

PRELIMINARY HYDROLOGY CALCULATIONS

FOR

AVENUE M INDUSTRIAL DEVELOPMENT 3347 E. AVENUE M PALMDALE, CALIFORNIA

PREPARED FOR

TRANSWESTERN DEVELOPMENT COMPANY

3501 JAMBOREE, SUITE 4400 NEWPORT BEACH, CA 92660 PHONE: (949) 351-5186

> JANUARY 13, 2022 JUNE 29, 2023 JANUARY 25, 2024

> > JOB NO. 4086

PREPARED BY

THIENES ENGINEERING 14349 FIRESTONE BLVD. LA MIRADA, CALIFORNIA 90638 (714) 521-4811

PRELIMINARY HYDROLOGY **CALCULATIONS**

FOR

AVENUE M INDUSTRIAL DEVELOPMENT

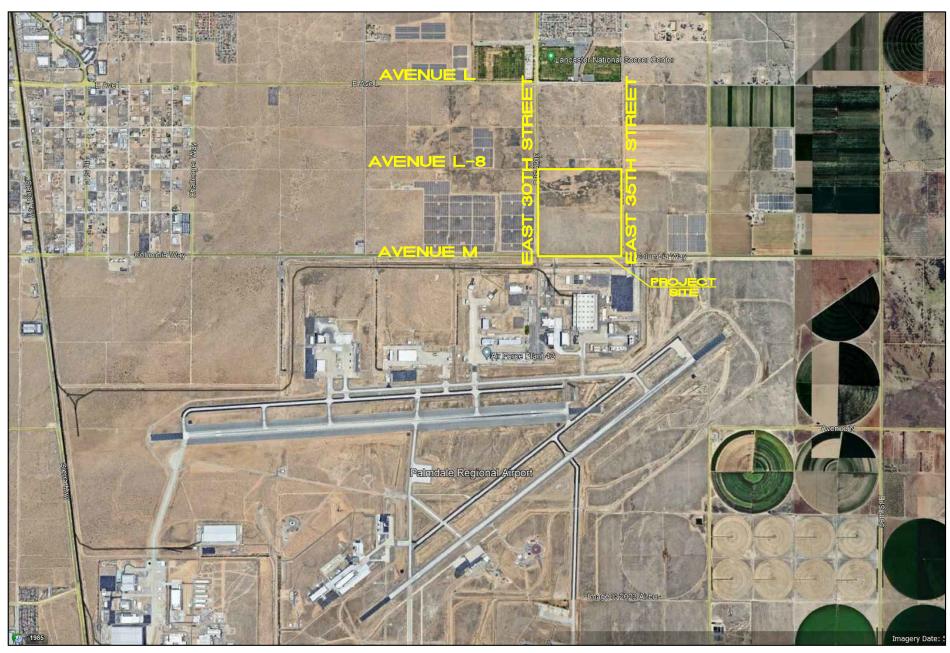
PREPARED UNDER THE SUPERVISION OF

DATE:

REINHARD STENZEL

R.C.E. 56155

EXP. 12/31/2024



Thienes Engineering, Inc.

CIVIL ENGINEERING • LAND SURVEYING
14349 FIRESTONE BOULEVARD
LA MIRADA, CALIFORNIA 90638
PH.(714)521-4811 FAX(714)521-4173

"VICINITY MAP"
FOR
AVENUE M INDUSTRIAL
DEVELOPMENT
PALMDALE, CA

INTRODUCTION

A: PROJECT LOCATION

The project site encompasses 150.18 acres is located at north of Avenue M between East 30th Street to the west and East 35th Street to the east in the City of Palmdale, California. Please see next page for vicinity map.

B: STUDY PURPOSE

The purpose of this study is to determine 50-year existing and proposed condition peak flow rates from the project site and to justify the design of the proposed storm drain improvements.

C: PROJECT STAFF:

Thienes Engineering staff involved in this study include:

Reinhard Stenzel James Wickenhaeuser

APPENDIX DESCRIPTION

A	REFERENCE MATERIALS

B HYDROLOGY CALCULATIONS

C DETENTION CALCULATIONS

D HYDROLOGY MAP

DISCUSSION

Master Plan Drainage

Per City of Palmdale's Master Plan of Drainage, a majority of the project site is part of the Anaverde Watershed and is tabled to two unconstructed master plan storm drains, one originating near the center of the project site area, and the other one originating in 30th Street East along the project frontage. Both unconstructed master plan lines drain northerly to an existing drainage channel north of Avenue L and east of 30th Street East, in the City of Lancaster.

Palmdale's master plan indicates a discharge rate of 414 cfs from the existing Plant 42 detention basin to be conveyed northerly via a 96" pipe, assuming the construction of several detention basins throughout the watershed upstream of Plant 42 to reduce tributary flows to Plant 42 and, in turn, to the proposed master plan storm drain. The existence of the proposed upstream detention basins needs to be verified, and further study may be required.

The 96"-102" Master Plan RCP will be constructed within East 30th Street from the Plant 42 Basin north to the intersection of Avenue L-8. The pipe will be sealed at the intersection pending future development and continued extension north to the downstream facilities. The storm drain will burp out of a large catch basin at the south easterly corner of the intersection. Runoff will continue surface draining as in the existing condition. Since the 96" storm drain doesn't have an outlet, a 12" pipe will be constructed that will drain the dead storage in the storm drain to the proposed onsite retention basin. Stormwater will be directed into the basin and infiltrated along with onsite runoff.

Per City of Palmdale drainage guidelines, proposed onsite detention basins must restrict proposed condition site discharge to 85 percent of existing condition site runoff. However, due to the absence of any nearby storm drain improvements, the proposed basin will retain the entire storm runoff volume. Hydrologic calculations show the 150.18-acre project site will require detention volume of approximately 27.5 ac-ft for a 50-year storm and 30.8 ac-ft for a 100-year storm.

Per FIRM map effective September 26, 2008, the project site is in "Zone X Shaded", delineating areas of 0.2 percent annual chance flood, areas of 1 percent annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile, and areas protected by levees from 1 percent annual chance flood.

Existing Condition

Under existing condition, the project site (150.18 acres total) is an undeveloped dirt lot. The existing condition 50-year peak flow rate for the project site is approximately 14.6 cfs. The resultant allowable proposed condition 50-year discharge is $14.6 \times 0.85 = 12.4 \text{ cfs}$.

Proposed Condition

In general, proposed condition runoff from each building drains to its truck yard and parking lots, then drains via proposed catch basins and onsite storm drains to a detention basin adjacent to the project's easterly or westerly property line. There are two main storm drain lines, Line A and Line E which will drain northerly within the westerly and easterly drive aisles respectively and convey runoff from other storm drain lines to the northerly retention basin.

The Building 1 roof ridge will split flows approximately evenly between the northerly and southerly truck yards. Two private storm drain systems will take runoff from the southerly truck yard to the basin on the northerly portion of the project site. Each drain will convey runoff approximately half of the runoff from each truck yard. Storm Drain Line A will take runoff from the southerly truck yard westerly then northerly through the westerly drive aisles, while Storm Drain Line E will take runoff easterly then northerly through the easterly drive aisle.

The westerly portion of Building 1 northerly truck yard will drain to Storm Drain Line D which connects to Storm Drain Line A in the westerly drive aisle. The easterly portion of the truck yard will drain to Storm Drain Line F which connects to Storm Drain Line E in the easterly drive aisle.

Building 2 drains the same way as Building 1. The roof ridge will split flows approximately evenly between the northerly and southerly truck yards. The truck yards each drain approximately half easterly and half westerly via a private storm drain system.

Storm Drain Line C will take approximately half of the runoff from the southerly truck yard of Building 2 westerly towards Storm Drain Line A in the westerly drive aisle. Storm Drain Line G will take the other half of the runoff from the southerly truck yard of Building 2 easterly to Storm Drain Line E in the easterly drive aisle.

The westerly portion of Building 1 northerly truck yard will drain to Storm Drain Line B which connects to Storm Drain Line A in the westerly drive aisle. The easterly portion of truck yard will drain to Storm Drain Line H which connects to Storm Drain Line E in the easterly drive aisle.

The peak 50 and 100-year flow rates to the basin will be approximately 85.5 and 95.9 cfs respectively.

See Appendix B for hydrographs.

Basin Retention

The public storm drain system is incomplete downstream of the project site. Since the drain doesn't continue to the City of Lancaster Channel G-2 north of Avenue L, the proposed basin will retain the entire storm runoff volume. A factor of safety of two (2) has been applied which means that the basin will be able to store two (2) successive 100-year storms and still have freeboard. Hydrologic calculations show the 150.18-acre project site will require detention volume of approximately 27.5 ac-ft for a 50-year storm and 30.8 ac-ft for a 100-year storm. (See Appendix C)

The basin has a total volume of approximately 73.5 ac-ft with a water surface elevation of 2464. With one and a half feet of freeboard the basin has a volume of approximately 60 ac-ft. This is more than double the 100-year storm runoff volume so the proposed basin has sufficient volume to satisfy the safety factor. Since there aren't any drainage facilities to discharge to, this basin design will contain the runoff and infiltrate the stormwater to empty itself.

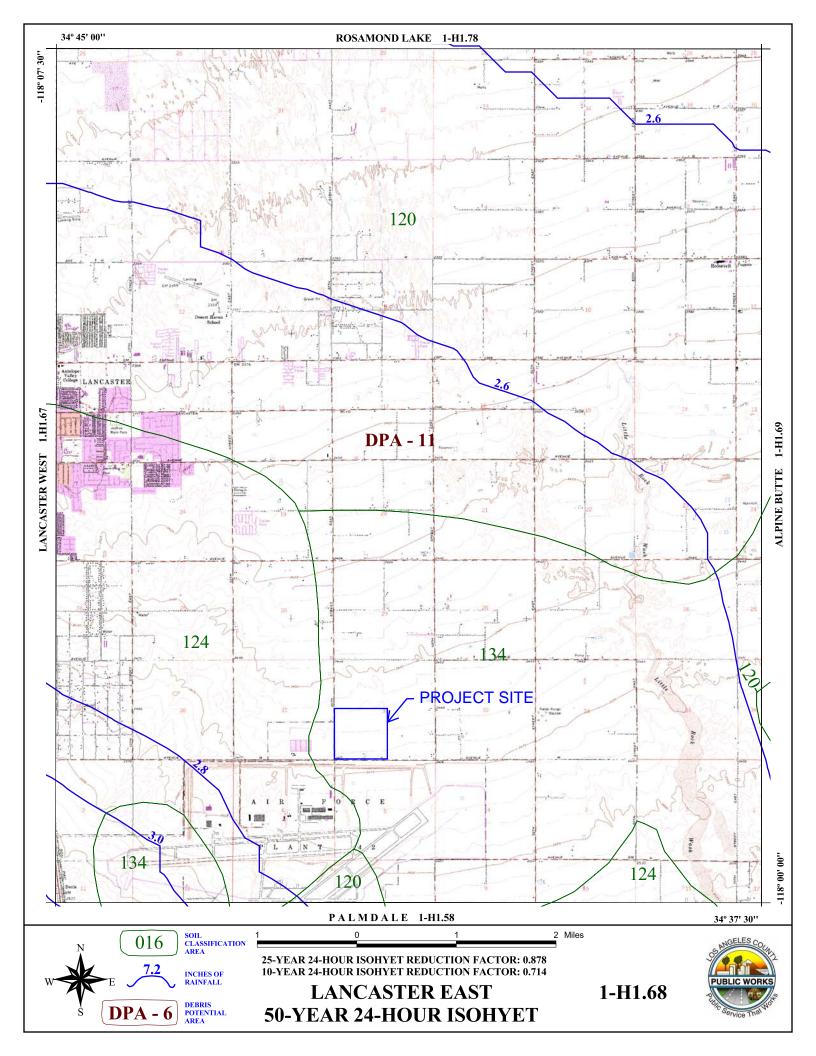
See Appendix C for detention calculations.

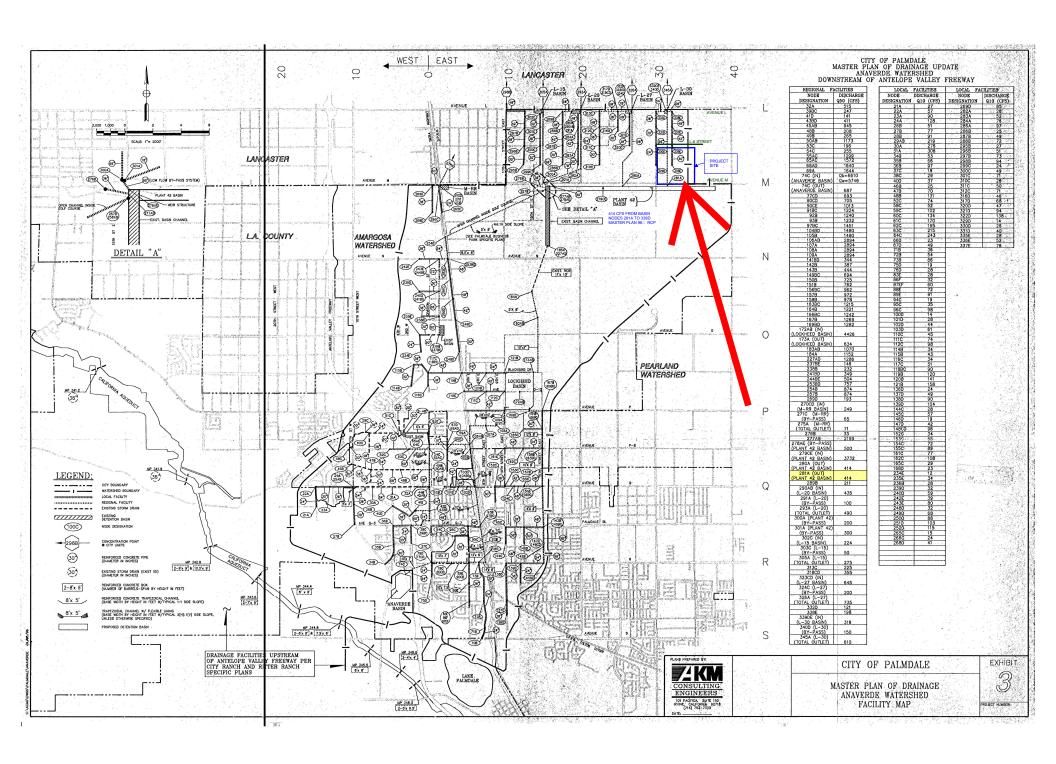
Methodology

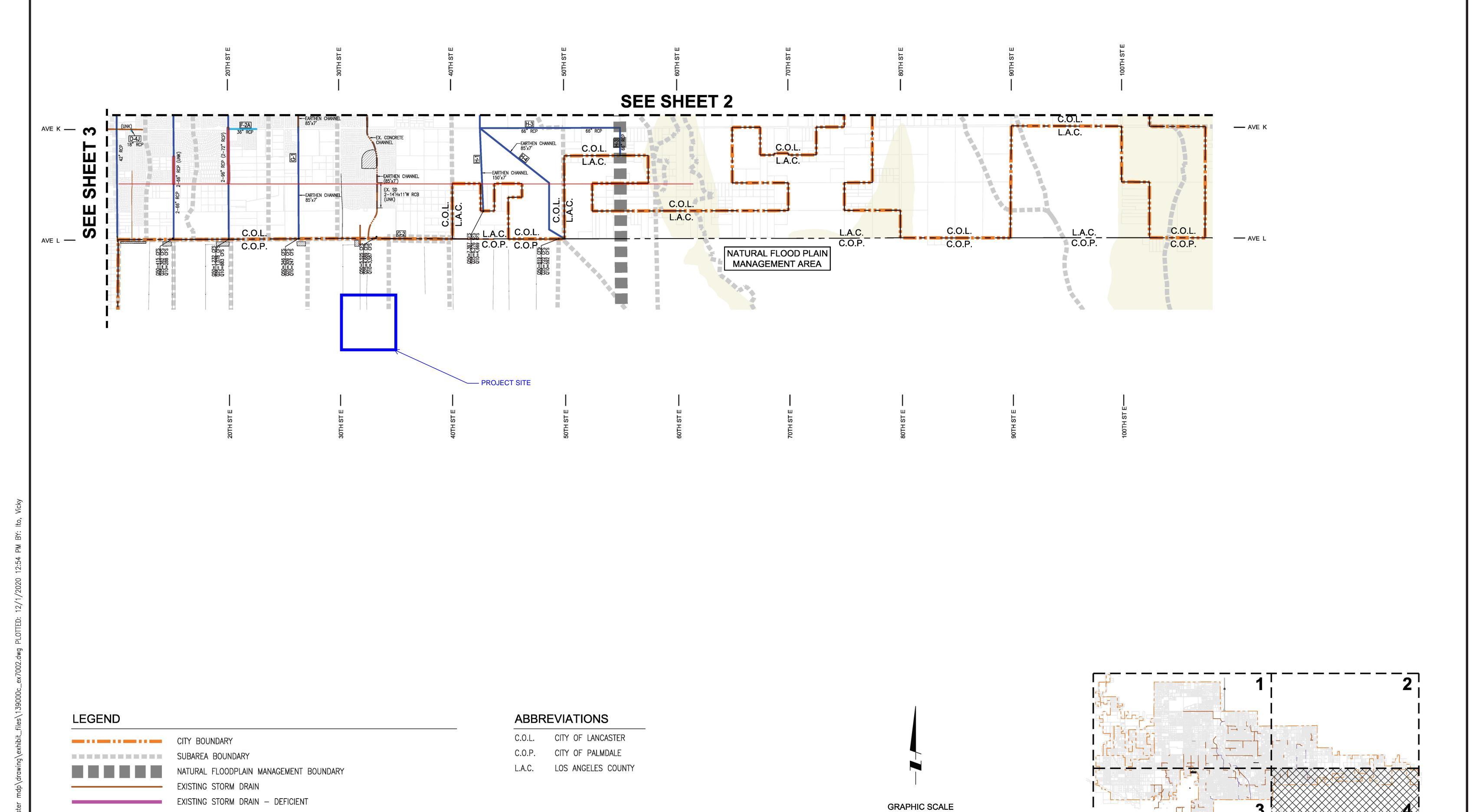
Hydrology calculations and detention calculations were computed using HydroCalc 1.0.2 software. The soil type is 134 per the Los Angeles County Hydrology Manual dated 2006. See Appendix "A" for reference materials.

APPENDIX A

REFERENCE MATERIALS







(IN FEET) 1 inch = 2000ft.

lancaster — ca
it's positively clear

KEYMAP

SCALE: 1"=15,000'

Stantec

38 TECHNOLOGY DRIVE IRVINE, CA 92618 949.923.6000 stant

stantec.com

CITY OF LANCASTER

PROPOSED MASTERPLAN

FACILITIES MAP

12/01/20

SHEET 4

OF **4**

PROPOSED REGIONAL STORM DRAIN, SIZED FOR 50-YEAR STORM EVENT

PROPOSED STORM DRAIN, SIZED FOR 25-YEAR STORM EVENT

FEMA 100-YEAR FLOODPLAIN

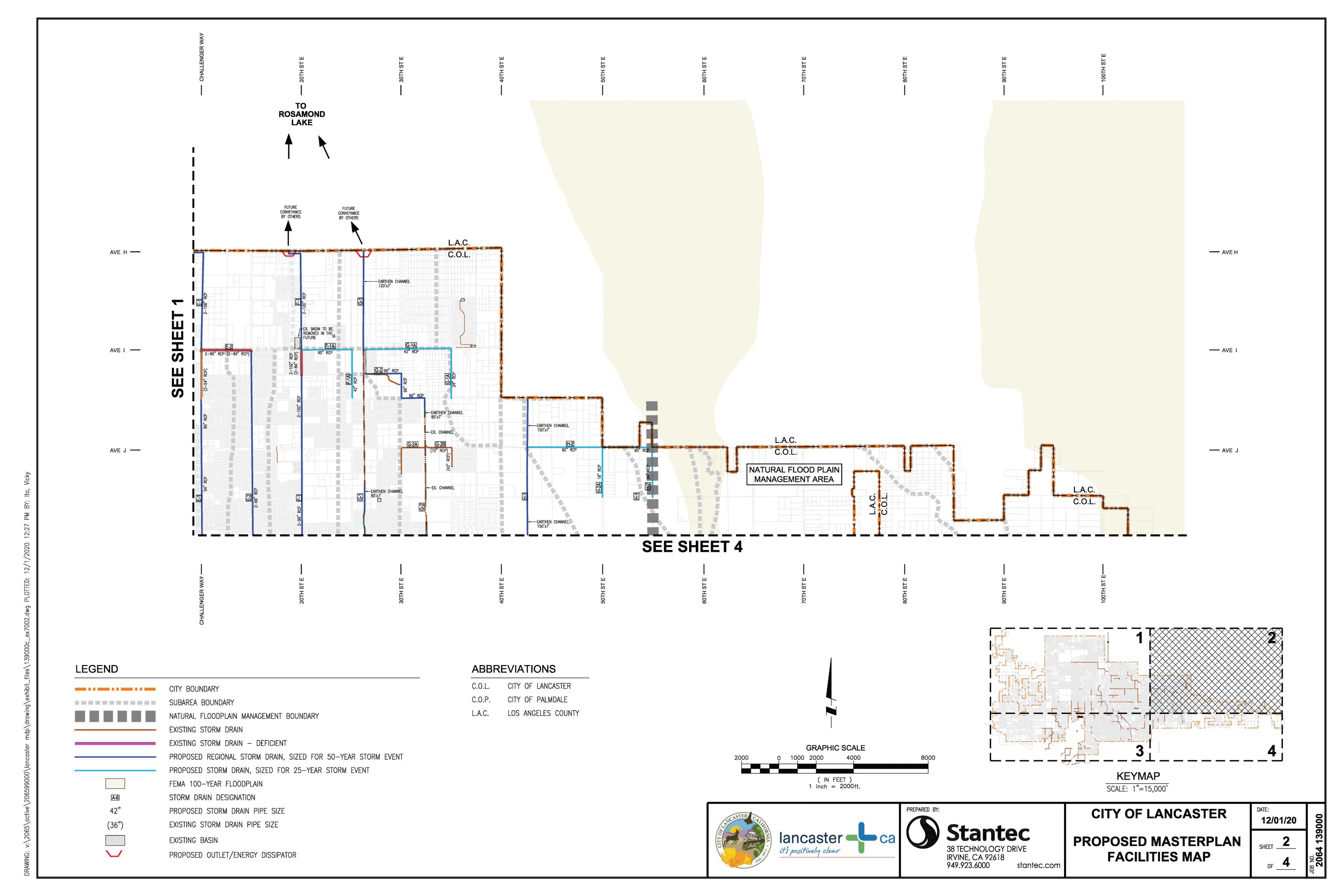
PROPOSED STORM DRAIN PIPE SIZE

PROPOSED OUTLET/ENERGY DISSIPATOR

EXISTING STORM DRAIN PIPE SIZE

STORM DRAIN DESIGNATION

EXISTING BASIN



The areas east of 15th Street East drain into the Plant 42 Basin. Two other drains which will be directed to the Plant 42 Basin collect runoff from the area west of Sierra Highway between Avenue O-8 and Avenue M-11 as well as most of the Lockheed property north of Avenue M-12.

The routing of the flows tributary to the Plant 42 Basin are summarized in Table IV-4.

The Plant 42 outlets are sized to discharge 414 cfs each at 25th Street East and 32nd Street East.

The portion of the watershed west of Sierra Highway and north of Avenue M-11 as well as a small area just east of the SPRR and south of Avenue M are planned to utilize a detention basin prior to outletting north to the City of Lancaster at the location of an existing flow path just east of the SPRR. The detention basin is utilized to reduce the peak outflow from these areas to the pre-development clear water flow. The routing conducted for this basin is summarized in Table IV-5. Alternatively, runoff from this area can be diverted west along Avenue M to Amargosa Creek, as the peak flow in Amargosa Creek will be reduced to less than half the design capacity of the channel at Avenue M.

Four combination flow by/flow through detention basins along the south side of Avenue L are planned for the City of Palmdale areas north of Avenue M. The purpose of these basins is to reduce the peak flow from their tributary areas so that the capacity of the Comprehensive Plan facilities are not exceeded. This is accomplished for all drains except the 15th Street East drain and 20th Street East drain where the releases from the south (272 cfs and 487 cfs) exceed the proposed Comprehensive Plan facility capacities by 12 cfs and 32 cfs, respectively. The routing of the four day hydrographs through the proposed basins at 15th Street East, 20th Street East, 27th Street East and 30th Street East are summarized in Tables IV-6 through IV-9, respectively.

Table IV-10 provides the computed peak flows for the pre-development and ultimate development conditions at selected locations. The estimated peak flow rates for the Comprehensive Plan facilities are also shown.

The recommended drainage facilities for the Anaverde Watershed downstream of the Antelope Valley Freeway crossing are shown on Exhibit 3.

TABLE IV-4
PROPOSED DETENTION BASIN FACILITIES
PLANT 42 BASIN

BASIN	RAT	ING TABLE	
ELEVATION (ft)		VOLUME (ac-ft)	
2459		0.0	
2460		44.9	
2461		90.9	
2462		138.0	
2464	235.7		
2466		338.0	
2468	2468		
2470		556.8	
2472		673.4	
2474		794.5	
2476 920.3		920.3	
TRIBUTARY AREAS BETWEEN LOCKHEED BASIN AND			
PLANT 42 BASIN = 5,569 acr	res		

10, 25	AND 50-Y	EAR S'	TORM	EVENTS					
	PEAK	INFLOW	(cfs) *	PEAK	OUTFLOV	W (cfs)	MAX.	WATER I	ELEV.
DAY	10-YR	25-YR	50-YR	10-YR	25-YR	50-YR	10-YR	25-YR	50-YR
1	92	129	166	0	6	11	2460.0	2460.4	2460.7
2	420	699	1027	102	175	243	2462.7	2463.7	2464.5
3	365	689	983	122	190	266	2463.0	2463.9	2464.8
4	1711	2702	3732	491	680	828	2467.2	2470.1	2473.0
* EXCLUDING THE B	Y-PASS RUNO	FF OF 500 C	FS						

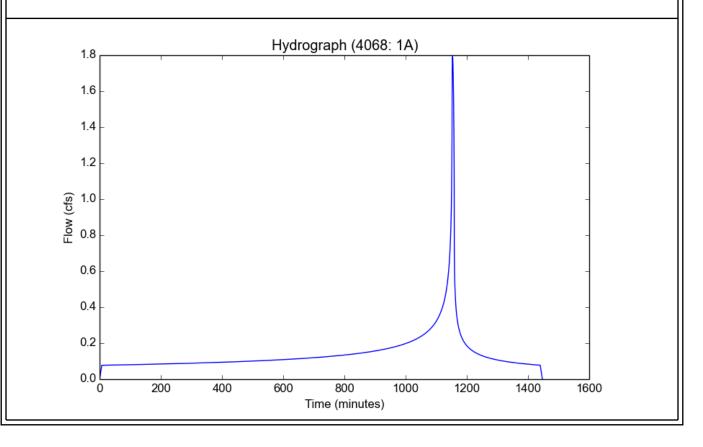
APPENDIX B

HYDROLOGY CALCULATIONS

File location: O:/4000-4099/4068/HYDROLOGY/4068 Report A.pdf Version: HydroCalc 1.0.3

Project Name	4068
Subarea ID	1A
Area (ac)	1.58
Flow Path Length (ft)	222.0
Flow Path Slope (vft/hft)	0.016
50-yr Rainfall Depth (in)	2.7
Percent Impervious	0.9
Soil Type	134
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

Output Modulio	
Modeled (50-yr) Rainfall Depth (in)	2.7
Peak Intensity (in/hr)	1.3753
Undeveloped Runoff Coefficient (Cu)	0.1525
Developed Runoff Coefficient (Cd)	0.8253
Time of Concentration (min)	7.0
Clear Peak Flow Rate (cfs)	1.7932
Burned Peak Flow Rate (cfs)	1.7932
24-Hr Clear Runoff Volume (ac-ft)	0.2892
24-Hr Clear Runoff Volume (cu-ft)	12595.5288

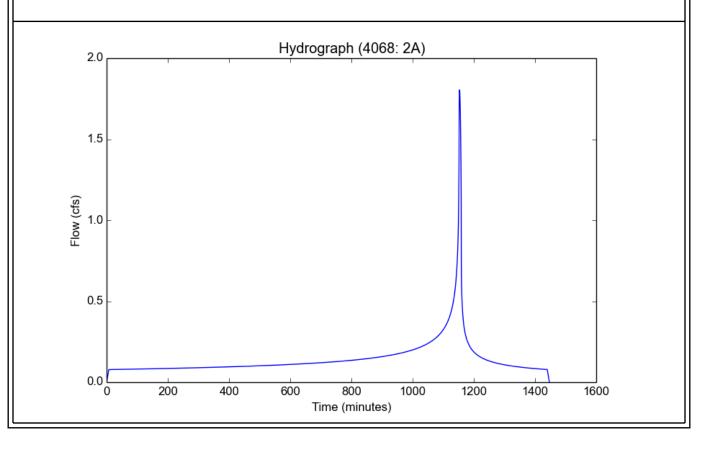


File location: O:/4000-4099/4068/HYDROLOGY/4068 Report A.pdf Version: HydroCalc 1.0.3

Input	Parameters
-------	-------------------

Project Name	4068
Subarea ID	2A
Area (ac)	1.59
Flow Path Length (ft)	222.0
Flow Path Slope (vft/hft)	0.016
50-yr Rainfall Depth (in)	2.7
Percent Impervious	0.9
Soil Type	134
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

Modeled (50-yr) Rainfall Depth (in)	2.7
Peak Intensity (in/hr)	1.3753
Undeveloped Runoff Coefficient (Cu)	0.1525
Developed Runoff Coefficient (Cd)	0.8253
Time of Concentration (min)	7.0
Clear Peak Flow Rate (cfs)	1.8046
Burned Peak Flow Rate (cfs)	1.8046
24-Hr Clear Runoff Volume (ac-ft)	0.291
24-Hr Clear Runoff Volume (cu-ft)	12675.2473
,	

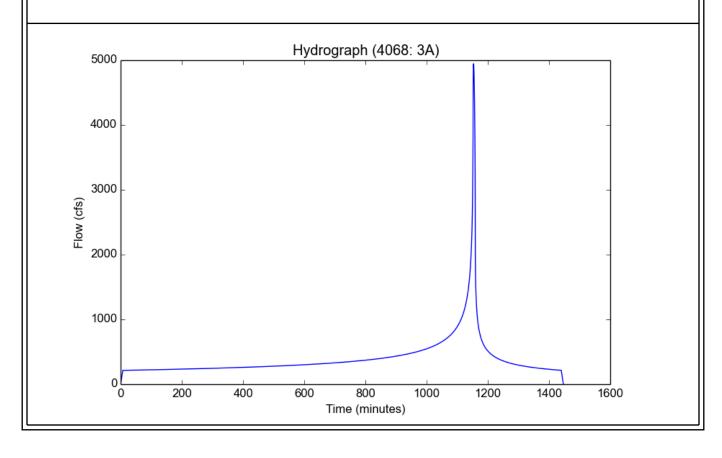


File location: O:/4000-4099/4068/HYDROLOGY/4068 Report A.pdf Version: HydroCalc 1.0.3

Input Parameters

part arameters	
Project Name	4068
Subarea ID	3A
Area (ac)	4358.0
Flow Path Length (ft)	222.0
Flow Path Slope (vft/hft)	0.016
50-yr Rainfall Depth (in)	2.7
Percent Impervious	0.9
Soil Type	134
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

Modeled (50-yr) Rainfall Depth (in)	2.7
Peak Intensity (in/hr)	1.3753
Undeveloped Runoff Coefficient (Cu)	0.1525
Developed Runoff Coefficient (Cd)	0.8253
Time of Concentration (min)	7.0
Clear Peak Flow Rate (cfs)	4946.0817
Burned Peak Flow Rate (cfs)	4946.0817
24-Hr Clear Runoff Volume (ac-ft)	797.5514
24-Hr Clear Runoff Volume (cu-ft)	34741338.3328
,	

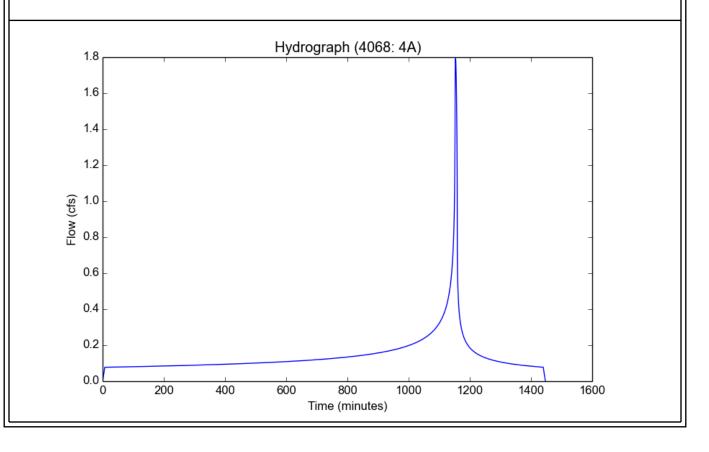


File location: O:/4000-4099/4068/HYDROLOGY/4068 Report A.pdf Version: HydroCalc 1.0.3

Input	Param	eters
-------	--------------	-------

Project Name	4068
Subarea ID	4A
Area (ac)	1.58
Flow Path Length (ft)	222.0
Flow Path Slope (vft/hft)	0.016
50-yr Rainfall Depth (in)	2.7
Percent Impervious	0.9
Soil Type	134
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

Modeled (50-yr) Rainfall Depth (in)	2.7
Peak Intensity (in/hr)	1.3753
Undeveloped Runoff Coefficient (Cu)	0.1525
Developed Runoff Coefficient (Cd)	0.8253
Time of Concentration (min)	7.0
Clear Peak Flow Rate (cfs)	1.7932
Burned Peak Flow Rate (cfs)	1.7932
24-Hr Clear Runoff Volume (ac-ft)	0.2892
24-Hr Clear Runoff Volume (cu-ft)	12595.5288
,	

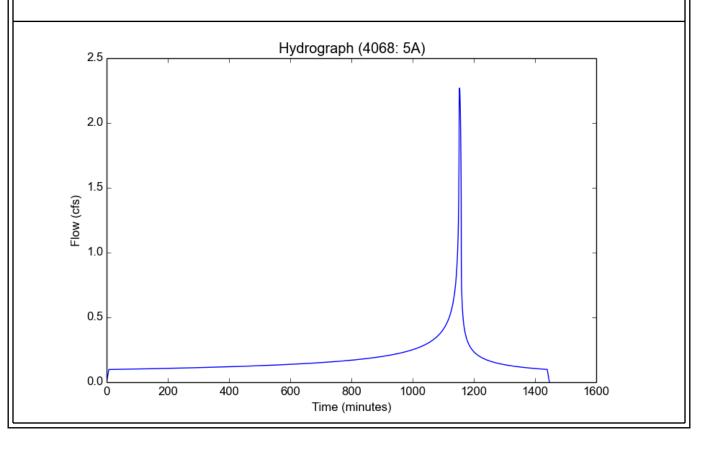


File location: O:/4000-4099/4068/HYDROLOGY/4068 Report A.pdf Version: HydroCalc 1.0.3

Input Parameters	
Project Name	4068
Subarea ID	5A
Area (ac)	2.0
Flow Path Length (ft)	222.0
Flow Path Slope (vft/hft)	0.016
50-yr Rainfall Depth (in)	2.7
Percent Impervious	0.9
Soil Type	134
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

Output Results

Modeled (50-yr) Rainfall Depth (in)	2.7
Peak Intensity (in/hr)	1.3753
Undeveloped Runoff Coefficient (Cu)	0.1525
Developed Runoff Coefficient (Cd)	0.8253
Time of Concentration (min)	7.0
Clear Peak Flow Rate (cfs)	2.2699
Burned Peak Flow Rate (cfs)	2.2699
24-Hr Clear Runoff Volume (ac-ft)	0.366
24-Hr Clear Runoff Volume (cu-ft)	15943.7074
,	

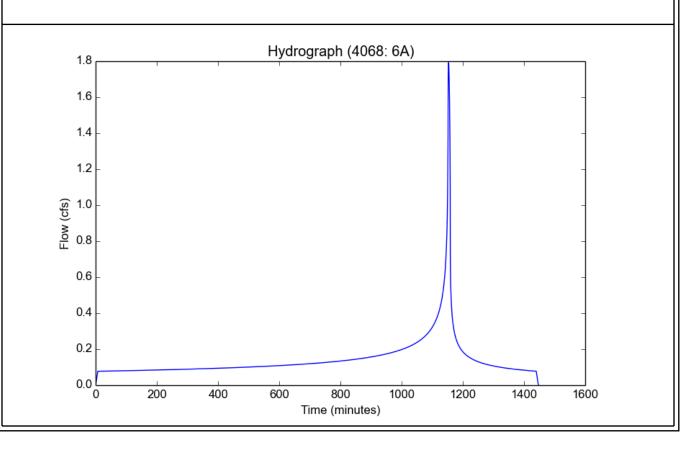


File location: O:/4000-4099/4068/HYDROLOGY/4068 Report A.pdf Version: HydroCalc 1.0.3

Input	Parameters
-------	-------------------

Project Name	4068
Subarea ID	6A
Area (ac)	1.58
Flow Path Length (ft)	222.0
Flow Path Slope (vft/hft)	0.016
50-yr Rainfall Depth (in)	2.7
Percent Impervious	0.9
Soil Type	134
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

Calput Nocalio	
Modeled (50-yr) Rainfall Depth (in)	2.7
Peak Intensity (in/hr)	1.3753
Undeveloped Runoff Coefficient (Cu)	0.1525
Developed Runoff Coefficient (Cd)	0.8253
Time of Concentration (min)	7.0
Clear Peak Flow Rate (cfs)	1.7932
Burned Peak Flow Rate (cfs)	1.7932
24-Hr Clear Runoff Volume (ac-ft)	0.2892
24-Hr Clear Runoff Volume (cu-ft)	12595.5288

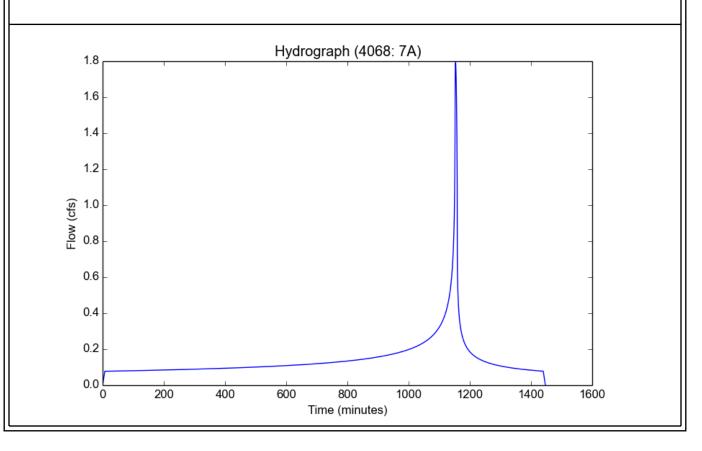


File location: O:/4000-4099/4068/HYDROLOGY/4068 Report A.pdf Version: HydroCalc 1.0.3

Input Parameters	Int	out	Para	imeters
------------------	-----	-----	------	---------

•	
Project Name	4068
Subarea ID	7A
Area (ac)	1.58
Flow Path Length (ft)	222.0
Flow Path Slope (vft/hft)	0.016
50-yr Rainfall Depth (in)	2.7
Percent Impervious	0.9
Soil Type	134
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

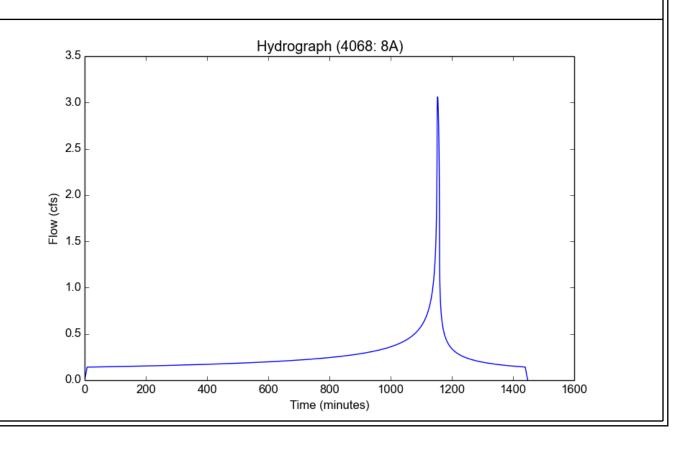
Calput Nocalio	
Modeled (50-yr) Rainfall Depth (in)	2.7
Peak Intensity (in/hr)	1.3753
Undeveloped Runoff Coefficient (Cu)	0.1525
Developed Runoff Coefficient (Cd)	0.8253
Time of Concentration (min)	7.0
Clear Peak Flow Rate (cfs)	1.7932
Burned Peak Flow Rate (cfs)	1.7932
24-Hr Clear Runoff Volume (ac-ft)	0.2892
24-Hr Clear Runoff Volume (cu-ft)	12595.5288



File location: O:/4000-4099/4068/HYDROLOGY/4068 Report A.pdf Version: HydroCalc 1.0.3

Project Name	4068
Subarea ID	8A
Area (ac)	2.88
Flow Path Length (ft)	259.0
Flow Path Slope (vft/hft)	0.012
50-yr Rainfall Depth (in)	2.7
Percent Impervious	0.9
Soil Type	134
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

Modeled (50-yr) Rainfall Depth (in)	2.7
Peak Intensity (in/hr)	1.2916
Undeveloped Runoff Coefficient (Cu)	0.1275
Developed Runoff Coefficient (Cd)	0.8227
Time of Concentration (min)	8.0
Clear Peak Flow Rate (cfs)	3.0605
Burned Peak Flow Rate (cfs)	3.0605
24-Hr Clear Runoff Volume (ac-ft)	0.527
24-Hr Clear Runoff Volume (cu-ft)	22956.6151

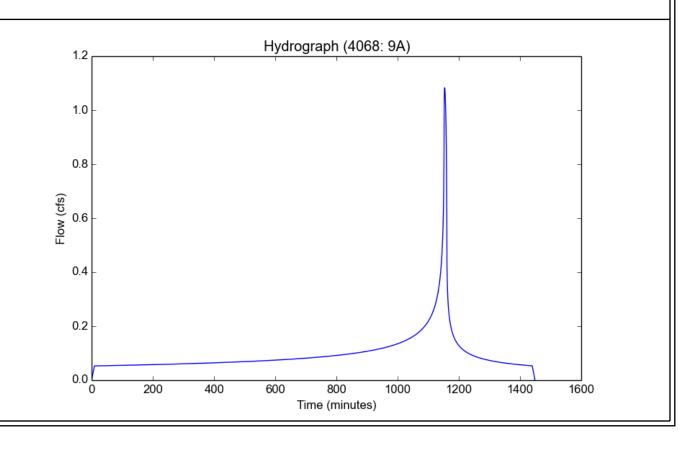


File location: O:/4000-4099/4068/HYDROLOGY/4068 Report A.pdf Version: HydroCalc 1.0.3

Input	Param	eters
-------	--------------	-------

Project Name	4068
Subarea ID	9A
Area (ac)	1.08
Flow Path Length (ft)	264.0
Flow Path Slope (vft/hft)	0.009
50-yr Rainfall Depth (in)	2.7
Percent Impervious	0.9
Soil Type	134
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

Modeled (50-yr) Rainfall Depth (in)	2.7	
Peak Intensity (in/hr)	1.222	
Undeveloped Runoff Coefficient (Cu)	0.1066	
Developed Runoff Coefficient (Cd)	0.8207	
Time of Concentration (min)	9.0	
Clear Peak Flow Rate (cfs)	1.0831	
Burned Peak Flow Rate (cfs)	1.0831	
24-Hr Clear Runoff Volume (ac-ft)	0.1976	
24-Hr Clear Runoff Volume (cu-ft)	8608.1349	
` ,		

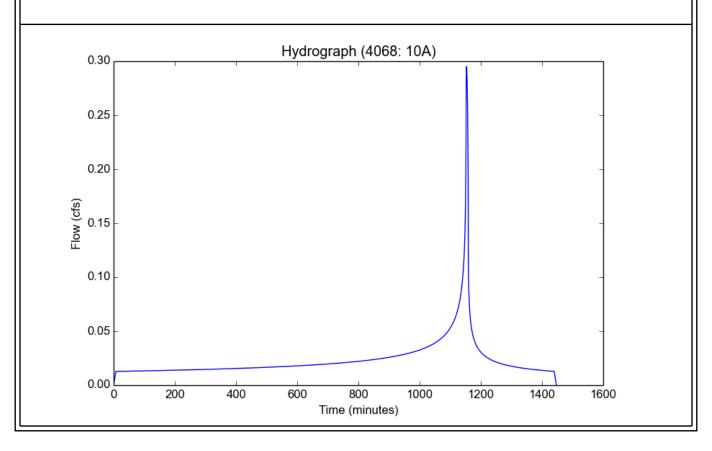


File location: O:/4000-4099/4068/HYDROLOGY/4068 Report A.pdf Version: HydroCalc 1.0.3

Innut	Parameter	
	PALAINELEI	-

•	
Project Name	4068
Subarea ID	10A
Area (ac)	0.26
Flow Path Length (ft)	185.0
Flow Path Slope (vft/hft)	0.007
50-yr Rainfall Depth (in)	2.7
Percent Impervious \(\)	0.9
Soil Type	134
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

Modeled (50-yr) Rainfall Depth (in)	2.7
Peak Intensity (in/hr)	1.3753
Undeveloped Runoff Coefficient (Cu)	0.1525
Developed Runoff Coefficient (Cd)	0.8253
Time of Concentration (min)	7.0
Clear Peak Flow Rate (cfs)	0.2951
Burned Peak Flow Rate (cfs)	0.2951
24-Hr Clear Runoff Volume (ac-ft)	0.0476
24-Hr Clear Runoff Volume (cu-ft)	2072.682

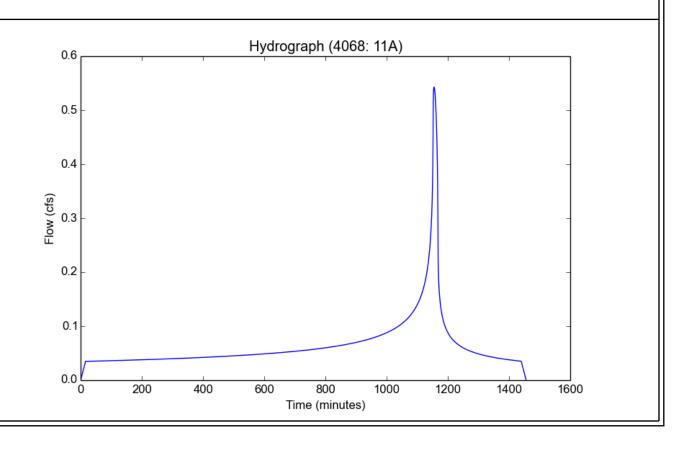


File location: O:/4000-4099/4068/HYDROLOGY/4068 Report A.pdf Version: HydroCalc 1.0.3

Input	Param	eters
-------	-------	-------

Project Name	4068
Subarea ID	11A
Area (ac)	0.71
Flow Path Length (ft)	614.0
Flow Path Slope (vft/hft)	0.006
50-yr Rainfall Depth (in)	2.7
Percent Impervious	0.9
Soil Type	134
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

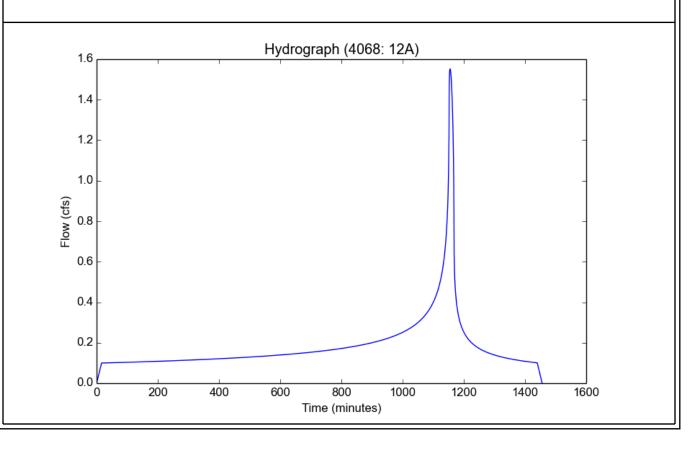
output Hooding	
Modeled (50-yr) Rainfall Depth (in)	2.7
Peak Intensity (in/hr)	0.9325
Undeveloped Runoff Coefficient (Cu)	0.1
Developed Runoff Coefficient (Cd)	0.82
Time of Concentration (min)	16.0
Clear Peak Flow Rate (cfs)	0.5429
Burned Peak Flow Rate (cfs)	0.5429
24-Hr Clear Runoff Volume (ac-ft)	0.1299
24-Hr Clear Runoff Volume (cu-ft)	5659.0023



File location: O:/4000-4099/4068/HYDROLOGY/4068 Report A.pdf Version: HydroCalc 1.0.3

•	
Project Name	4068
Subarea ID	12A
Area (ac)	2.03
Flow Path Length (ft)	630.0
Flow Path Slope (vft/hft)	0.006
50-yr Rainfall Depth (in)	2.7
Percent Impervious	0.9
Soil Type	134
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

o alpat 1.00 allo	
Modeled (50-yr) Rainfall Depth (in)	2.7
Peak Intensity (in/hr)	0.9325
Undeveloped Runoff Coefficient (Cu)	0.1
Developed Runoff Coefficient (Cd)	0.82
Time of Concentration (min)	16.0
Clear Peak Flow Rate (cfs)	1.5522
Burned Peak Flow Rate (cfs)	1.5522
24-Hr Clear Runoff Volume (ac-ft)	0.3714
24-Hr Clear Runoff Volume (cu-ft)	16179.9644

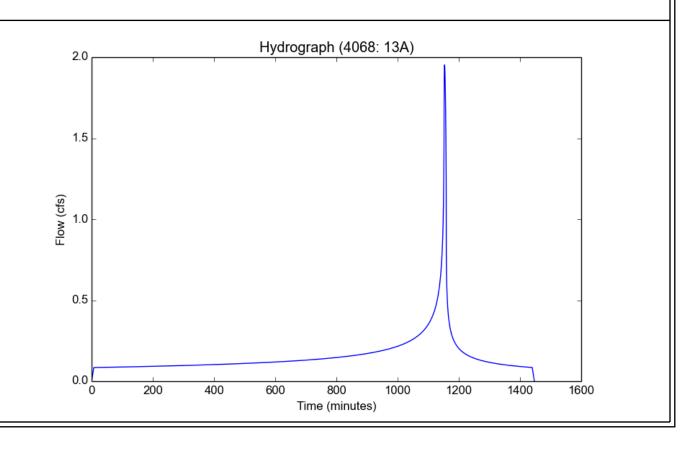


File location: O:/4000-4099/4068/HYDROLOGY/4068 Report A.pdf Version: HydroCalc 1.0.3

Input	Parameters
-------	-------------------

•	
Project Name	4068
Subarea ID	13A
Area (ac)	1.72
Flow Path Length (ft)	185.0
Flow Path Slope (vft/hft)	0.011
50-yr Rainfall Depth (in)	2.7
Percent Impervious \(\)	0.9
Soil Type	134
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

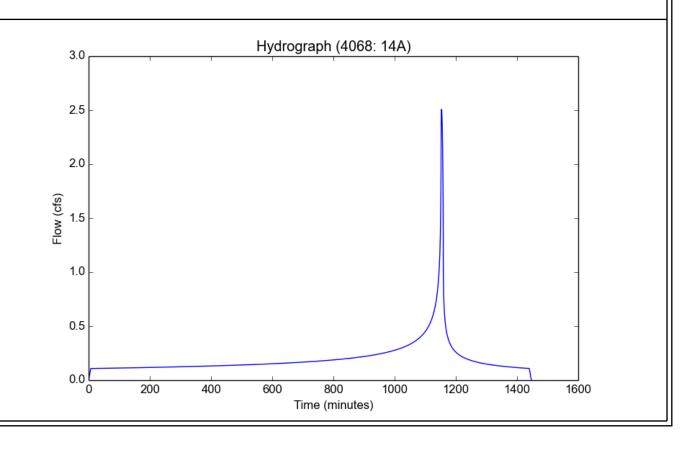
Calpat Rocalio	
Modeled (50-yr) Rainfall Depth (in)	2.7
Peak Intensity (in/hr)	1.3753
Undeveloped Runoff Coefficient (Cu)	0.1525
Developed Runoff Coefficient (Cd)	0.8253
Time of Concentration (min)	7.0
Clear Peak Flow Rate (cfs)	1.9521
Burned Peak Flow Rate (cfs)	1.9521
24-Hr Clear Runoff Volume (ac-ft)	0.3148
24-Hr Clear Runoff Volume (cu-ft)	13711.5883



File location: O:/4000-4099/4068/HYDROLOGY/4068 Report A.pdf Version: HydroCalc 1.0.3

Project Name	4068
Subarea ID	14A
Area (ac)	2.21
Flow Path Length (ft)	185.0
Flow Path Slope (vft/hft)	0.011
50-yr Rainfall Depth (in)	2.7
Percent Impervious	0.9
Soil Type	134
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

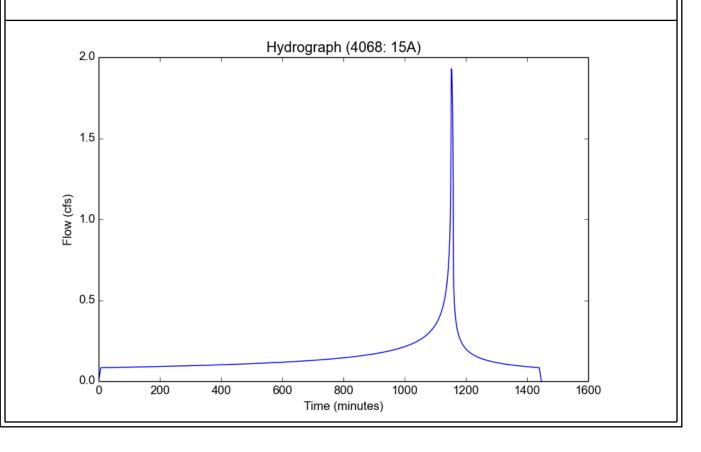
Modeled (50-yr) Rainfall Depth (in)	2.7	
Peak Intensity (in/hr)	1.3753	
Undeveloped Runoff Coefficient (Cu)	0.1525	
Developed Runoff Coefficient (Cd)	0.8253	
Time of Concentration (min)	7.0	
Clear Peak Flow Rate (cfs)	2.5082	
Burned Peak Flow Rate (cfs)	2.5082	
24-Hr Clear Runoff Volume (ac-ft)	0.4044	
24-Hr Clear Runoff Volume (cu-ft)	17617.7966	
` ,		



File location: O:/4000-4099/4068/HYDROLOGY/4068 Report A.pdf Version: HydroCalc 1.0.3

Project Name	4068
Subarea ID	15A
Area (ac)	1.7
Flow Path Length (ft)	185.0
Flow Path Slope (vft/hft)	0.011
50-yr Rainfall Depth (in)	2.7
Percent Impervious	0.9
Soil Type	134
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

Modeled (50-yr) Rainfall Depth (in)	2.7
Peak Intensity (in/hr)	1.3753
Undeveloped Runoff Coefficient (Cu)	0.1525
Developed Runoff Coefficient (Cd)	0.8253
Time of Concentration (min)	7.0
Clear Peak Flow Rate (cfs)	1.9294
Burned Peak Flow Rate (cfs)	1.9294
24-Hr Clear Runoff Volume (ac-ft)	0.3111
24-Hr Clear Runoff Volume (cu-ft)	13552.1513
,	

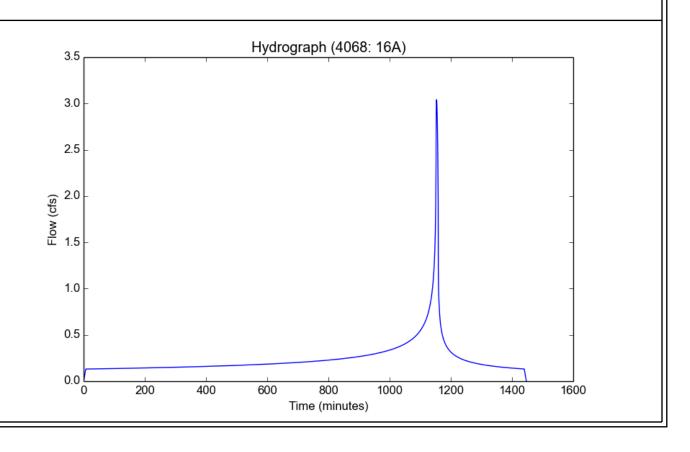


File location: O:/4000-4099/4068/HYDROLOGY/4068 Report A.pdf Version: HydroCalc 1.0.3

Input I	Parameters
---------	------------

Project Name	4068
Subarea ID	16A
Area (ac)	2.68
Flow Path Length (ft)	185.0
Flow Path Slope (vft/hft)	0.011
50-yr Rainfall Depth (in)	2.7
Percent Impervious	0.9
Soil Type	134
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

Output Hoodito	
Modeled (50-yr) Rainfall Depth (in)	2.7
Peak Intensity (in/hr)	1.3753
Undeveloped Runoff Coefficient (Cu)	0.1525
Developed Runoff Coefficient (Cd)	0.8253
Time of Concentration (min)	7.0
Clear Peak Flow Rate (cfs)	3.0416
Burned Peak Flow Rate (cfs)	3.0416
24-Hr Clear Runoff Volume (ac-ft)	0.4905
24-Hr Clear Runoff Volume (cu-ft)	21364.5679
,	

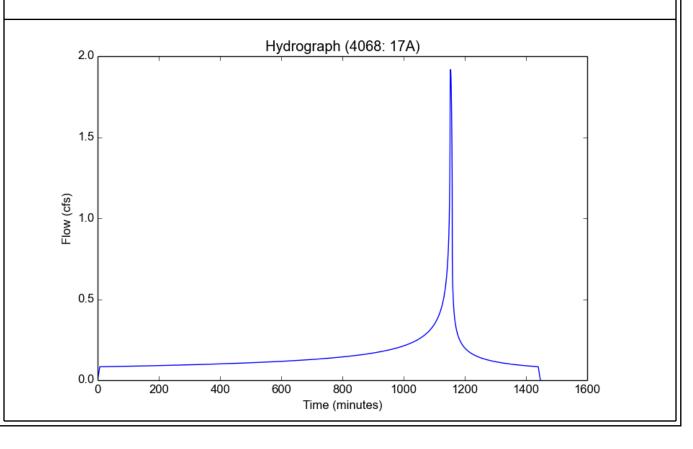


File location: O:/4000-4099/4068/HYDROLOGY/4068 Report A.pdf Version: HydroCalc 1.0.3

Input	Parame	eters
-------	--------	-------

Project Name	4068
Subarea ID	17A
Area (ac)	1.69
Flow Path Length (ft)	185.0
Flow Path Slope (vft/hft)	0.011
50-yr Rainfall Depth (in)	2.7
Percent Impervious	0.9
Soil Type	134
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

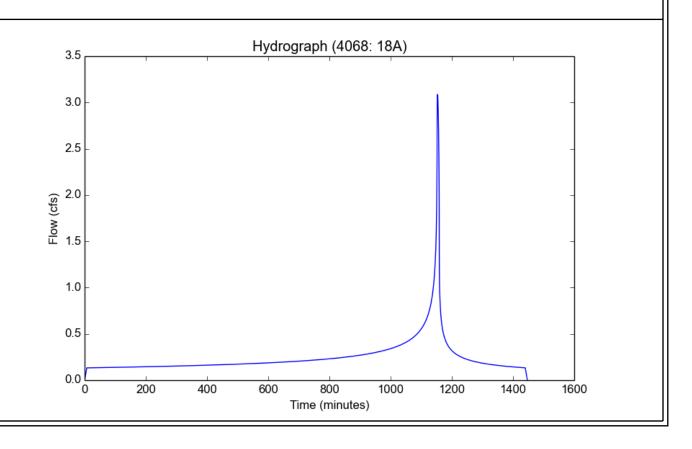
output itooutio	
Modeled (50-yr) Rainfall Depth (in)	2.7
Peak Intensity (in/hr)	1.3753
Undeveloped Runoff Coefficient (Cu)	0.1525
Developed Runoff Coefficient (Cd)	0.8253
Time of Concentration (min)	7.0
Clear Peak Flow Rate (cfs)	1.9181
Burned Peak Flow Rate (cfs)	1.9181
24-Hr Clear Runoff Volume (ac-ft)	0.3093
24-Hr Clear Runoff Volume (cu-ft)	13472.4327



File location: O:/4000-4099/4068/HYDROLOGY/4068 Report A.pdf Version: HydroCalc 1.0.3

Project Name	4068
Subarea ID	18A
Area (ac)	2.72
Flow Path Length (ft)	188.0
Flow Path Slope (vft/hft)	0.009
50-yr Rainfall Depth (in)	2.7
Percent Impervious	0.9
Soil Type	134
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

Catpat Rocard	
Modeled (50-yr) Rainfall Depth (in)	2.7
Peak Intensity (in/hr)	1.3753
Undeveloped Runoff Coefficient (Cu)	0.1525
Developed Runoff Coefficient (Cd)	0.8253
Time of Concentration (min)	7.0
Clear Peak Flow Rate (cfs)	3.087
Burned Peak Flow Rate (cfs)	3.087
24-Hr Clear Runoff Volume (ac-ft)	0.4978
24-Hr Clear Runoff Volume (cu-ft)	21683.442
, ,	

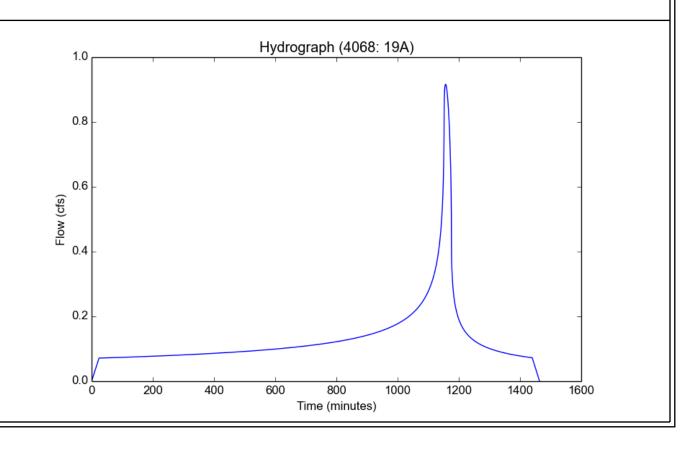


File location: O:/4000-4099/4068/HYDROLOGY/4068 Report A.pdf Version: HydroCalc 1.0.3

Input Parameters

mpat i arametere	
Project Name	4068
Subarea ID	19A
Area (ac)	1.45
Flow Path Length (ft)	1140.0
Flow Path Slope (vft/hft)	0.005
50-yr Rainfall Depth (in)	2.7
Percent Impervious	0.9
Soil Type	134
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

o a par 1 too a to	
Modeled (50-yr) Rainfall Depth (in)	2.7
Peak Intensity (in/hr)	0.7707
Undeveloped Runoff Coefficient (Cu)	0.1
Developed Runoff Coefficient (Cd)	0.82
Time of Concentration (min)	24.0
Clear Peak Flow Rate (cfs)	0.9164
Burned Peak Flow Rate (cfs)	0.9164
24-Hr Clear Runoff Volume (ac-ft)	0.2653
24-Hr Clear Runoff Volume (cu-ft)	11557.1646

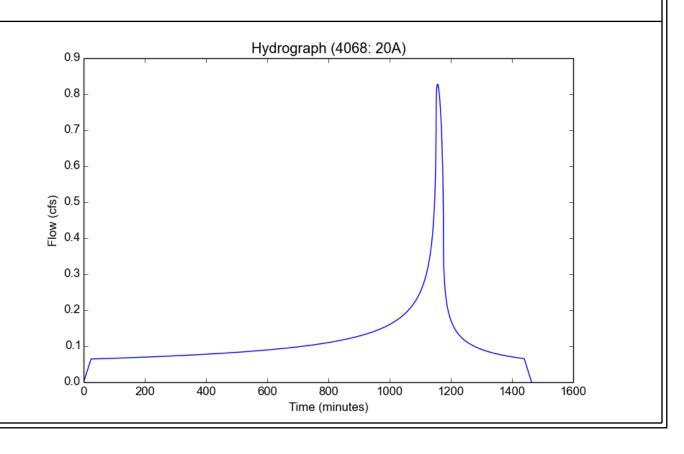


File location: O:/4000-4099/4068/HYDROLOGY/4068 Report A.pdf Version: HydroCalc 1.0.3

Input Parameters

mpat i arametere	
Project Name	4068
Subarea ID	20A
Area (ac)	1.31
Flow Path Length (ft)	1140.0
Flow Path Slope (vft/hft)	0.005
50-yr Rainfall Depth (in)	2.7
Percent Impervious	0.9
Soil Type	134
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

Modeled (50-yr) Rainfall Depth (in)	2.7
Peak Intensity (in/hr)	0.7707
Undeveloped Runoff Coefficient (Cu)	0.1
Developed Runoff Coefficient (Cd)	0.82
Time of Concentration (min)	24.0
Clear Peak Flow Rate (cfs)	0.8279
Burned Peak Flow Rate (cfs)	0.8279
24-Hr Clear Runoff Volume (ac-ft)	0.2397
24-Hr Clear Runoff Volume (cu-ft)	10441.3004
,	

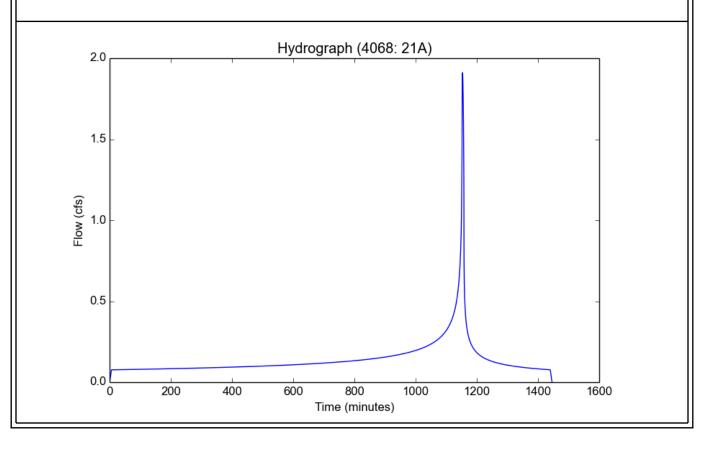


File location: O:/4000-4099/4068/HYDROLOGY/4068 Report A.pdf Version: HydroCalc 1.0.3 $\,$

Input	Param	eters
-------	--------------	-------

Project Name	4068
Subarea ID	21A
Area (ac)	1.56
Flow Path Length (ft)	165.0
Flow Path Slope (vft/hft)	0.016
50-yr Rainfall Depth (in)	2.7
Percent Impervious	0.9
Soil Type	134
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

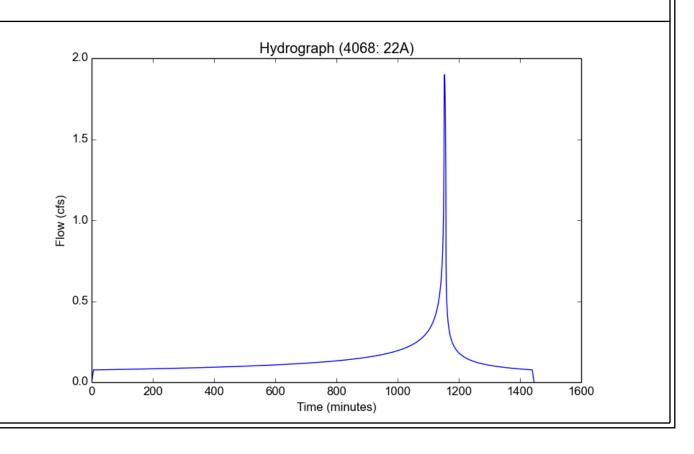
Output Roodito	
Modeled (50-yr) Rainfall Depth (in)	2.7
Peak Intensity (in/hr)	1.4786
Undeveloped Runoff Coefficient (Cu)	0.1835
Developed Runoff Coefficient (Cd)	0.8284
Time of Concentration (min)	6.0
Clear Peak Flow Rate (cfs)	1.9107
Burned Peak Flow Rate (cfs)	1.9107
24-Hr Clear Runoff Volume (ac-ft)	0.2855
24-Hr Clear Runoff Volume (cu-ft)	12437.683
•	



File location: O:/4000-4099/4068/HYDROLOGY/4068 Report A.pdf Version: HydroCalc 1.0.3 $\,$

Project Name	4068
Subarea ID	22A
Area (ac)	1.55
Flow Path Length (ft)	165.0
Flow Path Slope (vft/hft)	0.016
50-yr Rainfall Depth (in)	2.7
Percent Impervious	0.9
Soil Type	134
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

Modeled (50-yr) Rainfall Depth (in)	2.7
Peak Intensity (in/hr)	1.4786
Undeveloped Runoff Coefficient (Cu)	0.1835
Developed Runoff Coefficient (Cd)	0.8284
Time of Concentration (min)	6.0
Clear Peak Flow Rate (cfs)	1.8984
Burned Peak Flow Rate (cfs)	1.8984
24-Hr Clear Runoff Volume (ac-ft)	0.2837
24-Hr Clear Runoff Volume (cu-ft)	12357.9542

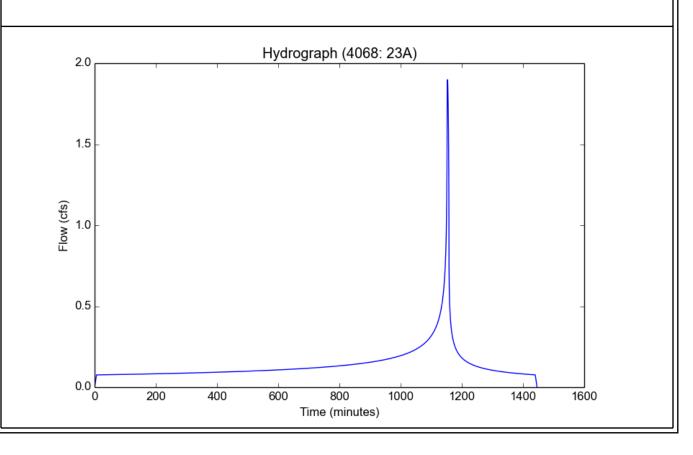


File location: O:/4000-4099/4068/HYDROLOGY/4068 Report A.pdf Version: HydroCalc 1.0.3 $\,$

Input	Parameters
-------	-------------------

•	
Project Name	4068
Subarea ID	23A
Area (ac)	1.55
Flow Path Length (ft)	165.0
Flow Path Slope (vft/hft)	0.016
50-yr Rainfall Depth (in)	2.7
Percent Impervious	0.9
Soil Type	134
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

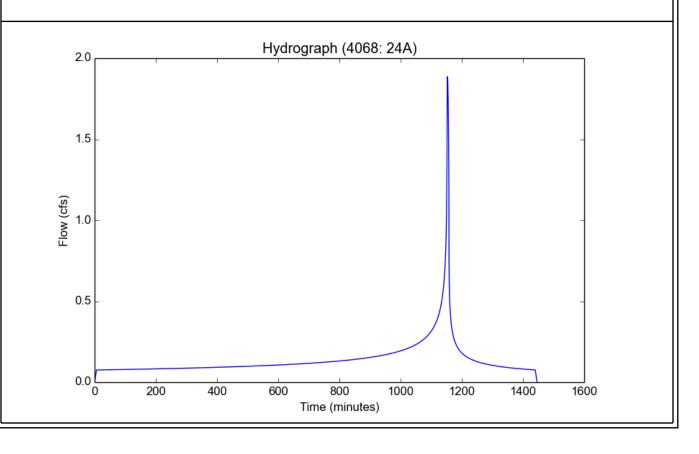
Modeled (50-yr) Rainfall Depth (in)	2.7
Peak Intensity (in/hr)	1.4786
Undeveloped Runoff Coefficient (Cu)	0.1835
Developed Runoff Coefficient (Cd)	0.8284
Time of Concentration (min)	6.0
Clear Peak Flow Rate (cfs)	1.8984
Burned Peak Flow Rate (cfs)	1.8984
24-Hr Clear Runoff Volume (ac-ft)	0.2837
24-Hr Clear Runoff Volume (cu-ft)	12357.9542



File location: O:/4000-4099/4068/HYDROLOGY/4068 Report A.pdf Version: HydroCalc 1.0.3 $\,$

•	
Project Name	4068
Subarea ID	24A
Area (ac)	1.54
Flow Path Length (ft)	165.0
Flow Path Slope (vft/hft)	0.016
50-yr Rainfall Depth (in)	2.7
Percent Impervious	0.9
Soil Type	134
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

o atpat i too aito	
Modeled (50-yr) Rainfall Depth (in)	2.7
Peak Intensity (in/hr)	1.4786
Undeveloped Runoff Coefficient (Cu)	0.1835
Developed Runoff Coefficient (Cd)	0.8284
Time of Concentration (min)	6.0
Clear Peak Flow Rate (cfs)	1.8862
Burned Peak Flow Rate (cfs)	1.8862
24-Hr Clear Runoff Volume (ac-ft)	0.2819
24-Hr Clear Runoff Volume (cu-ft)	12278.2255

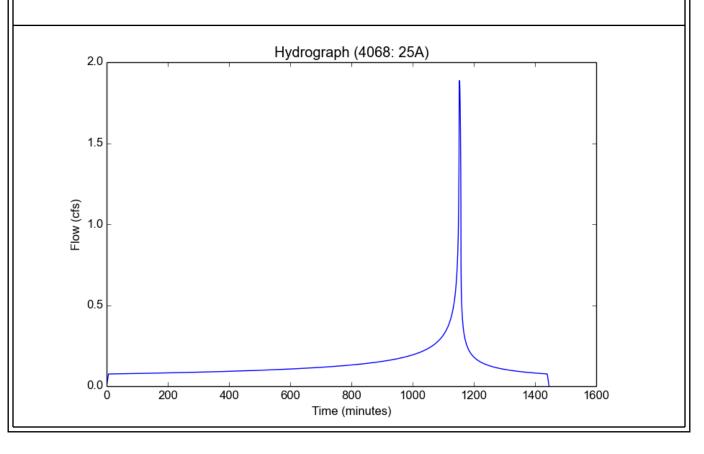


File location: O:/4000-4099/4068/HYDROLOGY/4068 Report A.pdf Version: HydroCalc 1.0.3

Input	Param	eters
-------	--------------	-------

Project Name	4068
Subarea ID	25A
Area (ac)	1.54
Flow Path Length (ft)	165.0
Flow Path Slope (vft/hft)	0.016
50-yr Rainfall Depth (in)	2.7
Percent Impervious	0.9
Soil Type	134
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

Modeled (50-yr) Rainfall Depth (in)	2.7
Peak Intensity (in/hr)	1.4786
Undeveloped Runoff Coefficient (Cu)	0.1835
Developed Runoff Coefficient (Cd)	0.8284
Time of Concentration (min)	6.0
Clear Peak Flow Rate (cfs)	1.8862
Burned Peak Flow Rate (cfs)	1.8862
24-Hr Clear Runoff Volume (ac-ft)	0.2819
24-Hr Clear Runoff Volume (cu-ft)	12278.2255
, ,	

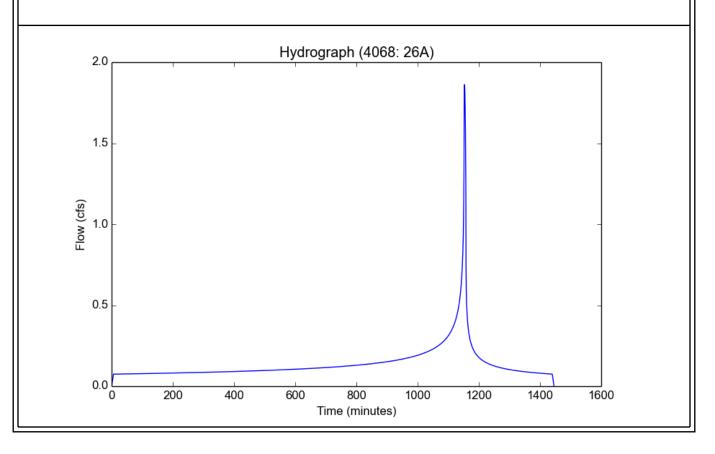


File location: O:/4000-4099/4068/HYDROLOGY/4068 Report A.pdf Version: HydroCalc 1.0.3 $\,$

Input Parameters

Project Name	4068
Subarea ID	26A
Area (ac)	1.52
Flow Path Length (ft)	165.0
Flow Path Slope (vft/hft)	0.016
50-yr Rainfall Depth (in)	2.7
Percent Impervious	0.9
Soil Type	134
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

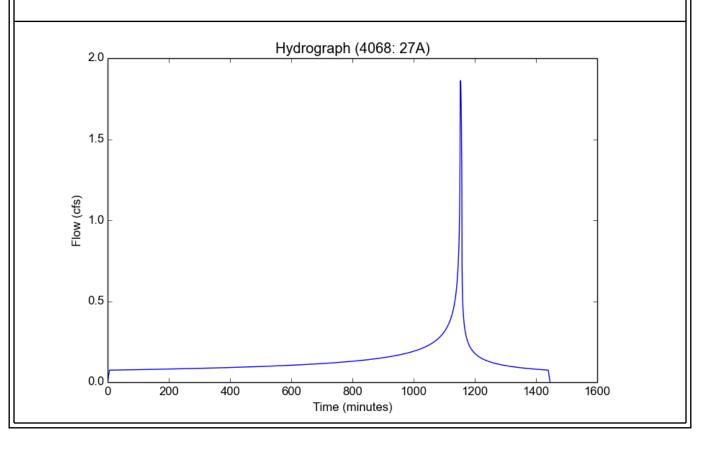
Output Roodito		
Modeled (50-yr) Rainfall Depth (in)	2.7	
Peak Intensity (in/hr)	1.4786	
Undeveloped Runoff Coefficient (Cu)	0.1835	
Developed Runoff Coefficient (Cd)	0.8284	
Time of Concentration (min)	6.0	
Clear Peak Flow Rate (cfs)	1.8617	
Burned Peak Flow Rate (cfs)	1.8617	
24-Hr Clear Runoff Volume (ac-ft)	0.2782	
24-Hr Clear Runoff Volume (cu-ft)	12118.768	
• • • • • • • • • • • • • • • • • • • •		



File location: O:/4000-4099/4068/HYDROLOGY/4068 Report A.pdf Version: HydroCalc 1.0.3 $\,$

Project Name	4068
Subarea ID	27A
Area (ac)	1.52
Flow Path Length (ft)	165.0
Flow Path Slope (vft/hft)	0.016
50-yr Rainfall Depth (in)	2.7
Percent Impervious	0.9
Soil Type	134
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

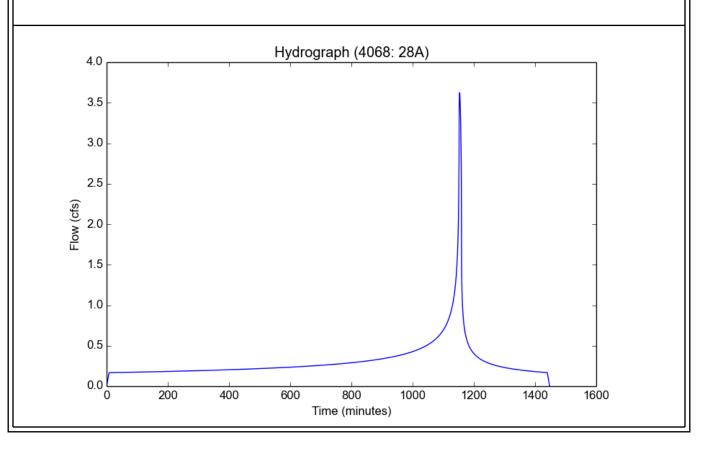
Output Nesults	
Modeled (50-yr) Rainfall Depth (in)	2.7
Peak Intensity (in/hr)	1.4786
Undeveloped Runoff Coefficient (Cu)	0.1835
Developed Runoff Coefficient (Cd)	0.8284
Time of Concentration (min)	6.0
Clear Peak Flow Rate (cfs)	1.8617
Burned Peak Flow Rate (cfs)	1.8617
24-Hr Clear Runoff Volume (ac-ft)	0.2782
24-Hr Clear Runoff Volume (cu-ft)	12118.768



File location: O:/4000-4099/4068/HYDROLOGY/4068 Report A.pdf Version: HydroCalc 1.0.3 $\,$

D.: (N	1000
Project Name	4068
Subarea ID	28A
Area (ac)	3.41
Flow Path Length (ft)	274.0
Flow Path Slope (vft/hft)	0.011
50-yr Rainfall Depth (in)	2.7
Percent Impervious	0.9
Soil Type	134
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

Output Modulio	
Modeled (50-yr) Rainfall Depth (in)	2.7
Peak Intensity (in/hr)	1.2916
Undeveloped Runoff Coefficient (Cu)	0.1275
Developed Runoff Coefficient (Cd)	0.8227
Time of Concentration (min)	8.0
Clear Peak Flow Rate (cfs)	3.6237
Burned Peak Flow Rate (cfs)	3.6237
24-Hr Clear Runoff Volume (ac-ft)	0.624
24-Hr Clear Runoff Volume (cu-ft)	27181.2699
• • •	

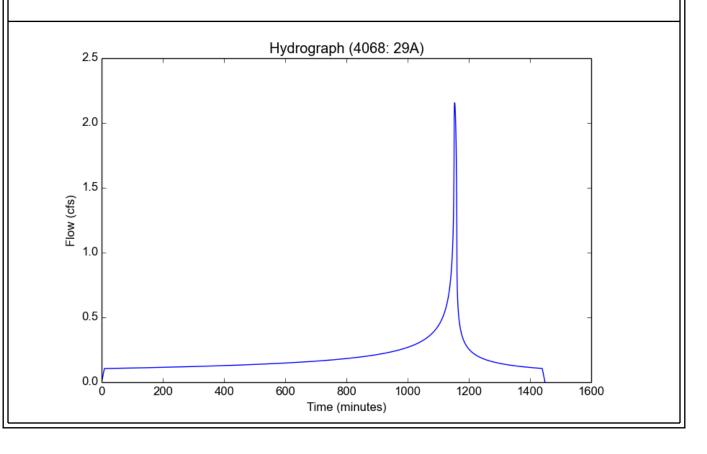


File location: O:/4000-4099/4068/HYDROLOGY/4068 Report A.pdf Version: HydroCalc 1.0.3 $\,$

Input	Param	eters
-------	--------------	-------

Project Name	4068
Subarea ID	29A
Area (ac)	2.15
Flow Path Length (ft)	238.0
Flow Path Slope (vft/hft)	0.005
50-yr Rainfall Depth (in)	2.7
Percent Impervious	0.9
Soil Type	134
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

Modeled (50-yr) Rainfall Depth (in)	2.7
Peak Intensity (in/hr)	1.222
Undeveloped Runoff Coefficient (Cu)	0.1066
Developed Runoff Coefficient (Cd)	0.8207
Time of Concentration (min)	9.0
Clear Peak Flow Rate (cfs)	2.1562
Burned Peak Flow Rate (cfs)	2.1562
24-Hr Clear Runoff Volume (ac-ft)	0.3934
24-Hr Clear Runoff Volume (cu-ft)	17136.5648
,	

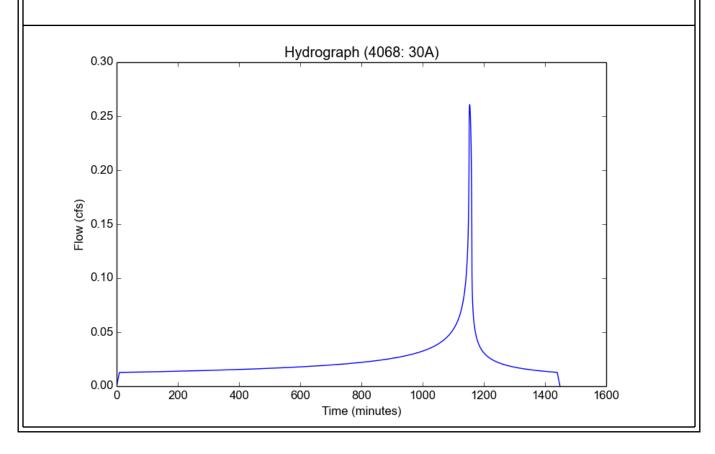


File location: O:/4000-4099/4068/HYDROLOGY/4068 Report A.pdf Version: HydroCalc 1.0.3

Input	Parameters
-------	-------------------

Project Name	4068
Subarea ID	30A
Area (ac)	0.26
Flow Path Length (ft)	240.0
Flow Path Slope (vft/hft)	0.005
50-yr Rainfall Depth (in)	2.7
Percent Impervious	0.9
Soil Type	134
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

Modeled (50-yr) Rainfall Depth (in)	2.7
Peak Intensity (in/hr)	1.222
Undeveloped Runoff Coefficient (Cu)	0.1066
Developed Runoff Coefficient (Cd)	0.8207
Time of Concentration (min)	9.0
Clear Peak Flow Rate (cfs)	0.2608
Burned Peak Flow Rate (cfs)	0.2608
24-Hr Clear Runoff Volume (ac-ft)	0.0476
24-Hr Clear Runoff Volume (cu-ft)	2072.3288
,	

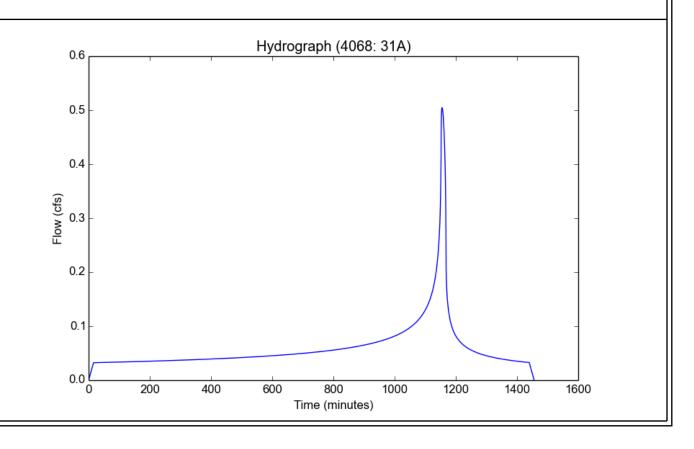


File location: O:/4000-4099/4068/HYDROLOGY/4068 Report A.pdf Version: HydroCalc 1.0.3 $\,$

Input	Param	eters
-------	--------------	-------

Project Name	4068
Subarea ID	31A
Area (ac)	0.66
Flow Path Length (ft)	590.0
Flow Path Slope (vft/hft)	0.005
50-yr Rainfall Depth (in)	2.7
Percent Impervious	0.9
Soil Type	134
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

Modeled (50-yr) Rainfall Depth (in)	2.7	
Peak Intensity (in/hr)	0.9325	
Undeveloped Runoff Coefficient (Cu)	0.1	
Developed Runoff Coefficient (Cd)	0.82	
Time of Concentration (min)	16.0	
Clear Peak Flow Rate (cfs)	0.5047	
Burned Peak Flow Rate (cfs)	0.5047	
24-Hr Clear Runoff Volume (ac-ft)	0.1208	
24-Hr Clear Runoff Volume (cu-ft)	5260.481	
,		

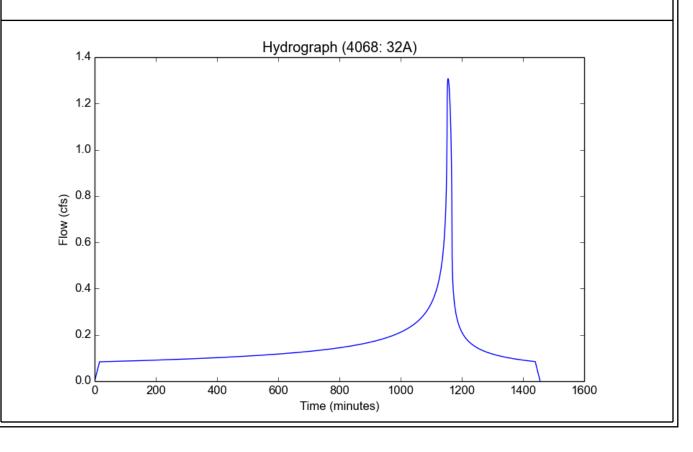


File location: O:/4000-4099/4068/HYDROLOGY/4068 Report A.pdf Version: HydroCalc 1.0.3

Input	Parame	eters
-------	--------	-------

_ •	
Project Name	4068
Subarea ID	32A
Area (ac)	1.71
Flow Path Length (ft)	642.0
Flow Path Slope (vft/hft)	0.007
50-yr Rainfall Depth (in)	2.7
Percent Impervious	0.9
Soil Type	134
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

Output Nooullo		
Modeled (50-yr) Rainfall Depth (in)	2.7	
Peak Intensity (in/hr)	0.9325	
Undeveloped Runoff Coefficient (Cu)	0.1	
Developed Runoff Coefficient (Cd)	0.82	
Time of Concentration (min)	16.0	
Clear Peak Flow Rate (cfs)	1.3075	
Burned Peak Flow Rate (cfs)	1.3075	
24-Hr Clear Runoff Volume (ac-ft)	0.3129	
24-Hr Clear Runoff Volume (cu-ft)	13629.4281	
•		

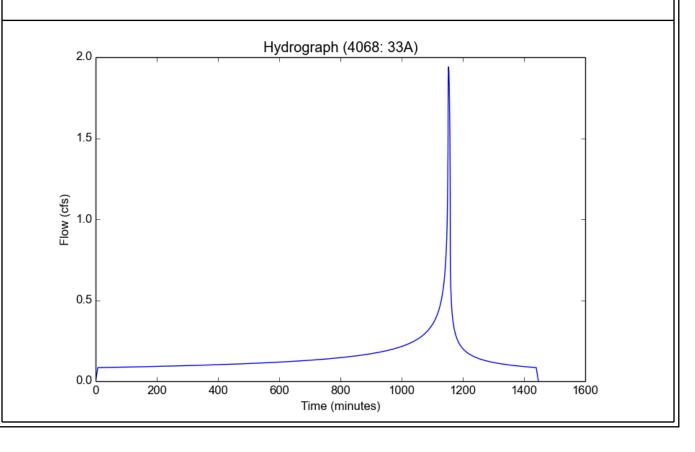


File location: O:/4000-4099/4068/HYDROLOGY/4068 Report A.pdf Version: HydroCalc 1.0.3 $\,$

Input	Parameters
-------	-------------------

4068
33A
1.71
192.0
0.012
2.7
0.9
134
50-yr
0
False

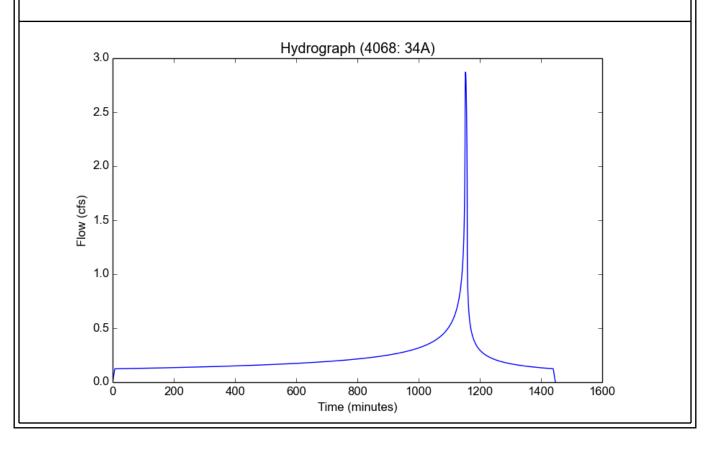
Modeled (50-yr) Rainfall Depth (in)	2.7
Peak Intensity (in/hr)	1.3753
Undeveloped Runoff Coefficient (Cu)	0.1525
Developed Runoff Coefficient (Cd)	0.8253
Time of Concentration (min)	7.0
Clear Peak Flow Rate (cfs)	1.9408
Burned Peak Flow Rate (cfs)	1.9408
24-Hr Clear Runoff Volume (ac-ft)	0.3129
24-Hr Clear Runoff Volume (cu-ft)	13631.8698
,	



File location: O:/4000-4099/4068/HYDROLOGY/4068 Report A.pdf Version: HydroCalc 1.0.3

Project Name	4068
Subarea ID	34A
Area (ac)	2.53
Flow Path Length (ft)	192.0
Flow Path Slope (vft/hft)	0.012
50-yr Rainfall Depth (in)	2.7
Percent Impervious	0.9
Soil Type	134
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

Catput Rocatto	
Modeled (50-yr) Rainfall Depth (in)	2.7
Peak Intensity (in/hr)	1.3753
Undeveloped Runoff Coefficient (Cu)	0.1525
Developed Runoff Coefficient (Cd)	0.8253
Time of Concentration (min)	7.0
Clear Peak Flow Rate (cfs)	2.8714
Burned Peak Flow Rate (cfs)	2.8714
24-Hr Clear Runoff Volume (ac-ft)	0.463
24-Hr Clear Runoff Volume (cu-ft)	20168.7898
,	

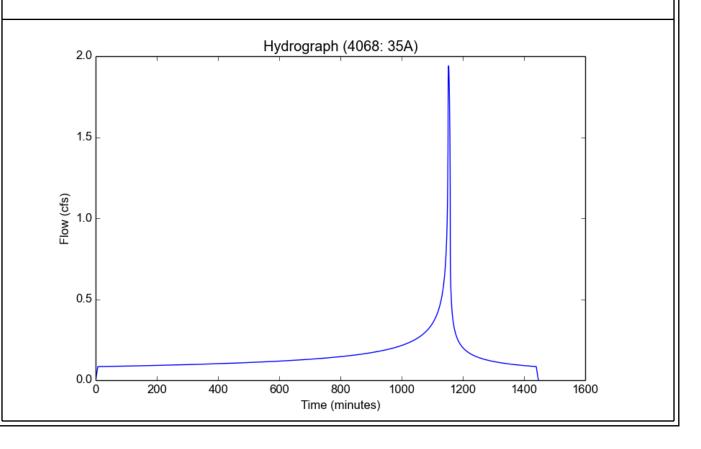


File location: O:/4000-4099/4068/HYDROLOGY/4068 Report A.pdf Version: HydroCalc 1.0.3

Input I	Parameters
---------	------------

•	
Project Name	4068
Subarea ID	35A
Area (ac)	1.71
Flow Path Length (ft)	192.0
Flow Path Slope (vft/hft)	0.012
50-yr Rainfall Depth (in)	2.7
Percent Impervious	0.9
Soil Type	134
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

Modeled (50-yr) Rainfall Depth (in)	2.7
Peak Intensity (in/hr)	1.3753
Undeveloped Runoff Coefficient (Cu)	0.1525
Developed Runoff Coefficient (Cd)	0.8253
Time of Concentration (min)	7.0
Clear Peak Flow Rate (cfs)	1.9408
Burned Peak Flow Rate (cfs)	1.9408
24-Hr Clear Runoff Volume (ac-ft)	0.3129
24-Hr Clear Runoff Volume (cu-ft)	13631.8698
,	

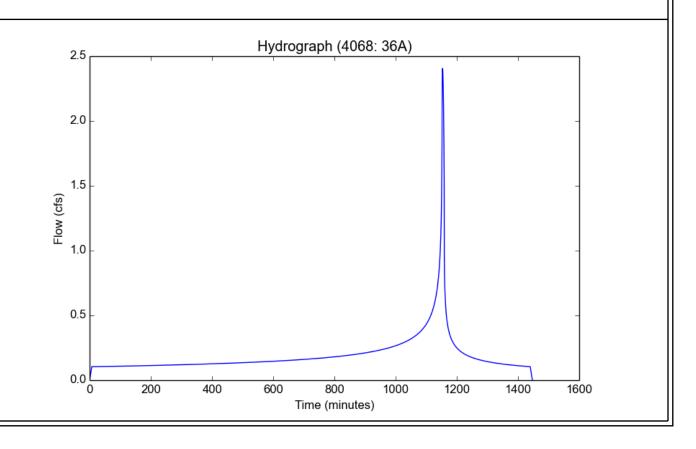


File location: O:/4000-4099/4068/HYDROLOGY/4068 Report A.pdf Version: HydroCalc 1.0.3

Input F	Param	eters
---------	-------	-------

Project Name	4068
Subarea ID	36A
Area (ac)	2.12
Flow Path Length (ft)	192.0
Flow Path Slope (vft/hft)	0.012
50-yr Rainfall Depth (in)	2.7
Percent Impervious	0.9
Soil Type	134
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

Modeled (50-yr) Rainfall Depth (in)	2.7
Peak Intensity (in/hr)	1.3753
Undeveloped Runoff Coefficient (Cu)	0.1525
Developed Runoff Coefficient (Cd)	0.8253
Time of Concentration (min)	7.0
Clear Peak Flow Rate (cfs)	2.4061
Burned Peak Flow Rate (cfs)	2.4061
24-Hr Clear Runoff Volume (ac-ft)	0.388
24-Hr Clear Runoff Volume (cu-ft)	16900.3298
,	

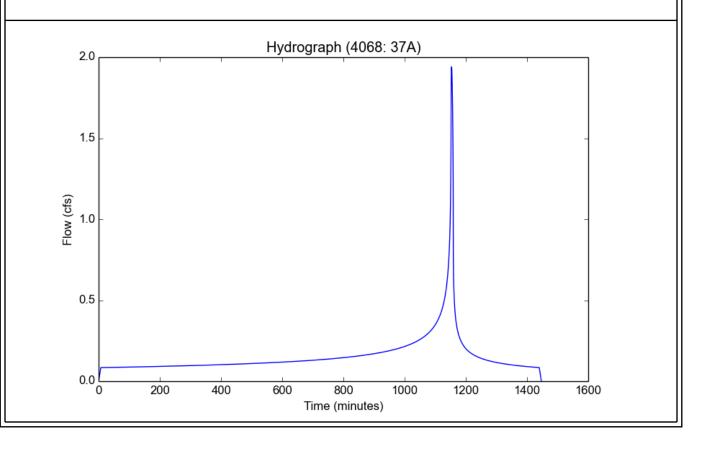


File location: O:/4000-4099/4068/HYDROLOGY/4068 Report A.pdf Version: HydroCalc 1.0.3 $\,$

Input	Param	eters
-------	--------------	-------

•	
Project Name	4068
Subarea ID	37A
Area (ac)	1.71
Flow Path Length (ft)	192.0
Flow Path Slope (vft/hft)	0.012
50-yr Rainfall Depth (in)	2.7
Percent Impervious	0.9
Soil Type	134
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

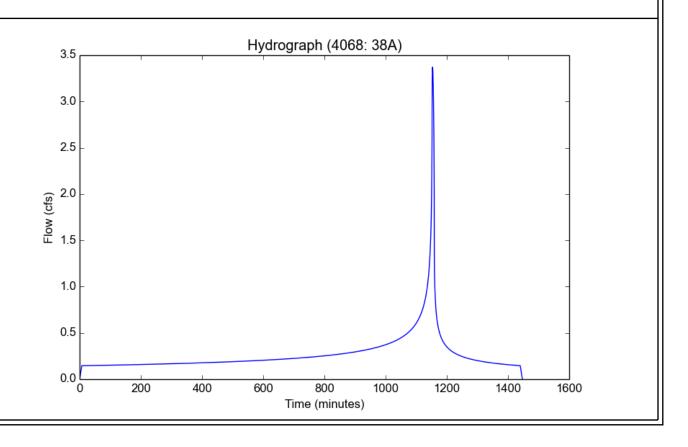
Calpat Nocalio	
Modeled (50-yr) Rainfall Depth (in)	2.7
Peak Intensity (in/hr)	1.3753
Undeveloped Runoff Coefficient (Cu)	0.1525
Developed Runoff Coefficient (Cd)	0.8253
Time of Concentration (min)	7.0
Clear Peak Flow Rate (cfs)	1.9408
Burned Peak Flow Rate (cfs)	1.9408
24-Hr Clear Runoff Volume (ac-ft)	0.3129
24-Hr Clear Runoff Volume (cu-ft)	13631.8698



File location: O:/4000-4099/4068/HYDROLOGY/4068 Report A.pdf Version: HydroCalc 1.0.3

•	
Project Name	4068
Subarea ID	38A
Area (ac)	2.97
Flow Path Length (ft)	192.0
Flow Path Slope (vft/hft)	0.012
50-yr Rainfall Depth (in)	2.7
Percent Impervious	0.9
Soil Type	134
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

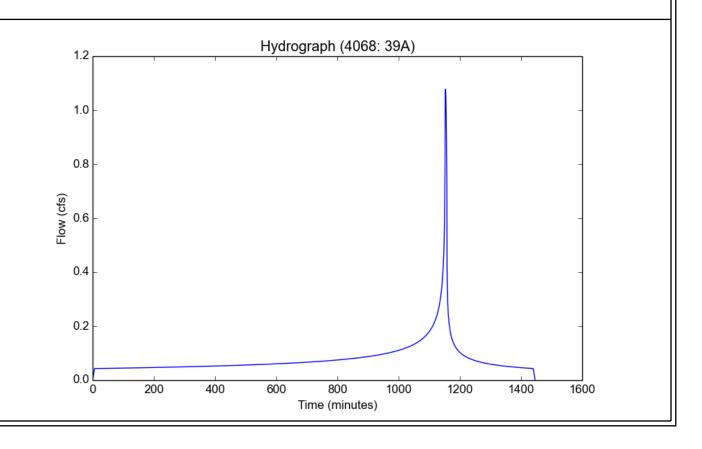
Output Modulio	
Modeled (50-yr) Rainfall Depth (in)	2.7
Peak Intensity (in/hr)	1.3753
Undeveloped Runoff Coefficient (Cu)	0.1525
Developed Runoff Coefficient (Cd)	0.8253
Time of Concentration (min)	7.0
Clear Peak Flow Rate (cfs)	3.3708
Burned Peak Flow Rate (cfs)	3.3708
24-Hr Clear Runoff Volume (ac-ft)	0.5435
24-Hr Clear Runoff Volume (cu-ft)	23676.4054
• • •	



File location: O:/4000-4099/4068/HYDROLOGY/4068 Report A.pdf Version: HydroCalc 1.0.3

Project Name	4068
Subarea ID	39A
Area (ac)	0.88
Flow Path Length (ft)	173.0
Flow Path Slope (vft/hft)	0.009
50-yr Rainfall Depth (in)	2.7
Percent Impervious	0.9
Soil Type	134
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

Catput Rocalio		
Modeled (50-yr) Rainfall Depth (in)	2.7	
Peak Intensity (in/hr)	1.4786	
Undeveloped Runoff Coefficient (Cu)	0.1835	
Developed Runoff Coefficient (Cd)	0.8284	
Time of Concentration (min)	6.0	
Clear Peak Flow Rate (cfs)	1.0778	
Burned Peak Flow Rate (cfs)	1.0778	
24-Hr Clear Runoff Volume (ac-ft)	0.1611	
24-Hr Clear Runoff Volume (cu-ft)	7016.1289	
• • • • • • • • • • • • • • • • • • • •		

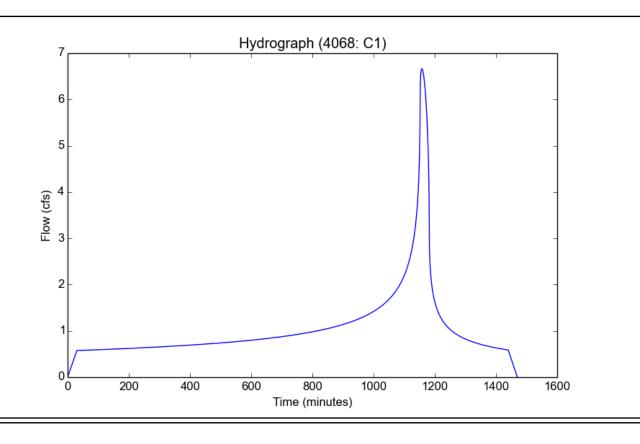


File location: O:/4000-4099/4068/HYDROLOGY/4068 Report A.pdf Version: HydroCalc 1.0.3 $\,$

Input	Param	eters
-------	--------------	-------

Project Name	4068
Subarea ID	C1
Area (ac)	11.71
Flow Path Length (ft)	2400.0
Flow Path Slope (vft/hft)	0.01
50-yr Rainfall Depth (in)	2.7
Percent Impervious	0.9
Soil Type	134
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

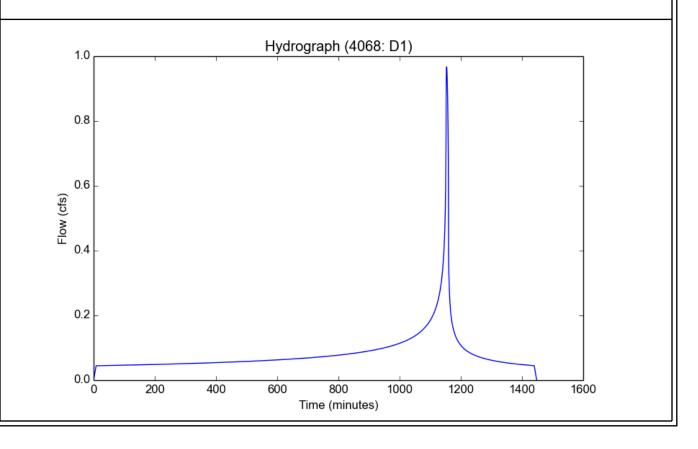
Modeled (50-yr) Rainfall Depth (in)	2.7
Peak Intensity (in/hr)	0.694
Undeveloped Runoff Coefficient (Cu)	0.1
Developed Runoff Coefficient (Cd)	0.82
Time of Concentration (min)	30.0
Clear Peak Flow Rate (cfs)	6.6636
Burned Peak Flow Rate (cfs)	6.6636
24-Hr Clear Runoff Volume (ac-ft)	2.1427
24-Hr Clear Runoff Volume (cu-ft)	93334.4556
` ,	



File location: O:/4000-4099/4068/HYDROLOGY/4068 Report A.pdf Version: HydroCalc 1.0.3 $\,$

Project Name	4068
Subarea ID	D1
Area (ac)	0.91
Flow Path Length (ft)	250.0
Flow Path Slope (vft/hft)	0.01
50-yr Rainfall Depth (in)	2.7
Percent Impervious	0.9
Soil Type	134
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

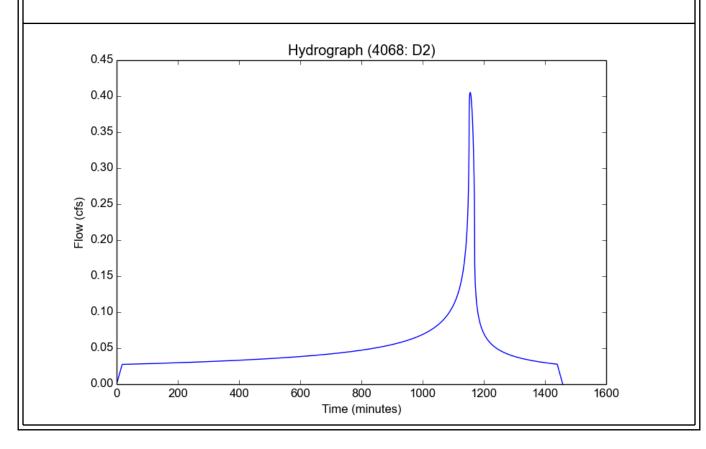
Modeled (50-yr) Rainfall Depth (in)	2.7
Peak Intensity (in/hr)	1.2916
Undeveloped Runoff Coefficient (Cu)	0.1275
Developed Runoff Coefficient (Cd)	0.8227
Time of Concentration (min)	8.0
Clear Peak Flow Rate (cfs)	0.967
Burned Peak Flow Rate (cfs)	0.967
24-Hr Clear Runoff Volume (ac-ft)	0.1665
24-Hr Clear Runoff Volume (cu-ft)	7253.6527
,	



File location: O:/4000-4099/4068/HYDROLOGY/4068 Report A.pdf Version: HydroCalc 1.0.3

Project Name	4068
Subarea ID	D2
Area (ac)	0.56
Flow Path Length (ft)	900.0
Flow Path Slope (vft/hft)	0.01
50-yr Rainfall Depth (in)	2.7
Percent Impervious	0.9
Soil Type	134
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

Output Roodito	
Modeled (50-yr) Rainfall Depth (in)	2.7
Peak Intensity (in/hr)	0.8823
Undeveloped Runoff Coefficient (Cu)	0.1
Developed Runoff Coefficient (Cd)	0.82
Time of Concentration (min)	18.0
Clear Peak Flow Rate (cfs)	0.4051
Burned Peak Flow Rate (cfs)	0.4051
24-Hr Clear Runoff Volume (ac-ft)	0.1025
24-Hr Clear Runoff Volume (cu-ft)	4463.4423
,	

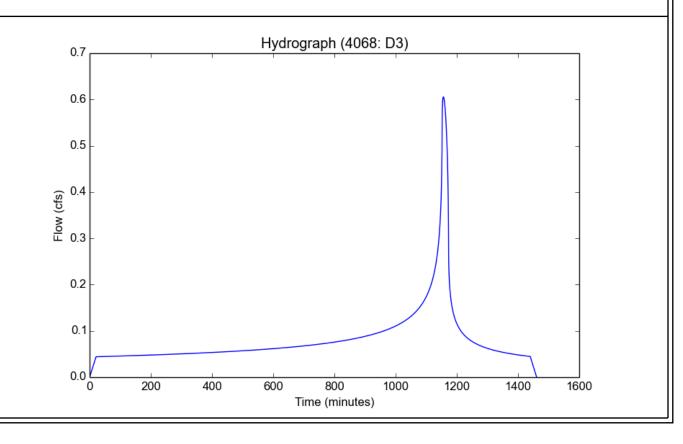


File location: O:/4000-4099/4068/HYDROLOGY/4068 Report A.pdf Version: HydroCalc 1.0.3 $\,$

Input	Param	eters
-------	--------------	-------

•	
Project Name	4068
Subarea ID	D3
Area (ac)	0.9
Flow Path Length (ft)	1116.0
Flow Path Slope (vft/hft)	0.01
50-yr Rainfall Depth (in)	2.7
Percent Impervious	0.9
Soil Type	134
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

Modeled (50-yr) Rainfall Depth (in)	2.7
Peak Intensity (in/hr)	0.8206
Undeveloped Runoff Coefficient (Cu)	0.1
Developed Runoff Coefficient (Cd)	0.82
Time of Concentration (min)	21.0
Clear Peak Flow Rate (cfs)	0.6056
Burned Peak Flow Rate (cfs)	0.6056
24-Hr Clear Runoff Volume (ac-ft)	0.1647
24-Hr Clear Runoff Volume (cu-ft)	7173.4001
,	

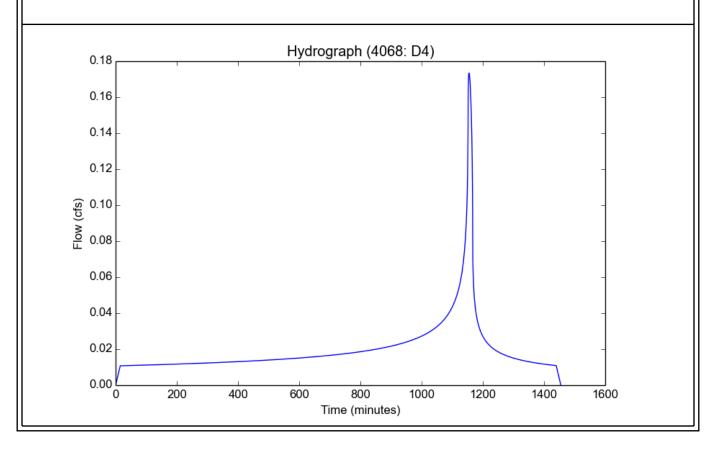


File location: O:/4000-4099/4068/HYDROLOGY/4068 Report A.pdf Version: HydroCalc 1.0.3

Input	Parameters
-------	-------------------

Drainat Nama	4060
Project Name	4068
Subarea ID	D4
Area (ac)	0.22
Flow Path Length (ft)	660.0
Flow Path Slope (vft/hft)	0.01
50-yr Rainfall Depth (in)	2.7
Percent Impervious	0.9
Soil Type	134
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

Carpar Rooano		
Modeled (50-yr) Rainfall Depth (in)	2.7	
Peak Intensity (in/hr)	0.9612	
Undeveloped Runoff Coefficient (Cu)	0.1	
Developed Runoff Coefficient (Cd)	0.82	
Time of Concentration (min)	15.0	
Clear Peak Flow Rate (cfs)	0.1734	
Burned Peak Flow Rate (cfs)	0.1734	
24-Hr Clear Runoff Volume (ac-ft)	0.0403	
24-Hr Clear Runoff Volume (cu-ft)	1753.493	
, ,		

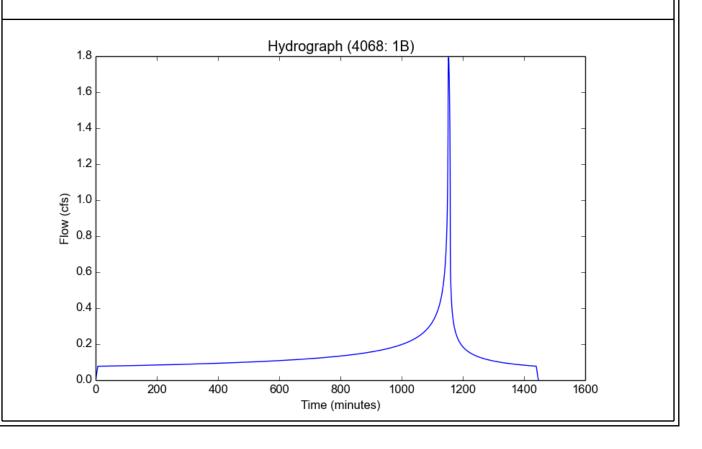


File location: O:/4000-4099/4068/HYDROLOGY/4068 Report B.pdf Version: HydroCalc 1.0.3

Input	Parameters
-------	-------------------

Project Name	4068
Subarea ID	1B
Area (ac)	1.58
Flow Path Length (ft)	222.0
Flow Path Slope (vft/hft)	0.016
50-yr Rainfall Depth (in)	2.7
Percent Impervious	0.9
Soil Type	134
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

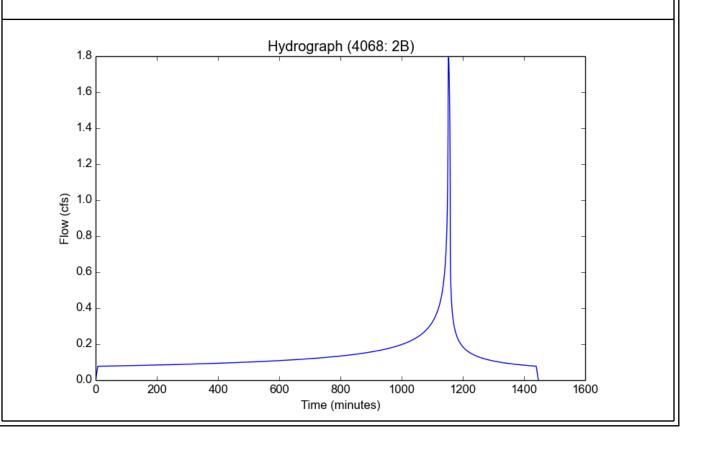
Output Modulio	
Modeled (50-yr) Rainfall Depth (in)	2.7
Peak Intensity (in/hr)	1.3753
Undeveloped Runoff Coefficient (Cu)	0.1525
Developed Runoff Coefficient (Cd)	0.8253
Time of Concentration (min)	7.0
Clear Peak Flow Rate (cfs)	1.7932
Burned Peak Flow Rate (cfs)	1.7932
24-Hr Clear Runoff Volume (ac-ft)	0.2892
24-Hr Clear Runoff Volume (cu-ft)	12595.5288
, ,	



File location: O:/4000-4099/4068/HYDROLOGY/4068 Report B.pdf Version: HydroCalc 1.0.3

Project Name	4068
Subarea ID	2B
Area (ac)	1.58
Flow Path Length (ft)	222.0
Flow Path Slope (vft/hft)	0.016
50-yr Rainfall Depth (in)	2.7
Percent Impervious	0.9
Soil Type	134
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

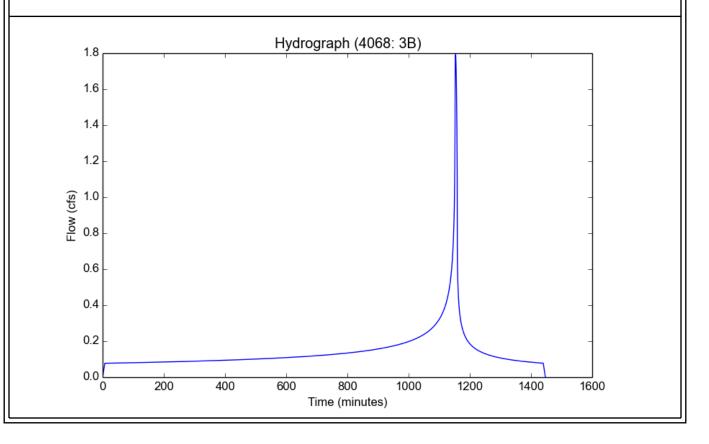
Output Modulio	
Modeled (50-yr) Rainfall Depth (in)	2.7
Peak Intensity (in/hr)	1.3753
Undeveloped Runoff Coefficient (Cu)	0.1525
Developed Runoff Coefficient (Cd)	0.8253
Time of Concentration (min)	7.0
Clear Peak Flow Rate (cfs)	1.7932
Burned Peak Flow Rate (cfs)	1.7932
24-Hr Clear Runoff Volume (ac-ft)	0.2892
24-Hr Clear Runoff Volume (cu-ft)	12595.5288
, ,	



File location: O:/4000-4099/4068/HYDROLOGY/4068 Report B.pdf Version: HydroCalc 1.0.3

Project Name	4068
Subarea ID	3B
Area (ac)	1.58
Flow Path Length (ft)	222.0
Flow Path Slope (vft/hft)	0.016
50-yr Rainfall Depth (in)	2.7
Percent Impervious	0.9
Soil Type	134
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

Output Modulio	
Modeled (50-yr) Rainfall Depth (in)	2.7
Peak Intensity (in/hr)	1.3753
Undeveloped Runoff Coefficient (Cu)	0.1525
Developed Runoff Coefficient (Cd)	0.8253
Time of Concentration (min)	7.0
Clear Peak Flow Rate (cfs)	1.7932
Burned Peak Flow Rate (cfs)	1.7932
24-Hr Clear Runoff Volume (ac-ft)	0.2892
24-Hr Clear Runoff Volume (cu-ft)	12595.5288

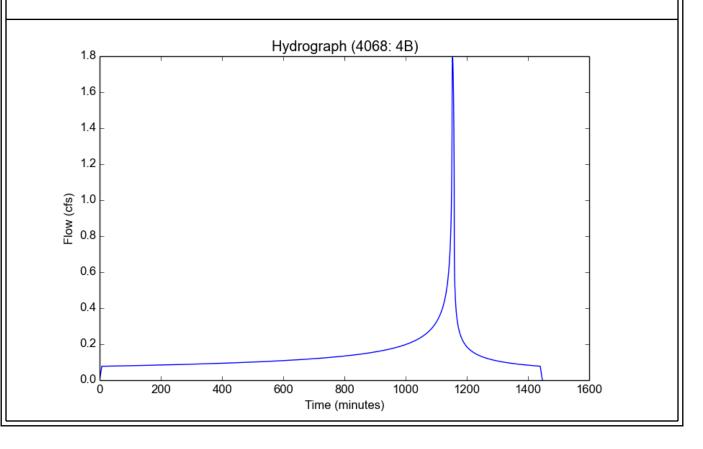


File location: O:/4000-4099/4068/HYDROLOGY/4068 Report B.pdf Version: HydroCalc 1.0.3

Input F	Parameters
---------	------------

Project Name	4068
Subarea ID	4B
Area (ac)	1.58
Flow Path Length (ft)	222.0
Flow Path Slope (vft/hft)	0.016
50-yr Rainfall Depth (in)	2.7
Percent Impervious	0.9
Soil Type	134
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

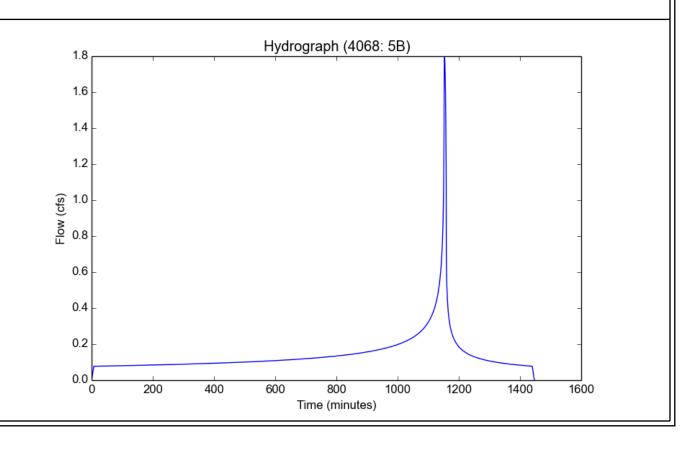
Calput Nocalio	
Modeled (50-yr) Rainfall Depth (in)	2.7
Peak Intensity (in/hr)	1.3753
Undeveloped Runoff Coefficient (Cu)	0.1525
Developed Runoff Coefficient (Cd)	0.8253
Time of Concentration (min)	7.0
Clear Peak Flow Rate (cfs)	1.7932
Burned Peak Flow Rate (cfs)	1.7932
24-Hr Clear Runoff Volume (ac-ft)	0.2892
24-Hr Clear Runoff Volume (cu-ft)	12595.5288



File location: O:/4000-4099/4068/HYDROLOGY/4068 Report B.pdf Version: HydroCalc 1.0.3

Project Name	4068
Subarea ID	5B
Area (ac)	1.58
Flow Path Length (ft)	222.0
Flow Path Slope (vft/hft)	0.016
50-yr Rainfall Depth (in)	2.7
Percent Impervious	0.9
Soil Type	134
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

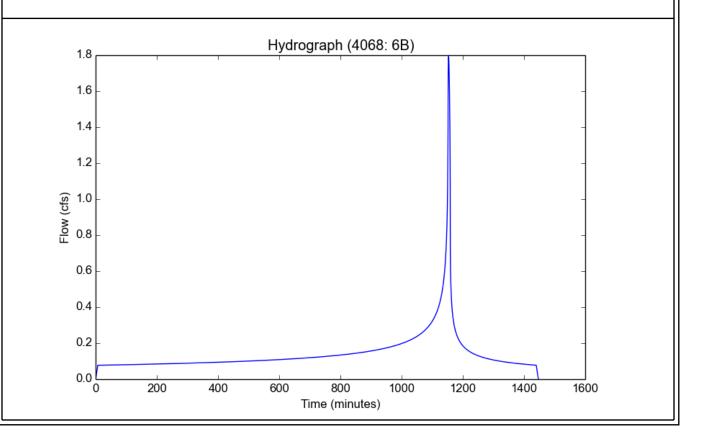
output resource	
Modeled (50-yr) Rainfall Depth (in)	2.7
Peak Intensity (in/hr)	1.3753
Undeveloped Runoff Coefficient (Cu)	0.1525
Developed Runoff Coefficient (Cd)	0.8253
Time of Concentration (min)	7.0
Clear Peak Flow Rate (cfs)	1.7932
Burned Peak Flow Rate (cfs)	1.7932
24-Hr Clear Runoff Volume (ac-ft)	0.2892
24-Hr Clear Runoff Volume (cu-ft)	12595.5288



File location: O:/4000-4099/4068/HYDROLOGY/4068 Report B.pdf Version: HydroCalc 1.0.3

Project Name	4068
Subarea ID	6B
Area (ac)	1.58
Flow Path Length (ft)	222.0
Flow Path Slope (vft/hft)	0.016
50-yr Rainfall Depth (in)	2.7
Percent Impervious	0.9
Soil Type	134
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

Output Modulio	
Modeled (50-yr) Rainfall Depth (in)	2.7
Peak Intensity (in/hr)	1.3753
Undeveloped Runoff Coefficient (Cu)	0.1525
Developed Runoff Coefficient (Cd)	0.8253
Time of Concentration (min)	7.0
Clear Peak Flow Rate (cfs)	1.7932
Burned Peak Flow Rate (cfs)	1.7932
24-Hr Clear Runoff Volume (ac-ft)	0.2892
24-Hr Clear Runoff Volume (cu-ft)	12595.5288

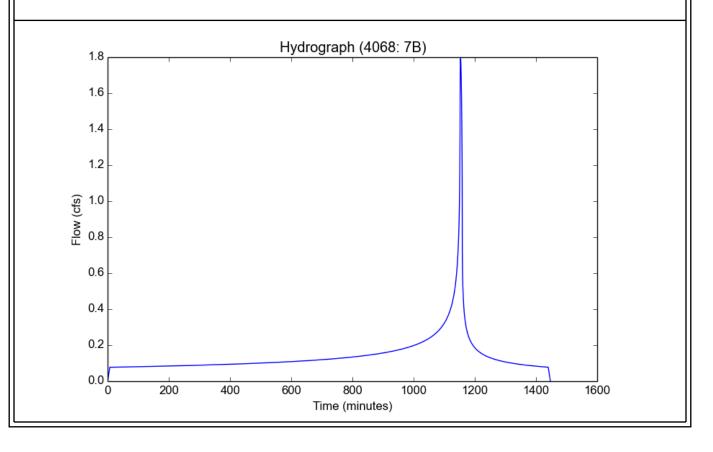


File location: O:/4000-4099/4068/HYDROLOGY/4068 Report B.pdf Version: HydroCalc 1.0.3

Input	Param	eters
-------	--------------	-------

Project Name	4068
Subarea ID	7B
Area (ac)	1.58
Flow Path Length (ft)	222.0
Flow Path Slope (vft/hft)	0.016
50-yr Rainfall Depth (in)	2.7
Percent Impervious	0.9
Soil Type	134
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

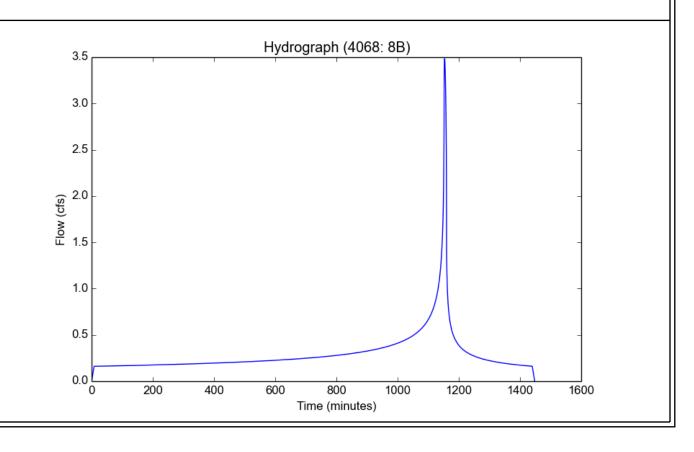
Output Modulio	
Modeled (50-yr) Rainfall Depth (in)	2.7
Peak Intensity (in/hr)	1.3753
Undeveloped Runoff Coefficient (Cu)	0.1525
Developed Runoff Coefficient (Cd)	0.8253
Time of Concentration (min)	7.0
Clear Peak Flow Rate (cfs)	1.7932
Burned Peak Flow Rate (cfs)	1.7932
24-Hr Clear Runoff Volume (ac-ft)	0.2892
24-Hr Clear Runoff Volume (cu-ft)	12595.5288
, ,	



File location: O:/4000-4099/4068/HYDROLOGY/4068 Report B.pdf Version: HydroCalc 1.0.3

Project Name	4068
Subarea ID	8B
Area (ac)	3.28
Flow Path Length (ft)	252.0
Flow Path Slope (vft/hft)	0.012
50-yr Rainfall Depth (in)	2.7
Percent Impervious	0.9
Soil Type	134
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

o at par 1 too a 10	
Modeled (50-yr) Rainfall Depth (in)	2.7
Peak Intensity (in/hr)	1.2916
Undeveloped Runoff Coefficient (Cu)	0.1275
Developed Runoff Coefficient (Cd)	0.8227
Time of Concentration (min)	8.0
Clear Peak Flow Rate (cfs)	3.4855
Burned Peak Flow Rate (cfs)	3.4855
24-Hr Clear Runoff Volume (ac-ft)	0.6002
24-Hr Clear Runoff Volume (cu-ft)	26145.0338

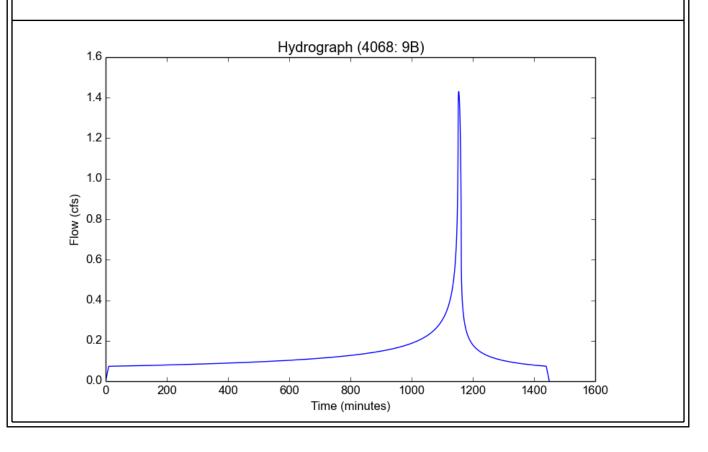


File location: O:/4000-4099/4068/HYDROLOGY/4068 Report B.pdf Version: HydroCalc 1.0.3

Innut Parameters

4068
9B
1.5
293.0
0.007
2.7
0.9
134
50-yr
0
False
2.7 0.9 134

Output Nesults	
Modeled (50-yr) Rainfall Depth (in)	2.7
Peak Intensity (in/hr)	1.163
Undeveloped Runoff Coefficient (Cu)	0.1
Developed Runoff Coefficient (Cd)	0.82
Time of Concentration (min)	10.0
Clear Peak Flow Rate (cfs)	1.4305
Burned Peak Flow Rate (cfs)	1.4305
24-Hr Clear Runoff Volume (ac-ft)	0.2745
24-Hr Clear Runoff Volume (cu-ft)	11955.6151

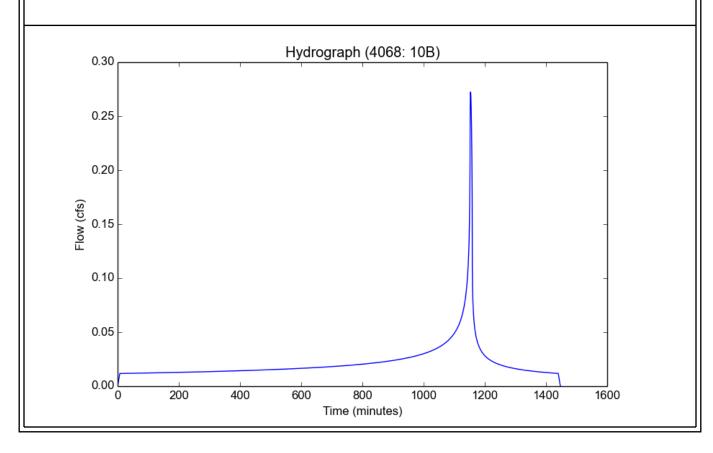


File location: O:/4000-4099/4068/HYDROLOGY/4068 Report B.pdf Version: HydroCalc 1.0.3

Input	Parameters	š
-------	-------------------	---

Project Name	4068
Subarea ID	10B
Area (ac)	0.24
Flow Path Length (ft)	185.0
Flow Path Slope (vft/hft)	0.007
50-yr Rainfall Depth (in)	2.7
Percent Impervious	0.9
Soil Type	134
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

Modeled (50-yr) Rainfall Depth (in)	2.7
Peak Intensity (in/hr)	1.3753
Undeveloped Runoff Coefficient (Cu)	0.1525
Developed Runoff Coefficient (Cd)	0.8253
Time of Concentration (min)	7.0
Clear Peak Flow Rate (cfs)	0.2724
Burned Peak Flow Rate (cfs)	0.2724
24-Hr Clear Runoff Volume (ac-ft)	0.0439
24-Hr Clear Runoff Volume (cu-ft)	1913.2449
,	

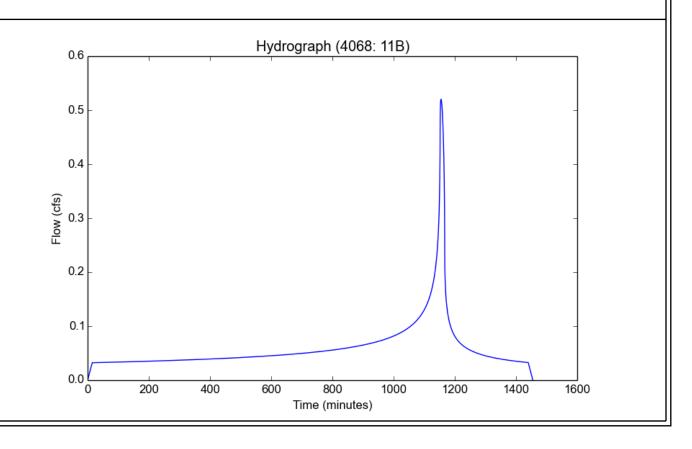


File location: O:/4000-4099/4068/HYDROLOGY/4068 Report B.pdf Version: HydroCalc 1.0.3

Input Parameters

4068
11B
0.66
580.0
0.007
2.7
0.9
134
50-yr
0
False

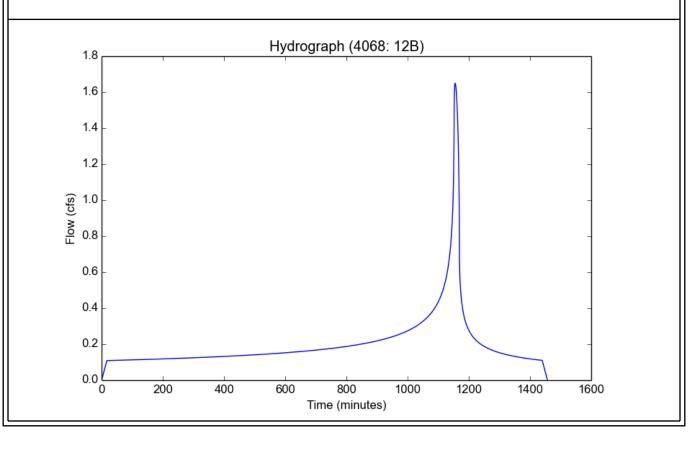
Modeled (50-yr) Rainfall Depth (in)	2.7	
Peak Intensity (in/hr)	0.9612	
Undeveloped Runoff Coefficient (Cu)	0.1	
Developed Runoff Coefficient (Cd)	0.82	
Time of Concentration (min)	15.0	
Clear Peak Flow Rate (cfs)	0.5202	
Burned Peak Flow Rate (cfs)	0.5202	
24-Hr Clear Runoff Volume (ac-ft)	0.1208	
24-Hr Clear Runoff Volume (cu-ft)	5260.479	
` ,		



File location: O:/4000-4099/4068/HYDROLOGY/4068 Report B.pdf Version: HydroCalc 1.0.3

Project Name	4068
Subarea ID	12B
Area (ac)	2.22
Flow Path Length (ft)	680.0
Flow Path Slope (vft/hft)	0.006
50-yr Rainfall Depth (in)	2.7
Percent Impervious	0.9
Soil Type	134
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

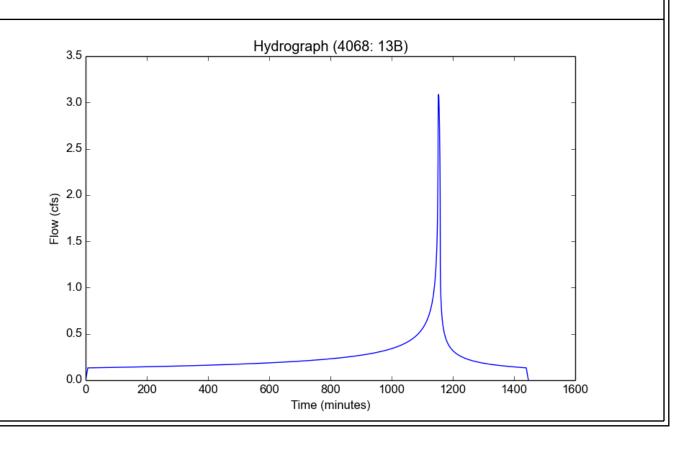
Output Roodito	
Modeled (50-yr) Rainfall Depth (in)	2.7
Peak Intensity (in/hr)	0.9063
Undeveloped Runoff Coefficient (Cu)	0.1
Developed Runoff Coefficient (Cd)	0.82
Time of Concentration (min)	17.0
Clear Peak Flow Rate (cfs)	1.6498
Burned Peak Flow Rate (cfs)	1.6498
24-Hr Clear Runoff Volume (ac-ft)	0.4062
24-Hr Clear Runoff Volume (cu-ft)	17694.3527
, ,	



File location: O:/4000-4099/4068/HYDROLOGY/4068 Report B.pdf Version: HydroCalc 1.0.3

Project Name	4068
Subarea ID	13B
Area (ac)	2.72
Flow Path Length (ft)	185.0
Flow Path Slope (vft/hft)	0.011
50-yr Rainfall Depth (in)	2.7
Percent Impervious	0.9
Soil Type	134
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

Modeled (50-yr) Rainfall Depth (in)	2.7	
Peak Intensity (in/hr)	1.3753	
Undeveloped Runoff Coefficient (Cu)	0.1525	
Developed Runoff Coefficient (Cd)	0.8253	
Time of Concentration (min)	7.0	
Clear Peak Flow Rate (cfs)	3.087	
Burned Peak Flow Rate (cfs)	3.087	
24-Hr Clear Runoff Volume (ac-ft)	0.4978	
24-Hr Clear Runoff Volume (cu-ft)	21683.442	
,		

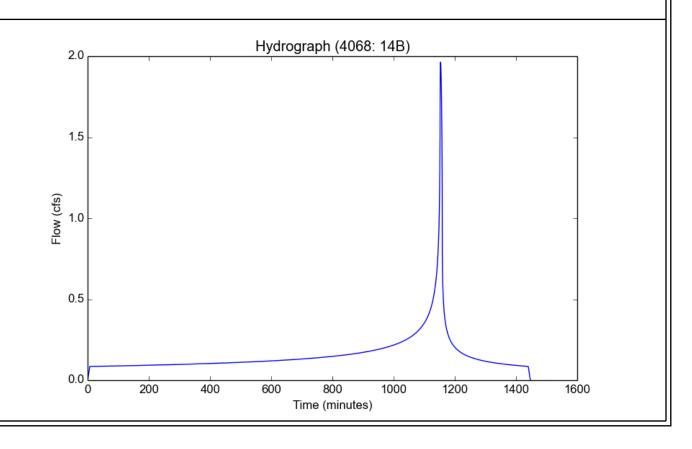


File location: O:/4000-4099/4068/HYDROLOGY/4068 Report B.pdf Version: HydroCalc 1.0.3

Input	Parameters
-------	-------------------

Project Name	4068
Subarea ID	14B
Area (ac)	1.73
Flow Path Length (ft)	185.0
Flow Path Slope (vft/hft)	0.011
50-yr Rainfall Depth (in)	2.7
Percent Impervious	0.9
Soil Type	134
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

Odipat Noodito		
Modeled (50-yr) Rainfall Depth (in)	2.7	
Peak Intensity (in/hr)	1.3753	
Undeveloped Runoff Coefficient (Cu)	0.1525	
Developed Runoff Coefficient (Cd)	0.8253	
Time of Concentration (min)	7.0	
Clear Peak Flow Rate (cfs)	1.9635	
Burned Peak Flow Rate (cfs)	1.9635	
24-Hr Clear Runoff Volume (ac-ft)	0.3166	
24-Hr Clear Runoff Volume (cu-ft)	13791.3069	
• • • • • • • • • • • • • • • • • • • •		

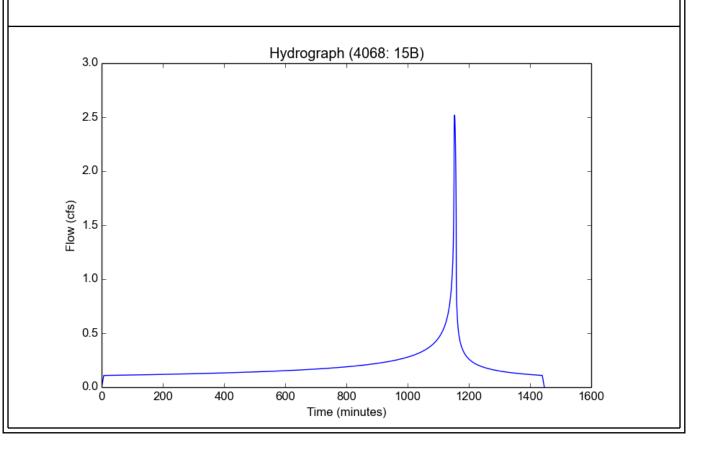


File location: O:/4000-4099/4068/HYDROLOGY/4068 Report B.pdf Version: HydroCalc 1.0.3

Input	Parameters
-------	-------------------

Project Name	4068
Subarea ID	15B
Area (ac)	2.22
Flow Path Length (ft)	185.0
Flow Path Slope (vft/hft)	0.011
50-yr Rainfall Depth (in)	2.7
Percent Impervious	0.9
Soil Type	134
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

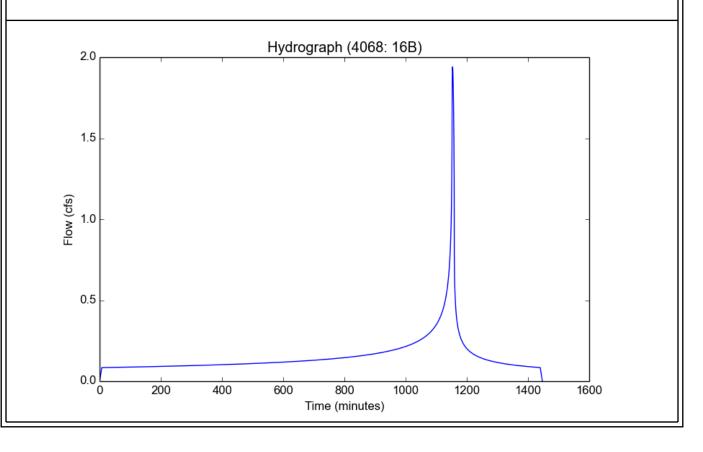
output Modulio	
Modeled (50-yr) Rainfall Depth (in)	2.7
Peak Intensity (in/hr)	1.3753
Undeveloped Runoff Coefficient (Cu)	0.1525
Developed Runoff Coefficient (Cd)	0.8253
Time of Concentration (min)	7.0
Clear Peak Flow Rate (cfs)	2.5196
Burned Peak Flow Rate (cfs)	2.5196
24-Hr Clear Runoff Volume (ac-ft)	0.4063
24-Hr Clear Runoff Volume (cu-ft)	17697.5152



File location: O:/4000-4099/4068/HYDROLOGY/4068 Report B.pdf Version: HydroCalc 1.0.3

Project Name	4068
Subarea ID	16B
Area (ac)	1.71
Flow Path Length (ft)	185.0
Flow Path Slope (vft/hft)	0.011
50-yr Rainfall Depth (in)	2.7
Percent Impervious	0.9
Soil Type	134
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

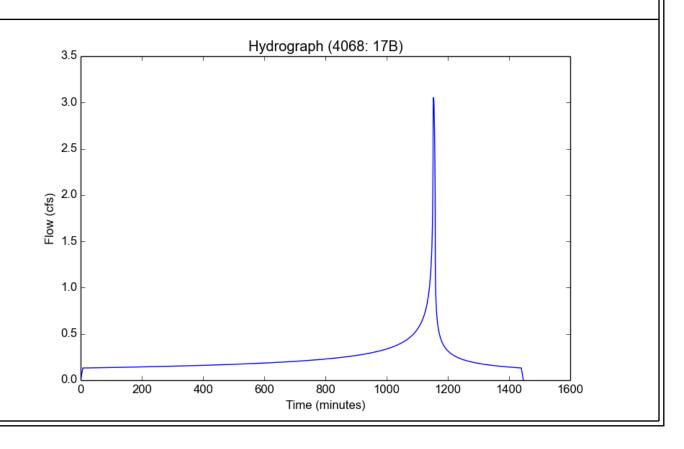
Odipat Noodito		
Modeled (50-yr) Rainfall Depth (in)	2.7	
Peak Intensity (in/hr)	1.3753	
Undeveloped Runoff Coefficient (Cu)	0.1525	
Developed Runoff Coefficient (Cd)	0.8253	
Time of Concentration (min)	7.0	
Clear Peak Flow Rate (cfs)	1.9408	
Burned Peak Flow Rate (cfs)	1.9408	
24-Hr Clear Runoff Volume (ac-ft)	0.3129	
24-Hr Clear Runoff Volume (cu-ft)	13631.8698	
• • •		



File location: O:/4000-4099/4068/HYDROLOGY/4068 Report B.pdf Version: HydroCalc 1.0.3

Project Name	4068
Subarea ID	17B
Area (ac)	2.69
Flow Path Length (ft)	185.0
Flow Path Slope (vft/hft)	0.011
50-yr Rainfall Depth (in)	2.7
Percent Impervious	0.9
Soil Type	134
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

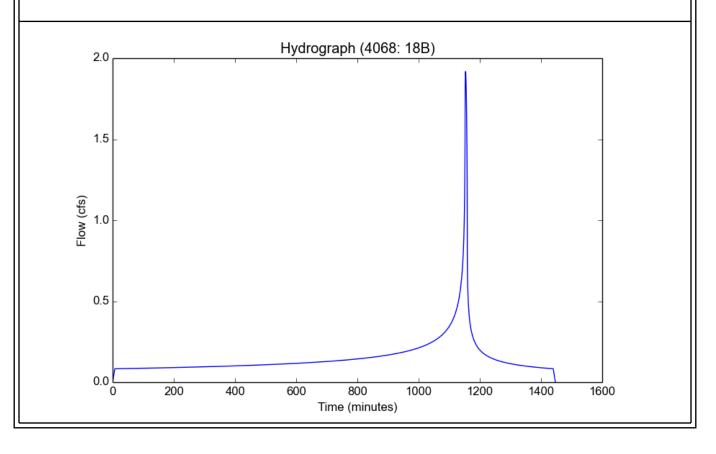
Output Nesans	
Modeled (50-yr) Rainfall Depth (in)	2.7
Peak Intensity (in/hr)	1.3753
Undeveloped Runoff Coefficient (Cu)	0.1525
Developed Runoff Coefficient (Cd)	0.8253
Time of Concentration (min)	7.0
Clear Peak Flow Rate (cfs)	3.053
Burned Peak Flow Rate (cfs)	3.053
24-Hr Clear Runoff Volume (ac-ft)	0.4923
24-Hr Clear Runoff Volume (cu-ft)	21444.2864
• • •	



File location: O:/4000-4099/4068/HYDROLOGY/4068 Report B.pdf Version: HydroCalc 1.0.3

Project Name	4068
Subarea ID	18B
Area (ac)	1.69
Flow Path Length (ft)	188.0
Flow Path Slope (vft/hft)	0.009
50-yr Rainfall Depth (in)	2.7
Percent Impervious	0.9
Soil Type	134
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

Output Nesalts	
Modeled (50-yr) Rainfall Depth (in)	2.7
Peak Intensity (in/hr)	1.3753
Undeveloped Runoff Coefficient (Cu)	0.1525
Developed Runoff Coefficient (Cd)	0.8253
Time of Concentration (min)	7.0
Clear Peak Flow Rate (cfs)	1.9181
Burned Peak Flow Rate (cfs)	1.9181
24-Hr Clear Runoff Volume (ac-ft)	0.3093
24-Hr Clear Runoff Volume (cu-ft)	13472.4327
, ,	

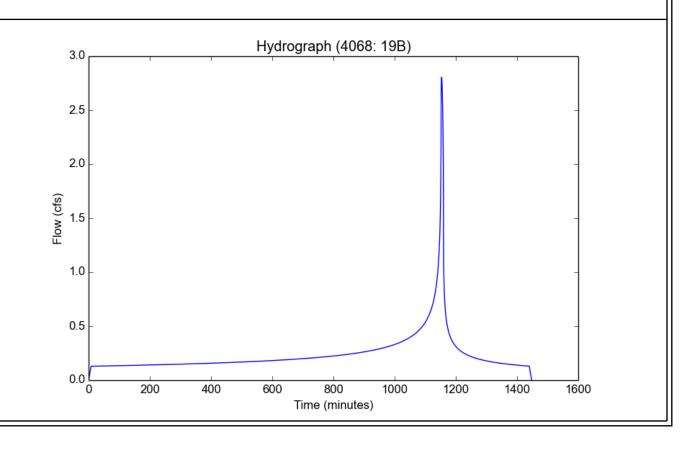


File location: O:/4000-4099/4068/HYDROLOGY/4068 Report B.pdf Version: HydroCalc 1.0.3

Input	Parameters
-------	-------------------

Project Name	4068
Subarea ID	19B
Area (ac)	2.64
Flow Path Length (ft)	188.0
Flow Path Slope (vft/hft)	0.005
50-yr Rainfall Depth (in)	2.7
Percent Impervious	0.9
Soil Type	134
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

Modeled (50-yr) Rainfall Depth (in)	2.7
Peak Intensity (in/hr)	1.2916
Undeveloped Runoff Coefficient (Cu)	0.1275
Developed Runoff Coefficient (Cd)	0.8227
Time of Concentration (min)	8.0
Clear Peak Flow Rate (cfs)	2.8054
Burned Peak Flow Rate (cfs)	2.8054
24-Hr Clear Runoff Volume (ac-ft)	0.4831
24-Hr Clear Runoff Volume (cu-ft)	21043.5638

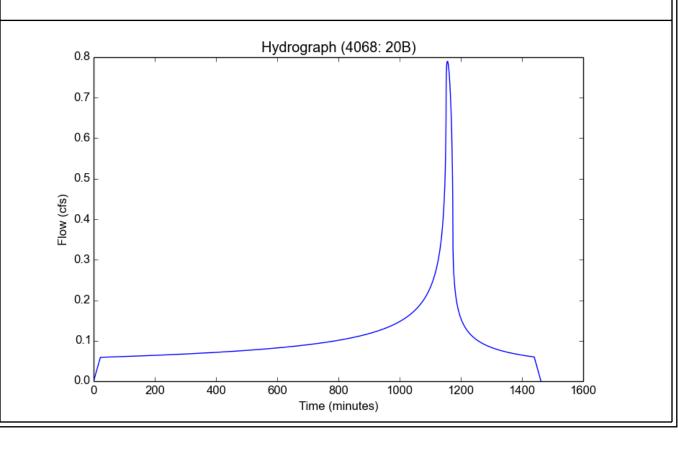


File location: O:/4000-4099/4068/HYDROLOGY/4068 Report B.pdf Version: HydroCalc 1.0.3

Input	Param	eters
-------	--------------	-------

Project Name	4068
Subarea ID	20B
Area (ac)	1.2
Flow Path Length (ft)	960.0
Flow Path Slope (vft/hft)	0.005
50-yr Rainfall Depth (in)	2.7
Percent Impervious	0.9
Soil Type	134
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

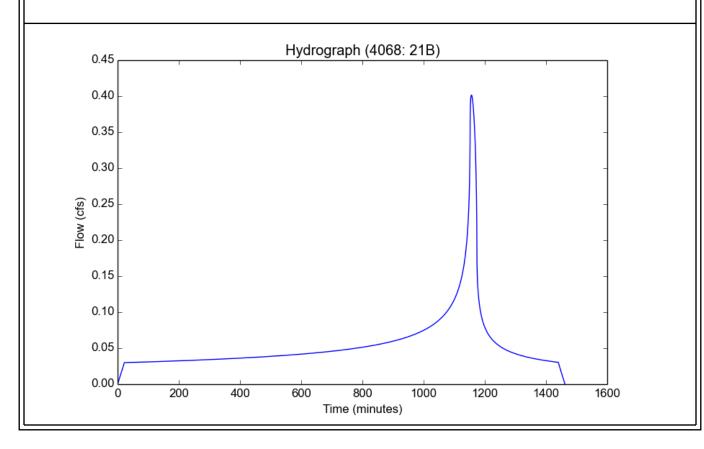
o diput Noodito	
Modeled (50-yr) Rainfall Depth (in)	2.7
Peak Intensity (in/hr)	0.8029
Undeveloped Runoff Coefficient (Cu)	0.1
Developed Runoff Coefficient (Cd)	0.82
Time of Concentration (min)	22.0
Clear Peak Flow Rate (cfs)	0.79
Burned Peak Flow Rate (cfs)	0.79
24-Hr Clear Runoff Volume (ac-ft)	0.2196
24-Hr Clear Runoff Volume (cu-ft)	9564.5387
•	



File location: O:/4000-4099/4068/HYDROLOGY/4068 Report B.pdf Version: HydroCalc 1.0.3

Project Name	4068
Subarea ID	21B
Area (ac)	0.61
Flow Path Length (ft)	960.0
Flow Path Slope (vft/hft)	0.005
50-yr Rainfall Depth (in)	2.7
Percent Impervious	0.9
Soil Type	134
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

output itooutio	
Modeled (50-yr) Rainfall Depth (in)	2.7
Peak Intensity (in/hr)	0.8029
Undeveloped Runoff Coefficient (Cu)	0.1
Developed Runoff Coefficient (Cd)	0.82
Time of Concentration (min)	22.0
Clear Peak Flow Rate (cfs)	0.4016
Burned Peak Flow Rate (cfs)	0.4016
24-Hr Clear Runoff Volume (ac-ft)	0.1116
24-Hr Clear Runoff Volume (cu-ft)	4861.9739

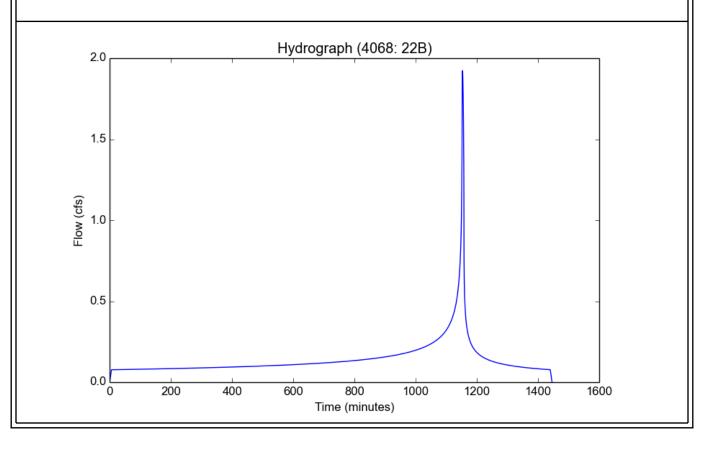


File location: O:/4000-4099/4068/HYDROLOGY/4068 Report B.pdf Version: HydroCalc 1.0.3

Input	Parameters
-------	-------------------

D.: (N	4000
Project Name	4068
Subarea ID	22B
Area (ac)	1.57
Flow Path Length (ft)	165.0
Flow Path Slope (vft/hft)	0.016
50-yr Rainfall Depth (in)	2.7
Percent Impervious	0.9
Soil Type	134
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

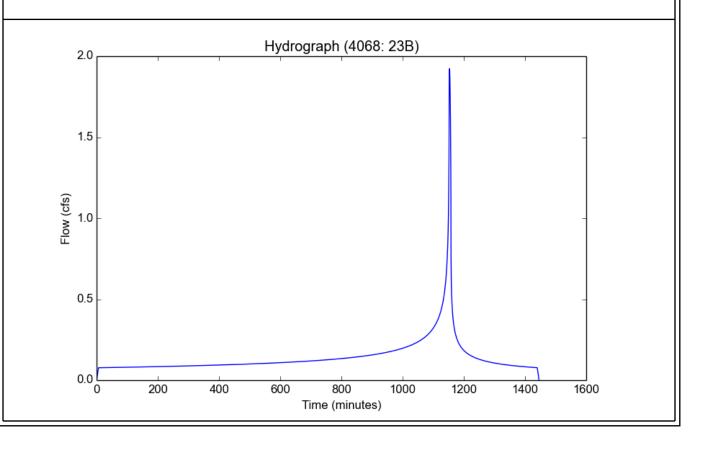
Carpar Rocard	
Modeled (50-yr) Rainfall Depth (in)	2.7
Peak Intensity (in/hr)	1.4786
Undeveloped Runoff Coefficient (Cu)	0.1835
Developed Runoff Coefficient (Cd)	0.8284
Time of Concentration (min)	6.0
Clear Peak Flow Rate (cfs)	1.9229
Burned Peak Flow Rate (cfs)	1.9229
24-Hr Clear Runoff Volume (ac-ft)	0.2874
24-Hr Clear Runoff Volume (cu-ft)	12517.4117
•	



File location: O:/4000-4099/4068/HYDROLOGY/4068 Report B.pdf Version: HydroCalc 1.0.3

Project Name	4068
Subarea ID	23B
Area (ac)	1.57
Flow Path Length (ft)	165.0
Flow Path Slope (vft/hft)	0.016
50-yr Rainfall Depth (in)	2.7
Percent Impervious	0.9
Soil Type	134
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

output itooutto	
Modeled (50-yr) Rainfall Depth (in)	2.7
Peak Intensity (in/hr)	1.4786
Undeveloped Runoff Coefficient (Cu)	0.1835
Developed Runoff Coefficient (Cd)	0.8284
Time of Concentration (min)	6.0
Clear Peak Flow Rate (cfs)	1.9229
Burned Peak Flow Rate (cfs)	1.9229
24-Hr Clear Runoff Volume (ac-ft)	0.2874
24-Hr Clear Runoff Volume (cu-ft)	12517.4117

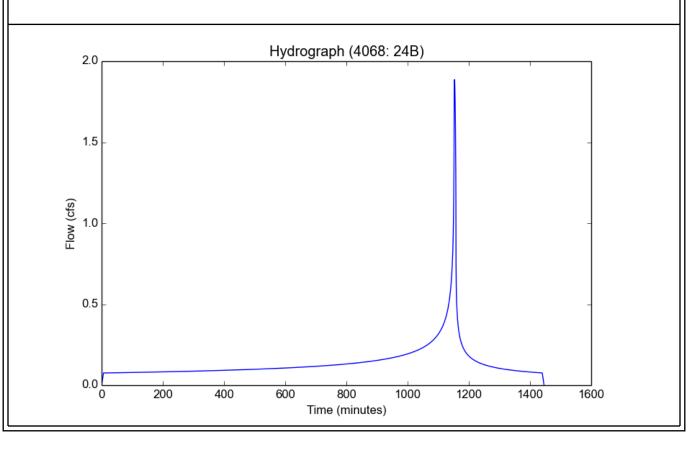


File location: O:/4000-4099/4068/HYDROLOGY/4068 Report B.pdf Version: HydroCalc 1.0.3

Input	Parameters
-------	-------------------

Project Name	4068
Subarea ID	24B
Area (ac)	1.54
Flow Path Length (ft)	165.0
Flow Path Slope (vft/hft)	0.016
50-yr Rainfall Depth (in)	2.7
Percent Impervious	0.9
Soil Type	134
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

Modeled (50-yr) Rainfall Depth (in)	2.7
Peak Intensity (in/hr)	1.4786
Undeveloped Runoff Coefficient (Cu)	0.1835
Developed Runoff Coefficient (Cd)	0.8284
Time of Concentration (min)	6.0
Clear Peak Flow Rate (cfs)	1.8862
Burned Peak Flow Rate (cfs)	1.8862
24-Hr Clear Runoff Volume (ac-ft)	0.2819
24-Hr Clear Runoff Volume (cu-ft)	12278.2255
, ,	

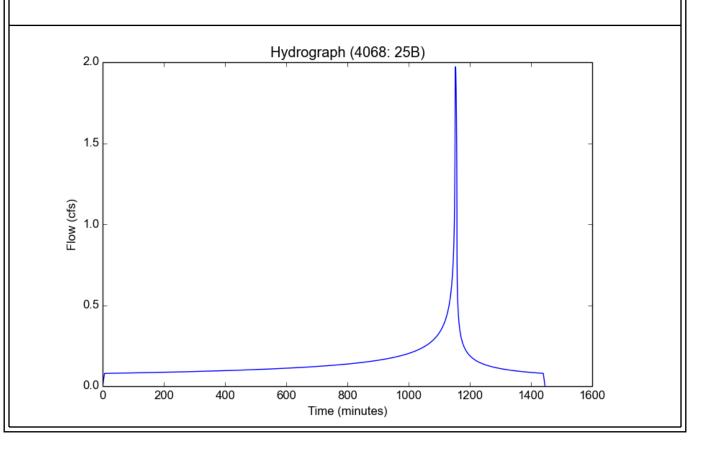


File location: O:/4000-4099/4068/HYDROLOGY/4068 Report B.pdf Version: HydroCalc 1.0.3

Input	Parameters
-------	-------------------

Project Name	4068
Subarea ID	25B
Area (ac)	1.61
Flow Path Length (ft)	165.0
Flow Path Slope (vft/hft)	0.016
50-yr Rainfall Depth (in)	2.7
Percent Impervious	0.9
Soil Type	134
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

output itooutto	
Modeled (50-yr) Rainfall Depth (in)	2.7
Peak Intensity (in/hr)	1.4786
Undeveloped Runoff Coefficient (Cu)	0.1835
Developed Runoff Coefficient (Cd)	0.8284
Time of Concentration (min)	6.0
Clear Peak Flow Rate (cfs)	1.9719
Burned Peak Flow Rate (cfs)	1.9719
24-Hr Clear Runoff Volume (ac-ft)	0.2947
24-Hr Clear Runoff Volume (cu-ft)	12836.3267

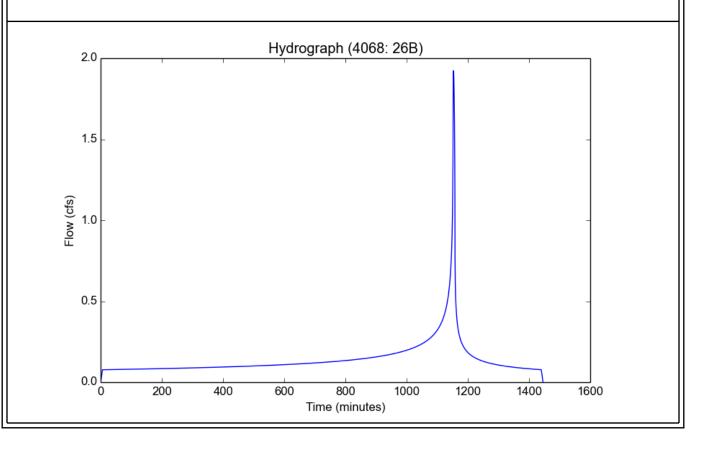


File location: O:/4000-4099/4068/HYDROLOGY/4068 Report B.pdf Version: HydroCalc 1.0.3

Input	Parame	eters
-------	--------	-------

Project Name	4068
Subarea ID	26B
Area (ac)	1.57
Flow Path Length (ft)	165.0
Flow Path Slope (vft/hft)	0.016
50-yr Rainfall Depth (in)	2.7
Percent Impervious	0.9
Soil Type	134
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

output itooutto	
Modeled (50-yr) Rainfall Depth (in)	2.7
Peak Intensity (in/hr)	1.4786
Undeveloped Runoff Coefficient (Cu)	0.1835
Developed Runoff Coefficient (Cd)	0.8284
Time of Concentration (min)	6.0
Clear Peak Flow Rate (cfs)	1.9229
Burned Peak Flow Rate (cfs)	1.9229
24-Hr Clear Runoff Volume (ac-ft)	0.2874
24-Hr Clear Runoff Volume (cu-ft)	12517.4117

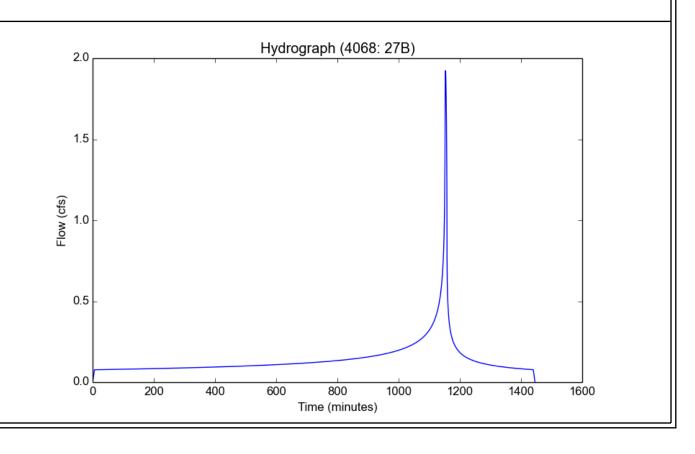


File location: O:/4000-4099/4068/HYDROLOGY/4068 Report B.pdf Version: HydroCalc 1.0.3

Input	Parameters
-------	-------------------

Project Name	4068
Subarea ID	27B
Area (ac)	1.57
Flow Path Length (ft)	165.0
Flow Path Slope (vft/hft)	0.016
50-yr Rainfall Depth (in)	2.7
Percent Impervious	0.9
Soil Type	134
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

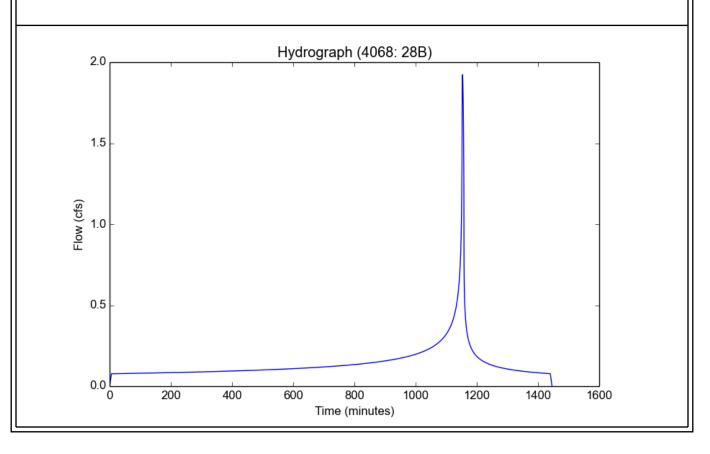
Carpar recard	
Modeled (50-yr) Rainfall Depth (in)	2.7
Peak Intensity (in/hr)	1.4786
Undeveloped Runoff Coefficient (Cu)	0.1835
Developed Runoff Coefficient (Cd)	0.8284
Time of Concentration (min)	6.0
Clear Peak Flow Rate (cfs)	1.9229
Burned Peak Flow Rate (cfs)	1.9229
24-Hr Clear Runoff Volume (ac-ft)	0.2874
24-Hr Clear Runoff Volume (cu-ft)	12517.4117
• • • • • • • • • • • • • • • • • • • •	



File location: O:/4000-4099/4068/HYDROLOGY/4068 Report B.pdf Version: HydroCalc 1.0.3

Project Name	4068
Subarea ID	28B
Area (ac)	1.57
Flow Path Length (ft)	165.0
Flow Path Slope (vft/hft)	0.016
50-yr Rainfall Depth (in)	2.7
Percent Impervious	0.9
Soil Type	134
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

Modeled (50-yr) Rainfall Depth (in)	2.7	
Peak Intensity (in/hr)	1.4786	
Undeveloped Runoff Coefficient (Cu)	0.1835	
Developed Runoff Coefficient (Cd)	0.8284	
Time of Concentration (min)	6.0	
Clear Peak Flow Rate (cfs)	1.9229	
Burned Peak Flow Rate (cfs)	1.9229	
24-Hr Clear Runoff Volume (ac-ft)	0.2874	
24-Hr Clear Runoff Volume (cu-ft)	12517.4117	
, ,		

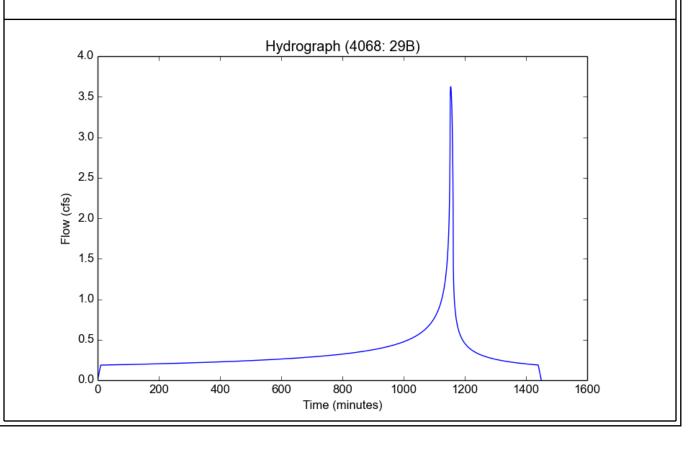


File location: O:/4000-4099/4068/HYDROLOGY/4068 Report B.pdf Version: HydroCalc 1.0.3

Input	Parameters
-------	-------------------

Project Name	4068
Subarea ID	29B
Area (ac)	3.8
Flow Path Length (ft)	331.0
Flow Path Slope (vft/hft)	0.011
50-yr Rainfall Depth (in)	2.7
Percent Impervious	0.9
Soil Type	134
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

o atpat i too allo	
Modeled (50-yr) Rainfall Depth (in)	2.7
Peak Intensity (in/hr)	1.163
Undeveloped Runoff Coefficient (Cu)	0.1
Developed Runoff Coefficient (Cd)	0.82
Time of Concentration (min)	10.0
Clear Peak Flow Rate (cfs)	3.6239
Burned Peak Flow Rate (cfs)	3.6239
24-Hr Clear Runoff Volume (ac-ft)	0.6953
24-Hr Clear Runoff Volume (cu-ft)	30287.5581

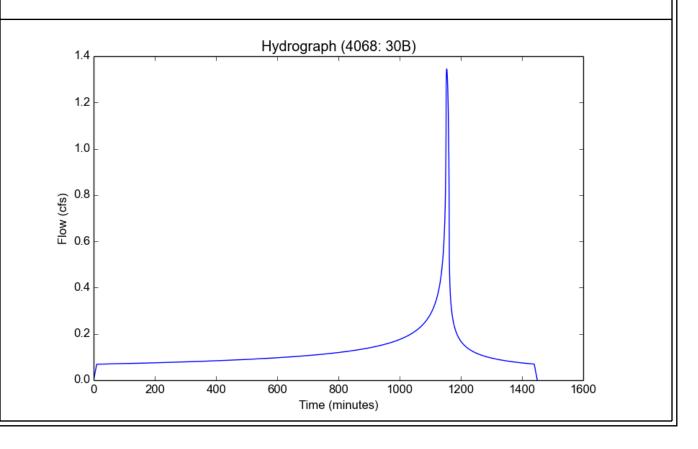


File location: O:/4000-4099/4068/HYDROLOGY/4068 Report B.pdf Version: HydroCalc 1.0.3

Input	Parameters

•	
Project Name	4068
Subarea ID	30B
Area (ac)	1.41
Flow Path Length (ft)	304.0
Flow Path Slope (vft/hft)	0.005
50-yr Rainfall Depth (in)	2.7
Percent Impervious	0.9
Soil Type	134
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

Output Modulio	
Modeled (50-yr) Rainfall Depth (in)	2.7
Peak Intensity (in/hr)	1.163
Undeveloped Runoff Coefficient (Cu)	0.1
Developed Runoff Coefficient (Cd)	0.82
Time of Concentration (min)	10.0
Clear Peak Flow Rate (cfs)	1.3447
Burned Peak Flow Rate (cfs)	1.3447
24-Hr Clear Runoff Volume (ac-ft)	0.258
24-Hr Clear Runoff Volume (cu-ft)	11238.2781
• • •	

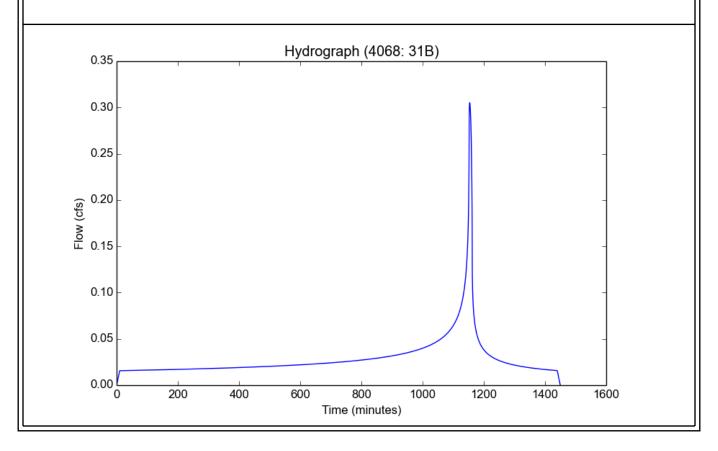


File location: O:/4000-4099/4068/HYDROLOGY/4068 Report B.pdf Version: HydroCalc 1.0.3

Input I	Parameters
---------	------------

Project Name	4068
Subarea ID	31B
Area (ac)	0.32
Flow Path Length (ft)	275.0
Flow Path Slope (vft/hft)	0.005
50-yr Rainfall Depth (in)	2.7
Percent Impervious	0.9
Soil Type	134
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

output itooutio	
Modeled (50-yr) Rainfall Depth (in)	2.7
Peak Intensity (in/hr)	1.163
Undeveloped Runoff Coefficient (Cu)	0.1
Developed Runoff Coefficient (Cd)	0.82
Time of Concentration (min)	10.0
Clear Peak Flow Rate (cfs)	0.3052
Burned Peak Flow Rate (cfs)	0.3052
24-Hr Clear Runoff Volume (ac-ft)	0.0586
24-Hr Clear Runoff Volume (cu-ft)	2550.5312

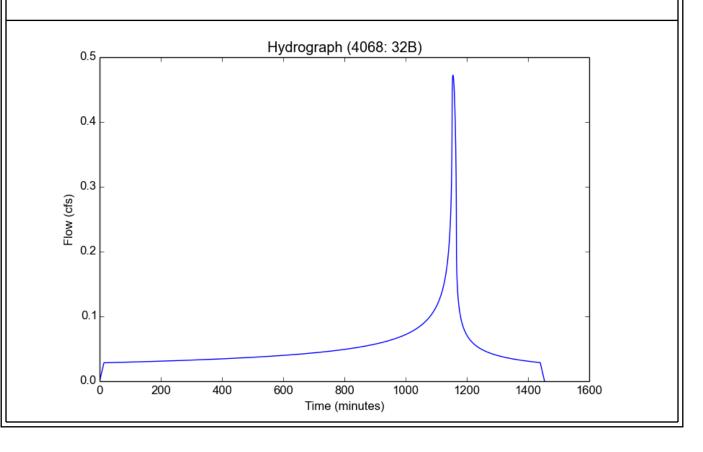


File location: O:/4000-4099/4068/HYDROLOGY/4068 Report B.pdf Version: HydroCalc 1.0.3

Input	Parameters
-------	-------------------

•	
Project Name	4068
Subarea ID	32B
Area (ac)	0.58
Flow Path Length (ft)	490.0
Flow Path Slope (vft/hft)	0.005
50-yr Rainfall Depth (in)	2.7
Percent Impervious	0.9
Soil Type	134
Design Storm Frequency	50-yr
Fire Factor	0
LID	False
LID	False

output itooutio	
Modeled (50-yr) Rainfall Depth (in)	2.7
Peak Intensity (in/hr)	0.9929
Undeveloped Runoff Coefficient (Cu)	0.1
Developed Runoff Coefficient (Cd)	0.82
Time of Concentration (min)	14.0
Clear Peak Flow Rate (cfs)	0.4722
Burned Peak Flow Rate (cfs)	0.4722
24-Hr Clear Runoff Volume (ac-ft)	0.1061
24-Hr Clear Runoff Volume (cu-ft)	4622.8434

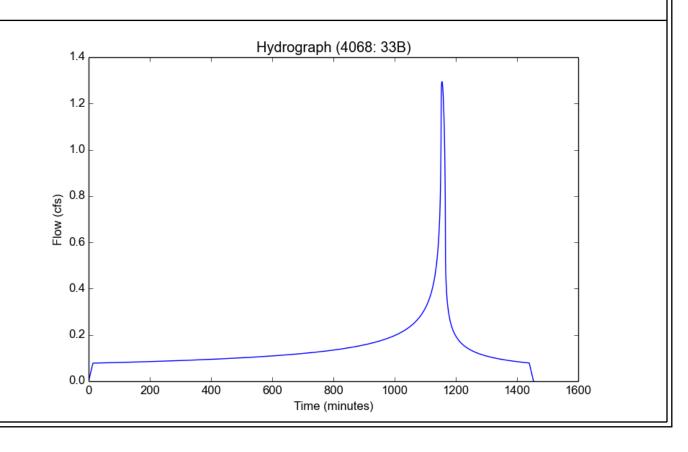


File location: O:/4000-4099/4068/HYDROLOGY/4068 Report B.pdf Version: HydroCalc 1.0.3

Input	Parameters
-------	-------------------

•	
Project Name	4068
Subarea ID	33B
Area (ac)	1.59
Flow Path Length (ft)	490.0
Flow Path Slope (vft/hft)	0.005
50-yr Rainfall Depth (in)	2.7
Percent Impervious	0.9
Soil Type	134
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

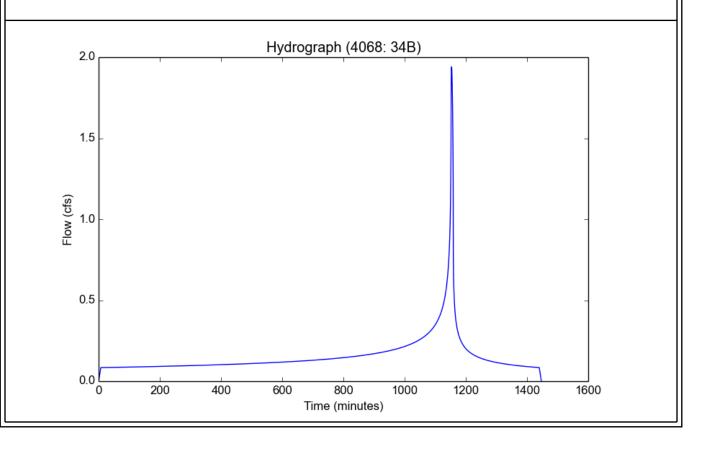
Catpat Rocalio	
Modeled (50-yr) Rainfall Depth (in)	2.7
Peak Intensity (in/hr)	0.9929
Undeveloped Runoff Coefficient (Cu)	0.1
Developed Runoff Coefficient (Cd)	0.82
Time of Concentration (min)	14.0
Clear Peak Flow Rate (cfs)	1.2945
Burned Peak Flow Rate (cfs)	1.2945
24-Hr Clear Runoff Volume (ac-ft)	0.2909
24-Hr Clear Runoff Volume (cu-ft)	12672.9674
,	



File location: O:/4000-4099/4068/HYDROLOGY/4068 Report B.pdf Version: HydroCalc 1.0.3

D	4000
Project Name	4068
Subarea ID	34B
Area (ac)	1.71
Flow Path Length (ft)	192.0
Flow Path Slope (vft/hft)	0.012
50-yr Rainfall Depth (in)	2.7
Percent Impervious	0.9
Soil Type	134
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

Modeled (50-yr) Rainfall Depth (in)	2.7
Peak Intensity (in/hr)	1.3753
Undeveloped Runoff Coefficient (Cu)	0.1525
Developed Runoff Coefficient (Cd)	0.8253
Time of Concentration (min)	7.0
Clear Peak Flow Rate (cfs)	1.9408
Burned Peak Flow Rate (cfs)	1.9408
24-Hr Clear Runoff Volume (ac-ft)	0.3129
24-Hr Clear Runoff Volume (cu-ft)	13631.8698
,	

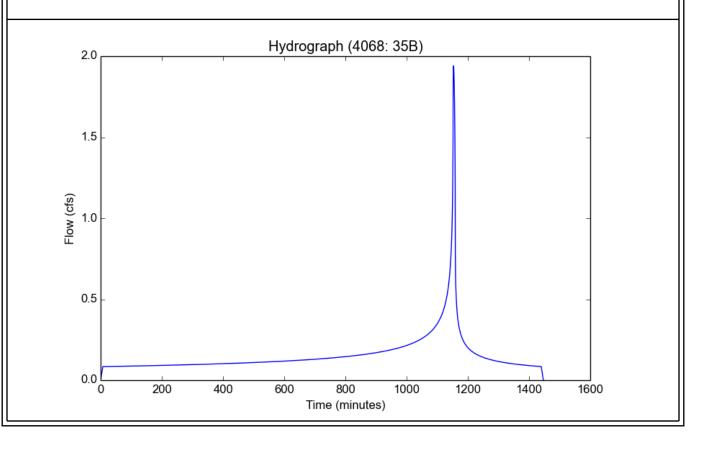


File location: O:/4000-4099/4068/HYDROLOGY/4068 Report B.pdf Version: HydroCalc 1.0.3

Input I	Parameters
---------	------------

Project Name	4068
Subarea ID	35B
Area (ac)	1.71
Flow Path Length (ft)	192.0
Flow Path Slope (vft/hft)	0.012
50-yr Rainfall Depth (in)	2.7
Percent Impervious	0.9
Soil Type	134
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

output Roodito	
Modeled (50-yr) Rainfall Depth (in)	2.7
Peak Intensity (in/hr)	1.3753
Undeveloped Runoff Coefficient (Cu)	0.1525
Developed Runoff Coefficient (Cd)	0.8253
Time of Concentration (min)	7.0
Clear Peak Flow Rate (cfs)	1.9408
Burned Peak Flow Rate (cfs)	1.9408
24-Hr Clear Runoff Volume (ac-ft)	0.3129
24-Hr Clear Runoff Volume (cu-ft)	13631.8698
, ,	

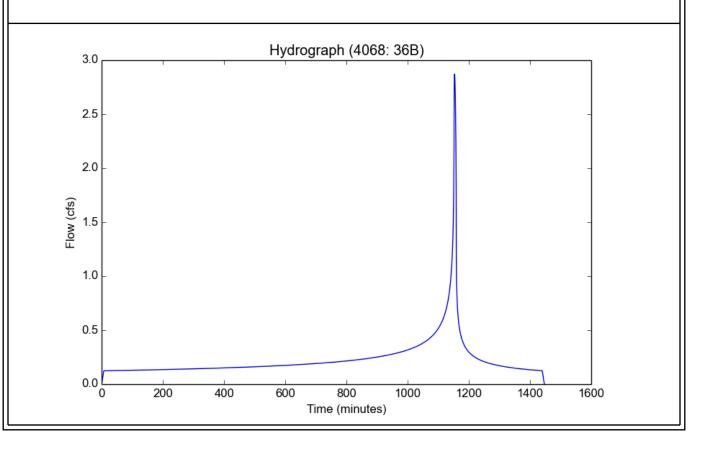


File location: O:/4000-4099/4068/HYDROLOGY/4068 Report B.pdf Version: HydroCalc 1.0.3

Input	Parameters
-------	-------------------

Project Name	4068
Subarea ID	36B
Area (ac)	2.53
Flow Path Length (ft)	192.0
Flow Path Slope (vft/hft)	0.012
50-yr Rainfall Depth (in)	2.7
Percent Impervious	0.9
Soil Type	134
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

Catpat Rocato	
Modeled (50-yr) Rainfall Depth (in)	2.7
Peak Intensity (in/hr)	1.3753
Undeveloped Runoff Coefficient (Cu)	0.1525
Developed Runoff Coefficient (Cd)	0.8253
Time of Concentration (min)	7.0
Clear Peak Flow Rate (cfs)	2.8714
Burned Peak Flow Rate (cfs)	2.8714
24-Hr Clear Runoff Volume (ac-ft)	0.463
24-Hr Clear Runoff Volume (cu-ft)	20168.7898
· , , , ,	

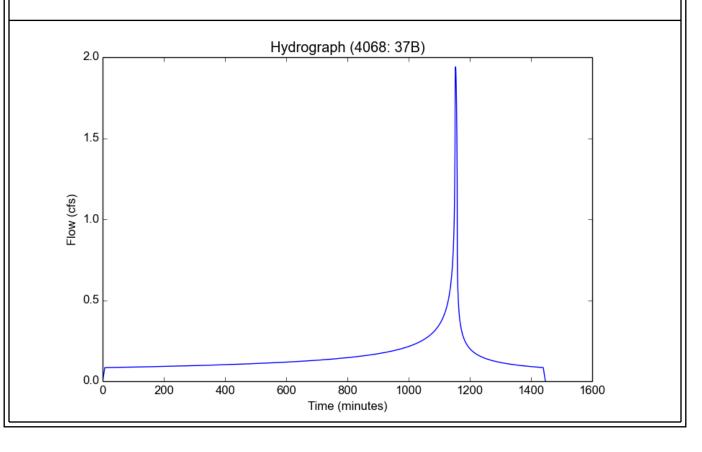


File location: O:/4000-4099/4068/HYDROLOGY/4068 Report B.pdf Version: HydroCalc 1.0.3

Input	Parameters
-------	-------------------

Project Name	4068
Subarea ID	37B
Area (ac)	1.71
Flow Path Length (ft)	192.0
Flow Path Slope (vft/hft)	0.012
50-yr Rainfall Depth (in)	2.7
Percent Impervious	0.9
Soil Type	134
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

Modeled (50-yr) Rainfall Depth (in)	2.7
Peak Intensity (in/hr)	1.3753
Undeveloped Runoff Coefficient (Cu)	0.1525
Developed Runoff Coefficient (Cd)	0.8253
Time of Concentration (min)	7.0
Clear Peak Flow Rate (cfs)	1.9408
Burned Peak Flow Rate (cfs)	1.9408
24-Hr Clear Runoff Volume (ac-ft)	0.3129
24-Hr Clear Runoff Volume (cu-ft)	13631.8698
,	

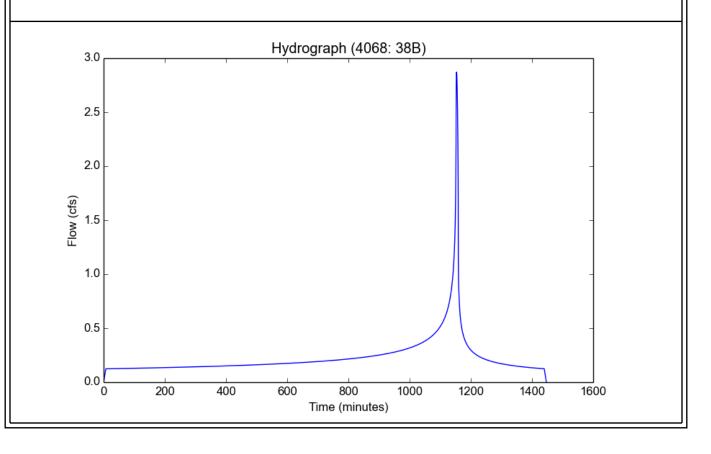


File location: O:/4000-4099/4068/HYDROLOGY/4068 Report B.pdf Version: HydroCalc 1.0.3

I.oo4	Param	-1
Innit	Param	DIDIE

Project Name	4068
Subarea ID	38B
Area (ac)	2.53
Flow Path Length (ft)	192.0
Flow Path Slope (vft/hft)	0.012
50-yr Rainfall Depth (in)	2.7
Percent Impervious	0.9
Soil Type	134
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

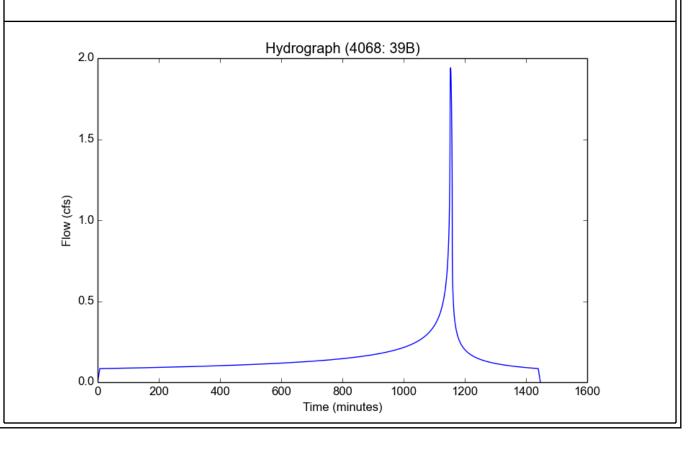
Output Modulio	
Modeled (50-yr) Rainfall Depth (in)	2.7
Peak Intensity (in/hr)	1.3753
Undeveloped Runoff Coefficient (Cu)	0.1525
Developed Runoff Coefficient (Cd)	0.8253
Time of Concentration (min)	7.0
Clear Peak Flow Rate (cfs)	2.8714
Burned Peak Flow Rate (cfs)	2.8714
24-Hr Clear Runoff Volume (ac-ft)	0.463
24-Hr Clear Runoff Volume (cu-ft)	20168.7898
, ,	



File location: O:/4000-4099/4068/HYDROLOGY/4068 Report B.pdf Version: HydroCalc 1.0.3

Project Name	4068
Subarea ID	39B
Area (ac)	1.71
Flow Path Length (ft)	192.0
Flow Path Slope (vft/hft)	0.012
50-yr Rainfall Depth (in)	2.7
Percent Impervious	0.9
Soil Type	134
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

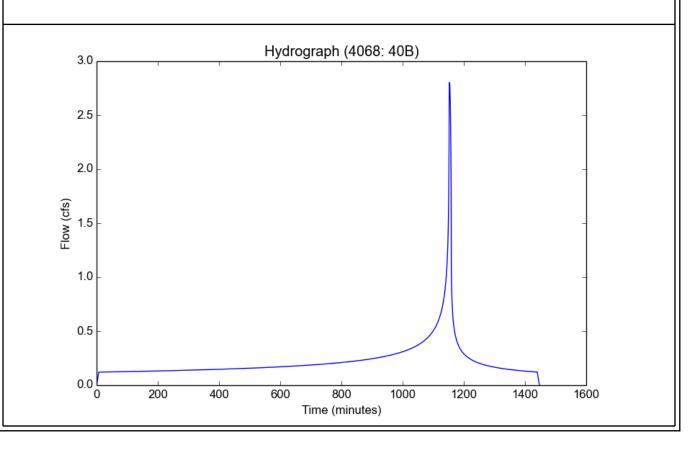
Calpat Nocalio	
Modeled (50-yr) Rainfall Depth (in)	2.7
Peak Intensity (in/hr)	1.3753
Undeveloped Runoff Coefficient (Cu)	0.1525
Developed Runoff Coefficient (Cd)	0.8253
Time of Concentration (min)	7.0
Clear Peak Flow Rate (cfs)	1.9408
Burned Peak Flow Rate (cfs)	1.9408
24-Hr Clear Runoff Volume (ac-ft)	0.3129
24-Hr Clear Runoff Volume (cu-ft)	13631.8698



File location: O:/4000-4099/4068/HYDROLOGY/4068 Report B.pdf Version: HydroCalc 1.0.3

•	
Project Name	4068
Subarea ID	40B
Area (ac)	2.47
Flow Path Length (ft)	210.0
Flow Path Slope (vft/hft)	0.012
50-yr Rainfall Depth (in)	2.7
Percent Impervious	0.9
Soil Type	134
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

Output Modulio	
Modeled (50-yr) Rainfall Depth (in)	2.7
Peak Intensity (in/hr)	1.3753
Undeveloped Runoff Coefficient (Cu)	0.1525
Developed Runoff Coefficient (Cd)	0.8253
Time of Concentration (min)	7.0
Clear Peak Flow Rate (cfs)	2.8033
Burned Peak Flow Rate (cfs)	2.8033
24-Hr Clear Runoff Volume (ac-ft)	0.452
24-Hr Clear Runoff Volume (cu-ft)	19690.4786
,	

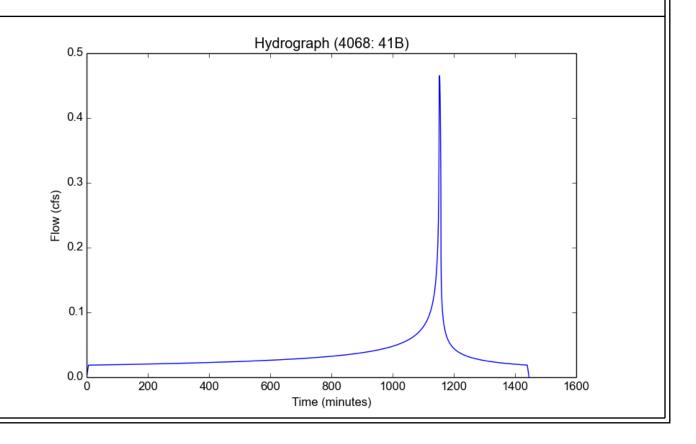


File location: O:/4000-4099/4068/HYDROLOGY/4068 Report B.pdf Version: HydroCalc 1.0.3

Input	Parameters
-------	-------------------

•	
Project Name	4068
Subarea ID	41B
Area (ac)	0.38
Flow Path Length (ft)	152.0
Flow Path Slope (vft/hft)	0.008
50-yr Rainfall Depth (in)	2.7
Percent Impervious	0.9
Soil Type	134
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

Catput Rocatto		
Modeled (50-yr) Rainfall Depth (in)	2.7	
Peak Intensity (in/hr)	1.4786	
Undeveloped Runoff Coefficient (Cu)	0.1835	
Developed Runoff Coefficient (Cd)	0.8284	
Time of Concentration (min)	6.0	
Clear Peak Flow Rate (cfs)	0.4654	
Burned Peak Flow Rate (cfs)	0.4654	
24-Hr Clear Runoff Volume (ac-ft)	0.0696	
24-Hr Clear Runoff Volume (cu-ft)	3029.692	
,		

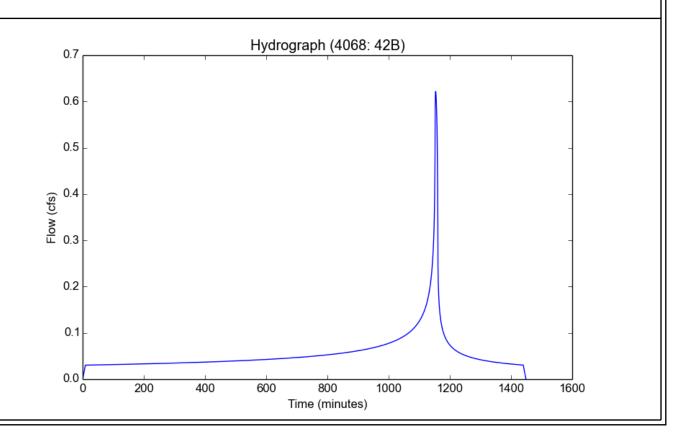


File location: O:/4000-4099/4068/HYDROLOGY/4068 Report B.pdf Version: HydroCalc 1.0.3

Input	Parameters
-------	------------

Project Name	4068
Subarea ID	42B
Area (ac)	0.62
Flow Path Length (ft)	252.0
Flow Path Slope (vft/hft)	0.007
50-yr Rainfall Depth (in)	2.7
Percent Impervious	0.9
Soil Type	134
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

output itooutio	
Modeled (50-yr) Rainfall Depth (in)	2.7
Peak Intensity (in/hr)	1.222
Undeveloped Runoff Coefficient (Cu)	0.1066
Developed Runoff Coefficient (Cd)	0.8207
Time of Concentration (min)	9.0
Clear Peak Flow Rate (cfs)	0.6218
Burned Peak Flow Rate (cfs)	0.6218
24-Hr Clear Runoff Volume (ac-ft)	0.1134
24-Hr Clear Runoff Volume (cu-ft)	4941.7071

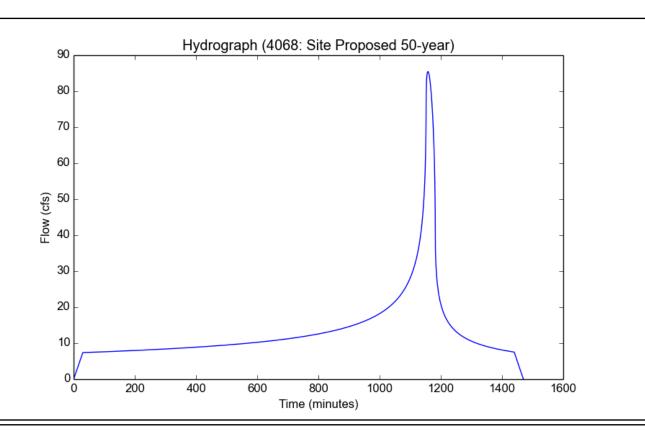


File location: O:/4000-4099/4068/HYDROLOGY/4068 Report.pdf Version: HydroCalc 1.0.3

Input	Param	eters
-------	--------------	-------

Project Name	4068
Subarea ID	Site Proposed 50-year
Area (ac)	150.18
Flow Path Length (ft)	2500.0
Flow Path Slope (vft/hft)	0.006
50-yr Rainfall Depth (in)	2.7
Percent Impervious	0.9
Soil Type	134
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

Modeled (50-yr) Rainfall Depth (in)	2.7
Peak Intensity (in/hr)	0.694
Undeveloped Runoff Coefficient (Cu)	0.1
Developed Runoff Coefficient (Cd)	0.82
Time of Concentration (min)	30.0
Clear Peak Flow Rate (cfs)	85.4598
Burned Peak Flow Rate (cfs)	85.4598
24-Hr Clear Runoff Volume (ac-ft)	27.4795
24-Hr Clear Runoff Volume (cu-ft)	1197008.4152

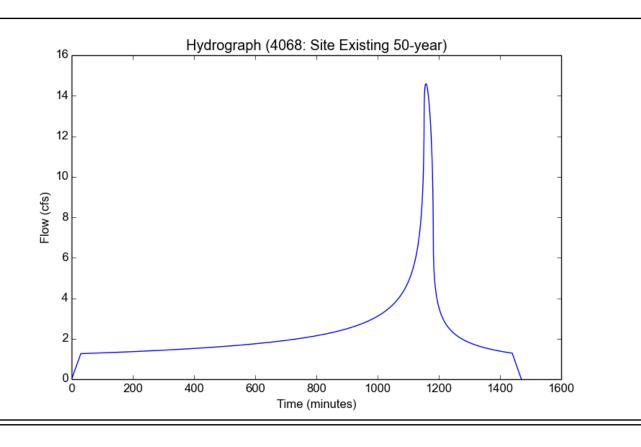


File location: O:/4000-4099/4068/HYDROLOGY/4068 Report.pdf Version: HydroCalc 1.0.3

Input	Parame	eters
-------	--------	-------

Project Name	4068
Subarea ID	Site Existing 50-year
Area (ac)	150.18
Flow Path Length (ft)	2500.0
Flow Path Slope (vft/hft)	0.006
50-yr Rainfall Depth (in)	2.7
Percent Impervious	0.05
Soil Type	134
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

output Modulio	
Modeled (50-yr) Rainfall Depth (in)	2.7
Peak Intensity (in/hr)	0.694
Undeveloped Runoff Coefficient (Cu)	0.1
Developed Runoff Coefficient (Cd)	0.14
Time of Concentration (min)	30.0
Clear Peak Flow Rate (cfs)	14.5907
Burned Peak Flow Rate (cfs)	14.5907
24-Hr Clear Runoff Volume (ac-ft)	4.6916
24-Hr Clear Runoff Volume (cu-ft)	204367.2904

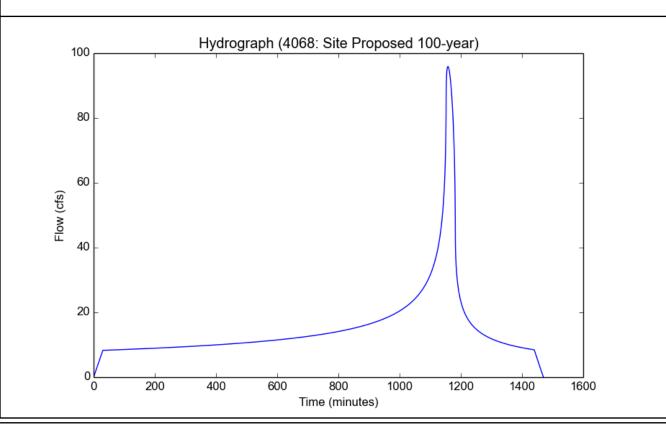


File location: O:/4000-4099/4068/HYDROLOGY/4068 Report.pdf Version: HydroCalc 1.0.3

Input	Param	eters
-------	--------------	-------

Project Name	4068
Subarea ID	Site Proposed 100-year
Area (ac)	150.18
Flow Path Length (ft)	2500.0
Flow Path Slope (vft/hft)	0.006
50-yr Rainfall Depth (in)	2.7
Percent Impervious	0.9
Soil Type	134
Design Storm Frequency	100-yr
Fire Factor	0
LID	False

Modeled (100-yr) Rainfall Depth (in)	3.0294
Peak Intensity (in/hr)	0.7786
Undeveloped Runoff Coefficient (Cu)	0.1
Developed Runoff Coefficient (Cd)	0.82
Time of Concentration (min)	30.0
Clear Peak Flow Rate (cfs)	95.8859
Burned Peak Flow Rate (cfs)	95.8859
24-Hr Clear Runoff Volume (ac-ft)	30.832
24-Hr Clear Runoff Volume (cu-ft)	1343043.4418



APPENDIX C

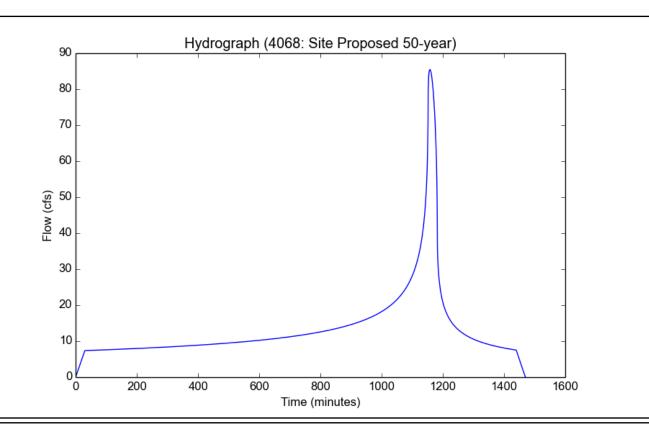
DETENTION CALCULATIONS

File location: O:/4000-4099/4068/HYDROLOGY/4068 Report.pdf Version: HydroCalc 1.0.3

Input	Param	eters
-------	-------	-------

Project Name	4068
Subarea ID	Site Proposed 50-year
Area (ac)	150.18
Flow Path Length (ft)	2500.0
Flow Path Slope (vft/hft)	0.006
50-yr Rainfall Depth (in)	2.7
Percent Impervious	0.9
Soil Type	134
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

Modeled (50-yr) Rainfall Depth (in)	2.7
Peak Intensity (in/hr)	0.694
Undeveloped Runoff Coefficient (Cu)	0.1
Developed Runoff Coefficient (Cd)	0.82
Time of Concentration (min)	30.0
Clear Peak Flow Rate (cfs)	85.4598
Burned Peak Flow Rate (cfs)	<u>85.4598</u>
24-Hr Clear Runoff Volume (ac-ft)	<mark>27.4795</mark>
24-Hr Clear Runoff Volume (cu-ft)	1197008.4152

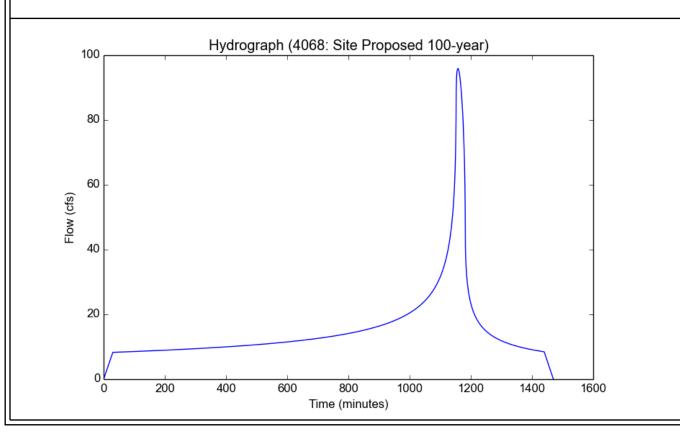


File location: O:/4000-4099/4068/HYDROLOGY/4068 Report.pdf Version: HydroCalc 1.0.3

Input	Parameters
-------	-------------------

Project Name	4068
Subarea ID	Site Proposed 100-year
Area (ac)	150.18
Flow Path Length (ft)	2500.0
Flow Path Slope (vft/hft)	0.006
50-yr Rainfall Depth (in)	2.7
Percent Impervious	0.9
Soil Type	134
Design Storm Frequency	100-yr
Fire Factor	0
LID	False

Modeled (100-yr) Rainfall Depth (in)	3.0294
Peak Intensity (in/hr)	0.7786
Undeveloped Runoff Coefficient (Cu)	0.1
Developed Runoff Coefficient (Cd)	0.82
Time of Concentration (min)	30.0
Clear Peak Flow Rate (cfs)	95.8859
Burned Peak Flow Rate (cfs)	<u>95.885</u> 9
24-Hr Clear Runoff Volume (ac-ft)	30.832
24-Hr Clear Runoff Volume (cu-ft)	1343043.4418



JOB #4068 3347 E. AVENUE M, PALMDALE DETENTION BASIN VOLUME - NORTH END OF PROJECT SITE

Elevation	Depth (feet)	Area (sq. ft.)	Volume (c.f.)	Σ Volume (c.f.)	Σ Volume (ac-ft)
2454.50	0.00	282,260			
2455.00	0.50	269,745	138,001	138,001	3.17
2456.00	1.50	285,300	277,523	415,524	9.54
			293,082	708,606	16.27
2457.00	2.50	300,864	308,698	1,017,303	23.35
2458.00	3.50	316,531	324,400	1,341,703	30.80
2459.00	4.50	332,268	,		
2460.00	5.50	348,075	340,172	1,681,874	38.61
2461.00	6.50	363,953	356,014	2,037,888	46.78
2462.00	7.50	379,901	371,927	2,409,815	55.32
		,	387,910	2,797,725	64.23
2463.00	8.50	395,919	403,963	3,201,688	73.50
2464.00	9.50	412,006	•		

APPENDIX D

HYDROLOGY MAP

