (v/hz) =   0.020
Gutter width =   2.000(Ft.)
Gutter hike from flowline =  2.000(In.)
 Manning's N in gutter =  0.0150
 Manning's N from gutter to grade break =  0.0150
 Manning's N from grade break to crown =  0.0150
Estimated mean flow rate at midpoint of street =      3.501(CFS)
Depth of flow =   0.307(Ft.), Average velocity =   3.740(Ft/s)
Streetflow hydraulics at midpoint of street travel:
Halfstreet flow width =   8.996(Ft.)
Flow velocity =   3.74(Ft/s)
Travel time =    2.05 min.     TC =   12.83  min.
 Adding area flow to street
SINGLE FAMILY (1/4 Acre Lot)
Runoff Coefficient = 0.790
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  69.60
Pervious area fraction =  0.500; Impervious fraction =  0.500
Rainfall intensity =      1.793(In/Hr) for a    10.0 year storm
Subarea runoff =      2.421(CFS) for      1.710(Ac.)
Total runoff =      4.681(CFS)       Total area =       3.160(Ac.)
Street flow at end of street =      4.681(CFS)
Half street flow at end of street =      4.681(CFS)
Depth of flow =   0.331(Ft.), Average velocity =   3.995(Ft/s)
Flow width (from curb towards crown)=  10.223(Ft.)


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Process from Point/Station      202.000 to Point/Station      210.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
______________________________________________________________________________
Upstream point/station elevation =  1268.000(Ft.)
Downstream point/station elevation =  1260.000(Ft.)
Pipe length  =    46.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =     4.681(CFS)
Nearest computed pipe diameter  =      9.00(In.)
Calculated individual pipe flow  =     4.681(CFS)
Normal flow depth in pipe =    5.44(In.)
Flow top width inside pipe =    8.80(In.)
Critical depth could not be calculated.
Pipe flow velocity =     16.79(Ft/s)
Travel time through pipe =    0.05 min.
Time of concentration (TC) =    12.87 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      210.000 to Point/Station      210.000
**** CONFLUENCE OF MINOR STREAMS ****
______________________________________________________________________________
Along Main Stream number: 2 in normal stream number 2
Stream flow area =      3.160(Ac.)
Runoff from this stream =      4.681(CFS)
Time of concentration =   12.87 min.
Rainfall intensity =     1.790(In/Hr)


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Process from Point/Station      209.000 to Point/Station      206.000
**** INITIAL AREA EVALUATION ****
______________________________________________________________________________
Initial area flow distance =   526.000(Ft.)
Top (of initial area) elevation =  1282.000(Ft.)
Bottom (of initial area) elevation =  1266.000(Ft.)
Difference in elevation =    16.000(Ft.)
Slope =    0.03042  s(percent)=       3.04
TC = k(0.390)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =    9.612 min.
Rainfall intensity =      2.071(In/Hr) for a    10.0 year storm
SINGLE FAMILY (1/4 Acre Lot)
Runoff Coefficient = 0.801
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  69.60
Pervious area fraction =  0.500; Impervious fraction =  0.500
Initial subarea runoff =      4.996(CFS)
Total initial stream area =        3.010(Ac.)
Pervious area fraction = 0.500
```

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Process from Point/Station      206.000 to Point/Station      210.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
----------------------------------------------------------------------------
Upstream point/station elevation =  1266.000(Ft.)
Downstream point/station elevation =  1260.000(Ft.)
Pipe length  =    19.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =     4.996(CFS)
Nearest computed pipe diameter  =      9.00(In.)
Calculated individual pipe flow  =     4.996(CFS)
Normal flow depth in pipe =    4.70(In.)
Flow top width inside pipe =    8.99(In.)
Critical depth could not be calculated.
Pipe flow velocity =     21.43(Ft/s)
Travel time through pipe =    0.01 min.
Time of concentration (TC) =     9.63 min.


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Process from Point/Station      210.000 to Point/Station      210.000
**** CONFLUENCE OF MINOR STREAMS ****
----------------------------------------------------------------------------
Along Main Stream number: 2 in normal stream number 3
Stream flow area =      3.010(Ac.)
Runoff from this stream =      4.996(CFS)
Time of concentration =    9.63 min.
Rainfall intensity =     2.070(In/Hr)
Summary of stream data:

Stream   Flow rate      TC            Rainfall Intensity
 No.       (CFS)       (min)                 (In/Hr)


1        5.483     11.50                 1.894
2        4.681     12.87                 1.790
3        4.996      9.63                 2.070
Largest stream flow has longer or shorter time of concentration
Qp =      5.483 + sum of
          Qa          Tb/Ta
           4.681 *    0.894 =      4.183
          Qb         Ia/Ib
           4.996 *    0.915 =      4.570
Qp =     14.237

Total of 3 streams to confluence:
Flow rates before confluence point:
       5.483       4.681       4.996
Area of streams before confluence:
        3.490       3.160       3.010
Results of confluence:
Total flow rate =     14.237(CFS)
Time of concentration =    11.504 min.
Effective stream area after confluence =      9.660(Ac.)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      210.000 to Point/Station      207.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
----------------------------------------------------------------------------
Upstream point/station elevation =  1260.000(Ft.)
Downstream point/station elevation =  1223.000(Ft.)
Pipe length  =   625.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =    14.237(CFS)
Nearest computed pipe diameter  =     15.00(In.)
Calculated individual pipe flow  =    14.237(CFS)
Normal flow depth in pipe =   11.18(In.)
Flow top width inside pipe =   13.07(In.)
Critical depth could not be calculated.
Pipe flow velocity =     14.50(Ft/s)
Travel time through pipe =    0.72 min.
Time of concentration (TC) =    12.22 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      207.000 to Point/Station      207.000
**** CONFLUENCE OF MAIN STREAMS ****
----------------------------------------------------------------------------
The following data inside Main Stream is listed:
In Main Stream number: 2
Stream flow area =      9.660(Ac.)
Runoff from this stream =     14.237(CFS)
Time of concentration =   12.22 min.
Rainfall intensity =     1.837(In/Hr)
Summary of stream data:
```

```
Stream   Flow rate      TC            Rainfall Intensity
 No.       (CFS)       (min)                 (In/Hr)


1       14.219     10.39               1.992
2       14.237     12.22               1.837
Largest stream flow has longer time of concentration
Qp =     14.237 + sum of
          Qb         Ia/Ib
          14.219 *    0.922 =     13.111
Qp =     27.347

Total of 2 main streams to confluence:
Flow rates before confluence point:
      14.219      14.237
Area of streams before confluence:
       11.000        9.660


Results of confluence:
Total flow rate =     27.347(CFS)
Time of concentration =    12.222 min.
Effective stream area after confluence  =     20.660(Ac.)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      207.000 to Point/Station      213.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
______________________________________________________________________________
Upstream point/station elevation =  1223.000(Ft.)
Downstream point/station elevation =  1205.000(Ft.)
Pipe length  =   227.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =    27.347(CFS)
Nearest computed pipe diameter  =     18.00(In.)
Calculated individual pipe flow  =    27.347(CFS)
Normal flow depth in pipe =   13.66(In.)
Flow top width inside pipe =   15.39(In.)
Critical depth could not be calculated.
Pipe flow velocity =     19.00(Ft/s)
Travel time through pipe =    0.20 min.
Time of concentration (TC) =    12.42 min.


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Process from Point/Station      213.000 to Point/Station      213.000
**** CONFLUENCE OF MINOR STREAMS ****
______________________________________________________________________________
Along Main Stream number: 1 in normal stream number 1
Stream flow area =     20.660(Ac.)
Runoff from this stream =     27.347(CFS)
Time of concentration =   12.42 min.
Rainfall intensity =     1.822(In/Hr)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      127.000 to Point/Station      127.000
**** USER DEFINED FLOW INFORMATION AT A POINT ****
______________________________________________________________________________
Rainfall intensity =      1.821(In/Hr) for a    10.0 year storm
SINGLE FAMILY (1/4 Acre Lot)
Runoff Coefficient = 0.791
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  69.60
Pervious area fraction =  0.500; Impervious fraction =  0.500
User specified values are as follows:
TC =  12.44 min.  Rain intensity =       1.82(In/Hr)
Total area =        33.99(Ac.)  Total runoff =     52.89(CFS)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      127.000 to Point/Station      213.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
______________________________________________________________________________
Upstream point/station elevation =  1215.000(Ft.)
Downstream point/station elevation =  1205.000(Ft.)
Pipe length  =   329.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =    52.890(CFS)
Nearest computed pipe diameter  =     27.00(In.)
Calculated individual pipe flow  =    52.890(CFS)
Normal flow depth in pipe =   21.66(In.)
Flow top width inside pipe =   21.52(In.)
Critical depth could not be calculated.
```

```
Pipe flow velocity =     15.48(Ft/s)
Travel time through pipe =    0.35 min.
Time of concentration (TC) =    12.79 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      213.000 to Point/Station      213.000
**** CONFLUENCE OF MINOR STREAMS ****
----------------------------------------------------------------------------
Along Main Stream number: 1 in normal stream number 2
Stream flow area =     33.990(Ac.)
Runoff from this stream =     52.890(CFS)
Time of concentration =   12.79 min.
Rainfall intensity =     1.796(In/Hr)
Summary of stream data:

Stream   Flow rate      TC            Rainfall Intensity
 No.       (CFS)       (min)                 (In/Hr)


1       27.347     12.42                  1.822
2       52.890     12.79                  1.796
Largest stream flow has longer time of concentration
Qp =     52.890 + sum of
          Qb          Ia/Ib
          27.347 *    0.985 =     26.946
Qp =     79.836

Total of 2 streams to confluence:
Flow rates before confluence point:
      27.347      52.890
Area of streams before confluence:
       20.660       33.990
Results of confluence:
Total flow rate =     79.836(CFS)
Time of concentration =    12.794 min.
Effective stream area after confluence =     54.650(Ac.)


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Process from Point/Station      213.000 to Point/Station      214.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
----------------------------------------------------------------------------
Upstream point/station elevation =  1205.000(Ft.)
Downstream point/station elevation =  1185.000(Ft.)
Pipe length  =   658.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =    79.836(CFS)
Nearest computed pipe diameter  =     33.00(In.)
Calculated individual pipe flow  =    79.836(CFS)
Normal flow depth in pipe =   23.72(In.)
Flow top width inside pipe =   29.67(In.)
Critical depth could not be calculated.
Pipe flow velocity =     17.48(Ft/s)
Travel time through pipe =    0.63 min.
Time of concentration (TC) =    13.42 min.


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Process from Point/Station      214.000 to Point/Station      214.000
**** CONFLUENCE OF MAIN STREAMS ****
----------------------------------------------------------------------------
The following data inside Main Stream is listed:
In Main Stream number: 1
Stream flow area =     54.650(Ac.)
Runoff from this stream =     79.836(CFS)
Time of concentration =   13.42 min.
Rainfall intensity =     1.753(In/Hr)
Program is now starting with Main Stream No. 2


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Process from Point/Station      125.000 to Point/Station      215.000
**** INITIAL AREA EVALUATION ****
----------------------------------------------------------------------------
Initial area flow distance =   605.000(Ft.)
Top (of initial area) elevation =  1230.000(Ft.)
Bottom (of initial area) elevation =  1216.000(Ft.)
Difference in elevation =    14.000(Ft.)
Slope =    0.02314  s(percent)=       2.31
TC = k(0.390)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =   10.737 min.
Rainfall intensity =      1.960(In/Hr) for a    10.0 year storm
USER INPUT of soil data for subarea
Runoff Coefficient = 0.795
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
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Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  69.00
Pervious area fraction =  0.500; Impervious fraction =  0.500
Initial subarea runoff =      2.679(CFS)
Total initial stream area =        1.720(Ac.)
Pervious area fraction = 0.500


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Process from Point/Station      215.000 to Point/Station      216.000
**** STREET FLOW TRAVEL TIME + SUBAREA FLOW ADDITION ****
______________________________________________________________________________
Top of street segment elevation =  1216.000(Ft.)
End of street segment elevation =  1189.000(Ft.)
Length of street segment  =   850.000(Ft.)
Height of curb above gutter flowline  =    6.0(In.)
Width of half street (curb to crown)  =  18.000(Ft.)
Distance from crown to crossfall grade break  =  16.000(Ft.)
Slope from gutter to grade break (v/hz) =   0.020
Slope from grade break to crown (v/hz)  =   0.020
Street flow is on [1] side(s) of the street
Distance from curb to property line  =  10.000(Ft.)
Slope from curb to property line (v/hz) =   0.020
Gutter width =   2.000(Ft.)
Gutter hike from flowline =  2.000(In.)
 Manning's N in gutter =  0.0150
 Manning's N from gutter to grade break =  0.0150
 Manning's N from grade break to crown =  0.0150
Estimated mean flow rate at midpoint of street =      3.812(CFS)
Depth of flow =   0.312(Ft.), Average velocity =   3.873(Ft/s)
Streetflow hydraulics at midpoint of street travel:
Halfstreet flow width =   9.261(Ft.)
Flow velocity =   3.87(Ft/s)
Travel time =    3.66 min.     TC =   14.40  min.
 Adding area flow to street
COMMERCIAL subarea type
Runoff Coefficient = 0.877
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  69.60
Pervious area fraction =  0.100; Impervious fraction =  0.900
Rainfall intensity =      1.693(In/Hr) for a    10.0 year storm
Subarea runoff =      2.212(CFS) for      1.490(Ac.)
Total runoff =      4.891(CFS)       Total area =       3.210(Ac.)
Street flow at end of street =      4.891(CFS)
Half street flow at end of street =      4.891(CFS)
Depth of flow =   0.333(Ft.), Average velocity =   4.099(Ft/s)
Flow width (from curb towards crown)=  10.328(Ft.)


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Process from Point/Station      216.000 to Point/Station      217.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
______________________________________________________________________________
Upstream point/station elevation =  1189.000(Ft.)
Downstream point/station elevation =  1186.000(Ft.)
Pipe length  =    40.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =     4.891(CFS)
Nearest computed pipe diameter  =     12.00(In.)
Calculated individual pipe flow  =     4.891(CFS)
Normal flow depth in pipe =    6.01(In.)
Flow top width inside pipe =   12.00(In.)
Critical Depth =   10.93(In.)
Pipe flow velocity =     12.43(Ft/s)
Travel time through pipe =    0.05 min.
Time of concentration (TC) =    14.45 min.


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Process from Point/Station      217.000 to Point/Station      217.000
**** CONFLUENCE OF MINOR STREAMS ****
______________________________________________________________________________
Along Main Stream number: 2 in normal stream number 1
Stream flow area =      3.210(Ac.)
Runoff from this stream =      4.891(CFS)
Time of concentration =   14.45 min.
Rainfall intensity =     1.690(In/Hr)


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Process from Point/Station      126.000 to Point/Station      218.000
**** INITIAL AREA EVALUATION ****
______________________________________________________________________________
```

```
Initial area flow distance =   625.000(Ft.)
Top (of initial area) elevation =  1230.000(Ft.)
Bottom (of initial area) elevation =  1216.000(Ft.)
Difference in elevation =    14.000(Ft.)
Slope =    0.02240  s(percent)=       2.24
TC = k(0.300)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =    8.422 min.
Rainfall intensity =      2.213(In/Hr) for a    10.0 year storm
COMMERCIAL subarea type
Runoff Coefficient = 0.881
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  69.60
Pervious area fraction =  0.100; Impervious fraction =  0.900
Initial subarea runoff =      0.878(CFS)
Total initial stream area =        0.450(Ac.)
Pervious area fraction = 0.100


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Process from Point/Station      218.000 to Point/Station      219.000
**** STREET FLOW TRAVEL TIME + SUBAREA FLOW ADDITION ****
------------------------------------------------------------------------------
Top of street segment elevation =  1216.000(Ft.)
End of street segment elevation =  1189.000(Ft.)
Length of street segment  =   850.000(Ft.)
Height of curb above gutter flowline  =    6.0(In.)
Width of half street (curb to crown)  =  18.000(Ft.)
Distance from crown to crossfall grade break  =  16.000(Ft.)
Slope from gutter to grade break (v/hz) =   0.020
Slope from grade break to crown (v/hz)  =   0.020
Street flow is on [1] side(s) of the street
Distance from curb to property line  =  10.000(Ft.)
Slope from curb to property line (v/hz) =   0.020
Gutter width =   2.000(Ft.)
Gutter hike from flowline =  2.000(In.)
 Manning's N in gutter =  0.0150
 Manning's N from gutter to grade break =  0.0150
 Manning's N from grade break to crown =  0.0150
Estimated mean flow rate at midpoint of street =      1.655(CFS)
Depth of flow =   0.250(Ft.), Average velocity =   3.251(Ft/s)
Streetflow hydraulics at midpoint of street travel:
Halfstreet flow width =   6.184(Ft.)
Flow velocity =   3.25(Ft/s)
Travel time =    4.36 min.     TC =   12.78  min.
 Adding area flow to street
COMMERCIAL subarea type
Runoff Coefficient = 0.878
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  69.60
Pervious area fraction =  0.100; Impervious fraction =  0.900
Rainfall intensity =      1.797(In/Hr) for a    10.0 year storm
Subarea runoff =      1.467(CFS) for      0.930(Ac.)
Total runoff =      2.345(CFS)       Total area =       1.380(Ac.)
Street flow at end of street =      2.345(CFS)
Half street flow at end of street =      2.345(CFS)
Depth of flow =   0.274(Ft.), Average velocity =   3.485(Ft/s)
Flow width (from curb towards crown)=   7.390(Ft.)


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Process from Point/Station      219.000 to Point/Station      217.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
------------------------------------------------------------------------------
Upstream point/station elevation =  1189.000(Ft.)
Downstream point/station elevation =  1186.000(Ft.)
Pipe length  =    29.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =     2.345(CFS)
Nearest computed pipe diameter  =      9.00(In.)
Calculated individual pipe flow  =     2.345(CFS)
Normal flow depth in pipe =    4.18(In.)
Flow top width inside pipe =    8.98(In.)
Critical Depth =    8.16(In.)
Pipe flow velocity =     11.67(Ft/s)
Travel time through pipe =    0.04 min.
Time of concentration (TC) =    12.82 min.


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Process from Point/Station      217.000 to Point/Station      217.000
**** CONFLUENCE OF MINOR STREAMS ****
```

```
Along Main Stream number: 2 in normal stream number 2
Stream flow area =      1.380(Ac.)
Runoff from this stream =      2.345(CFS)
Time of concentration =   12.82 min.
Rainfall intensity =     1.794(In/Hr)
Summary of stream data:

Stream   Flow rate      TC            Rainfall Intensity
 No.       (CFS)       (min)                 (In/Hr)


1        4.891     14.45                1.690
2        2.345     12.82                1.794
Largest stream flow has longer time of concentration
Qp =      4.891 + sum of
          Qb          Ia/Ib
           2.345 *    0.942 =      2.208
Qp =      7.099

Total of 2 streams to confluence:
Flow rates before confluence point:
       4.891       2.345
Area of streams before confluence:
        3.210        1.380
Results of confluence:
Total flow rate =      7.099(CFS)
Time of concentration =    14.449 min.
Effective stream area after confluence =      4.590(Ac.)


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Process from Point/Station      217.000 to Point/Station      214.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
------------------------------------------------------------------------
Upstream point/station elevation =  1186.000(Ft.)
Downstream point/station elevation =  1185.000(Ft.)
Pipe length  =    56.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =     7.099(CFS)
Nearest computed pipe diameter  =     15.00(In.)
Calculated individual pipe flow  =     7.099(CFS)
Normal flow depth in pipe =   10.36(In.)
Flow top width inside pipe =   13.87(In.)
Critical Depth =   12.79(In.)
Pipe flow velocity =      7.85(Ft/s)
Travel time through pipe =    0.12 min.
Time of concentration (TC) =    14.57 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      214.000 to Point/Station      214.000
**** CONFLUENCE OF MAIN STREAMS ****
------------------------------------------------------------------------
The following data inside Main Stream is listed:
In Main Stream number: 2
Stream flow area =      4.590(Ac.)
Runoff from this stream =      7.099(CFS)
Time of concentration =   14.57 min.
Rainfall intensity =     1.683(In/Hr)
Summary of stream data:

Stream   Flow rate      TC            Rainfall Intensity
 No.       (CFS)       (min)                 (In/Hr)


1       79.836     13.42                1.753
2        7.099     14.57                1.683
Largest stream flow has longer or shorter time of concentration
Qp =     79.836 + sum of
          Qa          Tb/Ta
           7.099 *    0.921 =      6.541
Qp =     86.377

Total of 2 main streams to confluence:
Flow rates before confluence point:
      79.836       7.099
Area of streams before confluence:
       54.650        4.590


Results of confluence:
Total flow rate =     86.377(CFS)
Time of concentration =    13.422 min.
Effective stream area after confluence  =     59.240(Ac.)
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Process from Point/Station      214.000 to Point/Station      220.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
------------------------------------------------------------------------------
Upstream point/station elevation =  1185.000(Ft.)
Downstream point/station elevation =  1184.000(Ft.)
Pipe length  =    66.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =    86.377(CFS)
Nearest computed pipe diameter  =     36.00(In.)
Calculated individual pipe flow  =    86.377(CFS)
Normal flow depth in pipe =   31.59(In.)
Flow top width inside pipe =   23.60(In.)
Critical Depth =   33.86(In.)
Pipe flow velocity =     13.14(Ft/s)
Travel time through pipe =    0.08 min.
Time of concentration (TC) =    13.51 min.


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Process from Point/Station      220.000 to Point/Station      220.000
**** CONFLUENCE OF MINOR STREAMS ****
------------------------------------------------------------------------------
Along Main Stream number: 1 in normal stream number 1
Stream flow area =     59.240(Ac.)
Runoff from this stream =     86.377(CFS)
Time of concentration =   13.51 min.
Rainfall intensity =     1.748(In/Hr)


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Process from Point/Station      221.000 to Point/Station      222.000
**** INITIAL AREA EVALUATION ****
------------------------------------------------------------------------------
Initial area flow distance =   864.000(Ft.)
Top (of initial area) elevation =  1218.000(Ft.)
Bottom (of initial area) elevation =  1191.000(Ft.)
Difference in elevation =    27.000(Ft.)
Slope =    0.03125  s(percent)=       3.13
TC = k(0.390)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =   11.660 min.
Rainfall intensity =      1.881(In/Hr) for a    10.0 year storm
SINGLE FAMILY (1/4 Acre Lot)
Runoff Coefficient = 0.794
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  69.60
Pervious area fraction =  0.500; Impervious fraction =  0.500
Initial subarea runoff =      7.224(CFS)
Total initial stream area =        4.840(Ac.)
Pervious area fraction = 0.500


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Process from Point/Station      222.000 to Point/Station      220.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
------------------------------------------------------------------------------
Upstream point/station elevation =  1191.000(Ft.)
Downstream point/station elevation =  1184.000(Ft.)
Pipe length  =    33.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =     7.224(CFS)
Nearest computed pipe diameter  =      9.00(In.)
Calculated individual pipe flow  =     7.224(CFS)
Normal flow depth in pipe =    6.98(In.)
Flow top width inside pipe =    7.50(In.)
Critical depth could not be calculated.
Pipe flow velocity =     19.62(Ft/s)
Travel time through pipe =    0.03 min.
Time of concentration (TC) =    11.69 min.


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Process from Point/Station      220.000 to Point/Station      220.000
**** CONFLUENCE OF MINOR STREAMS ****
------------------------------------------------------------------------------
Along Main Stream number: 1 in normal stream number 2
Stream flow area =      4.840(Ac.)
Runoff from this stream =      7.224(CFS)
Time of concentration =   11.69 min.
Rainfall intensity =     1.879(In/Hr)


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Process from Point/Station      223.000 to Point/Station      224.000
**** INITIAL AREA EVALUATION ****
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Initial area flow distance =   553.000(Ft.)
Top (of initial area) elevation =  1208.000(Ft.)
Bottom (of initial area) elevation =  1191.000(Ft.)
Difference in elevation =    17.000(Ft.)
Slope =    0.03074  s(percent)=       3.07
TC = k(0.300)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =    7.528 min.
Rainfall intensity =      2.341(In/Hr) for a    10.0 year storm
COMMERCIAL subarea type
Runoff Coefficient = 0.882
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  69.60
Pervious area fraction =  0.100; Impervious fraction =  0.900
Initial subarea runoff =      0.785(CFS)
Total initial stream area =        0.380(Ac.)
Pervious area fraction = 0.100


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Process from Point/Station      224.000 to Point/Station      220.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
------------------------------------------------------------------------------
Upstream point/station elevation =  1191.000(Ft.)
Downstream point/station elevation =  1184.000(Ft.)
Pipe length  =    40.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =     0.785(CFS)
Nearest computed pipe diameter  =      6.00(In.)
Calculated individual pipe flow  =     0.785(CFS)
Normal flow depth in pipe =    2.39(In.)
Flow top width inside pipe =    5.87(In.)
Critical Depth =    5.29(In.)
Pipe flow velocity =     10.76(Ft/s)
Travel time through pipe =    0.06 min.
Time of concentration (TC) =     7.59 min.


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Process from Point/Station      220.000 to Point/Station      220.000
**** CONFLUENCE OF MINOR STREAMS ****
------------------------------------------------------------------------------
Along Main Stream number: 1 in normal stream number 3
Stream flow area =      0.380(Ac.)
Runoff from this stream =      0.785(CFS)
Time of concentration =    7.59 min.
Rainfall intensity =     2.331(In/Hr)
Summary of stream data:

Stream   Flow rate      TC            Rainfall Intensity
 No.       (CFS)       (min)                 (In/Hr)


1       86.377     13.51                1.748
2        7.224     11.69                1.879
3        0.785      7.59                2.331
Largest stream flow has longer time of concentration
Qp =     86.377 + sum of
          Qb          Ia/Ib
           7.224 *    0.930 =      6.721
          Qb          Ia/Ib
           0.785 *    0.750 =      0.588
Qp =     93.685

Total of 3 streams to confluence:
Flow rates before confluence point:
      86.377       7.224       0.785
Area of streams before confluence:
       59.240        4.840        0.380
Results of confluence:
Total flow rate =     93.685(CFS)
Time of concentration =    13.505 min.
Effective stream area after confluence =     64.460(Ac.)
End of computations, total study area =           64.46 (Ac.)
The following figures may
be used for a unit hydrograph study of the same area.

Area averaged pervious area fraction(Ap) = 0.480
Area averaged RI index number =  69.6
```

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                Riverside County Rational Hydrology Program

CIVILCADD/CIVILDESIGN Engineering Software,(c) 1989 - 2004 Version 7.0
        Rational Hydrology Study        Date: 04/02/25  File:pro310.out
------------------------------------------------------------------------
 *********   Hydrology Study Control Information **********

 English (in-lb) Units used in input data file

------------------------------------------------------------------------


Program License Serial Number 5006

------------------------------------------------------------------------
Rational Method Hydrology Program based on
Riverside County Flood Control & Water Conservation District
1978 hydrology manual

Storm event (year) =   10.00 Antecedent Moisture Condition = 2

2 year, 1 hour precipitation =  0.500(In.)
100 year, 1 hour precipitation =  1.300(In.)

Storm event year =  10.0
Calculated rainfall intensity data:
1 hour intensity =  0.829(In/Hr)
Slope of intensity duration curve = 0.5000




++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      300.000 to Point/Station      301.000
**** INITIAL AREA EVALUATION ****
____________________________________________________________________________
Initial area flow distance =   708.000(Ft.)
Top (of initial area) elevation =  1262.000(Ft.)
Bottom (of initial area) elevation =  1254.000(Ft.)
Difference in elevation =     8.000(Ft.)
Slope =    0.01130  s(percent)=       1.13
TC = k(0.390)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =   13.197 min.
Rainfall intensity =      1.768(In/Hr) for a    10.0 year storm
SINGLE FAMILY (1/4 Acre Lot)
Runoff Coefficient = 0.788
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  69.60
Pervious area fraction =  0.500; Impervious fraction =  0.500
Initial subarea runoff =      5.353(CFS)
Total initial stream area =        3.840(Ac.)
Pervious area fraction = 0.500


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      301.000 to Point/Station      302.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
____________________________________________________________________________
Upstream point/station elevation =  1254.000(Ft.)
Downstream point/station elevation =  1245.000(Ft.)
Pipe length  =    39.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =     5.353(CFS)
Nearest computed pipe diameter  =      9.00(In.)
Calculated individual pipe flow  =     5.353(CFS)
Normal flow depth in pipe =    5.41(In.)
Flow top width inside pipe =    8.81(In.)
Critical depth could not be calculated.
Pipe flow velocity =     19.30(Ft/s)
Travel time through pipe =    0.03 min.
Time of concentration (TC) =    13.23 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      302.000 to Point/Station      302.000
**** CONFLUENCE OF MINOR STREAMS ****
____________________________________________________________________________
Along Main Stream number: 1 in normal stream number 1
Stream flow area =      3.840(Ac.)
Runoff from this stream =      5.353(CFS)
Time of concentration =   13.23 min.
Rainfall intensity =     1.766(In/Hr)
```

```
++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      300.000 to Point/Station      303.000
**** INITIAL AREA EVALUATION ****
------------------------------------------------------------------------------
Initial area flow distance =   638.000(Ft.)
Top (of initial area) elevation =  1262.000(Ft.)
Bottom (of initial area) elevation =  1254.000(Ft.)
Difference in elevation =     8.000(Ft.)
Slope =    0.01254  s(percent)=       1.25
TC = k(0.390)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =   12.398 min.
Rainfall intensity =      1.824(In/Hr) for a    10.0 year storm
SINGLE FAMILY (1/4 Acre Lot)
Runoff Coefficient = 0.791
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  69.60
Pervious area fraction =  0.500; Impervious fraction =  0.500
Initial subarea runoff =      3.261(CFS)
Total initial stream area =        2.260(Ac.)
Pervious area fraction = 0.500


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      303.000 to Point/Station      302.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
------------------------------------------------------------------------------
Upstream point/station elevation =  1254.000(Ft.)
Downstream point/station elevation =  1245.000(Ft.)
Pipe length  =    32.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =     3.261(CFS)
Nearest computed pipe diameter  =      9.00(In.)
Calculated individual pipe flow  =     3.261(CFS)
Normal flow depth in pipe =    3.80(In.)
Flow top width inside pipe =    8.89(In.)
Critical depth could not be calculated.
Pipe flow velocity =     18.39(Ft/s)
Travel time through pipe =    0.03 min.
Time of concentration (TC) =    12.43 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      302.000 to Point/Station      302.000
**** CONFLUENCE OF MINOR STREAMS ****
------------------------------------------------------------------------------
Along Main Stream number: 1 in normal stream number 2
Stream flow area =      2.260(Ac.)
Runoff from this stream =      3.261(CFS)
Time of concentration =   12.43 min.
Rainfall intensity =     1.822(In/Hr)
Summary of stream data:

Stream   Flow rate      TC            Rainfall Intensity
 No.       (CFS)       (min)                 (In/Hr)


1        5.353     13.23                 1.766
2        3.261     12.43                 1.822
Largest stream flow has longer time of concentration
Qp =      5.353 + sum of
          Qb          Ia/Ib
           3.261 *    0.969 =      3.160
Qp =      8.513

Total of 2 streams to confluence:
Flow rates before confluence point:
       5.353       3.261
Area of streams before confluence:
        3.840        2.260
Results of confluence:
Total flow rate =      8.513(CFS)
Time of concentration =    13.230 min.
Effective stream area after confluence =      6.100(Ac.)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      302.000 to Point/Station      304.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
------------------------------------------------------------------------------
Upstream point/station elevation =  1245.000(Ft.)
Downstream point/station elevation =  1233.000(Ft.)
Pipe length  =   527.00(Ft.)   Manning's N = 0.013
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```
No. of pipes = 1  Required pipe flow  =     8.513(CFS)
Nearest computed pipe diameter  =     15.00(In.)
Calculated individual pipe flow  =     8.513(CFS)
Normal flow depth in pipe =   10.85(In.)
Flow top width inside pipe =   13.42(In.)
Critical Depth =   13.65(In.)
Pipe flow velocity =      8.95(Ft/s)
Travel time through pipe =    0.98 min.
Time of concentration (TC) =    14.21 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      304.000 to Point/Station      304.000
**** CONFLUENCE OF MINOR STREAMS ****
------------------------------------------------------------------------------
Along Main Stream number: 1 in normal stream number 1
Stream flow area =      6.100(Ac.)
Runoff from this stream =      8.513(CFS)
Time of concentration =   14.21 min.
Rainfall intensity =     1.704(In/Hr)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      305.000 to Point/Station      306.000
**** INITIAL AREA EVALUATION ****
------------------------------------------------------------------------------
Initial area flow distance =   945.000(Ft.)
Top (of initial area) elevation =  1289.000(Ft.)
Bottom (of initial area) elevation =  1238.000(Ft.)
Difference in elevation =    51.000(Ft.)
Slope =    0.05397  s(percent)=       5.40
TC = k(0.300)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =    8.334 min.
Rainfall intensity =      2.225(In/Hr) for a    10.0 year storm
COMMERCIAL subarea type
Runoff Coefficient = 0.881
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  69.60
Pervious area fraction =  0.100; Impervious fraction =  0.900
Initial subarea runoff =      1.392(CFS)
Total initial stream area =        0.710(Ac.)
Pervious area fraction = 0.100


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      306.000 to Point/Station      304.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
------------------------------------------------------------------------------
Upstream point/station elevation =  1238.000(Ft.)
Downstream point/station elevation =  1233.000(Ft.)
Pipe length  =    34.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =     1.392(CFS)
Nearest computed pipe diameter  =      6.00(In.)
Calculated individual pipe flow  =     1.392(CFS)
Normal flow depth in pipe =    3.51(In.)
Flow top width inside pipe =    5.91(In.)
Critical depth could not be calculated.
Pipe flow velocity =     11.65(Ft/s)
Travel time through pipe =    0.05 min.
Time of concentration (TC) =     8.38 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      304.000 to Point/Station      304.000
**** CONFLUENCE OF MINOR STREAMS ****
------------------------------------------------------------------------------
Along Main Stream number: 1 in normal stream number 2
Stream flow area =      0.710(Ac.)
Runoff from this stream =      1.392(CFS)
Time of concentration =    8.38 min.
Rainfall intensity =     2.218(In/Hr)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      307.000 to Point/Station      308.000
**** INITIAL AREA EVALUATION ****
------------------------------------------------------------------------------
Initial area flow distance =   980.000(Ft.)
Top (of initial area) elevation =  1289.000(Ft.)
Bottom (of initial area) elevation =  1238.000(Ft.)
Difference in elevation =    51.000(Ft.)
Slope =    0.05204  s(percent)=       5.20
TC = k(0.300)*[(length^3)/(elevation change)]^0.2
```

```
Initial area time of concentration =    8.518 min.
Rainfall intensity =      2.201(In/Hr) for a    10.0 year storm
COMMERCIAL subarea type
Runoff Coefficient = 0.881
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  69.60
Pervious area fraction =  0.100; Impervious fraction =  0.900
Initial subarea runoff =      2.094(CFS)
Total initial stream area =        1.080(Ac.)
Pervious area fraction = 0.100


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      308.000 to Point/Station      304.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
------------------------------------------------------------------------------
Upstream point/station elevation =  1238.000(Ft.)
Downstream point/station elevation =  1233.000(Ft.)
Pipe length  =    22.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =     2.094(CFS)
Nearest computed pipe diameter  =      6.00(In.)
Calculated individual pipe flow  =     2.094(CFS)
Normal flow depth in pipe =    4.00(In.)
Flow top width inside pipe =    5.66(In.)
Critical depth could not be calculated.
Pipe flow velocity =     15.08(Ft/s)
Travel time through pipe =    0.02 min.
Time of concentration (TC) =     8.54 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      304.000 to Point/Station      304.000
**** CONFLUENCE OF MINOR STREAMS ****
------------------------------------------------------------------------------
Along Main Stream number: 1 in normal stream number 3
Stream flow area =      1.080(Ac.)
Runoff from this stream =      2.094(CFS)
Time of concentration =    8.54 min.
Rainfall intensity =     2.197(In/Hr)
Summary of stream data:

Stream   Flow rate      TC            Rainfall Intensity
 No.       (CFS)       (min)                 (In/Hr)


1        8.513     14.21                1.704
2        1.392      8.38                2.218
3        2.094      8.54                2.197
Largest stream flow has longer time of concentration
Qp =      8.513 + sum of
          Qb         Ia/Ib
           1.392 *    0.768 =      1.069
          Qb         Ia/Ib
           2.094 *    0.775 =      1.624
Qp =     11.206

Total of 3 streams to confluence:
Flow rates before confluence point:
       8.513       1.392       2.094
Area of streams before confluence:
        6.100        0.710        1.080
Results of confluence:
Total flow rate =     11.206(CFS)
Time of concentration =    14.212 min.
Effective stream area after confluence =      7.890(Ac.)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      304.000 to Point/Station      309.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
------------------------------------------------------------------------------
Upstream point/station elevation =  1233.000(Ft.)
Downstream point/station elevation =  1203.000(Ft.)
Pipe length  =   495.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =    11.206(CFS)
Nearest computed pipe diameter  =     15.00(In.)
Calculated individual pipe flow  =    11.206(CFS)
Normal flow depth in pipe =    9.29(In.)
Flow top width inside pipe =   14.57(In.)
Critical depth could not be calculated.
Pipe flow velocity =     14.04(Ft/s)
Travel time through pipe =    0.59 min.
Time of concentration (TC) =    14.80 min.
```

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++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      309.000 to Point/Station      309.000
**** CONFLUENCE OF MINOR STREAMS ****
----------------------------------------------------------------------------
Along Main Stream number: 1 in normal stream number 1
Stream flow area =      7.890(Ac.)
Runoff from this stream =     11.206(CFS)
Time of concentration =   14.80 min.
Rainfall intensity =     1.669(In/Hr)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      306.000 to Point/Station      223.000
**** INITIAL AREA EVALUATION ****
----------------------------------------------------------------------------
Initial area flow distance =   485.000(Ft.)
Top (of initial area) elevation =  1238.000(Ft.)
Bottom (of initial area) elevation =  1208.000(Ft.)
Difference in elevation =    30.000(Ft.)
Slope =    0.06186  s(percent)=       6.19
TC = k(0.300)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =    6.211 min.
Rainfall intensity =      2.577(In/Hr) for a    10.0 year storm
COMMERCIAL subarea type
Runoff Coefficient = 0.883
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  69.60
Pervious area fraction =  0.100; Impervious fraction =  0.900
Initial subarea runoff =      0.888(CFS)
Total initial stream area =        0.390(Ac.)
Pervious area fraction = 0.100


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      223.000 to Point/Station      309.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
----------------------------------------------------------------------------
Upstream point/station elevation =  1208.000(Ft.)
Downstream point/station elevation =  1203.000(Ft.)
Pipe length  =    30.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =     0.888(CFS)
Nearest computed pipe diameter  =      6.00(In.)
Calculated individual pipe flow  =     0.888(CFS)
Normal flow depth in pipe =    2.59(In.)
Flow top width inside pipe =    5.94(In.)
Critical Depth =    5.51(In.)
Pipe flow velocity =     10.93(Ft/s)
Travel time through pipe =    0.05 min.
Time of concentration (TC) =     6.26 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      309.000 to Point/Station      309.000
**** CONFLUENCE OF MINOR STREAMS ****
----------------------------------------------------------------------------
Along Main Stream number: 1 in normal stream number 2
Stream flow area =      0.390(Ac.)
Runoff from this stream =      0.888(CFS)
Time of concentration =    6.26 min.
Rainfall intensity =     2.568(In/Hr)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      308.000 to Point/Station      310.000
**** INITIAL AREA EVALUATION ****
----------------------------------------------------------------------------
Initial area flow distance =   485.000(Ft.)
Top (of initial area) elevation =  1238.000(Ft.)
Bottom (of initial area) elevation =  1208.000(Ft.)
Difference in elevation =    30.000(Ft.)
Slope =    0.06186  s(percent)=       6.19
TC = k(0.300)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =    6.211 min.
Rainfall intensity =      2.577(In/Hr) for a    10.0 year storm
COMMERCIAL subarea type
Runoff Coefficient = 0.883
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  69.60
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Pervious area fraction =  0.100; Impervious fraction =  0.900
Initial subarea runoff =      1.093(CFS)
Total initial stream area =        0.480(Ac.)
Pervious area fraction = 0.100


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      309.000 to Point/Station      309.000
**** CONFLUENCE OF MINOR STREAMS ****
----------------------------------------------------------------------------
Along Main Stream number: 1 in normal stream number 3
Stream flow area =      0.480(Ac.)
Runoff from this stream =      1.093(CFS)
Time of concentration =    6.21 min.
Rainfall intensity =     2.577(In/Hr)
Summary of stream data:

Stream   Flow rate      TC            Rainfall Intensity
 No.       (CFS)       (min)                 (In/Hr)


1       11.206     14.80                1.669
2        0.888      6.26                2.568
3        1.093      6.21                2.577
Largest stream flow has longer time of concentration
Qp =     11.206 + sum of
          Qb         Ia/Ib
           0.888 *    0.650 =      0.577
          Qb         Ia/Ib
           1.093 *    0.648 =      0.708
Qp =     12.491

Total of 3 streams to confluence:
Flow rates before confluence point:
      11.206       0.888       1.093
Area of streams before confluence:
        7.890        0.390        0.480
Results of confluence:
Total flow rate =     12.491(CFS)
Time of concentration =    14.799 min.
Effective stream area after confluence =      8.760(Ac.)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      309.000 to Point/Station      310.500
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
----------------------------------------------------------------------------
Upstream point/station elevation =  1203.000(Ft.)
Downstream point/station elevation =  1182.000(Ft.)
Pipe length  =   202.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =    12.491(CFS)
Nearest computed pipe diameter  =     15.00(In.)
Calculated individual pipe flow  =    12.491(CFS)
Normal flow depth in pipe =    8.37(In.)
Flow top width inside pipe =   14.90(In.)
Critical depth could not be calculated.
Pipe flow velocity =     17.73(Ft/s)
Travel time through pipe =    0.19 min.
Time of concentration (TC) =    14.99 min.


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Process from Point/Station      310.500 to Point/Station      310.500
**** CONFLUENCE OF MINOR STREAMS ****
----------------------------------------------------------------------------
Along Main Stream number: 1 in normal stream number 1
Stream flow area =      8.760(Ac.)
Runoff from this stream =     12.491(CFS)
Time of concentration =   14.99 min.
Rainfall intensity =     1.659(In/Hr)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      220.000 to Point/Station      220.000
**** USER DEFINED FLOW INFORMATION AT A POINT ****
----------------------------------------------------------------------------
Rainfall intensity =      1.756(In/Hr) for a    10.0 year storm
SINGLE FAMILY (1/4 Acre Lot)
Runoff Coefficient = 0.788
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  69.60
Pervious area fraction =  0.500; Impervious fraction =  0.500
User specified values are as follows:
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TC =  13.38 min.  Rain intensity =       1.76(In/Hr)
Total area =        64.46(Ac.)  Total runoff =     93.68(CFS)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      220.000 to Point/Station      310.500
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
______________________________________________________________________________
Upstream point/station elevation =  1184.000(Ft.)
Downstream point/station elevation =  1182.000(Ft.)
Pipe length  =   306.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =    93.680(CFS)
Nearest computed pipe diameter  =     45.00(In.)
Calculated individual pipe flow  =    93.680(CFS)
Normal flow depth in pipe =   35.30(In.)
Flow top width inside pipe =   37.01(In.)
Critical Depth =   35.68(In.)
Pipe flow velocity =     10.08(Ft/s)
Travel time through pipe =    0.51 min.
Time of concentration (TC) =    13.89 min.


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Process from Point/Station      310.500 to Point/Station      310.500
**** CONFLUENCE OF MINOR STREAMS ****
______________________________________________________________________________
Along Main Stream number: 1 in normal stream number 2
Stream flow area =     64.460(Ac.)
Runoff from this stream =     93.680(CFS)
Time of concentration =   13.89 min.
Rainfall intensity =     1.723(In/Hr)
Summary of stream data:

Stream   Flow rate      TC            Rainfall Intensity
 No.       (CFS)       (min)                 (In/Hr)


1       12.491     14.99                 1.659
2       93.680     13.89                 1.723
Largest stream flow has longer or shorter time of concentration
Qp =     93.680 + sum of
          Qa          Tb/Ta
          12.491 *    0.926 =     11.572
Qp =    105.252

Total of 2 streams to confluence:
Flow rates before confluence point:
      12.491      93.680
Area of streams before confluence:
        8.760       64.460
Results of confluence:
Total flow rate =    105.252(CFS)
Time of concentration =    13.886 min.
Effective stream area after confluence =     73.220(Ac.)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      310.500 to Point/Station      311.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
______________________________________________________________________________
Upstream point/station elevation =  1182.000(Ft.)
Downstream point/station elevation =  1178.000(Ft.)
Pipe length  =    70.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =   105.252(CFS)
Nearest computed pipe diameter  =     33.00(In.)
Calculated individual pipe flow  =   105.252(CFS)
Normal flow depth in pipe =   23.02(In.)
Flow top width inside pipe =   30.32(In.)
Critical depth could not be calculated.
Pipe flow velocity =     23.82(Ft/s)
Travel time through pipe =    0.05 min.
Time of concentration (TC) =    13.93 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      311.000 to Point/Station      312.000
**** SUBAREA FLOW ADDITION ****
______________________________________________________________________________
UNDEVELOPED (good cover) subarea
Runoff Coefficient = 0.712
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  74.60
Pervious area fraction =  1.000; Impervious fraction =  0.000
```

```
Time of concentration =    13.93 min.
Rainfall intensity =      1.720(In/Hr) for a    10.0 year storm
Subarea runoff =      1.531(CFS) for      1.250(Ac.)
Total runoff =    106.784(CFS)       Total area =      74.470(Ac.)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      312.000 to Point/Station      313.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
______________________________________________________________________________
Upstream point/station elevation =  1176.000(Ft.)
Downstream point/station elevation =  1146.000(Ft.)
Pipe length  =   433.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =   106.784(CFS)
Nearest computed pipe diameter  =     30.00(In.)
Calculated individual pipe flow  =   106.784(CFS)
Normal flow depth in pipe =   24.28(In.)
Flow top width inside pipe =   23.57(In.)
Critical depth could not be calculated.
Pipe flow velocity =     25.07(Ft/s)
Travel time through pipe =    0.29 min.
Time of concentration (TC) =    14.22 min.


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Process from Point/Station      313.000 to Point/Station      313.000
**** CONFLUENCE OF MAIN STREAMS ****
______________________________________________________________________________
The following data inside Main Stream is listed:
In Main Stream number: 1
Stream flow area =     74.470(Ac.)
Runoff from this stream =    106.784(CFS)
Time of concentration =   14.22 min.
Rainfall intensity =     1.703(In/Hr)
Program is now starting with Main Stream No. 2


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      216.000 to Point/Station      314.000
**** INITIAL AREA EVALUATION ****
______________________________________________________________________________
Initial area flow distance =   496.000(Ft.)
Top (of initial area) elevation =  1189.000(Ft.)
Bottom (of initial area) elevation =  1177.000(Ft.)
Difference in elevation =    12.000(Ft.)
Slope =    0.02419  s(percent)=       2.42
TC = k(0.300)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =    7.561 min.
Rainfall intensity =      2.336(In/Hr) for a    10.0 year storm
COMMERCIAL subarea type
Runoff Coefficient = 0.882
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  69.60
Pervious area fraction =  0.100; Impervious fraction =  0.900
Initial subarea runoff =      1.071(CFS)
Total initial stream area =        0.520(Ac.)
Pervious area fraction = 0.100


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      314.000 to Point/Station      315.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
______________________________________________________________________________
Upstream point/station elevation =  1177.000(Ft.)
Downstream point/station elevation =  1173.000(Ft.)
Pipe length  =    30.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =     1.071(CFS)
Nearest computed pipe diameter  =      6.00(In.)
Calculated individual pipe flow  =     1.071(CFS)
Normal flow depth in pipe =    3.08(In.)
Flow top width inside pipe =    6.00(In.)
Critical depth could not be calculated.
Pipe flow velocity =     10.55(Ft/s)
Travel time through pipe =    0.05 min.
Time of concentration (TC) =     7.61 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      315.000 to Point/Station      315.000
**** CONFLUENCE OF MINOR STREAMS ****
______________________________________________________________________________
Along Main Stream number: 2 in normal stream number 1
Stream flow area =      0.520(Ac.)
```

```
Runoff from this stream =      1.071(CFS)
Time of concentration =    7.61 min.
Rainfall intensity =     2.328(In/Hr)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      219.000 to Point/Station      316.000
**** INITIAL AREA EVALUATION ****
------------------------------------------------------------------------------
Initial area flow distance =   511.000(Ft.)
Top (of initial area) elevation =  1189.000(Ft.)
Bottom (of initial area) elevation =  1177.000(Ft.)
Difference in elevation =    12.000(Ft.)
Slope =    0.02348  s(percent)=       2.35
TC = k(0.300)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =    7.697 min.
Rainfall intensity =      2.315(In/Hr) for a    10.0 year storm
COMMERCIAL subarea type
Runoff Coefficient = 0.882
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  69.60
Pervious area fraction =  0.100; Impervious fraction =  0.900
Initial subarea runoff =      1.021(CFS)
Total initial stream area =        0.500(Ac.)
Pervious area fraction = 0.100


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      316.000 to Point/Station      315.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
------------------------------------------------------------------------------
Upstream point/station elevation =  1177.000(Ft.)
Downstream point/station elevation =  1173.000(Ft.)
Pipe length  =    22.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =     1.021(CFS)
Nearest computed pipe diameter  =      6.00(In.)
Calculated individual pipe flow  =     1.021(CFS)
Normal flow depth in pipe =    2.74(In.)
Flow top width inside pipe =    5.98(In.)
Critical Depth =    5.69(In.)
Pipe flow velocity =     11.70(Ft/s)
Travel time through pipe =    0.03 min.
Time of concentration (TC) =     7.73 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      315.000 to Point/Station      315.000
**** CONFLUENCE OF MINOR STREAMS ****
------------------------------------------------------------------------------
Along Main Stream number: 2 in normal stream number 2
Stream flow area =      0.500(Ac.)
Runoff from this stream =      1.021(CFS)
Time of concentration =    7.73 min.
Rainfall intensity =     2.310(In/Hr)
Summary of stream data:

Stream   Flow rate      TC            Rainfall Intensity
 No.       (CFS)       (min)                 (In/Hr)


1        1.071      7.61                2.328
2        1.021      7.73                2.310
Largest stream flow has longer or shorter time of concentration
Qp =      1.071 + sum of
          Qa          Tb/Ta
           1.021 *    0.984 =      1.005
Qp =      2.076

Total of 2 streams to confluence:
Flow rates before confluence point:
       1.071       1.021
Area of streams before confluence:
        0.520        0.500
Results of confluence:
Total flow rate =      2.076(CFS)
Time of concentration =     7.608 min.
Effective stream area after confluence =      1.020(Ac.)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      315.000 to Point/Station      313.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
------------------------------------------------------------------------------
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Upstream point/station elevation =  1170.000(Ft.)
Downstream point/station elevation =  1145.000(Ft.)
Pipe length  =   121.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =     2.076(CFS)
Nearest computed pipe diameter  =      6.00(In.)
Calculated individual pipe flow  =     2.076(CFS)
Normal flow depth in pipe =    4.11(In.)
Flow top width inside pipe =    5.57(In.)
Critical depth could not be calculated.
Pipe flow velocity =     14.48(Ft/s)
Travel time through pipe =    0.14 min.
Time of concentration (TC) =     7.75 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      313.000 to Point/Station      313.000
**** CONFLUENCE OF MAIN STREAMS ****
________________________________________________________________________
The following data inside Main Stream is listed:
In Main Stream number: 2
Stream flow area =      1.020(Ac.)
Runoff from this stream =      2.076(CFS)
Time of concentration =    7.75 min.
Rainfall intensity =     2.307(In/Hr)
Summary of stream data:

Stream   Flow rate      TC            Rainfall Intensity
 No.       (CFS)       (min)                 (In/Hr)


1      106.784     14.22               1.703
2        2.076      7.75               2.307
Largest stream flow has longer time of concentration
Qp =    106.784 + sum of
          Qb         Ia/Ib
           2.076 *    0.738 =      1.532
Qp =    108.316

Total of 2 main streams to confluence:
Flow rates before confluence point:
     106.784       2.076
Area of streams before confluence:
       74.470        1.020


Results of confluence:
Total flow rate =    108.316(CFS)
Time of concentration =    14.223 min.
Effective stream area after confluence  =     75.490(Ac.)
End of computations, total study area =           75.49 (Ac.)
The following figures may
be used for a unit hydrograph study of the same area.

Area averaged pervious area fraction(Ap) = 0.489
Area averaged RI index number =  69.7
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                Riverside County Rational Hydrology Program

CIVILCADD/CIVILDESIGN Engineering Software,(c) 1989 - 2004 Version 7.0
        Rational Hydrology Study        Date: 08/26/25  File:pro510.out
------------------------------------------------------------------------
 *********   Hydrology Study Control Information **********

 English (in-lb) Units used in input data file

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Program License Serial Number 5006

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Rational Method Hydrology Program based on
Riverside County Flood Control & Water Conservation District
1978 hydrology manual

Storm event (year) =   10.00 Antecedent Moisture Condition = 2

2 year, 1 hour precipitation =  0.500(In.)
100 year, 1 hour precipitation =  1.300(In.)

Storm event year =  10.0
Calculated rainfall intensity data:
1 hour intensity =  0.829(In/Hr)
Slope of intensity duration curve = 0.5000




++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       10.000 to Point/Station      408.000
**** INITIAL AREA EVALUATION ****
____________________________________________________________________________
Initial area flow distance =   462.000(Ft.)
Top (of initial area) elevation =  1288.000(Ft.)
Bottom (of initial area) elevation =  1246.500(Ft.)
Difference in elevation =    41.500(Ft.)
Slope =    0.08983  s(percent)=       8.98
TC = k(0.940)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =   17.713 min.
Rainfall intensity =      1.526(In/Hr) for a    10.0 year storm
UNDEVELOPED (good cover) subarea
Runoff Coefficient = 0.694
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  74.60
Pervious area fraction =  1.000; Impervious fraction =  0.000
Initial subarea runoff =      1.905(CFS)
Total initial stream area =        1.800(Ac.)
Pervious area fraction = 1.000


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Process from Point/Station      408.000 to Point/Station      409.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
____________________________________________________________________________
Upstream point/station elevation =  1246.500(Ft.)
Downstream point/station elevation =  1234.000(Ft.)
Pipe length  =   125.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =     1.905(CFS)
Nearest computed pipe diameter  =      9.00(In.)
Calculated individual pipe flow  =     1.905(CFS)
Normal flow depth in pipe =    3.76(In.)
Flow top width inside pipe =    8.88(In.)
Critical Depth =    7.56(In.)
Pipe flow velocity =     10.91(Ft/s)
Travel time through pipe =    0.19 min.
Time of concentration (TC) =    17.90 min.


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Process from Point/Station      409.000 to Point/Station      409.000
**** CONFLUENCE OF MINOR STREAMS ****
____________________________________________________________________________
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Along Main Stream number: 1 in normal stream number 1
Stream flow area =      1.800(Ac.)
Runoff from this stream =      1.905(CFS)
Time of concentration =   17.90 min.
Rainfall intensity =     1.518(In/Hr)


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Process from Point/Station      410.000 to Point/Station      411.000
**** INITIAL AREA EVALUATION ****
______________________________________________________________________________
Initial area flow distance =  1000.000(Ft.)
Top (of initial area) elevation =  1280.000(Ft.)
Bottom (of initial area) elevation =  1242.000(Ft.)
Difference in elevation =    38.000(Ft.)
Slope =    0.03800  s(percent)=       3.80
TC = k(0.940)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =   28.653 min.
Rainfall intensity =      1.200(In/Hr) for a    10.0 year storm
UNDEVELOPED (good cover) subarea
Runoff Coefficient = 0.653
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  74.60
Pervious area fraction =  1.000; Impervious fraction =  0.000
Initial subarea runoff =      5.249(CFS)
Total initial stream area =        6.700(Ac.)
Pervious area fraction = 1.000


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Process from Point/Station      411.000 to Point/Station      409.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
______________________________________________________________________________
Upstream point/station elevation =  1242.000(Ft.)
Downstream point/station elevation =  1237.000(Ft.)
Pipe length  =    48.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =     5.249(CFS)
Nearest computed pipe diameter  =      9.00(In.)
Calculated individual pipe flow  =     5.249(CFS)
Normal flow depth in pipe =    7.24(In.)
Flow top width inside pipe =    7.14(In.)
Critical depth could not be calculated.
Pipe flow velocity =     13.78(Ft/s)
Travel time through pipe =    0.06 min.
Time of concentration (TC) =    28.71 min.


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Process from Point/Station      409.000 to Point/Station      409.000
**** CONFLUENCE OF MINOR STREAMS ****
______________________________________________________________________________
Along Main Stream number: 1 in normal stream number 2
Stream flow area =      6.700(Ac.)
Runoff from this stream =      5.249(CFS)
Time of concentration =   28.71 min.
Rainfall intensity =     1.199(In/Hr)
Summary of stream data:

Stream   Flow rate      TC            Rainfall Intensity
 No.       (CFS)       (min)                 (In/Hr)


1        1.905     17.90                 1.518
2        5.249     28.71                 1.199
Largest stream flow has longer time of concentration
Qp =      5.249 + sum of
          Qb         Ia/Ib
           1.905 *    0.790 =      1.505
Qp =      6.753

Total of 2 streams to confluence:
Flow rates before confluence point:
       1.905       5.249
Area of streams before confluence:
        1.800        6.700
Results of confluence:
Total flow rate =      6.753(CFS)
Time of concentration =    28.711 min.
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Effective stream area after confluence =      8.500(Ac.)


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Process from Point/Station      409.000 to Point/Station      409.500
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
______________________________________________________________________________
Upstream point/station elevation =  1237.000(Ft.)
Downstream point/station elevation =  1236.000(Ft.)
Pipe length  =    71.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =     6.753(CFS)
Nearest computed pipe diameter  =     15.00(In.)
Calculated individual pipe flow  =     6.753(CFS)
Normal flow depth in pipe =   10.92(In.)
Flow top width inside pipe =   13.35(In.)
Critical Depth =   12.53(In.)
Pipe flow velocity =      7.05(Ft/s)
Travel time through pipe =    0.17 min.
Time of concentration (TC) =    28.88 min.


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Process from Point/Station      409.500 to Point/Station      409.500
**** CONFLUENCE OF MINOR STREAMS ****
______________________________________________________________________________
Along Main Stream number: 1 in normal stream number 1
Stream flow area =      8.500(Ac.)
Runoff from this stream =      6.753(CFS)
Time of concentration =   28.88 min.
Rainfall intensity =     1.195(In/Hr)


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Process from Point/Station      413.000 to Point/Station      411.500
**** INITIAL AREA EVALUATION ****
______________________________________________________________________________
Initial area flow distance =  1000.000(Ft.)
Top (of initial area) elevation =  1286.000(Ft.)
Bottom (of initial area) elevation =  1240.000(Ft.)
Difference in elevation =    46.000(Ft.)
Slope =    0.04600  s(percent)=       4.60
TC = k(0.940)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =   27.579 min.
Rainfall intensity =      1.223(In/Hr) for a    10.0 year storm
UNDEVELOPED (good cover) subarea
Runoff Coefficient = 0.656
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  74.60
Pervious area fraction =  1.000; Impervious fraction =  0.000
Initial subarea runoff =      3.829(CFS)
Total initial stream area =        4.770(Ac.)
Pervious area fraction = 1.000


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Process from Point/Station      411.500 to Point/Station      409.500
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
______________________________________________________________________________
Upstream point/station elevation =  1240.000(Ft.)
Downstream point/station elevation =  1236.000(Ft.)
Pipe length  =    50.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =     3.829(CFS)
Nearest computed pipe diameter  =      9.00(In.)
Calculated individual pipe flow  =     3.829(CFS)
Normal flow depth in pipe =    6.19(In.)
Flow top width inside pipe =    8.34(In.)
Critical depth could not be calculated.
Pipe flow velocity =     11.81(Ft/s)
Travel time through pipe =    0.07 min.
Time of concentration (TC) =    27.65 min.


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Process from Point/Station      409.500 to Point/Station      409.500
**** CONFLUENCE OF MINOR STREAMS ****
______________________________________________________________________________
Along Main Stream number: 1 in normal stream number 2
Stream flow area =      4.770(Ac.)
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Runoff from this stream =      3.829(CFS)
Time of concentration =   27.65 min.
Rainfall intensity =     1.221(In/Hr)
Summary of stream data:

Stream   Flow rate      TC            Rainfall Intensity
 No.       (CFS)       (min)                 (In/Hr)


1        6.753     28.88                 1.195
2        3.829     27.65                 1.221
Largest stream flow has longer time of concentration
Qp =      6.753 + sum of
          Qb         Ia/Ib
           3.829 *    0.978 =      3.746
Qp =     10.500

Total of 2 streams to confluence:
Flow rates before confluence point:
       6.753       3.829
Area of streams before confluence:
        8.500        4.770
Results of confluence:
Total flow rate =     10.500(CFS)
Time of concentration =    28.879 min.
Effective stream area after confluence =     13.270(Ac.)


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Process from Point/Station      409.500 to Point/Station      412.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
______________________________________________________________________________
Upstream point/station elevation =  1236.000(Ft.)
Downstream point/station elevation =  1235.000(Ft.)
Pipe length  =    36.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =    10.500(CFS)
Nearest computed pipe diameter  =     15.00(In.)
Calculated individual pipe flow  =    10.500(CFS)
Normal flow depth in pipe =   11.98(In.)
Flow top width inside pipe =   12.04(In.)
Critical depth could not be calculated.
Pipe flow velocity =     10.00(Ft/s)
Travel time through pipe =    0.06 min.
Time of concentration (TC) =    28.94 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      412.000 to Point/Station      412.000
**** CONFLUENCE OF MINOR STREAMS ****
______________________________________________________________________________
Along Main Stream number: 1 in normal stream number 1
Stream flow area =     13.270(Ac.)
Runoff from this stream =     10.500(CFS)
Time of concentration =   28.94 min.
Rainfall intensity =     1.194(In/Hr)


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Process from Point/Station      413.000 to Point/Station      414.000
**** INITIAL AREA EVALUATION ****
______________________________________________________________________________
Initial area flow distance =   885.000(Ft.)
Top (of initial area) elevation =  1286.000(Ft.)
Bottom (of initial area) elevation =  1237.000(Ft.)
Difference in elevation =    49.000(Ft.)
Slope =    0.05537  s(percent)=       5.54
TC = k(0.480)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =   12.923 min.
Rainfall intensity =      1.787(In/Hr) for a    10.0 year storm
SINGLE FAMILY (1 Acre Lot)
Runoff Coefficient = 0.723
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  69.60
Pervious area fraction =  0.800; Impervious fraction =  0.200
Initial subarea runoff =      2.402(CFS)
Total initial stream area =        1.860(Ac.)
Pervious area fraction = 0.800
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Process from Point/Station      414.000 to Point/Station      412.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
------------------------------------------------------------------------------
Upstream point/station elevation =  1237.000(Ft.)
Downstream point/station elevation =  1235.000(Ft.)
Pipe length  =    48.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =     2.402(CFS)
Nearest computed pipe diameter  =      9.00(In.)
Calculated individual pipe flow  =     2.402(CFS)
Normal flow depth in pipe =    5.61(In.)
Flow top width inside pipe =    8.72(In.)
Critical Depth =    8.22(In.)
Pipe flow velocity =      8.30(Ft/s)
Travel time through pipe =    0.10 min.
Time of concentration (TC) =    13.02 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      412.000 to Point/Station      412.000
**** CONFLUENCE OF MINOR STREAMS ****
------------------------------------------------------------------------------
Along Main Stream number: 1 in normal stream number 2
Stream flow area =      1.860(Ac.)
Runoff from this stream =      2.402(CFS)
Time of concentration =   13.02 min.
Rainfall intensity =     1.780(In/Hr)
Summary of stream data:

Stream   Flow rate      TC            Rainfall Intensity
 No.       (CFS)       (min)                 (In/Hr)


1       10.500     28.94                1.194
2        2.402     13.02                1.780
Largest stream flow has longer time of concentration
Qp =     10.500 + sum of
          Qb          Ia/Ib
           2.402 *    0.671 =      1.611
Qp =     12.111

Total of 2 streams to confluence:
Flow rates before confluence point:
      10.500       2.402
Area of streams before confluence:
       13.270        1.860
Results of confluence:
Total flow rate =     12.111(CFS)
Time of concentration =    28.939 min.
Effective stream area after confluence =     15.130(Ac.)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      412.000 to Point/Station      415.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
------------------------------------------------------------------------------
Upstream point/station elevation =  1235.000(Ft.)
Downstream point/station elevation =  1234.000(Ft.)
Pipe length  =   100.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =    12.111(CFS)
Nearest computed pipe diameter  =     21.00(In.)
Calculated individual pipe flow  =    12.111(CFS)
Normal flow depth in pipe =   13.76(In.)
Flow top width inside pipe =   19.96(In.)
Critical Depth =   15.57(In.)
Pipe flow velocity =      7.26(Ft/s)
Travel time through pipe =    0.23 min.
Time of concentration (TC) =    29.17 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      415.000 to Point/Station      415.000
**** CONFLUENCE OF MINOR STREAMS ****
------------------------------------------------------------------------------
Along Main Stream number: 1 in normal stream number 1
Stream flow area =     15.130(Ac.)
Runoff from this stream =     12.111(CFS)
Time of concentration =   29.17 min.
Rainfall intensity =     1.189(In/Hr)
```

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++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      416.000 to Point/Station      417.000
**** INITIAL AREA EVALUATION ****
------------------------------------------------------------------------------
Initial area flow distance =   749.000(Ft.)
Top (of initial area) elevation =  1304.000(Ft.)
Bottom (of initial area) elevation =  1239.000(Ft.)
Difference in elevation =    65.000(Ft.)
Slope =    0.08678  s(percent)=       8.68
TC = k(0.940)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =   21.639 min.
Rainfall intensity =      1.381(In/Hr) for a    10.0 year storm
UNDEVELOPED (good cover) subarea
Runoff Coefficient = 0.677
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  74.60
Pervious area fraction =  1.000; Impervious fraction =  0.000
Initial subarea runoff =      5.162(CFS)
Total initial stream area =        5.520(Ac.)
Pervious area fraction = 1.000


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Process from Point/Station      417.000 to Point/Station      415.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
------------------------------------------------------------------------------
Upstream point/station elevation =  1239.000(Ft.)
Downstream point/station elevation =  1234.000(Ft.)
Pipe length  =    48.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =     5.162(CFS)
Nearest computed pipe diameter  =      9.00(In.)
Calculated individual pipe flow  =     5.162(CFS)
Normal flow depth in pipe =    7.13(In.)
Flow top width inside pipe =    7.31(In.)
Critical depth could not be calculated.
Pipe flow velocity =     13.77(Ft/s)
Travel time through pipe =    0.06 min.
Time of concentration (TC) =    21.70 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      415.000 to Point/Station      415.000
**** CONFLUENCE OF MINOR STREAMS ****
------------------------------------------------------------------------------
Along Main Stream number: 1 in normal stream number 2
Stream flow area =      5.520(Ac.)
Runoff from this stream =      5.162(CFS)
Time of concentration =   21.70 min.
Rainfall intensity =     1.379(In/Hr)
Summary of stream data:

Stream   Flow rate      TC            Rainfall Intensity
 No.       (CFS)       (min)                  (In/Hr)


1       12.111     29.17                 1.189
2        5.162     21.70                 1.379
Largest stream flow has longer time of concentration
Qp =     12.111 + sum of
          Qb         Ia/Ib
           5.162 *    0.862 =      4.452
Qp =     16.563

Total of 2 streams to confluence:
Flow rates before confluence point:
      12.111       5.162
Area of streams before confluence:
       15.130        5.520
Results of confluence:
Total flow rate =     16.563(CFS)
Time of concentration =    29.169 min.
Effective stream area after confluence =     20.650(Ac.)


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Process from Point/Station      415.000 to Point/Station      418.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
```

```
Upstream point/station elevation =  1234.000(Ft.)
Downstream point/station elevation =  1233.000(Ft.)
Pipe length  =    99.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =    16.563(CFS)
Nearest computed pipe diameter  =     24.00(In.)
Calculated individual pipe flow  =    16.563(CFS)
Normal flow depth in pipe =   15.20(In.)
Flow top width inside pipe =   23.13(In.)
Critical Depth =   17.61(In.)
Pipe flow velocity =      7.90(Ft/s)
Travel time through pipe =    0.21 min.
Time of concentration (TC) =    29.38 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      418.000 to Point/Station      418.000
**** CONFLUENCE OF MINOR STREAMS ****
------------------------------------------------------------------------------
Along Main Stream number: 1 in normal stream number 1
Stream flow area =     20.650(Ac.)
Runoff from this stream =     16.563(CFS)
Time of concentration =   29.38 min.
Rainfall intensity =     1.185(In/Hr)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      416.000 to Point/Station      419.000
**** INITIAL AREA EVALUATION ****
------------------------------------------------------------------------------
Initial area flow distance =   736.000(Ft.)
Top (of initial area) elevation =  1304.000(Ft.)
Bottom (of initial area) elevation =  1241.500(Ft.)
Difference in elevation =    62.500(Ft.)
Slope =    0.08492  s(percent)=       8.49
TC = k(0.940)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =   21.581 min.
Rainfall intensity =      1.382(In/Hr) for a    10.0 year storm
UNDEVELOPED (good cover) subarea
Runoff Coefficient = 0.678
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  74.60
Pervious area fraction =  1.000; Impervious fraction =  0.000
Initial subarea runoff =      2.473(CFS)
Total initial stream area =        2.640(Ac.)
Pervious area fraction = 1.000


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      419.000 to Point/Station      418.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
------------------------------------------------------------------------------
Upstream point/station elevation =  1241.500(Ft.)
Downstream point/station elevation =  1233.000(Ft.)
Pipe length  =    48.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =     2.473(CFS)
Nearest computed pipe diameter  =      9.00(In.)
Calculated individual pipe flow  =     2.473(CFS)
Normal flow depth in pipe =    3.71(In.)
Flow top width inside pipe =    8.86(In.)
Critical Depth =    8.29(In.)
Pipe flow velocity =     14.42(Ft/s)
Travel time through pipe =    0.06 min.
Time of concentration (TC) =    21.64 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      418.000 to Point/Station      418.000
**** CONFLUENCE OF MINOR STREAMS ****
------------------------------------------------------------------------------
Along Main Stream number: 1 in normal stream number 2
Stream flow area =      2.640(Ac.)
Runoff from this stream =      2.473(CFS)
Time of concentration =   21.64 min.
Rainfall intensity =     1.381(In/Hr)
Summary of stream data:

Stream   Flow rate      TC            Rainfall Intensity
```

```
 No.       (CFS)       (min)                 (In/Hr)


1       16.563     29.38                 1.185
2        2.473     21.64                 1.381
Largest stream flow has longer time of concentration
Qp =     16.563 + sum of
          Qb          Ia/Ib
           2.473 *    0.858 =      2.122
Qp =     18.685

Total of 2 streams to confluence:
Flow rates before confluence point:
      16.563       2.473
Area of streams before confluence:
       20.650        2.640
Results of confluence:
Total flow rate =     18.685(CFS)
Time of concentration =    29.378 min.
Effective stream area after confluence =     23.290(Ac.)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      418.000 to Point/Station      420.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
______________________________________________________________________________
Upstream point/station elevation =  1233.000(Ft.)
Downstream point/station elevation =  1230.000(Ft.)
Pipe length  =   299.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =    18.685(CFS)
Nearest computed pipe diameter  =     24.00(In.)
Calculated individual pipe flow  =    18.685(CFS)
Normal flow depth in pipe =   16.62(In.)
Flow top width inside pipe =   22.15(In.)
Critical Depth =   18.66(In.)
Pipe flow velocity =      8.06(Ft/s)
Travel time through pipe =    0.62 min.
Time of concentration (TC) =    30.00 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      420.000 to Point/Station      420.000
**** CONFLUENCE OF MINOR STREAMS ****
______________________________________________________________________________
Along Main Stream number: 1 in normal stream number 1
Stream flow area =     23.290(Ac.)
Runoff from this stream =     18.685(CFS)
Time of concentration =   30.00 min.
Rainfall intensity =     1.173(In/Hr)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      421.000 to Point/Station      422.000
**** INITIAL AREA EVALUATION ****
______________________________________________________________________________
Initial area flow distance =   978.000(Ft.)
Top (of initial area) elevation =  1295.000(Ft.)
Bottom (of initial area) elevation =  1247.000(Ft.)
Difference in elevation =    48.000(Ft.)
Slope =    0.04908  s(percent)=       4.91
TC = k(0.940)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =   26.983 min.
Rainfall intensity =      1.236(In/Hr) for a    10.0 year storm
UNDEVELOPED (good cover) subarea
Runoff Coefficient = 0.658
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  74.60
Pervious area fraction =  1.000; Impervious fraction =  0.000
Initial subarea runoff =      5.787(CFS)
Total initial stream area =        7.110(Ac.)
Pervious area fraction = 1.000


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      422.000 to Point/Station      420.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
______________________________________________________________________________
Upstream point/station elevation =  1247.000(Ft.)
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Downstream point/station elevation =  1230.000(Ft.)
Pipe length  =    48.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =     5.787(CFS)
Nearest computed pipe diameter  =      9.00(In.)
Calculated individual pipe flow  =     5.787(CFS)
Normal flow depth in pipe =    4.96(In.)
Flow top width inside pipe =    8.95(In.)
Critical depth could not be calculated.
Pipe flow velocity =     23.18(Ft/s)
Travel time through pipe =    0.03 min.
Time of concentration (TC) =    27.02 min.


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Process from Point/Station      420.000 to Point/Station      420.000
**** CONFLUENCE OF MINOR STREAMS ****
______________________________________________________________________________
Along Main Stream number: 1 in normal stream number 2
Stream flow area =      7.110(Ac.)
Runoff from this stream =      5.787(CFS)
Time of concentration =   27.02 min.
Rainfall intensity =     1.236(In/Hr)
Summary of stream data:

Stream   Flow rate      TC            Rainfall Intensity
 No.       (CFS)       (min)                 (In/Hr)


1       18.685     30.00                  1.173
2        5.787     27.02                  1.236
Largest stream flow has longer time of concentration
Qp =     18.685 + sum of
          Qb         Ia/Ib
           5.787 *    0.949 =      5.492
Qp =     24.177

Total of 2 streams to confluence:
Flow rates before confluence point:
      18.685       5.787
Area of streams before confluence:
       23.290        7.110
Results of confluence:
Total flow rate =     24.177(CFS)
Time of concentration =    29.996 min.
Effective stream area after confluence =     30.400(Ac.)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      420.000 to Point/Station      423.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
______________________________________________________________________________
Upstream point/station elevation =  1230.000(Ft.)
Downstream point/station elevation =  1227.000(Ft.)
Pipe length  =    84.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =    24.177(CFS)
Nearest computed pipe diameter  =     21.00(In.)
Calculated individual pipe flow  =    24.177(CFS)
Normal flow depth in pipe =   14.30(In.)
Flow top width inside pipe =   19.58(In.)
Critical depth could not be calculated.
Pipe flow velocity =     13.85(Ft/s)
Travel time through pipe =    0.10 min.
Time of concentration (TC) =    30.10 min.


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Process from Point/Station      423.000 to Point/Station      423.000
**** CONFLUENCE OF MINOR STREAMS ****
______________________________________________________________________________
Along Main Stream number: 1 in normal stream number 1
Stream flow area =     30.400(Ac.)
Runoff from this stream =     24.177(CFS)
Time of concentration =   30.10 min.
Rainfall intensity =     1.171(In/Hr)


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Process from Point/Station      424.000 to Point/Station      425.000
**** INITIAL AREA EVALUATION ****
______________________________________________________________________________
Initial area flow distance =   823.000(Ft.)
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Top (of initial area) elevation =  1280.000(Ft.)
Bottom (of initial area) elevation =  1247.000(Ft.)
Difference in elevation =    33.000(Ft.)
Slope =    0.04010  s(percent)=       4.01
TC = k(0.940)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =   26.222 min.
Rainfall intensity =      1.254(In/Hr) for a    10.0 year storm
UNDEVELOPED (good cover) subarea
Runoff Coefficient = 0.661
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  74.60
Pervious area fraction =  1.000; Impervious fraction =  0.000
Initial subarea runoff =      1.169(CFS)
Total initial stream area =        1.410(Ac.)
Pervious area fraction = 1.000


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Process from Point/Station      425.000 to Point/Station      423.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
______________________________________________________________________________
Upstream point/station elevation =  1247.000(Ft.)
Downstream point/station elevation =  1227.000(Ft.)
Pipe length  =    54.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =     1.169(CFS)
Nearest computed pipe diameter  =      6.00(In.)
Calculated individual pipe flow  =     1.169(CFS)
Normal flow depth in pipe =    2.42(In.)
Flow top width inside pipe =    5.89(In.)
Critical depth could not be calculated.
Pipe flow velocity =     15.75(Ft/s)
Travel time through pipe =    0.06 min.
Time of concentration (TC) =    26.28 min.


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Process from Point/Station      423.000 to Point/Station      423.000
**** CONFLUENCE OF MINOR STREAMS ****
______________________________________________________________________________
Along Main Stream number: 1 in normal stream number 2
Stream flow area =      1.410(Ac.)
Runoff from this stream =      1.169(CFS)
Time of concentration =   26.28 min.
Rainfall intensity =     1.253(In/Hr)
Summary of stream data:

Stream   Flow rate      TC            Rainfall Intensity
 No.       (CFS)       (min)                 (In/Hr)


1       24.177     30.10                 1.171
2        1.169     26.28                 1.253
Largest stream flow has longer time of concentration
Qp =     24.177 + sum of
          Qb         Ia/Ib
           1.169 *    0.934 =      1.092
Qp =     25.269

Total of 2 streams to confluence:
Flow rates before confluence point:
      24.177       1.169
Area of streams before confluence:
       30.400        1.410
Results of confluence:
Total flow rate =     25.269(CFS)
Time of concentration =    30.097 min.
Effective stream area after confluence =     31.810(Ac.)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      423.000 to Point/Station      426.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
______________________________________________________________________________
Upstream point/station elevation =  1227.000(Ft.)
Downstream point/station elevation =  1220.000(Ft.)
Pipe length  =   164.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =    25.269(CFS)
Nearest computed pipe diameter  =     21.00(In.)
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Calculated individual pipe flow  =    25.269(CFS)
Normal flow depth in pipe =   13.85(In.)
Flow top width inside pipe =   19.90(In.)
Critical depth could not be calculated.
Pipe flow velocity =     15.02(Ft/s)
Travel time through pipe =    0.18 min.
Time of concentration (TC) =    30.28 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      426.000 to Point/Station      426.000
**** CONFLUENCE OF MAIN STREAMS ****
______________________________________________________________________________
The following data inside Main Stream is listed:
In Main Stream number: 1
Stream flow area =     31.810(Ac.)
Runoff from this stream =     25.269(CFS)
Time of concentration =   30.28 min.
Rainfall intensity =     1.167(In/Hr)
Program is now starting with Main Stream No. 2


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Process from Point/Station      427.000 to Point/Station      428.000
**** INITIAL AREA EVALUATION ****
______________________________________________________________________________
Initial area flow distance =   429.000(Ft.)
Top (of initial area) elevation =  1408.000(Ft.)
Bottom (of initial area) elevation =  1302.000(Ft.)
Difference in elevation =   106.000(Ft.)
Slope =    0.24709  s(percent)=      24.71
TC = k(0.940)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =   14.046 min.
Rainfall intensity =      1.714(In/Hr) for a    10.0 year storm
UNDEVELOPED (good cover) subarea
Runoff Coefficient = 0.712
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  74.60
Pervious area fraction =  1.000; Impervious fraction =  0.000
Initial subarea runoff =     11.400(CFS)
Total initial stream area =        9.350(Ac.)
Pervious area fraction = 1.000


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      428.000 to Point/Station      429.000
**** NATURAL CHANNEL TIME + SUBAREA FLOW ADDITION ****
______________________________________________________________________________
Top of natural channel elevation =   1302.000(Ft.)
End of natural channel elevation =   1253.000(Ft.)
Length of natural channel  =   694.000(Ft.)
Estimated mean flow rate at midpoint of channel =     17.917(CFS)

Natural valley channel type used
L.A. County flood control district formula for channel velocity:
 Velocity(ft/s) = (7 + 8(q(English Units)^.352)(slope^0.5)
Velocity using mean channel flow =   7.73(Ft/s)

Correction to map slope used on extremely rugged channels with
drops and waterfalls (Plate D-6.2)
       Normal channel slope =  0.0706
Corrected/adjusted channel slope =  0.0706
Travel time =    1.50 min.     TC =   15.54  min.


 Adding area flow to channel
UNDEVELOPED (poor cover) subarea
Runoff Coefficient = 0.797
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  86.30
Pervious area fraction =  1.000; Impervious fraction =  0.000
Rainfall intensity =      1.629(In/Hr) for a    10.0 year storm
Subarea runoff =     13.871(CFS) for     10.690(Ac.)
Total runoff =     25.272(CFS)       Total area =      20.040(Ac.)
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Process from Point/Station      429.000 to Point/Station      429.000
**** CONFLUENCE OF MINOR STREAMS ****
____________________________________________________________________________
Along Main Stream number: 2 in normal stream number 1
Stream flow area =     20.040(Ac.)
Runoff from this stream =     25.272(CFS)
Time of concentration =   15.54 min.
Rainfall intensity =     1.629(In/Hr)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      429.500 to Point/Station      429.500
**** USER DEFINED FLOW INFORMATION AT A POINT ****
____________________________________________________________________________
Rainfall intensity =      1.452(In/Hr) for a    10.0 year storm
UNDEVELOPED (good cover) subarea
Runoff Coefficient = 0.686
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  74.60
Pervious area fraction =  1.000; Impervious fraction =  0.000
User specified values are as follows:
TC =  19.56 min.  Rain intensity =       1.45(In/Hr)
Total area =         2.50(Ac.)  Total runoff =      2.02(CFS)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      429.500 to Point/Station      429.000
**** NATURAL CHANNEL TIME + SUBAREA FLOW ADDITION ****
____________________________________________________________________________
Top of natural channel elevation =   1260.000(Ft.)
End of natural channel elevation =   1253.000(Ft.)
Length of natural channel  =   123.000(Ft.)
Estimated mean flow rate at midpoint of channel =      2.020(CFS)

Natural valley channel type used
L.A. County flood control district formula for channel velocity:
 Velocity(ft/s) = (7 + 8(q(English Units)^.352)(slope^0.5)
Velocity using mean channel flow =   4.11(Ft/s)

Correction to map slope used on extremely rugged channels with
drops and waterfalls (Plate D-6.2)
       Normal channel slope =  0.0569
Corrected/adjusted channel slope =  0.0569
Travel time =    0.50 min.     TC =   20.06  min.


 Adding area flow to channel
UNDEVELOPED (good cover) subarea
Runoff Coefficient = 0.684
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  74.60
Pervious area fraction =  1.000; Impervious fraction =  0.000
Rainfall intensity =      1.434(In/Hr) for a    10.0 year storm
Subarea runoff =      0.000(CFS) for      0.000(Ac.)
Total runoff =      2.020(CFS)       Total area =       2.500(Ac.)


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Process from Point/Station      429.000 to Point/Station      429.000
**** CONFLUENCE OF MINOR STREAMS ****
____________________________________________________________________________
Along Main Stream number: 2 in normal stream number 2
Stream flow area =      2.500(Ac.)
Runoff from this stream =      2.020(CFS)
Time of concentration =   20.06 min.
Rainfall intensity =     1.434(In/Hr)
Summary of stream data:

Stream   Flow rate      TC            Rainfall Intensity
 No.       (CFS)       (min)                 (In/Hr)


1       25.272     15.54                1.629
```

```
2        2.020     20.06                 1.434
Largest stream flow has longer or shorter time of concentration
Qp =     25.272 + sum of
          Qa          Tb/Ta
           2.020 *    0.775 =      1.565
Qp =     26.837

Total of 2 streams to confluence:
Flow rates before confluence point:
      25.272       2.020
Area of streams before confluence:
       20.040        2.500
Results of confluence:
Total flow rate =     26.837(CFS)
Time of concentration =    15.542 min.
Effective stream area after confluence =     22.540(Ac.)


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Process from Point/Station      429.000 to Point/Station      430.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
______________________________________________________________________________
Upstream point/station elevation =  1253.000(Ft.)
Downstream point/station elevation =  1249.000(Ft.)
Pipe length  =    41.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =    26.837(CFS)
Nearest computed pipe diameter  =     18.00(In.)
Calculated individual pipe flow  =    26.837(CFS)
Normal flow depth in pipe =   12.38(In.)
Flow top width inside pipe =   16.69(In.)
Critical depth could not be calculated.
Pipe flow velocity =     20.71(Ft/s)
Travel time through pipe =    0.03 min.
Time of concentration (TC) =    15.57 min.


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Process from Point/Station      430.000 to Point/Station      430.000
**** CONFLUENCE OF MINOR STREAMS ****
______________________________________________________________________________
Along Main Stream number: 2 in normal stream number 1
Stream flow area =     22.540(Ac.)
Runoff from this stream =     26.837(CFS)
Time of concentration =   15.57 min.
Rainfall intensity =     1.627(In/Hr)


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Process from Point/Station      431.000 to Point/Station      431.000
**** USER DEFINED FLOW INFORMATION AT A POINT ****
______________________________________________________________________________
Rainfall intensity =      1.513(In/Hr) for a    10.0 year storm
SINGLE FAMILY (1/4 Acre Lot)
Runoff Coefficient = 0.775
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  69.60
Pervious area fraction =  0.500; Impervious fraction =  0.500
User specified values are as follows:
TC =  18.02 min.  Rain intensity =       1.51(In/Hr)
Total area =        30.70(Ac.)  Total runoff =     40.26(CFS)


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Process from Point/Station      431.000 to Point/Station      430.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
______________________________________________________________________________
Upstream point/station elevation =  1250.000(Ft.)
Downstream point/station elevation =  1249.000(Ft.)
Pipe length  =    45.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =    40.260(CFS)
Nearest computed pipe diameter  =     27.00(In.)
Calculated individual pipe flow  =    40.260(CFS)
Normal flow depth in pipe =   19.50(In.)
Flow top width inside pipe =   24.19(In.)
Critical Depth =   25.12(In.)
Pipe flow velocity =     13.08(Ft/s)
Travel time through pipe =    0.06 min.
Time of concentration (TC) =    18.08 min.
```

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++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      430.000 to Point/Station      430.000
**** CONFLUENCE OF MINOR STREAMS ****
____________________________________________________________________________
Along Main Stream number: 2 in normal stream number 2
Stream flow area =     30.700(Ac.)
Runoff from this stream =     40.260(CFS)
Time of concentration =   18.08 min.
Rainfall intensity =     1.511(In/Hr)
Summary of stream data:

Stream   Flow rate      TC            Rainfall Intensity
 No.       (CFS)       (min)                 (In/Hr)


1       26.837     15.57                 1.627
2       40.260     18.08                 1.511
Largest stream flow has longer time of concentration
Qp =     40.260 + sum of
          Qb         Ia/Ib
          26.837 *    0.928 =     24.910
Qp =     65.170

Total of 2 streams to confluence:
Flow rates before confluence point:
      26.837      40.260
Area of streams before confluence:
       22.540       30.700
Results of confluence:
Total flow rate =     65.170(CFS)
Time of concentration =    18.077 min.
Effective stream area after confluence =     53.240(Ac.)


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Process from Point/Station      430.000 to Point/Station      426.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
____________________________________________________________________________
Upstream point/station elevation =  1249.000(Ft.)
Downstream point/station elevation =  1220.000(Ft.)
Pipe length  =   193.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =    65.170(CFS)
Nearest computed pipe diameter  =     24.00(In.)
Calculated individual pipe flow  =    65.170(CFS)
Normal flow depth in pipe =   15.41(In.)
Flow top width inside pipe =   23.01(In.)
Critical depth could not be calculated.
Pipe flow velocity =     30.58(Ft/s)
Travel time through pipe =    0.11 min.
Time of concentration (TC) =    18.18 min.


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Process from Point/Station      426.000 to Point/Station      426.000
**** CONFLUENCE OF MAIN STREAMS ****
____________________________________________________________________________
The following data inside Main Stream is listed:
In Main Stream number: 2
Stream flow area =     53.240(Ac.)
Runoff from this stream =     65.170(CFS)
Time of concentration =   18.18 min.
Rainfall intensity =     1.506(In/Hr)
Summary of stream data:

Stream   Flow rate      TC            Rainfall Intensity
 No.       (CFS)       (min)                 (In/Hr)


1       25.269     30.28                 1.167
2       65.170     18.18                 1.506
Largest stream flow has longer or shorter time of concentration
Qp =     65.170 + sum of
          Qa         Tb/Ta
          25.269 *    0.600 =     15.174
Qp =     80.344

Total of 2 main streams to confluence:
Flow rates before confluence point:
      25.269      65.170
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```
Area of streams before confluence:
       31.810       53.240


Results of confluence:
Total flow rate =     80.344(CFS)
Time of concentration =    18.183 min.
Effective stream area after confluence  =     85.050(Ac.)
End of computations, total study area =           85.05 (Ac.)
The following figures may
be used for a unit hydrograph study of the same area.

Area averaged pervious area fraction(Ap) = 0.815
Area averaged RI index number =  74.2
```

```
                Riverside County Rational Hydrology Program

CIVILCADD/CIVILDESIGN Engineering Software,(c) 1989 - 2004 Version 7.0
        Rational Hydrology Study        Date: 04/02/25  File:pro610.out
------------------------------------------------------------------------
 *********   Hydrology Study Control Information **********

 English (in-lb) Units used in input data file

------------------------------------------------------------------------


Program License Serial Number 5006

------------------------------------------------------------------------
Rational Method Hydrology Program based on
Riverside County Flood Control & Water Conservation District
1978 hydrology manual

Storm event (year) =   10.00 Antecedent Moisture Condition = 2

2 year, 1 hour precipitation =  0.500(In.)
100 year, 1 hour precipitation =  1.300(In.)

Storm event year =  10.0
Calculated rainfall intensity data:
1 hour intensity =  0.829(In/Hr)
Slope of intensity duration curve = 0.5000




++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      500.000 to Point/Station      501.000
**** INITIAL AREA EVALUATION ****
____________________________________________________________________________
Initial area flow distance =   671.000(Ft.)
Top (of initial area) elevation =  1338.000(Ft.)
Bottom (of initial area) elevation =  1283.000(Ft.)
Difference in elevation =    55.000(Ft.)
Slope =    0.08197  s(percent)=       8.20
TC = k(0.530)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =   11.810 min.
Rainfall intensity =      1.869(In/Hr) for a    10.0 year storm
UNDEVELOPED (poor cover) subarea
Runoff Coefficient = 0.808
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  86.30
Pervious area fraction =  1.000; Impervious fraction =  0.000
Initial subarea runoff =      3.430(CFS)
Total initial stream area =        2.270(Ac.)
Pervious area fraction = 1.000


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      501.000 to Point/Station      502.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
____________________________________________________________________________
Upstream point/station elevation =  1283.000(Ft.)
Downstream point/station elevation =  1275.000(Ft.)
Pipe length  =    80.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =     3.430(CFS)
Nearest computed pipe diameter  =      9.00(In.)
Calculated individual pipe flow  =     3.430(CFS)
Normal flow depth in pipe =    5.31(In.)
Flow top width inside pipe =    8.85(In.)
Critical depth could not be calculated.
Pipe flow velocity =     12.63(Ft/s)
Travel time through pipe =    0.11 min.
Time of concentration (TC) =    11.92 min.
End of computations, total study area =            2.27 (Ac.)
The following figures may
be used for a unit hydrograph study of the same area.

Area averaged pervious area fraction(Ap) = 1.000
Area averaged RI index number =  86.3
```

PROPOSED 100 YEAR

```
                Riverside County Rational Hydrology Program

CIVILCADD/CIVILDESIGN Engineering Software,(c) 1989 - 2004 Version 7.0
        Rational Hydrology Study        Date: 04/02/25  File:pro100.out
------------------------------------------------------------------------
 *********   Hydrology Study Control Information **********

 English (in-lb) Units used in input data file

------------------------------------------------------------------------


Program License Serial Number 5006

------------------------------------------------------------------------
Rational Method Hydrology Program based on
Riverside County Flood Control & Water Conservation District
1978 hydrology manual

Storm event (year) =  100.00 Antecedent Moisture Condition = 2

2 year, 1 hour precipitation =  0.500(In.)
100 year, 1 hour precipitation =  1.300(In.)

Storm event year = 100.0
Calculated rainfall intensity data:
1 hour intensity =  1.300(In/Hr)
Slope of intensity duration curve = 0.5000




++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station        1.000 to Point/Station        2.000
**** INITIAL AREA EVALUATION ****
____________________________________________________________________________
Initial area flow distance =   969.000(Ft.)
Top (of initial area) elevation =  1256.000(Ft.)
Bottom (of initial area) elevation =  1238.000(Ft.)
Difference in elevation =    18.000(Ft.)
Slope =    0.01858  s(percent)=       1.86
TC = k(0.390)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =   13.546 min.
Rainfall intensity =      2.736(In/Hr) for a   100.0 year storm
SINGLE FAMILY (1/4 Acre Lot)
Runoff Coefficient = 0.821
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  69.60
Pervious area fraction =  0.500; Impervious fraction =  0.500
Initial subarea runoff =      2.920(CFS)
Total initial stream area =        1.300(Ac.)
Pervious area fraction = 0.500


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station        2.000 to Point/Station        3.000
**** STREET FLOW TRAVEL TIME + SUBAREA FLOW ADDITION ****
____________________________________________________________________________
Top of street segment elevation =  1238.000(Ft.)
End of street segment elevation =  1220.000(Ft.)
Length of street segment  =   820.000(Ft.)
Height of curb above gutter flowline  =    6.0(In.)
Width of half street (curb to crown)  =  18.000(Ft.)
Distance from crown to crossfall grade break  =  16.000(Ft.)
Slope from gutter to grade break (v/hz) =   0.020
Slope from grade break to crown (v/hz)  =   0.020
Street flow is on [1] side(s) of the street
Distance from curb to property line  =  10.000(Ft.)
Slope from curb to property line (v/hz) =   0.020
Gutter width =   2.000(Ft.)
Gutter hike from flowline =  2.000(In.)
 Manning's N in gutter =  0.0150
 Manning's N from gutter to grade break =  0.0150
 Manning's N from grade break to crown =  0.0150
Estimated mean flow rate at midpoint of street =      6.896(CFS)
Depth of flow =   0.385(Ft.), Average velocity =   3.856(Ft/s)
Streetflow hydraulics at midpoint of street travel:
Halfstreet flow width =  12.892(Ft.)
Flow velocity =   3.86(Ft/s)
Travel time =    3.54 min.     TC =   17.09  min.
 Adding area flow to street
```

```
SINGLE FAMILY (1/4 Acre Lot)
Runoff Coefficient = 0.813
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  69.60
Pervious area fraction =  0.500; Impervious fraction =  0.500
Rainfall intensity =      2.436(In/Hr) for a   100.0 year storm
Subarea runoff =      7.883(CFS) for      3.980(Ac.)
Total runoff =     10.804(CFS)        Total area =       5.280(Ac.)
Street flow at end of street =     10.804(CFS)
Half street flow at end of street =     10.804(CFS)
Depth of flow =   0.436(Ft.), Average velocity =   4.294(Ft/s)
Flow width (from curb towards crown)=  15.458(Ft.)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station        3.000 to Point/Station        3.000
**** CONFLUENCE OF MINOR STREAMS ****
------------------------------------------------------------------------------
Along Main Stream number: 1 in normal stream number 1
Stream flow area =      5.280(Ac.)
Runoff from this stream =     10.804(CFS)
Time of concentration =   17.09 min.
Rainfall intensity =     2.436(In/Hr)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station        4.000 to Point/Station        3.000
**** INITIAL AREA EVALUATION ****
------------------------------------------------------------------------------
Initial area flow distance =   451.000(Ft.)
Top (of initial area) elevation =  1238.000(Ft.)
Bottom (of initial area) elevation =  1220.000(Ft.)
Difference in elevation =    18.000(Ft.)
Slope =    0.03991  s(percent)=       3.99
TC = k(0.390)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =    8.561 min.
Rainfall intensity =      3.442(In/Hr) for a   100.0 year storm
SINGLE FAMILY (1/4 Acre Lot)
Runoff Coefficient = 0.835
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  69.60
Pervious area fraction =  0.500; Impervious fraction =  0.500
Initial subarea runoff =      4.425(CFS)
Total initial stream area =        1.540(Ac.)
Pervious area fraction = 0.500


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station        3.000 to Point/Station        3.000
**** CONFLUENCE OF MINOR STREAMS ****
------------------------------------------------------------------------------
Along Main Stream number: 1 in normal stream number 2
Stream flow area =      1.540(Ac.)
Runoff from this stream =      4.425(CFS)
Time of concentration =    8.56 min.
Rainfall intensity =     3.442(In/Hr)
Summary of stream data:

Stream   Flow rate      TC            Rainfall Intensity
 No.       (CFS)       (min)                 (In/Hr)


1       10.804     17.09                 2.436
2        4.425      8.56                 3.442
Largest stream flow has longer time of concentration
Qp =     10.804 + sum of
          Qb         Ia/Ib
           4.425 *    0.708 =      3.132
Qp =     13.935

Total of 2 streams to confluence:
Flow rates before confluence point:
      10.804       4.425
Area of streams before confluence:
        5.280        1.540
Results of confluence:
Total flow rate =     13.935(CFS)
Time of concentration =    17.090 min.
Effective stream area after confluence =      6.820(Ac.)
```

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++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station        3.000 to Point/Station        5.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
------------------------------------------------------------------------------
Upstream point/station elevation =  1220.000(Ft.)
Downstream point/station elevation =  1218.000(Ft.)
Pipe length  =    39.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =    13.935(CFS)
Nearest computed pipe diameter  =     15.00(In.)
Calculated individual pipe flow  =    13.935(CFS)
Normal flow depth in pipe =   11.70(In.)
Flow top width inside pipe =   12.43(In.)
Critical depth could not be calculated.
Pipe flow velocity =     13.57(Ft/s)
Travel time through pipe =    0.05 min.
Time of concentration (TC) =    17.14 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station        5.000 to Point/Station        5.000
**** CONFLUENCE OF MAIN STREAMS ****
------------------------------------------------------------------------------
The following data inside Main Stream is listed:
In Main Stream number: 1
Stream flow area =      6.820(Ac.)
Runoff from this stream =     13.935(CFS)
Time of concentration =   17.14 min.
Rainfall intensity =     2.432(In/Hr)
Program is now starting with Main Stream No. 2


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station        6.000 to Point/Station        7.000
**** INITIAL AREA EVALUATION ****
------------------------------------------------------------------------------
Initial area flow distance =   963.000(Ft.)
Top (of initial area) elevation =  1254.000(Ft.)
Bottom (of initial area) elevation =  1234.000(Ft.)
Difference in elevation =    20.000(Ft.)
Slope =    0.02077  s(percent)=       2.08
TC = k(0.390)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =   13.214 min.
Rainfall intensity =      2.770(In/Hr) for a   100.0 year storm
SINGLE FAMILY (1/4 Acre Lot)
Runoff Coefficient = 0.822
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  69.60
Pervious area fraction =  0.500; Impervious fraction =  0.500
Initial subarea runoff =      6.306(CFS)
Total initial stream area =        2.770(Ac.)
Pervious area fraction = 0.500


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station        7.000 to Point/Station        8.000
**** STREET FLOW TRAVEL TIME + SUBAREA FLOW ADDITION ****
------------------------------------------------------------------------------
Top of street segment elevation =  1234.000(Ft.)
End of street segment elevation =  1220.000(Ft.)
Length of street segment  =   780.000(Ft.)
Height of curb above gutter flowline  =    6.0(In.)
Width of half street (curb to crown)  =  18.000(Ft.)
Distance from crown to crossfall grade break  =  16.000(Ft.)
Slope from gutter to grade break (v/hz) =   0.020
Slope from grade break to crown (v/hz)  =   0.020
Street flow is on [1] side(s) of the street
Distance from curb to property line  =  10.000(Ft.)
Slope from curb to property line (v/hz) =   0.020
Gutter width =   2.000(Ft.)
Gutter hike from flowline =  2.000(In.)
 Manning's N in gutter =  0.0150
 Manning's N from gutter to grade break =  0.0150
 Manning's N from grade break to crown =  0.0150
Estimated mean flow rate at midpoint of street =     12.065(CFS)
Depth of flow =   0.463(Ft.), Average velocity =   4.086(Ft/s)
Streetflow hydraulics at midpoint of street travel:
Halfstreet flow width =  16.810(Ft.)
Flow velocity =   4.09(Ft/s)
Travel time =    3.18 min.     TC =   16.40  min.
 Adding area flow to street
SINGLE FAMILY (1/4 Acre Lot)
Runoff Coefficient = 0.815
```

```
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  69.60
Pervious area fraction =  0.500; Impervious fraction =  0.500
Rainfall intensity =      2.487(In/Hr) for a   100.0 year storm
Subarea runoff =     11.426(CFS) for      5.640(Ac.)
Total runoff =     17.732(CFS)       Total area =       8.410(Ac.)
Street flow at end of street =     17.732(CFS)
Half street flow at end of street =     17.732(CFS)
Depth of flow =   0.515(Ft.), Average velocity =   4.564(Ft/s)
Warning: depth of flow exceeds top of curb
Note:  depth of flow exceeds top of street crown.
Distance that curb overflow reaches into property =    0.76(Ft.)
Flow width (from curb towards crown)=  18.000(Ft.)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station        8.000 to Point/Station        8.000
**** CONFLUENCE OF MINOR STREAMS ****
______________________________________________________________________________
Along Main Stream number: 2 in normal stream number 1
Stream flow area =      8.410(Ac.)
Runoff from this stream =     17.732(CFS)
Time of concentration =   16.40 min.
Rainfall intensity =     2.487(In/Hr)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station        4.000 to Point/Station        8.000
**** INITIAL AREA EVALUATION ****
______________________________________________________________________________
Initial area flow distance =   440.000(Ft.)
Top (of initial area) elevation =  1238.000(Ft.)
Bottom (of initial area) elevation =  1220.000(Ft.)
Difference in elevation =    18.000(Ft.)
Slope =    0.04091  s(percent)=       4.09
TC = k(0.390)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =    8.435 min.
Rainfall intensity =      3.467(In/Hr) for a   100.0 year storm
SINGLE FAMILY (1/4 Acre Lot)
Runoff Coefficient = 0.835
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  69.60
Pervious area fraction =  0.500; Impervious fraction =  0.500
Initial subarea runoff =      3.099(CFS)
Total initial stream area =        1.070(Ac.)
Pervious area fraction = 0.500


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station        8.000 to Point/Station        8.000
**** CONFLUENCE OF MINOR STREAMS ****
______________________________________________________________________________
Along Main Stream number: 2 in normal stream number 2
Stream flow area =      1.070(Ac.)
Runoff from this stream =      3.099(CFS)
Time of concentration =    8.43 min.
Rainfall intensity =     3.467(In/Hr)
Summary of stream data:

Stream   Flow rate      TC            Rainfall Intensity
 No.       (CFS)       (min)                 (In/Hr)


1       17.732     16.40                 2.487
2        3.099      8.43                 3.467
Largest stream flow has longer time of concentration
Qp =     17.732 + sum of
          Qb          Ia/Ib
           3.099 *    0.717 =      2.223
Qp =     19.955

Total of 2 streams to confluence:
Flow rates before confluence point:
      17.732       3.099
Area of streams before confluence:
       8.410       1.070
Results of confluence:
Total flow rate =     19.955(CFS)
Time of concentration =    16.395 min.
Effective stream area after confluence =      9.480(Ac.)
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++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station        8.000 to Point/Station        5.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
------------------------------------------------------------------------------
Upstream point/station elevation =  1220.000(Ft.)
Downstream point/station elevation =  1218.000(Ft.)
Pipe length  =    34.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =    19.955(CFS)
Nearest computed pipe diameter  =     18.00(In.)
Calculated individual pipe flow  =    19.955(CFS)
Normal flow depth in pipe =   12.00(In.)
Flow top width inside pipe =   16.97(In.)
Critical depth could not be calculated.
Pipe flow velocity =     15.96(Ft/s)
Travel time through pipe =    0.04 min.
Time of concentration (TC) =    16.43 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station        5.000 to Point/Station        5.000
**** CONFLUENCE OF MAIN STREAMS ****
------------------------------------------------------------------------------
The following data inside Main Stream is listed:
In Main Stream number: 2
Stream flow area =      9.480(Ac.)
Runoff from this stream =     19.955(CFS)
Time of concentration =   16.43 min.
Rainfall intensity =     2.484(In/Hr)
Summary of stream data:

Stream   Flow rate      TC            Rainfall Intensity
 No.       (CFS)       (min)                 (In/Hr)


1       13.935     17.14               2.432
2       19.955     16.43               2.484
Largest stream flow has longer or shorter time of concentration
Qp =     19.955 + sum of
          Qa          Tb/Ta
          13.935 *    0.959 =     13.360
Qp =     33.315

Total of 2 main streams to confluence:
Flow rates before confluence point:
      13.935      19.955
Area of streams before confluence:
        6.820        9.480


Results of confluence:
Total flow rate =     33.315(CFS)
Time of concentration =    16.431 min.
Effective stream area after confluence  =     16.300(Ac.)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station        5.000 to Point/Station        9.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
------------------------------------------------------------------------------
Upstream point/station elevation =  1218.000(Ft.)
Downstream point/station elevation =  1217.000(Ft.)
Pipe length  =   361.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =    33.315(CFS)
Nearest computed pipe diameter  =     36.00(In.)
Calculated individual pipe flow  =    33.315(CFS)
Normal flow depth in pipe =   27.98(In.)
Flow top width inside pipe =   29.95(In.)
Critical Depth =   22.47(In.)
Pipe flow velocity =      5.65(Ft/s)
Travel time through pipe =    1.06 min.
Time of concentration (TC) =    17.50 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station        9.000 to Point/Station        9.000
**** CONFLUENCE OF MINOR STREAMS ****
------------------------------------------------------------------------------
Along Main Stream number: 1 in normal stream number 1
Stream flow area =     16.300(Ac.)
Runoff from this stream =     33.315(CFS)
Time of concentration =   17.50 min.
Rainfall intensity =     2.407(In/Hr)
```

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++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       10.000 to Point/Station       11.000
**** INITIAL AREA EVALUATION ****
------------------------------------------------------------------------------
Initial area flow distance =   317.000(Ft.)
Top (of initial area) elevation =  1288.000(Ft.)
Bottom (of initial area) elevation =  1240.000(Ft.)
Difference in elevation =    48.000(Ft.)
Slope =    0.15142  s(percent)=      15.14
TC = k(0.390)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =    5.694 min.
Rainfall intensity =      4.220(In/Hr) for a   100.0 year storm
SINGLE FAMILY (1/4 Acre Lot)
Runoff Coefficient = 0.845
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  69.60
Pervious area fraction =  0.500; Impervious fraction =  0.500
Initial subarea runoff =      6.707(CFS)
Total initial stream area =        1.880(Ac.)
Pervious area fraction = 0.500


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       11.000 to Point/Station        9.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
------------------------------------------------------------------------------
Upstream point/station elevation =  1240.000(Ft.)
Downstream point/station elevation =  1217.000(Ft.)
Pipe length  =   233.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =     6.707(CFS)
Nearest computed pipe diameter  =     12.00(In.)
Calculated individual pipe flow  =     6.707(CFS)
Normal flow depth in pipe =    6.69(In.)
Flow top width inside pipe =   11.92(In.)
Critical depth could not be calculated.
Pipe flow velocity =     14.89(Ft/s)
Travel time through pipe =    0.26 min.
Time of concentration (TC) =     5.96 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station        9.000 to Point/Station        9.000
**** CONFLUENCE OF MINOR STREAMS ****
------------------------------------------------------------------------------
Along Main Stream number: 1 in normal stream number 2
Stream flow area =      1.880(Ac.)
Runoff from this stream =      6.707(CFS)
Time of concentration =    5.96 min.
Rainfall intensity =     4.126(In/Hr)
Summary of stream data:

Stream    Flow rate      TC            Rainfall Intensity
 No.        (CFS)       (min)                 (In/Hr)


1        33.315     17.50                 2.407
2         6.707      5.96                 4.126
Largest stream flow has longer time of concentration
Qp =     33.315 + sum of
          Qb          Ia/Ib
           6.707 *    0.583 =      3.913
Qp =     37.228

Total of 2 streams to confluence:
Flow rates before confluence point:
      33.315       6.707
Area of streams before confluence:
       16.300        1.880
Results of confluence:
Total flow rate =     37.228(CFS)
Time of concentration =    17.496 min.
Effective stream area after confluence =     18.180(Ac.)


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Process from Point/Station        9.000 to Point/Station       12.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
------------------------------------------------------------------------------
Upstream point/station elevation =  1217.000(Ft.)
Downstream point/station elevation =  1216.200(Ft.)
Pipe length  =   139.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =    37.228(CFS)
Nearest computed pipe diameter  =     33.00(In.)
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Calculated individual pipe flow  =    37.228(CFS)
Normal flow depth in pipe =   25.13(In.)
Flow top width inside pipe =   28.13(In.)
Critical Depth =   24.36(In.)
Pipe flow velocity =      7.67(Ft/s)
Travel time through pipe =    0.30 min.
Time of concentration (TC) =    17.80 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       12.000 to Point/Station       13.000
**** SUBAREA FLOW ADDITION ****
______________________________________________________________________________
UNDEVELOPED (good cover) subarea
Runoff Coefficient = 0.756
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  74.60
Pervious area fraction =  1.000; Impervious fraction =  0.000
Time of concentration =    17.80 min.
Rainfall intensity =      2.387(In/Hr) for a   100.0 year storm
Subarea runoff =      1.697(CFS) for      0.940(Ac.)
Total runoff =     38.924(CFS)       Total area =      19.120(Ac.)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       13.000 to Point/Station       14.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
______________________________________________________________________________
Upstream point/station elevation =  1216.000(Ft.)
Downstream point/station elevation =  1211.000(Ft.)
Pipe length  =   245.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =    38.924(CFS)
Nearest computed pipe diameter  =     27.00(In.)
Calculated individual pipe flow  =    38.924(CFS)
Normal flow depth in pipe =   19.64(In.)
Flow top width inside pipe =   24.05(In.)
Critical Depth =   24.91(In.)
Pipe flow velocity =     12.55(Ft/s)
Travel time through pipe =    0.33 min.
Time of concentration (TC) =    18.12 min.
End of computations, total study area =           19.12 (Ac.)
The following figures may
be used for a unit hydrograph study of the same area.

Area averaged pervious area fraction(Ap) = 0.525
Area averaged RI index number =  69.8
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                Riverside County Rational Hydrology Program

CIVILCADD/CIVILDESIGN Engineering Software,(c) 1989 - 2004 Version 7.0
        Rational Hydrology Study        Date: 04/02/25  File:pro1100.out
------------------------------------------------------------------------
 *********   Hydrology Study Control Information **********

 English (in-lb) Units used in input data file

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Program License Serial Number 5006

------------------------------------------------------------------------
Rational Method Hydrology Program based on
Riverside County Flood Control & Water Conservation District
1978 hydrology manual

Storm event (year) =  100.00 Antecedent Moisture Condition = 2

2 year, 1 hour precipitation =  0.500(In.)
100 year, 1 hour precipitation =  1.300(In.)

Storm event year = 100.0
Calculated rainfall intensity data:
1 hour intensity =  1.300(In/Hr)
Slope of intensity duration curve = 0.5000




++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      100.000 to Point/Station      101.000
**** INITIAL AREA EVALUATION ****
____________________________________________________________________________
Initial area flow distance =   575.000(Ft.)
Top (of initial area) elevation =  1333.000(Ft.)
Bottom (of initial area) elevation =  1303.000(Ft.)
Difference in elevation =    30.000(Ft.)
Slope =    0.05217  s(percent)=       5.22
TC = k(0.390)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =    8.942 min.
Rainfall intensity =      3.367(In/Hr) for a   100.0 year storm
SINGLE FAMILY (1/4 Acre Lot)
Runoff Coefficient = 0.834
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  69.60
Pervious area fraction =  0.500; Impervious fraction =  0.500
Initial subarea runoff =      9.545(CFS)
Total initial stream area =        3.400(Ac.)
Pervious area fraction = 0.500


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      101.000 to Point/Station      102.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
____________________________________________________________________________
Upstream point/station elevation =  1303.000(Ft.)
Downstream point/station elevation =  1295.000(Ft.)
Pipe length  =    35.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =     9.545(CFS)
Nearest computed pipe diameter  =     12.00(In.)
Calculated individual pipe flow  =     9.545(CFS)
Normal flow depth in pipe =    6.42(In.)
Flow top width inside pipe =   11.97(In.)
Critical depth could not be calculated.
Pipe flow velocity =     22.30(Ft/s)
Travel time through pipe =    0.03 min.
Time of concentration (TC) =     8.97 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      102.000 to Point/Station      102.000
**** CONFLUENCE OF MINOR STREAMS ****
____________________________________________________________________________
Along Main Stream number: 1 in normal stream number 1
Stream flow area =      3.400(Ac.)
Runoff from this stream =      9.545(CFS)
Time of concentration =    8.97 min.
Rainfall intensity =     3.363(In/Hr)
```

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++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      103.000 to Point/Station      104.000
**** INITIAL AREA EVALUATION ****
------------------------------------------------------------------------------
Initial area flow distance =   589.000(Ft.)
Top (of initial area) elevation =  1333.000(Ft.)
Bottom (of initial area) elevation =  1303.000(Ft.)
Difference in elevation =    30.000(Ft.)
Slope =    0.05093  s(percent)=       5.09
TC = k(0.390)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =    9.072 min.
Rainfall intensity =      3.343(In/Hr) for a   100.0 year storm
SINGLE FAMILY (1/4 Acre Lot)
Runoff Coefficient = 0.833
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  69.60
Pervious area fraction =  0.500; Impervious fraction =  0.500
Initial subarea runoff =      5.794(CFS)
Total initial stream area =        2.080(Ac.)
Pervious area fraction = 0.500


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      104.000 to Point/Station      102.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
------------------------------------------------------------------------------
Upstream point/station elevation =  1303.000(Ft.)
Downstream point/station elevation =  1295.000(Ft.)
Pipe length  =    26.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =     5.794(CFS)
Nearest computed pipe diameter  =      9.00(In.)
Calculated individual pipe flow  =     5.794(CFS)
Normal flow depth in pipe =    5.19(In.)
Flow top width inside pipe =    8.89(In.)
Critical depth could not be calculated.
Pipe flow velocity =     21.97(Ft/s)
Travel time through pipe =    0.02 min.
Time of concentration (TC) =     9.09 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      102.000 to Point/Station      102.000
**** CONFLUENCE OF MINOR STREAMS ****
------------------------------------------------------------------------------
Along Main Stream number: 1 in normal stream number 2
Stream flow area =      2.080(Ac.)
Runoff from this stream =      5.794(CFS)
Time of concentration =    9.09 min.
Rainfall intensity =     3.340(In/Hr)
Summary of stream data:

Stream   Flow rate      TC            Rainfall Intensity
 No.       (CFS)       (min)                 (In/Hr)


1        9.545      8.97                  3.363
2        5.794      9.09                  3.340
Largest stream flow has longer or shorter time of concentration
Qp =      9.545 + sum of
          Qa           Tb/Ta
           5.794 *    0.986 =      5.716
Qp =     15.260

Total of 2 streams to confluence:
Flow rates before confluence point:
       9.545       5.794
Area of streams before confluence:
        3.400        2.080
Results of confluence:
Total flow rate =     15.260(CFS)
Time of concentration =     8.968 min.
Effective stream area after confluence =      5.480(Ac.)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      102.000 to Point/Station      105.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
------------------------------------------------------------------------------
Upstream point/station elevation =  1295.000(Ft.)
Downstream point/station elevation =  1268.000(Ft.)
Pipe length  =   451.00(Ft.)   Manning's N = 0.013
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No. of pipes = 1  Required pipe flow  =    15.260(CFS)
Nearest computed pipe diameter  =     15.00(In.)
Calculated individual pipe flow  =    15.260(CFS)
Normal flow depth in pipe =   11.86(In.)
Flow top width inside pipe =   12.21(In.)
Critical depth could not be calculated.
Pipe flow velocity =     14.67(Ft/s)
Travel time through pipe =    0.51 min.
Time of concentration (TC) =     9.48 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      105.000 to Point/Station      105.000
**** CONFLUENCE OF MAIN STREAMS ****
______________________________________________________________________________
The following data inside Main Stream is listed:
In Main Stream number: 1
Stream flow area =      5.480(Ac.)
Runoff from this stream =     15.260(CFS)
Time of concentration =    9.48 min.
Rainfall intensity =     3.270(In/Hr)
Program is now starting with Main Stream No. 2


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      106.000 to Point/Station      107.000
**** INITIAL AREA EVALUATION ****
______________________________________________________________________________
Initial area flow distance =   708.000(Ft.)
Top (of initial area) elevation =  1347.000(Ft.)
Bottom (of initial area) elevation =  1313.000(Ft.)
Difference in elevation =    34.000(Ft.)
Slope =    0.04802  s(percent)=       4.80
TC = k(0.390)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =    9.881 min.
Rainfall intensity =      3.203(In/Hr) for a   100.0 year storm
SINGLE FAMILY (1/4 Acre Lot)
Runoff Coefficient = 0.831
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  69.60
Pervious area fraction =  0.500; Impervious fraction =  0.500
Initial subarea runoff =      7.266(CFS)
Total initial stream area =        2.730(Ac.)
Pervious area fraction = 0.500


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      107.000 to Point/Station      108.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
______________________________________________________________________________
Upstream point/station elevation =  1313.000(Ft.)
Downstream point/station elevation =  1306.000(Ft.)
Pipe length  =    43.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =     7.266(CFS)
Nearest computed pipe diameter  =     12.00(In.)
Calculated individual pipe flow  =     7.266(CFS)
Normal flow depth in pipe =    6.04(In.)
Flow top width inside pipe =   12.00(In.)
Critical depth could not be calculated.
Pipe flow velocity =     18.35(Ft/s)
Travel time through pipe =    0.04 min.
Time of concentration (TC) =     9.92 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      108.000 to Point/Station      108.000
**** CONFLUENCE OF MINOR STREAMS ****
______________________________________________________________________________
Along Main Stream number: 2 in normal stream number 1
Stream flow area =      2.730(Ac.)
Runoff from this stream =      7.266(CFS)
Time of concentration =    9.92 min.
Rainfall intensity =     3.197(In/Hr)


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Process from Point/Station      106.000 to Point/Station      109.000
**** INITIAL AREA EVALUATION ****
______________________________________________________________________________
Initial area flow distance =   636.000(Ft.)
Top (of initial area) elevation =  1347.000(Ft.)
Bottom (of initial area) elevation =  1314.000(Ft.)
Difference in elevation =    33.000(Ft.)
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Slope =    0.05189  s(percent)=       5.19
TC = k(0.390)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =    9.320 min.
Rainfall intensity =      3.298(In/Hr) for a   100.0 year storm
SINGLE FAMILY (1/4 Acre Lot)
Runoff Coefficient = 0.832
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  69.60
Pervious area fraction =  0.500; Impervious fraction =  0.500
Initial subarea runoff =      4.064(CFS)
Total initial stream area =        1.480(Ac.)
Pervious area fraction = 0.500


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      109.000 to Point/Station      108.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
______________________________________________________________________________
Upstream point/station elevation =  1314.000(Ft.)
Downstream point/station elevation =  1306.000(Ft.)
Pipe length  =    60.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =     4.064(CFS)
Nearest computed pipe diameter  =      9.00(In.)
Calculated individual pipe flow  =     4.064(CFS)
Normal flow depth in pipe =    5.40(In.)
Flow top width inside pipe =    8.82(In.)
Critical depth could not be calculated.
Pipe flow velocity =     14.67(Ft/s)
Travel time through pipe =    0.07 min.
Time of concentration (TC) =     9.39 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      108.000 to Point/Station      108.000
**** CONFLUENCE OF MINOR STREAMS ****
______________________________________________________________________________
Along Main Stream number: 2 in normal stream number 2
Stream flow area =      1.480(Ac.)
Runoff from this stream =      4.064(CFS)
Time of concentration =    9.39 min.
Rainfall intensity =     3.286(In/Hr)
Summary of stream data:

Stream   Flow rate      TC            Rainfall Intensity
 No.       (CFS)       (min)                 (In/Hr)


1        7.266      9.92                  3.197
2        4.064      9.39                  3.286
Largest stream flow has longer time of concentration
Qp =      7.266 + sum of
          Qb         Ia/Ib
           4.064 *    0.973 =      3.953
Qp =     11.219

Total of 2 streams to confluence:
Flow rates before confluence point:
       7.266       4.064
Area of streams before confluence:
       2.730       1.480
Results of confluence:
Total flow rate =     11.219(CFS)
Time of concentration =     9.920 min.
Effective stream area after confluence =      4.210(Ac.)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      108.000 to Point/Station      110.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
______________________________________________________________________________
Upstream point/station elevation =  1306.000(Ft.)
Downstream point/station elevation =  1270.000(Ft.)
Pipe length  =   579.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =    11.219(CFS)
Nearest computed pipe diameter  =     15.00(In.)
Calculated individual pipe flow  =    11.219(CFS)
Normal flow depth in pipe =    9.21(In.)
Flow top width inside pipe =   14.60(In.)
Critical depth could not be calculated.
Pipe flow velocity =     14.18(Ft/s)
Travel time through pipe =    0.68 min.
Time of concentration (TC) =    10.60 min.
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++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      110.000 to Point/Station      110.000
**** CONFLUENCE OF MINOR STREAMS ****
------------------------------------------------------------------------------
Along Main Stream number: 2 in normal stream number 1
Stream flow area =      4.210(Ac.)
Runoff from this stream =     11.219(CFS)
Time of concentration =   10.60 min.
Rainfall intensity =     3.093(In/Hr)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      107.000 to Point/Station      111.000
**** INITIAL AREA EVALUATION ****
------------------------------------------------------------------------------
Initial area flow distance =   619.000(Ft.)
Top (of initial area) elevation =  1313.000(Ft.)
Bottom (of initial area) elevation =  1276.000(Ft.)
Difference in elevation =    37.000(Ft.)
Slope =    0.05977  s(percent)=       5.98
TC = k(0.390)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =    8.963 min.
Rainfall intensity =      3.364(In/Hr) for a   100.0 year storm
SINGLE FAMILY (1/4 Acre Lot)
Runoff Coefficient = 0.834
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  69.60
Pervious area fraction =  0.500; Impervious fraction =  0.500
Initial subarea runoff =      6.813(CFS)
Total initial stream area =        2.430(Ac.)
Pervious area fraction = 0.500


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      111.000 to Point/Station      110.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
------------------------------------------------------------------------------
Upstream point/station elevation =  1276.000(Ft.)
Downstream point/station elevation =  1270.000(Ft.)
Pipe length  =    18.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =     6.813(CFS)
Nearest computed pipe diameter  =      9.00(In.)
Calculated individual pipe flow  =     6.813(CFS)
Normal flow depth in pipe =    5.62(In.)
Flow top width inside pipe =    8.72(In.)
Critical depth could not be calculated.
Pipe flow velocity =     23.49(Ft/s)
Travel time through pipe =    0.01 min.
Time of concentration (TC) =     8.98 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      110.000 to Point/Station      110.000
**** CONFLUENCE OF MINOR STREAMS ****
------------------------------------------------------------------------------
Along Main Stream number: 2 in normal stream number 2
Stream flow area =      2.430(Ac.)
Runoff from this stream =      6.813(CFS)
Time of concentration =    8.98 min.
Rainfall intensity =     3.361(In/Hr)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      109.000 to Point/Station      112.000
**** INITIAL AREA EVALUATION ****
------------------------------------------------------------------------------
Initial area flow distance =   582.000(Ft.)
Top (of initial area) elevation =  1314.000(Ft.)
Bottom (of initial area) elevation =  1276.000(Ft.)
Difference in elevation =    38.000(Ft.)
Slope =    0.06529  s(percent)=       6.53
TC = k(0.390)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =    8.591 min.
Rainfall intensity =      3.435(In/Hr) for a   100.0 year storm
SINGLE FAMILY (1/4 Acre Lot)
Runoff Coefficient = 0.835
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  69.60
Pervious area fraction =  0.500; Impervious fraction =  0.500
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Initial subarea runoff =      7.801(CFS)
Total initial stream area =        2.720(Ac.)
Pervious area fraction = 0.500


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      112.000 to Point/Station      110.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
______________________________________________________________________________
Upstream point/station elevation =  1276.000(Ft.)
Downstream point/station elevation =  1270.000(Ft.)
Pipe length  =    30.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =     7.801(CFS)
Nearest computed pipe diameter  =     12.00(In.)
Calculated individual pipe flow  =     7.801(CFS)
Normal flow depth in pipe =    5.92(In.)
Flow top width inside pipe =   12.00(In.)
Critical depth could not be calculated.
Pipe flow velocity =     20.18(Ft/s)
Travel time through pipe =    0.02 min.
Time of concentration (TC) =     8.62 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      110.000 to Point/Station      110.000
**** CONFLUENCE OF MINOR STREAMS ****
______________________________________________________________________________
Along Main Stream number: 2 in normal stream number 3
Stream flow area =      2.720(Ac.)
Runoff from this stream =      7.801(CFS)
Time of concentration =    8.62 min.
Rainfall intensity =     3.431(In/Hr)
Summary of stream data:

Stream   Flow rate      TC            Rainfall Intensity
 No.       (CFS)       (min)                 (In/Hr)


1       11.219     10.60                 3.093
2        6.813      8.98                 3.361
3        7.801      8.62                 3.431
Largest stream flow has longer time of concentration
Qp =     11.219 + sum of
          Qb          Ia/Ib
           6.813 *    0.920 =      6.269
          Qb          Ia/Ib
           7.801 *    0.902 =      7.033
Qp =     24.521

Total of 3 streams to confluence:
Flow rates before confluence point:
      11.219       6.813       7.801
Area of streams before confluence:
        4.210        2.430        2.720
Results of confluence:
Total flow rate =     24.521(CFS)
Time of concentration =    10.600 min.
Effective stream area after confluence =      9.360(Ac.)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      110.000 to Point/Station      105.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
______________________________________________________________________________
Upstream point/station elevation =  1270.000(Ft.)
Downstream point/station elevation =  1268.000(Ft.)
Pipe length  =    69.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =    24.521(CFS)
Nearest computed pipe diameter  =     21.00(In.)
Calculated individual pipe flow  =    24.521(CFS)
Normal flow depth in pipe =   15.70(In.)
Flow top width inside pipe =   18.24(In.)
Critical depth could not be calculated.
Pipe flow velocity =     12.71(Ft/s)
Travel time through pipe =    0.09 min.
Time of concentration (TC) =    10.69 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      105.000 to Point/Station      105.000
**** CONFLUENCE OF MAIN STREAMS ****
______________________________________________________________________________
The following data inside Main Stream is listed:
In Main Stream number: 2
Stream flow area =      9.360(Ac.)
Runoff from this stream =     24.521(CFS)
```

```
Time of concentration =   10.69 min.
Rainfall intensity =     3.080(In/Hr)
Summary of stream data:

Stream   Flow rate      TC            Rainfall Intensity
 No.       (CFS)       (min)                 (In/Hr)


1       15.260      9.48               3.270
2       24.521     10.69               3.080
Largest stream flow has longer time of concentration
Qp =     24.521 + sum of
          Qb         Ia/Ib
          15.260 *    0.942 =     14.371
Qp =     38.892

Total of 2 main streams to confluence:
Flow rates before confluence point:
       15.260      24.521
Area of streams before confluence:
        5.480        9.360


Results of confluence:
Total flow rate =     38.892(CFS)
Time of concentration =    10.691 min.
Effective stream area after confluence  =     14.840(Ac.)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      105.000 to Point/Station      113.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
______________________________________________________________________________
Upstream point/station elevation =  1268.000(Ft.)
Downstream point/station elevation =  1258.000(Ft.)
Pipe length  =   288.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =    38.892(CFS)
Nearest computed pipe diameter  =     24.00(In.)
Calculated individual pipe flow  =    38.892(CFS)
Normal flow depth in pipe =   18.19(In.)
Flow top width inside pipe =   20.56(In.)
Critical depth could not be calculated.
Pipe flow velocity =     15.23(Ft/s)
Travel time through pipe =    0.32 min.
Time of concentration (TC) =    11.01 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      113.000 to Point/Station      113.000
**** CONFLUENCE OF MINOR STREAMS ****
______________________________________________________________________________
Along Main Stream number: 1 in normal stream number 1
Stream flow area =     14.840(Ac.)
Runoff from this stream =     38.892(CFS)
Time of concentration =   11.01 min.
Rainfall intensity =     3.035(In/Hr)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      114.000 to Point/Station      115.000
**** INITIAL AREA EVALUATION ****
______________________________________________________________________________
Initial area flow distance =  1000.000(Ft.)
Top (of initial area) elevation =  1330.000(Ft.)
Bottom (of initial area) elevation =  1265.000(Ft.)
Difference in elevation =    65.000(Ft.)
Slope =    0.06500  s(percent)=       6.50
TC = k(0.300)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =    8.214 min.
Rainfall intensity =      3.514(In/Hr) for a   100.0 year storm
COMMERCIAL subarea type
Runoff Coefficient = 0.887
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  69.60
Pervious area fraction =  0.100; Impervious fraction =  0.900
Initial subarea runoff =      3.460(CFS)
Total initial stream area =        1.110(Ac.)
Pervious area fraction = 0.100


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Process from Point/Station      115.000 to Point/Station      113.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
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Upstream point/station elevation =  1265.000(Ft.)
Downstream point/station elevation =  1258.000(Ft.)
Pipe length  =    41.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =     3.460(CFS)
Nearest computed pipe diameter  =      9.00(In.)
Calculated individual pipe flow  =     3.460(CFS)
Normal flow depth in pipe =    4.54(In.)
Flow top width inside pipe =    9.00(In.)
Critical depth could not be calculated.
Pipe flow velocity =     15.52(Ft/s)
Travel time through pipe =    0.04 min.
Time of concentration (TC) =     8.26 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      113.000 to Point/Station      113.000
**** CONFLUENCE OF MINOR STREAMS ****
------------------------------------------------------------------------------
Along Main Stream number: 1 in normal stream number 2
Stream flow area =      1.110(Ac.)
Runoff from this stream =      3.460(CFS)
Time of concentration =    8.26 min.
Rainfall intensity =     3.504(In/Hr)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      116.000 to Point/Station      117.000
**** INITIAL AREA EVALUATION ****
------------------------------------------------------------------------------
Initial area flow distance =  1000.000(Ft.)
Top (of initial area) elevation =  1330.000(Ft.)
Bottom (of initial area) elevation =  1265.000(Ft.)
Difference in elevation =    65.000(Ft.)
Slope =    0.06500  s(percent)=       6.50
TC = k(0.300)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =    8.214 min.
Rainfall intensity =      3.514(In/Hr) for a   100.0 year storm
COMMERCIAL subarea type
Runoff Coefficient = 0.887
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  69.60
Pervious area fraction =  0.100; Impervious fraction =  0.900
Initial subarea runoff =      2.930(CFS)
Total initial stream area =        0.940(Ac.)
Pervious area fraction = 0.100


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      117.000 to Point/Station      113.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
------------------------------------------------------------------------------
Upstream point/station elevation =  1265.000(Ft.)
Downstream point/station elevation =  1258.000(Ft.)
Pipe length  =    21.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =     2.930(CFS)
Nearest computed pipe diameter  =      6.00(In.)
Calculated individual pipe flow  =     2.930(CFS)
Normal flow depth in pipe =    4.47(In.)
Flow top width inside pipe =    5.23(In.)
Critical depth could not be calculated.
Pipe flow velocity =     18.68(Ft/s)
Travel time through pipe =    0.02 min.
Time of concentration (TC) =     8.23 min.


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Process from Point/Station      113.000 to Point/Station      113.000
**** CONFLUENCE OF MINOR STREAMS ****
------------------------------------------------------------------------------
Along Main Stream number: 1 in normal stream number 3
Stream flow area =      0.940(Ac.)
Runoff from this stream =      2.930(CFS)
Time of concentration =    8.23 min.
Rainfall intensity =     3.510(In/Hr)
Summary of stream data:

Stream    Flow rate      TC            Rainfall Intensity
 No.        (CFS)       (min)                  (In/Hr)


1        38.892     11.01                3.035
2         3.460      8.26                3.504
```

```
3        2.930      8.23                 3.510
Largest stream flow has longer time of concentration
Qp =     38.892 + sum of
          Qb         Ia/Ib
           3.460 *    0.866 =      2.997
          Qb         Ia/Ib
           2.930 *    0.865 =      2.534
Qp =     44.423

Total of 3 streams to confluence:
Flow rates before confluence point:
      38.892       3.460       2.930
Area of streams before confluence:
       14.840        1.110        0.940
Results of confluence:
Total flow rate =     44.423(CFS)
Time of concentration =    11.006 min.
Effective stream area after confluence =     16.890(Ac.)


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Process from Point/Station      113.000 to Point/Station      118.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
______________________________________________________________________________
Upstream point/station elevation =  1258.000(Ft.)
Downstream point/station elevation =  1256.000(Ft.)
Pipe length  =    68.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =    44.423(CFS)
Nearest computed pipe diameter  =     27.00(In.)
Calculated individual pipe flow  =    44.423(CFS)
Normal flow depth in pipe =   18.89(In.)
Flow top width inside pipe =   24.75(In.)
Critical depth could not be calculated.
Pipe flow velocity =     14.96(Ft/s)
Travel time through pipe =    0.08 min.
Time of concentration (TC) =    11.08 min.


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Process from Point/Station      118.000 to Point/Station      118.000
**** CONFLUENCE OF MAIN STREAMS ****
______________________________________________________________________________
The following data inside Main Stream is listed:
In Main Stream number: 1
Stream flow area =     16.890(Ac.)
Runoff from this stream =     44.423(CFS)
Time of concentration =   11.08 min.
Rainfall intensity =     3.025(In/Hr)
Program is now starting with Main Stream No. 2


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Process from Point/Station      119.000 to Point/Station      120.000
**** INITIAL AREA EVALUATION ****
______________________________________________________________________________
Initial area flow distance =   502.000(Ft.)
Top (of initial area) elevation =  1291.000(Ft.)
Bottom (of initial area) elevation =  1265.000(Ft.)
Difference in elevation =    26.000(Ft.)
Slope =    0.05179  s(percent)=       5.18
TC = k(0.390)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =    8.482 min.
Rainfall intensity =      3.458(In/Hr) for a   100.0 year storm
SINGLE FAMILY (1/4 Acre Lot)
Runoff Coefficient = 0.835
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  69.60
Pervious area fraction =  0.500; Impervious fraction =  0.500
Initial subarea runoff =      7.046(CFS)
Total initial stream area =        2.440(Ac.)
Pervious area fraction = 0.500


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Process from Point/Station      120.000 to Point/Station      120.500
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
______________________________________________________________________________
Upstream point/station elevation =  1265.000(Ft.)
Downstream point/station elevation =  1257.000(Ft.)
Pipe length  =    42.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =     7.046(CFS)
Nearest computed pipe diameter  =      9.00(In.)
Calculated individual pipe flow  =     7.046(CFS)
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Normal flow depth in pipe =    7.18(In.)
Flow top width inside pipe =    7.22(In.)
Critical depth could not be calculated.
Pipe flow velocity =     18.63(Ft/s)
Travel time through pipe =    0.04 min.
Time of concentration (TC) =     8.52 min.


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Process from Point/Station      120.500 to Point/Station      120.500
**** CONFLUENCE OF MINOR STREAMS ****
______________________________________________________________________________
Along Main Stream number: 2 in normal stream number 1
Stream flow area =      2.440(Ac.)
Runoff from this stream =      7.046(CFS)
Time of concentration =    8.52 min.
Rainfall intensity =     3.450(In/Hr)


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Process from Point/Station      119.000 to Point/Station      121.000
**** INITIAL AREA EVALUATION ****
______________________________________________________________________________
Initial area flow distance =   507.000(Ft.)
Top (of initial area) elevation =  1291.000(Ft.)
Bottom (of initial area) elevation =  1265.000(Ft.)
Difference in elevation =    26.000(Ft.)
Slope =    0.05128  s(percent)=       5.13
TC = k(0.390)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =    8.532 min.
Rainfall intensity =      3.447(In/Hr) for a   100.0 year storm
SINGLE FAMILY (1/4 Acre Lot)
Runoff Coefficient = 0.835
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  69.60
Pervious area fraction =  0.500; Impervious fraction =  0.500
Initial subarea runoff =      6.102(CFS)
Total initial stream area =        2.120(Ac.)
Pervious area fraction = 0.500


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Process from Point/Station      121.000 to Point/Station      120.500
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
______________________________________________________________________________
Upstream point/station elevation =  1265.000(Ft.)
Downstream point/station elevation =  1257.000(Ft.)
Pipe length  =    34.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =     6.102(CFS)
Nearest computed pipe diameter  =      9.00(In.)
Calculated individual pipe flow  =     6.102(CFS)
Normal flow depth in pipe =    5.87(In.)
Flow top width inside pipe =    8.57(In.)
Critical depth could not be calculated.
Pipe flow velocity =     19.99(Ft/s)
Travel time through pipe =    0.03 min.
Time of concentration (TC) =     8.56 min.


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Process from Point/Station      120.500 to Point/Station      120.500
**** CONFLUENCE OF MINOR STREAMS ****
______________________________________________________________________________
Along Main Stream number: 2 in normal stream number 2
Stream flow area =      2.120(Ac.)
Runoff from this stream =      6.102(CFS)
Time of concentration =    8.56 min.
Rainfall intensity =     3.442(In/Hr)
Summary of stream data:

Stream   Flow rate      TC            Rainfall Intensity
 No.       (CFS)       (min)                (In/Hr)


1        7.046      8.52                 3.450
2        6.102      8.56                 3.442
Largest stream flow has longer or shorter time of concentration
Qp =      7.046 + sum of
          Qa           Tb/Ta
           6.102 *    0.995 =      6.073
Qp =     13.118

Total of 2 streams to confluence:
```

```
Flow rates before confluence point:
       7.046       6.102
Area of streams before confluence:
       2.440       2.120
Results of confluence:
Total flow rate =     13.118(CFS)
Time of concentration =     8.519 min.
Effective stream area after confluence =      4.560(Ac.)


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Process from Point/Station      120.500 to Point/Station      118.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
________________________________________________________________________
Upstream point/station elevation =  1257.000(Ft.)
Downstream point/station elevation =  1256.000(Ft.)
Pipe length  =    35.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =    13.118(CFS)
Nearest computed pipe diameter  =     18.00(In.)
Calculated individual pipe flow  =    13.118(CFS)
Normal flow depth in pipe =   11.51(In.)
Flow top width inside pipe =   17.29(In.)
Critical Depth =   16.27(In.)
Pipe flow velocity =     10.99(Ft/s)
Travel time through pipe =    0.05 min.
Time of concentration (TC) =     8.57 min.


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Process from Point/Station      118.000 to Point/Station      118.000
**** CONFLUENCE OF MAIN STREAMS ****
________________________________________________________________________
The following data inside Main Stream is listed:
In Main Stream number: 2
Stream flow area =      4.560(Ac.)
Runoff from this stream =     13.118(CFS)
Time of concentration =    8.57 min.
Rainfall intensity =     3.439(In/Hr)
Summary of stream data:

Stream   Flow rate      TC            Rainfall Intensity
 No.       (CFS)       (min)                 (In/Hr)


1       44.423     11.08               3.025
2       13.118      8.57               3.439
Largest stream flow has longer time of concentration
Qp =     44.423 + sum of
          Qb          Ia/Ib
          13.118 *    0.880 =     11.538
Qp =     55.961

Total of 2 main streams to confluence:
Flow rates before confluence point:
      44.423      13.118
Area of streams before confluence:
       16.890        4.560


Results of confluence:
Total flow rate =     55.961(CFS)
Time of concentration =    11.082 min.
Effective stream area after confluence  =     21.450(Ac.)


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Process from Point/Station      118.000 to Point/Station      122.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
________________________________________________________________________
Upstream point/station elevation =  1256.000(Ft.)
Downstream point/station elevation =  1236.000(Ft.)
Pipe length  =   533.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =    55.961(CFS)
Nearest computed pipe diameter  =     27.00(In.)
Calculated individual pipe flow  =    55.961(CFS)
Normal flow depth in pipe =   20.67(In.)
Flow top width inside pipe =   22.87(In.)
Critical depth could not be calculated.
Pipe flow velocity =     17.14(Ft/s)
Travel time through pipe =    0.52 min.
Time of concentration (TC) =    11.60 min.


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Process from Point/Station      122.000 to Point/Station      122.000
**** CONFLUENCE OF MINOR STREAMS ****
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```
Along Main Stream number: 1 in normal stream number 1
Stream flow area =     21.450(Ac.)
Runoff from this stream =     55.961(CFS)
Time of concentration =   11.60 min.
Rainfall intensity =     2.957(In/Hr)


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Process from Point/Station      115.000 to Point/Station      123.000
**** INITIAL AREA EVALUATION ****
------------------------------------------------------------------------------
Initial area flow distance =   622.000(Ft.)
Top (of initial area) elevation =  1265.000(Ft.)
Bottom (of initial area) elevation =  1242.000(Ft.)
Difference in elevation =    23.000(Ft.)
Slope =    0.03698  s(percent)=       3.70
TC = k(0.390)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =    9.885 min.
Rainfall intensity =      3.203(In/Hr) for a   100.0 year storm
SINGLE FAMILY (1/4 Acre Lot)
Runoff Coefficient = 0.831
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  69.60
Pervious area fraction =  0.500; Impervious fraction =  0.500
Initial subarea runoff =     10.882(CFS)
Total initial stream area =        4.090(Ac.)
Pervious area fraction = 0.500


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Process from Point/Station      123.000 to Point/Station      122.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
------------------------------------------------------------------------------
Upstream point/station elevation =  1242.000(Ft.)
Downstream point/station elevation =  1236.000(Ft.)
Pipe length  =    29.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =    10.882(CFS)
Nearest computed pipe diameter  =     12.00(In.)
Calculated individual pipe flow  =    10.882(CFS)
Normal flow depth in pipe =    7.20(In.)
Flow top width inside pipe =   11.76(In.)
Critical depth could not be calculated.
Pipe flow velocity =     22.12(Ft/s)
Travel time through pipe =    0.02 min.
Time of concentration (TC) =     9.91 min.


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Process from Point/Station      122.000 to Point/Station      122.000
**** CONFLUENCE OF MINOR STREAMS ****
------------------------------------------------------------------------------
Along Main Stream number: 1 in normal stream number 2
Stream flow area =      4.090(Ac.)
Runoff from this stream =     10.882(CFS)
Time of concentration =    9.91 min.
Rainfall intensity =     3.199(In/Hr)
Summary of stream data:

Stream   Flow rate      TC            Rainfall Intensity
 No.       (CFS)       (min)                  (In/Hr)


1       55.961     11.60                  2.957
2       10.882      9.91                  3.199
Largest stream flow has longer time of concentration
Qp =     55.961 + sum of
          Qb         Ia/Ib
          10.882 *    0.924 =     10.057
Qp =     66.019

Total of 2 streams to confluence:
Flow rates before confluence point:
      55.961      10.882
Area of streams before confluence:
       21.450        4.090
Results of confluence:
Total flow rate =     66.019(CFS)
Time of concentration =    11.600 min.
Effective stream area after confluence =     25.540(Ac.)


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Process from Point/Station      122.000 to Point/Station      124.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
------------------------------------------------------------------------
Upstream point/station elevation =  1236.000(Ft.)
Downstream point/station elevation =  1223.000(Ft.)
Pipe length  =   418.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =    66.019(CFS)
Nearest computed pipe diameter  =     30.00(In.)
Calculated individual pipe flow  =    66.019(CFS)
Normal flow depth in pipe =   22.50(In.)
Flow top width inside pipe =   25.98(In.)
Critical depth could not be calculated.
Pipe flow velocity =     16.70(Ft/s)
Travel time through pipe =    0.42 min.
Time of concentration (TC) =    12.02 min.


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Process from Point/Station      124.000 to Point/Station      124.000
**** CONFLUENCE OF MINOR STREAMS ****
------------------------------------------------------------------------
Along Main Stream number: 1 in normal stream number 1
Stream flow area =     25.540(Ac.)
Runoff from this stream =     66.019(CFS)
Time of concentration =   12.02 min.
Rainfall intensity =     2.905(In/Hr)


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Process from Point/Station      123.000 to Point/Station      125.000
**** INITIAL AREA EVALUATION ****
------------------------------------------------------------------------
Initial area flow distance =   383.000(Ft.)
Top (of initial area) elevation =  1242.000(Ft.)
Bottom (of initial area) elevation =  1230.000(Ft.)
Difference in elevation =    12.000(Ft.)
Slope =    0.03133  s(percent)=       3.13
TC = k(0.390)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =    8.417 min.
Rainfall intensity =      3.471(In/Hr) for a   100.0 year storm
SINGLE FAMILY (1/4 Acre Lot)
Runoff Coefficient = 0.835
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  69.60
Pervious area fraction =  0.500; Impervious fraction =  0.500
Initial subarea runoff =      7.944(CFS)
Total initial stream area =        2.740(Ac.)
Pervious area fraction = 0.500


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Process from Point/Station      125.000 to Point/Station      124.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
------------------------------------------------------------------------
Upstream point/station elevation =  1230.000(Ft.)
Downstream point/station elevation =  1223.000(Ft.)
Pipe length  =    33.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =     7.944(CFS)
Nearest computed pipe diameter  =     12.00(In.)
Calculated individual pipe flow  =     7.944(CFS)
Normal flow depth in pipe =    5.89(In.)
Flow top width inside pipe =   12.00(In.)
Critical depth could not be calculated.
Pipe flow velocity =     20.73(Ft/s)
Travel time through pipe =    0.03 min.
Time of concentration (TC) =     8.44 min.


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Process from Point/Station      124.000 to Point/Station      124.000
**** CONFLUENCE OF MINOR STREAMS ****
------------------------------------------------------------------------
Along Main Stream number: 1 in normal stream number 2
Stream flow area =      2.740(Ac.)
Runoff from this stream =      7.944(CFS)
Time of concentration =    8.44 min.
Rainfall intensity =     3.465(In/Hr)


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Process from Point/Station      117.000 to Point/Station      126.000
**** INITIAL AREA EVALUATION ****
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Initial area flow distance =  1000.000(Ft.)
Top (of initial area) elevation =  1265.000(Ft.)
Bottom (of initial area) elevation =  1230.000(Ft.)
Difference in elevation =    35.000(Ft.)
Slope =    0.03500  s(percent)=       3.50
TC = k(0.300)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =    9.296 min.
Rainfall intensity =      3.303(In/Hr) for a   100.0 year storm
COMMERCIAL subarea type
Runoff Coefficient = 0.887
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  69.60
Pervious area fraction =  0.100; Impervious fraction =  0.900
Initial subarea runoff =     11.975(CFS)
Total initial stream area =        4.090(Ac.)
Pervious area fraction = 0.100


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Process from Point/Station      126.000 to Point/Station      124.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
------------------------------------------------------------------------------
Upstream point/station elevation =  1230.000(Ft.)
Downstream point/station elevation =  1223.000(Ft.)
Pipe length  =    28.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =    11.975(CFS)
Nearest computed pipe diameter  =     12.00(In.)
Calculated individual pipe flow  =    11.975(CFS)
Normal flow depth in pipe =    7.21(In.)
Flow top width inside pipe =   11.75(In.)
Critical depth could not be calculated.
Pipe flow velocity =     24.33(Ft/s)
Travel time through pipe =    0.02 min.
Time of concentration (TC) =     9.32 min.


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Process from Point/Station      124.000 to Point/Station      124.000
**** CONFLUENCE OF MINOR STREAMS ****
------------------------------------------------------------------------------
Along Main Stream number: 1 in normal stream number 3
Stream flow area =      4.090(Ac.)
Runoff from this stream =     11.975(CFS)
Time of concentration =    9.32 min.
Rainfall intensity =     3.299(In/Hr)
Summary of stream data:

Stream   Flow rate      TC            Rainfall Intensity
 No.       (CFS)       (min)                 (In/Hr)


1       66.019     12.02                 2.905
2        7.944      8.44                 3.465
3       11.975      9.32                 3.299
Largest stream flow has longer time of concentration
Qp =     66.019 + sum of
          Qb         Ia/Ib
           7.944 *    0.838 =      6.659
          Qb         Ia/Ib
          11.975 *    0.880 =     10.543
Qp =     83.221

Total of 3 streams to confluence:
Flow rates before confluence point:
      66.019       7.944      11.975
Area of streams before confluence:
       25.540        2.740        4.090
Results of confluence:
Total flow rate =     83.221(CFS)
Time of concentration =    12.017 min.
Effective stream area after confluence =     32.370(Ac.)


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Process from Point/Station      124.000 to Point/Station      127.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
------------------------------------------------------------------------------
Upstream point/station elevation =  1223.000(Ft.)
Downstream point/station elevation =  1215.000(Ft.)
Pipe length  =   390.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =    83.221(CFS)
Nearest computed pipe diameter  =     36.00(In.)
Calculated individual pipe flow  =    83.221(CFS)
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Normal flow depth in pipe =   26.02(In.)
Flow top width inside pipe =   32.23(In.)
Critical Depth =   33.58(In.)
Pipe flow velocity =     15.23(Ft/s)
Travel time through pipe =    0.43 min.
Time of concentration (TC) =    12.44 min.


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Process from Point/Station      127.000 to Point/Station      127.000
**** CONFLUENCE OF MINOR STREAMS ****
______________________________________________________________________________
Along Main Stream number: 1 in normal stream number 1
Stream flow area =     32.370(Ac.)
Runoff from this stream =     83.221(CFS)
Time of concentration =   12.44 min.
Rainfall intensity =     2.855(In/Hr)


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Process from Point/Station      128.000 to Point/Station      129.000
**** INITIAL AREA EVALUATION ****
______________________________________________________________________________
Initial area flow distance =   298.000(Ft.)
Top (of initial area) elevation =  1248.000(Ft.)
Bottom (of initial area) elevation =  1227.000(Ft.)
Difference in elevation =    21.000(Ft.)
Slope =    0.07047  s(percent)=       7.05
TC = k(0.940)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =   15.603 min.
Rainfall intensity =      2.549(In/Hr) for a   100.0 year storm
UNDEVELOPED (good cover) subarea
Runoff Coefficient = 0.764
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  74.60
Pervious area fraction =  1.000; Impervious fraction =  0.000
Initial subarea runoff =      3.155(CFS)
Total initial stream area =        1.620(Ac.)
Pervious area fraction = 1.000


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Process from Point/Station      129.000 to Point/Station      127.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
______________________________________________________________________________
Upstream point/station elevation =  1227.000(Ft.)
Downstream point/station elevation =  1215.000(Ft.)
Pipe length  =    76.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =     3.155(CFS)
Nearest computed pipe diameter  =      9.00(In.)
Calculated individual pipe flow  =     3.155(CFS)
Normal flow depth in pipe =    4.39(In.)
Flow top width inside pipe =    9.00(In.)
Critical depth could not be calculated.
Pipe flow velocity =     14.73(Ft/s)
Travel time through pipe =    0.09 min.
Time of concentration (TC) =    15.69 min.


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Process from Point/Station      127.000 to Point/Station      127.000
**** CONFLUENCE OF MINOR STREAMS ****
______________________________________________________________________________
Along Main Stream number: 1 in normal stream number 2
Stream flow area =      1.620(Ac.)
Runoff from this stream =      3.155(CFS)
Time of concentration =   15.69 min.
Rainfall intensity =     2.542(In/Hr)
Summary of stream data:

Stream   Flow rate      TC            Rainfall Intensity
 No.       (CFS)       (min)                (In/Hr)


1       83.221     12.44                 2.855
2        3.155     15.69                 2.542
Largest stream flow has longer or shorter time of concentration
Qp =     83.221 + sum of
          Qa           Tb/Ta
           3.155 *    0.793 =      2.502
Qp =     85.723

Total of 2 streams to confluence:
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```
Flow rates before confluence point:
      83.221       3.155
Area of streams before confluence:
       32.370        1.620
Results of confluence:
Total flow rate =     85.723(CFS)
Time of concentration =    12.444 min.
Effective stream area after confluence =     33.990(Ac.)
End of computations, total study area =           33.99 (Ac.)
The following figures may
be used for a unit hydrograph study of the same area.

Area averaged pervious area fraction(Ap) = 0.452
Area averaged RI index number =  69.8
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                Riverside County Rational Hydrology Program

CIVILCADD/CIVILDESIGN Engineering Software,(c) 1989 - 2004 Version 7.0
        Rational Hydrology Study        Date: 04/02/25  File:pro2100.out
------------------------------------------------------------------------
 *********   Hydrology Study Control Information **********

 English (in-lb) Units used in input data file

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Program License Serial Number 5006

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Rational Method Hydrology Program based on
Riverside County Flood Control & Water Conservation District
1978 hydrology manual

Storm event (year) =  100.00 Antecedent Moisture Condition = 2

2 year, 1 hour precipitation =  0.500(In.)
100 year, 1 hour precipitation =  1.300(In.)

Storm event year = 100.0
Calculated rainfall intensity data:
1 hour intensity =  1.300(In/Hr)
Slope of intensity duration curve = 0.5000




++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      200.000 to Point/Station      201.000
**** INITIAL AREA EVALUATION ****
____________________________________________________________________________
Initial area flow distance =   603.000(Ft.)
Top (of initial area) elevation =  1235.000(Ft.)
Bottom (of initial area) elevation =  1231.000(Ft.)
Difference in elevation =     4.000(Ft.)
Slope =    0.00663  s(percent)=       0.66
TC = k(0.390)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =   13.767 min.
Rainfall intensity =      2.714(In/Hr) for a   100.0 year storm
SINGLE FAMILY (1/4 Acre Lot)
Runoff Coefficient = 0.820
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  69.60
Pervious area fraction =  0.500; Impervious fraction =  0.500
Initial subarea runoff =      5.901(CFS)
Total initial stream area =        2.650(Ac.)
Pervious area fraction = 0.500


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      201.000 to Point/Station      201.000
**** CONFLUENCE OF MINOR STREAMS ****
____________________________________________________________________________
Along Main Stream number: 1 in normal stream number 1
Stream flow area =      2.650(Ac.)
Runoff from this stream =      5.901(CFS)
Time of concentration =   13.77 min.
Rainfall intensity =     2.714(In/Hr)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      202.000 to Point/Station      201.000
**** INITIAL AREA EVALUATION ****
____________________________________________________________________________
Initial area flow distance =   723.000(Ft.)
Top (of initial area) elevation =  1268.000(Ft.)
Bottom (of initial area) elevation =  1231.000(Ft.)
Difference in elevation =    37.000(Ft.)
Slope =    0.05118  s(percent)=       5.12
TC = k(0.390)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =    9.838 min.
Rainfall intensity =      3.210(In/Hr) for a   100.0 year storm
SINGLE FAMILY (1/4 Acre Lot)
Runoff Coefficient = 0.831
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
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Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  69.60
Pervious area fraction =  0.500; Impervious fraction =  0.500
Initial subarea runoff =      6.696(CFS)
Total initial stream area =        2.510(Ac.)
Pervious area fraction = 0.500


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      201.000 to Point/Station      201.000
**** CONFLUENCE OF MINOR STREAMS ****
----------------------------------------------------------------------------
Along Main Stream number: 1 in normal stream number 2
Stream flow area =      2.510(Ac.)
Runoff from this stream =      6.696(CFS)
Time of concentration =    9.84 min.
Rainfall intensity =     3.210(In/Hr)
Summary of stream data:

Stream   Flow rate      TC            Rainfall Intensity
 No.       (CFS)       (min)                 (In/Hr)


1        5.901     13.77                 2.714
2        6.696      9.84                 3.210
Largest stream flow has longer or shorter time of concentration
Qp =      6.696 + sum of
          Qa          Tb/Ta
           5.901 *    0.715 =      4.217
Qp =     10.912

Total of 2 streams to confluence:
Flow rates before confluence point:
       5.901       6.696
Area of streams before confluence:
        2.650        2.510
Results of confluence:
Total flow rate =     10.912(CFS)
Time of concentration =     9.838 min.
Effective stream area after confluence =      5.160(Ac.)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      201.000 to Point/Station      203.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
----------------------------------------------------------------------------
Upstream point/station elevation =  1231.000(Ft.)
Downstream point/station elevation =  1225.000(Ft.)
Pipe length  =    68.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =    10.912(CFS)
Nearest computed pipe diameter  =     15.00(In.)
Calculated individual pipe flow  =    10.912(CFS)
Normal flow depth in pipe =    8.10(In.)
Flow top width inside pipe =   14.95(In.)
Critical depth could not be calculated.
Pipe flow velocity =     16.13(Ft/s)
Travel time through pipe =    0.07 min.
Time of concentration (TC) =     9.91 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      203.000 to Point/Station      203.000
**** CONFLUENCE OF MAIN STREAMS ****
----------------------------------------------------------------------------
The following data inside Main Stream is listed:
In Main Stream number: 1
Stream flow area =      5.160(Ac.)
Runoff from this stream =     10.912(CFS)
Time of concentration =    9.91 min.
Rainfall intensity =     3.199(In/Hr)
Program is now starting with Main Stream No. 2


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      204.000 to Point/Station      205.000
**** INITIAL AREA EVALUATION ****
----------------------------------------------------------------------------
Initial area flow distance =   644.000(Ft.)
Top (of initial area) elevation =  1235.000(Ft.)
Bottom (of initial area) elevation =  1231.000(Ft.)
Difference in elevation =     4.000(Ft.)
Slope =    0.00621  s(percent)=       0.62
TC = k(0.390)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =   14.321 min.
Rainfall intensity =      2.661(In/Hr) for a   100.0 year storm
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SINGLE FAMILY (1/4 Acre Lot)
Runoff Coefficient = 0.819
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  69.60
Pervious area fraction =  0.500; Impervious fraction =  0.500
Initial subarea runoff =      5.776(CFS)
Total initial stream area =        2.650(Ac.)
Pervious area fraction = 0.500


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      205.000 to Point/Station      205.000
**** CONFLUENCE OF MINOR STREAMS ****
______________________________________________________________________________
Along Main Stream number: 2 in normal stream number 1
Stream flow area =      2.650(Ac.)
Runoff from this stream =      5.776(CFS)
Time of concentration =   14.32 min.
Rainfall intensity =     2.661(In/Hr)


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Process from Point/Station      206.000 to Point/Station      205.000
**** INITIAL AREA EVALUATION ****
______________________________________________________________________________
Initial area flow distance =   757.000(Ft.)
Top (of initial area) elevation =  1266.000(Ft.)
Bottom (of initial area) elevation =  1231.000(Ft.)
Difference in elevation =    35.000(Ft.)
Slope =    0.04624  s(percent)=       4.62
TC = k(0.390)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =   10.226 min.
Rainfall intensity =      3.149(In/Hr) for a   100.0 year storm
SINGLE FAMILY (1/4 Acre Lot)
Runoff Coefficient = 0.830
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  69.60
Pervious area fraction =  0.500; Impervious fraction =  0.500
Initial subarea runoff =      8.335(CFS)
Total initial stream area =        3.190(Ac.)
Pervious area fraction = 0.500


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      205.000 to Point/Station      205.000
**** CONFLUENCE OF MINOR STREAMS ****
______________________________________________________________________________
Along Main Stream number: 2 in normal stream number 2
Stream flow area =      3.190(Ac.)
Runoff from this stream =      8.335(CFS)
Time of concentration =   10.23 min.
Rainfall intensity =     3.149(In/Hr)
Summary of stream data:

Stream   Flow rate      TC            Rainfall Intensity
 No.       (CFS)       (min)                 (In/Hr)


1        5.776     14.32                 2.661
2        8.335     10.23                 3.149
Largest stream flow has longer or shorter time of concentration
Qp =      8.335 + sum of
          Qa          Tb/Ta
           5.776 *    0.714 =      4.125
Qp =     12.460

Total of 2 streams to confluence:
Flow rates before confluence point:
       5.776       8.335
Area of streams before confluence:
        2.650        3.190
Results of confluence:
Total flow rate =     12.460(CFS)
Time of concentration =    10.226 min.
Effective stream area after confluence =      5.840(Ac.)


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Process from Point/Station      205.000 to Point/Station      203.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
```

```
Upstream point/station elevation =  1231.000(Ft.)
Downstream point/station elevation =  1225.000(Ft.)
Pipe length  =    36.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =    12.460(CFS)
Nearest computed pipe diameter  =     12.00(In.)
Calculated individual pipe flow  =    12.460(CFS)
Normal flow depth in pipe =    8.55(In.)
Flow top width inside pipe =   10.86(In.)
Critical depth could not be calculated.
Pipe flow velocity =     20.82(Ft/s)
Travel time through pipe =    0.03 min.
Time of concentration (TC) =    10.25 min.


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Process from Point/Station      203.000 to Point/Station      203.000
**** CONFLUENCE OF MAIN STREAMS ****
------------------------------------------------------------------------------
The following data inside Main Stream is listed:
In Main Stream number: 2
Stream flow area =      5.840(Ac.)
Runoff from this stream =     12.460(CFS)
Time of concentration =   10.25 min.
Rainfall intensity =     3.145(In/Hr)
Summary of stream data:

Stream   Flow rate      TC            Rainfall Intensity
 No.       (CFS)       (min)                 (In/Hr)


1       10.912      9.91               3.199
2       12.460     10.25               3.145
Largest stream flow has longer time of concentration
Qp =     12.460 + sum of
          Qb          Ia/Ib
          10.912 *    0.983 =     10.726
Qp =     23.186

Total of 2 main streams to confluence:
Flow rates before confluence point:
      10.912      12.460
Area of streams before confluence:
        5.160        5.840


Results of confluence:
Total flow rate =     23.186(CFS)
Time of concentration =    10.255 min.
Effective stream area after confluence  =     11.000(Ac.)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      203.000 to Point/Station      207.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
------------------------------------------------------------------------------
Upstream point/station elevation =  1225.000(Ft.)
Downstream point/station elevation =  1223.000(Ft.)
Pipe length  =    83.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =    23.186(CFS)
Nearest computed pipe diameter  =     21.00(In.)
Calculated individual pipe flow  =    23.186(CFS)
Normal flow depth in pipe =   16.22(In.)
Flow top width inside pipe =   17.61(In.)
Critical Depth =   19.89(In.)
Pipe flow velocity =     11.63(Ft/s)
Travel time through pipe =    0.12 min.
Time of concentration (TC) =    10.37 min.


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Process from Point/Station      207.000 to Point/Station      207.000
**** CONFLUENCE OF MAIN STREAMS ****
------------------------------------------------------------------------------
The following data inside Main Stream is listed:
In Main Stream number: 1
Stream flow area =     11.000(Ac.)
Runoff from this stream =     23.186(CFS)
Time of concentration =   10.37 min.
Rainfall intensity =     3.126(In/Hr)
Program is now starting with Main Stream No. 2


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Process from Point/Station      208.000 to Point/Station      209.000
**** INITIAL AREA EVALUATION ****
```

```
Initial area flow distance =   634.000(Ft.)
Top (of initial area) elevation =  1299.000(Ft.)
Bottom (of initial area) elevation =  1282.000(Ft.)
Difference in elevation =    17.000(Ft.)
Slope =    0.02681  s(percent)=       2.68
TC = k(0.390)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =   10.623 min.
Rainfall intensity =      3.090(In/Hr) for a   100.0 year storm
SINGLE FAMILY (1/4 Acre Lot)
Runoff Coefficient = 0.829
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  69.60
Pervious area fraction =  0.500; Impervious fraction =  0.500
Initial subarea runoff =      8.935(CFS)
Total initial stream area =        3.490(Ac.)
Pervious area fraction = 0.500


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      209.000 to Point/Station      210.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
------------------------------------------------------------------------------
Upstream point/station elevation =  1282.000(Ft.)
Downstream point/station elevation =  1260.000(Ft.)
Pipe length  =   535.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =     8.935(CFS)
Nearest computed pipe diameter  =     15.00(In.)
Calculated individual pipe flow  =     8.935(CFS)
Normal flow depth in pipe =    9.09(In.)
Flow top width inside pipe =   14.66(In.)
Critical Depth =   13.84(In.)
Pipe flow velocity =     11.49(Ft/s)
Travel time through pipe =    0.78 min.
Time of concentration (TC) =    11.40 min.


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Process from Point/Station      210.000 to Point/Station      210.000
**** CONFLUENCE OF MINOR STREAMS ****
------------------------------------------------------------------------------
Along Main Stream number: 2 in normal stream number 1
Stream flow area =      3.490(Ac.)
Runoff from this stream =      8.935(CFS)
Time of concentration =   11.40 min.
Rainfall intensity =     2.983(In/Hr)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      211.000 to Point/Station      212.000
**** INITIAL AREA EVALUATION ****
------------------------------------------------------------------------------
Initial area flow distance =   650.000(Ft.)
Top (of initial area) elevation =  1299.000(Ft.)
Bottom (of initial area) elevation =  1282.000(Ft.)
Difference in elevation =    17.000(Ft.)
Slope =    0.02615  s(percent)=       2.62
TC = k(0.390)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =   10.783 min.
Rainfall intensity =      3.067(In/Hr) for a   100.0 year storm
SINGLE FAMILY (1/4 Acre Lot)
Runoff Coefficient = 0.828
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  69.60
Pervious area fraction =  0.500; Impervious fraction =  0.500
Initial subarea runoff =      3.683(CFS)
Total initial stream area =        1.450(Ac.)
Pervious area fraction = 0.500


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Process from Point/Station      212.000 to Point/Station      202.000
**** STREET FLOW TRAVEL TIME + SUBAREA FLOW ADDITION ****
------------------------------------------------------------------------------
Top of street segment elevation =  1282.000(Ft.)
End of street segment elevation =  1268.000(Ft.)
Length of street segment  =   459.000(Ft.)
Height of curb above gutter flowline  =    6.0(In.)
Width of half street (curb to crown)  =  18.000(Ft.)
Distance from crown to crossfall grade break  =  16.000(Ft.)
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```
Slope from gutter to grade break (v/hz) =   0.020
Slope from grade break to crown (v/hz)  =   0.020
Street flow is on [1] side(s) of the street
Distance from curb to property line  =  10.000(Ft.)
Slope from curb to property line (v/hz) =   0.020
Gutter width =   2.000(Ft.)
Gutter hike from flowline =  2.000(In.)
 Manning's N in gutter =  0.0150
 Manning's N from gutter to grade break =  0.0150
 Manning's N from grade break to crown =  0.0150
Estimated mean flow rate at midpoint of street =      5.723(CFS)
Depth of flow =   0.349(Ft.), Average velocity =   4.185(Ft/s)
Streetflow hydraulics at midpoint of street travel:
Halfstreet flow width =  11.140(Ft.)
Flow velocity =   4.18(Ft/s)
Travel time =    1.83 min.     TC =   12.61  min.
 Adding area flow to street
SINGLE FAMILY (1/4 Acre Lot)
Runoff Coefficient = 0.823
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  69.60
Pervious area fraction =  0.500; Impervious fraction =  0.500
Rainfall intensity =      2.836(In/Hr) for a   100.0 year storm
Subarea runoff =      3.992(CFS) for      1.710(Ac.)
Total runoff =      7.675(CFS)       Total area =       3.160(Ac.)
Street flow at end of street =      7.675(CFS)
Half street flow at end of street =      7.675(CFS)
Depth of flow =   0.378(Ft.), Average velocity =   4.483(Ft/s)
Flow width (from curb towards crown)=  12.591(Ft.)


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Process from Point/Station      202.000 to Point/Station      210.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
______________________________________________________________________________
Upstream point/station elevation =  1268.000(Ft.)
Downstream point/station elevation =  1260.000(Ft.)
Pipe length  =    46.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =     7.675(CFS)
Nearest computed pipe diameter  =     12.00(In.)
Calculated individual pipe flow  =     7.675(CFS)
Normal flow depth in pipe =    6.12(In.)
Flow top width inside pipe =   12.00(In.)
Critical depth could not be calculated.
Pipe flow velocity =     19.07(Ft/s)
Travel time through pipe =    0.04 min.
Time of concentration (TC) =    12.65 min.


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Process from Point/Station      210.000 to Point/Station      210.000
**** CONFLUENCE OF MINOR STREAMS ****
______________________________________________________________________________
Along Main Stream number: 2 in normal stream number 2
Stream flow area =      3.160(Ac.)
Runoff from this stream =      7.675(CFS)
Time of concentration =   12.65 min.
Rainfall intensity =     2.831(In/Hr)


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Process from Point/Station      209.000 to Point/Station      206.000
**** INITIAL AREA EVALUATION ****
______________________________________________________________________________
Initial area flow distance =   526.000(Ft.)
Top (of initial area) elevation =  1282.000(Ft.)
Bottom (of initial area) elevation =  1266.000(Ft.)
Difference in elevation =    16.000(Ft.)
Slope =    0.03042  s(percent)=       3.04
TC = k(0.390)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =    9.612 min.
Rainfall intensity =      3.248(In/Hr) for a   100.0 year storm
SINGLE FAMILY (1/4 Acre Lot)
Runoff Coefficient = 0.832
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  69.60
Pervious area fraction =  0.500; Impervious fraction =  0.500
Initial subarea runoff =      8.130(CFS)
Total initial stream area =        3.010(Ac.)
Pervious area fraction = 0.500
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Process from Point/Station      206.000 to Point/Station      210.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
----------------------------------------------------------------------------
Upstream point/station elevation =  1266.000(Ft.)
Downstream point/station elevation =  1260.000(Ft.)
Pipe length  =    19.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =     8.130(CFS)
Nearest computed pipe diameter  =      9.00(In.)
Calculated individual pipe flow  =     8.130(CFS)
Normal flow depth in pipe =    6.52(In.)
Flow top width inside pipe =    8.05(In.)
Critical depth could not be calculated.
Pipe flow velocity =     23.72(Ft/s)
Travel time through pipe =    0.01 min.
Time of concentration (TC) =     9.63 min.


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Process from Point/Station      210.000 to Point/Station      210.000
**** CONFLUENCE OF MINOR STREAMS ****
----------------------------------------------------------------------------
Along Main Stream number: 2 in normal stream number 3
Stream flow area =      3.010(Ac.)
Runoff from this stream =      8.130(CFS)
Time of concentration =    9.63 min.
Rainfall intensity =     3.246(In/Hr)
Summary of stream data:

Stream   Flow rate      TC            Rainfall Intensity
 No.       (CFS)       (min)                 (In/Hr)


1        8.935     11.40                 2.983
2        7.675     12.65                 2.831
3        8.130      9.63                 3.246
Largest stream flow has longer or shorter time of concentration
Qp =      8.935 + sum of
          Qa          Tb/Ta
           7.675 *    0.901 =      6.915
          Qb          Ia/Ib
           8.130 *    0.919 =      7.471
Qp =     23.321

Total of 3 streams to confluence:
Flow rates before confluence point:
       8.935       7.675       8.130
Area of streams before confluence:
        3.490       3.160       3.010
Results of confluence:
Total flow rate =     23.321(CFS)
Time of concentration =    11.399 min.
Effective stream area after confluence =      9.660(Ac.)


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Process from Point/Station      210.000 to Point/Station      207.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
----------------------------------------------------------------------------
Upstream point/station elevation =  1260.000(Ft.)
Downstream point/station elevation =  1223.000(Ft.)
Pipe length  =   625.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =    23.321(CFS)
Nearest computed pipe diameter  =     18.00(In.)
Calculated individual pipe flow  =    23.321(CFS)
Normal flow depth in pipe =   13.50(In.)
Flow top width inside pipe =   15.59(In.)
Critical depth could not be calculated.
Pipe flow velocity =     16.39(Ft/s)
Travel time through pipe =    0.64 min.
Time of concentration (TC) =    12.03 min.


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Process from Point/Station      207.000 to Point/Station      207.000
**** CONFLUENCE OF MAIN STREAMS ****
----------------------------------------------------------------------------
The following data inside Main Stream is listed:
In Main Stream number: 2
Stream flow area =      9.660(Ac.)
Runoff from this stream =     23.321(CFS)
Time of concentration =   12.03 min.
Rainfall intensity =     2.903(In/Hr)
Summary of stream data:
```

```
Stream   Flow rate      TC            Rainfall Intensity
 No.       (CFS)       (min)                (In/Hr)


1       23.186     10.37               3.126
2       23.321     12.03               2.903
Largest stream flow has longer time of concentration
Qp =     23.321 + sum of
          Qb         Ia/Ib
          23.186 *    0.928 =     21.527
Qp =     44.848

Total of 2 main streams to confluence:
Flow rates before confluence point:
      23.186      23.321
Area of streams before confluence:
       11.000        9.660


Results of confluence:
Total flow rate =     44.848(CFS)
Time of concentration =    12.034 min.
Effective stream area after confluence  =     20.660(Ac.)


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Process from Point/Station      207.000 to Point/Station      213.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
______________________________________________________________________________
Upstream point/station elevation =  1223.000(Ft.)
Downstream point/station elevation =  1205.000(Ft.)
Pipe length  =   227.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =    44.848(CFS)
Nearest computed pipe diameter  =     21.00(In.)
Calculated individual pipe flow  =    44.848(CFS)
Normal flow depth in pipe =   17.30(In.)
Flow top width inside pipe =   16.01(In.)
Critical depth could not be calculated.
Pipe flow velocity =     21.14(Ft/s)
Travel time through pipe =    0.18 min.
Time of concentration (TC) =    12.21 min.


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Process from Point/Station      213.000 to Point/Station      213.000
**** CONFLUENCE OF MINOR STREAMS ****
______________________________________________________________________________
Along Main Stream number: 1 in normal stream number 1
Stream flow area =     20.660(Ac.)
Runoff from this stream =     44.848(CFS)
Time of concentration =   12.21 min.
Rainfall intensity =     2.881(In/Hr)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      127.000 to Point/Station      127.000
**** USER DEFINED FLOW INFORMATION AT A POINT ****
______________________________________________________________________________
Rainfall intensity =      2.855(In/Hr) for a   100.0 year storm
SINGLE FAMILY (1/4 Acre Lot)
Runoff Coefficient = 0.824
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  69.60
Pervious area fraction =  0.500; Impervious fraction =  0.500
User specified values are as follows:
TC =  12.44 min.  Rain intensity =       2.86(In/Hr)
Total area =        33.99(Ac.)  Total runoff =     85.72(CFS)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      127.000 to Point/Station      213.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
______________________________________________________________________________
Upstream point/station elevation =  1215.000(Ft.)
Downstream point/station elevation =  1205.000(Ft.)
Pipe length  =   329.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =    85.720(CFS)
Nearest computed pipe diameter  =     33.00(In.)
Calculated individual pipe flow  =    85.720(CFS)
Normal flow depth in pipe =   25.17(In.)
Flow top width inside pipe =   28.07(In.)
Critical depth could not be calculated.
```

```
Pipe flow velocity =     17.63(Ft/s)
Travel time through pipe =    0.31 min.
Time of concentration (TC) =    12.75 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      213.000 to Point/Station      213.000
**** CONFLUENCE OF MINOR STREAMS ****
----------------------------------------------------------------------------
Along Main Stream number: 1 in normal stream number 2
Stream flow area =     33.990(Ac.)
Runoff from this stream =     85.720(CFS)
Time of concentration =   12.75 min.
Rainfall intensity =     2.820(In/Hr)
Summary of stream data:

Stream   Flow rate      TC            Rainfall Intensity
 No.       (CFS)       (min)                 (In/Hr)


1       44.848     12.21                 2.881
2       85.720     12.75                 2.820
Largest stream flow has longer time of concentration
Qp =     85.720 + sum of
          Qb          Ia/Ib
          44.848 *    0.979 =     43.892
Qp =    129.612

Total of 2 streams to confluence:
Flow rates before confluence point:
      44.848      85.720
Area of streams before confluence:
       20.660       33.990
Results of confluence:
Total flow rate =    129.612(CFS)
Time of concentration =    12.751 min.
Effective stream area after confluence =     54.650(Ac.)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      213.000 to Point/Station      214.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
----------------------------------------------------------------------------
Upstream point/station elevation =  1205.000(Ft.)
Downstream point/station elevation =  1185.000(Ft.)
Pipe length  =   658.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =   129.612(CFS)
Nearest computed pipe diameter  =     39.00(In.)
Calculated individual pipe flow  =   129.612(CFS)
Normal flow depth in pipe =   28.92(In.)
Flow top width inside pipe =   34.15(In.)
Critical depth could not be calculated.
Pipe flow velocity =     19.64(Ft/s)
Travel time through pipe =    0.56 min.
Time of concentration (TC) =    13.31 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      214.000 to Point/Station      214.000
**** CONFLUENCE OF MAIN STREAMS ****
----------------------------------------------------------------------------
The following data inside Main Stream is listed:
In Main Stream number: 1
Stream flow area =     54.650(Ac.)
Runoff from this stream =    129.612(CFS)
Time of concentration =   13.31 min.
Rainfall intensity =     2.760(In/Hr)
Program is now starting with Main Stream No. 2


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      125.000 to Point/Station      215.000
**** INITIAL AREA EVALUATION ****
----------------------------------------------------------------------------
Initial area flow distance =   605.000(Ft.)
Top (of initial area) elevation =  1230.000(Ft.)
Bottom (of initial area) elevation =  1216.000(Ft.)
Difference in elevation =    14.000(Ft.)
Slope =    0.02314  s(percent)=       2.31
TC = k(0.390)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =   10.737 min.
Rainfall intensity =      3.073(In/Hr) for a   100.0 year storm
USER INPUT of soil data for subarea
Runoff Coefficient = 0.827
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
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Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  69.00
Pervious area fraction =  0.500; Impervious fraction =  0.500
Initial subarea runoff =      4.369(CFS)
Total initial stream area =        1.720(Ac.)
Pervious area fraction = 0.500


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      215.000 to Point/Station      216.000
**** STREET FLOW TRAVEL TIME + SUBAREA FLOW ADDITION ****
______________________________________________________________________________
Top of street segment elevation =  1216.000(Ft.)
End of street segment elevation =  1189.000(Ft.)
Length of street segment  =   850.000(Ft.)
Height of curb above gutter flowline  =    6.0(In.)
Width of half street (curb to crown)  =  18.000(Ft.)
Distance from crown to crossfall grade break  =  16.000(Ft.)
Slope from gutter to grade break (v/hz) =   0.020
Slope from grade break to crown (v/hz)  =   0.020
Street flow is on [1] side(s) of the street
Distance from curb to property line  =  10.000(Ft.)
Slope from curb to property line (v/hz) =   0.020
Gutter width =   2.000(Ft.)
Gutter hike from flowline =  2.000(In.)
 Manning's N in gutter =  0.0150
 Manning's N from gutter to grade break =  0.0150
 Manning's N from grade break to crown =  0.0150
Estimated mean flow rate at midpoint of street =      6.171(CFS)
Depth of flow =   0.355(Ft.), Average velocity =   4.326(Ft/s)
Streetflow hydraulics at midpoint of street travel:
Halfstreet flow width =  11.402(Ft.)
Flow velocity =   4.33(Ft/s)
Travel time =    3.28 min.     TC =   14.01  min.
 Adding area flow to street
COMMERCIAL subarea type
Runoff Coefficient = 0.884
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  69.60
Pervious area fraction =  0.100; Impervious fraction =  0.900
Rainfall intensity =      2.690(In/Hr) for a   100.0 year storm
Subarea runoff =      3.543(CFS) for      1.490(Ac.)
Total runoff =      7.912(CFS)       Total area =       3.210(Ac.)
Street flow at end of street =      7.912(CFS)
Half street flow at end of street =      7.912(CFS)
Depth of flow =   0.380(Ft.), Average velocity =   4.586(Ft/s)
Flow width (from curb towards crown)=  12.643(Ft.)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      216.000 to Point/Station      217.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
______________________________________________________________________________
Upstream point/station elevation =  1189.000(Ft.)
Downstream point/station elevation =  1186.000(Ft.)
Pipe length  =    40.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =     7.912(CFS)
Nearest computed pipe diameter  =     12.00(In.)
Calculated individual pipe flow  =     7.912(CFS)
Normal flow depth in pipe =    8.20(In.)
Flow top width inside pipe =   11.16(In.)
Critical depth could not be calculated.
Pipe flow velocity =     13.84(Ft/s)
Travel time through pipe =    0.05 min.
Time of concentration (TC) =    14.06 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      217.000 to Point/Station      217.000
**** CONFLUENCE OF MINOR STREAMS ****
______________________________________________________________________________
Along Main Stream number: 2 in normal stream number 1
Stream flow area =      3.210(Ac.)
Runoff from this stream =      7.912(CFS)
Time of concentration =   14.06 min.
Rainfall intensity =     2.685(In/Hr)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      126.000 to Point/Station      218.000
**** INITIAL AREA EVALUATION ****
______________________________________________________________________________
```

```
Initial area flow distance =   625.000(Ft.)
Top (of initial area) elevation =  1230.000(Ft.)
Bottom (of initial area) elevation =  1216.000(Ft.)
Difference in elevation =    14.000(Ft.)
Slope =    0.02240  s(percent)=       2.24
TC = k(0.300)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =    8.422 min.
Rainfall intensity =      3.470(In/Hr) for a   100.0 year storm
COMMERCIAL subarea type
Runoff Coefficient = 0.887
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  69.60
Pervious area fraction =  0.100; Impervious fraction =  0.900
Initial subarea runoff =      1.385(CFS)
Total initial stream area =        0.450(Ac.)
Pervious area fraction = 0.100


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      218.000 to Point/Station      219.000
**** STREET FLOW TRAVEL TIME + SUBAREA FLOW ADDITION ****
________________________________________________________________________
Top of street segment elevation =  1216.000(Ft.)
End of street segment elevation =  1189.000(Ft.)
Length of street segment  =   850.000(Ft.)
Height of curb above gutter flowline  =    6.0(In.)
Width of half street (curb to crown)  =  18.000(Ft.)
Distance from crown to crossfall grade break  =  16.000(Ft.)
Slope from gutter to grade break (v/hz) =   0.020
Slope from grade break to crown (v/hz)  =   0.020
Street flow is on [1] side(s) of the street
Distance from curb to property line  =  10.000(Ft.)
Slope from curb to property line (v/hz) =   0.020
Gutter width =   2.000(Ft.)
Gutter hike from flowline =  2.000(In.)
 Manning's N in gutter =  0.0150
 Manning's N from gutter to grade break =  0.0150
 Manning's N from grade break to crown =  0.0150
Estimated mean flow rate at midpoint of street =      2.594(CFS)
Depth of flow =   0.282(Ft.), Average velocity =   3.560(Ft/s)
Streetflow hydraulics at midpoint of street travel:
Halfstreet flow width =   7.759(Ft.)
Flow velocity =   3.56(Ft/s)
Travel time =    3.98 min.     TC =   12.40  min.
 Adding area flow to street
COMMERCIAL subarea type
Runoff Coefficient = 0.885
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  69.60
Pervious area fraction =  0.100; Impervious fraction =  0.900
Rainfall intensity =      2.859(In/Hr) for a   100.0 year storm
Subarea runoff =      2.353(CFS) for      0.930(Ac.)
Total runoff =      3.738(CFS)       Total area =       1.380(Ac.)
Street flow at end of street =      3.738(CFS)
Half street flow at end of street =      3.738(CFS)
Depth of flow =   0.310(Ft.), Average velocity =   3.856(Ft/s)
Flow width (from curb towards crown)=   9.180(Ft.)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      219.000 to Point/Station      217.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
________________________________________________________________________
Upstream point/station elevation =  1189.000(Ft.)
Downstream point/station elevation =  1186.000(Ft.)
Pipe length  =    29.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =     3.738(CFS)
Nearest computed pipe diameter  =      9.00(In.)
Calculated individual pipe flow  =     3.738(CFS)
Normal flow depth in pipe =    5.56(In.)
Flow top width inside pipe =    8.75(In.)
Critical depth could not be calculated.
Pipe flow velocity =     13.04(Ft/s)
Travel time through pipe =    0.04 min.
Time of concentration (TC) =    12.44 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      217.000 to Point/Station      217.000
**** CONFLUENCE OF MINOR STREAMS ****
```

```
Along Main Stream number: 2 in normal stream number 2
Stream flow area =      1.380(Ac.)
Runoff from this stream =      3.738(CFS)
Time of concentration =   12.44 min.
Rainfall intensity =     2.855(In/Hr)
Summary of stream data:

Stream   Flow rate      TC            Rainfall Intensity
 No.       (CFS)       (min)                (In/Hr)


1        7.912     14.06                2.685
2        3.738     12.44                2.855
Largest stream flow has longer time of concentration
Qp =      7.912 + sum of
          Qb          Ia/Ib
           3.738 *    0.941 =      3.516
Qp =     11.428

Total of 2 streams to confluence:
Flow rates before confluence point:
       7.912       3.738
Area of streams before confluence:
        3.210        1.380
Results of confluence:
Total flow rate =     11.428(CFS)
Time of concentration =    14.061 min.
Effective stream area after confluence =      4.590(Ac.)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      217.000 to Point/Station      214.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
------------------------------------------------------------------------------
Upstream point/station elevation =  1186.000(Ft.)
Downstream point/station elevation =  1185.000(Ft.)
Pipe length  =    56.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =    11.428(CFS)
Nearest computed pipe diameter  =     18.00(In.)
Calculated individual pipe flow  =    11.428(CFS)
Normal flow depth in pipe =   12.33(In.)
Flow top width inside pipe =   16.72(In.)
Critical Depth =   15.48(In.)
Pipe flow velocity =      8.85(Ft/s)
Travel time through pipe =    0.11 min.
Time of concentration (TC) =    14.17 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      214.000 to Point/Station      214.000
**** CONFLUENCE OF MAIN STREAMS ****
------------------------------------------------------------------------------
The following data inside Main Stream is listed:
In Main Stream number: 2
Stream flow area =      4.590(Ac.)
Runoff from this stream =     11.428(CFS)
Time of concentration =   14.17 min.
Rainfall intensity =     2.675(In/Hr)
Summary of stream data:

Stream   Flow rate      TC            Rainfall Intensity
 No.       (CFS)       (min)                (In/Hr)


1      129.612     13.31               2.760
2       11.428     14.17               2.675
Largest stream flow has longer or shorter time of concentration
Qp =    129.612 + sum of
          Qa          Tb/Ta
           11.428 *    0.940 =     10.737
Qp =    140.349

Total of 2 main streams to confluence:
Flow rates before confluence point:
     129.612      11.428
Area of streams before confluence:
       54.650        4.590


Results of confluence:
Total flow rate =    140.349(CFS)
Time of concentration =    13.309 min.
Effective stream area after confluence  =     59.240(Ac.)
```

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++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      214.000 to Point/Station      220.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
------------------------------------------------------------------------------
Upstream point/station elevation =  1185.000(Ft.)
Downstream point/station elevation =  1184.000(Ft.)
Pipe length  =    66.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =   140.349(CFS)
Nearest computed pipe diameter  =     45.00(In.)
Calculated individual pipe flow  =   140.349(CFS)
Normal flow depth in pipe =   34.78(In.)
Flow top width inside pipe =   37.71(In.)
Critical Depth =   41.59(In.)
Pipe flow velocity =     15.33(Ft/s)
Travel time through pipe =    0.07 min.
Time of concentration (TC) =    13.38 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      220.000 to Point/Station      220.000
**** CONFLUENCE OF MINOR STREAMS ****
------------------------------------------------------------------------------
Along Main Stream number: 1 in normal stream number 1
Stream flow area =     59.240(Ac.)
Runoff from this stream =    140.349(CFS)
Time of concentration =   13.38 min.
Rainfall intensity =     2.753(In/Hr)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      221.000 to Point/Station      222.000
**** INITIAL AREA EVALUATION ****
------------------------------------------------------------------------------
Initial area flow distance =   864.000(Ft.)
Top (of initial area) elevation =  1218.000(Ft.)
Bottom (of initial area) elevation =  1191.000(Ft.)
Difference in elevation =    27.000(Ft.)
Slope =    0.03125  s(percent)=       3.13
TC = k(0.390)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =   11.660 min.
Rainfall intensity =      2.949(In/Hr) for a   100.0 year storm
SINGLE FAMILY (1/4 Acre Lot)
Runoff Coefficient = 0.826
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  69.60
Pervious area fraction =  0.500; Impervious fraction =  0.500
Initial subarea runoff =     11.786(CFS)
Total initial stream area =        4.840(Ac.)
Pervious area fraction = 0.500


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      222.000 to Point/Station      220.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
------------------------------------------------------------------------------
Upstream point/station elevation =  1191.000(Ft.)
Downstream point/station elevation =  1184.000(Ft.)
Pipe length  =    33.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =    11.786(CFS)
Nearest computed pipe diameter  =     12.00(In.)
Calculated individual pipe flow  =    11.786(CFS)
Normal flow depth in pipe =    7.52(In.)
Flow top width inside pipe =   11.61(In.)
Critical depth could not be calculated.
Pipe flow velocity =     22.72(Ft/s)
Travel time through pipe =    0.02 min.
Time of concentration (TC) =    11.68 min.


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Process from Point/Station      220.000 to Point/Station      220.000
**** CONFLUENCE OF MINOR STREAMS ****
------------------------------------------------------------------------------
Along Main Stream number: 1 in normal stream number 2
Stream flow area =      4.840(Ac.)
Runoff from this stream =     11.786(CFS)
Time of concentration =   11.68 min.
Rainfall intensity =     2.946(In/Hr)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      223.000 to Point/Station      224.000
**** INITIAL AREA EVALUATION ****
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Initial area flow distance =   553.000(Ft.)
Top (of initial area) elevation =  1208.000(Ft.)
Bottom (of initial area) elevation =  1191.000(Ft.)
Difference in elevation =    17.000(Ft.)
Slope =    0.03074  s(percent)=       3.07
TC = k(0.300)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =    7.528 min.
Rainfall intensity =      3.670(In/Hr) for a   100.0 year storm
COMMERCIAL subarea type
Runoff Coefficient = 0.888
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  69.60
Pervious area fraction =  0.100; Impervious fraction =  0.900
Initial subarea runoff =      1.238(CFS)
Total initial stream area =        0.380(Ac.)
Pervious area fraction = 0.100


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Process from Point/Station      224.000 to Point/Station      220.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
------------------------------------------------------------------------------
Upstream point/station elevation =  1191.000(Ft.)
Downstream point/station elevation =  1184.000(Ft.)
Pipe length  =    40.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =     1.238(CFS)
Nearest computed pipe diameter  =      6.00(In.)
Calculated individual pipe flow  =     1.238(CFS)
Normal flow depth in pipe =    3.10(In.)
Flow top width inside pipe =    6.00(In.)
Critical depth could not be calculated.
Pipe flow velocity =     12.11(Ft/s)
Travel time through pipe =    0.06 min.
Time of concentration (TC) =     7.58 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      220.000 to Point/Station      220.000
**** CONFLUENCE OF MINOR STREAMS ****
------------------------------------------------------------------------------
Along Main Stream number: 1 in normal stream number 3
Stream flow area =      0.380(Ac.)
Runoff from this stream =      1.238(CFS)
Time of concentration =    7.58 min.
Rainfall intensity =     3.657(In/Hr)
Summary of stream data:

Stream   Flow rate      TC            Rainfall Intensity
 No.       (CFS)       (min)                 (In/Hr)


1      140.349     13.38                2.753
2       11.786     11.68                2.946
3        1.238      7.58                3.657
Largest stream flow has longer time of concentration
Qp =    140.349 + sum of
          Qb          Ia/Ib
          11.786 *    0.934 =     11.014
          Qb          Ia/Ib
           1.238 *    0.753 =      0.932
Qp =    152.295

Total of 3 streams to confluence:
Flow rates before confluence point:
     140.349      11.786       1.238
Area of streams before confluence:
       59.240        4.840        0.380
Results of confluence:
Total flow rate =    152.295(CFS)
Time of concentration =    13.381 min.
Effective stream area after confluence =     64.460(Ac.)
End of computations, total study area =           64.46 (Ac.)
The following figures may
be used for a unit hydrograph study of the same area.

Area averaged pervious area fraction(Ap) = 0.480
Area averaged RI index number =  69.6
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                Riverside County Rational Hydrology Program

CIVILCADD/CIVILDESIGN Engineering Software,(c) 1989 - 2004 Version 7.0
        Rational Hydrology Study        Date: 04/02/25  File:pro3100.out
------------------------------------------------------------------------
 *********   Hydrology Study Control Information **********

 English (in-lb) Units used in input data file

------------------------------------------------------------------------


Program License Serial Number 5006

------------------------------------------------------------------------
Rational Method Hydrology Program based on
Riverside County Flood Control & Water Conservation District
1978 hydrology manual

Storm event (year) =  100.00 Antecedent Moisture Condition = 2

2 year, 1 hour precipitation =  0.500(In.)
100 year, 1 hour precipitation =  1.300(In.)

Storm event year = 100.0
Calculated rainfall intensity data:
1 hour intensity =  1.300(In/Hr)
Slope of intensity duration curve = 0.5000




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Process from Point/Station      300.000 to Point/Station      301.000
**** INITIAL AREA EVALUATION ****
____________________________________________________________________________
Initial area flow distance =   708.000(Ft.)
Top (of initial area) elevation =  1262.000(Ft.)
Bottom (of initial area) elevation =  1254.000(Ft.)
Difference in elevation =     8.000(Ft.)
Slope =    0.01130  s(percent)=       1.13
TC = k(0.390)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =   13.197 min.
Rainfall intensity =      2.772(In/Hr) for a   100.0 year storm
SINGLE FAMILY (1/4 Acre Lot)
Runoff Coefficient = 0.822
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  69.60
Pervious area fraction =  0.500; Impervious fraction =  0.500
Initial subarea runoff =      8.748(CFS)
Total initial stream area =        3.840(Ac.)
Pervious area fraction = 0.500


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      301.000 to Point/Station      302.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
____________________________________________________________________________
Upstream point/station elevation =  1254.000(Ft.)
Downstream point/station elevation =  1245.000(Ft.)
Pipe length  =    39.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =     8.748(CFS)
Nearest computed pipe diameter  =     12.00(In.)
Calculated individual pipe flow  =     8.748(CFS)
Normal flow depth in pipe =    6.08(In.)
Flow top width inside pipe =   12.00(In.)
Critical depth could not be calculated.
Pipe flow velocity =     21.92(Ft/s)
Travel time through pipe =    0.03 min.
Time of concentration (TC) =    13.23 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      302.000 to Point/Station      302.000
**** CONFLUENCE OF MINOR STREAMS ****
____________________________________________________________________________
Along Main Stream number: 1 in normal stream number 1
Stream flow area =      3.840(Ac.)
Runoff from this stream =      8.748(CFS)
Time of concentration =   13.23 min.
Rainfall intensity =     2.769(In/Hr)
```

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++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      300.000 to Point/Station      303.000
**** INITIAL AREA EVALUATION ****
------------------------------------------------------------------------------
Initial area flow distance =   638.000(Ft.)
Top (of initial area) elevation =  1262.000(Ft.)
Bottom (of initial area) elevation =  1254.000(Ft.)
Difference in elevation =     8.000(Ft.)
Slope =    0.01254  s(percent)=       1.25
TC = k(0.390)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =   12.398 min.
Rainfall intensity =      2.860(In/Hr) for a   100.0 year storm
SINGLE FAMILY (1/4 Acre Lot)
Runoff Coefficient = 0.824
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  69.60
Pervious area fraction =  0.500; Impervious fraction =  0.500
Initial subarea runoff =      5.325(CFS)
Total initial stream area =        2.260(Ac.)
Pervious area fraction = 0.500


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      303.000 to Point/Station      302.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
------------------------------------------------------------------------------
Upstream point/station elevation =  1254.000(Ft.)
Downstream point/station elevation =  1245.000(Ft.)
Pipe length  =    32.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =     5.325(CFS)
Nearest computed pipe diameter  =      9.00(In.)
Calculated individual pipe flow  =     5.325(CFS)
Normal flow depth in pipe =    5.06(In.)
Flow top width inside pipe =    8.93(In.)
Critical depth could not be calculated.
Pipe flow velocity =     20.82(Ft/s)
Travel time through pipe =    0.03 min.
Time of concentration (TC) =    12.42 min.


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Process from Point/Station      302.000 to Point/Station      302.000
**** CONFLUENCE OF MINOR STREAMS ****
------------------------------------------------------------------------------
Along Main Stream number: 1 in normal stream number 2
Stream flow area =      2.260(Ac.)
Runoff from this stream =      5.325(CFS)
Time of concentration =   12.42 min.
Rainfall intensity =     2.857(In/Hr)
Summary of stream data:

Stream   Flow rate      TC            Rainfall Intensity
 No.       (CFS)       (min)                 (In/Hr)


1        8.748     13.23                 2.769
2        5.325     12.42                 2.857
Largest stream flow has longer time of concentration
Qp =      8.748 + sum of
          Qb          Ia/Ib
           5.325 *    0.969 =      5.161
Qp =     13.909

Total of 2 streams to confluence:
Flow rates before confluence point:
       8.748       5.325
Area of streams before confluence:
        3.840        2.260
Results of confluence:
Total flow rate =     13.909(CFS)
Time of concentration =    13.226 min.
Effective stream area after confluence =      6.100(Ac.)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      302.000 to Point/Station      304.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
------------------------------------------------------------------------------
Upstream point/station elevation =  1245.000(Ft.)
Downstream point/station elevation =  1233.000(Ft.)
Pipe length  =   527.00(Ft.)   Manning's N = 0.013
```

```
No. of pipes = 1  Required pipe flow  =    13.909(CFS)
Nearest computed pipe diameter  =     18.00(In.)
Calculated individual pipe flow  =    13.909(CFS)
Normal flow depth in pipe =   13.08(In.)
Flow top width inside pipe =   16.05(In.)
Critical Depth =   16.55(In.)
Pipe flow velocity =     10.12(Ft/s)
Travel time through pipe =    0.87 min.
Time of concentration (TC) =    14.09 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      304.000 to Point/Station      304.000
**** CONFLUENCE OF MINOR STREAMS ****
------------------------------------------------------------------------------
Along Main Stream number: 1 in normal stream number 1
Stream flow area =      6.100(Ac.)
Runoff from this stream =     13.909(CFS)
Time of concentration =   14.09 min.
Rainfall intensity =     2.682(In/Hr)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      305.000 to Point/Station      306.000
**** INITIAL AREA EVALUATION ****
------------------------------------------------------------------------------
Initial area flow distance =   945.000(Ft.)
Top (of initial area) elevation =  1289.000(Ft.)
Bottom (of initial area) elevation =  1238.000(Ft.)
Difference in elevation =    51.000(Ft.)
Slope =    0.05397  s(percent)=       5.40
TC = k(0.300)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =    8.334 min.
Rainfall intensity =      3.488(In/Hr) for a   100.0 year storm
COMMERCIAL subarea type
Runoff Coefficient = 0.887
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  69.60
Pervious area fraction =  0.100; Impervious fraction =  0.900
Initial subarea runoff =      2.197(CFS)
Total initial stream area =        0.710(Ac.)
Pervious area fraction = 0.100


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Process from Point/Station      306.000 to Point/Station      304.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
------------------------------------------------------------------------------
Upstream point/station elevation =  1238.000(Ft.)
Downstream point/station elevation =  1233.000(Ft.)
Pipe length  =    34.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =     2.197(CFS)
Nearest computed pipe diameter  =      9.00(In.)
Calculated individual pipe flow  =     2.197(CFS)
Normal flow depth in pipe =    3.65(In.)
Flow top width inside pipe =    8.84(In.)
Critical Depth =    7.98(In.)
Pipe flow velocity =     13.05(Ft/s)
Travel time through pipe =    0.04 min.
Time of concentration (TC) =     8.38 min.


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Process from Point/Station      304.000 to Point/Station      304.000
**** CONFLUENCE OF MINOR STREAMS ****
------------------------------------------------------------------------------
Along Main Stream number: 1 in normal stream number 2
Stream flow area =      0.710(Ac.)
Runoff from this stream =      2.197(CFS)
Time of concentration =    8.38 min.
Rainfall intensity =     3.479(In/Hr)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      307.000 to Point/Station      308.000
**** INITIAL AREA EVALUATION ****
------------------------------------------------------------------------------
Initial area flow distance =   980.000(Ft.)
Top (of initial area) elevation =  1289.000(Ft.)
Bottom (of initial area) elevation =  1238.000(Ft.)
Difference in elevation =    51.000(Ft.)
Slope =    0.05204  s(percent)=       5.20
TC = k(0.300)*[(length^3)/(elevation change)]^0.2
```

```
Initial area time of concentration =    8.518 min.
Rainfall intensity =      3.450(In/Hr) for a   100.0 year storm
COMMERCIAL subarea type
Runoff Coefficient = 0.887
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  69.60
Pervious area fraction =  0.100; Impervious fraction =  0.900
Initial subarea runoff =      3.305(CFS)
Total initial stream area =        1.080(Ac.)
Pervious area fraction = 0.100


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Process from Point/Station      308.000 to Point/Station      304.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
______________________________________________________________________________
Upstream point/station elevation =  1238.000(Ft.)
Downstream point/station elevation =  1233.000(Ft.)
Pipe length  =    22.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =     3.305(CFS)
Nearest computed pipe diameter  =      9.00(In.)
Calculated individual pipe flow  =     3.305(CFS)
Normal flow depth in pipe =    4.06(In.)
Flow top width inside pipe =    8.96(In.)
Critical depth could not be calculated.
Pipe flow velocity =     17.06(Ft/s)
Travel time through pipe =    0.02 min.
Time of concentration (TC) =     8.54 min.


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Process from Point/Station      304.000 to Point/Station      304.000
**** CONFLUENCE OF MINOR STREAMS ****
______________________________________________________________________________
Along Main Stream number: 1 in normal stream number 3
Stream flow area =      1.080(Ac.)
Runoff from this stream =      3.305(CFS)
Time of concentration =    8.54 min.
Rainfall intensity =     3.446(In/Hr)
Summary of stream data:

Stream   Flow rate      TC            Rainfall Intensity
 No.       (CFS)       (min)                 (In/Hr)


1       13.909     14.09                 2.682
2        2.197      8.38                 3.479
3        3.305      8.54                 3.446
Largest stream flow has longer time of concentration
Qp =     13.909 + sum of
          Qb         Ia/Ib
           2.197 *    0.771 =      1.694
          Qb         Ia/Ib
           3.305 *    0.778 =      2.573
Qp =     18.175

Total of 3 streams to confluence:
Flow rates before confluence point:
      13.909       2.197       3.305
Area of streams before confluence:
        6.100        0.710        1.080
Results of confluence:
Total flow rate =     18.175(CFS)
Time of concentration =    14.095 min.
Effective stream area after confluence =      7.890(Ac.)


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Process from Point/Station      304.000 to Point/Station      309.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
______________________________________________________________________________
Upstream point/station elevation =  1233.000(Ft.)
Downstream point/station elevation =  1203.000(Ft.)
Pipe length  =   495.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =    18.175(CFS)
Nearest computed pipe diameter  =     18.00(In.)
Calculated individual pipe flow  =    18.175(CFS)
Normal flow depth in pipe =   11.13(In.)
Flow top width inside pipe =   17.49(In.)
Critical depth could not be calculated.
Pipe flow velocity =     15.85(Ft/s)
Travel time through pipe =    0.52 min.
Time of concentration (TC) =    14.62 min.
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Process from Point/Station      309.000 to Point/Station      309.000
**** CONFLUENCE OF MINOR STREAMS ****
----------------------------------------------------------------------------
Along Main Stream number: 1 in normal stream number 1
Stream flow area =      7.890(Ac.)
Runoff from this stream =     18.175(CFS)
Time of concentration =   14.62 min.
Rainfall intensity =     2.634(In/Hr)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      306.000 to Point/Station      223.000
**** INITIAL AREA EVALUATION ****
----------------------------------------------------------------------------
Initial area flow distance =   485.000(Ft.)
Top (of initial area) elevation =  1238.000(Ft.)
Bottom (of initial area) elevation =  1208.000(Ft.)
Difference in elevation =    30.000(Ft.)
Slope =    0.06186  s(percent)=       6.19
TC = k(0.300)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =    6.211 min.
Rainfall intensity =      4.041(In/Hr) for a   100.0 year storm
COMMERCIAL subarea type
Runoff Coefficient = 0.889
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  69.60
Pervious area fraction =  0.100; Impervious fraction =  0.900
Initial subarea runoff =      1.400(CFS)
Total initial stream area =        0.390(Ac.)
Pervious area fraction = 0.100


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Process from Point/Station      223.000 to Point/Station      309.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
----------------------------------------------------------------------------
Upstream point/station elevation =  1208.000(Ft.)
Downstream point/station elevation =  1203.000(Ft.)
Pipe length  =    30.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =     1.400(CFS)
Nearest computed pipe diameter  =      6.00(In.)
Calculated individual pipe flow  =     1.400(CFS)
Normal flow depth in pipe =    3.39(In.)
Flow top width inside pipe =    5.95(In.)
Critical depth could not be calculated.
Pipe flow velocity =     12.25(Ft/s)
Travel time through pipe =    0.04 min.
Time of concentration (TC) =     6.25 min.


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Process from Point/Station      309.000 to Point/Station      309.000
**** CONFLUENCE OF MINOR STREAMS ****
----------------------------------------------------------------------------
Along Main Stream number: 1 in normal stream number 2
Stream flow area =      0.390(Ac.)
Runoff from this stream =      1.400(CFS)
Time of concentration =    6.25 min.
Rainfall intensity =     4.027(In/Hr)


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Process from Point/Station      308.000 to Point/Station      310.000
**** INITIAL AREA EVALUATION ****
----------------------------------------------------------------------------
Initial area flow distance =   485.000(Ft.)
Top (of initial area) elevation =  1238.000(Ft.)
Bottom (of initial area) elevation =  1208.000(Ft.)
Difference in elevation =    30.000(Ft.)
Slope =    0.06186  s(percent)=       6.19
TC = k(0.300)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =    6.211 min.
Rainfall intensity =      4.041(In/Hr) for a   100.0 year storm
COMMERCIAL subarea type
Runoff Coefficient = 0.889
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  69.60
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Pervious area fraction =  0.100; Impervious fraction =  0.900
Initial subarea runoff =      1.724(CFS)
Total initial stream area =        0.480(Ac.)
Pervious area fraction = 0.100


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Process from Point/Station      309.000 to Point/Station      309.000
**** CONFLUENCE OF MINOR STREAMS ****
______________________________________________________________________________
Along Main Stream number: 1 in normal stream number 3
Stream flow area =      0.480(Ac.)
Runoff from this stream =      1.724(CFS)
Time of concentration =    6.21 min.
Rainfall intensity =     4.041(In/Hr)
Summary of stream data:

Stream   Flow rate      TC            Rainfall Intensity
 No.       (CFS)       (min)                 (In/Hr)


1       18.175     14.62                2.634
2        1.400      6.25                4.027
3        1.724      6.21                4.041
Largest stream flow has longer time of concentration
Qp =     18.175 + sum of
          Qb         Ia/Ib
           1.400 *    0.654 =      0.916
          Qb         Ia/Ib
           1.724 *    0.652 =      1.124
Qp =     20.215

Total of 3 streams to confluence:
Flow rates before confluence point:
      18.175       1.400       1.724
Area of streams before confluence:
        7.890        0.390        0.480
Results of confluence:
Total flow rate =     20.215(CFS)
Time of concentration =    14.615 min.
Effective stream area after confluence =      8.760(Ac.)


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Process from Point/Station      309.000 to Point/Station      310.500
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
______________________________________________________________________________
Upstream point/station elevation =  1203.000(Ft.)
Downstream point/station elevation =  1182.000(Ft.)
Pipe length  =   202.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =    20.215(CFS)
Nearest computed pipe diameter  =     15.00(In.)
Calculated individual pipe flow  =    20.215(CFS)
Normal flow depth in pipe =   11.91(In.)
Flow top width inside pipe =   12.14(In.)
Critical depth could not be calculated.
Pipe flow velocity =     19.34(Ft/s)
Travel time through pipe =    0.17 min.
Time of concentration (TC) =    14.79 min.


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Process from Point/Station      310.500 to Point/Station      310.500
**** CONFLUENCE OF MINOR STREAMS ****
______________________________________________________________________________
Along Main Stream number: 1 in normal stream number 1
Stream flow area =      8.760(Ac.)
Runoff from this stream =     20.215(CFS)
Time of concentration =   14.79 min.
Rainfall intensity =     2.618(In/Hr)


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Process from Point/Station      220.000 to Point/Station      220.000
**** USER DEFINED FLOW INFORMATION AT A POINT ****
______________________________________________________________________________
Rainfall intensity =      2.753(In/Hr) for a   100.0 year storm
SINGLE FAMILY (1/4 Acre Lot)
Runoff Coefficient = 0.821
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  69.60
Pervious area fraction =  0.500; Impervious fraction =  0.500
User specified values are as follows:
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TC =  13.38 min.  Rain intensity =       2.75(In/Hr)
Total area =        64.46(Ac.)  Total runoff =    152.29(CFS)


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Process from Point/Station      220.000 to Point/Station      310.500
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
______________________________________________________________________________
Upstream point/station elevation =  1184.000(Ft.)
Downstream point/station elevation =  1182.000(Ft.)
Pipe length  =   306.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =   152.290(CFS)
Nearest computed pipe diameter  =     54.00(In.)
Calculated individual pipe flow  =   152.290(CFS)
Normal flow depth in pipe =   42.38(In.)
Flow top width inside pipe =   44.39(In.)
Critical Depth =   43.41(In.)
Pipe flow velocity =     11.38(Ft/s)
Travel time through pipe =    0.45 min.
Time of concentration (TC) =    13.83 min.


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Process from Point/Station      310.500 to Point/Station      310.500
**** CONFLUENCE OF MINOR STREAMS ****
______________________________________________________________________________
Along Main Stream number: 1 in normal stream number 2
Stream flow area =     64.460(Ac.)
Runoff from this stream =    152.290(CFS)
Time of concentration =   13.83 min.
Rainfall intensity =     2.708(In/Hr)
Summary of stream data:

Stream   Flow rate      TC            Rainfall Intensity
 No.       (CFS)       (min)                 (In/Hr)


1       20.215     14.79                 2.618
2      152.290     13.83                 2.708
Largest stream flow has longer or shorter time of concentration
Qp =    152.290 + sum of
          Qa          Tb/Ta
          20.215 *    0.935 =     18.901
Qp =    171.191

Total of 2 streams to confluence:
Flow rates before confluence point:
      20.215     152.290
Area of streams before confluence:
        8.760       64.460
Results of confluence:
Total flow rate =    171.191(CFS)
Time of concentration =    13.828 min.
Effective stream area after confluence =     73.220(Ac.)


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Process from Point/Station      310.500 to Point/Station      311.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
______________________________________________________________________________
Upstream point/station elevation =  1182.000(Ft.)
Downstream point/station elevation =  1178.000(Ft.)
Pipe length  =    70.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =   171.191(CFS)
Nearest computed pipe diameter  =     39.00(In.)
Calculated individual pipe flow  =   171.191(CFS)
Normal flow depth in pipe =   28.08(In.)
Flow top width inside pipe =   35.02(In.)
Critical depth could not be calculated.
Pipe flow velocity =     26.79(Ft/s)
Travel time through pipe =    0.04 min.
Time of concentration (TC) =    13.87 min.


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Process from Point/Station      311.000 to Point/Station      312.000
**** SUBAREA FLOW ADDITION ****
______________________________________________________________________________
UNDEVELOPED (good cover) subarea
Runoff Coefficient = 0.771
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  74.60
Pervious area fraction =  1.000; Impervious fraction =  0.000
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```
Time of concentration =    13.87 min.
Rainfall intensity =      2.704(In/Hr) for a   100.0 year storm
Subarea runoff =      2.604(CFS) for      1.250(Ac.)
Total runoff =    173.796(CFS)       Total area =      74.470(Ac.)


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Process from Point/Station      312.000 to Point/Station      313.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
______________________________________________________________________________
Upstream point/station elevation =  1176.000(Ft.)
Downstream point/station elevation =  1146.000(Ft.)
Pipe length  =   433.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =   173.796(CFS)
Nearest computed pipe diameter  =     36.00(In.)
Calculated individual pipe flow  =   173.796(CFS)
Normal flow depth in pipe =   29.16(In.)
Flow top width inside pipe =   28.25(In.)
Critical depth could not be calculated.
Pipe flow velocity =     28.31(Ft/s)
Travel time through pipe =    0.25 min.
Time of concentration (TC) =    14.13 min.


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Process from Point/Station      313.000 to Point/Station      313.000
**** CONFLUENCE OF MAIN STREAMS ****
______________________________________________________________________________
The following data inside Main Stream is listed:
In Main Stream number: 1
Stream flow area =     74.470(Ac.)
Runoff from this stream =    173.796(CFS)
Time of concentration =   14.13 min.
Rainfall intensity =     2.679(In/Hr)
Program is now starting with Main Stream No. 2


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Process from Point/Station      216.000 to Point/Station      314.000
**** INITIAL AREA EVALUATION ****
______________________________________________________________________________
Initial area flow distance =   496.000(Ft.)
Top (of initial area) elevation =  1189.000(Ft.)
Bottom (of initial area) elevation =  1177.000(Ft.)
Difference in elevation =    12.000(Ft.)
Slope =    0.02419  s(percent)=       2.42
TC = k(0.300)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =    7.561 min.
Rainfall intensity =      3.662(In/Hr) for a   100.0 year storm
COMMERCIAL subarea type
Runoff Coefficient = 0.888
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  69.60
Pervious area fraction =  0.100; Impervious fraction =  0.900
Initial subarea runoff =      1.690(CFS)
Total initial stream area =        0.520(Ac.)
Pervious area fraction = 0.100


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      314.000 to Point/Station      315.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
______________________________________________________________________________
Upstream point/station elevation =  1177.000(Ft.)
Downstream point/station elevation =  1173.000(Ft.)
Pipe length  =    30.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =     1.690(CFS)
Nearest computed pipe diameter  =      6.00(In.)
Calculated individual pipe flow  =     1.690(CFS)
Normal flow depth in pipe =    4.15(In.)
Flow top width inside pipe =    5.54(In.)
Critical depth could not be calculated.
Pipe flow velocity =     11.66(Ft/s)
Travel time through pipe =    0.04 min.
Time of concentration (TC) =     7.60 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      315.000 to Point/Station      315.000
**** CONFLUENCE OF MINOR STREAMS ****
______________________________________________________________________________
Along Main Stream number: 2 in normal stream number 1
Stream flow area =      0.520(Ac.)
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Runoff from this stream =      1.690(CFS)
Time of concentration =    7.60 min.
Rainfall intensity =     3.652(In/Hr)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      219.000 to Point/Station      316.000
**** INITIAL AREA EVALUATION ****
------------------------------------------------------------------------------
Initial area flow distance =   511.000(Ft.)
Top (of initial area) elevation =  1189.000(Ft.)
Bottom (of initial area) elevation =  1177.000(Ft.)
Difference in elevation =    12.000(Ft.)
Slope =    0.02348  s(percent)=       2.35
TC = k(0.300)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =    7.697 min.
Rainfall intensity =      3.630(In/Hr) for a   100.0 year storm
COMMERCIAL subarea type
Runoff Coefficient = 0.888
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  69.60
Pervious area fraction =  0.100; Impervious fraction =  0.900
Initial subarea runoff =      1.611(CFS)
Total initial stream area =        0.500(Ac.)
Pervious area fraction = 0.100


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Process from Point/Station      316.000 to Point/Station      315.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
------------------------------------------------------------------------------
Upstream point/station elevation =  1177.000(Ft.)
Downstream point/station elevation =  1173.000(Ft.)
Pipe length  =    22.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =     1.611(CFS)
Nearest computed pipe diameter  =      6.00(In.)
Calculated individual pipe flow  =     1.611(CFS)
Normal flow depth in pipe =    3.60(In.)
Flow top width inside pipe =    5.88(In.)
Critical depth could not be calculated.
Pipe flow velocity =     13.07(Ft/s)
Travel time through pipe =    0.03 min.
Time of concentration (TC) =     7.73 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      315.000 to Point/Station      315.000
**** CONFLUENCE OF MINOR STREAMS ****
------------------------------------------------------------------------------
Along Main Stream number: 2 in normal stream number 2
Stream flow area =      0.500(Ac.)
Runoff from this stream =      1.611(CFS)
Time of concentration =    7.73 min.
Rainfall intensity =     3.623(In/Hr)
Summary of stream data:

Stream   Flow rate      TC            Rainfall Intensity
 No.       (CFS)       (min)                 (In/Hr)


1        1.690      7.60                 3.652
2        1.611      7.73                 3.623
Largest stream flow has longer or shorter time of concentration
Qp =      1.690 + sum of
          Qa          Tb/Ta
           1.611 *    0.984 =      1.585
Qp =      3.276

Total of 2 streams to confluence:
Flow rates before confluence point:
       1.690       1.611
Area of streams before confluence:
        0.520        0.500
Results of confluence:
Total flow rate =      3.276(CFS)
Time of concentration =     7.604 min.
Effective stream area after confluence =      1.020(Ac.)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      315.000 to Point/Station      313.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
------------------------------------------------------------------------------
```

```
Upstream point/station elevation =  1170.000(Ft.)
Downstream point/station elevation =  1145.000(Ft.)
Pipe length  =   121.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =     3.276(CFS)
Nearest computed pipe diameter  =      9.00(In.)
Calculated individual pipe flow  =     3.276(CFS)
Normal flow depth in pipe =    4.15(In.)
Flow top width inside pipe =    8.97(In.)
Critical depth could not be calculated.
Pipe flow velocity =     16.43(Ft/s)
Travel time through pipe =    0.12 min.
Time of concentration (TC) =     7.73 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      313.000 to Point/Station      313.000
**** CONFLUENCE OF MAIN STREAMS ****
______________________________________________________________________________
The following data inside Main Stream is listed:
In Main Stream number: 2
Stream flow area =      1.020(Ac.)
Runoff from this stream =      3.276(CFS)
Time of concentration =    7.73 min.
Rainfall intensity =     3.623(In/Hr)
Summary of stream data:

Stream   Flow rate      TC            Rainfall Intensity
 No.       (CFS)       (min)                 (In/Hr)


1      173.796     14.13               2.679
2        3.276      7.73               3.623
Largest stream flow has longer time of concentration
Qp =    173.796 + sum of
          Qb         Ia/Ib
           3.276 *    0.740 =      2.423
Qp =    176.218

Total of 2 main streams to confluence:
Flow rates before confluence point:
     173.796       3.276
Area of streams before confluence:
       74.470        1.020


Results of confluence:
Total flow rate =    176.218(CFS)
Time of concentration =    14.126 min.
Effective stream area after confluence  =     75.490(Ac.)
End of computations, total study area =           75.49 (Ac.)
The following figures may
be used for a unit hydrograph study of the same area.

Area averaged pervious area fraction(Ap) = 0.489
Area averaged RI index number =  69.7
```

```
                Riverside County Rational Hydrology Program

CIVILCADD/CIVILDESIGN Engineering Software,(c) 1989 - 2004 Version 7.0
        Rational Hydrology Study        Date: 04/02/25  File:pro4100.out
------------------------------------------------------------------------
 *********   Hydrology Study Control Information **********

 English (in-lb) Units used in input data file

------------------------------------------------------------------------


Program License Serial Number 5006

------------------------------------------------------------------------
Rational Method Hydrology Program based on
Riverside County Flood Control & Water Conservation District
1978 hydrology manual

Storm event (year) =  100.00 Antecedent Moisture Condition = 2

2 year, 1 hour precipitation =  0.500(In.)
100 year, 1 hour precipitation =  1.300(In.)

Storm event year = 100.0
Calculated rainfall intensity data:
1 hour intensity =  1.300(In/Hr)
Slope of intensity duration curve = 0.5000




++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      402.000 to Point/Station      403.000
**** INITIAL AREA EVALUATION ****
____________________________________________________________________________
Initial area flow distance =   678.000(Ft.)
Top (of initial area) elevation =  1348.000(Ft.)
Bottom (of initial area) elevation =  1312.000(Ft.)
Difference in elevation =    36.000(Ft.)
Slope =    0.05310  s(percent)=       5.31
TC = k(0.530)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =   12.935 min.
Rainfall intensity =      2.800(In/Hr) for a   100.0 year storm
UNDEVELOPED (poor cover) subarea
Runoff Coefficient = 0.837
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  86.30
Pervious area fraction =  1.000; Impervious fraction =  0.000
Initial subarea runoff =      2.015(CFS)
Total initial stream area =        0.860(Ac.)
Pervious area fraction = 1.000


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      403.000 to Point/Station      404.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
____________________________________________________________________________
Upstream point/station elevation =  1312.000(Ft.)
Downstream point/station elevation =  1304.000(Ft.)
Pipe length  =   124.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =     2.015(CFS)
Nearest computed pipe diameter  =      9.00(In.)
Calculated individual pipe flow  =     2.015(CFS)
Normal flow depth in pipe =    4.39(In.)
Flow top width inside pipe =    9.00(In.)
Critical Depth =    7.73(In.)
Pipe flow velocity =      9.41(Ft/s)
Travel time through pipe =    0.22 min.
Time of concentration (TC) =    13.15 min.
End of computations, total study area =            0.86 (Ac.)
The following figures may
be used for a unit hydrograph study of the same area.

Area averaged pervious area fraction(Ap) = 1.000
Area averaged RI index number =  86.3
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                Riverside County Rational Hydrology Program

CIVILCADD/CIVILDESIGN Engineering Software,(c) 1989 - 2004 Version 7.0
        Rational Hydrology Study        Date: 08/26/25  File:pro5100.out
------------------------------------------------------------------------
 *********   Hydrology Study Control Information **********

 English (in-lb) Units used in input data file

------------------------------------------------------------------------


Program License Serial Number 5006

------------------------------------------------------------------------
Rational Method Hydrology Program based on
Riverside County Flood Control & Water Conservation District
1978 hydrology manual

Storm event (year) =  100.00 Antecedent Moisture Condition = 2

2 year, 1 hour precipitation =  0.500(In.)
100 year, 1 hour precipitation =  1.300(In.)

Storm event year = 100.0
Calculated rainfall intensity data:
1 hour intensity =  1.300(In/Hr)
Slope of intensity duration curve = 0.5000




++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       10.000 to Point/Station      408.000
**** INITIAL AREA EVALUATION ****
____________________________________________________________________________
Initial area flow distance =   462.000(Ft.)
Top (of initial area) elevation =  1288.000(Ft.)
Bottom (of initial area) elevation =  1246.500(Ft.)
Difference in elevation =    41.500(Ft.)
Slope =    0.08983  s(percent)=       8.98
TC = k(0.940)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =   17.713 min.
Rainfall intensity =      2.393(In/Hr) for a   100.0 year storm
UNDEVELOPED (good cover) subarea
Runoff Coefficient = 0.756
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  74.60
Pervious area fraction =  1.000; Impervious fraction =  0.000
Initial subarea runoff =      3.258(CFS)
Total initial stream area =        1.800(Ac.)
Pervious area fraction = 1.000


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      408.000 to Point/Station      409.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
____________________________________________________________________________
Upstream point/station elevation =  1246.500(Ft.)
Downstream point/station elevation =  1234.000(Ft.)
Pipe length  =   125.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =     3.258(CFS)
Nearest computed pipe diameter  =      9.00(In.)
Calculated individual pipe flow  =     3.258(CFS)
Normal flow depth in pipe =    5.14(In.)
Flow top width inside pipe =    8.91(In.)
Critical depth could not be calculated.
Pipe flow velocity =     12.49(Ft/s)
Travel time through pipe =    0.17 min.
Time of concentration (TC) =    17.88 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      409.000 to Point/Station      409.000
**** CONFLUENCE OF MINOR STREAMS ****
____________________________________________________________________________
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```
Along Main Stream number: 1 in normal stream number 1
Stream flow area =      1.800(Ac.)
Runoff from this stream =      3.258(CFS)
Time of concentration =   17.88 min.
Rainfall intensity =     2.381(In/Hr)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      410.000 to Point/Station      411.000
**** INITIAL AREA EVALUATION ****
______________________________________________________________________________
Initial area flow distance =  1000.000(Ft.)
Top (of initial area) elevation =  1280.000(Ft.)
Bottom (of initial area) elevation =  1242.000(Ft.)
Difference in elevation =    38.000(Ft.)
Slope =    0.03800  s(percent)=       3.80
TC = k(0.940)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =   28.653 min.
Rainfall intensity =      1.881(In/Hr) for a   100.0 year storm
UNDEVELOPED (good cover) subarea
Runoff Coefficient = 0.725
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  74.60
Pervious area fraction =  1.000; Impervious fraction =  0.000
Initial subarea runoff =      9.138(CFS)
Total initial stream area =        6.700(Ac.)
Pervious area fraction = 1.000


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Process from Point/Station      411.000 to Point/Station      409.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
______________________________________________________________________________
Upstream point/station elevation =  1242.000(Ft.)
Downstream point/station elevation =  1237.000(Ft.)
Pipe length  =    48.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =     9.138(CFS)
Nearest computed pipe diameter  =     12.00(In.)
Calculated individual pipe flow  =     9.138(CFS)
Normal flow depth in pipe =    8.07(In.)
Flow top width inside pipe =   11.26(In.)
Critical depth could not be calculated.
Pipe flow velocity =     16.24(Ft/s)
Travel time through pipe =    0.05 min.
Time of concentration (TC) =    28.70 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      409.000 to Point/Station      409.000
**** CONFLUENCE OF MINOR STREAMS ****
______________________________________________________________________________
Along Main Stream number: 1 in normal stream number 2
Stream flow area =      6.700(Ac.)
Runoff from this stream =      9.138(CFS)
Time of concentration =   28.70 min.
Rainfall intensity =     1.880(In/Hr)
Summary of stream data:

Stream   Flow rate      TC            Rainfall Intensity
 No.       (CFS)       (min)                 (In/Hr)


1        3.258     17.88                2.381
2        9.138     28.70                1.880
Largest stream flow has longer time of concentration
Qp =      9.138 + sum of
          Qb         Ia/Ib
           3.258 *    0.789 =      2.571
Qp =     11.710

Total of 2 streams to confluence:
Flow rates before confluence point:
       3.258       9.138
Area of streams before confluence:
        1.800        6.700
Results of confluence:
Total flow rate =     11.710(CFS)
Time of concentration =    28.702 min.
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Effective stream area after confluence =      8.500(Ac.)


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Process from Point/Station      409.000 to Point/Station      409.500
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
______________________________________________________________________________
Upstream point/station elevation =  1237.000(Ft.)
Downstream point/station elevation =  1236.000(Ft.)
Pipe length  =    71.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =    11.710(CFS)
Nearest computed pipe diameter  =     18.00(In.)
Calculated individual pipe flow  =    11.710(CFS)
Normal flow depth in pipe =   13.85(In.)
Flow top width inside pipe =   15.16(In.)
Critical Depth =   15.62(In.)
Pipe flow velocity =      8.02(Ft/s)
Travel time through pipe =    0.15 min.
Time of concentration (TC) =    28.85 min.


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Process from Point/Station      409.500 to Point/Station      409.500
**** CONFLUENCE OF MINOR STREAMS ****
______________________________________________________________________________
Along Main Stream number: 1 in normal stream number 1
Stream flow area =      8.500(Ac.)
Runoff from this stream =     11.710(CFS)
Time of concentration =   28.85 min.
Rainfall intensity =     1.875(In/Hr)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      413.000 to Point/Station      411.500
**** INITIAL AREA EVALUATION ****
______________________________________________________________________________
Initial area flow distance =  1000.000(Ft.)
Top (of initial area) elevation =  1286.000(Ft.)
Bottom (of initial area) elevation =  1240.000(Ft.)
Difference in elevation =    46.000(Ft.)
Slope =    0.04600  s(percent)=       4.60
TC = k(0.940)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =   27.579 min.
Rainfall intensity =      1.917(In/Hr) for a   100.0 year storm
UNDEVELOPED (good cover) subarea
Runoff Coefficient = 0.728
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  74.60
Pervious area fraction =  1.000; Impervious fraction =  0.000
Initial subarea runoff =      6.656(CFS)
Total initial stream area =        4.770(Ac.)
Pervious area fraction = 1.000


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      411.500 to Point/Station      409.500
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
______________________________________________________________________________
Upstream point/station elevation =  1240.000(Ft.)
Downstream point/station elevation =  1236.000(Ft.)
Pipe length  =    50.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =     6.656(CFS)
Nearest computed pipe diameter  =     12.00(In.)
Calculated individual pipe flow  =     6.656(CFS)
Normal flow depth in pipe =    7.13(In.)
Flow top width inside pipe =   11.79(In.)
Critical depth could not be calculated.
Pipe flow velocity =     13.71(Ft/s)
Travel time through pipe =    0.06 min.
Time of concentration (TC) =    27.64 min.


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Process from Point/Station      409.500 to Point/Station      409.500
**** CONFLUENCE OF MINOR STREAMS ****
______________________________________________________________________________
Along Main Stream number: 1 in normal stream number 2
Stream flow area =      4.770(Ac.)
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Runoff from this stream =      6.656(CFS)
Time of concentration =   27.64 min.
Rainfall intensity =     1.915(In/Hr)
Summary of stream data:

Stream   Flow rate      TC            Rainfall Intensity
 No.       (CFS)       (min)                 (In/Hr)


1       11.710     28.85                 1.875
2        6.656     27.64                 1.915
Largest stream flow has longer time of concentration
Qp =     11.710 + sum of
          Qb          Ia/Ib
           6.656 *    0.979 =      6.515
Qp =     18.224

Total of 2 streams to confluence:
Flow rates before confluence point:
      11.710       6.656
Area of streams before confluence:
        8.500        4.770
Results of confluence:
Total flow rate =     18.224(CFS)
Time of concentration =    28.850 min.
Effective stream area after confluence =     13.270(Ac.)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      409.500 to Point/Station      412.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
______________________________________________________________________________
Upstream point/station elevation =  1236.000(Ft.)
Downstream point/station elevation =  1235.000(Ft.)
Pipe length  =    36.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =    18.224(CFS)
Nearest computed pipe diameter  =     21.00(In.)
Calculated individual pipe flow  =    18.224(CFS)
Normal flow depth in pipe =   12.82(In.)
Flow top width inside pipe =   20.48(In.)
Critical Depth =   18.62(In.)
Pipe flow velocity =     11.84(Ft/s)
Travel time through pipe =    0.05 min.
Time of concentration (TC) =    28.90 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      412.000 to Point/Station      412.000
**** CONFLUENCE OF MINOR STREAMS ****
______________________________________________________________________________
Along Main Stream number: 1 in normal stream number 1
Stream flow area =     13.270(Ac.)
Runoff from this stream =     18.224(CFS)
Time of concentration =   28.90 min.
Rainfall intensity =     1.873(In/Hr)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      413.000 to Point/Station      414.000
**** INITIAL AREA EVALUATION ****
______________________________________________________________________________
Initial area flow distance =   885.000(Ft.)
Top (of initial area) elevation =  1286.000(Ft.)
Bottom (of initial area) elevation =  1237.000(Ft.)
Difference in elevation =    49.000(Ft.)
Slope =    0.05537  s(percent)=       5.54
TC = k(0.940)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =   25.308 min.
Rainfall intensity =      2.002(In/Hr) for a   100.0 year storm
UNDEVELOPED (good cover) subarea
Runoff Coefficient = 0.734
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  74.60
Pervious area fraction =  1.000; Impervious fraction =  0.000
Initial subarea runoff =      2.731(CFS)
Total initial stream area =        1.860(Ac.)
Pervious area fraction = 1.000
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++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      414.000 to Point/Station      412.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
------------------------------------------------------------------------------
Upstream point/station elevation =  1237.000(Ft.)
Downstream point/station elevation =  1235.000(Ft.)
Pipe length  =    48.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =     2.731(CFS)
Nearest computed pipe diameter  =      9.00(In.)
Calculated individual pipe flow  =     2.731(CFS)
Normal flow depth in pipe =    6.14(In.)
Flow top width inside pipe =    8.38(In.)
Critical Depth =    8.49(In.)
Pipe flow velocity =      8.51(Ft/s)
Travel time through pipe =    0.09 min.
Time of concentration (TC) =    25.40 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      412.000 to Point/Station      412.000
**** CONFLUENCE OF MINOR STREAMS ****
------------------------------------------------------------------------------
Along Main Stream number: 1 in normal stream number 2
Stream flow area =      1.860(Ac.)
Runoff from this stream =      2.731(CFS)
Time of concentration =   25.40 min.
Rainfall intensity =     1.998(In/Hr)
Summary of stream data:

Stream   Flow rate      TC             Rainfall Intensity
 No.       (CFS)       (min)                  (In/Hr)


1       18.224     28.90                  1.873
2        2.731     25.40                  1.998
Largest stream flow has longer time of concentration
Qp =     18.224 + sum of
          Qb         Ia/Ib
           2.731 *    0.938 =      2.561
Qp =     20.785

Total of 2 streams to confluence:
Flow rates before confluence point:
      18.224       2.731
Area of streams before confluence:
       13.270        1.860
Results of confluence:
Total flow rate =     20.785(CFS)
Time of concentration =    28.901 min.
Effective stream area after confluence =     15.130(Ac.)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      412.000 to Point/Station      415.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
------------------------------------------------------------------------------
Upstream point/station elevation =  1235.000(Ft.)
Downstream point/station elevation =  1234.000(Ft.)
Pipe length  =   100.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =    20.785(CFS)
Nearest computed pipe diameter  =     24.00(In.)
Calculated individual pipe flow  =    20.785(CFS)
Normal flow depth in pipe =   18.12(In.)
Flow top width inside pipe =   20.65(In.)
Critical Depth =   19.61(In.)
Pipe flow velocity =      8.17(Ft/s)
Travel time through pipe =    0.20 min.
Time of concentration (TC) =    29.10 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      415.000 to Point/Station      415.000
**** CONFLUENCE OF MINOR STREAMS ****
------------------------------------------------------------------------------
Along Main Stream number: 1 in normal stream number 1
Stream flow area =     15.130(Ac.)
Runoff from this stream =     20.785(CFS)
Time of concentration =   29.10 min.
Rainfall intensity =     1.867(In/Hr)
```

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++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      416.000 to Point/Station      417.000
**** INITIAL AREA EVALUATION ****
------------------------------------------------------------------------------
Initial area flow distance =   749.000(Ft.)
Top (of initial area) elevation =  1304.000(Ft.)
Bottom (of initial area) elevation =  1239.000(Ft.)
Difference in elevation =    65.000(Ft.)
Slope =    0.08678  s(percent)=       8.68
TC = k(0.940)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =   21.639 min.
Rainfall intensity =      2.165(In/Hr) for a   100.0 year storm
UNDEVELOPED (good cover) subarea
Runoff Coefficient = 0.744
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  74.60
Pervious area fraction =  1.000; Impervious fraction =  0.000
Initial subarea runoff =      8.890(CFS)
Total initial stream area =        5.520(Ac.)
Pervious area fraction = 1.000


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      417.000 to Point/Station      415.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
------------------------------------------------------------------------------
Upstream point/station elevation =  1239.000(Ft.)
Downstream point/station elevation =  1234.000(Ft.)
Pipe length  =    48.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =     8.890(CFS)
Nearest computed pipe diameter  =     12.00(In.)
Calculated individual pipe flow  =     8.890(CFS)
Normal flow depth in pipe =    7.92(In.)
Flow top width inside pipe =   11.37(In.)
Critical depth could not be calculated.
Pipe flow velocity =     16.16(Ft/s)
Travel time through pipe =    0.05 min.
Time of concentration (TC) =    21.69 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      415.000 to Point/Station      415.000
**** CONFLUENCE OF MINOR STREAMS ****
------------------------------------------------------------------------------
Along Main Stream number: 1 in normal stream number 2
Stream flow area =      5.520(Ac.)
Runoff from this stream =      8.890(CFS)
Time of concentration =   21.69 min.
Rainfall intensity =     2.162(In/Hr)
Summary of stream data:

Stream   Flow rate      TC            Rainfall Intensity
 No.       (CFS)       (min)                  (In/Hr)


1       20.785     29.10                 1.867
2        8.890     21.69                 2.162
Largest stream flow has longer time of concentration
Qp =     20.785 + sum of
          Qb         Ia/Ib
           8.890 *    0.863 =      7.674
Qp =     28.459

Total of 2 streams to confluence:
Flow rates before confluence point:
      20.785       8.890
Area of streams before confluence:
       15.130        5.520
Results of confluence:
Total flow rate =     28.459(CFS)
Time of concentration =    29.105 min.
Effective stream area after confluence =     20.650(Ac.)


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Process from Point/Station      415.000 to Point/Station      418.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
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Upstream point/station elevation =  1234.000(Ft.)
Downstream point/station elevation =  1233.000(Ft.)
Pipe length  =    99.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =    28.459(CFS)
Nearest computed pipe diameter  =     27.00(In.)
Calculated individual pipe flow  =    28.459(CFS)
Normal flow depth in pipe =   20.30(In.)
Flow top width inside pipe =   23.33(In.)
Critical Depth =   22.25(In.)
Pipe flow velocity =      8.88(Ft/s)
Travel time through pipe =    0.19 min.
Time of concentration (TC) =    29.29 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      418.000 to Point/Station      418.000
**** CONFLUENCE OF MINOR STREAMS ****
------------------------------------------------------------------------------
Along Main Stream number: 1 in normal stream number 1
Stream flow area =     20.650(Ac.)
Runoff from this stream =     28.459(CFS)
Time of concentration =   29.29 min.
Rainfall intensity =     1.861(In/Hr)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      416.000 to Point/Station      419.000
**** INITIAL AREA EVALUATION ****
------------------------------------------------------------------------------
Initial area flow distance =   736.000(Ft.)
Top (of initial area) elevation =  1304.000(Ft.)
Bottom (of initial area) elevation =  1241.500(Ft.)
Difference in elevation =    62.500(Ft.)
Slope =    0.08492  s(percent)=       8.49
TC = k(0.940)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =   21.581 min.
Rainfall intensity =      2.168(In/Hr) for a   100.0 year storm
UNDEVELOPED (good cover) subarea
Runoff Coefficient = 0.744
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  74.60
Pervious area fraction =  1.000; Impervious fraction =  0.000
Initial subarea runoff =      4.258(CFS)
Total initial stream area =        2.640(Ac.)
Pervious area fraction = 1.000


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      419.000 to Point/Station      418.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
------------------------------------------------------------------------------
Upstream point/station elevation =  1241.500(Ft.)
Downstream point/station elevation =  1233.000(Ft.)
Pipe length  =    48.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =     4.258(CFS)
Nearest computed pipe diameter  =      9.00(In.)
Calculated individual pipe flow  =     4.258(CFS)
Normal flow depth in pipe =    5.09(In.)
Flow top width inside pipe =    8.92(In.)
Critical depth could not be calculated.
Pipe flow velocity =     16.55(Ft/s)
Travel time through pipe =    0.05 min.
Time of concentration (TC) =    21.63 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      418.000 to Point/Station      418.000
**** CONFLUENCE OF MINOR STREAMS ****
------------------------------------------------------------------------------
Along Main Stream number: 1 in normal stream number 2
Stream flow area =      2.640(Ac.)
Runoff from this stream =      4.258(CFS)
Time of concentration =   21.63 min.
Rainfall intensity =     2.165(In/Hr)
Summary of stream data:

Stream   Flow rate      TC            Rainfall Intensity
```

```
 No.       (CFS)       (min)                 (In/Hr)


1       28.459     29.29                 1.861
2        4.258     21.63                 2.165
Largest stream flow has longer time of concentration
Qp =     28.459 + sum of
          Qb         Ia/Ib
           4.258 *    0.859 =      3.659
Qp =     32.119

Total of 2 streams to confluence:
Flow rates before confluence point:
      28.459       4.258
Area of streams before confluence:
       20.650        2.640
Results of confluence:
Total flow rate =     32.119(CFS)
Time of concentration =    29.290 min.
Effective stream area after confluence =     23.290(Ac.)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      418.000 to Point/Station      420.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
______________________________________________________________________________
Upstream point/station elevation =  1233.000(Ft.)
Downstream point/station elevation =  1230.000(Ft.)
Pipe length  =   299.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =    32.119(CFS)
Nearest computed pipe diameter  =     27.00(In.)
Calculated individual pipe flow  =    32.119(CFS)
Normal flow depth in pipe =   23.11(In.)
Flow top width inside pipe =   18.96(In.)
Critical Depth =   23.39(In.)
Pipe flow velocity =      8.87(Ft/s)
Travel time through pipe =    0.56 min.
Time of concentration (TC) =    29.85 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      420.000 to Point/Station      420.000
**** CONFLUENCE OF MINOR STREAMS ****
______________________________________________________________________________
Along Main Stream number: 1 in normal stream number 1
Stream flow area =     23.290(Ac.)
Runoff from this stream =     32.119(CFS)
Time of concentration =   29.85 min.
Rainfall intensity =     1.843(In/Hr)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      421.000 to Point/Station      422.000
**** INITIAL AREA EVALUATION ****
______________________________________________________________________________
Initial area flow distance =   978.000(Ft.)
Top (of initial area) elevation =  1295.000(Ft.)
Bottom (of initial area) elevation =  1247.000(Ft.)
Difference in elevation =    48.000(Ft.)
Slope =    0.04908  s(percent)=       4.91
TC = k(0.940)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =   26.983 min.
Rainfall intensity =      1.939(In/Hr) for a   100.0 year storm
UNDEVELOPED (good cover) subarea
Runoff Coefficient = 0.729
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  74.60
Pervious area fraction =  1.000; Impervious fraction =  0.000
Initial subarea runoff =     10.051(CFS)
Total initial stream area =        7.110(Ac.)
Pervious area fraction = 1.000


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Process from Point/Station      422.000 to Point/Station      420.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
______________________________________________________________________________
Upstream point/station elevation =  1247.000(Ft.)
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Downstream point/station elevation =  1230.000(Ft.)
Pipe length  =    48.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =    10.051(CFS)
Nearest computed pipe diameter  =     12.00(In.)
Calculated individual pipe flow  =    10.051(CFS)
Normal flow depth in pipe =    5.81(In.)
Flow top width inside pipe =   11.99(In.)
Critical depth could not be calculated.
Pipe flow velocity =     26.63(Ft/s)
Travel time through pipe =    0.03 min.
Time of concentration (TC) =    27.01 min.


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Process from Point/Station      420.000 to Point/Station      420.000
**** CONFLUENCE OF MINOR STREAMS ****
______________________________________________________________________________
Along Main Stream number: 1 in normal stream number 2
Stream flow area =      7.110(Ac.)
Runoff from this stream =     10.051(CFS)
Time of concentration =   27.01 min.
Rainfall intensity =     1.937(In/Hr)
Summary of stream data:

Stream   Flow rate      TC            Rainfall Intensity
 No.       (CFS)       (min)                 (In/Hr)


1       32.119     29.85                 1.843
2       10.051     27.01                 1.937
Largest stream flow has longer time of concentration
Qp =     32.119 + sum of
          Qb         Ia/Ib
          10.051 *    0.951 =      9.561
Qp =     41.680

Total of 2 streams to confluence:
Flow rates before confluence point:
      32.119      10.051
Area of streams before confluence:
       23.290        7.110
Results of confluence:
Total flow rate =     41.680(CFS)
Time of concentration =    29.852 min.
Effective stream area after confluence =     30.400(Ac.)


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Process from Point/Station      420.000 to Point/Station      423.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
______________________________________________________________________________
Upstream point/station elevation =  1230.000(Ft.)
Downstream point/station elevation =  1227.000(Ft.)
Pipe length  =    84.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =    41.680(CFS)
Nearest computed pipe diameter  =     24.00(In.)
Calculated individual pipe flow  =    41.680(CFS)
Normal flow depth in pipe =   19.15(In.)
Flow top width inside pipe =   19.28(In.)
Critical depth could not be calculated.
Pipe flow velocity =     15.51(Ft/s)
Travel time through pipe =    0.09 min.
Time of concentration (TC) =    29.94 min.


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Process from Point/Station      423.000 to Point/Station      423.000
**** CONFLUENCE OF MINOR STREAMS ****
______________________________________________________________________________
Along Main Stream number: 1 in normal stream number 1
Stream flow area =     30.400(Ac.)
Runoff from this stream =     41.680(CFS)
Time of concentration =   29.94 min.
Rainfall intensity =     1.840(In/Hr)


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Process from Point/Station      424.000 to Point/Station      425.000
**** INITIAL AREA EVALUATION ****
______________________________________________________________________________
Initial area flow distance =   823.000(Ft.)
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Top (of initial area) elevation =  1280.000(Ft.)
Bottom (of initial area) elevation =  1247.000(Ft.)
Difference in elevation =    33.000(Ft.)
Slope =    0.04010  s(percent)=       4.01
TC = k(0.940)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =   26.222 min.
Rainfall intensity =      1.966(In/Hr) for a   100.0 year storm
UNDEVELOPED (good cover) subarea
Runoff Coefficient = 0.731
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  74.60
Pervious area fraction =  1.000; Impervious fraction =  0.000
Initial subarea runoff =      2.027(CFS)
Total initial stream area =        1.410(Ac.)
Pervious area fraction = 1.000


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Process from Point/Station      425.000 to Point/Station      423.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
______________________________________________________________________________
Upstream point/station elevation =  1247.000(Ft.)
Downstream point/station elevation =  1227.000(Ft.)
Pipe length  =    54.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =     2.027(CFS)
Nearest computed pipe diameter  =      6.00(In.)
Calculated individual pipe flow  =     2.027(CFS)
Normal flow depth in pipe =    3.33(In.)
Flow top width inside pipe =    5.96(In.)
Critical depth could not be calculated.
Pipe flow velocity =     18.13(Ft/s)
Travel time through pipe =    0.05 min.
Time of concentration (TC) =    26.27 min.


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Process from Point/Station      423.000 to Point/Station      423.000
**** CONFLUENCE OF MINOR STREAMS ****
______________________________________________________________________________
Along Main Stream number: 1 in normal stream number 2
Stream flow area =      1.410(Ac.)
Runoff from this stream =      2.027(CFS)
Time of concentration =   26.27 min.
Rainfall intensity =     1.965(In/Hr)
Summary of stream data:

Stream   Flow rate      TC            Rainfall Intensity
 No.       (CFS)       (min)                 (In/Hr)


1       41.680     29.94                 1.840
2        2.027     26.27                 1.965
Largest stream flow has longer time of concentration
Qp =     41.680 + sum of
          Qb         Ia/Ib
           2.027 *    0.937 =      1.899
Qp =     43.579

Total of 2 streams to confluence:
Flow rates before confluence point:
      41.680       2.027
Area of streams before confluence:
       30.400        1.410
Results of confluence:
Total flow rate =     43.579(CFS)
Time of concentration =    29.943 min.
Effective stream area after confluence =     31.810(Ac.)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      423.000 to Point/Station      426.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
______________________________________________________________________________
Upstream point/station elevation =  1227.000(Ft.)
Downstream point/station elevation =  1220.000(Ft.)
Pipe length  =   164.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =    43.579(CFS)
Nearest computed pipe diameter  =     24.00(In.)
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Calculated individual pipe flow  =    43.579(CFS)
Normal flow depth in pipe =   18.35(In.)
Flow top width inside pipe =   20.36(In.)
Critical depth could not be calculated.
Pipe flow velocity =     16.90(Ft/s)
Travel time through pipe =    0.16 min.
Time of concentration (TC) =    30.10 min.


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Process from Point/Station      426.000 to Point/Station      426.000
**** CONFLUENCE OF MAIN STREAMS ****
______________________________________________________________________________
The following data inside Main Stream is listed:
In Main Stream number: 1
Stream flow area =     31.810(Ac.)
Runoff from this stream =     43.579(CFS)
Time of concentration =   30.10 min.
Rainfall intensity =     1.835(In/Hr)
Program is now starting with Main Stream No. 2


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Process from Point/Station      427.000 to Point/Station      428.000
**** INITIAL AREA EVALUATION ****
______________________________________________________________________________
Initial area flow distance =   429.000(Ft.)
Top (of initial area) elevation =  1408.000(Ft.)
Bottom (of initial area) elevation =  1302.000(Ft.)
Difference in elevation =   106.000(Ft.)
Slope =    0.24709  s(percent)=      24.71
TC = k(0.940)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =   14.046 min.
Rainfall intensity =      2.687(In/Hr) for a   100.0 year storm
UNDEVELOPED (good cover) subarea
Runoff Coefficient = 0.770
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  74.60
Pervious area fraction =  1.000; Impervious fraction =  0.000
Initial subarea runoff =     19.342(CFS)
Total initial stream area =        9.350(Ac.)
Pervious area fraction = 1.000


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      428.000 to Point/Station      429.000
**** NATURAL CHANNEL TIME + SUBAREA FLOW ADDITION ****
______________________________________________________________________________
Top of natural channel elevation =   1302.000(Ft.)
End of natural channel elevation =   1253.000(Ft.)
Length of natural channel  =   694.000(Ft.)
Estimated mean flow rate at midpoint of channel =     30.399(CFS)

Natural valley channel type used
L.A. County flood control district formula for channel velocity:
 Velocity(ft/s) = (7 + 8(q(English Units)^.352)(slope^0.5)
Velocity using mean channel flow =   8.93(Ft/s)

Correction to map slope used on extremely rugged channels with
drops and waterfalls (Plate D-6.2)
       Normal channel slope =  0.0706
Corrected/adjusted channel slope =  0.0706
Travel time =    1.30 min.     TC =   15.34  min.


 Adding area flow to channel
UNDEVELOPED (poor cover) subarea
Runoff Coefficient = 0.832
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  86.30
Pervious area fraction =  1.000; Impervious fraction =  0.000
Rainfall intensity =      2.571(In/Hr) for a   100.0 year storm
Subarea runoff =     22.854(CFS) for     10.690(Ac.)
Total runoff =     42.196(CFS)       Total area =      20.040(Ac.)
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++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      429.000 to Point/Station      429.000
**** CONFLUENCE OF MINOR STREAMS ****
____________________________________________________________________________
Along Main Stream number: 2 in normal stream number 1
Stream flow area =     20.040(Ac.)
Runoff from this stream =     42.196(CFS)
Time of concentration =   15.34 min.
Rainfall intensity =     2.571(In/Hr)


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Process from Point/Station      429.500 to Point/Station      429.500
**** USER DEFINED FLOW INFORMATION AT A POINT ****
____________________________________________________________________________
Rainfall intensity =      2.277(In/Hr) for a   100.0 year storm
UNDEVELOPED (good cover) subarea
Runoff Coefficient = 0.750
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  74.60
Pervious area fraction =  1.000; Impervious fraction =  0.000
User specified values are as follows:
TC =  19.56 min.  Rain intensity =       2.28(In/Hr)
Total area =         2.50(Ac.)  Total runoff =      3.41(CFS)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      429.500 to Point/Station      429.000
**** NATURAL CHANNEL TIME + SUBAREA FLOW ADDITION ****
____________________________________________________________________________
Top of natural channel elevation =   1260.000(Ft.)
End of natural channel elevation =   1253.000(Ft.)
Length of natural channel  =   123.000(Ft.)
Estimated mean flow rate at midpoint of channel =      3.410(CFS)

Natural valley channel type used
L.A. County flood control district formula for channel velocity:
 Velocity(ft/s) = (7 + 8(q(English Units)^.352)(slope^0.5)
Velocity using mean channel flow =   4.61(Ft/s)

Correction to map slope used on extremely rugged channels with
drops and waterfalls (Plate D-6.2)
       Normal channel slope =  0.0569
Corrected/adjusted channel slope =  0.0569
Travel time =    0.44 min.     TC =   20.00  min.


 Adding area flow to channel
UNDEVELOPED (good cover) subarea
Runoff Coefficient = 0.749
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  74.60
Pervious area fraction =  1.000; Impervious fraction =  0.000
Rainfall intensity =      2.251(In/Hr) for a   100.0 year storm
Subarea runoff =      0.000(CFS) for      0.000(Ac.)
Total runoff =      3.410(CFS)       Total area =       2.500(Ac.)


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Process from Point/Station      429.000 to Point/Station      429.000
**** CONFLUENCE OF MINOR STREAMS ****
____________________________________________________________________________
Along Main Stream number: 2 in normal stream number 2
Stream flow area =      2.500(Ac.)
Runoff from this stream =      3.410(CFS)
Time of concentration =   20.00 min.
Rainfall intensity =     2.251(In/Hr)
Summary of stream data:

Stream   Flow rate      TC            Rainfall Intensity
 No.       (CFS)       (min)                 (In/Hr)


1       42.196     15.34                2.571
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```
2        3.410     20.00                 2.251
Largest stream flow has longer or shorter time of concentration
Qp =     42.196 + sum of
          Qa          Tb/Ta
           3.410 *    0.767 =      2.615
Qp =     44.811

Total of 2 streams to confluence:
Flow rates before confluence point:
      42.196       3.410
Area of streams before confluence:
       20.040        2.500
Results of confluence:
Total flow rate =     44.811(CFS)
Time of concentration =    15.341 min.
Effective stream area after confluence =     22.540(Ac.)


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Process from Point/Station      429.000 to Point/Station      430.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
______________________________________________________________________________
Upstream point/station elevation =  1253.000(Ft.)
Downstream point/station elevation =  1249.000(Ft.)
Pipe length  =    41.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =    44.811(CFS)
Nearest computed pipe diameter  =     21.00(In.)
Calculated individual pipe flow  =    44.811(CFS)
Normal flow depth in pipe =   15.66(In.)
Flow top width inside pipe =   18.29(In.)
Critical depth could not be calculated.
Pipe flow velocity =     23.30(Ft/s)
Travel time through pipe =    0.03 min.
Time of concentration (TC) =    15.37 min.


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Process from Point/Station      430.000 to Point/Station      430.000
**** CONFLUENCE OF MINOR STREAMS ****
______________________________________________________________________________
Along Main Stream number: 2 in normal stream number 1
Stream flow area =     22.540(Ac.)
Runoff from this stream =     44.811(CFS)
Time of concentration =   15.37 min.
Rainfall intensity =     2.569(In/Hr)


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Process from Point/Station      431.000 to Point/Station      431.000
**** USER DEFINED FLOW INFORMATION AT A POINT ****
______________________________________________________________________________
Rainfall intensity =      2.372(In/Hr) for a   100.0 year storm
SINGLE FAMILY (1/4 Acre Lot)
Runoff Coefficient = 0.811
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  69.60
Pervious area fraction =  0.500; Impervious fraction =  0.500
User specified values are as follows:
TC =  18.02 min.  Rain intensity =       2.37(In/Hr)
Total area =        30.70(Ac.)  Total runoff =     64.32(CFS)


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Process from Point/Station      431.000 to Point/Station      430.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
______________________________________________________________________________
Upstream point/station elevation =  1250.000(Ft.)
Downstream point/station elevation =  1249.000(Ft.)
Pipe length  =    45.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =    64.320(CFS)
Nearest computed pipe diameter  =     30.00(In.)
Calculated individual pipe flow  =    64.320(CFS)
Normal flow depth in pipe =   26.34(In.)
Flow top width inside pipe =   19.63(In.)
Critical depth could not be calculated.
Pipe flow velocity =     14.10(Ft/s)
Travel time through pipe =    0.05 min.
Time of concentration (TC) =    18.07 min.
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Process from Point/Station      430.000 to Point/Station      430.000
**** CONFLUENCE OF MINOR STREAMS ****
____________________________________________________________________________
Along Main Stream number: 2 in normal stream number 2
Stream flow area =     30.700(Ac.)
Runoff from this stream =     64.320(CFS)
Time of concentration =   18.07 min.
Rainfall intensity =     2.369(In/Hr)
Summary of stream data:

Stream   Flow rate      TC            Rainfall Intensity
 No.       (CFS)       (min)                 (In/Hr)


1       44.811     15.37                2.569
2       64.320     18.07                2.369
Largest stream flow has longer time of concentration
Qp =     64.320 + sum of
          Qb         Ia/Ib
          44.811 *    0.922 =     41.324
Qp =    105.644

Total of 2 streams to confluence:
Flow rates before confluence point:
      44.811      64.320
Area of streams before confluence:
       22.540       30.700
Results of confluence:
Total flow rate =    105.644(CFS)
Time of concentration =    18.073 min.
Effective stream area after confluence =     53.240(Ac.)


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Process from Point/Station      430.000 to Point/Station      426.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
____________________________________________________________________________
Upstream point/station elevation =  1249.000(Ft.)
Downstream point/station elevation =  1220.000(Ft.)
Pipe length  =   193.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =   105.644(CFS)
Nearest computed pipe diameter  =     27.00(In.)
Calculated individual pipe flow  =   105.644(CFS)
Normal flow depth in pipe =   19.64(In.)
Flow top width inside pipe =   24.05(In.)
Critical depth could not be calculated.
Pipe flow velocity =     34.06(Ft/s)
Travel time through pipe =    0.09 min.
Time of concentration (TC) =    18.17 min.


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Process from Point/Station      426.000 to Point/Station      426.000
**** CONFLUENCE OF MAIN STREAMS ****
____________________________________________________________________________
The following data inside Main Stream is listed:
In Main Stream number: 2
Stream flow area =     53.240(Ac.)
Runoff from this stream =    105.644(CFS)
Time of concentration =   18.17 min.
Rainfall intensity =     2.362(In/Hr)
Summary of stream data:

Stream   Flow rate      TC            Rainfall Intensity
 No.       (CFS)       (min)                 (In/Hr)


1       43.579     30.10                1.835
2      105.644     18.17                2.362
Largest stream flow has longer or shorter time of concentration
Qp =    105.644 + sum of
          Qa          Tb/Ta
          43.579 *    0.603 =     26.299
Qp =    131.943

Total of 2 main streams to confluence:
Flow rates before confluence point:
      43.579     105.644
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```
Area of streams before confluence:
       31.810       53.240


Results of confluence:
Total flow rate =    131.943(CFS)
Time of concentration =    18.168 min.
Effective stream area after confluence  =     85.050(Ac.)
End of computations, total study area =           85.05 (Ac.)
The following figures may
be used for a unit hydrograph study of the same area.

Area averaged pervious area fraction(Ap) = 0.820
Area averaged RI index number =  74.3
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                Riverside County Rational Hydrology Program

CIVILCADD/CIVILDESIGN Engineering Software,(c) 1989 - 2004 Version 7.0
        Rational Hydrology Study        Date: 04/02/25  File:pro6100.out
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 *********   Hydrology Study Control Information **********

 English (in-lb) Units used in input data file

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Program License Serial Number 5006

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Rational Method Hydrology Program based on
Riverside County Flood Control & Water Conservation District
1978 hydrology manual

Storm event (year) =  100.00 Antecedent Moisture Condition = 2

2 year, 1 hour precipitation =  0.500(In.)
100 year, 1 hour precipitation =  1.300(In.)

Storm event year = 100.0
Calculated rainfall intensity data:
1 hour intensity =  1.300(In/Hr)
Slope of intensity duration curve = 0.5000




++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      500.000 to Point/Station      501.000
**** INITIAL AREA EVALUATION ****
____________________________________________________________________________
Initial area flow distance =   671.000(Ft.)
Top (of initial area) elevation =  1338.000(Ft.)
Bottom (of initial area) elevation =  1283.000(Ft.)
Difference in elevation =    55.000(Ft.)
Slope =    0.08197  s(percent)=       8.20
TC = k(0.530)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =   11.810 min.
Rainfall intensity =      2.930(In/Hr) for a   100.0 year storm
UNDEVELOPED (poor cover) subarea
Runoff Coefficient = 0.839
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.900
Decimal fraction soil group D = 0.100
RI index for soil(AMC 2)  =  86.30
Pervious area fraction =  1.000; Impervious fraction =  0.000
Initial subarea runoff =      5.583(CFS)
Total initial stream area =        2.270(Ac.)
Pervious area fraction = 1.000


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Process from Point/Station      501.000 to Point/Station      502.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
____________________________________________________________________________
Upstream point/station elevation =  1283.000(Ft.)
Downstream point/station elevation =  1275.000(Ft.)
Pipe length  =    80.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =     5.583(CFS)
Nearest computed pipe diameter  =     12.00(In.)
Calculated individual pipe flow  =     5.583(CFS)
Normal flow depth in pipe =    5.97(In.)
Flow top width inside pipe =   12.00(In.)
Critical Depth =   11.31(In.)
Pipe flow velocity =     14.32(Ft/s)
Travel time through pipe =    0.09 min.
Time of concentration (TC) =    11.90 min.
End of computations, total study area =            2.27 (Ac.)
The following figures may
be used for a unit hydrograph study of the same area.

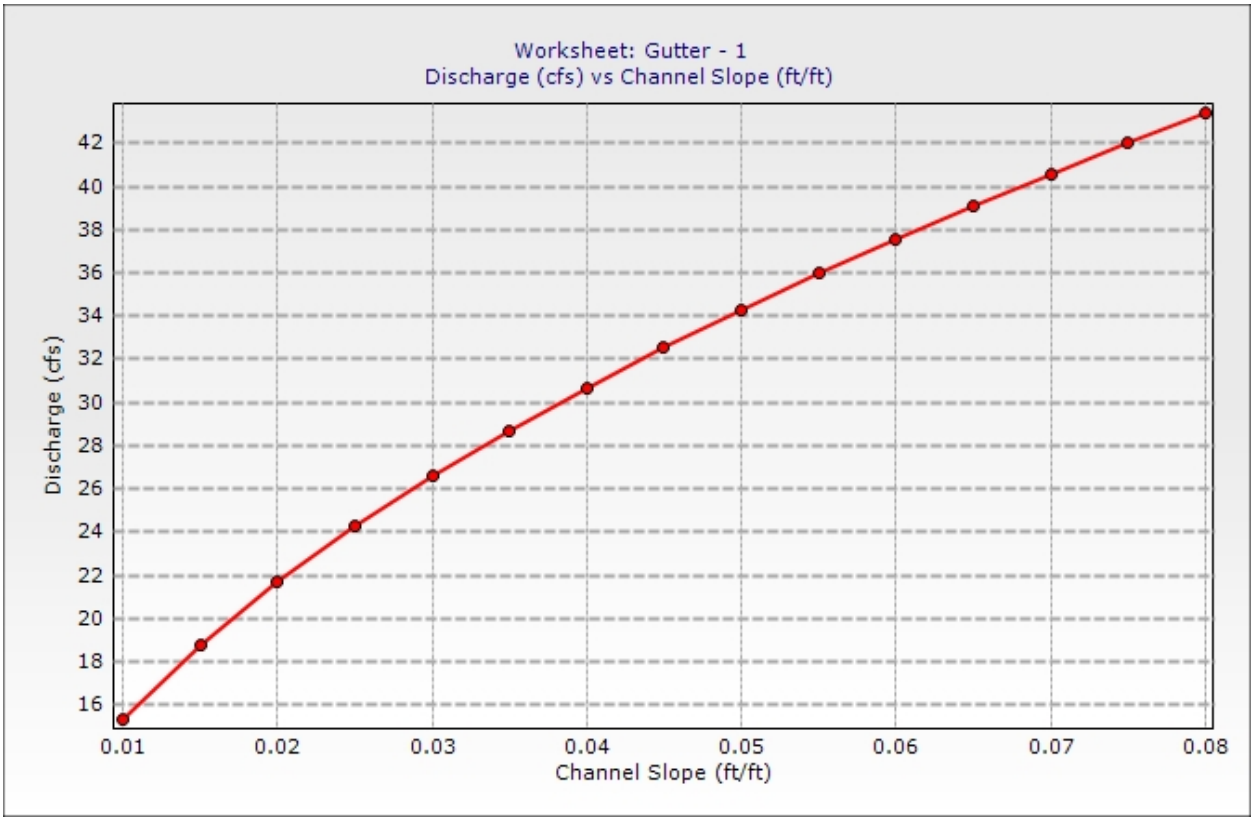
Area averaged pervious area fraction(Ap) = 1.000
Area averaged RI index number =  86.3
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Appendix E – Catch Basin and Streert Capacity Calculations

Rating Curve of On-Site Street (Curb Height)

Project Description	
Solve For	Discharge

Input Data	
Channel Slope	0.010 ft/ft
Gutter Width	2.0 ft
Gutter Cross Slope	0.080 ft/ft
Road Cross Slope	0.020 ft/ft
Spread	18.0 ft
Roughness Coefficient	0.013



U-Channel at Westerly Boundary (10 CFS Max.)

Project Description	
Friction Method	Manning Formula
Solve For	Normal Depth

Input Data	
Roughness Coefficient	0.013
Channel Slope	0.018 ft/ft
Bottom Width	6.00 ft
Discharge	10.00 cfs

Results	
Normal Depth	3.3 in
Flow Area	1.6 ft²
Wetted Perimeter	6.5 ft
Hydraulic Radius	3.0 in
Top Width	6.00 ft
Critical Depth	5.3 in
Critical Slope	0.004 ft/ft
Velocity	6.10 ft/s
Velocity Head	0.58 ft
Specific Energy	0.85 ft
Froude Number	2.055
Flow Type	Supercritical

GVF Input Data	
Downstream Depth	0.0 in
Length	0.0 ft
Number Of Steps	0

GVF Output Data	
Upstream Depth	0.0 in
Profile Description	N/A
Profile Headloss	0.00 ft
Downstream Velocity	Infinity ft/s
Upstream Velocity	Infinity ft/s
Normal Depth	3.3 in
Critical Depth	5.3 in
Channel Slope	0.018 ft/ft
Critical Slope	0.004 ft/ft

Drop Inlet on Westerly Boundary in Sag (10 CFS Max.)

Project Description	
Solve For	Spread

Input Data	
Discharge	10.00 cfs
Left Side Slope	0.001 H:V
Right Side Slope	0.001 H:V
Bottom Width	2.00 ft
Grate Width	2.00 ft
Grate Length	2.0 ft
Local Depression	0.0 in
Local Depression Width	0.0 in
Grate Type	P-50 mm (P-1 -7/8")
Clogging	0.0 %

Results	
Spread	2.0 ft
Depth	6.7 in
Wetted Perimeter	3.1 ft
Top Width	2.00 ft
Open Grate Area	3.6 ft²
Active Grate Weir Length	8.0 ft

Drop Inlet on Westerly Boundary on Grade (10 CFS Max.)

Project Description	
Solve For	Efficiency

Input Data	
Roughness Coefficient	0.013
Slope	0.018 ft/ft
Left Side Slope	0.001 H:V
Right Side Slope	0.001 H:V
Bottom Width	2.00 ft
Discharge	10.00 cfs
Grate Width	2.00 ft
Grate Length	2.0 ft
Grate Type	P-50 mm (P-1 -7/8")
Clogging	0.0 %

Options	
Grate Flow Option	Exclude None

Results	
Efficiency	100.00 %
Intercepted Flow	10.00 cfs
Bypass Flow	0.00 cfs
Flow Area	1.2 ft²
Wetted Perimeter	3.2 ft
Top Width	2.00 ft
Velocity	8.08 ft/s
Splash Over Velocity	8.13 ft/s
Frontal Flow Factor	1.000
Side Flow Factor	0.999
Grate Flow Ratio	1.000
Active Grate Length	2.0 ft
Critical Depth	11.0 in
Critical Slope	0.006 ft/ft
Froude Number	1.812
Flow Type	Supercritical
Specific Energy	1.63 ft
Velocity Head	1.01 ft
Depth	7.4 in

V-Ditch at Node 11

Project Description	
Friction Method	Manning Formula
Solve For	Normal Depth

Input Data	
Roughness Coefficient	0.015
Channel Slope	0.050 ft/ft
Left Side Slope	1.000 H:V
Right Side Slope	1.000 H:V
Discharge	6.71 cfs

Results	
Normal Depth	9.9 in
Flow Area	0.7 ft²
Wetted Perimeter	2.3 ft
Hydraulic Radius	3.5 in
Top Width	1.66 ft
Critical Depth	14.7 in
Critical Slope	0.006 ft/ft
Velocity	9.77 ft/s
Velocity Head	1.48 ft
Specific Energy	2.31 ft
Froude Number	2.676
Flow Type	Supercritical

GVF Input Data	
Downstream Depth	0.0 in
Length	0.0 ft
Number Of Steps	0

GVF Output Data	
Upstream Depth	0.0 in
Profile Description	N/A
Profile Headloss	0.00 ft
Downstream Velocity	Infinity ft/s
Upstream Velocity	Infinity ft/s
Normal Depth	9.9 in
Critical Depth	14.7 in
Channel Slope	0.050 ft/ft
Critical Slope	0.006 ft/ft

Drop Inlet at V-Ditch Node 11

Project Description	
Solve For	Spread

Input Data	
Discharge	6.71 cfs
Left Side Slope	1.000 H:V
Right Side Slope	1.000 H:V
Bottom Width	1.50 ft
Grate Width	1.50 ft
Grate Length	1.5 ft
Local Depression	0.0 in
Local Depression Width	0.0 in
Grate Type	P-50 mm (P-1 -7/8")
Clogging	0.0 %

Results	
Spread	2.5 ft
Depth	6.2 in
Wetted Perimeter	3.0 ft
Top Width	2.54 ft
Open Grate Area	2.0 ft²
Active Grate Weir Length	6.0 ft

Sag Curb Inlet at Node 3

Project Description	
Solve For	Spread

Input Data		
Discharge	13.93	cfs
Gutter Width	2.00	ft
Gutter Cross Slope	0.080	ft/ft
Road Cross Slope	0.020	ft/ft
Curb Opening Length	21.0	ft
Opening Height	0.5	ft
Curb Throat Type	Horizontal	
Local Depression	3.0	in
Local Depression Width	48.0	in
Throat Incline Angle	90.00	degrees

Results		
Spread	18.3	ft
Depth	5.8	in
Gutter Depression	1.4	in
Total Depression	4.4	in

Sag Curb inlet at Node 8

Project Description	
Solve For	Spread

Input Data		
Discharge	19.95	cfs
Gutter Width	2.00	ft
Gutter Cross Slope	0.080	ft/ft
Road Cross Slope	0.020	ft/ft
Curb Opening Length	21.0	ft
Opening Height	0.5	ft
Curb Throat Type	Horizontal	
Local Depression	3.0	in
Local Depression Width	48.0	in
Throat Incline Angle	90.00	degrees

Results		
Spread	23.2	ft
Depth	7.0	in
Gutter Depression	1.4	in
Total Depression	4.4	in

Curb Inlet on Grade Node 109

Project Description	
Solve For	Efficiency

Input Data	
Discharge	4.06 cfs
Slope	0.045 ft/ft
Gutter Width	2.00 ft
Gutter Cross Slope	0.080 ft/ft
Road Cross Slope	0.020 ft/ft
Roughness Coefficient	0.013
Curb Opening Length	21.0 ft
Local Depression	3.0 in
Local Depression Width	48.0 in

Results	
Efficiency	96.55 %
Intercepted Flow	3.92 cfs
Bypass Flow	0.14 cfs
Spread	7.2 ft
Depth	3.2 in
Flow Area	0.6 ft²
Gutter Depression	1.4 in
Total Depression	4.4 in
Velocity	6.38 ft/s
Equivalent Cross Slope	0.088 ft/ft
Length Factor	0.846
Total Interception Length	24.8 ft

Curb Inlet on Grade Node 107

Project Description	
Solve For	Efficiency

Input Data	
Discharge	7.26 cfs
Slope	0.045 ft/ft
Gutter Width	2.00 ft
Gutter Cross Slope	0.080 ft/ft
Road Cross Slope	0.020 ft/ft
Roughness Coefficient	0.013
Curb Opening Length	21.0 ft
Local Depression	3.0 in
Local Depression Width	48.0 in

Results	
Efficiency	80.98 %
Intercepted Flow	5.88 cfs
Bypass Flow	1.38 cfs
Spread	9.6 ft
Depth	3.7 in
Flow Area	1.0 ft²
Gutter Depression	1.4 in
Total Depression	4.4 in
Velocity	7.03 ft/s
Equivalent Cross Slope	0.075 ft/ft
Length Factor	0.602
Total Interception Length	34.9 ft

Curb inlet on Grade Node 101

Project Description	
Solve For	Efficiency

Input Data	
Discharge	9.54 cfs
Slope	0.033 ft/ft
Gutter Width	2.00 ft
Gutter Cross Slope	0.080 ft/ft
Road Cross Slope	0.020 ft/ft
Roughness Coefficient	0.013
Curb Opening Length	21.0 ft
Local Depression	3.0 in
Local Depression Width	48.0 in

Results	
Efficiency	76.13 %
Intercepted Flow	7.26 cfs
Bypass Flow	2.28 cfs
Spread	11.6 ft
Depth	4.2 in
Flow Area	1.5 ft²
Gutter Depression	1.4 in
Total Depression	4.4 in
Velocity	6.54 ft/s
Equivalent Cross Slope	0.067 ft/ft
Length Factor	0.549
Total Interception Length	38.3 ft

Curb Inlet on Grade Node 104

Project Description	
Solve For	Efficiency

Input Data	
Discharge	5.79 cfs
Slope	0.033 ft/ft
Gutter Width	2.00 ft
Gutter Cross Slope	0.080 ft/ft
Road Cross Slope	0.020 ft/ft
Roughness Coefficient	0.013
Curb Opening Length	21.0 ft
Local Depression	3.0 in
Local Depression Width	48.0 in

Results	
Efficiency	90.88 %
Intercepted Flow	5.26 cfs
Bypass Flow	0.53 cfs
Spread	9.2 ft
Depth	3.7 in
Flow Area	1.0 ft²
Gutter Depression	1.4 in
Total Depression	4.4 in
Velocity	5.94 ft/s
Equivalent Cross Slope	0.076 ft/ft
Length Factor	0.736
Total Interception Length	28.5 ft

Curb Inlet on Grade Node 112

Project Description	
Solve For	Efficiency

Input Data		
Discharge	7.94 cfs	0.14cfs Bypass from Node 109
Slope	0.048 ft/ft	
Gutter Width	2.00 ft	
Gutter Cross Slope	0.080 ft/ft	
Road Cross Slope	0.020 ft/ft	
Roughness Coefficient	0.013	
Curb Opening Length	21.0 ft	
Local Depression	3.0 in	
Local Depression Width	48.0 in	

Results	
Efficiency	77.52 %
Intercepted Flow	6.15 cfs
Bypass Flow	1.79 cfs
Spread	9.8 ft
Depth	3.8 in
Flow Area	1.1 ft²
Gutter Depression	1.4 in
Total Depression	4.4 in
Velocity	7.34 ft/s
Equivalent Cross Slope	0.074 ft/ft
Length Factor	0.564
Total Interception Length	37.3 ft

Curb Inlet on Grade Node 111

Project Description	
Solve For	Efficiency

Input Data		
Discharge	8.19 cfs	1.38cfs Bypass from Node 108
Slope	0.048 ft/ft	
Gutter Width	2.00 ft	
Gutter Cross Slope	0.080 ft/ft	
Road Cross Slope	0.020 ft/ft	
Roughness Coefficient	0.013	
Curb Opening Length	21.0 ft	
Local Depression	3.0 in	
Local Depression Width	48.0 in	

Results	
Efficiency	76.57 %
Intercepted Flow	6.27 cfs
Bypass Flow	1.92 cfs
Spread	9.9 ft
Depth	3.8 in
Flow Area	1.1 ft²
Gutter Depression	1.4 in
Total Depression	4.4 in
Velocity	7.38 ft/s
Equivalent Cross Slope	0.073 ft/ft
Length Factor	0.553
Total Interception Length	37.9 ft

Curb Inlet on Grade Node 115

Project Description	
Solve For	Efficiency

Input Data		
Discharge	9.98 cfs	2.28cfs Bypass from Node 101 0.53cfs Bypass from Node 104 1.79cfs Bypass from Node 112 1.92cfs Bypass from Node 110
Slope	0.023 ft/ft	
Gutter Width	2.00 ft	
Gutter Cross Slope	0.080 ft/ft	
Road Cross Slope	0.020 ft/ft	
Roughness Coefficient	0.013	
Curb Opening Length	21.0 ft	
Local Depression	3.0 in	
Local Depression Width	48.0 in	

Results	
Efficiency	78.86 %
Intercepted Flow	7.87 cfs
Bypass Flow	2.11 cfs
Spread	12.7 ft
Depth	4.5 in
Flow Area	1.7 ft²
Gutter Depression	1.4 in
Total Depression	4.4 in
Velocity	5.72 ft/s
Equivalent Cross Slope	0.063 ft/ft
Length Factor	0.578
Total Interception Length	36.3 ft

Curb Inlet on Grade Node 117

Project Description	
Solve For	Efficiency

Input Data	
Discharge	2.93 cfs
Slope	0.023 ft/ft
Gutter Width	2.00 ft
Gutter Cross Slope	0.080 ft/ft
Road Cross Slope	0.020 ft/ft
Roughness Coefficient	0.013
Curb Opening Length	14.0 ft
Local Depression	3.0 in
Local Depression Width	48.0 in

Results	
Efficiency	93.96 %
Intercepted Flow	2.75 cfs
Bypass Flow	0.18 cfs
Spread	7.2 ft
Depth	3.2 in
Flow Area	0.6 ft²
Gutter Depression	1.4 in
Total Depression	4.4 in
Velocity	4.57 ft/s
Equivalent Cross Slope	0.088 ft/ft
Length Factor	0.790
Total Interception Length	17.7 ft

Crub Inlet on Grade Node 120

Project Description	
Solve For	Efficiency

Input Data	
Discharge	7.04 cfs
Slope	0.048 ft/ft
Gutter Width	2.00 ft
Gutter Cross Slope	0.080 ft/ft
Road Cross Slope	0.020 ft/ft
Roughness Coefficient	0.013
Curb Opening Length	21.0 ft
Local Depression	3.0 in
Local Depression Width	48.0 in

Results	
Efficiency	81.20 %
Intercepted Flow	5.72 cfs
Bypass Flow	1.32 cfs
Spread	9.3 ft
Depth	3.7 in
Flow Area	1.0 ft²
Gutter Depression	1.4 in
Total Depression	4.4 in
Velocity	7.18 ft/s
Equivalent Cross Slope	0.076 ft/ft
Length Factor	0.605
Total Interception Length	34.7 ft

Crub Inlet on Grade Node 121

Project Description	
Solve For	Efficiency

Input Data	
Discharge	6.10 cfs
Slope	0.048 ft/ft
Gutter Width	2.00 ft
Gutter Cross Slope	0.080 ft/ft
Road Cross Slope	0.020 ft/ft
Roughness Coefficient	0.013
Curb Opening Length	21.0 ft
Local Depression	3.0 in
Local Depression Width	48.0 in

Results	
Efficiency	85.49 %
Intercepted Flow	5.22 cfs
Bypass Flow	0.88 cfs
Spread	8.7 ft
Depth	3.5 in
Flow Area	0.9 ft²
Gutter Depression	1.4 in
Total Depression	4.4 in
Velocity	7.00 ft/s
Equivalent Cross Slope	0.079 ft/ft
Length Factor	0.658
Total Interception Length	31.9 ft

Combination Inlet on Grade Node 123

Project Description	
Solve For	Efficiency

Input Data		
Discharge	15.19 cfs	2.11cfs Bypass from Node 115 1.32cfs Bypass from Node 120 0.88cfs Bypass from Node 121
Slope	0.025 ft/ft	
Gutter Width	2.00 ft	
Gutter Cross Slope	0.080 ft/ft	
Road Cross Slope	0.020 ft/ft	
Roughness Coefficient	0.013	
Local Depression	3.0 in	
Local Depression Width	48.0 in	
Grate Width	2.00 ft	
Grate Length	6.0 ft	
Grate Type	P-50 mm (P-1 -7/8")	
Clogging	0.0 %	
Curb Opening Length	21.0 ft	

Options	
Calculation Option	Use Both
Grate Flow Option	Exclude None

Results	
Efficiency	82.42 %
Intercepted Flow	12.52 cfs
Bypass Flow	2.67 cfs
Spread	14.9 ft
Depth	5.0 in
Flow Area	2.3 ft²
Gutter Depression	1.4 in
Total Depression	4.4 in
Velocity	6.48 ft/s
Splash Over Velocity	15.04 ft/s
Frontal Flow Factor	1.000
Side Flow Factor	0.221
Grate Flow Ratio	0.395
Equivalent Cross Slope	0.057 ft/ft
Active Grate Length	6.0 ft
Length Factor	0.318
Total Interception Length	47.2 ft

Curb Inlet on Grade Node 126

Project Description	
Solve For	Efficiency

Input Data		
Discharge	11.97 cfs	0.18cfs Bypass from Node 117
Slope	0.025 ft/ft	
Gutter Width	2.00 ft	
Gutter Cross Slope	0.080 ft/ft	
Road Cross Slope	0.020 ft/ft	
Roughness Coefficient	0.013	
Curb Opening Length	21.0 ft	
Local Depression	3.0 in	
Local Depression Width	48.0 in	

Results	
Efficiency	72.39 %
Intercepted Flow	8.67 cfs
Bypass Flow	3.30 cfs
Spread	13.5 ft
Depth	4.7 in
Flow Area	1.9 ft²
Gutter Depression	1.4 in
Total Depression	4.4 in
Velocity	6.15 ft/s
Equivalent Cross Slope	0.060 ft/ft
Length Factor	0.511
Total Interception Length	41.1 ft

Curb Inlet on Grade Node 125

Project Description	
Solve For	Efficiency

Input Data		
Discharge	10.61 cfs	2.67cfs Bypass from Node 123
Slope	0.025 ft/ft	
Gutter Width	2.00 ft	
Gutter Cross Slope	0.080 ft/ft	
Road Cross Slope	0.020 ft/ft	
Roughness Coefficient	0.013	
Curb Opening Length	21.0 ft	
Local Depression	3.0 in	
Local Depression Width	48.0 in	

Results	
Efficiency	76.05 %
Intercepted Flow	8.07 cfs
Bypass Flow	2.54 cfs
Spread	12.8 ft
Depth	4.5 in
Flow Area	1.8 ft²
Gutter Depression	1.4 in
Total Depression	4.4 in
Velocity	5.99 ft/s
Equivalent Cross Slope	0.062 ft/ft
Length Factor	0.548
Total Interception Length	38.3 ft

Drop Inlet at Park Node 129

Project Description	
Solve For	Spread

Input Data	
Discharge	3.15 cfs
Left Side Slope	0.010 H:V
Right Side Slope	0.010 H:V
Bottom Width	2.00 ft
Grate Width	2.00 ft
Grate Length	2.0 ft
Local Depression	0.0 in
Local Depression Width	0.0 in
Grate Type	P-50 mm (P-1 -7/8")
Clogging	0.0 %

Results	
Spread	2.0 ft
Depth	3.1 in
Wetted Perimeter	2.5 ft
Top Width	2.01 ft
Open Grate Area	3.6 ft²
Active Grate Weir Length	8.0 ft

Curb Inlet on Grade Node 202

Project Description	
Solve For	Efficiency

Input Data	
Discharge	7.67 cfs
Slope	0.020 ft/ft
Gutter Width	2.00 ft
Gutter Cross Slope	0.080 ft/ft
Road Cross Slope	0.020 ft/ft
Roughness Coefficient	0.013
Curb Opening Length	21.0 ft
Local Depression	3.0 in
Local Depression Width	48.0 in

Results	
Efficiency	88.22 %
Intercepted Flow	6.77 cfs
Bypass Flow	0.90 cfs
Spread	11.7 ft
Depth	4.3 in
Flow Area	1.5 ft²
Gutter Depression	1.4 in
Total Depression	4.4 in
Velocity	5.13 ft/s
Equivalent Cross Slope	0.066 ft/ft
Length Factor	0.695
Total Interception Length	30.2 ft

Curb Inlet on Grade Node 206

Project Description	
Solve For	Efficiency

Input Data	
Discharge	8.13 cfs
Slope	0.020 ft/ft
Gutter Width	2.00 ft
Gutter Cross Slope	0.080 ft/ft
Road Cross Slope	0.020 ft/ft
Roughness Coefficient	0.013
Curb Opening Length	21.0 ft
Local Depression	3.0 in
Local Depression Width	48.0 in

Results	
Efficiency	86.55 %
Intercepted Flow	7.04 cfs
Bypass Flow	1.09 cfs
Spread	12.0 ft
Depth	4.3 in
Flow Area	1.6 ft²
Gutter Depression	1.4 in
Total Depression	4.4 in
Velocity	5.19 ft/s
Equivalent Cross Slope	0.065 ft/ft
Length Factor	0.672
Total Interception Length	31.3 ft

Curb Inlet on Sag Node 201

Project Description	
Solve For	Spread

Input Data		
Discharge	11.81 cfs	0.90cfs Bypass from Node 202
Gutter Width	2.00 ft	
Gutter Cross Slope	0.080 ft/ft	
Road Cross Slope	0.020 ft/ft	
Curb Opening Length	21.0 ft	
Opening Height	0.5 ft	
Curb Throat Type	Horizontal	
Local Depression	3.0 in	
Local Depression Width	48.0 in	
Throat Incline Angle	90.00 degrees	

Results	
Spread	16.4 ft
Depth	5.4 in
Gutter Depression	1.4 in
Total Depression	4.4 in

Curb Inlet in Sag Node 205

Project Description	
Solve For	Spread

Input Data		
Discharge	13.55 cfs	1.09cfs Bypass from Node 206
Gutter Width	2.00 ft	
Gutter Cross Slope	0.080 ft/ft	
Road Cross Slope	0.020 ft/ft	
Curb Opening Length	21.0 ft	
Opening Height	0.5 ft	
Curb Throat Type	Horizontal	
Local Depression	3.0 in	
Local Depression Width	48.0 in	
Throat Incline Angle	90.00 degrees	

Results	
Spread	17.9 ft
Depth	5.7 in
Gutter Depression	1.4 in
Total Depression	4.4 in

Curb Inlet on Grade Node 301

Project Description	
Solve For	Efficiency

Input Data	
Discharge	8.13 cfs
Slope	0.013 ft/ft
Gutter Width	2.00 ft
Gutter Cross Slope	0.080 ft/ft
Road Cross Slope	0.020 ft/ft
Roughness Coefficient	0.013
Curb Opening Length	21.0 ft
Local Depression	3.0 in
Local Depression Width	48.0 in

Results	
Efficiency	91.04 %
Intercepted Flow	7.40 cfs
Bypass Flow	0.73 cfs
Spread	13.2 ft
Depth	4.6 in
Flow Area	1.9 ft²
Gutter Depression	1.4 in
Total Depression	4.4 in
Velocity	4.38 ft/s
Equivalent Cross Slope	0.061 ft/ft
Length Factor	0.738
Total Interception Length	28.4 ft

Curb Inlet on Grade Node 303

Project Description	
Solve For	Efficiency

Input Data	
Discharge	5.32 cfs
Slope	0.013 ft/ft
Gutter Width	2.00 ft
Gutter Cross Slope	0.080 ft/ft
Road Cross Slope	0.020 ft/ft
Roughness Coefficient	0.013
Curb Opening Length	14.0 ft
Local Depression	3.0 in
Local Depression Width	48.0 in

Results	
Efficiency	83.35 %
Intercepted Flow	4.43 cfs
Bypass Flow	0.89 cfs
Spread	11.0 ft
Depth	4.1 in
Flow Area	1.3 ft²
Gutter Depression	1.4 in
Total Depression	4.4 in
Velocity	4.01 ft/s
Equivalent Cross Slope	0.069 ft/ft
Length Factor	0.631
Total Interception Length	22.2 ft

Curb Inlet on Grade Node 306

Project Description	
Solve For	Efficiency

Input Data	
Discharge	2.20 cfs
Slope	0.010 ft/ft
Gutter Width	2.00 ft
Gutter Cross Slope	0.080 ft/ft
Road Cross Slope	0.020 ft/ft
Roughness Coefficient	0.013
Curb Opening Length	7.0 ft
Local Depression	3.0 in
Local Depression Width	48.0 in

Results	
Efficiency	77.19 %
Intercepted Flow	1.70 cfs
Bypass Flow	0.50 cfs
Spread	7.7 ft
Depth	3.3 in
Flow Area	0.7 ft²
Gutter Depression	1.4 in
Total Depression	4.4 in
Velocity	3.07 ft/s
Equivalent Cross Slope	0.085 ft/ft
Length Factor	0.560
Total Interception Length	12.5 ft

Curb Inlet on Grade Node 308

Project Description	
Solve For	Efficiency

Input Data		
Discharge	4.92 cfs	0.89cfs Bypass from Node 303 0.73cfs Bypass from Node 301
Slope	0.010 ft/ft	
Gutter Width	2.00 ft	
Gutter Cross Slope	0.080 ft/ft	
Road Cross Slope	0.020 ft/ft	
Roughness Coefficient	0.013	
Curb Opening Length	14.0 ft	
Local Depression	3.0 in	
Local Depression Width	48.0 in	

Results	
Efficiency	88.47 %
Intercepted Flow	4.35 cfs
Bypass Flow	0.57 cfs
Spread	11.2 ft
Depth	4.1 in
Flow Area	1.4 ft²
Gutter Depression	1.4 in
Total Depression	4.4 in
Velocity	3.55 ft/s
Equivalent Cross Slope	0.068 ft/ft
Length Factor	0.699
Total Interception Length	20.0 ft

Curb Inlet on Grade Node 223

Project Description	
Solve For	Efficiency

Input Data		
Discharge	1.90 cfs	0.50cfs Bypass from Node 306
Slope	0.010 ft/ft	
Gutter Width	2.00 ft	
Gutter Cross Slope	0.080 ft/ft	
Road Cross Slope	0.020 ft/ft	
Roughness Coefficient	0.013	
Curb Opening Length	7.0 ft	
Local Depression	3.0 in	
Local Depression Width	48.0 in	

Results	
Efficiency	81.62 %
Intercepted Flow	1.55 cfs
Bypass Flow	0.35 cfs
Spread	7.2 ft
Depth	3.2 in
Flow Area	0.6 ft²
Gutter Depression	1.4 in
Total Depression	4.4 in
Velocity	3.00 ft/s
Equivalent Cross Slope	0.088 ft/ft
Length Factor	0.610
Total Interception Length	11.5 ft

Curb Inlet on Grade Node 310

Project Description	
Solve For	Efficiency

Input Data		
Discharge	2.29 cfs	0.57cfs Bypass from Node 308
Slope	0.010 ft/ft	
Gutter Width	2.00 ft	
Gutter Cross Slope	0.080 ft/ft	
Road Cross Slope	0.020 ft/ft	
Roughness Coefficient	0.013	
Curb Opening Length	7.0 ft	
Local Depression	3.0 in	
Local Depression Width	48.0 in	

Results	
Efficiency	75.97 %
Intercepted Flow	1.74 cfs
Bypass Flow	0.55 cfs
Spread	7.9 ft
Depth	3.3 in
Flow Area	0.7 ft²
Gutter Depression	1.4 in
Total Depression	4.4 in
Velocity	3.09 ft/s
Equivalent Cross Slope	0.084 ft/ft
Length Factor	0.547
Total Interception Length	12.8 ft

Curb Inlet on Grade node 224

Project Description	
Solve For	Efficiency

Input Data		
Discharge	1.59 cfs	0.35cfs Bypass from Node 223
Slope	0.035 ft/ft	
Gutter Width	2.00 ft	
Gutter Cross Slope	0.080 ft/ft	
Road Cross Slope	0.020 ft/ft	
Roughness Coefficient	0.013	
Curb Opening Length	7.0 ft	
Local Depression	3.0 in	
Local Depression Width	48.0 in	

Results	
Efficiency	71.66 %
Intercepted Flow	1.14 cfs
Bypass Flow	0.45 cfs
Spread	4.4 ft
Depth	2.5 in
Flow Area	0.3 ft²
Gutter Depression	1.4 in
Total Depression	4.4 in
Velocity	5.14 ft/s
Equivalent Cross Slope	0.106 ft/ft
Length Factor	0.504
Total Interception Length	13.9 ft

Curb Inlet on Grade Node 222

Project Description	
Solve For	Efficiency

Input Data		
Discharge	12.33 cfs	0.55cfs Bypass from Node 310
Slope	0.035 ft/ft	
Gutter Width	2.00 ft	
Gutter Cross Slope	0.080 ft/ft	
Road Cross Slope	0.020 ft/ft	
Roughness Coefficient	0.013	
Curb Opening Length	21.0 ft	
Local Depression	3.0 in	
Local Depression Width	48.0 in	

Results	
Efficiency	67.72 %
Intercepted Flow	8.35 cfs
Bypass Flow	3.98 cfs
Spread	12.7 ft
Depth	4.5 in
Flow Area	1.7 ft²
Gutter Depression	1.4 in
Total Depression	4.4 in
Velocity	7.06 ft/s
Equivalent Cross Slope	0.063 ft/ft
Length Factor	0.466
Total Interception Length	45.0 ft

Curb Inlet on Grade Node 216

Project Description	
Solve For	Efficiency

Input Data		
Discharge	14.88 cfs	3.98cfs Bypass from Node 222 0.45cfs Bypass from Node 224 2.54cfs Bypass from Node 125
Slope	0.010 ft/ft	
Gutter Width	2.00 ft	
Gutter Cross Slope	0.080 ft/ft	
Road Cross Slope	0.020 ft/ft	
Roughness Coefficient	0.013	
Curb Opening Length	21.0 ft	
Local Depression	3.0 in	
Local Depression Width	48.0 in	

Results	
Efficiency	76.52 %
Intercepted Flow	11.39 cfs
Bypass Flow	3.49 cfs
Spread	17.8 ft
Depth	5.7 in
Flow Area	3.3 ft²
Gutter Depression	1.4 in
Total Depression	4.4 in
Velocity	4.52 ft/s
Equivalent Cross Slope	0.051 ft/ft
Length Factor	0.553
Total Interception Length	38.0 ft

Curb Inlet on Grade Node 219

Project Description	
Solve For	Efficiency

Input Data		
Discharge	6.04 cfs	3.30cfs Bypass from Node 126
Slope	0.010 ft/ft	
Gutter Width	2.00 ft	
Gutter Cross Slope	0.080 ft/ft	
Road Cross Slope	0.020 ft/ft	
Roughness Coefficient	0.013	
Curb Opening Length	14.0 ft	
Local Depression	3.0 in	
Local Depression Width	48.0 in	

Results	
Efficiency	82.46 %
Intercepted Flow	4.98 cfs
Bypass Flow	1.06 cfs
Spread	12.3 ft
Depth	4.4 in
Flow Area	1.6 ft²
Gutter Depression	1.4 in
Total Depression	4.4 in
Velocity	3.71 ft/s
Equivalent Cross Slope	0.064 ft/ft
Length Factor	0.620
Total Interception Length	22.6 ft

Curb Inelt on Sag Node 316

Project Description	
Solve For	Spread

Input Data		
Discharge	2.67 cfs	1.06cfs Bypass from Node 219
Gutter Width	2.00 ft	
Gutter Cross Slope	0.080 ft/ft	
Road Cross Slope	0.020 ft/ft	
Curb Opening Length	7.0 ft	
Opening Height	0.5 ft	
Curb Throat Type	Horizontal	
Local Depression	3.0 in	
Local Depression Width	48.0 in	
Throat Incline Angle	90.00 degrees	

Results	
Spread	3.9 ft
Depth	3.7 in
Gutter Depression	1.4 in
Total Depression	4.4 in

Curb Inlet on Sag Node 314

Project Description	
Solve For	Spread

Input Data		
Discharge	5.18 cfs	3.49cfs Bypass from Node 316
Gutter Width	2.00 ft	
Gutter Cross Slope	0.080 ft/ft	
Road Cross Slope	0.020 ft/ft	
Curb Opening Length	14.0 ft	
Opening Height	0.5 ft	
Curb Throat Type	Horizontal	
Local Depression	3.0 in	
Local Depression Width	48.0 in	
Throat Incline Angle	90.00 degrees	

Results	
Spread	12.4 ft
Depth	4.4 in
Gutter Depression	1.4 in
Total Depression	4.4 in

HY-8 Culvert Analysis Report (Culvert No. 1)

Table 1 - Project Headwater Table

Crossing Name	Culvert Name	Total Discharge (cfs)	Culvert Discharge (cfs)	Headwater Elevation (ft)	Inlet Control Depth (ft)	Outlet Control Depth (ft)	HW / D (ft)	Normal Depth (ft)	Critical Depth (ft)	Outlet Depth (ft)	Outlet Velocity (ft/s)
Culvert Line "E"	Culvert Line E	793.30	793.30	1228.75	11.75	10.115	1.96	4.60	5.32	4.84	16.24

Crossing Input: Culvert Line "E"

Parameter	Value	Units
DISCHARGE DATA		
Discharge Method	User-Defined	
Discharge List	Define...	
TAILWATER DATA		
Channel Type	Trapezoidal Channel	
Bottom Width	30.000	ft
Side Slope (H:V)	1.000	_:1
Channel Slope	0.1200	ft/ft
Manning's n (channel)	0.045	
Channel Invert Elevation	1216.000	ft
Rating Curve	View...	
ROADWAY DATA		
Roadway Profile Shape	Constant Roadway Elevation	
First Roadway Station	1000.000	ft
Crest Length	50.000	ft
Crest Elevation	1232.000	ft
Roadway Surface	Paved	
Top Width	66.000	ft

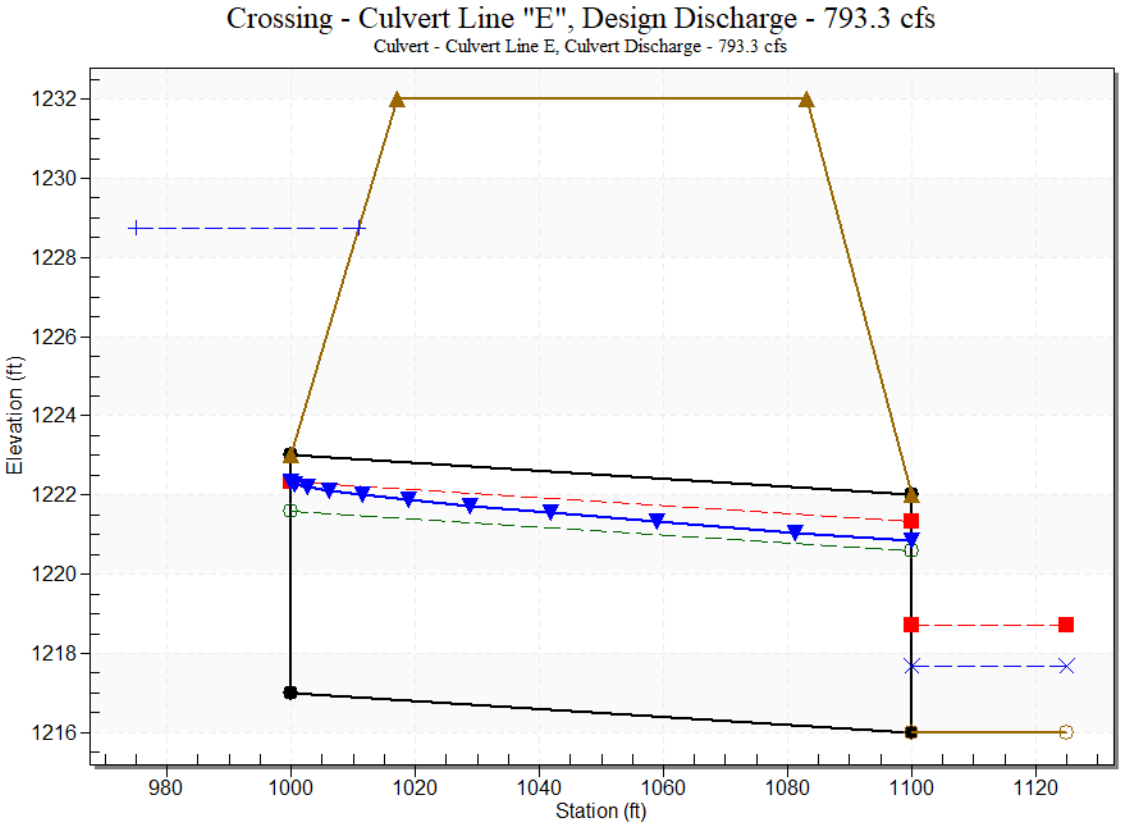
Culvert Input: Culvert Line "E"

Parameter	Value	Units
CULVERT DATA		
Name	Culvert Line E	
Shape	Circular	
Material	Concrete	
Diameter	6.000	ft
Embedment Depth	0.000	in
Manning's n	0.013	
Culvert Type	Straight	
Inlet Configuration	Square Edge with Headwall (Ke=0.5)	
Inlet Depression?	No	
SITE DATA		
Site Data Input Option	Culvert Invert Data	
Inlet Station	1000.000	ft
Inlet Elevation	1217.000	ft
Outlet Station	1100.000	ft
Outlet Elevation	1216.000	ft
Number of Barrels	2	
Computed Culvert Slope	0.010000	ft/ft

Table 2 - Culvert Summary Table: Culvert Line E

Total Discharge (cfs)	Culvert Discharge (cfs)	Headwater Elevation (ft)	Inlet Control Depth (ft)	Outlet Control Depth (ft)	HW / D (ft)	Flow Type	Normal Depth (ft)	Critical Depth (ft)	Outlet Depth (ft)	Tailwater Depth (ft)	Outlet Velocity (ft/s)	Tailwater Velocity (ft/s)
793.30	793.30	1228.75	11.75	10.115	1.96	5-S2n	4.60	5.32	4.84	1.66	16.24	15.09
793.30	793.30	1228.75	11.75	10.115	1.96	5-S2n	4.60	5.32	4.84	1.66	16.24	15.09
1189.95	991.62	1233.20	16.20	13.351	2.70	7-M2c	6.00	5.66	5.66	2.12	17.94	17.49

Water Surface Profile Plot for Culvert: Culvert Line E



HY-8 Culvert Analysis Report (Culvert No. 2)

Table 1 - Project Headwater Table

Crossing Name	Culvert Name	Total Discharge (cfs)	Culvert Discharge (cfs)	Headwater Elevation (ft)	Inlet Control Depth (ft)	Outlet Control Depth (ft)	HW / D (ft)	Normal Depth (ft)	Critical Depth (ft)	Outlet Depth (ft)	Outlet Velocity (ft/s)
Culvert Line F	Culvet Line F	785.10	785.10	1196.59	11.59	9.993	1.93	4.56	5.30	4.80	16.19

Crossing Input: Culvert Line F

Parameter	Value	Units
DISCHARGE DATA		
Discharge Method	User-Defined	
Discharge List	Define...	
TAILWATER DATA		
Channel Type	Trapezoidal Channel	
Bottom Width	60.000	ft
Side Slope (H:V)	1.000	_:1
Channel Slope	0.0240	ft/ft
Manning's n (channel)	0.045	
Channel Invert Elevation	1184.000	ft
Rating Curve	View...	
ROADWAY DATA		
Roadway Profile Shape	Constant Roadway Elevation	
First Roadway Station	1000.000	ft
Crest Length	50.000	ft
Crest Elevation	1209.000	ft
Roadway Surface	Paved	
Top Width	50.000	ft

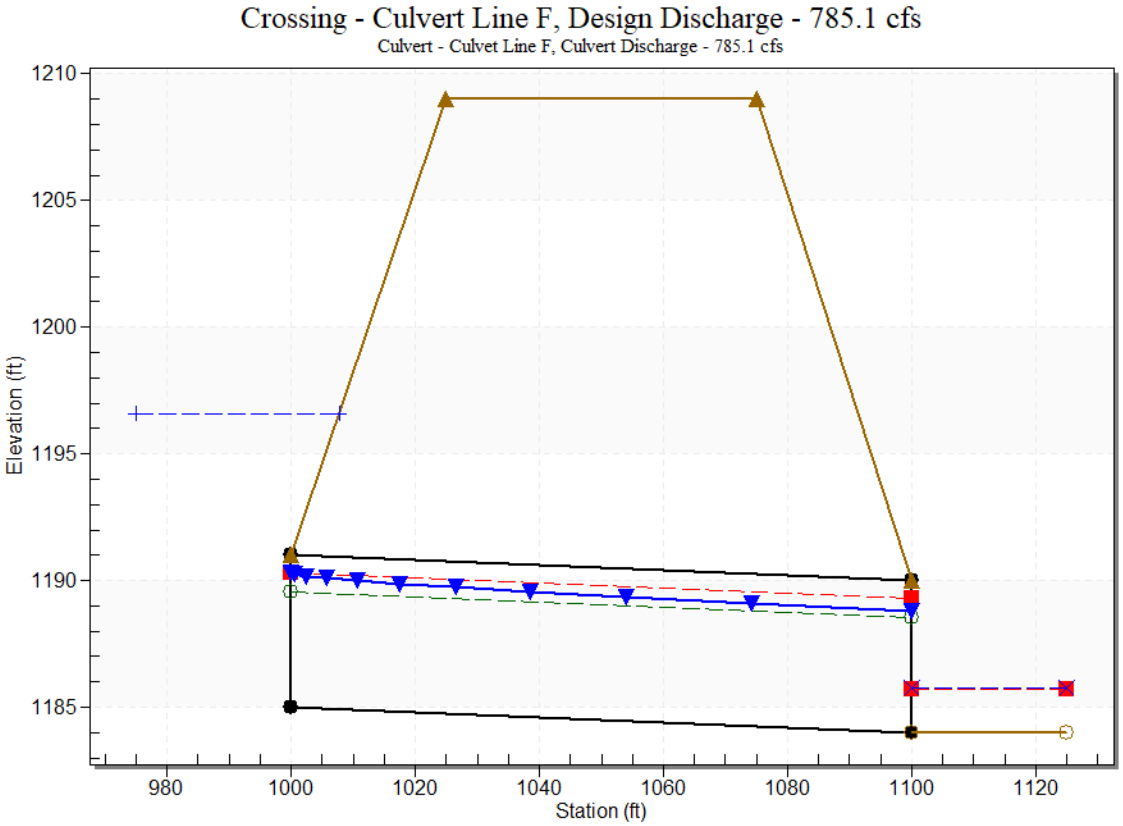
Culvert Input: Culvert Line F

Parameter	Value	Units
CULVERT DATA		
Name	Culvet Line F	
Shape	Circular	
Material	Concrete	
Diameter	6.000	ft
Embedment Depth	0.000	in
Manning's n	0.013	
Culvert Type	Straight	
Inlet Configuration	Square Edge with Headwall (Ke=0.5)	
Inlet Depression?	No	
SITE DATA		
Site Data Input Option	Culvert Invert Data	
Inlet Station	1000.000	ft
Inlet Elevation	1185.000	ft
Outlet Station	1100.000	ft
Outlet Elevation	1184.000	ft
Number of Barrels	2	
Computed Culvert Slope	0.010000	ft/ft

Table 2 - Culvert Summary Table: Culvet Line F

Total Discharge (cfs)	Culvert Discharge (cfs)	Headwater Elevation (ft)	Inlet Control Depth (ft)	Outlet Control Depth (ft)	HW / D (ft)	Flow Type	Normal Depth (ft)	Critical Depth (ft)	Outlet Depth (ft)	Tailwater Depth (ft)	Outlet Velocity (ft/s)	Tailwater Velocity (ft/s)
785.10	785.10	1196.59	11.59	9.993	1.93	5-S2n	4.56	5.30	4.80	1.76	16.19	7.21
785.10	785.10	1196.59	11.59	9.993	1.93	5-S2n	4.56	5.30	4.80	1.76	16.19	7.21
1570.20	1299.82	1210.47	25.47	19.648	4.25	6-FFc	6.00	6.00	6.00	2.67	22.99	9.37

Water Surface Profile Plot for Culvert: Culvet Line F



HY-8 Culvert Analysis Report (Culvert No. 3)

Table 1 - Project Headwater Table

Crossing Name	Culvert Name	Total Discharge (cfs)	Culvert Discharge (cfs)	Headwater Elevation (ft)	Inlet Control Depth (ft)	Outlet Control Depth (ft)	HW / D (ft)	Normal Depth (ft)	Critical Depth (ft)	Outlet Depth (ft)	Outlet Velocity (ft/s)
Culvert Line I	Culvert Line I	446.00	446.00	1156.54	13.84	11.781	2.31	5.26	5.52	5.30	16.88

Crossing Input: Culvert Line I

Parameter	Value	Units
DISCHARGE DATA		
Discharge Method	User-Defined	
Discharge List	Define...	
TAILWATER DATA		
Channel Type	Trapezoidal Channel	
Bottom Width	28.000	ft
Side Slope (H:V)	1.500	_:1
Channel Slope	0.0430	ft/ft
Manning's n (channel)	0.045	
Channel Invert Elevation	1140.500	ft
Rating Curve	View...	
ROADWAY DATA		
Roadway Profile Shape	Constant Roadway Elevation	
First Roadway Station	1000.000	ft
Crest Length	50.000	ft
Crest Elevation	1180.000	ft
Roadway Surface	Paved	
Top Width	60.000	ft

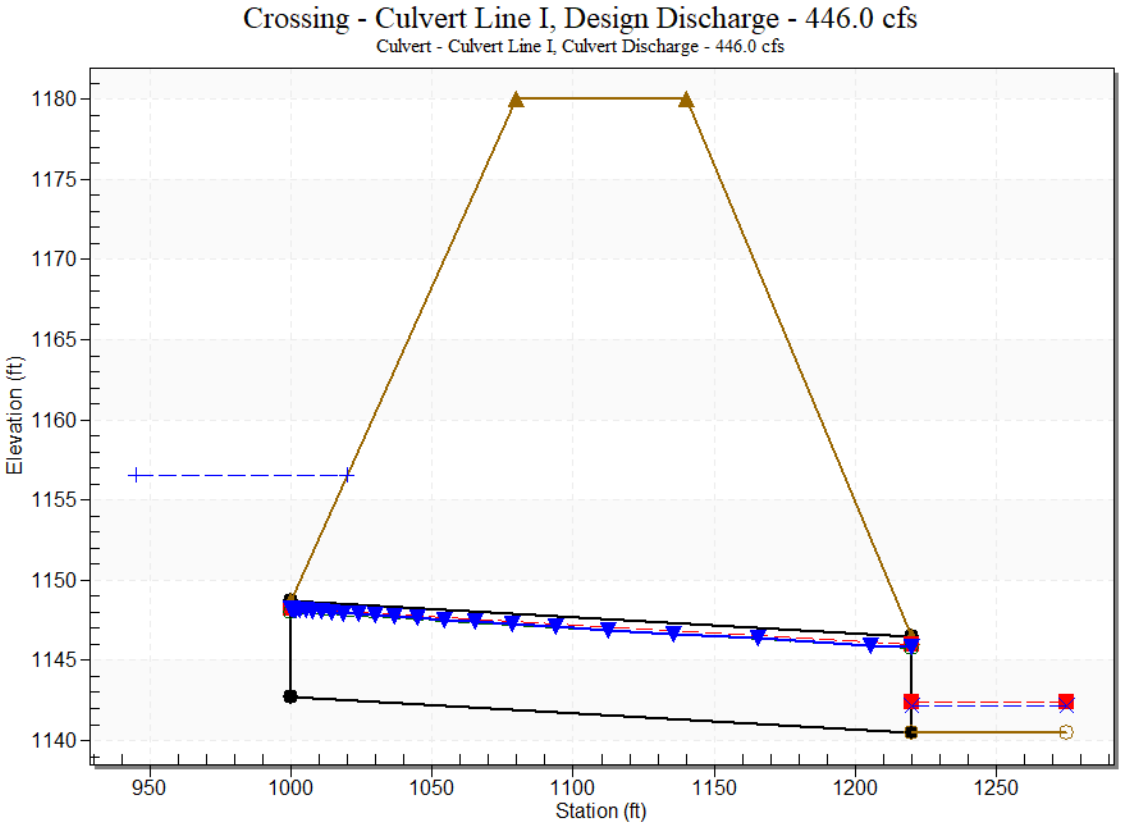
Culvert Input: Culvert Line I

Parameter	Value	Units
CULVERT DATA		
Name	Culvert Line I	
Shape	Circular	
Material	Concrete	
Diameter	6.000	ft
Embedment Depth	0.000	in
Manning's n	0.013	
Culvert Type	Straight	
Inlet Configuration	Square Edge with Headwall (Ke=0.5)	
Inlet Depression?	No	
SITE DATA		
Site Data Input Option	Culvert Invert Data	
Inlet Station	1000.000	ft
Inlet Elevation	1142.700	ft
Outlet Station	1220.000	ft
Outlet Elevation	1140.500	ft
Number of Barrels	1	
Computed Culvert Slope	0.010000	ft/ft

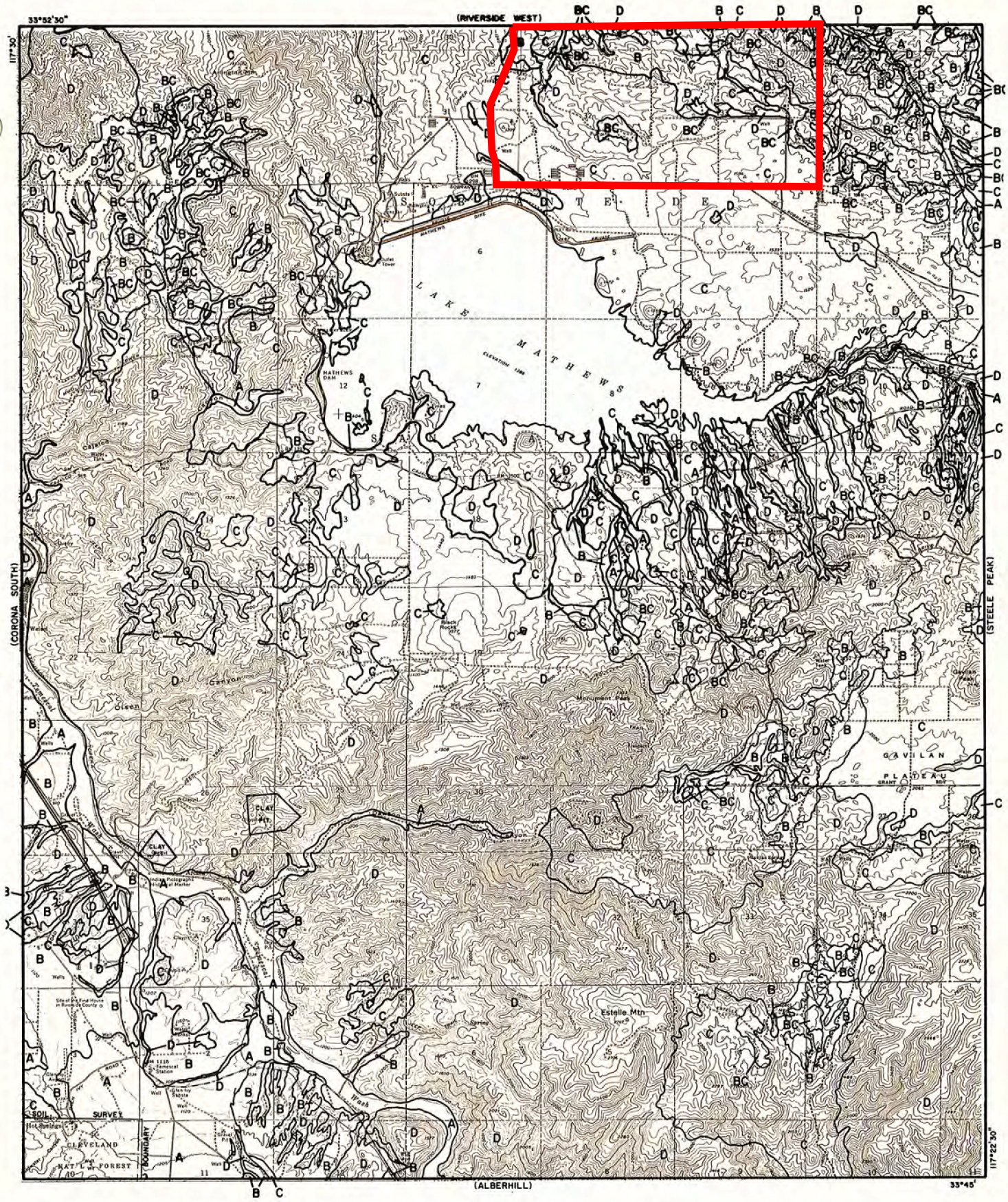
Table 2 - Culvert Summary Table: Culvert Line I

Total Discharge (cfs)	Culvert Discharge (cfs)	Headwater Elevation (ft)	Inlet Control Depth (ft)	Outlet Control Depth (ft)	HW / D (ft)	Flow Type	Normal Depth (ft)	Critical Depth (ft)	Outlet Depth (ft)	Tailwater Depth (ft)	Outlet Velocity (ft/s)	Tailwater Velocity (ft/s)
446.00	446.00	1156.54	13.84	11.781	2.31	5-S2n	5.26	5.52	5.30	1.65	16.88	8.89
446.00	446.00	1156.54	13.84	11.781	2.31	5-S2n	5.26	5.52	5.30	1.65	16.88	8.89
892.00	810.66	1180.66	37.96	30.962	6.33	6-FFc	6.00	6.00	6.00	2.48	28.67	11.34

Water Surface Profile Plot for Culvert: Culvert Line I



Appendix F – Riverside County Flood Control Hydology Manual Plates



LEGEND

—— SOILS GROUP BOUNDARY

A SOILS GROUP DESIGNATION

RCFC&WCD

HYDROLOGY MANUAL

N

0 FEET 5000

HYDROLOGIC SOILS GROUP MAP FOR LAKE MATHEWS

PLATE C-1.28

ACTUAL IMPERVIOUS COVER

Land Use (1)	Range-Percent	Recommended Value For Average Conditions-Percent(2)
Natural or Agriculture	0 - 10	0
Single Family Residential: (3)		
40,000 S. F. (1 Acre) Lots	10 - 25	20
20,000 S. F. (½ Acre) Lots	30 - 45	40
7,200 - 10,000 S. F. Lots	45 - 55	50
Multiple Family Residential:		
Condominiums	45 - 70	65
Apartments	65 - 90	80
Mobile Home Park	60 - 85	75
Commercial, Downtown Business or Industrial	80 -100	90

Notes:

1. Land use should be based on ultimate development of the watershed. Long range master plans for the County and incorporated cities should be reviewed to insure reasonable land use assumptions.

2. Recommended values are based on average conditions which may not apply to a particular study area. The percentage impervious may vary greatly even on comparable sized lots due to differences in dwelling size, improvements, etc. Landscape practices should also be considered as it is common in some areas to use ornamental gravels underlain by impervious plastic materials in place of lawns and shrubs. A field investigation of a study area should always be made, and a review of aerial photos, where available may assist in estimating the percentage of impervious cover in developed areas.

3. For typical horse ranch subdivisions increase impervious area 5 percent over the values recommended in the table above.

RCFC & WCD
HYDROLOGY MANUAL

IMPERVIOUS COVER FOR DEVELOPED AREAS

RUNOFF INDEX NUMBERS OF HYDROLOGIC SOIL-COVER COMPLEXES FOR PERVIOUS AREAS-AMC II

Cover Type (3)	Quality of Cover (2)	Soil Group A	B	C	D
NATURAL COVERS -					
Barren (Rockland, eroded and graded land)		78	86	91	93
Chaparrel, Broadleaf (Manzonita, ceanothus and scrub oak)	Poor	53	70	80	85
	Fair	40	63	75	81
	Good	31	57	71	78
Chaparrel, Narrowleaf (Chamise and redshank)	Poor	71	82	88	91
	Fair	55	72	81	86
Grass, Annual or Perennial	Poor	67	78	86	89
	Fair	50	69	79	84
	Good	38	61	74	80
Meadows or Cienegas (Areas with seasonally high water table, principal vegetation is sod forming grass)	Poor	63	77	85	88
	Fair	51	70	80	84
	Good	30	58	72	78
Open Brush (Soft wood shrubs - buckwheat, sage, etc.)	Poor	62	76	84	88
	Fair	46	66	77	83
	Good	41	63	75	81
Woodland (Coniferous or broadleaf trees predominate. Canopy density is at least 50 percent)	Poor	45	66	77	83
	Fair	36	60	73	79
	Good	28	55	70	77
Woodland, Grass (Coniferous or broadleaf trees with canopy density from 20 to 50 percent)	Poor	57	73	82	86
	Fair	44	65	77	82
	Good	33	58	72	79
URBAN COVERS -					
Residential or Commercial Landscaping (Lawn, shrubs, etc.)	Good	32	56	69	75
Turf (Irrigated and mowed grass)	Poor	58	74	83	87
	Fair	44	65	77	82
	Good	33	58	72	79
AGRICULTURAL COVERS -					
Fallow (Land plowed but not tilled or seeded)		76	85	90	92

RCFC & WCD
HYDROLOGY MANUAL

RUNOFF INDEX NUMBERS FOR PERVIOUS AREA

PLATE D-5.5 (1 of 2)

STATE OF CALIFORNIA

The Resources Agency

Department of Water Resources

Division of Safety of Dams

STATUTES AND REGULATIONS PERTAINING TO SUPERVISION OF DAMS AND RESERVOIRS

1970*

CALIFORNIA ADMINISTRATIVE CODE

Title 23. Waters

Chapter 2. Department of Water Resources

Subchapter 1. Dams and Reservoirs

Article 1. General Provisions

301. Definitions. As used in these regulations, the terms listed below shall have the meanings noted:

(a) Department. "Department" means the Department of Water Resources of the State of California.

(b) Dam. "Dam" means any artificial barrier, together with appurtenant works, which does or may impound or divert water, and which either (a) is or will be 25 feet or more in height from the natural bed of the stream or watercourse at the downstream toe of the barrier, as determined by the department, or from the lowest elevation of the outside limit of the barrier, as determined by the department, if it is not across a stream channel or watercourse, to the maximum possible water storage elevation or (b) has or will have an impounding capacity of 50 acre-feet or more.

Any such barrier which is or will not be in excess of 6 feet in height, regardless of storage capacity, or which has or will have a storage capacity not in excess of 15 acre-feet, regardless of height, shall not be considered a dam.

No obstruction in a canal used to raise or lower water therein or divert water therefrom, no levee, including but not limited to a levee on the bed of a natural lake the primary purpose of which levee is to control floodwaters, no railroad fill or structure, and no road or highway fill or structure, no circular tank constructed of steel or concrete or of a combination thereof, no tank elevated above the ground, and no barrier which is not across a stream channel, watercourse, or natural drainage area and which has the principal purpose of impounding water for agricultural use shall be considered a dam. In addition, no obstruction in the channel of a stream or watercourse which is 15 feet or less in height from the lowest elevation of the obstruction and which has the single purpose of spreading water within the bed of the stream or watercourse upstream from the obstruction for percolation underground shall be considered a dam.

(c) Reservoir. "Reservoir" means any reservoir which contains or will contain the water impounded by a dam.

(d) Owner. "Owner" includes any of the following who own, control, operate, maintain, manage, or propose to construct a dam or reservoir:

(1) The State and its departments, institutions, agencies, and political subdivisions.

(2) Every municipal or quasi-municipal corporation.

(3) Every public utility.

(4) Every district.

(5) Every person.

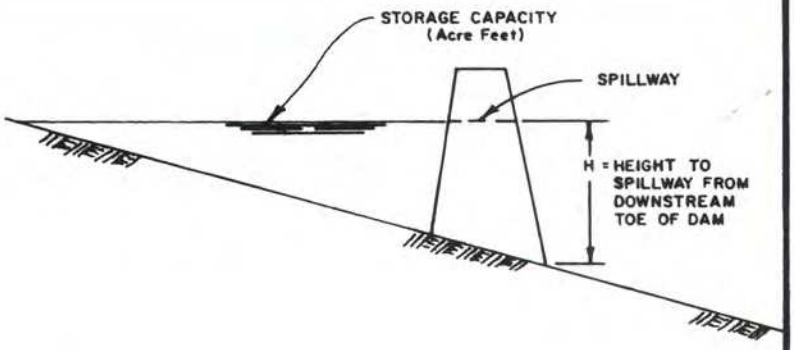
(6) The duly authorized agents, lessees, or trustees of any of the foregoing.

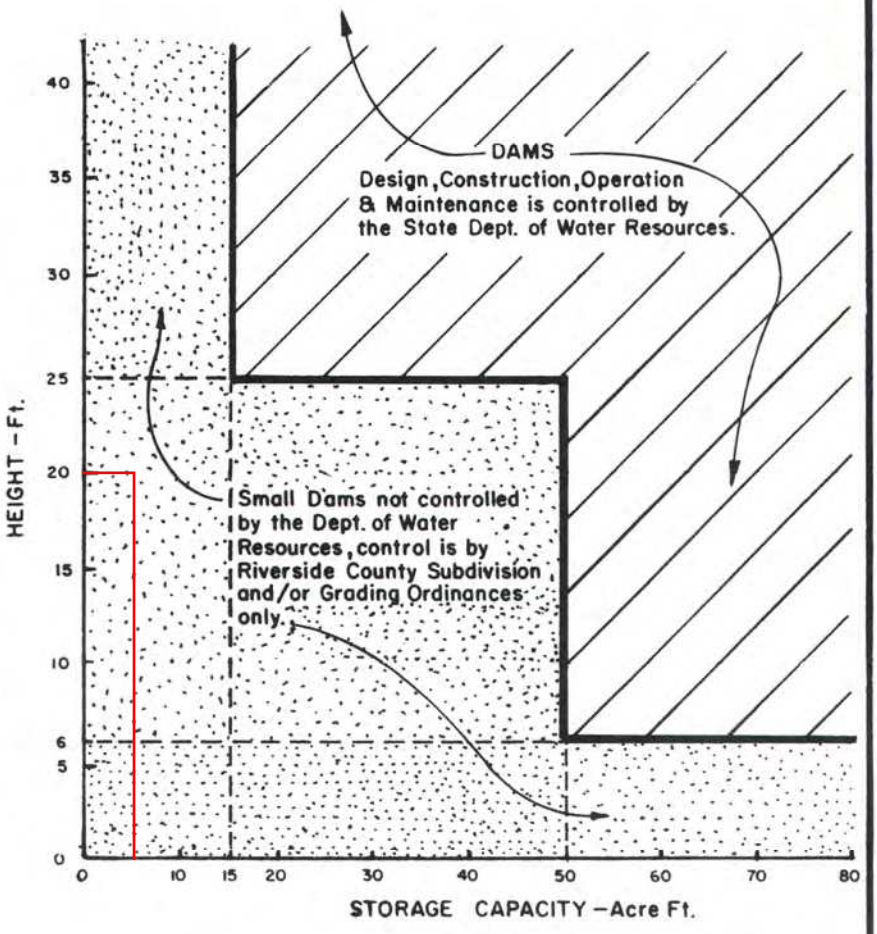
(7) Receivers or trustees appointed by any court for any of the foregoing.

"Owner" does not include the United States. (Sections 6002-6005, Water Code)

302. Purpose and Effect of Regulations. These regulations are adopted for the purpose of carrying out the provisions of Part 1 of Division 3 of the Water Code. Under no circumstances, and in no particular case, shall these regulations, or any of them, be construed as a limitation or restriction upon the exercise of any proper discretion that is vested in the department, nor shall they in any event be construed to deprive the department of any exercise of powers, duties and jurisdiction conferred by law, nor to limit or restrict the amount or character of data or information which may be required for the proper administration of the law. (Section 6078, Water Code)

* USERS SHOULD ASCERTAIN IF STATUTES HAVE BEEN REVISED.



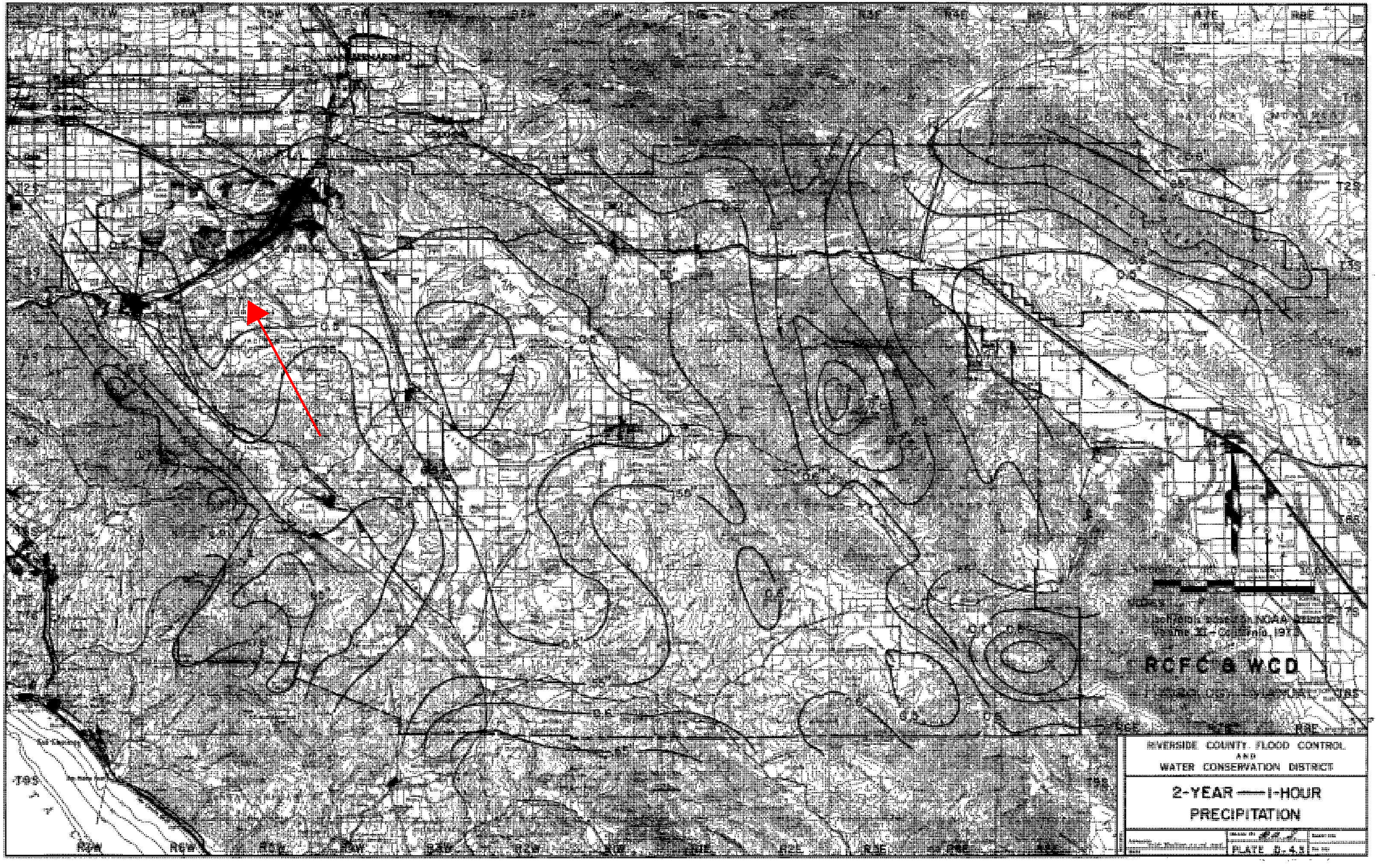


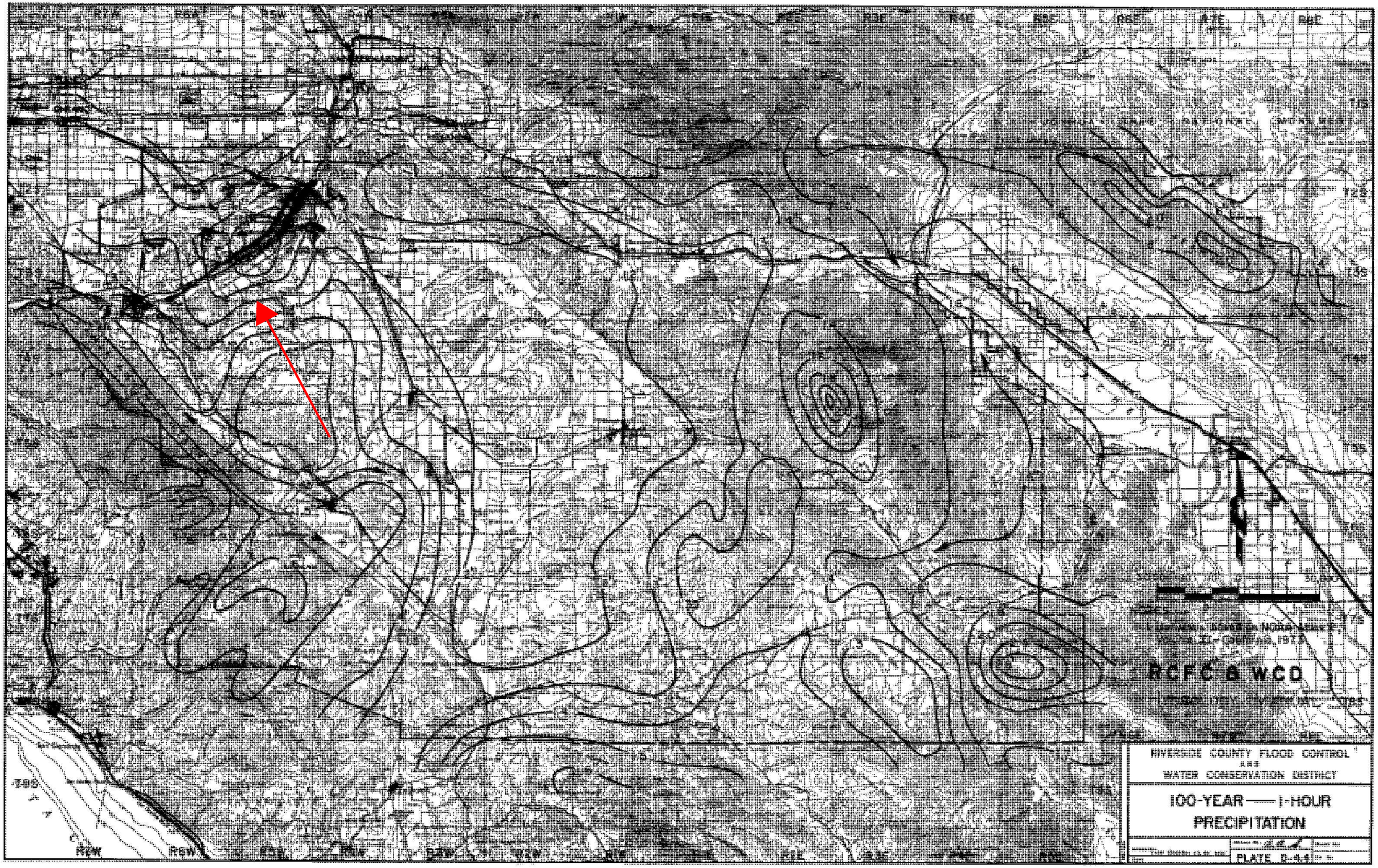
RCFC & WCD

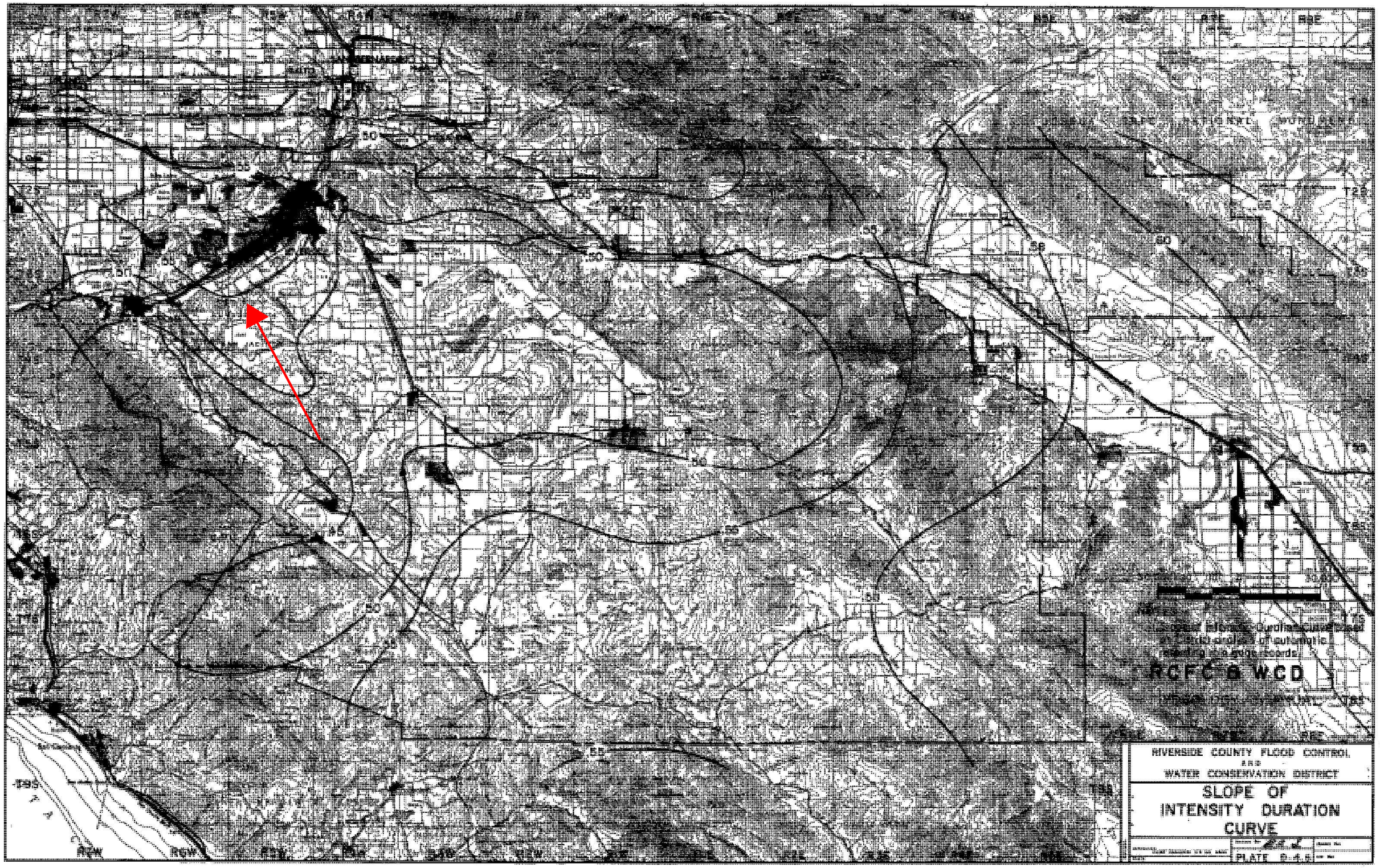
HYDROLOGY MANUAL

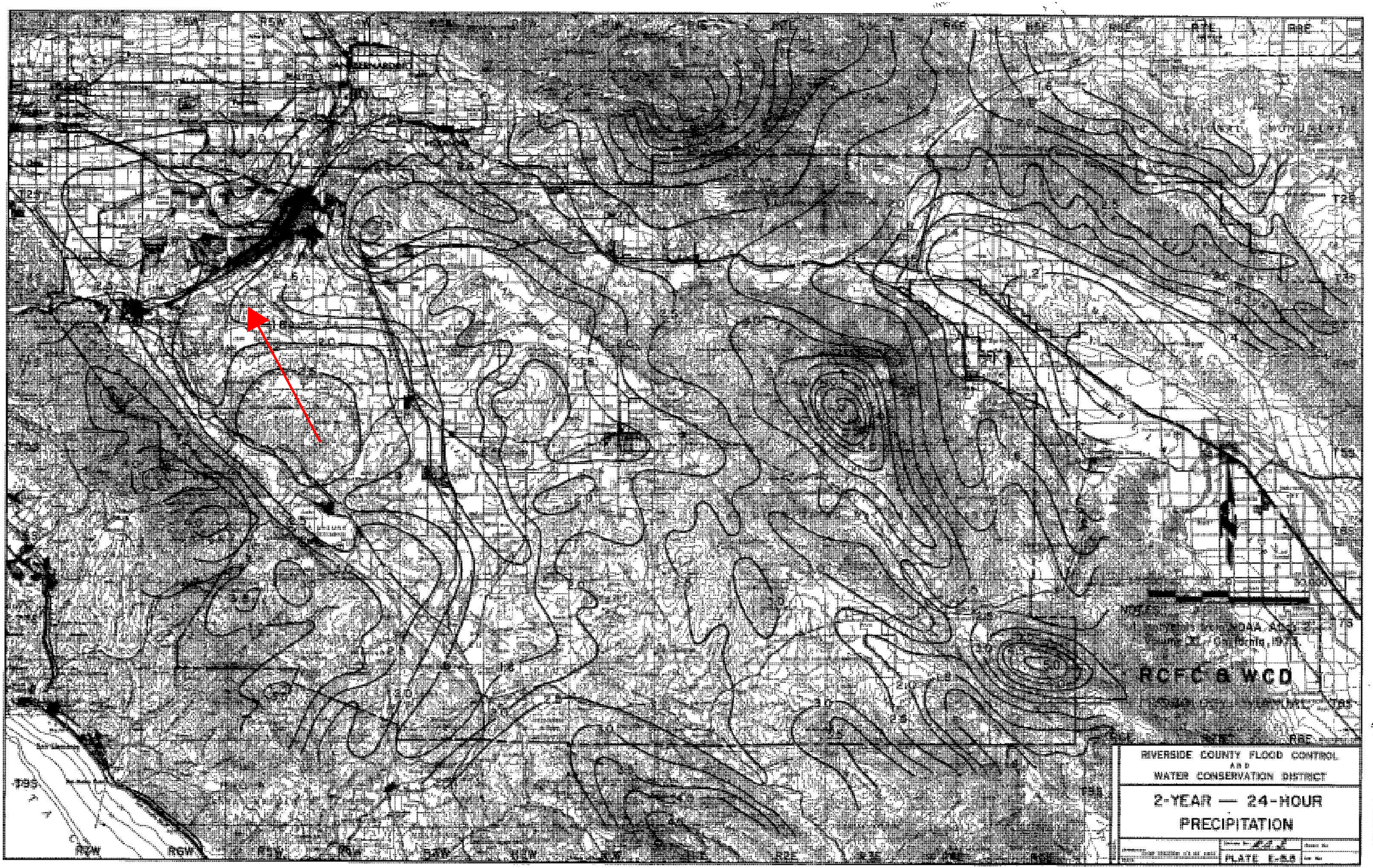
DAMS & IMPOUNDMENT RESERVOIRS UNDER STATE CONTROL

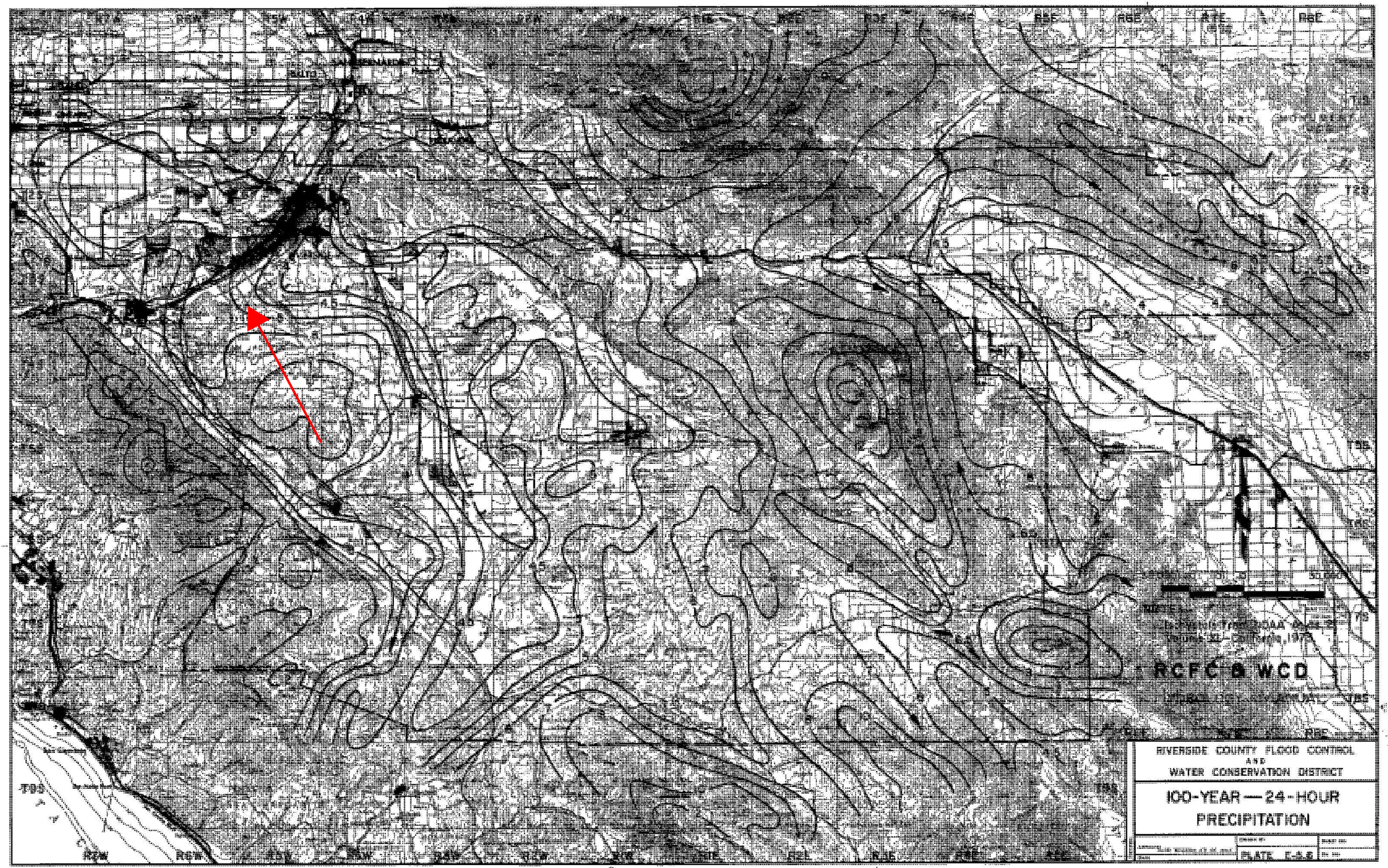
PLATE A-3


RCFC & WCD
RIVERSIDE COUNTY FLOOD CONTROL
AND
WATER CONSERVATION DISTRICT
2-YEAR — 1-HOUR
PRECIPITATION
PLATE D-4.3


RCFC & WCD
RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT
100-YEAR — 1-HOUR PRECIPITATION
PLATE D-4.4


RIVERSIDE COUNTY FLOOD CONTROL
AND
WATER CONSERVATION DISTRICT
SLOPE OF
INTENSITY DURATION
CURVE
PLATE D-4.6
RCFC & WCD


RIVERSIDE COUNTY FLOOD CONTROL
AND
WATER CONSERVATION DISTRICT
2-YEAR — 24-HOUR
PRECIPITATION
PLATE E-5.6
RCFC & WCD



RIVERSIDE COUNTY FLOOD CONTROL
AND
WATER CONSERVATION DISTRICT

100-YEAR — 24-HOUR PRECIPITATION

PLATE E-4.8

Appendix G – Tract 38927 HEC-RAS Analysis (Reference Copy)

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CIVIL ENGINEERING · SURVEYING · PLANNING
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Preliminary HEC-RAS Analysis

Tentative Tract Map No. 38927 and 38910

JN: 10308
CLIENT: Raincross Development, LLC
DATE PREPARED
8/12/2025
DATES REVISED:
9/16/2025, 10/16/2025
12/11/2025

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Section 1 - Introduction

1. Introduction

This report provides a for analysis of post development 100-year flooding limits for the natural drainage courses located within the project limits for a development known as Tentative Tract Map No. 38927 utilizing the Hydrologic Engineering Center's River Analysis System (HEC-RAS). Tentative Tract Map No. 38297 is located in the unincorporated area of Riverside County. The project is located on the north side of Lake Matthews, north of El Sobrante Road and East of McAllister Street. Figure 1.1 provides a location map for the project. This project also is also being utilized for a project directly south and adjacent of Tentative Tract Map No. 38927 known as Tentative Tract Map No. 38910 that is being processed concurrently. Tentative Tract Map No. 38910 adjoins the natural drainage course being analyzed as part of the Tentative Tract Map No. 39827 and this report is being utilized to establish the 100-year limits associated with it's development. The hydrology and hydraulic analysis associated with Tentative Tract Map No. 38910 will be reviewed under a separate case number and is not associated with Tentative Tract Map No. 38927.

This report provides information on proposed storm flows rates, established bed and bank locations, existing culvert/storm drain facilities, proposed culvert/storm drain facilities, and any other necessary criteria for the analysis of the development to determine the extent of the post development 100-year flooding limits. The extents of the analysis will be utilized to determine the post-development impacts of Tentative Tract Map No. 38927 to prevent impedance of any run-on flows, protect downstream properties and/or facilities from potential flooding, and to identify the 100-year flooding limits to confirm the design of the proposed development does not create any adverse drainage impacts.

2. Land Use Plan

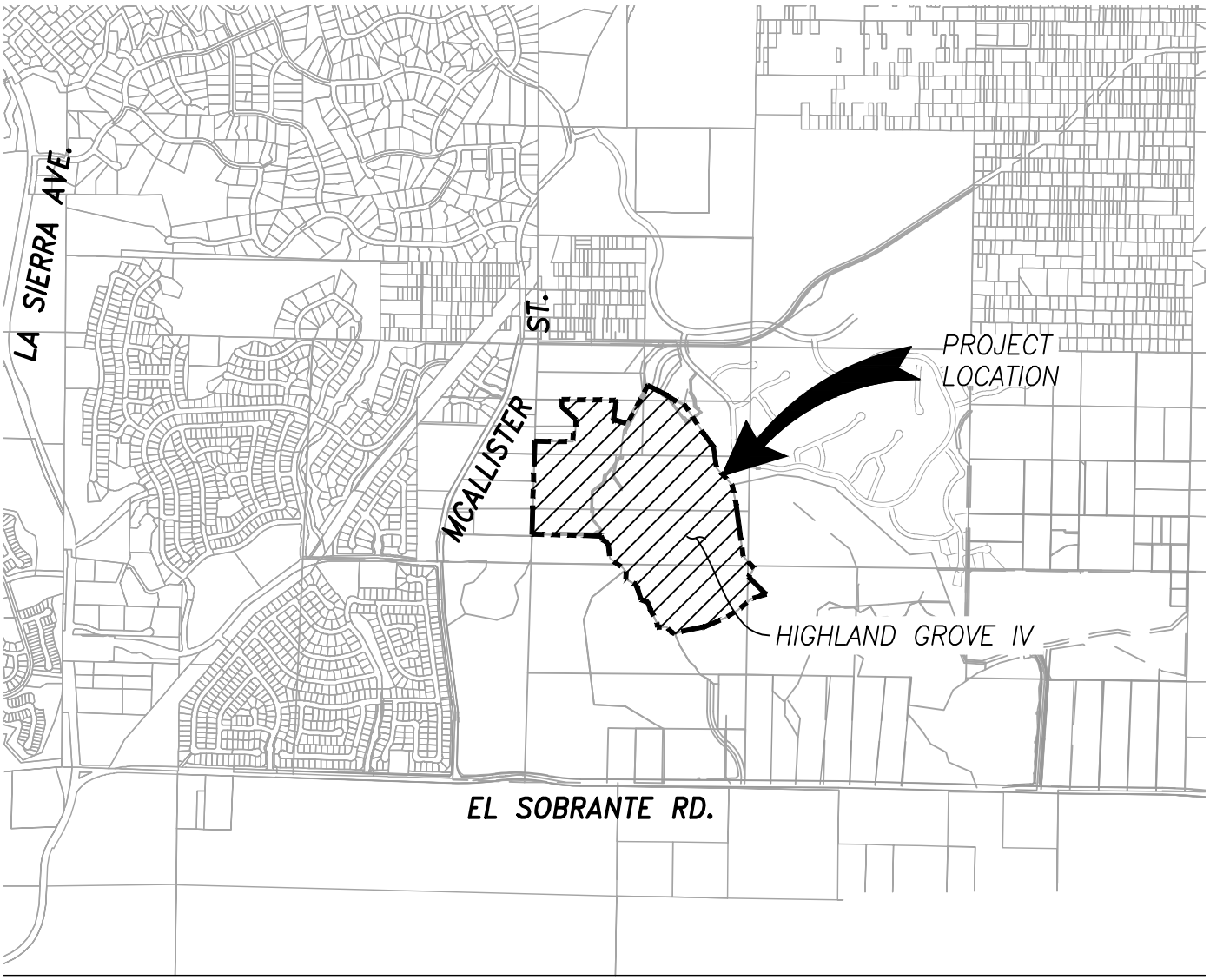
Tentative Tract Map No. 38927 encompasses a total of approximately 112.34 acres. Figure 1.2 provides the development plan for the project. The proposed project consists of the development of 206 detached single family dwelling units located within the unincorporated area of Riverside County known as the Lake Matthews Area. The Lake Mathew Area Plan was developed as part of the Riverside County General Plan 2025, prepared in 2003 as part of the General Plan Update. The project is located with the El Sobrante Policy Area of the Lake Matthews Area, which encourages the clustering of parcel sizes to a minimum of 10,000 square feet for the purposes of conserving open space and sensitive habitat while not exceeding the underlying housing densities identified by the general plan's designation of LDR-Low Density Residential (2 units/acre) and VLDR-Very Low Density Residentials (1 unit/acre). As part of the clustering efforts the project will be proposing a zone change to incorporate development standards that are consistent with the reduced lot sizes. It should be noted that although the project is clustering the units to a smaller overall parcel size, the total number of units is consistent with the existing land use designation.

3. Purpose of Study

The purpose of this study is to substantiate the hydrology and hydraulic design of the residential development known as Tentative Tract Map No. 38927 to determine the 100-year flooding limits of the existing drainage

courses that bisect the project site. This study will analyze post-development storm water run-on and run-off values and propose storm water design recommendations to ensure the adequate size, volumes, and proper operation of drainage facilities for the proposed project while not adversely affecting the capacity of the existing drainage courses while maintaining the conveyance of 100-year storm flows without impeding on adjacent development or cause any downstream or upstream flooding impacts. Along with the standard analysis of a typical report, this report outlines the specific analysis and provides the back-up calculations necessary for determining the 100-year flooding limits of the natural drainage courses within the development such that the anticipated storm drain flows are adequately contained without causing any adverse drainage impacts. Figure 1.3, aerial imagery of the project, shown below, identifies the existing drainage reach locations analyzed as part of post development analysis, Figure 1.4 also shown below identifies the proposed culvert locations associated with analysis of the post development condition.

4. Figure 1.1 Location Map - Tentative Tract No. 38927



LAKE MATHEWS

0 2000 6000

1000 4000 8000

SCALE: 1" = 2000'

PREPARATION DATE: JULY 2024

adkan ENGINEERS
Civil Engineering · Surveying · Planning
6879 AIRPORT DRIVE RIVERSIDE, CA 92504
TEL:(951) 688-0241 · FAX:(951) 688-0599

FIGURE 1.1
VICINITY MAP

HIGHLAND GROVE IV
TTM 38927

U:\Projects\Pulte\10615 - HG4\water analysis\TTM 38927 VICINITY MAP FIGURE 1.1.dwg

5. Figure 1.2 Land Use Map - Tentative Tract No. 38927



0 600 1800

300 1200 2400

SCALE: 1" = 600'

PREPARATION DATE: JULY 2024

adkan ENGINEERS
Civil Engineering · Surveying · Planning
6879 AIRPORT DRIVE RIVERSIDE, CA 92504
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FIGURE 1.2
LAND USE PLAN

HIGH GROVE IV
TTM 38927

U:\Projects\Pulte\10615 - HG4\water analysis\TTM 38927 LAND USE FIGURE 1.2.dwg

6. Figure 1.3 Aerial Imagery Map - Tentative Tract No. 38927

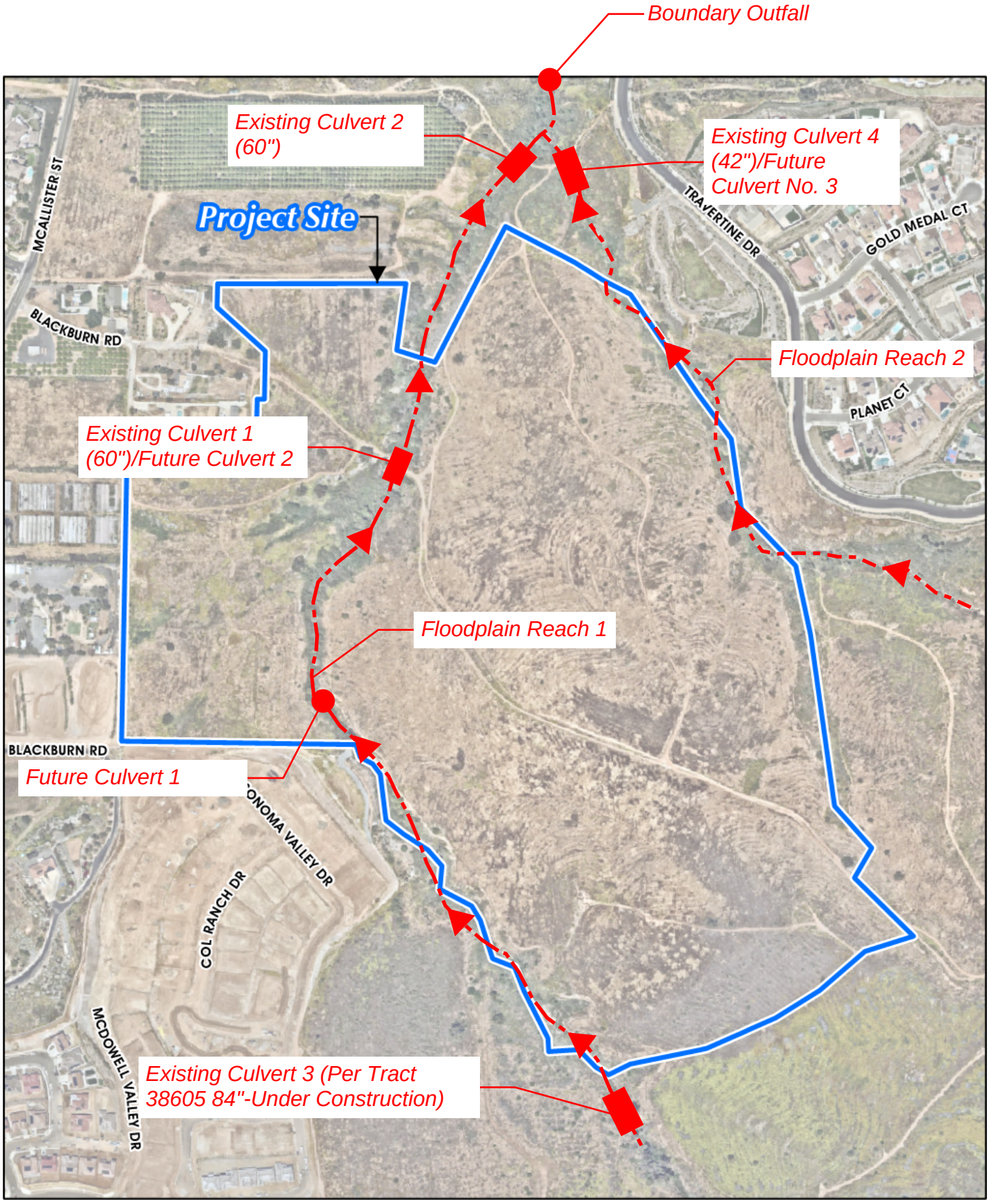


Figure 1.3 - Aerial Image Map

Section 2 –Site Conditions

1. Existing Hydrololgic Site Conditions

The existing site is an irregular shaped property consisting of rolling hills previously utilized for the cultivation of citrus fruit. The existing citrus trees have since been removed leaving the remanent of citrus furrows and overgrown earthen irrigation trenches. The project site is bisected by a ridgeline running from east to west close to the center of the property assemblage. The ridgeline can also be defined by an unpaved road seen within aerial imagery providing a means of maintenance access for an existing reservoir owned by Western Municipal Water District (WMWD) to the east of the Project site. From the ridge line the existing flows travel north and south into two natural drainage courses (Reach 1 and Reach 2) that bound the north and south edges of the project site. The northerly tributary (Reach 2) flows from east to west along the northerly project boundary, the southerly tributary (Reach 1) flows from east to west along the southerly project boundary and then bisects a small portion of the project site flowing from the south to the northeast corner of the site.

Floodplain Reach No. 1 contains three existing culverts modeled as part of this analysis. At the most upstream end of Floodplain Reach No. 1 is a culvert currently being constructed by Tract 38605. This culvert has been installed and backfilled. This culvert is an 84" reinforced concrete pipe and will remain in place as part of Tentative Tract Map 38927 and is identified as Existing Culvert No. 3 on Figure 1.3. Located at the approximate middle of Flood Plain Reach No. 1 is an existing 60" corrugated metal pipe which facilitates an existing trail crossing. This culvert will be removed and replaced as part of Tentative Tract Map No. 38927 and is identified as Existing Culvert No. 1 on Figure 1.3. At the most downstream end of Flood Plain Reach No. 1 is an existing 60" corrugated metal pipe which facilitates an existing trail crossing. This culvert will remain in place as part of Tentative Tract Map No. 38927 and is identified as Existing Culvert No. 2 on Figure 1.3. Floodplain Reach No. 2 contains one existing culvert modeled as part of this analysis. At the most downstream end of Flood Plain Reach No. 2 is an existing 42" corrugated metal pipe which facilitates an existing trail crossing. This culvert will be removed and replaced as part of Tentative Tract Map No. 38927 and is identified as Existing Culvert No. 4 on Figure 1.3.

The existing drainage courses have been deeply incised and defined throughout time, and in many locations exhibit exposed bedrock limiting the potential for future erosion. Each of these two natural drainage courses ultimately convey flows northwesterly to a point of confluence at the most northwest corner of the project site before being conveyed northerly beyond the project through a development to the north of the project site, known as Tramonte, and finally into the Harrison Dam facility. It should be noted that all run-on flows and flows tributary from Tentative Tract Map No. 38927 leave the project site at a single point of discharge.

The Harrison Dam was constructed based on the development of the upstream tributaries to protect the downstream properties located in the City of Riverside. The Dam was designed to detain the watershed of the proposed project, including the upstream properties. From the Harrison Dam facility existing storm flows are conveyed through the City of Riverside and ultimately into the Arlington Channel owned and maintained by RCFC. The Arlington Channel is part of a drainage system funded by Area Drainage Plan fees known at the Southwest Area Drainage Plan.

2. Proposed Hydrologic Site Conditions

The proposed project consists of 206 single family detached single family residences. The project site has been designed in such a manner to respect the existing ridgeline that bisects the project from east to west. The existing ridgeline, also being an unpaved road as seen within aerial imagery, provides a means of maintenance access for an existing reservoir owned by WMWD and was avoided from disturbance and the existing grade respected. The project is divided into two distinct drainage tributaries separated into a westerly and easterly drainage area. The portion of the project lying westerly of the existing tributary bisecting the project from the south to the north is conveyed into one extended detention basin on the west side of the project which is then conveyed northerly to a point of confluence at the northwest corner of the project boundary. The portion of the project lying westerly of the same bisecting tributary is conveyed into another extended detention basin located at near the northwest corner of the project which is then conveyed northerly to a point of confluence at the same northwest corner of the project boundary. This northwest location is the projects single point of flows leaving from the project site.
There are three culvert crossings being proposed as part of the project. One of these culvert crossings are located in the northerly existing drainage course (Reach 2) and two of the culvert crossings are located where the southerly existing drainage (Reach 1) bisects the westerly portion of the project site from south to north. These culvert crossing will allow the development to provide access and utilities over the existing drainage courses. The culverts have been designed in accordance with the California Department of Fish and Wildlife (CDFW) to have a minimum size of 72" for the purposes of providing a downstream and upstream connection for habitat and wildlife within the drainage corridor. This results in culverts larger than necessary to convey the actual flow experience by a 100-year storm event. The culverts also contain the necessary headwalls, cutoff walls, and rip-rap energy dissipaters to reduce the storm flow velocities to a non-erosive level protecting the downstream drainage courses. A depiction showing the location of the proposed culverts is located below within Figure 2.1.

3. Tributary Migration and 100 Year Flood Setback

An investigation of the soils composition for the project site was conducted by Leighton and Associations with regard to the potential lateral migration of the existing drainage courses to establish a flood limit setback for structures proposed as part of Tentative Tract Map No. 38927. Riverside County Flood Control suggests a minimum of a 50' setback flood setback without any supporting site-specific soils data or analytics performed to determine the actual erosion potential. Based on the findings that the existing drainage courses were deeply incised tributaries and within the limits of these tributaries was dense weathered bedrock it was determined the lateral migration of the tributaries would not occur. This was further substantiated by evidence of locations where bedrock was already exposed negating any long-term erosion concerns both vertically and laterally for the lifetime of the project. A letter prepared by Leighton and Associates, supplemental to their analysis conducted under their Geotechnical Due Diligence Evaluation of the Proposed Highland Grove 4 (Tentative Tract Map No. 38927) Residential Development Report dated November 17, 2023 is included within Appendix "C" of this report.

4. Figure 2.1 – Proposed Culvert Locations

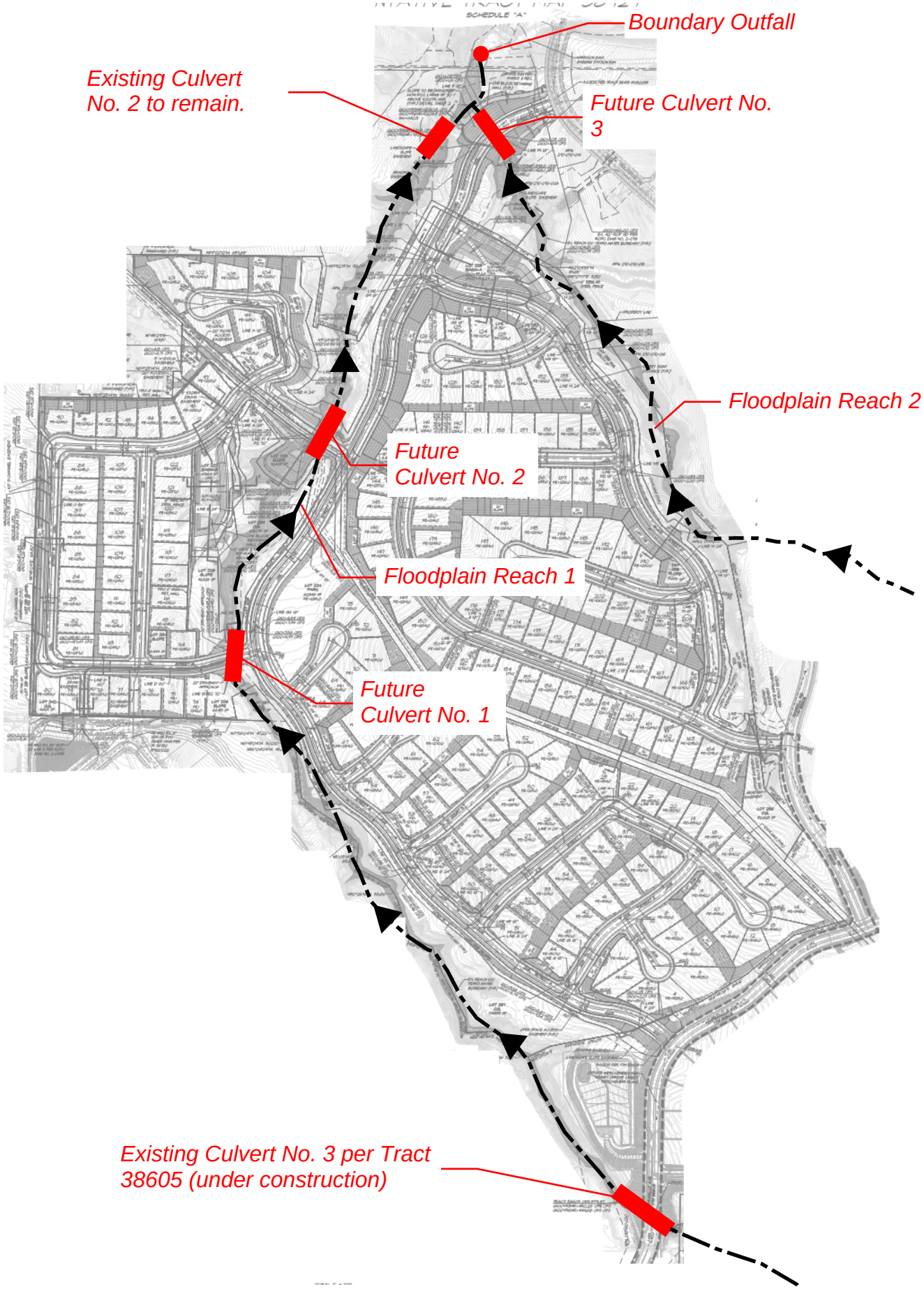


Figure 2.1 - Proposed Culvert Locations

Section 3 – Analytical Approach

The site hydrology was performed utilizing Riverside County Flood Control and Water Conversation District Hydrology Manual, from which pertinent soil and rainfall information was obtained. The results of the hydrology analysis determined Synthetic Unit Method storm flow rates utilized for the purposes of determining the 100-year flooding limits within the existing drainage courses, Reach 1 and Reach 2.

Reach 1, located southerly of project boundary, was analyzed downstream of a proposed culvert west of Street "A", to be constructed as part of Tentative Tract Map 38605. Tentative Tract Map 38605 has undergone Hydrology review by the County of Riverside and has been conditionally approved. Reach 1 was then analyzed downstream of this location within the existing drainage course, flowing westerly along the southerly project boundary, to a proposed double barrel 72" culvert noted as Line "E1" and "E2" per Tentative Tract Map No. 38927. Reach 1 was then analyzed down stream of this location within the existing drainage course, flowing northerly, bisecting the project site to another proposed double barrel 72" culvert noted as Line "F1" and "F2" per Tentative Tract Map No. 38927. Reach 1 was then analyzed downstream of this location within the existing drainage course flowing northerly to a confluence point with Reach 2. Reach 1 was then analyzed down stream of this location terminating a location just prior to flows entering into an existing culvert south of Travertine Drive.

Reach 2, located northerly of the project boundary, was analyzed downstream of a proposed culvert southwest of Travertine Drive and north of the termination of Street "G", to be constructed as part of Tentative Tract Map 38605. Reach 2 was then analyzed downstream of this location within the existing drainage course, flowing westerly along the northerly project boundary to a proposed 72" culvert, noted as Line "I" as shown per Tentative Tract Map No. 38927. Reach 2 was then analyzed through the proposed 72" culvert and confluenced downstream with the flows from Reach 1. Reach 2 was terminated at this location.

Section 4 – Method of Analysis

The dry streambed was analyzed using the US Army Corps of Engineers' HEC-RAS channel hydraulic modeler (version 6.4.1) in conjunction with AutoCAD Civil 3D. A centerline alignment for the reach was delineated in Autodesk Civil 3d and left bank and right bank alignments were established along with sample lines enabling export to HEC-RAS for further study. Once the surface, alignments, and sample lines were exported into HEC-RAS, the following flow regime and design parameters were utilized to model the reach effectively, see the below Table 4-1 for the pre-development modeling conditions and Table 4-2 for the post development modeling conditions:

Table 4-1
Pre-Development Condition

Reach No.	Drainage Area	Flow Regime	Flow Raate CFS (100 Year – 6 Hour)	Mannings Coef. "n" (Bank)	Mannings Coef. "n" (Bed)[1]
1	Upstream of Boundary Outfall	Mixed	1079.5 CFS	0.07	0.10
1	Upstream of Future Culvert No. 2	Mixed	632.5 CFS	0.07	0.10
1	Upstream of Future Culvert No. 1	Mixed	478.6 CFS	0.07	0.10
2	Upstream of Reach 1	Mixed	372.4 CFS	0.07	0.10

Notes:
[1]Bed is defined by the limits of riparian habitat.

Table 4-2
Post-Development Condition

Reach No.	Drainage Area	Flow Regime	Flow Raate CFS (100 Year – 6 Hour)	Mannings Coef. "n" (Bank)	Mannings Coef. "n" (Bed)[1]
1	Upstream of Boundary Outfall	Mixed	1245.2 CFS	0.07	0.10
1	Upstream of Existing Culvert	Mixed	807.4 CFS	0.07	0.10
1	Upstream of Future Culvert No. 2	Mixed	785.1 CFS	0.07	0.10
1	Upstream of Future Culvert No. 1	Mixed	757.7 CFS	0.07	0.10
2	Upstream of Reach 1	Mixed	444.6 CFS	0.07	0.10

Notes:
[1]Bed is defined by the limits of riparian habitat.

The Mixed Flow regime was run with the above flow rates & Manning's Coefficients per values established with RCFC through HEC-RAS analyses for the preliminary design phase of the project. A mixed flow regime was used to demonstrate both the greatest depth of the stream to delineate the highest potential flood limits of the stream. These limits and their respective velocities and flow characteristics can be found in post development summary tables shown within Appendix "A" of this report. The location of the streambed reaches, cross section locations, and flooding limits can be found on the HEC-RAS work map shown within Appendix "B" of this report.

The n-values for the separation of the bed and bank locations were determined by using the extents of the riparian area established by the project biologist. A manning's value of 0.10 was utilized for the riparian areas within the river cross section and 0.07 for area outside of the bank locations. These "n" values represent a conservative assumption when analyzing the streambed for depth of flow to determine the greatest extents of the flooding limits.

The upstream and downstream boundary constraints for both the pre-development and post-development condition are shown for each of the corresponding drainage reaches within Table 4-3 and Table 4-4 shown below:

Table 4-3
Pre Development - Upstream and Downstream Boundary Constraint

Reach No.	Location	Boundary Constraint
1	Upstream	Normal Depth HGL Based on Slope (2.78%)
1	Downstream	Existing Tract 36475 Culvert HGL Elevation (1128.0)
2	Upstream	Normal Depth HGL Based on Slope (2.86%)
2	Downstream	Reach 1 HGL Elevation (1145.16)

Table 4-4
Post Development - Upstream and Downstream Boundary Constraint

Reach No.	Location	Boundary Constraint
1	Upstream	Normal Depth HGL Based on Slope (2.78%)
1	Downstream	Existing Tract 36475 Culvert HGL Elevation (1128.00)
2	Upstream	Proposed Tract 38605 Culvert HGL Elevation (1244.00)
2	Downstream	Reach 1 HGL Elevation (1145.11)

Flow rates were established by utilizing the Synthetic Unit Hydrograph Method per the Riverside County Flood Control and Water Conversation District Hydrology Manual as shown with "Preliminary Hydrology Study, Tentative Tract Map No. 38927" prepared by Adkan Engineers, dated April 3, 2025.

Section 5 – Conclusion

The hydrologic calculations provided within this report substantiate the preliminary hydrology and hydraulic design of the proposed project, Tentative Tract Map No. 38927, and indicate the following:

- The proposed storm drain culvert facilities crossing the natural drainage course demonstrate the ability to convey the Rational Hydrology Method 100 year storm event as required by the Riverside County Flood Control Hydrology Manual.

- The 100-year water surface in the post construction condition is constrained within the natural drainage course and is not adversely affected by the proposed development. Furthermore, the natural drainage course in the post development condition does not impeded the existing run-on flows, create any downstream flooding impacts, or create any adverse drainage impacts for future residents within the proposed development of Tentative Tract Map No. 38927.

Therefore, it is our conclusion this project **does not** negatively impact the local community or watershed goals of the Santa Ana River and does not adversely affect downstream facilities while maintaining the adequate conveyance of storm flows for on-site facilities to the criteria for the protection of storm flow as determined by the Riverside County Flood Control Hydrology Manual.

Appendix A – Reach 1 - Pre Development and Post Development 100-Year 6-Hr HEC-RAS Analysis

PRE DEVELOPMENT

HEC-RAS Plan: EX REACH 1 River: EX REACH 1 Reach: EX REACH 1 Profile: 100YR6HR

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
EX REACH 1	5428	100YR6HR	478.60	1291.94	1296.39	1295.53	1297.06	0.024079	6.54	73.14	23.66	0.66
EX REACH 1	5300	100YR6HR	478.60	1288.33	1294.61		1294.78	0.004483	3.29	145.68	39.09	0.30
EX REACH 1	5208.6	100YR6HR	478.60	1283.30	1293.75	1288.02	1294.13	0.012213	4.89	97.89	13.83	0.32
EX REACH 1	5208.59		Culvert									
EX REACH 1	5012.8	100YR6HR	478.60	1282.20	1283.73	1285.53	1291.75	0.842882	22.71	21.07	13.87	3.25
EX REACH 1	4900	100YR6HR	478.60	1278.73	1283.18	1282.84	1284.21	0.041611	8.13	58.88	20.51	0.85
EX REACH 1	4700	100YR6HR	478.60	1274.47	1279.16		1279.56	0.013868	5.06	94.59	30.99	0.51
EX REACH 1	4500	100YR6HR	478.60	1269.94	1274.68		1275.47	0.032429	7.09	67.50	23.94	0.74
EX REACH 1	4300	100YR6HR	478.60	1260.04	1265.40	1265.13	1266.61	0.063495	7.09	57.06	18.47	0.74
EX REACH 1	4100	100YR6HR	478.60	1256.82	1259.71		1260.23	0.018187	2.66	86.57	30.48	0.35
EX REACH 1	3900	100YR6HR	478.60	1251.93	1256.01		1256.36	0.020088	4.77	101.12	32.18	0.44
EX REACH 1	3700	100YR6HR	478.60	1244.93	1248.58	1248.58	1249.64	0.064960	5.84	61.41	28.44	0.73
EX REACH 1	3500	100YR6HR	478.60	1237.00	1244.30	1241.59	1244.56	0.010943	3.94	117.26	29.53	0.33
EX REACH 1	3300	100YR6HR	478.60	1233.92	1240.70		1241.23	0.027684	5.51	82.50	24.59	0.49
EX REACH 1	3100	100YR6HR	478.60	1230.66	1236.22		1236.51	0.019784	4.28	110.02	39.50	0.43
EX REACH 1	2900	100YR6HR	478.60	1227.36	1229.22	1229.22	1230.34	0.052620	3.21	58.94	27.33	0.58
EX REACH 1	2700	100YR6HR	478.60	1216.86	1222.23	1220.32	1222.48	0.016543	4.02	119.11	37.09	0.40
EX REACH 1	2543.26	100YR6HR	478.60	1212.99	1220.21		1220.39	0.010806	3.47	138.11	38.24	0.32
EX REACH 1	2438.15	100YR6HR	478.60	1212.00	1219.01		1219.21	0.011705	3.62	132.05	35.90	0.33
EX REACH 1	2400	100YR6HR	478.60	1212.00	1218.47	1216.21	1218.70	0.015081	3.88	123.37	37.34	0.38
EX REACH 1	2200	100YR6HR	478.60	1208.96	1211.65	1211.50	1212.38	0.100605	6.87	69.68	38.87	0.90
EX REACH 1	2000	100YR6HR	478.60	1205.26	1209.74		1209.81	0.004312	2.10	232.26	80.69	0.21
EX REACH 1	1800	100YR6HR	478.60	1200.79	1209.77		1209.77	0.000034	0.33	1452.84	209.47	0.02
EX REACH 1	1636.82	100YR6HR	478.60	1199.00	1209.76	1200.25	1209.76	0.000034	0.36	1348.96	166.98	0.02
EX REACH 1	1636.76		Culvert									
EX REACH 1	1542.86	100YR6HR	478.60	1183.35	1186.02		1186.19	0.020251	3.28	146.01	75.12	0.41
EX REACH 1	1400	100YR6HR	632.50	1176.00	1180.54		1181.18	0.059365	6.43	98.38	39.97	0.72
EX REACH 1	1200	100YR6HR	632.50	1176.88	1172.08		1172.71	0.031778		99.47	44.10	0.00
EX REACH 1	1000	100YR6HR	632.50	1158.95	1162.96	1162.96	1164.24	0.058188	9.07	69.76	27.38	1.00
EX REACH 1	800	100YR6HR	632.50	1153.95	1162.04	1157.42	1162.14	0.001876	2.64	239.48	45.45	0.20
EX REACH 1	600	100YR6HR	632.50	1149.98	1162.00		1162.02	0.000214	1.16	543.10	68.99	0.07
EX REACH 1	426.55	100YR6HR	632.50	1143.00	1161.98	1148.22	1161.99	0.000111	0.81	776.23	98.17	0.05
EX REACH 1	426.5		Culvert									
EX REACH 1	358.29	100YR6HR	632.50	1140.07	1146.43		1146.81	0.011117	4.97	127.22	35.63	0.46
EX REACH 1	300	100YR6HR	1079.50	1139.88	1145.24		1145.76	0.024940	5.78	186.79	81.31	0.67
EX REACH 1	200	100YR6HR	1079.50	1137.71	1140.96	1140.96	1142.14	0.054879	8.71	123.94	52.58	1.00
EX REACH 1	100	100YR6HR	1079.50	1129.97	1134.46	1133.97	1135.68	0.037625	8.86	121.82	33.91	0.82
EX REACH 1	0	100YR6HR	1079.50	1127.00	1129.90	1129.90	1131.10	0.056714	8.77	123.15	51.96	1.00

HEC-RAS Plan: EX REACH 1 River: EX REACH 1 Reach: EX REACH 1 Profile: 100YR6HR

Reach	River Sta	Profile	E.G. Elev	W.S. Elev	Vel Head	Frctn Loss	C & E Loss	Q Left	Q Channel	Q Right	Top Width
			(ft)	(ft)	(ft)	(ft)	(ft)	(cfs)	(cfs)	(cfs)	(ft)
EX REACH 1	5428	100YR6HR	1297.06	1296.39	0.67	2.13	0.15		478.60		23.66
EX REACH 1	5300	100YR6HR	1294.78	1294.61	0.17	0.64	0.02		478.60		39.09
EX REACH 1	5208.6	100YR6HR	1294.13	1293.75	0.37				478.60		13.83
EX REACH 1	5208.59		Culvert								
EX REACH 1	5012.8	100YR6HR	1291.75	1283.73	8.02				478.60		13.87
EX REACH 1	4900	100YR6HR	1284.21	1283.18	1.03	4.46	0.19		478.60		20.51
EX REACH 1	4700	100YR6HR	1279.56	1279.16	0.40	4.06	0.04		478.60		30.99
EX REACH 1	4500	100YR6HR	1275.47	1274.68	0.78	8.82	0.04		478.60		23.94
EX REACH 1	4300	100YR6HR	1266.61	1265.40	1.20	6.17	0.21		235.52	243.08	18.47
EX REACH 1	4100	100YR6HR	1260.23	1259.71	0.51	3.82	0.05		24.64	453.96	30.48
EX REACH 1	3900	100YR6HR	1256.36	1256.01	0.35	6.64	0.07		388.56	90.04	32.18
EX REACH 1	3700	100YR6HR	1249.64	1248.58	1.07	4.40	0.24		147.17	331.43	28.44
EX REACH 1	3500	100YR6HR	1244.56	1244.30	0.26	3.30	0.03		314.83	163.77	29.53
EX REACH 1	3300	100YR6HR	1241.23	1240.70	0.53	4.65	0.07		291.61	186.99	24.59
EX REACH 1	3100	100YR6HR	1236.51	1236.22	0.30	6.08	0.08		380.46	98.14	39.50
EX REACH 1	2900	100YR6HR	1230.34	1229.22	1.12	5.43	0.26		17.94	460.66	27.33
EX REACH 1	2700	100YR6HR	1222.48	1222.23	0.25	2.07	0.02		478.60		37.09
EX REACH 1	2543.26	100YR6HR	1220.39	1220.21	0.19	1.18	0.00		478.60		38.24
EX REACH 1	2438.15	100YR6HR	1219.21	1219.01	0.20	0.50	0.00		478.60		35.90
EX REACH 1	2400	100YR6HR	1218.70	1218.47	0.23	6.27	0.05		478.60		37.34
EX REACH 1	2200	100YR6HR	1212.38	1211.65	0.73	2.37	0.20		478.60		38.87
EX REACH 1	2000	100YR6HR	1209.81	1209.74	0.07	0.02	0.02		458.56	20.04	80.69
EX REACH 1	1800	100YR6HR	1209.77	1209.77	0.00	0.01	0.00		474.46	4.14	209.47
EX REACH 1	1636.82	100YR6HR	1209.76	1209.76	0.00			3.05	475.55		166.98
EX REACH 1	1636.76		Culvert								
EX REACH 1	1542.86	100YR6HR	1186.19	1186.02	0.17	4.97	0.05		478.60		75.12
EX REACH 1	1400	100YR6HR	1181.18	1180.54	0.64	8.48	0.00		632.50		39.97
EX REACH 1	1200	100YR6HR	1172.71	1172.08	0.63	8.41	0.06	632.50			44.10
EX REACH 1	1000	100YR6HR	1164.24	1162.96	1.28	1.08	0.35		632.50		27.38
EX REACH 1	800	100YR6HR	1162.14	1162.04	0.11	0.10	0.03		632.50		45.45
EX REACH 1	600	100YR6HR	1162.02	1162.00	0.02	0.03	0.00		632.50		68.99
EX REACH 1	426.55	100YR6HR	1161.99	1161.98	0.01				632.50		98.17
EX REACH 1	426.5		Culvert								
EX REACH 1	358.29	100YR6HR	1146.81	1146.43	0.38	1.04	0.01		632.50		35.63
EX REACH 1	300	100YR6HR	1145.76	1145.24	0.52	3.56	0.07		1079.50		81.31
EX REACH 1	200	100YR6HR	1142.14	1140.96	1.18	4.50	0.00		1079.50		52.58
EX REACH 1	100	100YR6HR	1135.68	1134.46	1.22	4.57	0.01		1079.50		33.91
EX REACH 1	0	100YR6HR	1131.10	1129.90	1.19				1079.50		51.96

Plan: EX REACH 1 EX REACH 1 EX REACH 1 RS: 1636.76 Culv Group: Culvert #1 Profile: 100YR6HR

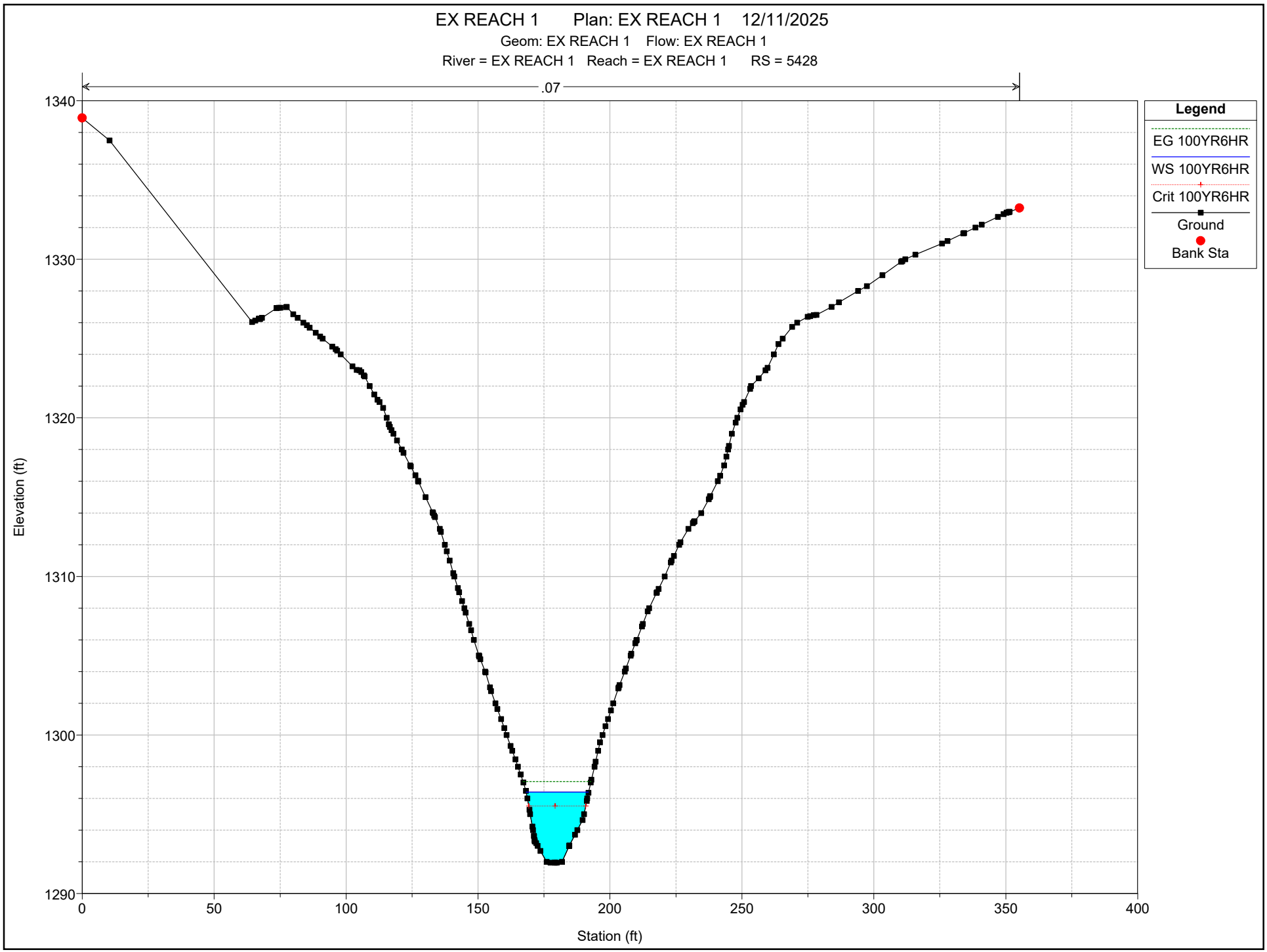
Q Culv Group (cfs)	270.77	Culv Full Len (ft)	
# Barrels	1	Culv Vel US (ft/s)	13.79
Q Barrel (cfs)	270.77	Culv Vel DS (ft/s)	28.05
E.G. US. (ft)	1209.76	Culv Inv El Up (ft)	1199.27
W.S. US. (ft)	1209.76	Culv Inv El Dn (ft)	1183.50
E.G. DS (ft)	1186.19	Culv Frctn Ls (ft)	11.48
W.S. DS (ft)	1186.02	Culv Exit Loss (ft)	12.01
Delta EG (ft)	23.58	Culv Entr Loss (ft)	0.09
Delta WS (ft)	23.74	Q Weir (cfs)	209.53
E.G. IC (ft)	1209.76	Weir Sta Lft (ft)	137.78
E.G. OC (ft)	1207.16	Weir Sta Rgt (ft)	304.78
Culvert Control	Inlet	Weir Submerg	0.00
Culv WS Inlet (ft)	1204.27	Weir Max Depth (ft)	2.04
Culv WS Outlet (ft)	1185.97	Weir Avg Depth (ft)	0.61
Culv Nml Depth (ft)	2.40	Weir Flow Area (sq ft)	102.14
Culv Crt Depth (ft)	4.54	Min El Weir Flow (ft)	1207.73

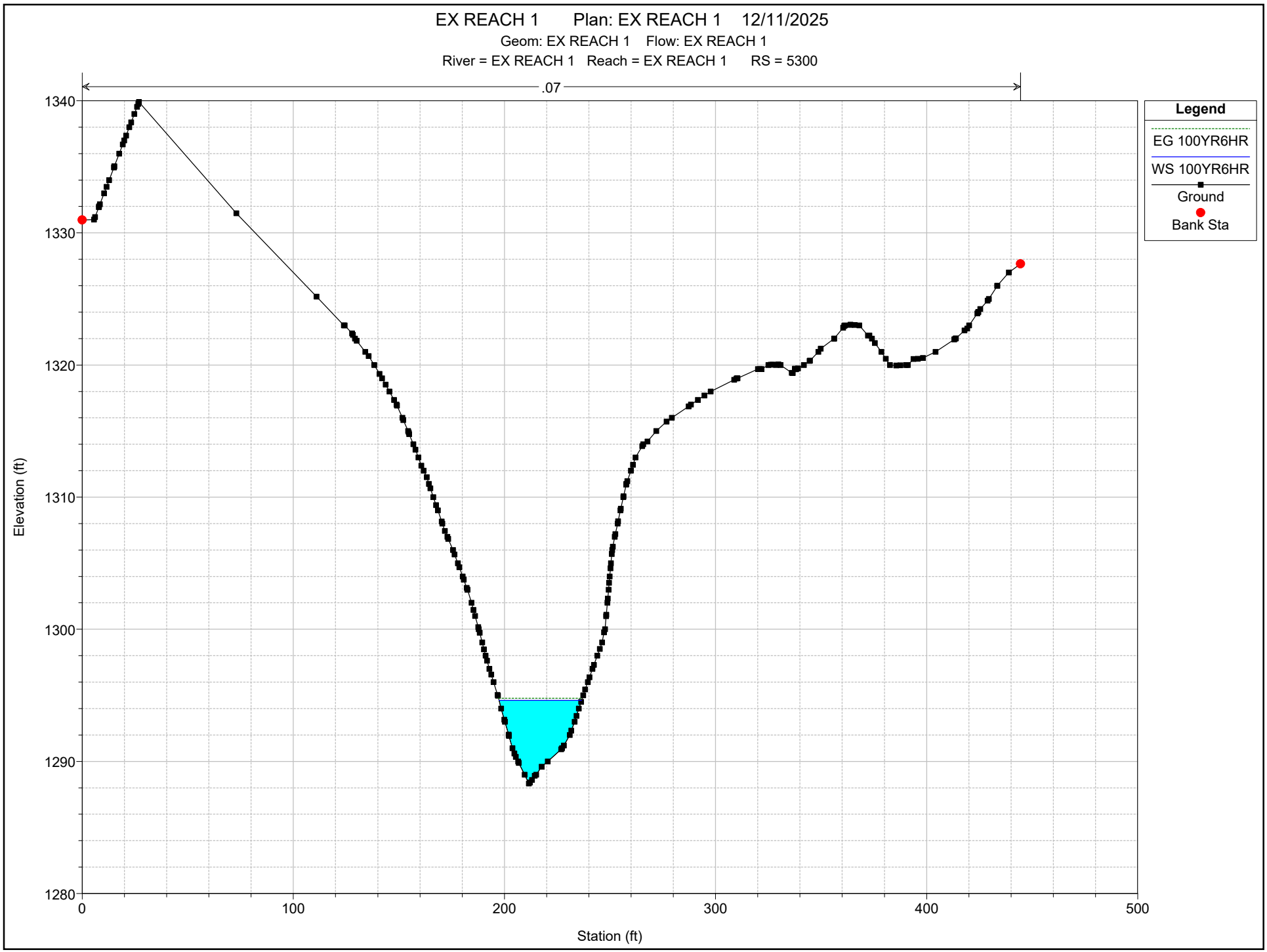
Plan: EX REACH 1 EX REACH 1 EX REACH 1 RS: 426.5 Culv Group: EX CULVERT 2 Profile: 100YR6HR

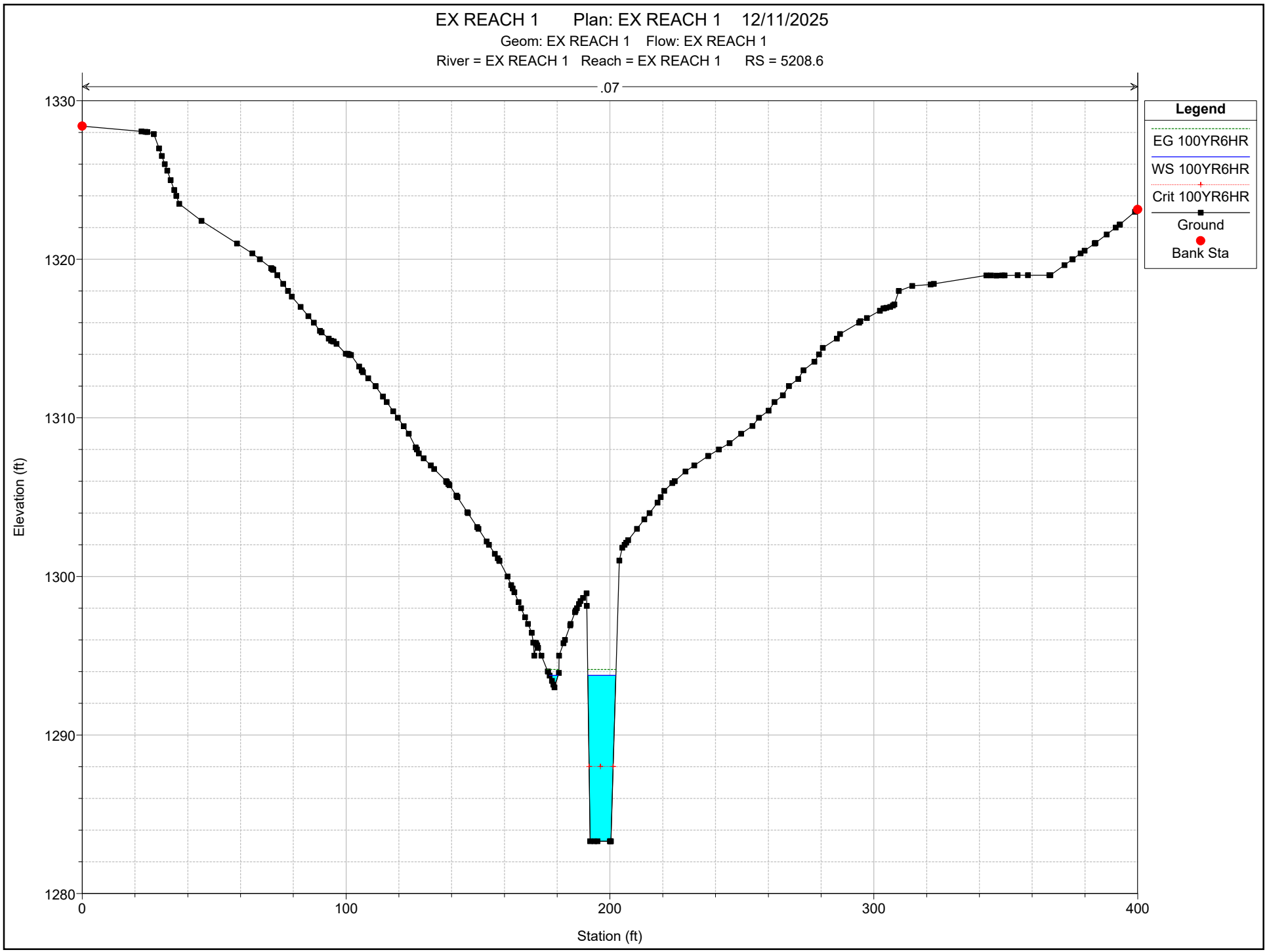
Q Culv Group (cfs)	390.41	Culv Full Len (ft)	
# Barrels	1	Culv Vel US (ft/s)	19.88
Q Barrel (cfs)	390.41	Culv Vel DS (ft/s)	31.19
E.G. US. (ft)	1161.99	Culv Inv El Up (ft)	1143.00
W.S. US. (ft)	1161.98	Culv Inv El Dn (ft)	1140.50
E.G. DS (ft)	1146.81	Culv Frctn Ls (ft)	3.15
W.S. DS (ft)	1146.43	Culv Exit Loss (ft)	11.85
Delta EG (ft)	15.18	Culv Entr Loss (ft)	0.18
Delta WS (ft)	15.56	Q Weir (cfs)	241.91
E.G. IC (ft)	1161.99	Weir Sta Lft (ft)	176.42
E.G. OC (ft)	1154.33	Weir Sta Rgt (ft)	226.30
Culvert Control	Inlet	Weir Submerg	0.00
Culv WS Inlet (ft)	1148.00	Weir Max Depth (ft)	1.84
Culv WS Outlet (ft)	1143.54	Weir Avg Depth (ft)	1.50
Culv Nml Depth (ft)	3.33	Weir Flow Area (sq ft)	74.89
Culv Crt Depth (ft)	5.00	Min El Weir Flow (ft)	1154.75

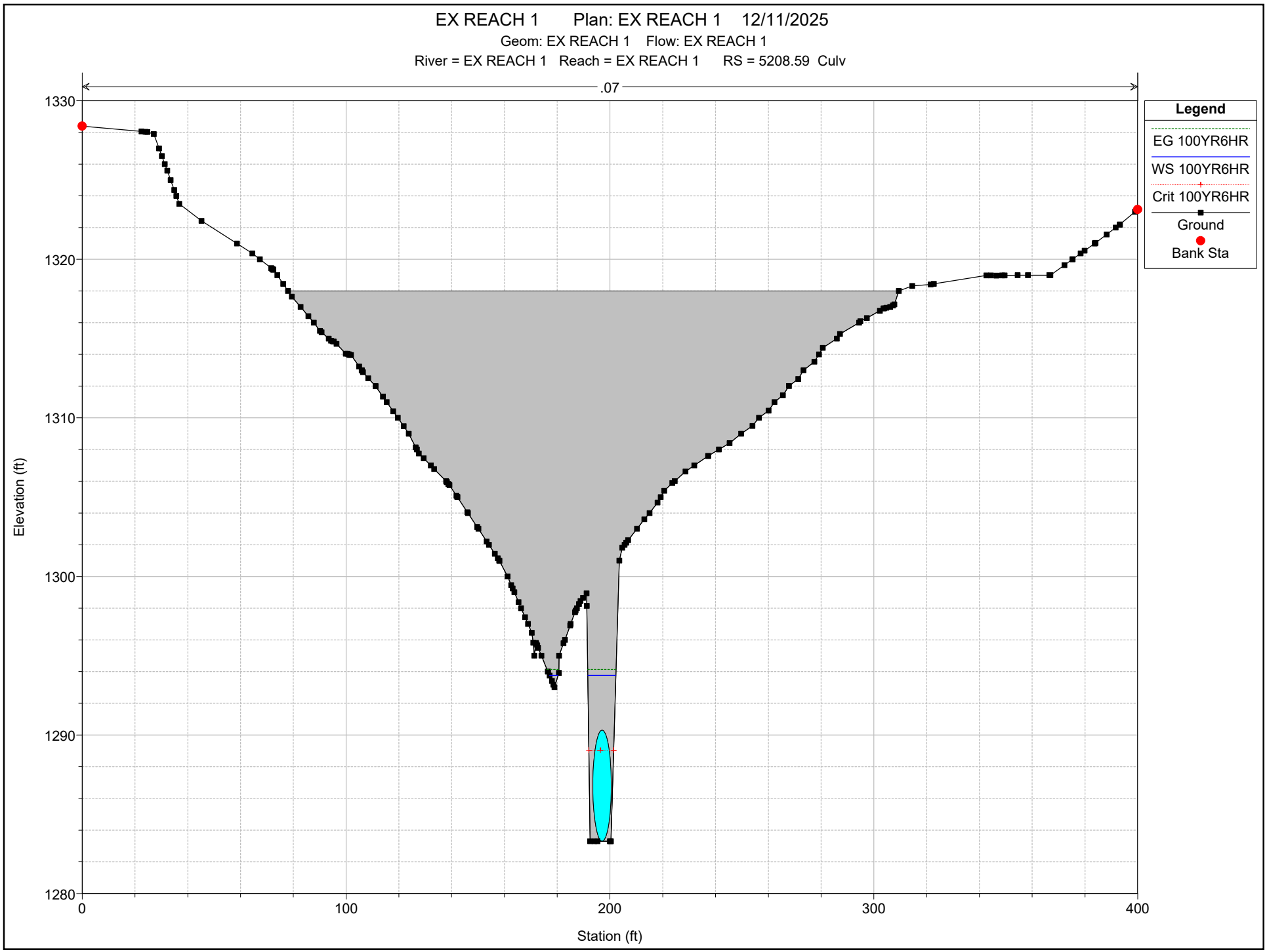
Plan: EX REACH 1 EX REACH 1 EX REACH 1 RS: 5208.59 Culv Group: EX CULVERT 3 Profile: 100YR6HR

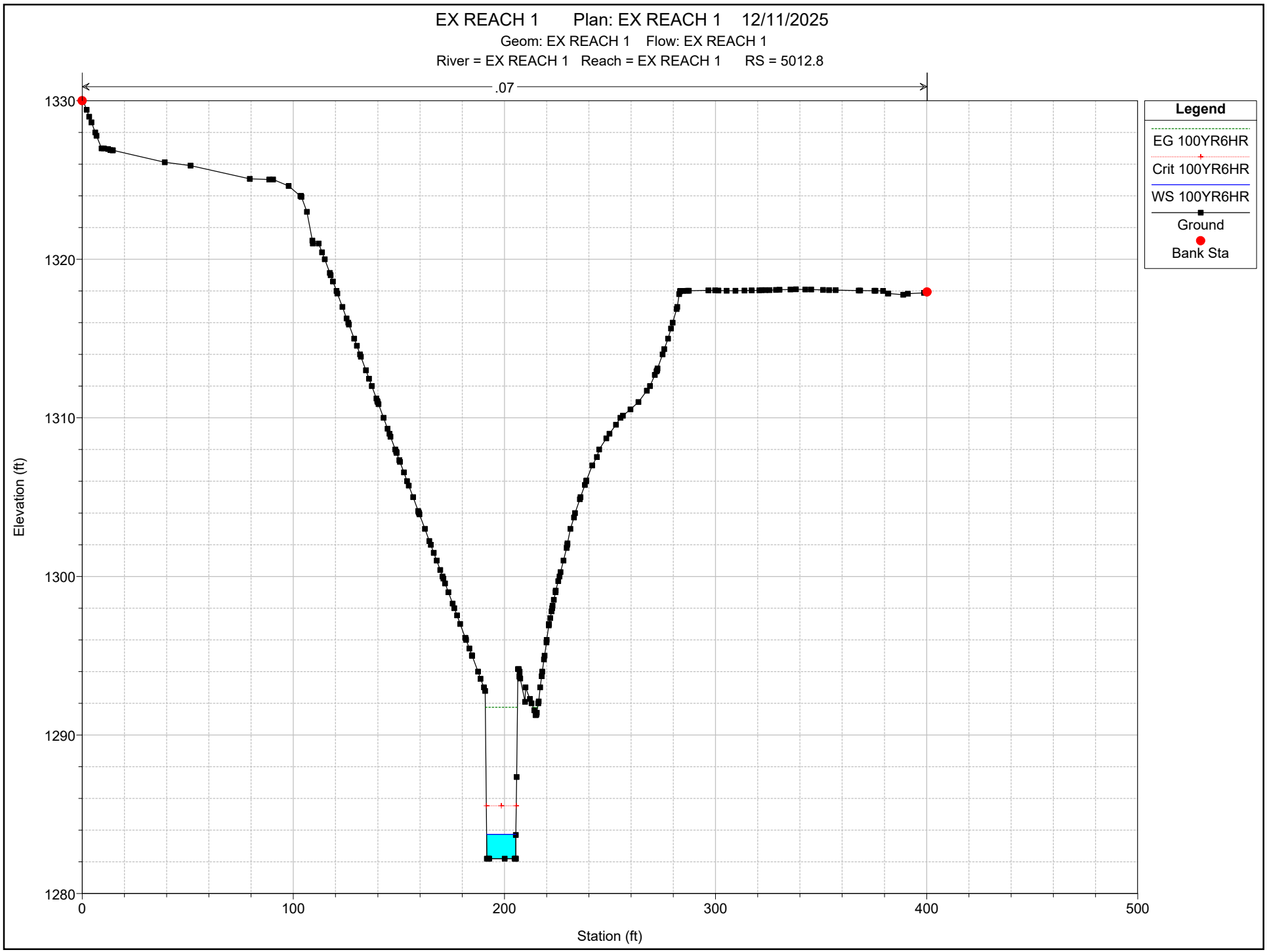
Q Culv Group (cfs)	478.60	Culv Full Len (ft)	
# Barrels	1	Culv Vel US (ft/s)	12.44
Q Barrel (cfs)	478.60	Culv Vel DS (ft/s)	18.09
E.G. US. (ft)	1294.13	Culv Inv El Up (ft)	1283.30
W.S. US. (ft)	1293.75	Culv Inv El Dn (ft)	1282.20
E.G. DS (ft)	1288.86	Culv Frctn Ls (ft)	2.22
W.S. DS (ft)	1288.40	Culv Exit Loss (ft)	2.97
Delta EG (ft)	5.27	Culv Entr Loss (ft)	0.07
Delta WS (ft)	5.36	Q Weir (cfs)	
E.G. IC (ft)	1294.13	Weir Sta Lft (ft)	
E.G. OC (ft)	1292.26	Weir Sta Rgt (ft)	
Culvert Control	Inlet	Weir Submerg	
Culv WS Inlet (ft)	1290.30	Weir Max Depth (ft)	
Culv WS Outlet (ft)	1286.75	Weir Avg Depth (ft)	
Culv Nml Depth (ft)	5.72	Weir Flow Area (sq ft)	
Culv Crt Depth (ft)	5.73	Min El Weir Flow (ft)	1318.01

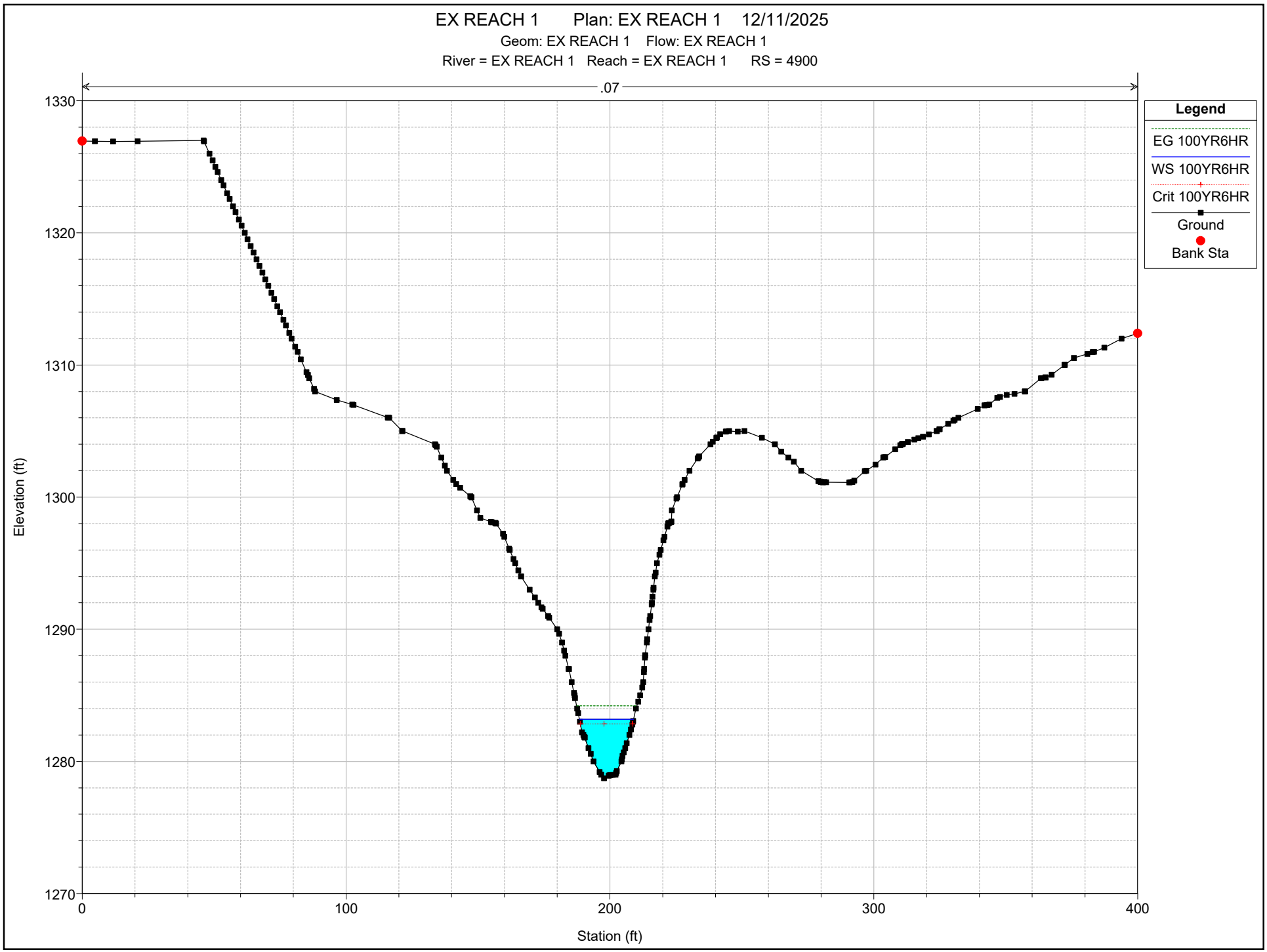

EX REACH 1 Plan: EX REACH 1 12/11/2025
Geom: EX REACH 1 Flow: EX REACH 1
River = EX REACH 1 Reach = EX REACH 1 RS = 5428
.07
Legend
EG 100YR6HR
WS 100YR6HR
Crit 100YR6HR
Ground
Bank Sta
Elevation (ft)
1340
1330
1320
1310
1300
1290
0
50
100
150
200
250
300
350
400
Station (ft)

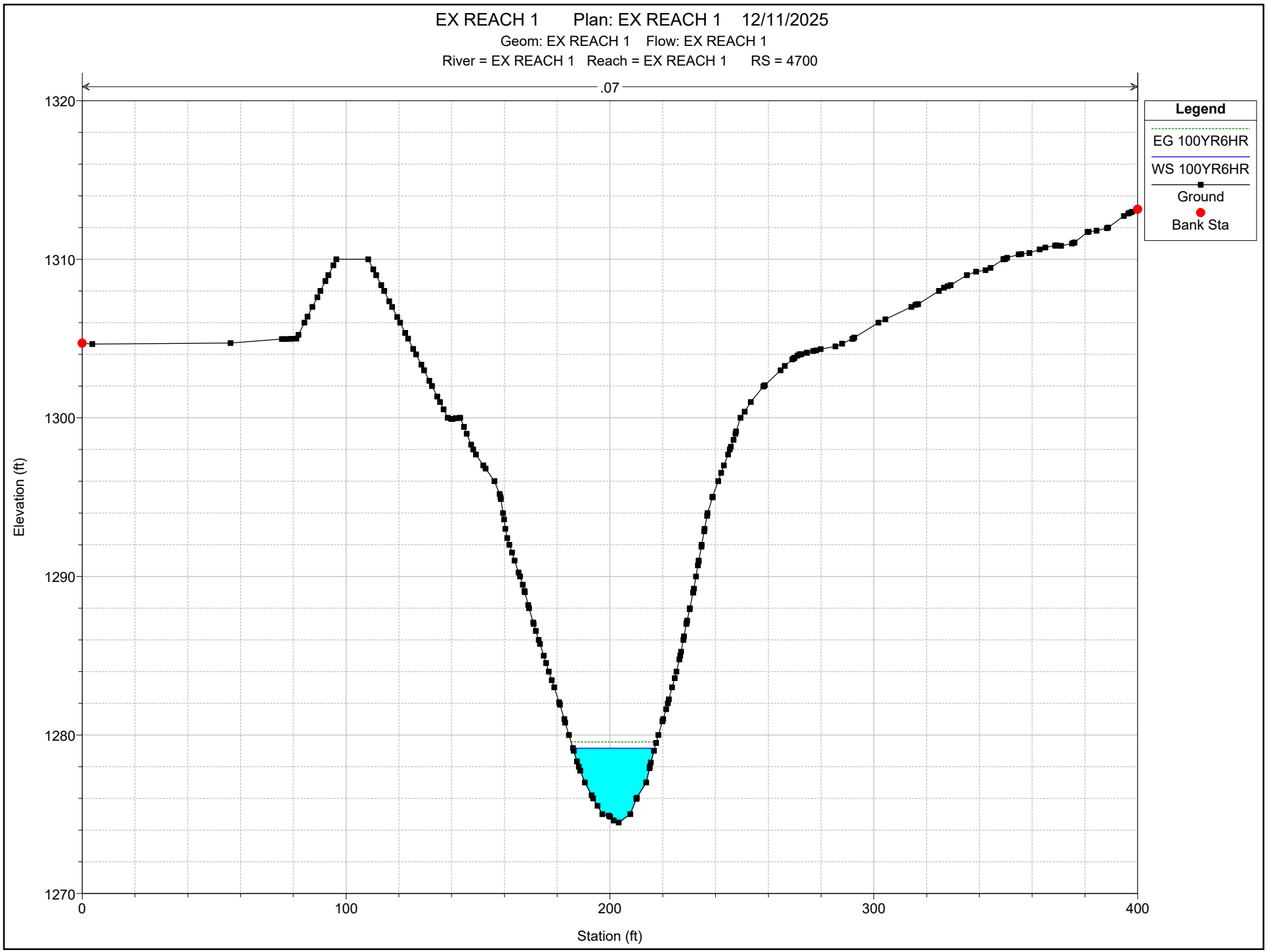

EX REACH 1 Plan: EX REACH 1 12/11/2025
Geom: EX REACH 1 Flow: EX REACH 1
River = EX REACH 1 Reach = EX REACH 1 RS = 5300
.07
Legend
EG 100YR6HR
WS 100YR6HR
Ground
Bank Sta
Elevation (ft)
1340
1330
1320
1310
1300
1290
1280
0
100
200
300
400
500
Station (ft)

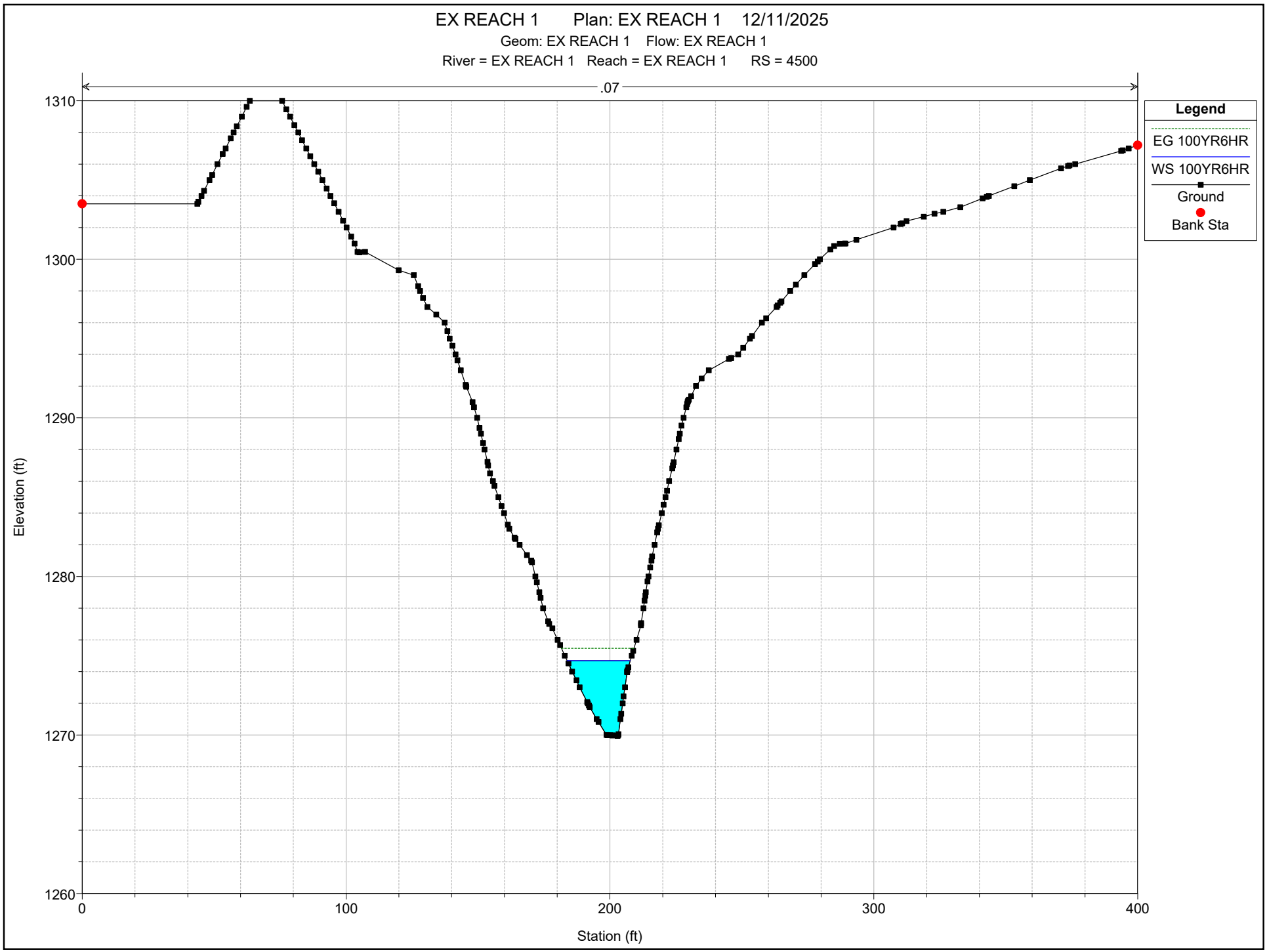

EX REACH 1 Plan: EX REACH 1 12/11/2025
Geom: EX REACH 1 Flow: EX REACH 1
River = EX REACH 1 Reach = EX REACH 1 RS = 5208.6
.07
Legend
EG 100YR6HR
WS 100YR6HR
Crit 100YR6HR
Ground
Bank Sta
Elevation (ft)
1330
1320
1310
1300
1290
1280
0
100
200
300
400
Station (ft)

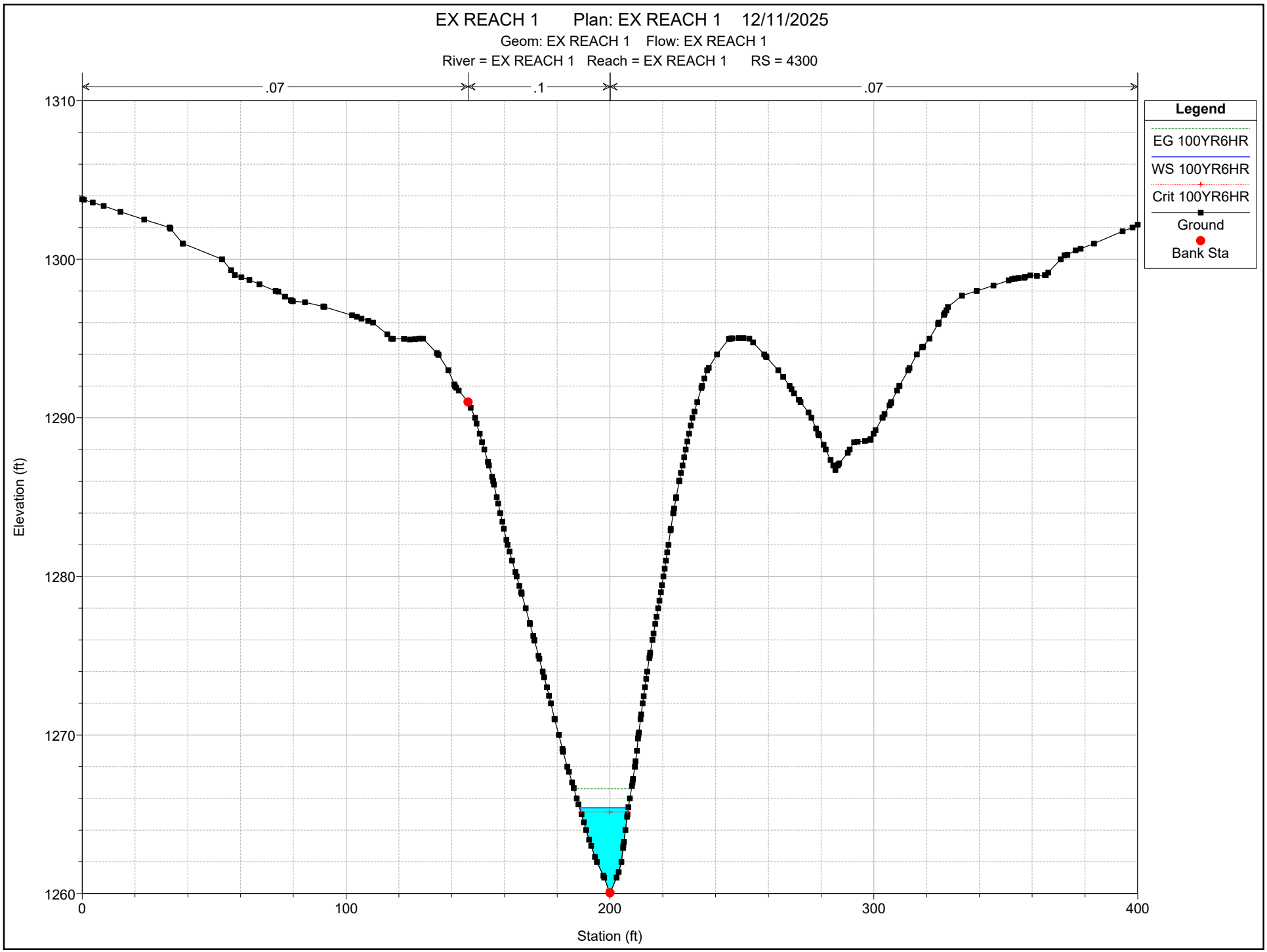

EX REACH 1 Plan: EX REACH 1 12/11/2025
Geom: EX REACH 1 Flow: EX REACH 1
River = EX REACH 1 Reach = EX REACH 1 RS = 5208.59 Culv
.07
Legend
EG 100YR6HR
WS 100YR6HR
Crit 100YR6HR
Ground
Bank Sta
Elevation (ft)
1330
1320
1310
1300
1290
1280
0
100
200
300
400
Station (ft)

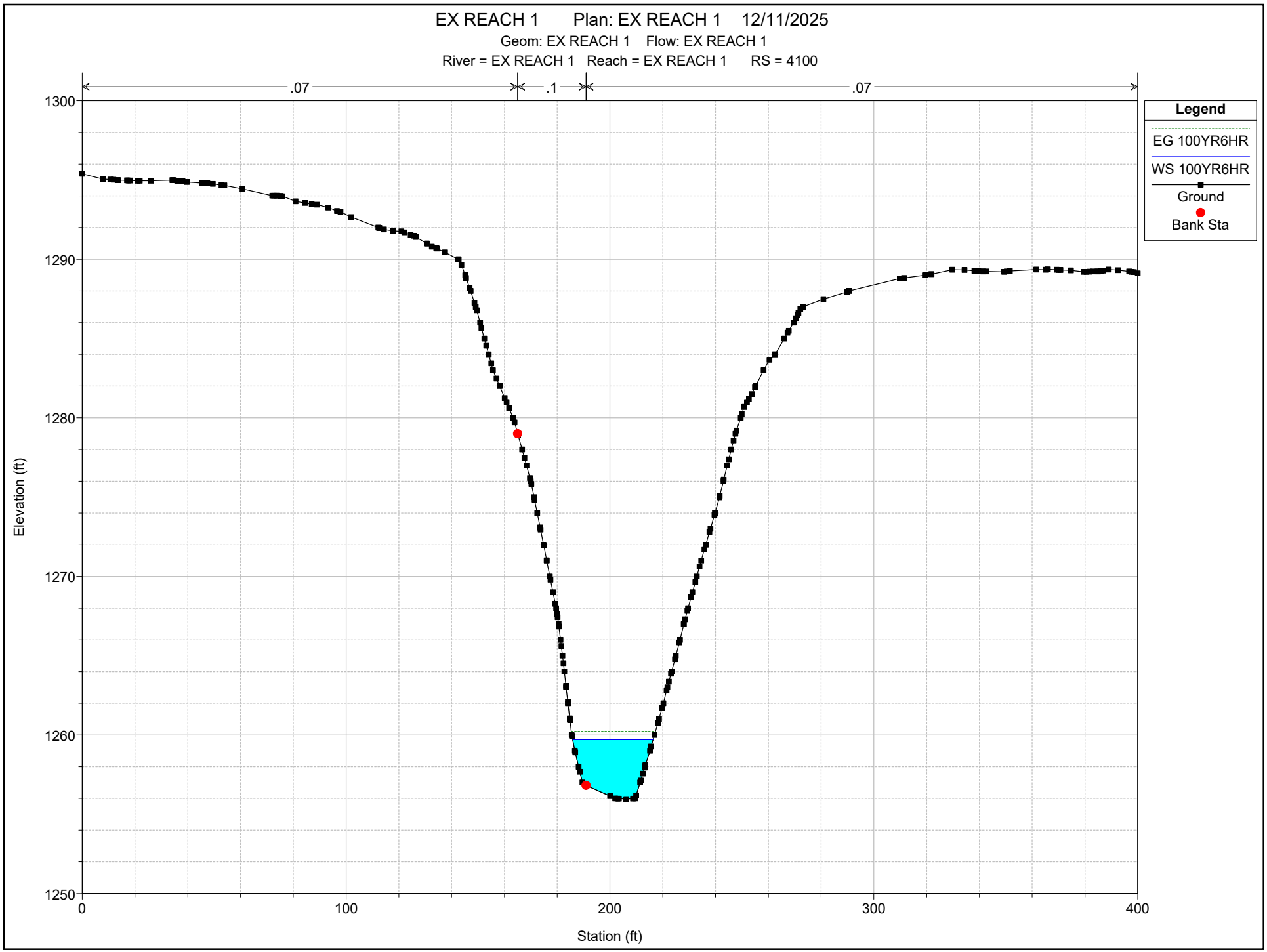

EX REACH 1 Plan: EX REACH 1 12/11/2025
Geom: EX REACH 1 Flow: EX REACH 1
River = EX REACH 1 Reach = EX REACH 1 RS = 5012.8
.07
Legend
EG 100YR6HR
Crit 100YR6HR
WS 100YR6HR
Ground
Bank Sta
Elevation (ft)
1330
1320
1310
1300
1290
1280
0
100
200
300
400
500
Station (ft)

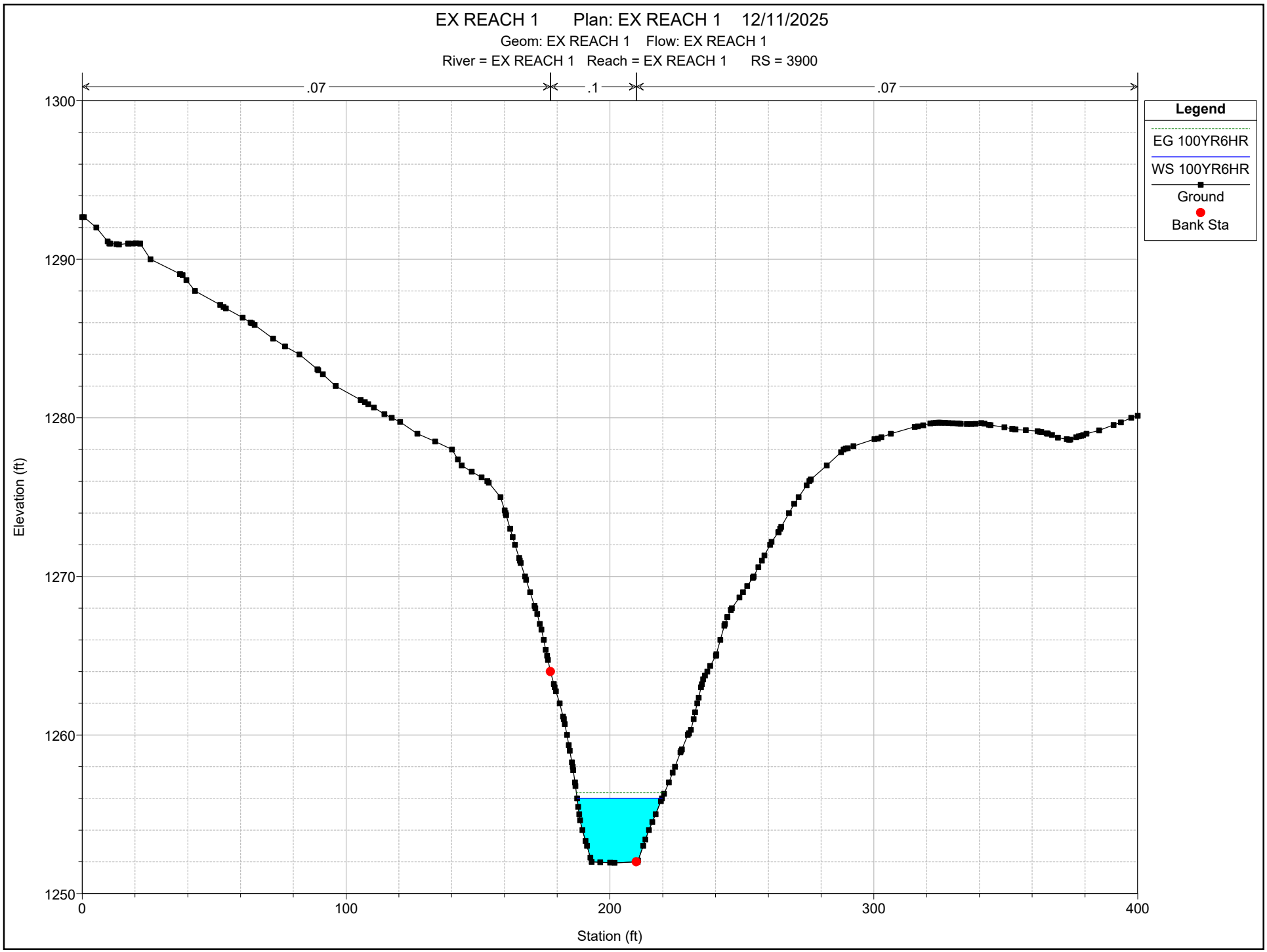

EX REACH 1 Plan: EX REACH 1 12/11/2025
Geom: EX REACH 1 Flow: EX REACH 1
River = EX REACH 1 Reach = EX REACH 1 RS = 4900
.07
Legend
EG 100YR6HR
WS 100YR6HR
Crit 100YR6HR
Ground
Bank Sta
Elevation (ft)
1330
1320
1310
1300
1290
1280
1270
0
100
200
300
400
Station (ft)

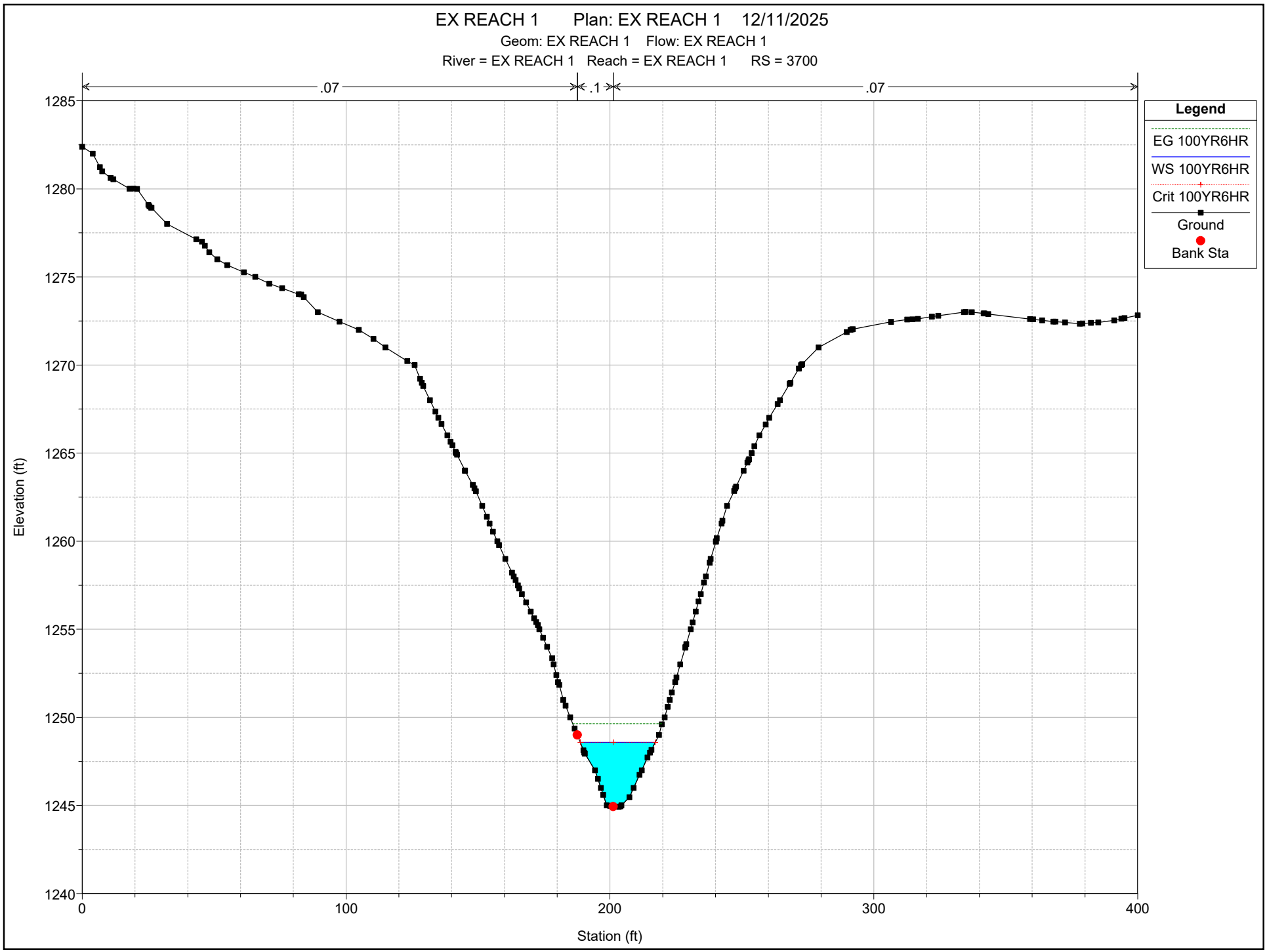

EX REACH 1 Plan: EX REACH 1 12/11/2025
Geom: EX REACH 1 Flow: EX REACH 1
River = EX REACH 1 Reach = EX REACH 1 RS = 4700
.07
Legend
EG 100YR6HR
WS 100YR6HR
Ground
Bank Sta
Elevation (ft)
1320
1310
1300
1290
1280
1270
0
100
200
300
400
Station (ft)

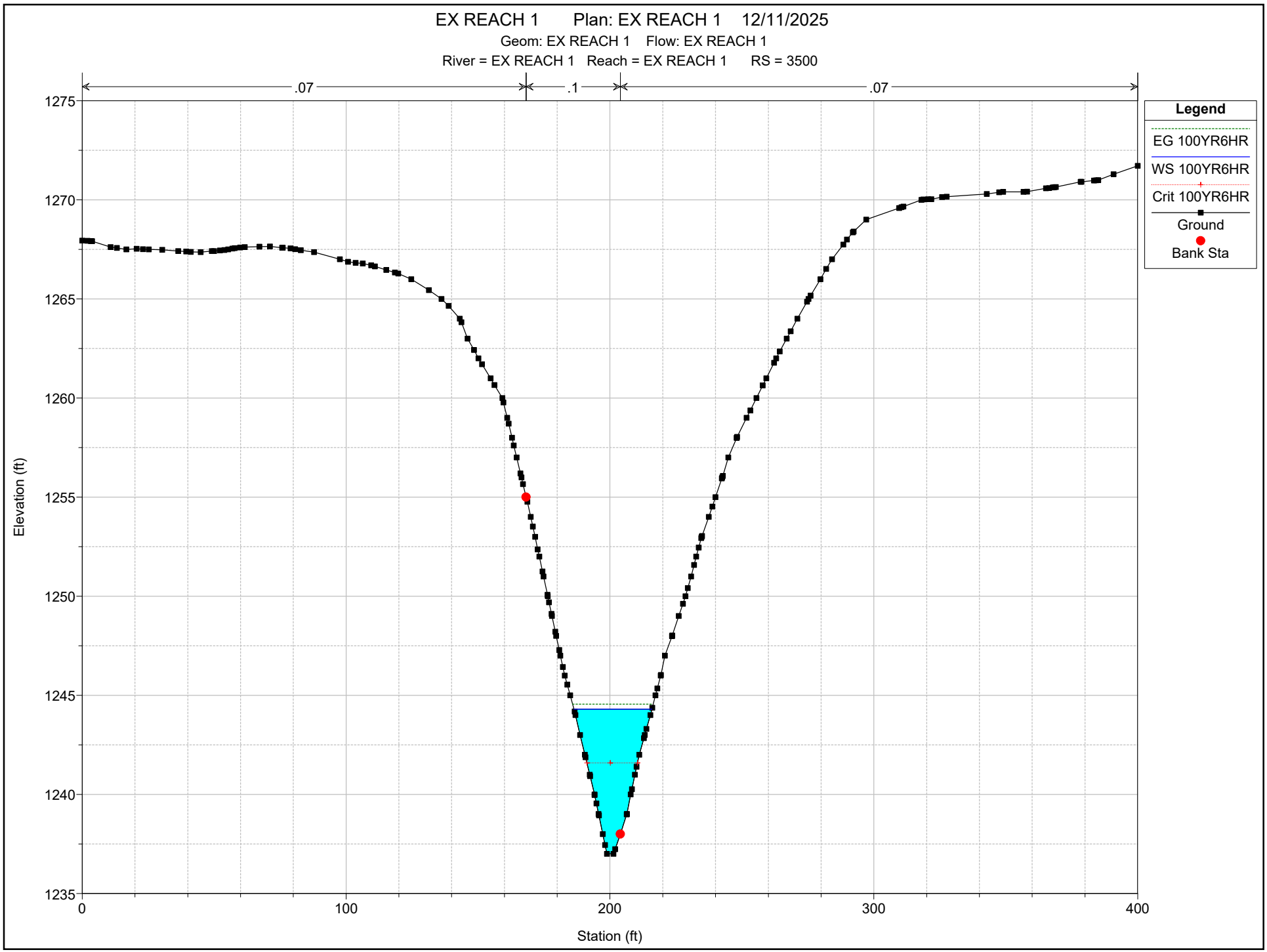

EX REACH 1 Plan: EX REACH 1 12/11/2025
Geom: EX REACH 1 Flow: EX REACH 1
River = EX REACH 1 Reach = EX REACH 1 RS = 4500
.07
Legend
EG 100YR6HR
WS 100YR6HR
Ground
Bank Sta
Elevation (ft)
1310
1300
1290
1280
1270
1260
0
100
200
300
400
Station (ft)

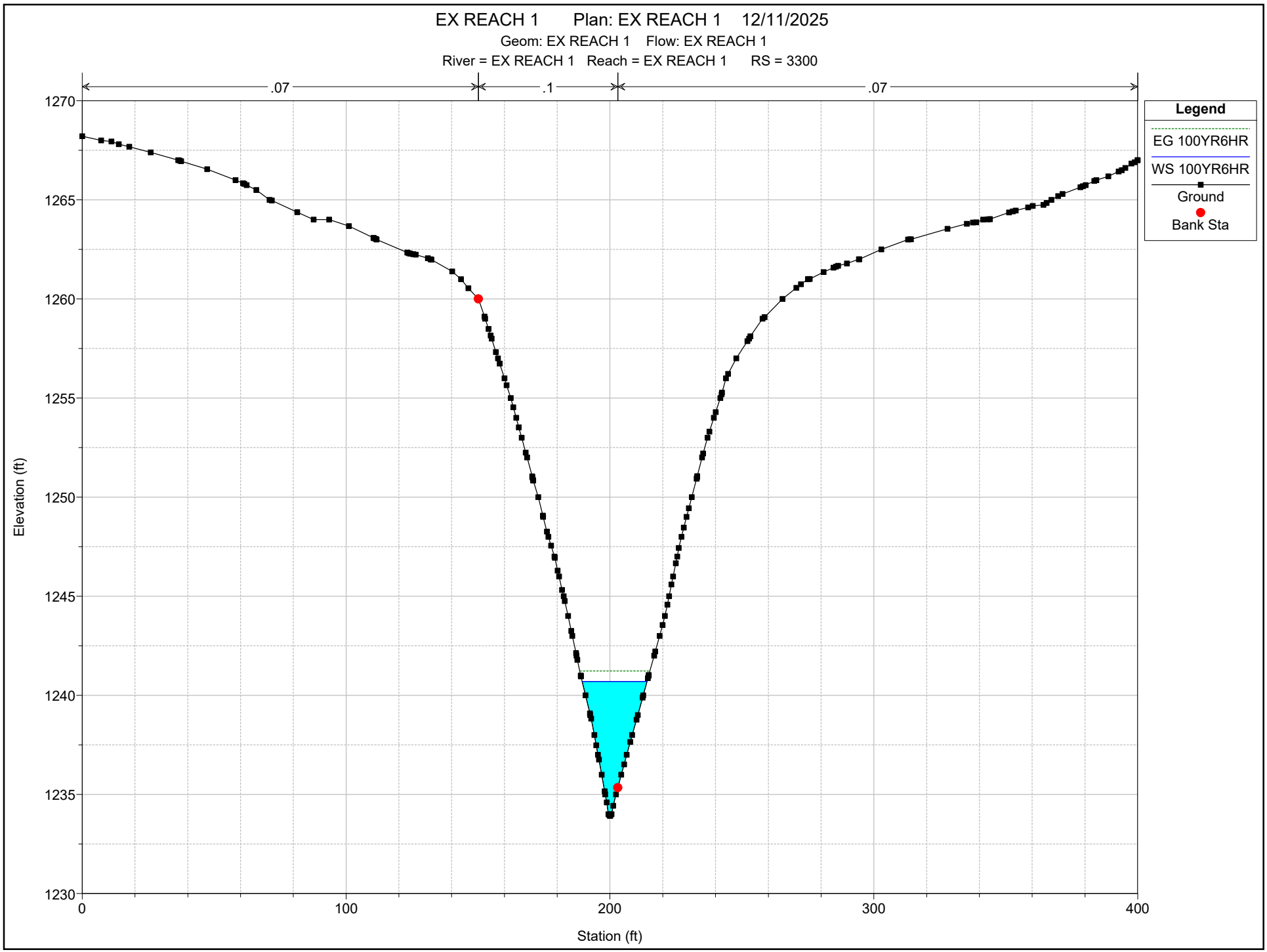

EX REACH 1 Plan: EX REACH 1 12/11/2025
Geom: EX REACH 1 Flow: EX REACH 1
River = EX REACH 1 Reach = EX REACH 1 RS = 4300
.07
.1
.07
Legend
EG 100YR6HR
WS 100YR6HR
Crit 100YR6HR
Ground
Bank Sta
Elevation (ft)
1310
1300
1290
1280
1270
1260
0
100
200
300
400
Station (ft)

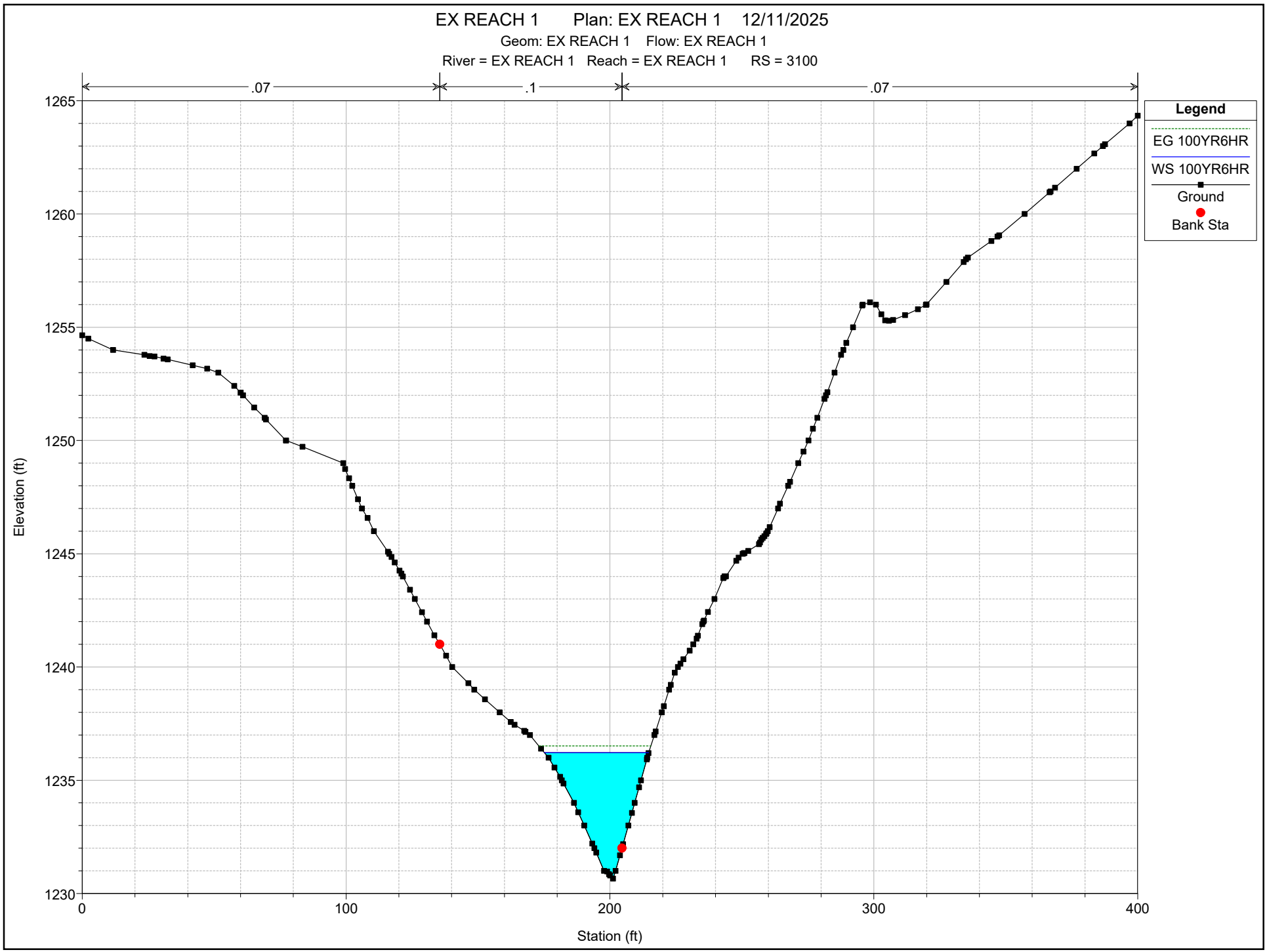

EX REACH 1 Plan: EX REACH 1 12/11/2025
Geom: EX REACH 1 Flow: EX REACH 1
River = EX REACH 1 Reach = EX REACH 1 RS = 4100
.07
.1
.07
Legend
EG 100YR6HR
WS 100YR6HR
Ground
Bank Sta
Elevation (ft)
1300
1290
1280
1270
1260
1250
0
100
200
300
400
Station (ft)

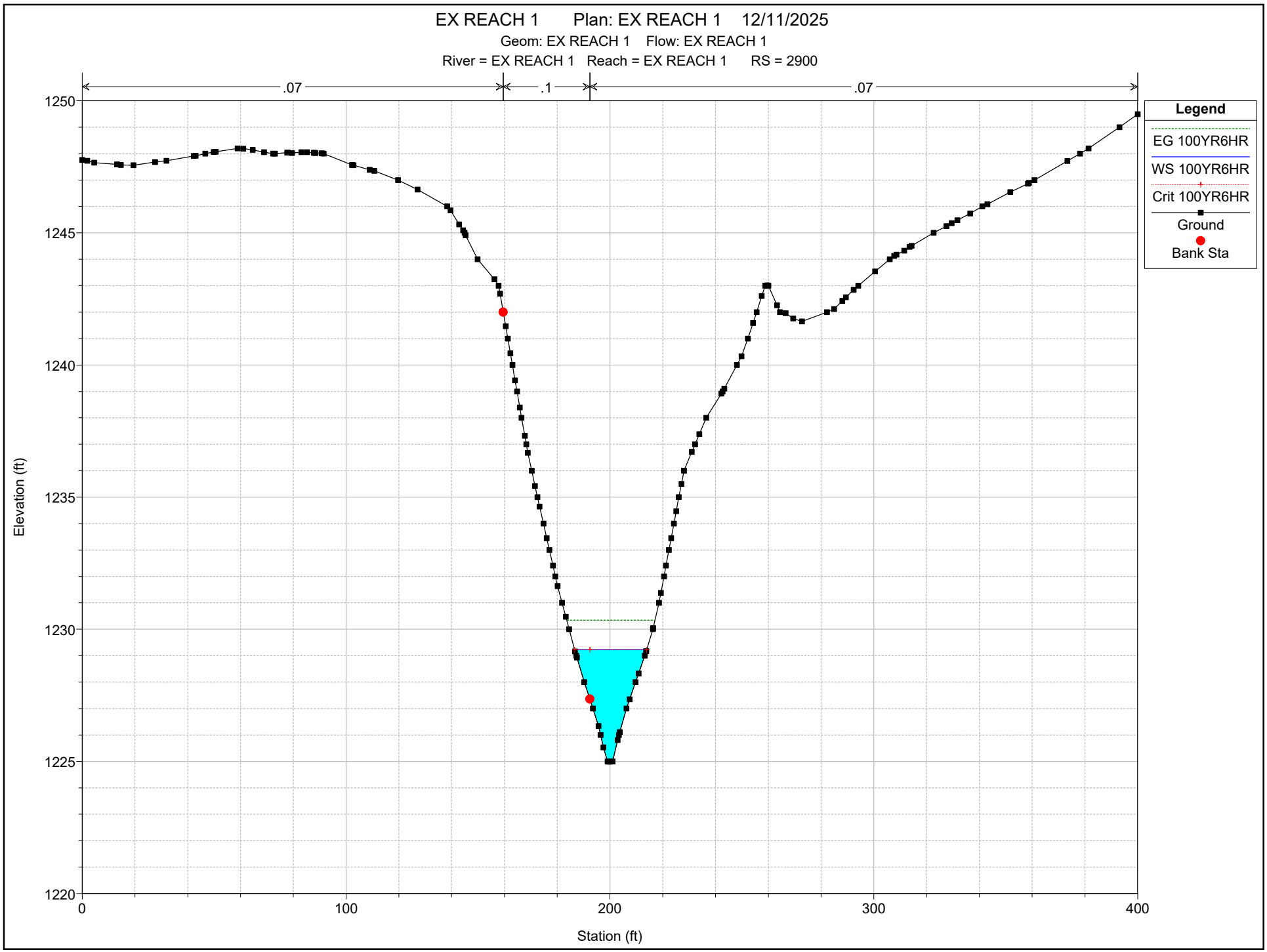

EX REACH 1 Plan: EX REACH 1 12/11/2025
Geom: EX REACH 1 Flow: EX REACH 1
River = EX REACH 1 Reach = EX REACH 1 RS = 3900
.07
.1
.07
Legend
EG 100YR6HR
WS 100YR6HR
Ground
Bank Sta
Elevation (ft)
1300
1290
1280
1270
1260
1250
0
100
200
300
400
Station (ft)

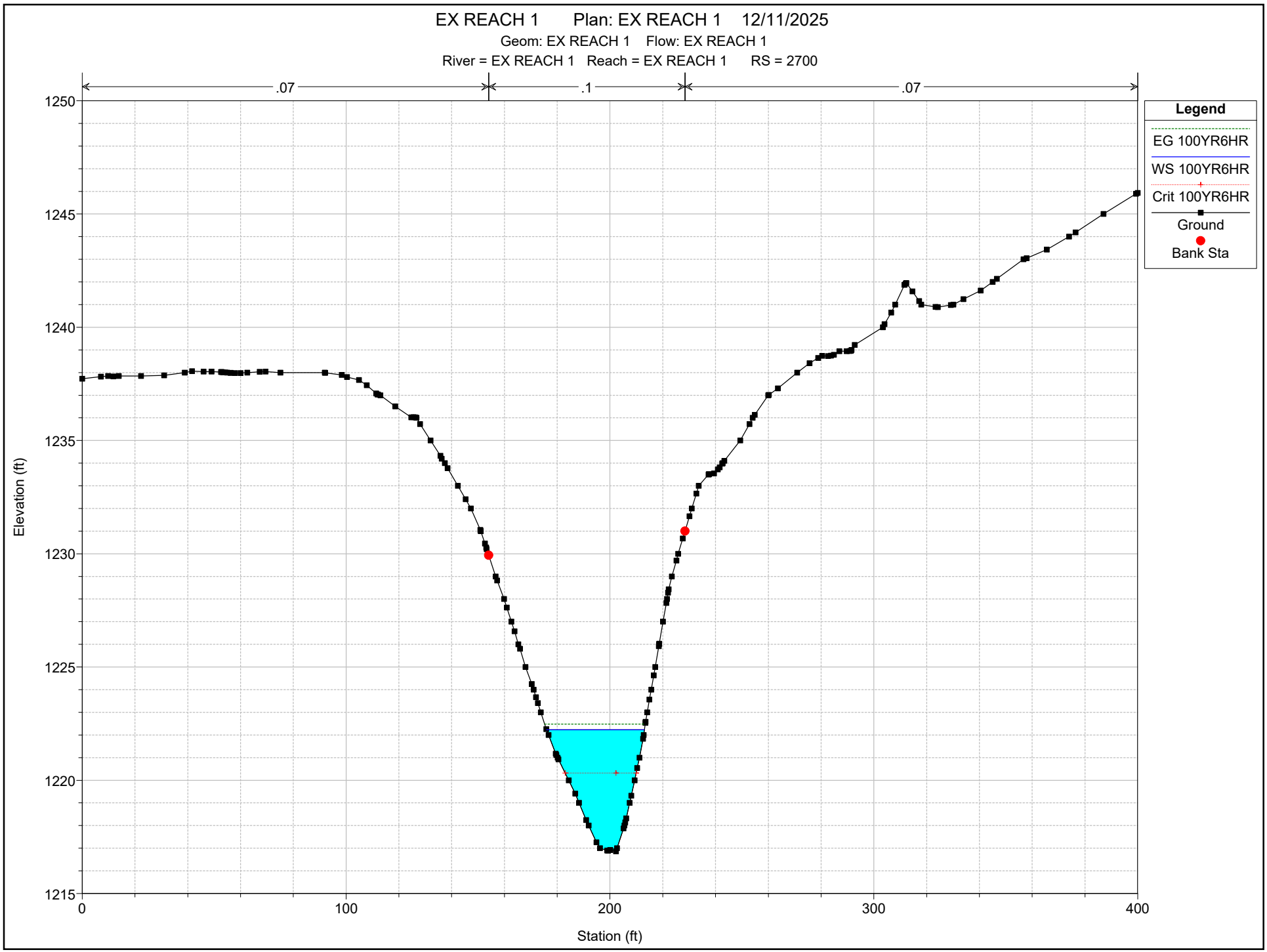

EX REACH 1 Plan: EX REACH 1 12/11/2025
Geom: EX REACH 1 Flow: EX REACH 1
River = EX REACH 1 Reach = EX REACH 1 RS = 3700
.07
.1
.07
Legend
EG 100YR6HR
WS 100YR6HR
Crit 100YR6HR
Ground
Bank Sta
Elevation (ft)
1285
1280
1275
1270
1265
1260
1255
1250
1245
1240
0
100
200
300
400
Station (ft)

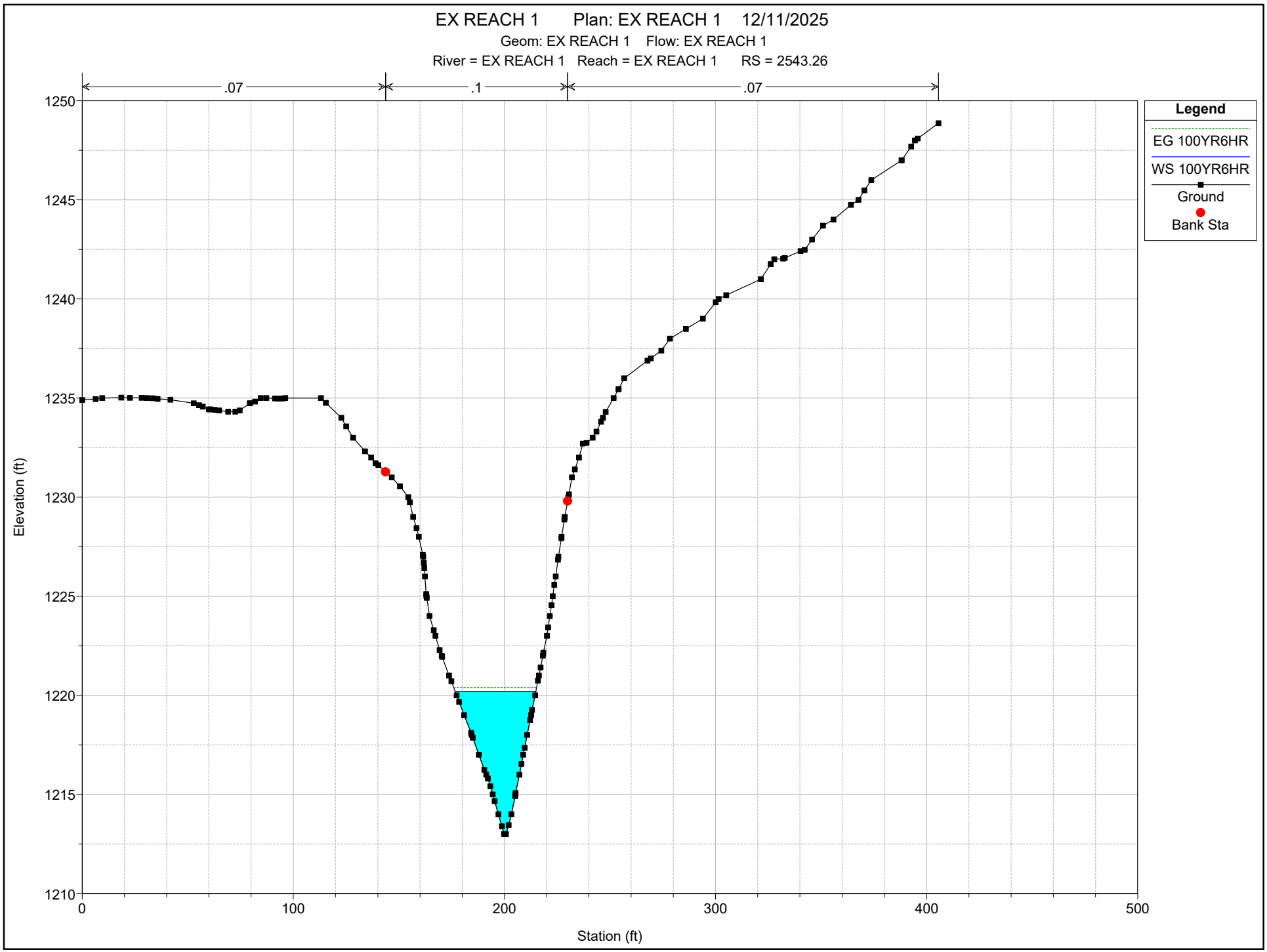

EX REACH 1 Plan: EX REACH 1 12/11/2025
Geom: EX REACH 1 Flow: EX REACH 1
River = EX REACH 1 Reach = EX REACH 1 RS = 3500
.07
.1
.07
Legend
EG 100YR6HR
WS 100YR6HR
Crit 100YR6HR
Ground
Bank Sta
Elevation (ft)
1275
1270
1265
1260
1255
1250
1245
1240
1235
0
100
200
300
400
Station (ft)

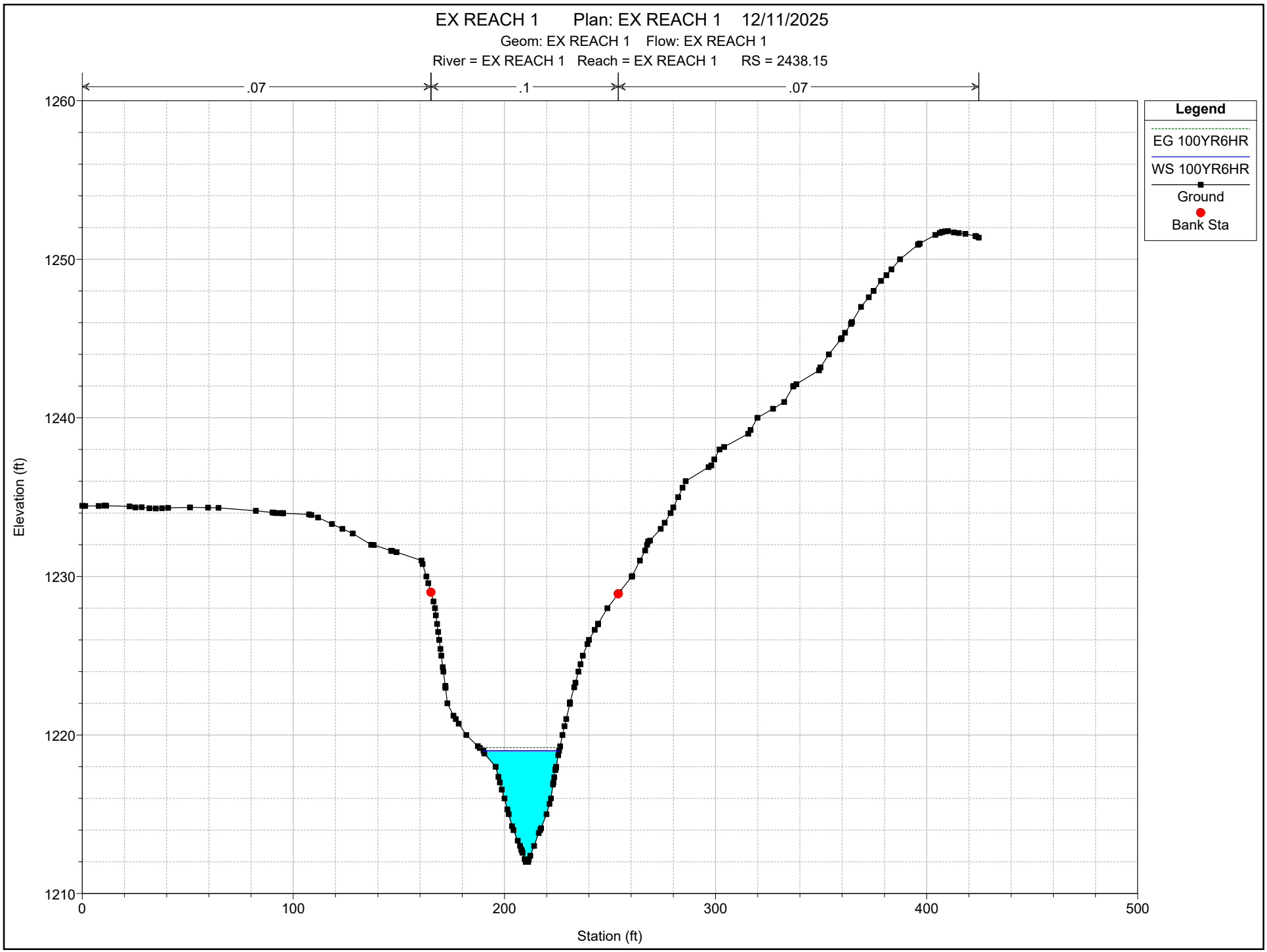

EX REACH 1 Plan: EX REACH 1 12/11/2025
Geom: EX REACH 1 Flow: EX REACH 1
River = EX REACH 1 Reach = EX REACH 1 RS = 3300
.07
.1
.07
Legend
EG 100YR6HR
WS 100YR6HR
Ground
Bank Sta
Elevation (ft)
Station (ft)
1270
1265
1260
1255
1250
1245
1240
1235
1230
0
100
200
300
400

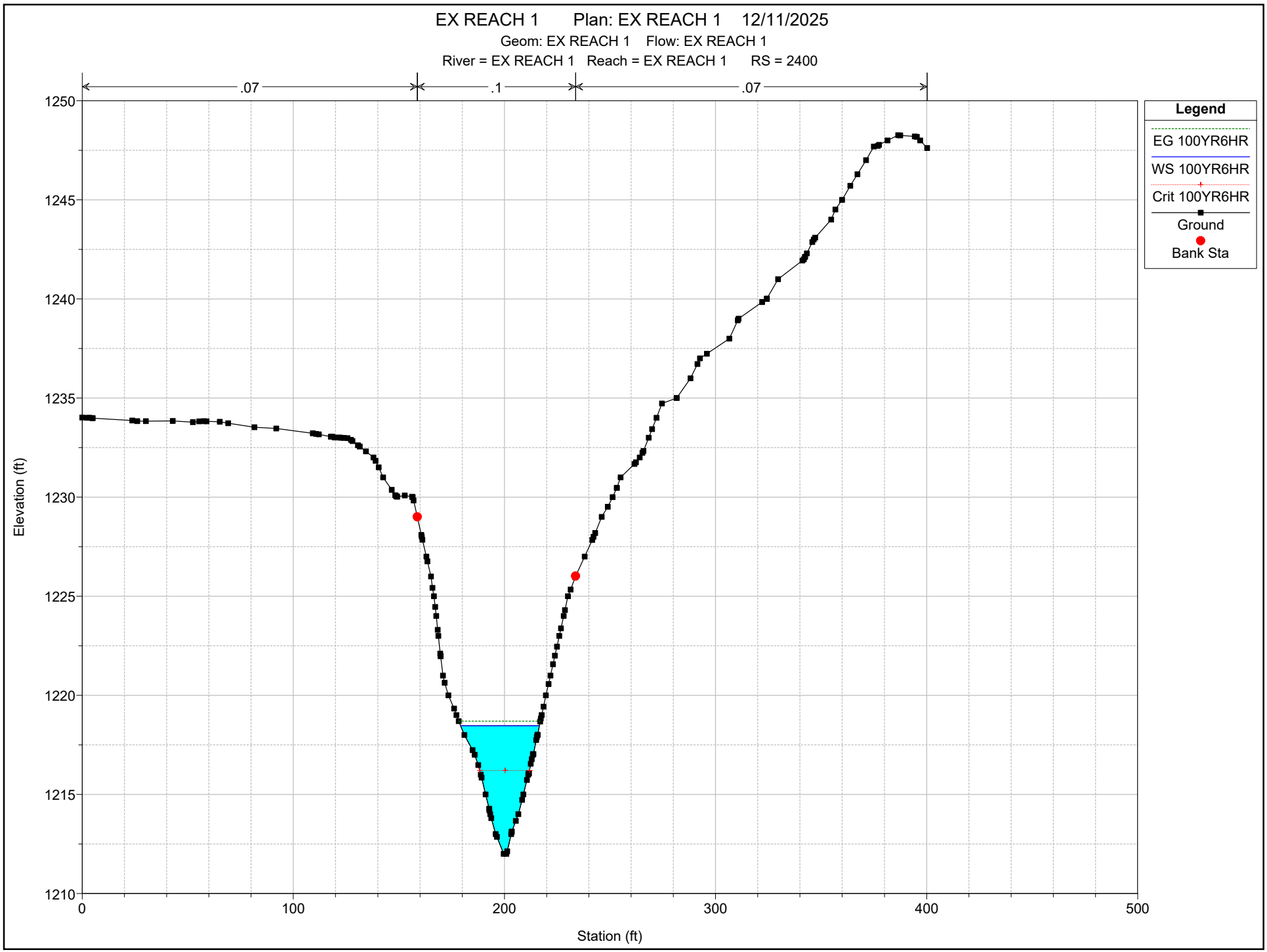

EX REACH 1 Plan: EX REACH 1 12/11/2025
Geom: EX REACH 1 Flow: EX REACH 1
River = EX REACH 1 Reach = EX REACH 1 RS = 3100
.07
.1
.07
Legend
EG 100YR6HR
WS 100YR6HR
Ground
Bank Sta
Elevation (ft)
Station (ft)
1265
1260
1255
1250
1245
1240
1235
1230
0
100
200
300
400

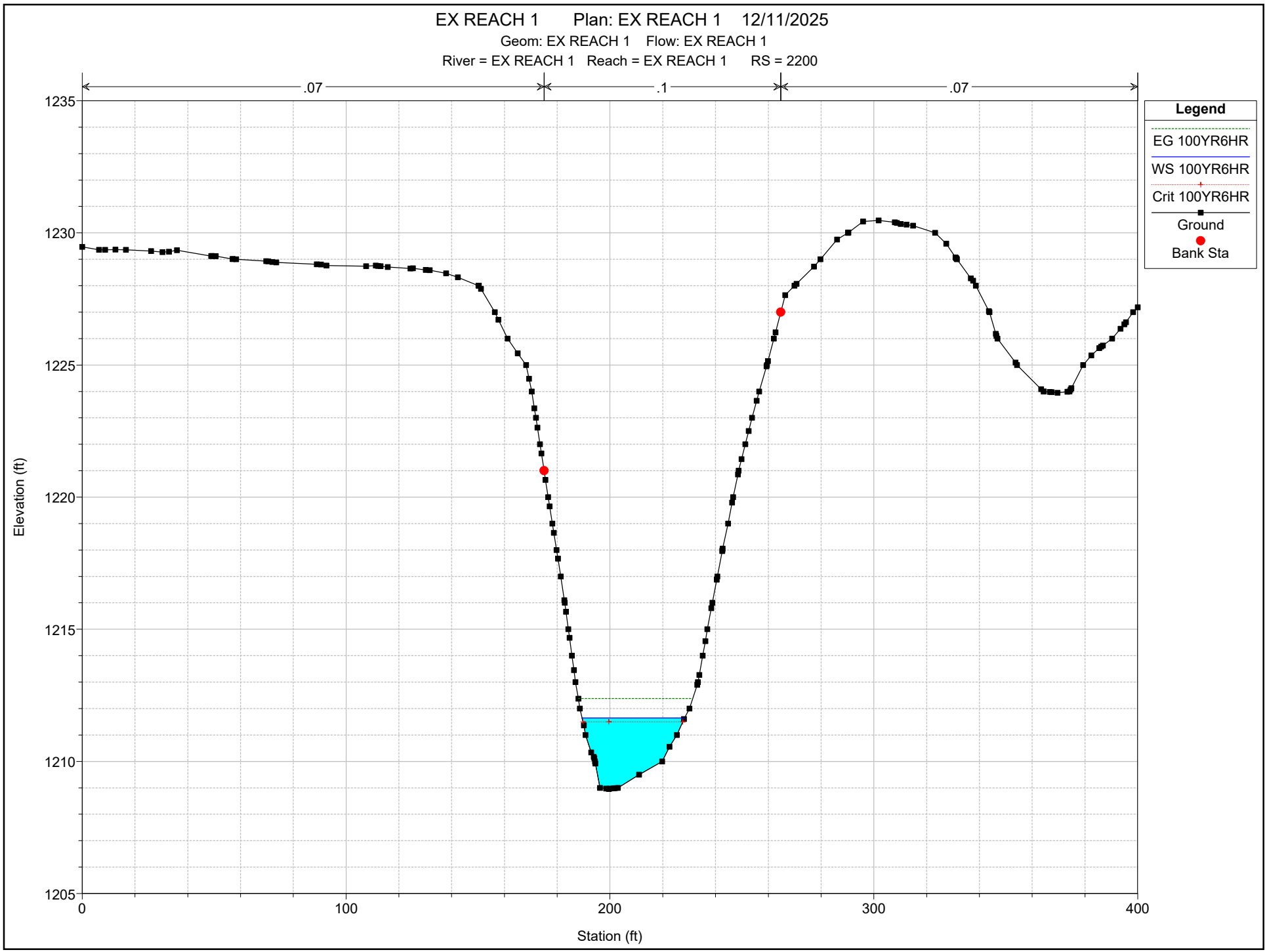

EX REACH 1 Plan: EX REACH 1 12/11/2025
Geom: EX REACH 1 Flow: EX REACH 1
River = EX REACH 1 Reach = EX REACH 1 RS = 2900
.07
.1
.07
Legend
EG 100YR6HR
WS 100YR6HR
Crit 100YR6HR
Ground
Bank Sta
Elevation (ft)
Station (ft)
1250
1245
1240
1235
1230
1225
1220
0
100
200
300
400

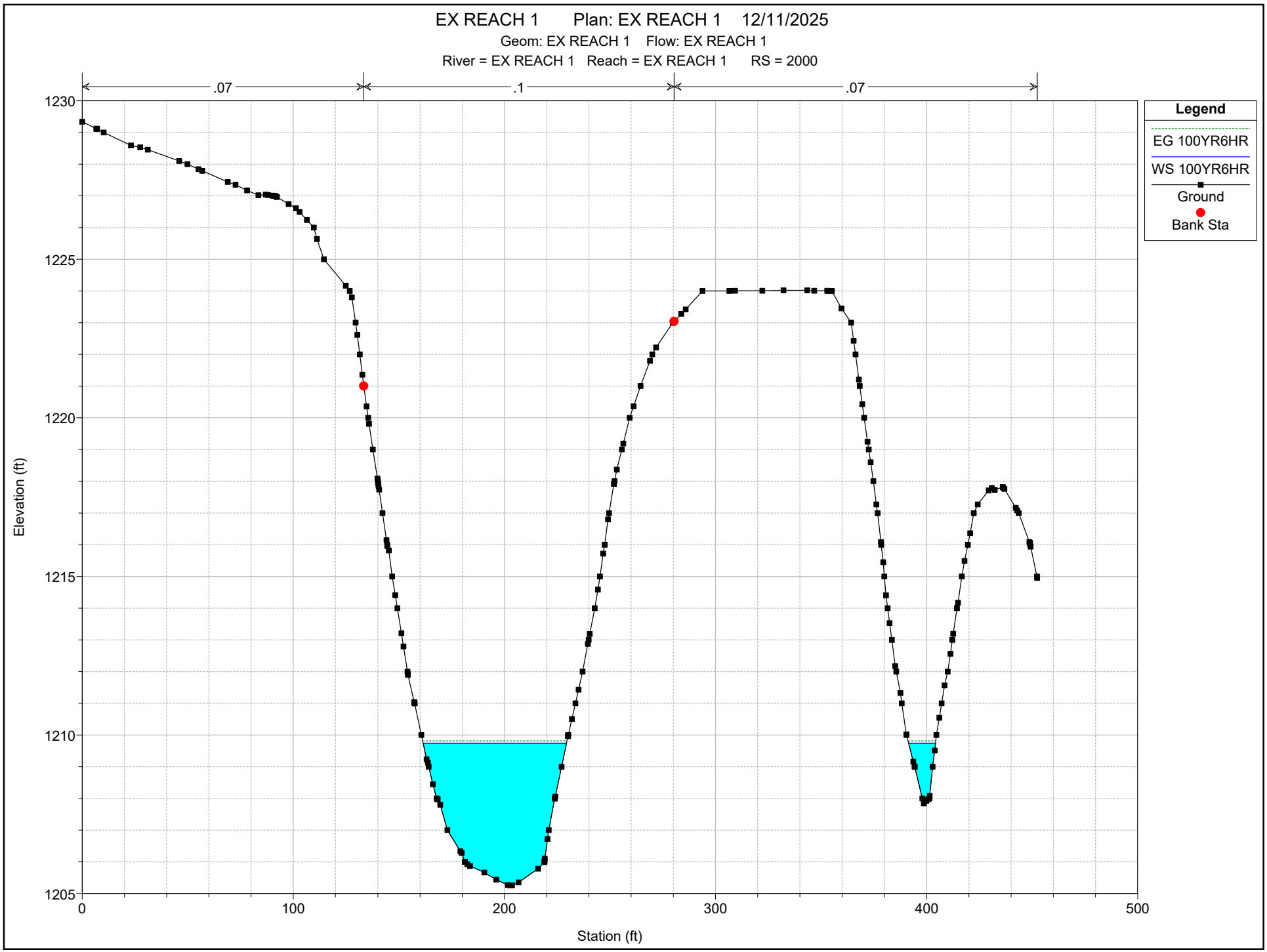

EX REACH 1 Plan: EX REACH 1 12/11/2025
Geom: EX REACH 1 Flow: EX REACH 1
River = EX REACH 1 Reach = EX REACH 1 RS = 2700
.07
.1
.07
Legend
EG 100YR6HR
WS 100YR6HR
Crit 100YR6HR
Ground
Bank Sta
Elevation (ft)
Station (ft)
1250
1245
1240
1235
1230
1225
1220
1215
0
100
200
300
400

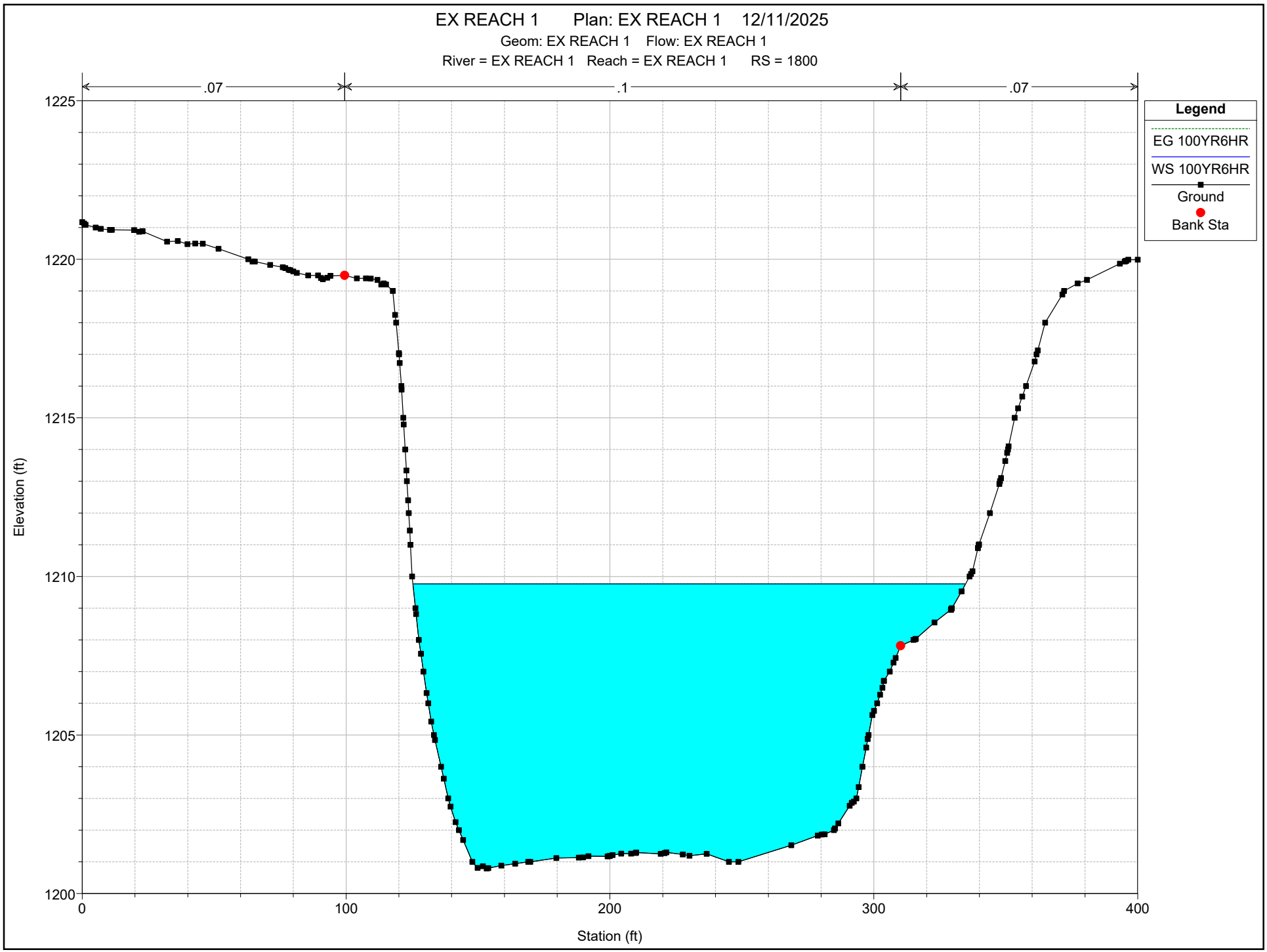

EX REACH 1 Plan: EX REACH 1 12/11/2025
Geom: EX REACH 1 Flow: EX REACH 1
River = EX REACH 1 Reach = EX REACH 1 RS = 2543.26
.07
.1
.07
Legend
EG 100YR6HR
WS 100YR6HR
Ground
Bank Sta
Elevation (ft)
Station (ft)
1250
1245
1240
1235
1230
1225
1220
1215
1210
0
100
200
300
400
500

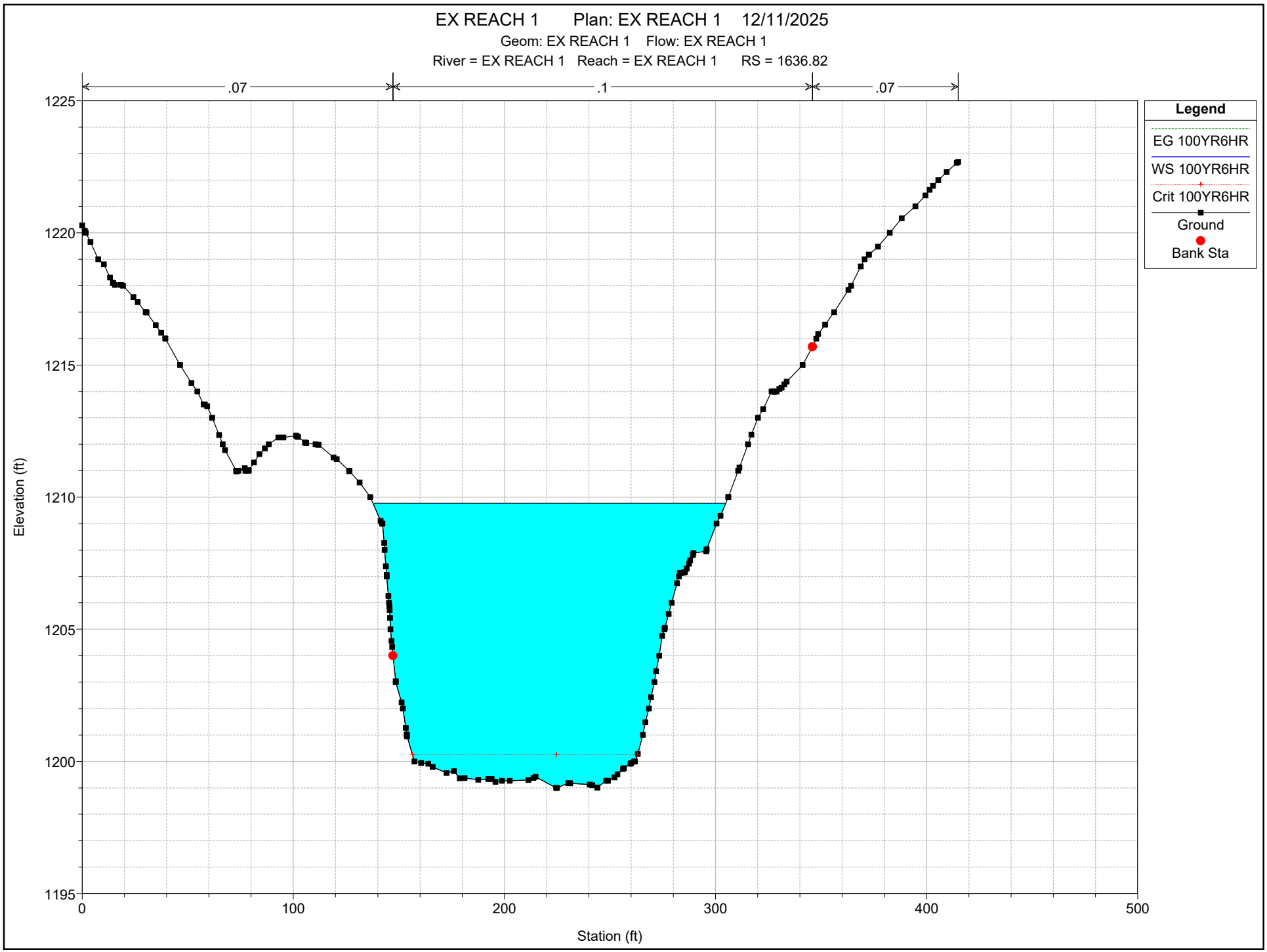

EX REACH 1 Plan: EX REACH 1 12/11/2025
Geom: EX REACH 1 Flow: EX REACH 1
River = EX REACH 1 Reach = EX REACH 1 RS = 2438.15
.07
.1
.07
Legend
EG 100YR6HR
WS 100YR6HR
Ground
Bank Sta
Elevation (ft)
1260
1250
1240
1230
1220
1210
0
100
200
300
400
500
Station (ft)

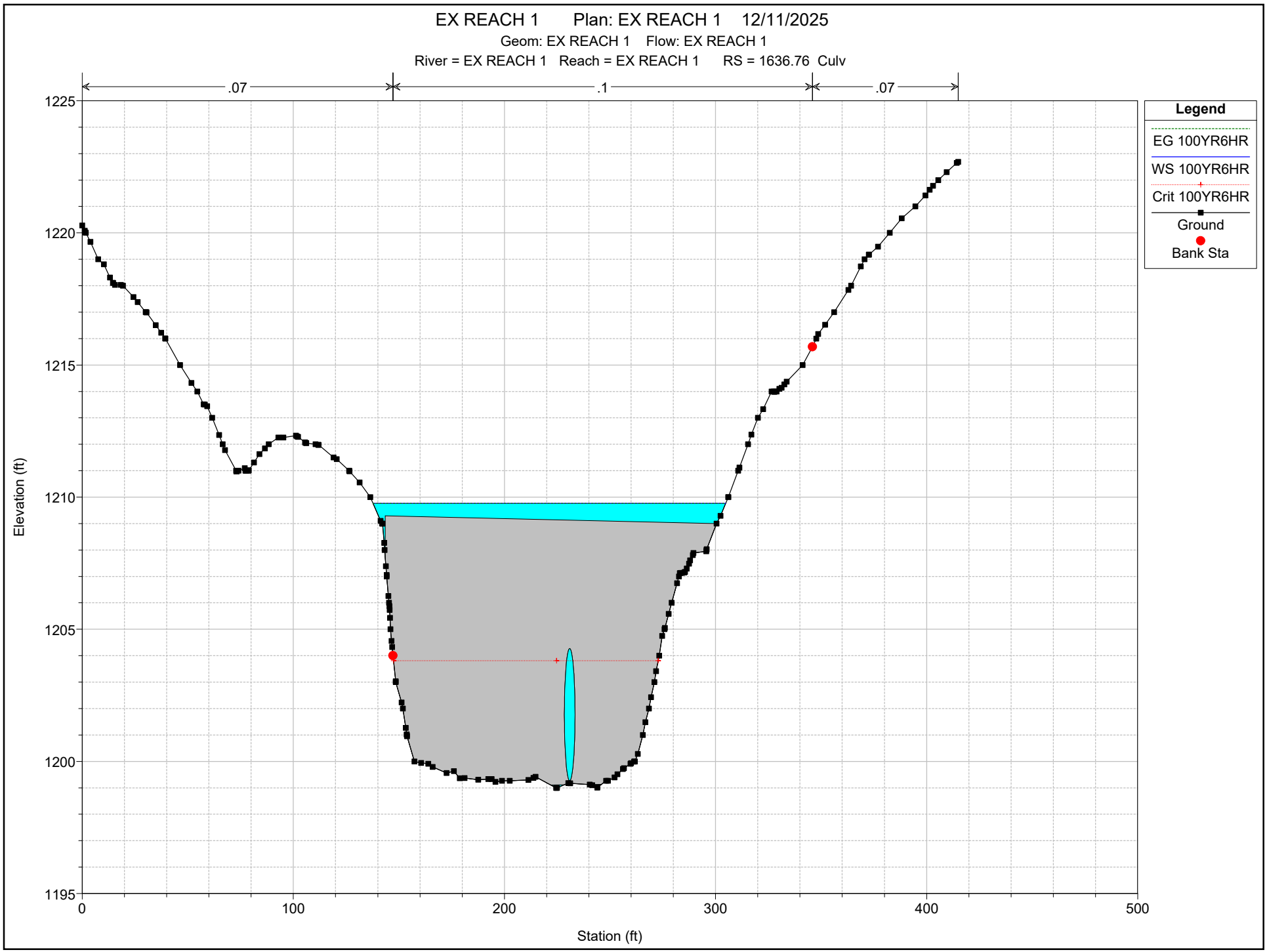

EX REACH 1 Plan: EX REACH 1 12/11/2025
Geom: EX REACH 1 Flow: EX REACH 1
River = EX REACH 1 Reach = EX REACH 1 RS = 2400
.07
.1
.07
Legend
EG 100YR6HR
WS 100YR6HR
Crit 100YR6HR
Ground
Bank Sta
Elevation (ft)
Station (ft)
1250
1245
1240
1235
1230
1225
1220
1215
1210
0
100
200
300
400
500

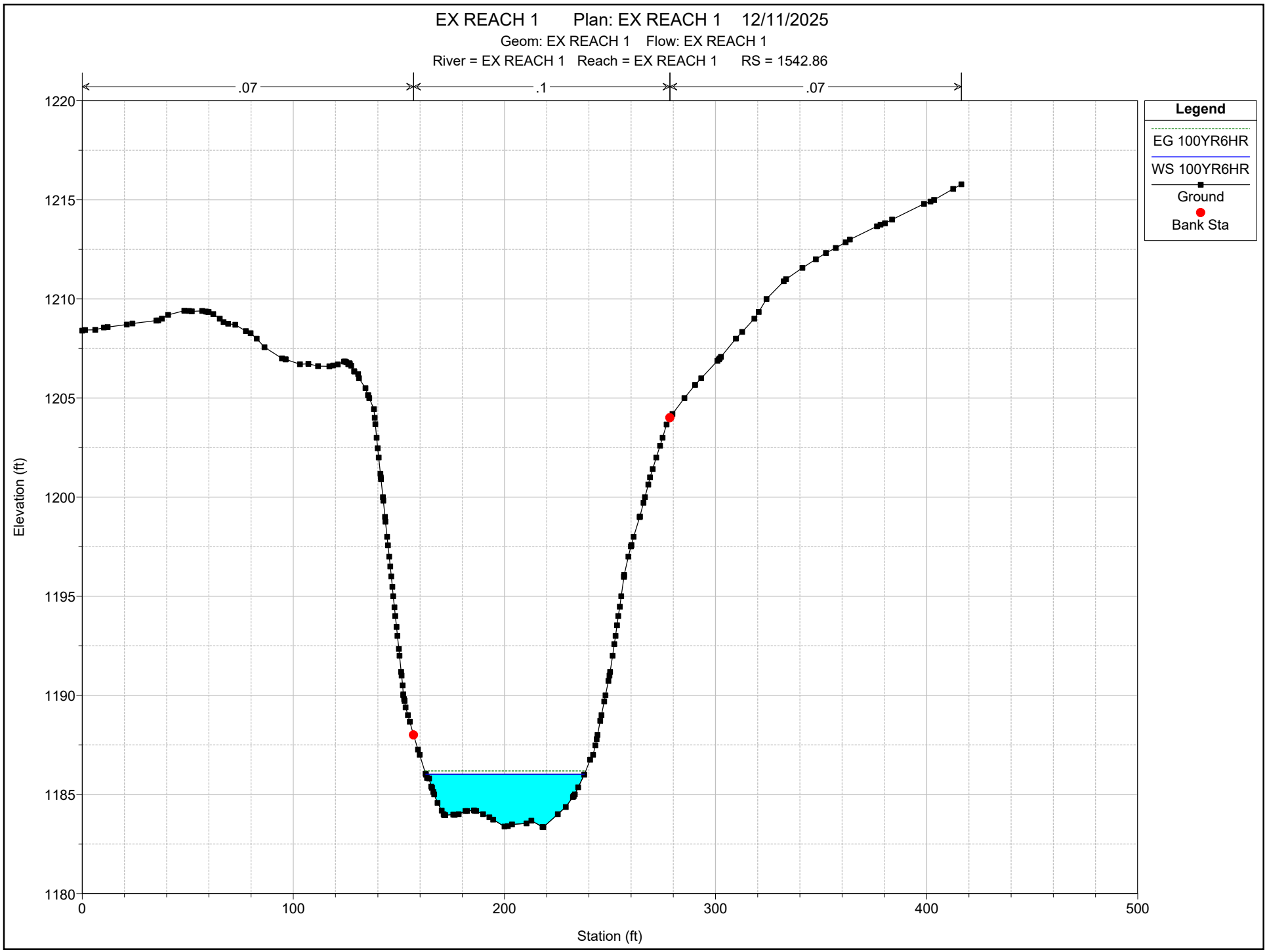

EX REACH 1 Plan: EX REACH 1 12/11/2025
Geom: EX REACH 1 Flow: EX REACH 1
River = EX REACH 1 Reach = EX REACH 1 RS = 2200
.07
.1
.07
Legend
EG 100YR6HR
WS 100YR6HR
Crit 100YR6HR
Ground
Bank Sta
Elevation (ft)
1235
1230
1225
1220
1215
1210
1205
0
100
200
300
400
Station (ft)

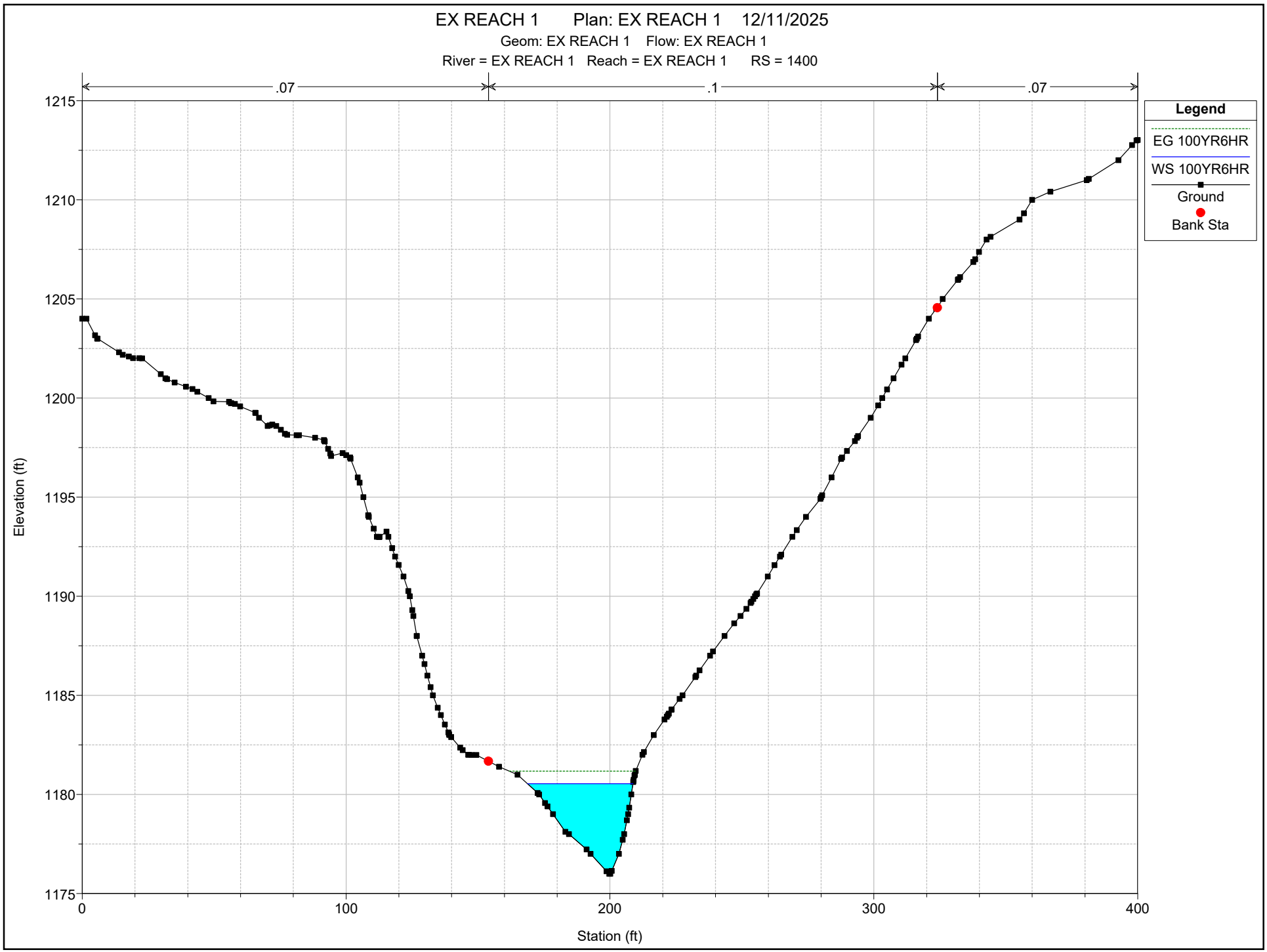

EX REACH 1 Plan: EX REACH 1 12/11/2025
Geom: EX REACH 1 Flow: EX REACH 1
River = EX REACH 1 Reach = EX REACH 1 RS = 2000
.07
.1
.07
Legend
EG 100YR6HR
WS 100YR6HR
Ground
Bank Sta
Elevation (ft)
Station (ft)
1230
1225
1220
1215
1210
1205
0
100
200
300
400
500

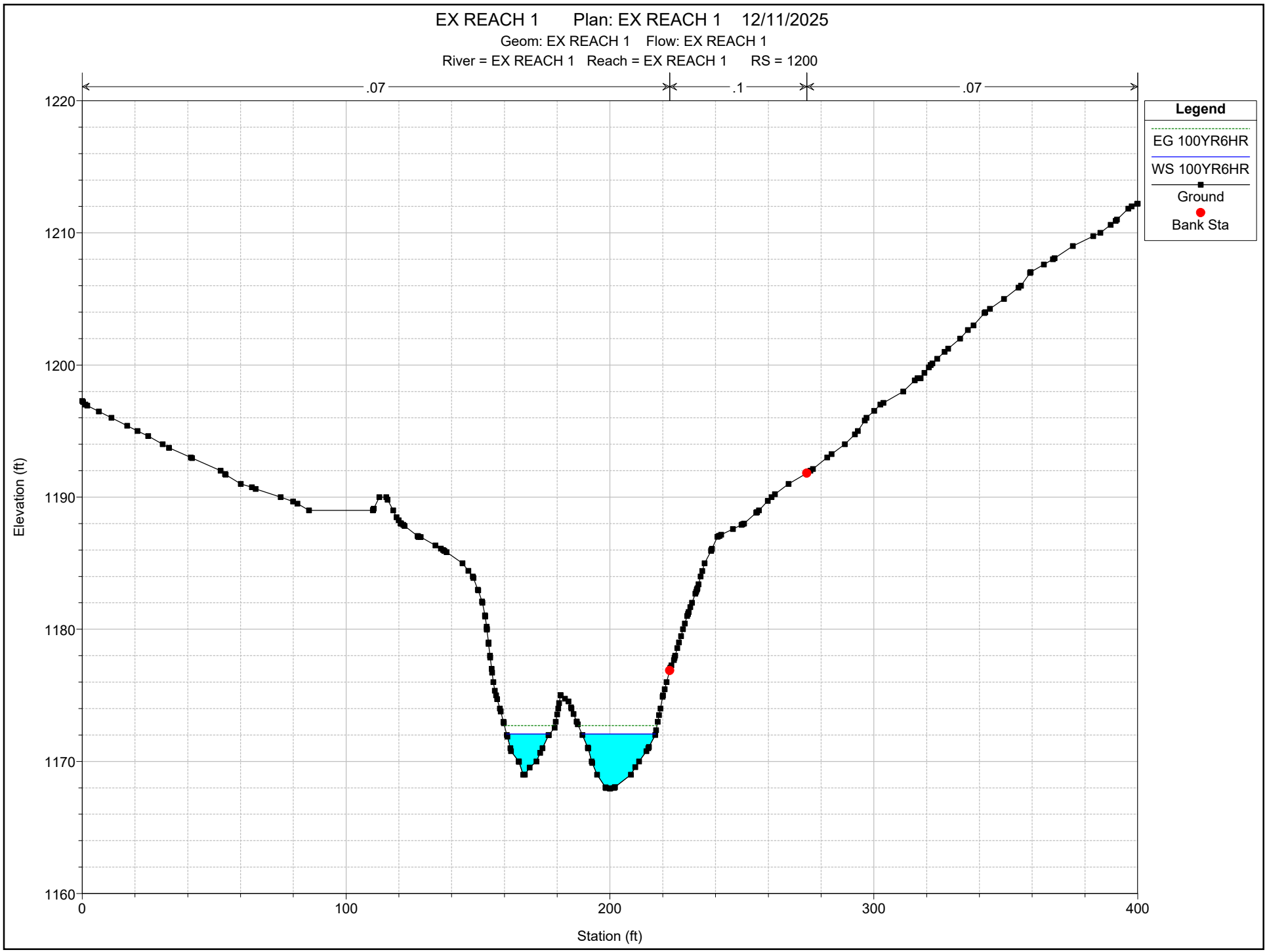

EX REACH 1 Plan: EX REACH 1 12/11/2025
Geom: EX REACH 1 Flow: EX REACH 1
River = EX REACH 1 Reach = EX REACH 1 RS = 1800
.07
.1
.07
Legend
EG 100YR6HR
WS 100YR6HR
Ground
Bank Sta
Elevation (ft)
1225
1220
1215
1210
1205
1200
0
100
200
300
400
Station (ft)

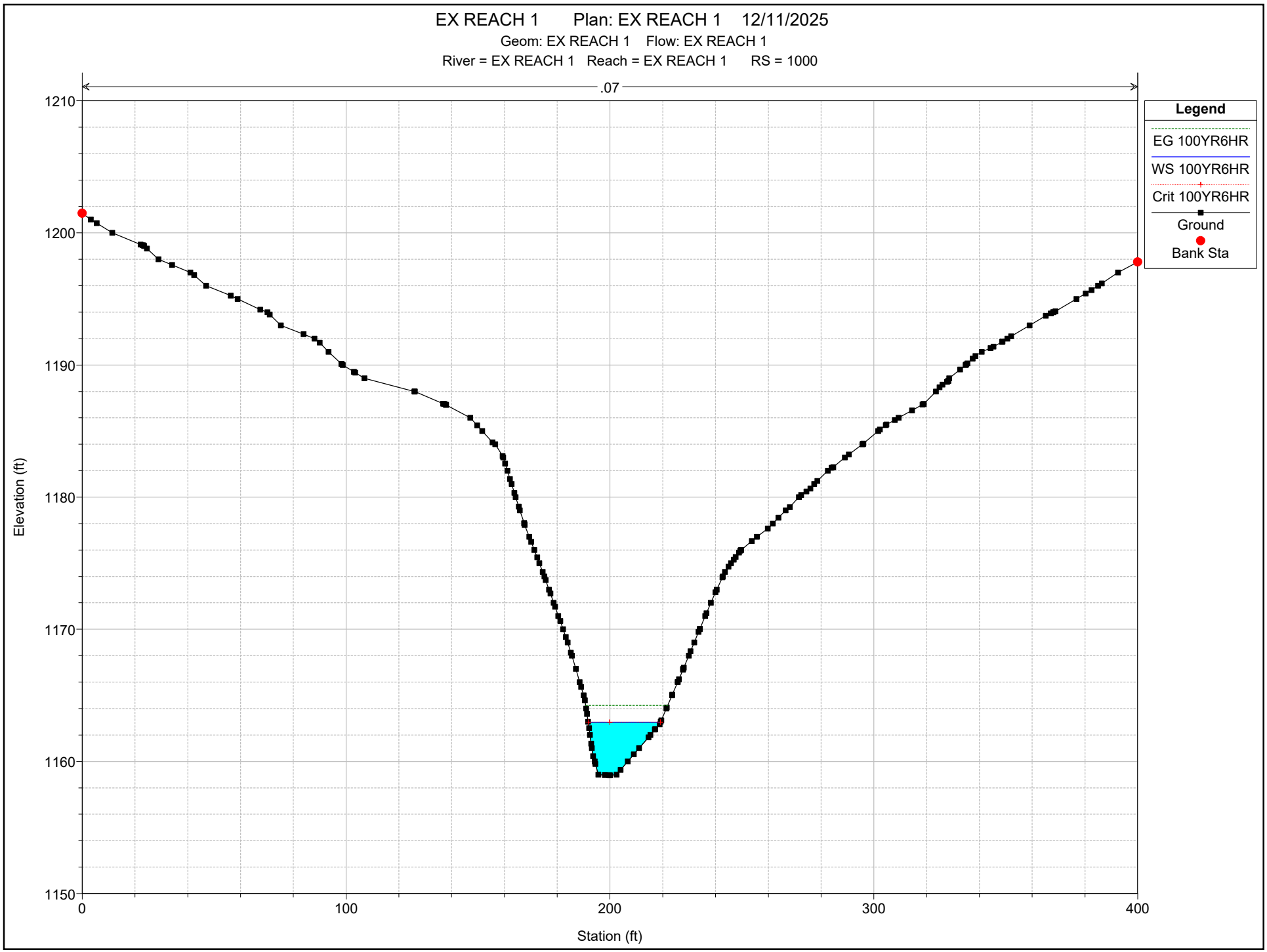

EX REACH 1 Plan: EX REACH 1 12/11/2025
Geom: EX REACH 1 Flow: EX REACH 1
River = EX REACH 1 Reach = EX REACH 1 RS = 1636.82
.07
.1
.07
Legend
EG 100YR6HR
WS 100YR6HR
Crit 100YR6HR
Ground
Bank Sta
Elevation (ft)
Station (ft)
1225
1220
1215
1210
1205
1200
1195
0
100
200
300
400
500

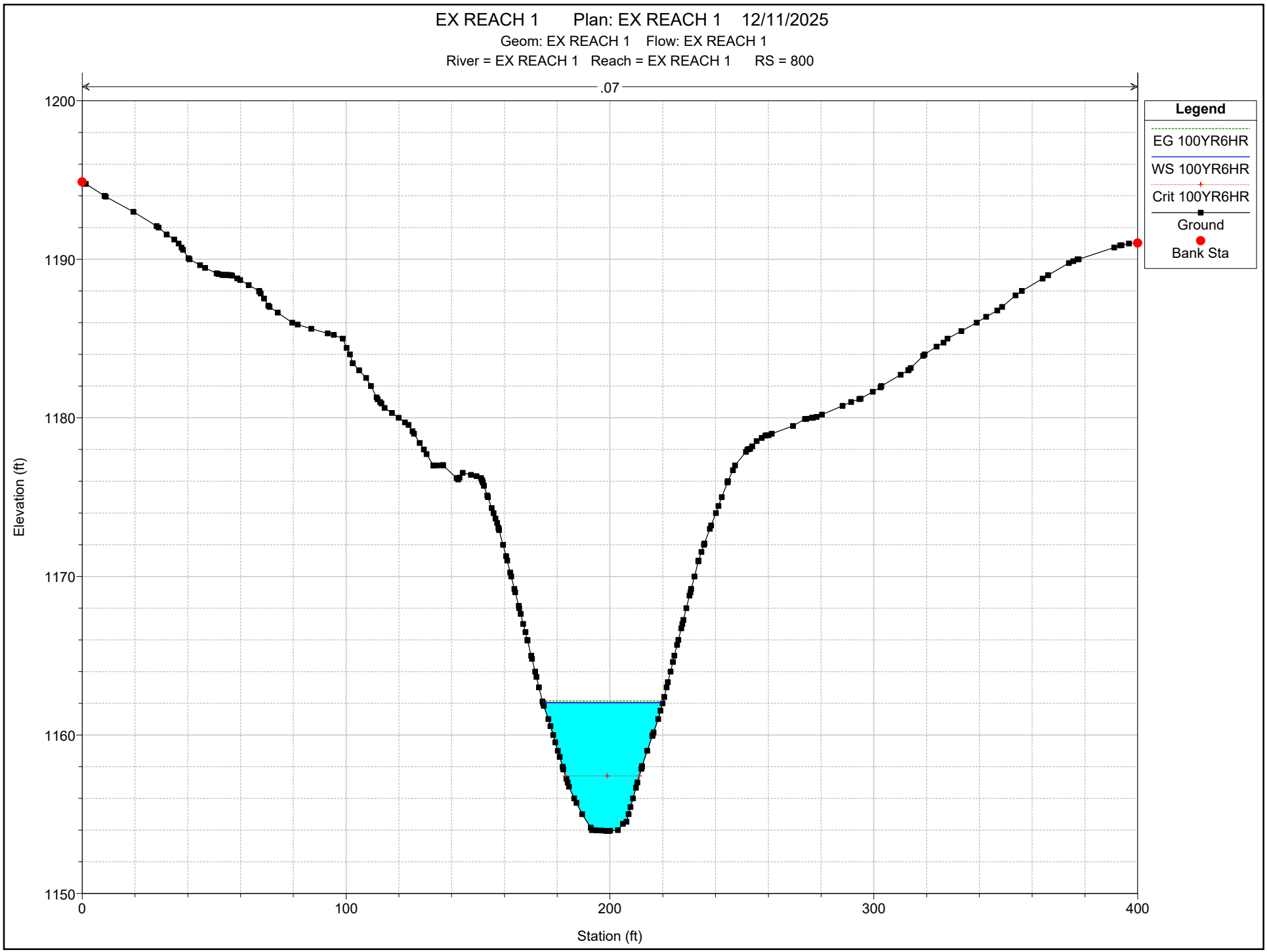

EX REACH 1 Plan: EX REACH 1 12/11/2025
Geom: EX REACH 1 Flow: EX REACH 1
River = EX REACH 1 Reach = EX REACH 1 RS = 1636.76 Culv
.07
.1
.07
Legend
EG 100YR6HR
WS 100YR6HR
Crit 100YR6HR
Ground
Bank Sta
Elevation (ft)
1225
1220
1215
1210
1205
1200
1195
0
100
200
300
400
500
Station (ft)

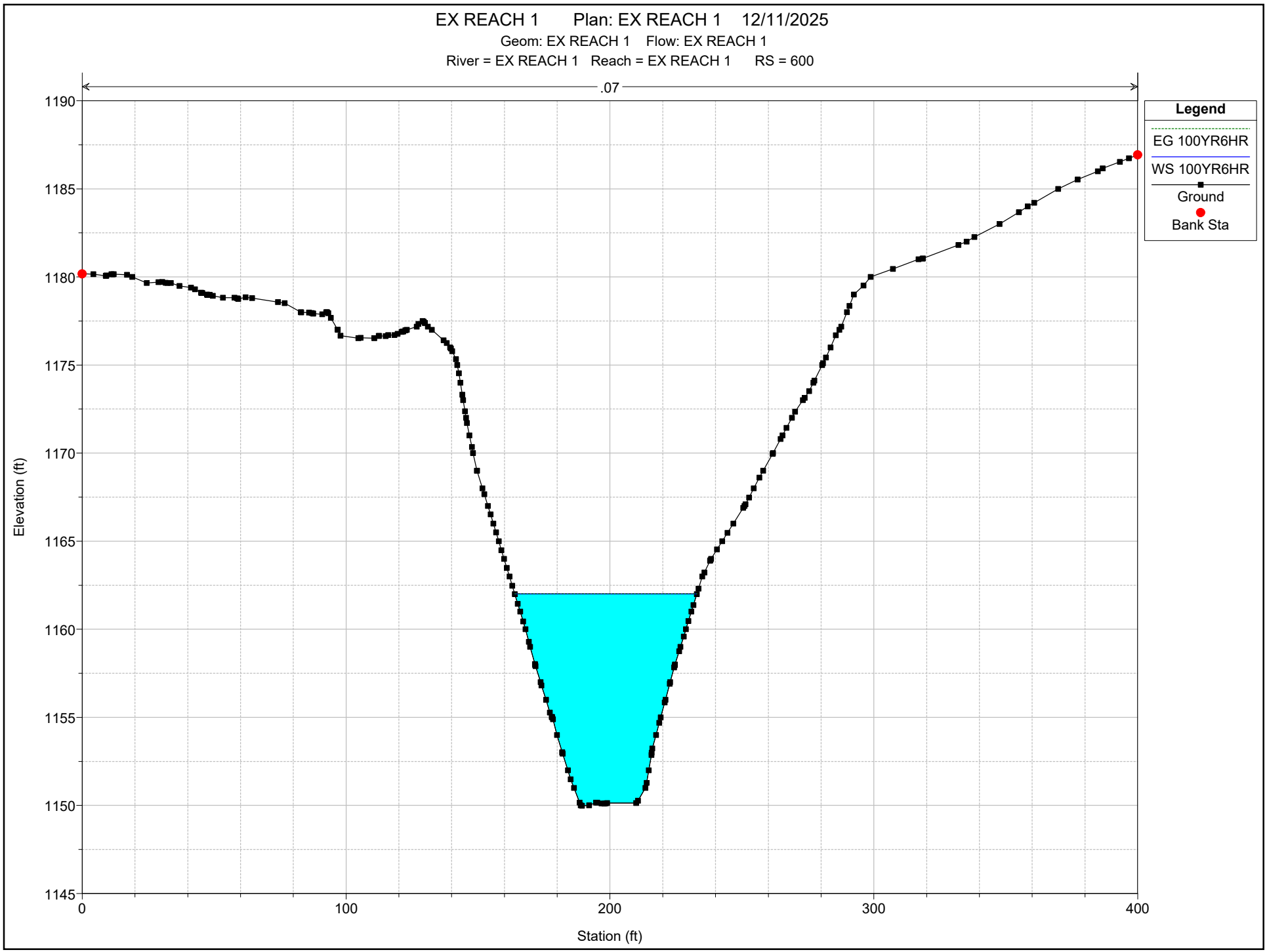

EX REACH 1 Plan: EX REACH 1 12/11/2025
Geom: EX REACH 1 Flow: EX REACH 1
River = EX REACH 1 Reach = EX REACH 1 RS = 1542.86
.07
.1
.07
Legend
EG 100YR6HR
WS 100YR6HR
Ground
Bank Sta
Elevation (ft)
Station (ft)
1220
1215
1210
1205
1200
1195
1190
1185
1180
0
100
200
300
400
500

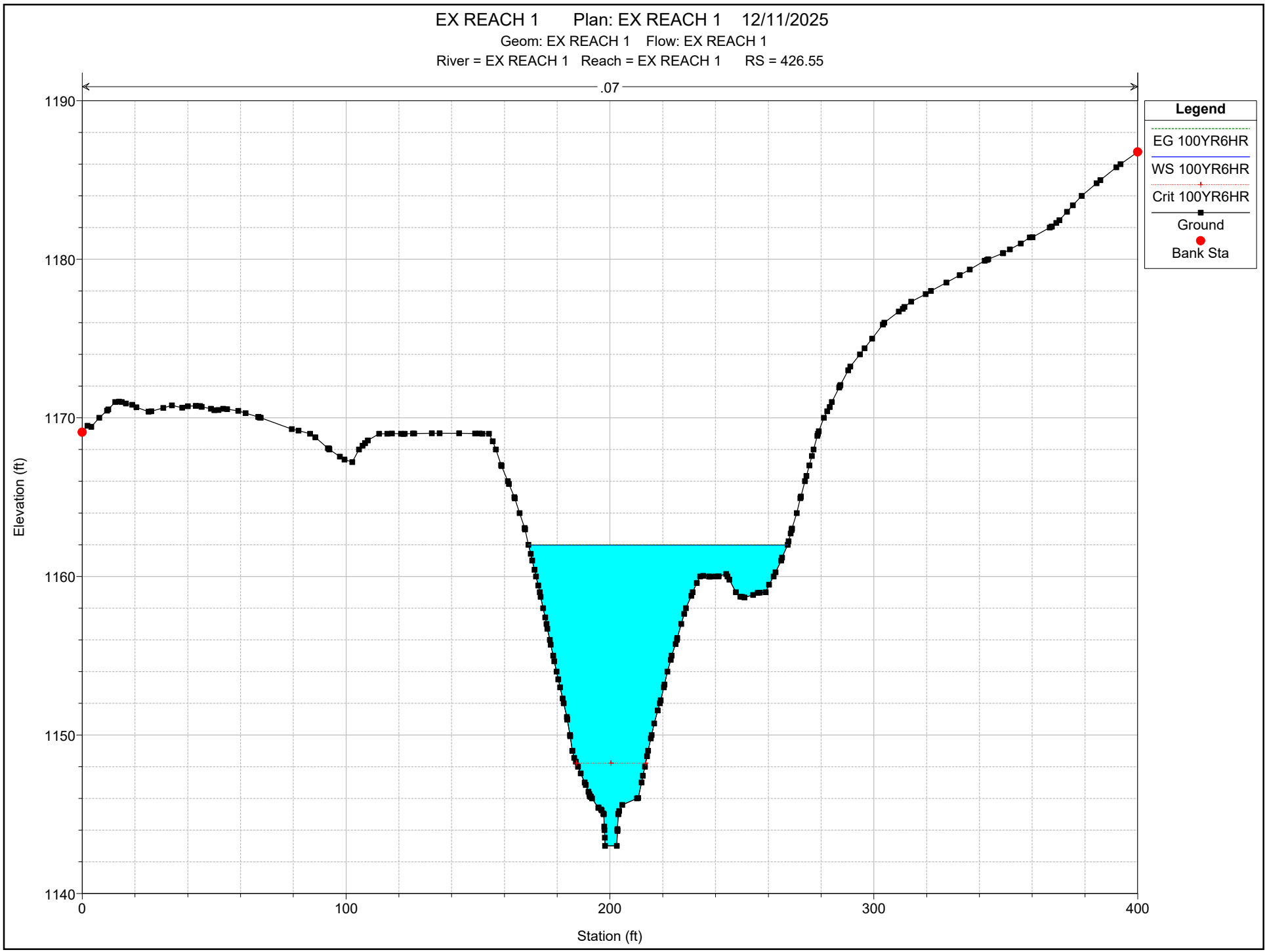

EX REACH 1 Plan: EX REACH 1 12/11/2025
Geom: EX REACH 1 Flow: EX REACH 1
River = EX REACH 1 Reach = EX REACH 1 RS = 1400
.07
.1
.07
Legend
EG 100YR6HR
WS 100YR6HR
Ground
Bank Sta
Elevation (ft)
1215
1210
1205
1200
1195
1190
1185
1180
1175
0
100
200
300
400
Station (ft)

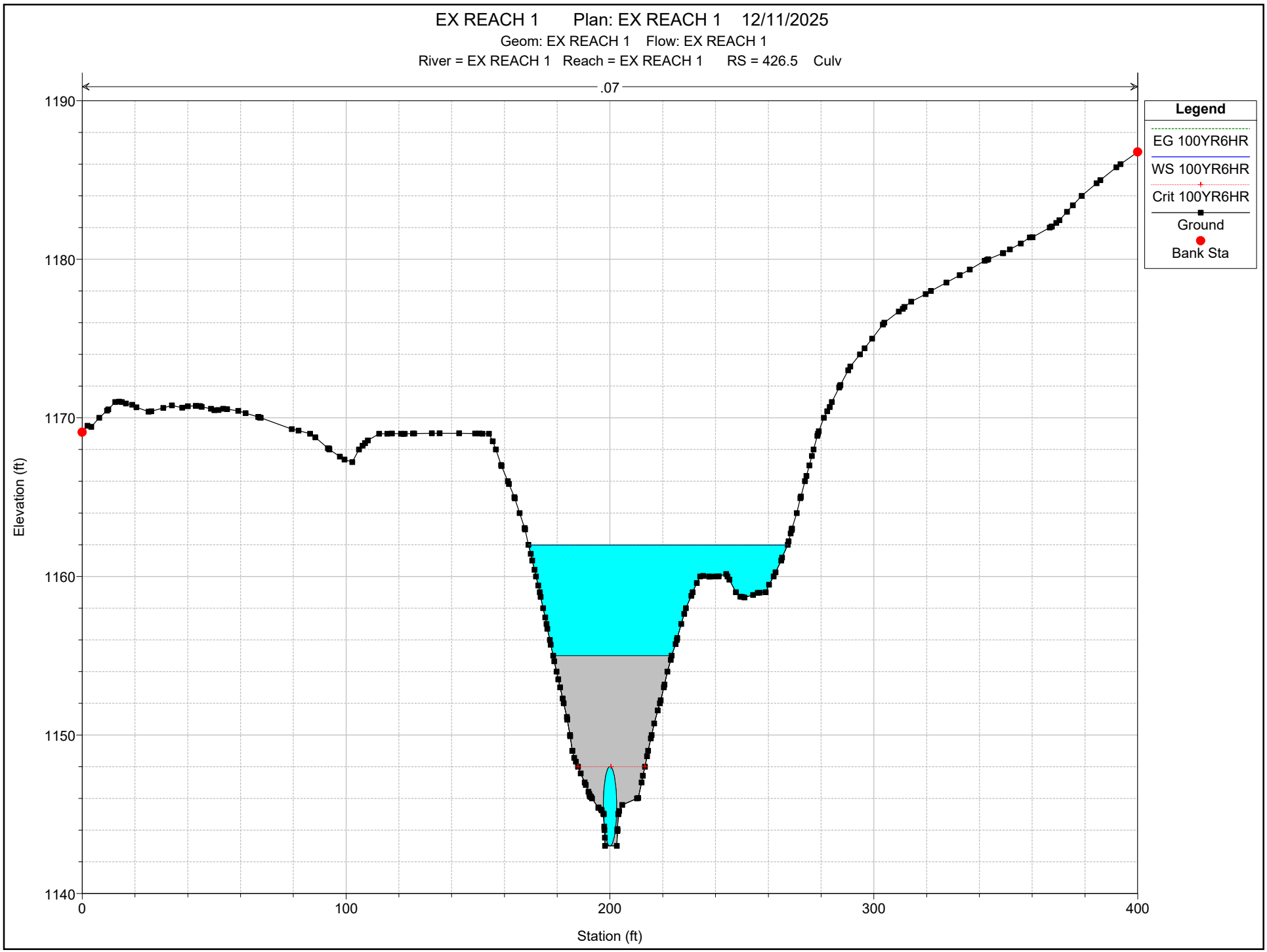

EX REACH 1 Plan: EX REACH 1 12/11/2025
Geom: EX REACH 1 Flow: EX REACH 1
River = EX REACH 1 Reach = EX REACH 1 RS = 1200
.07
.1
.07
Legend
EG 100YR6HR
WS 100YR6HR
Ground
Bank Sta
Elevation (ft)
Station (ft)
1220
1210
1200
1190
1180
1170
1160
0
100
200
300
400

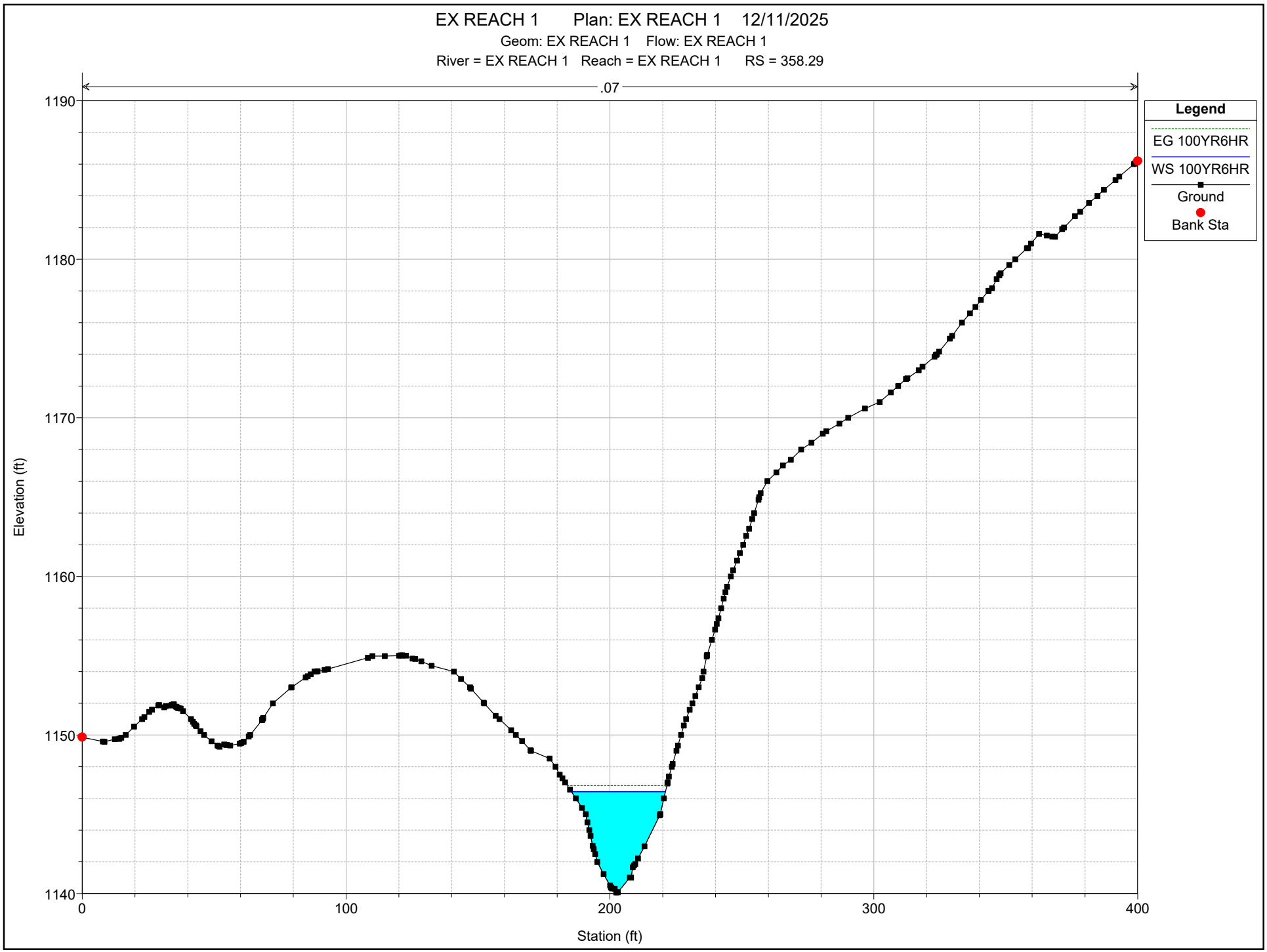

EX REACH 1 Plan: EX REACH 1 12/11/2025
Geom: EX REACH 1 Flow: EX REACH 1
River = EX REACH 1 Reach = EX REACH 1 RS = 1000
.07
Legend
EG 100YR6HR
WS 100YR6HR
Crit 100YR6HR
Ground
Bank Sta
Elevation (ft)
Station (ft)
1210
1200
1190
1180
1170
1160
1150
0
100
200
300
400

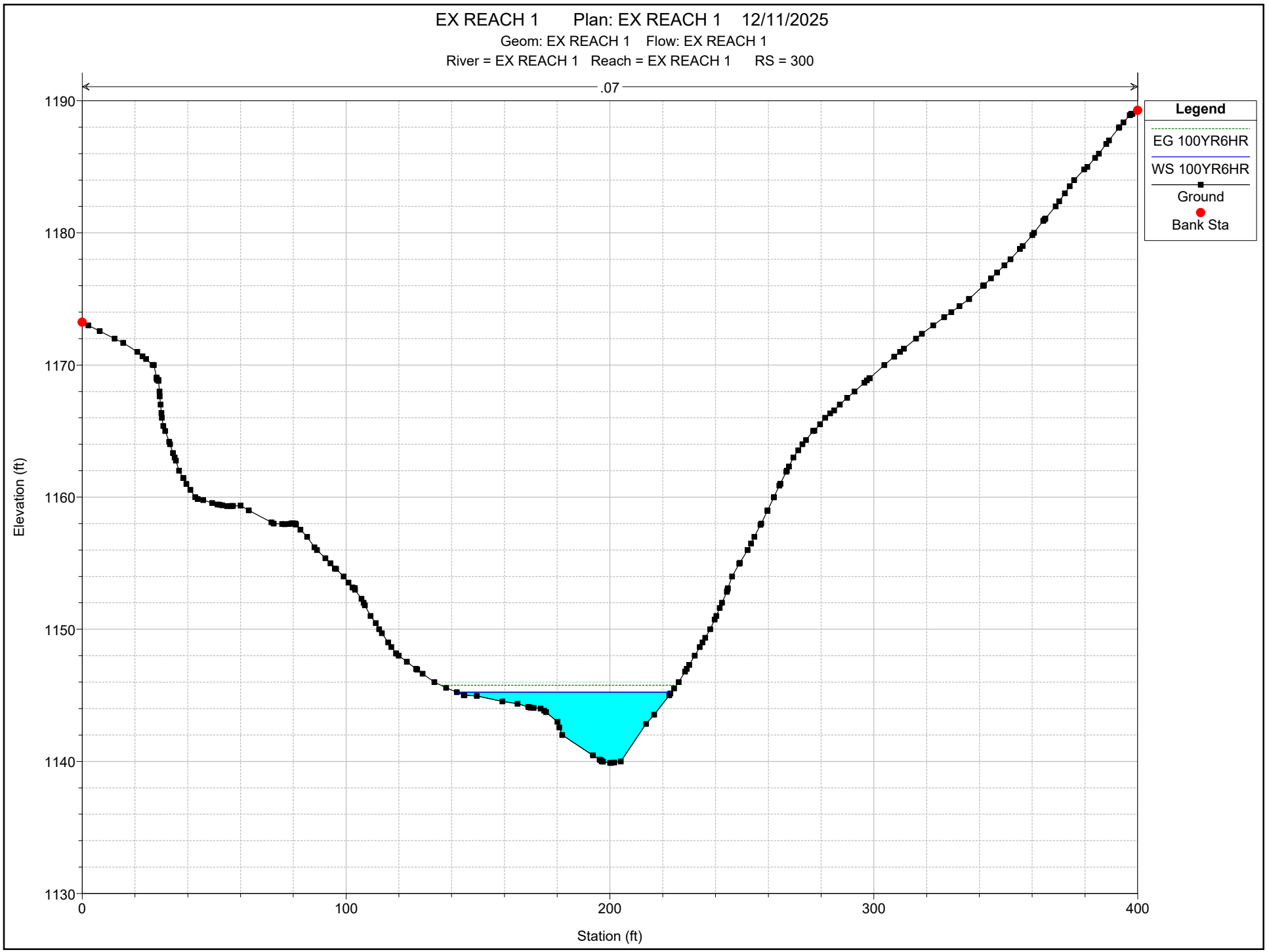

EX REACH 1 Plan: EX REACH 1 12/11/2025
Geom: EX REACH 1 Flow: EX REACH 1
River = EX REACH 1 Reach = EX REACH 1 RS = 800
.07
Legend
EG 100YR6HR
WS 100YR6HR
Crit 100YR6HR
Ground
Bank Sta
Elevation (ft)
1200
1190
1180
1170
1160
1150
0
100
200
300
400
Station (ft)

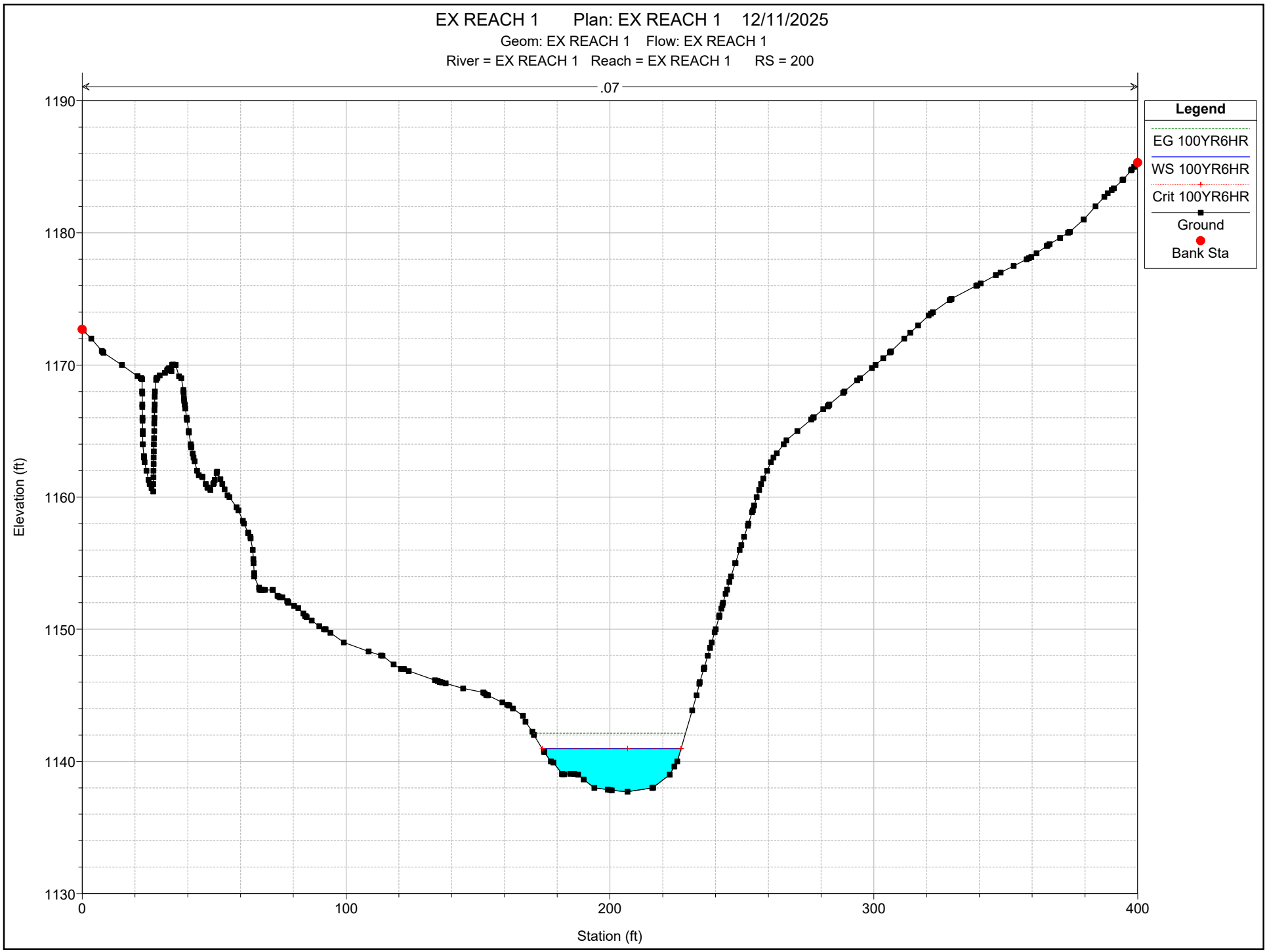

EX REACH 1 Plan: EX REACH 1 12/11/2025
Geom: EX REACH 1 Flow: EX REACH 1
River = EX REACH 1 Reach = EX REACH 1 RS = 600
.07
Legend
EG 100YR6HR
WS 100YR6HR
Ground
Bank Sta
Elevation (ft)
1190
1185
1180
1175
1170
1165
1160
1155
1150
1145
0
100
200
300
400
Station (ft)

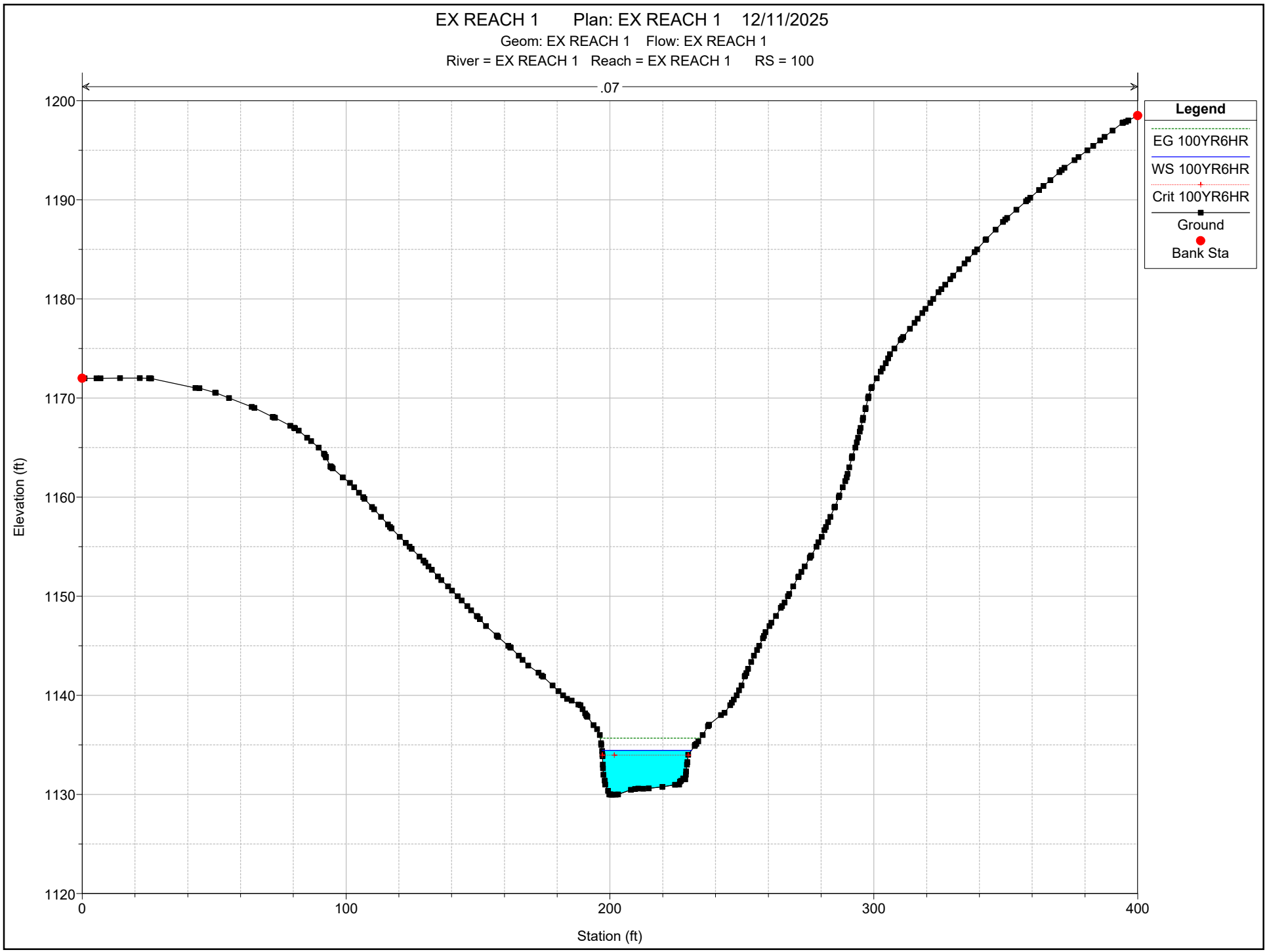

EX REACH 1 Plan: EX REACH 1 12/11/2025
Geom: EX REACH 1 Flow: EX REACH 1
River = EX REACH 1 Reach = EX REACH 1 RS = 426.55
.07
Legend
EG 100YR6HR
WS 100YR6HR
Crit 100YR6HR
Ground
Bank Sta
Elevation (ft)
1190
1180
1170
1160
1150
1140
0
100
200
300
400
Station (ft)

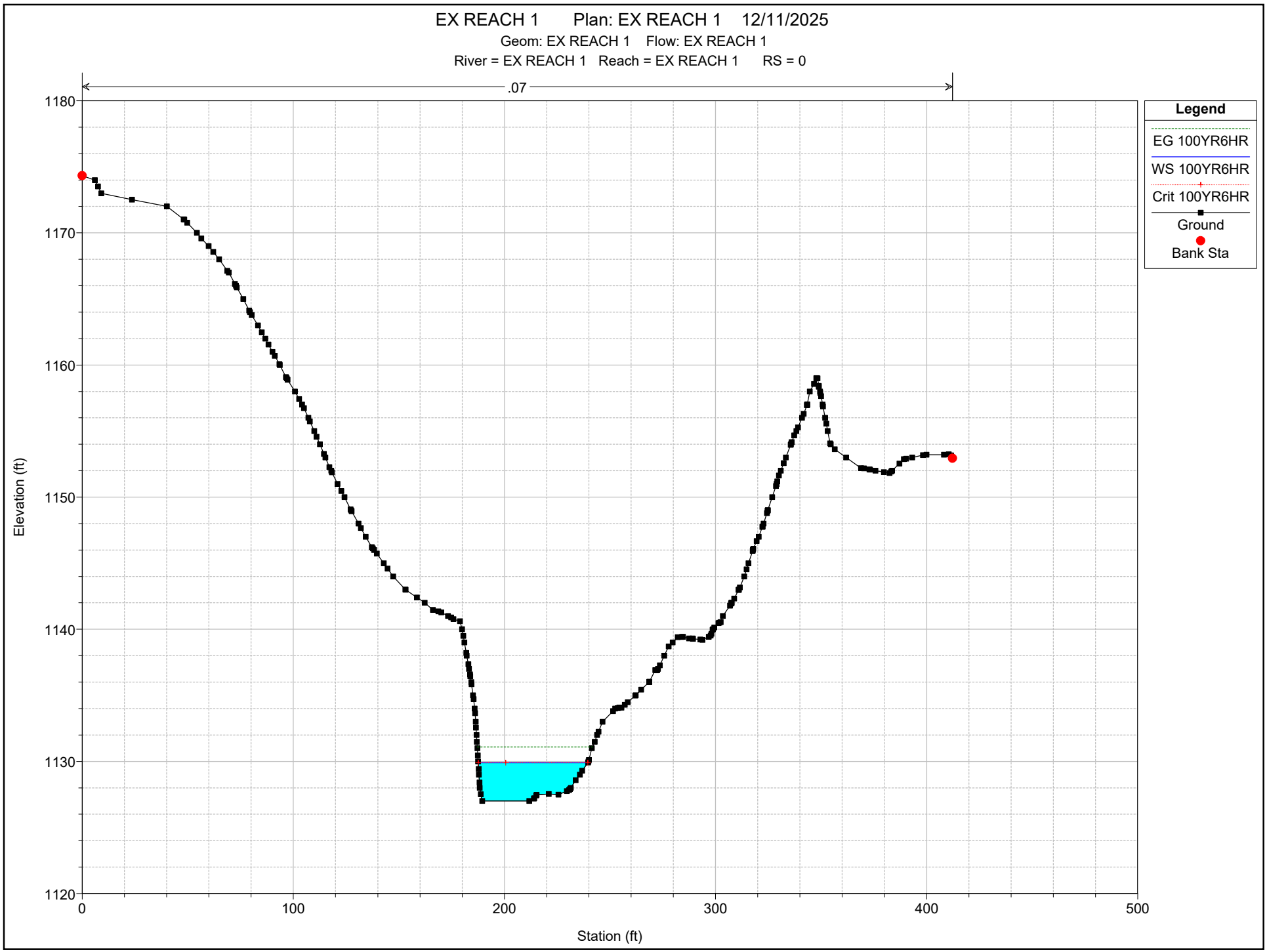

EX REACH 1 Plan: EX REACH 1 12/11/2025
Geom: EX REACH 1 Flow: EX REACH 1
River = EX REACH 1 Reach = EX REACH 1 RS = 426.5 Culv
.07
Legend
EG 100YR6HR
WS 100YR6HR
Crit 100YR6HR
Ground
Bank Sta
Elevation (ft)
1190
1180
1170
1160
1150
1140
0
100
200
300
400
Station (ft)


EX REACH 1 Plan: EX REACH 1 12/11/2025
Geom: EX REACH 1 Flow: EX REACH 1
River = EX REACH 1 Reach = EX REACH 1 RS = 358.29
.07
Legend
EG 100YR6HR
WS 100YR6HR
Ground
Bank Sta
Elevation (ft)
1190
1180
1170
1160
1150
1140
0
100
200
300
400
Station (ft)


EX REACH 1 Plan: EX REACH 1 12/11/2025
Geom: EX REACH 1 Flow: EX REACH 1
River = EX REACH 1 Reach = EX REACH 1 RS = 300
.07
Legend
EG 100YR6HR
WS 100YR6HR
Ground
Bank Sta
Elevation (ft)
1190
1180
1170
1160
1150
1140
1130
0
100
200
300
400
Station (ft)


EX REACH 1 Plan: EX REACH 1 12/11/2025
Geom: EX REACH 1 Flow: EX REACH 1
River = EX REACH 1 Reach = EX REACH 1 RS = 200
.07
Legend
EG 100YR6HR
WS 100YR6HR
Crit 100YR6HR
Ground
Bank Sta
Elevation (ft)
Station (ft)
1190
1180
1170
1160
1150
1140
1130
0
100
200
300
400


EX REACH 1 Plan: EX REACH 1 12/11/2025
Geom: EX REACH 1 Flow: EX REACH 1
River = EX REACH 1 Reach = EX REACH 1 RS = 100
.07
Legend
EG 100YR6HR
WS 100YR6HR
Crit 100YR6HR
Ground
Bank Sta
Elevation (ft)
Station (ft)
1200
1190
1180
1170
1160
1150
1140
1130
1120
0
100
200
300
400


EX REACH 1 Plan: EX REACH 1 12/11/2025
Geom: EX REACH 1 Flow: EX REACH 1
River = EX REACH 1 Reach = EX REACH 1 RS = 0
.07
Legend
EG 100YR6HR
WS 100YR6HR
Crit 100YR6HR
Ground
Bank Sta
Elevation (ft)
1180
1170
1160
1150
1140
1130
1120
0
100
200
300
400
500
Station (ft)

POST DEVELOPMENT

HEC-RAS Plan: PROP R1 River: PROP R1 Reach: PROP R1 Profile: 100YR6HR

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
PROP R1	5415.34	100YR6HR	757.70	1291.93	1298.31		1298.81	0.012492	5.68	133.31	32.84	0.50
PROP R1	5300	100YR6HR	757.70	1288.98	1298.04		1298.18	0.002332	3.01	251.38	45.90	0.23
PROP R1	5196.59	100YR6HR	757.70	1283.30	1297.63	1288.29	1297.82	0.005404	3.47	218.60	38.33	0.26
PROP R1	5196.50		Culvert									
PROP R1	5001.38	100YR6HR	757.70	1282.20	1288.11		1289.40	0.038085	9.13	83.01	14.58	0.67
PROP R1	4900	100YR6HR	757.70	1278.96	1284.39		1285.52	0.037628	8.54	88.77	27.01	0.83
PROP R1	4700	100YR6HR	757.70	1274.51	1280.25		1280.80	0.015180	5.95	127.26	34.66	0.55
PROP R1	4500	100YR6HR	757.70	1270.00	1275.70		1276.63	0.029583	7.75	97.79	28.76	0.74
PROP R1	4300	100YR6HR	757.70	1261.00	1266.49	1266.49	1268.26	0.062104	7.22	76.80	21.47	0.73
PROP R1	4100	100YR6HR	757.70	1257.00	1261.11		1261.81	0.018127	3.23	117.96	31.85	0.36
PROP R1	3900	100YR6HR	757.70	1251.95	1257.42		1257.91	0.020347	5.53	135.11	34.63	0.45
PROP R1	3700	100YR6HR	757.70	1245.76	1249.93	1249.93	1251.17	0.064011	6.56	89.78	35.98	0.75
PROP R1	3500	100YR6HR	757.70	1237.00	1245.78		1246.13	0.010607	4.03	164.00	36.60	0.32
PROP R1	3300	100YR6HR	757.70	1233.95	1242.03		1242.75	0.030125	6.59	111.84	27.57	0.52
PROP R1	3100	100YR6HR	757.70	1230.99	1237.48		1237.86	0.019498	4.33	158.89	52.30	0.43
PROP R1	2900	100YR6HR	757.70	1228.10	1230.45	1230.45	1231.81	0.050708	3.60	84.54	32.56	0.58
PROP R1	2700	100YR6HR	757.70	1217.96	1228.79		1228.84	0.001364	1.81	418.67	65.67	0.13
PROP R1	2543.75	100YR6HR	757.70	1217.70	1228.74	1220.49	1228.82	0.000055	2.20	344.49	63.33	0.16
PROP R1	2543.7		Culvert									
PROP R1	2438.5	100YR6HR	785.10	1215.99	1219.38	1219.38	1221.06	0.002287	10.40	75.48	22.62	1.00
PROP R1	2400	100YR6HR	785.10	1215.04	1218.57		1219.51	0.081561	7.79	100.74	38.28	0.85
PROP R1	2250	100YR6HR	785.10	1208.99	1214.02		1214.33	0.017969	4.50	174.46	49.34	0.42
PROP R1	2050	100YR6HR	785.10	1206.89	1211.17	1209.30	1211.35	0.012265	3.41	230.22	76.22	0.35
PROP R1	1850	100YR6HR	785.10	1202.80	1205.17	1205.17	1205.97	0.095852	6.46	111.54	70.59	0.88
PROP R1	1678.7	100YR6HR	807.40	1185.01	1197.08	1188.31	1197.13	0.000040	1.86	434.94	89.86	0.15
PROP R1	1671.65		Culvert									
PROP R1	1530.35	100YR6HR	807.40	1184.50	1187.56	1187.56	1189.09	0.002215	9.93	81.32	26.85	1.01
PROP R1	1400	100YR6HR	807.40	1175.99	1181.63	1180.31	1182.06	0.035531	5.30	152.36	56.72	0.57
PROP R1	1200	100YR6HR	807.40	1177.64	1171.94	1171.94	1173.04	0.058236		96.12	44.56	0.00
PROP R1	1000	100YR6HR	807.40	1159.00	1166.99		1167.23	0.004501	3.91	206.59	40.61	0.31
PROP R1	800	100YR6HR	807.40	1153.95	1166.94		1166.98	0.000397	1.61	500.16	60.36	0.10
PROP R1	600	100YR6HR	807.40	1149.96	1166.93		1166.94	0.000085	0.85	946.33	96.47	0.05
PROP R1	500	100YR6HR	807.40	1146.00	1166.93		1166.93	0.000044	0.68	1193.14	102.99	0.04
PROP R1	426.54	100YR6HR	807.40	1144.00	1166.93	1149.11	1166.93	0.000002	0.62	1302.66	124.85	0.03
PROP R1	426.5		Culvert									
PROP R1	364.84	100YR6HR	807.40	1141.04	1147.50	1147.50	1148.91	0.002303	9.51	84.88	30.56	1.01
PROP R1	300	100YR6HR	1245.20	1140.00	1145.11		1145.98	0.024299	7.49	166.29	45.81	0.69
PROP R1	200	100YR6HR	1245.20	1137.71	1141.21	1141.21	1142.47	0.053698	8.98	138.60	55.28	1.00
PROP R1	100	100YR6HR	1245.20	1129.97	1134.76	1134.32	1136.14	0.039674	9.41	132.28	34.91	0.85
PROP R1	0	100YR6HR	1245.20	1127.00	1130.14	1130.14	1131.45	0.055699	9.17	135.75	52.59	1.01

HEC-RAS Plan: PROP R1 River: PROP R1 Reach: PROP R1 Profile: 100YR6HR

Reach	River Sta	Profile	E.G. Elev	W.S. Elev	Vel Head	Frctn Loss	C & E Loss	Q Left	Q Channel	Q Right	Top Width
			(ft)	(ft)	(ft)	(ft)	(ft)	(cfs)	(cfs)	(cfs)	(ft)
PROP R1	5415.34	100YR6HR	1298.81	1298.31	0.50	0.52	0.11		757.70		32.84
PROP R1	5300	100YR6HR	1298.18	1298.04	0.14	0.35	0.00		757.70		45.90
PROP R1	5196.59	100YR6HR	1297.82	1297.63	0.19				757.70		38.33
PROP R1	5196.50		Culvert								
PROP R1	5001.38	100YR6HR	1289.40	1288.11	1.29	3.84	0.05		757.70		14.58
PROP R1	4900	100YR6HR	1285.52	1284.39	1.13	4.54	0.17		757.70		27.01
PROP R1	4700	100YR6HR	1280.80	1280.25	0.55	4.12	0.04		757.70		34.66
PROP R1	4500	100YR6HR	1276.63	1275.70	0.93	8.28	0.08		757.70		28.76
PROP R1	4300	100YR6HR	1268.26	1266.49	1.77	6.11	0.32		246.52	511.18	21.47
PROP R1	4100	100YR6HR	1261.81	1261.11	0.70	3.84	0.06		50.11	707.59	31.85
PROP R1	3900	100YR6HR	1257.91	1257.42	0.49	6.66	0.07		526.78	230.92	34.63
PROP R1	3700	100YR6HR	1251.17	1249.93	1.24	4.29	0.27		261.58	496.12	35.98
PROP R1	3500	100YR6HR	1246.13	1245.78	0.35	3.34	0.04		348.79	408.91	36.60
PROP R1	3300	100YR6HR	1242.75	1242.03	0.72	4.79	0.10		480.39	277.31	27.57
PROP R1	3100	100YR6HR	1237.86	1237.48	0.38	5.94	0.10		486.88	270.82	52.30
PROP R1	2900	100YR6HR	1231.81	1230.45	1.37	0.81	0.39		29.66	728.04	32.56
PROP R1	2700	100YR6HR	1228.84	1228.79	0.05	0.02	0.00		757.70		65.67
PROP R1	2543.75	100YR6HR	1228.82	1228.74	0.08				757.67	0.03	63.33
PROP R1	2543.7		Culvert								
PROP R1	2438.5	100YR6HR	1221.06	1219.38	1.68	0.26	0.22		785.10		22.62
PROP R1	2400	100YR6HR	1219.51	1218.57	0.94	4.99	0.19		785.10		38.28
PROP R1	2250	100YR6HR	1214.33	1214.02	0.31	2.94	0.04		785.10		49.34
PROP R1	2050	100YR6HR	1211.35	1211.17	0.18	5.32	0.06		785.10		76.22
PROP R1	1850	100YR6HR	1205.97	1205.17	0.80	0.03	0.22		462.65	322.45	70.59
PROP R1	1678.7	100YR6HR	1197.13	1197.08	0.05				807.40		89.86
PROP R1	1671.65		Culvert								
PROP R1	1530.35	100YR6HR	1189.09	1187.56	1.53	0.74	0.33		807.40		26.85
PROP R1	1400	100YR6HR	1182.06	1181.63	0.44	8.96	0.07	0.00	807.40		56.72
PROP R1	1200	100YR6HR	1173.04	1171.94	1.10	2.20	0.26	807.40			44.56
PROP R1	1000	100YR6HR	1167.23	1166.99	0.24	0.19	0.06		807.40		40.61
PROP R1	800	100YR6HR	1166.98	1166.94	0.04	0.03	0.01		807.40		60.36
PROP R1	600	100YR6HR	1166.94	1166.93	0.01	0.01	0.00		807.40		96.47
PROP R1	500	100YR6HR	1166.93	1166.93	0.01	0.00	0.00		807.40		102.99
PROP R1	426.54	100YR6HR	1166.93	1166.93	0.01				807.40		124.85
PROP R1	426.5		Culvert								
PROP R1	364.84	100YR6HR	1148.91	1147.50	1.41	0.44	0.16		807.40		30.56
PROP R1	300	100YR6HR	1145.98	1145.11	0.87	3.47	0.04		1245.20		45.81
PROP R1	200	100YR6HR	1142.47	1141.21	1.25	4.59	0.01		1245.20		55.28
PROP R1	100	100YR6HR	1136.14	1134.76	1.38	4.67	0.02		1245.20		34.91
PROP R1	0	100YR6HR	1131.45	1130.14	1.31				1245.20		52.59

Plan: PROP R1 PROP R1 PROP R1 RS: 1671.65 Culv Group: Culvert #1 Profile: 100YR6HR

Q Culv Group (cfs)	807.40	Culv Full Len (ft)	
# Barrels	2	Culv Vel US (ft/s)	14.28
Q Barrel (cfs)	403.70	Culv Vel DS (ft/s)	19.56
E.G. US. (ft)	1197.13	Culv Inv El Up (ft)	1185.01
W.S. US. (ft)	1197.08	Culv Inv El Dn (ft)	1184.50
E.G. DS (ft)	1189.09	Culv Frctn Ls (ft)	2.48
W.S. DS (ft)	1187.56	Culv Exit Loss (ft)	5.46
Delta EG (ft)	8.04	Culv Entr Loss (ft)	0.10
Delta WS (ft)	9.52	Q Weir (cfs)	
E.G. IC (ft)	1197.13	Weir Sta Lft (ft)	
E.G. OC (ft)	1194.82	Weir Sta Rgt (ft)	
Culvert Control	Inlet	Weir Submerg	
Culv WS Inlet (ft)	1191.01	Weir Max Depth (ft)	
Culv WS Outlet (ft)	1188.61	Weir Avg Depth (ft)	
Culv Nml Depth (ft)	6.00	Weir Flow Area (sq ft)	
Culv Crt Depth (ft)	5.35	Min El Weir Flow (ft)	1208.80

Plan: PROP R1 PROP R1 PROP R1 RS: 2543.7 Culv Group: Culvert #2 Profile: 100YR6HR

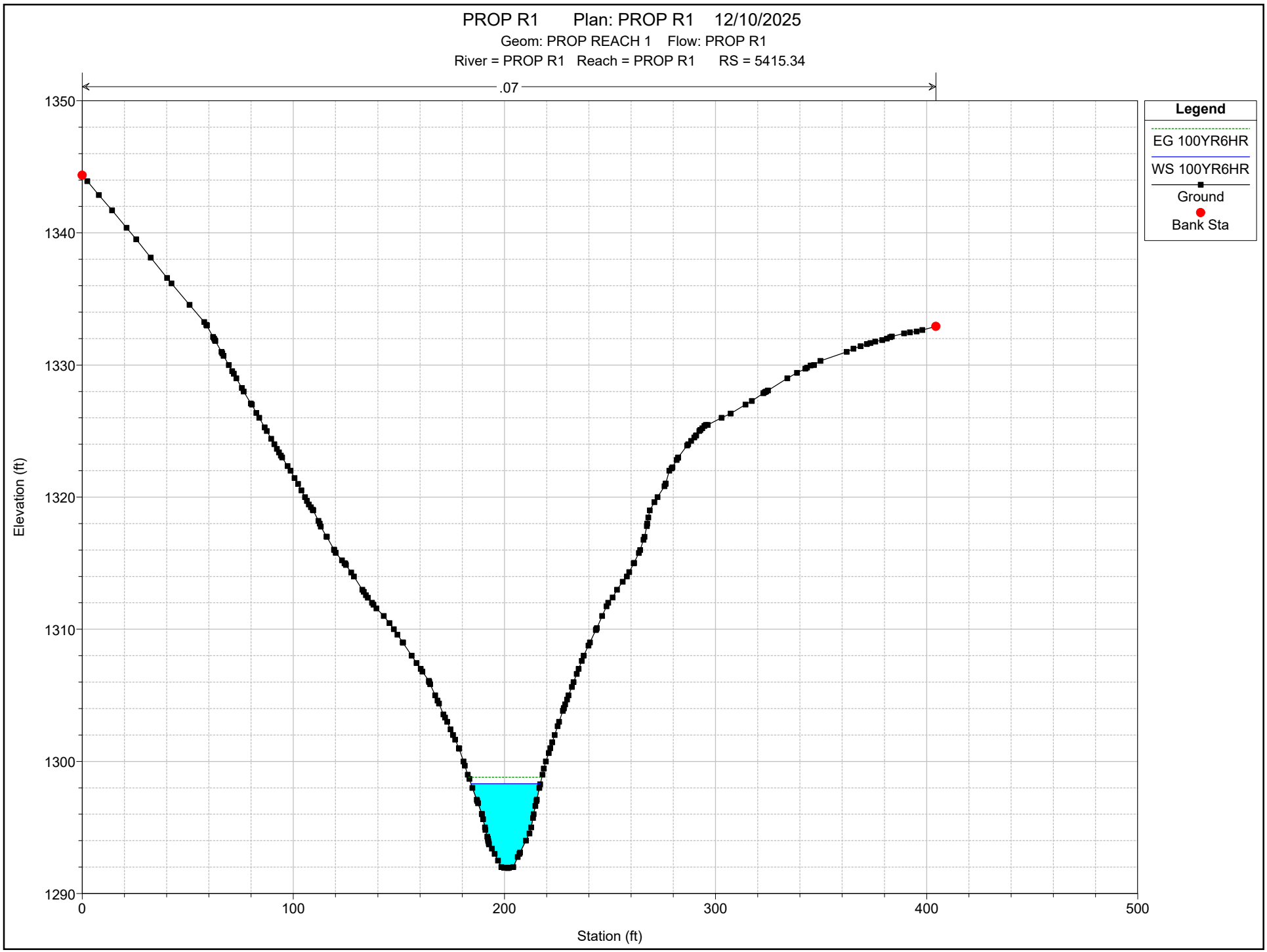
Q Culv Group (cfs)	757.70	Culv Full Len (ft)	
# Barrels	2	Culv Vel US (ft/s)	13.40
Q Barrel (cfs)	378.85	Culv Vel DS (ft/s)	21.66
E.G. US. (ft)	1228.82	Culv Inv El Up (ft)	1217.70
W.S. US. (ft)	1228.74	Culv Inv El Dn (ft)	1216.00
E.G. DS (ft)	1221.06	Culv Frctn Ls (ft)	1.88
W.S. DS (ft)	1219.38	Culv Exit Loss (ft)	5.79
Delta EG (ft)	7.75	Culv Entr Loss (ft)	0.08
Delta WS (ft)	9.36	Q Weir (cfs)	
E.G. IC (ft)	1228.82	Weir Sta Lft (ft)	
E.G. OC (ft)	1226.29	Weir Sta Rgt (ft)	
Culvert Control	Inlet	Weir Submerg	
Culv WS Inlet (ft)	1223.70	Weir Max Depth (ft)	
Culv WS Outlet (ft)	1219.56	Weir Avg Depth (ft)	
Culv Nml Depth (ft)	3.71	Weir Flow Area (sq ft)	
Culv Crt Depth (ft)	5.23	Min El Weir Flow (ft)	1229.65

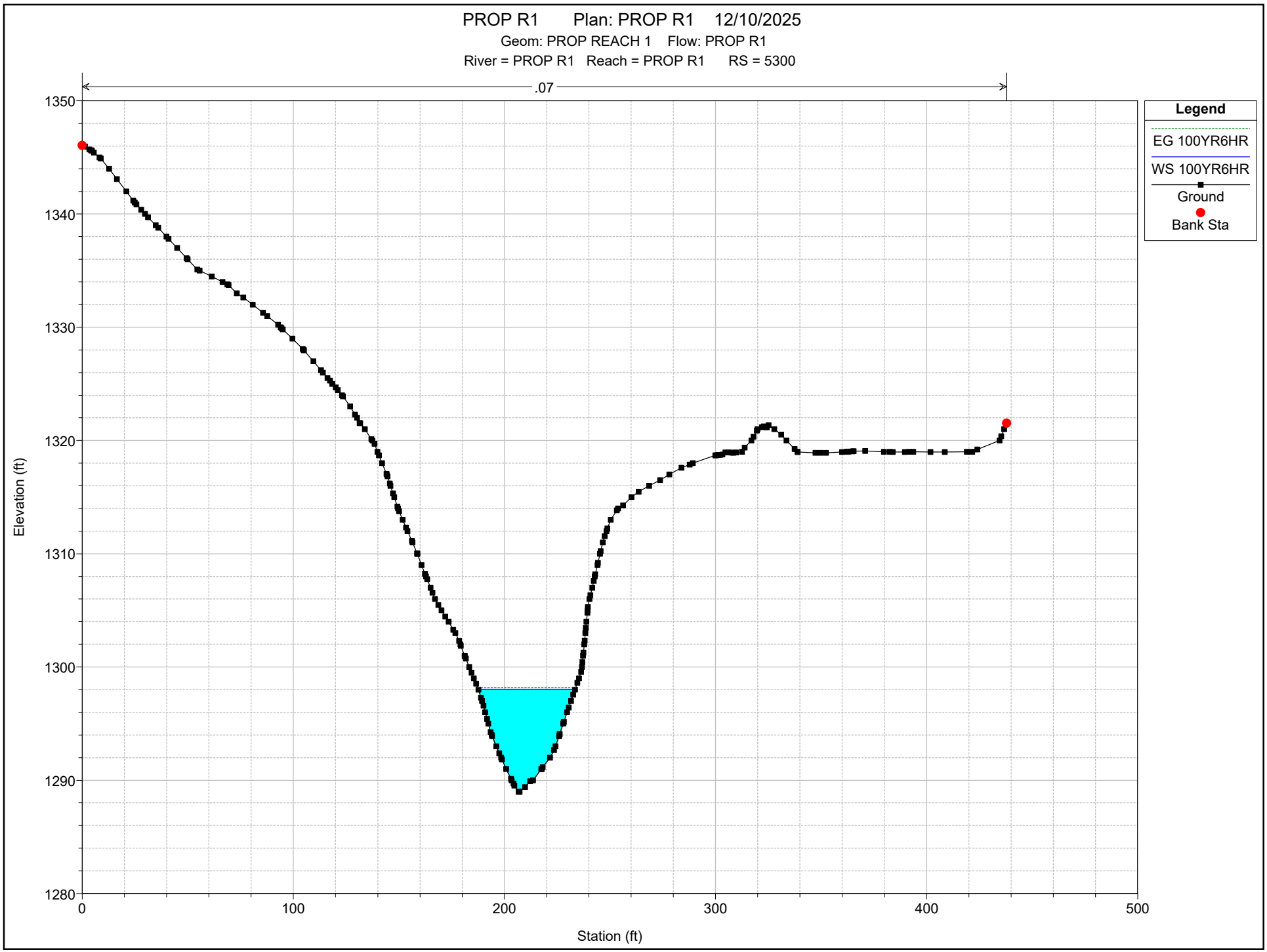
Plan: PROP R1 PROP R1 PROP R1 RS: 426.5 Culv Group: EX CULVERT 2 Profile: 100YR6HR

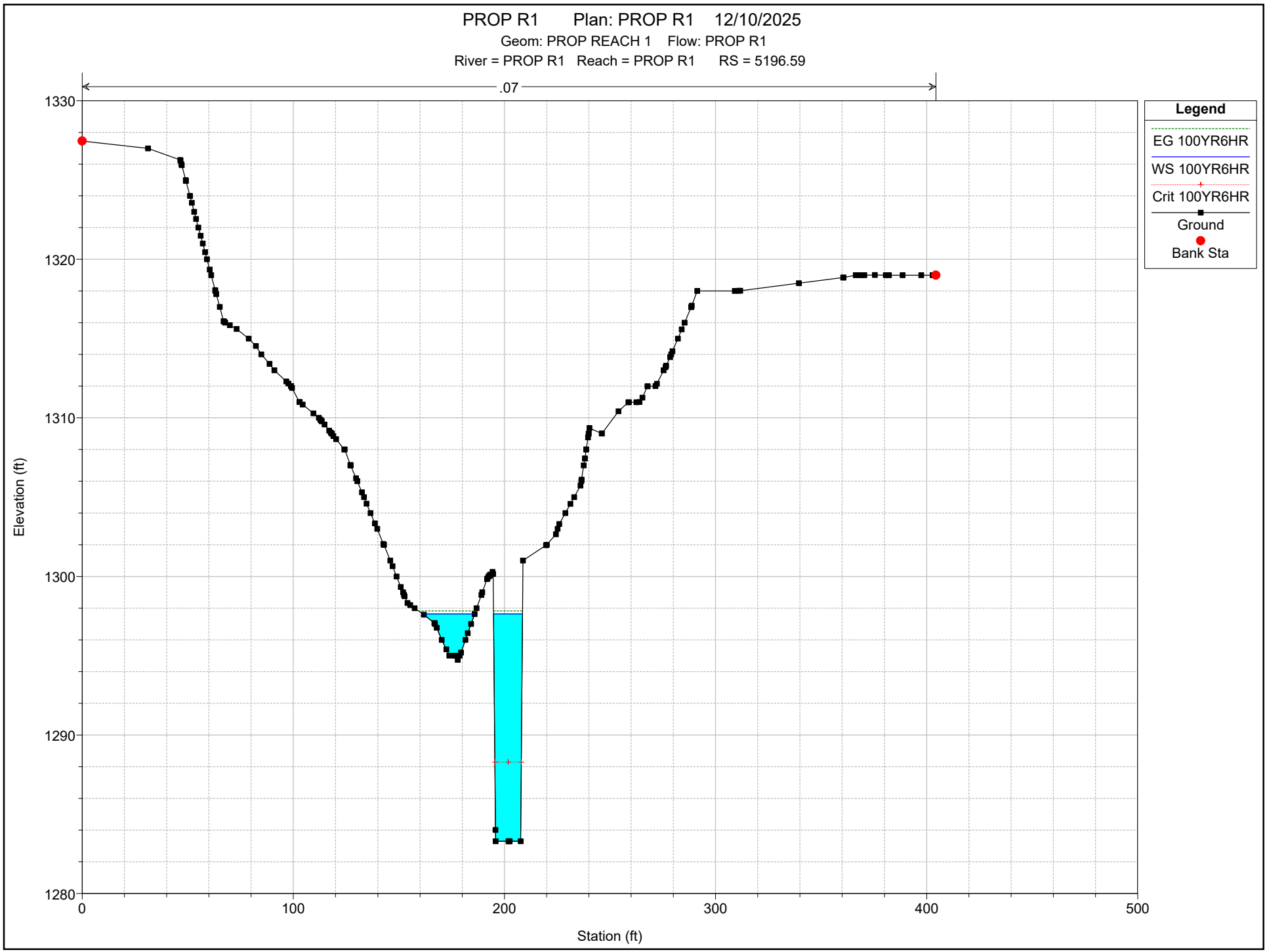
Q Culv Group (cfs)	436.90	Culv Full Len (ft)	
# Barrels	1	Culv Vel US (ft/s)	22.25
Q Barrel (cfs)	436.90	Culv Vel DS (ft/s)	28.59
E.G. US. (ft)	1166.93	Culv Inv El Up (ft)	1144.00
W.S. US. (ft)	1166.93	Culv Inv El Dn (ft)	1141.00
E.G. DS (ft)	1148.91	Culv Frctn Ls (ft)	9.37
W.S. DS (ft)	1147.50	Culv Exit Loss (ft)	8.43
Delta EG (ft)	18.02	Culv Entr Loss (ft)	0.23
Delta WS (ft)	19.42	Q Weir (cfs)	1488.93
E.G. IC (ft)	1166.93	Weir Sta Lft (ft)	167.91
E.G. OC (ft)	1159.84	Weir Sta Rgt (ft)	272.59
Culvert Control	Inlet	Weir Submerg	0.00
Culv WS Inlet (ft)	1149.00	Weir Max Depth (ft)	4.18
Culv WS Outlet (ft)	1144.63	Weir Avg Depth (ft)	3.06
Culv Nml Depth (ft)	5.00	Weir Flow Area (sq ft)	320.52
Culv Crt Depth (ft)	5.00	Min El Weir Flow (ft)	1163.17

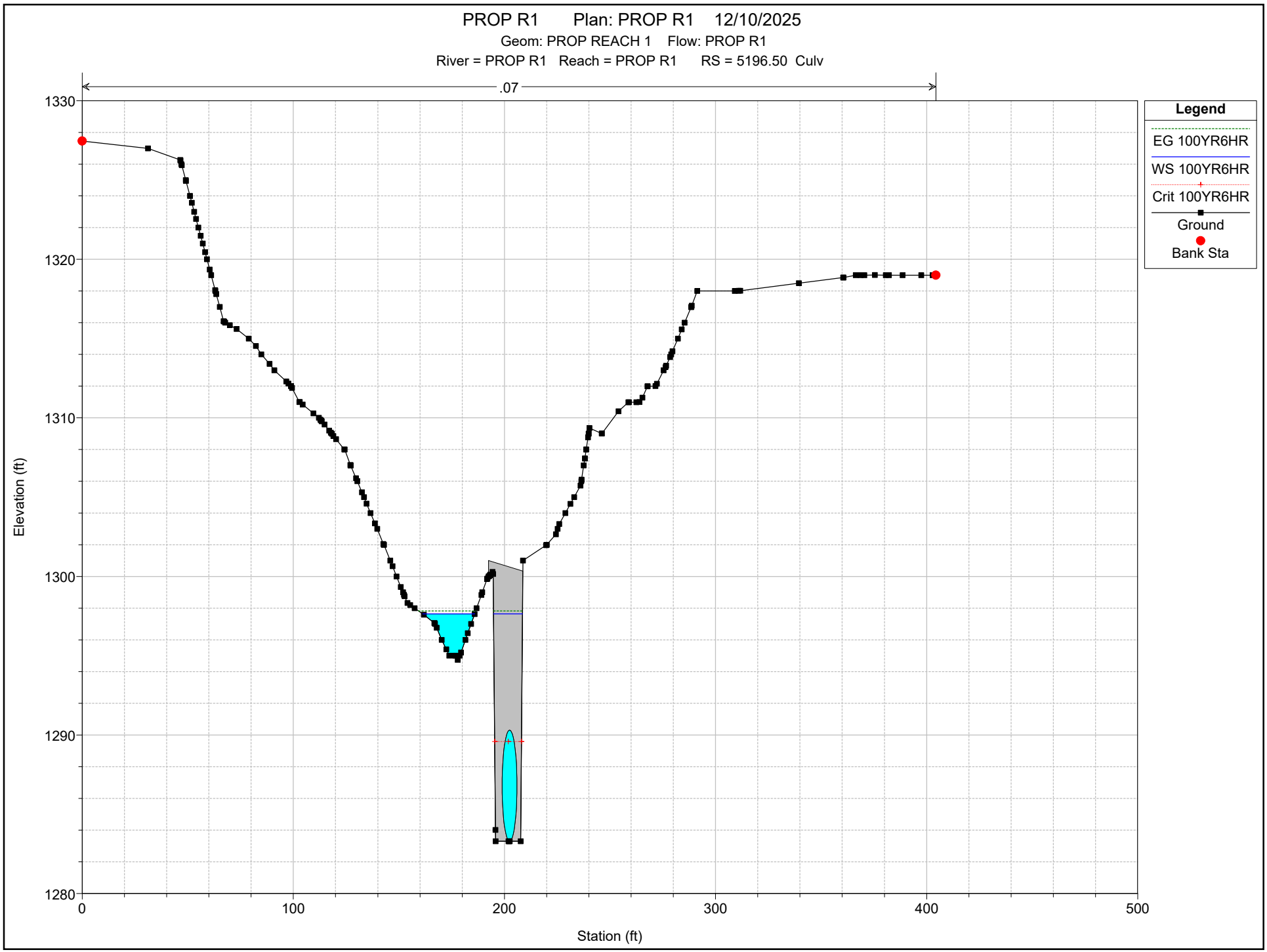
Plan: PROP R1 PROP R1 PROP R1 RS: 5196.50 Culv Group: EX CULVERT 3 Profile: 100YR6HR

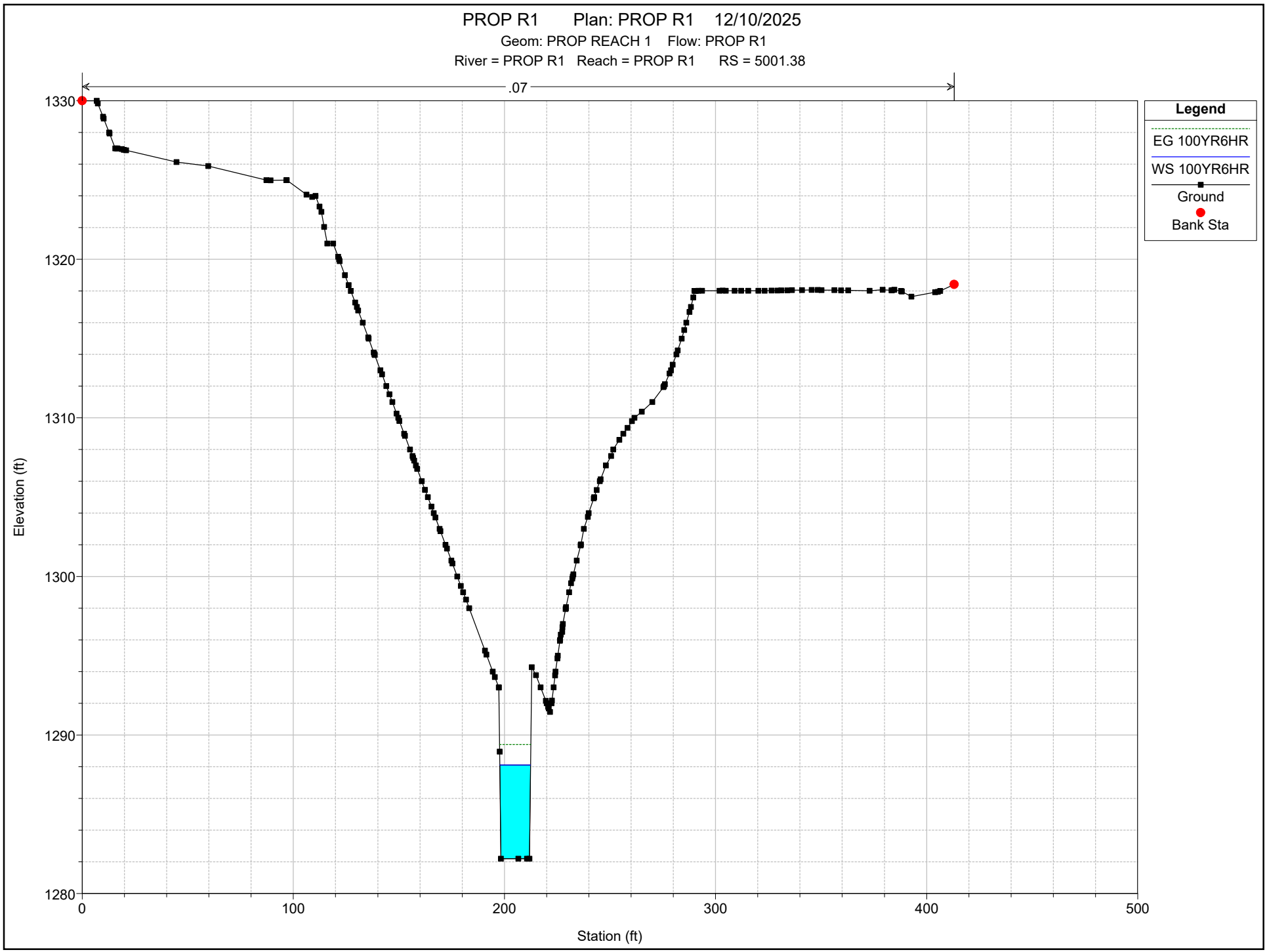
Q Culv Group (cfs)	605.53	Culv Full Len (ft)	
# Barrels	1	Culv Vel US (ft/s)	15.73
Q Barrel (cfs)	605.53	Culv Vel DS (ft/s)	21.97
E.G. US. (ft)	1297.82	Culv Inv El Up (ft)	1283.30
W.S. US. (ft)	1297.63	Culv Inv El Dn (ft)	1282.20
E.G. DS (ft)	1289.40	Culv Frctn Ls (ft)	3.30
W.S. DS (ft)	1288.11	Culv Exit Loss (ft)	5.01
Delta EG (ft)	8.42	Culv Entr Loss (ft)	0.12
Delta WS (ft)	9.53	Q Weir (cfs)	152.17
E.G. IC (ft)	1297.82	Weir Sta Lft (ft)	159.17
E.G. OC (ft)	1294.55	Weir Sta Rgt (ft)	186.39
Culvert Control	Inlet	Weir Submerg	0.00
Culv WS Inlet (ft)	1290.30	Weir Max Depth (ft)	3.09
Culv WS Outlet (ft)	1286.91	Weir Avg Depth (ft)	1.50
Culv Nml Depth (ft)	7.00	Weir Flow Area (sq ft)	40.73
Culv Crt Depth (ft)	6.29	Min El Weir Flow (ft)	1294.75

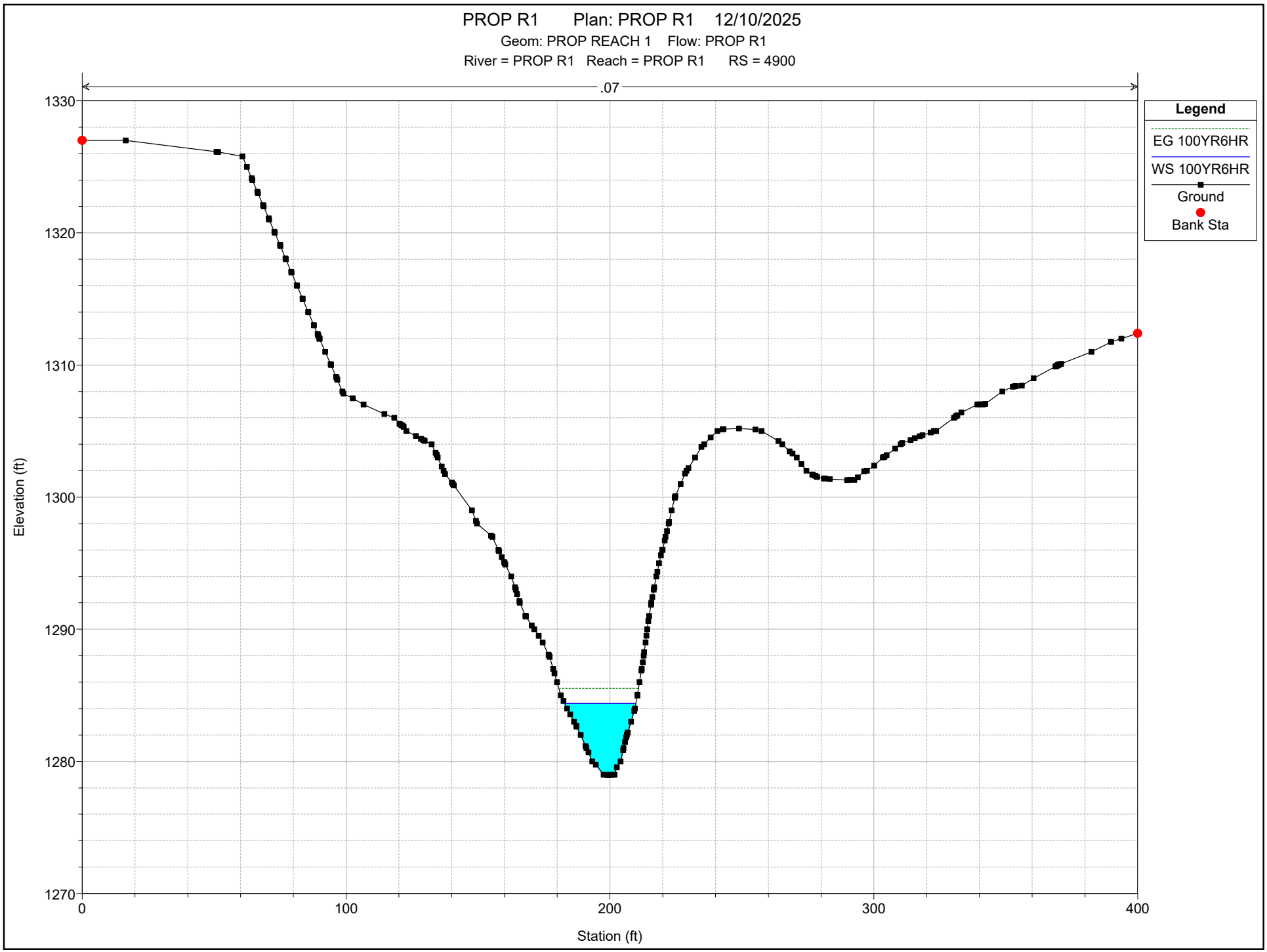

PROP R1 Plan: PROP R1 12/10/2025
Geom: PROP REACH 1 Flow: PROP R1
River = PROP R1 Reach = PROP R1 RS = 5415.34
.07
Legend
EG 100YR6HR
WS 100YR6HR
Ground
Bank Sta
Elevation (ft)
1350
1340
1330
1320
1310
1300
1290
0
100
200
300
400
500
Station (ft)

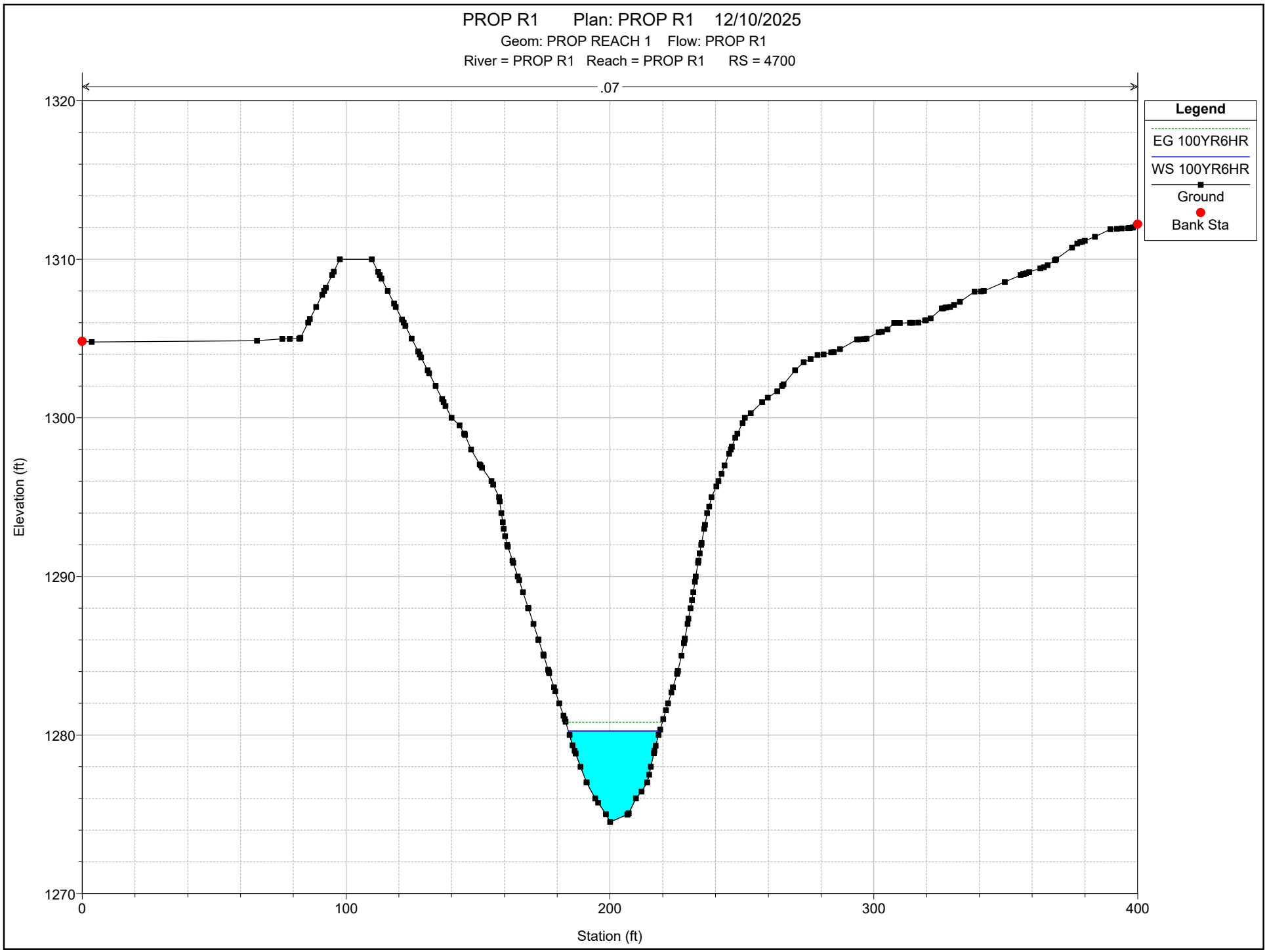

PROP R1 Plan: PROP R1 12/10/2025
Geom: PROP REACH 1 Flow: PROP R1
River = PROP R1 Reach = PROP R1 RS = 5300
.07
Legend
EG 100YR6HR
WS 100YR6HR
Ground
Bank Sta
Elevation (ft)
1350
1340
1330
1320
1310
1300
1290
1280
0
100
200
300
400
500
Station (ft)

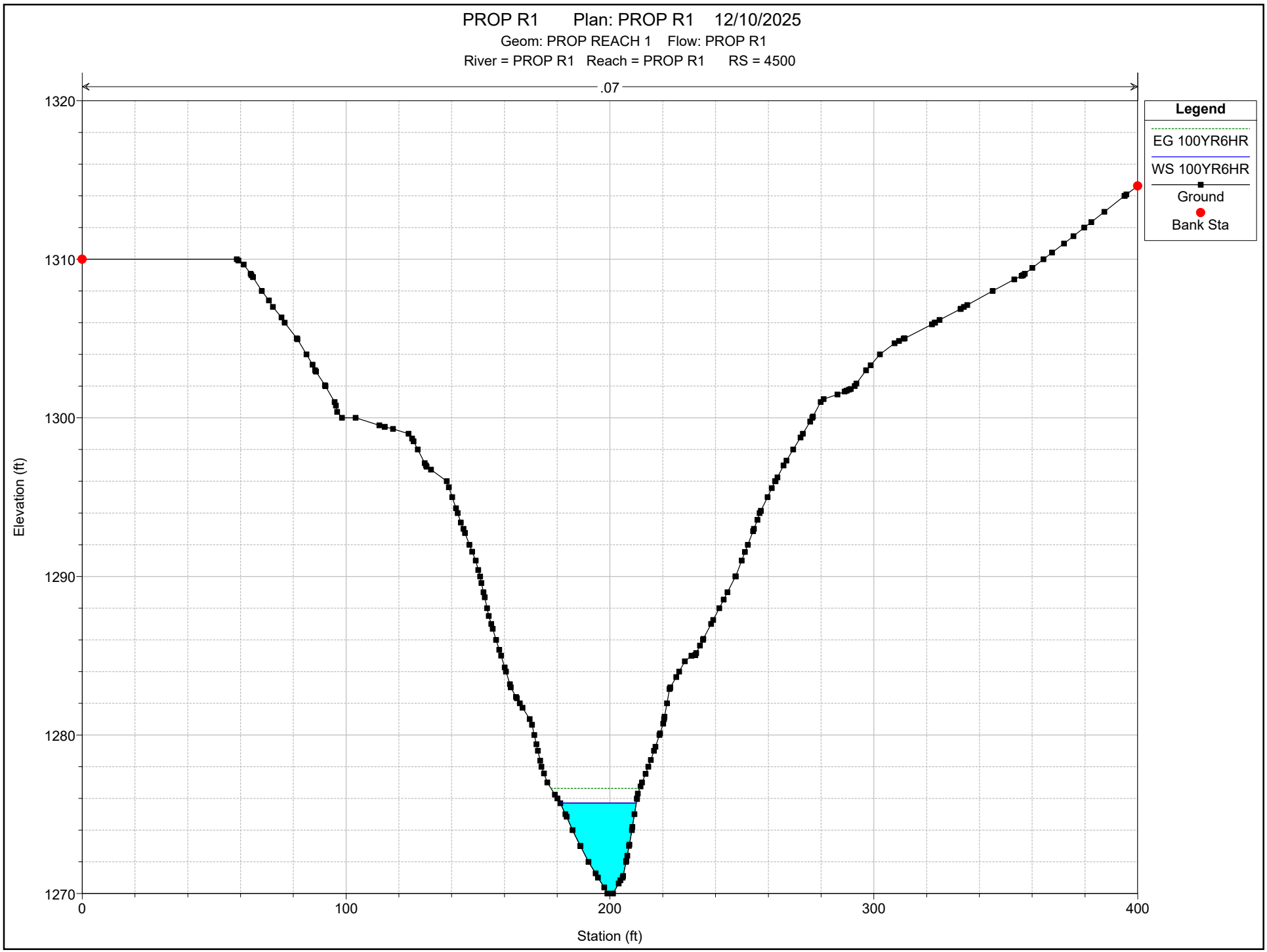

PROP R1 Plan: PROP R1 12/10/2025
Geom: PROP REACH 1 Flow: PROP R1
River = PROP R1 Reach = PROP R1 RS = 5196.59
.07
Legend
EG 100YR6HR
WS 100YR6HR
Crit 100YR6HR
Ground
Bank Sta
Elevation (ft)
1330
1320
1310
1300
1290
1280
0
100
200
300
400
500
Station (ft)

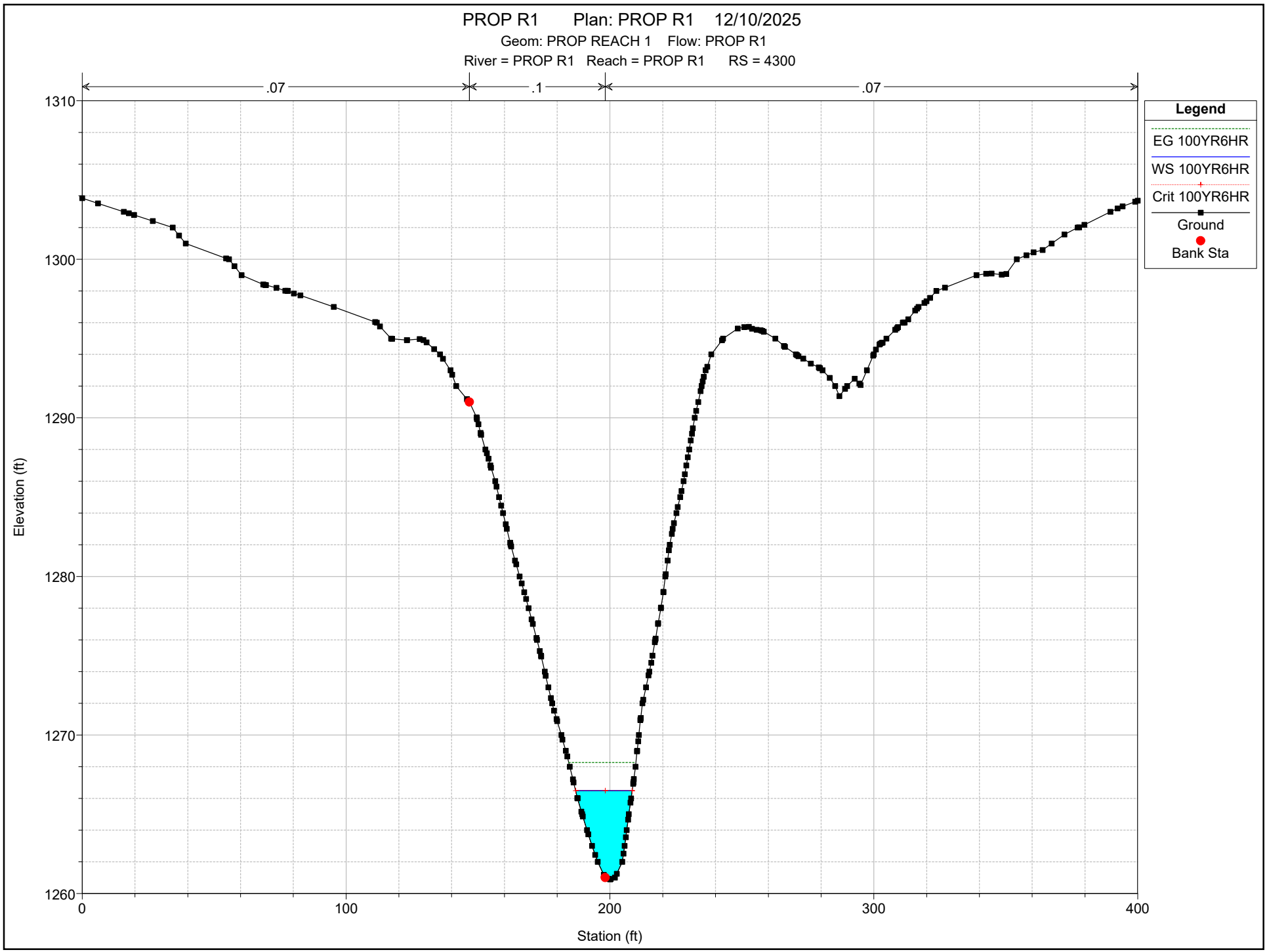

PROP R1 Plan: PROP R1 12/10/2025
Geom: PROP REACH 1 Flow: PROP R1
River = PROP R1 Reach = PROP R1 RS = 5196.50 Culv
.07
Legend
EG 100YR6HR
WS 100YR6HR
Crit 100YR6HR
Ground
Bank Sta
Elevation (ft)
1330
1320
1310
1300
1290
1280
0
100
200
300
400
500
Station (ft)

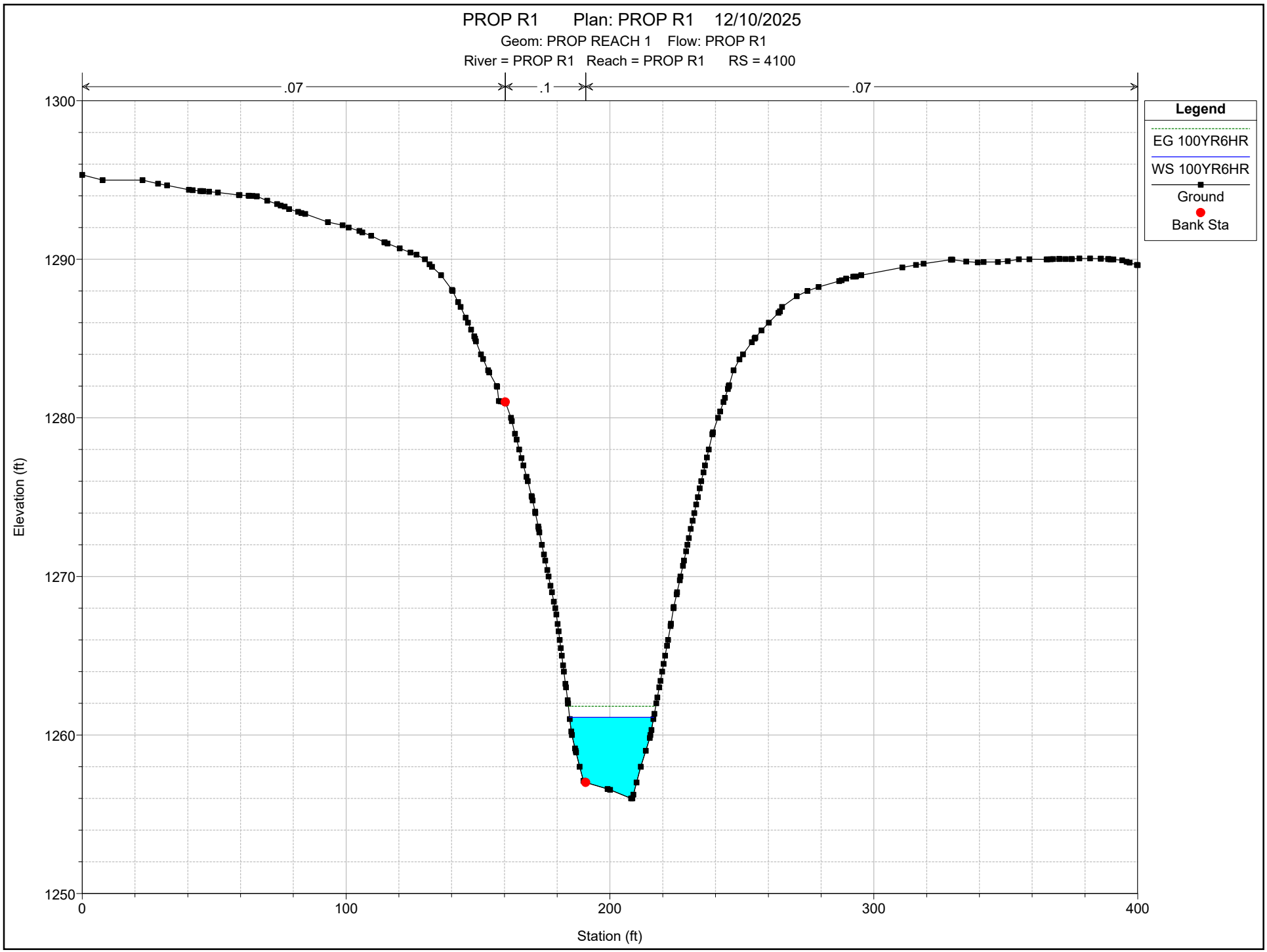

PROP R1 Plan: PROP R1 12/10/2025
Geom: PROP REACH 1 Flow: PROP R1
River = PROP R1 Reach = PROP R1 RS = 5001.38
.07
Legend
EG 100YR6HR
WS 100YR6HR
Ground
Bank Sta
Elevation (ft)
Station (ft)
1330
1320
1310
1300
1290
1280
0
100
200
300
400
500

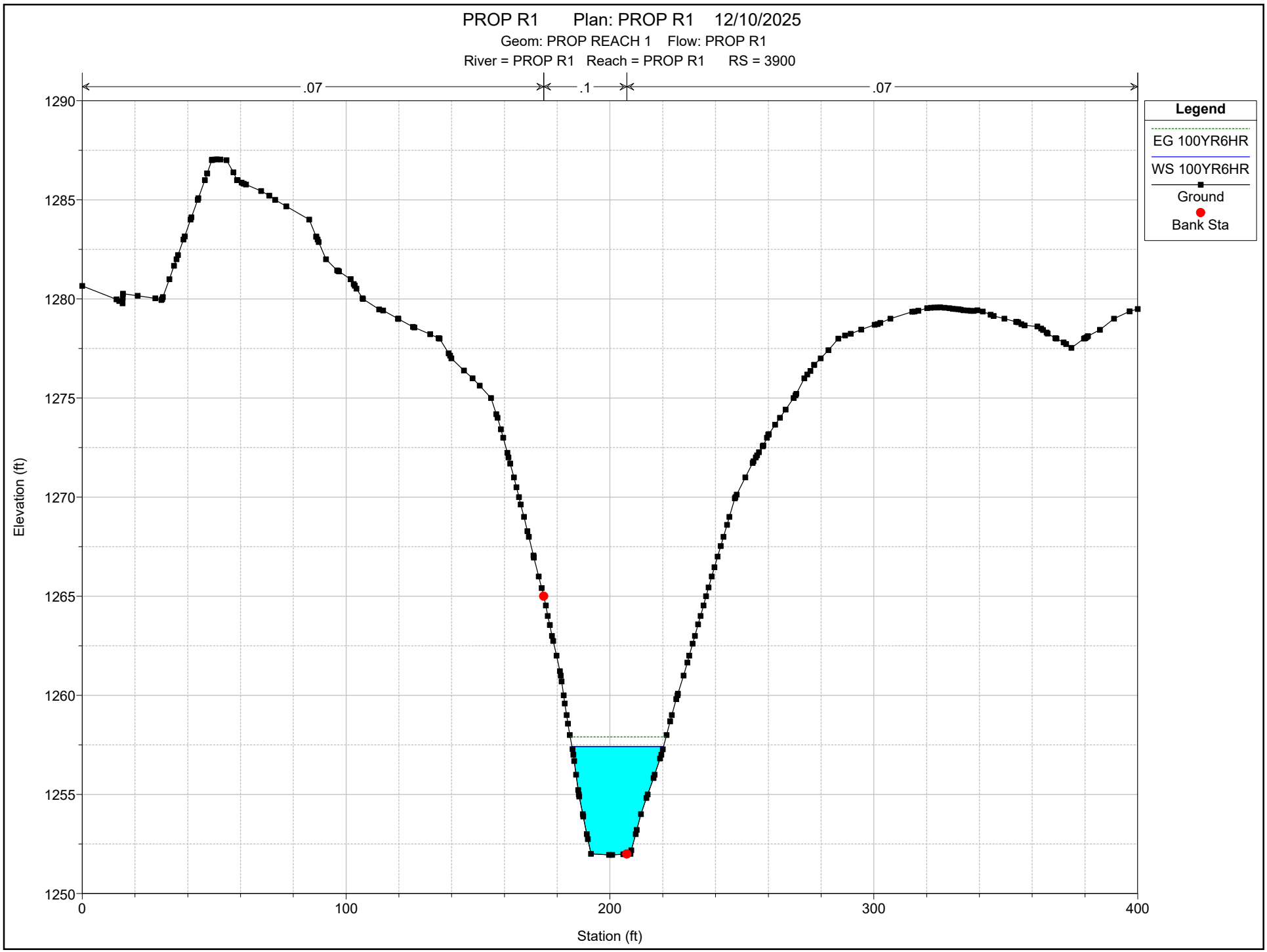

PROP R1 Plan: PROP R1 12/10/2025
Geom: PROP REACH 1 Flow: PROP R1
River = PROP R1 Reach = PROP R1 RS = 4900
.07
Legend
EG 100YR6HR
WS 100YR6HR
Ground
Bank Sta
Elevation (ft)
1330
1320
1310
1300
1290
1280
1270
0
100
200
300
400
Station (ft)

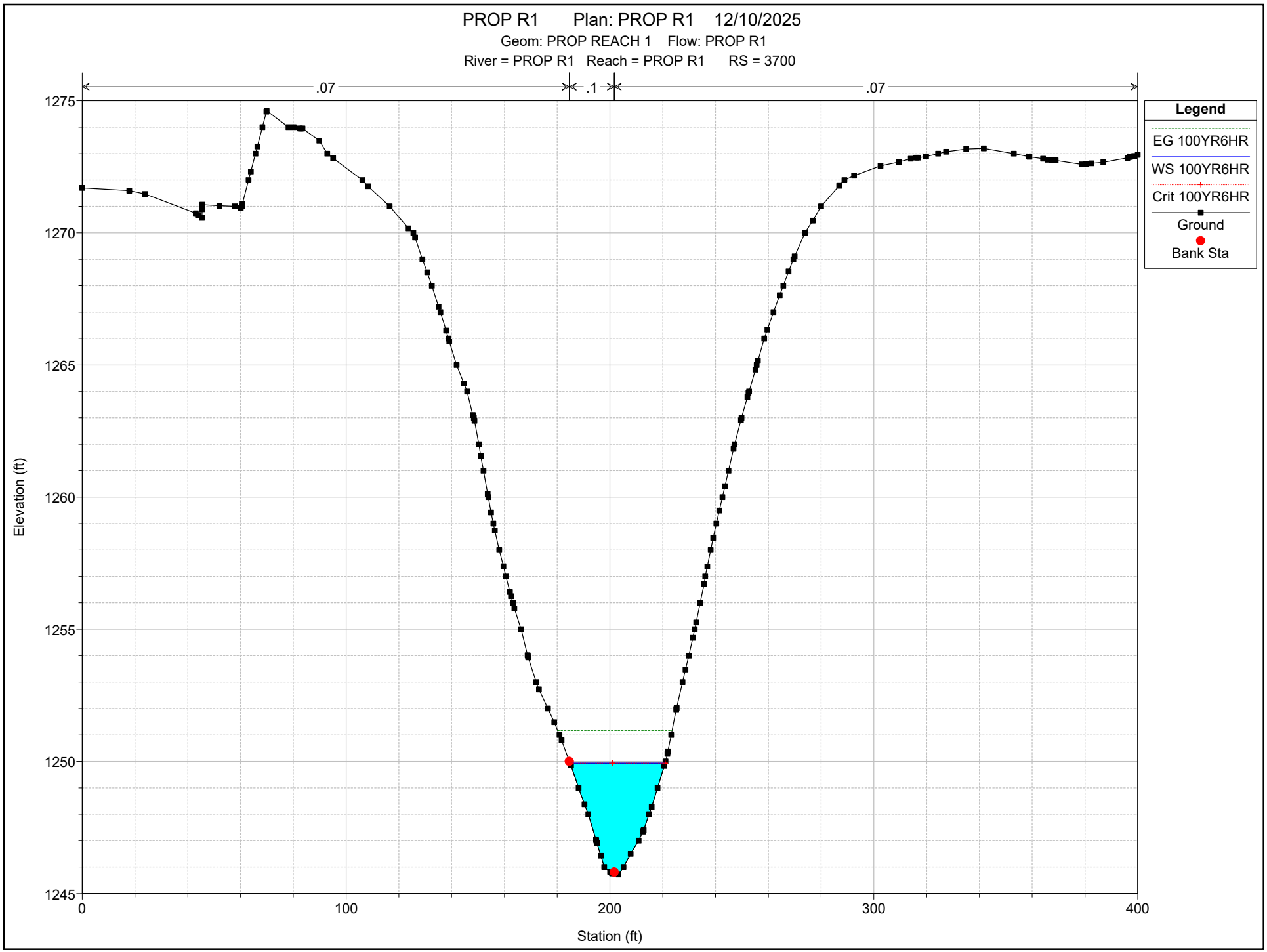

PROP R1 Plan: PROP R1 12/10/2025
Geom: PROP REACH 1 Flow: PROP R1
River = PROP R1 Reach = PROP R1 RS = 4700
.07
Legend
EG 100YR6HR
WS 100YR6HR
Ground
Bank Sta
Elevation (ft)
1320
1310
1300
1290
1280
1270
0
100
200
300
400
Station (ft)

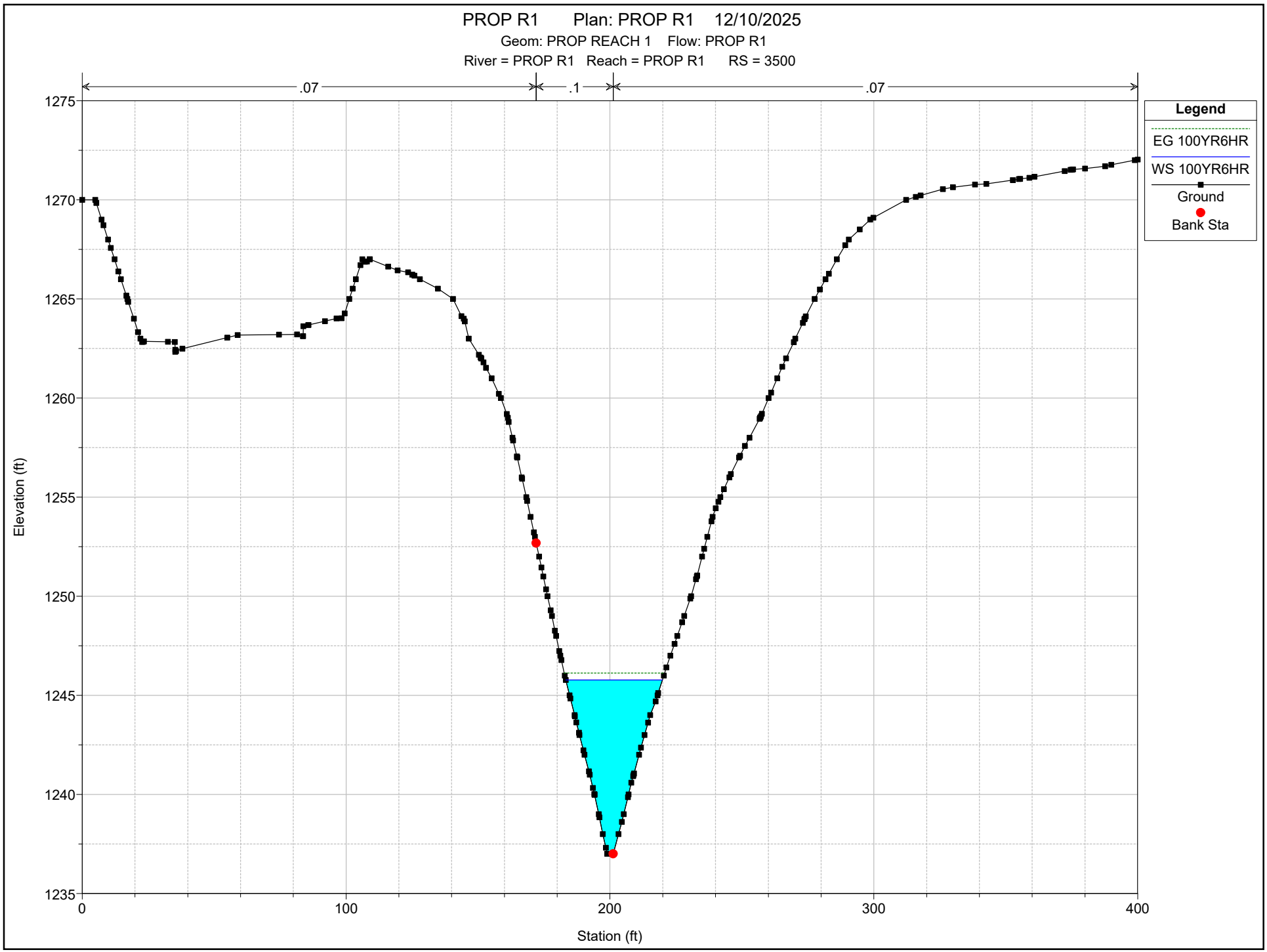

PROP R1 Plan: PROP R1 12/10/2025
Geom: PROP REACH 1 Flow: PROP R1
River = PROP R1 Reach = PROP R1 RS = 4500
.07
Legend
EG 100YR6HR
WS 100YR6HR
Ground
Bank Sta
Elevation (ft)
1320
1310
1300
1290
1280
1270
0
100
200
300
400
Station (ft)

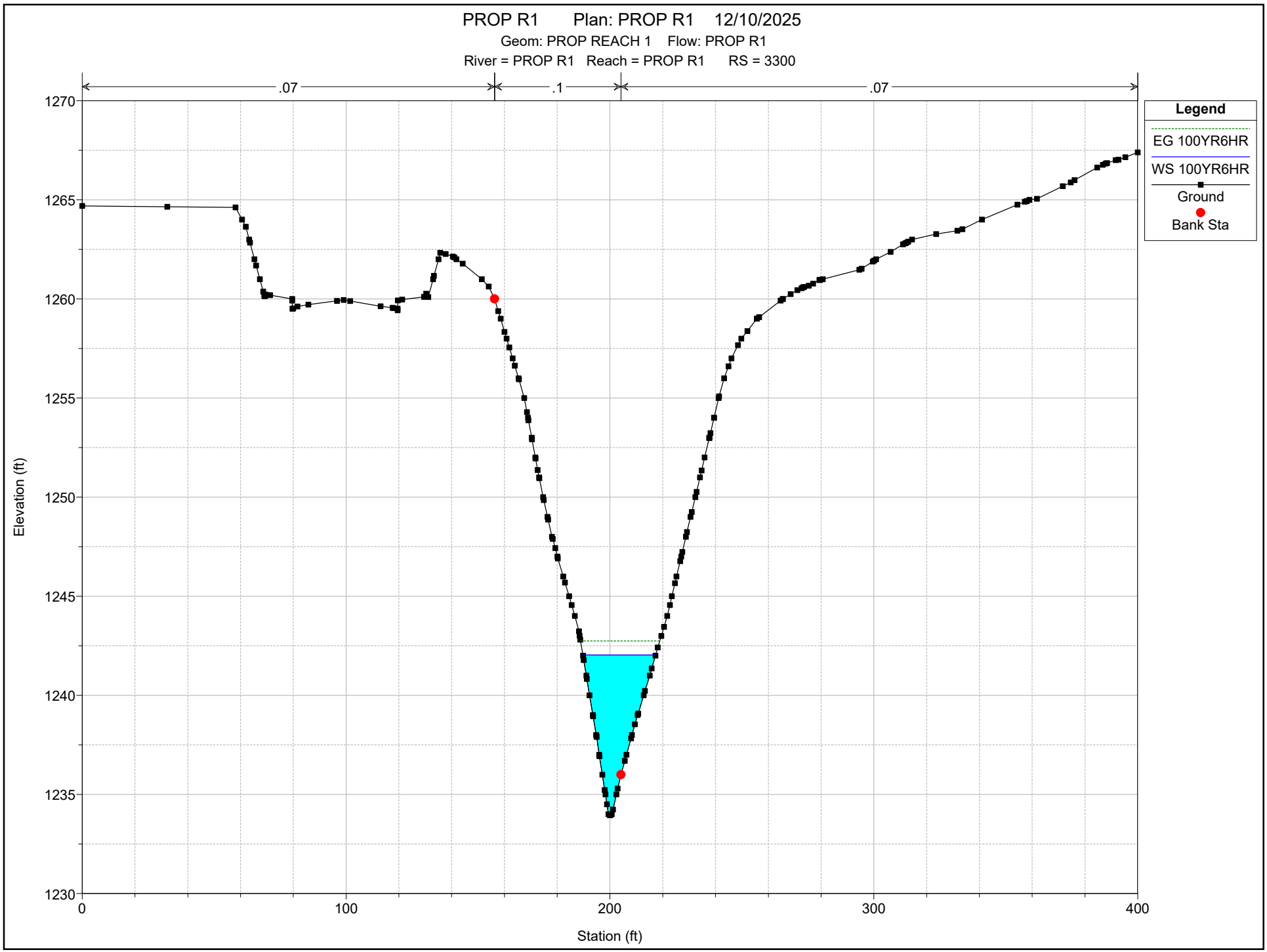

PROP R1 Plan: PROP R1 12/10/2025
Geom: PROP REACH 1 Flow: PROP R1
River = PROP R1 Reach = PROP R1 RS = 4300
.07
.1
.07
Legend
EG 100YR6HR
WS 100YR6HR
Crit 100YR6HR
Ground
Bank Sta
Elevation (ft)
1310
1300
1290
1280
1270
1260
0
100
200
300
400
Station (ft)

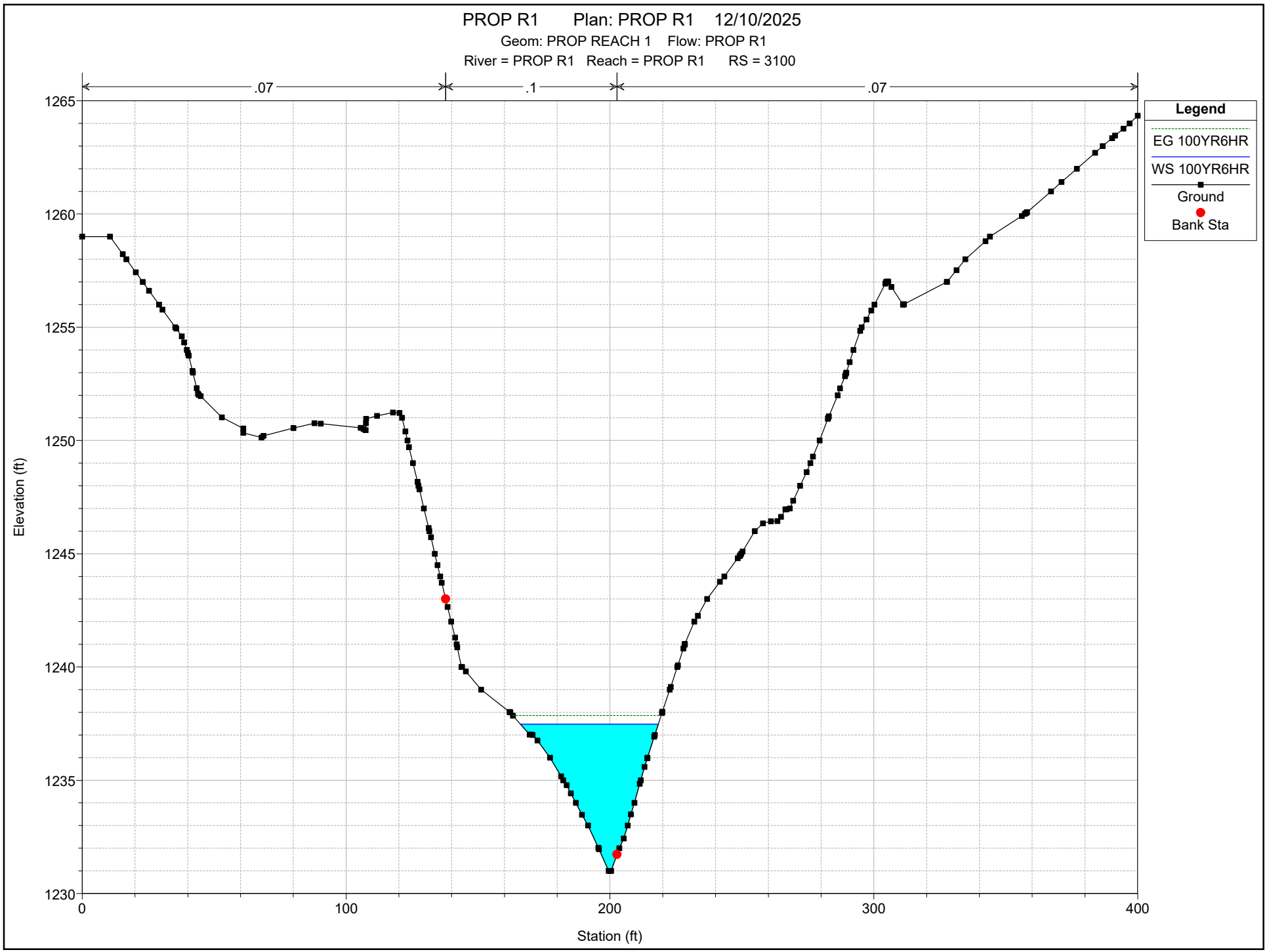

PROP R1 Plan: PROP R1 12/10/2025
Geom: PROP REACH 1 Flow: PROP R1
River = PROP R1 Reach = PROP R1 RS = 4100
.07
.1
.07
Legend
EG 100YR6HR
WS 100YR6HR
Ground
Bank Sta
Elevation (ft)
1300
1290
1280
1270
1260
1250
0
100
200
300
400
Station (ft)

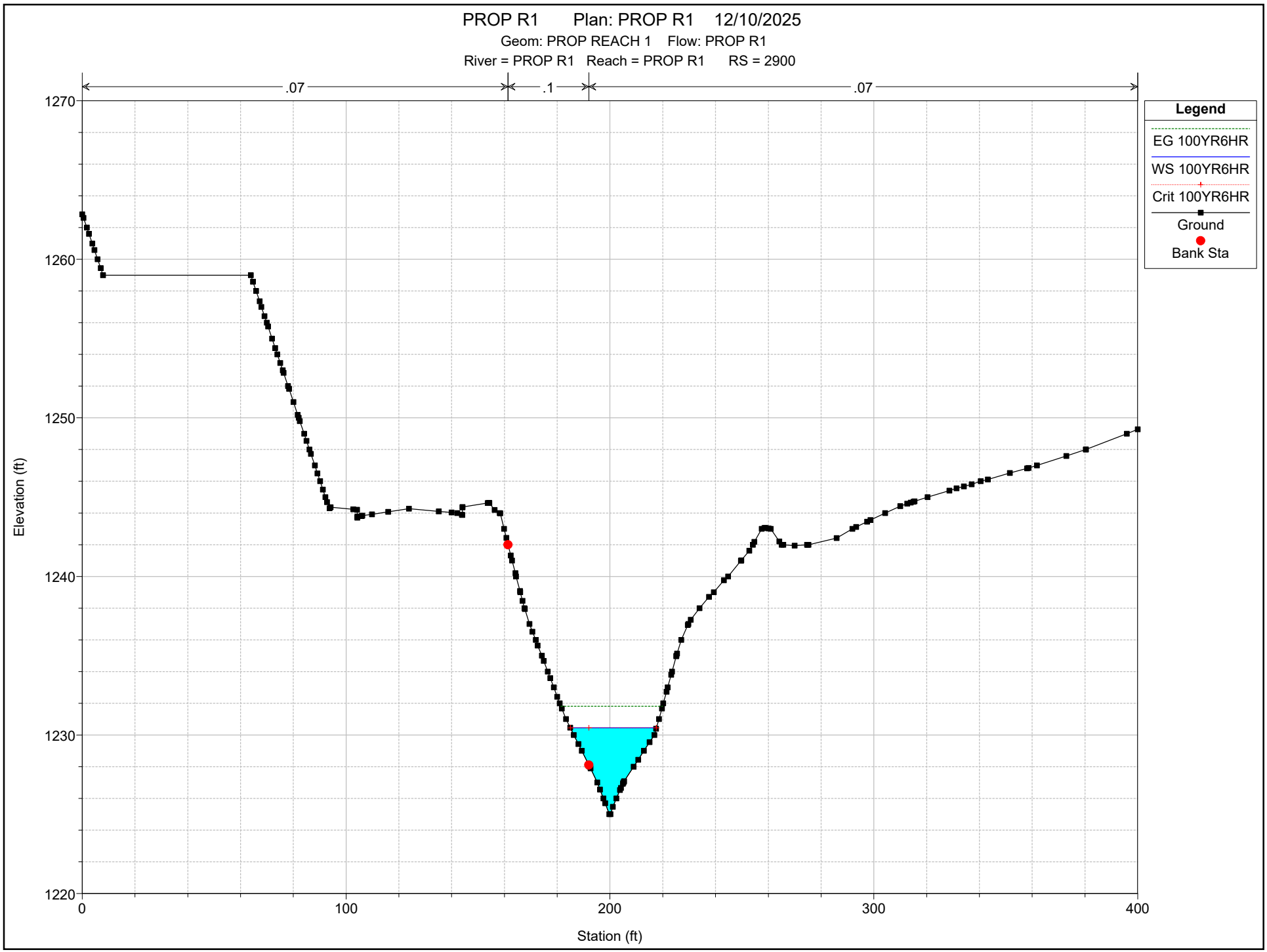

PROP R1 Plan: PROP R1 12/10/2025
Geom: PROP REACH 1 Flow: PROP R1
River = PROP R1 Reach = PROP R1 RS = 3900
.07
.1
.07
Legend
EG 100YR6HR
WS 100YR6HR
Ground
Bank Sta
Elevation (ft)
1290
1285
1280
1275
1270
1265
1260
1255
1250
0
100
200
300
400
Station (ft)

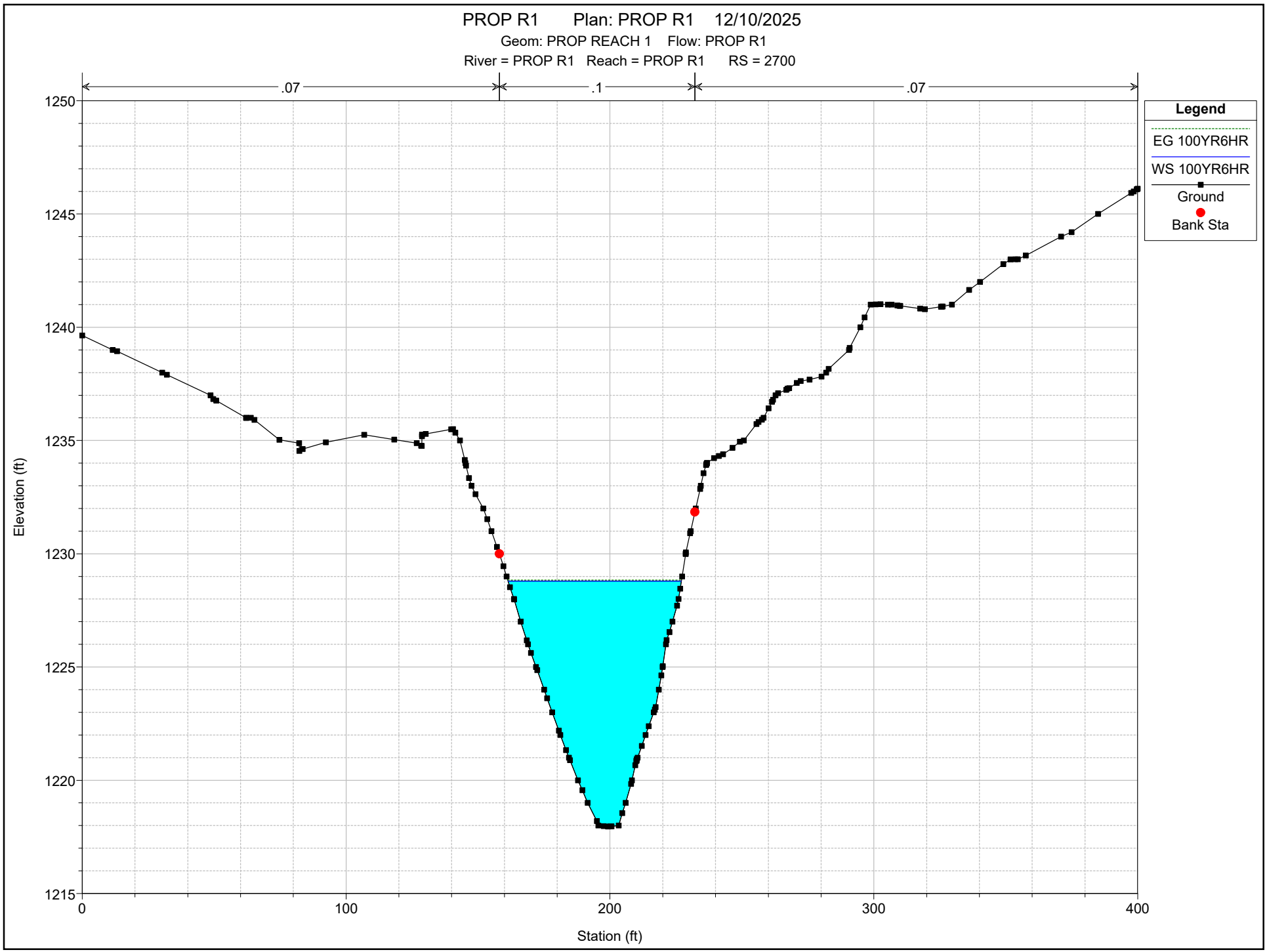

PROP R1 Plan: PROP R1 12/10/2025
Geom: PROP REACH 1 Flow: PROP R1
River = PROP R1 Reach = PROP R1 RS = 3700
.07
.1
.07
Legend
EG 100YR6HR
WS 100YR6HR
Crit 100YR6HR
Ground
Bank Sta
Elevation (ft)
1275
1270
1265
1260
1255
1250
1245
0
100
200
300
400
Station (ft)

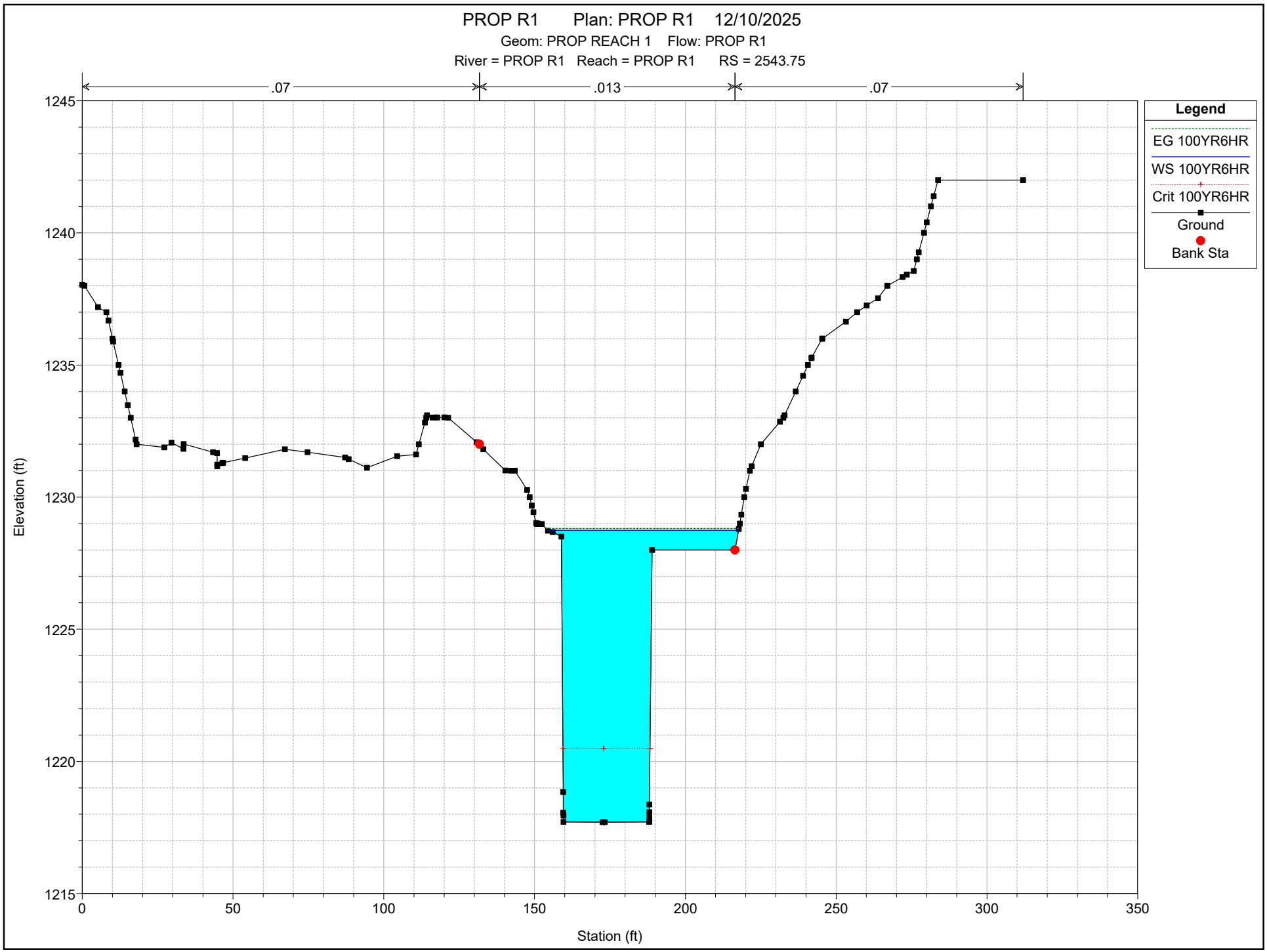

PROP R1 Plan: PROP R1 12/10/2025
Geom: PROP REACH 1 Flow: PROP R1
River = PROP R1 Reach = PROP R1 RS = 3500
.07
.1
.07
Legend
EG 100YR6HR
WS 100YR6HR
Ground
Bank Sta
Elevation (ft)
1275
1270
1265
1260
1255
1250
1245
1240
1235
0
100
200
300
400
Station (ft)

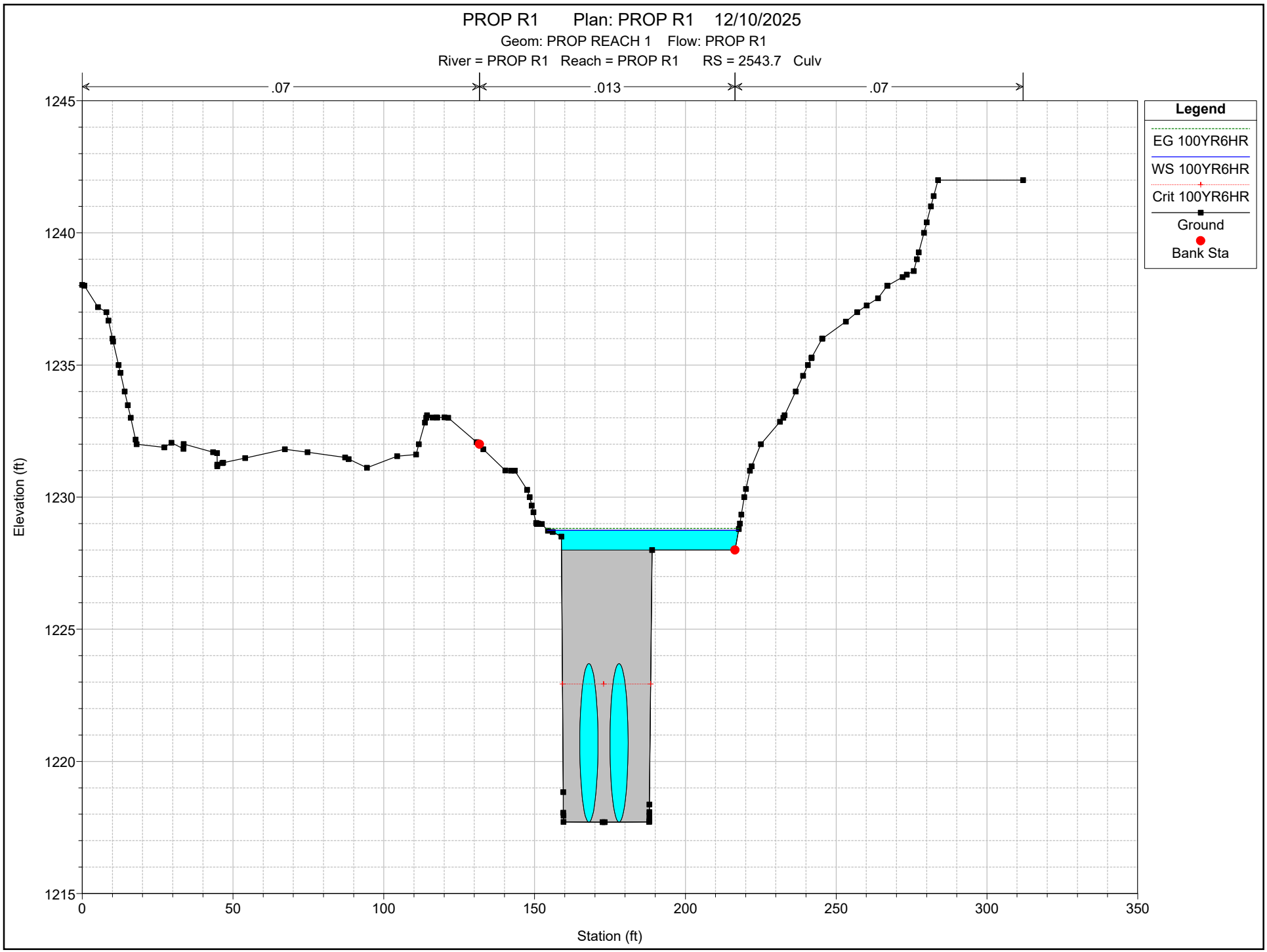

PROP R1 Plan: PROP R1 12/10/2025
Geom: PROP REACH 1 Flow: PROP R1
River = PROP R1 Reach = PROP R1 RS = 3300
.07
.1
.07
Legend
EG 100YR6HR
WS 100YR6HR
Ground
Bank Sta
Elevation (ft)
Station (ft)
1270
1265
1260
1255
1250
1245
1240
1235
1230
0
100
200
300
400

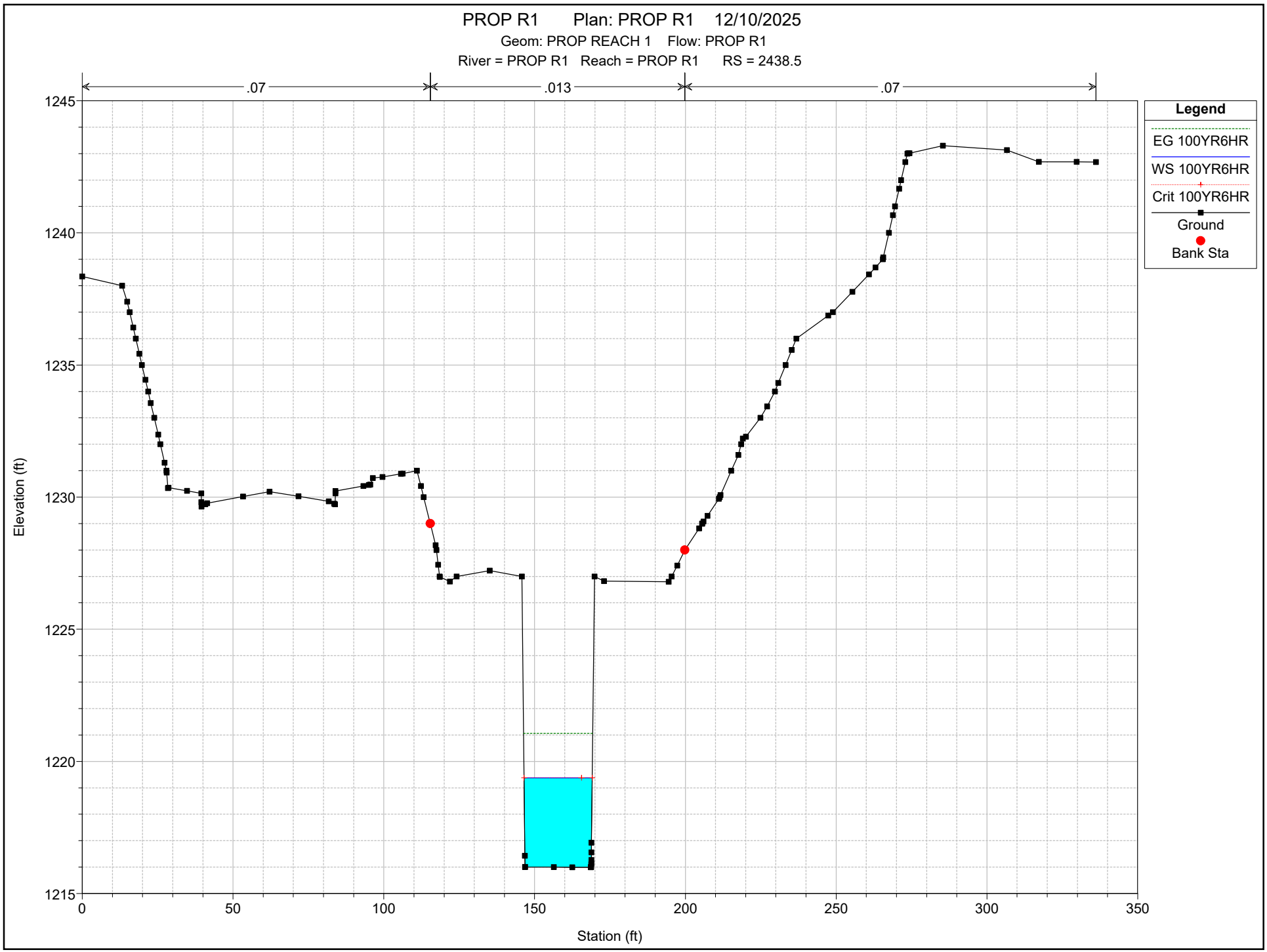

PROP R1 Plan: PROP R1 12/10/2025
Geom: PROP REACH 1 Flow: PROP R1
River = PROP R1 Reach = PROP R1 RS = 3100
.07
.1
.07
Legend
EG 100YR6HR
WS 100YR6HR
Ground
Bank Sta
Elevation (ft)
Station (ft)
1265
1260
1255
1250
1245
1240
1235
1230
0
100
200
300
400

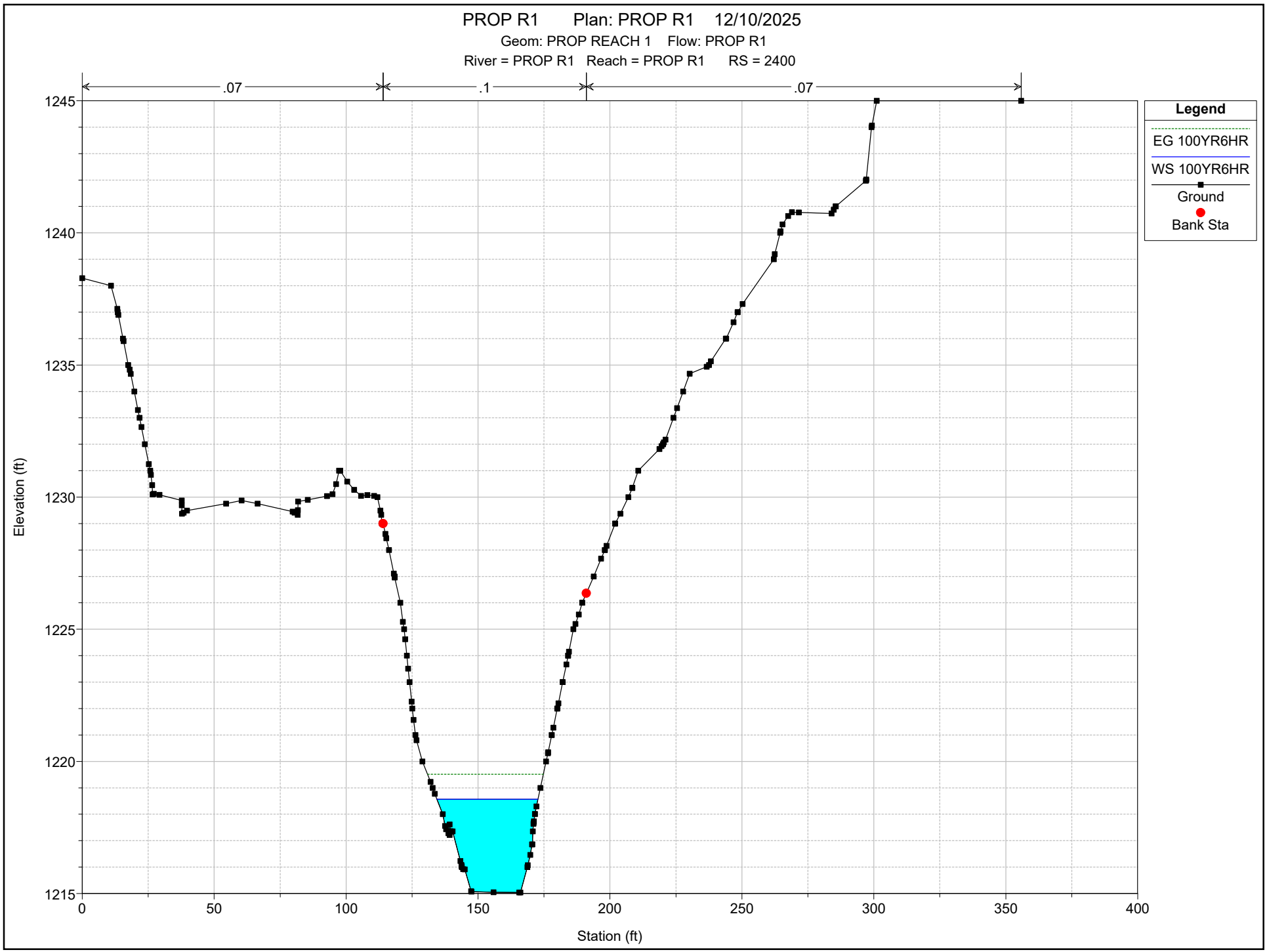

PROP R1 Plan: PROP R1 12/10/2025
Geom: PROP REACH 1 Flow: PROP R1
River = PROP R1 Reach = PROP R1 RS = 2900
.07
.1
.07
Legend
EG 100YR6HR
WS 100YR6HR
Crit 100YR6HR
Ground
Bank Sta
Elevation (ft)
1270
1260
1250
1240
1230
1220
0
100
200
300
400
Station (ft)

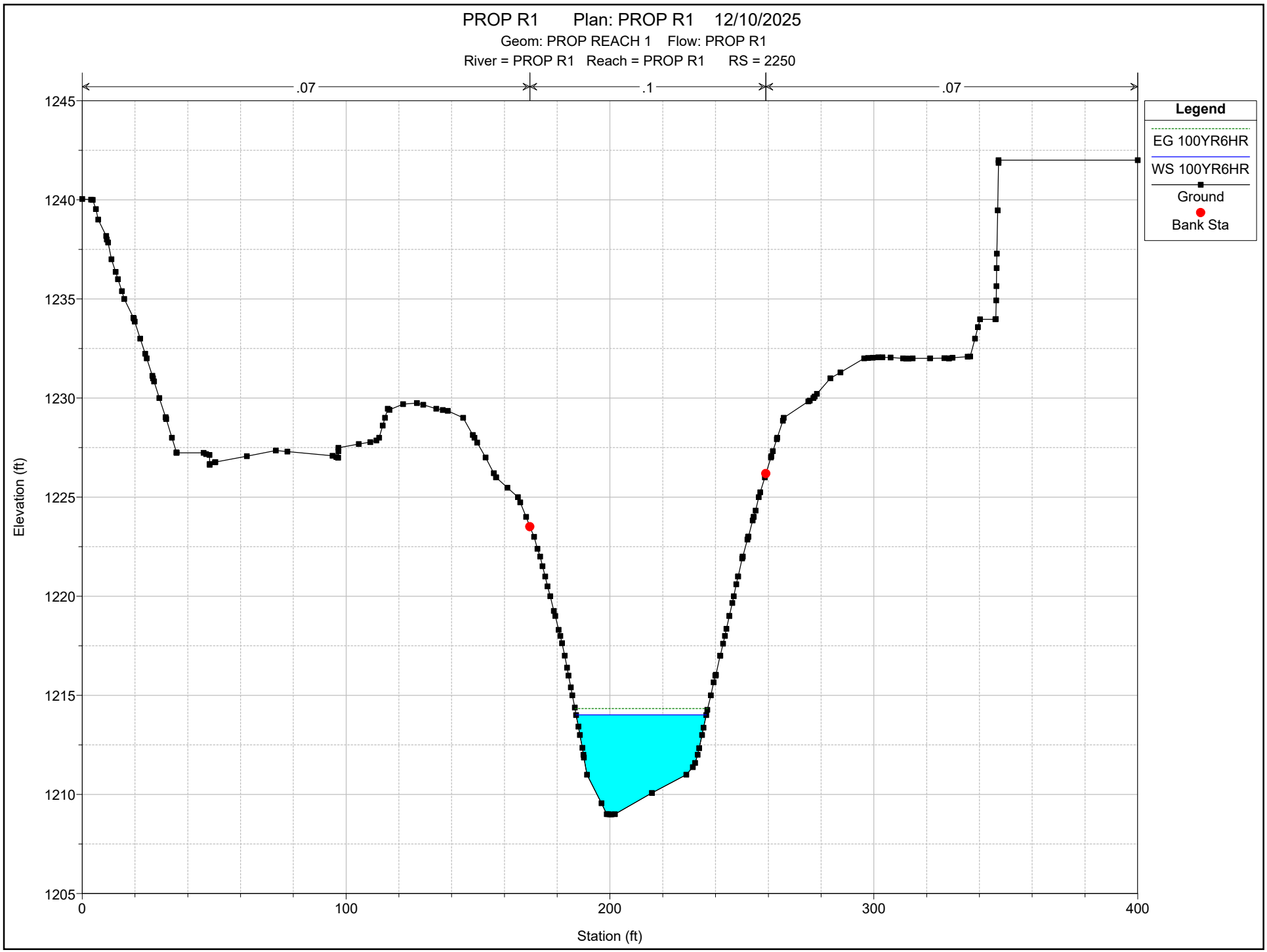

PROP R1 Plan: PROP R1 12/10/2025
Geom: PROP REACH 1 Flow: PROP R1
River = PROP R1 Reach = PROP R1 RS = 2700
.07
.1
.07
Legend
EG 100YR6HR
WS 100YR6HR
Ground
Bank Sta
Elevation (ft)
Station (ft)
1250
1245
1240
1235
1230
1225
1220
1215
0
100
200
300
400

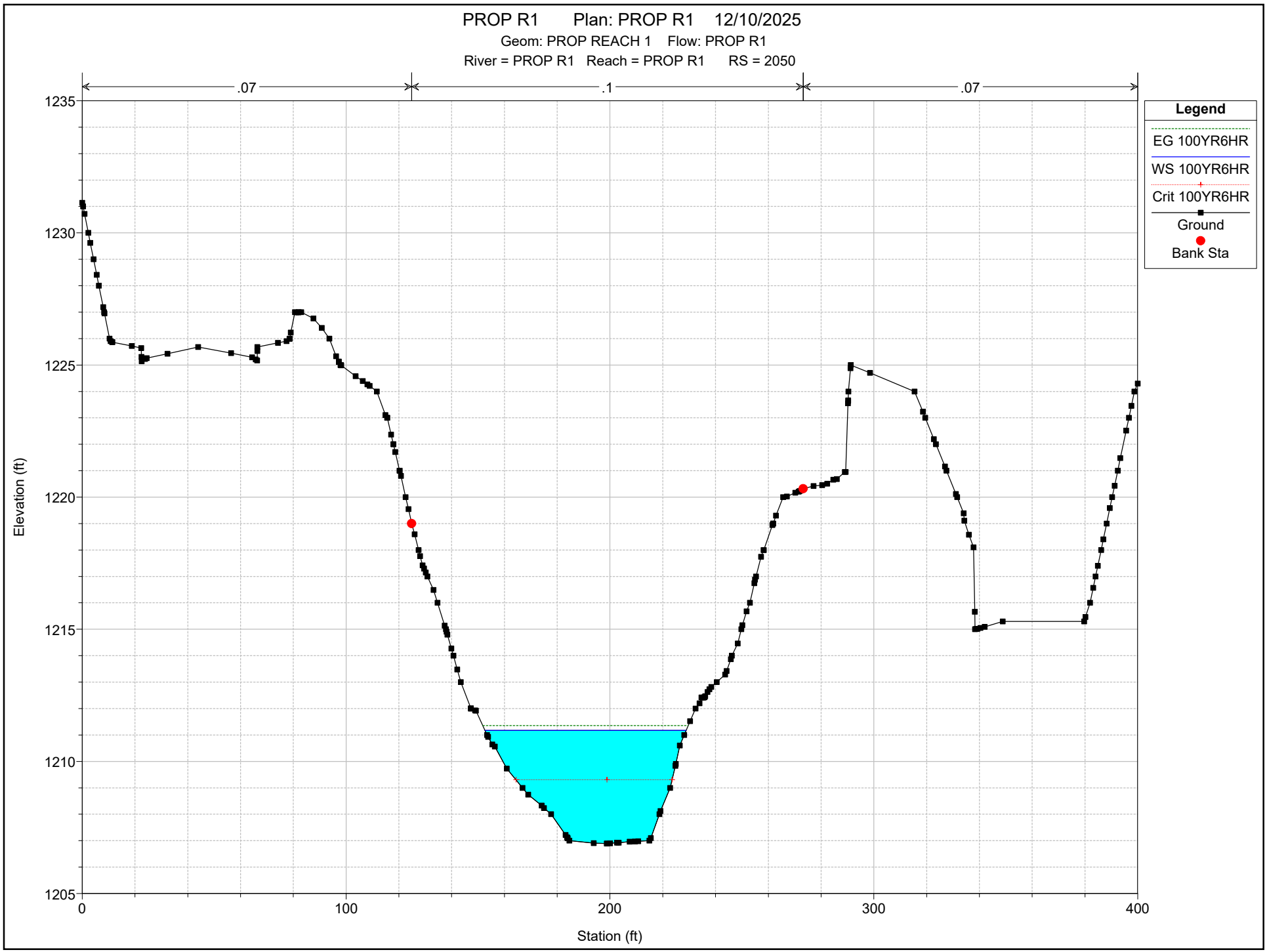

PROP R1 Plan: PROP R1 12/10/2025
Geom: PROP REACH 1 Flow: PROP R1
River = PROP R1 Reach = PROP R1 RS = 2543.75
.07
.013
.07
Legend
EG 100YR6HR
WS 100YR6HR
Crit 100YR6HR
Ground
Bank Sta
Elevation (ft)
Station (ft)
1245
1240
1235
1230
1225
1220
1215
0
50
100
150
200
250
300
350

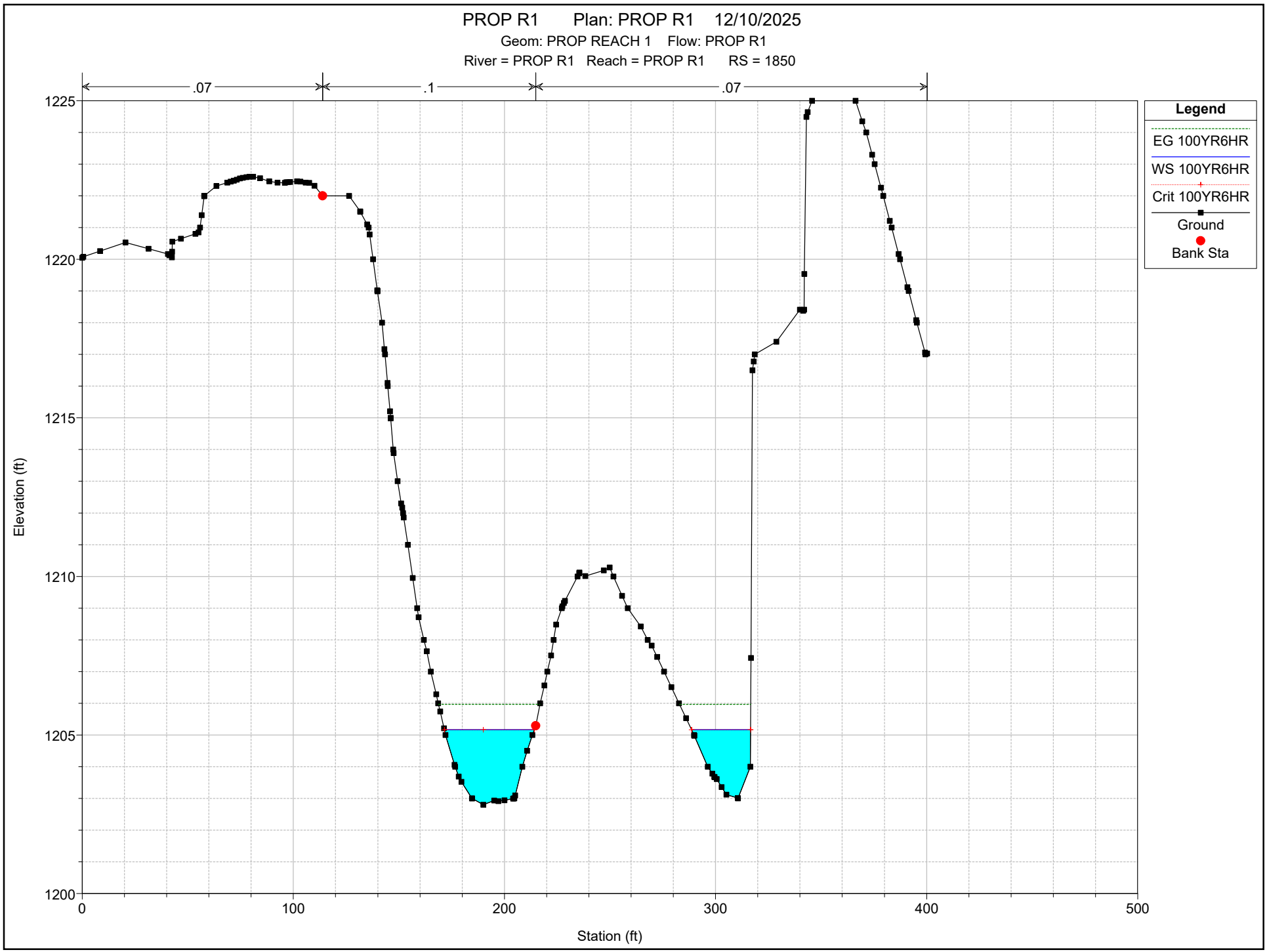

PROP R1 Plan: PROP R1 12/10/2025
Geom: PROP REACH 1 Flow: PROP R1
River = PROP R1 Reach = PROP R1 RS = 2543.7 Culv
.07
.013
.07
Legend
EG 100YR6HR
WS 100YR6HR
Crit 100YR6HR
Ground
Bank Sta
Elevation (ft)
Station (ft)
1245
1240
1235
1230
1225
1220
1215
0
50
100
150
200
250
300
350

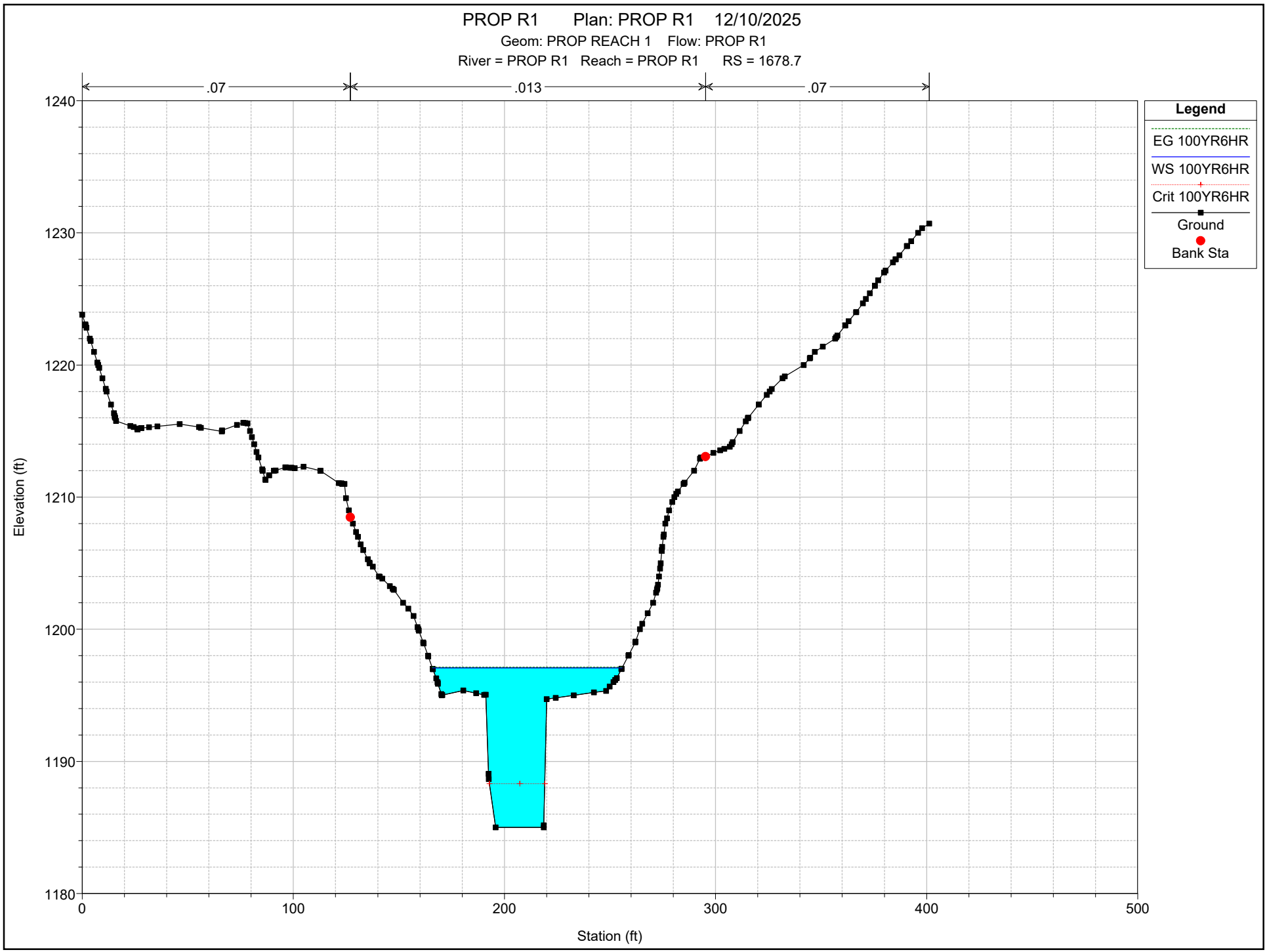

PROP R1 Plan: PROP R1 12/10/2025
Geom: PROP REACH 1 Flow: PROP R1
River = PROP R1 Reach = PROP R1 RS = 2438.5
.07
.013
.07
Legend
EG 100YR6HR
WS 100YR6HR
Crit 100YR6HR
Ground
Bank Sta
Elevation (ft)
Station (ft)
1245
1240
1235
1230
1225
1220
1215
0
50
100
150
200
250
300
350

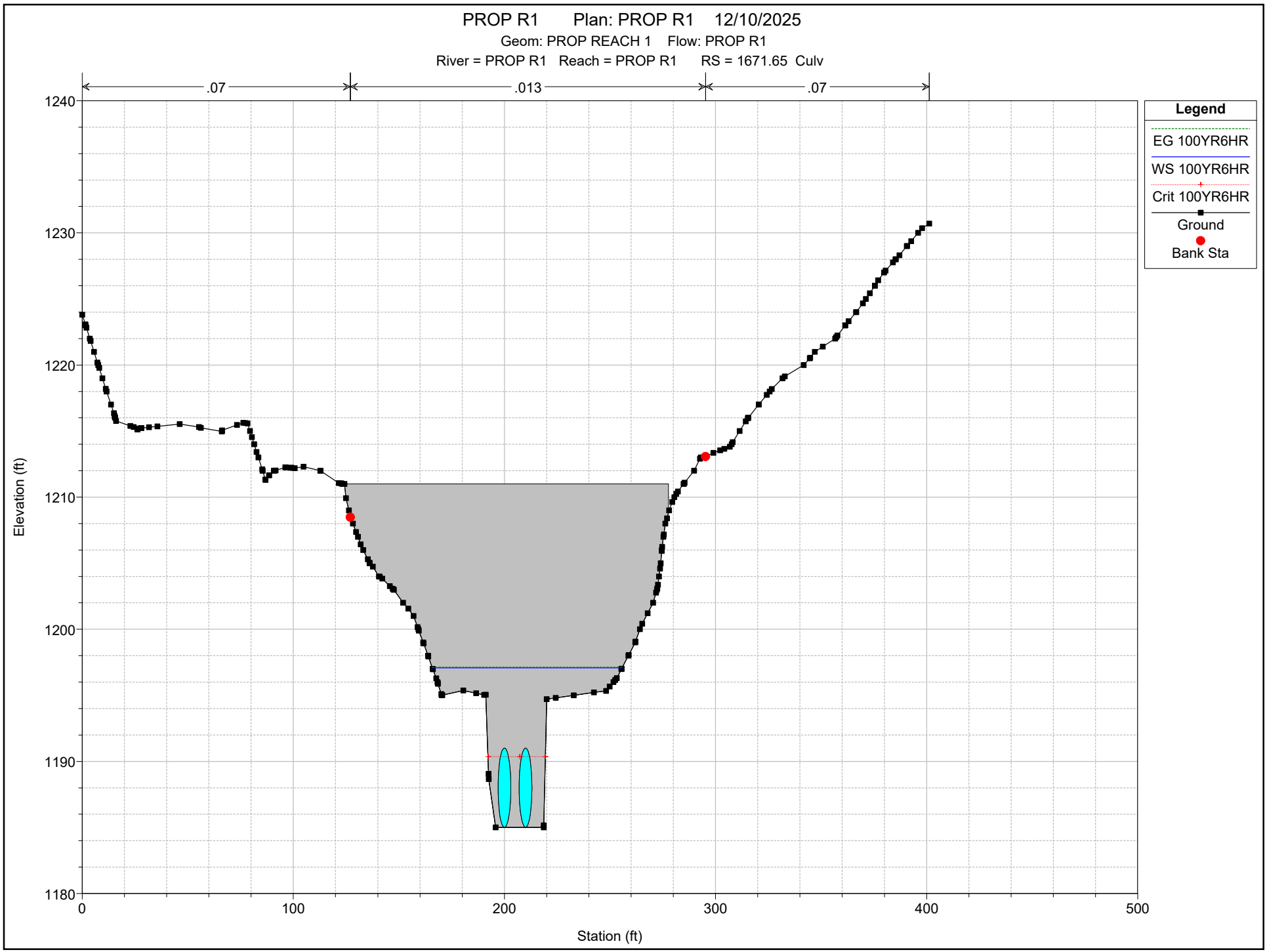

PROP R1 Plan: PROP R1 12/10/2025
Geom: PROP REACH 1 Flow: PROP R1
River = PROP R1 Reach = PROP R1 RS = 2400
.07
.1
.07
Legend
EG 100YR6HR
WS 100YR6HR
Ground
Bank Sta
Elevation (ft)
Station (ft)
1245
1240
1235
1230
1225
1220
1215
0
50
100
150
200
250
300
350
400

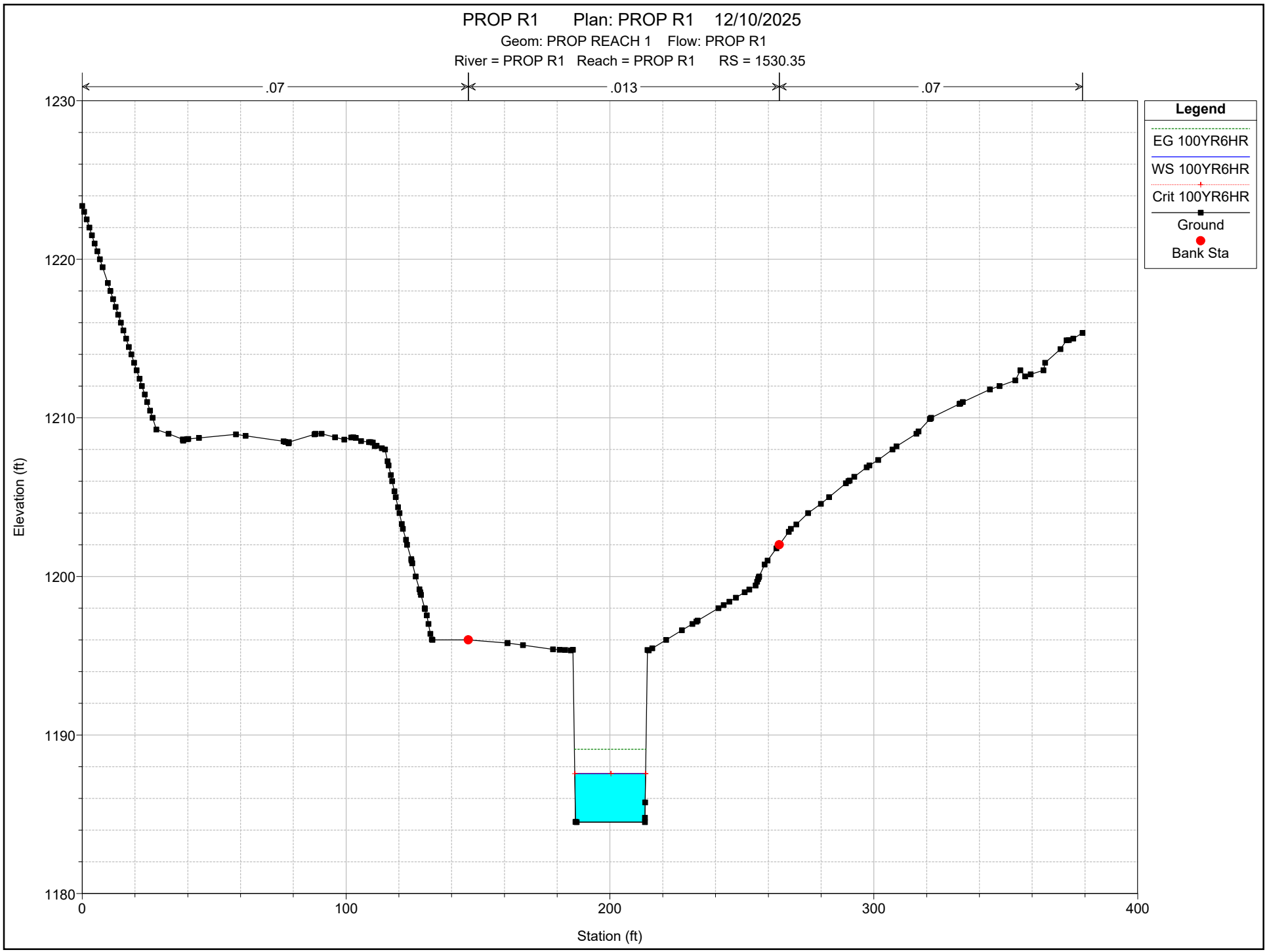

PROP R1 Plan: PROP R1 12/10/2025
Geom: PROP REACH 1 Flow: PROP R1
River = PROP R1 Reach = PROP R1 RS = 2250
.07
.1
.07
Legend
EG 100YR6HR
WS 100YR6HR
Ground
Bank Sta
Elevation (ft)
Station (ft)
1245
1240
1235
1230
1225
1220
1215
1210
1205
0
100
200
300
400

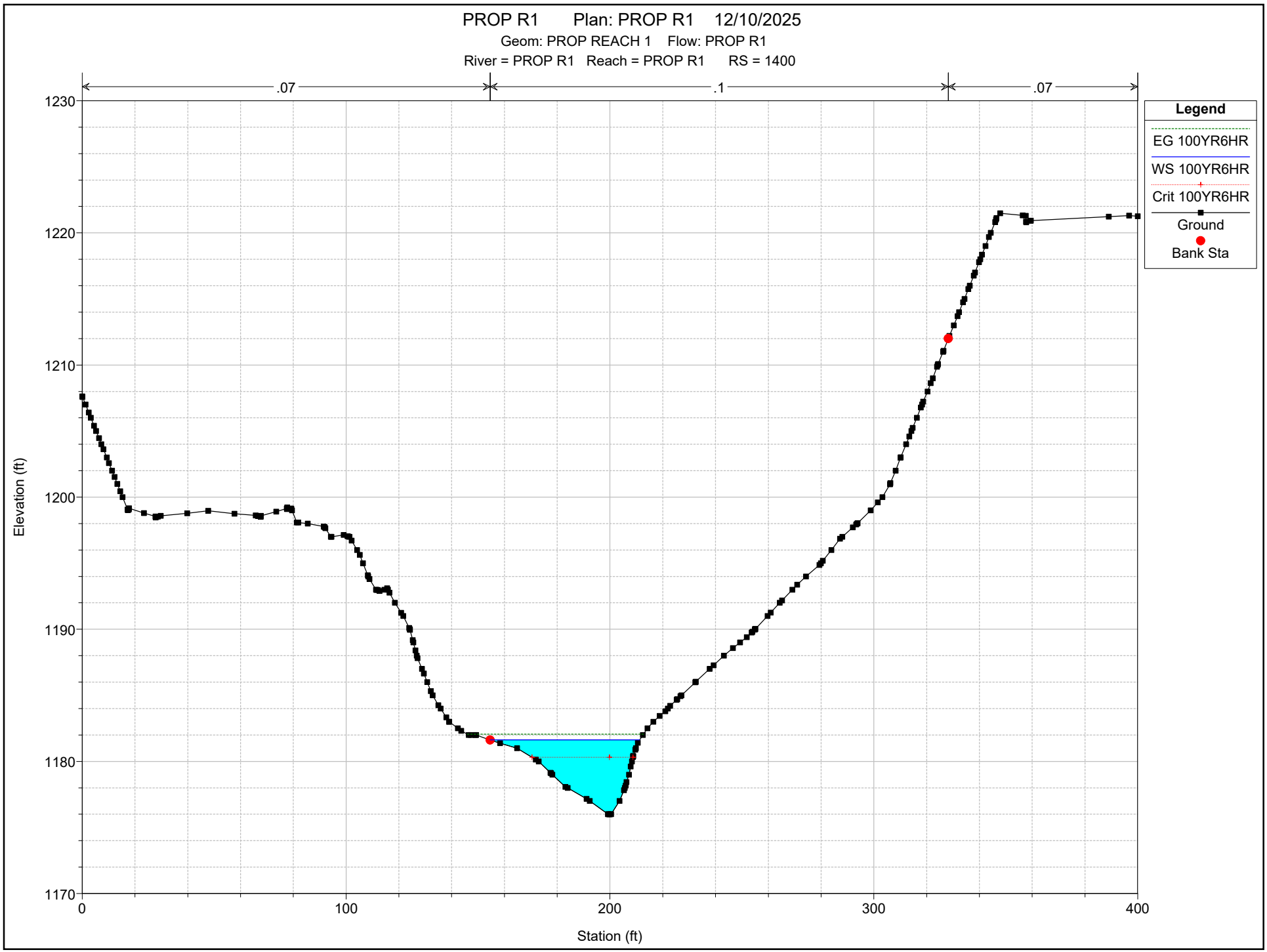

PROP R1 Plan: PROP R1 12/10/2025
Geom: PROP REACH 1 Flow: PROP R1
River = PROP R1 Reach = PROP R1 RS = 2050
.07
.1
.07
Legend
EG 100YR6HR
WS 100YR6HR
Crit 100YR6HR
Ground
Bank Sta
Elevation (ft)
1235
1230
1225
1220
1215
1210
1205
0
100
200
300
400
Station (ft)

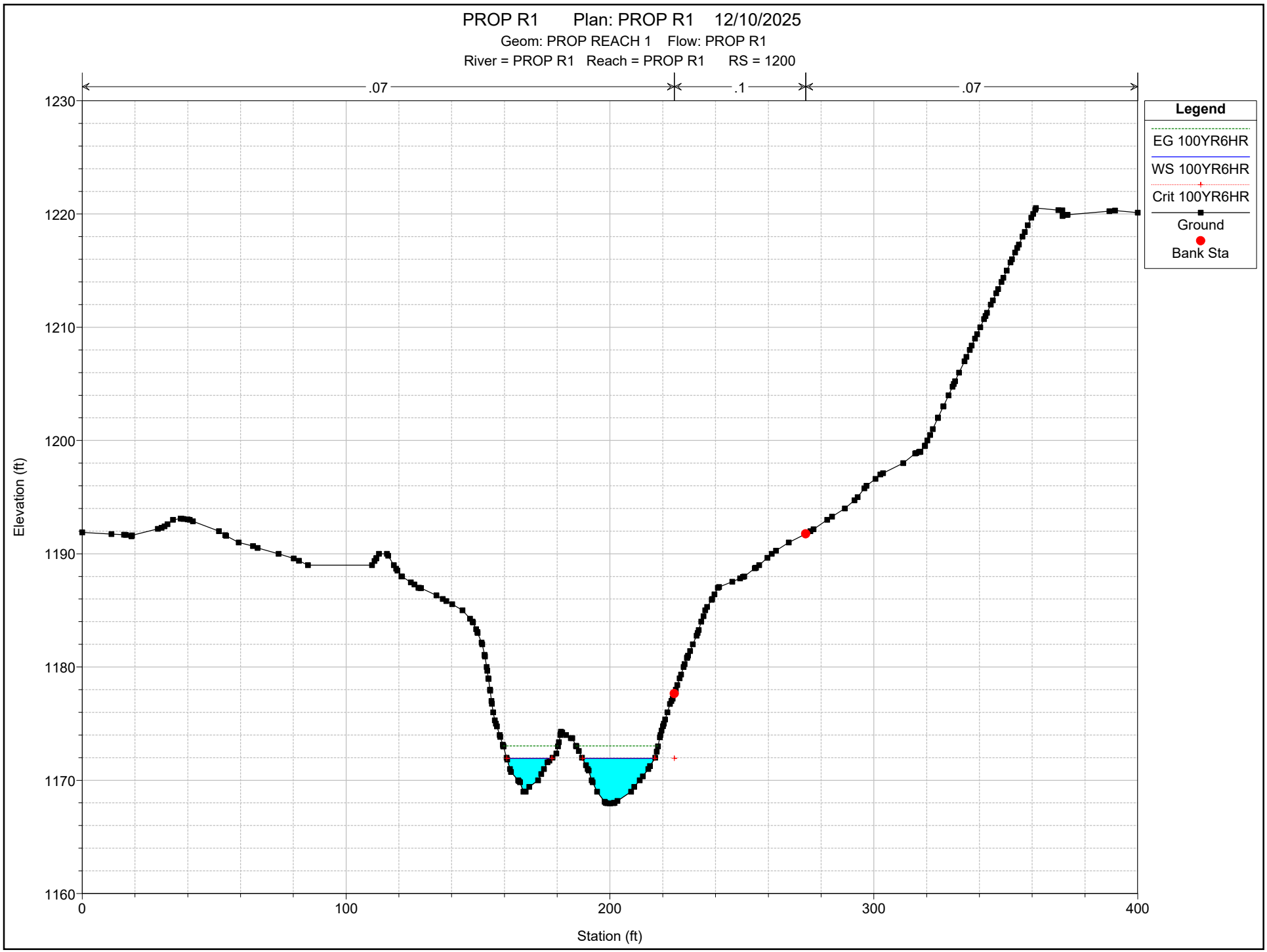

PROP R1 Plan: PROP R1 12/10/2025
Geom: PROP REACH 1 Flow: PROP R1
River = PROP R1 Reach = PROP R1 RS = 1850
.07
.1
.07
Legend
EG 100YR6HR
WS 100YR6HR
Crit 100YR6HR
Ground
Bank Sta
Elevation (ft)
1225
1220
1215
1210
1205
1200
0
100
200
300
400
500
Station (ft)

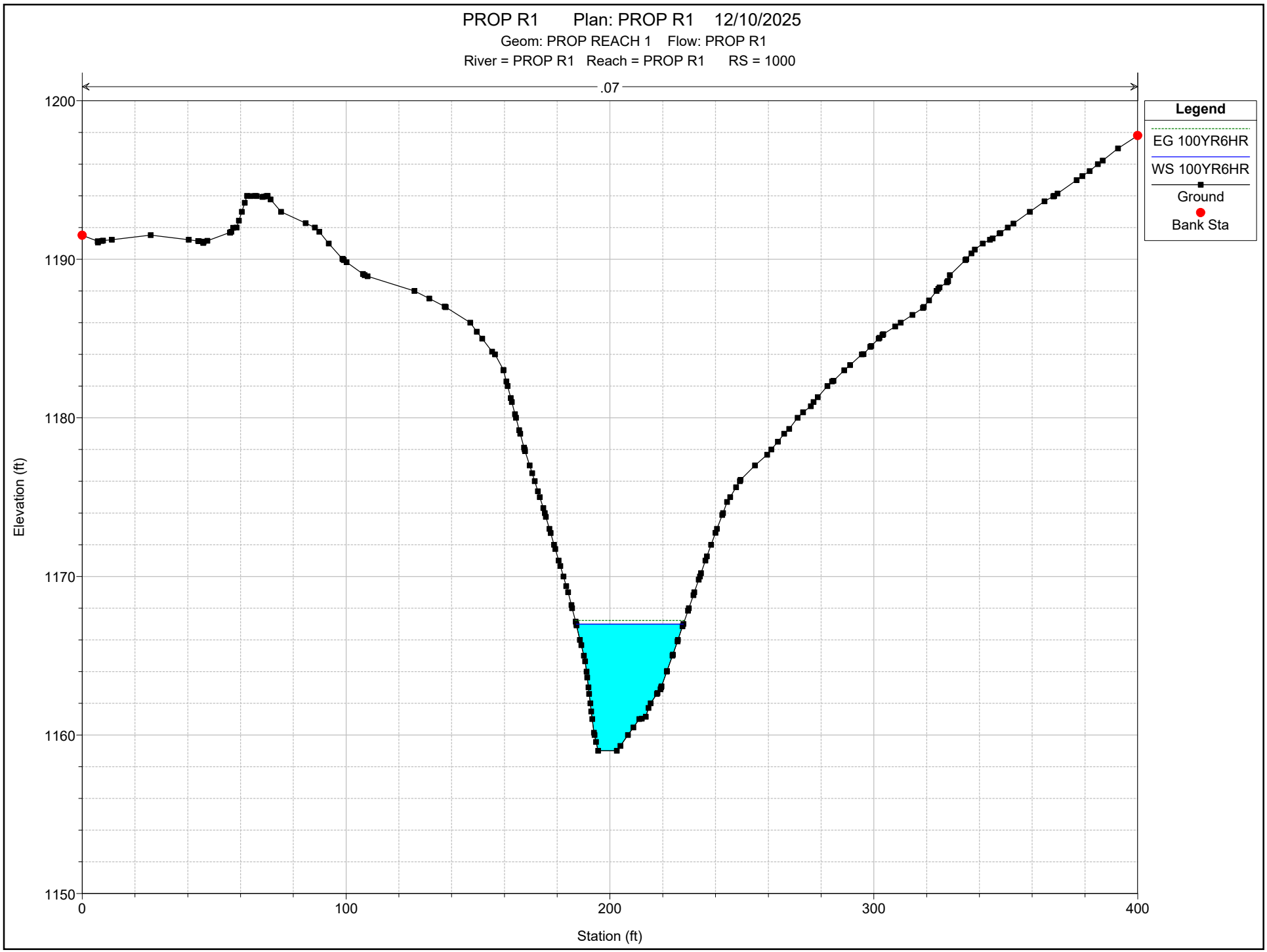

PROP R1 Plan: PROP R1 12/10/2025
Geom: PROP REACH 1 Flow: PROP R1
River = PROP R1 Reach = PROP R1 RS = 1678.7
.07
.013
.07
Legend
EG 100YR6HR
WS 100YR6HR
Crit 100YR6HR
Ground
Bank Sta
Elevation (ft)
Station (ft)
1240
1230
1220
1210
1200
1190
1180
0
100
200
300
400
500

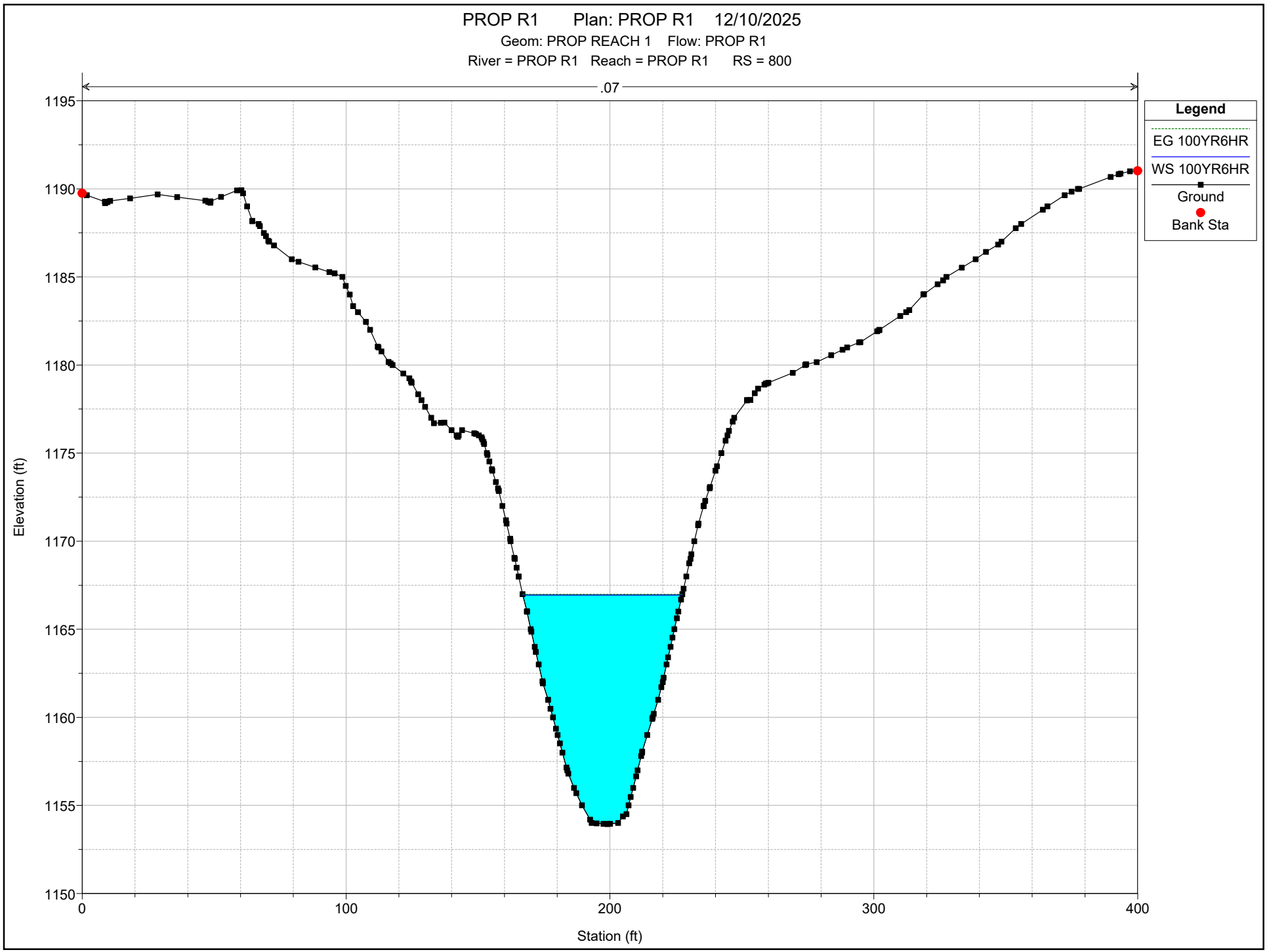

PROP R1 Plan: PROP R1 12/10/2025
Geom: PROP REACH 1 Flow: PROP R1
River = PROP R1 Reach = PROP R1 RS = 1671.65 Culv
.07
.013
.07
Legend
EG 100YR6HR
WS 100YR6HR
Crit 100YR6HR
Ground
Bank Sta
Elevation (ft)
Station (ft)
1240
1230
1220
1210
1200
1190
1180
0
100
200
300
400
500

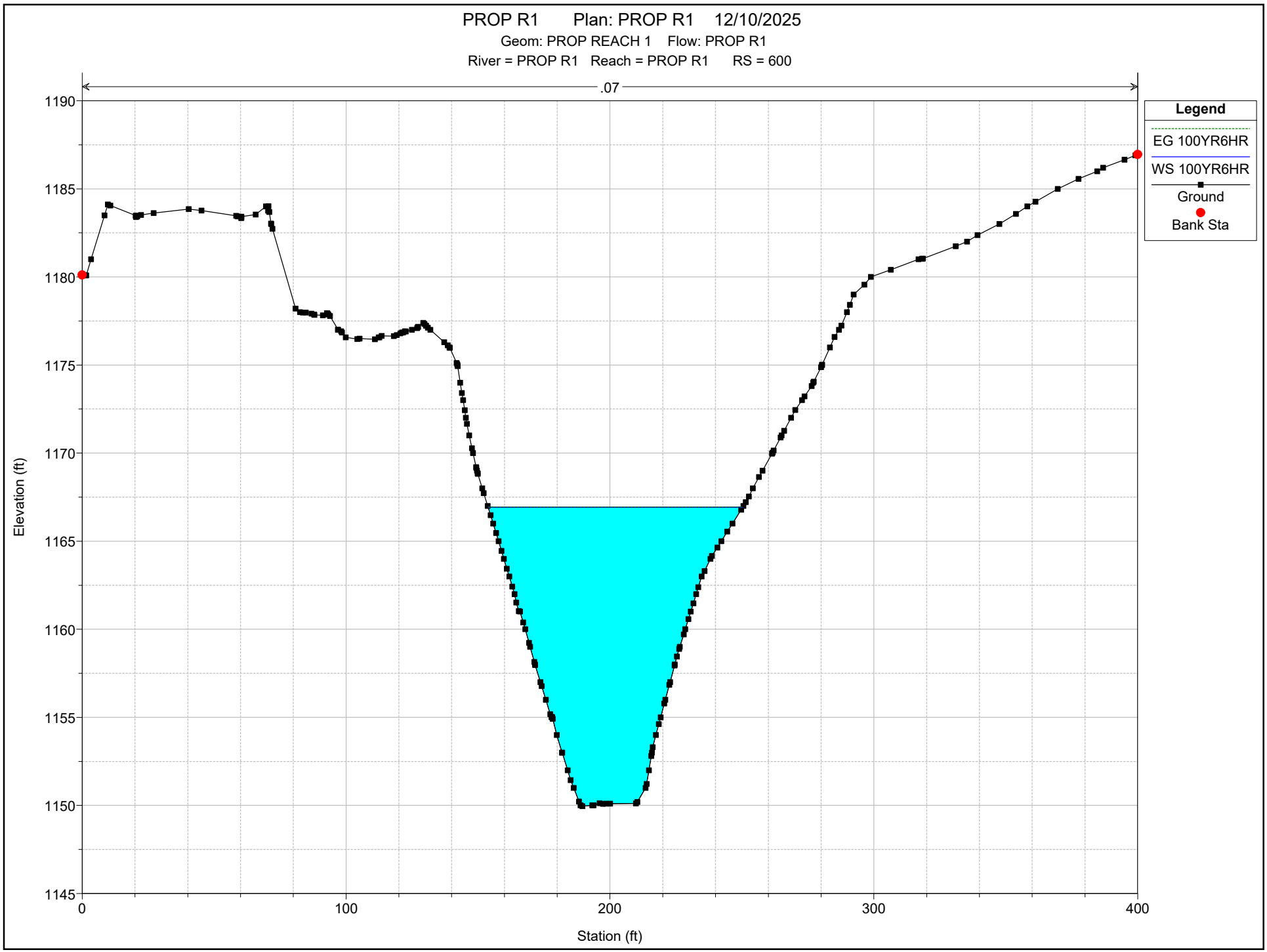

PROP R1 Plan: PROP R1 12/10/2025
Geom: PROP REACH 1 Flow: PROP R1
River = PROP R1 Reach = PROP R1 RS = 1530.35
.07
.013
.07
Legend
EG 100YR6HR
WS 100YR6HR
Crit 100YR6HR
Ground
Bank Sta
Elevation (ft)
1230
1220
1210
1200
1190
1180
0
100
200
300
400
Station (ft)

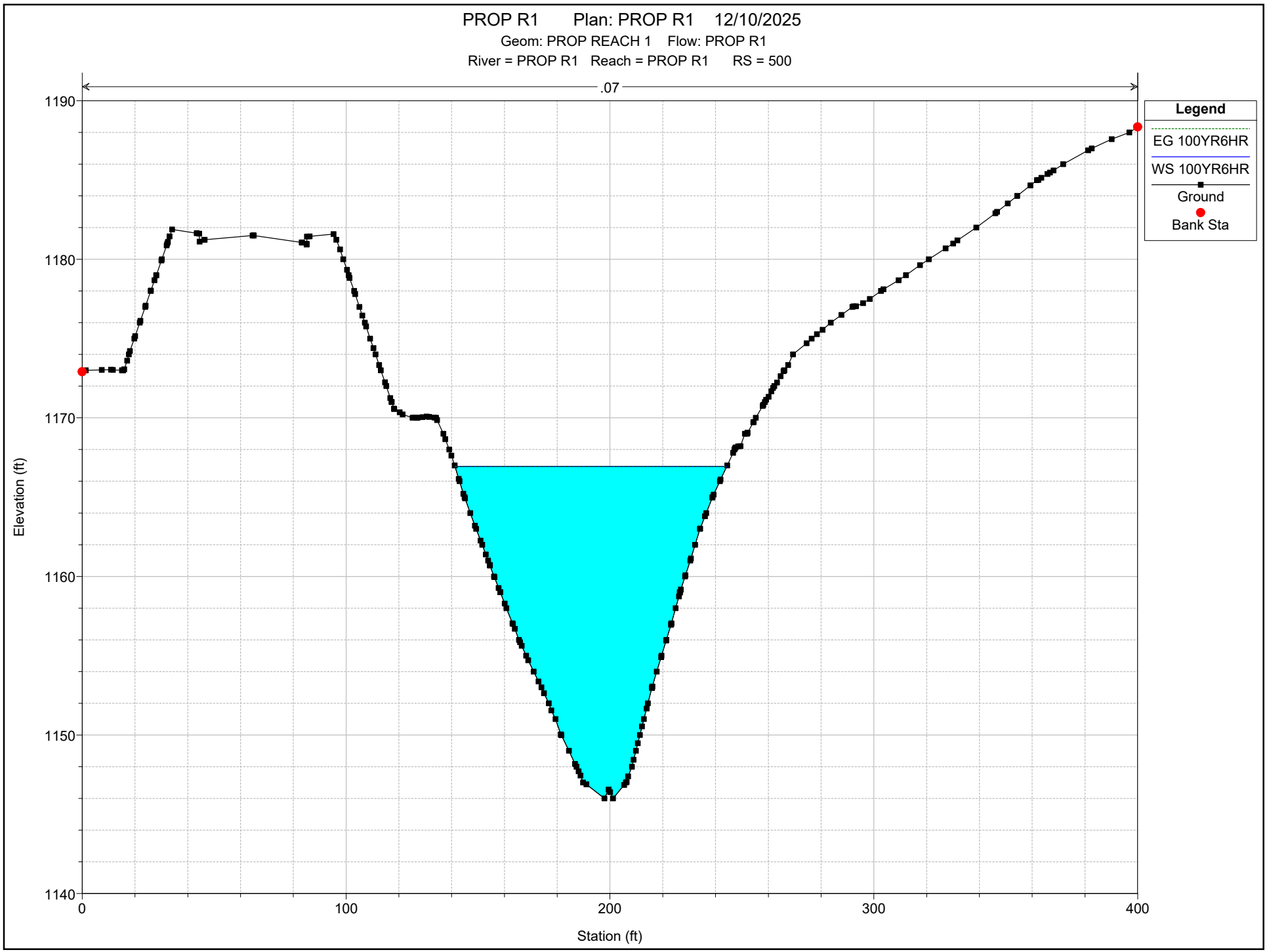

PROP R1 Plan: PROP R1 12/10/2025
Geom: PROP REACH 1 Flow: PROP R1
River = PROP R1 Reach = PROP R1 RS = 1400
.07
.1
.07
Legend
EG 100YR6HR
WS 100YR6HR
Crit 100YR6HR
Ground
Bank Sta
Elevation (ft)
1230
1220
1210
1200
1190
1180
1170
0
100
200
300
400
Station (ft)

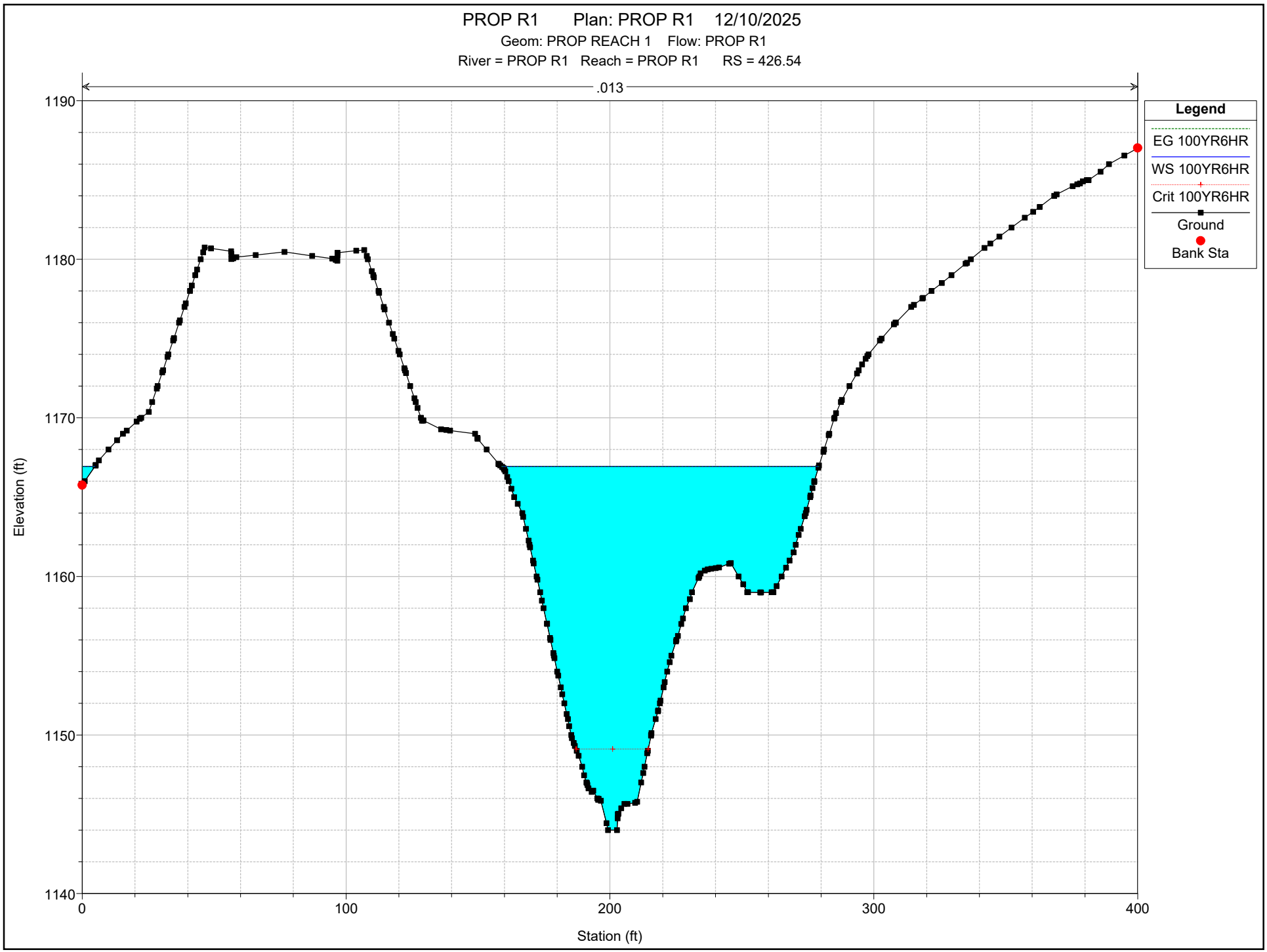

PROP R1 Plan: PROP R1 12/10/2025
Geom: PROP REACH 1 Flow: PROP R1
River = PROP R1 Reach = PROP R1 RS = 1200
.07
.1
.07
Legend
EG 100YR6HR
WS 100YR6HR
Crit 100YR6HR
Ground
Bank Sta
Elevation (ft)
1230
1220
1210
1200
1190
1180
1170
1160
0
100
200
300
400
Station (ft)

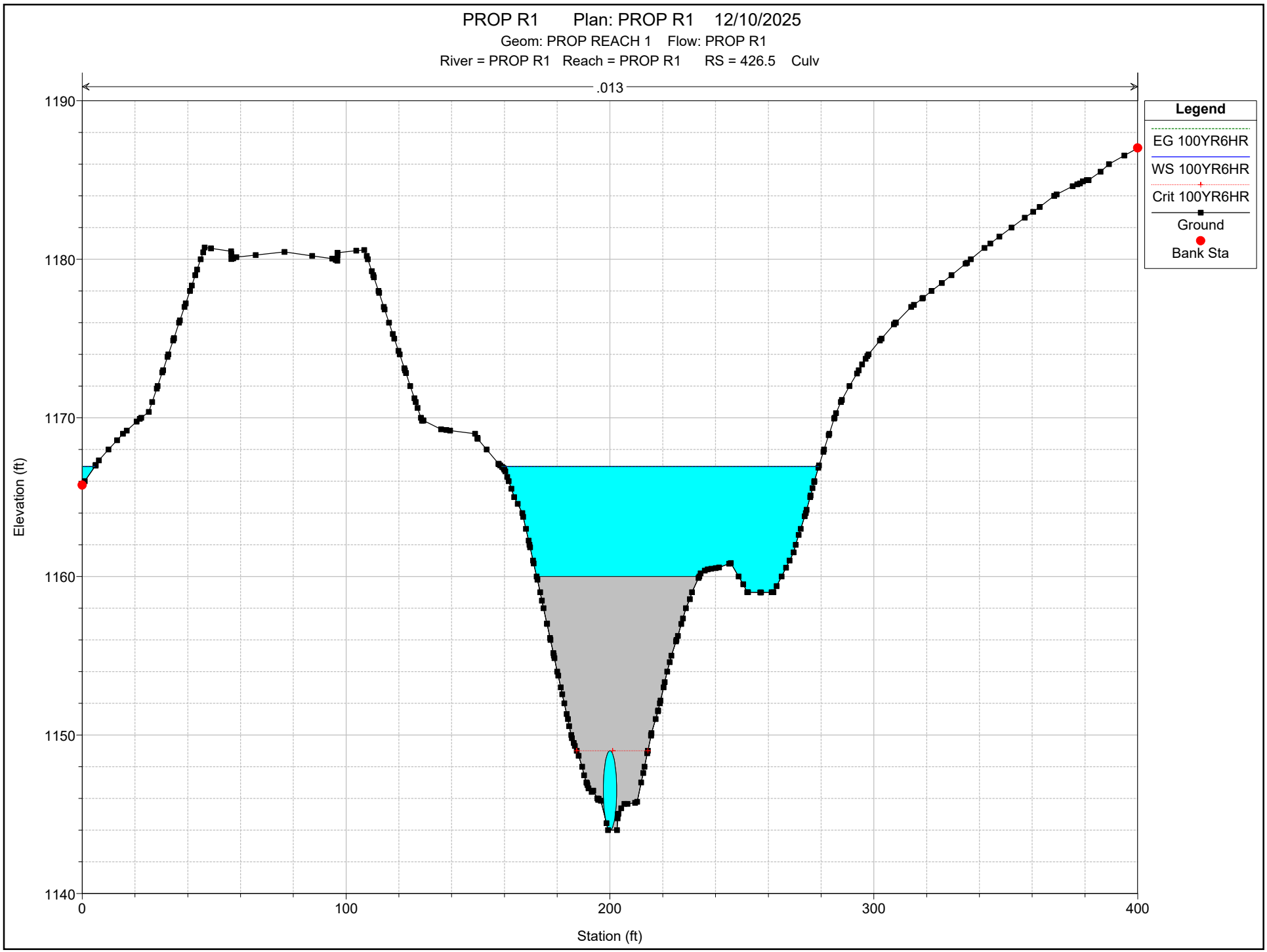

PROP R1 Plan: PROP R1 12/10/2025
Geom: PROP REACH 1 Flow: PROP R1
River = PROP R1 Reach = PROP R1 RS = 1000
.07
Legend
EG 100YR6HR
WS 100YR6HR
Ground
Bank Sta
Elevation (ft)
1200
1190
1180
1170
1160
1150
0
100
200
300
400
Station (ft)

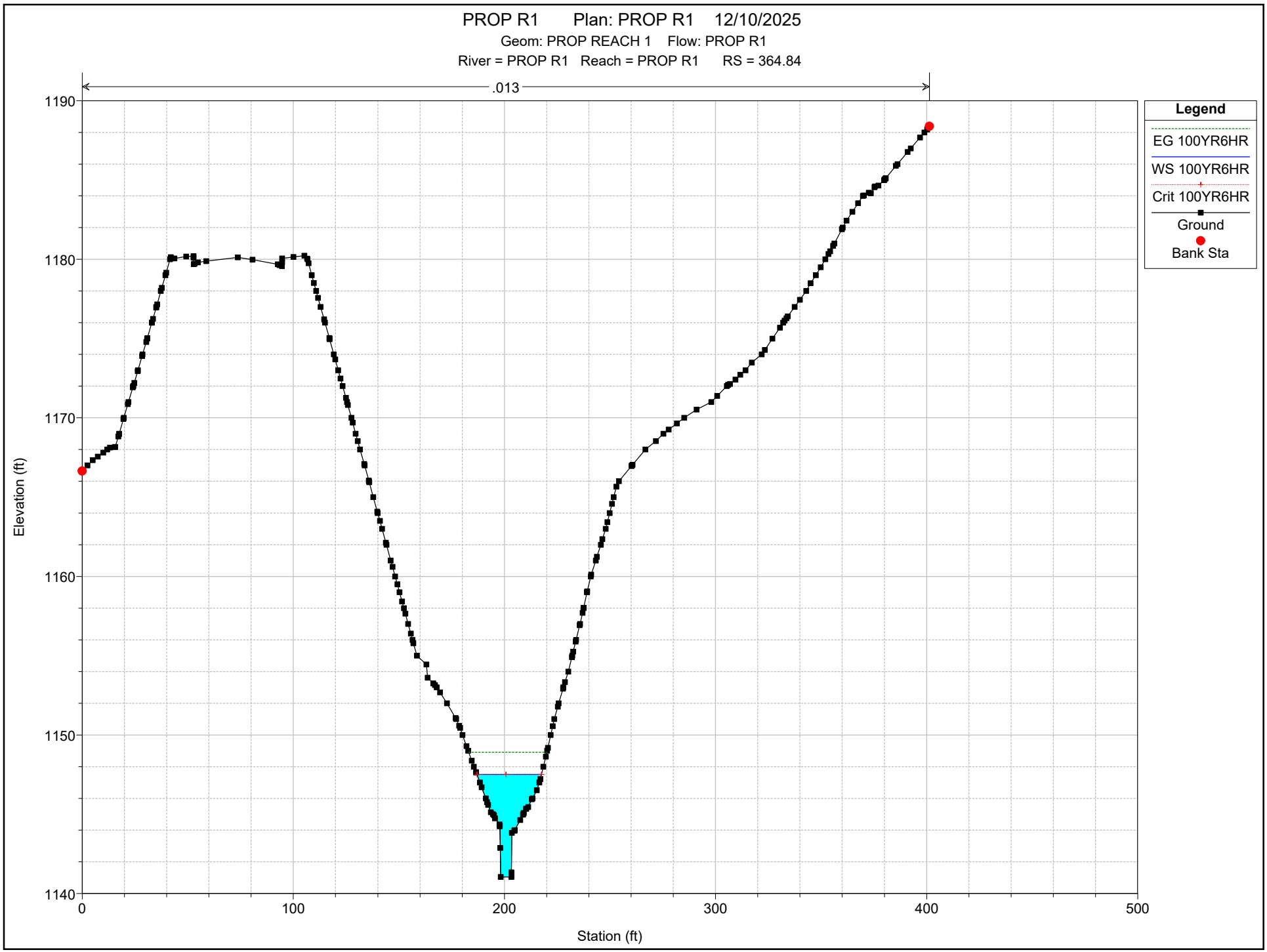

PROP R1 Plan: PROP R1 12/10/2025
Geom: PROP REACH 1 Flow: PROP R1
River = PROP R1 Reach = PROP R1 RS = 800
.07
Legend
EG 100YR6HR
WS 100YR6HR
Ground
Bank Sta
Elevation (ft)
Station (ft)
1195
1190
1185
1180
1175
1170
1165
1160
1155
1150
0
100
200
300
400

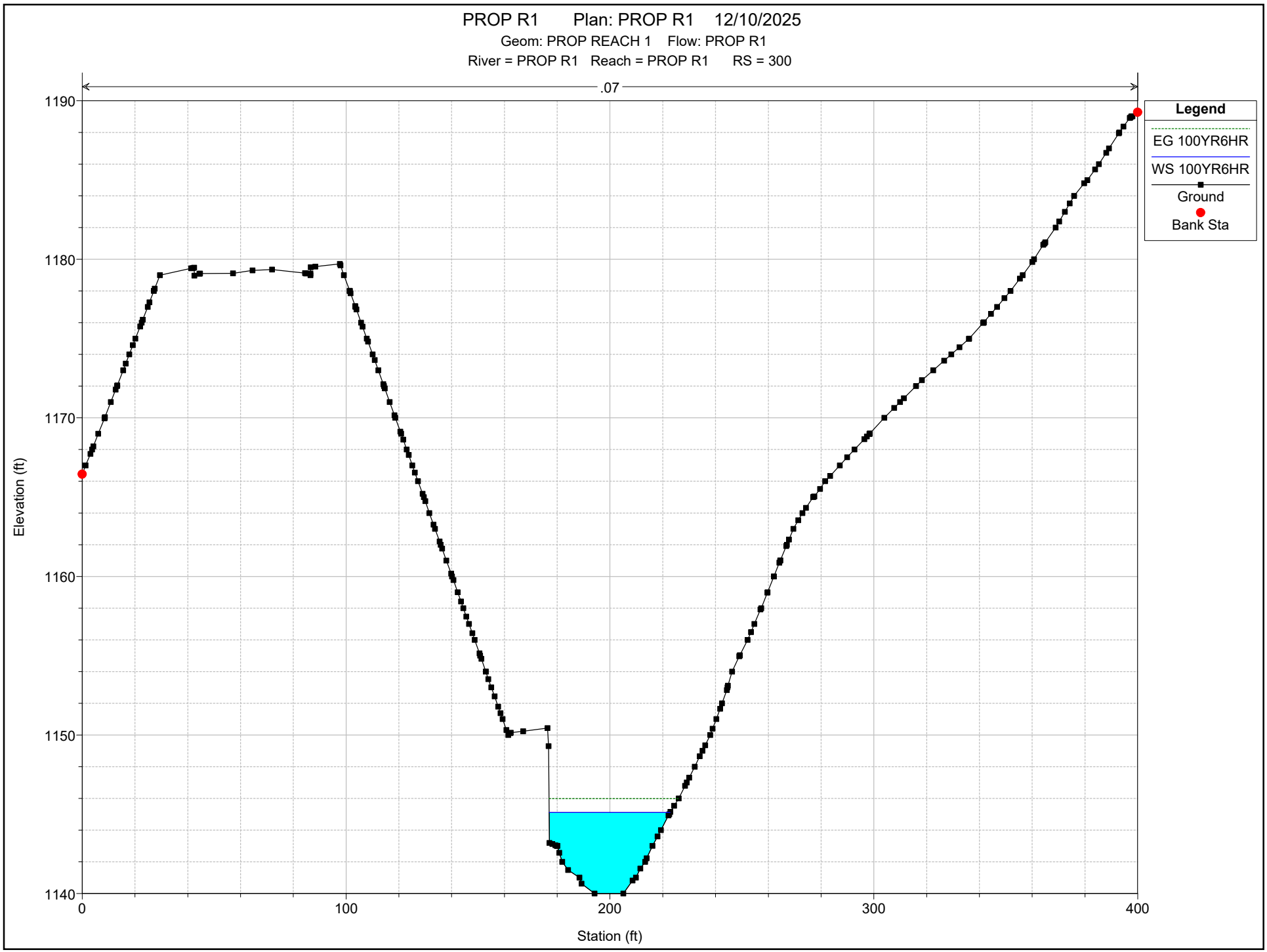

PROP R1 Plan: PROP R1 12/10/2025
Geom: PROP REACH 1 Flow: PROP R1
River = PROP R1 Reach = PROP R1 RS = 600
.07
Legend
EG 100YR6HR
WS 100YR6HR
Ground
Bank Sta
Elevation (ft)
1190
1185
1180
1175
1170
1165
1160
1155
1150
1145
0
100
200
300
400
Station (ft)

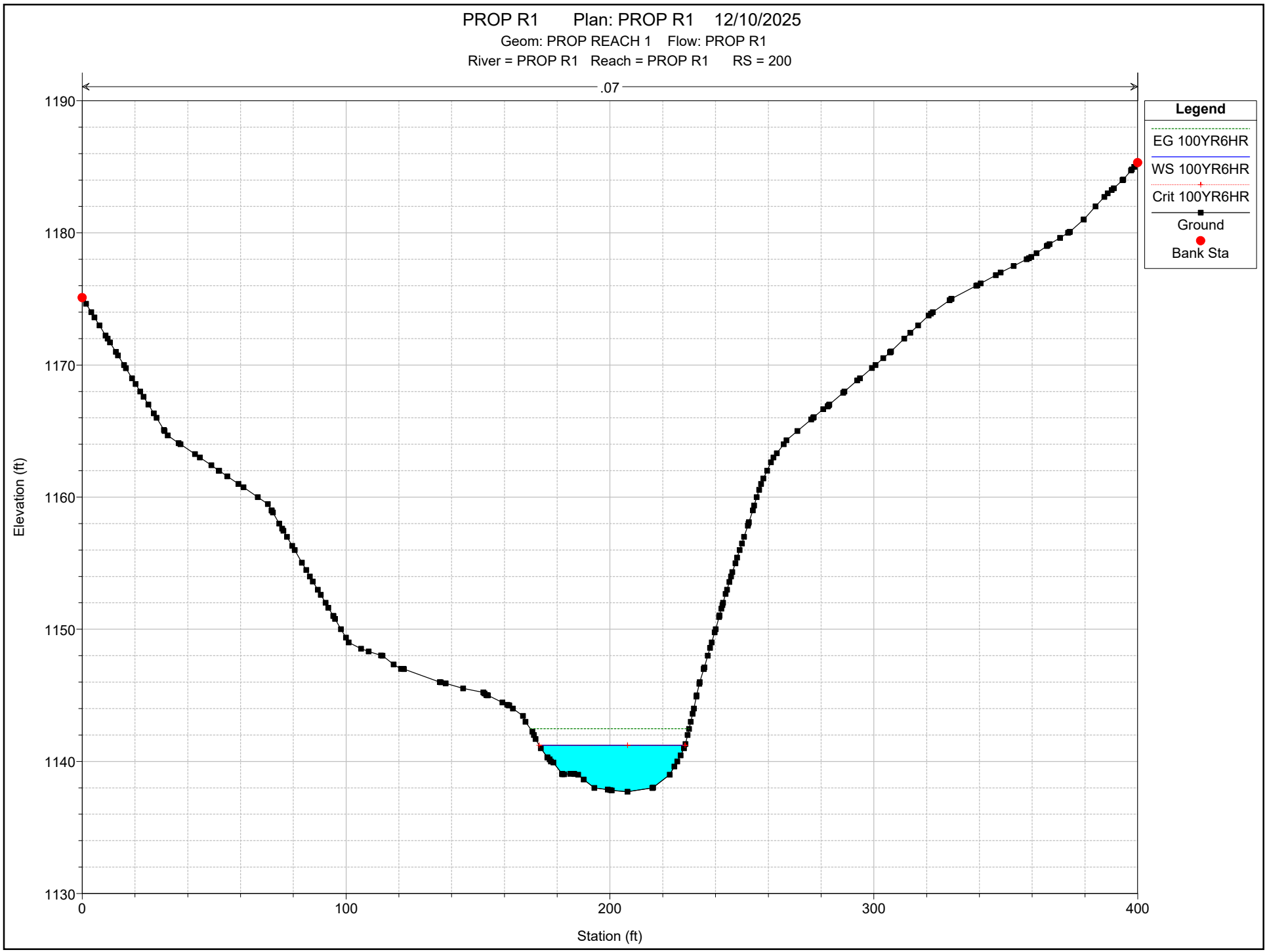

PROP R1 Plan: PROP R1 12/10/2025
Geom: PROP REACH 1 Flow: PROP R1
River = PROP R1 Reach = PROP R1 RS = 500
.07
Legend
EG 100YR6HR
WS 100YR6HR
Ground
Bank Sta
Elevation (ft)
1190
1180
1170
1160
1150
1140
0
100
200
300
400
Station (ft)

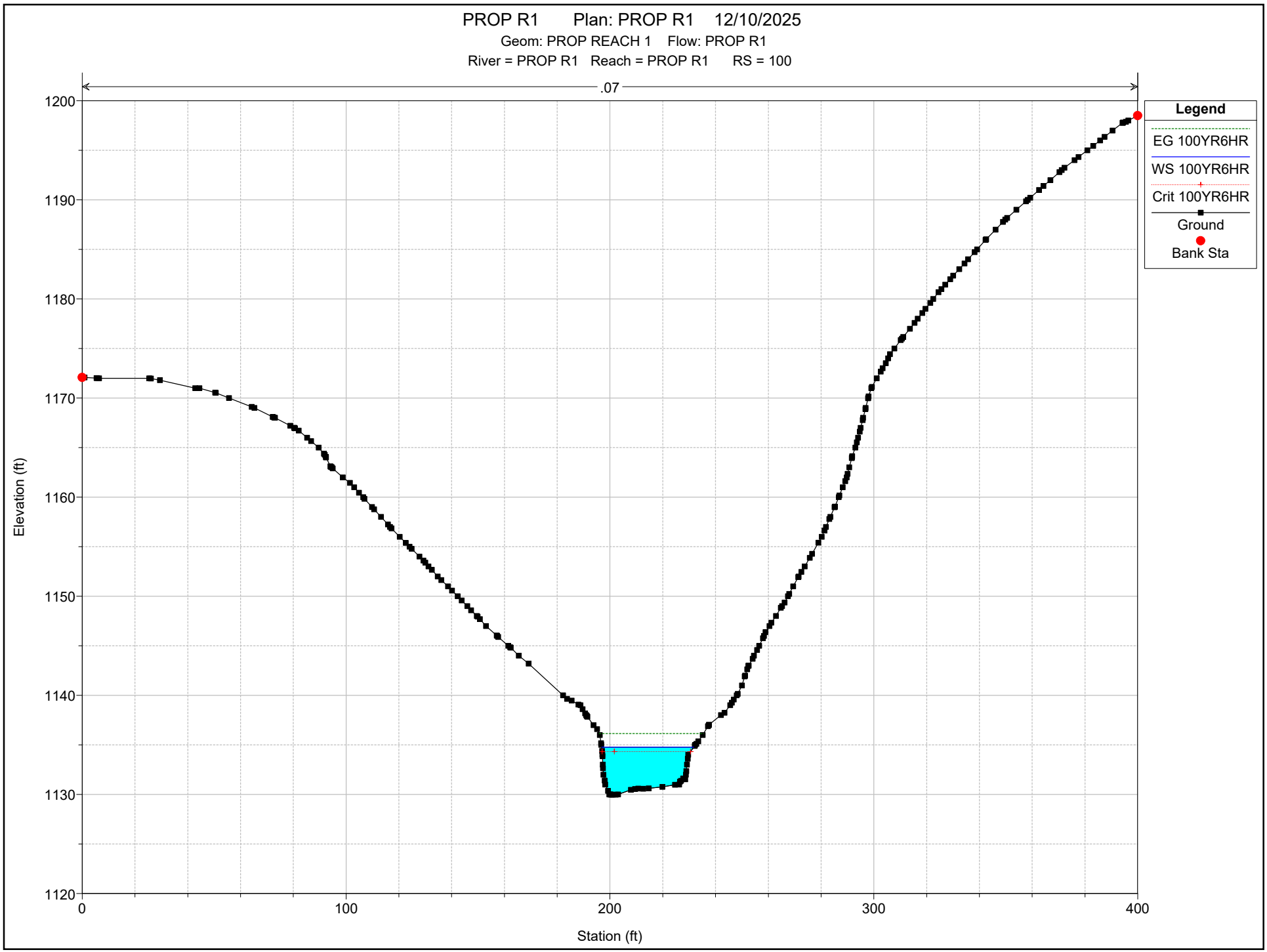

PROP R1 Plan: PROP R1 12/10/2025
Geom: PROP REACH 1 Flow: PROP R1
River = PROP R1 Reach = PROP R1 RS = 426.54
.013
Legend
EG 100YR6HR
WS 100YR6HR
Crit 100YR6HR
Ground
Bank Sta
Elevation (ft)
1190
1180
1170
1160
1150
1140
0
100
200
300
400
Station (ft)

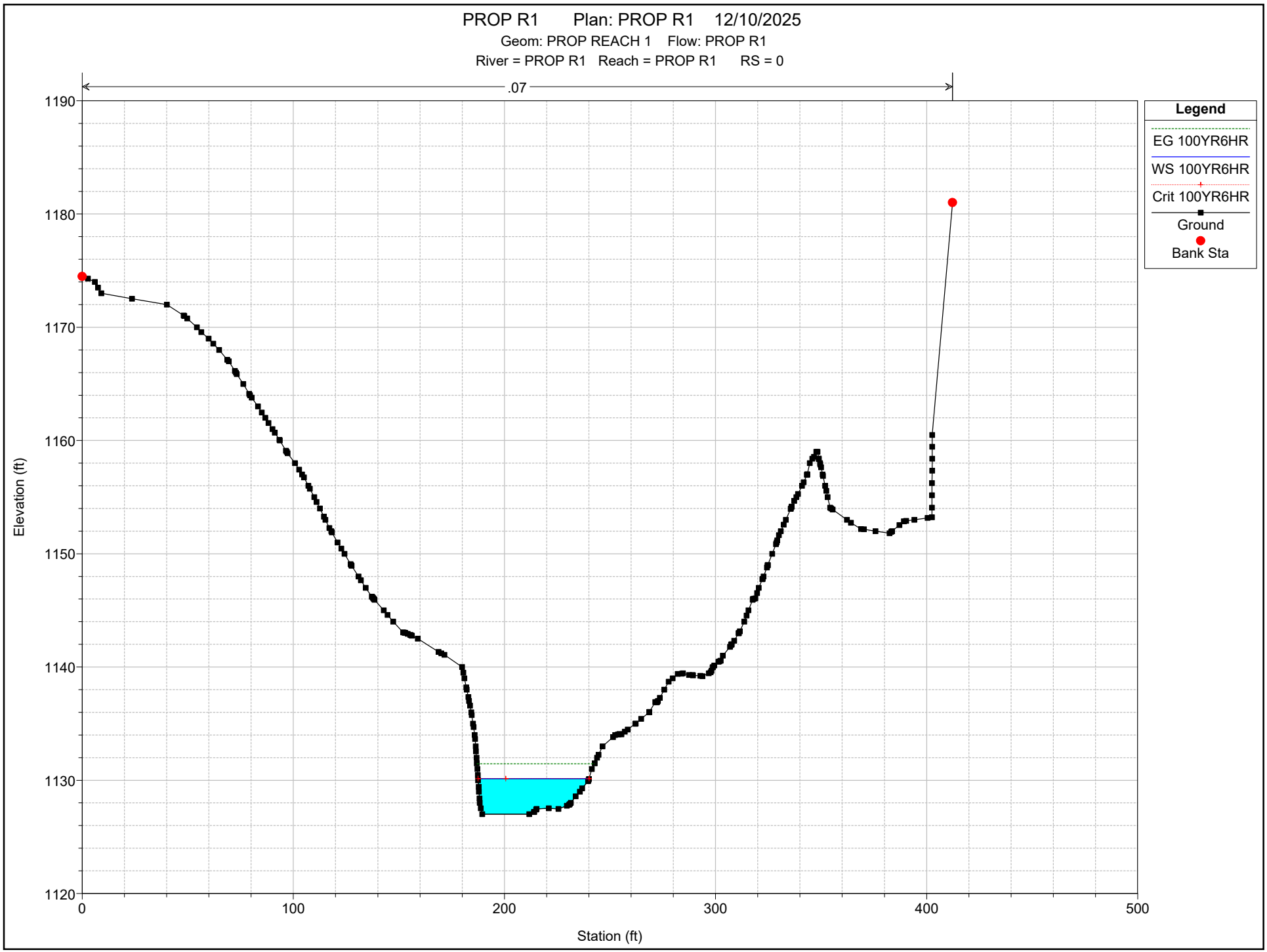

PROP R1 Plan: PROP R1 12/10/2025
Geom: PROP REACH 1 Flow: PROP R1
River = PROP R1 Reach = PROP R1 RS = 426.5 Culv
.013
Legend
EG 100YR6HR
WS 100YR6HR
Crit 100YR6HR
Ground
Bank Sta
Elevation (ft)
1190
1180
1170
1160
1150
1140
0
100
200
300
400
Station (ft)

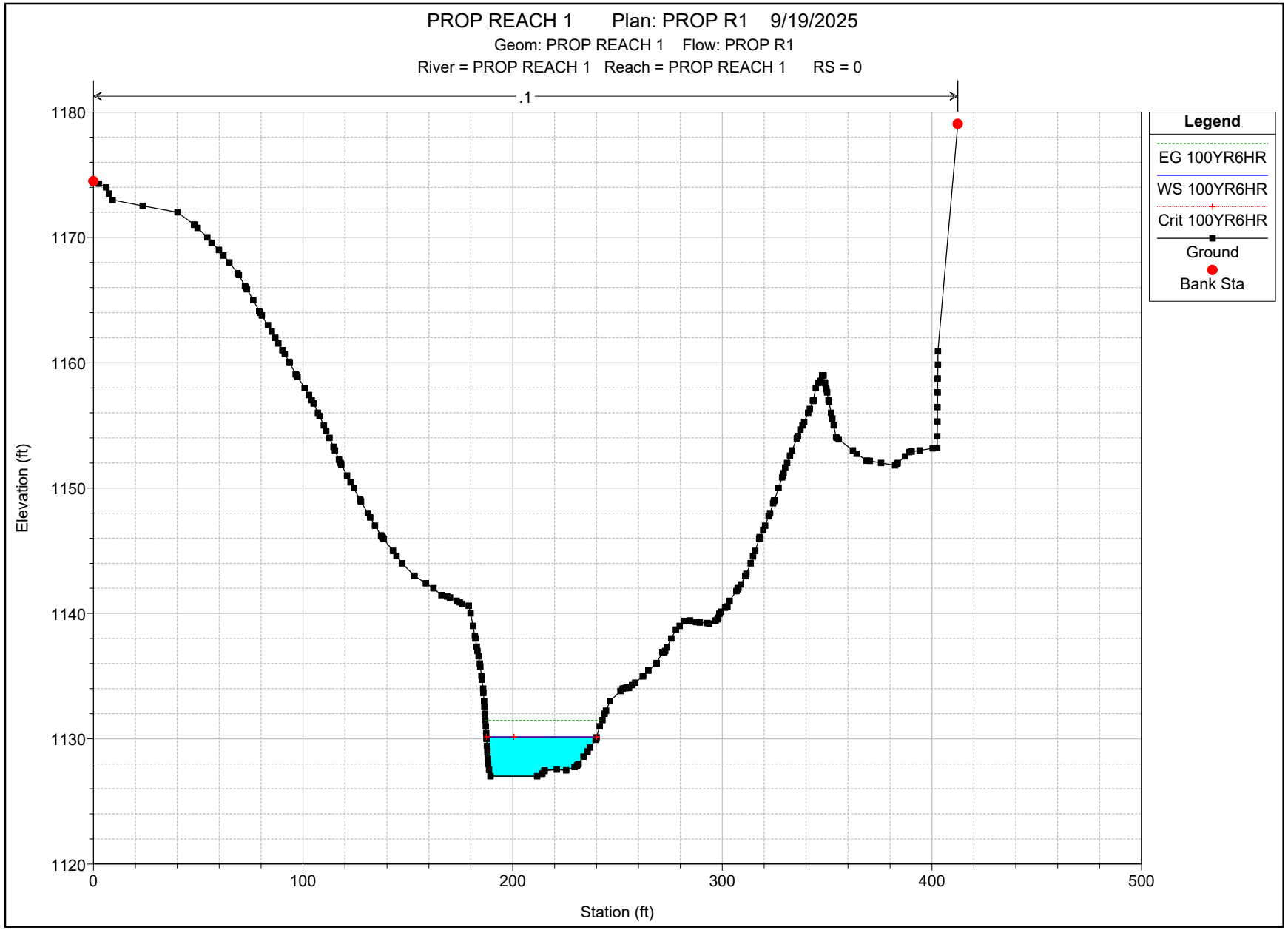

PROP R1 Plan: PROP R1 12/10/2025
Geom: PROP REACH 1 Flow: PROP R1
River = PROP R1 Reach = PROP R1 RS = 364.84
.013
Legend
EG 100YR6HR
WS 100YR6HR
Crit 100YR6HR
Ground
Bank Sta
Elevation (ft)
1190
1180
1170
1160
1150
1140
0
100
200
300
400
500
Station (ft)


PROP R1 Plan: PROP R1 12/10/2025
Geom: PROP REACH 1 Flow: PROP R1
River = PROP R1 Reach = PROP R1 RS = 300
.07
Legend
EG 100YR6HR
WS 100YR6HR
Ground
Bank Sta
Elevation (ft)
1190
1180
1170
1160
1150
1140
0
100
200
300
400
Station (ft)


PROP R1 Plan: PROP R1 12/10/2025
Geom: PROP REACH 1 Flow: PROP R1
River = PROP R1 Reach = PROP R1 RS = 200
.07
Legend
EG 100YR6HR
WS 100YR6HR
Crit 100YR6HR
Ground
Bank Sta
Elevation (ft)
1190
1180
1170
1160
1150
1140
1130
0
100
200
300
400
Station (ft)


PROP R1 Plan: PROP R1 12/10/2025
Geom: PROP REACH 1 Flow: PROP R1
River = PROP R1 Reach = PROP R1 RS = 100
.07
Legend
EG 100YR6HR
WS 100YR6HR
Crit 100YR6HR
Ground
Bank Sta
Elevation (ft)
1200
1190
1180
1170
1160
1150
1140
1130
1120
0
100
200
300
400
Station (ft)


PROP R1 Plan: PROP R1 12/10/2025
Geom: PROP REACH 1 Flow: PROP R1
River = PROP R1 Reach = PROP R1 RS = 0
.07
Legend
EG 100YR6HR
WS 100YR6HR
Crit 100YR6HR
Ground
Bank Sta
Elevation (ft)
1190
1180
1170
1160
1150
1140
1130
1120
0
100
200
300
400
500
Station (ft)


PROP REACH 1 Plan: PROP R1 9/19/2025
Geom: PROP REACH 1 Flow: PROP R1
River = PROP REACH 1 Reach = PROP REACH 1 RS = 0
.1
Legend
EG 100YR6HR
WS 100YR6HR
Crit 100YR6HR
Ground
Bank Sta
Elevation (ft)
Station (ft)
1180
1170
1160
1150
1140
1130
1120
0
100
200
300
400
500

Appendix B – Reach 2 - Pre Development and Post Development 100-Year 6-Hr HEC-RAS Analysis

PRE DEVELOPMENT

HEC-RAS Plan: EX R2 FLOW River: EX REACH 2 Reach: EX REACH 2 Profile: 100YR6HR

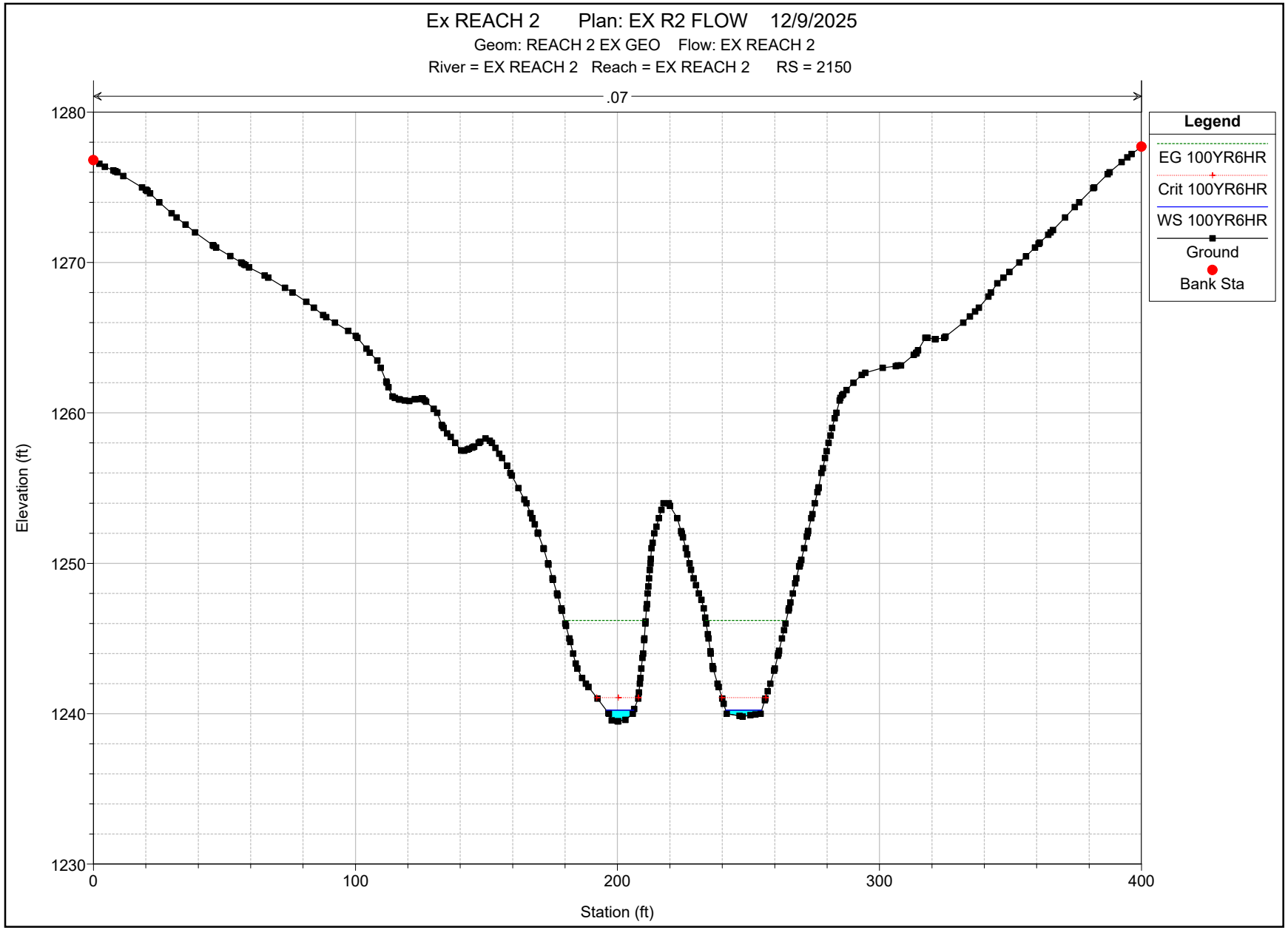
Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
EX REACH 2	2150	100YR6HR	194.73	1239.49	1240.24	1241.06	1246.21	2.863342	19.60	9.94	24.32	5.41
EX REACH 2	2100	100YR6HR	194.73	1237.94	1240.02	1240.02	1240.54	0.076321	5.80	33.58	32.98	1.01
EX REACH 2	1900	100YR6HR	194.73	1217.76	1220.20	1219.79	1220.57	0.047031	5.05	40.00	25.73	0.63
EX REACH 2	1700	100YR6HR	194.73	1208.83	1211.61		1211.92	0.039831	4.47	43.59	22.45	0.57
EX REACH 2	1500	100YR6HR	194.73	1207.83	1205.11		1205.52	0.026176		37.83	19.33	0.00
EX REACH 2	1300	100YR6HR	194.73	1191.63	1194.45	1194.45	1195.31	0.138061	7.43	26.20	15.55	1.01
EX REACH 2	1100	100YR6HR	194.73	1193.60	1184.31	1183.83	1184.61	0.024883		44.47	29.17	0.00
EX REACH 2	900	100YR6HR	194.73	1175.95	1177.93		1178.21	0.042621	4.30	46.19	30.64	0.58
EX REACH 2	700	100YR6HR	194.73	1170.51	1173.21		1173.36	0.015429	3.10	63.66	31.84	0.37
EX REACH 2	500	100YR6HR	372.40	1162.32	1165.56	1165.56	1166.32	0.064264	7.03	53.00	34.72	1.00
EX REACH 2	300	100YR6HR	372.40	1151.96	1156.52	1154.90	1156.77	0.009997	4.05	91.84	33.09	0.43
EX REACH 2	200	100YR6HR	372.40	1148.96	1156.46		1156.49	0.000909	1.44	257.79	73.38	0.14
EX REACH 2	150.05	100YR6HR	372.40	1148.00	1156.44	1150.56	1156.46	0.000371	1.23	303.02	54.66	0.09
EX REACH 2	150.0		Culvert									
EX REACH 2	67.55	100YR6HR	372.40	1145.00	1147.51	1147.51	1148.02	0.077962	5.74	64.83	66.43	1.03
EX REACH 2	0	100YR6HR	372.40	1139.93	1145.16	1141.21	1145.17	0.000199	0.67	554.47	163.72	0.06

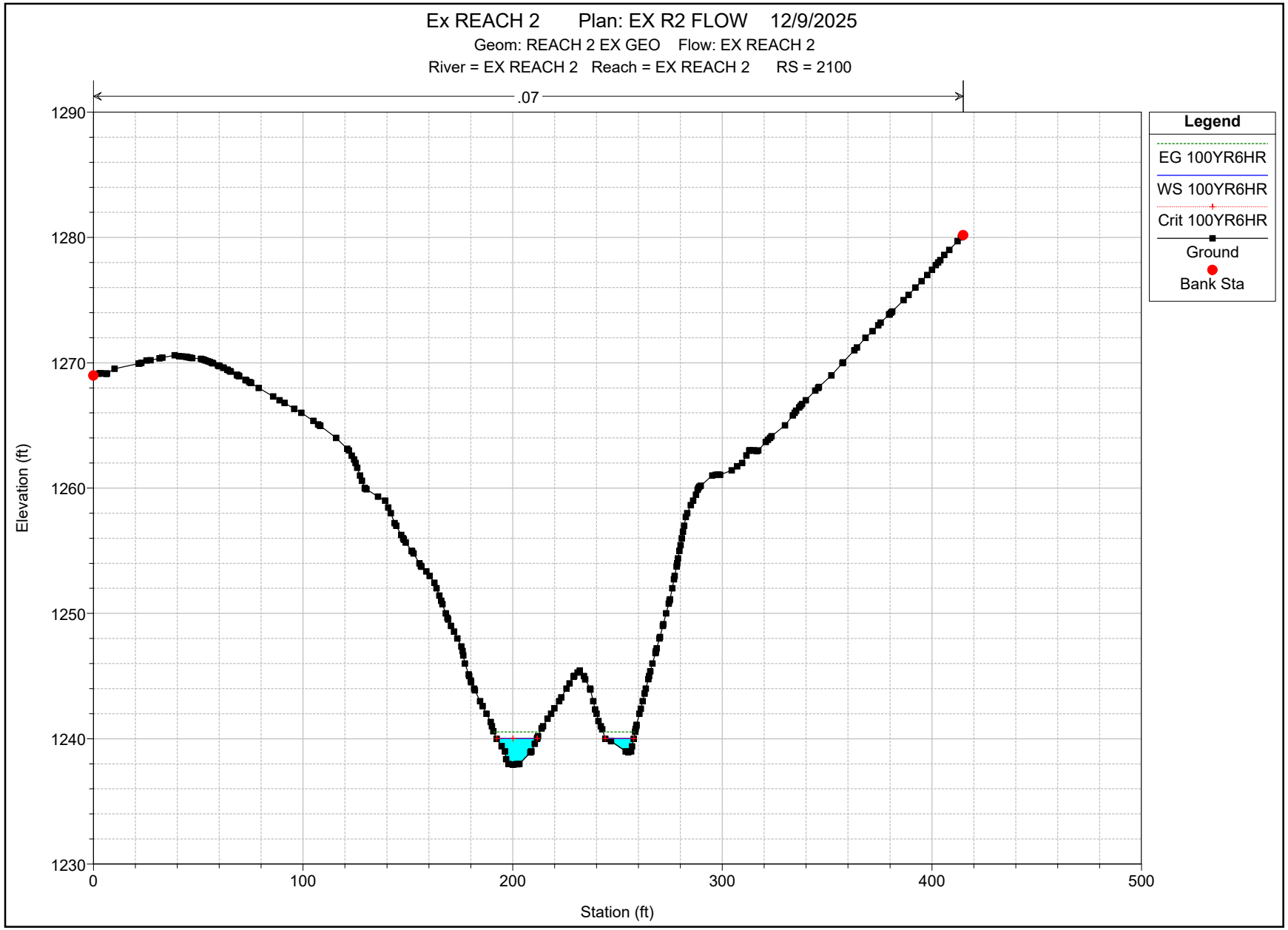
HEC-RAS Plan: EX R2 FLOW River: EX REACH 2 Reach: EX REACH 2 Profile: 100YR6HR

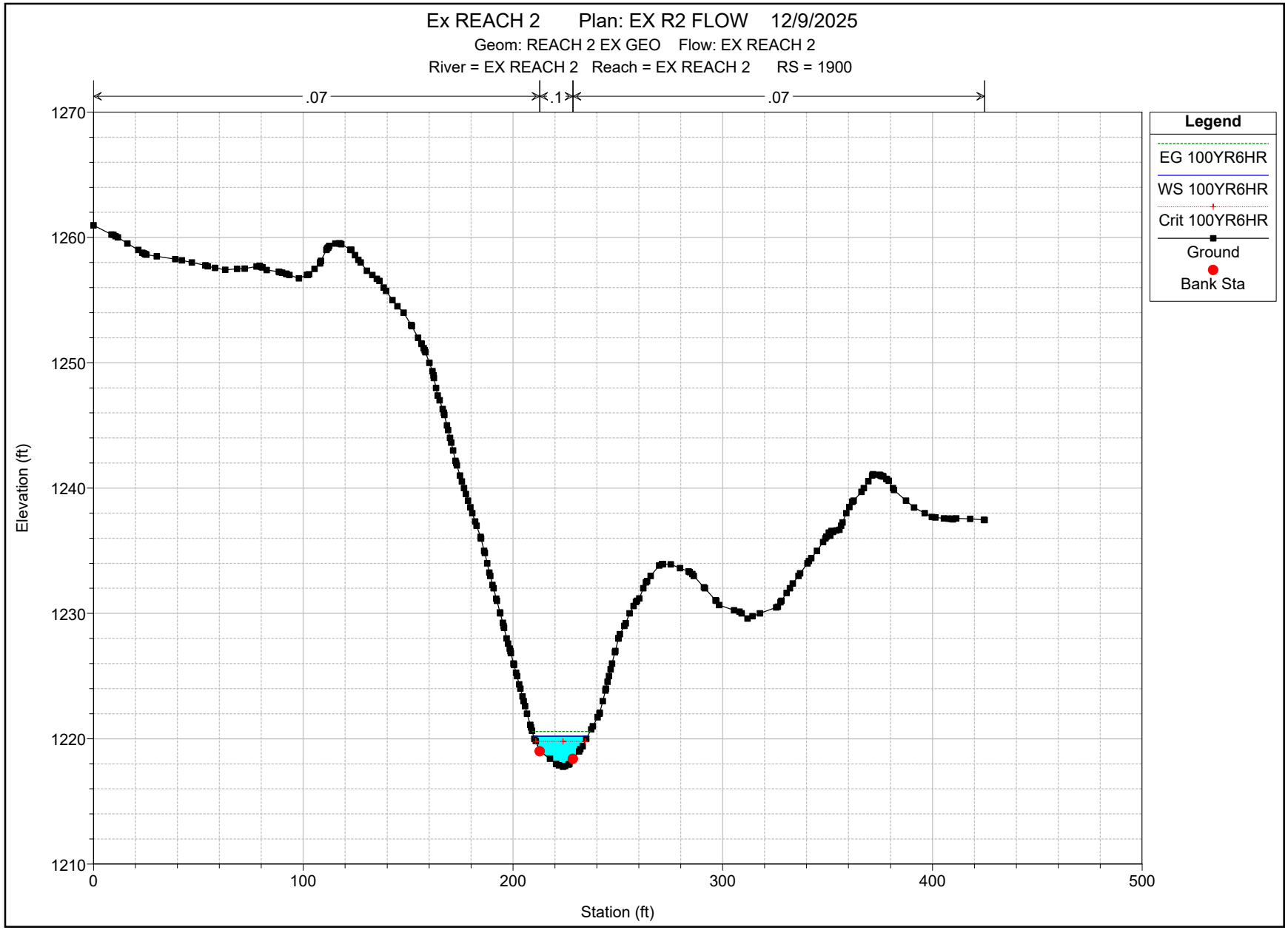
Reach	River Sta	Profile	E.G. Elev	W.S. Elev	Vel Head	Frctn Loss	C & E Loss	Q Left	Q Channel	Q Right	Top Width
			(ft)	(ft)	(ft)	(ft)	(ft)	(cfs)	(cfs)	(cfs)	(ft)
EX REACH 2	2150	100YR6HR	1246.21	1240.24	5.97				194.73		24.32
EX REACH 2	2100	100YR6HR	1240.54	1240.02	0.52	11.81	0.04		194.73		32.98
EX REACH 2	1900	100YR6HR	1220.57	1220.20	0.38	8.64	0.02	5.53	157.76	31.44	25.73
EX REACH 2	1700	100YR6HR	1211.92	1211.61	0.31	6.39	0.01		194.73		22.45
EX REACH 2	1500	100YR6HR	1205.52	1205.11	0.41	10.16	0.04	194.73			19.33
EX REACH 2	1300	100YR6HR	1195.31	1194.45	0.86	9.81	0.17		194.73		15.55
EX REACH 2	1100	100YR6HR	1184.61	1184.31	0.30	6.40	0.01	194.73			29.17
EX REACH 2	900	100YR6HR	1178.21	1177.93	0.28	4.81	0.04		187.57	7.16	30.64
EX REACH 2	700	100YR6HR	1173.36	1173.21	0.15	6.98	0.06	19.24	175.49		31.84
EX REACH 2	500	100YR6HR	1166.32	1165.56	0.77	4.11	0.15		372.40		34.72
EX REACH 2	300	100YR6HR	1156.77	1156.52	0.26	0.21	0.07		372.40		33.09
EX REACH 2	200	100YR6HR	1156.49	1156.46	0.03	0.03	0.00		372.40		73.38
EX REACH 2	150.05	100YR6HR	1156.46	1156.44	0.02				372.40		54.66
EX REACH 2	150.0		Culvert								
EX REACH 2	67.55	100YR6HR	1148.02	1147.51	0.51	0.05	0.15		372.40		66.43
EX REACH 2	0	100YR6HR	1145.17	1145.16	0.01				372.40		163.72

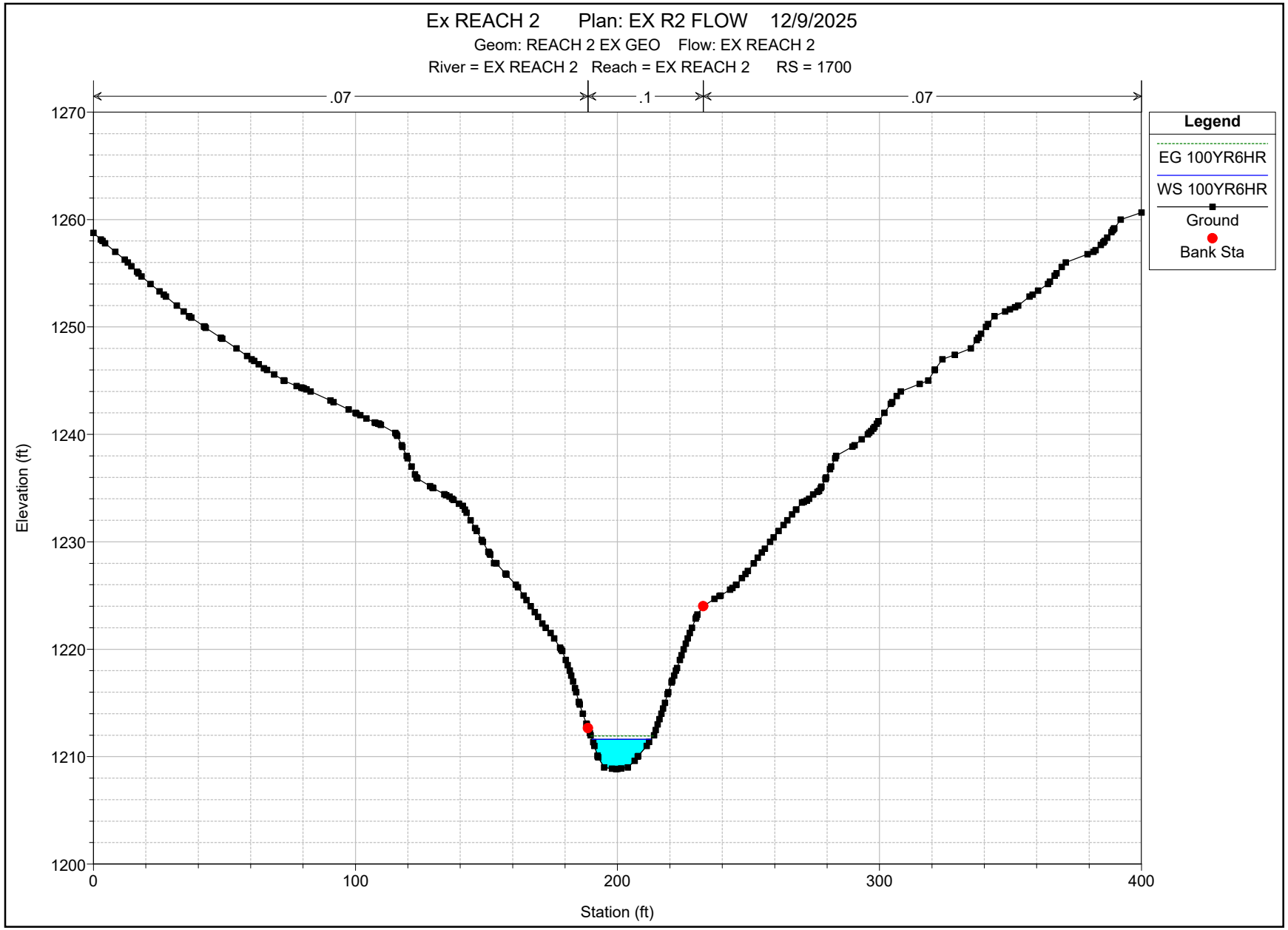
Plan: EX R2 FLOW EX REACH 2 EX REACH 2 RS: 150.0 Culv Group: EX CULVERT 4 Profile: 100YR6HR

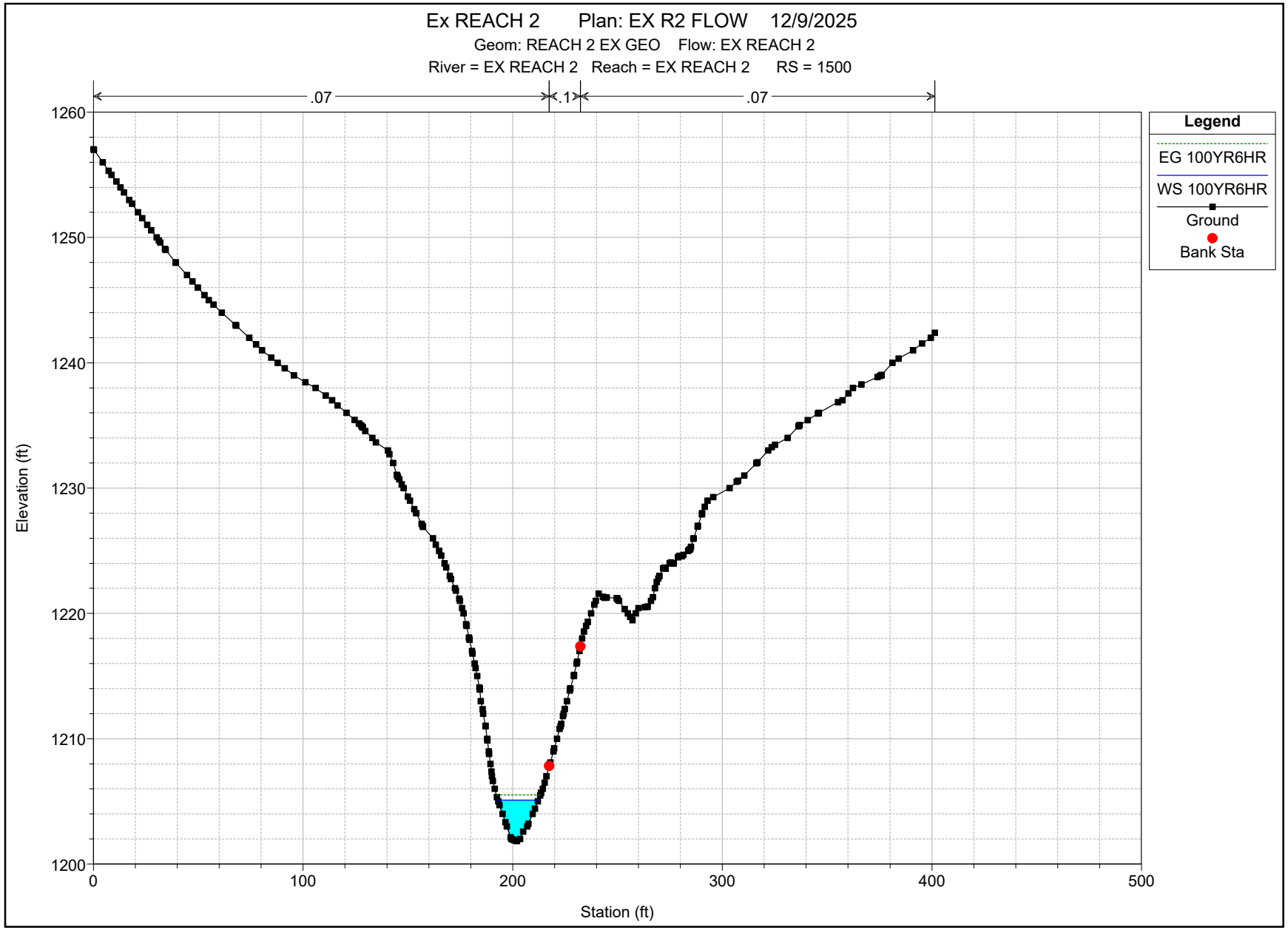
Q Culv Group (cfs)	143.64	Culv Full Len (ft)	82.48
# Barrels	1	Culv Vel US (ft/s)	14.93
Q Barrel (cfs)	143.64	Culv Vel DS (ft/s)	14.93
E.G. US. (ft)	1156.46	Culv Inv El Up (ft)	1148.00
W.S. US. (ft)	1156.44	Culv Inv El Dn (ft)	1145.00
E.G. DS (ft)	1148.02	Culv Frctn Ls (ft)	4.39
W.S. DS (ft)	1147.51	Culv Exit Loss (ft)	3.94
Delta EG (ft)	8.44	Culv Entr Loss (ft)	0.10
Delta WS (ft)	8.93	Q Weir (cfs)	229.27
E.G. IC (ft)	1156.56	Weir Sta Lft (ft)	173.75
E.G. OC (ft)	1156.46	Weir Sta Rgt (ft)	228.51
Culvert Control	Outlet	Weir Submerg	0.00
Culv WS Inlet (ft)	1151.50	Weir Max Depth (ft)	1.46
Culv WS Outlet (ft)	1148.50	Weir Avg Depth (ft)	1.36
Culv Nml Depth (ft)	3.50	Weir Flow Area (sq ft)	74.44
Culv Crt Depth (ft)	3.50	Min El Weir Flow (ft)	1155.01

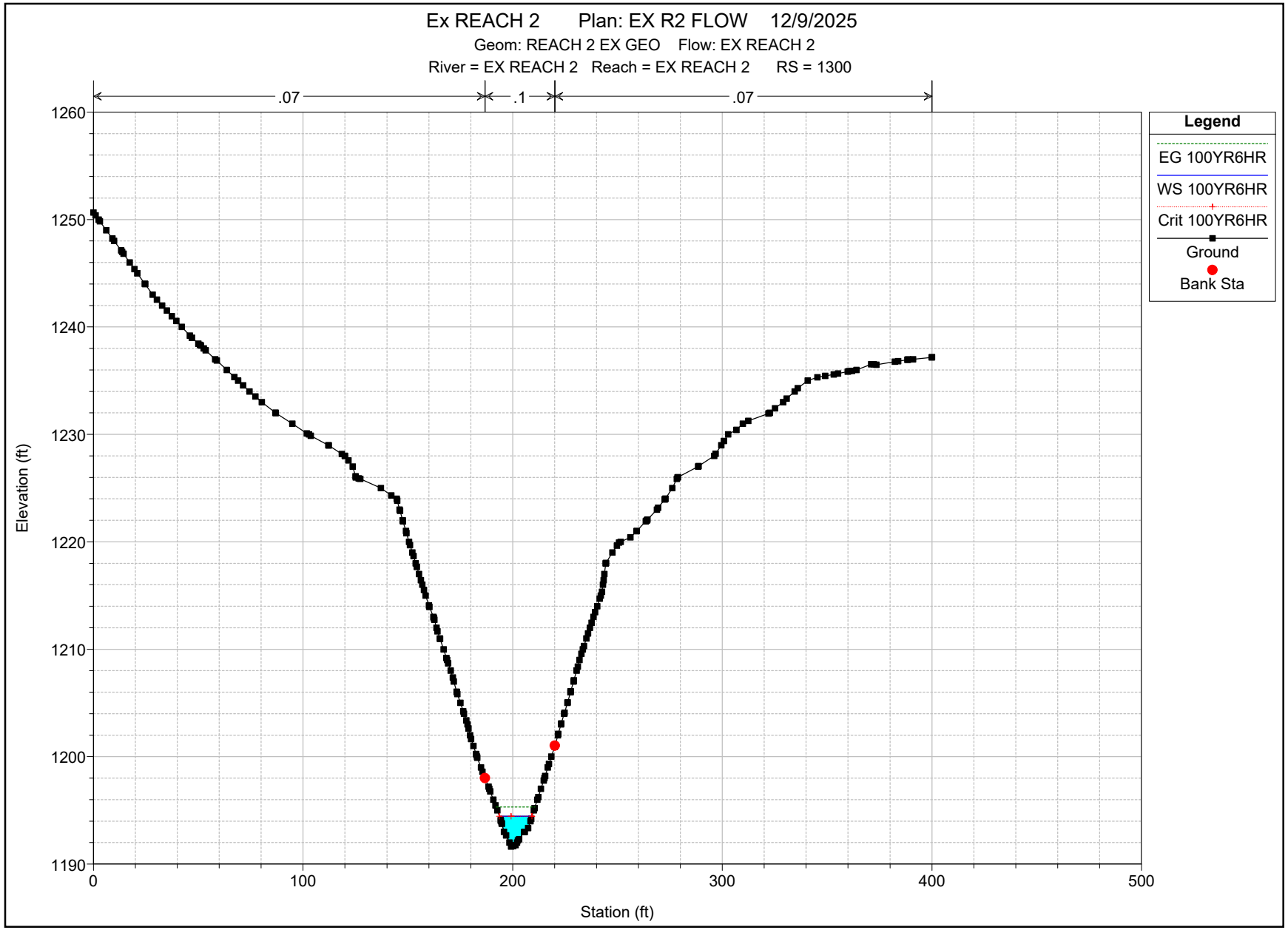

Ex REACH 2 Plan: EX R2 FLOW 12/9/2025
Geom: REACH 2 EX GEO Flow: EX REACH 2
River = EX REACH 2 Reach = EX REACH 2 RS = 2150
.07
Legend
EG 100YR6HR
Crit 100YR6HR
WS 100YR6HR
Ground
Bank Sta
Elevation (ft)
1280
1270
1260
1250
1240
1230
0
100
200
300
400
Station (ft)

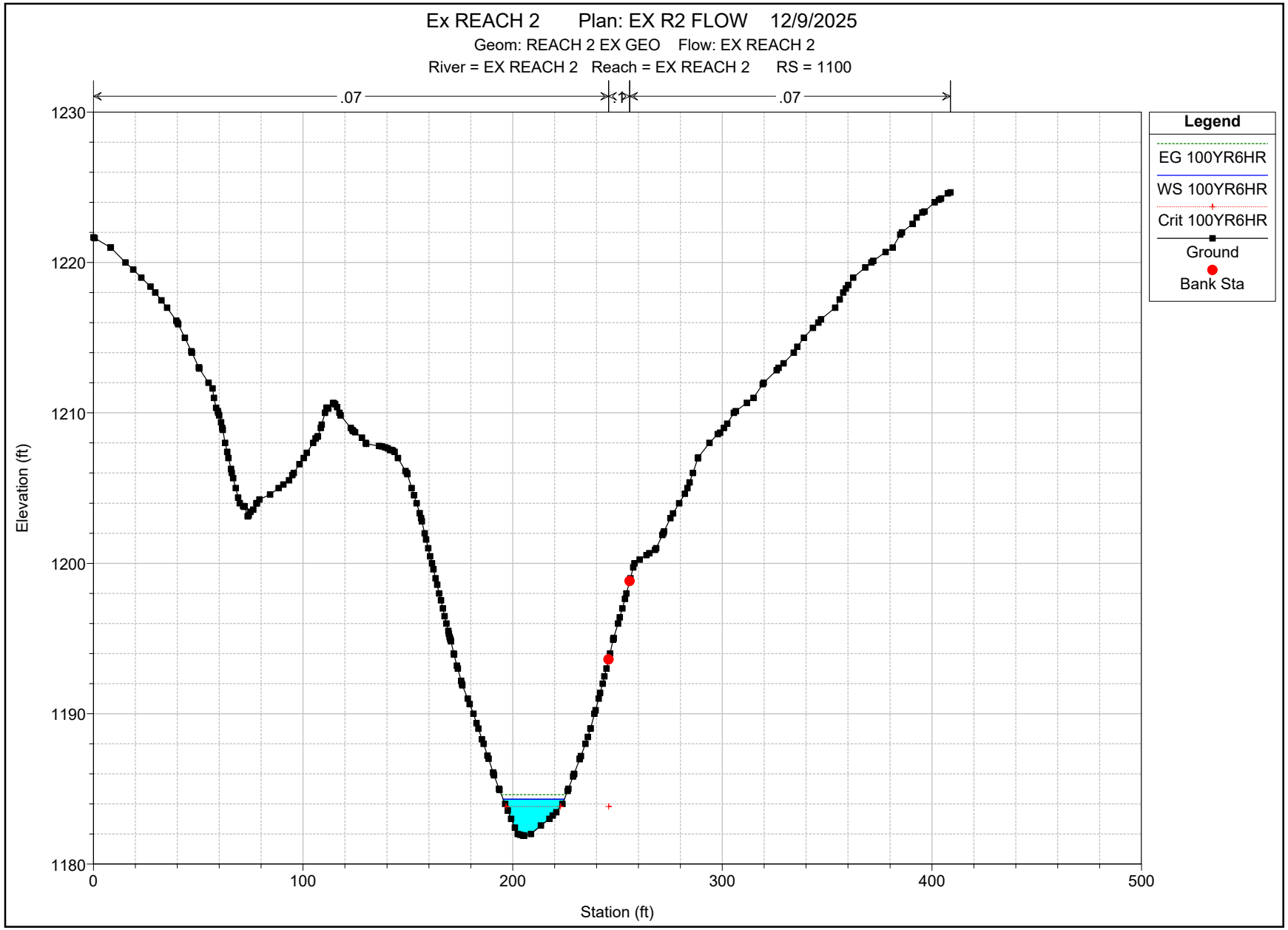

Ex REACH 2 Plan: EX R2 FLOW 12/9/2025
Geom: REACH 2 EX GEO Flow: EX REACH 2
River = EX REACH 2 Reach = EX REACH 2 RS = 2100
.07
Legend
EG 100YR6HR
WS 100YR6HR
Crit 100YR6HR
Ground
Bank Sta
Elevation (ft)
Station (ft)
1290
1280
1270
1260
1250
1240
1230
0
100
200
300
400
500

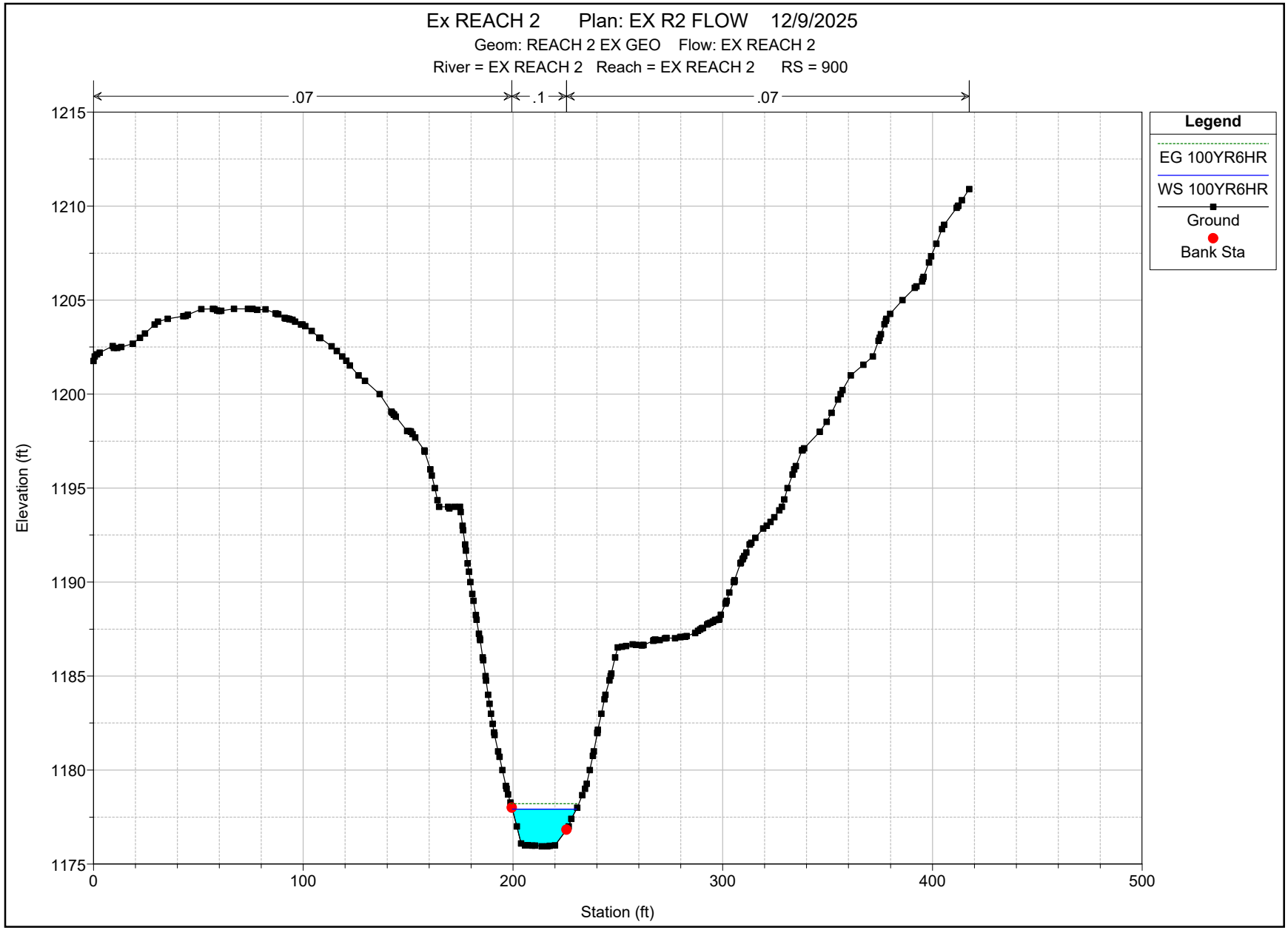

Ex REACH 2 Plan: EX R2 FLOW 12/9/2025
Geom: REACH 2 EX GEO Flow: EX REACH 2
River = EX REACH 2 Reach = EX REACH 2 RS = 1900
.07
.1
.07
Legend
EG 100YR6HR
WS 100YR6HR
Crit 100YR6HR
Ground
Bank Sta
Elevation (ft)
1270
1260
1250
1240
1230
1220
1210
0
100
200
300
400
500
Station (ft)

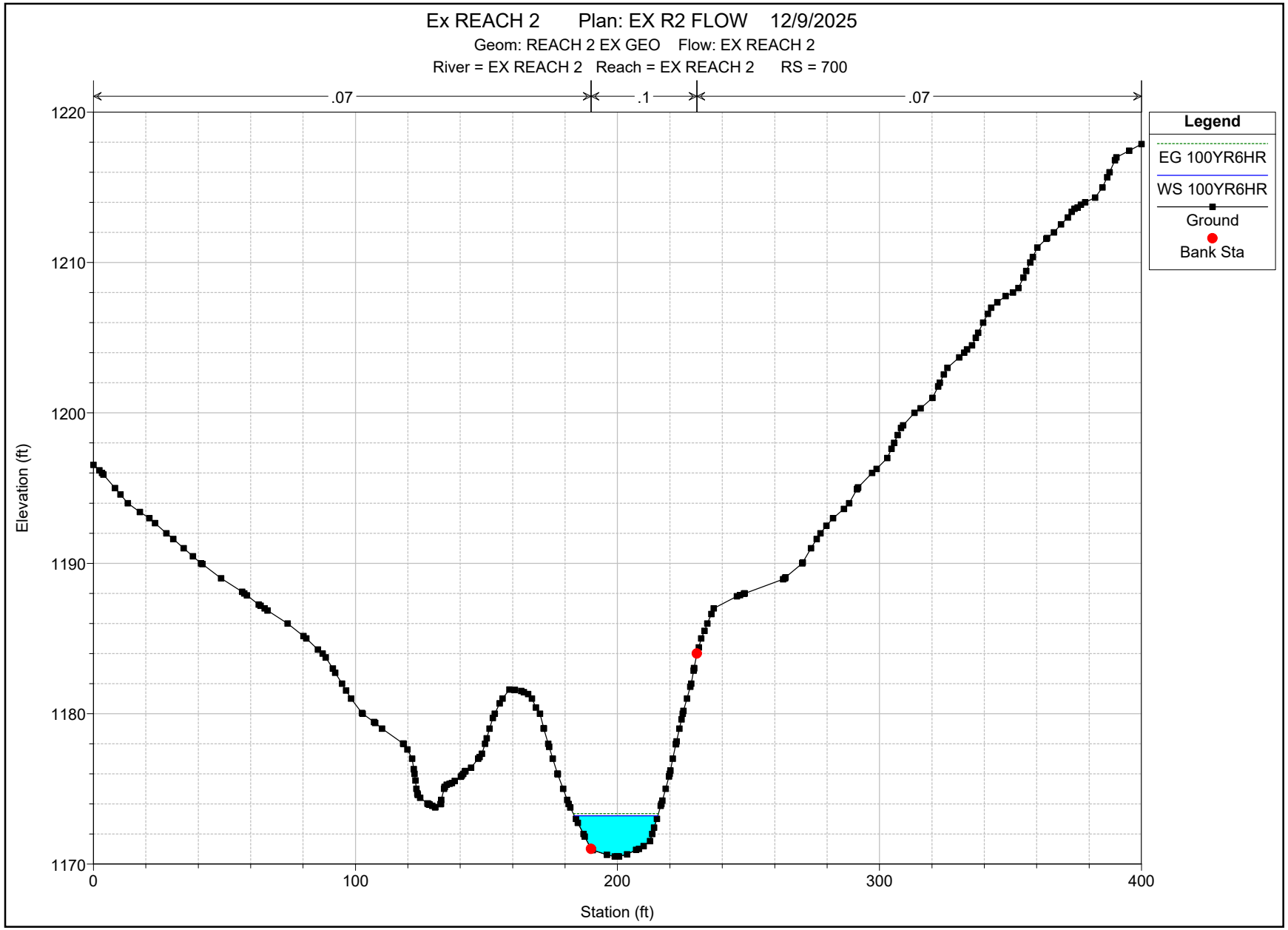

Ex REACH 2 Plan: EX R2 FLOW 12/9/2025
Geom: REACH 2 EX GEO Flow: EX REACH 2
River = EX REACH 2 Reach = EX REACH 2 RS = 1700
.07
.1
.07
Legend
EG 100YR6HR
WS 100YR6HR
Ground
Bank Sta
Elevation (ft)
1270
1260
1250
1240
1230
1220
1210
1200
0
100
200
300
400
Station (ft)

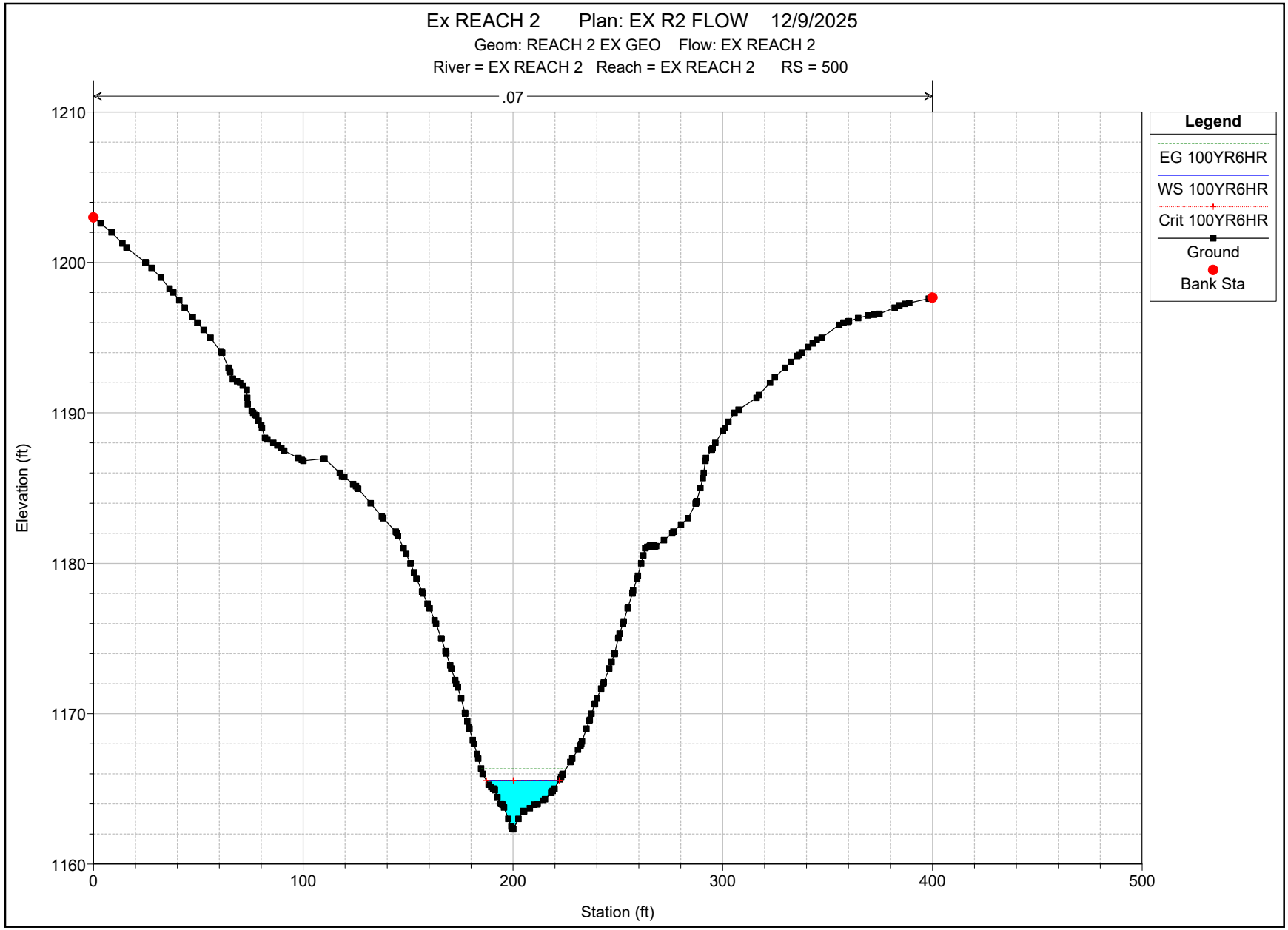

Ex REACH 2 Plan: EX R2 FLOW 12/9/2025
Geom: REACH 2 EX GEO Flow: EX REACH 2
River = EX REACH 2 Reach = EX REACH 2 RS = 1500
.07
.1
.07
Legend
EG 100YR6HR
WS 100YR6HR
Ground
Bank Sta
Elevation (ft)
Station (ft)
1260
1250
1240
1230
1220
1210
1200
0
100
200
300
400
500

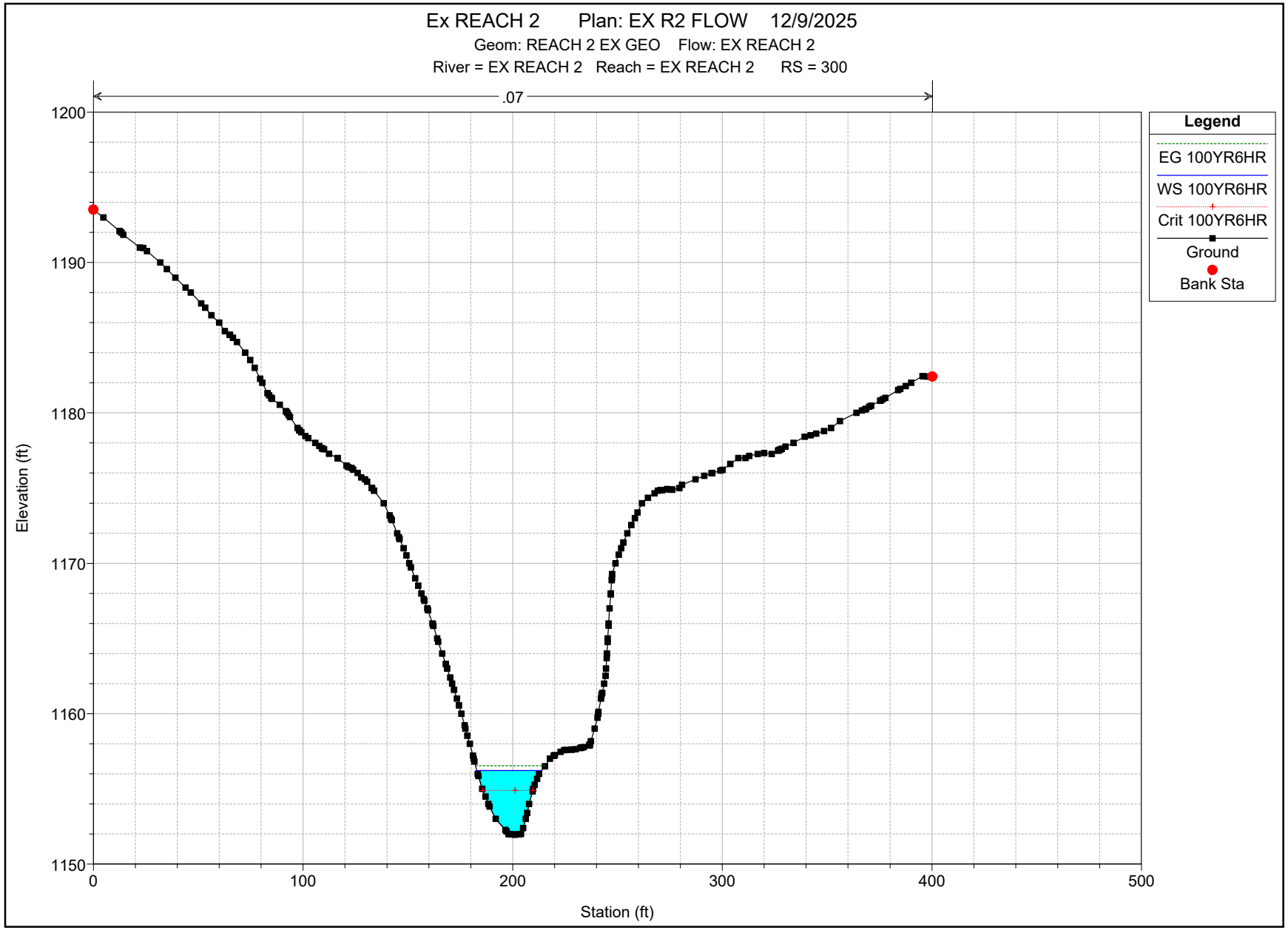

Ex REACH 2 Plan: EX R2 FLOW 12/9/2025
Geom: REACH 2 EX GEO Flow: EX REACH 2
River = EX REACH 2 Reach = EX REACH 2 RS = 1300
.07
.1
.07
Legend
EG 100YR6HR
WS 100YR6HR
Crit 100YR6HR
Ground
Bank Sta
Elevation (ft)
Station (ft)
1260
1250
1240
1230
1220
1210
1200
1190
0
100
200
300
400
500

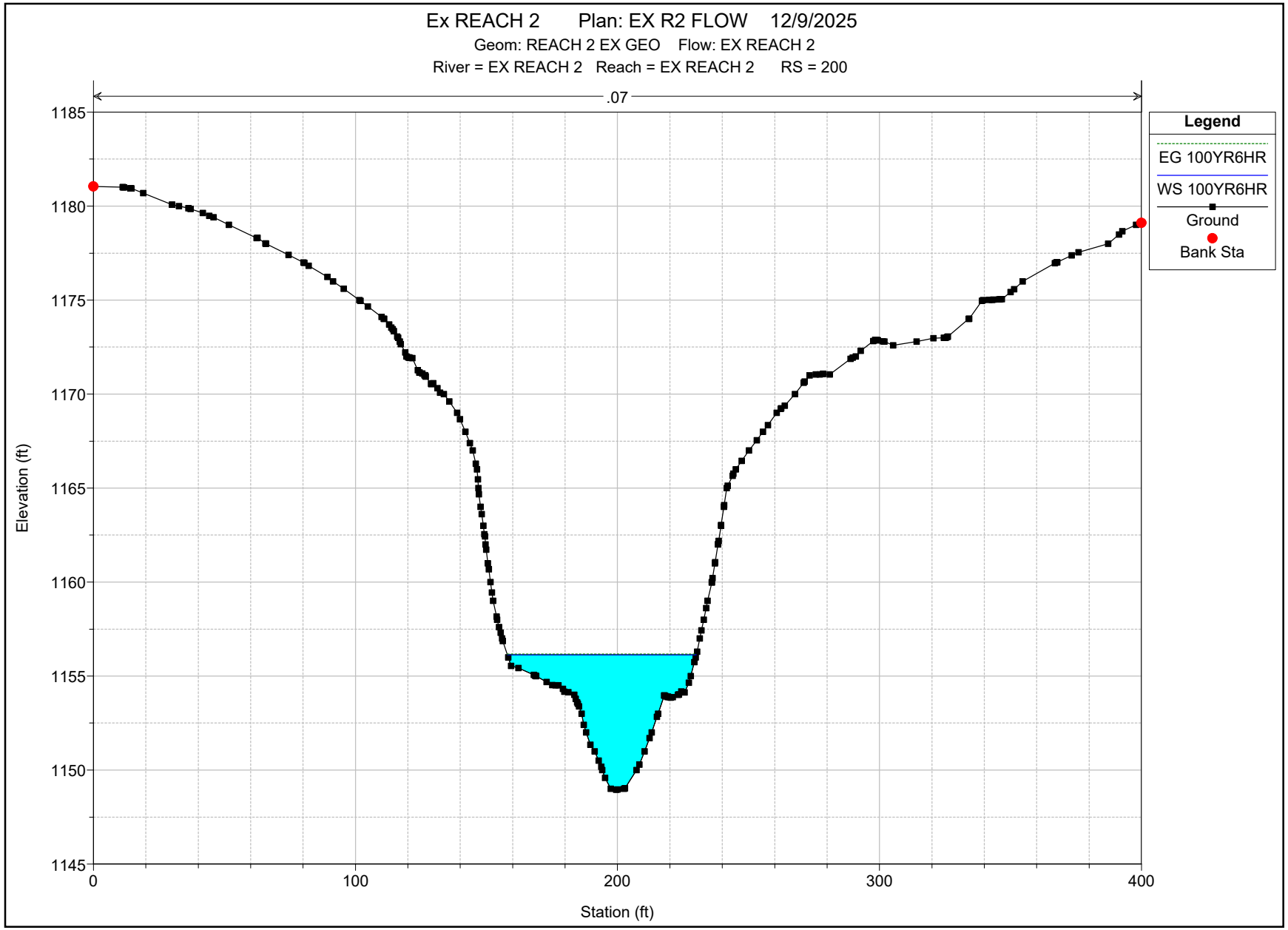

Ex REACH 2 Plan: EX R2 FLOW 12/9/2025
Geom: REACH 2 EX GEO Flow: EX REACH 2
River = EX REACH 2 Reach = EX REACH 2 RS = 1100
.07
.1
.07
Legend
EG 100YR6HR
WS 100YR6HR
Crit 100YR6HR
Ground
Bank Sta
Elevation (ft)
1230
1220
1210
1200
1190
1180
0
100
200
300
400
500
Station (ft)

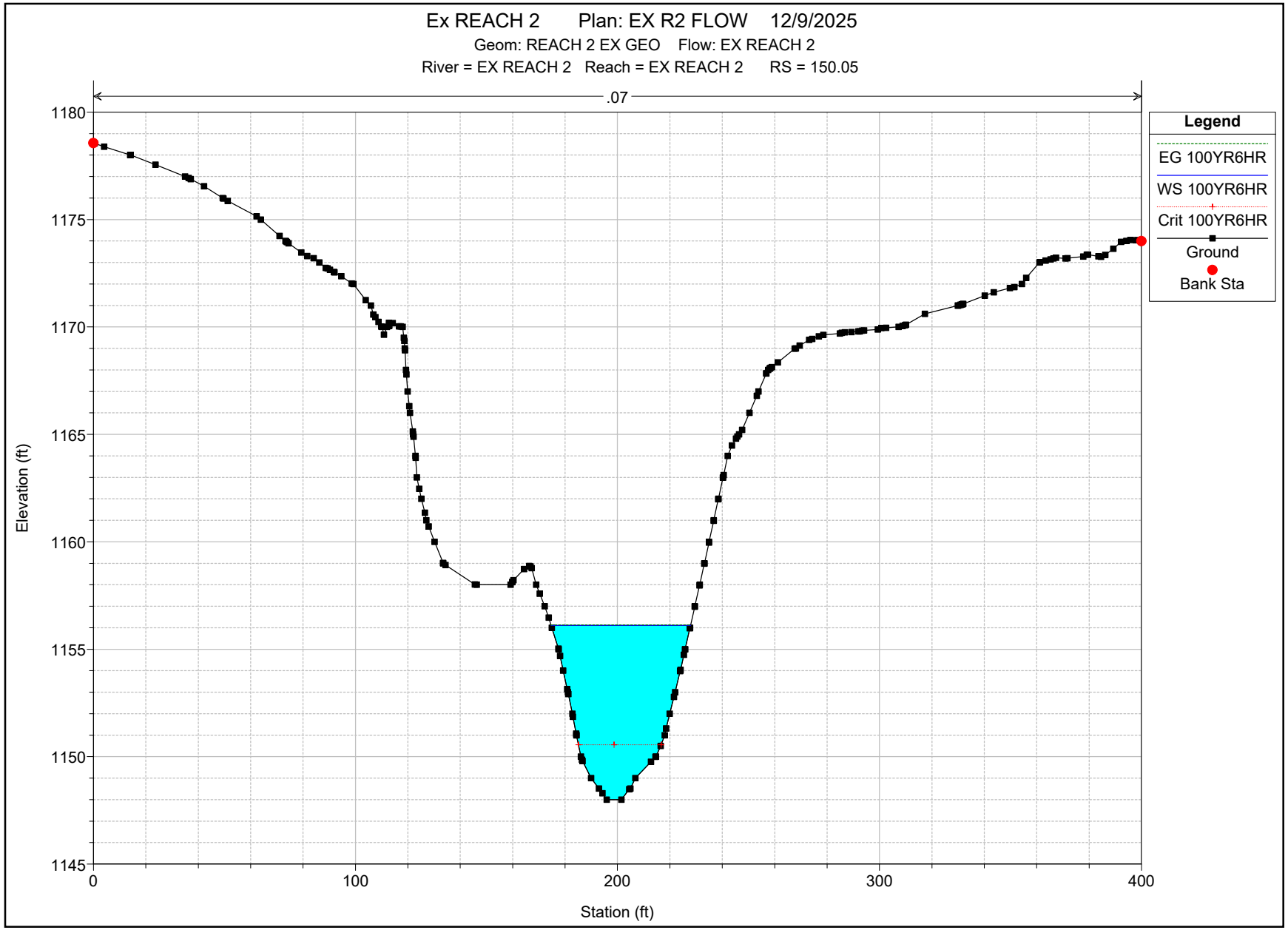

Ex REACH 2 Plan: EX R2 FLOW 12/9/2025
Geom: REACH 2 EX GEO Flow: EX REACH 2
River = EX REACH 2 Reach = EX REACH 2 RS = 900
.07
.1
.07
Legend
EG 100YR6HR
WS 100YR6HR
Ground
Bank Sta
Elevation (ft)
Station (ft)
1215
1210
1205
1200
1195
1190
1185
1180
1175
0
100
200
300
400
500

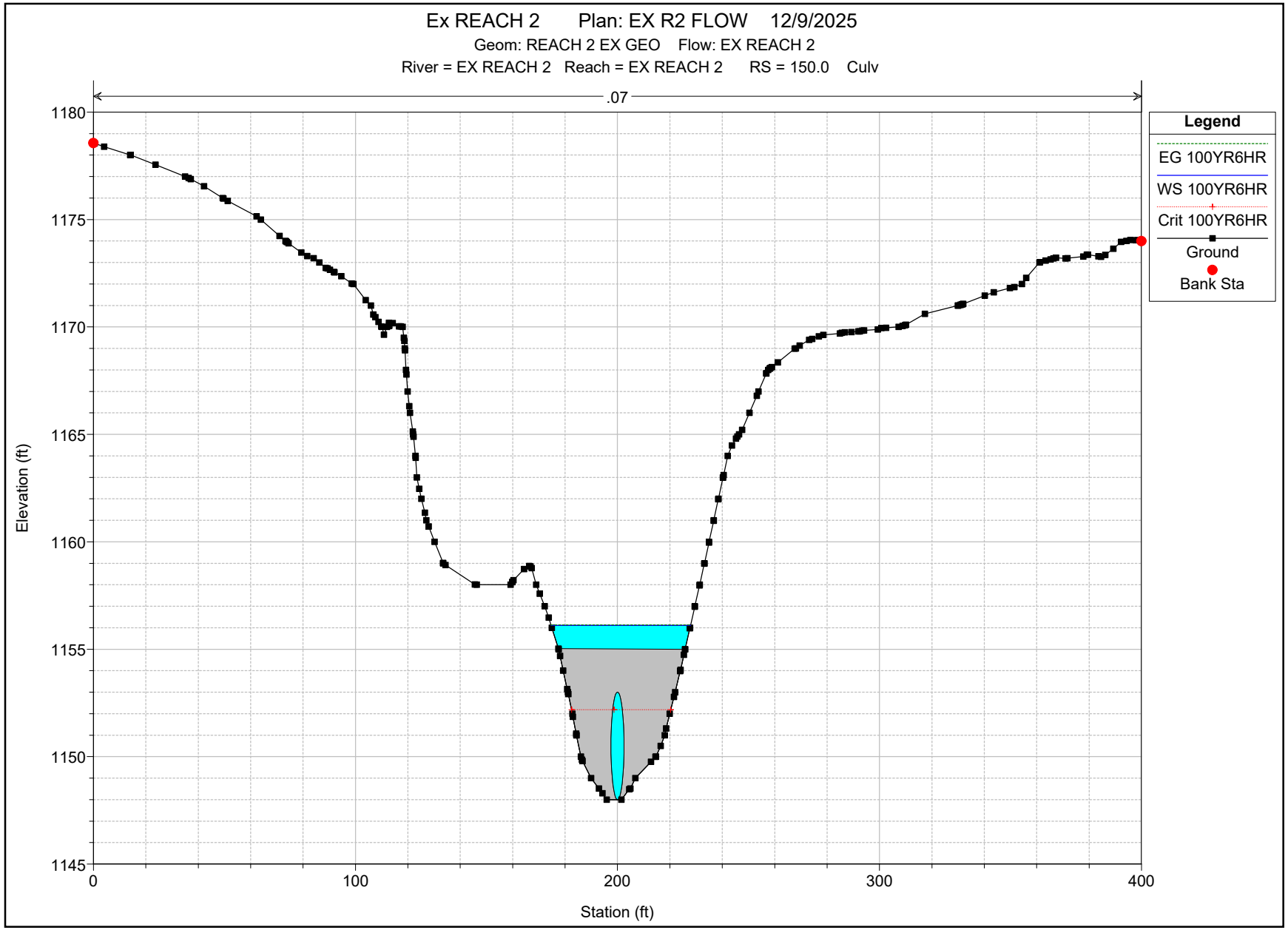

Ex REACH 2 Plan: EX R2 FLOW 12/9/2025
Geom: REACH 2 EX GEO Flow: EX REACH 2
River = EX REACH 2 Reach = EX REACH 2 RS = 700
.07
.1
.07
Legend
EG 100YR6HR
WS 100YR6HR
Ground
Bank Sta
Elevation (ft)
1220
1210
1200
1190
1180
1170
0
100
200
300
400
Station (ft)

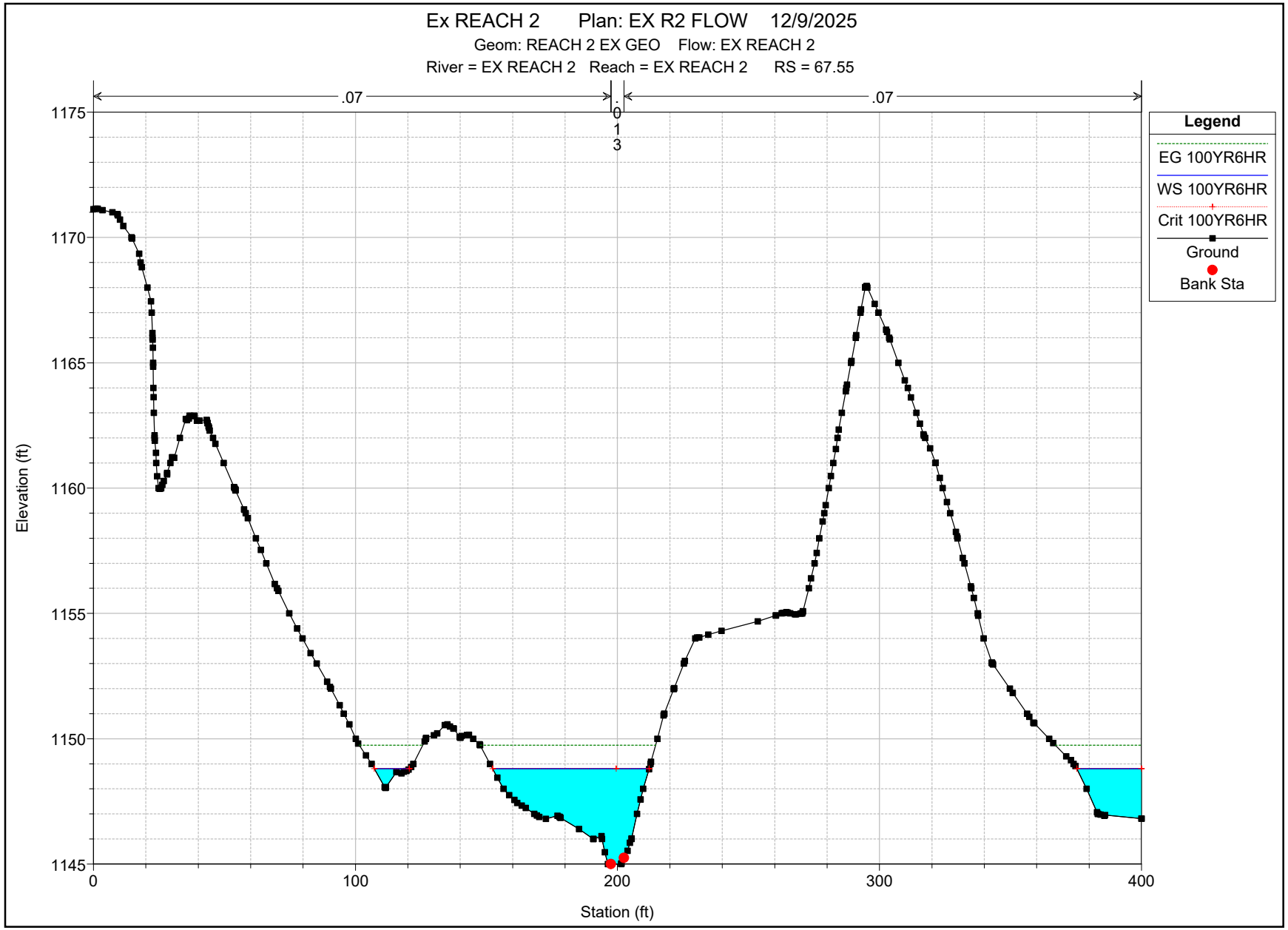

Ex REACH 2 Plan: EX R2 FLOW 12/9/2025
Geom: REACH 2 EX GEO Flow: EX REACH 2
River = EX REACH 2 Reach = EX REACH 2 RS = 500
.07
Legend
EG 100YR6HR
WS 100YR6HR
Crit 100YR6HR
Ground
Bank Sta
Elevation (ft)
Station (ft)
1210
1200
1190
1180
1170
1160
0
100
200
300
400
500

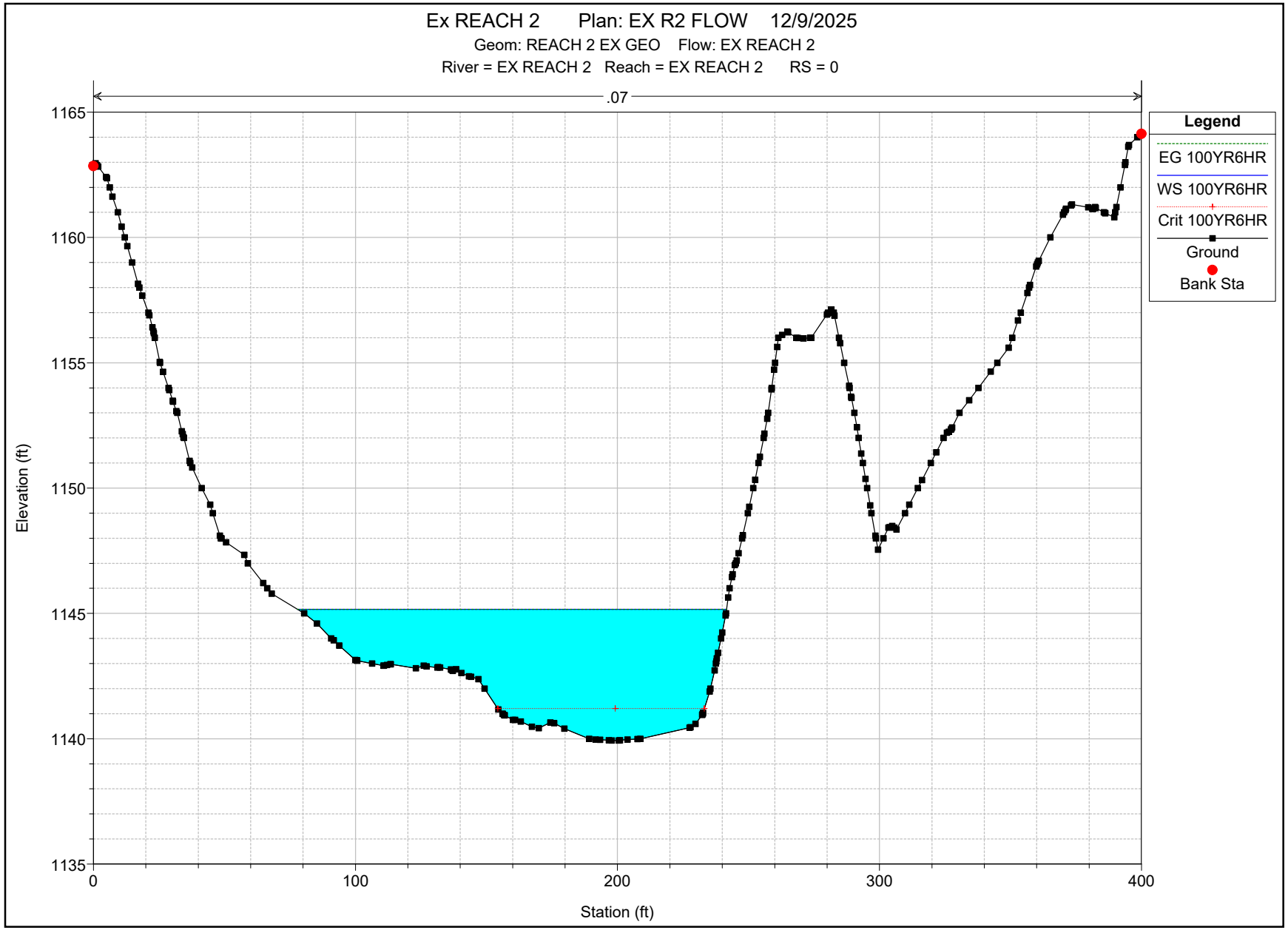

Ex REACH 2 Plan: EX R2 FLOW 12/9/2025
Geom: REACH 2 EX GEO Flow: EX REACH 2
River = EX REACH 2 Reach = EX REACH 2 RS = 300
.07
Legend
EG 100YR6HR
WS 100YR6HR
Crit 100YR6HR
Ground
Bank Sta
Elevation (ft)
Station (ft)
1200
1190
1180
1170
1160
1150
0
100
200
300
400
500

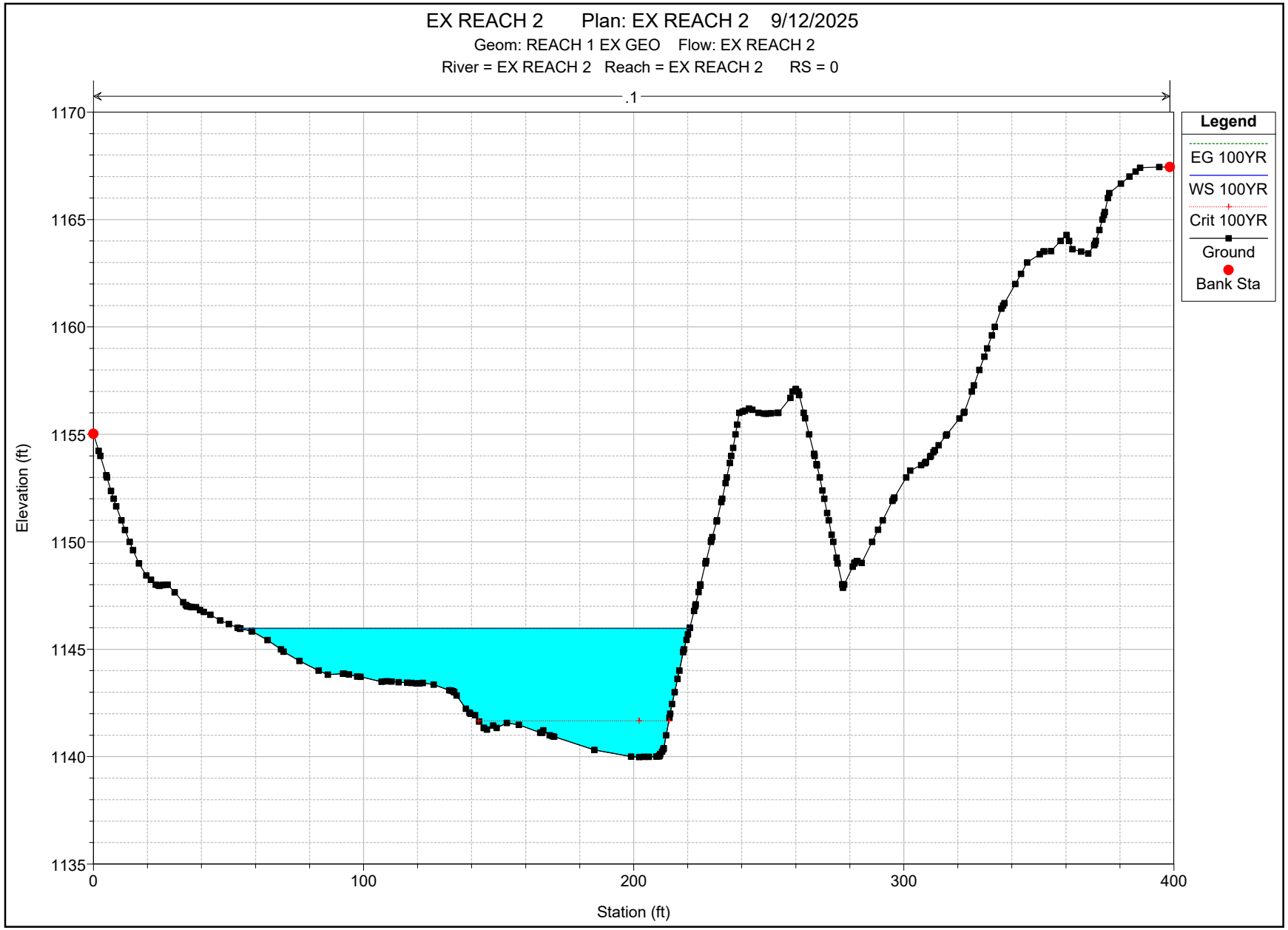

Ex REACH 2 Plan: EX R2 FLOW 12/9/2025
Geom: REACH 2 EX GEO Flow: EX REACH 2
River = EX REACH 2 Reach = EX REACH 2 RS = 200
.07
Legend
EG 100YR6HR
WS 100YR6HR
Ground
Bank Sta
Elevation (ft)
Station (ft)
1185
1180
1175
1170
1165
1160
1155
1150
1145
0
100
200
300
400


Ex REACH 2 Plan: EX R2 FLOW 12/9/2025
Geom: REACH 2 EX GEO Flow: EX REACH 2
River = EX REACH 2 Reach = EX REACH 2 RS = 150.05
.07
Legend
EG 100YR6HR
WS 100YR6HR
Crit 100YR6HR
Ground
Bank Sta
Elevation (ft)
1180
1175
1170
1165
1160
1155
1150
1145
0
100
200
300
400
Station (ft)


Ex REACH 2 Plan: EX R2 FLOW 12/9/2025
Geom: REACH 2 EX GEO Flow: EX REACH 2
River = EX REACH 2 Reach = EX REACH 2 RS = 150.0 Culv
.07
Legend
EG 100YR6HR
WS 100YR6HR
Crit 100YR6HR
Ground
Bank Sta
Elevation (ft)
Station (ft)
1180
1175
1170
1165
1160
1155
1150
1145
0
100
200
300
400


Ex REACH 2 Plan: EX R2 FLOW 12/9/2025
Geom: REACH 2 EX GEO Flow: EX REACH 2
River = EX REACH 2 Reach = EX REACH 2 RS = 67.55
.07
.013
.07
Legend
EG 100YR6HR
WS 100YR6HR
Crit 100YR6HR
Ground
Bank Sta
Elevation (ft)
1175
1170
1165
1160
1155
1150
1145
0
100
200
300
400
Station (ft)


Ex REACH 2 Plan: EX R2 FLOW 12/9/2025
Geom: REACH 2 EX GEO Flow: EX REACH 2
River = EX REACH 2 Reach = EX REACH 2 RS = 0
.07
Legend
EG 100YR6HR
WS 100YR6HR
Crit 100YR6HR
Ground
Bank Sta
Elevation (ft)
Station (ft)
1165
1160
1155
1150
1145
1140
1135
0
100
200
300
400


EX REACH 2 Plan: EX REACH 2 9/12/2025
Geom: REACH 1 EX GEO Flow: EX REACH 2
River = EX REACH 2 Reach = EX REACH 2 RS = 0
.1
Legend
EG 100YR
WS 100YR
Crit 100YR
Ground
Bank Sta
Elevation (ft)
Station (ft)
1170
1165
1160
1155
1150
1145
1140
1135
0
100
200
300
400

POST DEVELOPMENT

HEC-RAS Plan: PROP R2 River: PROP R2 Reach: PROP R2 Profile: 100YR6HR

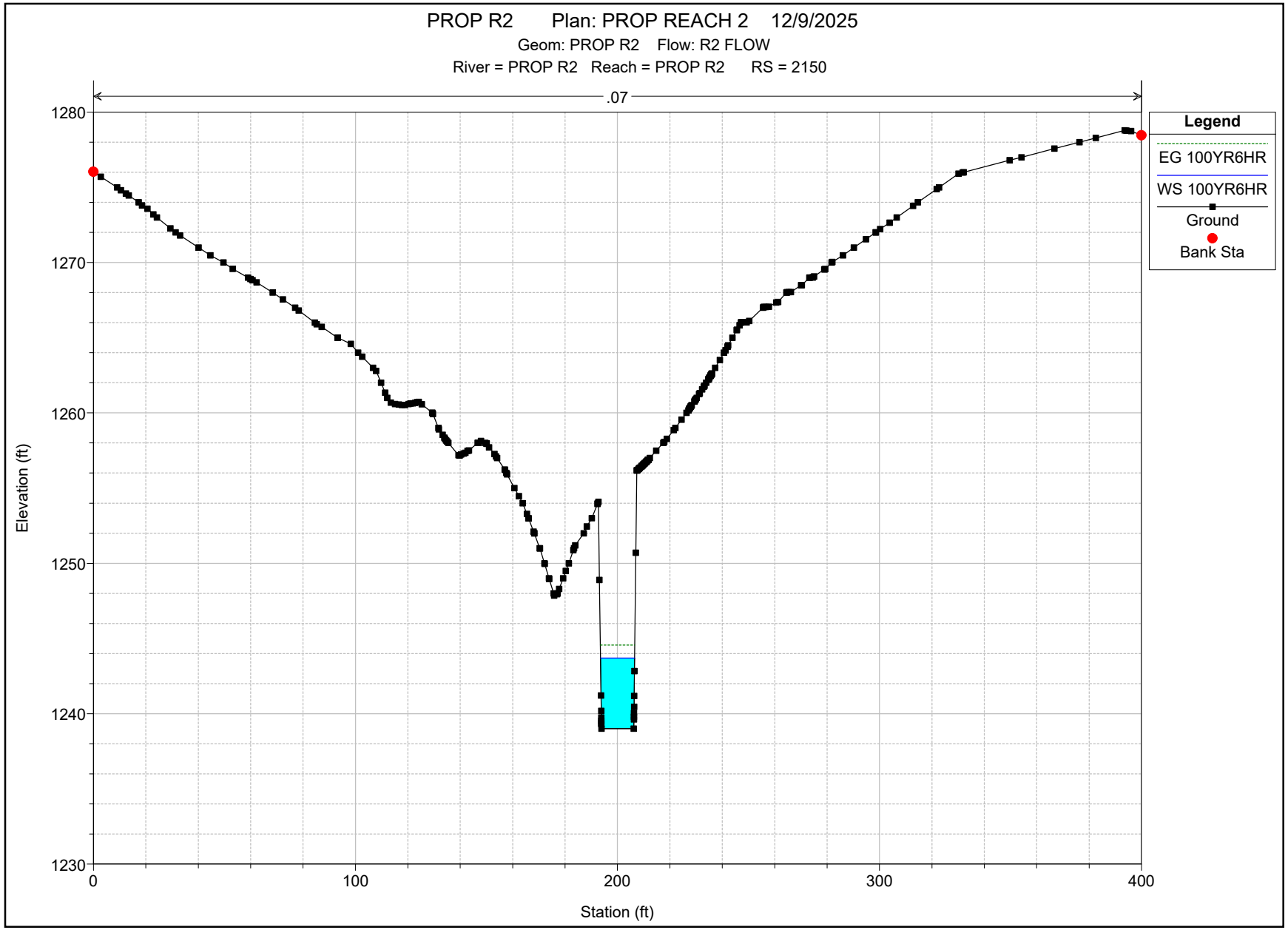
Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
PROP R2	2150	100YR6HR	444.10	1239.00	1243.70		1244.56	0.031864	7.43	59.77	13.04	0.61
PROP R2	2100	100YR6HR	444.10	1237.94	1241.30	1241.30	1242.41	0.059534	8.45	52.53	23.92	1.01
PROP R2	1900	100YR6HR	444.10	1217.77	1222.07		1222.43	0.017956	4.74	94.39	34.43	0.43
PROP R2	1750	100YR6HR	444.10	1209.94	1213.79		1214.04	0.024432	4.07	109.19	46.12	0.47
PROP R2	1500	100YR6HR	444.10	1206.65	1206.33		1207.07	0.031734		64.65	24.55	0.00
PROP R2	1300	100YR6HR	444.10	1191.49	1196.02	1195.72	1197.02	0.090818	8.01	55.44	21.01	0.87
PROP R2	1100	100YR6HR	444.10	1192.94	1185.11	1184.80	1185.74	0.037744		69.24	34.91	0.00
PROP R2	900	100YR6HR	444.10	1175.95	1179.30		1179.65	0.024511	4.57	94.63	39.46	0.48
PROP R2	700	100YR6HR	444.10	1170.63	1174.17		1174.52	0.026779	4.87	93.57	38.98	0.50
PROP R2	500	100YR6HR	444.10	1162.41	1165.82	1165.82	1166.65	0.062539	7.29	60.89	36.99	1.00
PROP R2	300	100YR6HR	444.10	1151.96	1160.43		1160.46	0.000697	1.48	301.03	67.30	0.12
PROP R2	201.95	100YR6HR	444.10	1149.50	1160.42	1152.77	1160.45	0.000028	1.40	316.93	77.59	0.12
PROP R2	201.9		Culvert									
PROP R2	15.8	100YR6HR	444.10	1140.50	1144.71		1145.39	0.001019	6.57	67.55	23.48	0.68
PROP R2	0	100YR6HR	444.10	1140.00	1145.11	1142.27	1145.18	0.001875	2.19	202.93	52.13	0.20

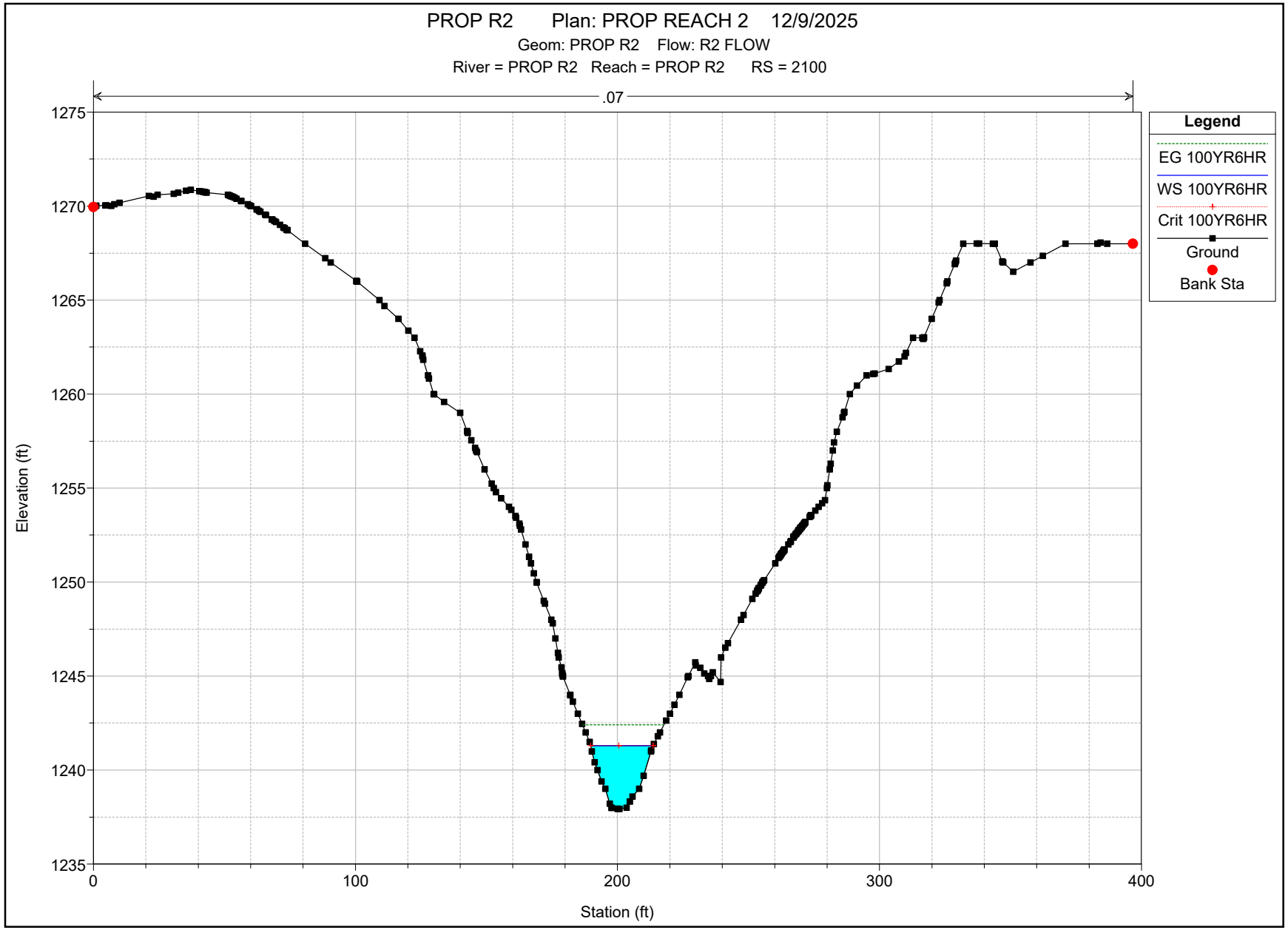
HEC-RAS Plan: PROP R2 River: PROP R2 Reach: PROP R2 Profile: 100YR6HR

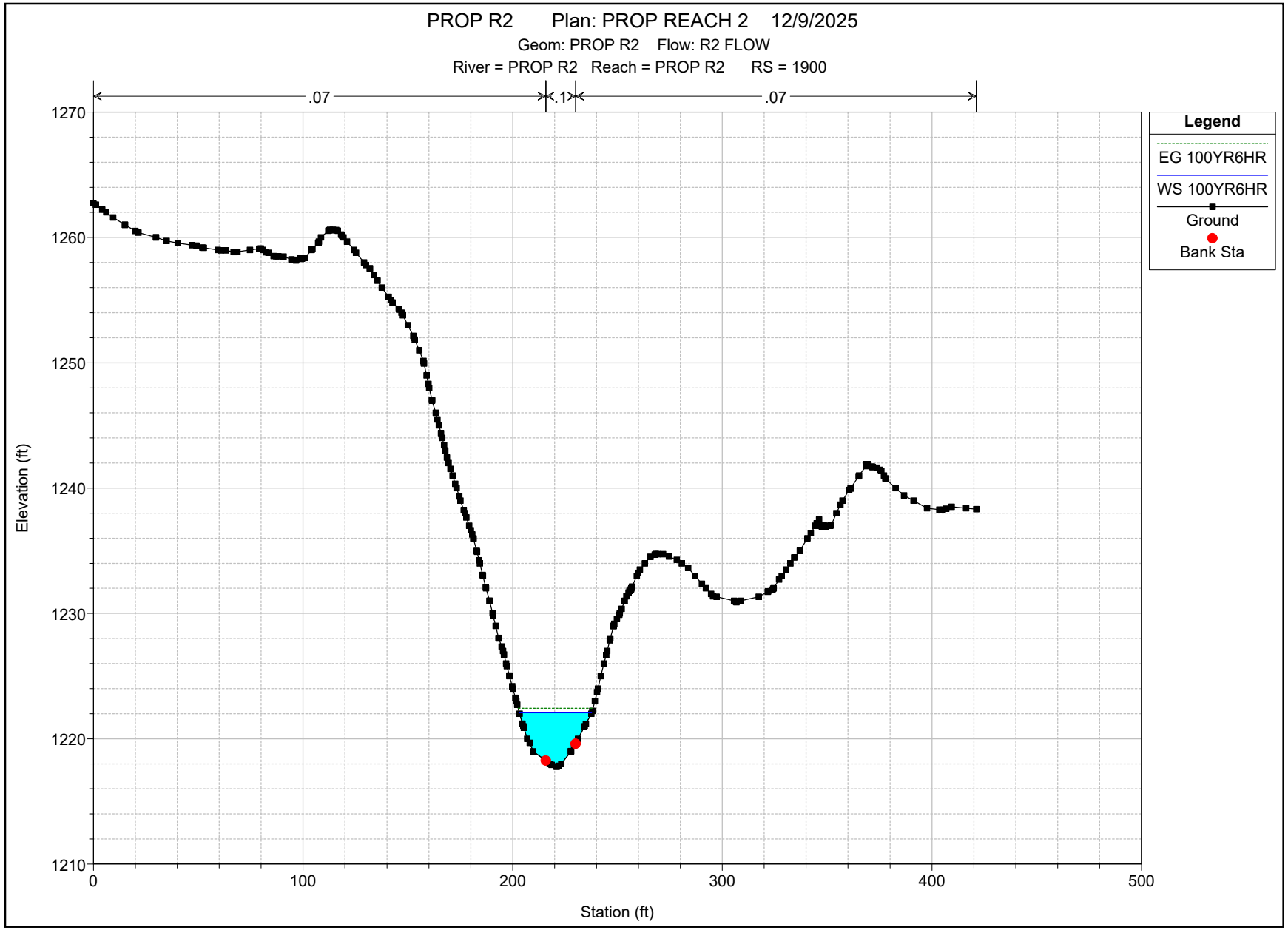
Reach	River Sta	Profile	E.G. Elev	W.S. Elev	Vel Head	Frctn Loss	C & E Loss	Q Left	Q Channel	Q Right	Top Width
			(ft)	(ft)	(ft)	(ft)	(ft)	(cfs)	(cfs)	(cfs)	(ft)
PROP R2	2150	100YR6HR	1244.56	1243.70	0.86	2.13	0.03		444.10		13.04
PROP R2	2100	100YR6HR	1242.41	1241.30	1.11	5.99	0.23		444.10		23.92
PROP R2	1900	100YR6HR	1222.43	1222.07	0.36	8.36	0.03	164.06	250.39	29.65	34.43
PROP R2	1750	100YR6HR	1214.04	1213.79	0.26	6.93	0.05		444.10		46.12
PROP R2	1500	100YR6HR	1207.07	1206.33	0.73	10.03	0.03	444.10			24.55
PROP R2	1300	100YR6HR	1197.02	1196.02	1.00	11.16	0.11		444.10		21.01
PROP R2	1100	100YR6HR	1185.74	1185.11	0.64	6.01	0.09	444.10			34.91
PROP R2	900	100YR6HR	1179.65	1179.30	0.34	5.12	0.00	0.11	297.95	146.04	39.46
PROP R2	700	100YR6HR	1174.52	1174.17	0.36	7.83	0.05	30.16	413.94		38.98
PROP R2	500	100YR6HR	1166.65	1165.82	0.83	0.46	0.24		444.10		36.99
PROP R2	300	100YR6HR	1160.46	1160.43	0.03	0.01	0.00		444.10		67.30
PROP R2	201.95	100YR6HR	1160.45	1160.42	0.03				444.10		77.59
PROP R2	201.9		Culvert								
PROP R2	15.8	100YR6HR	1145.39	1144.71	0.67	0.02	0.18		444.10		23.48
PROP R2	0	100YR6HR	1145.18	1145.11	0.07				444.10		52.13

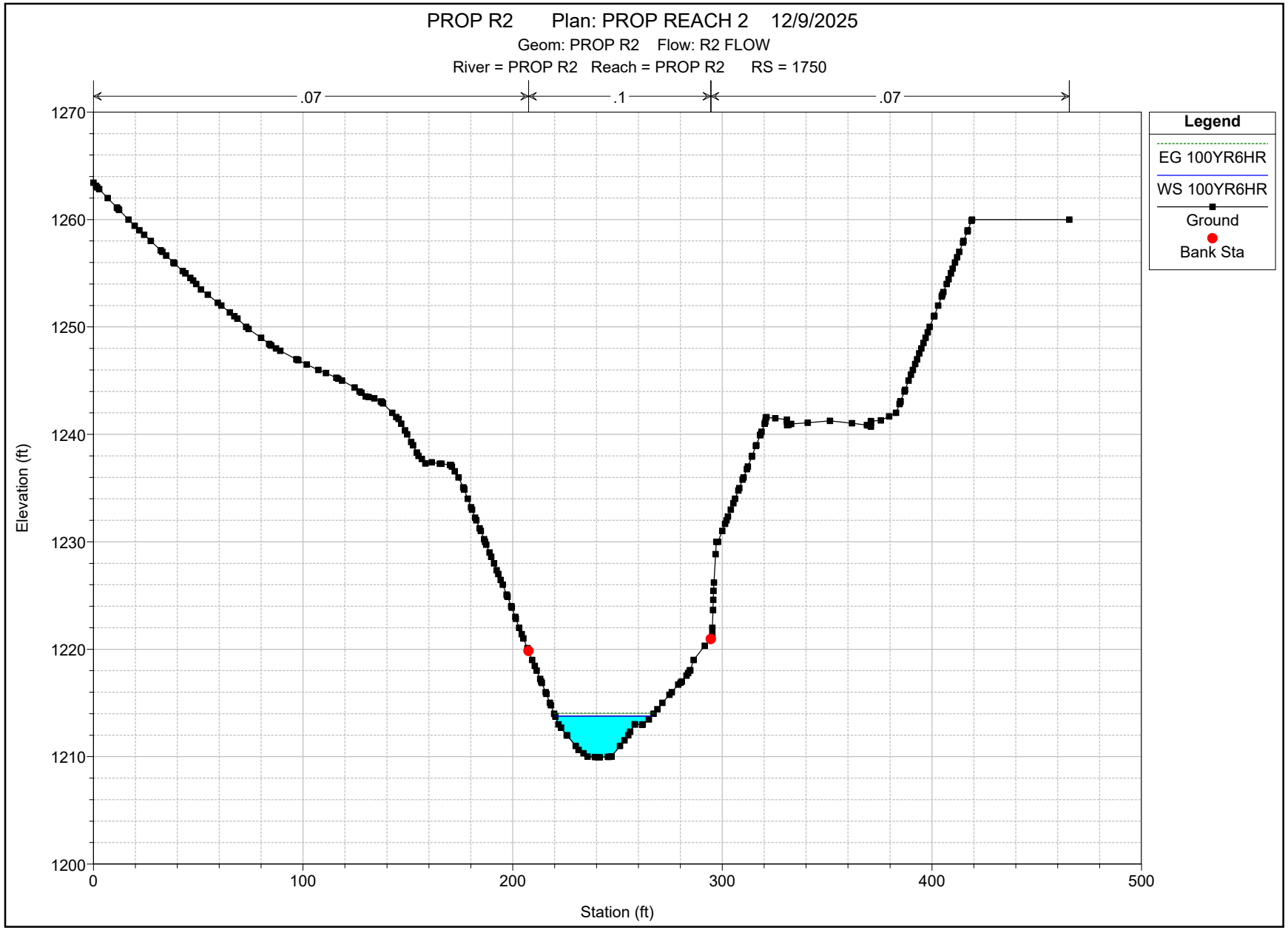
Plan: PROP R2 PROP R2 PROP R2 RS: 201.9 Culv Group: Culvert #3 Profile: 100YR6HR

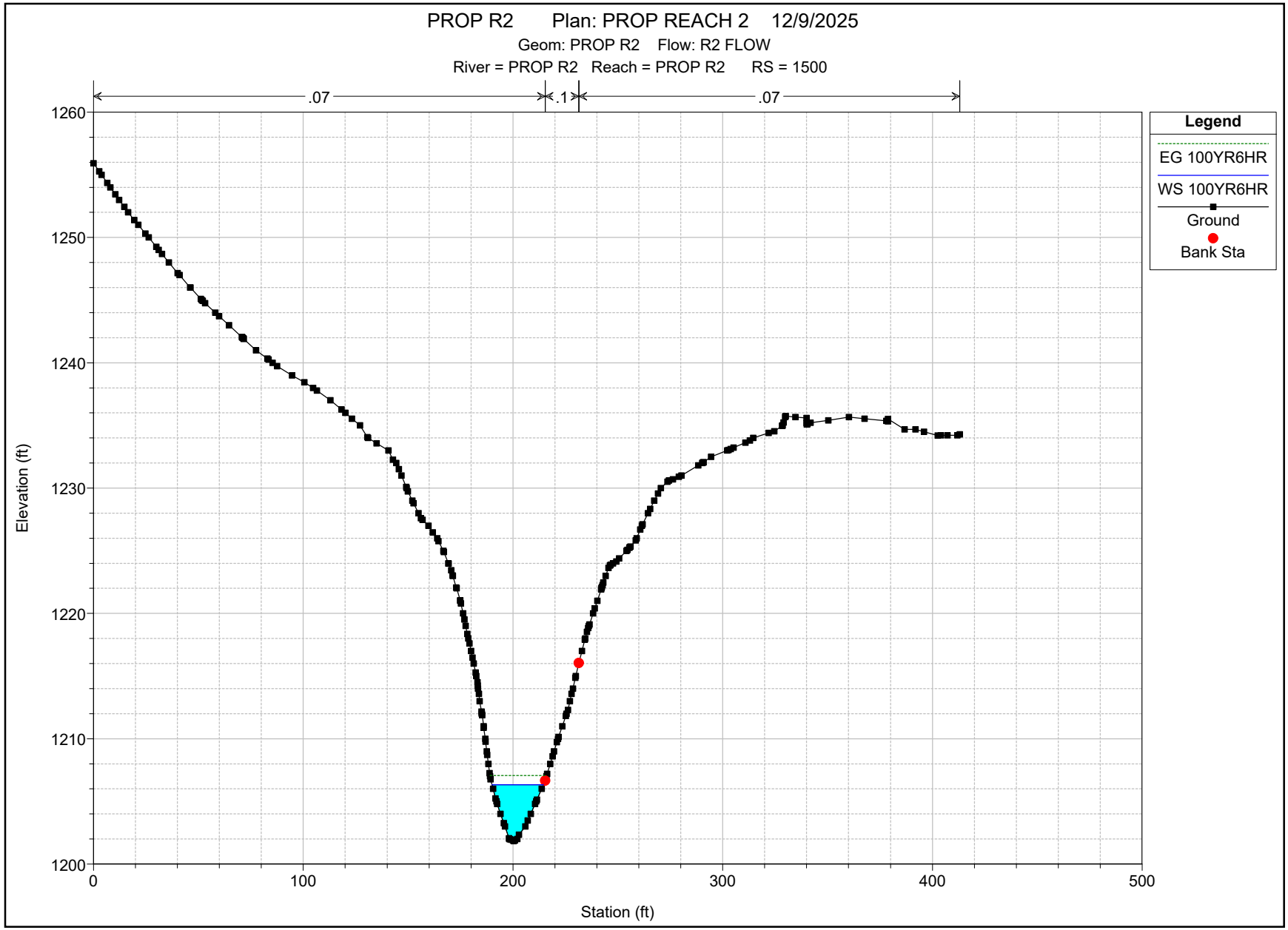
Q Culv Group (cfs)	377.00	Culv Full Len (ft)	
# Barrels	1	Culv Vel US (ft/s)	13.33
Q Barrel (cfs)	377.00	Culv Vel DS (ft/s)	27.46
E.G. US. (ft)	1160.45	Culv Inv El Up (ft)	1149.50
W.S. US. (ft)	1160.42	Culv Inv El Dn (ft)	1140.70
E.G. DS (ft)	1145.39	Culv Frctn Ls (ft)	5.02
W.S. DS (ft)	1144.71	Culv Exit Loss (ft)	9.97
Delta EG (ft)	15.07	Culv Entr Loss (ft)	0.08
Delta WS (ft)	15.71	Q Weir (cfs)	67.10
E.G. IC (ft)	1160.45	Weir Sta Lft (ft)	149.86
E.G. OC (ft)	1158.06	Weir Sta Rgt (ft)	227.76
Culvert Control	Inlet	Weir Submerg	0.00
Culv WS Inlet (ft)	1155.50	Weir Max Depth (ft)	1.20
Culv WS Outlet (ft)	1143.63	Weir Avg Depth (ft)	0.47
Culv Nml Depth (ft)	2.67	Weir Flow Area (sq ft)	36.98
Culv Crt Depth (ft)	5.22	Min El Weir Flow (ft)	1159.27

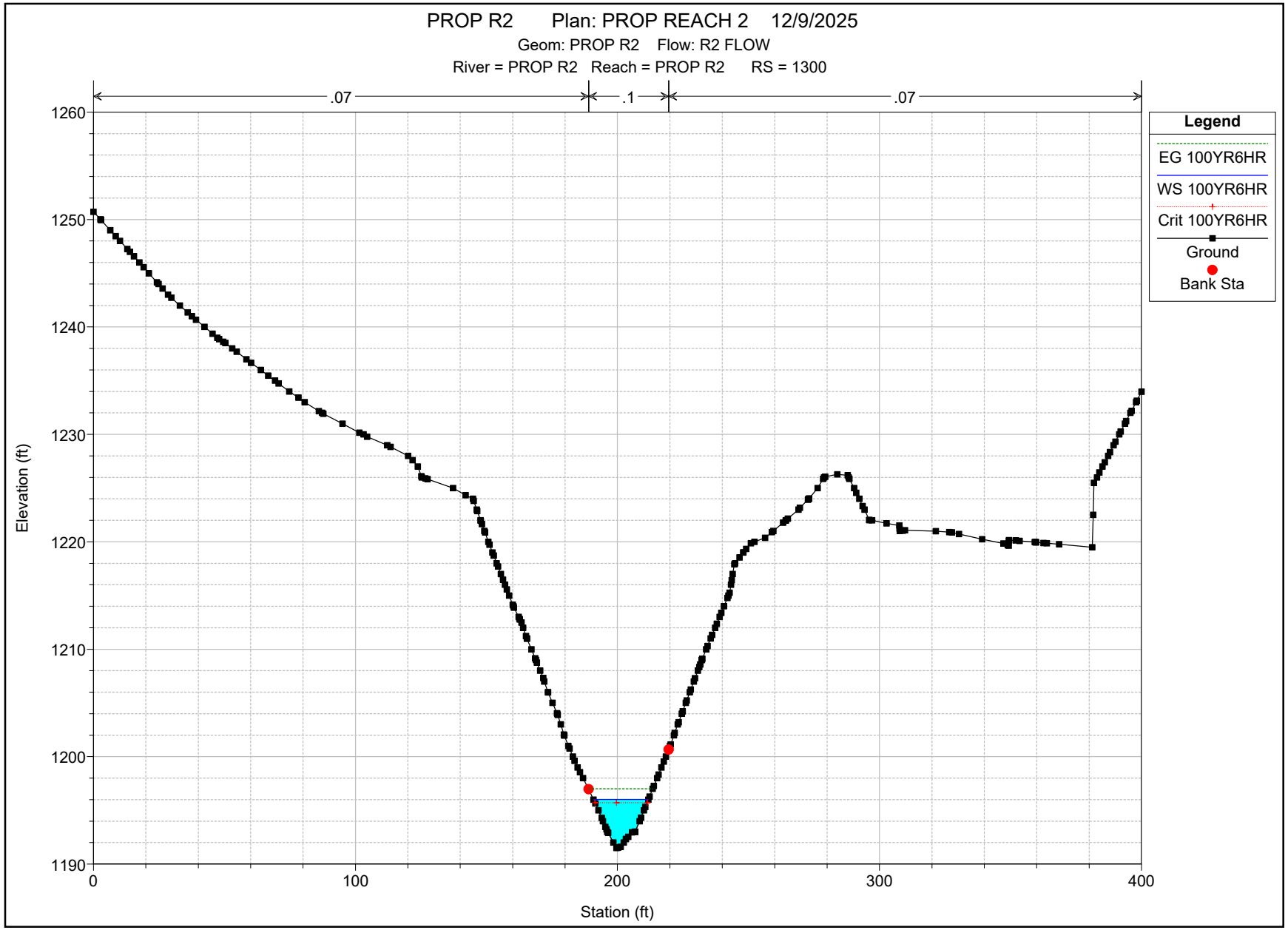

PROP R2 Plan: PROP REACH 2 12/9/2025
Geom: PROP R2 Flow: R2 FLOW
River = PROP R2 Reach = PROP R2 RS = 2150
.07
Legend
EG 100YR6HR
WS 100YR6HR
Ground
Bank Sta
Elevation (ft)
1280
1270
1260
1250
1240
1230
0
100
200
300
400
Station (ft)

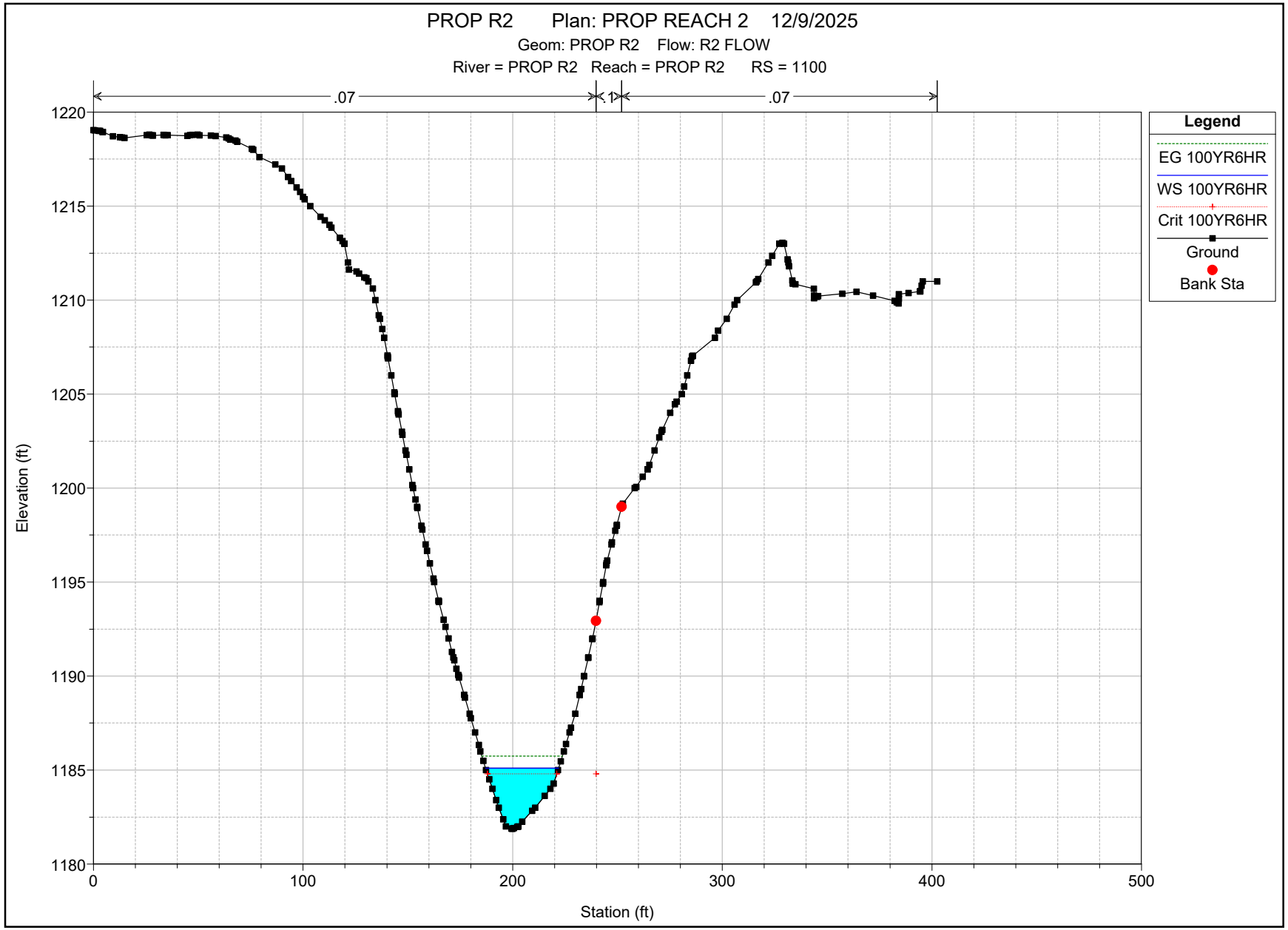

PROP R2 Plan: PROP REACH 2 12/9/2025
Geom: PROP R2 Flow: R2 FLOW
River = PROP R2 Reach = PROP R2 RS = 2100
.07
Legend
EG 100YR6HR
WS 100YR6HR
Crit 100YR6HR
Ground
Bank Sta
Elevation (ft)
1275
1270
1265
1260
1255
1250
1245
1240
1235
0
100
200
300
400
Station (ft)

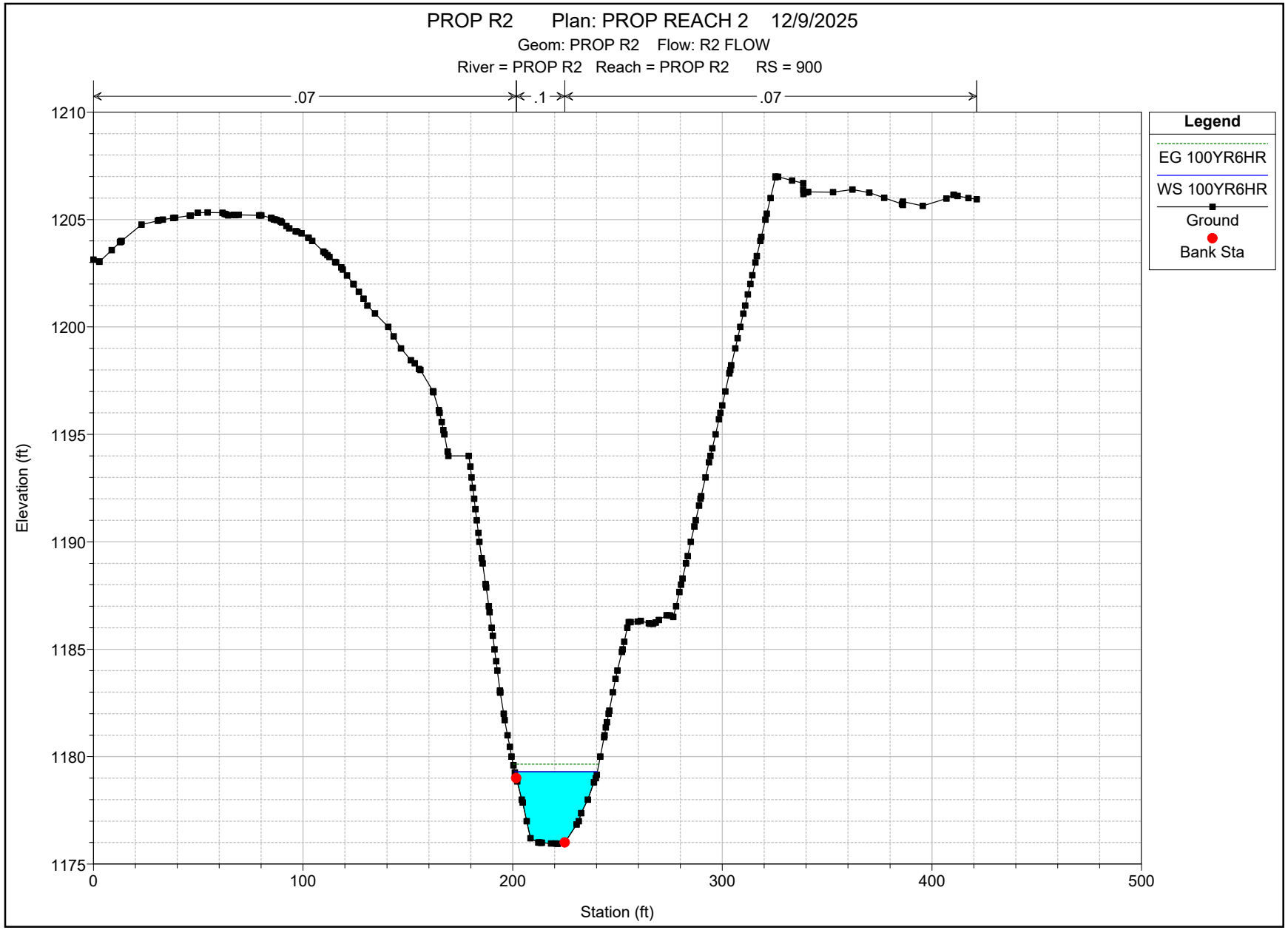

PROP R2 Plan: PROP REACH 2 12/9/2025
Geom: PROP R2 Flow: R2 FLOW
River = PROP R2 Reach = PROP R2 RS = 1900
.07
.1
.07
Legend
EG 100YR6HR
WS 100YR6HR
Ground
Bank Sta
Elevation (ft)
1270
1260
1250
1240
1230
1220
1210
0
100
200
300
400
500
Station (ft)

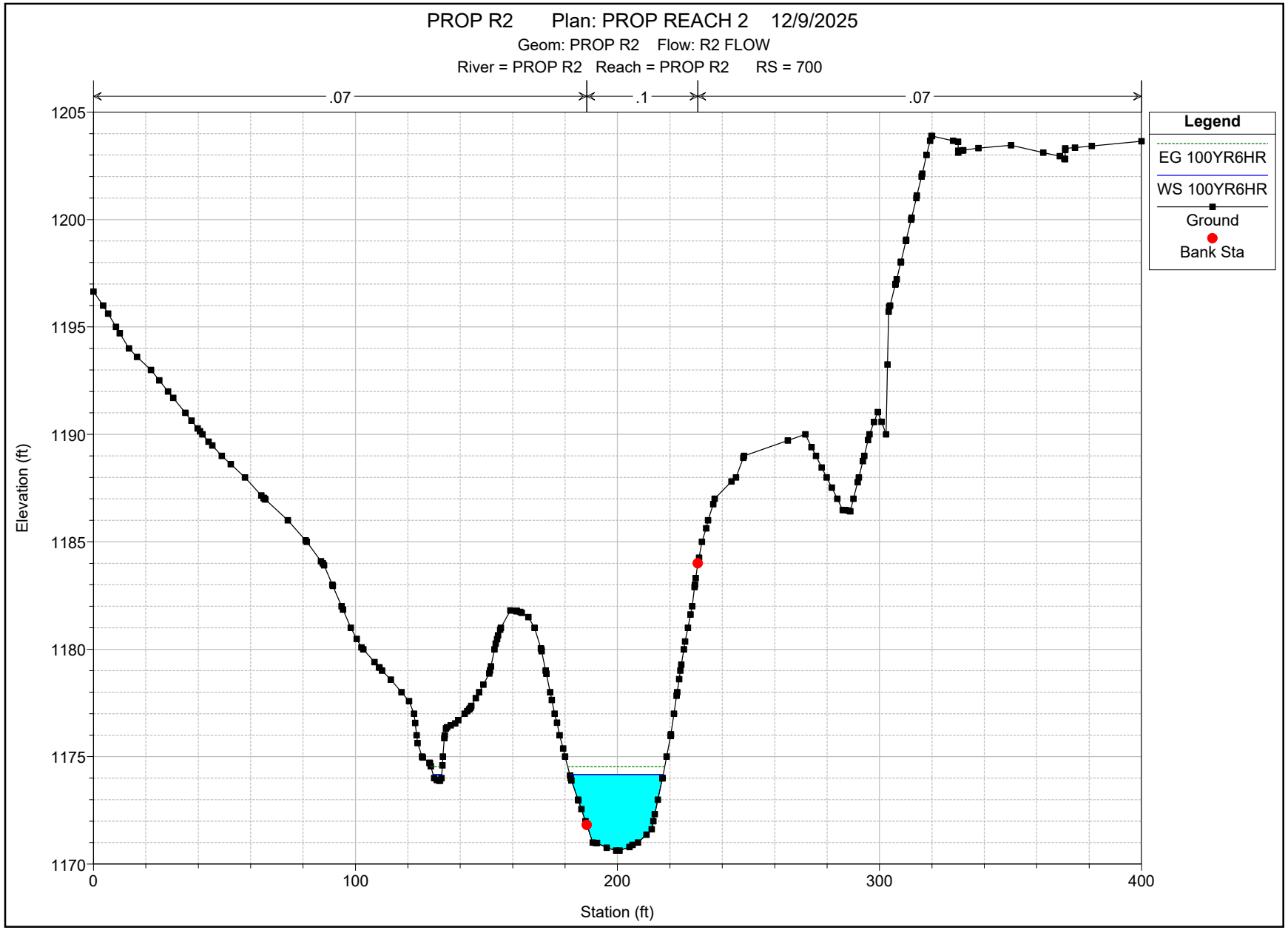

PROP R2 Plan: PROP REACH 2 12/9/2025
Geom: PROP R2 Flow: R2 FLOW
River = PROP R2 Reach = PROP R2 RS = 1750
.07
.1
.07
Legend
EG 100YR6HR
WS 100YR6HR
Ground
Bank Sta
Elevation (ft)
Station (ft)
1270
1260
1250
1240
1230
1220
1210
1200
0
100
200
300
400
500

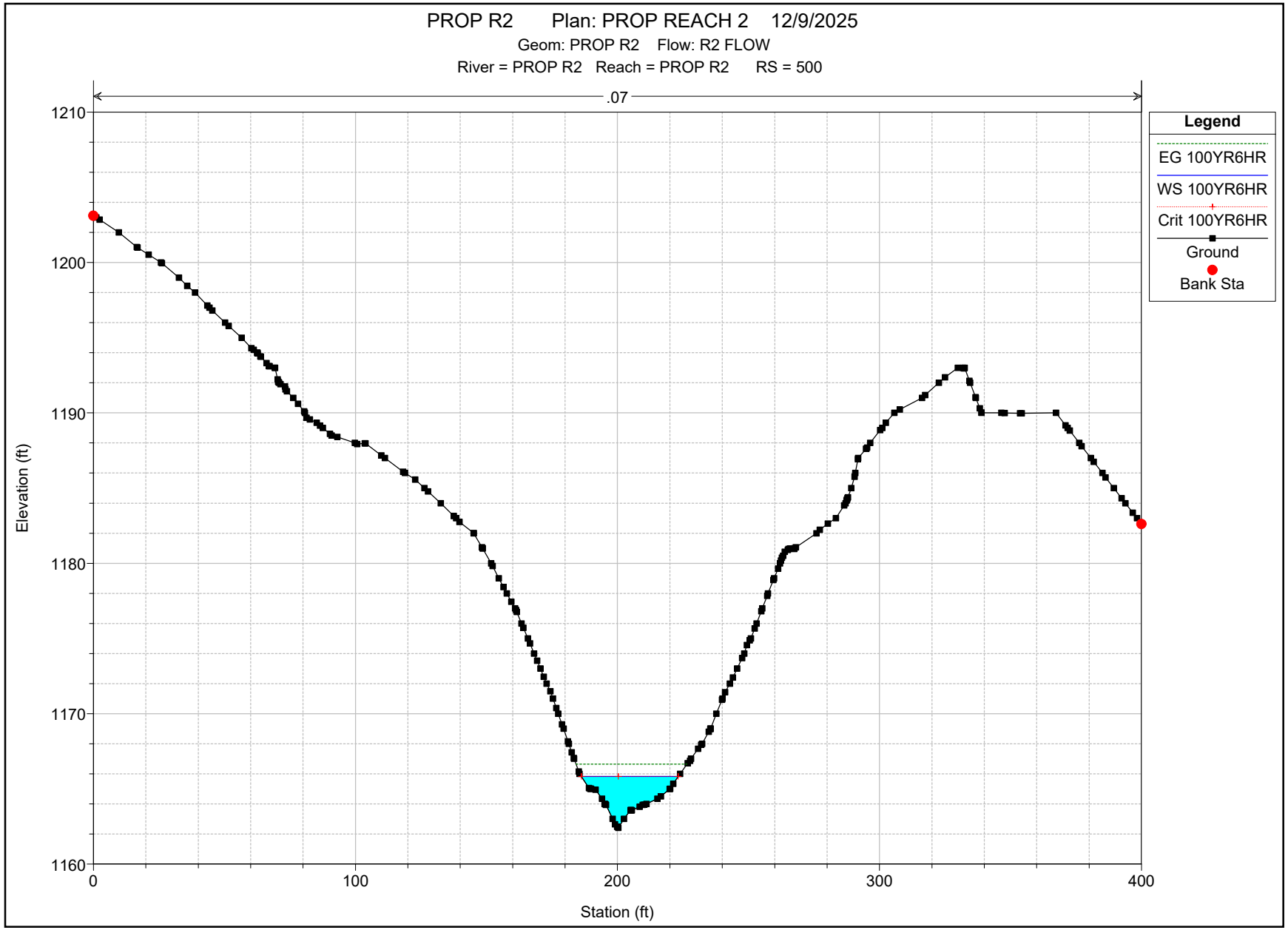

PROP R2 Plan: PROP REACH 2 12/9/2025
Geom: PROP R2 Flow: R2 FLOW
River = PROP R2 Reach = PROP R2 RS = 1500
.07
.1
.07
Legend
EG 100YR6HR
WS 100YR6HR
Ground
Bank Sta
Elevation (ft)
Station (ft)
1260
1250
1240
1230
1220
1210
1200
0
100
200
300
400
500

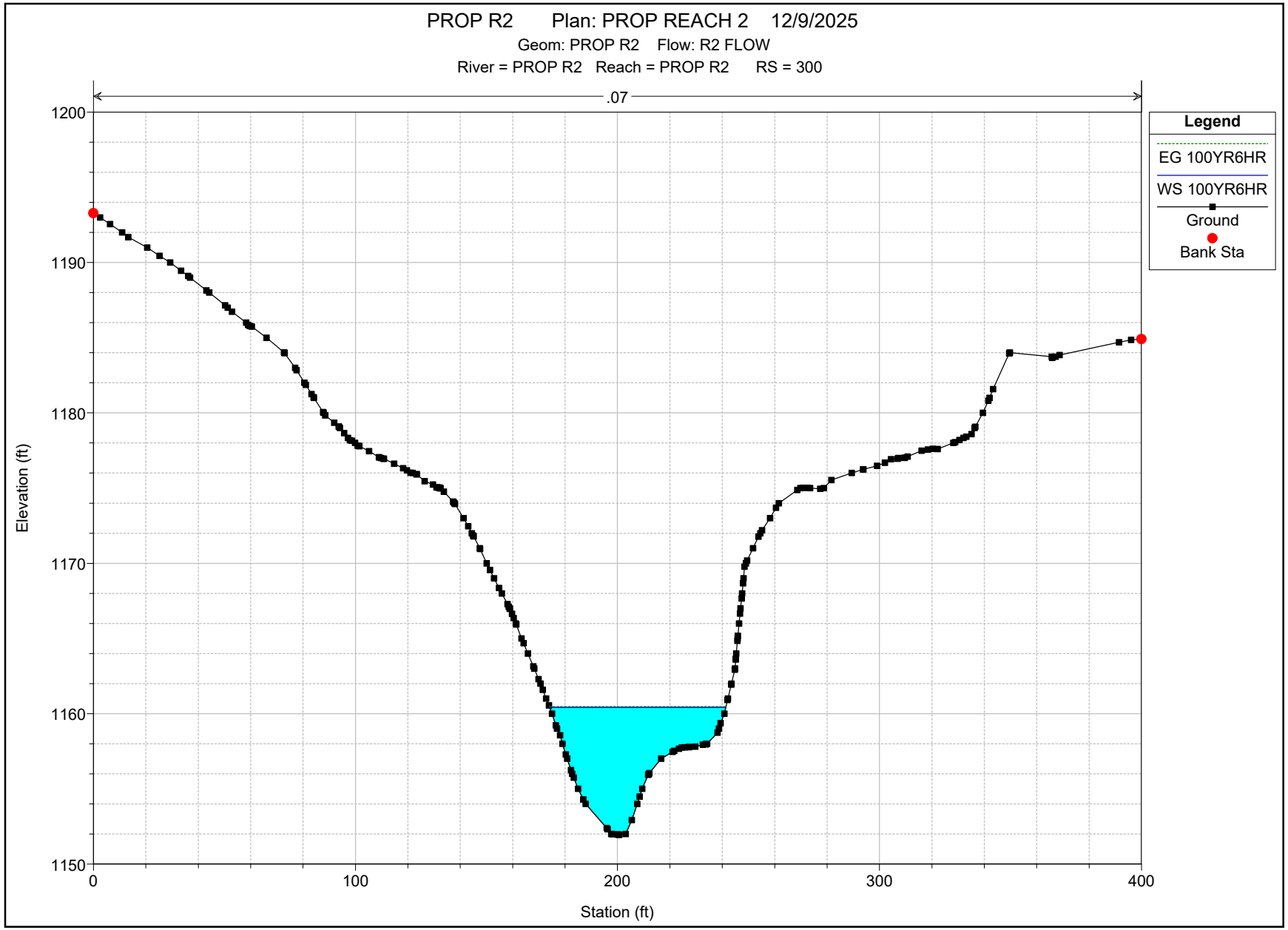

PROP R2 Plan: PROP REACH 2 12/9/2025
Geom: PROP R2 Flow: R2 FLOW
River = PROP R2 Reach = PROP R2 RS = 1300
.07
.1
.07
Legend
EG 100YR6HR
WS 100YR6HR
Crit 100YR6HR
Ground
Bank Sta
Elevation (ft)
Station (ft)
1260
1250
1240
1230
1220
1210
1200
1190
0
100
200
300
400

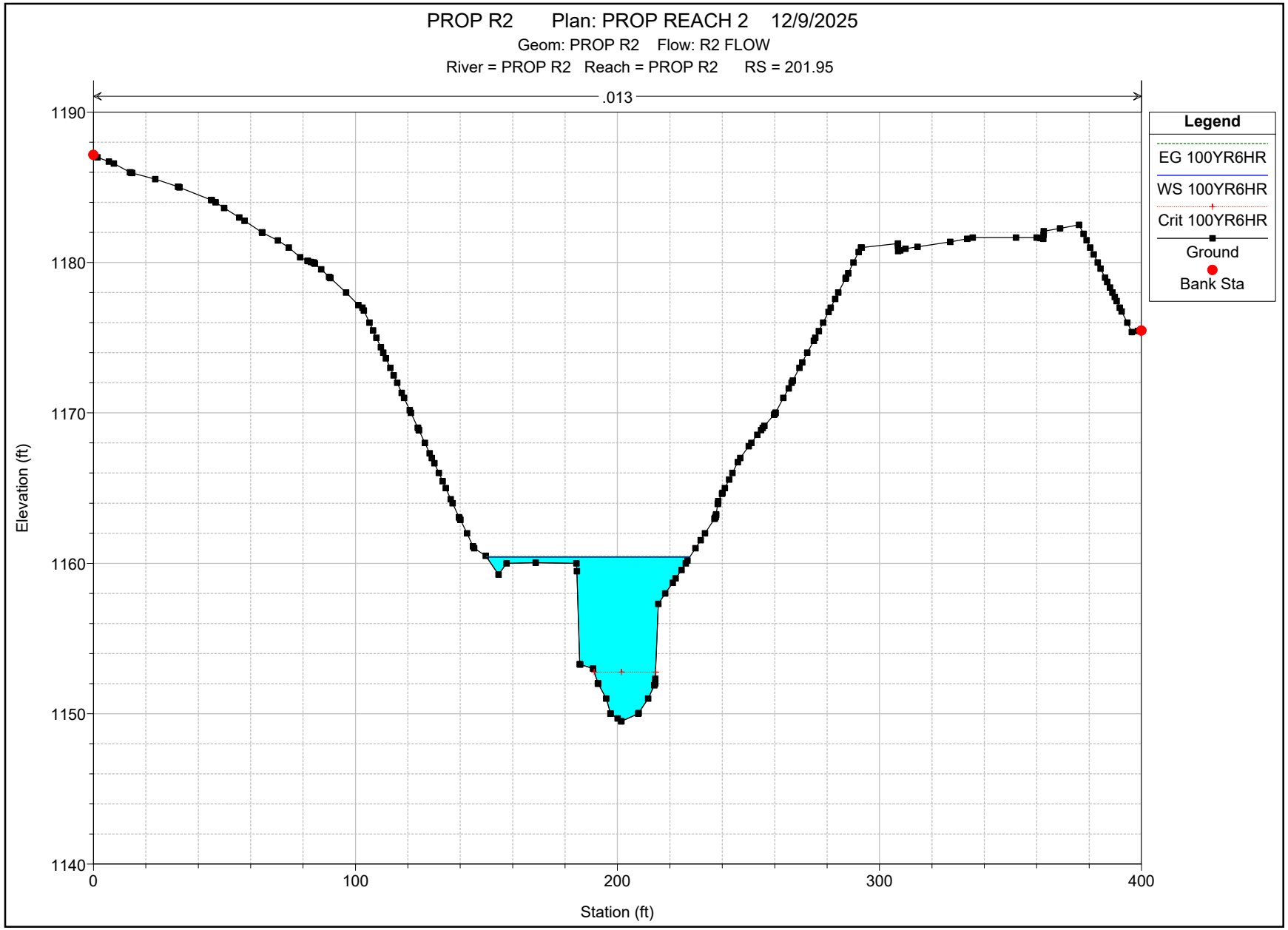

PROP R2 Plan: PROP REACH 2 12/9/2025
Geom: PROP R2 Flow: R2 FLOW
River = PROP R2 Reach = PROP R2 RS = 1100
.07
.1
.07
Legend
EG 100YR6HR
WS 100YR6HR
Crit 100YR6HR
Ground
Bank Sta
Elevation (ft)
Station (ft)
1220
1215
1210
1205
1200
1195
1190
1185
1180
0
100
200
300
400
500

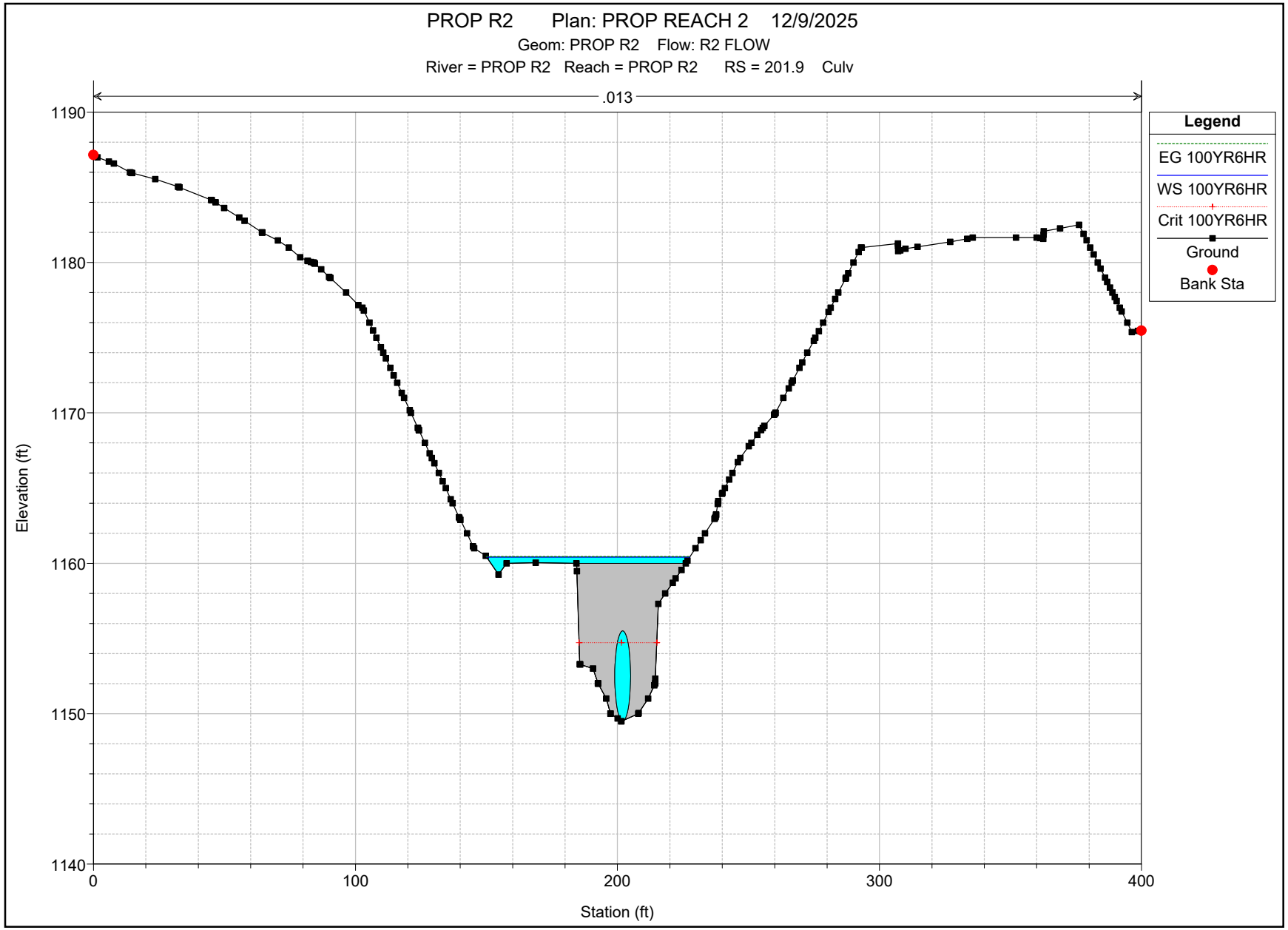

PROP R2 Plan: PROP REACH 2 12/9/2025
Geom: PROP R2 Flow: R2 FLOW
River = PROP R2 Reach = PROP R2 RS = 900
.07
.1
.07
Legend
EG 100YR6HR
WS 100YR6HR
Ground
Bank Sta
Elevation (ft)
1210
1205
1200
1195
1190
1185
1180
1175
0
100
200
300
400
500
Station (ft)

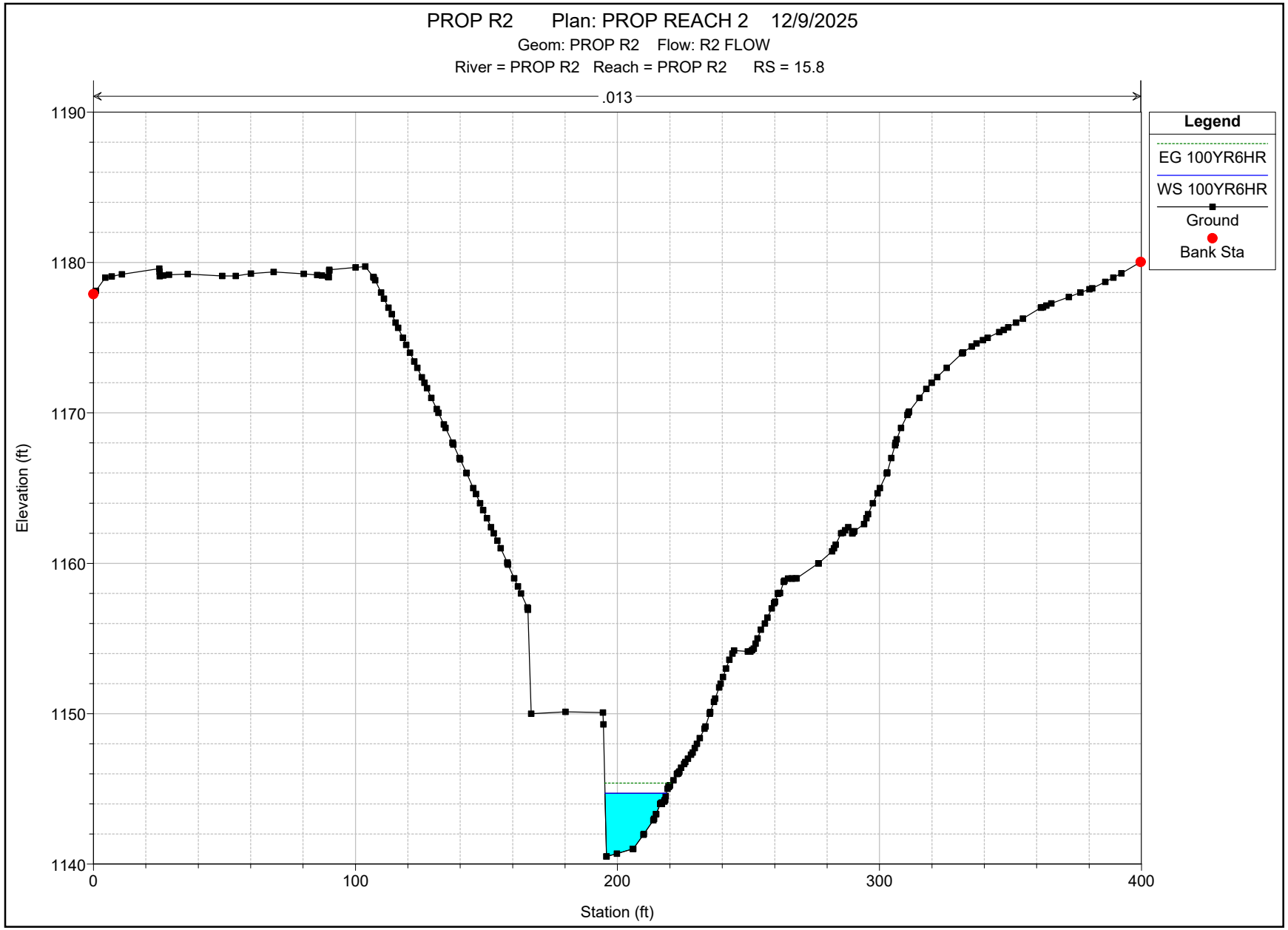

PROP R2 Plan: PROP REACH 2 12/9/2025
Geom: PROP R2 Flow: R2 FLOW
River = PROP R2 Reach = PROP R2 RS = 700
.07
.1
.07
Legend
EG 100YR6HR
WS 100YR6HR
Ground
Bank Sta
Elevation (ft)
Station (ft)
1205
1200
1195
1190
1185
1180
1175
1170
0
100
200
300
400

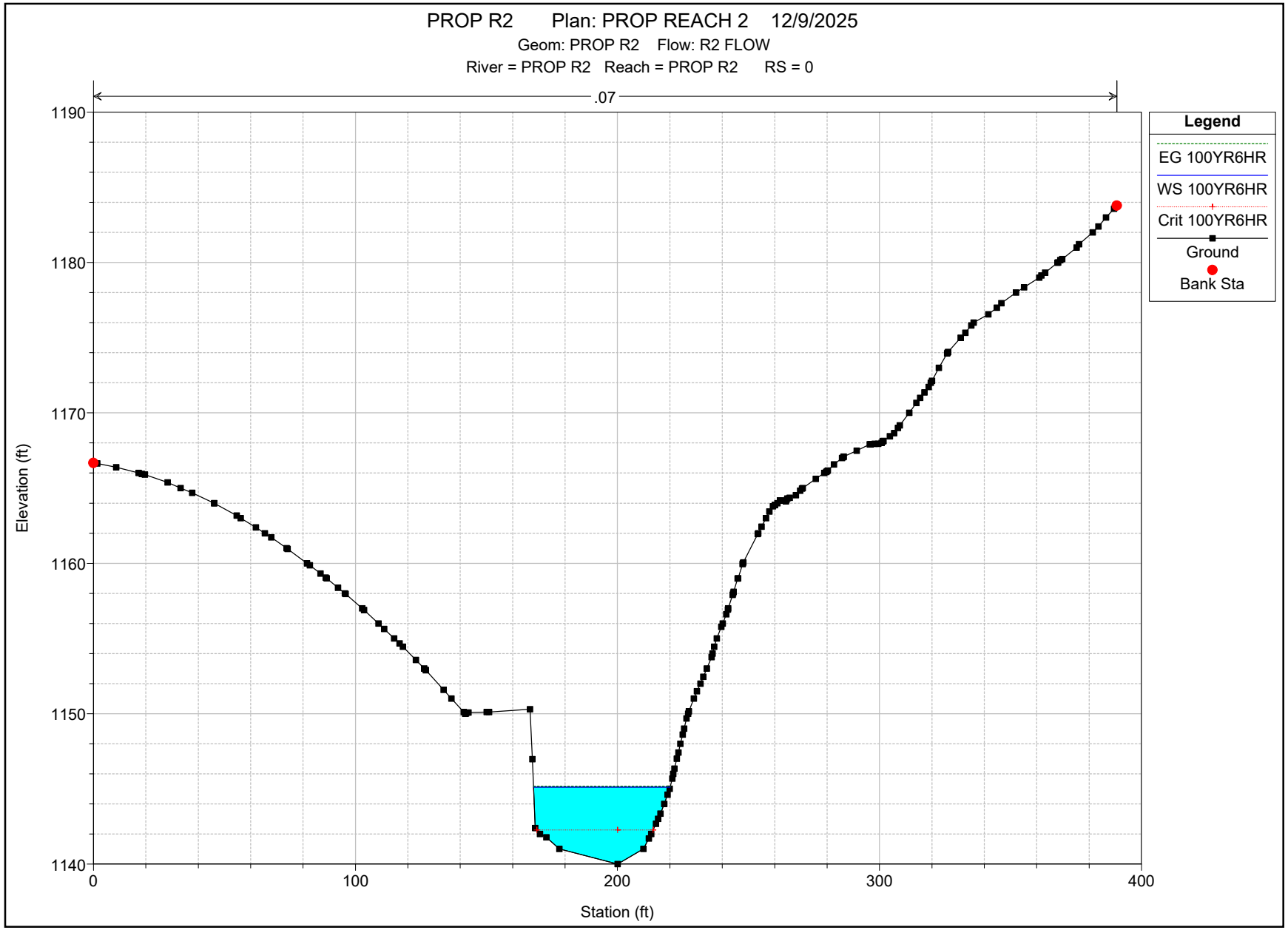

PROP R2 Plan: PROP REACH 2 12/9/2025
Geom: PROP R2 Flow: R2 FLOW
River = PROP R2 Reach = PROP R2 RS = 500
.07
Legend
EG 100YR6HR
WS 100YR6HR
Crit 100YR6HR
Ground
Bank Sta
Elevation (ft)
1210
1200
1190
1180
1170
1160
0
100
200
300
400
Station (ft)

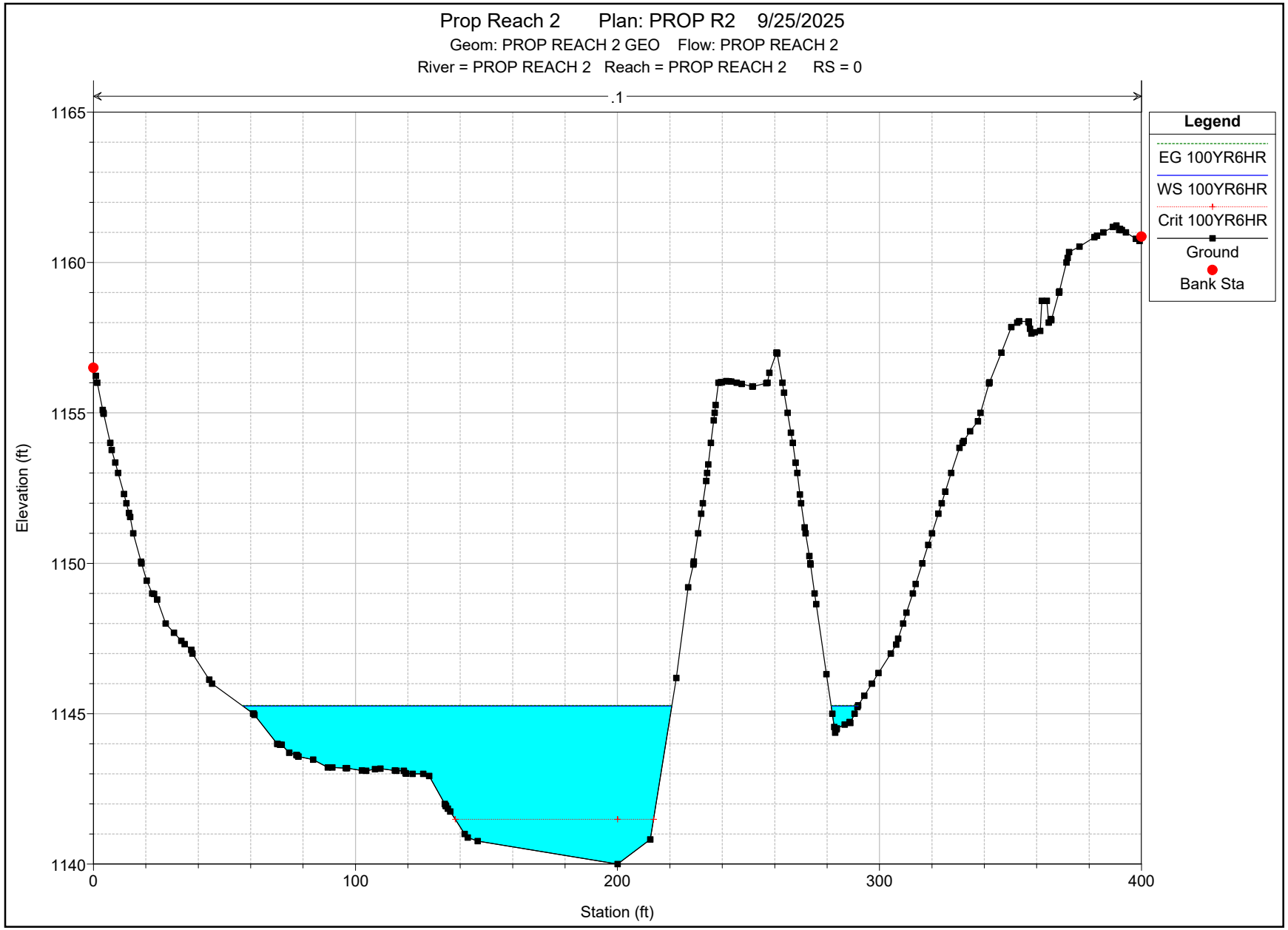

PROP R2 Plan: PROP REACH 2 12/9/2025
Geom: PROP R2 Flow: R2 FLOW
River = PROP R2 Reach = PROP R2 RS = 300
.07
Legend
EG 100YR6HR
WS 100YR6HR
Ground
Bank Sta
Elevation (ft)
Station (ft)
1200
1190
1180
1170
1160
1150
0
100
200
300
400


PROP R2 Plan: PROP REACH 2 12/9/2025
Geom: PROP R2 Flow: R2 FLOW
River = PROP R2 Reach = PROP R2 RS = 201.95
.013
Legend
EG 100YR6HR
WS 100YR6HR
Crit 100YR6HR
Ground
Bank Sta
Elevation (ft)
1190
1180
1170
1160
1150
1140
0
100
200
300
400
Station (ft)


PROP R2 Plan: PROP REACH 2 12/9/2025
Geom: PROP R2 Flow: R2 FLOW
River = PROP R2 Reach = PROP R2 RS = 201.9 Culv
.013
Legend
EG 100YR6HR
WS 100YR6HR
Crit 100YR6HR
Ground
Bank Sta
Elevation (ft)
1190
1180
1170
1160
1150
1140
0
100
200
300
400
Station (ft)


PROP R2 Plan: PROP REACH 2 12/9/2025
Geom: PROP R2 Flow: R2 FLOW
River = PROP R2 Reach = PROP R2 RS = 15.8
.013
Legend
EG 100YR6HR
WS 100YR6HR
Ground
Bank Sta
Elevation (ft)
Station (ft)
1190
1180
1170
1160
1150
1140
0
100
200
300
400


PROP R2 Plan: PROP REACH 2 12/9/2025
Geom: PROP R2 Flow: R2 FLOW
River = PROP R2 Reach = PROP R2 RS = 0
.07
Legend
EG 100YR6HR
WS 100YR6HR
Crit 100YR6HR
Ground
Bank Sta
Elevation (ft)
1190
1180
1170
1160
1150
1140
0
100
200
300
400
Station (ft)

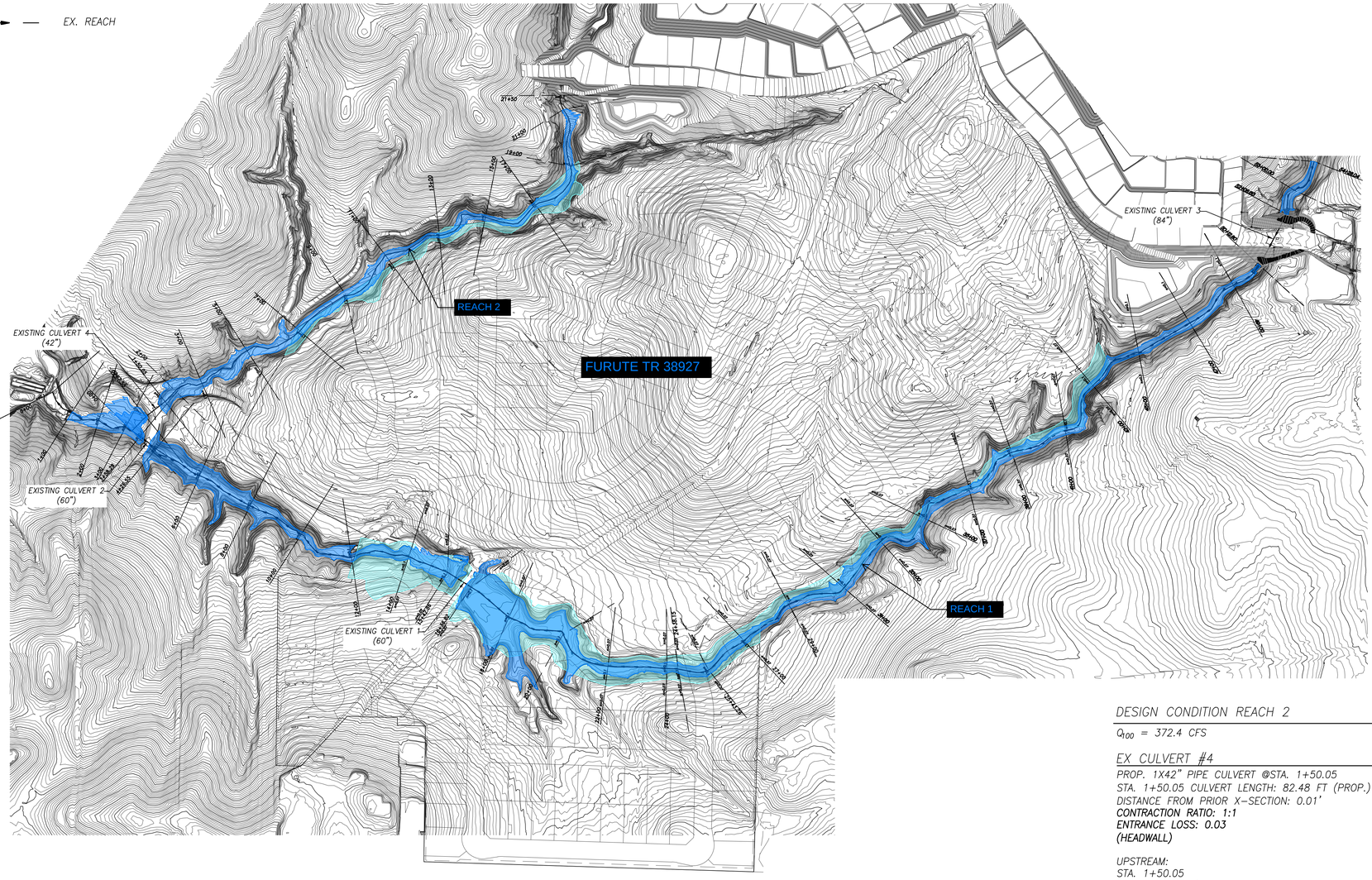

Prop Reach 2 Plan: PROP R2 9/25/2025
Geom: PROP REACH 2 GEO Flow: PROP REACH 2
River = PROP REACH 2 Reach = PROP REACH 2 RS = 0
.1
Legend
EG 100YR6HR
WS 100YR6HR
Crit 100YR6HR
Ground
Bank Sta
Elevation (ft)
1165
1160
1155
1150
1145
1140
0
100
200
300
400
Station (ft)

Appendix C – Pre Development and Post Development HEC-RAS Workplan

TR 38927 HEC-RAS ANALYSIS PRE-DEVELOPMENT WORKMAP

LEGEND

- INUNDATION BOUNDARY PRE-DEVELOPMENT 100 YEARS WITH MANNING'S N=0.1 FOR RIPARIAN AREAS AND N=0.07 FOR UNTOUCHED EXISTING AREAS.
- RIPARIAN LIMITS
- EX. REACH SAMPLE LINE
- EX. REACH



DESIGN CONDITION REACH 1

Q_{100} = 1079.5 CFS

EX CULVERT #3

PROP. 1X84" PIPE CULVERT @STA. 52+08.6
STA. 52+08.6 CULVERT LENGTH: 195 FT (PROP.)
DISTANCE FROM PRIOR X-SECTION: 0.01'
CONTRACTION RATIO: 1:1
ENTRANCE LOSS: 0.03
(HEADWALL)

UPSTREAM:
STA. 52+08.6
ELEV. 1283.3 (EX) @ INLET
DOWNSTREAM:
STA: 50+12.8
ELEV. 1282.2 (EX) @ OUTLET
EXPANSION RATIO: 1:1.5

CULVERT:
MANNING N: 0.013 (CONCRETE)
BARREL: US CENTER: 197
DS CENTER: 199

UPSTREAM SLOPE: 0.50%
DOWNSTREAM SLOPE: 0.50%

EX CULVERT #1

EX. 60" CMP PIPE @STA. 16+36.82
STA. 16+36.82 CULVERT LENGTH: 93.89 FT
DISTANCE FROM PRIOR X-SECTION: 0.06'
ENTRANCE LOSS: 0.03

UPSTREAM:
STA. 16+36.82
ELEV. 1199.27 (EX) @ INLET
DOWNSTREAM:
STA: 15+42.86
ELEV. 1183.5 (EX) @ OUTLET

CULVERT:
MANNING N: 0.025 (CMP)
BARREL: US CENTER: 230.91
DS CENTER: 225.42

UPSTREAM SLOPE: 1.2%
DOWNSTREAM SLOPE: 7.6%

EX CULVERT #2

EX. 60" CMP PIPE @STA. 3+58.29
STA. 3+58.29 CULVERT LENGTH: 68 FT
DISTANCE FROM PRIOR X-SECTION: 0.05'
ENTRANCE LOSS: 0.03

UPSTREAM:
STA. 4+26.55
ELEV. 1143 (EX) @ INLET
DOWNSTREAM:
STA: 3+58.29
ELEV. 1140.50 (EX) @ OUTLET

CULVERT:
MANNING N: 0.025 (CMP)
BARREL: US CENTER: 200
DS CENTER: 203

UPSTREAM SLOPE: 5.8%
DOWNSTREAM SLOPE: 1.3%

DESIGN CONDITION REACH 2

Q_{100} = 372.4 CFS

EX CULVERT #4

PROP. 1X42" PIPE CULVERT @STA. 1+50.05
STA. 1+50.05 CULVERT LENGTH: 82.48 FT (PROP.)
DISTANCE FROM PRIOR X-SECTION: 0.01'
CONTRACTION RATIO: 1:1
ENTRANCE LOSS: 0.03
(HEADWALL)

UPSTREAM:
STA. 1+50.05
ELEV. 1148 (EX) @ INLET
DOWNSTREAM:
STA: 0+67.55
ELEV. 1145 (EX) @ OUTLET
EXPANSION RATIO: 1:1.5

CULVERT:
MANNING N: 0.025 (CMP)
BARREL: US CENTER: 200
DS CENTER: 200

UPSTREAM SLOPE: 1.92%
DOWNSTREAM SLOPE: 1.85%

0 100 200 400 600 800
SCALE: 1" = 200'

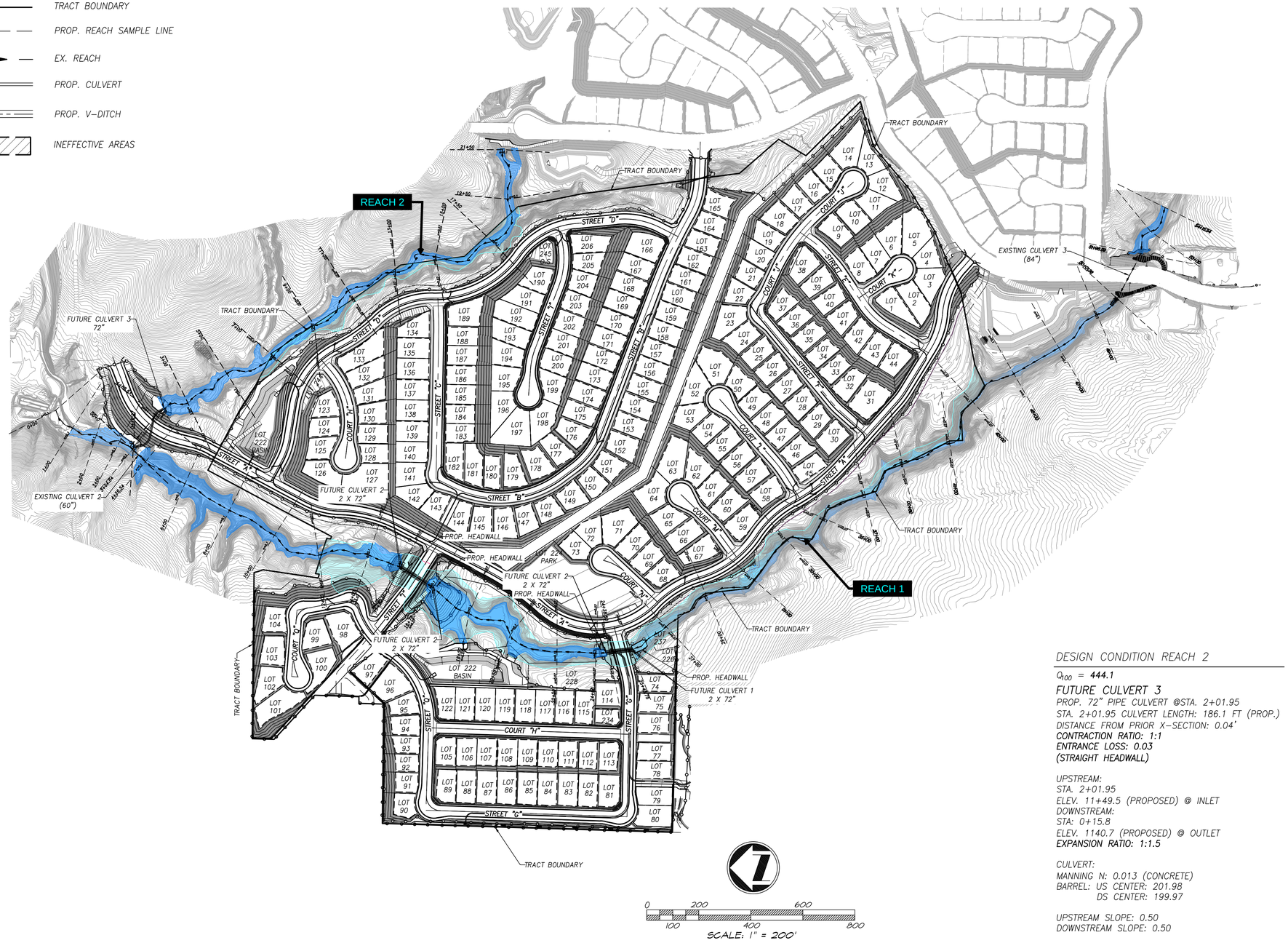
PREPARED DATE: DECEMBER 2024

PLANS PREPARED BY:
adkan ENGINEERS
Civil Engineering · Surveying · Planning
6879 Airport Drive, Riverside, CA 92504
Tel:(951) 688-0241 · Fax:(951) 688-0599

TR 38927 HEC-RAS ANALYSIS POST-DEVELOPMENT WORKMAP

LEGEND

- INUNDATION BOUNDARY PRO-DEVELOPMENT 100 YEARS WITH MANNING'S N=0.1 FOR RIPARIAN AREAS AND N=0.07 FOR UNTOUCHED EXISTING AREAS.
- RIPARIAN LIMITS
- TRACT BOUNDARY
- PROP. REACH SAMPLE LINE
- EX. REACH
- PROP. CULVERT
- PROP. V-DITCH
- INEFFECTIVE AREAS



DESIGN CONDITION REACH 1

Q_{100} = **1245.2**

FUTURE CULVERT 1

PROP. 2x72" PIPE CULVERT @STA. 25+43.75
STA. 25+43.75 CULVERT LENGTH: 105.15 FT (PROP.)
DISTANCE FROM PRIOR X-SECTION: 0.05'
CONTRACTION RATIO: 1:1
ENTRANCE LOSS: 0.03
(HEADWALL)

UPSTREAM:
STA. 25+43.75
ELEV. 1217.7 (PROPOSED) @ INLET
DOWNSTREAM:
STA: 24+38.5
ELEV. 1216 (PROPOSED) @ OUTLET
EXPANSION RATIO: 1:1.5

CULVERT:
MANNING N: 0.013 (CONCRETE)
BARREL: US CENTER: 173
DS CENTER: 157

UPSTREAM SLOPE: 0.50
DOWNSTREAM SLOPE: 0.50

FUTURE CULVERT 2

PROP. 2x72" PIPE CULVERT @STA. 16+78.7
STA. 16+78.7 CULVERT LENGTH: 148.25 FT (PROP.)
DISTANCE FROM PRIOR X-SECTION: 0.05'
CONTRACTION RATIO: 1:1
ENTRANCE LOSS: 0.03
(STRAIGHT HEADWALL)

UPSTREAM:
STA. 16+78.7
ELEV. 1185.01 (PROPOSED) @ INLET
DOWNSTREAM:
STA: 15+30.35
ELEV. 1184.5 (PROPOSED) @ OUTLET
EXPANSION RATIO: 1:1.5

CULVERT:
MANNING N: 0.013 (CONCRETE)
BARREL: US CENTER: 205
DS CENTER: 200

UPSTREAM SLOPE: 0.50
DOWNSTREAM SLOPE: 0.50

EX CULVERT 2

PROP. 1X60" PIPE CULVERT @STA. 4+26.54
STA. 4+26.54 CULVERT LENGTH: 61.6 FT (PROP.)
DISTANCE FROM PRIOR X-SECTION: 0.1'
CONTRACTION RATIO: 1:1
ENTRANCE LOSS: 0.03
(HEADWALL)

UPSTREAM:
STA. 4+26.54
ELEV. 1144 (EX) @ INLET
DOWNSTREAM:
STA: 3+64.54
ELEV. 1141 (EX) @ OUTLET
EXPANSION RATIO: 1:1.5

CULVERT:
MANNING N: 0.025 (CMP)
BARREL: US CENTER: 200
DS CENTER: 201.32

UPSTREAM SLOPE: 5.8%
DOWNSTREAM SLOPE: 1.3%

EX CULVERT 3

PROP. 1X84" PIPE CULVERT @STA. 51+96.59
STA. 51+96.59 CULVERT LENGTH: 195 FT (PROP.)
DISTANCE FROM PRIOR X-SECTION: 0.09'
CONTRACTION RATIO: 1:1
ENTRANCE LOSS: 0.03
(HEADWALL)

UPSTREAM:
STA. 51+96.59
ELEV. 1283.3 (EX) @ INLET
DOWNSTREAM:
STA: 50+01.38
ELEV. 1282.2 (EX) @ OUTLET
EXPANSION RATIO: 1:1.5

CULVERT:
MANNING N: 0.013 (CONCRETE)
BARREL: US CENTER: 202.43
DS CENTER: 206.54

UPSTREAM SLOPE: 0.50%
DOWNSTREAM SLOPE: 0.50%

DESIGN CONDITION REACH 2

Q_{100} = **444.1**

FUTURE CULVERT 3

PROP. 72" PIPE CULVERT @STA. 2+01.95
STA. 2+01.95 CULVERT LENGTH: 186.1 FT (PROP.)
DISTANCE FROM PRIOR X-SECTION: 0.04'
CONTRACTION RATIO: 1:1
ENTRANCE LOSS: 0.03
(STRAIGHT HEADWALL)

UPSTREAM:
STA. 2+01.95
ELEV. 11+49.5 (PROPOSED) @ INLET
DOWNSTREAM:
STA: 0+15.8
ELEV. 1140.7 (PROPOSED) @ OUTLET
EXPANSION RATIO: 1:1.5

CULVERT:
MANNING N: 0.013 (CONCRETE)
BARREL: US CENTER: 201.98
DS CENTER: 199.97

UPSTREAM SLOPE: 0.50
DOWNSTREAM SLOPE: 0.50

PREPARED DATE: JULY 2024

PLANS PREPARED BY:
adkan ENGINEERS
Civil Engineering · Surveying · Planning
6879 Airport Drive, Riverside, CA 92504
Tel:(951) 688-0241 · Fax:(951) 688-0599

Appendix D – Soils Memorandum on Tributary Migration

July 29, 2024

Project No. 41.19909

Pulte Home Company, LLC
27401 Los Altos, Suite 400
Mission Viejo, California 92503

Attention: Mr. Patric Lynam

Subject: Lateral Migration of On-site Tributaries
Highland Grove 4, Tract 38927
Lake Matthews Area
County of Riverside, California

References: Geotechnical Due Diligence Evaluation, Proposed Highland Grove IV Residential Development, Lake Matthews Area, Riverside County, California, by Leighton and Associates, Inc., PN. 41.19909, dated November 17, 2023.

Highland Grove 4 Site Plans, by Adkan Engineers, (undated).

In accordance with a request by Mitch Adkison with Adkan Engineers, this letter is to provide our opinion regarding the possible migration of the tributary drainages on-site. It is our understanding that The County of Riverside Flood Control (RCFC) agency has reviewed the submittal of Highland Grove IV and they conveyed a concern for lateral migration of the existing flow line for the two main tributaries that bisect the site. Based on our above geotechnical report and understanding of the site geology, these tributaries are incised into granitic bedrock, and generally exhibit minimum flow. As such, it is our opinion that lateral migration of the flow lines for these tributaries should not be a design concern during the life time of this project.

The opportunity to be of service is sincerely appreciated. If you should have any questions, please do not hesitate to call our office.

Respectfully submitted,
LEIGHTON AND ASSOCIATES, INC.





Brent Adam, CEG
Senior Project Geologist
Ext 8923, badam@leightongroup.com

Distribution: (1) Addressee (PDF via email)

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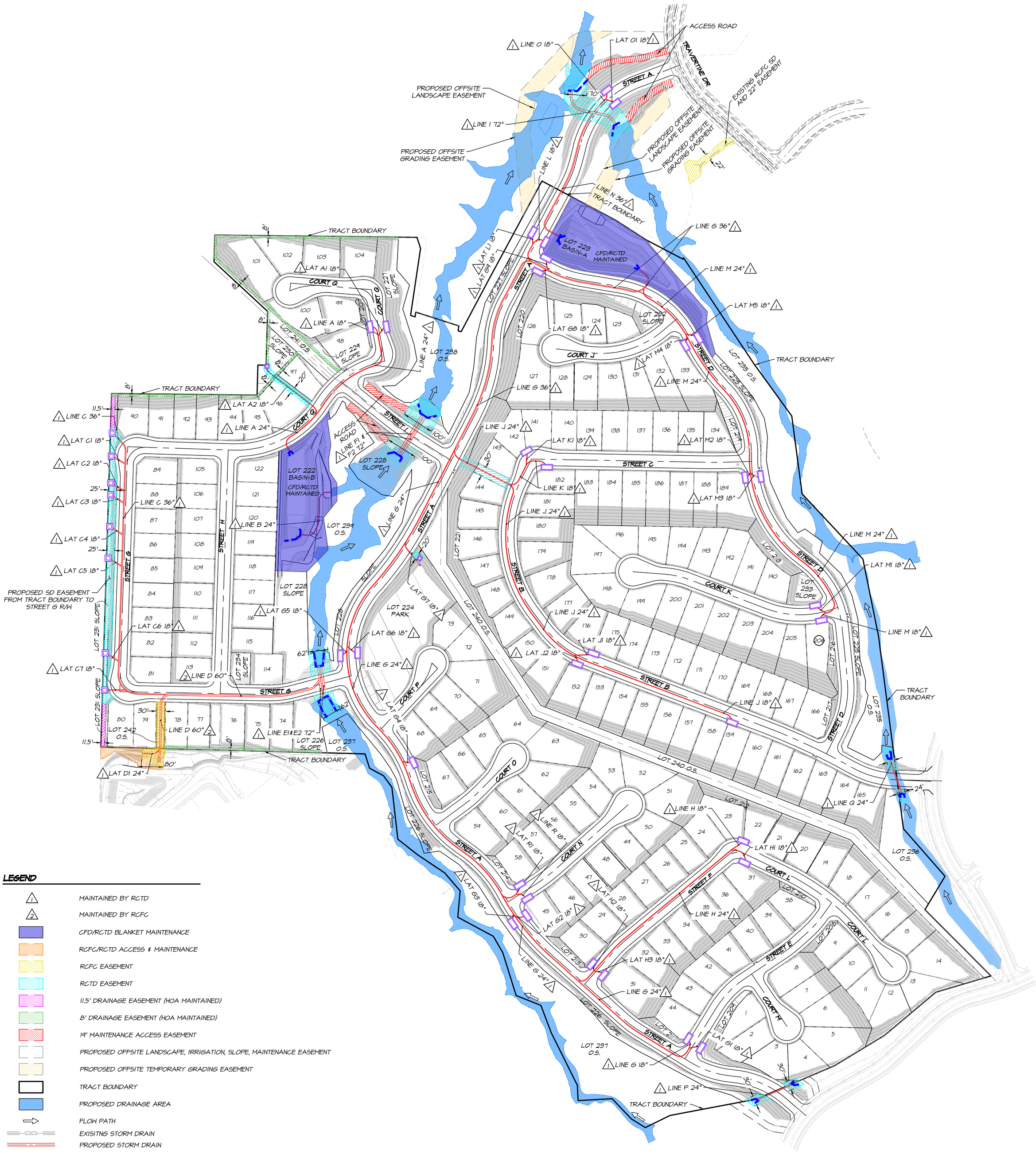


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Appendix H – Facilities and Easement Exhibit

TTM 38927 HIGHLAND GROVE IV STORM DRAIN MAINTENANCE EXHIBIT



LEGEND

- MAINTAINED BY RCTD
- MAINTAINED BY RCFC
- CFD/RCTD BLANKET MAINTENANCE
- RCFC/RCTD ACCESS & MAINTENANCE
- RCFC EASEMENT
- RCTD EASEMENT
- 11.5' DRAINAGE EASEMENT (HOA MAINTAINED)
- 8' DRAINAGE EASEMENT (HOA MAINTAINED)
- 19' MAINTENANCE ACCESS EASEMENT
- PROPOSED OFFSITE LANDSCAPE, IRRIGATION, SLOPE, MAINTENANCE EASEMENT
- PROPOSED OFFSITE TEMPORARY GRADING EASEMENT
- TRACT BOUNDARY
- PROPOSED DRAINAGE AREA
- FLOW PATH
- EXISITNG STORM DRAIN
- PROPOSED STORM DRAIN
- STORM DRAIN EASEMENT
- PROPOSED HEADWALL
- PROPOSED CATCH BASIN

0 150 450
75 300 600
SCALE: 1" = 150'

PREPARED DATE: December 2025

PLANS PREPARED BY:
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