Appendix G-2

Hydrology Report for Tract No. 83301

HYDROLOGY REPORT

FOR

TRACT No. 83301

Trails at Lyons Canyon
Stevenson Ranch, CA

Prepared For:

New Urban West, Inc.
16935 W. Bernardo Drive, Suite 260

San Diego, CA 92127

HYDROLOGY STUDY
APPROVED

REVIEWED BY:__________ DATE 10/07/2024

APPROVED BY:__________ DATE 10/07/2024

COUNTY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS
LAND DEVELOPMENT DIVISION

October 3, 2024

Prepared by:

Siew Huat Ng
R.C.E. 46026

REGISTERED PROFESSIONAL ENGINEER
SIEW HUAT NG
NO.46026
EXP.12-31-24
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STATE OF CALIFORNIA

Ng Siew Huat

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1. Introduction

1.1 Project Description

The project study area is located westerly adjacent to The Old Road between Lyons Avenue and Calgrove Boulevard in an unincorporated area in the County of Los Angeles (Appendix A). The L-shaped site encompasses approximately 235± acres. The southerly and westerly portions of the project site are bound by undeveloped land. The northerly portion of the site is bound by existing residential and commercial properties and the Old Road bounds the easterly portion of the site. Site access is currently obtained from various locked gates located along The Old Road.

The project site is currently undeveloped land. The runoff drains in a northeast direction and into an existing box culvert which carries the flow under The Old Road and the I-5 freeway. Two large offsite tributary watersheds and several small offsite watersheds drain through the project area to the existing box culvert.

The proposed offsite flood control improvements include two regional debris basins and five smaller ones to capture debris. The offsite development hydrology and hydraulics are documented in a separate report by Pacific Advanced Civil Engineering, Inc. (PACE) [1].

The Tentative Tract Map (TTM) [2] includes a total of 32 lots for the proposed site: eight lots of attached condos, two lots of senior housing, two lots of recreation center, two lots of water tank, two lots of private streets, four lots of natural open spaces, eleven lots of HOA open space, and three lots of debris basin. Also, there are two public streets going through the site.

1.2 Study Objectives

The purpose of this report was to evaluate hydrology of the proposed onsite development, including:

- Determine 25-year and 50-year peak flow for the proposed condition.
- Evaluate the proposed onsite storm drain system and street capacities to convey 25-year storm.
- Evaluate the proposed storm drain on the parameter road to convey 50-year storm.

2. Regularity Jurisdiction

The study area is under the jurisdiction of the Los Angeles County Department of Public Works. The values are calculated in accordance with Los Angeles County Department of Public Works standard [1] [2].

3. Hydrologic Data

The project and the surrounding area are located in the Oak Mountain quadrant of Isohyet Map 1-H1.35. The 24-hour 50-year storm is 8.4 inch and the soil classification is Type 097 (Appendix B). The land use is a mixture of residential buildings, a recreation center, a fire station, landscaping, and hardscape. The imperviousness is from measurement based on landscape plan (Appendix C). To be conservative, the values were adjusted as following (also see Table 1):

- values between 0.5-0.59 were increased to 0.65
- values between 0.6-0.69 were increased to 0.7
- values above 0.7 were maintained
- 0.78 for streets based on measurements
- 0.1 for graded slopes
- 0.07 for mixed graded slopes and natural area

4. Methodology

The hydrology methodology used is the new modified rational method. Time of concentration (Tc) and peak flow of each subarea is calculated using hydrologic calculator (HydroCalc) of LACDPW [4].

5. Hydrology Analysis

5.1 Offsite Hydrology

As stated above, seven debris basins are proposed to capture debris. Clear flows from the regional debris basins will be conveyed into the proposed 42" storm drain under the proposed private drive along the project's perimeter to the existing Caltran's double box RCB culvert under The Old Road and the I-5 freeway. Overflow from the basins is conveyed by 96" RCP storm drain under the parameter private drive to the double box culvert as well.

Drainage of the west half of The Old Road is separated by a high point. The north portion drains northerly towards the Caltran's double box culvert. The runoff is intercepted by a proposed water quality device and conveyed to the double box culvert. The south portion drains southerly, and is intercepted by another proposed water quality device and conveyed to the existing Caltran's 24" CMP at the southeast of the site (Appendix D).

5.2 Onsite Hydrology

The proposed onsite drainage is a combination of overland flow, street and gutter flow, catch basins/inlets, and storm drain. The onsite runoff is collected by catch basins and routed through the storm drain. Based on the drainage pattern, the site is divided into 28 subareas. Among those, 10E, 14D, 18D, 26J, and 32M are public streets. 35O, 36P, 37Q, and 38R are the parameter streets. 29K and 33N are the west half of The Old Road, for which street improvements are proposed. It is noted that there are three areas graded for tree protection. Two of them (SC1 & SC2) are self-contained. The third is within Subarea 8D, and the runoff joins the onsite flow of that subarea (see Proposed Hydrology Map).

Majority of the onsite runoff is routed to the proposed storm drains under the private parameter drive. Subarea 1A connects to the 42" RCP at its northwest corner. Runoff of Subarea 2B – Subarea 6B is routed northerly through the storm drain system, and discharged to the 42" RCP at the north end of Subarea 6B. Runoff of Subarea 7D – Subarea 23I (including that from the offsite Subareas 9E and 11F) is routed through the storm drain under the public "B" Street and "A" Street, and discharged to the proposed 84" RCP at the north end of Subarea 23I. Runoff of Subarea 25J – Subarea 27I is routed through the storm drain under "A" Street and discharged to the proposed 42" RCP at the north end of Subarea 27I. Runoff of Subarea 31L and Subarea 32M is routed through the storm drain under "B" Street southeasterly and discharged to the proposed 24" CMP that connects to the existing Caltrans's 24" CMP.

The peak flow of each subarea was calculated using HydroCalc for 25-year and 50-year storm (Appendix E, Table 2).

6. Conclusions

This study analyzes 25-year and 50-year peak flow for the proposed site. The proposed catch basins and storm drain are sized to capture and convey the runoff and discharge offsite. Overall, the proposed development will not have negative impact to the surrounding area.

References

1) Drainage Concept Report – Volume I, Regional Flood Protection and Debris Management, Tract No. 83301, Pacific Advanced Civil Engineering, Inc., September 2024.
2) The Trails at Lyons Canyon, Vesting Tentative Tract Map No. 083301, United Civil Inc., September 2024
3) Hydrology Manual, County of Los Angeles Department of Public Works, 2006
4) Low Impact Development Standards Manual, County of Los Angeles Department of Public Works, 2014
5) 85th percentile 24-hour rainfall depth, http://dpw.lacounty.gov/wrd/hydrologygis/
6) Hydrologic Calculator, LACDPW, http://dpw.lacounty.gov/wrd/publication/.

Table 1 – Onsite Imperviousness Summary

Subarea/Node	Area	Calculated	Actually Used
	(sf)		
1A	371,330	0.58	0.65
2B	94,142	0.64	0.70
3C	25,717		
4BC	-		
5B	140,240		
6B	75,311		
7D	156,988	0.75	0.82
15G	130,686	0.75	0.75
8D	225,578	0.65	0.70
9E(1)		0.01	0.01
10E(2)	25,747	0.78	0.78
11F(1)		0.01	0.01
12EF	-		
13DE	-		
14D(2)	35,689	0.78	0.78
16G	163,051	0.71	0.71
17DG	-		
18D(2)	33,882	0.78	0.78
19G	30,744	0.66	0.70
20DG	-		
21H	284,476	0.67	0.70
22DH	-		
23I	54,713	0.74	0.74
24DI	-		
25J	83,516	0.07	0.07
26J (2)	31,169	0.78	0.78
27J	56,834	0.75	0.75
28DJ	-		
29K (2)	40,759	0.78	0.78
30DK	-		
31L	72,333	0.07	0.07
32M(2)	52,887	0.78	0.78
33N(2)	21,515	0.78	0.78
34LN	-		
35O(2)	31,237	0.78	0.78
36P(2)	21,084	0.78	0.78
37Q(2)	44,538	0.78	0.78

38R	57,316	0.4	0.4
SC1(3)	8,947	0.07	0.07
SC2(3)	10,848	0.07	0.07

(1) Natural area, imperviousness=0.01
(2) Street, imperviousness=0.78
(3) Self-contained area, use similar area of 25J and 31L

Table 2 – Onsite Proposed Hydrology Summary

(24-hr 50-yr Isohyet=8.4 inch)

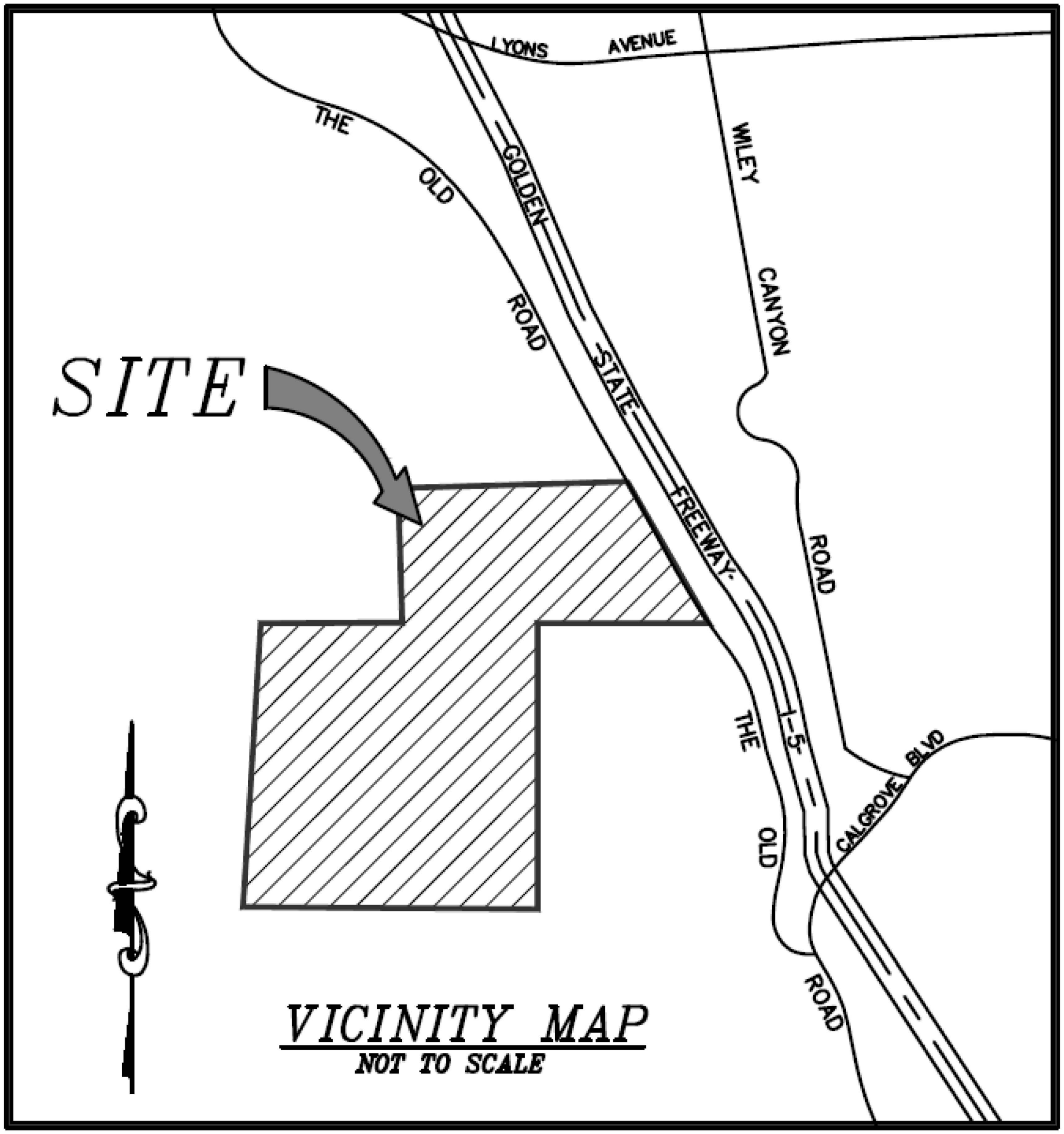
Subarea/Node	Area	Length	Slope	Soil Type	Impervious	Tc_{25}	Q_{25}	Tc_{50}	Q_{50}
	(ac)	(ft)				(min)	(cfs)	(min)	(cfs)
1A	8.52	1,019	0.011	97	0.65	10	22.83	9	27.59
2B	2.16	465	0.013	97	0.70	6	7.51	5	9.39
3C	0.59	258	0.006	97	0.70	5	2.24	5	2.56
4BC									
5B	3.22	669	0.011	97	0.70	7	10.38	7	11.89
6B	1.73	528	0.005	97	0.70	7	5.58	7	6.39
7D	3.60	556	0.008	97	0.82	7	11.83	6	14.56
8D	5.18	853	0.009	97	0.70	9	14.76	8	17.91
9E(1)	2.62				0.01				10.9
10E	0.59	443	0.039	97	0.78	5	2.27	5	2.59
11F(1)	12.56				0.01				44.2
12EF									
13DE									
14D	0.82	595	0.009	97	0.78	7	2.68	6	3.3
15G	3.00	540	0.010	97	0.75	6	10.51	6	12.02
16G	3.74	619	0.009	20	0.71	7	11.62	7	13.34
17DG									
18D	0.78	578	0.018	20	0.78	6	2.67	6	3.06
19G	0.71	224	0.013	20	0.70	5	2.60	5	2.98
20DG									
21H	6.53	841	0.010	97	0.70	9	18.61	8	22.58
22DH									
23I	1.26	341	0.010	20	0.74	5	4.67	5	5.35
24DI									
25J	1.92	580	0.068	97	0.07	5	6.66	5	7.68
26J	0.72	520	0.041	20	0.78	5	2.69	5	3.08
27J	1.30	350	0.010	20	0.75	5	4.83	5	5.53
28DJ									
29K	0.94	791	0.016	97	0.78	7	3.07	7	3.51

30DK										
31L	1.66	550	0.064	97	0.07	5	5.76	5	6.64
32M	1.21	908	0.059	97	0.78	6	4.26	6	4.87
33N	0.49	465	0.008	97	0.78	6	1.72	5	2.15
34LN									
35O	0.72	696	0.01	97	0.78	8	2.2	7	2.69
36P	0.48	659	0.023	97	0.78	6	1.69	6	1.93
37Q	1.02	836	0.018	97	0.78	8	3.12	7	3.81
38R	1.32	974	0.029	97	0.4	8	3.78	7	4.66
Tank & Access Rd	1.24	1520	0.102	97	0.8	8	3.81	7	4.64
SC1(2)	0.21			97	0.07		0.71		0.82
SC2(2)	0.25			20	0.07		0.86		1.00

(1) Offsite Subarea with burned flow, obtained from the Offsite Hydrology Report by PACE
(2) Self-contained area for tree protection, flow prorated from 25J and 31L.

APPENDIX A

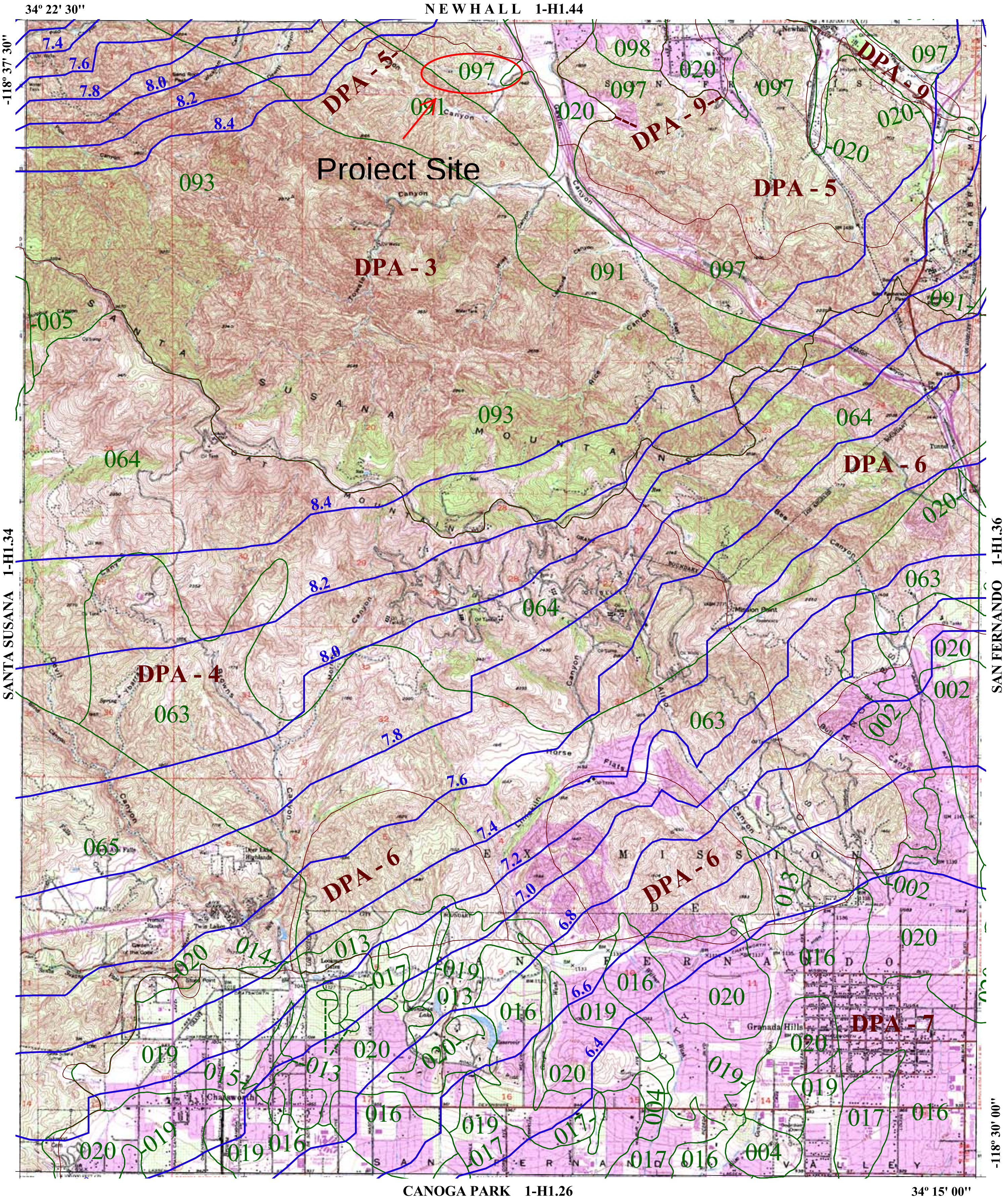
VICINITY MAP



VICINITY MAP
NOT TO SCALE

APPENDIX B

HYDROLOGIC DATA



016 SOIL CLASSIFICATION AREA

7.2 INCHES OF RAINFALL

DPA - 6 DEBRIS POTENTIAL AREA

1 0 1 2 Miles

N
W E
S

25-YEAR 24-HOUR ISOHYET REDUCTION FACTOR: 0.878
10-YEAR 24-HOUR ISOHYET REDUCTION FACTOR: 0.714

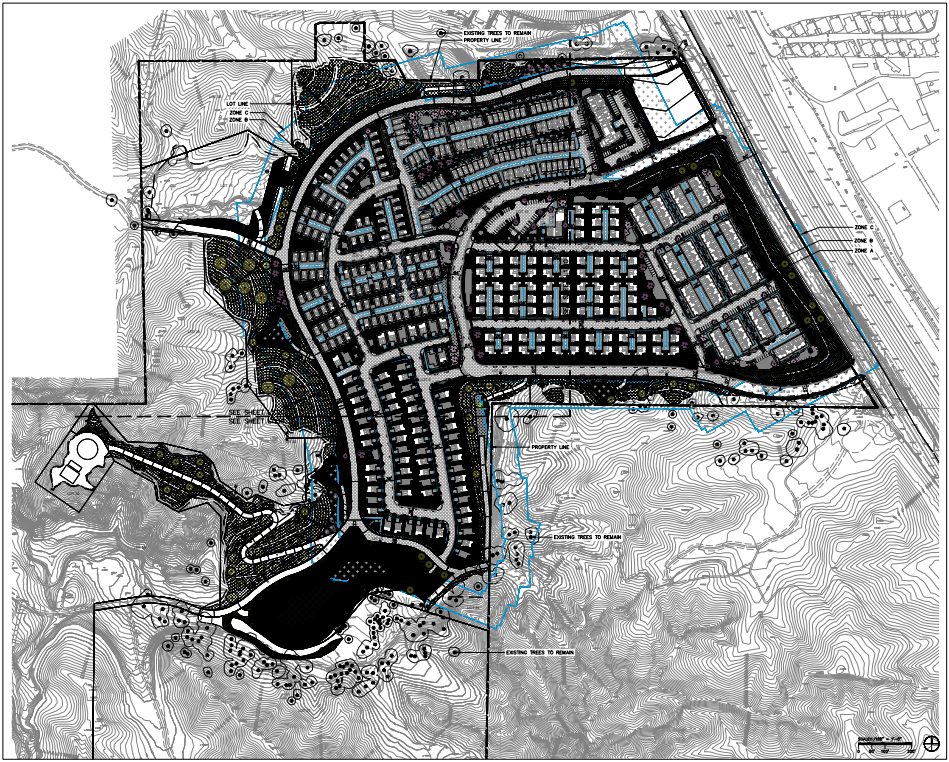
OAT MOUNTAIN
50-YEAR 24-HOUR ISOHYET

1-H1.35

LOS ANGELES COUNTY PUBLIC WORKS Public Service That Works

APPENDIX C

Landscape Plan



SUPERNATURAL
1494 Kenmore Road
Pasadena, CA 91106
www.studio-supernatural.com
510 910 5662

PROJECT
THE TRAILS AT LYONS CANYON
STEVENSON RANCH, CA 91321

REVISIONS

DATE	SYMBOL	DESCRIPTION
2/28/21		FUEL MOD. SUBMITTAL #1
7/28/21		FUEL MOD. SUBMITTAL #2
1/20/22		FUEL MOD. SUBMITTAL #3
5/03/22		FUEL MOD. SUBMITTAL #4
6/02/22		SUBMITTAL #4 - REVISION
9/07/22		SUBMITTAL REVISION
3/14/23		SUBMITTAL REVISION #6

DATE	03/14/2023
PROJECT NO.	212107
DRAWN BY	MT/KF
CHK BY	

LANDSCAPE SITE - FUEL MODIFICATION PLAN

L1.00

APPENDIX D

Caltran Storm Drain Plan (Reference)

F.P.R. REG No	STATE	FEDERAL PROJECT NO	FISCAL YEAR	SHEET No	TOTAL SHEETS
7	CALIF.				

DIST	COUNTY	ROUTE	POST MILES – TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	5	49.1/53.7	47	156

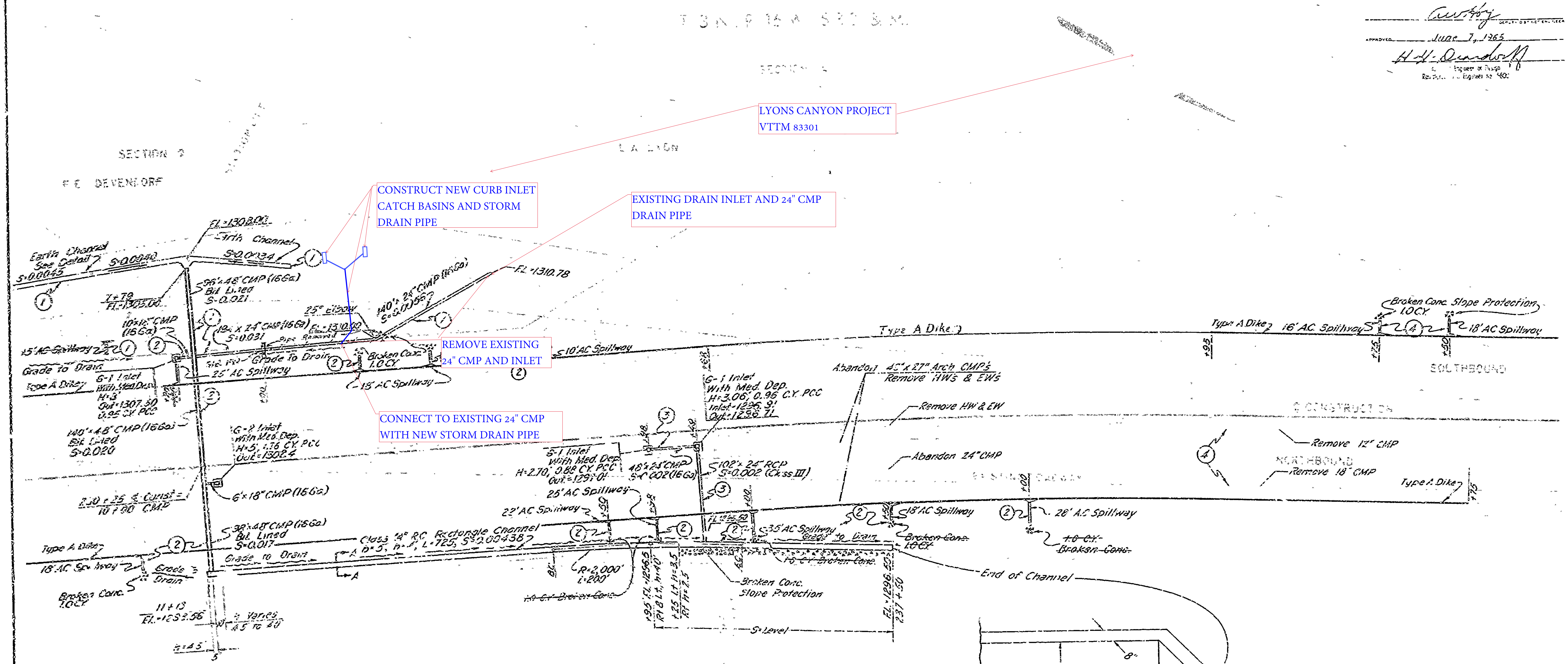
Deputy District Engineer

APPROVED June 7, 1965

H. H. Dandorff

Engineer of Design

Registered Civil Engineer No 4600



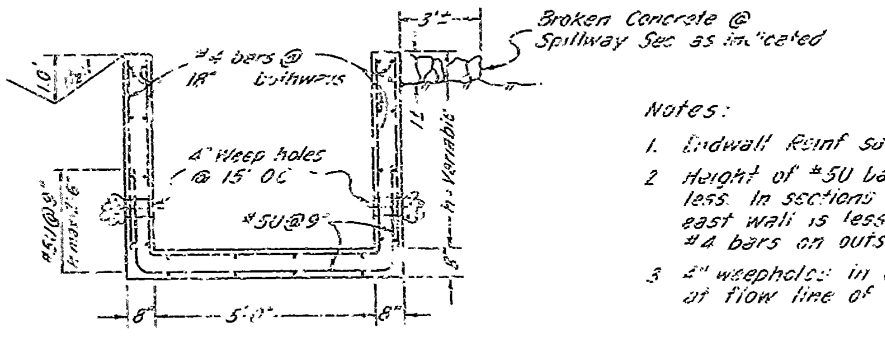
LYONS CANYON PROJECT
VTTM 83301

CONSTRUCT NEW CURB INLET
CATCH BASINS AND STORM
DRAIN PIPE

EXISTING DRAIN INLET AND 24" CMP
DRAIN PIPE

REMOVE EXISTING
24" CMP AND INLET

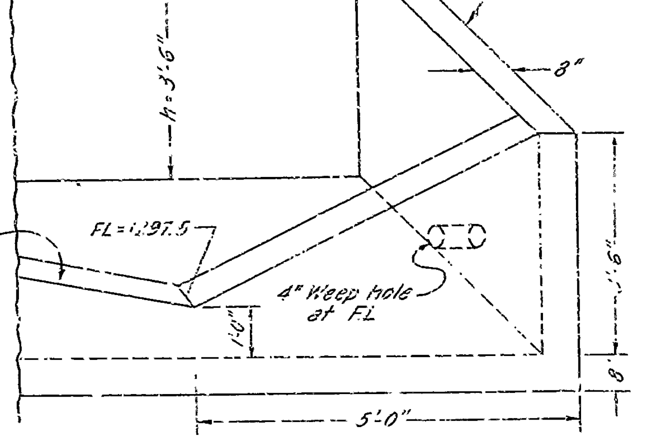
CONNECT TO EXISTING 24" CMP
WITH NEW STORM DRAIN PIPE



SECTION A-A
R.C. CHANNEL DETAIL
Sta 230+22 to Sta 237+50 Rt FWY
No Scale

Notes:

1. Endwall Reinf same as side walls.
2. Height of #5U bars equal 2'6" or less. In sections where height of east wall is less than 2'-6", delete #4 bars on outside face.
3. 4" weepholes in east wall @ 15' O.C. at flow line of level section.



DETAIL
END OF CHANNEL
No Scale

AS BUILT PLANS
Contract No. 07-034724
Date Completed 10-19-67
Document No. 70000113

AS BUILT
CONTRACT NO. 07-034724
R. W. Dues
12-18-67

DRAINAGE

D-2

166-18

Rev 3-65

DESIGN Dept	DATE
Designed by	
Drawn by	
Checked by	
Supervised by	
Right of Way	

PROJECT Engineer	DATE	DESIGN Engineer	DATE	APPROVAL Recommended by	DATE
R Allen	9/64	H Heckerroth	9/64	W E Schaefer	9/64

47

Caltran 24" CMP Capacity

Project Description

Friction Method	Manning Formula
Solve For	Full Flow Capacity

Input Data

Roughness Coefficient	0.013	
Channel Slope	0.03100	ft/ft
Normal Depth	2.00	ft
Diameter	2.00	ft
Discharge	39.83	ft³/s

Results

Discharge	39.83	ft³/s
Normal Depth	2.00	ft
Flow Area	3.14	ft²
Wetted Perimeter	6.28	ft
Hydraulic Radius	0.50	ft
Top Width	0.00	ft
Critical Depth	1.95	ft
Percent Full	100.0	%
Critical Slope	0.02753	ft/ft
Velocity	12.68	ft/s
Velocity Head	2.50	ft
Specific Energy	4.50	ft
Froude Number	0.00	
Maximum Discharge	42.84	ft³/s
Discharge Full	39.83	ft³/s
Slope Full	0.03100	ft/ft
Flow Type	SubCritical	

GVF Input Data

Downstream Depth	0.00	ft
Length	0.00	ft
Number Of Steps	0	

GVF Output Data

Upstream Depth	0.00	ft
Profile Description		
Profile Headloss	0.00	ft
Average End Depth Over Rise	0.00	%

Caltran 24" CMP Capacity

GVF Output Data

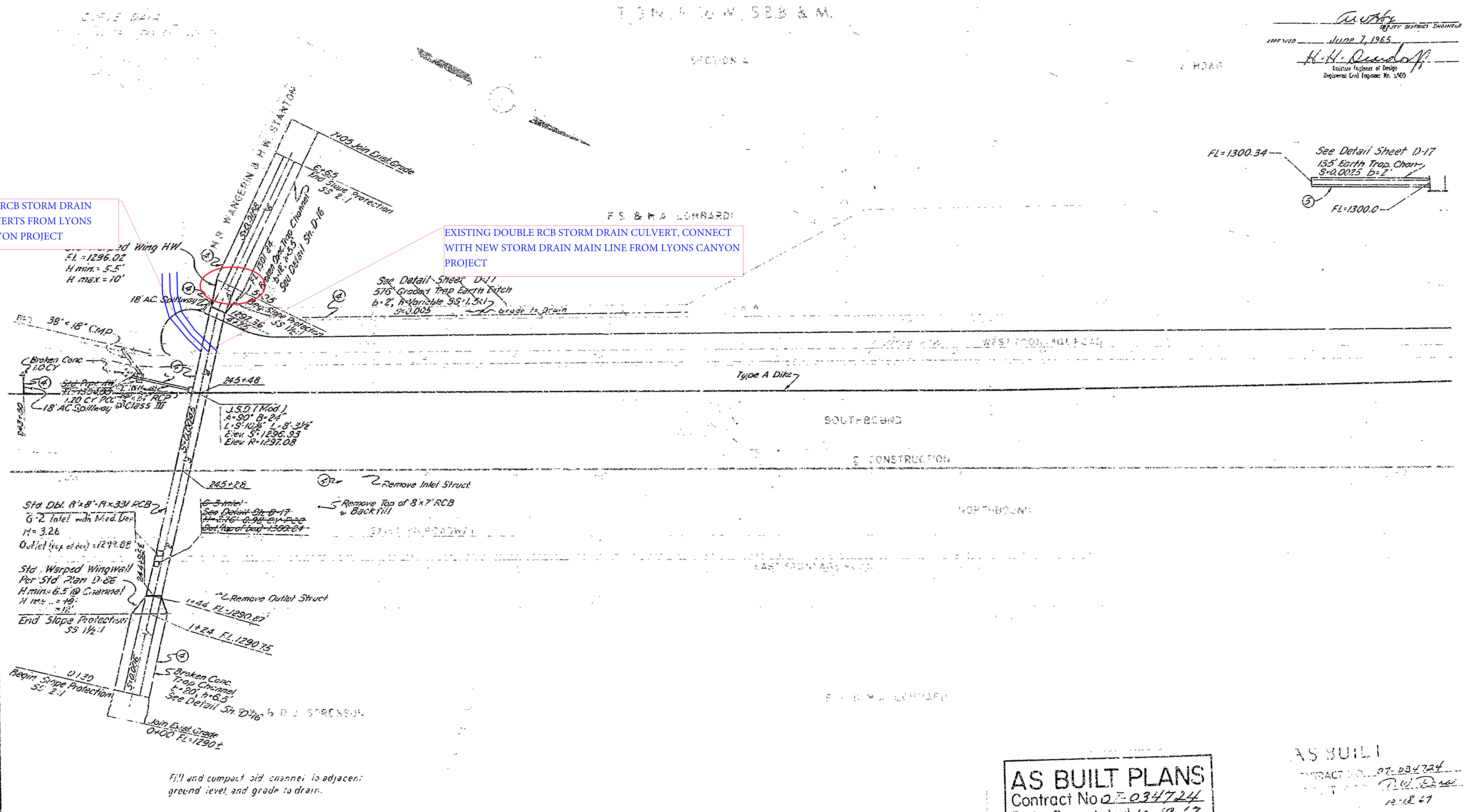
Normal Depth Over Rise	100.00	%
Downstream Velocity	Infinity	ft/s
Upstream Velocity	Infinity	ft/s
Normal Depth	2.00	ft
Critical Depth	1.95	ft
Channel Slope	0.03100	ft/ft
Critical Slope	0.02753	ft/ft

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJ.	SHEET NO.	TOTAL SHEETS
07	LA	5	49.1 / 53.7	48	156

DEPUTY DISTRICT ENGINEER

APPROVED June 7, 1965

H. H. Deudorff
Assistant Engineer of Design
Registered Civil Engineer No. 5560



NEW RCB STORM DRAIN CULVERTS FROM LYONS CANYON PROJECT

EXISTING DOUBLE RCB STORM DRAIN CULVERT, CONNECT WITH NEW STORM DRAIN MAIN LINE FROM LYONS CANYON PROJECT

AS BUILT PLANS
Contract No 07-034724
Date Completed 10-19-67
Document No. 70000113

AS BUILT
CONTRACT NO. 07-034724
10-18-67

DRAINAGE

D-3

PROJECT ENGINEER	DATE	DESIGN ENGINEER	DATE	APPROVAL RECOMMENDED BY	DATE
R. Allen	9/64	H Heckeroth	9/64	W E Schaefer	9/64

REV 3-65

APPENDIX E

Proposed Hydrology Calculations

25-YEAR

Peak Flow Hydrologic Analysis

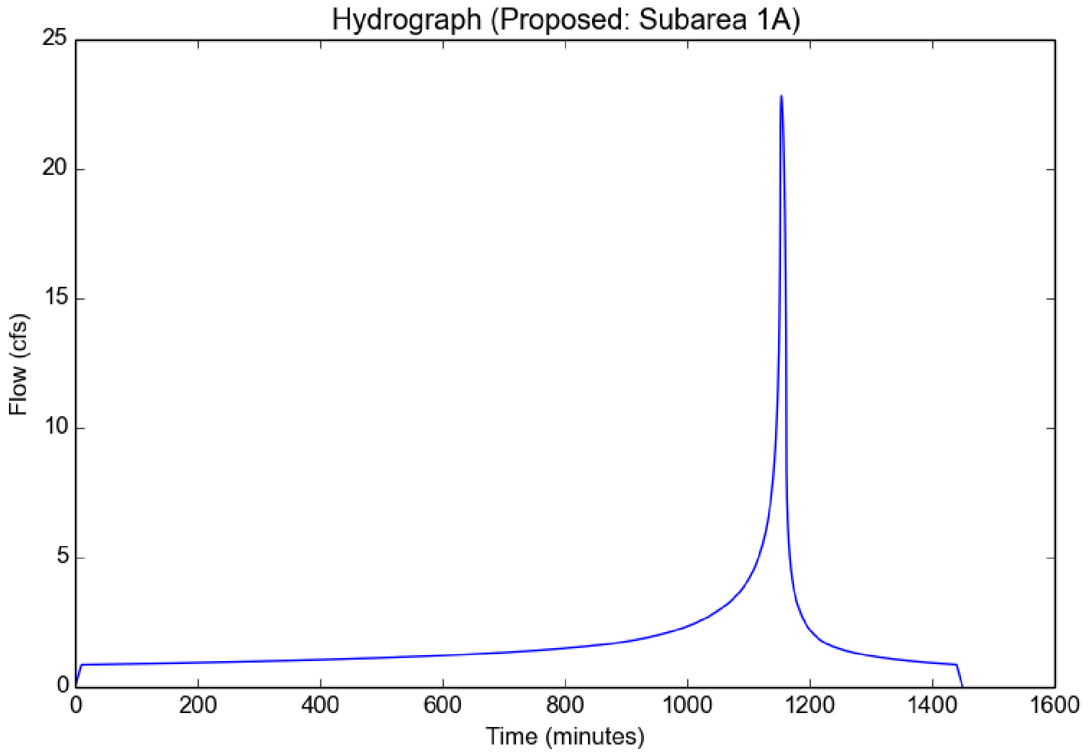
File location: Q:/Santa Clarita/Lyons Canyon Ranch/UCI/Hydrology/Tc/2024-1-4/Proposed - Subarea 1A.pdf
Version: HydroCalc 1.0.3

Input Parameters

Project Name	Proposed
Subarea ID	Subarea 1A
Area (ac)	8.52
Flow Path Length (ft)	1019.0
Flow Path Slope (vft/hft)	0.011
50-yr Rainfall Depth (in)	8.4
Percent Impervious	0.65
Soil Type	97
Design Storm Frequency	25-yr
Fire Factor	0
LID	False

Output Results

Modeled (25-yr) Rainfall Depth (in)	7.3752
Peak Intensity (in/hr)	3.1768
Undeveloped Runoff Coefficient (Cu)	0.7382
Developed Runoff Coefficient (Cd)	0.8434
Time of Concentration (min)	10.0
Clear Peak Flow Rate (cfs)	22.8267
Burned Peak Flow Rate (cfs)	22.8267
24-Hr Clear Runoff Volume (ac-ft)	3.4658
24-Hr Clear Runoff Volume (cu-ft)	150969.6201



Peak Flow Hydrologic Analysis

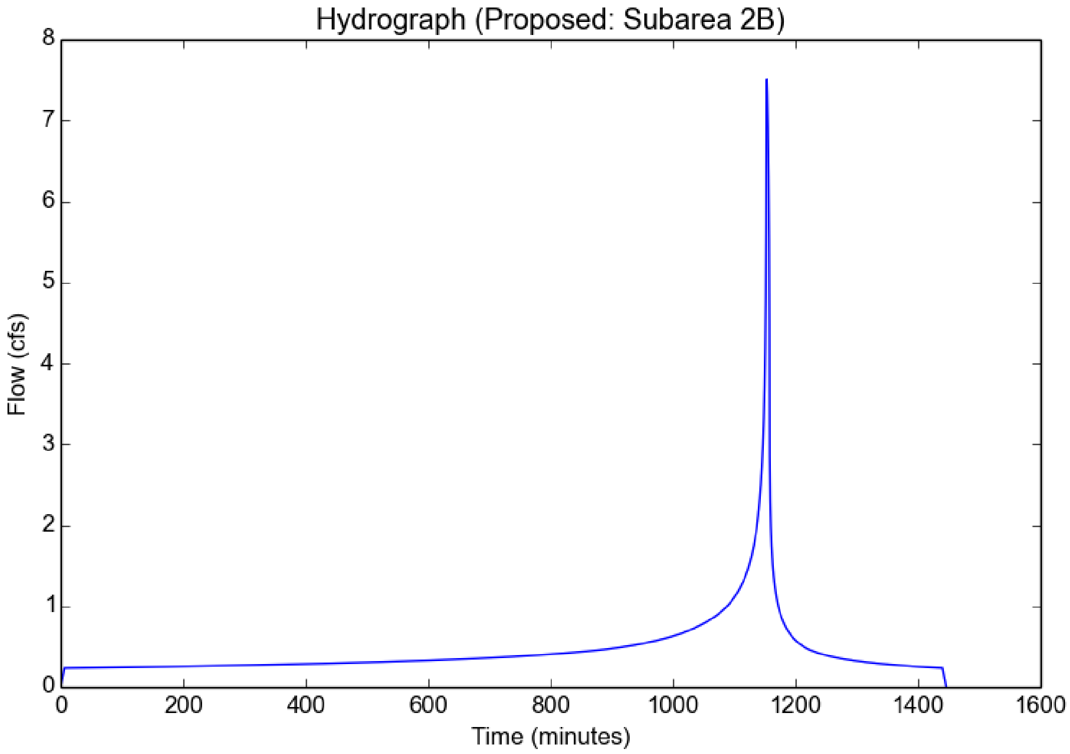
File location: Q:/Santa Clarita/Lyons Canyon Ranch/UCI/Hydrology/Tc/2024-1-4/Proposed - Subarea 2B.pdf
Version: HydroCalc 1.0.3

Input Parameters

Project Name	Proposed
Subarea ID	Subarea 2B
Area (ac)	2.16
Flow Path Length (ft)	465.0
Flow Path Slope (vft/hft)	0.013
50-yr Rainfall Depth (in)	8.4
Percent Impervious	0.7
Soil Type	97
Design Storm Frequency	25-yr
Fire Factor	0
LID	False

Output Results

Modeled (25-yr) Rainfall Depth (in)	7.3752
Peak Intensity (in/hr)	4.0389
Undeveloped Runoff Coefficient (Cu)	0.7691
Developed Runoff Coefficient (Cd)	0.8607
Time of Concentration (min)	6.0
Clear Peak Flow Rate (cfs)	7.509
Burned Peak Flow Rate (cfs)	7.509
24-Hr Clear Runoff Volume (ac-ft)	0.9226
24-Hr Clear Runoff Volume (cu-ft)	40187.2599



Peak Flow Hydrologic Analysis

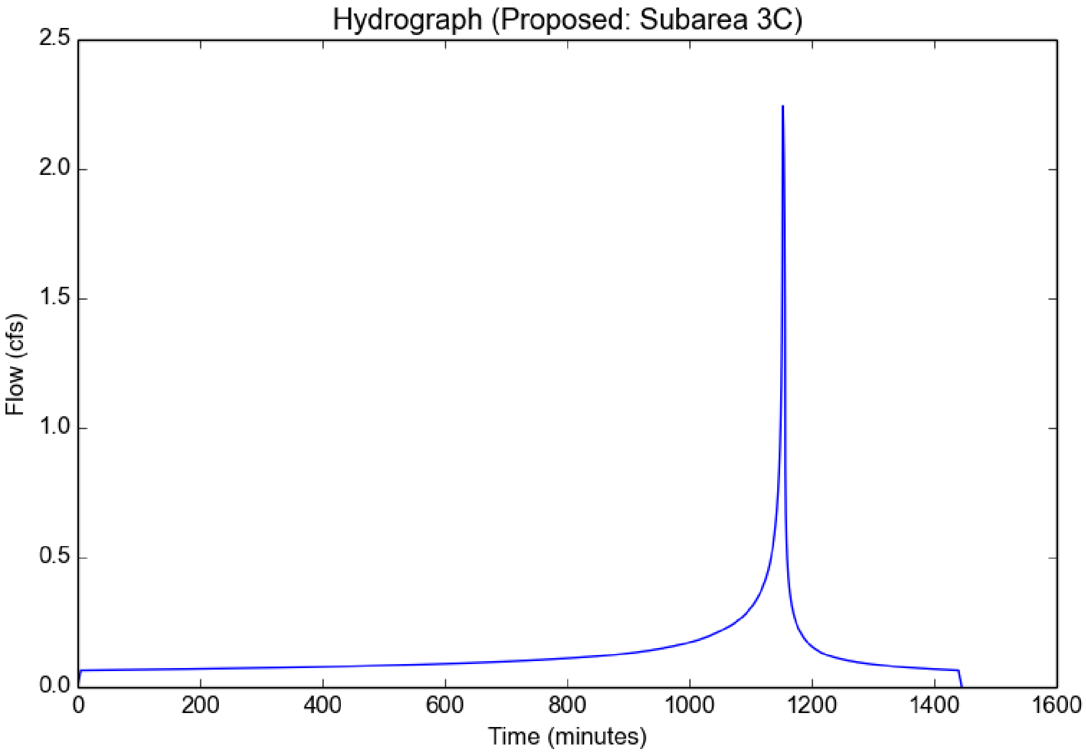
File location: Q:/Santa Clarita/Lyons Canyon Ranch/UCI/Hydrology/Tc/2024-1-4/Proposed - Subarea 3C.pdf
Version: HydroCalc 1.0.3

Input Parameters

Project Name	Proposed
Subarea ID	Subarea 3C
Area (ac)	0.59
Flow Path Length (ft)	258.0
Flow Path Slope (vft/hft)	0.006
50-yr Rainfall Depth (in)	8.4
Percent Impervious	0.7
Soil Type	97
Design Storm Frequency	25-yr
Fire Factor	0
LID	False

Output Results

Modeled (25-yr) Rainfall Depth (in)	7.3752
Peak Intensity (in/hr)	4.4002
Undeveloped Runoff Coefficient (Cu)	0.7796
Developed Runoff Coefficient (Cd)	0.8639
Time of Concentration (min)	5.0
Clear Peak Flow Rate (cfs)	2.2427
Burned Peak Flow Rate (cfs)	2.2427
24-Hr Clear Runoff Volume (ac-ft)	0.252
24-Hr Clear Runoff Volume (cu-ft)	10977.5748



Peak Flow Hydrologic Analysis

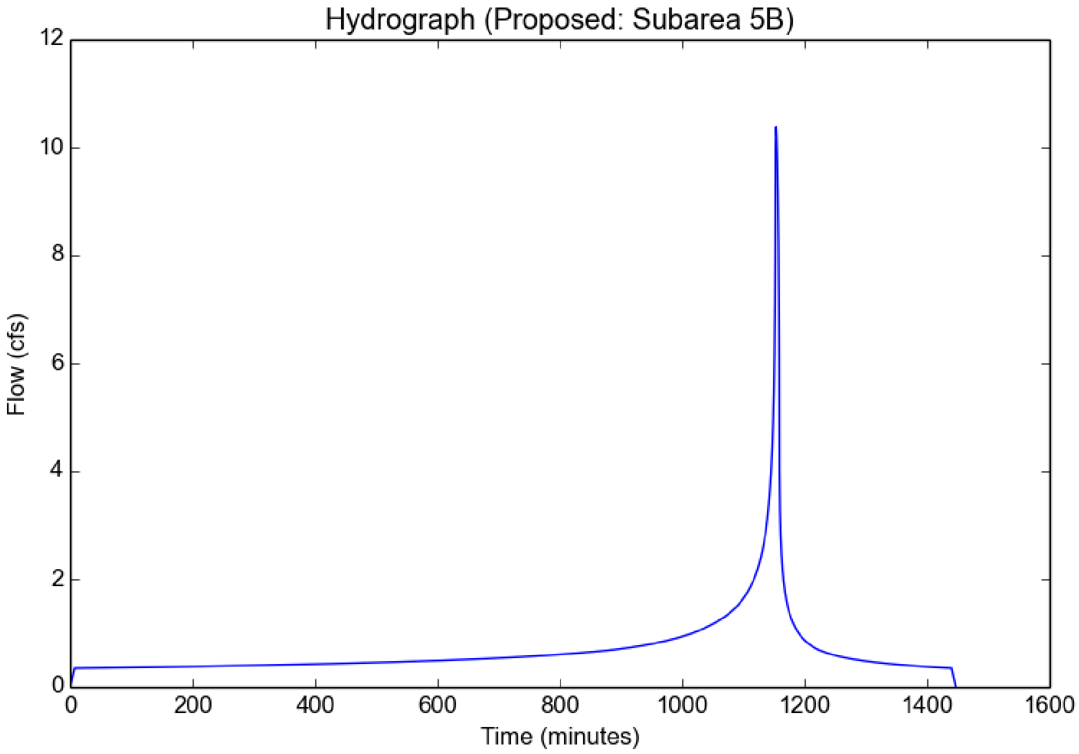
File location: Q:/Santa Clarita/Lyons Canyon Ranch/UCI/Hydrology/Tc/2024-1-4/Proposed - Subarea 5B.pdf
Version: HydroCalc 1.0.3

Input Parameters

Project Name	Proposed
Subarea ID	Subarea 5B
Area (ac)	3.22
Flow Path Length (ft)	656.0
Flow Path Slope (vft/hft)	0.011
50-yr Rainfall Depth (in)	8.4
Percent Impervious	0.7
Soil Type	97
Design Storm Frequency	25-yr
Fire Factor	0
LID	False

Output Results

Modeled (25-yr) Rainfall Depth (in)	7.3752
Peak Intensity (in/hr)	3.7566
Undeveloped Runoff Coefficient (Cu)	0.7609
Developed Runoff Coefficient (Cd)	0.8583
Time of Concentration (min)	7.0
Clear Peak Flow Rate (cfs)	10.382
Burned Peak Flow Rate (cfs)	10.382
24-Hr Clear Runoff Volume (ac-ft)	1.3753
24-Hr Clear Runoff Volume (cu-ft)	59906.6661



Peak Flow Hydrologic Analysis

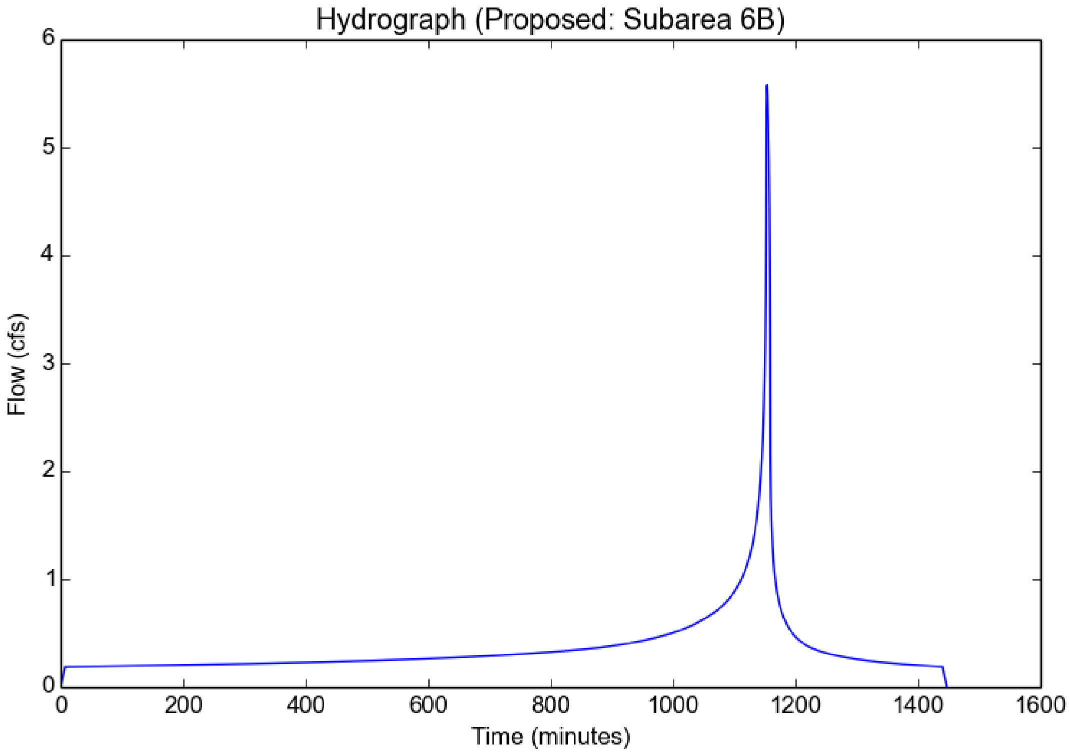
File location: Q:/Santa Clarita/Lyons Canyon Ranch/UCI/Hydrology/Tc/2024-1-4/Proposed - Subarea 6B.pdf
Version: HydroCalc 1.0.3

Input Parameters

Project Name	Proposed
Subarea ID	Subarea 6B
Area (ac)	1.73
Flow Path Length (ft)	528.0
Flow Path Slope (vft/hft)	0.005
50-yr Rainfall Depth (in)	8.4
Percent Impervious	0.7
Soil Type	97
Design Storm Frequency	25-yr
Fire Factor	0
LID	False

Output Results

Modeled (25-yr) Rainfall Depth (in)	7.3752
Peak Intensity (in/hr)	3.7566
Undeveloped Runoff Coefficient (Cu)	0.7609
Developed Runoff Coefficient (Cd)	0.8583
Time of Concentration (min)	7.0
Clear Peak Flow Rate (cfs)	5.5779
Burned Peak Flow Rate (cfs)	5.5779
24-Hr Clear Runoff Volume (ac-ft)	0.7389
24-Hr Clear Runoff Volume (cu-ft)	32185.8796



Peak Flow Hydrologic Analysis

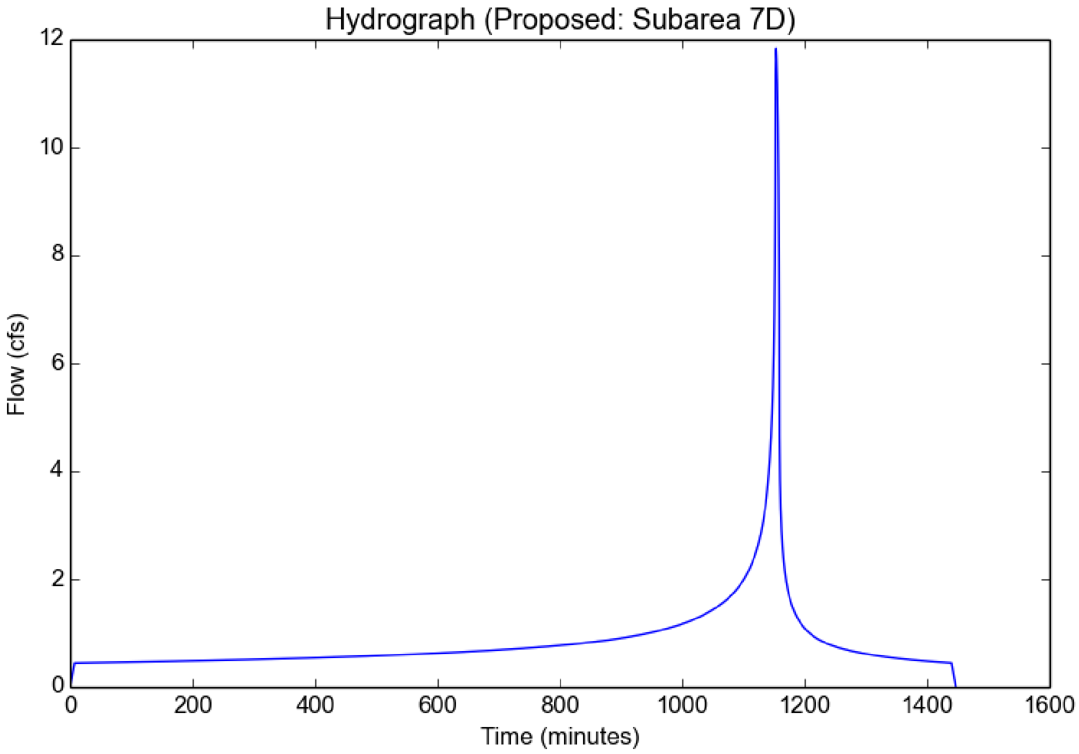
File location: Q:/Santa Clarita/Lyons Canyon Ranch/UCI/Hydrology/Tc/2024-1-4/Proposed - Subarea 7D.pdf
Version: HydroCalc 1.0.3

Input Parameters

Project Name	Proposed
Subarea ID	Subarea 7D
Area (ac)	3.6
Flow Path Length (ft)	512.0
Flow Path Slope (vft/hft)	0.007
50-yr Rainfall Depth (in)	8.4
Percent Impervious	0.82
Soil Type	97
Design Storm Frequency	25-yr
Fire Factor	0
LID	False

Output Results

Modeled (25-yr) Rainfall Depth (in)	7.3752
Peak Intensity (in/hr)	3.7566
Undeveloped Runoff Coefficient (Cu)	0.7609
Developed Runoff Coefficient (Cd)	0.875
Time of Concentration (min)	7.0
Clear Peak Flow Rate (cfs)	11.8329
Burned Peak Flow Rate (cfs)	11.8329
24-Hr Clear Runoff Volume (ac-ft)	1.7125
24-Hr Clear Runoff Volume (cu-ft)	74595.5924



Peak Flow Hydrologic Analysis

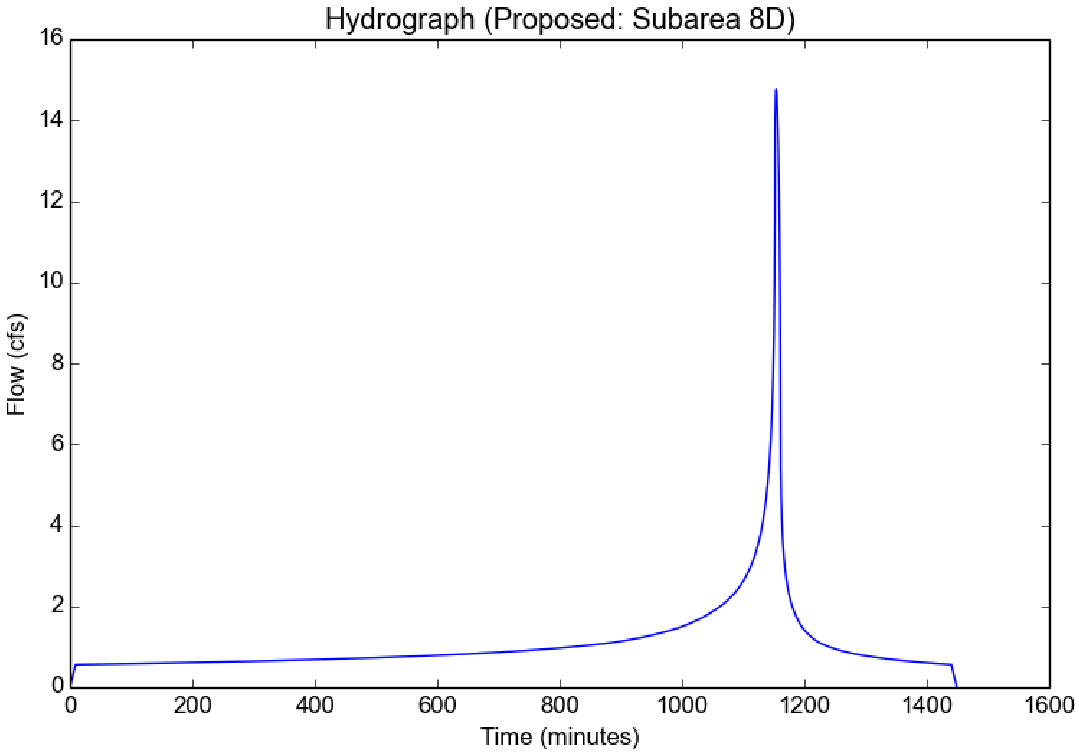
File location: Q:/Santa Clarita/Lyons Canyon Ranch/UCI/Hydrology/Tc/2024-1-4/Proposed - Subarea 8D.pdf
Version: HydroCalc 1.0.3

Input Parameters

Project Name	Proposed
Subarea ID	Subarea 8D
Area (ac)	5.18
Flow Path Length (ft)	853.0
Flow Path Slope (vft/hft)	0.009
50-yr Rainfall Depth (in)	8.4
Percent Impervious	0.7
Soil Type	97
Design Storm Frequency	25-yr
Fire Factor	0
LID	False

Output Results

Modeled (25-yr) Rainfall Depth (in)	7.3752
Peak Intensity (in/hr)	3.3381
Undeveloped Runoff Coefficient (Cu)	0.7458
Developed Runoff Coefficient (Cd)	0.8537
Time of Concentration (min)	9.0
Clear Peak Flow Rate (cfs)	14.7624
Burned Peak Flow Rate (cfs)	14.7624
24-Hr Clear Runoff Volume (ac-ft)	2.2122
24-Hr Clear Runoff Volume (cu-ft)	96361.9837



Peak Flow Hydrologic Analysis

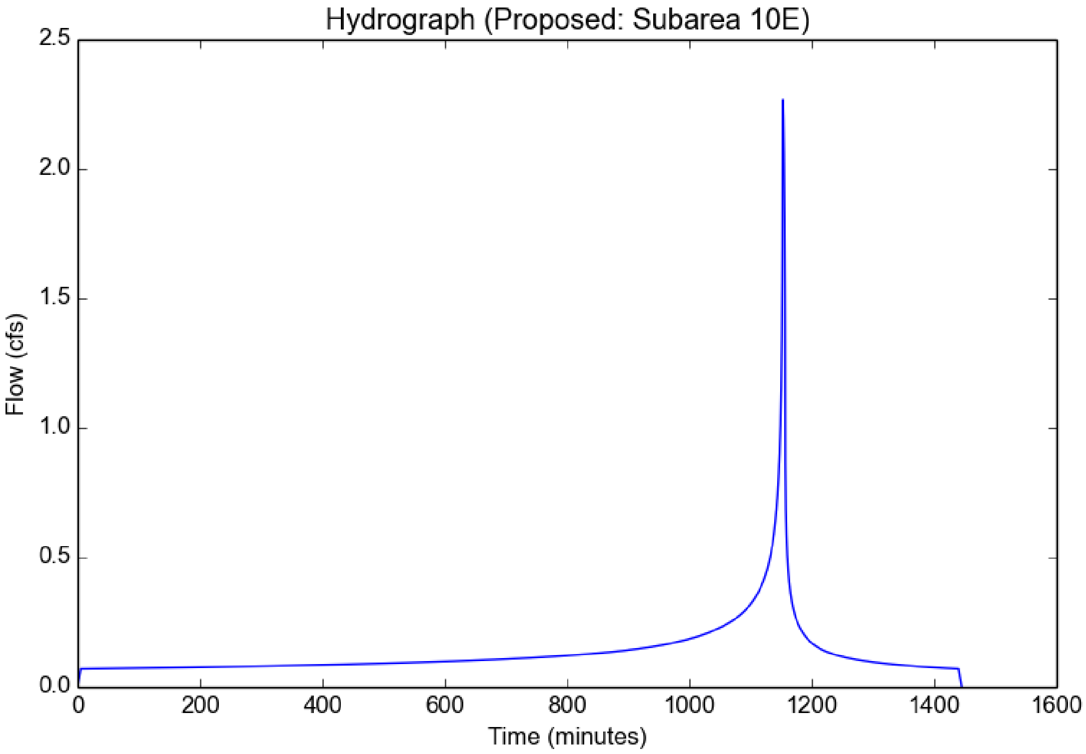
File location: Q:/Santa Clarita/Lyons Canyon Ranch/UCI/Hydrology/Tc/2024-1-4/Proposed - Subarea 10E.pdf
Version: HydroCalc 1.0.3

Input Parameters

Project Name	Proposed
Subarea ID	Subarea 10E
Area (ac)	0.59
Flow Path Length (ft)	443.0
Flow Path Slope (vft/hft)	0.039
50-yr Rainfall Depth (in)	8.4
Percent Impervious	0.78
Soil Type	97
Design Storm Frequency	25-yr
Fire Factor	0
LID	False

Output Results

Modeled (25-yr) Rainfall Depth (in)	7.3752
Peak Intensity (in/hr)	4.4002
Undeveloped Runoff Coefficient (Cu)	0.7796
Developed Runoff Coefficient (Cd)	0.8735
Time of Concentration (min)	5.0
Clear Peak Flow Rate (cfs)	2.2677
Burned Peak Flow Rate (cfs)	2.2677
24-Hr Clear Runoff Volume (ac-ft)	0.2711
24-Hr Clear Runoff Volume (cu-ft)	11809.8046



Peak Flow Hydrologic Analysis

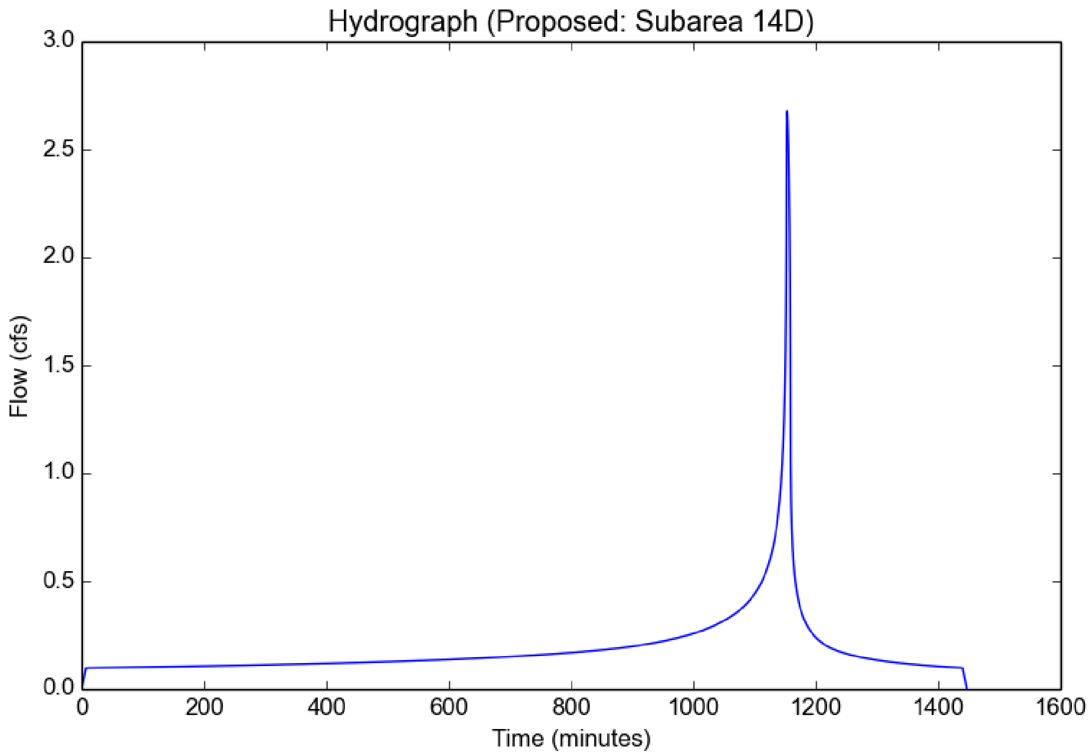
File location: Q:/Santa Clarita/Lyons Canyon Ranch/UCI/Hydrology/Tc/2024-1-4/Proposed - Subarea 14D.pdf
Version: HydroCalc 1.0.3

Input Parameters

Project Name	Proposed
Subarea ID	Subarea 14D
Area (ac)	0.82
Flow Path Length (ft)	595.0
Flow Path Slope (vft/hft)	0.009
50-yr Rainfall Depth (in)	8.4
Percent Impervious	0.78
Soil Type	97
Design Storm Frequency	25-yr
Fire Factor	0
LID	False

Output Results

Modeled (25-yr) Rainfall Depth (in)	7.3752
Peak Intensity (in/hr)	3.7566
Undeveloped Runoff Coefficient (Cu)	0.7609
Developed Runoff Coefficient (Cd)	0.8694
Time of Concentration (min)	7.0
Clear Peak Flow Rate (cfs)	2.6781
Burned Peak Flow Rate (cfs)	2.6781
24-Hr Clear Runoff Volume (ac-ft)	0.3768
24-Hr Clear Runoff Volume (cu-ft)	16412.7238



Peak Flow Hydrologic Analysis

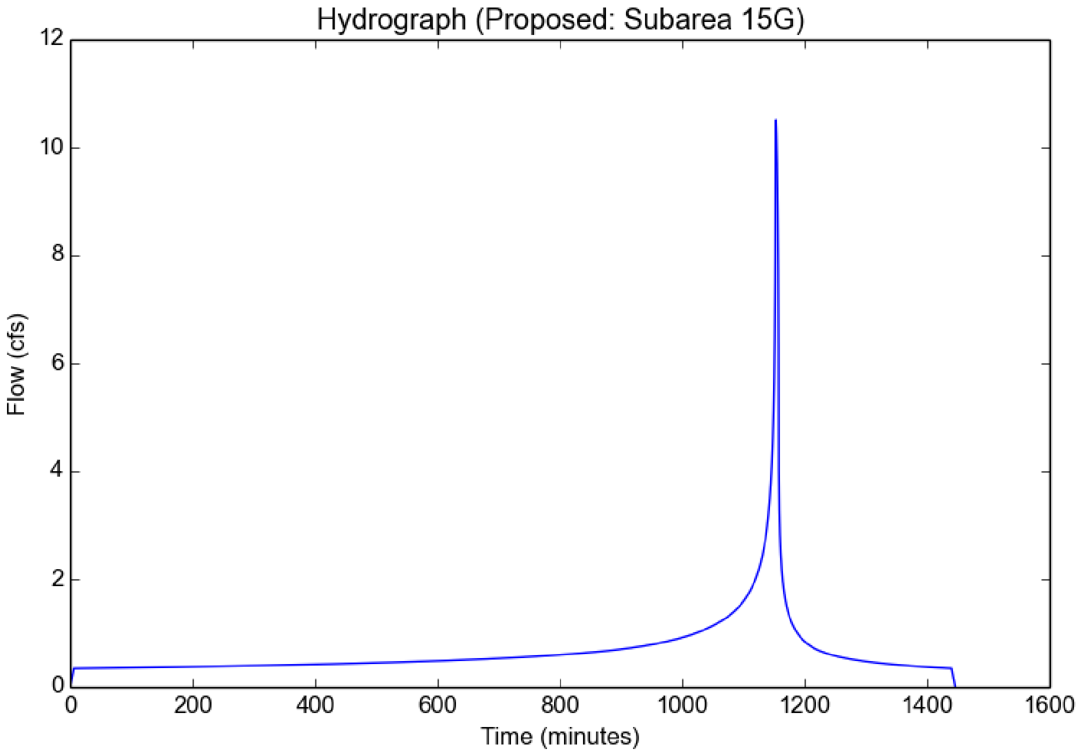
File location: Q:/Santa Clarita/Lyons Canyon Ranch/UCI/Hydrology/Tc/2024-1-4/Proposed - Subarea 15G.pdf
Version: HydroCalc 1.0.3

Input Parameters

Project Name	Proposed
Subarea ID	Subarea 15G
Area (ac)	3.0
Flow Path Length (ft)	540.0
Flow Path Slope (vft/hft)	0.01
50-yr Rainfall Depth (in)	8.4
Percent Impervious	0.75
Soil Type	97
Design Storm Frequency	25-yr
Fire Factor	0
LID	False

Output Results

Modeled (25-yr) Rainfall Depth (in)	7.3752
Peak Intensity (in/hr)	4.0389
Undeveloped Runoff Coefficient (Cu)	0.7691
Developed Runoff Coefficient (Cd)	0.8673
Time of Concentration (min)	6.0
Clear Peak Flow Rate (cfs)	10.5085
Burned Peak Flow Rate (cfs)	10.5085
24-Hr Clear Runoff Volume (ac-ft)	1.3421
24-Hr Clear Runoff Volume (cu-ft)	58460.8617



Peak Flow Hydrologic Analysis

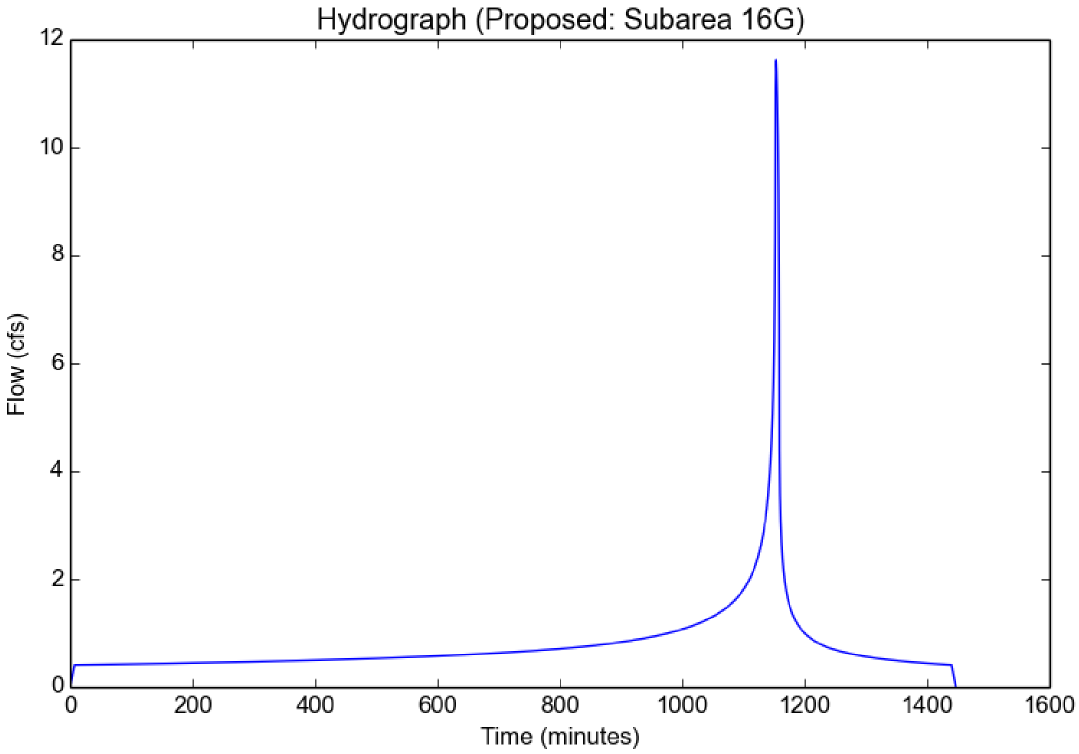
File location: Q:/Santa Clarita/Lyons Canyon Ranch/UCI/Hydrology/Tc/2024-1-4/Proposed - Subarea 16G.pdf
Version: HydroCalc 1.0.3

Input Parameters

Project Name	Proposed
Subarea ID	Subarea 16G
Area (ac)	3.74
Flow Path Length (ft)	619.0
Flow Path Slope (vft/hft)	0.009
50-yr Rainfall Depth (in)	8.4
Percent Impervious	0.71
Soil Type	20
Design Storm Frequency	25-yr
Fire Factor	0
LID	False

Output Results

Modeled (25-yr) Rainfall Depth (in)	7.3752
Peak Intensity (in/hr)	3.7566
Undeveloped Runoff Coefficient (Cu)	0.6485
Developed Runoff Coefficient (Cd)	0.8271
Time of Concentration (min)	7.0
Clear Peak Flow Rate (cfs)	11.62
Burned Peak Flow Rate (cfs)	11.62
24-Hr Clear Runoff Volume (ac-ft)	1.5794
24-Hr Clear Runoff Volume (cu-ft)	68800.6426



Peak Flow Hydrologic Analysis

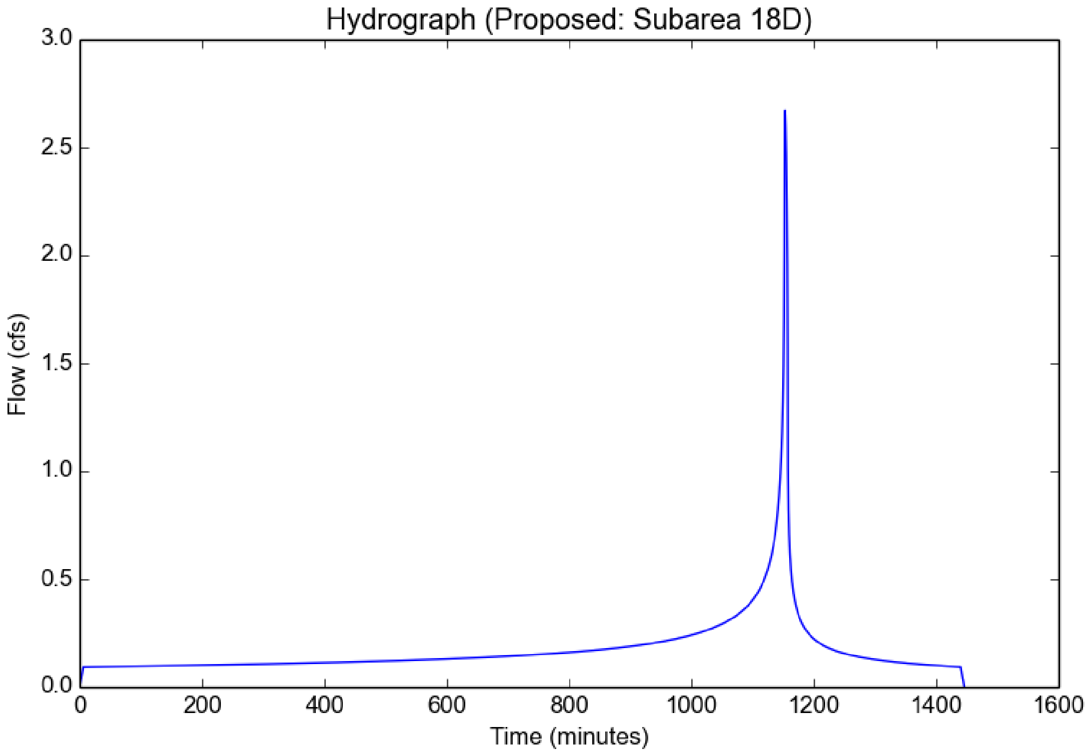
File location: Q:/Santa Clarita/Lyons Canyon Ranch/UCI/Hydrology/Tc/2024-1-4/Proposed - Subarea 18D.pdf
Version: HydroCalc 1.0.3

Input Parameters

Project Name	Proposed
Subarea ID	Subarea 18D
Area (ac)	0.78
Flow Path Length (ft)	578.0
Flow Path Slope (vft/hft)	0.018
50-yr Rainfall Depth (in)	8.4
Percent Impervious	0.78
Soil Type	20
Design Storm Frequency	25-yr
Fire Factor	0
LID	False

Output Results

Modeled (25-yr) Rainfall Depth (in)	7.3752
Peak Intensity (in/hr)	4.0389
Undeveloped Runoff Coefficient (Cu)	0.6632
Developed Runoff Coefficient (Cd)	0.8479
Time of Concentration (min)	6.0
Clear Peak Flow Rate (cfs)	2.6712
Burned Peak Flow Rate (cfs)	2.6712
24-Hr Clear Runoff Volume (ac-ft)	0.3532
24-Hr Clear Runoff Volume (cu-ft)	15385.514



Peak Flow Hydrologic Analysis

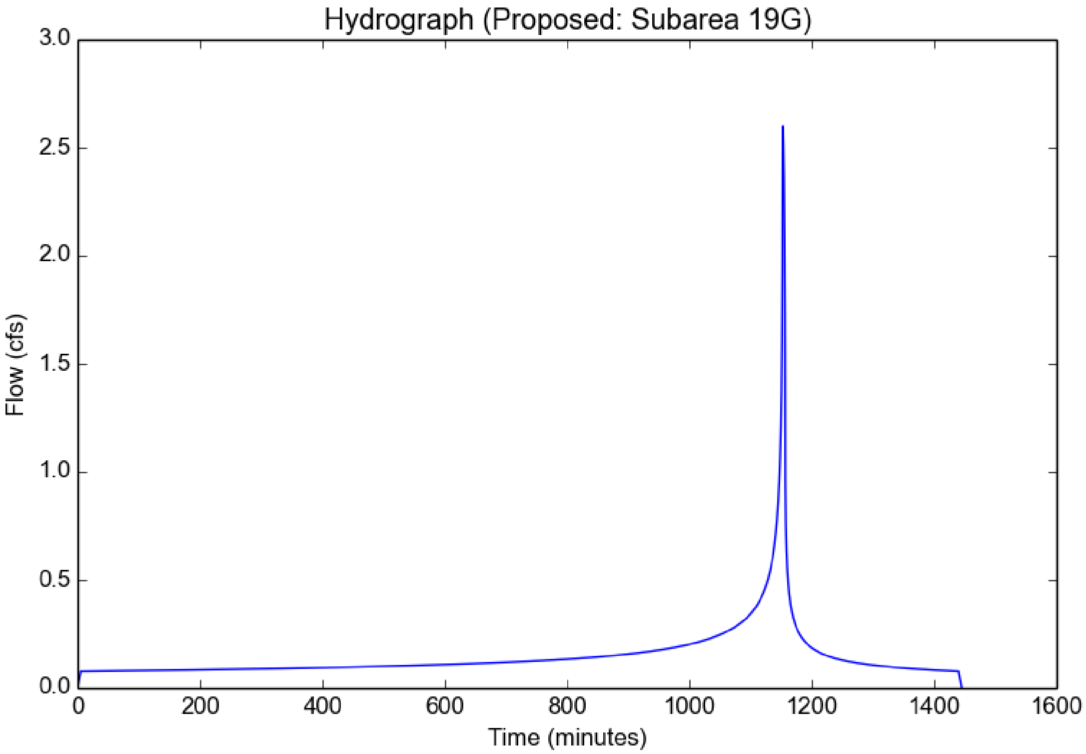
File location: Q:/Santa Clarita/Lyons Canyon Ranch/UCI/Hydrology/Tc/2024-1-4/Proposed - Subarea 19G.pdf
Version: HydroCalc 1.0.3

Input Parameters

Project Name	Proposed
Subarea ID	Subarea 19G
Area (ac)	0.71
Flow Path Length (ft)	224.0
Flow Path Slope (vft/hft)	0.013
50-yr Rainfall Depth (in)	8.4
Percent Impervious	0.7
Soil Type	20
Design Storm Frequency	25-yr
Fire Factor	0
LID	False

Output Results

Modeled (25-yr) Rainfall Depth (in)	7.3752
Peak Intensity (in/hr)	4.4002
Undeveloped Runoff Coefficient (Cu)	0.6748
Developed Runoff Coefficient (Cd)	0.8324
Time of Concentration (min)	5.0
Clear Peak Flow Rate (cfs)	2.6007
Burned Peak Flow Rate (cfs)	2.6007
24-Hr Clear Runoff Volume (ac-ft)	0.2968
24-Hr Clear Runoff Volume (cu-ft)	12928.9245



Peak Flow Hydrologic Analysis

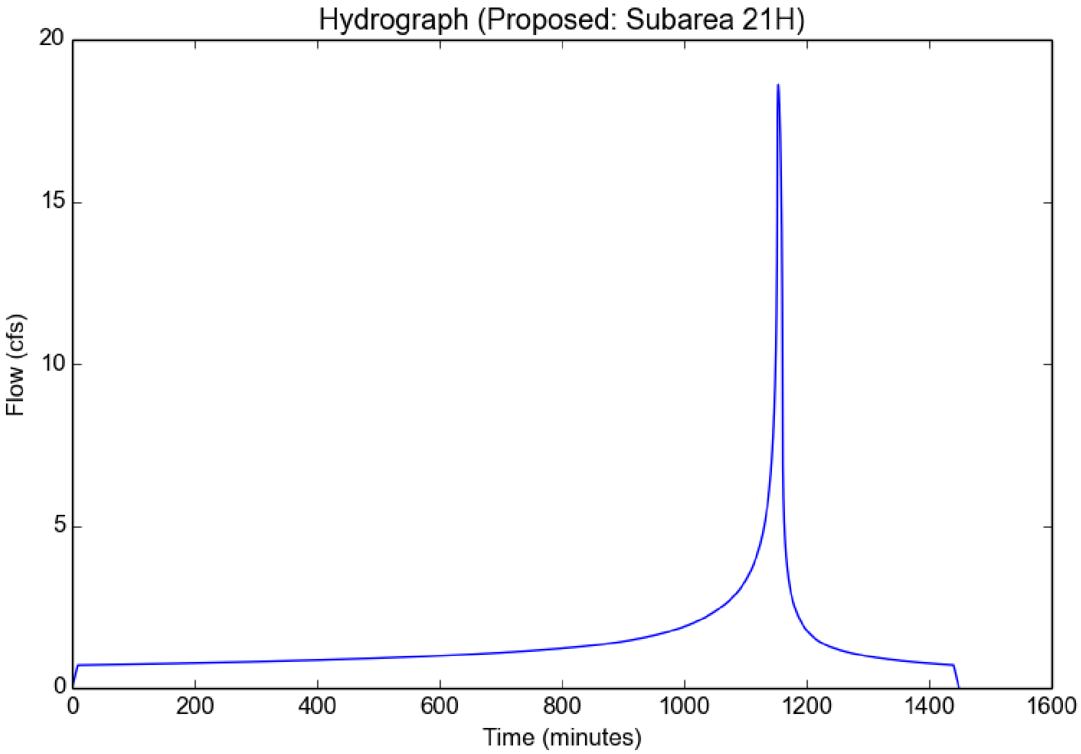
File location: Q:/Santa Clarita/Lyons Canyon Ranch/UCI/Hydrology/Tc/2024-1-4/Proposed - Subarea 21H.pdf
Version: HydroCalc 1.0.3

Input Parameters

Project Name	Proposed
Subarea ID	Subarea 21H
Area (ac)	6.53
Flow Path Length (ft)	841.0
Flow Path Slope (vft/hft)	0.01
50-yr Rainfall Depth (in)	8.4
Percent Impervious	0.7
Soil Type	97
Design Storm Frequency	25-yr
Fire Factor	0
LID	False

Output Results

Modeled (25-yr) Rainfall Depth (in)	7.3752
Peak Intensity (in/hr)	3.3381
Undeveloped Runoff Coefficient (Cu)	0.7458
Developed Runoff Coefficient (Cd)	0.8537
Time of Concentration (min)	9.0
Clear Peak Flow Rate (cfs)	18.6097
Burned Peak Flow Rate (cfs)	18.6097
24-Hr Clear Runoff Volume (ac-ft)	2.7887
24-Hr Clear Runoff Volume (cu-ft)	121475.6281



Peak Flow Hydrologic Analysis

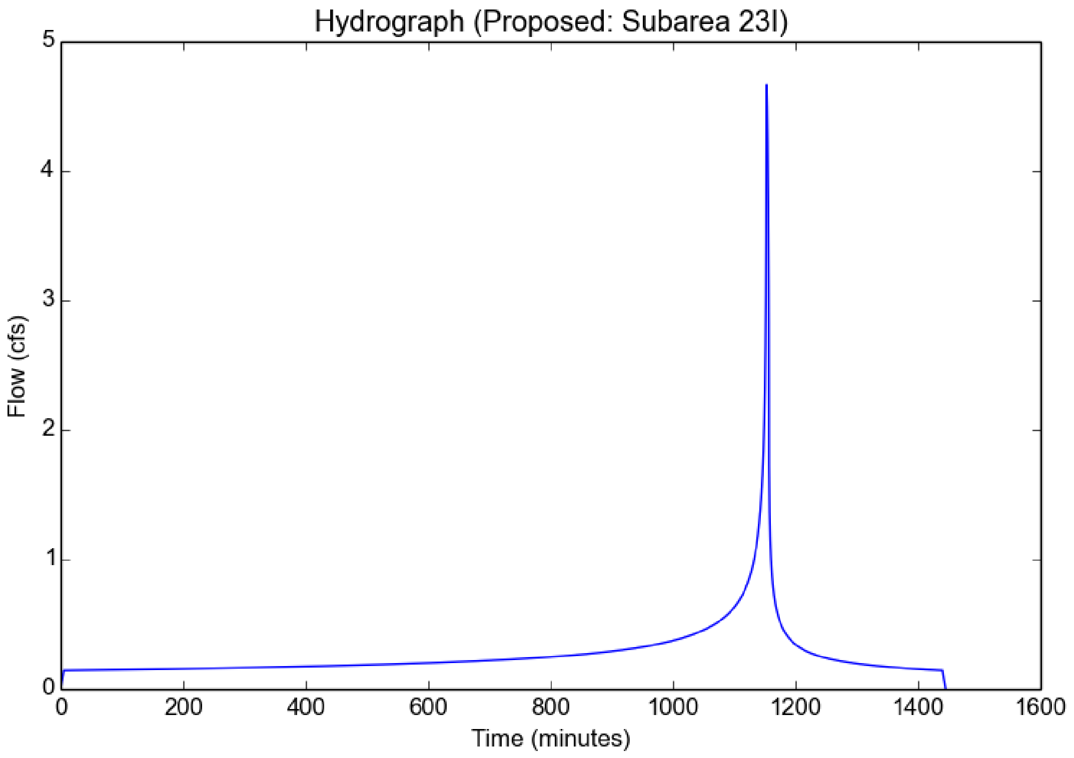
File location: Q:/Santa Clarita/Lyons Canyon Ranch/UCI/Hydrology/Tc/2024-1-4/Proposed - Subarea 23I.pdf
Version: HydroCalc 1.0.3

Input Parameters

Project Name	Proposed
Subarea ID	Subarea 23I
Area (ac)	1.26
Flow Path Length (ft)	341.0
Flow Path Slope (vft/hft)	0.01
50-yr Rainfall Depth (in)	8.4
Percent Impervious	0.74
Soil Type	20
Design Storm Frequency	25-yr
Fire Factor	0
LID	False

Output Results

Modeled (25-yr) Rainfall Depth (in)	7.3752
Peak Intensity (in/hr)	4.4002
Undeveloped Runoff Coefficient (Cu)	0.6748
Developed Runoff Coefficient (Cd)	0.8414
Time of Concentration (min)	5.0
Clear Peak Flow Rate (cfs)	4.6652
Burned Peak Flow Rate (cfs)	4.6652
24-Hr Clear Runoff Volume (ac-ft)	0.5487
24-Hr Clear Runoff Volume (cu-ft)	23899.5202



Peak Flow Hydrologic Analysis

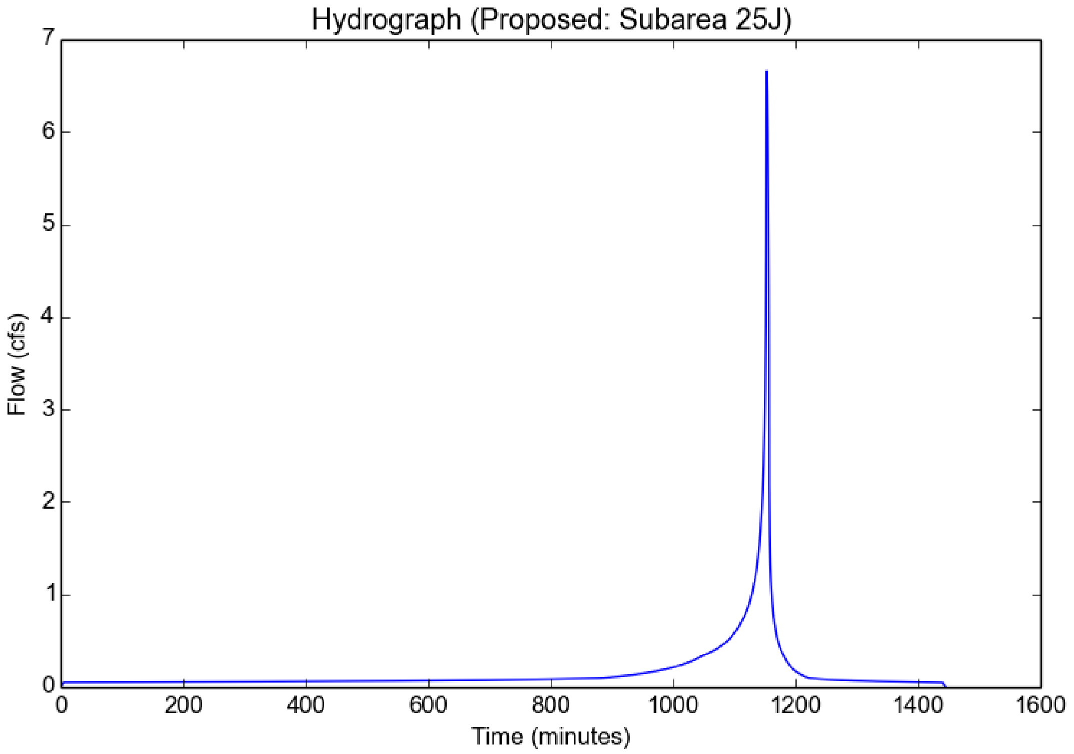
File location: Q:/Santa Clarita/Lyons Canyon Ranch/UCI/Hydrology/Tc/2024-1-4/Proposed - Subarea 25J.pdf
Version: HydroCalc 1.0.3

Input Parameters

Project Name	Proposed
Subarea ID	Subarea 25J
Area (ac)	1.92
Flow Path Length (ft)	580.0
Flow Path Slope (vft/hft)	0.068
50-yr Rainfall Depth (in)	8.4
Percent Impervious	0.07
Soil Type	97
Design Storm Frequency	25-yr
Fire Factor	0
LID	False

Output Results

Modeled (25-yr) Rainfall Depth (in)	7.3752
Peak Intensity (in/hr)	4.4002
Undeveloped Runoff Coefficient (Cu)	0.7796
Developed Runoff Coefficient (Cd)	0.788
Time of Concentration (min)	5.0
Clear Peak Flow Rate (cfs)	6.6574
Burned Peak Flow Rate (cfs)	6.6574
24-Hr Clear Runoff Volume (ac-ft)	0.3305
24-Hr Clear Runoff Volume (cu-ft)	14395.9801



Peak Flow Hydrologic Analysis

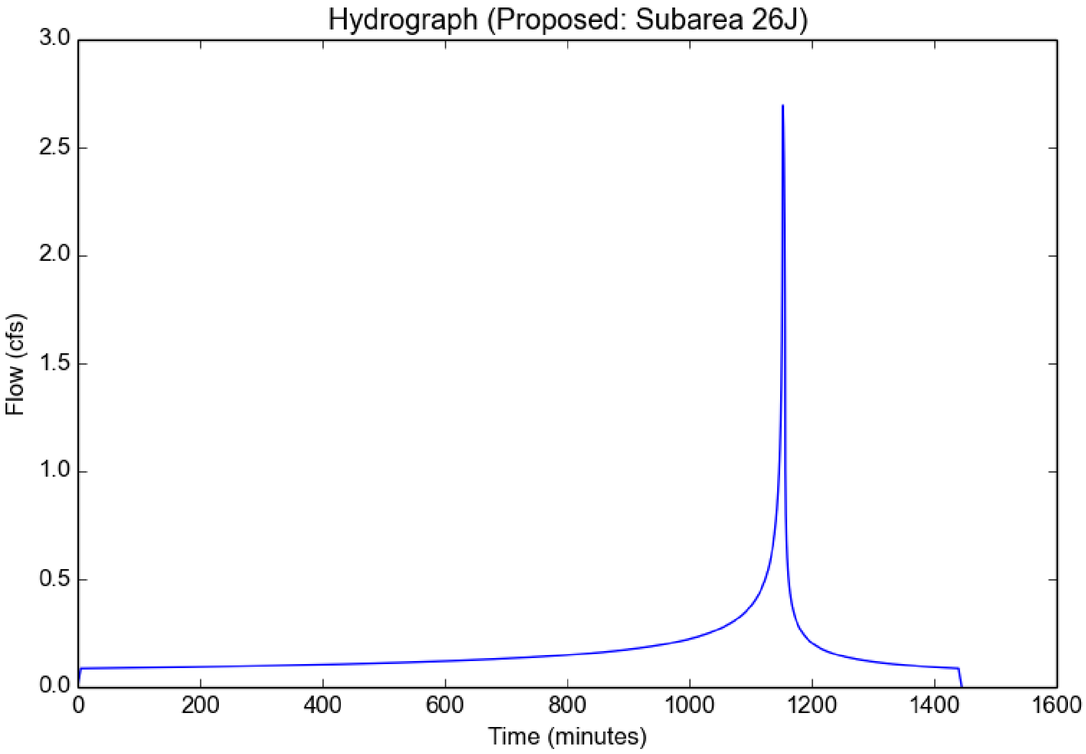
File location: Q:/Santa Clarita/Lyons Canyon Ranch/UCI/Hydrology/Tc/2024-1-4/Proposed - Subarea 26J.pdf
Version: HydroCalc 1.0.3

Input Parameters

Project Name	Proposed
Subarea ID	Subarea 26J
Area (ac)	0.72
Flow Path Length (ft)	520.0
Flow Path Slope (vft/hft)	0.041
50-yr Rainfall Depth (in)	8.4
Percent Impervious	0.78
Soil Type	20
Design Storm Frequency	25-yr
Fire Factor	0
LID	False

Output Results

Modeled (25-yr) Rainfall Depth (in)	7.3752
Peak Intensity (in/hr)	4.4002
Undeveloped Runoff Coefficient (Cu)	0.6748
Developed Runoff Coefficient (Cd)	0.8505
Time of Concentration (min)	5.0
Clear Peak Flow Rate (cfs)	2.6944
Burned Peak Flow Rate (cfs)	2.6944
24-Hr Clear Runoff Volume (ac-ft)	0.326
24-Hr Clear Runoff Volume (cu-ft)	14202.7153



Peak Flow Hydrologic Analysis

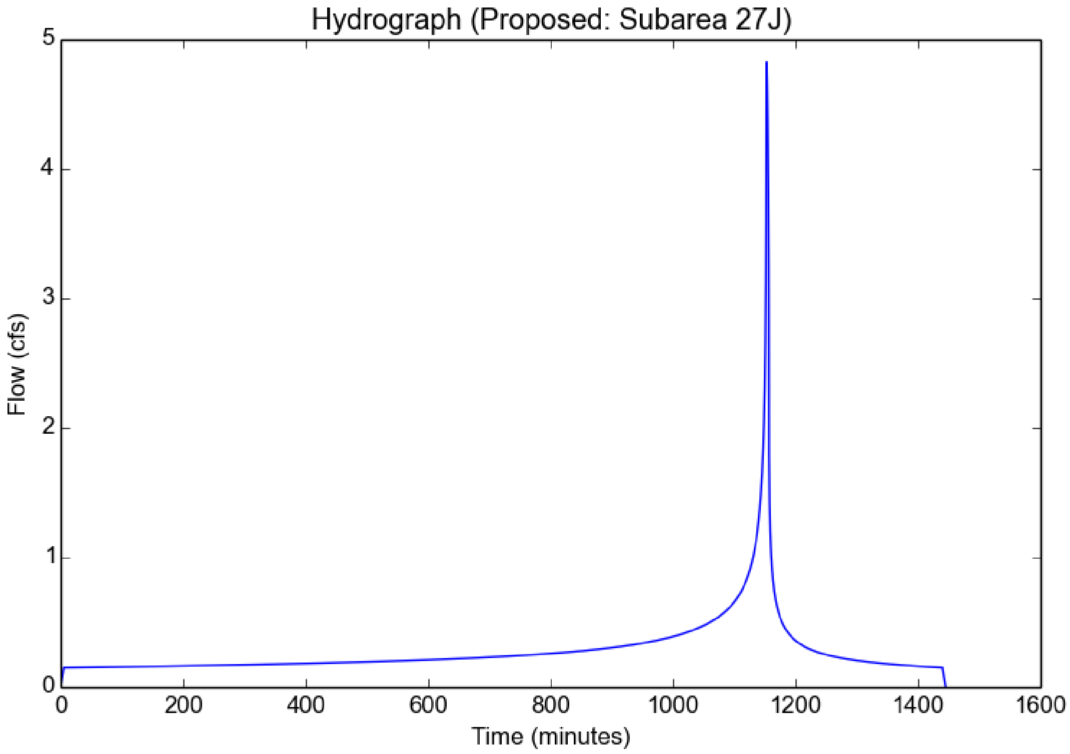
File location: Q:/Santa Clarita/Lyons Canyon Ranch/UCI/Hydrology/Tc/2024-1-4/Proposed - Subarea 27J.pdf
Version: HydroCalc 1.0.3

Input Parameters

Project Name	Proposed
Subarea ID	Subarea 27J
Area (ac)	1.3
Flow Path Length (ft)	350.0
Flow Path Slope (vft/hft)	0.01
50-yr Rainfall Depth (in)	8.4
Percent Impervious	0.75
Soil Type	20
Design Storm Frequency	25-yr
Fire Factor	0
LID	False

Output Results

Modeled (25-yr) Rainfall Depth (in)	7.3752
Peak Intensity (in/hr)	4.4002
Undeveloped Runoff Coefficient (Cu)	0.6748
Developed Runoff Coefficient (Cd)	0.8437
Time of Concentration (min)	5.0
Clear Peak Flow Rate (cfs)	4.8262
Burned Peak Flow Rate (cfs)	4.8262
24-Hr Clear Runoff Volume (ac-ft)	0.5717
24-Hr Clear Runoff Volume (cu-ft)	24904.6242



Peak Flow Hydrologic Analysis

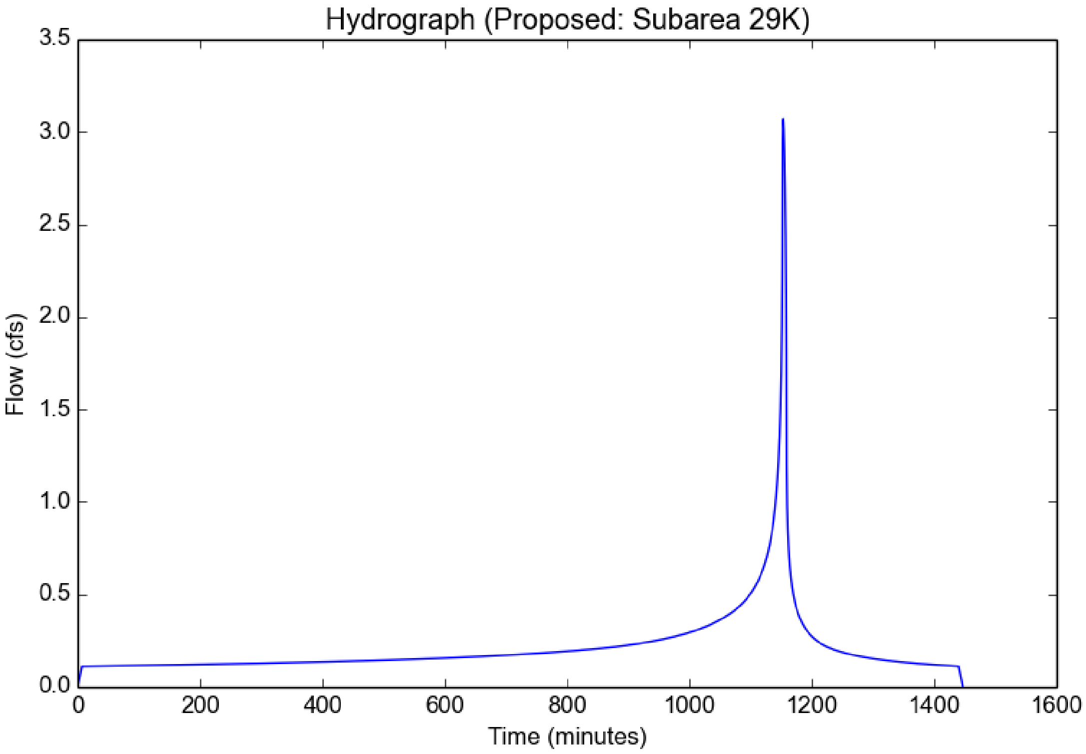
File location: Q:/Santa Clarita/Lyons Canyon Ranch/UCI/Hydrology/Tc/2024-1-4/Proposed - Subarea 29K.pdf
Version: HydroCalc 1.0.3

Input Parameters

Project Name	Proposed
Subarea ID	Subarea 29K
Area (ac)	0.94
Flow Path Length (ft)	791.0
Flow Path Slope (vft/hft)	0.016
50-yr Rainfall Depth (in)	8.4
Percent Impervious	0.78
Soil Type	97
Design Storm Frequency	25-yr
Fire Factor	0
LID	False

Output Results

Modeled (25-yr) Rainfall Depth (in)	7.3752
Peak Intensity (in/hr)	3.7566
Undeveloped Runoff Coefficient (Cu)	0.7609
Developed Runoff Coefficient (Cd)	0.8694
Time of Concentration (min)	7.0
Clear Peak Flow Rate (cfs)	3.0701
Burned Peak Flow Rate (cfs)	3.0701
24-Hr Clear Runoff Volume (ac-ft)	0.4319
24-Hr Clear Runoff Volume (cu-ft)	18814.5858



Peak Flow Hydrologic Analysis

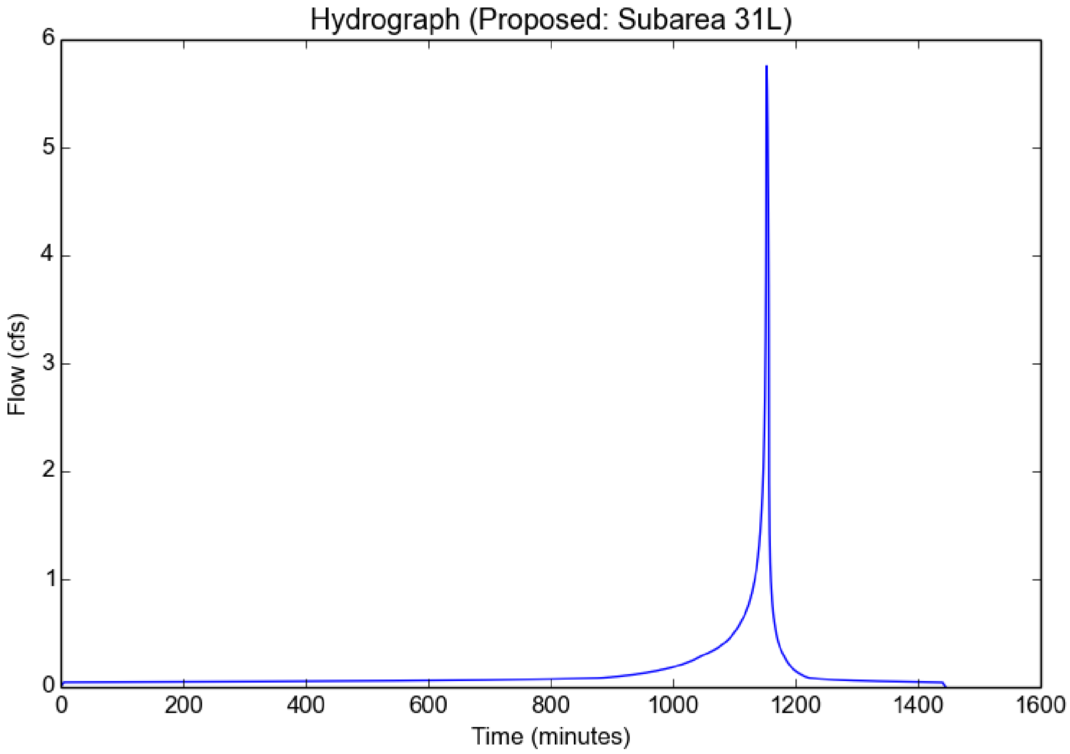
File location: Q:/Santa Clarita/Lyons Canyon Ranch/UCI/Hydrology/Tc/2024-1-4/Proposed - Subarea 31L.pdf
Version: HydroCalc 1.0.3

Input Parameters

Project Name	Proposed
Subarea ID	Subarea 31L
Area (ac)	1.66
Flow Path Length (ft)	550.0
Flow Path Slope (vft/hft)	0.064
50-yr Rainfall Depth (in)	8.4
Percent Impervious	0.07
Soil Type	97
Design Storm Frequency	25-yr
Fire Factor	0
LID	False

Output Results

Modeled (25-yr) Rainfall Depth (in)	7.3752
Peak Intensity (in/hr)	4.4002
Undeveloped Runoff Coefficient (Cu)	0.7796
Developed Runoff Coefficient (Cd)	0.788
Time of Concentration (min)	5.0
Clear Peak Flow Rate (cfs)	5.7559
Burned Peak Flow Rate (cfs)	5.7559
24-Hr Clear Runoff Volume (ac-ft)	0.2857
24-Hr Clear Runoff Volume (cu-ft)	12446.5245



Peak Flow Hydrologic Analysis

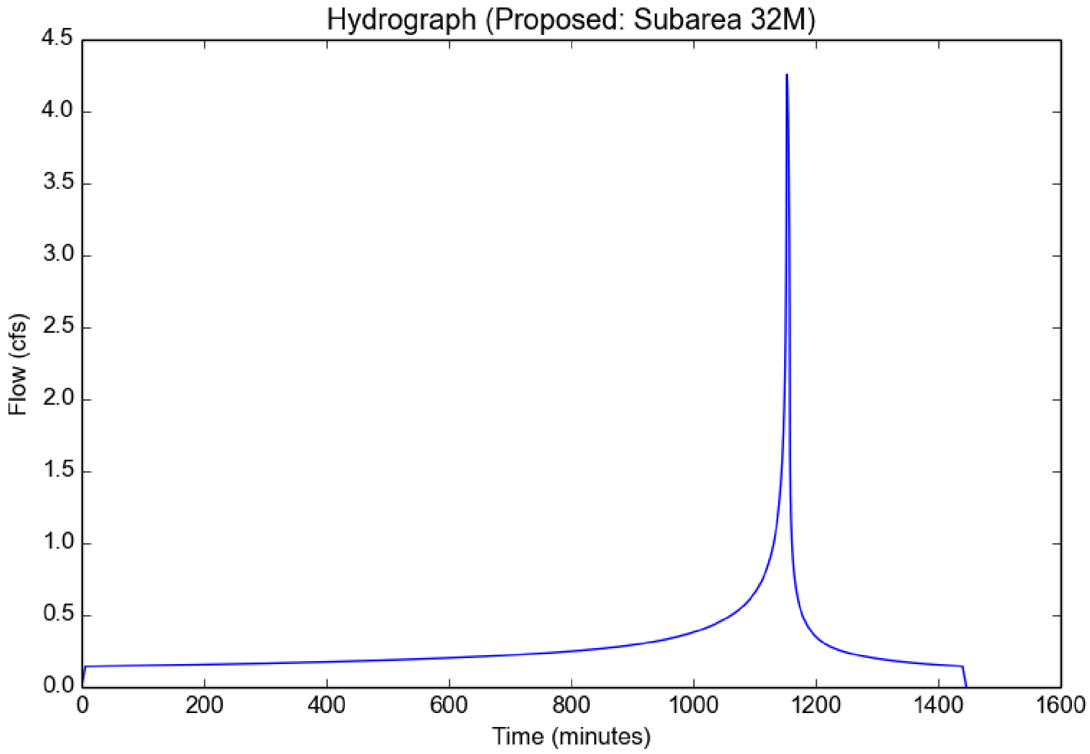
File location: Q:/Santa Clarita/Lyons Canyon Ranch/UCI/Hydrology/Tc/2024-1-4/Proposed - Subarea 32M.pdf
Version: HydroCalc 1.0.3

Input Parameters

Project Name	Proposed
Subarea ID	Subarea 32M
Area (ac)	1.21
Flow Path Length (ft)	908.0
Flow Path Slope (vft/hft)	0.059
50-yr Rainfall Depth (in)	8.4
Percent Impervious	0.78
Soil Type	97
Design Storm Frequency	25-yr
Fire Factor	0
LID	False

Output Results

Modeled (25-yr) Rainfall Depth (in)	7.3752
Peak Intensity (in/hr)	4.0389
Undeveloped Runoff Coefficient (Cu)	0.7691
Developed Runoff Coefficient (Cd)	0.8712
Time of Concentration (min)	6.0
Clear Peak Flow Rate (cfs)	4.2576
Burned Peak Flow Rate (cfs)	4.2576
24-Hr Clear Runoff Volume (ac-ft)	0.556
24-Hr Clear Runoff Volume (cu-ft)	24219.3582



Peak Flow Hydrologic Analysis

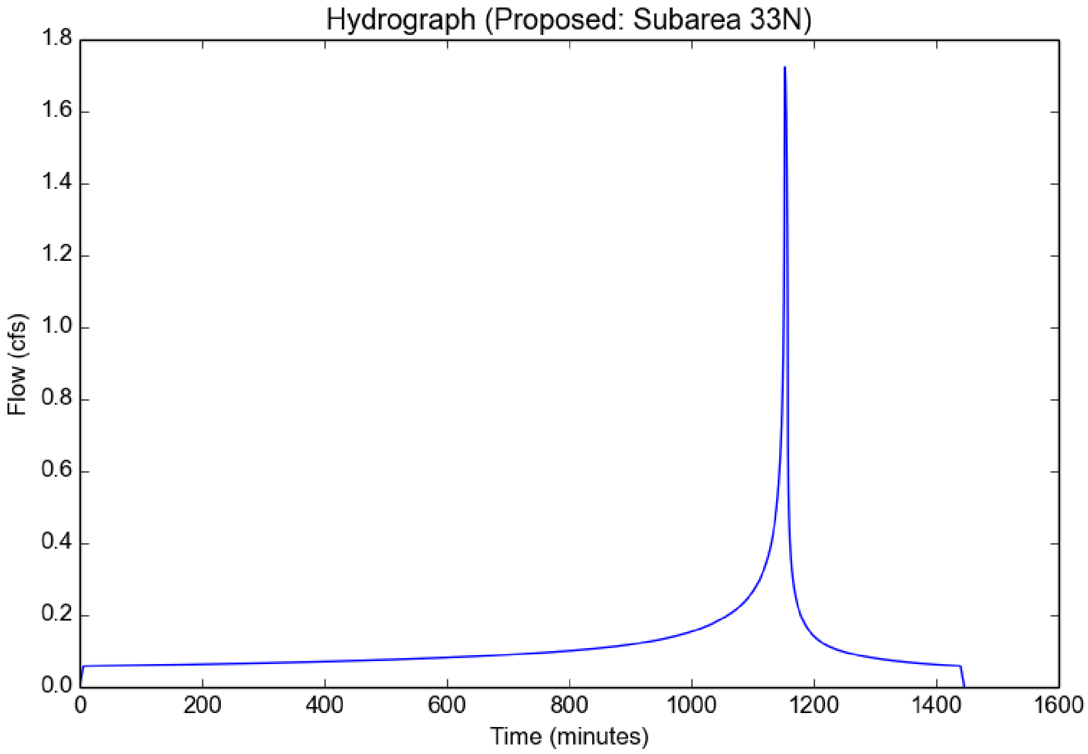
File location: Q:/Santa Clarita/Lyons Canyon Ranch/UCI/Hydrology/Tc/2024-1-4/Proposed - Subarea 33N.pdf
Version: HydroCalc 1.0.3

Input Parameters

Project Name	Proposed
Subarea ID	Subarea 33N
Area (ac)	0.49
Flow Path Length (ft)	465.0
Flow Path Slope (vft/hft)	0.008
50-yr Rainfall Depth (in)	8.4
Percent Impervious	0.78
Soil Type	97
Design Storm Frequency	25-yr
Fire Factor	0
LID	False

Output Results

Modeled (25-yr) Rainfall Depth (in)	7.3752
Peak Intensity (in/hr)	4.0389
Undeveloped Runoff Coefficient (Cu)	0.7691
Developed Runoff Coefficient (Cd)	0.8712
Time of Concentration (min)	6.0
Clear Peak Flow Rate (cfs)	1.7242
Burned Peak Flow Rate (cfs)	1.7242
24-Hr Clear Runoff Volume (ac-ft)	0.2252
24-Hr Clear Runoff Volume (cu-ft)	9807.8393



Peak Flow Hydrologic Analysis

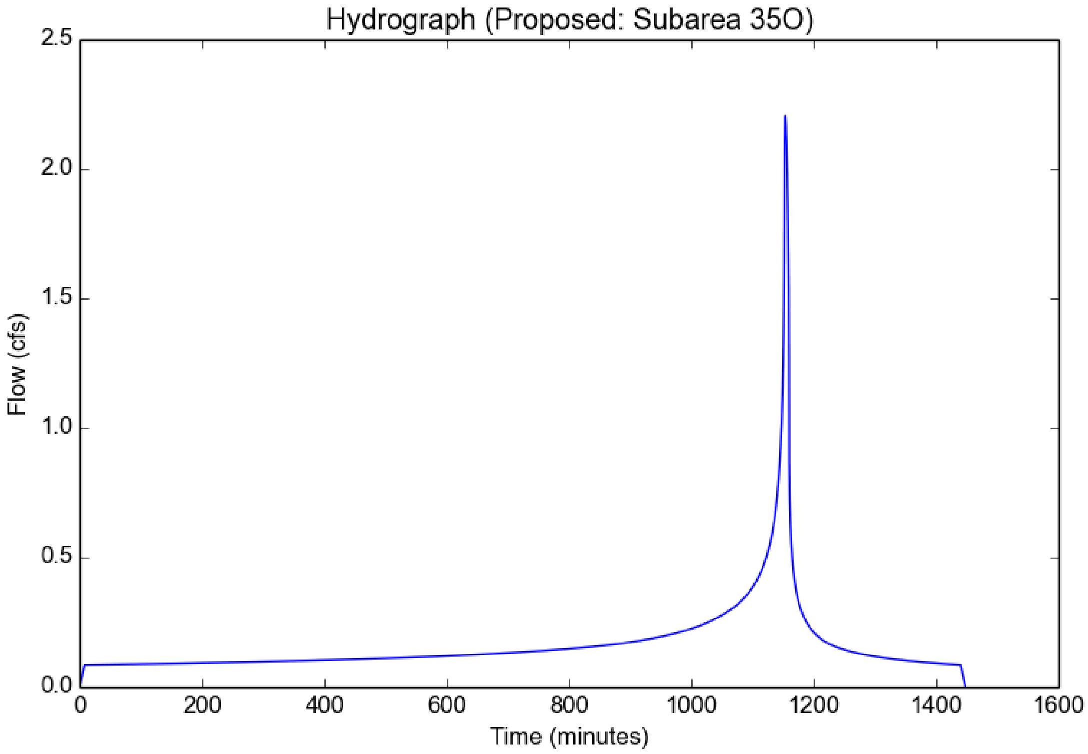
File location: Q:/Santa Clarita/Lyons Canyon Ranch/UCI/Hydrology/Tc/2024-1-4/Proposed - Subarea 35O.pdf
Version: HydroCalc 1.0.3

Input Parameters

Project Name	Proposed
Subarea ID	Subarea 35O
Area (ac)	0.72
Flow Path Length (ft)	696.0
Flow Path Slope (vft/hft)	0.01
50-yr Rainfall Depth (in)	8.4
Percent Impervious	0.78
Soil Type	97
Design Storm Frequency	25-yr
Fire Factor	0
LID	False

Output Results

Modeled (25-yr) Rainfall Depth (in)	7.3752
Peak Intensity (in/hr)	3.5281
Undeveloped Runoff Coefficient (Cu)	0.7543
Developed Runoff Coefficient (Cd)	0.8679
Time of Concentration (min)	8.0
Clear Peak Flow Rate (cfs)	2.2048
Burned Peak Flow Rate (cfs)	2.2048
24-Hr Clear Runoff Volume (ac-ft)	0.3308
24-Hr Clear Runoff Volume (cu-ft)	14410.799



Peak Flow Hydrologic Analysis

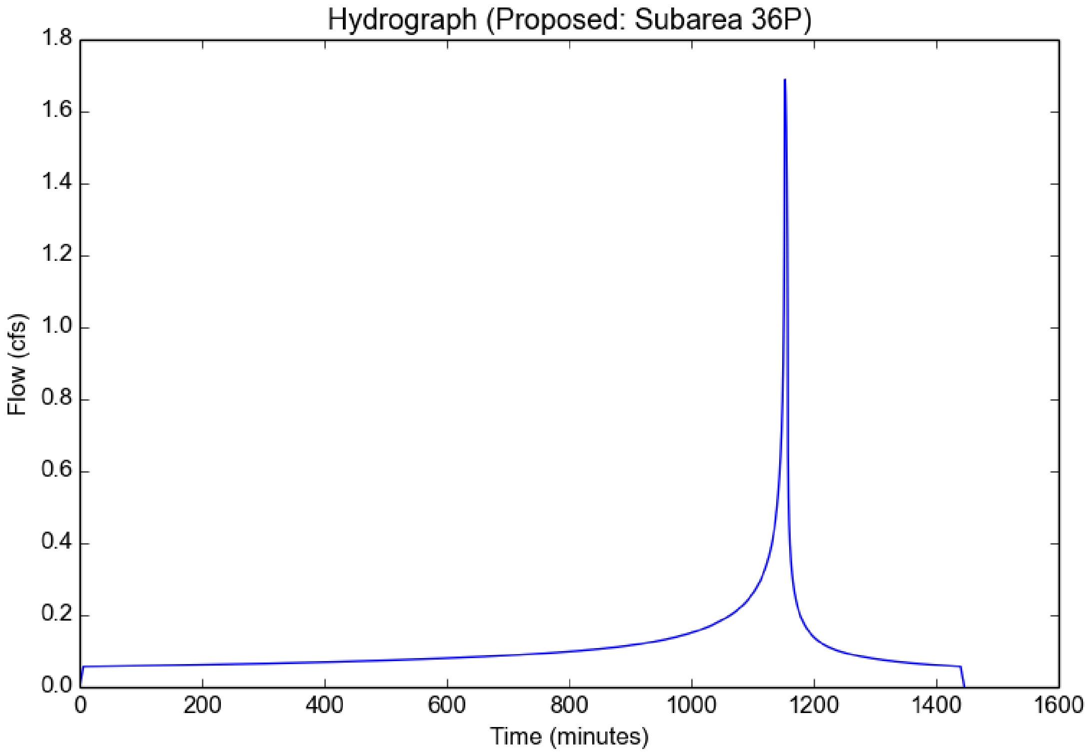
File location: Q:/Santa Clarita/Lyons Canyon Ranch/UCI/Hydrology/Tc/2024-1-4/Proposed - Subarea 36P.pdf
Version: HydroCalc 1.0.3

Input Parameters

Project Name	Proposed
Subarea ID	Subarea 36P
Area (ac)	0.48
Flow Path Length (ft)	659.0
Flow Path Slope (vft/hft)	0.023
50-yr Rainfall Depth (in)	8.4
Percent Impervious	0.78
Soil Type	97
Design Storm Frequency	25-yr
Fire Factor	0
LID	False

Output Results

Modeled (25-yr) Rainfall Depth (in)	7.3752
Peak Intensity (in/hr)	4.0389
Undeveloped Runoff Coefficient (Cu)	0.7691
Developed Runoff Coefficient (Cd)	0.8712
Time of Concentration (min)	6.0
Clear Peak Flow Rate (cfs)	1.689
Burned Peak Flow Rate (cfs)	1.689
24-Hr Clear Runoff Volume (ac-ft)	0.2206
24-Hr Clear Runoff Volume (cu-ft)	9607.6793



Peak Flow Hydrologic Analysis

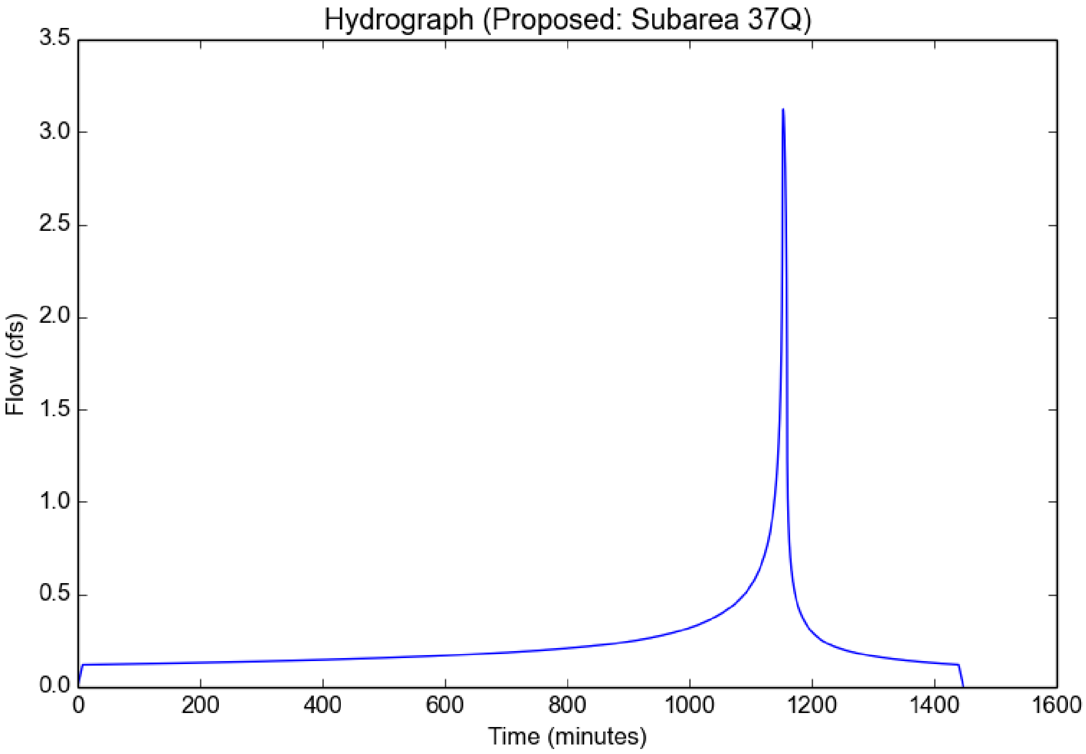
File location: Q:/Santa Clarita/Lyons Canyon Ranch/UCI/Hydrology/Tc/2024-1-4/Proposed - Subarea 37Q.pdf
Version: HydroCalc 1.0.3

Input Parameters

Project Name	Proposed
Subarea ID	Subarea 37Q
Area (ac)	1.02
Flow Path Length (ft)	836.0
Flow Path Slope (vft/hft)	0.018
50-yr Rainfall Depth (in)	8.4
Percent Impervious	0.78
Soil Type	97
Design Storm Frequency	25-yr
Fire Factor	0
LID	False

Output Results

Modeled (25-yr) Rainfall Depth (in)	7.3752
Peak Intensity (in/hr)	3.5281
Undeveloped Runoff Coefficient (Cu)	0.7543
Developed Runoff Coefficient (Cd)	0.8679
Time of Concentration (min)	8.0
Clear Peak Flow Rate (cfs)	3.1235
Burned Peak Flow Rate (cfs)	3.1235
24-Hr Clear Runoff Volume (ac-ft)	0.4687
24-Hr Clear Runoff Volume (cu-ft)	20415.2985



Peak Flow Hydrologic Analysis

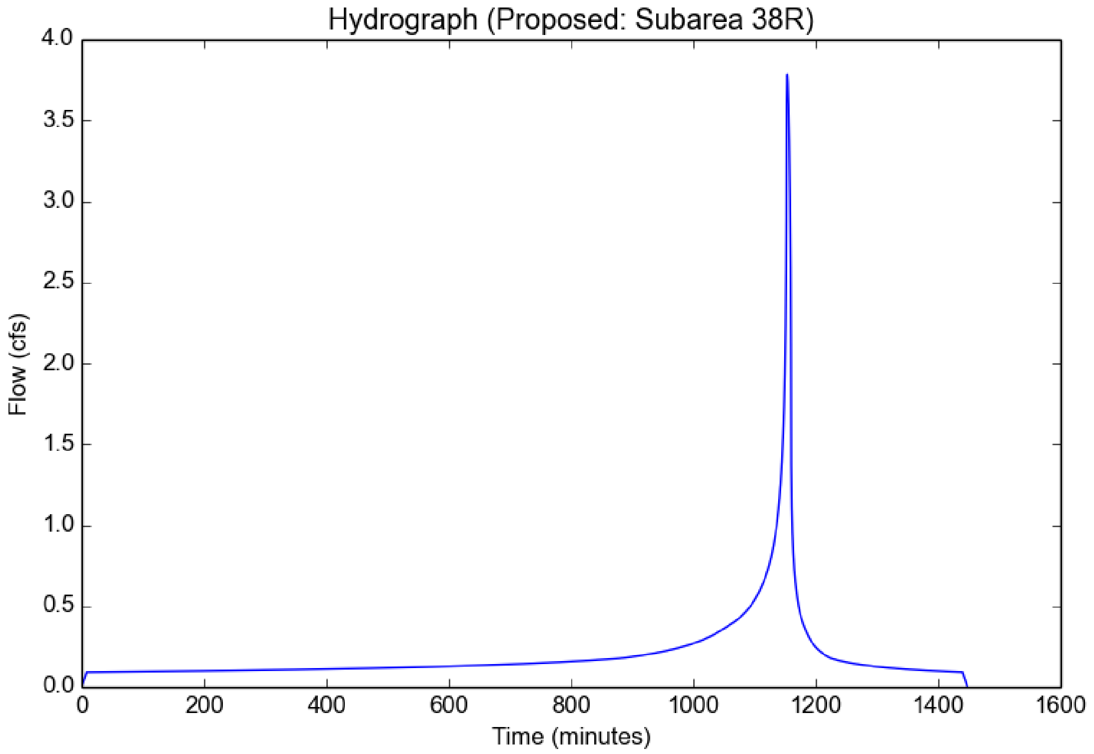
File location: Q:/Santa Clarita/Lyons Canyon Ranch/UCI/Hydrology/Tc/2024-1-4/Proposed - Subarea 38R.pdf
Version: HydroCalc 1.0.3

Input Parameters

Project Name	Proposed
Subarea ID	Subarea 38R
Area (ac)	1.32
Flow Path Length (ft)	974.0
Flow Path Slope (vft/hft)	0.029
50-yr Rainfall Depth (in)	8.4
Percent Impervious	0.4
Soil Type	97
Design Storm Frequency	25-yr
Fire Factor	0
LID	False

Output Results

Modeled (25-yr) Rainfall Depth (in)	7.3752
Peak Intensity (in/hr)	3.5281
Undeveloped Runoff Coefficient (Cu)	0.7543
Developed Runoff Coefficient (Cd)	0.8126
Time of Concentration (min)	8.0
Clear Peak Flow Rate (cfs)	3.7843
Burned Peak Flow Rate (cfs)	3.7843
24-Hr Clear Runoff Volume (ac-ft)	0.4034
24-Hr Clear Runoff Volume (cu-ft)	17571.8735



Peak Flow Hydrologic Analysis

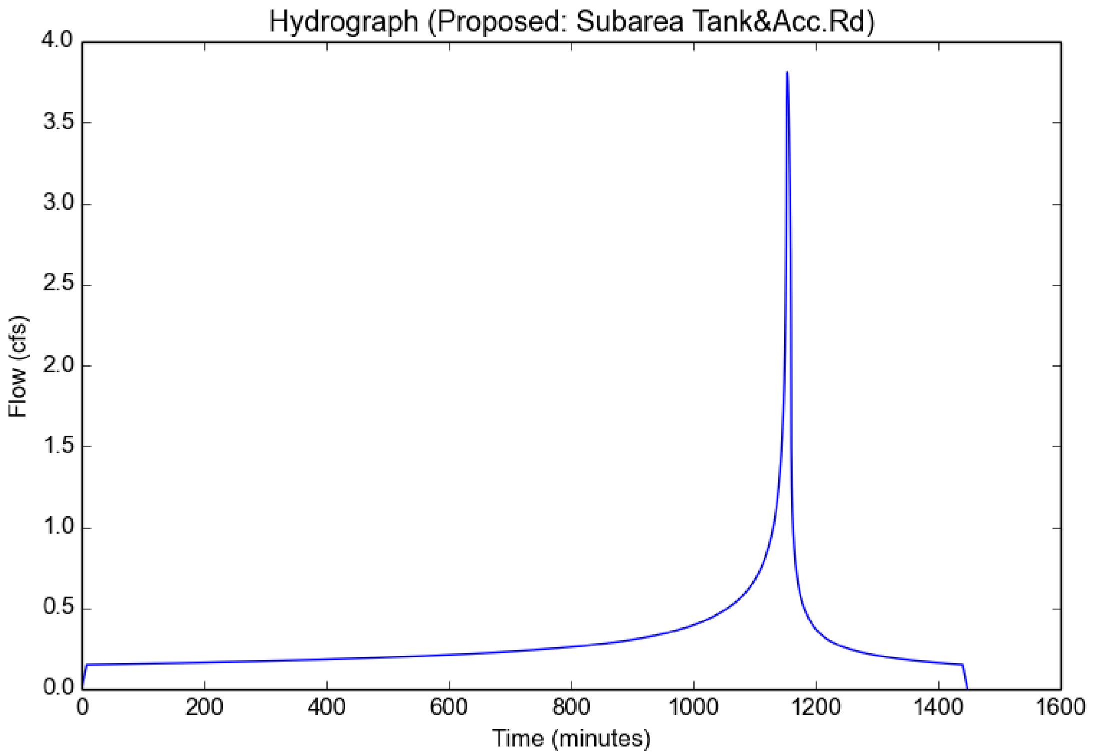
File location: Q:/Santa Clarita/Lyons Canyon Ranch/UCI/Hydrology/Tc/2024-1-4/Proposed - Subarea Tank&Acc.Rd-25.pdf
Version: HydroCalc 1.0.3

Input Parameters

Project Name	Proposed
Subarea ID	Subarea Tank&Acc.Rd
Area (ac)	1.24
Flow Path Length (ft)	1520.0
Flow Path Slope (vft/hft)	0.102
50-yr Rainfall Depth (in)	8.4
Percent Impervious	0.8
Soil Type	97
Design Storm Frequency	25-yr
Fire Factor	0
LID	False

Output Results

Modeled (25-yr) Rainfall Depth (in)	7.3752
Peak Intensity (in/hr)	3.5281
Undeveloped Runoff Coefficient (Cu)	0.7543
Developed Runoff Coefficient (Cd)	0.8709
Time of Concentration (min)	8.0
Clear Peak Flow Rate (cfs)	3.8099
Burned Peak Flow Rate (cfs)	3.8099
24-Hr Clear Runoff Volume (ac-ft)	0.5798
24-Hr Clear Runoff Volume (cu-ft)	25256.0554



50-YEAR

Peak Flow Hydrologic Analysis

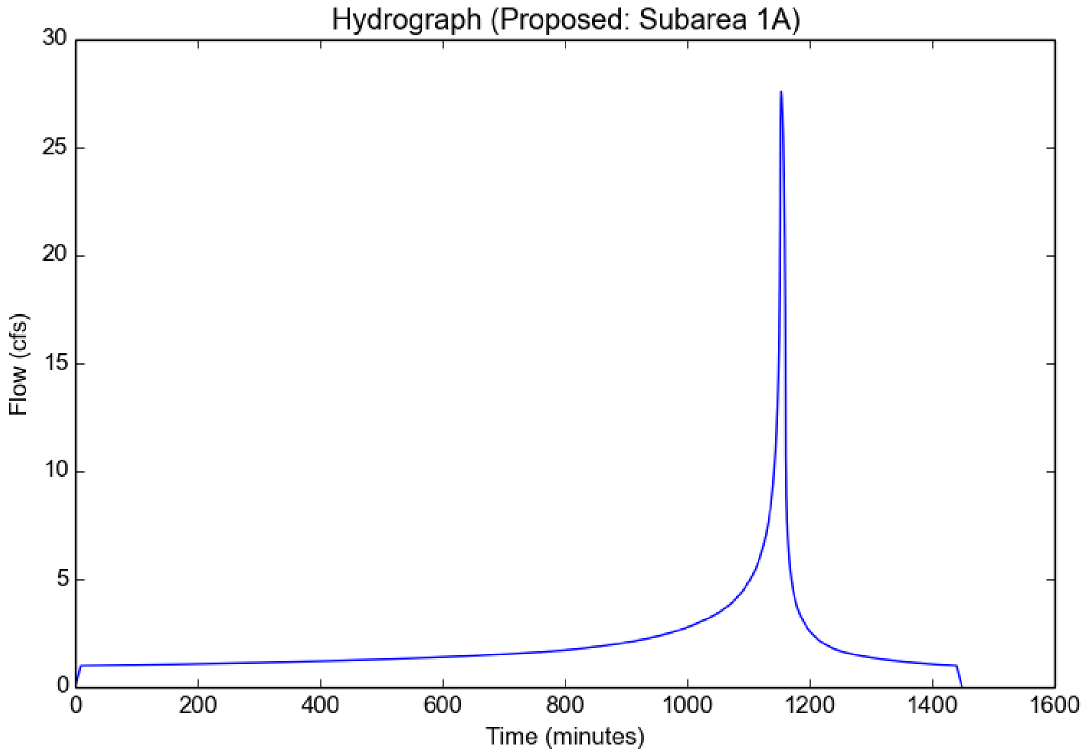
File location: Q:/Santa Clarita/Lyons Canyon Ranch/UCI/Hydrology/Tc/2024-1-4/Proposed - Subarea 1A-50.pdf
Version: HydroCalc 1.0.3

Input Parameters

Project Name	Proposed
Subarea ID	Subarea 1A
Area (ac)	8.52
Flow Path Length (ft)	1019.0
Flow Path Slope (vft/hft)	0.011
50-yr Rainfall Depth (in)	8.4
Percent Impervious	0.65
Soil Type	97
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

Output Results

Modeled (50-yr) Rainfall Depth (in)	8.4
Peak Intensity (in/hr)	3.8019
Undeveloped Runoff Coefficient (Cu)	0.7622
Developed Runoff Coefficient (Cd)	0.8518
Time of Concentration (min)	9.0
Clear Peak Flow Rate (cfs)	27.5914
Burned Peak Flow Rate (cfs)	27.5914
24-Hr Clear Runoff Volume (ac-ft)	3.9925
24-Hr Clear Runoff Volume (cu-ft)	173914.4433



Peak Flow Hydrologic Analysis

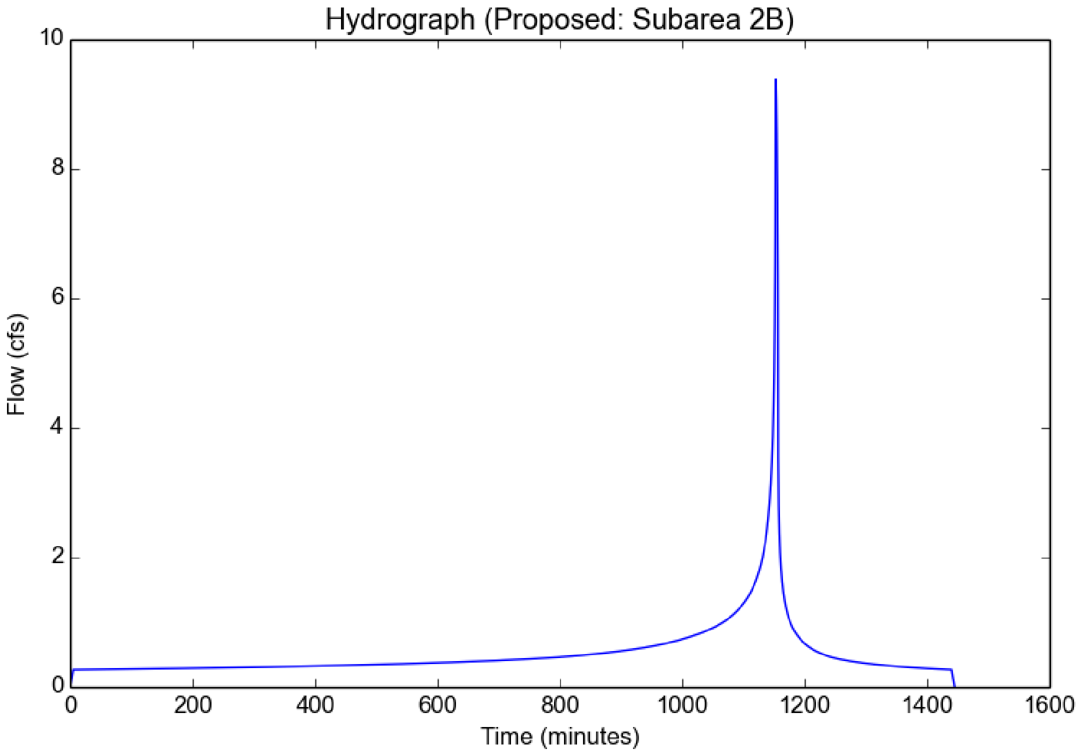
File location: Q:/Santa Clarita/Lyons Canyon Ranch/UCI/Hydrology/Tc/2024-1-4/Proposed - Subarea 2B-50.pdf
Version: HydroCalc 1.0.3

Input Parameters

Project Name	Proposed
Subarea ID	Subarea 2B
Area (ac)	2.16
Flow Path Length (ft)	465.0
Flow Path Slope (vft/hft)	0.013
50-yr Rainfall Depth (in)	8.4
Percent Impervious	0.7
Soil Type	97
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

Output Results

Modeled (50-yr) Rainfall Depth (in)	8.4
Peak Intensity (in/hr)	5.0117
Undeveloped Runoff Coefficient (Cu)	0.7905
Developed Runoff Coefficient (Cd)	0.8672
Time of Concentration (min)	5.0
Clear Peak Flow Rate (cfs)	9.3871
Burned Peak Flow Rate (cfs)	9.3871
24-Hr Clear Runoff Volume (ac-ft)	1.0605
24-Hr Clear Runoff Volume (cu-ft)	46196.199



Peak Flow Hydrologic Analysis

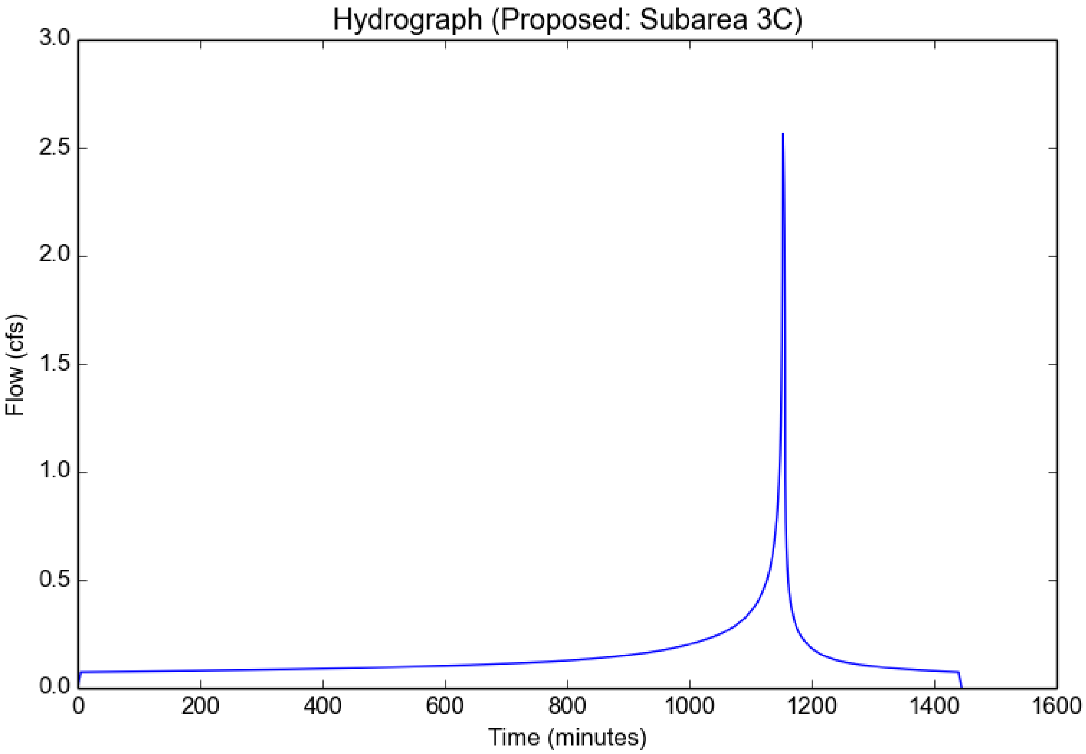
File location: Q:/Santa Clarita/Lyons Canyon Ranch/UCI/Hydrology/Tc/2024-1-4/Proposed - Subarea 3C-50.pdf
Version: HydroCalc 1.0.3

Input Parameters

Project Name	Proposed
Subarea ID	Subarea 3C
Area (ac)	0.59
Flow Path Length (ft)	258.0
Flow Path Slope (vft/hft)	0.006
50-yr Rainfall Depth (in)	8.4
Percent Impervious	0.7
Soil Type	97
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

Output Results

Modeled (50-yr) Rainfall Depth (in)	8.4
Peak Intensity (in/hr)	5.0117
Undeveloped Runoff Coefficient (Cu)	0.7905
Developed Runoff Coefficient (Cd)	0.8672
Time of Concentration (min)	5.0
Clear Peak Flow Rate (cfs)	2.5641
Burned Peak Flow Rate (cfs)	2.5641
24-Hr Clear Runoff Volume (ac-ft)	0.2897
24-Hr Clear Runoff Volume (cu-ft)	12618.4062



Peak Flow Hydrologic Analysis

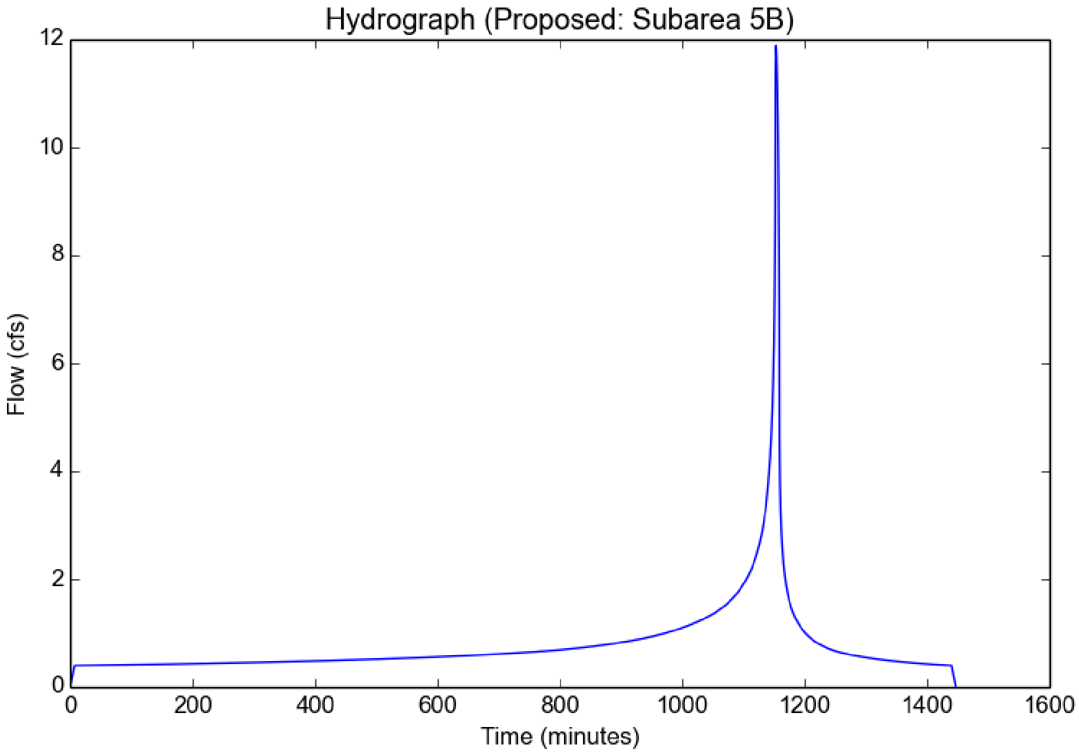
File location: Q:/Santa Clarita/Lyons Canyon Ranch/UCI/Hydrology/Tc/2024-1-4/Proposed - Subarea 5B-50.pdf
Version: HydroCalc 1.0.3

Input Parameters

Project Name	Proposed
Subarea ID	Subarea 5B
Area (ac)	3.22
Flow Path Length (ft)	656.0
Flow Path Slope (vft/hft)	0.011
50-yr Rainfall Depth (in)	8.4
Percent Impervious	0.7
Soil Type	97
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

Output Results

Modeled (50-yr) Rainfall Depth (in)	8.4
Peak Intensity (in/hr)	4.2786
Undeveloped Runoff Coefficient (Cu)	0.776
Developed Runoff Coefficient (Cd)	0.8628
Time of Concentration (min)	7.0
Clear Peak Flow Rate (cfs)	11.8871
Burned Peak Flow Rate (cfs)	11.8871
24-Hr Clear Runoff Volume (ac-ft)	1.5809
24-Hr Clear Runoff Volume (cu-ft)	68862.5372



Peak Flow Hydrologic Analysis

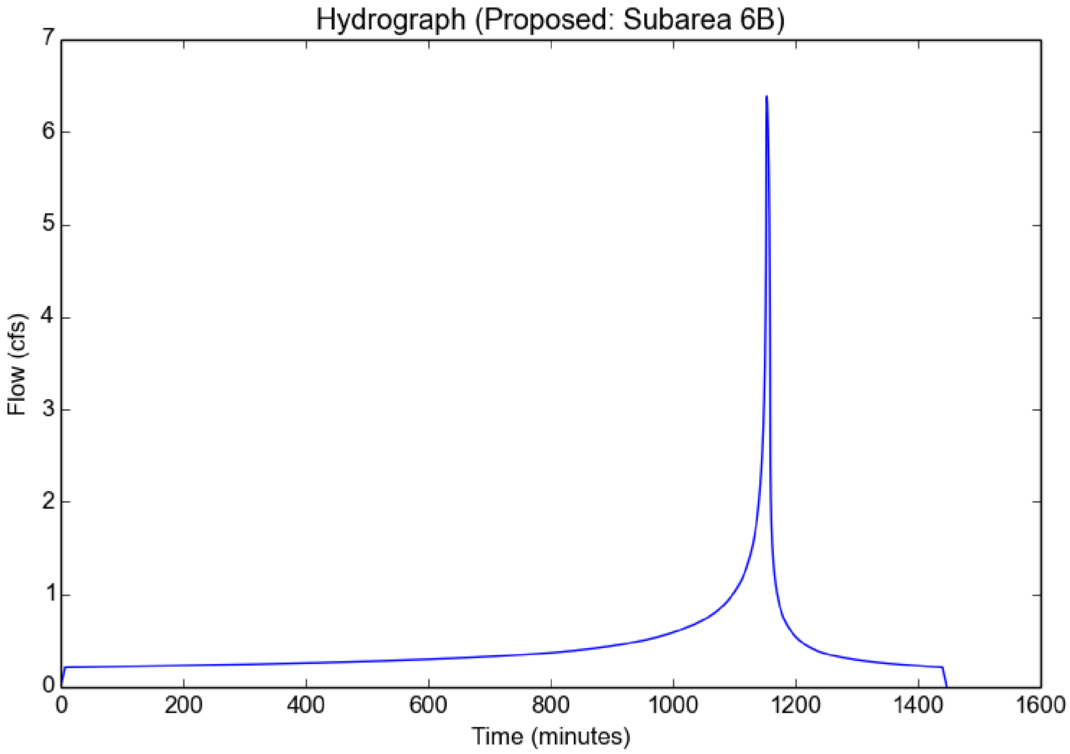
File location: Q:/Santa Clarita/Lyons Canyon Ranch/UCI/Hydrology/Tc/2024-1-4/Proposed - Subarea 6B-50.pdf
Version: HydroCalc 1.0.3

Input Parameters

Project Name	Proposed
Subarea ID	Subarea 6B
Area (ac)	1.73
Flow Path Length (ft)	528.0
Flow Path Slope (vft/hft)	0.005
50-yr Rainfall Depth (in)	8.4
Percent Impervious	0.7
Soil Type	97
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

Output Results

Modeled (50-yr) Rainfall Depth (in)	8.4
Peak Intensity (in/hr)	4.2786
Undeveloped Runoff Coefficient (Cu)	0.776
Developed Runoff Coefficient (Cd)	0.8628
Time of Concentration (min)	7.0
Clear Peak Flow Rate (cfs)	6.3865
Burned Peak Flow Rate (cfs)	6.3865
24-Hr Clear Runoff Volume (ac-ft)	0.8493
24-Hr Clear Runoff Volume (cu-ft)	36997.5743



Peak Flow Hydrologic Analysis

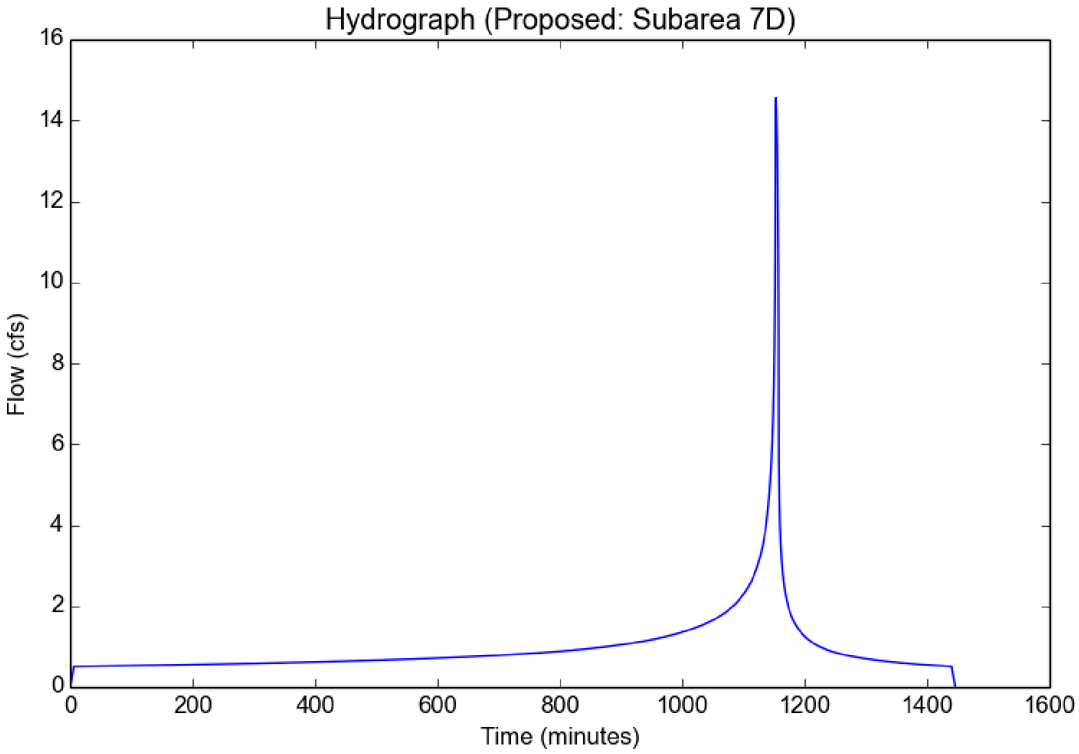
File location: Q:/Santa Clarita/Lyons Canyon Ranch/UCI/Hydrology/Tc/2024-1-4/Proposed - Subarea 7D-50.pdf
Version: HydroCalc 1.0.3

Input Parameters

Project Name	Proposed
Subarea ID	Subarea 7D
Area (ac)	3.6
Flow Path Length (ft)	512.0
Flow Path Slope (vft/hft)	0.007
50-yr Rainfall Depth (in)	8.4
Percent Impervious	0.82
Soil Type	97
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

Output Results

Modeled (50-yr) Rainfall Depth (in)	8.4
Peak Intensity (in/hr)	4.6001
Undeveloped Runoff Coefficient (Cu)	0.784
Developed Runoff Coefficient (Cd)	0.8791
Time of Concentration (min)	6.0
Clear Peak Flow Rate (cfs)	14.5587
Burned Peak Flow Rate (cfs)	14.5587
24-Hr Clear Runoff Volume (ac-ft)	1.9602
24-Hr Clear Runoff Volume (cu-ft)	85386.5416



Peak Flow Hydrologic Analysis

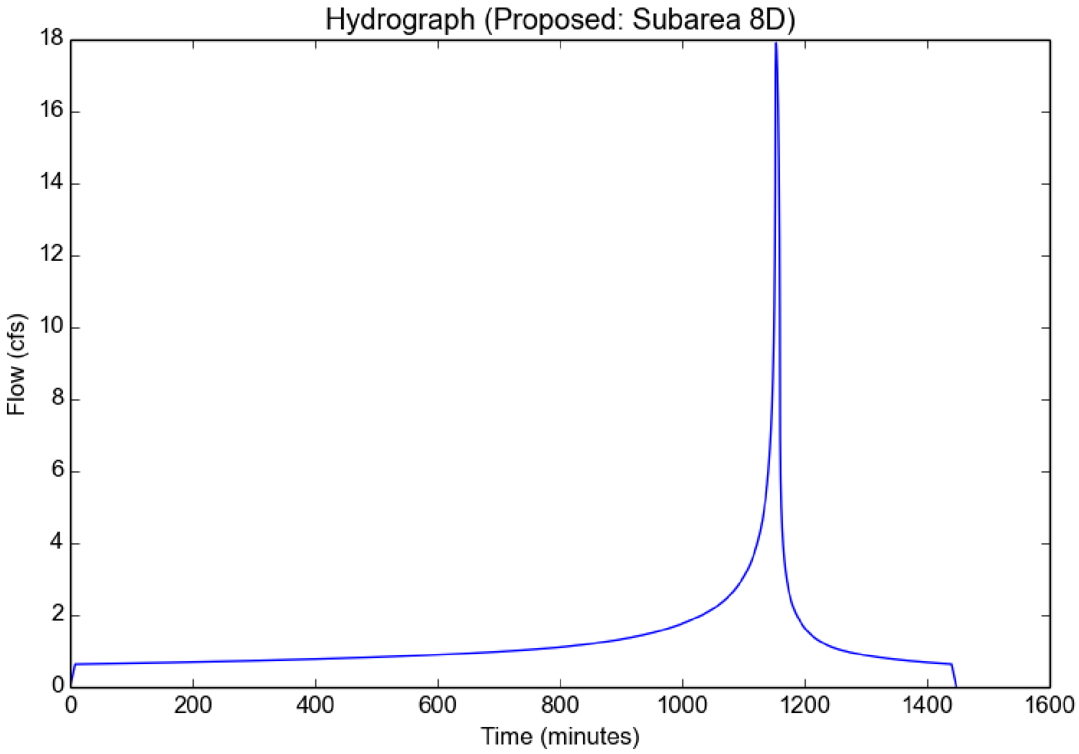
File location: Q:/Santa Clarita/Lyons Canyon Ranch/UCI/Hydrology/Tc/2024-1-4/Proposed - Subarea 8D-50.pdf
Version: HydroCalc 1.0.3

Input Parameters

Project Name	Proposed
Subarea ID	Subarea 8D
Area (ac)	5.18
Flow Path Length (ft)	853.0
Flow Path Slope (vft/hft)	0.009
50-yr Rainfall Depth (in)	8.4
Percent Impervious	0.7
Soil Type	97
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

Output Results

Modeled (50-yr) Rainfall Depth (in)	8.4
Peak Intensity (in/hr)	4.0183
Undeveloped Runoff Coefficient (Cu)	0.7685
Developed Runoff Coefficient (Cd)	0.8606
Time of Concentration (min)	8.0
Clear Peak Flow Rate (cfs)	17.9124
Burned Peak Flow Rate (cfs)	17.9124
24-Hr Clear Runoff Volume (ac-ft)	2.543
24-Hr Clear Runoff Volume (cu-ft)	110774.7001



Peak Flow Hydrologic Analysis

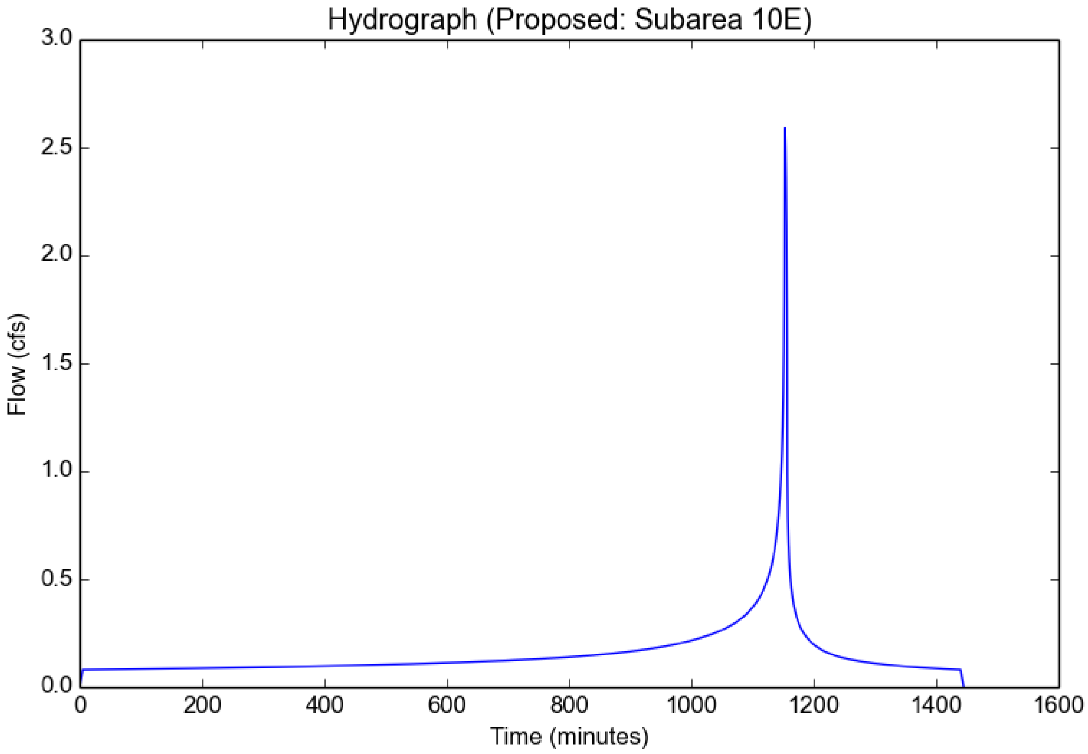
File location: Q:/Santa Clarita/Lyons Canyon Ranch/UCI/Hydrology/Tc/2024-1-4/Proposed - Subarea 10E-50.pdf
Version: HydroCalc 1.0.3

Input Parameters

Project Name	Proposed
Subarea ID	Subarea 10E
Area (ac)	0.59
Flow Path Length (ft)	443.0
Flow Path Slope (vft/hft)	0.039
50-yr Rainfall Depth (in)	8.4
Percent Impervious	0.78
Soil Type	97
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

Output Results

Modeled (50-yr) Rainfall Depth (in)	8.4
Peak Intensity (in/hr)	5.0117
Undeveloped Runoff Coefficient (Cu)	0.7905
Developed Runoff Coefficient (Cd)	0.8759
Time of Concentration (min)	5.0
Clear Peak Flow Rate (cfs)	2.59
Burned Peak Flow Rate (cfs)	2.59
24-Hr Clear Runoff Volume (ac-ft)	0.3107
24-Hr Clear Runoff Volume (cu-ft)	13535.4832



Peak Flow Hydrologic Analysis

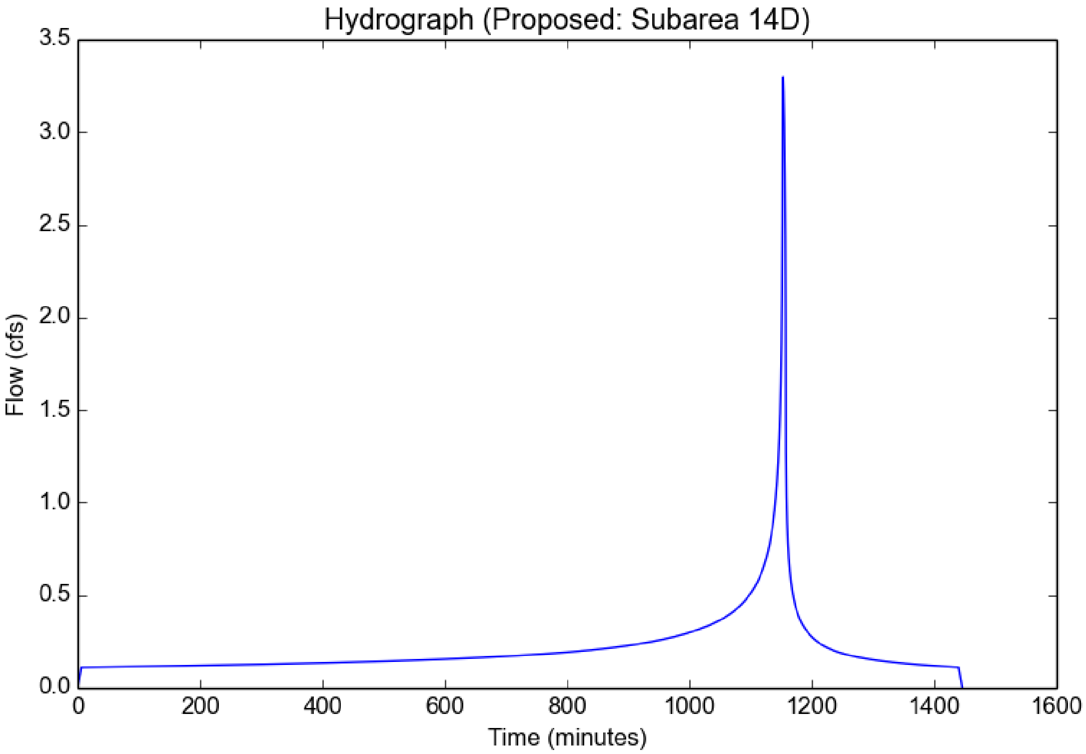
File location: Q:/Santa Clarita/Lyons Canyon Ranch/UCI/Hydrology/Tc/2024-1-4/Proposed - Subarea 14D-50.pdf
Version: HydroCalc 1.0.3

Input Parameters

Project Name	Proposed
Subarea ID	Subarea 14D
Area (ac)	0.82
Flow Path Length (ft)	595.0
Flow Path Slope (vft/hft)	0.009
50-yr Rainfall Depth (in)	8.4
Percent Impervious	0.78
Soil Type	97
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

Output Results

Modeled (50-yr) Rainfall Depth (in)	8.4
Peak Intensity (in/hr)	4.6001
Undeveloped Runoff Coefficient (Cu)	0.784
Developed Runoff Coefficient (Cd)	0.8745
Time of Concentration (min)	6.0
Clear Peak Flow Rate (cfs)	3.2986
Burned Peak Flow Rate (cfs)	3.2986
24-Hr Clear Runoff Volume (ac-ft)	0.4319
24-Hr Clear Runoff Volume (cu-ft)	18811.8293



Peak Flow Hydrologic Analysis

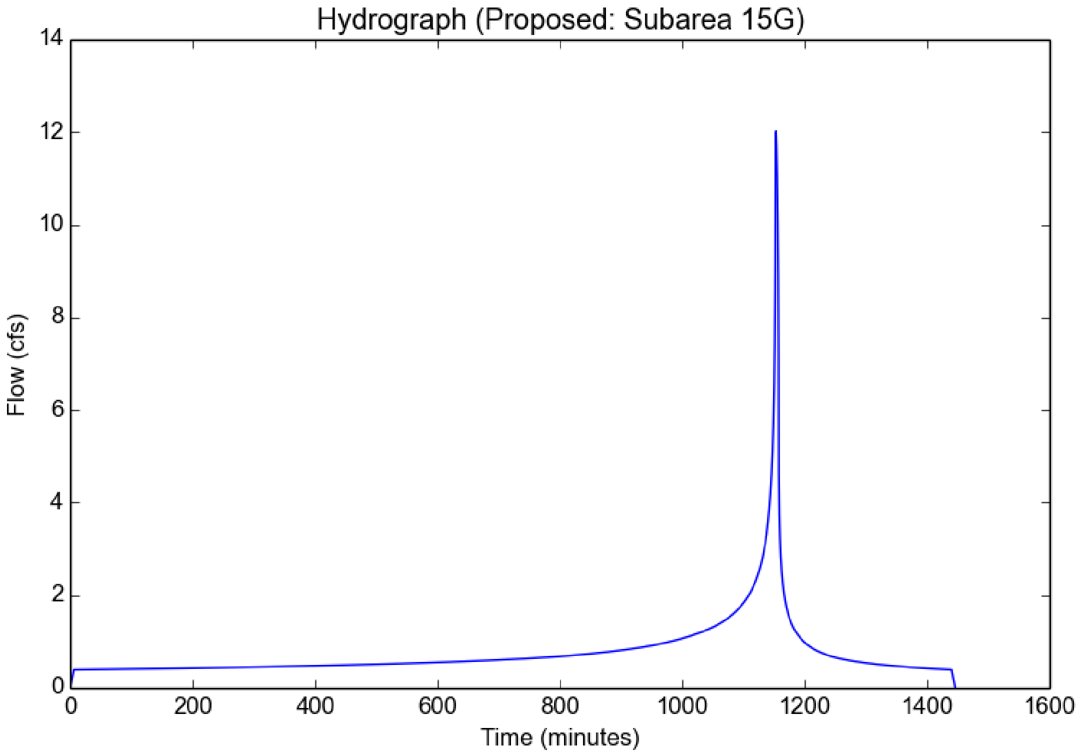
File location: Q:/Santa Clarita/Lyons Canyon Ranch/UCI/Hydrology/Tc/2024-1-4/Proposed - Subarea 15G-50.pdf
Version: HydroCalc 1.0.3

Input Parameters

Project Name	Proposed
Subarea ID	Subarea 15G
Area (ac)	3.0
Flow Path Length (ft)	540.0
Flow Path Slope (vft/hft)	0.01
50-yr Rainfall Depth (in)	8.4
Percent Impervious	0.75
Soil Type	97
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

Output Results

Modeled (50-yr) Rainfall Depth (in)	8.4
Peak Intensity (in/hr)	4.6001
Undeveloped Runoff Coefficient (Cu)	0.784
Developed Runoff Coefficient (Cd)	0.871
Time of Concentration (min)	6.0
Clear Peak Flow Rate (cfs)	12.0202
Burned Peak Flow Rate (cfs)	12.0202
24-Hr Clear Runoff Volume (ac-ft)	1.5398
24-Hr Clear Runoff Volume (cu-ft)	67075.0014



Peak Flow Hydrologic Analysis

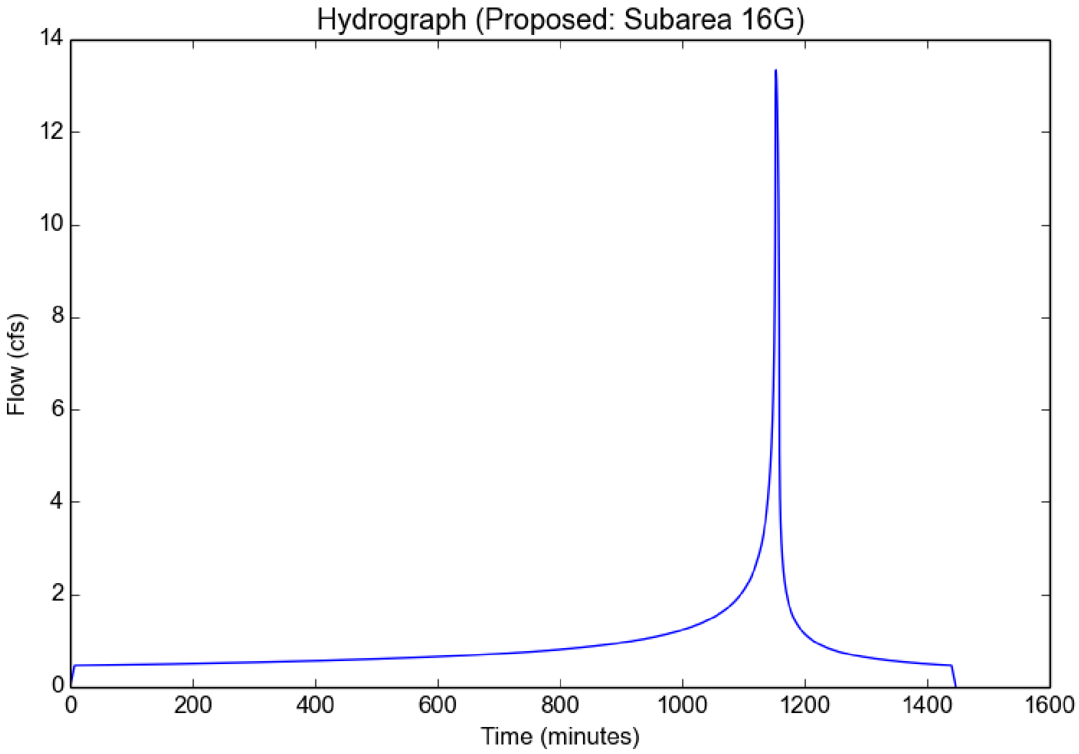
File location: Q:/Santa Clarita/Lyons Canyon Ranch/UCI/Hydrology/Tc/2024-1-4/Proposed - Subarea 16G-50.pdf
Version: HydroCalc 1.0.3

Input Parameters

Project Name	Proposed
Subarea ID	Subarea 16G
Area (ac)	3.74
Flow Path Length (ft)	619.0
Flow Path Slope (vft/hft)	0.009
50-yr Rainfall Depth (in)	8.4
Percent Impervious	0.71
Soil Type	20
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

Output Results

Modeled (50-yr) Rainfall Depth (in)	8.4
Peak Intensity (in/hr)	4.2786
Undeveloped Runoff Coefficient (Cu)	0.6709
Developed Runoff Coefficient (Cd)	0.8336
Time of Concentration (min)	7.0
Clear Peak Flow Rate (cfs)	13.3386
Burned Peak Flow Rate (cfs)	13.3386
24-Hr Clear Runoff Volume (ac-ft)	1.8095
24-Hr Clear Runoff Volume (cu-ft)	78819.8771



Peak Flow Hydrologic Analysis

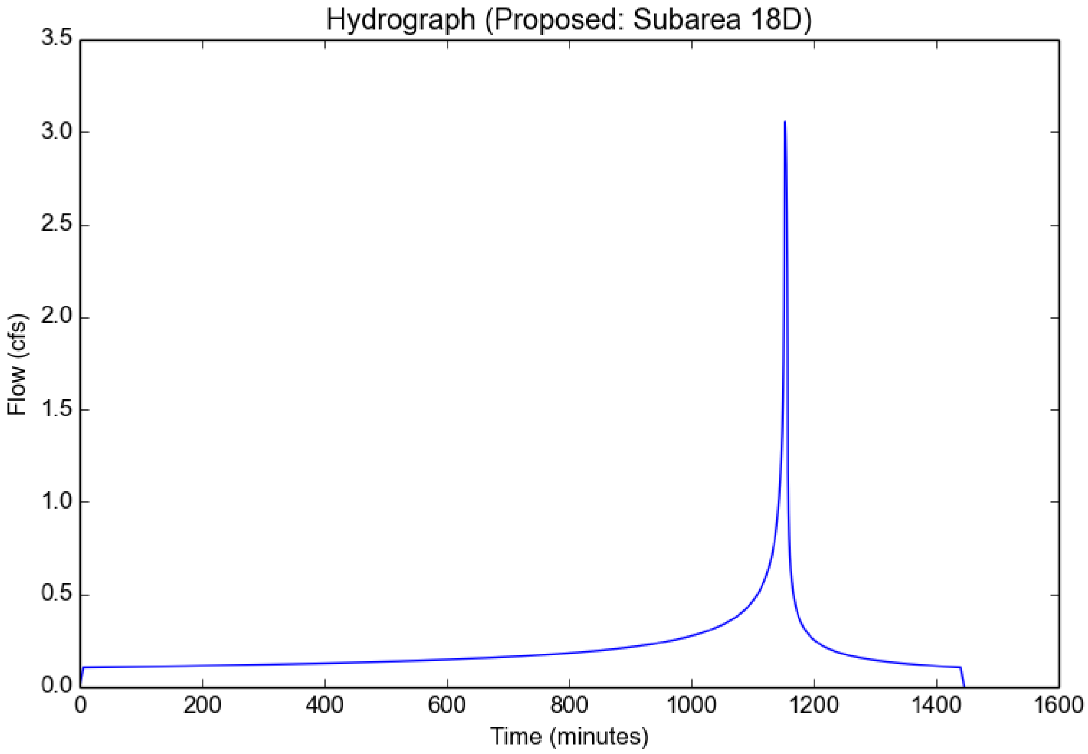
File location: Q:/Santa Clarita/Lyons Canyon Ranch/UCI/Hydrology/Tc/2024-1-4/Proposed - Subarea 18D-50.pdf
Version: HydroCalc 1.0.3

Input Parameters

Project Name	Proposed
Subarea ID	Subarea 18D
Area (ac)	0.78
Flow Path Length (ft)	578.0
Flow Path Slope (vft/hft)	0.018
50-yr Rainfall Depth (in)	8.4
Percent Impervious	0.78
Soil Type	20
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

Output Results

Modeled (50-yr) Rainfall Depth (in)	8.4
Peak Intensity (in/hr)	4.6001
Undeveloped Runoff Coefficient (Cu)	0.6812
Developed Runoff Coefficient (Cd)	0.8519
Time of Concentration (min)	6.0
Clear Peak Flow Rate (cfs)	3.0566
Burned Peak Flow Rate (cfs)	3.0566
24-Hr Clear Runoff Volume (ac-ft)	0.4039
24-Hr Clear Runoff Volume (cu-ft)	17595.2583



Peak Flow Hydrologic Analysis

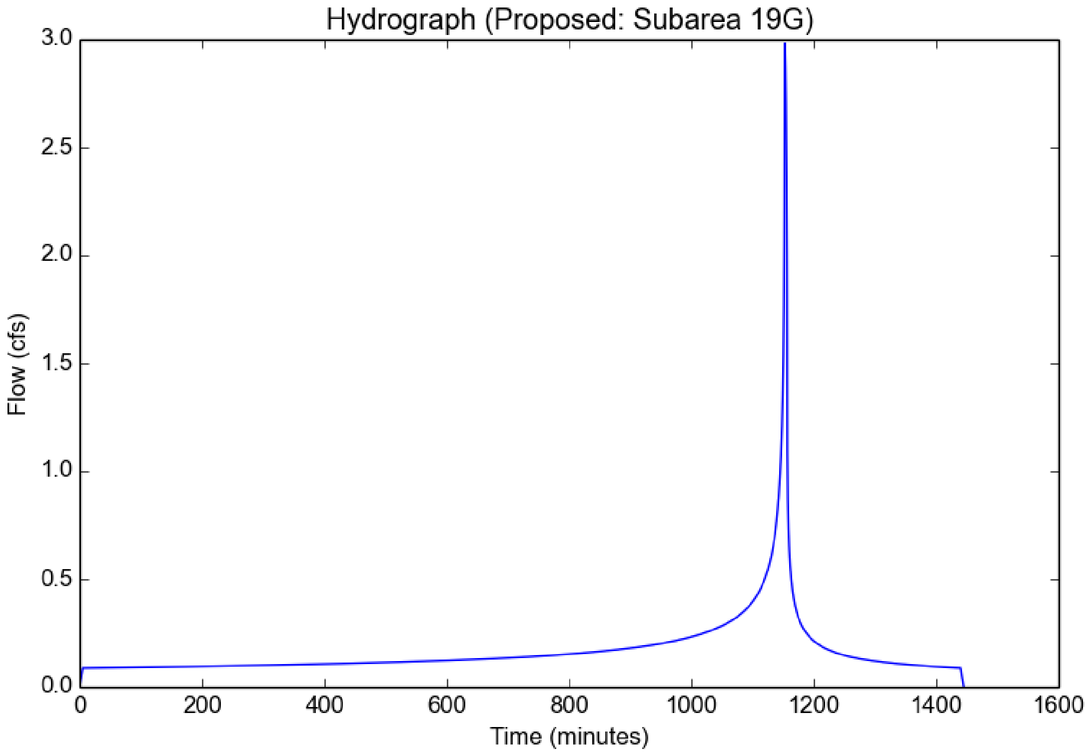
File location: Q:/Santa Clarita/Lyons Canyon Ranch/UCI/Hydrology/Tc/2024-1-4/Proposed - Subarea 19G-50.pdf
Version: HydroCalc 1.0.3

Input Parameters

Project Name	Proposed
Subarea ID	Subarea 19G
Area (ac)	0.71
Flow Path Length (ft)	224.0
Flow Path Slope (vft/hft)	0.013
50-yr Rainfall Depth (in)	8.4
Percent Impervious	0.7
Soil Type	20
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

Output Results

Modeled (50-yr) Rainfall Depth (in)	8.4
Peak Intensity (in/hr)	5.0117
Undeveloped Runoff Coefficient (Cu)	0.6944
Developed Runoff Coefficient (Cd)	0.8383
Time of Concentration (min)	5.0
Clear Peak Flow Rate (cfs)	2.983
Burned Peak Flow Rate (cfs)	2.983
24-Hr Clear Runoff Volume (ac-ft)	0.3401
24-Hr Clear Runoff Volume (cu-ft)	14814.5274



Peak Flow Hydrologic Analysis

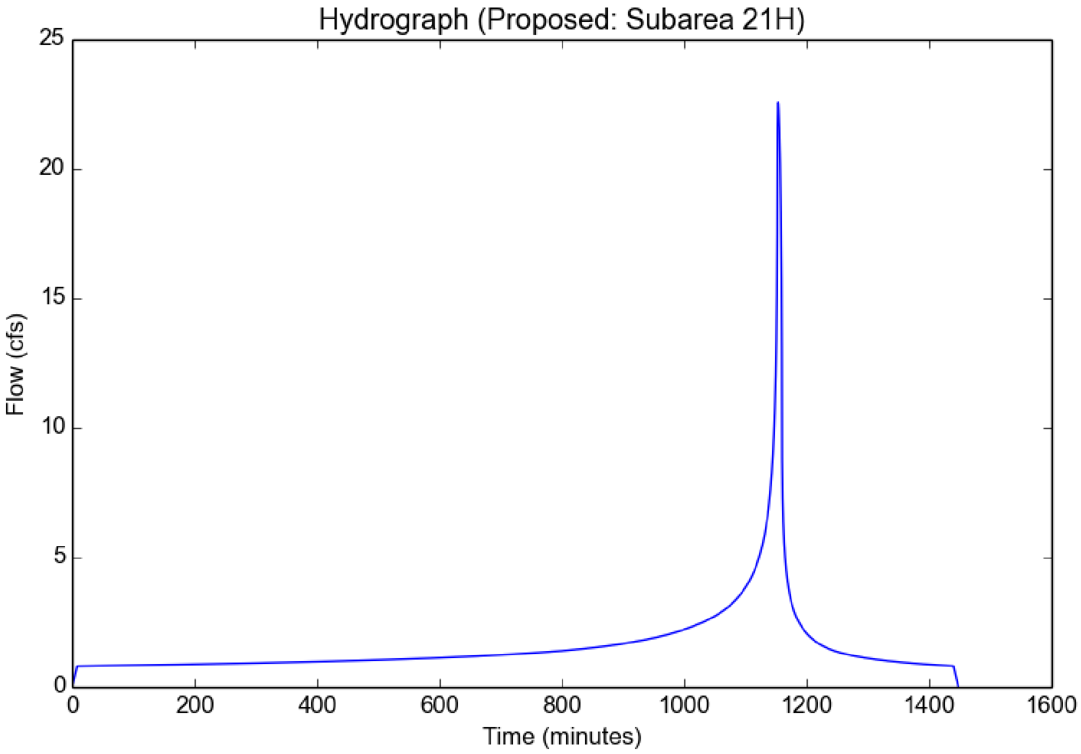
File location: Q:/Santa Clarita/Lyons Canyon Ranch/UCI/Hydrology/Tc/2024-1-4/Proposed - Subarea 21H-50.pdf
Version: HydroCalc 1.0.3

Input Parameters

Project Name	Proposed
Subarea ID	Subarea 21H
Area (ac)	6.53
Flow Path Length (ft)	841.0
Flow Path Slope (vft/hft)	0.01
50-yr Rainfall Depth (in)	8.4
Percent Impervious	0.7
Soil Type	97
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

Output Results

Modeled (50-yr) Rainfall Depth (in)	8.4
Peak Intensity (in/hr)	4.0183
Undeveloped Runoff Coefficient (Cu)	0.7685
Developed Runoff Coefficient (Cd)	0.8606
Time of Concentration (min)	8.0
Clear Peak Flow Rate (cfs)	22.5807
Burned Peak Flow Rate (cfs)	22.5807
24-Hr Clear Runoff Volume (ac-ft)	3.2058
24-Hr Clear Runoff Volume (cu-ft)	139644.5544



Peak Flow Hydrologic Analysis

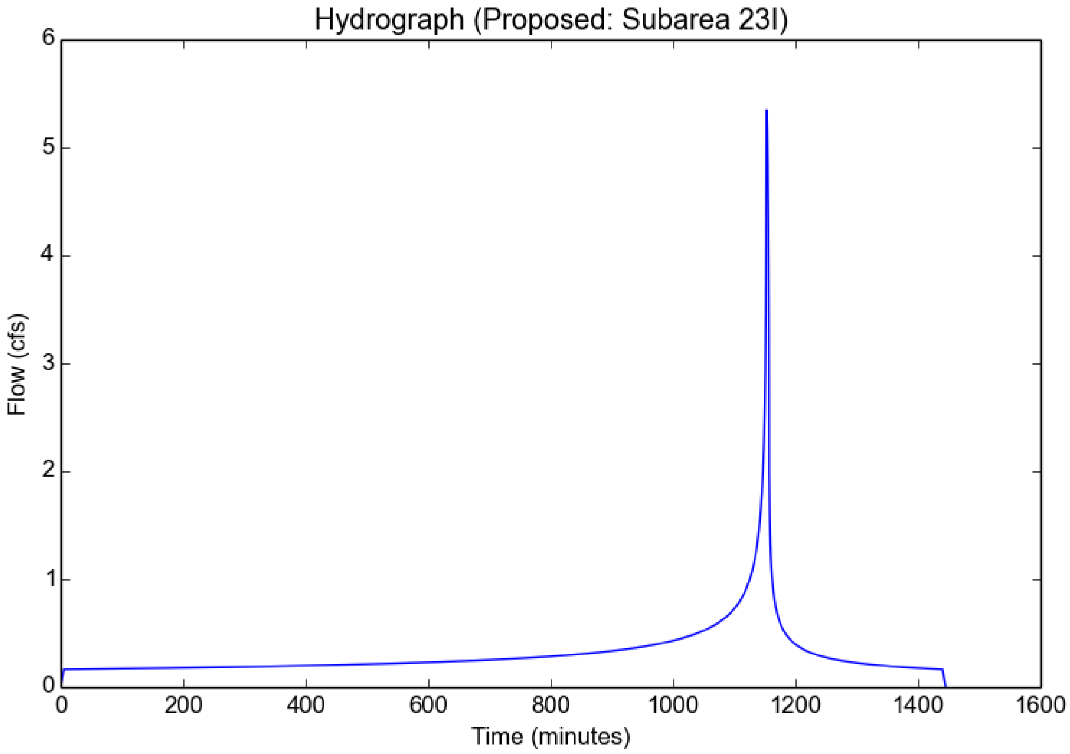
File location: Q:/Santa Clarita/Lyons Canyon Ranch/UCI/Hydrology/Tc/2024-1-4/Proposed - Subarea 23I-50.pdf
Version: HydroCalc 1.0.3

Input Parameters

Project Name	Proposed
Subarea ID	Subarea 23I
Area (ac)	1.26
Flow Path Length (ft)	341.0
Flow Path Slope (vft/hft)	0.01
50-yr Rainfall Depth (in)	8.4
Percent Impervious	0.74
Soil Type	20
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

Output Results

Modeled (50-yr) Rainfall Depth (in)	8.4
Peak Intensity (in/hr)	5.0117
Undeveloped Runoff Coefficient (Cu)	0.6944
Developed Runoff Coefficient (Cd)	0.8465
Time of Concentration (min)	5.0
Clear Peak Flow Rate (cfs)	5.3457
Burned Peak Flow Rate (cfs)	5.3457
24-Hr Clear Runoff Volume (ac-ft)	0.628
24-Hr Clear Runoff Volume (cu-ft)	27357.45



Peak Flow Hydrologic Analysis

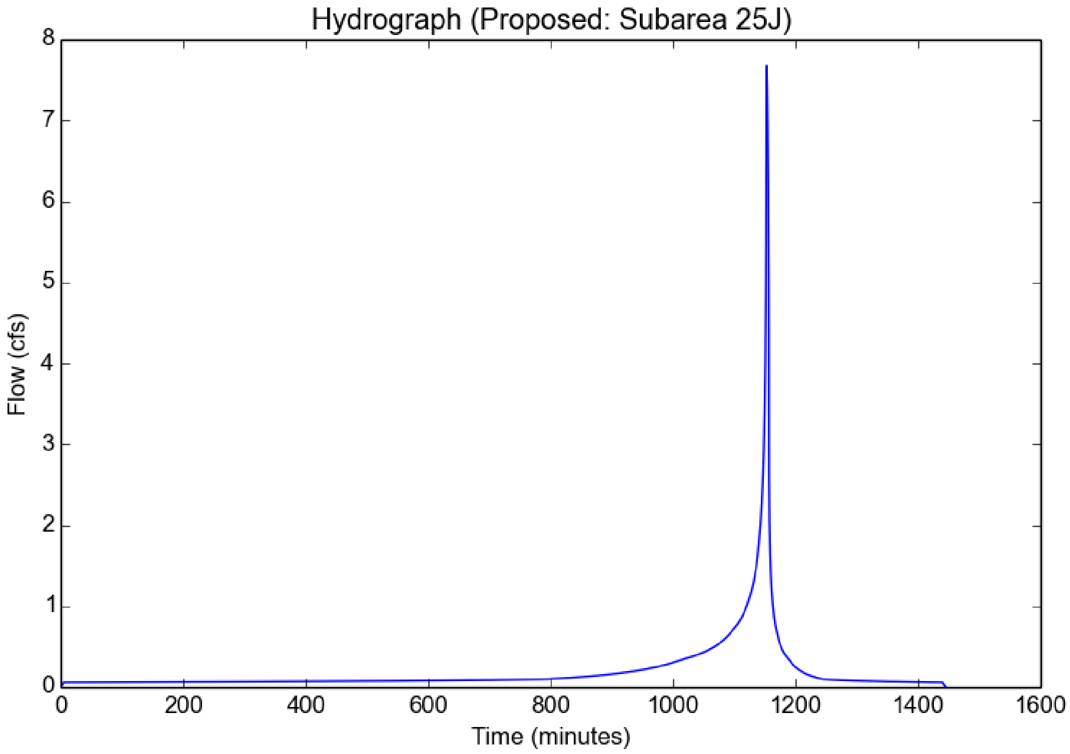
File location: Q:/Santa Clarita/Lyons Canyon Ranch/UCI/Hydrology/Tc/2024-1-4/Proposed - Subarea 25J-50.pdf
Version: HydroCalc 1.0.3

Input Parameters

Project Name	Proposed
Subarea ID	Subarea 25J
Area (ac)	1.92
Flow Path Length (ft)	580.0
Flow Path Slope (vft/hft)	0.068
50-yr Rainfall Depth (in)	8.4
Percent Impervious	0.07
Soil Type	97
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

Output Results

Modeled (50-yr) Rainfall Depth (in)	8.4
Peak Intensity (in/hr)	5.0117
Undeveloped Runoff Coefficient (Cu)	0.7905
Developed Runoff Coefficient (Cd)	0.7982
Time of Concentration (min)	5.0
Clear Peak Flow Rate (cfs)	7.6803
Burned Peak Flow Rate (cfs)	7.6803
24-Hr Clear Runoff Volume (ac-ft)	0.4032
24-Hr Clear Runoff Volume (cu-ft)	17561.2464



Peak Flow Hydrologic Analysis

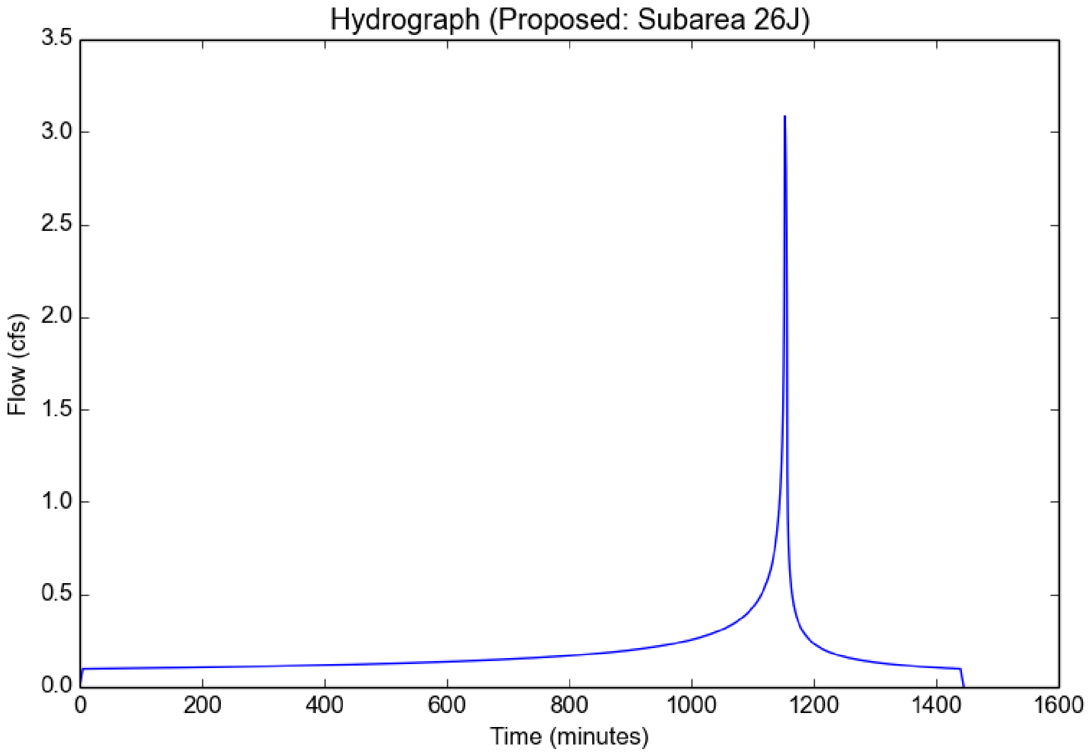
File location: Q:/Santa Clarita/Lyons Canyon Ranch/UCI/Hydrology/Tc/2024-1-4/Proposed - Subarea 26J-50.pdf
Version: HydroCalc 1.0.3

Input Parameters

Project Name	Proposed
Subarea ID	Subarea 26J
Area (ac)	0.72
Flow Path Length (ft)	520.0
Flow Path Slope (vft/hft)	0.041
50-yr Rainfall Depth (in)	8.4
Percent Impervious	0.78
Soil Type	20
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

Output Results

Modeled (50-yr) Rainfall Depth (in)	8.4
Peak Intensity (in/hr)	5.0117
Undeveloped Runoff Coefficient (Cu)	0.6944
Developed Runoff Coefficient (Cd)	0.8548
Time of Concentration (min)	5.0
Clear Peak Flow Rate (cfs)	3.0843
Burned Peak Flow Rate (cfs)	3.0843
24-Hr Clear Runoff Volume (ac-ft)	0.3729
24-Hr Clear Runoff Volume (cu-ft)	16242.4743



Peak Flow Hydrologic Analysis

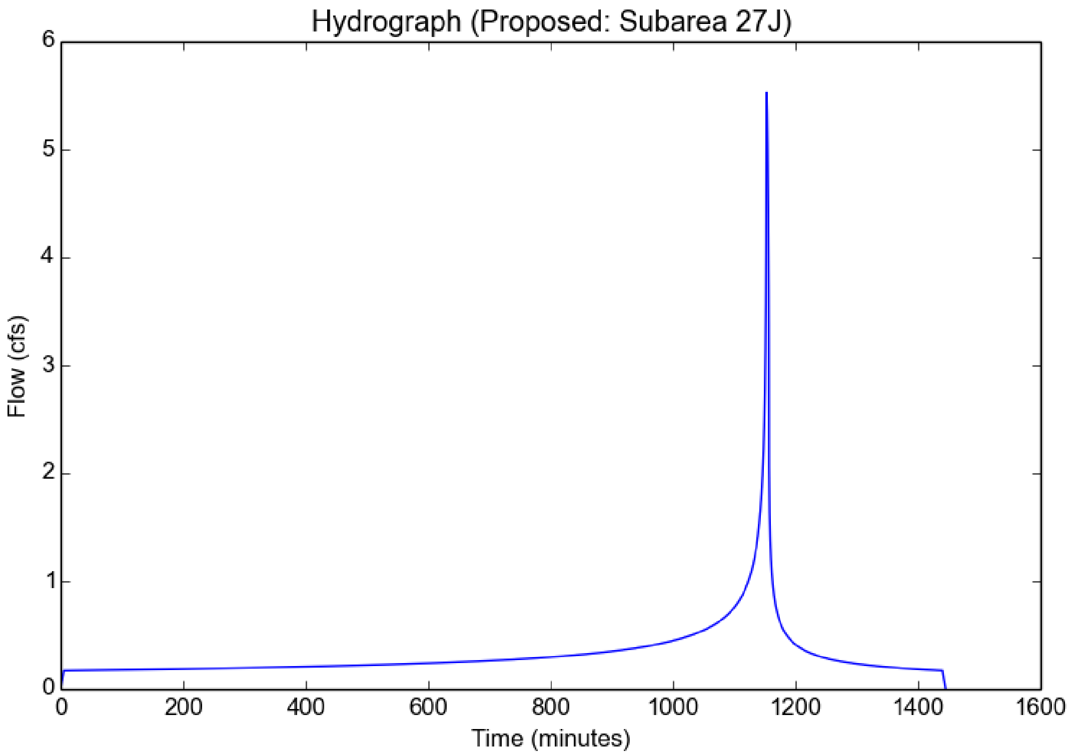
File location: Q:/Santa Clarita/Lyons Canyon Ranch/UCI/Hydrology/Tc/2024-1-4/Proposed - Subarea 27J-50.pdf
Version: HydroCalc 1.0.3

Input Parameters

Project Name	Proposed
Subarea ID	Subarea 27J
Area (ac)	1.3
Flow Path Length (ft)	350.0
Flow Path Slope (vft/hft)	0.01
50-yr Rainfall Depth (in)	8.4
Percent Impervious	0.75
Soil Type	20
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

Output Results

Modeled (50-yr) Rainfall Depth (in)	8.4
Peak Intensity (in/hr)	5.0117
Undeveloped Runoff Coefficient (Cu)	0.6944
Developed Runoff Coefficient (Cd)	0.8486
Time of Concentration (min)	5.0
Clear Peak Flow Rate (cfs)	5.5288
Burned Peak Flow Rate (cfs)	5.5288
24-Hr Clear Runoff Volume (ac-ft)	0.6543
24-Hr Clear Runoff Volume (cu-ft)	28501.1278



Peak Flow Hydrologic Analysis

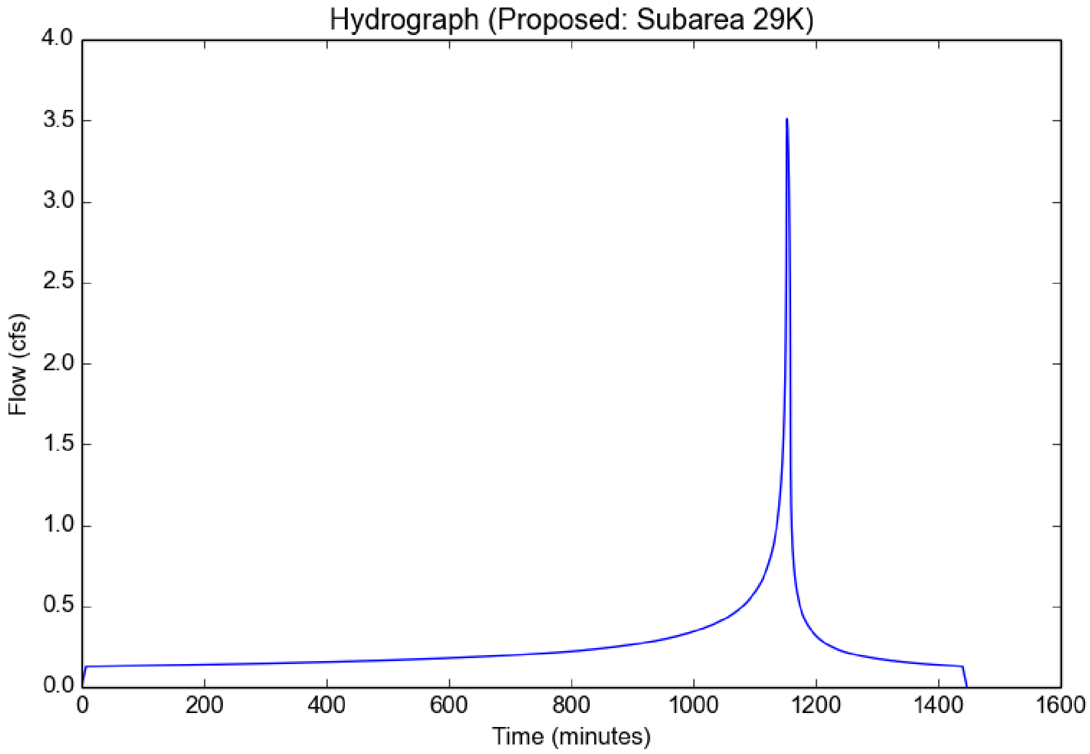
File location: Q:/Santa Clarita/Lyons Canyon Ranch/UCI/Hydrology/Tc/2024-1-4/Proposed - Subarea 29K-50.pdf
Version: HydroCalc 1.0.3

Input Parameters

Project Name	Proposed
Subarea ID	Subarea 29K
Area (ac)	0.94
Flow Path Length (ft)	791.0
Flow Path Slope (vft/hft)	0.016
50-yr Rainfall Depth (in)	8.4
Percent Impervious	0.78
Soil Type	97
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

Output Results

Modeled (50-yr) Rainfall Depth (in)	8.4
Peak Intensity (in/hr)	4.2786
Undeveloped Runoff Coefficient (Cu)	0.776
Developed Runoff Coefficient (Cd)	0.8727
Time of Concentration (min)	7.0
Clear Peak Flow Rate (cfs)	3.51
Burned Peak Flow Rate (cfs)	3.51
24-Hr Clear Runoff Volume (ac-ft)	0.495
24-Hr Clear Runoff Volume (cu-ft)	21564.1489



Peak Flow Hydrologic Analysis

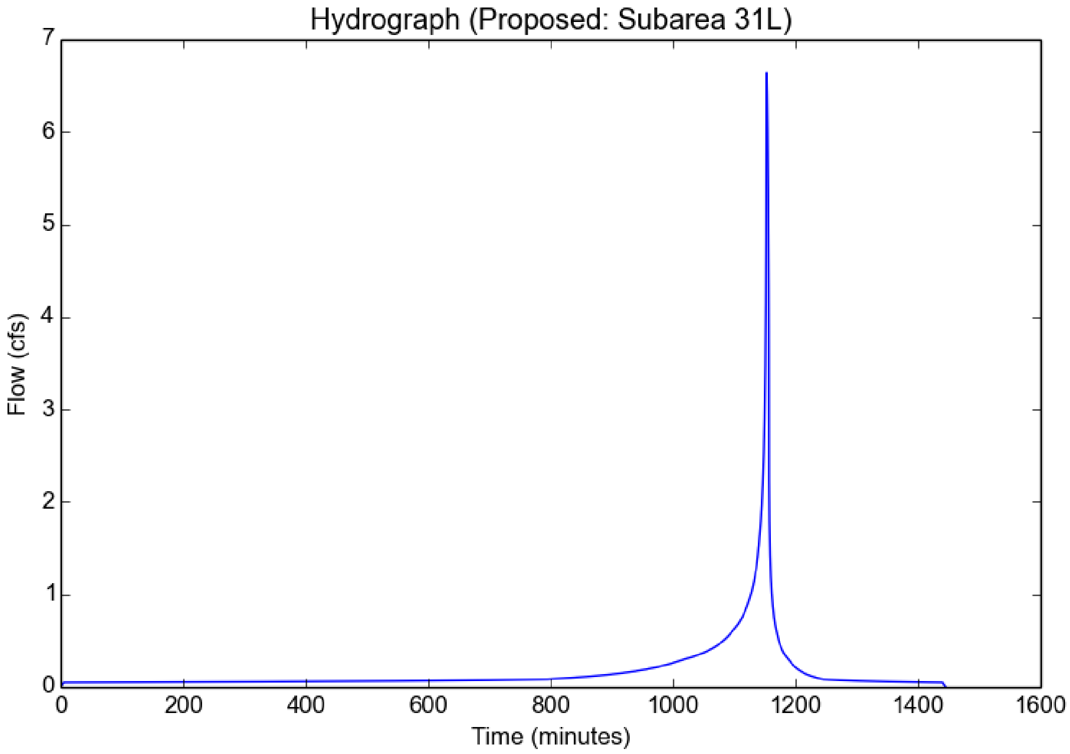
File location: Q:/Santa Clarita/Lyons Canyon Ranch/UCI/Hydrology/Tc/2024-1-4/Proposed - Subarea 31L-50.pdf
Version: HydroCalc 1.0.3

Input Parameters

Project Name	Proposed
Subarea ID	Subarea 31L
Area (ac)	1.66
Flow Path Length (ft)	550.0
Flow Path Slope (vft/hft)	0.064
50-yr Rainfall Depth (in)	8.4
Percent Impervious	0.07
Soil Type	97
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

Output Results

Modeled (50-yr) Rainfall Depth (in)	8.4
Peak Intensity (in/hr)	5.0117
Undeveloped Runoff Coefficient (Cu)	0.7905
Developed Runoff Coefficient (Cd)	0.7982
Time of Concentration (min)	5.0
Clear Peak Flow Rate (cfs)	6.6403
Burned Peak Flow Rate (cfs)	6.6403
24-Hr Clear Runoff Volume (ac-ft)	0.3486
24-Hr Clear Runoff Volume (cu-ft)	15183.161



Peak Flow Hydrologic Analysis

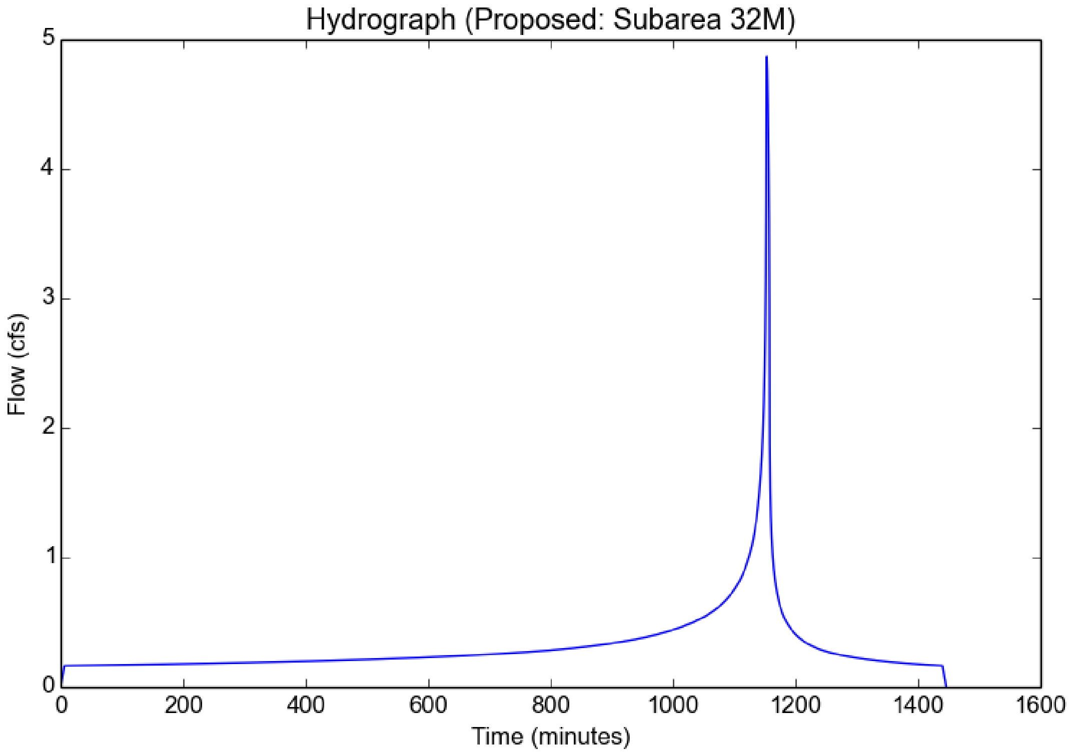
File location: Q:/Santa Clarita/Lyons Canyon Ranch/UCI/Hydrology/Tc/2024-1-4/Proposed - Subarea 32M-50.pdf
Version: HydroCalc 1.0.3

Input Parameters

Project Name	Proposed
Subarea ID	Subarea 32M
Area (ac)	1.21
Flow Path Length (ft)	908.0
Flow Path Slope (vft/hft)	0.059
50-yr Rainfall Depth (in)	8.4
Percent Impervious	0.78
Soil Type	97
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

Output Results

Modeled (50-yr) Rainfall Depth (in)	8.4
Peak Intensity (in/hr)	4.6001
Undeveloped Runoff Coefficient (Cu)	0.784
Developed Runoff Coefficient (Cd)	0.8745
Time of Concentration (min)	6.0
Clear Peak Flow Rate (cfs)	4.8675
Burned Peak Flow Rate (cfs)	4.8675
24-Hr Clear Runoff Volume (ac-ft)	0.6373
24-Hr Clear Runoff Volume (cu-ft)	27758.9188



Peak Flow Hydrologic Analysis

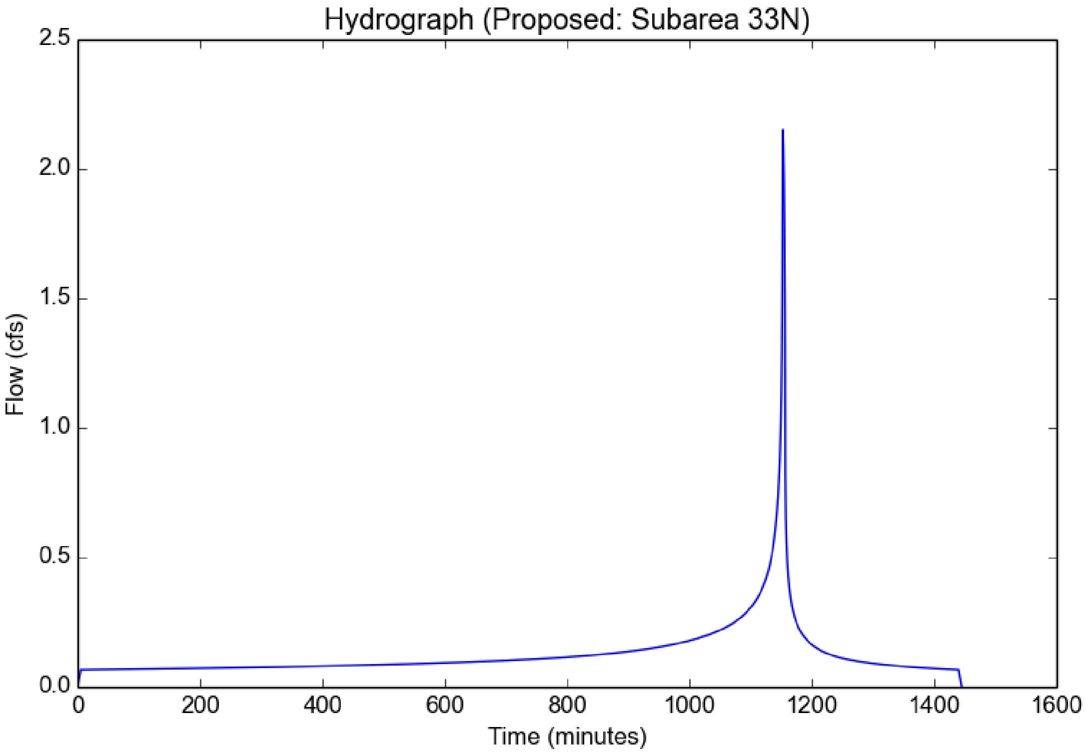
File location: Q:/Santa Clarita/Lyons Canyon Ranch/UCI/Hydrology/Tc/2024-1-4/Proposed - Subarea 33N-50.pdf
Version: HydroCalc 1.0.3

Input Parameters

Project Name	Proposed
Subarea ID	Subarea 33N
Area (ac)	0.49
Flow Path Length (ft)	465.0
Flow Path Slope (vft/hft)	0.008
50-yr Rainfall Depth (in)	8.4
Percent Impervious	0.78
Soil Type	97
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

Output Results

Modeled (50-yr) Rainfall Depth (in)	8.4
Peak Intensity (in/hr)	5.0117
Undeveloped Runoff Coefficient (Cu)	0.7905
Developed Runoff Coefficient (Cd)	0.8759
Time of Concentration (min)	5.0
Clear Peak Flow Rate (cfs)	2.151
Burned Peak Flow Rate (cfs)	2.151
24-Hr Clear Runoff Volume (ac-ft)	0.2581
24-Hr Clear Runoff Volume (cu-ft)	11241.3335



Peak Flow Hydrologic Analysis

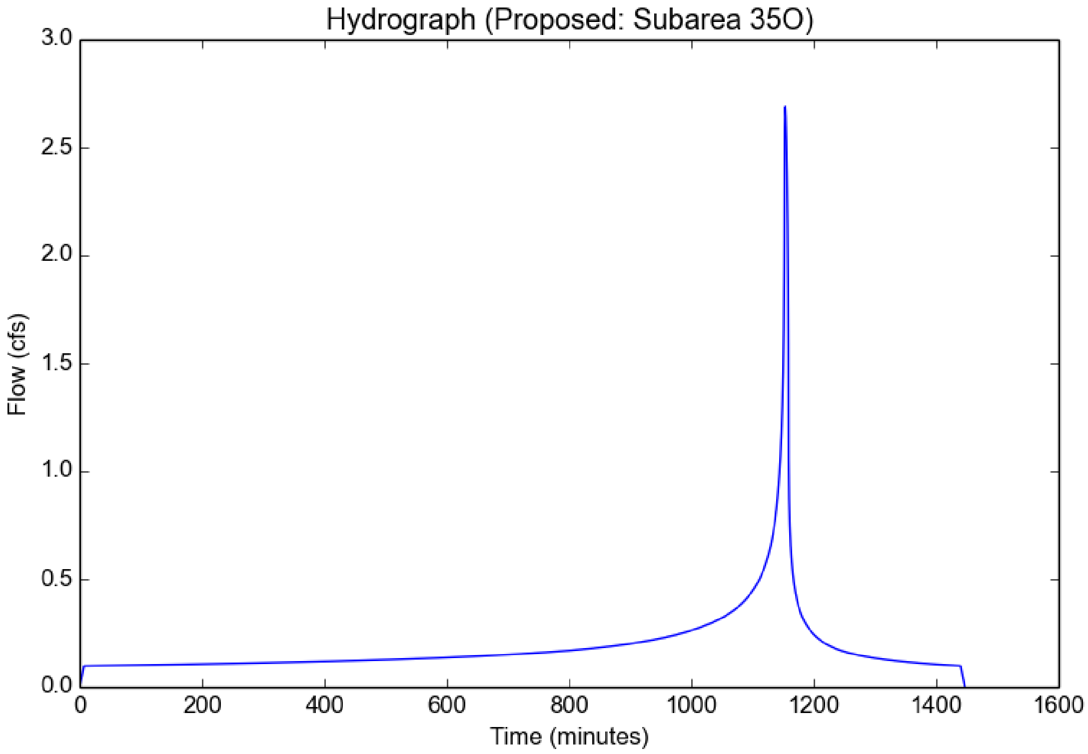
File location: Q:/Santa Clarita/Lyons Canyon Ranch/UCI/Hydrology/Tc/2024-1-4/Proposed - Subarea 35O-50.pdf
Version: HydroCalc 1.0.3

Input Parameters

Project Name	Proposed
Subarea ID	Subarea 35O
Area (ac)	0.72
Flow Path Length (ft)	696.0
Flow Path Slope (vft/hft)	0.01
50-yr Rainfall Depth (in)	8.4
Percent Impervious	0.78
Soil Type	97
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

Output Results

Modeled (50-yr) Rainfall Depth (in)	8.4
Peak Intensity (in/hr)	4.2786
Undeveloped Runoff Coefficient (Cu)	0.776
Developed Runoff Coefficient (Cd)	0.8727
Time of Concentration (min)	7.0
Clear Peak Flow Rate (cfs)	2.6885
Burned Peak Flow Rate (cfs)	2.6885
24-Hr Clear Runoff Volume (ac-ft)	0.3792
24-Hr Clear Runoff Volume (cu-ft)	16517.2204



Peak Flow Hydrologic Analysis

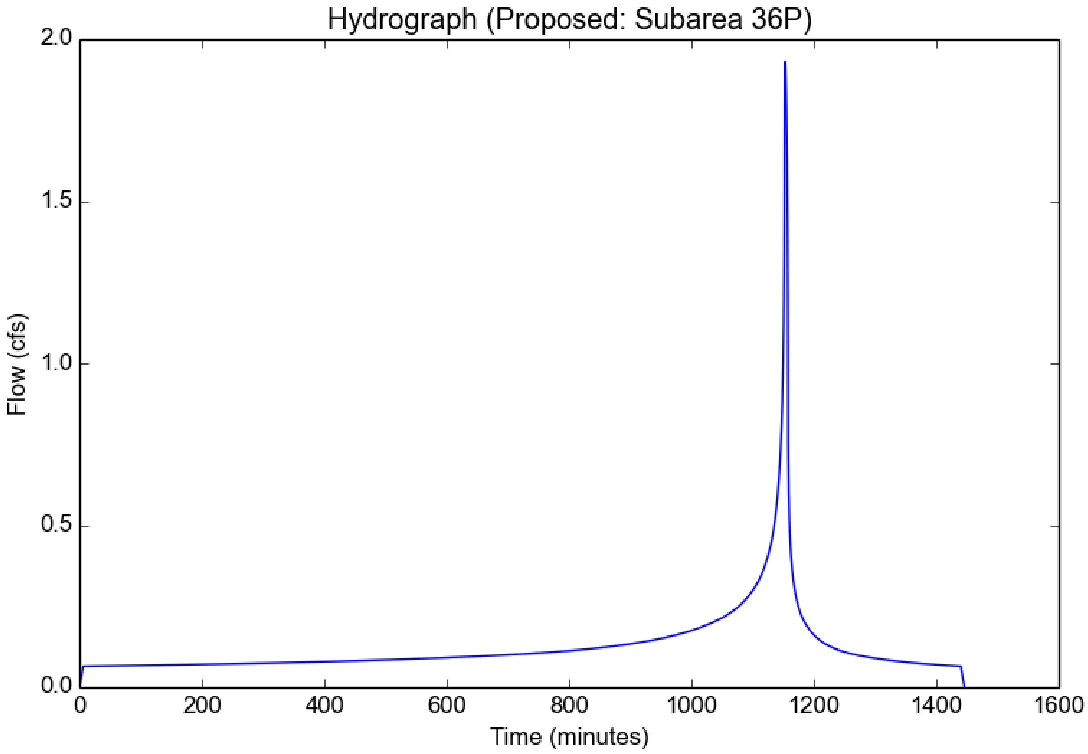
File location: Q:/Santa Clarita/Lyons Canyon Ranch/UCI/Hydrology/Tc/2024-1-4/Proposed - Subarea 36P-50.pdf
Version: HydroCalc 1.0.3

Input Parameters

Project Name	Proposed
Subarea ID	Subarea 36P
Area (ac)	0.48
Flow Path Length (ft)	659.0
Flow Path Slope (vft/hft)	0.023
50-yr Rainfall Depth (in)	8.4
Percent Impervious	0.78
Soil Type	97
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

Output Results

Modeled (50-yr) Rainfall Depth (in)	8.4
Peak Intensity (in/hr)	4.6001
Undeveloped Runoff Coefficient (Cu)	0.784
Developed Runoff Coefficient (Cd)	0.8745
Time of Concentration (min)	6.0
Clear Peak Flow Rate (cfs)	1.9309
Burned Peak Flow Rate (cfs)	1.9309
24-Hr Clear Runoff Volume (ac-ft)	0.2528
24-Hr Clear Runoff Volume (cu-ft)	11011.8025



Peak Flow Hydrologic Analysis

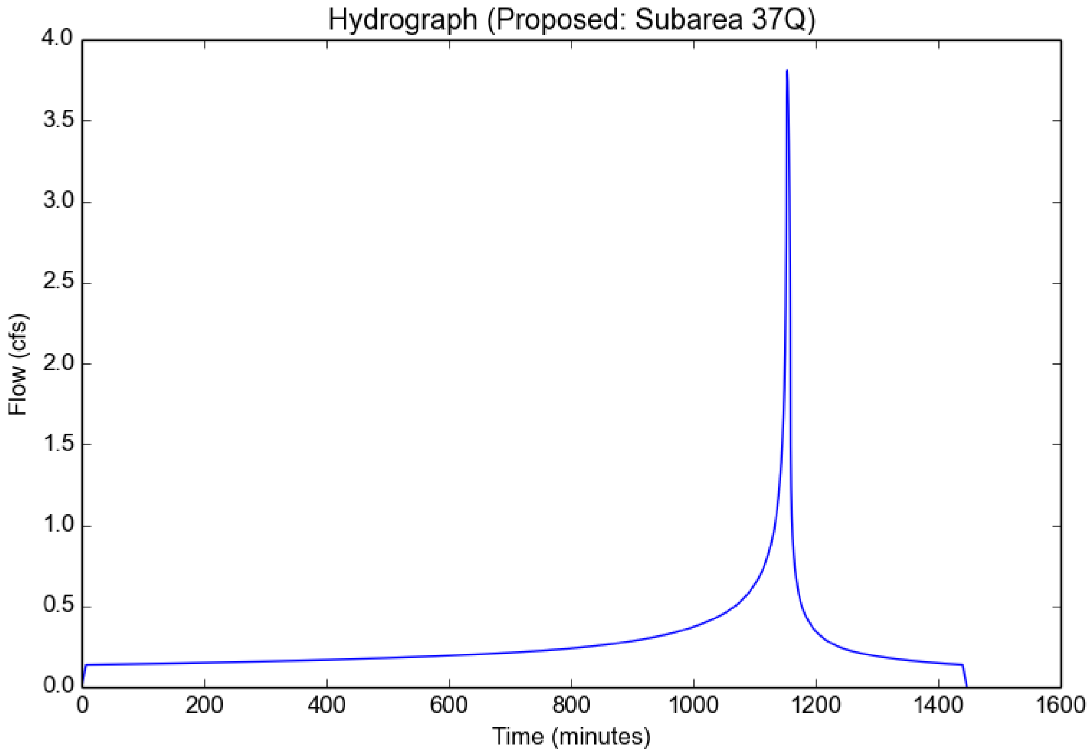
File location: Q:/Santa Clarita/Lyons Canyon Ranch/UCI/Hydrology/Tc/2024-1-4/Proposed - Subarea 37Q-50.pdf
Version: HydroCalc 1.0.3

Input Parameters

Project Name	Proposed
Subarea ID	Subarea 37Q
Area (ac)	1.02
Flow Path Length (ft)	836.0
Flow Path Slope (vft/hft)	0.018
50-yr Rainfall Depth (in)	8.4
Percent Impervious	0.78
Soil Type	97
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

Output Results

Modeled (50-yr) Rainfall Depth (in)	8.4
Peak Intensity (in/hr)	4.2786
Undeveloped Runoff Coefficient (Cu)	0.776
Developed Runoff Coefficient (Cd)	0.8727
Time of Concentration (min)	7.0
Clear Peak Flow Rate (cfs)	3.8088
Burned Peak Flow Rate (cfs)	3.8088
24-Hr Clear Runoff Volume (ac-ft)	0.5372
24-Hr Clear Runoff Volume (cu-ft)	23399.3956



Peak Flow Hydrologic Analysis

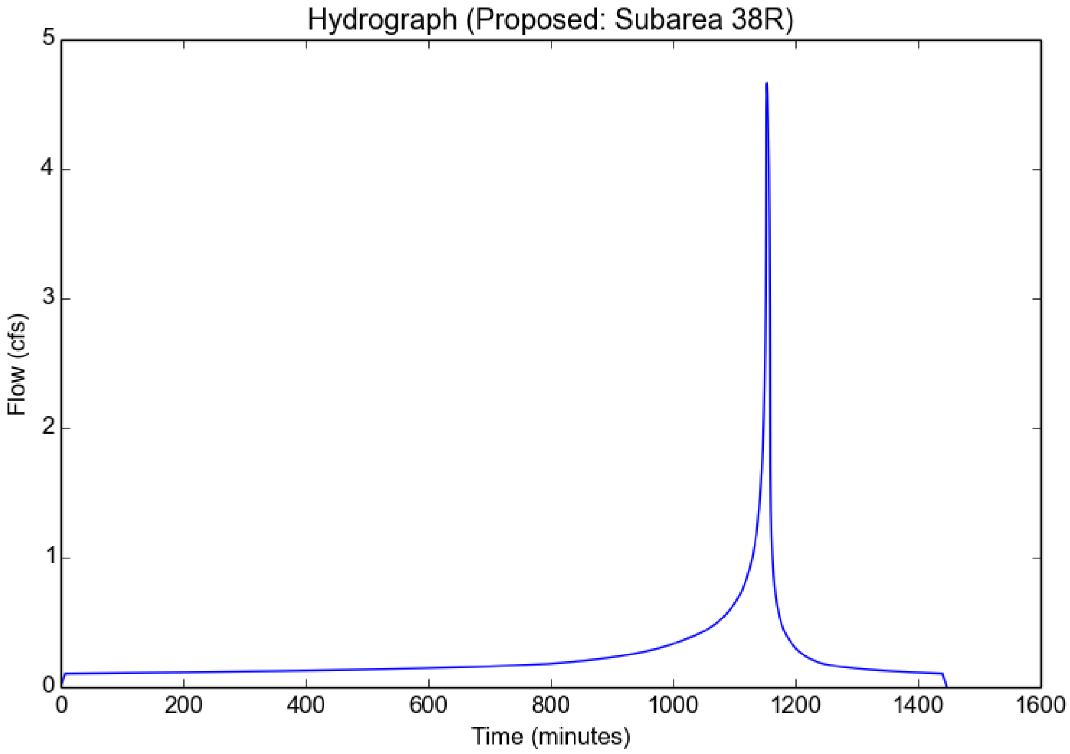
File location: Q:/Santa Clarita/Lyons Canyon Ranch/UCI/Hydrology/Tc/2024-1-4/Proposed - Subarea 38R-50.pdf
Version: HydroCalc 1.0.3

Input Parameters

Project Name	Proposed
Subarea ID	Subarea 38R
Area (ac)	1.32
Flow Path Length (ft)	974.0
Flow Path Slope (vft/hft)	0.029
50-yr Rainfall Depth (in)	8.4
Percent Impervious	0.4
Soil Type	97
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

Output Results

Modeled (50-yr) Rainfall Depth (in)	8.4
Peak Intensity (in/hr)	4.2786
Undeveloped Runoff Coefficient (Cu)	0.776
Developed Runoff Coefficient (Cd)	0.8256
Time of Concentration (min)	7.0
Clear Peak Flow Rate (cfs)	4.663
Burned Peak Flow Rate (cfs)	4.663
24-Hr Clear Runoff Volume (ac-ft)	0.4714
24-Hr Clear Runoff Volume (cu-ft)	20533.5841



Peak Flow Hydrologic Analysis

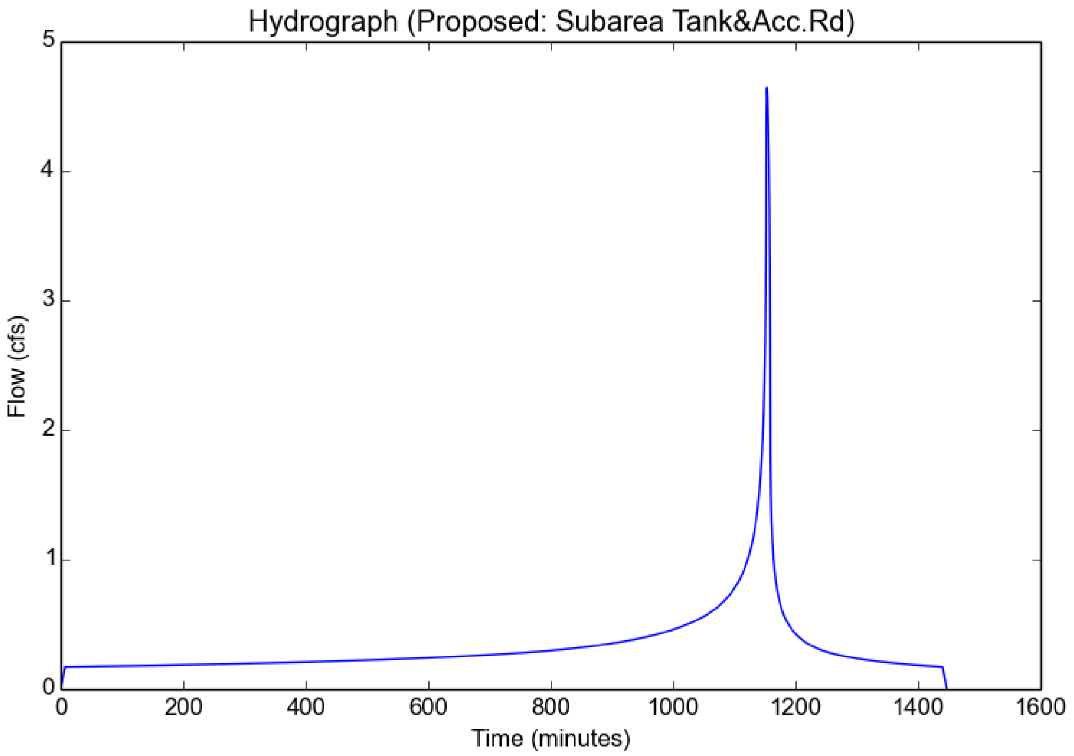
File location: Q:/Santa Clarita/Lyons Canyon Ranch/UCI/Hydrology/Tc/2024-1-4/Proposed - Subarea Tank&Acc.Rd-50.pdf
Version: HydroCalc 1.0.3

Input Parameters

Project Name	Proposed
Subarea ID	Subarea Tank&Acc.Rd
Area (ac)	1.24
Flow Path Length (ft)	1520.0
Flow Path Slope (vft/hft)	0.102
50-yr Rainfall Depth (in)	8.4
Percent Impervious	0.8
Soil Type	97
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

Output Results

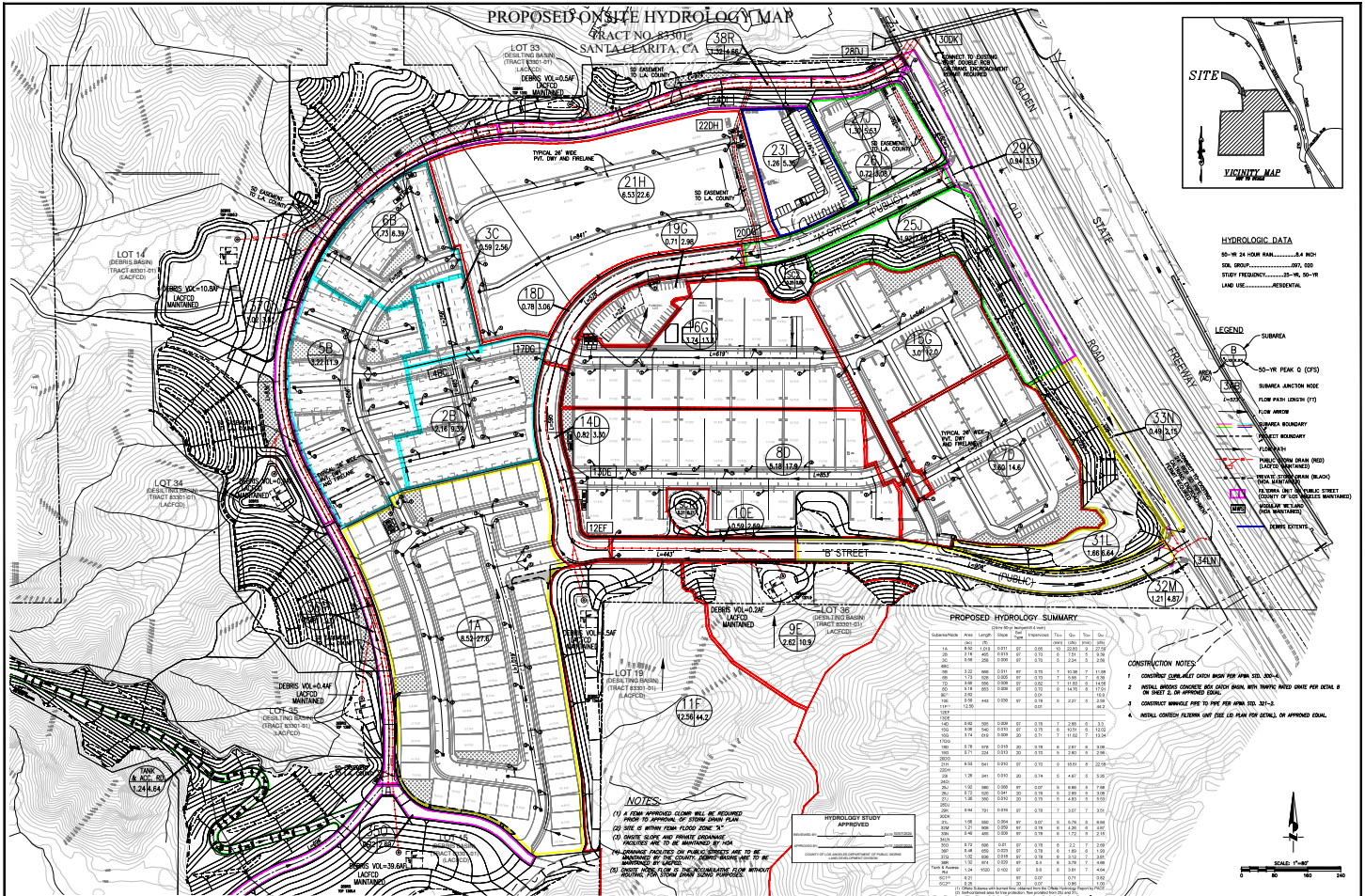
Modeled (50-yr) Rainfall Depth (in)	8.4
Peak Intensity (in/hr)	4.2786
Undeveloped Runoff Coefficient (Cu)	0.776
Developed Runoff Coefficient (Cd)	0.8752
Time of Concentration (min)	7.0
Clear Peak Flow Rate (cfs)	4.6434
Burned Peak Flow Rate (cfs)	4.6434
24-Hr Clear Runoff Volume (ac-ft)	0.6641
24-Hr Clear Runoff Volume (cu-ft)	28928.282



MAP

PROPOSED ONSITE HYDROLOGY MAP

TRACT NO. 83301
SANTA CLARITA, CA



HYDROLOGIC DATA

50-YR 24 HOUR RAIN................8.4 INCH
SOIL GROUP..............................097, 020
STUDY FREQUENCY.............25-YR, 50-YR
LAND USE....................RESIDENTIAL

LEGEND

B (x.xx | x.xx)	SUBAREA; AREA (AC); 50-YR PEAK Q (CFS)
3AB	SUBAREA JUNCTION NODE
L=573'	FLOW PATH LENGTH (FT)
→	FLOW ARROW
🟨🟩🟦	SUBAREA BOUNDARY
— — —	PROJECT BOUNDARY
—·—▶	FLOW PATH
— SD —	PUBLIC STORM DRAIN (RED) (LACFCD MAINTAINED)
— SD —	PRIVATE STORM DRAIN (BLACK) (HOA MAINTAINED)
🟪	FILTERRA UNIT ON PUBLIC STREET (COUNTY OF LOS ANGELES MAINTAINED)
MWS	MODULAR WETLAND (HOA MAINTAINED)
🟦	DEBRIS EXTENTS

PROPOSED HYDROLOGY SUMMARY

(24-hr 50-yr Isohyet=8.4 inch)

Subarea/Node	Area	Length	Slope	Soil Type	Impervious	Tc_{25}	Q_{25}	Tc_{50}	Q_{50}
	(ac)	(ft)				(min)	(cfs)	(min)	(cfs)
1A	8.52	1,019	0.011	97	0.65	10	22.83	9	27.59
2B	2.16	465	0.013	97	0.70	6	7.51	5	9.39
3C	0.59	258	0.006	97	0.70	5	2.24	5	2.56
4BC									
5B	3.22	669	0.011	97	0.70	7	10.38	7	11.89
6B	1.73	528	0.005	97	0.70	7	5.58	7	6.39
7D	3.60	556	0.008	97	0.82	7	11.83	6	14.56
8D	5.18	853	0.009	97	0.70	9	14.76	8	17.91
9E(1)	2.62				0.01				10.9
10E	0.59	443	0.039	97	0.78	5	2.27	5	2.59
11F(1)	12.56				0.01				44.2
12EF									
13DE									
14D	0.82	595	0.009	97	0.78	7	2.68	6	3.3
15G	3.00	540	0.010	97	0.75	6	10.51	6	12.02
16G	3.74	619	0.009	20	0.71	7	11.62	7	13.34
17DG									
18D	0.78	578	0.018	20	0.78	6	2.67	6	3.06
19G	0.71	224	0.013	20	0.70	5	2.60	5	2.98
20DG									
21H	6.53	841	0.010	97	0.70	9	18.61	8	22.58
22DH									
23I	1.26	341	0.010	20	0.74	5	4.67	5	5.35
24DI									
25J	1.92	580	0.068	97	0.07	5	6.66	5	7.68
26J	0.72	520	0.041	20	0.78	5	2.69	5	3.08
27J	1.30	350	0.010	20	0.75	5	4.83	5	5.53
28DJ									
29K	0.94	791	0.016	97	0.78	7	3.07	7	3.51
30DK									
31L	1.66	550	0.064	97	0.07	5	5.76	5	6.64
32M	1.21	908	0.059	97	0.78	6	4.26	6	4.87
33N	0.49	465	0.008	97	0.78	6	1.72	5	2.15
34LN									
35O	0.72	696	0.01	97	0.78	8	2.2	7	2.69
36P	0.48	659	0.023	97	0.78	6	1.69	6	1.93
37Q	1.02	836	0.018	97	0.78	8	3.12	7	3.81
38R	1.32	974	0.029	97	0.4	8	3.78	7	4.66
Tank & Access Rd	1.24	1520	0.102	97	0.8	8	3.81	7	4.64
SC1(2)	0.21			97	0.07		0.71		0.82
SC2(2)	0.25			20	0.07		0.86		1.00

(1) Offsite Subarea with burned flow, obtained from the Offsite Hydrology Report by PACE
(2) Self-contained area for tree protection, flow prorated from 25J and 31L.

CONSTRUCTION NOTES:

1 CONSTRUCT CURB INLET CATCH BASIN PER APWA STD. 300-4.

2 INSTALL BROOKS CONCRETE BOX CATCH BASIN, WITH TRAFFIC RATED GRATE PER DETAIL B ON SHEET 2, OR APPROVED EQUAL.

3 CONSTRUCT MANHOLE PIPE TO PIPE PER APWA STD. 321-2.

4. INSTALL CONTECH FILTERRA UNIT (SEE LID PLAN FOR DETAIL), OR APPROVED EQUAL.

NOTES:

(1) A FEMA APPROVED CLOMR WILL BE REQUIRED PRIOR TO APPROVAL OF STORM DRAIN PLAN

(2) SITE IS WITHIN FEMA FLOOD ZONE "A"

(3) ONSITE SLOPE AND PRIVATE DRDAINAGE FACILITIES ARE TO BE MAINTAINED BY HOA

(4) DRAINAGE FACILITIES ON PUBLIC STREETS ARE TO BE MAINTAINED BY THE COUNTY. DEBRIS BASINS ARE TO BE MAINTAINED BY LACFCD.

(5) ONSITE NODE FLOW IS THE ACCUMULATIVE FLOW WITHOUT ROUTING, FOR STORM DRAIN SIZING PURPOSES.

HYDROLOGY STUDY APPROVED

REVIEWED BY: ______ DATE 10/07/2024

APPROVED BY: ______ DATE 10/07/2024

COUNTY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS
LAND DEVELOPMENT DIVISION

UNITED CIVIL INC
30141 Agoura Road, Suite 215
Agoura Hills, CA 91301
PH: (818) 707-8648

Ng Siew Huat
SIEW HUAT NG R.C.E. 46026
10/3/2024
DATE

SIEW HUAT NG
NO.46026
EXP.12-31-24

OWNER/APPLICANT:

NUWI LYONS CANYON, LLC
2001 WILSHIRE BOULEVARD, SUITE 401
SANTA MONICA, CA 90403
TEL: (310) 864-2427

NO.	DATE	REVISIONS	BY	APPR

HYDROLOGY STUDY FOR TR 83301

PROPOSED ONSITE HYDROLOGY

LOCATED IN THE UNINCORPORATED TERRITORY OF
THE COUNTY OF LOS ANGELES, STATE OF CALIFORNIA

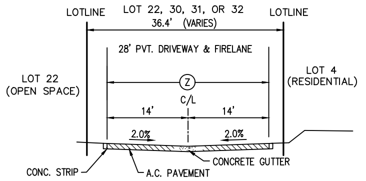
DATE: 10/3/2024

SHEET 1 OF 2

Q:\Santa Clarita\Lyons Canyon Ranch\UCI\Hydrology\CAD\2038_Hydro_Prop.dwg

PROPOSED ONSITE HYDROLOGY MAP

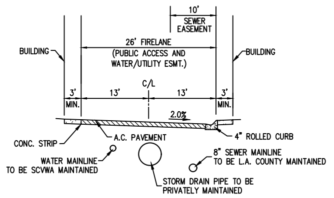
TRACT NO. 83301
SANTA CLARITA, CA



ACCESS ROAD SECTION A-A

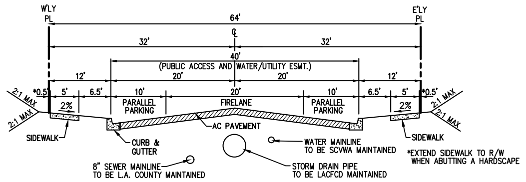
N.T.S

Ⓩ STORM DRAIN EASEMENT FOR ACCESS AND MAINTENANCE OF LOS ANGELES COUNTY OWNED BASIN, PIPES, AND STRUCTURES TO LA COUNTY FLOOD CONTROL



TYPICAL 26' PRIVATE DRIVEWAY AND FIRELANE

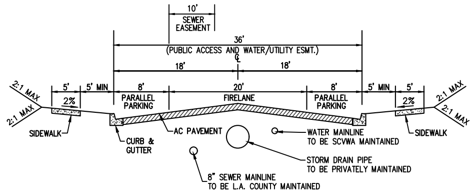
N.T.S



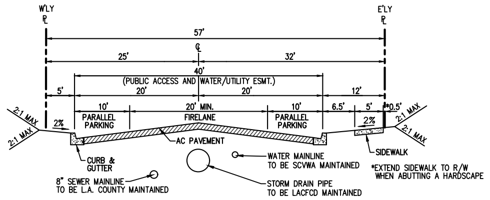
64' PUBLIC STREET

"A" STREET AND "B" STREET

N.T.S



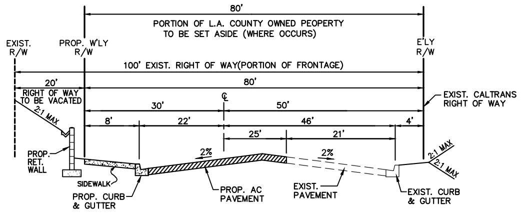
TYPICAL 36' PRIVATE DRIVEWAY AND FIRELANE



57' PUBLIC STREET

"A" STREET AND "B" STREET

N.T.S



PUBLIC STREET - (R/W = 80')

THE OLD ROAD

HYDROLOGY STUDY
APPROVED

REVIEWED BY:______________ DATE 10/07/2024

APPROVED BY:______________ DATE 10/07/2024

COUNTY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS
LAND DEVELOPMENT DIVISION

UNITED CIVIL INC
30141 Agoura Road, Suite 215
Agoura Hills, CA 91301
PH: (818) 707-8648

Ng Siew Huat 10/3/2024
SIEW HUAT NG R.C.E. 46026 DATE

SIEW HUAT NG
NO.46026
EXP.12-31-24

OWNER/APPLICANT:

NUWI LYONS CANYON, LLC
2001 WILSHIRE BOULEVARD, SUITE 401
SANTA MONICA, CA 90403
TEL: (310) 864-2427

NO.	DATE	REVISIONS	BY	APPR

HYDROLOGY STUDY FOR TR 83301

PROPOSED ONSITE HYDROLOGY

LOCATED IN THE UNINCORPORATED TERRITORY OF
THE COUNTY OF LOS ANGELES, STATE OF CALIFORNIA

DATE: 10/3/2024

SHEET 2
OF 2

Q:\Santa Clarita\Lyons Canyon Ranch\UCI\Hydrology\CAD\2038_Hydro_Prop.dwg