

P. B. L. A. ENGINEERING, INC

PLANNING • ENGINEERING • SURVEYING

***PRELIMINARY
HYDROLOGY STUDY***

***RAMONA GATEWAY
COMMERCE CENTER***

PERRIS, CA

PREPARED FOR:

**Perris Landco, LLC
201 Spear Street
Suite 1100
San Francisco, CA**

Preparation Date: January, 2022



Prepared under the supervision of:

A handwritten signature in blue ink that reads "Steve Levisee". The signature is written in a cursive style and is positioned above a horizontal line.

Steve Levisee, P.E.

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Background and Purpose

Perris Landco, LLC is proposing to develop a multi building commercial/retail and industrial project on approximately 50.0 acres of land in the City of Perris, CA. The property is located on the south side of the Ramona Expressway between Nevada Avenue and Webster Avenue 1/8 mile east of Interstate 215.

The property is vacant and unimproved. The natural drainage pattern flows generally from west to east as surface flows. The site was formerly used as agriculture, but has been fallow for some time. The proposed development will consist of a retail component on the northerly 7.55 acres, and the remaining property to the south will be developed as a single industrial logistics 850,224 sf building footprint.

Onsite drainage design will consist of various inlets at low points around the site and these inlets will connect to underground detention systems. The Industrial site will have one underground system on each side of the building in the truck court areas, and the Retail site will have it's own separate system and underground detention. The detention systems will capture the required Water Quality volume as well as attenuate peak storm flows to ensure that the developed condition does not exceed the existing condition peak runoff rate.

This project is also downstream of the Perris Valley Master Plan of Drainage (MPD) Line E culvert that daylight on the eastern side of Interstate 215. The ultimate flow rate of this line delivers 1000 cfs per the aforementioned MPD onto the existing ground and is returned to a surface drainage state after the flows exit the existing box culvert. The Master Plan indicates that there will be a detention basin at the location of the Line E outlet from the freeway. The Master Planned Detention Basin is slated to be located on the property to the west of Nevada on property that is owned by a different entity, and as of the date of this report, the status of the design and construction of that basin remains unknown.

Since the Ramona Gateway Commerce Center is east of Nevada Avenue, this ultimate Line E flow is directly tributary to this project as un-detained, bulk sheet flow crossing Nevada Avenue on the western edge of the Property. To mitigate this condition, the project proponent will install a 60" RCP Storm Drain that will eventually act as the ultimate outlet storm drain line from the future detention basin. This storm drain will be designed to RCFCD standards and be transferred to the City for operation and maintenance. The storm drain will be located in Nevada at it's upstream end and run northerly to the retail parcels, turn easterly and ultimately connect to the existing 60" storm drain in Ramona Expressway. The existing Ramona Storm Drain Plan & Profile is provided in Appendix J.

In addition to the ultimate storm drain line being installed with this project, an emergency bypass channel is planned to pick-up any remaining sheet-flow runoff that does not enter

the proposed 60" storm drain and crosses over Nevada toward the project. The Nevada Avenue crossing is proposed to be a full section concrete "Arizona Crossing" that will convey excess sheet flow from the west side of Nevada to the east, and the Bypass Channel. The channel is planned to be a trapezoidal channel with an 11 foot wide bottom and 2:1 side slopes, and will be constructed of concrete. The size and slope of the channel will safely convey this remainder flow through the site and deliver it back to Webster Avenue. At the downstream terminus of the bypass channel, there will be a stilling basin that will be about 7feet deep and approximately 39' wide. This basin calms the flows exiting the trapezoidal channel and reduces velocities dramatically before the basin is overtopped and water sheet flows to Webster Ave. Please note that this condition will occur only in the design storm 100 year event. The majority of storms will not produce enough runoff to trigger the basin overflow condition. There will also be an inlet provided at the downstream end of the channel to drain low flows to the existing storm drain in Webster Ave.

The purpose of this report is to establish the basis for final design of flood protection and drainage conveyance elements, ensure that these elements can be sized properly, and to ensure the development can comply with County of Riverside requirements when constructed. Additionally, an analysis of the ultimate Master Planned Storm Drain and emergency bypass channel is also presented to show the concept for both systems is viable.

Project Scope

This study contemplates the entire project site along with all tributary offsite areas. Both the existing pre-developed condition of the site and the post-developed proposed condition are analyzed for comparison to ensure compliance with current drainage policies and regulations.

The Hydrology Maps for both the existing condition and proposed condition are given in Appendix A & B respectively.

Flood Designation

The Project Site lies within Zone "X" of the Flood Insurance Rate Map identified as Community Panel No. 1410 of 3805, map number 06065C1430H bearing an effective date of August 18, 2014.

Zone "X" is defined as areas outside the 0.2% annual chance floodplain.

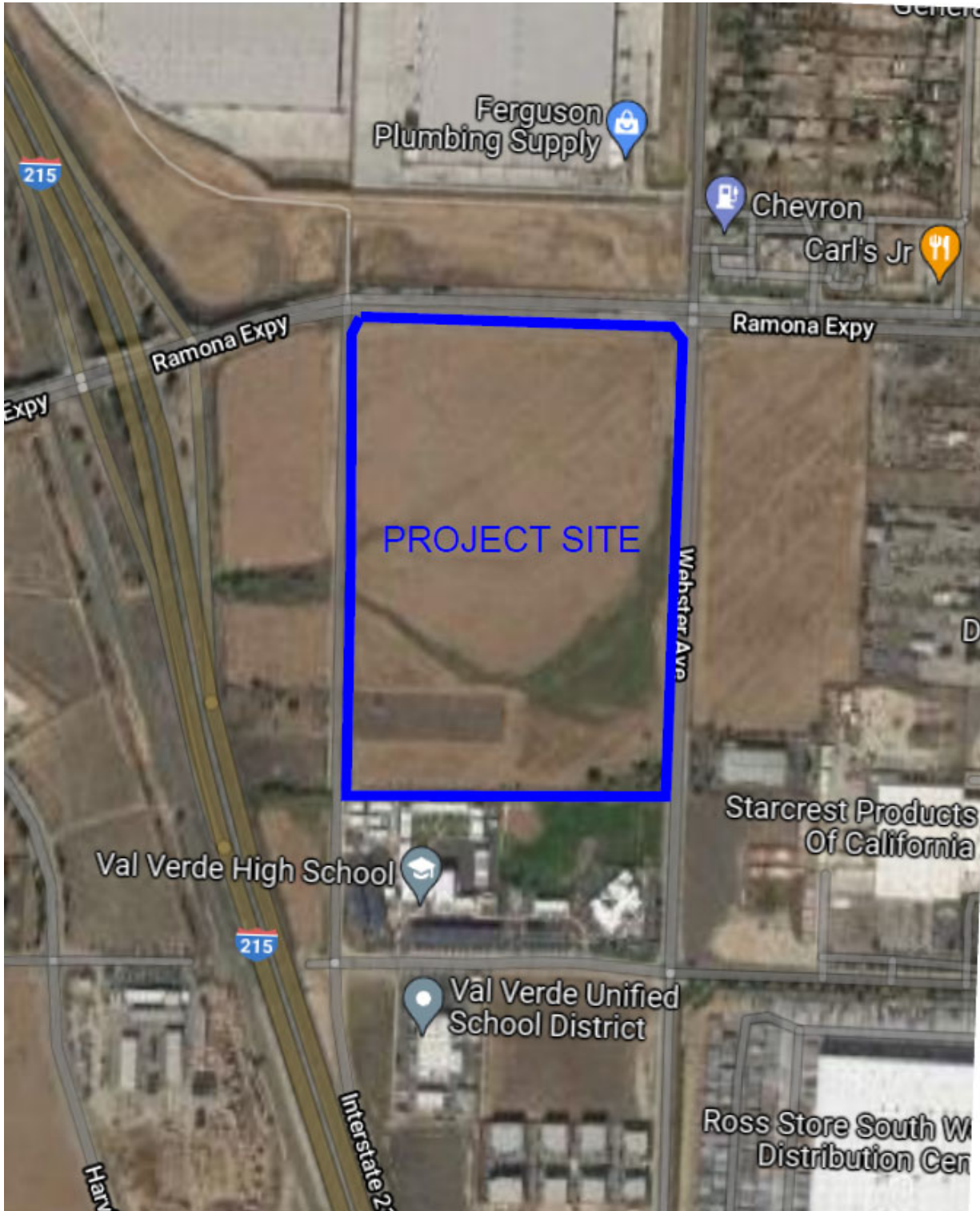
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Project Location



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Design Criteria and Methods

The runoff calculations presented in this study are produced using the Unit Hydrograph method as detailed in the current Riverside County Hydrology Manual. Because this is a preliminary study to determine feasibility, multiple recurrence interval storms were not produced as would be required on a final report. This study presents the typical worst case storm events which are typically the 100 year storms.

The County requires that post-development runoff does not exceed pre-development runoff.

The proposed detention system will be a series of perforated High Density Polyethylene (HDPE) pipe surrounded by gravel. A flood routing analysis is performed for each of 3 separate tributary areas on the project. Each system will be drained by way of a pump and the effluent will be directed through a Modular Wetlands Unit to attain water quality requirements.

Rainfall data, soil loss, and SCS curve numbers are based on the County Manual. No volume reduction is taken for infiltration, although the basins will incorporate under-drain systems to evacuate standing water. Detention basin volume and outflow calculations are produced with a spreadsheet program.

Hydrology Model Assumptions

Existing Condition:

Runoff Index = 85 – From Plate E 6.1 of the RCFC&WCD Hydrology Manual

Soils Type = B – Soil map included.

Rainfall Data – NOAA Atlas 14 per SB County requirements.

AMC = 2 - Typical for studies of this nature.

Unit Hydrograph Lag Time – Calculated by Hydrology program based on physical properties.

Base Flow = 0 - It is assumed that omitting the drainage flows from the freeway will required to accurately compare the existing and developed cases.

Proposed Condition:

Runoff Index = 56 – From Plate E 6.1 of the RCFC&WCD Hydrology Manual

Soils Type = B – Soil map included.

Rainfall Data – NOAA Atlas 14 per SB County requirements.

AMC = 2 - Typical for studies of this nature.

Unit Hydrograph Lag Time – Calculated by Hydrology program based on physical properties.

Base Flow = 0 – It is assumed that the 60” storm drain, and the bypass systems will eliminate any run-on to onsite storm drain.

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Detention System Outlet

The proposed structures controlling outlet flows at each underground storage system will occur at the last catch basin upstream of the underground storage. As the underground system fills, no water is leaving the site. At the point that the system is 100% full, an outlet pipe set at the soffit elevation of the storage system will start to outlet flows to the existing storm drain system in Webster Avenue. The underground storage system will ensure Water Quality treatment volumes and outlet times are retained, ensure peak inflow attenuation, and safely outlet design storm flows to the existing storm drain systems.

Preliminary Hydrology Results

HYDROLOGY AND FLOOD ROUTING RESULTS
RAMONA - WEBSTER

EXISTING CONDITION - SITE RUNOFF (cfs)

	1 HR	3 HR	6 HR	24 HR	24 HR TOTAL VOLUME (AC-FT)
100 YR	121.2	89.3	72.7	27.9	9.0

DEVELOPED CONDITION - AREA 1 - RETAIL AREA BASIN OUTFLOW (cfs)

	1 HR	3 HR	6 HR	24 HR	24 HR TOTAL VOLUME (AC-FT)
100 YR	16.1	11.8	10.1	4.0	2.1

DEVELOPED CONDITION - AREA 2 - WEST INDUSTRIAL AREA BASIN OUTFLOW (cfs)

	1 HR	3 HR	6 HR	24 HR	24 HR TOTAL VOLUME (AC-FT)
100 YR	47.0	34.4	30.9	12.2	7.0

DEVELOPED CONDITION - AREA 3 - EAST INDUSTRIAL AREA BASIN OUTFLOW (cfs)

	1 HR	3 HR	6 HR	24 HR	24 HR TOTAL VOLUME (AC-FT)
100 YR	36.0	42.5	30.2	11.4	6.0
TOTALS	99.1	88.7	71.2	27.6	ALL LESS THAN EXIST

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Conclusion

This study and the related calculations indicated that the proposed development design flows can be conveyed to the proposed detention systems without danger of site flooding. Additionally, the detention systems are properly sized to attenuate the difference between pre-development runoff and runoff from the completed development.

Note that a final Hydrology and Hydraulics study will be required to accompany final construction documents to analyze final basin geometry, provide conveyance element hydraulics for proper pipe sizing, surface drainage facilities and energy dissipation.

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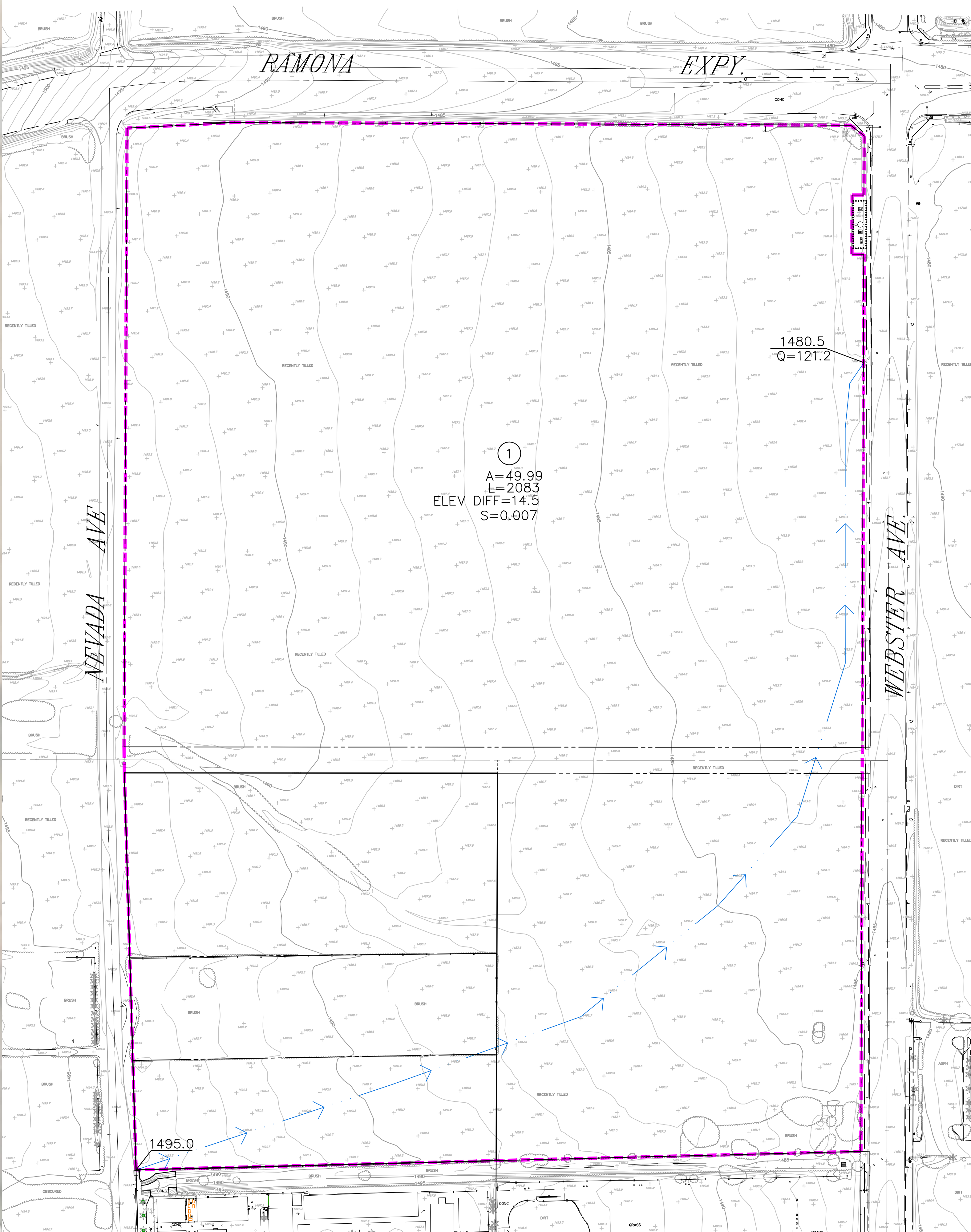
APPENDIX A
HYDROLOGY MAP – EXISTING CONDITION

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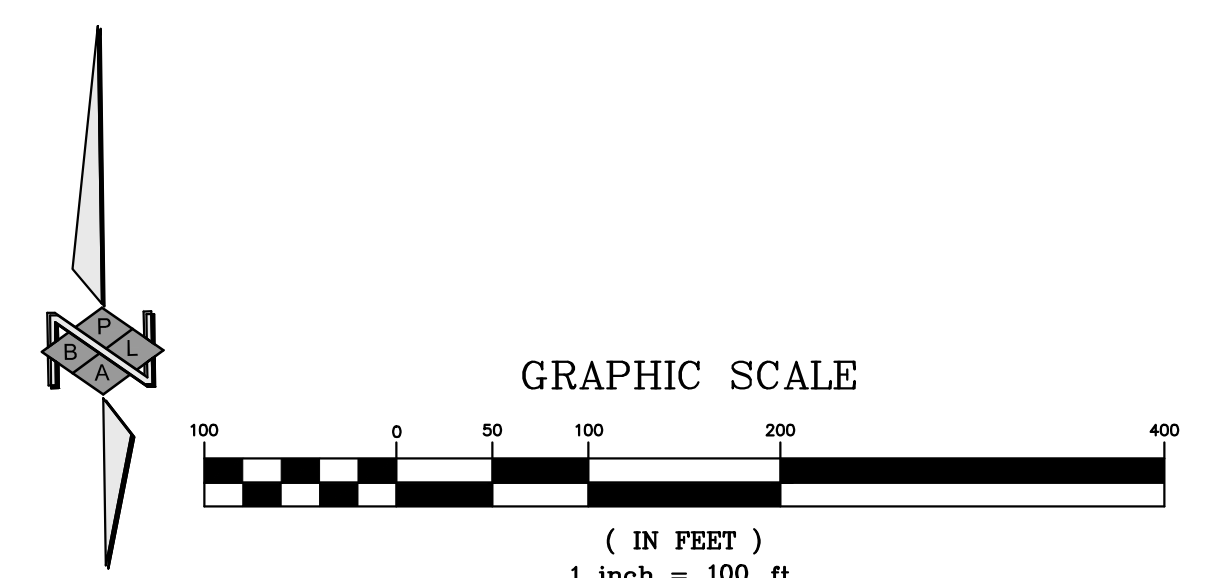
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LEGEND

- ① — SUBAREA DESIGNATION
- SUBAREA BOUNDARY
- FLOWPATH
- Q=7.39 — 100 YR / 1 HR DISCHARGE
- A=1.68 — SUB-AREA ACRES
- L=750' — FLOWPATH LENGTH
- S=0.01 — FLOWPATH SLOPE



Sep 22 2021

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REVISIONS:

UNIT HYDROGRAPH HYDROLOGY MAP
EXISTING CONDITION
RAMONA - WEBSTER
PERRIS, CA

JOB NO.
139-1
SHEET
1 of 1

APPENDIX B

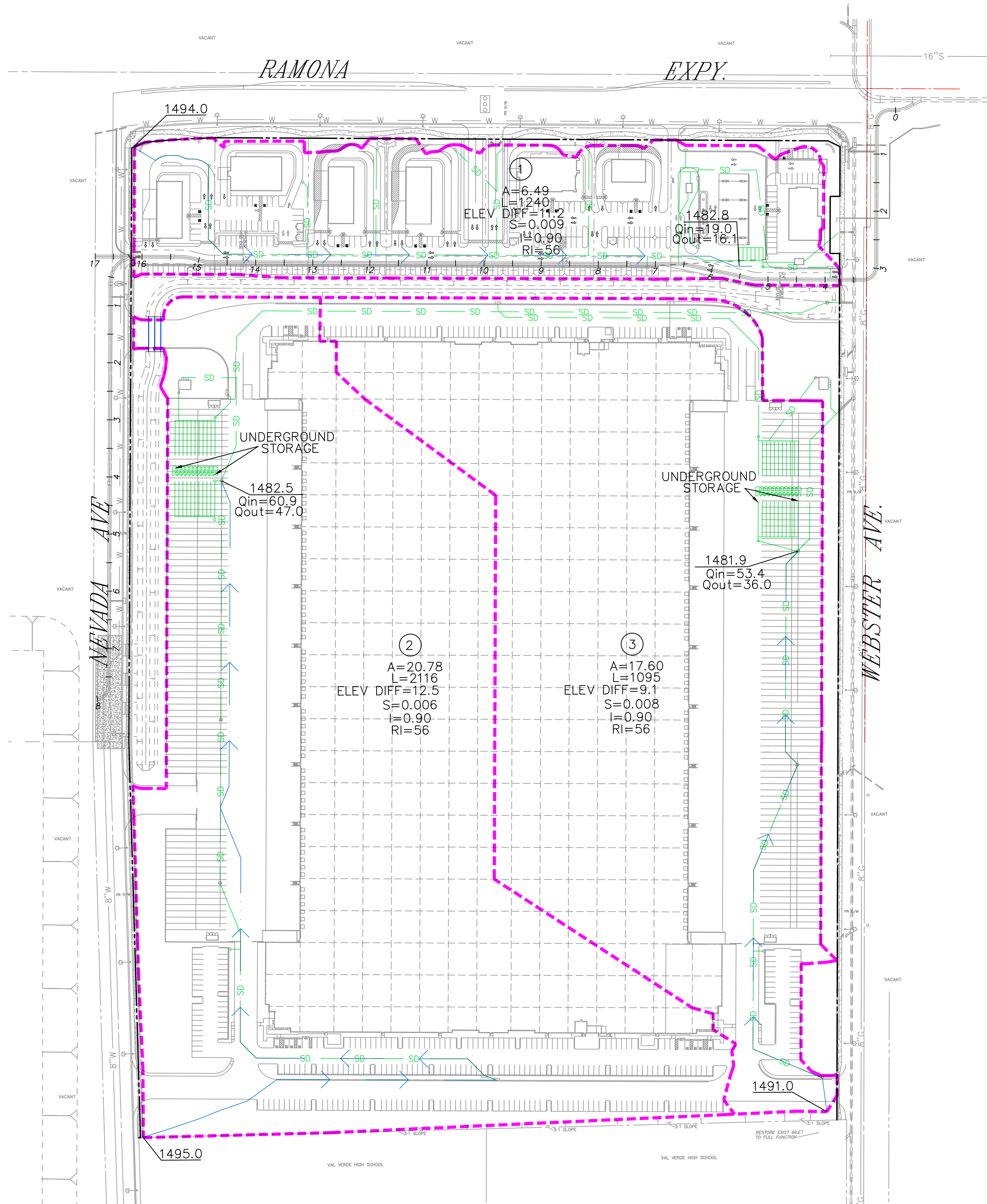
HYDROLOGY MAP – DEVELOPED CONDITION

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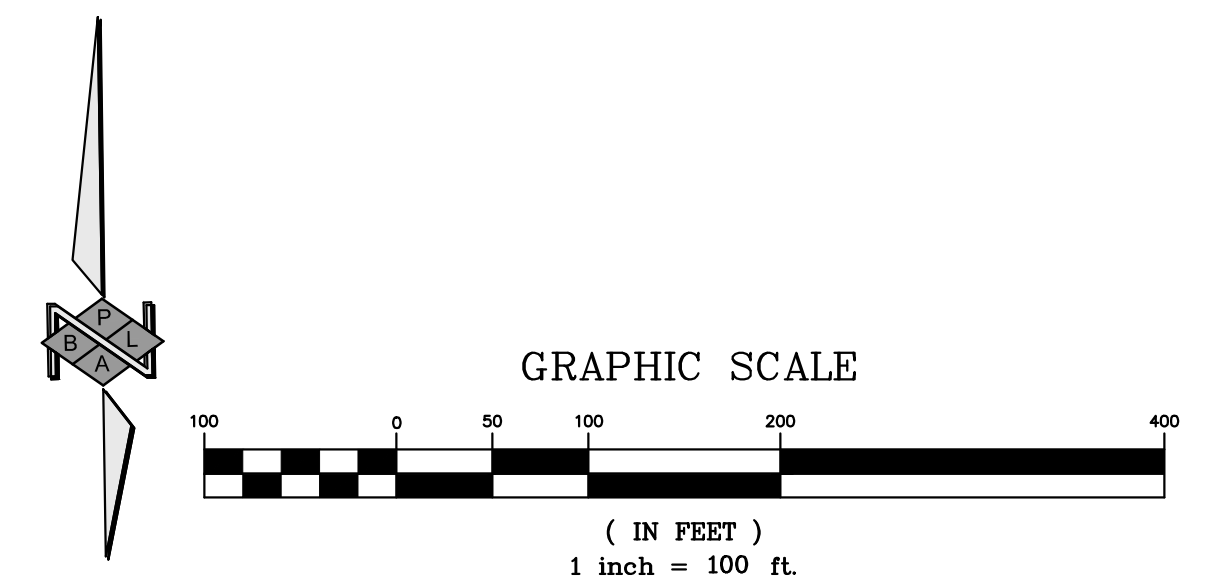
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LEGEND

- ① — SUBAREA DESIGNATION
- SD — PROPOSED STORM DRAIN
- SUBAREA BOUNDARY
- FLOWPATH
- Q=7.39 — 100 YR / 1 HR DISCHARGE
- A=1.68 — SUB-AREA ACRES
- L=750' — FLOWPATH LENGTH
- S=0.01 — FLOWPATH SLOPE



Sep 06 2022

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**UNIT HYDROGRAPH HYDROLOGY MAP
 DEVELOPED CONDITION
 RAMONA - WEBSTER
 PERRIS, CA**

JOB NO.
 139-1
 SHEET
 1 of 1

APPENDIX C
UNIT HYDROGRAPH HYDROLOGY
EXISTING CONDITION

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Unit Hydrograph Analysis

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Study date 09/06/21 File: 1391EXUH1100.out

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

Program License Serial Number 6490

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

English Units used in output format

RAMONA-WEBSTER
EXISTING CONDITION
100 YEAR STORMS
1391EXUH

Drainage Area = 49.99(Ac.) = 0.078 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 49.99(Ac.) = 0.078 Sq. Mi.
Length along longest watercourse = 2083.00(Ft.)
Length along longest watercourse measured to centroid = 1000.00(Ft.)
Length along longest watercourse = 0.395 Mi.
Length along longest watercourse measured to centroid = 0.189 Mi.
Difference in elevation = 14.50(Ft.)
Slope along watercourse = 36.7547 Ft./Mi.
Average Manning's 'N' = 0.030
Lag time = 0.135 Hr.
Lag time = 8.13 Min.
25% of lag time = 2.03 Min.
40% of lag time = 3.25 Min.
Unit time = 5.00 Min.
Duration of storm = 1 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall(In) [2]	Weighting[1*2]
49.99	0.46	22.85

100 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall(In) [2]	Weighting[1*2]
49.99	1.35	67.49

STORM EVENT (YEAR) = 100.00
Area Averaged 2-Year Rainfall = 0.457(In)
Area Averaged 100-Year Rainfall = 1.350(In)

Point rain (area averaged) = 1.350(In)
Areal adjustment factor = 99.95 %

Adjusted average point rain = 1.349(In)

Sub-Area Data:

Area(Ac.)	Runoff Index	Impervious %
49.990	85.00	0.000
Total Area Entered = 49.99(Ac.)		

RI	RI	Infil. Rate	Impervious	Adj. Infil. Rate	Area%	F
AMC2	AMC-2	(In/Hr)	(Dec.%)	(In/Hr)	(Dec.)	(In/Hr)
85.0	85.0	0.187	0.000	0.187	1.000	0.187
						Sum (F) = 0.187

Area averaged mean soil loss (F) (In/Hr) = 0.187

Minimum soil loss rate ((In/Hr)) = 0.094

(for 24 hour storm duration)

Soil loss rate (decimal) = 0.900

Slope of intensity-duration curve for a 1 hour storm =0.5000

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

Unit Hydrograph Data

Unit time period (hrs)	Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	61.517	4.314
2	0.167	123.034	17.642
3	0.250	184.551	13.139
4	0.333	246.068	5.064
5	0.417	307.585	3.025
6	0.500	369.102	2.034
7	0.583	430.619	1.435
8	0.667	492.136	1.024
9	0.750	553.653	0.838
10	0.833	615.171	0.611
11	0.917	676.688	0.457
12	1.000	738.205	0.330
13	1.083	799.722	0.310
14	1.167	861.239	0.156
		Sum = 100.000	Sum= 50.381

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

Unit Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr) Max Low	Effective (In/Hr)
1	0.08	4.20	0.680 (0.612)	0.493
2	0.17	4.30	0.696 (0.627)	0.509
3	0.25	5.00	0.810 (0.729)	0.623
4	0.33	5.00	0.810 (0.729)	0.623
5	0.42	5.80	0.939 (0.845)	0.752
6	0.50	6.50	1.053 (0.947)	0.866
7	0.58	7.40	1.198 (1.078)	1.011
8	0.67	8.60	1.393 (1.253)	1.206
9	0.75	12.30	1.992 (1.793)	1.805
10	0.83	29.10	4.712 (4.241)	4.525
11	0.92	6.80	1.101 (0.991)	0.914
12	1.00	5.00	0.810 (0.729)	0.623
(Loss Rate Not Used)				
Sum =	100.0			Sum = 13.9
Flood volume = Effective rainfall 1.16(In)				

times area 50.0(Ac.)/[(In)/(Ft.)] = 4.8(Ac.Ft)
 Total soil loss = 0.19(In)
 Total soil loss = 0.779(Ac.Ft)
 Total rainfall = 1.35(In)
 Flood volume = 210931.3 Cubic Feet
 Total soil loss = 33933.7 Cubic Feet

 Peak flow rate of this hydrograph = 121.248 (CFS)

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

 Hydrograph in 5 Minute intervals ((CFS))

Time (h+m)	Volume Ac.Ft	Q (CFS)	0	50.0	100.0	150.0	200.0
0+ 5	0.0147	2.13	Q				
0+10	0.0897	10.90	V Q				
0+15	0.2148	18.16	V Q				
0+20	0.3723	22.87	V Q				
0+25	0.5548	26.49	V Q				
0+30	0.7676	30.90	Q				
0+35	1.0177	36.31	Q V				
0+40	1.3113	42.63	Q V				
0+45	1.6702	52.12	Q V				
0+50	2.2127	78.77	Q V				
0+55	3.0478	121.25	Q V				
1+ 0	3.7122	96.47	Q		Q	V	
1+ 5	4.1103	57.81	Q			V	
1+10	4.3504	34.86	Q			V	
1+15	4.4961	21.16	Q			V	
1+20	4.5970	14.66	Q			V	
1+25	4.6697	10.55	Q			V	
1+30	4.7248	8.00	Q			V	
1+35	4.7650	5.84	Q			V	
1+40	4.7945	4.28	Q			V	
1+45	4.8154	3.04	Q			V	
1+50	4.8311	2.27	Q			V	
1+55	4.8393	1.20	Q			V	
2+ 0	4.8416	0.34	Q			V	
2+ 5	4.8423	0.10	Q			V	

Unit Hydrograph Analysis

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Study date 09/06/21 File: 1391EXUH3100.out

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

Program License Serial Number 6490

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

English Units used in output format

RAMONA-WEBSTER
EXISTING CONDITION
100 YEAR STORMS
1391EXUH

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Lag time = 0.135 Hr.
Lag time = 8.13 Min.
25% of lag time = 2.03 Min.
40% of lag time = 3.25 Min.
Unit time = 5.00 Min.
Duration of storm = 3 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall(In) [2]	Weighting[1*2]
49.99	0.80	39.94

100 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall(In) [2]	Weighting[1*2]
49.99	2.01	100.48

STORM EVENT (YEAR) = 100.00
Area Averaged 2-Year Rainfall = 0.799(In)
Area Averaged 100-Year Rainfall = 2.010(In)

Point rain (area averaged) = 2.010(In)
Areal adjustment factor = 99.98 %

Adjusted average point rain = 2.010(In)

Sub-Area Data:

Area(Ac.) Runoff Index Impervious %
 49.990 85.00 0.000
 Total Area Entered = 49.99(Ac.)

RI	RI	Infil. Rate	Impervious	Adj. Infil. Rate	Area%	F
AMC2	AMC-2	(In/Hr)	(Dec.%)	(In/Hr)	(Dec.)	(In/Hr)
85.0	85.0	0.187	0.000	0.187	1.000	0.187
						Sum (F) = 0.187

Area averaged mean soil loss (F) (In/Hr) = 0.187

Minimum soil loss rate ((In/Hr)) = 0.094

(for 24 hour storm duration)

Soil loss rate (decimal) = 0.900

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

Unit Hydrograph Data

Unit time period (hrs)	Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
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14	1.167	861.239	0.310
Sum = 100.000			Sum= 50.381

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Unit Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr) Max Low	Effective (In/Hr)
1	0.08	1.30	0.313 (0.282)	0.126
2	0.17	1.30	0.313 (0.282)	0.126
3	0.25	1.10	0.265 (0.239)	0.078
4	0.33	1.50	0.362 (0.326)	0.175
5	0.42	1.50	0.362 (0.326)	0.175
6	0.50	1.80	0.434 (0.391)	0.247
7	0.58	1.50	0.362 (0.326)	0.175
8	0.67	1.80	0.434 (0.391)	0.247
9	0.75	1.80	0.434 (0.391)	0.247
10	0.83	1.50	0.362 (0.326)	0.175
11	0.92	1.60	0.386 (0.347)	0.199
12	1.00	1.80	0.434 (0.391)	0.247
13	1.08	2.20	0.531 (0.477)	0.344
14	1.17	2.20	0.531 (0.477)	0.344
15	1.25	2.20	0.531 (0.477)	0.344
16	1.33	2.00	0.482 (0.434)	0.295
17	1.42	2.60	0.627 (0.564)	0.440

18	1.50	2.70	0.651	0.187	(0.586)	0.464
19	1.58	2.40	0.579	0.187	(0.521)	0.392
20	1.67	2.70	0.651	0.187	(0.586)	0.464
21	1.75	3.30	0.796	0.187	(0.716)	0.609
22	1.83	3.10	0.748	0.187	(0.673)	0.561
23	1.92	2.90	0.699	0.187	(0.629)	0.512
24	2.00	3.00	0.723	0.187	(0.651)	0.536
25	2.08	3.10	0.748	0.187	(0.673)	0.561
26	2.17	4.20	1.013	0.187	(0.912)	0.826
27	2.25	5.00	1.206	0.187	(1.085)	1.019
28	2.33	3.50	0.844	0.187	(0.760)	0.657
29	2.42	6.80	1.640	0.187	(1.476)	1.453
30	2.50	7.30	1.760	0.187	(1.584)	1.573
31	2.58	8.20	1.977	0.187	(1.780)	1.790
32	2.67	5.90	1.423	0.187	(1.280)	1.236
33	2.75	2.00	0.482	0.187	(0.434)	0.295
34	2.83	1.80	0.434	0.187	(0.391)	0.247
35	2.92	1.80	0.434	0.187	(0.391)	0.247
36	3.00	0.60	0.145	(0.187)	0.130	0.014

(Loss Rate Not Used)

Sum = 100.0 Sum = 17.4

Flood volume = Effective rainfall 1.45(In)
times area 50.0(Ac.)/[(In)/(Ft.)] = 6.1(Ac.Ft)
Total soil loss = 0.56(In)
Total soil loss = 2.317(Ac.Ft)
Total rainfall = 2.01(In)
Flood volume = 263719.8 Cubic Feet
Total soil loss = 100942.5 Cubic Feet

Peak flow rate of this hydrograph = 89.328(CFS)

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

Hydrograph in 5 Minute intervals ((CFS))

Time (h+m)	Volume Ac.Ft	Q(CFS)	0	20.0	40.0	60.0	80.0
0+ 5	0.0038	0.55	Q				
0+10	0.0229	2.78	VQ				
0+15	0.0521	4.23	V Q				
0+20	0.0826	4.44	V Q				
0+25	0.1232	5.89	V Q				
0+30	0.1747	7.48	V Q				
0+35	0.2365	8.97	V Q				
0+40	0.3005	9.28	V Q				
0+45	0.3708	10.21	V Q				
0+50	0.4456	10.87	V Q				
0+55	0.5152	10.10	V Q				
1+ 0	0.5845	10.06	V Q				
1+ 5	0.6634	11.47	VQ				
1+10	0.7588	13.85	VQ				
1+15	0.8646	15.36	V Q				
1+20	0.9734	15.80	VQ				
1+25	1.0834	15.98	Q				
1+30	1.2092	18.26	V Q				
1+35	1.3484	20.21	V Q				
1+40	1.4880	20.28	VQ				
1+45	1.6382	21.80	Q				
1+50	1.8110	25.10	VQ				
1+55	1.9925	26.35	Q				
2+ 0	2.1714	25.97	Q V				
2+ 5	2.3522	26.25	Q V				
2+10	2.5462	28.18	Q V				

2+15	2.7816	34.17			QV			
2+20	3.0553	39.74			QV			
2+25	3.3366	40.85			Q	V		
2+30	3.6986	52.57				V	Q	
2+35	4.1494	65.44				V	V	Q
2+40	4.6468	89.33					V	Q
2+45	5.0884	64.12					QV	
2+50	5.3847	43.02				Q		V
2+55	5.5843	28.99			Q			V
3+ 0	5.7378	22.28			Q			V
3+ 5	5.8408	14.96		Q				V
3+10	5.9069	9.59		Q				V
3+15	5.9537	6.80		Q				V
3+20	5.9875	4.90		Q				V
3+25	6.0118	3.53		Q				V
3+30	6.0292	2.53		Q				V
3+35	6.0411	1.72		Q				V
3+40	6.0482	1.04		Q				V
3+45	6.0516	0.49		Q				V
3+50	6.0530	0.21		Q				V
3+55	6.0539	0.12		Q				V
4+ 0	6.0542	0.04		Q				V
4+ 5	6.0542	0.00		Q				V

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

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Study date 09/06/21 File: 1391EXUH6100.out

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

Program License Serial Number 6490

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

English Units used in output format

RAMONA-WEBSTER
EXISTING CONDITION
100 YEAR STORMS
1391EXUH

Drainage Area = 49.99(Ac.) = 0.078 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 49.99(Ac.) = 0.078 Sq. Mi.
Length along longest watercourse = 2083.00(Ft.)
Length along longest watercourse measured to centroid = 1000.00(Ft.)
Length along longest watercourse = 0.395 Mi.
Length along longest watercourse measured to centroid = 0.189 Mi.
Difference in elevation = 14.50(Ft.)
Slope along watercourse = 36.7547 Ft./Mi.
Average Manning's 'N' = 0.030
Lag time = 0.135 Hr.
Lag time = 8.13 Min.
25% of lag time = 2.03 Min.
40% of lag time = 3.25 Min.
Unit time = 5.00 Min.
Duration of storm = 6 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall(In) [2]	Weighting[1*2]
49.99	1.11	55.49

100 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall(In) [2]	Weighting[1*2]
49.99	2.70	134.97

STORM EVENT (YEAR) = 100.00
Area Averaged 2-Year Rainfall = 1.110(In)
Area Averaged 100-Year Rainfall = 2.700(In)

Point rain (area averaged) = 2.700(In)
Areal adjustment factor = 99.98 %

Adjusted average point rain = 2.700(In)

Sub-Area Data:

Area(Ac.) Runoff Index Impervious %
 49.990 85.00 0.000
 Total Area Entered = 49.99(Ac.)

RI	RI	Infil. Rate	Impervious	Adj. Infil. Rate	Area%	F
AMC2	AMC-2	(In/Hr)	(Dec.%)	(In/Hr)	(Dec.)	(In/Hr)
85.0	85.0	0.187	0.000	0.187	1.000	0.187
						Sum (F) = 0.187

Area averaged mean soil loss (F) (In/Hr) = 0.187

Minimum soil loss rate ((In/Hr)) = 0.094

(for 24 hour storm duration)

Soil loss rate (decimal) = 0.900

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

Unit Hydrograph Data

Unit time period (hrs)	Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	61.517	4.314
2	0.167	123.034	17.642
3	0.250	184.551	13.139
4	0.333	246.068	5.064
5	0.417	307.585	3.025
6	0.500	369.102	2.034
7	0.583	430.619	1.435
8	0.667	492.136	1.024
9	0.750	553.653	0.838
10	0.833	615.171	0.611
11	0.917	676.688	0.457
12	1.000	738.205	0.330
13	1.083	799.722	0.310
14	1.167	861.239	0.156
		Sum = 100.000	Sum= 50.381

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

Unit Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr)		Effective (In/Hr)
			Max	Low	
1	0.08	0.162	(0.187)	0.146	0.016
2	0.17	0.194	(0.187)	0.175	0.019
3	0.25	0.194	(0.187)	0.175	0.019
4	0.33	0.194	(0.187)	0.175	0.019
5	0.42	0.194	(0.187)	0.175	0.019
6	0.50	0.227	0.187	(0.204)	0.040
7	0.58	0.227	0.187	(0.204)	0.040
8	0.67	0.227	0.187	(0.204)	0.040
9	0.75	0.227	0.187	(0.204)	0.040
10	0.83	0.227	0.187	(0.204)	0.040
11	0.92	0.227	0.187	(0.204)	0.040
12	1.00	0.259	0.187	(0.233)	0.072
13	1.08	0.259	0.187	(0.233)	0.072
14	1.17	0.259	0.187	(0.233)	0.072
15	1.25	0.259	0.187	(0.233)	0.072
16	1.33	0.259	0.187	(0.233)	0.072
17	1.42	0.259	0.187	(0.233)	0.072

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

Hydrograph in 5 Minute intervals ((CFS))

Time (h+m)	Volume Ac.Ft	Q(CFS)	0	17.5	35.0	52.5	70.0
0+ 5	0.0005	0.07	Q				
0+10	0.0030	0.37	Q				
0+15	0.0074	0.64	Q				
0+20	0.0127	0.76	Q				
0+25	0.0184	0.83	Q				
0+30	0.0250	0.96	Q				
0+35	0.0343	1.35	Q				
0+40	0.0456	1.64	Q				
0+45	0.0577	1.76	VQ				
0+50	0.0703	1.83	VQ				
0+55	0.0833	1.88	VQ				
1+ 0	0.0975	2.06	VQ				
1+ 5	0.1158	2.66	VQ				
1+10	0.1371	3.10	VQ				
1+15	0.1597	3.28	VQ				
1+20	0.1830	3.39	Q				
1+25	0.2069	3.46	Q				
1+30	0.2311	3.51	VQ				
1+35	0.2555	3.55	VQ				
1+40	0.2802	3.58	VQ				
1+45	0.3049	3.60	VQ				
1+50	0.3298	3.61	VQ				
1+55	0.3547	3.62	Q				
2+ 0	0.3807	3.77	Q				
2+ 5	0.4097	4.21	Q				
2+10	0.4386	4.20	Q				
2+15	0.4697	4.51	Q				
2+20	0.5033	4.87	QV				
2+25	0.5378	5.00	QV				
2+30	0.5728	5.08	QV				
2+35	0.6081	5.14	QV				
2+40	0.6438	5.18	QV				
2+45	0.6806	5.34	QV				
2+50	0.7215	5.94	QV				
2+55	0.7654	6.38	QV				
3+ 0	0.8105	6.56	QV				
3+ 5	0.8564	6.66	Q V				
3+10	0.9037	6.87	Q V				
3+15	0.9553	7.49	QV				
3+20	1.0101	7.95	Q V				
3+25	1.0671	8.28	Q V				
3+30	1.1299	9.11	QV				
3+35	1.2011	10.33	Q V				
3+40	1.2806	11.55	QV				
3+45	1.3662	12.42	QV				
3+50	1.4581	13.35	QV				
3+55	1.5556	14.15	QV				
4+ 0	1.6592	15.05	QV				
4+ 5	1.7682	15.83	QV				
4+10	1.8843	16.86	Q V				
4+15	2.0097	18.21	QV				
4+20	2.1451	19.65	QV				
4+25	2.2908	21.16	QV				
4+30	2.4463	22.57	Q V				
4+35	2.6085	23.57	Q V				
4+40	2.7788	24.72	Q V				

4+45	2.9589	26.15			Q	V				
4+50	3.1485	27.52			Q	V				
4+55	3.3448	28.50			Q	V				
5+ 0	3.5490	29.65			Q		V			
5+ 5	3.7669	31.64			Q		V			
5+10	4.0148	36.00			Q		V			
5+15	4.3028	41.81				Q	V			
5+20	4.6277	47.17					QV			
5+25	4.9883	52.36						Q		
5+30	5.3960	59.20							VQ	
5+35	5.8281	72.75							VQ	
5+40	6.1436	45.81					Q		V	
5+45	6.3270	26.62			Q				V	
5+50	6.4405	16.49			Q				V	
5+55	6.5178	11.22		Q					V	
6+ 0	6.5734	8.07		Q					V	
6+ 5	6.6139	5.89		Q					V	
6+10	6.6436	4.32		Q					V	
6+15	6.6648	3.07		Q					V	
6+20	6.6796	2.15		Q					V	
6+25	6.6896	1.45	Q						V	
6+30	6.6961	0.95	Q						V	
6+35	6.6993	0.46	Q						V	
6+40	6.7001	0.12	Q						V	
6+45	6.7004	0.04	Q						V	
6+50	6.7005	0.01	Q						V	
6+55	6.7005	0.01	Q						V	
7+ 0	6.7005	0.00	Q						V	
7+ 5	6.7006	0.00	Q						V	

Unit Hydrograph Analysis

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Study date 09/06/21 File: 1391EXUH24100.out

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

Program License Serial Number 6490

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

English Units used in output format

RAMONA-WEBSTER
EXISTING CONDITION
100 YEAR STORMS
1391EXUH

Drainage Area = 49.99(Ac.) = 0.078 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 49.99(Ac.) = 0.078 Sq. Mi.
Length along longest watercourse = 2083.00(Ft.)
Length along longest watercourse measured to centroid = 1000.00(Ft.)
Length along longest watercourse = 0.395 Mi.
Length along longest watercourse measured to centroid = 0.189 Mi.
Difference in elevation = 14.50(Ft.)
Slope along watercourse = 36.7547 Ft./Mi.
Average Manning's 'N' = 0.030
Lag time = 0.135 Hr.
Lag time = 8.13 Min.
25% of lag time = 2.03 Min.
40% of lag time = 3.25 Min.
Unit time = 5.00 Min.
Duration of storm = 24 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall(In) [2]	Weighting[1*2]
49.99	1.94	96.98

100 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall(In) [2]	Weighting[1*2]
49.99	4.91	245.45

STORM EVENT (YEAR) = 100.00
Area Averaged 2-Year Rainfall = 1.940(In)
Area Averaged 100-Year Rainfall = 4.910(In)

Point rain (area averaged) = 4.910(In)
Areal adjustment factor = 99.99 %
Adjusted average point rain = 4.910(In)

Sub-Area Data:

Area(Ac.) Runoff Index Impervious %
 49.990 85.00 0.000
 Total Area Entered = 49.99(Ac.)

RI	RI	Infil. Rate	Impervious	Adj. Infil. Rate	Area%	F
AMC2	AMC-2	(In/Hr)	(Dec.%)	(In/Hr)	(Dec.)	(In/Hr)
85.0	85.0	0.187	0.000	0.187	1.000	0.187
					Sum (F) =	0.187

Area averaged mean soil loss (F) (In/Hr) = 0.187
 Minimum soil loss rate ((In/Hr)) = 0.094
 (for 24 hour storm duration)
 Soil low loss rate (decimal) = 0.900

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

Unit Hydrograph Data

Unit time period (hrs)	Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	61.517	4.314
2	0.167	123.034	17.642
3	0.250	184.551	13.139
4	0.333	246.068	5.064
5	0.417	307.585	3.025
6	0.500	369.102	2.034
7	0.583	430.619	1.435
8	0.667	492.136	1.024
9	0.750	553.653	0.838
10	0.833	615.171	0.611
11	0.917	676.688	0.457
12	1.000	738.205	0.330
13	1.083	799.722	0.310
14	1.167	861.239	0.156
		Sum = 100.000	Sum= 50.381

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

Unit Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr) Max Low	Effective (In/Hr)
1	0.08	0.039	(0.331) 0.035	0.004
2	0.17	0.039	(0.330) 0.035	0.004
3	0.25	0.039	(0.329) 0.035	0.004
4	0.33	0.059	(0.328) 0.053	0.006
5	0.42	0.059	(0.326) 0.053	0.006
6	0.50	0.059	(0.325) 0.053	0.006
7	0.58	0.059	(0.324) 0.053	0.006
8	0.67	0.059	(0.323) 0.053	0.006
9	0.75	0.059	(0.321) 0.053	0.006
10	0.83	0.079	(0.320) 0.071	0.008
11	0.92	0.079	(0.319) 0.071	0.008
12	1.00	0.079	(0.318) 0.071	0.008
13	1.08	0.059	(0.316) 0.053	0.006
14	1.17	0.059	(0.315) 0.053	0.006
15	1.25	0.059	(0.314) 0.053	0.006
16	1.33	0.059	(0.313) 0.053	0.006
17	1.42	0.059	(0.311) 0.053	0.006
18	1.50	0.059	(0.310) 0.053	0.006

19	1.58	0.10	0.059	(0.309)	0.053	0.006
20	1.67	0.10	0.059	(0.308)	0.053	0.006
21	1.75	0.10	0.059	(0.306)	0.053	0.006
22	1.83	0.13	0.079	(0.305)	0.071	0.008
23	1.92	0.13	0.079	(0.304)	0.071	0.008
24	2.00	0.13	0.079	(0.303)	0.071	0.008
25	2.08	0.13	0.079	(0.301)	0.071	0.008
26	2.17	0.13	0.079	(0.300)	0.071	0.008
27	2.25	0.13	0.079	(0.299)	0.071	0.008
28	2.33	0.13	0.079	(0.298)	0.071	0.008
29	2.42	0.13	0.079	(0.297)	0.071	0.008
30	2.50	0.13	0.079	(0.295)	0.071	0.008
31	2.58	0.17	0.098	(0.294)	0.088	0.010
32	2.67	0.17	0.098	(0.293)	0.088	0.010
33	2.75	0.17	0.098	(0.292)	0.088	0.010
34	2.83	0.17	0.098	(0.291)	0.088	0.010
35	2.92	0.17	0.098	(0.289)	0.088	0.010
36	3.00	0.17	0.098	(0.288)	0.088	0.010
37	3.08	0.17	0.098	(0.287)	0.088	0.010
38	3.17	0.17	0.098	(0.286)	0.088	0.010
39	3.25	0.17	0.098	(0.285)	0.088	0.010
40	3.33	0.17	0.098	(0.283)	0.088	0.010
41	3.42	0.17	0.098	(0.282)	0.088	0.010
42	3.50	0.17	0.098	(0.281)	0.088	0.010
43	3.58	0.17	0.098	(0.280)	0.088	0.010
44	3.67	0.17	0.098	(0.279)	0.088	0.010
45	3.75	0.17	0.098	(0.277)	0.088	0.010
46	3.83	0.20	0.118	(0.276)	0.106	0.012
47	3.92	0.20	0.118	(0.275)	0.106	0.012
48	4.00	0.20	0.118	(0.274)	0.106	0.012
49	4.08	0.20	0.118	(0.273)	0.106	0.012
50	4.17	0.20	0.118	(0.272)	0.106	0.012
51	4.25	0.20	0.118	(0.270)	0.106	0.012
52	4.33	0.23	0.137	(0.269)	0.124	0.014
53	4.42	0.23	0.137	(0.268)	0.124	0.014
54	4.50	0.23	0.137	(0.267)	0.124	0.014
55	4.58	0.23	0.137	(0.266)	0.124	0.014
56	4.67	0.23	0.137	(0.265)	0.124	0.014
57	4.75	0.23	0.137	(0.264)	0.124	0.014
58	4.83	0.27	0.157	(0.262)	0.141	0.016
59	4.92	0.27	0.157	(0.261)	0.141	0.016
60	5.00	0.27	0.157	(0.260)	0.141	0.016
61	5.08	0.20	0.118	(0.259)	0.106	0.012
62	5.17	0.20	0.118	(0.258)	0.106	0.012
63	5.25	0.20	0.118	(0.257)	0.106	0.012
64	5.33	0.23	0.137	(0.256)	0.124	0.014
65	5.42	0.23	0.137	(0.255)	0.124	0.014
66	5.50	0.23	0.137	(0.253)	0.124	0.014
67	5.58	0.27	0.157	(0.252)	0.141	0.016
68	5.67	0.27	0.157	(0.251)	0.141	0.016
69	5.75	0.27	0.157	(0.250)	0.141	0.016
70	5.83	0.27	0.157	(0.249)	0.141	0.016
71	5.92	0.27	0.157	(0.248)	0.141	0.016
72	6.00	0.27	0.157	(0.247)	0.141	0.016
73	6.08	0.30	0.177	(0.246)	0.159	0.018
74	6.17	0.30	0.177	(0.245)	0.159	0.018
75	6.25	0.30	0.177	(0.244)	0.159	0.018
76	6.33	0.30	0.177	(0.242)	0.159	0.018
77	6.42	0.30	0.177	(0.241)	0.159	0.018
78	6.50	0.30	0.177	(0.240)	0.159	0.018
79	6.58	0.33	0.196	(0.239)	0.177	0.020
80	6.67	0.33	0.196	(0.238)	0.177	0.020
81	6.75	0.33	0.196	(0.237)	0.177	0.020
82	6.83	0.33	0.196	(0.236)	0.177	0.020
83	6.92	0.33	0.196	(0.235)	0.177	0.020
84	7.00	0.33	0.196	(0.234)	0.177	0.020

85	7.08	0.33	0.196	(0.233)	0.177	0.020
86	7.17	0.33	0.196	(0.232)	0.177	0.020
87	7.25	0.33	0.196	(0.231)	0.177	0.020
88	7.33	0.37	0.216	(0.230)	0.194	0.022
89	7.42	0.37	0.216	(0.229)	0.194	0.022
90	7.50	0.37	0.216	(0.228)	0.194	0.022
91	7.58	0.40	0.236	(0.226)	0.212	0.024
92	7.67	0.40	0.236	(0.225)	0.212	0.024
93	7.75	0.40	0.236	(0.224)	0.212	0.024
94	7.83	0.43	0.255	0.223	(0.230)	0.032
95	7.92	0.43	0.255	0.222	(0.230)	0.033
96	8.00	0.43	0.255	0.221	(0.230)	0.034
97	8.08	0.50	0.295	0.220	(0.265)	0.074
98	8.17	0.50	0.295	0.219	(0.265)	0.075
99	8.25	0.50	0.295	0.218	(0.265)	0.076
100	8.33	0.50	0.295	0.217	(0.265)	0.077
101	8.42	0.50	0.295	0.216	(0.265)	0.078
102	8.50	0.50	0.295	0.215	(0.265)	0.079
103	8.58	0.53	0.314	0.214	(0.283)	0.100
104	8.67	0.53	0.314	0.213	(0.283)	0.101
105	8.75	0.53	0.314	0.212	(0.283)	0.102
106	8.83	0.57	0.334	0.211	(0.300)	0.123
107	8.92	0.57	0.334	0.210	(0.300)	0.124
108	9.00	0.57	0.334	0.209	(0.300)	0.125
109	9.08	0.63	0.373	0.208	(0.336)	0.165
110	9.17	0.63	0.373	0.207	(0.336)	0.166
111	9.25	0.63	0.373	0.206	(0.336)	0.167
112	9.33	0.67	0.393	0.205	(0.353)	0.188
113	9.42	0.67	0.393	0.204	(0.353)	0.189
114	9.50	0.67	0.393	0.203	(0.353)	0.189
115	9.58	0.70	0.412	0.202	(0.371)	0.210
116	9.67	0.70	0.412	0.201	(0.371)	0.211
117	9.75	0.70	0.412	0.200	(0.371)	0.212
118	9.83	0.73	0.432	0.199	(0.389)	0.233
119	9.92	0.73	0.432	0.198	(0.389)	0.234
120	10.00	0.73	0.432	0.197	(0.389)	0.235
121	10.08	0.50	0.295	0.197	(0.265)	0.098
122	10.17	0.50	0.295	0.196	(0.265)	0.099
123	10.25	0.50	0.295	0.195	(0.265)	0.100
124	10.33	0.50	0.295	0.194	(0.265)	0.101
125	10.42	0.50	0.295	0.193	(0.265)	0.102
126	10.50	0.50	0.295	0.192	(0.265)	0.103
127	10.58	0.67	0.393	0.191	(0.353)	0.202
128	10.67	0.67	0.393	0.190	(0.353)	0.203
129	10.75	0.67	0.393	0.189	(0.353)	0.204
130	10.83	0.67	0.393	0.188	(0.353)	0.205
131	10.92	0.67	0.393	0.187	(0.353)	0.206
132	11.00	0.67	0.393	0.186	(0.353)	0.207
133	11.08	0.63	0.373	0.185	(0.336)	0.188
134	11.17	0.63	0.373	0.184	(0.336)	0.189
135	11.25	0.63	0.373	0.183	(0.336)	0.190
136	11.33	0.63	0.373	0.183	(0.336)	0.191
137	11.42	0.63	0.373	0.182	(0.336)	0.191
138	11.50	0.63	0.373	0.181	(0.336)	0.192
139	11.58	0.57	0.334	0.180	(0.300)	0.154
140	11.67	0.57	0.334	0.179	(0.300)	0.155
141	11.75	0.57	0.334	0.178	(0.300)	0.156
142	11.83	0.60	0.353	0.177	(0.318)	0.176
143	11.92	0.60	0.353	0.176	(0.318)	0.177
144	12.00	0.60	0.353	0.175	(0.318)	0.178
145	12.08	0.83	0.491	0.175	(0.442)	0.316
146	12.17	0.83	0.491	0.174	(0.442)	0.317
147	12.25	0.83	0.491	0.173	(0.442)	0.318
148	12.33	0.87	0.511	0.172	(0.460)	0.339
149	12.42	0.87	0.511	0.171	(0.460)	0.340
150	12.50	0.87	0.511	0.170	(0.460)	0.340

151	12.58	0.93	0.550	0.169	(0.495)	0.380
152	12.67	0.93	0.550	0.169	(0.495)	0.381
153	12.75	0.93	0.550	0.168	(0.495)	0.382
154	12.83	0.97	0.570	0.167	(0.513)	0.403
155	12.92	0.97	0.570	0.166	(0.513)	0.404
156	13.00	0.97	0.570	0.165	(0.513)	0.404
157	13.08	1.13	0.668	0.164	(0.601)	0.503
158	13.17	1.13	0.668	0.163	(0.601)	0.504
159	13.25	1.13	0.668	0.163	(0.601)	0.505
160	13.33	1.13	0.668	0.162	(0.601)	0.506
161	13.42	1.13	0.668	0.161	(0.601)	0.507
162	13.50	1.13	0.668	0.160	(0.601)	0.508
163	13.58	0.77	0.452	0.159	(0.407)	0.292
164	13.67	0.77	0.452	0.159	(0.407)	0.293
165	13.75	0.77	0.452	0.158	(0.407)	0.294
166	13.83	0.77	0.452	0.157	(0.407)	0.295
167	13.92	0.77	0.452	0.156	(0.407)	0.296
168	14.00	0.77	0.452	0.155	(0.407)	0.296
169	14.08	0.90	0.530	0.155	(0.477)	0.376
170	14.17	0.90	0.530	0.154	(0.477)	0.376
171	14.25	0.90	0.530	0.153	(0.477)	0.377
172	14.33	0.87	0.511	0.152	(0.460)	0.358
173	14.42	0.87	0.511	0.151	(0.460)	0.359
174	14.50	0.87	0.511	0.151	(0.460)	0.360
175	14.58	0.87	0.511	0.150	(0.460)	0.361
176	14.67	0.87	0.511	0.149	(0.460)	0.362
177	14.75	0.87	0.511	0.148	(0.460)	0.362
178	14.83	0.83	0.491	0.148	(0.442)	0.343
179	14.92	0.83	0.491	0.147	(0.442)	0.344
180	15.00	0.83	0.491	0.146	(0.442)	0.345
181	15.08	0.80	0.471	0.145	(0.424)	0.326
182	15.17	0.80	0.471	0.145	(0.424)	0.327
183	15.25	0.80	0.471	0.144	(0.424)	0.327
184	15.33	0.77	0.452	0.143	(0.407)	0.309
185	15.42	0.77	0.452	0.142	(0.407)	0.309
186	15.50	0.77	0.452	0.142	(0.407)	0.310
187	15.58	0.63	0.373	0.141	(0.336)	0.232
188	15.67	0.63	0.373	0.140	(0.336)	0.233
189	15.75	0.63	0.373	0.139	(0.336)	0.234
190	15.83	0.63	0.373	0.139	(0.336)	0.234
191	15.92	0.63	0.373	0.138	(0.336)	0.235
192	16.00	0.63	0.373	0.137	(0.336)	0.236
193	16.08	0.13	0.079	(0.137)	0.071	0.008
194	16.17	0.13	0.079	(0.136)	0.071	0.008
195	16.25	0.13	0.079	(0.135)	0.071	0.008
196	16.33	0.13	0.079	(0.135)	0.071	0.008
197	16.42	0.13	0.079	(0.134)	0.071	0.008
198	16.50	0.13	0.079	(0.133)	0.071	0.008
199	16.58	0.10	0.059	(0.132)	0.053	0.006
200	16.67	0.10	0.059	(0.132)	0.053	0.006
201	16.75	0.10	0.059	(0.131)	0.053	0.006
202	16.83	0.10	0.059	(0.130)	0.053	0.006
203	16.92	0.10	0.059	(0.130)	0.053	0.006
204	17.00	0.10	0.059	(0.129)	0.053	0.006
205	17.08	0.17	0.098	(0.129)	0.088	0.010
206	17.17	0.17	0.098	(0.128)	0.088	0.010
207	17.25	0.17	0.098	(0.127)	0.088	0.010
208	17.33	0.17	0.098	(0.127)	0.088	0.010
209	17.42	0.17	0.098	(0.126)	0.088	0.010
210	17.50	0.17	0.098	(0.125)	0.088	0.010
211	17.58	0.17	0.098	(0.125)	0.088	0.010
212	17.67	0.17	0.098	(0.124)	0.088	0.010
213	17.75	0.17	0.098	(0.123)	0.088	0.010
214	17.83	0.13	0.079	(0.123)	0.071	0.008
215	17.92	0.13	0.079	(0.122)	0.071	0.008
216	18.00	0.13	0.079	(0.122)	0.071	0.008

217	18.08	0.13	0.079	(0.121)	0.071	0.008
218	18.17	0.13	0.079	(0.120)	0.071	0.008
219	18.25	0.13	0.079	(0.120)	0.071	0.008
220	18.33	0.13	0.079	(0.119)	0.071	0.008
221	18.42	0.13	0.079	(0.119)	0.071	0.008
222	18.50	0.13	0.079	(0.118)	0.071	0.008
223	18.58	0.10	0.059	(0.118)	0.053	0.006
224	18.67	0.10	0.059	(0.117)	0.053	0.006
225	18.75	0.10	0.059	(0.116)	0.053	0.006
226	18.83	0.07	0.039	(0.116)	0.035	0.004
227	18.92	0.07	0.039	(0.115)	0.035	0.004
228	19.00	0.07	0.039	(0.115)	0.035	0.004
229	19.08	0.10	0.059	(0.114)	0.053	0.006
230	19.17	0.10	0.059	(0.114)	0.053	0.006
231	19.25	0.10	0.059	(0.113)	0.053	0.006
232	19.33	0.13	0.079	(0.113)	0.071	0.008
233	19.42	0.13	0.079	(0.112)	0.071	0.008
234	19.50	0.13	0.079	(0.112)	0.071	0.008
235	19.58	0.10	0.059	(0.111)	0.053	0.006
236	19.67	0.10	0.059	(0.111)	0.053	0.006
237	19.75	0.10	0.059	(0.110)	0.053	0.006
238	19.83	0.07	0.039	(0.110)	0.035	0.004
239	19.92	0.07	0.039	(0.109)	0.035	0.004
240	20.00	0.07	0.039	(0.109)	0.035	0.004
241	20.08	0.10	0.059	(0.108)	0.053	0.006
242	20.17	0.10	0.059	(0.108)	0.053	0.006
243	20.25	0.10	0.059	(0.107)	0.053	0.006
244	20.33	0.10	0.059	(0.107)	0.053	0.006
245	20.42	0.10	0.059	(0.106)	0.053	0.006
246	20.50	0.10	0.059	(0.106)	0.053	0.006
247	20.58	0.10	0.059	(0.105)	0.053	0.006
248	20.67	0.10	0.059	(0.105)	0.053	0.006
249	20.75	0.10	0.059	(0.104)	0.053	0.006
250	20.83	0.07	0.039	(0.104)	0.035	0.004
251	20.92	0.07	0.039	(0.104)	0.035	0.004
252	21.00	0.07	0.039	(0.103)	0.035	0.004
253	21.08	0.10	0.059	(0.103)	0.053	0.006
254	21.17	0.10	0.059	(0.102)	0.053	0.006
255	21.25	0.10	0.059	(0.102)	0.053	0.006
256	21.33	0.07	0.039	(0.102)	0.035	0.004
257	21.42	0.07	0.039	(0.101)	0.035	0.004
258	21.50	0.07	0.039	(0.101)	0.035	0.004
259	21.58	0.10	0.059	(0.100)	0.053	0.006
260	21.67	0.10	0.059	(0.100)	0.053	0.006
261	21.75	0.10	0.059	(0.100)	0.053	0.006
262	21.83	0.07	0.039	(0.099)	0.035	0.004
263	21.92	0.07	0.039	(0.099)	0.035	0.004
264	22.00	0.07	0.039	(0.099)	0.035	0.004
265	22.08	0.10	0.059	(0.098)	0.053	0.006
266	22.17	0.10	0.059	(0.098)	0.053	0.006
267	22.25	0.10	0.059	(0.098)	0.053	0.006
268	22.33	0.07	0.039	(0.097)	0.035	0.004
269	22.42	0.07	0.039	(0.097)	0.035	0.004
270	22.50	0.07	0.039	(0.097)	0.035	0.004
271	22.58	0.07	0.039	(0.097)	0.035	0.004
272	22.67	0.07	0.039	(0.096)	0.035	0.004
273	22.75	0.07	0.039	(0.096)	0.035	0.004
274	22.83	0.07	0.039	(0.096)	0.035	0.004
275	22.92	0.07	0.039	(0.096)	0.035	0.004
276	23.00	0.07	0.039	(0.095)	0.035	0.004
277	23.08	0.07	0.039	(0.095)	0.035	0.004
278	23.17	0.07	0.039	(0.095)	0.035	0.004
279	23.25	0.07	0.039	(0.095)	0.035	0.004
280	23.33	0.07	0.039	(0.095)	0.035	0.004
281	23.42	0.07	0.039	(0.094)	0.035	0.004
282	23.50	0.07	0.039	(0.094)	0.035	0.004

283	23.58	0.07	0.039	(0.094)	0.035	0.004
284	23.67	0.07	0.039	(0.094)	0.035	0.004
285	23.75	0.07	0.039	(0.094)	0.035	0.004
286	23.83	0.07	0.039	(0.094)	0.035	0.004
287	23.92	0.07	0.039	(0.094)	0.035	0.004
288	24.00	0.07	0.039	(0.094)	0.035	0.004

(Loss Rate Not Used)

Sum = 100.0 Sum = 26.1

Flood volume = Effective rainfall 2.17(In)
times area 50.0(Ac.)/[(In)/(Ft.)] = 9.0(Ac.Ft)
Total soil loss = 2.74(In)
Total soil loss = 11.408(Ac.Ft)
Total rainfall = 4.91(In)
Flood volume = 393970.7 Cubic Feet
Total soil loss = 496929.1 Cubic Feet

Peak flow rate of this hydrograph = 27.919(CFS)

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

Hydrograph in 5 Minute intervals ((CFS))

Time(h+m)	Volume Ac.Ft	Q(CFS)	0	7.5	15.0	22.5	30.0
0+ 5	0.0001	0.02	Q				
0+10	0.0007	0.09	Q				
0+15	0.0017	0.14	Q				
0+20	0.0028	0.17	Q				
0+25	0.0043	0.21	Q				
0+30	0.0060	0.25	Q				
0+35	0.0078	0.26	Q				
0+40	0.0097	0.27	Q				
0+45	0.0116	0.28	Q				
0+50	0.0136	0.29	Q				
0+55	0.0159	0.33	Q				
1+ 0	0.0184	0.36	Q				
1+ 5	0.0209	0.36	Q				
1+10	0.0232	0.34	Q				
1+15	0.0254	0.32	Q				
1+20	0.0275	0.31	Q				
1+25	0.0296	0.31	Q				
1+30	0.0317	0.30	Q				
1+35	0.0338	0.30	Q				
1+40	0.0358	0.30	Q				
1+45	0.0379	0.30	Q				
1+50	0.0400	0.31	Q				
1+55	0.0424	0.34	Q				
2+ 0	0.0449	0.37	Q				
2+ 5	0.0475	0.38	Q				
2+10	0.0501	0.38	Q				
2+15	0.0528	0.39	Q				
2+20	0.0555	0.39	Q				
2+25	0.0582	0.39	Q				
2+30	0.0609	0.39	Q				
2+35	0.0636	0.40	Q				
2+40	0.0666	0.44	Q				
2+45	0.0698	0.46	Q				
2+50	0.0731	0.47	Q				
2+55	0.0764	0.48	Q				
3+ 0	0.0797	0.48	Q				
3+ 5	0.0831	0.49	Q				
3+10	0.0865	0.49	Q				
3+15	0.0899	0.49	Q				

3+20	0.0933	0.49	Q				
3+25	0.0967	0.49	Q				
3+30	0.1001	0.49	Q				
3+35	0.1035	0.49	Q				
3+40	0.1069	0.49	Q				
3+45	0.1103	0.49	Q				
3+50	0.1137	0.50	Q				
3+55	0.1175	0.54	Q				
4+ 0	0.1213	0.56	Q				
4+ 5	0.1253	0.57	Q				
4+10	0.1293	0.58	Q				
4+15	0.1333	0.58	Q				
4+20	0.1374	0.60	Q				
4+25	0.1418	0.63	Q				
4+30	0.1463	0.66	Q				
4+35	0.1509	0.67	Q				
4+40	0.1556	0.68	Q				
4+45	0.1603	0.68	Q				
4+50	0.1650	0.69	Q				
4+55	0.1701	0.73	Q				
5+ 0	0.1753	0.76	VQ				
5+ 5	0.1805	0.75	VQ				
5+10	0.1852	0.69	Q				
5+15	0.1897	0.64	Q				
5+20	0.1940	0.63	Q				
5+25	0.1986	0.66	Q				
5+30	0.2033	0.68	Q				
5+35	0.2080	0.69	Q				
5+40	0.2131	0.73	Q				
5+45	0.2183	0.76	VQ				
5+50	0.2236	0.77	VQ				
5+55	0.2289	0.78	IQ				
6+ 0	0.2343	0.78	IQ				
6+ 5	0.2398	0.79	IQ				
6+10	0.2455	0.83	IQ				
6+15	0.2514	0.86	IQ				
6+20	0.2573	0.87	IQ				
6+25	0.2634	0.88	IQ				
6+30	0.2694	0.88	IQ				
6+35	0.2756	0.89	IQ				
6+40	0.2820	0.93	IQ				
6+45	0.2885	0.96	IQ				
6+50	0.2952	0.97	IQ				
6+55	0.3019	0.97	IQ				
7+ 0	0.3087	0.98	IQ				
7+ 5	0.3154	0.98	IQ				
7+10	0.3222	0.98	IQ				
7+15	0.3290	0.99	IQ				
7+20	0.3358	1.00	IQ				
7+25	0.3430	1.03	IQ				
7+30	0.3502	1.06	IQ				
7+35	0.3577	1.08	IQ				
7+40	0.3654	1.12	IQ				
7+45	0.3733	1.15	IQ				
7+50	0.3815	1.20	IQ				
7+55	0.3908	1.36	IQ				
8+ 0	0.4011	1.49	IQ				
8+ 5	0.4132	1.75	IVQ				
8+10	0.4305	2.51	IV Q				
8+15	0.4517	3.09	IV Q				
8+20	0.4748	3.35	I V Q				
8+25	0.4991	3.53	I V Q				
8+30	0.5243	3.66	I V Q				
8+35	0.5509	3.86	I V Q				
8+40	0.5805	4.30	I V Q				
8+45	0.6124	4.64	I V Q				

8+50	0.6462	4.90	V	Q							
8+55	0.6832	5.38	V	Q							
9+ 0	0.7228	5.74	V	Q							
9+ 5	0.7648	6.10	V	Q							
9+10	0.8125	6.93	V	Q							
9+15	0.8645	7.55	V	Q							
9+20	0.9191	7.93	V	Q							
9+25	0.9775	8.47	V	Q							
9+30	1.0386	8.88	V	Q							
9+35	1.1019	9.19	V		Q						
9+40	1.1687	9.70	V		Q						
9+45	1.2382	10.08	V		Q						
9+50	1.3096	10.38	V		Q						
9+55	1.3845	10.87	V		Q	Q					
10+ 0	1.4620	11.25	V		Q	Q					
10+ 5	1.5367	10.86	V		Q	Q					
10+10	1.5958	8.57	V	Q							
10+15	1.6431	6.88	V	Q							
10+20	1.6863	6.27	VQ								
10+25	1.7272	5.94	Q								
10+30	1.7667	5.73	Q								
10+35	1.8081	6.02	VQ								
10+40	1.8610	7.67	V	Q							
10+45	1.9223	8.90	V	Q							
10+50	1.9868	9.37	V		Q						
10+55	2.0533	9.65	V		Q						
11+ 0	2.1211	9.85	V		Q						
11+ 5	2.1894	9.91	V		Q						
11+10	2.2562	9.69	V		Q						
11+15	2.3220	9.56	V	Q							
11+20	2.3879	9.57	V	Q							
11+25	2.4541	9.60	V	Q							
11+30	2.5205	9.64	VQ								
11+35	2.5860	9.52	VQ								
11+40	2.6471	8.87	Q								
11+45	2.7048	8.38	Q								
11+50	2.7619	8.30	QV								
11+55	2.8209	8.56	QV								
12+ 0	2.8813	8.78	QV								
12+ 5	2.9464	9.45		QV							
12+10	3.0286	11.94		V	Q						
12+15	3.1236	13.80		V	Q						
12+20	3.2244	14.63		V	Q						
12+25	3.3307	15.44		V	Q						
12+30	3.4410	16.02		V	Q						
12+35	3.5549	16.53		V		Q					
12+40	3.6752	17.47		V		Q	Q				
12+45	3.8005	18.19		V		Q	Q				
12+50	3.9288	18.64		V		Q	Q				
12+55	4.0613	19.23		V		Q	Q				
13+ 0	4.1968	19.67		V		Q	Q				
13+ 5	4.3370	20.35		V		Q	Q				
13+10	4.4902	22.26		V		Q	Q				
13+15	4.6533	23.67		V		Q	Q				
13+20	4.8204	24.27		V		Q	Q				
13+25	4.9901	26.65			V		Q	Q			
13+30	5.1618	27.92			V		Q	Q			
13+35	5.3284	25.19			V		Q	Q			
13+40	5.4698	20.54			V	Q					
13+45	5.5926	17.83			QV						
13+50	5.7086	16.84			Q	V					
13+55	5.8207	16.28			Q	V					
14+ 0	5.9302	15.91			Q	V					
14+ 5	6.0405	16.01			Q	V					
14+10	6.1591	17.23				Q	V				
14+15	6.2839	18.12				Q	V				

14+20	6.4102	18.34				Q	V		
14+25	6.5354	18.17				Q	V		
14+30	6.6597	18.04				Q	V		
14+35	6.7838	18.03				Q	V		
14+40	6.9082	18.06				Q	V		
14+45	7.0330	18.12				Q	V		
14+50	7.1576	18.09				Q	V		
14+55	7.2802	17.80				Q	V		
15+ 0	7.4014	17.59				Q	V		
15+ 5	7.5216	17.46				Q	V		
15+10	7.6393	17.09				Q	V		
15+15	7.7552	16.83				Q	V		
15+20	7.8698	16.65				Q	V		
15+25	7.9818	16.25				Q	V		
15+30	8.0918	15.98				Q	V		
15+35	8.1988	15.53				Q	V		
15+40	8.2959	14.10				Q	V		
15+45	8.3857	13.04				Q	V		
15+50	8.4727	12.63				Q	V		
15+55	8.5580	12.40				Q	V		
16+ 0	8.6424	12.25				Q	V		
16+ 5	8.7193	11.17			Q	V	V		
16+10	8.7680	7.07		Q			V		
16+15	8.7957	4.01		Q			V		
16+20	8.8150	2.81		Q			V		
16+25	8.8294	2.09		Q			V		
16+30	8.8404	1.60		Q			V		
16+35	8.8490	1.24		Q			V		
16+40	8.8557	0.97		Q			V		
16+45	8.8608	0.75		Q			V		
16+50	8.8650	0.60		Q			V		
16+55	8.8684	0.49		Q			V		
17+ 0	8.8712	0.41		Q			V		
17+ 5	8.8737	0.36		Q			V		
17+10	8.8763	0.39		Q			V		
17+15	8.8794	0.44		Q			V		
17+20	8.8825	0.46		Q			V		
17+25	8.8857	0.47		Q			V		
17+30	8.8890	0.48		Q			V		
17+35	8.8923	0.48		Q			V		
17+40	8.8957	0.48		Q			V		
17+45	8.8990	0.49		Q			V		
17+50	8.9023	0.48		Q			V		
17+55	8.9054	0.45		Q			V		
18+ 0	8.9083	0.42		Q			V		
18+ 5	8.9112	0.42		Q			V		
18+10	8.9140	0.41		Q			V		
18+15	8.9168	0.41		Q			V		
18+20	8.9196	0.40		Q			V		
18+25	8.9224	0.40		Q			V		
18+30	8.9251	0.40		Q			V		
18+35	8.9278	0.39		Q			V		
18+40	8.9302	0.35		Q			V		
18+45	8.9325	0.33		Q			V		
18+50	8.9346	0.31		Q			V		
18+55	8.9365	0.27		Q			V		
19+ 0	8.9381	0.24		Q			V		
19+ 5	8.9397	0.23		Q			V		
19+10	8.9415	0.26		Q			V		
19+15	8.9435	0.28		Q			V		
19+20	8.9455	0.30		Q			V		
19+25	8.9478	0.33		Q			V		
19+30	8.9503	0.36		Q			V		
19+35	8.9528	0.36		Q			V		
19+40	8.9551	0.33		Q			V		
19+45	8.9572	0.31		Q			V		

19+50	8.9593	0.30	Q				V
19+55	8.9611	0.26	Q				V
20+ 0	8.9627	0.23	Q				V
20+ 5	8.9643	0.23	Q				V
20+10	8.9661	0.26	Q				V
20+15	8.9680	0.28	Q				V
20+20	8.9700	0.29	Q				V
20+25	8.9720	0.29	Q				V
20+30	8.9740	0.29	Q				V
20+35	8.9760	0.29	Q				V
20+40	8.9780	0.29	Q				V
20+45	8.9800	0.29	Q				V
20+50	8.9820	0.29	Q				V
20+55	8.9837	0.25	Q				V
21+ 0	8.9853	0.23	Q				V
21+ 5	8.9869	0.23	Q				V
21+10	8.9886	0.26	Q				V
21+15	8.9905	0.28	Q				V
21+20	8.9924	0.28	Q				V
21+25	8.9941	0.24	Q				V
21+30	8.9956	0.22	Q				V
21+35	8.9972	0.22	Q				V
21+40	8.9989	0.25	Q				V
21+45	9.0008	0.27	Q				V
21+50	9.0027	0.27	Q				V
21+55	9.0044	0.24	Q				V
22+ 0	9.0059	0.22	Q				V
22+ 5	9.0074	0.22	Q				V
22+10	9.0091	0.25	Q				V
22+15	9.0110	0.27	Q				V
22+20	9.0129	0.27	Q				V
22+25	9.0146	0.24	Q				V
22+30	9.0161	0.22	Q				V
22+35	9.0176	0.21	Q				V
22+40	9.0190	0.21	Q				V
22+45	9.0204	0.21	Q				V
22+50	9.0218	0.20	Q				V
22+55	9.0232	0.20	Q				V
23+ 0	9.0246	0.20	Q				V
23+ 5	9.0260	0.20	Q				V
23+10	9.0273	0.20	Q				V
23+15	9.0287	0.20	Q				V
23+20	9.0301	0.20	Q				V
23+25	9.0314	0.20	Q				V
23+30	9.0328	0.20	Q				V
23+35	9.0342	0.20	Q				V
23+40	9.0355	0.20	Q				V
23+45	9.0369	0.20	Q				V
23+50	9.0383	0.20	Q				V
23+55	9.0396	0.20	Q				V
24+ 0	9.0410	0.20	Q				V
24+ 5	9.0422	0.18	Q				V
24+10	9.0430	0.11	Q				V
24+15	9.0434	0.06	Q				V
24+20	9.0437	0.04	Q				V
24+25	9.0439	0.03	Q				V
24+30	9.0440	0.02	Q				V
24+35	9.0441	0.01	Q				V
24+40	9.0442	0.01	Q				V
24+45	9.0442	0.01	Q				V
24+50	9.0443	0.00	Q				V
24+55	9.0443	0.00	Q				V
25+ 0	9.0443	0.00	Q				V
25+ 5	9.0443	0.00	Q				V

APPENDIX D
UNIT HYDROGRAPH HYDROLOGY
DEVELOPED CONDITION

PBLA ENGINEERING, INC.

1809 E. Dyer Rd., Suite 301
Santa Ana, CA 92705
(888)714-9642

981 Corporate Center Drive, Suite 150
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(626) 512-4934

1481 Ford Street, Suite 201
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(714) 620-4960

Unit Hydrograph Analysis

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Study date 09/06/21 File: 1391PRUH11100.out

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

Program License Serial Number 6490

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

English Units used in output format

RAMONA - WEBSTER
DEVELOPED CONDITION
AREA 1 - RETAIL - 100 YEAR STORMS
1391PRUH1

Drainage Area = 6.49(Ac.) = 0.010 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 6.49(Ac.) = 0.010 Sq. Mi.
Length along longest watercourse = 1240.00(Ft.)
Length along longest watercourse measured to centroid = 620.00(Ft.)
Length along longest watercourse = 0.235 Mi.
Length along longest watercourse measured to centroid = 0.117 Mi.
Difference in elevation = 11.20(Ft.)
Slope along watercourse = 47.6903 Ft./Mi.
Average Manning's 'N' = 0.015
Lag time = 0.044 Hr.
Lag time = 2.65 Min.
25% of lag time = 0.66 Min.
40% of lag time = 1.06 Min.
Unit time = 5.00 Min.
Duration of storm = 1 Hour(s)
User Entered Base Flow = 0.00 (CFS)

2 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall(In) [2]	Weighting[1*2]
6.49	0.46	2.97

100 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall(In) [2]	Weighting[1*2]
6.49	1.35	8.76

STORM EVENT (YEAR) = 100.00
Area Averaged 2-Year Rainfall = 0.457(In)
Area Averaged 100-Year Rainfall = 1.350(In)

Point rain (area averaged) = 1.350(In)

Areal adjustment factor = 99.99 %
 Adjusted average point rain = 1.350(In)

Sub-Area Data:

Area(Ac.)	Runoff Index	Impervious %
6.490	56.00	0.850
Total Area Entered = 6.49(Ac.)		

RI	RI	Infil. Rate	Impervious	Adj. Infil. Rate	Area%	F
AMC2	AMC-2	(In/Hr)	(Dec.%)	(In/Hr)	(Dec.)	(In/Hr)
56.0	56.0	0.511	0.850	0.120	1.000	0.120
Sum (F) =						0.120

Area averaged mean soil loss (F) (In/Hr) = 0.120
 Minimum soil loss rate ((In/Hr)) = 0.060
 (for 24 hour storm duration)
 Soil low loss rate (decimal) = 0.240

 Slope of intensity-duration curve for a 1 hour storm =0.5000

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

 Unit Hydrograph Data

Unit time period (hrs)	Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	188.804	2.708
2	0.167	377.608	2.888
3	0.250	566.411	0.606
4	0.333	755.215	0.242
5	0.417	944.019	0.097
Sum =	100.000	Sum=	6.541

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

Unit Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr) Max Low	Effective (In/Hr)
1	0.08	4.20	0.680 (0.163)	0.560
2	0.17	4.30	0.697 (0.167)	0.577
3	0.25	5.00	0.810 (0.194)	0.690
4	0.33	5.00	0.810 (0.194)	0.690
5	0.42	5.80	0.940 (0.225)	0.820
6	0.50	6.50	1.053 (0.253)	0.933
7	0.58	7.40	1.199 (0.288)	1.079
8	0.67	8.60	1.393 (0.334)	1.273
9	0.75	12.30	1.992 (0.478)	1.872
10	0.83	29.10	4.714 (1.131)	4.594
11	0.92	6.80	1.102 (0.264)	0.981
12	1.00	5.00	0.810 (0.194)	0.690

(Loss Rate Not Used)
 Sum = 100.0 Sum = 14.8

Flood volume = Effective rainfall 1.23(In)
 times area 6.5(Ac.)/[(In)/(Ft.)] = 0.7(Ac.Ft)
 Total soil loss = 0.12(In)
 Total soil loss = 0.065(Ac.Ft)
 Total rainfall = 1.35(In)
 Flood volume = 28974.4 Cubic Feet
 Total soil loss = 2827.9 Cubic Feet

 Peak flow rate of this hydrograph = 18.980(CFS)

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

Hydrograph in 5 Minute intervals ((CFS))

Time (h+m)	Volume	Ac.Ft	Q(CFS)	0	5.0	10.0	15.0	20.0
0+ 5	0.0105	1.52	V Q					
0+10	0.0324	3.18	V Q					
0+15	0.0590	3.87	V Q					
0+20	0.0890	4.35	V Q					
0+25	0.1222	4.83	V Q					
0+30	0.1604	5.54	V Q					
0+35	0.2041	6.35	Q					
0+40	0.2550	7.40	QV					
0+45	0.3219	9.71	Q					
0+50	0.4526	18.98	V					
0+55	0.5730	17.48	Q					
1+ 0	0.6286	8.07	Q					
1+ 5	0.6553	3.88	Q					
1+10	0.6629	1.10	Q					
1+15	0.6647	0.26	Q					
1+20	0.6652	0.07	Q					

Unit Hydrograph Analysis

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Study date 09/06/21 File: 1391PRUH13100.out

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

Program License Serial Number 6490

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

English Units used in output format

RAMONA - WEBSTER
DEVELOPED CONDITION
AREA 1 - RETAIL - 100 YEAR STORMS
1391PRUH1

Drainage Area = 6.49(Ac.) = 0.010 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 6.49(Ac.) = 0.010 Sq. Mi.
Length along longest watercourse = 1240.00(Ft.)
Length along longest watercourse measured to centroid = 620.00(Ft.)
Length along longest watercourse = 0.235 Mi.
Length along longest watercourse measured to centroid = 0.117 Mi.
Difference in elevation = 11.20(Ft.)
Slope along watercourse = 47.6903 Ft./Mi.
Average Manning's 'N' = 0.015
Lag time = 0.044 Hr.
Lag time = 2.65 Min.
25% of lag time = 0.66 Min.
40% of lag time = 1.06 Min.
Unit time = 5.00 Min.
Duration of storm = 3 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall(In) [2]	Weighting[1*2]
6.49	0.80	5.19

100 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall(In) [2]	Weighting[1*2]
6.49	2.01	13.04

STORM EVENT (YEAR) = 100.00
Area Averaged 2-Year Rainfall = 0.799(In)
Area Averaged 100-Year Rainfall = 2.010(In)

Point rain (area averaged) = 2.010(In)
Areal adjustment factor = 100.00 %

Adjusted average point rain = 2.010(In)

Sub-Area Data:

Area(Ac.) Runoff Index Impervious %
 6.490 56.00 0.850
 Total Area Entered = 6.49(Ac.)

RI	RI	Infil. Rate	Impervious	Adj. Infil. Rate	Area%	F
AMC2	AMC-2	(In/Hr)	(Dec.%)	(In/Hr)	(Dec.)	(In/Hr)
56.0	56.0	0.511	0.850	0.120	1.000	0.120
						Sum (F) = 0.120

Area averaged mean soil loss (F) (In/Hr) = 0.120

Minimum soil loss rate ((In/Hr)) = 0.060

(for 24 hour storm duration)

Soil low loss rate (decimal) = 0.240

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

Unit Hydrograph Data

Unit time period (hrs)	Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	188.804	41.399
2	0.167	377.608	44.156
3	0.250	566.411	9.266
4	0.333	755.215	3.702
5	0.417	944.019	1.478
		Sum = 100.000	Sum= 6.541

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

Unit Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr) Max Low	Effective (In/Hr)
1	0.08	1.30	(0.120) 0.075	0.238
2	0.17	1.30	(0.120) 0.075	0.238
3	0.25	1.10	(0.120) 0.064	0.202
4	0.33	1.50	(0.120) 0.087	0.275
5	0.42	1.50	(0.120) 0.087	0.275
6	0.50	1.80	(0.120) 0.104	0.330
7	0.58	1.50	(0.120) 0.087	0.275
8	0.67	1.80	(0.120) 0.104	0.330
9	0.75	1.80	(0.120) 0.104	0.330
10	0.83	1.50	(0.120) 0.087	0.275
11	0.92	1.60	(0.120) 0.093	0.293
12	1.00	1.80	(0.120) 0.104	0.330
13	1.08	2.20	0.120 (0.127)	0.411
14	1.17	2.20	0.120 (0.127)	0.411
15	1.25	2.20	0.120 (0.127)	0.411
16	1.33	2.00	(0.120) 0.116	0.367
17	1.42	2.60	0.120 (0.151)	0.507
18	1.50	2.70	0.120 (0.156)	0.531
19	1.58	2.40	0.120 (0.139)	0.459
20	1.67	2.70	0.120 (0.156)	0.531
21	1.75	3.30	0.120 (0.191)	0.676
22	1.83	3.10	0.120 (0.179)	0.628
23	1.92	2.90	0.120 (0.168)	0.579
24	2.00	3.00	0.120 (0.174)	0.604
25	2.08	3.10	0.120 (0.179)	0.628
26	2.17	4.20	0.120 (0.243)	0.893

27	2.25	5.00	1.206	0.120	(0.289)	1.086
28	2.33	3.50	0.844	0.120	(0.203)	0.724
29	2.42	6.80	1.640	0.120	(0.394)	1.520
30	2.50	7.30	1.761	0.120	(0.423)	1.641
31	2.58	8.20	1.978	0.120	(0.475)	1.858
32	2.67	5.90	1.423	0.120	(0.342)	1.303
33	2.75	2.00	0.482	(0.120)	0.116	0.367
34	2.83	1.80	0.434	(0.120)	0.104	0.330
35	2.92	1.80	0.434	(0.120)	0.104	0.330
36	3.00	0.60	0.145	(0.120)	0.035	0.110

(Loss Rate Not Used)

Sum = 100.0 Sum = 20.3

Flood volume = Effective rainfall 1.69(In)
times area 6.5(Ac.) / [(In)/(Ft.)] = 0.9(Ac.Ft)
Total soil loss = 0.32(In)
Total soil loss = 0.172(Ac.Ft)
Total rainfall = 2.01(In)
Flood volume = 39839.8 Cubic Feet
Total soil loss = 7511.9 Cubic Feet

Peak flow rate of this hydrograph = 10.976(CFS)

3 - H O U R S T O R M

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

Hydrograph in 5 Minute intervals ((CFS))

Time (h+m)	Volume Ac.Ft	Q(CFS)	0	5.0	10.0	15.0	20.0
0+ 5	0.0044	0.65	VQ				
0+10	0.0136	1.33	V Q				
0+15	0.0231	1.38	VQ				
0+20	0.0337	1.53	V Q				
0+25	0.0457	1.74	V Q				
0+30	0.0589	1.93	VQ				
0+35	0.0724	1.95	Q				
0+40	0.0860	1.98	Q				
0+45	0.1006	2.12	Q				
0+50	0.1144	2.00	Q V				
0+55	0.1274	1.90	Q V				
1+ 0	0.1414	2.02	Q V				
1+ 5	0.1575	2.34	Q V				
1+10	0.1754	2.60	Q V				
1+15	0.1937	2.66	Q V				
1+20	0.2113	2.56	Q V				
1+25	0.2307	2.82	Q V				
1+30	0.2532	3.27	Q V				
1+35	0.2753	3.21	Q V				
1+40	0.2977	3.25	Q V				
1+45	0.3240	3.82	Q V				
1+50	0.3525	4.14	Q V				
1+55	0.3798	3.97	Q V				
2+ 0	0.4067	3.91	Q V				
2+ 5	0.4344	4.01	Q V				
2+10	0.4674	4.80	Q V				
2+15	0.5095	6.11	Q V				
2+20	0.5498	5.85	Q V				
2+25	0.5990	7.15	Q V				
2+30	0.6653	9.63	Q V				
2+35	0.7409	10.98	Q V				
2+40	0.8120	10.33	Q V				
2+45	0.8563	6.43	Q V				
2+50	0.8794	3.35	Q V				
2+55	0.8971	2.56	Q V				

3+ 0	0.9085	1.67	Q				V
3+ 5	0.9129	0.63	Q				V
3+10	0.9141	0.18	Q				V
3+15	0.9145	0.06	Q				V
3+20	0.9146	0.01	Q				V

Unit Hydrograph Analysis

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Study date 09/06/21 File: 1391PRUH16100.out

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

Program License Serial Number 6490

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

English Units used in output format

RAMONA - WEBSTER
DEVELOPED CONDITION
AREA 1 - RETAIL - 100 YER STORMS
1391PRUH1

Drainage Area = 6.49(Ac.) = 0.010 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 6.49(Ac.) = 0.010 Sq. Mi.
Length along longest watercourse = 1240.00(Ft.)
Length along longest watercourse measured to centroid = 620.00(Ft.)
Length along longest watercourse = 0.235 Mi.
Length along longest watercourse measured to centroid = 0.117 Mi.
Difference in elevation = 11.20(Ft.)
Slope along watercourse = 47.6903 Ft./Mi.
Average Manning's 'N' = 0.015
Lag time = 0.044 Hr.
Lag time = 2.65 Min.
25% of lag time = 0.66 Min.
40% of lag time = 1.06 Min.
Unit time = 5.00 Min.
Duration of storm = 6 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall(In) [2]	Weighting[1*2]
6.49	1.11	7.20

100 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall(In) [2]	Weighting[1*2]
6.49	2.70	17.52

STORM EVENT (YEAR) = 100.00
Area Averaged 2-Year Rainfall = 1.110(In)
Area Averaged 100-Year Rainfall = 2.700(In)

Point rain (area averaged) = 2.700(In)

Areal adjustment factor = 100.00 %
 Adjusted average point rain = 2.700(In)

Sub-Area Data:

Area(Ac.)	Runoff Index	Impervious %
6.490	56.00	0.850
Total Area Entered = 6.49(Ac.)		

RI	RI	Infil. Rate	Impervious	Adj. Infil. Rate	Area%	F
AMC2	AMC-2	(In/Hr)	(Dec.%)	(In/Hr)	(Dec.)	(In/Hr)
56.0	56.0	0.511	0.850	0.120	1.000	0.120
Sum (F) =						0.120

Area averaged mean soil loss (F) (In/Hr) = 0.120
 Minimum soil loss rate ((In/Hr)) = 0.060
 (for 24 hour storm duration)
 Soil low loss rate (decimal) = 0.240

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

Unit Hydrograph Data

Unit time period (hrs)	Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	188.804	41.399
2	0.167	377.608	44.156
3	0.250	566.411	9.266
4	0.333	755.215	3.702
5	0.417	944.019	1.478
Sum = 100.000			Sum= 6.541

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

Unit Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr)		Effective (In/Hr)
			Max	Low	
1	0.08	0.50	(0.120)	0.039	0.123
2	0.17	0.60	(0.120)	0.047	0.148
3	0.25	0.60	(0.120)	0.047	0.148
4	0.33	0.60	(0.120)	0.047	0.148
5	0.42	0.60	(0.120)	0.047	0.148
6	0.50	0.70	(0.120)	0.054	0.172
7	0.58	0.70	(0.120)	0.054	0.172
8	0.67	0.70	(0.120)	0.054	0.172
9	0.75	0.70	(0.120)	0.054	0.172
10	0.83	0.70	(0.120)	0.054	0.172
11	0.92	0.70	(0.120)	0.054	0.172
12	1.00	0.80	(0.120)	0.062	0.197
13	1.08	0.80	(0.120)	0.062	0.197
14	1.17	0.80	(0.120)	0.062	0.197
15	1.25	0.80	(0.120)	0.062	0.197
16	1.33	0.80	(0.120)	0.062	0.197
17	1.42	0.80	(0.120)	0.062	0.197
18	1.50	0.80	(0.120)	0.062	0.197
19	1.58	0.80	(0.120)	0.062	0.197
20	1.67	0.80	(0.120)	0.062	0.197
21	1.75	0.80	(0.120)	0.062	0.197
22	1.83	0.80	(0.120)	0.062	0.197
23	1.92	0.80	(0.120)	0.062	0.197
24	2.00	0.90	(0.120)	0.070	0.222
25	2.08	0.80	(0.120)	0.062	0.197

26	2.17	0.90	0.292	(0.120)	0.070	0.222
27	2.25	0.90	0.292	(0.120)	0.070	0.222
28	2.33	0.90	0.292	(0.120)	0.070	0.222
29	2.42	0.90	0.292	(0.120)	0.070	0.222
30	2.50	0.90	0.292	(0.120)	0.070	0.222
31	2.58	0.90	0.292	(0.120)	0.070	0.222
32	2.67	0.90	0.292	(0.120)	0.070	0.222
33	2.75	1.00	0.324	(0.120)	0.078	0.246
34	2.83	1.00	0.324	(0.120)	0.078	0.246
35	2.92	1.00	0.324	(0.120)	0.078	0.246
36	3.00	1.00	0.324	(0.120)	0.078	0.246
37	3.08	1.00	0.324	(0.120)	0.078	0.246
38	3.17	1.10	0.356	(0.120)	0.086	0.271
39	3.25	1.10	0.356	(0.120)	0.086	0.271
40	3.33	1.10	0.356	(0.120)	0.086	0.271
41	3.42	1.20	0.389	(0.120)	0.093	0.295
42	3.50	1.30	0.421	(0.120)	0.101	0.320
43	3.58	1.40	0.454	(0.120)	0.109	0.345
44	3.67	1.40	0.454	(0.120)	0.109	0.345
45	3.75	1.50	0.486	(0.120)	0.117	0.369
46	3.83	1.50	0.486	(0.120)	0.117	0.369
47	3.92	1.60	0.518	0.120 (0.124)		0.398
48	4.00	1.60	0.518	0.120 (0.124)		0.398
49	4.08	1.70	0.551	0.120 (0.132)		0.431
50	4.17	1.80	0.583	0.120 (0.140)		0.463
51	4.25	1.90	0.616	0.120 (0.148)		0.496
52	4.33	2.00	0.648	0.120 (0.156)		0.528
53	4.42	2.10	0.680	0.120 (0.163)		0.560
54	4.50	2.10	0.680	0.120 (0.163)		0.560
55	4.58	2.20	0.713	0.120 (0.171)		0.593
56	4.67	2.30	0.745	0.120 (0.179)		0.625
57	4.75	2.40	0.778	0.120 (0.187)		0.658
58	4.83	2.40	0.778	0.120 (0.187)		0.658
59	4.92	2.50	0.810	0.120 (0.194)		0.690
60	5.00	2.60	0.842	0.120 (0.202)		0.722
61	5.08	3.10	1.004	0.120 (0.241)		0.884
62	5.17	3.60	1.166	0.120 (0.280)		1.046
63	5.25	3.90	1.264	0.120 (0.303)		1.144
64	5.33	4.20	1.361	0.120 (0.327)		1.241
65	5.42	4.70	1.523	0.120 (0.365)		1.403
66	5.50	5.60	1.814	0.120 (0.435)		1.694
67	5.58	1.90	0.616	0.120 (0.148)		0.496
68	5.67	0.90	0.292	(0.120)	0.070	0.222
69	5.75	0.60	0.194	(0.120)	0.047	0.148
70	5.83	0.50	0.162	(0.120)	0.039	0.123
71	5.92	0.30	0.097	(0.120)	0.023	0.074
72	6.00	0.20	0.065	(0.120)	0.016	0.049

(Loss Rate Not Used)

Sum = 100.0 Sum = 26.5

Flood volume = Effective rainfall 2.21(In)
times area 6.5(Ac.) / [(In)/(Ft.)] = 1.2(Ac.Ft)
Total soil loss = 0.49(In)
Total soil loss = 0.267(Ac.Ft)
Total rainfall = 2.70(In)
Flood volume = 51971.8 Cubic Feet
Total soil loss = 11635.3 Cubic Feet

Peak flow rate of this hydrograph = 9.774 (CFS)

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

Hydrograph in 5 Minute intervals ((CFS))

Time(h+m) Volume Ac.Ft Q(CFS) 0 2.5 5.0 7.5 10.0

Time(h+m)	Volume	Ac.Ft	Q(CFS)	0	2.5	5.0	7.5	10.0
0+ 5	0.0023	0.33	VQ					
0+10	0.0075	0.76	V Q					
0+15	0.0137	0.90	V Q					
0+20	0.0202	0.95	V Q					
0+25	0.0269	0.96	V Q					
0+30	0.0340	1.03	V Q					
0+35	0.0416	1.10	V Q					
0+40	0.0493	1.12	V Q					
0+45	0.0571	1.13	V Q					
0+50	0.0648	1.13	V Q					
0+55	0.0726	1.13	V Q					
1+ 0	0.0808	1.19	V Q					
1+ 5	0.0895	1.27	V Q					
1+10	0.0984	1.28	V Q					
1+15	0.1072	1.29	V Q					
1+20	0.1161	1.29	V Q					
1+25	0.1250	1.29	VQ					
1+30	0.1339	1.29	VQ					
1+35	0.1427	1.29	VQ					
1+40	0.1516	1.29	Q					
1+45	0.1605	1.29	Q					
1+50	0.1694	1.29	Q					
1+55	0.1783	1.29	Q					
2+ 0	0.1876	1.36	QV					
2+ 5	0.1970	1.36	QV					
2+10	0.2064	1.37	QV					
2+15	0.2163	1.43	Q V					
2+20	0.2262	1.44	Q V					
2+25	0.2362	1.45	Q V					
2+30	0.2462	1.45	Q V					
2+35	0.2562	1.45	Q V					
2+40	0.2662	1.45	Q V					
2+45	0.2766	1.52	Q V					
2+50	0.2875	1.59	Q V					
2+55	0.2986	1.60	Q V					
3+ 0	0.3097	1.61	Q V					
3+ 5	0.3208	1.61	Q V					
3+10	0.3323	1.68	Q V					
3+15	0.3444	1.75	Q V					
3+20	0.3565	1.76	Q V					
3+25	0.3692	1.84	Q V					
3+30	0.3828	1.98	Q V					
3+35	0.3974	2.13	Q V					
3+40	0.4127	2.22	Q V					
3+45	0.4287	2.31	Q V					
3+50	0.4451	2.39	Q V					
3+55	0.4623	2.49	Q V					
4+ 0	0.4800	2.58	Q V					
4+ 5	0.4985	2.68	Q V					
4+10	0.5183	2.87	Q V					
4+15	0.5395	3.08	Q V					
4+20	0.5621	3.29	Q V					
4+25	0.5862	3.50	Q V					
4+30	0.6112	3.62	Q V					
4+35	0.6369	3.74	Q V					
4+40	0.6640	3.93	Q V					
4+45	0.6925	4.14	Q V					
4+50	0.7218	4.26	Q V					
4+55	0.7520	4.38	Q V					
5+ 0	0.7834	4.57	Q V					
5+ 5	0.8187	5.12	Q V					
5+10	0.8605	6.06	Q V					
5+15	0.9080	6.90	Q V					
5+20	0.9602	7.58	Q V					

5+25	1.0182	8.42					QV	
5+30	1.0855	9.77					V QI	
5+35	1.1371	7.50				Q	V	
5+40	1.1614	3.52			Q		V	
5+45	1.1744	1.89		Q			V	
5+50	1.1825	1.18		Q			V	
5+55	1.1876	0.75		Q			V	
6+ 0	1.1909	0.48		Q			V	
6+ 5	1.1925	0.23	Q				V	
6+10	1.1929	0.06	Q				V	
6+15	1.1931	0.02	Q				V	
6+20	1.1931	0.00	Q				V	

Unit Hydrograph Analysis

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Study date 09/06/21 File: 1391PRUH124100.out

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

Program License Serial Number 6490

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

English Units used in output format

RAMONA - WEBSTER
DEVELOPED CONDITION
AREA 1 - RETAIL - 100 YEAR STORMS
1391PRUH1

Drainage Area = 6.49(Ac.) = 0.010 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 6.49(Ac.) = 0.010 Sq. Mi.
Length along longest watercourse = 1240.00(Ft.)
Length along longest watercourse measured to centroid = 620.00(Ft.)
Length along longest watercourse = 0.235 Mi.
Length along longest watercourse measured to centroid = 0.117 Mi.
Difference in elevation = 11.20(Ft.)
Slope along watercourse = 47.6903 Ft./Mi.
Average Manning's 'N' = 0.015
Lag time = 0.044 Hr.
Lag time = 2.65 Min.
25% of lag time = 0.66 Min.
40% of lag time = 1.06 Min.
Unit time = 5.00 Min.
Duration of storm = 24 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall(In) [2]	Weighting[1*2]
6.49	1.94	12.59

100 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall(In) [2]	Weighting[1*2]
6.49	4.91	31.87

STORM EVENT (YEAR) = 100.00
Area Averaged 2-Year Rainfall = 1.940(In)
Area Averaged 100-Year Rainfall = 4.910(In)

Point rain (area averaged) = 4.910(In)
Areal adjustment factor = 100.00 %
Adjusted average point rain = 4.910(In)

Sub-Area Data:

Area(Ac.) Runoff Index Impervious %
 6.490 56.00 0.850
 Total Area Entered = 6.49(Ac.)

RI	RI	Infil. Rate	Impervious	Adj. Infil. Rate	Area%	F
AMC2	AMC-2	(In/Hr)	(Dec.%)	(In/Hr)	(Dec.)	(In/Hr)
56.0	56.0	0.511	0.850	0.120	1.000	0.120
						Sum (F) = 0.120

Area averaged mean soil loss (F) (In/Hr) = 0.120
 Minimum soil loss rate ((In/Hr)) = 0.060
 (for 24 hour storm duration)
 Soil low loss rate (decimal) = 0.240

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

Unit Hydrograph Data

Unit time period (hrs)	Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	188.804	41.399
2	0.167	377.608	44.156
3	0.250	566.411	9.266
4	0.333	755.215	3.702
5	0.417	944.019	1.478
Sum = 100.000			Sum= 6.541

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

Unit Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr)		Effective (In/Hr)
			Max	Low	
1	0.08	0.07	(0.213)	0.009	0.030
2	0.17	0.07	(0.212)	0.009	0.030
3	0.25	0.07	(0.211)	0.009	0.030
4	0.33	0.10	(0.210)	0.014	0.045
5	0.42	0.10	(0.210)	0.014	0.045
6	0.50	0.10	(0.209)	0.014	0.045
7	0.58	0.10	(0.208)	0.014	0.045
8	0.67	0.10	(0.207)	0.014	0.045
9	0.75	0.10	(0.206)	0.014	0.045
10	0.83	0.13	(0.205)	0.019	0.060
11	0.92	0.13	(0.205)	0.019	0.060
12	1.00	0.13	(0.204)	0.019	0.060
13	1.08	0.10	(0.203)	0.014	0.045
14	1.17	0.10	(0.202)	0.014	0.045
15	1.25	0.10	(0.201)	0.014	0.045
16	1.33	0.10	(0.201)	0.014	0.045
17	1.42	0.10	(0.200)	0.014	0.045
18	1.50	0.10	(0.199)	0.014	0.045
19	1.58	0.10	(0.198)	0.014	0.045
20	1.67	0.10	(0.197)	0.014	0.045
21	1.75	0.10	(0.197)	0.014	0.045
22	1.83	0.13	(0.196)	0.019	0.060
23	1.92	0.13	(0.195)	0.019	0.060
24	2.00	0.13	(0.194)	0.019	0.060
25	2.08	0.13	(0.193)	0.019	0.060
26	2.17	0.13	(0.193)	0.019	0.060
27	2.25	0.13	(0.192)	0.019	0.060

28	2.33	0.13	0.079	(0.191)	0.019	0.060
29	2.42	0.13	0.079	(0.190)	0.019	0.060
30	2.50	0.13	0.079	(0.190)	0.019	0.060
31	2.58	0.17	0.098	(0.189)	0.024	0.075
32	2.67	0.17	0.098	(0.188)	0.024	0.075
33	2.75	0.17	0.098	(0.187)	0.024	0.075
34	2.83	0.17	0.098	(0.186)	0.024	0.075
35	2.92	0.17	0.098	(0.186)	0.024	0.075
36	3.00	0.17	0.098	(0.185)	0.024	0.075
37	3.08	0.17	0.098	(0.184)	0.024	0.075
38	3.17	0.17	0.098	(0.183)	0.024	0.075
39	3.25	0.17	0.098	(0.183)	0.024	0.075
40	3.33	0.17	0.098	(0.182)	0.024	0.075
41	3.42	0.17	0.098	(0.181)	0.024	0.075
42	3.50	0.17	0.098	(0.180)	0.024	0.075
43	3.58	0.17	0.098	(0.180)	0.024	0.075
44	3.67	0.17	0.098	(0.179)	0.024	0.075
45	3.75	0.17	0.098	(0.178)	0.024	0.075
46	3.83	0.20	0.118	(0.177)	0.028	0.090
47	3.92	0.20	0.118	(0.177)	0.028	0.090
48	4.00	0.20	0.118	(0.176)	0.028	0.090
49	4.08	0.20	0.118	(0.175)	0.028	0.090
50	4.17	0.20	0.118	(0.174)	0.028	0.090
51	4.25	0.20	0.118	(0.174)	0.028	0.090
52	4.33	0.23	0.137	(0.173)	0.033	0.104
53	4.42	0.23	0.137	(0.172)	0.033	0.104
54	4.50	0.23	0.137	(0.171)	0.033	0.104
55	4.58	0.23	0.137	(0.171)	0.033	0.104
56	4.67	0.23	0.137	(0.170)	0.033	0.104
57	4.75	0.23	0.137	(0.169)	0.033	0.104
58	4.83	0.27	0.157	(0.168)	0.038	0.119
59	4.92	0.27	0.157	(0.168)	0.038	0.119
60	5.00	0.27	0.157	(0.167)	0.038	0.119
61	5.08	0.20	0.118	(0.166)	0.028	0.090
62	5.17	0.20	0.118	(0.166)	0.028	0.090
63	5.25	0.20	0.118	(0.165)	0.028	0.090
64	5.33	0.23	0.137	(0.164)	0.033	0.104
65	5.42	0.23	0.137	(0.163)	0.033	0.104
66	5.50	0.23	0.137	(0.163)	0.033	0.104
67	5.58	0.27	0.157	(0.162)	0.038	0.119
68	5.67	0.27	0.157	(0.161)	0.038	0.119
69	5.75	0.27	0.157	(0.161)	0.038	0.119
70	5.83	0.27	0.157	(0.160)	0.038	0.119
71	5.92	0.27	0.157	(0.159)	0.038	0.119
72	6.00	0.27	0.157	(0.158)	0.038	0.119
73	6.08	0.30	0.177	(0.158)	0.042	0.134
74	6.17	0.30	0.177	(0.157)	0.042	0.134
75	6.25	0.30	0.177	(0.156)	0.042	0.134
76	6.33	0.30	0.177	(0.156)	0.042	0.134
77	6.42	0.30	0.177	(0.155)	0.042	0.134
78	6.50	0.30	0.177	(0.154)	0.042	0.134
79	6.58	0.33	0.196	(0.154)	0.047	0.149
80	6.67	0.33	0.196	(0.153)	0.047	0.149
81	6.75	0.33	0.196	(0.152)	0.047	0.149
82	6.83	0.33	0.196	(0.151)	0.047	0.149
83	6.92	0.33	0.196	(0.151)	0.047	0.149
84	7.00	0.33	0.196	(0.150)	0.047	0.149
85	7.08	0.33	0.196	(0.149)	0.047	0.149
86	7.17	0.33	0.196	(0.149)	0.047	0.149
87	7.25	0.33	0.196	(0.148)	0.047	0.149
88	7.33	0.37	0.216	(0.147)	0.052	0.164
89	7.42	0.37	0.216	(0.147)	0.052	0.164
90	7.50	0.37	0.216	(0.146)	0.052	0.164
91	7.58	0.40	0.236	(0.145)	0.057	0.179
92	7.67	0.40	0.236	(0.145)	0.057	0.179
93	7.75	0.40	0.236	(0.144)	0.057	0.179

94	7.83	0.43	0.255	(0.143)	0.061	0.194
95	7.92	0.43	0.255	(0.143)	0.061	0.194
96	8.00	0.43	0.255	(0.142)	0.061	0.194
97	8.08	0.50	0.295	(0.141)	0.071	0.224
98	8.17	0.50	0.295	(0.141)	0.071	0.224
99	8.25	0.50	0.295	(0.140)	0.071	0.224
100	8.33	0.50	0.295	(0.139)	0.071	0.224
101	8.42	0.50	0.295	(0.139)	0.071	0.224
102	8.50	0.50	0.295	(0.138)	0.071	0.224
103	8.58	0.53	0.314	(0.137)	0.075	0.239
104	8.67	0.53	0.314	(0.137)	0.075	0.239
105	8.75	0.53	0.314	(0.136)	0.075	0.239
106	8.83	0.57	0.334	(0.136)	0.080	0.254
107	8.92	0.57	0.334	(0.135)	0.080	0.254
108	9.00	0.57	0.334	(0.134)	0.080	0.254
109	9.08	0.63	0.373	(0.134)	0.090	0.284
110	9.17	0.63	0.373	(0.133)	0.090	0.284
111	9.25	0.63	0.373	(0.132)	0.090	0.284
112	9.33	0.67	0.393	(0.132)	0.094	0.299
113	9.42	0.67	0.393	(0.131)	0.094	0.299
114	9.50	0.67	0.393	(0.130)	0.094	0.299
115	9.58	0.70	0.412	(0.130)	0.099	0.313
116	9.67	0.70	0.412	(0.129)	0.099	0.313
117	9.75	0.70	0.412	(0.129)	0.099	0.313
118	9.83	0.73	0.432	(0.128)	0.104	0.328
119	9.92	0.73	0.432	(0.127)	0.104	0.328
120	10.00	0.73	0.432	(0.127)	0.104	0.328
121	10.08	0.50	0.295	(0.126)	0.071	0.224
122	10.17	0.50	0.295	(0.126)	0.071	0.224
123	10.25	0.50	0.295	(0.125)	0.071	0.224
124	10.33	0.50	0.295	(0.124)	0.071	0.224
125	10.42	0.50	0.295	(0.124)	0.071	0.224
126	10.50	0.50	0.295	(0.123)	0.071	0.224
127	10.58	0.67	0.393	(0.123)	0.094	0.299
128	10.67	0.67	0.393	(0.122)	0.094	0.299
129	10.75	0.67	0.393	(0.121)	0.094	0.299
130	10.83	0.67	0.393	(0.121)	0.094	0.299
131	10.92	0.67	0.393	(0.120)	0.094	0.299
132	11.00	0.67	0.393	(0.120)	0.094	0.299
133	11.08	0.63	0.373	(0.119)	0.090	0.284
134	11.17	0.63	0.373	(0.118)	0.090	0.284
135	11.25	0.63	0.373	(0.118)	0.090	0.284
136	11.33	0.63	0.373	(0.117)	0.090	0.284
137	11.42	0.63	0.373	(0.117)	0.090	0.284
138	11.50	0.63	0.373	(0.116)	0.090	0.284
139	11.58	0.57	0.334	(0.115)	0.080	0.254
140	11.67	0.57	0.334	(0.115)	0.080	0.254
141	11.75	0.57	0.334	(0.114)	0.080	0.254
142	11.83	0.60	0.354	(0.114)	0.085	0.269
143	11.92	0.60	0.354	(0.113)	0.085	0.269
144	12.00	0.60	0.354	(0.113)	0.085	0.269
145	12.08	0.83	0.491	0.112	(0.118)	0.379
146	12.17	0.83	0.491	0.111	(0.118)	0.380
147	12.25	0.83	0.491	0.111	(0.118)	0.380
148	12.33	0.87	0.511	0.110	(0.123)	0.400
149	12.42	0.87	0.511	0.110	(0.123)	0.401
150	12.50	0.87	0.511	0.109	(0.123)	0.401
151	12.58	0.93	0.550	0.109	(0.132)	0.441
152	12.67	0.93	0.550	0.108	(0.132)	0.442
153	12.75	0.93	0.550	0.108	(0.132)	0.442
154	12.83	0.97	0.570	0.107	(0.137)	0.462
155	12.92	0.97	0.570	0.107	(0.137)	0.463
156	13.00	0.97	0.570	0.106	(0.137)	0.464
157	13.08	1.13	0.668	0.105	(0.160)	0.562
158	13.17	1.13	0.668	0.105	(0.160)	0.563
159	13.25	1.13	0.668	0.104	(0.160)	0.563

160	13.33	1.13	0.668	0.104	(0.160)	0.564
161	13.42	1.13	0.668	0.103	(0.160)	0.564
162	13.50	1.13	0.668	0.103	(0.160)	0.565
163	13.58	0.77	0.452	0.102	(0.108)	0.349
164	13.67	0.77	0.452	0.102	(0.108)	0.350
165	13.75	0.77	0.452	0.101	(0.108)	0.350
166	13.83	0.77	0.452	0.101	(0.108)	0.351
167	13.92	0.77	0.452	0.100	(0.108)	0.351
168	14.00	0.77	0.452	0.100	(0.108)	0.352
169	14.08	0.90	0.530	0.099	(0.127)	0.431
170	14.17	0.90	0.530	0.099	(0.127)	0.432
171	14.25	0.90	0.530	0.098	(0.127)	0.432
172	14.33	0.87	0.511	0.098	(0.123)	0.413
173	14.42	0.87	0.511	0.097	(0.123)	0.413
174	14.50	0.87	0.511	0.097	(0.123)	0.414
175	14.58	0.87	0.511	0.096	(0.123)	0.414
176	14.67	0.87	0.511	0.096	(0.123)	0.415
177	14.75	0.87	0.511	0.095	(0.123)	0.415
178	14.83	0.83	0.491	0.095	(0.118)	0.396
179	14.92	0.83	0.491	0.094	(0.118)	0.397
180	15.00	0.83	0.491	0.094	(0.118)	0.397
181	15.08	0.80	0.471	0.093	(0.113)	0.378
182	15.17	0.80	0.471	0.093	(0.113)	0.379
183	15.25	0.80	0.471	0.092	(0.113)	0.379
184	15.33	0.77	0.452	0.092	(0.108)	0.360
185	15.42	0.77	0.452	0.091	(0.108)	0.360
186	15.50	0.77	0.452	0.091	(0.108)	0.361
187	15.58	0.63	0.373	(0.090)	0.090	0.284
188	15.67	0.63	0.373	(0.090)	0.090	0.284
189	15.75	0.63	0.373	0.090	(0.090)	0.284
190	15.83	0.63	0.373	0.089	(0.090)	0.284
191	15.92	0.63	0.373	0.089	(0.090)	0.285
192	16.00	0.63	0.373	0.088	(0.090)	0.285
193	16.08	0.13	0.079	(0.088)	0.019	0.060
194	16.17	0.13	0.079	(0.087)	0.019	0.060
195	16.25	0.13	0.079	(0.087)	0.019	0.060
196	16.33	0.13	0.079	(0.086)	0.019	0.060
197	16.42	0.13	0.079	(0.086)	0.019	0.060
198	16.50	0.13	0.079	(0.085)	0.019	0.060
199	16.58	0.10	0.059	(0.085)	0.014	0.045
200	16.67	0.10	0.059	(0.085)	0.014	0.045
201	16.75	0.10	0.059	(0.084)	0.014	0.045
202	16.83	0.10	0.059	(0.084)	0.014	0.045
203	16.92	0.10	0.059	(0.083)	0.014	0.045
204	17.00	0.10	0.059	(0.083)	0.014	0.045
205	17.08	0.17	0.098	(0.082)	0.024	0.075
206	17.17	0.17	0.098	(0.082)	0.024	0.075
207	17.25	0.17	0.098	(0.082)	0.024	0.075
208	17.33	0.17	0.098	(0.081)	0.024	0.075
209	17.42	0.17	0.098	(0.081)	0.024	0.075
210	17.50	0.17	0.098	(0.080)	0.024	0.075
211	17.58	0.17	0.098	(0.080)	0.024	0.075
212	17.67	0.17	0.098	(0.080)	0.024	0.075
213	17.75	0.17	0.098	(0.079)	0.024	0.075
214	17.83	0.13	0.079	(0.079)	0.019	0.060
215	17.92	0.13	0.079	(0.078)	0.019	0.060
216	18.00	0.13	0.079	(0.078)	0.019	0.060
217	18.08	0.13	0.079	(0.078)	0.019	0.060
218	18.17	0.13	0.079	(0.077)	0.019	0.060
219	18.25	0.13	0.079	(0.077)	0.019	0.060
220	18.33	0.13	0.079	(0.077)	0.019	0.060
221	18.42	0.13	0.079	(0.076)	0.019	0.060
222	18.50	0.13	0.079	(0.076)	0.019	0.060
223	18.58	0.10	0.059	(0.075)	0.014	0.045
224	18.67	0.10	0.059	(0.075)	0.014	0.045
225	18.75	0.10	0.059	(0.075)	0.014	0.045

226	18.83	0.07	0.039	(0.074)	0.009	0.030
227	18.92	0.07	0.039	(0.074)	0.009	0.030
228	19.00	0.07	0.039	(0.074)	0.009	0.030
229	19.08	0.10	0.059	(0.073)	0.014	0.045
230	19.17	0.10	0.059	(0.073)	0.014	0.045
231	19.25	0.10	0.059	(0.073)	0.014	0.045
232	19.33	0.13	0.079	(0.072)	0.019	0.060
233	19.42	0.13	0.079	(0.072)	0.019	0.060
234	19.50	0.13	0.079	(0.072)	0.019	0.060
235	19.58	0.10	0.059	(0.071)	0.014	0.045
236	19.67	0.10	0.059	(0.071)	0.014	0.045
237	19.75	0.10	0.059	(0.071)	0.014	0.045
238	19.83	0.07	0.039	(0.070)	0.009	0.030
239	19.92	0.07	0.039	(0.070)	0.009	0.030
240	20.00	0.07	0.039	(0.070)	0.009	0.030
241	20.08	0.10	0.059	(0.069)	0.014	0.045
242	20.17	0.10	0.059	(0.069)	0.014	0.045
243	20.25	0.10	0.059	(0.069)	0.014	0.045
244	20.33	0.10	0.059	(0.068)	0.014	0.045
245	20.42	0.10	0.059	(0.068)	0.014	0.045
246	20.50	0.10	0.059	(0.068)	0.014	0.045
247	20.58	0.10	0.059	(0.068)	0.014	0.045
248	20.67	0.10	0.059	(0.067)	0.014	0.045
249	20.75	0.10	0.059	(0.067)	0.014	0.045
250	20.83	0.07	0.039	(0.067)	0.009	0.030
251	20.92	0.07	0.039	(0.067)	0.009	0.030
252	21.00	0.07	0.039	(0.066)	0.009	0.030
253	21.08	0.10	0.059	(0.066)	0.014	0.045
254	21.17	0.10	0.059	(0.066)	0.014	0.045
255	21.25	0.10	0.059	(0.065)	0.014	0.045
256	21.33	0.07	0.039	(0.065)	0.009	0.030
257	21.42	0.07	0.039	(0.065)	0.009	0.030
258	21.50	0.07	0.039	(0.065)	0.009	0.030
259	21.58	0.10	0.059	(0.065)	0.014	0.045
260	21.67	0.10	0.059	(0.064)	0.014	0.045
261	21.75	0.10	0.059	(0.064)	0.014	0.045
262	21.83	0.07	0.039	(0.064)	0.009	0.030
263	21.92	0.07	0.039	(0.064)	0.009	0.030
264	22.00	0.07	0.039	(0.063)	0.009	0.030
265	22.08	0.10	0.059	(0.063)	0.014	0.045
266	22.17	0.10	0.059	(0.063)	0.014	0.045
267	22.25	0.10	0.059	(0.063)	0.014	0.045
268	22.33	0.07	0.039	(0.063)	0.009	0.030
269	22.42	0.07	0.039	(0.062)	0.009	0.030
270	22.50	0.07	0.039	(0.062)	0.009	0.030
271	22.58	0.07	0.039	(0.062)	0.009	0.030
272	22.67	0.07	0.039	(0.062)	0.009	0.030
273	22.75	0.07	0.039	(0.062)	0.009	0.030
274	22.83	0.07	0.039	(0.062)	0.009	0.030
275	22.92	0.07	0.039	(0.061)	0.009	0.030
276	23.00	0.07	0.039	(0.061)	0.009	0.030
277	23.08	0.07	0.039	(0.061)	0.009	0.030
278	23.17	0.07	0.039	(0.061)	0.009	0.030
279	23.25	0.07	0.039	(0.061)	0.009	0.030
280	23.33	0.07	0.039	(0.061)	0.009	0.030
281	23.42	0.07	0.039	(0.061)	0.009	0.030
282	23.50	0.07	0.039	(0.060)	0.009	0.030
283	23.58	0.07	0.039	(0.060)	0.009	0.030
284	23.67	0.07	0.039	(0.060)	0.009	0.030
285	23.75	0.07	0.039	(0.060)	0.009	0.030
286	23.83	0.07	0.039	(0.060)	0.009	0.030
287	23.92	0.07	0.039	(0.060)	0.009	0.030
288	24.00	0.07	0.039	(0.060)	0.009	0.030

(Loss Rate Not Used)

Sum = 100.0

Sum = 45.8

Flood volume = Effective rainfall 3.82(In)

times area 6.5(Ac.)/[(In)/(Ft.)] = 2.1(Ac.Ft)
 Total soil loss = 1.09(In)
 Total soil loss = 0.591(Ac.Ft)
 Total rainfall = 4.91(In)
 Flood volume = 89929.7 Cubic Feet
 Total soil loss = 25742.1 Cubic Feet

 Peak flow rate of this hydrograph = 3.694(CFS)

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

 Hydrograph in 5 Minute intervals ((CFS))

Time(h+m)	Volume Ac.Ft	Q(CFS)	0	2.5	5.0	7.5	10.0
0+ 5	0.0006	0.08	Q				
0+10	0.0017	0.17	Q				
0+15	0.0030	0.19	Q				
0+20	0.0046	0.23	Q				
0+25	0.0065	0.28	VQ				
0+30	0.0085	0.29	VQ				
0+35	0.0105	0.29	VQ				
0+40	0.0125	0.29	VQ				
0+45	0.0145	0.29	VQ				
0+50	0.0168	0.33	VQ				
0+55	0.0194	0.38	VQ				
1+ 0	0.0221	0.39	VQ				
1+ 5	0.0245	0.35	VQ				
1+10	0.0266	0.31	VQ				
1+15	0.0287	0.30	VQ				
1+20	0.0307	0.29	VQ				
1+25	0.0327	0.29	VQ				
1+30	0.0347	0.29	VQ				
1+35	0.0367	0.29	VQ				
1+40	0.0388	0.29	VQ				
1+45	0.0408	0.29	VQ				
1+50	0.0431	0.33	VQ				
1+55	0.0457	0.38	VQ				
2+ 0	0.0483	0.39	VQ				
2+ 5	0.0510	0.39	VQ				
2+10	0.0537	0.39	IQ				
2+15	0.0564	0.39	IQ				
2+20	0.0591	0.39	IQ				
2+25	0.0618	0.39	IQ				
2+30	0.0645	0.39	IQ				
2+35	0.0674	0.43	IQ				
2+40	0.0707	0.47	IQ				
2+45	0.0740	0.48	IQ				
2+50	0.0774	0.49	IQ				
2+55	0.0807	0.49	IQ				
3+ 0	0.0841	0.49	IQ				
3+ 5	0.0875	0.49	IQ				
3+10	0.0908	0.49	IQ				
3+15	0.0942	0.49	IQ				
3+20	0.0976	0.49	IQ				
3+25	0.1009	0.49	IQ				
3+30	0.1043	0.49	IQV				
3+35	0.1076	0.49	IQV				
3+40	0.1110	0.49	IQV				
3+45	0.1144	0.49	IQV				
3+50	0.1180	0.53	I Q				
3+55	0.1220	0.57	I Q				
4+ 0	0.1260	0.58	I Q				

4+ 5	0.1300	0.58	Q					
4+10	0.1340	0.59	Q					
4+15	0.1381	0.59	Q					
4+20	0.1424	0.63	Q					
4+25	0.1470	0.67	Q					
4+30	0.1517	0.68	Q					
4+35	0.1564	0.68	QV					
4+40	0.1611	0.68	QV					
4+45	0.1658	0.68	QV					
4+50	0.1708	0.72	QV					
4+55	0.1760	0.77	Q					
5+ 0	0.1814	0.78	Q					
5+ 5	0.1862	0.70	QV					
5+10	0.1904	0.61	QV					
5+15	0.1945	0.60	QV					
5+20	0.1989	0.63	QV					
5+25	0.2035	0.67	QV					
5+30	0.2082	0.68	Q V					
5+35	0.2131	0.72	Q V					
5+40	0.2184	0.77	QV					
5+45	0.2238	0.78	QV					
5+50	0.2291	0.78	QV					
5+55	0.2345	0.78	QV					
6+ 0	0.2399	0.78	QV					
6+ 5	0.2456	0.82	QV					
6+10	0.2515	0.86	QV					
6+15	0.2575	0.87	QV					
6+20	0.2636	0.88	Q V					
6+25	0.2696	0.88	Q V					
6+30	0.2757	0.88	Q V					
6+35	0.2820	0.92	Q V					
6+40	0.2887	0.96	Q V					
6+45	0.2954	0.97	Q V					
6+50	0.3021	0.98	Q V					
6+55	0.3088	0.98	Q V					
7+ 0	0.3155	0.98	Q V					
7+ 5	0.3223	0.98	Q V					
7+10	0.3290	0.98	Q V					
7+15	0.3357	0.98	Q V					
7+20	0.3427	1.02	Q V					
7+25	0.3500	1.06	Q V					
7+30	0.3574	1.07	Q V					
7+35	0.3650	1.11	Q V					
7+40	0.3730	1.16	Q V					
7+45	0.3811	1.17	Q V					
7+50	0.3894	1.21	Q V					
7+55	0.3980	1.26	Q V					
8+ 0	0.4068	1.26	Q V					
8+ 5	0.4161	1.35	Q V					
8+10	0.4259	1.44	Q V					
8+15	0.4360	1.46	Q V					
8+20	0.4460	1.46	Q V					
8+25	0.4561	1.47	Q V					
8+30	0.4662	1.47	Q V					
8+35	0.4766	1.51	Q V					
8+40	0.4873	1.55	Q V					
8+45	0.4980	1.56	Q V					
8+50	0.5090	1.60	Q V					
8+55	0.5204	1.65	Q V					
9+ 0	0.5318	1.66	Q V					
9+ 5	0.5437	1.74	Q V					
9+10	0.5563	1.83	Q V					
9+15	0.5690	1.85	Q V					
9+20	0.5821	1.89	Q V					
9+25	0.5954	1.94	Q V					
9+30	0.6089	1.95	Q V					

9+35	0.6226	1.99	Q	V				
9+40	0.6366	2.04	Q	V				
9+45	0.6507	2.05	Q	V				
9+50	0.6651	2.09	Q	V				
9+55	0.6798	2.13	Q	V				
10+ 0	0.6946	2.14	Q	V				
10+ 5	0.7074	1.86	Q	V				
10+10	0.7182	1.56	Q	V				
10+15	0.7285	1.50	Q	V				
10+20	0.7387	1.48	Q	V				
10+25	0.7488	1.47	Q	V				
10+30	0.7589	1.47	Q	V				
10+35	0.7703	1.67	Q	V				
10+40	0.7833	1.88	Q	V				
10+45	0.7966	1.93	Q	V				
10+50	0.8100	1.95	Q	V				
10+55	0.8234	1.95	Q	V				
11+ 0	0.8369	1.95	Q	V				
11+ 5	0.8501	1.91	Q	V				
11+10	0.8630	1.87	Q	V				
11+15	0.8758	1.86	Q	V				
11+20	0.8886	1.86	Q	V				
11+25	0.9013	1.86	Q	V				
11+30	0.9141	1.86	Q	V				
11+35	0.9263	1.78	Q	V				
11+40	0.9380	1.69	Q	V				
11+45	0.9495	1.67	Q	V				
11+50	0.9612	1.70	Q	V				
11+55	0.9732	1.74	Q	V				
12+ 0	0.9853	1.75	Q	V				
12+ 5	0.9995	2.06	Q	V				
12+10	1.0158	2.38	Q	V				
12+15	1.0327	2.45	Q	V				
12+20	1.0501	2.53	Q	V				
12+25	1.0680	2.60	Q	V				
12+30	1.0861	2.62	Q	V				
12+35	1.1049	2.73	Q	V				
12+40	1.1245	2.85	Q	V				
12+45	1.1443	2.88	Q	V				
12+50	1.1646	2.94	Q	V				
12+55	1.1853	3.01	Q	V				
13+ 0	1.2062	3.02	Q	V				
13+ 5	1.2289	3.30	Q	V				
13+10	1.2536	3.59	Q	V				
13+15	1.2787	3.65	Q	V				
13+20	1.3040	3.68	Q	V				
13+25	1.3295	3.69	Q	V				
13+30	1.3549	3.69	Q	V				
13+35	1.3763	3.11	Q	V				
13+40	1.3935	2.49	Q	V				
13+45	1.4098	2.36	Q	V				
13+50	1.4257	2.32	Q	V				
13+55	1.4415	2.30	Q	V				
14+ 0	1.4574	2.30	Q	V				
14+ 5	1.4747	2.52	Q	V				
14+10	1.4937	2.75	Q	V				
14+15	1.5129	2.80	Q	V				
14+20	1.5320	2.77	Q	V				
14+25	1.5507	2.72	Q	V				
14+30	1.5694	2.71	Q	V				
14+35	1.5881	2.71	Q	V				
14+40	1.6068	2.71	Q	V				
14+45	1.6255	2.72	Q	V				
14+50	1.6438	2.67	Q	V				
14+55	1.6618	2.61	Q	V				
15+ 0	1.6798	2.60	Q	V				

15+ 5	1.6973	2.55			Q			V	
15+10	1.7145	2.49			Q			V	
15+15	1.7316	2.48			Q			V	
15+20	1.7483	2.43			Q			V	
15+25	1.7647	2.37			Q			V	
15+30	1.7810	2.37			Q			V	
15+35	1.7958	2.15			Q			V	
15+40	1.8091	1.93			Q			V	
15+45	1.8220	1.88			Q			V	
15+50	1.8349	1.86			Q			V	
15+55	1.8477	1.86			Q			V	
16+ 0	1.8605	1.86			Q			V	
16+ 5	1.8692	1.25		Q				V	
16+10	1.8733	0.60		Q				V	
16+15	1.8765	0.47		Q				V	
16+20	1.8794	0.41		Q				V	
16+25	1.8821	0.39		Q				V	
16+30	1.8848	0.39		Q				V	
16+35	1.8872	0.35		Q				V	
16+40	1.8893	0.31		Q				V	
16+45	1.8913	0.30		Q				V	
16+50	1.8934	0.29		Q				V	
16+55	1.8954	0.29		Q				V	
17+ 0	1.8974	0.29		Q				V	
17+ 5	1.9000	0.37		Q				V	
17+10	1.9031	0.46		Q				V	
17+15	1.9064	0.48		Q				V	
17+20	1.9098	0.49		Q				V	
17+25	1.9132	0.49		Q				V	
17+30	1.9165	0.49		Q				V	
17+35	1.9199	0.49		Q				V	
17+40	1.9232	0.49		Q				V	
17+45	1.9266	0.49		Q				V	
17+50	1.9297	0.45		Q				V	
17+55	1.9325	0.40		Q				V	
18+ 0	1.9352	0.40		Q				V	
18+ 5	1.9379	0.39		Q				V	
18+10	1.9406	0.39		Q				V	
18+15	1.9433	0.39		Q				V	
18+20	1.9460	0.39		Q				V	
18+25	1.9487	0.39		Q				V	
18+30	1.9514	0.39		Q				V	
18+35	1.9538	0.35		Q				V	
18+40	1.9559	0.31		Q				V	
18+45	1.9579	0.30		Q				V	
18+50	1.9597	0.25		Q				V	
18+55	1.9611	0.21		Q				V	
19+ 0	1.9625	0.20		Q				V	
19+ 5	1.9641	0.24		Q				V	
19+10	1.9661	0.28		Q				V	
19+15	1.9680	0.29		Q				V	
19+20	1.9703	0.33		Q				V	
19+25	1.9729	0.38		Q				V	
19+30	1.9756	0.39		Q				V	
19+35	1.9780	0.35		Q				V	
19+40	1.9801	0.31		Q				V	
19+45	1.9822	0.30		Q				V	
19+50	1.9839	0.25		Q				V	
19+55	1.9853	0.21		Q				V	
20+ 0	1.9867	0.20		Q				V	
20+ 5	1.9884	0.24		Q				V	
20+10	1.9903	0.28		Q				V	
20+15	1.9923	0.29		Q				V	
20+20	1.9943	0.29		Q				V	
20+25	1.9963	0.29		Q				V	
20+30	1.9983	0.29		Q				V	

20+35	2.0003	0.29	Q				V	
20+40	2.0023	0.29	Q				V	
20+45	2.0044	0.29	Q				V	
20+50	2.0061	0.25	Q				V	
20+55	2.0075	0.21	Q				V	
21+ 0	2.0089	0.20	Q				V	
21+ 5	2.0106	0.24	Q				V	
21+10	2.0125	0.28	Q				V	
21+15	2.0145	0.29	Q				V	
21+20	2.0162	0.25	Q				V	
21+25	2.0176	0.21	Q				V	
21+30	2.0190	0.20	Q				V	
21+35	2.0207	0.24	Q				V	
21+40	2.0226	0.28	Q				V	
21+45	2.0246	0.29	Q				V	
21+50	2.0263	0.25	Q				V	
21+55	2.0277	0.21	Q				V	
22+ 0	2.0291	0.20	Q				V	
22+ 5	2.0307	0.24	Q				V	
22+10	2.0327	0.28	Q				V	
22+15	2.0346	0.29	Q				V	
22+20	2.0364	0.25	Q				V	
22+25	2.0378	0.21	Q				V	
22+30	2.0392	0.20	Q				V	
22+35	2.0406	0.20	Q				V	
22+40	2.0419	0.20	Q				V	
22+45	2.0432	0.20	Q				V	
22+50	2.0446	0.20	Q				V	
22+55	2.0459	0.20	Q				V	
23+ 0	2.0473	0.20	Q				V	
23+ 5	2.0486	0.20	Q				V	
23+10	2.0500	0.20	Q				V	
23+15	2.0513	0.20	Q				V	
23+20	2.0527	0.20	Q				V	
23+25	2.0540	0.20	Q				V	
23+30	2.0554	0.20	Q				V	
23+35	2.0567	0.20	Q				V	
23+40	2.0580	0.20	Q				V	
23+45	2.0594	0.20	Q				V	
23+50	2.0607	0.20	Q				V	
23+55	2.0621	0.20	Q				V	
24+ 0	2.0634	0.20	Q				V	
24+ 5	2.0642	0.11	Q				V	
24+10	2.0644	0.03	Q				V	
24+15	2.0645	0.01	Q				V	
24+20	2.0645	0.00	Q				V	

Unit Hydrograph Analysis

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

Program License Serial Number 6490

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

English Units used in output format

RAMONA - WEBSTER
AREA 2- INDUSTRIAL
100 YEAR STORMS
1391PRUH2

Drainage Area = 20.78(Ac.) = 0.032 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 20.78(Ac.) = 0.032 Sq. Mi.
Length along longest watercourse = 2116.00(Ft.)
Length along longest watercourse measured to centroid = 1075.00(Ft.)
Length along longest watercourse = 0.401 Mi.
Length along longest watercourse measured to centroid = 0.204 Mi.
Difference in elevation = 12.50(Ft.)
Slope along watercourse = 31.1909 Ft./Mi.
Average Manning's 'N' = 0.015
Lag time = 0.072 Hr.
Lag time = 4.34 Min.
25% of lag time = 1.08 Min.
40% of lag time = 1.73 Min.
Unit time = 5.00 Min.
Duration of storm = 1 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall(In) [2]	Weighting[1*2]
20.78	0.46	9.50

100 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall(In) [2]	Weighting[1*2]
20.78	1.35	28.05

STORM EVENT (YEAR) = 100.00
Area Averaged 2-Year Rainfall = 0.457(In)
Area Averaged 100-Year Rainfall = 1.350(In)

Point rain (area averaged) = 1.350(In)
Areal adjustment factor = 99.98 %
Adjusted average point rain = 1.350(In)

Sub-Area Data:
Area(Ac.) Runoff Index Impervious %

20.780 56.00 0.900
Total Area Entered = 20.78(Ac.)

RI	RI	Infil. Rate	Impervious	Adj. Infil. Rate	Area%	F
AMC2	AMC-2	(In/Hr)	(Dec.%)	(In/Hr)	(Dec.)	(In/Hr)
56.0	56.0	0.511	0.900	0.097	1.000	0.097
						Sum (F) = 0.097

Area averaged mean soil loss (F) (In/Hr) = 0.097
Minimum soil loss rate ((In/Hr)) = 0.049
(for 24 hour storm duration)
Soil low loss rate (decimal) = 0.180

Slope of intensity-duration curve for a 1 hour storm =0.5000

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

Unit Hydrograph Data

Unit time period	Time	% of lag	Distribution	Unit Hydrograph
(hrs)			Graph %	(CFS)
1	0.083	115.333	23.831	4.991
2	0.167	230.665	48.826	10.225
3	0.250	345.998	13.737	2.877
4	0.333	461.331	6.269	1.313
5	0.417	576.663	3.490	0.731
6	0.500	691.996	2.087	0.437
7	0.583	807.328	1.759	0.368
			Sum = 100.000	Sum= 20.942

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

Unit Time	Pattern	Storm Rain	Loss rate(In./Hr)	Effective	
(Hr.)	Percent	(In/Hr)	Max Low	(In/Hr)	
1	0.08	4.20	0.680	0.097 (0.122)	0.583
2	0.17	4.30	0.696	0.097 (0.125)	0.599
3	0.25	5.00	0.810	0.097 (0.146)	0.713
4	0.33	5.00	0.810	0.097 (0.146)	0.713
5	0.42	5.80	0.939	0.097 (0.169)	0.842
6	0.50	6.50	1.053	0.097 (0.190)	0.956
7	0.58	7.40	1.199	0.097 (0.216)	1.102
8	0.67	8.60	1.393	0.097 (0.251)	1.296
9	0.75	12.30	1.992	0.097 (0.359)	1.895
10	0.83	29.10	4.713	0.097 (0.848)	4.616
11	0.92	6.80	1.101	0.097 (0.198)	1.004
12	1.00	5.00	0.810	0.097 (0.146)	0.713

(Loss Rate Not Used)
Sum = 100.0 Sum = 15.0

Flood volume = Effective rainfall 1.25(In)
times area 20.8(Ac.)/[(In)/(Ft.)] = 2.2(Ac.Ft)
Total soil loss = 0.10(In)
Total soil loss = 0.168(Ac.Ft)
Total rainfall = 1.35(In)
Flood volume = 94492.4 Cubic Feet
Total soil loss = 7320.8 Cubic Feet

Peak flow rate of this hydrograph = 60.933(CFS)

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1 - H O U R S T O R M

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

Hydrograph in 5 Minute intervals ((CFS))

Time (h+m)	Volume Ac.Ft	Q(CFS)	0	17.5	35.0	52.5	70.0
0+ 5	0.0201	2.91	VQ				
0+10	0.0818	8.96	V Q				
0+15	0.1601	11.37	V Q				
0+20	0.2520	13.34	V Q				
0+25	0.3536	14.76	V Q				
0+30	0.4712	17.07	VQ				
0+35	0.6065	19.64	Q				
0+40	0.7625	22.65	Q V				
0+45	0.9576	28.34	QV				
0+50	1.2947	48.95	V Q				
0+55	1.7144	60.93	V Q				
1+ 0	1.9306	31.39	Q				
1+ 5	2.0587	18.61	Q				
1+10	2.1142	8.05	Q				
1+15	2.1444	4.39	Q				
1+20	2.1627	2.66	Q				
1+25	2.1674	0.68	Q				
1+30	2.1692	0.26	Q				

Unit Hydrograph Analysis

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

Program License Serial Number 6490

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

English Units used in output format

RAMONA - WEBSTER
AREA 2- INDUSTRIAL
100 YEAR STORMS
1391PRUH2

Drainage Area = 20.78(Ac.) = 0.032 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 20.78(Ac.) = 0.032 Sq. Mi.
Length along longest watercourse = 2116.00(Ft.)
Length along longest watercourse measured to centroid = 1075.00(Ft.)
Length along longest watercourse = 0.401 Mi.
Length along longest watercourse measured to centroid = 0.204 Mi.
Difference in elevation = 12.50(Ft.)
Slope along watercourse = 31.1909 Ft./Mi.
Average Manning's 'N' = 0.015
Lag time = 0.072 Hr.
Lag time = 4.34 Min.
25% of lag time = 1.08 Min.
40% of lag time = 1.73 Min.
Unit time = 5.00 Min.
Duration of storm = 3 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall(In) [2]	Weighting[1*2]
20.78	0.80	16.60

100 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall(In) [2]	Weighting[1*2]
20.78	2.01	41.77

STORM EVENT (YEAR) = 100.00
Area Averaged 2-Year Rainfall = 0.799(In)
Area Averaged 100-Year Rainfall = 2.010(In)

Point rain (area averaged) = 2.010(In)
Areal adjustment factor = 99.99 %

Adjusted average point rain = 2.010(In)

Sub-Area Data:

Area(Ac.) Runoff Index Impervious %
 20.780 56.00 0.900
 Total Area Entered = 20.78(Ac.)

RI	RI	Infil. Rate	Impervious	Adj. Infil. Rate	Area%	F
AMC2	AMC-2	(In/Hr)	(Dec.%)	(In/Hr)	(Dec.)	(In/Hr)
56.0	56.0	0.511	0.900	0.097	1.000	0.097
						Sum (F) = 0.097

Area averaged mean soil loss (F) (In/Hr) = 0.097

Minimum soil loss rate ((In/Hr)) = 0.049

(for 24 hour storm duration)

Soil low loss rate (decimal) = 0.180

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

Unit Hydrograph Data

Unit time period (hrs)	Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	115.333	4.991
2	0.167	230.665	10.225
3	0.250	345.998	2.877
4	0.333	461.331	1.313
5	0.417	576.663	0.731
6	0.500	691.996	0.437
7	0.583	807.328	0.368
Sum = 100.000			Sum= 20.942

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

Unit Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr)		Effective (In/Hr)
			Max	Low	
1	0.08	1.30	(0.097)	0.056	0.257
2	0.17	1.30	(0.097)	0.056	0.257
3	0.25	1.10	(0.097)	0.048	0.218
4	0.33	1.50	(0.097)	0.065	0.297
5	0.42	1.50	(0.097)	0.065	0.297
6	0.50	1.80	(0.097)	0.078	0.356
7	0.58	1.50	(0.097)	0.065	0.297
8	0.67	1.80	(0.097)	0.078	0.356
9	0.75	1.80	(0.097)	0.078	0.356
10	0.83	1.50	(0.097)	0.065	0.297
11	0.92	1.60	(0.097)	0.069	0.316
12	1.00	1.80	(0.097)	0.078	0.356
13	1.08	2.20	(0.097)	0.096	0.435
14	1.17	2.20	(0.097)	0.096	0.435
15	1.25	2.20	(0.097)	0.096	0.435
16	1.33	2.00	(0.097)	0.087	0.396
17	1.42	2.60	0.097	(0.113)	0.530
18	1.50	2.70	0.097	(0.117)	0.554
19	1.58	2.40	0.097	(0.104)	0.482
20	1.67	2.70	0.097	(0.117)	0.554
21	1.75	3.30	0.097	(0.143)	0.699
22	1.83	3.10	0.097	(0.135)	0.651
23	1.92	2.90	0.097	(0.126)	0.602
24	2.00	3.00	0.097	(0.130)	0.626

2+50	2.8653	14.28			Q			V	
2+55	2.9409	10.97			Q			V	
3+ 0	2.9972	8.18			Q			V	
3+ 5	3.0266	4.27		Q				V	
3+10	3.0386	1.73		Q				V	
3+15	3.0435	0.72	Q					V	
3+20	3.0461	0.37	Q					V	
3+25	3.0473	0.18	Q					V	
3+30	3.0476	0.04	Q					V	

Unit Hydrograph Analysis

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

Program License Serial Number 6490

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

English Units used in output format

RAMONA - WEBSTER
AREA 2- INDUSTRIAL
100 YEAR STORMS
1391PRUH2

Drainage Area = 20.78(Ac.) = 0.032 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 20.78(Ac.) = 0.032 Sq. Mi.
Length along longest watercourse = 2116.00(Ft.)
Length along longest watercourse measured to centroid = 1075.00(Ft.)
Length along longest watercourse = 0.401 Mi.
Length along longest watercourse measured to centroid = 0.204 Mi.
Difference in elevation = 12.50(Ft.)
Slope along watercourse = 31.1909 Ft./Mi.
Average Manning's 'N' = 0.015
Lag time = 0.072 Hr.
Lag time = 4.34 Min.
25% of lag time = 1.08 Min.
40% of lag time = 1.73 Min.
Unit time = 5.00 Min.
Duration of storm = 6 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall(In) [2]	Weighting[1*2]
20.78	1.11	23.07

100 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall(In) [2]	Weighting[1*2]
20.78	2.70	56.11

STORM EVENT (YEAR) = 100.00
Area Averaged 2-Year Rainfall = 1.110(In)
Area Averaged 100-Year Rainfall = 2.700(In)

Point rain (area averaged) = 2.700(In)
Areal adjustment factor = 99.99 %
Adjusted average point rain = 2.700(In)

Sub-Area Data:

Area(Ac.) Runoff Index Impervious %
 20.780 56.00 0.900
 Total Area Entered = 20.78(Ac.)

RI	RI	Infil. Rate	Impervious	Adj. Infil. Rate	Area%	F
AMC2	AMC-2	(In/Hr)	(Dec.%)	(In/Hr)	(Dec.)	(In/Hr)
56.0	56.0	0.511	0.900	0.097	1.000	0.097
						Sum (F) = 0.097

Area averaged mean soil loss (F) (In/Hr) = 0.097
 Minimum soil loss rate ((In/Hr)) = 0.049
 (for 24 hour storm duration)
 Soil low loss rate (decimal) = 0.180

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

Unit Hydrograph Data

Unit time period (hrs)	Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	115.333	23.831
2	0.167	230.665	48.826
3	0.250	345.998	13.737
4	0.333	461.331	6.269
5	0.417	576.663	3.490
6	0.500	691.996	2.087
7	0.583	807.328	1.759
Sum = 100.000			Sum= 20.942

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

Unit Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr)		Effective (In/Hr)
			Max	Low	
1	0.08	0.50	(0.097)	0.029	0.133
2	0.17	0.60	(0.097)	0.035	0.159
3	0.25	0.60	(0.097)	0.035	0.159
4	0.33	0.60	(0.097)	0.035	0.159
5	0.42	0.60	(0.097)	0.035	0.159
6	0.50	0.70	(0.097)	0.041	0.186
7	0.58	0.70	(0.097)	0.041	0.186
8	0.67	0.70	(0.097)	0.041	0.186
9	0.75	0.70	(0.097)	0.041	0.186
10	0.83	0.70	(0.097)	0.041	0.186
11	0.92	0.70	(0.097)	0.041	0.186
12	1.00	0.80	(0.097)	0.047	0.213
13	1.08	0.80	(0.097)	0.047	0.213
14	1.17	0.80	(0.097)	0.047	0.213
15	1.25	0.80	(0.097)	0.047	0.213
16	1.33	0.80	(0.097)	0.047	0.213
17	1.42	0.80	(0.097)	0.047	0.213
18	1.50	0.80	(0.097)	0.047	0.213
19	1.58	0.80	(0.097)	0.047	0.213
20	1.67	0.80	(0.097)	0.047	0.213
21	1.75	0.80	(0.097)	0.047	0.213
22	1.83	0.80	(0.097)	0.047	0.213
23	1.92	0.80	(0.097)	0.047	0.213
24	2.00	0.90	(0.097)	0.052	0.239
25	2.08	0.80	(0.097)	0.047	0.213

26	2.17	0.90	0.292	(0.097)	0.052	0.239
27	2.25	0.90	0.292	(0.097)	0.052	0.239
28	2.33	0.90	0.292	(0.097)	0.052	0.239
29	2.42	0.90	0.292	(0.097)	0.052	0.239
30	2.50	0.90	0.292	(0.097)	0.052	0.239
31	2.58	0.90	0.292	(0.097)	0.052	0.239
32	2.67	0.90	0.292	(0.097)	0.052	0.239
33	2.75	1.00	0.324	(0.097)	0.058	0.266
34	2.83	1.00	0.324	(0.097)	0.058	0.266
35	2.92	1.00	0.324	(0.097)	0.058	0.266
36	3.00	1.00	0.324	(0.097)	0.058	0.266
37	3.08	1.00	0.324	(0.097)	0.058	0.266
38	3.17	1.10	0.356	(0.097)	0.064	0.292
39	3.25	1.10	0.356	(0.097)	0.064	0.292
40	3.33	1.10	0.356	(0.097)	0.064	0.292
41	3.42	1.20	0.389	(0.097)	0.070	0.319
42	3.50	1.30	0.421	(0.097)	0.076	0.345
43	3.58	1.40	0.454	(0.097)	0.082	0.372
44	3.67	1.40	0.454	(0.097)	0.082	0.372
45	3.75	1.50	0.486	(0.097)	0.087	0.398
46	3.83	1.50	0.486	(0.097)	0.087	0.398
47	3.92	1.60	0.518	(0.097)	0.093	0.425
48	4.00	1.60	0.518	(0.097)	0.093	0.425
49	4.08	1.70	0.551	0.097 (0.099)		0.454
50	4.17	1.80	0.583	0.097 (0.105)		0.486
51	4.25	1.90	0.616	0.097 (0.111)		0.519
52	4.33	2.00	0.648	0.097 (0.117)		0.551
53	4.42	2.10	0.680	0.097 (0.122)		0.583
54	4.50	2.10	0.680	0.097 (0.122)		0.583
55	4.58	2.20	0.713	0.097 (0.128)		0.616
56	4.67	2.30	0.745	0.097 (0.134)		0.648
57	4.75	2.40	0.778	0.097 (0.140)		0.680
58	4.83	2.40	0.778	0.097 (0.140)		0.680
59	4.92	2.50	0.810	0.097 (0.146)		0.713
60	5.00	2.60	0.842	0.097 (0.152)		0.745
61	5.08	3.10	1.004	0.097 (0.181)		0.907
62	5.17	3.60	1.166	0.097 (0.210)		1.069
63	5.25	3.90	1.264	0.097 (0.227)		1.166
64	5.33	4.20	1.361	0.097 (0.245)		1.264
65	5.42	4.70	1.523	0.097 (0.274)		1.426
66	5.50	5.60	1.814	0.097 (0.327)		1.717
67	5.58	1.90	0.616	0.097 (0.111)		0.519
68	5.67	0.90	0.292	(0.097)	0.052	0.239
69	5.75	0.60	0.194	(0.097)	0.035	0.159
70	5.83	0.50	0.162	(0.097)	0.029	0.133
71	5.92	0.30	0.097	(0.097)	0.017	0.080
72	6.00	0.20	0.065	(0.097)	0.012	0.053

(Loss Rate Not Used)

Sum = 100.0 Sum = 27.8

Flood volume = Effective rainfall 2.32(In)
times area 20.8(Ac.) / [(In)/(Ft.)] = 4.0(Ac.Ft)
Total soil loss = 0.38(In)
Total soil loss = 0.662(Ac.Ft)
Total rainfall = 2.70(In)
Flood volume = 174830.2 Cubic Feet
Total soil loss = 28820.0 Cubic Feet

Peak flow rate of this hydrograph = 29.783(CFS)

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6 - H O U R S T O R M

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

Hydrograph in 5 Minute intervals ((CFS))

Time(h+m)	Volume	Ac.Ft	Q(CFS)	0	7.5	15.0	22.5	30.0
0+ 5	0.0046	0.66	Q					
0+10	0.0194	2.15	V Q					
0+15	0.0388	2.81	V Q					
0+20	0.0598	3.06	V Q					
0+25	0.0818	3.19	V Q					
0+30	0.1052	3.40	V Q					
0+35	0.1310	3.73	V Q					
0+40	0.1573	3.82	V Q					
0+45	0.1838	3.86	V Q					
0+50	0.2105	3.88	V Q					
0+55	0.2373	3.89	V Q					
1+ 0	0.2650	4.03	V Q					
1+ 5	0.2947	4.30	V Q					
1+10	0.3248	4.38	V Q					
1+15	0.3552	4.41	V Q					
1+20	0.3857	4.43	V Q					
1+25	0.4163	4.44	VQ					
1+30	0.4470	4.45	VQ					
1+35	0.4777	4.45	VQ					
1+40	0.5083	4.45	Q					
1+45	0.5390	4.45	Q					
1+50	0.5697	4.45	Q					
1+55	0.6003	4.45	Q					
2+ 0	0.6319	4.59	Q					
2+ 5	0.6645	4.72	Q					
2+10	0.6966	4.66	Q					
2+15	0.7303	4.89	QV					
2+20	0.7644	4.95	QV					
2+25	0.7987	4.98	QV					
2+30	0.8331	5.00	Q V					
2+35	0.8675	5.00	Q V					
2+40	0.9020	5.01	Q V					
2+45	0.9375	5.14	Q V					
2+50	0.9747	5.41	Q V					
2+55	1.0126	5.49	Q V					
3+ 0	1.0506	5.53	Q V					
3+ 5	1.0888	5.55	Q V					
3+10	1.1280	5.69	Q V					
3+15	1.1691	5.97	Q V					
3+20	1.2107	6.05	Q V					
3+25	1.2536	6.21	Q V					
3+30	1.2993	6.64	Q V					
3+35	1.3484	7.13	Q V					
3+40	1.4002	7.52	Q V					
3+45	1.4538	7.79	Q V					
3+50	1.5098	8.13	Q V					
3+55	1.5675	8.38	Q V					
4+ 0	1.6274	8.70	Q V					
4+ 5	1.6891	8.95	Q V					
4+10	1.7542	9.45	Q V					
4+15	1.8235	10.06	Q V					
4+20	1.8971	10.69	Q V					
4+25	1.9753	11.35	Q V					
4+30	2.0570	11.86	Q V					
4+35	2.1410	12.20	Q V					
4+40	2.2291	12.79	Q V					
4+45	2.3216	13.43	Q V					
4+50	2.4174	13.92	Q V					
4+55	2.5156	14.25	Q V					
5+ 0	2.6177	14.83	Q V					
5+ 5	2.7286	16.11	Q V					
5+10	2.8577	18.74	Q V					
5+15	3.0052	21.42	QV					
5+20	3.1679	23.62	Q					

5+25	3.3474	26.06					VQ	
5+30	3.5525	29.78					V	Q
5+35	3.7424	27.58					QV	
5+40	3.8467	15.14			Q		V	
5+45	3.9088	9.02		Q	Q		V	
5+50	3.9502	6.01		Q			V	
5+55	3.9790	4.19		Q			V	
6+ 0	3.9976	2.71		Q			V	
6+ 5	4.0070	1.36		Q			V	
6+10	4.0105	0.51	Q				V	
6+15	4.0122	0.24	Q				V	
6+20	4.0131	0.12	Q				V	
6+25	4.0134	0.05	Q				V	
6+30	4.0135	0.02	Q				V	

Unit Hydrograph Analysis

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Study date 09/06/21 File: 1391PRUH224100.out

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

Program License Serial Number 6490

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

English Units used in output format

RAMONA - WEBSTER
AREA 2- INDUSTRIAL
100 YEAR STORMS
1391PRUH2

Drainage Area = 20.78(Ac.) = 0.032 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 20.78(Ac.) = 0.032 Sq. Mi.
Length along longest watercourse = 2116.00(Ft.)
Length along longest watercourse measured to centroid = 1075.00(Ft.)
Length along longest watercourse = 0.401 Mi.
Length along longest watercourse measured to centroid = 0.204 Mi.
Difference in elevation = 12.50(Ft.)
Slope along watercourse = 31.1909 Ft./Mi.
Average Manning's 'N' = 0.015
Lag time = 0.072 Hr.
Lag time = 4.34 Min.
25% of lag time = 1.08 Min.
40% of lag time = 1.73 Min.
Unit time = 5.00 Min.
Duration of storm = 24 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall(In) [2]	Weighting[1*2]
20.78	1.94	40.31

100 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall(In) [2]	Weighting[1*2]
20.78	4.91	102.03

STORM EVENT (YEAR) = 100.00
Area Averaged 2-Year Rainfall = 1.940(In)
Area Averaged 100-Year Rainfall = 4.910(In)

Point rain (area averaged) = 4.910(In)
Areal adjustment factor = 100.00 %
Adjusted average point rain = 4.910(In)

Sub-Area Data:

Area(Ac.) Runoff Index Impervious %
 20.780 56.00 0.900
 Total Area Entered = 20.78(Ac.)

RI	RI	Infil. Rate	Impervious	Adj. Infil. Rate	Area%	F
AMC2	AMC-2	(In/Hr)	(Dec.%)	(In/Hr)	(Dec.)	(In/Hr)
56.0	56.0	0.511	0.900	0.097	1.000	0.097
						Sum (F) = 0.097

Area averaged mean soil loss (F) (In/Hr) = 0.097
 Minimum soil loss rate ((In/Hr)) = 0.049
 (for 24 hour storm duration)
 Soil low loss rate (decimal) = 0.180

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

Unit Hydrograph Data

Unit time period (hrs)	Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	115.333	23.831
2	0.167	230.665	48.826
3	0.250	345.998	13.737
4	0.333	461.331	6.269
5	0.417	576.663	3.490
6	0.500	691.996	2.087
7	0.583	807.328	1.759
Sum = 100.000			Sum= 20.942

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

Unit Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr)		Effective (In/Hr)	
			Max	Low		
1	0.08	0.07	0.039	(0.172)	0.007	0.032
2	0.17	0.07	0.039	(0.171)	0.007	0.032
3	0.25	0.07	0.039	(0.171)	0.007	0.032
4	0.33	0.10	0.059	(0.170)	0.011	0.048
5	0.42	0.10	0.059	(0.169)	0.011	0.048
6	0.50	0.10	0.059	(0.169)	0.011	0.048
7	0.58	0.10	0.059	(0.168)	0.011	0.048
8	0.67	0.10	0.059	(0.167)	0.011	0.048
9	0.75	0.10	0.059	(0.167)	0.011	0.048
10	0.83	0.13	0.079	(0.166)	0.014	0.064
11	0.92	0.13	0.079	(0.165)	0.014	0.064
12	1.00	0.13	0.079	(0.165)	0.014	0.064
13	1.08	0.10	0.059	(0.164)	0.011	0.048
14	1.17	0.10	0.059	(0.163)	0.011	0.048
15	1.25	0.10	0.059	(0.163)	0.011	0.048
16	1.33	0.10	0.059	(0.162)	0.011	0.048
17	1.42	0.10	0.059	(0.162)	0.011	0.048
18	1.50	0.10	0.059	(0.161)	0.011	0.048
19	1.58	0.10	0.059	(0.160)	0.011	0.048
20	1.67	0.10	0.059	(0.160)	0.011	0.048
21	1.75	0.10	0.059	(0.159)	0.011	0.048
22	1.83	0.13	0.079	(0.158)	0.014	0.064
23	1.92	0.13	0.079	(0.158)	0.014	0.064
24	2.00	0.13	0.079	(0.157)	0.014	0.064
25	2.08	0.13	0.079	(0.156)	0.014	0.064

26	2.17	0.13	0.079	(0.156)	0.014	0.064
27	2.25	0.13	0.079	(0.155)	0.014	0.064
28	2.33	0.13	0.079	(0.155)	0.014	0.064
29	2.42	0.13	0.079	(0.154)	0.014	0.064
30	2.50	0.13	0.079	(0.153)	0.014	0.064
31	2.58	0.17	0.098	(0.153)	0.018	0.081
32	2.67	0.17	0.098	(0.152)	0.018	0.081
33	2.75	0.17	0.098	(0.151)	0.018	0.081
34	2.83	0.17	0.098	(0.151)	0.018	0.081
35	2.92	0.17	0.098	(0.150)	0.018	0.081
36	3.00	0.17	0.098	(0.150)	0.018	0.081
37	3.08	0.17	0.098	(0.149)	0.018	0.081
38	3.17	0.17	0.098	(0.148)	0.018	0.081
39	3.25	0.17	0.098	(0.148)	0.018	0.081
40	3.33	0.17	0.098	(0.147)	0.018	0.081
41	3.42	0.17	0.098	(0.146)	0.018	0.081
42	3.50	0.17	0.098	(0.146)	0.018	0.081
43	3.58	0.17	0.098	(0.145)	0.018	0.081
44	3.67	0.17	0.098	(0.145)	0.018	0.081
45	3.75	0.17	0.098	(0.144)	0.018	0.081
46	3.83	0.20	0.118	(0.143)	0.021	0.097
47	3.92	0.20	0.118	(0.143)	0.021	0.097
48	4.00	0.20	0.118	(0.142)	0.021	0.097
49	4.08	0.20	0.118	(0.142)	0.021	0.097
50	4.17	0.20	0.118	(0.141)	0.021	0.097
51	4.25	0.20	0.118	(0.140)	0.021	0.097
52	4.33	0.23	0.137	(0.140)	0.025	0.113
53	4.42	0.23	0.137	(0.139)	0.025	0.113
54	4.50	0.23	0.137	(0.139)	0.025	0.113
55	4.58	0.23	0.137	(0.138)	0.025	0.113
56	4.67	0.23	0.137	(0.137)	0.025	0.113
57	4.75	0.23	0.137	(0.137)	0.025	0.113
58	4.83	0.27	0.157	(0.136)	0.028	0.129
59	4.92	0.27	0.157	(0.136)	0.028	0.129
60	5.00	0.27	0.157	(0.135)	0.028	0.129
61	5.08	0.20	0.118	(0.134)	0.021	0.097
62	5.17	0.20	0.118	(0.134)	0.021	0.097
63	5.25	0.20	0.118	(0.133)	0.021	0.097
64	5.33	0.23	0.137	(0.133)	0.025	0.113
65	5.42	0.23	0.137	(0.132)	0.025	0.113
66	5.50	0.23	0.137	(0.132)	0.025	0.113
67	5.58	0.27	0.157	(0.131)	0.028	0.129
68	5.67	0.27	0.157	(0.130)	0.028	0.129
69	5.75	0.27	0.157	(0.130)	0.028	0.129
70	5.83	0.27	0.157	(0.129)	0.028	0.129
71	5.92	0.27	0.157	(0.129)	0.028	0.129
72	6.00	0.27	0.157	(0.128)	0.028	0.129
73	6.08	0.30	0.177	(0.128)	0.032	0.145
74	6.17	0.30	0.177	(0.127)	0.032	0.145
75	6.25	0.30	0.177	(0.126)	0.032	0.145
76	6.33	0.30	0.177	(0.126)	0.032	0.145
77	6.42	0.30	0.177	(0.125)	0.032	0.145
78	6.50	0.30	0.177	(0.125)	0.032	0.145
79	6.58	0.33	0.196	(0.124)	0.035	0.161
80	6.67	0.33	0.196	(0.124)	0.035	0.161
81	6.75	0.33	0.196	(0.123)	0.035	0.161
82	6.83	0.33	0.196	(0.122)	0.035	0.161
83	6.92	0.33	0.196	(0.122)	0.035	0.161
84	7.00	0.33	0.196	(0.121)	0.035	0.161
85	7.08	0.33	0.196	(0.121)	0.035	0.161
86	7.17	0.33	0.196	(0.120)	0.035	0.161
87	7.25	0.33	0.196	(0.120)	0.035	0.161
88	7.33	0.37	0.216	(0.119)	0.039	0.177
89	7.42	0.37	0.216	(0.119)	0.039	0.177
90	7.50	0.37	0.216	(0.118)	0.039	0.177
91	7.58	0.40	0.236	(0.118)	0.042	0.193

92	7.67	0.40	0.236	(0.117)	0.042	0.193
93	7.75	0.40	0.236	(0.116)	0.042	0.193
94	7.83	0.43	0.255	(0.116)	0.046	0.209
95	7.92	0.43	0.255	(0.115)	0.046	0.209
96	8.00	0.43	0.255	(0.115)	0.046	0.209
97	8.08	0.50	0.295	(0.114)	0.053	0.242
98	8.17	0.50	0.295	(0.114)	0.053	0.242
99	8.25	0.50	0.295	(0.113)	0.053	0.242
100	8.33	0.50	0.295	(0.113)	0.053	0.242
101	8.42	0.50	0.295	(0.112)	0.053	0.242
102	8.50	0.50	0.295	(0.112)	0.053	0.242
103	8.58	0.53	0.314	(0.111)	0.057	0.258
104	8.67	0.53	0.314	(0.111)	0.057	0.258
105	8.75	0.53	0.314	(0.110)	0.057	0.258
106	8.83	0.57	0.334	(0.110)	0.060	0.274
107	8.92	0.57	0.334	(0.109)	0.060	0.274
108	9.00	0.57	0.334	(0.109)	0.060	0.274
109	9.08	0.63	0.373	(0.108)	0.067	0.306
110	9.17	0.63	0.373	(0.108)	0.067	0.306
111	9.25	0.63	0.373	(0.107)	0.067	0.306
112	9.33	0.67	0.393	(0.107)	0.071	0.322
113	9.42	0.67	0.393	(0.106)	0.071	0.322
114	9.50	0.67	0.393	(0.105)	0.071	0.322
115	9.58	0.70	0.412	(0.105)	0.074	0.338
116	9.67	0.70	0.412	(0.104)	0.074	0.338
117	9.75	0.70	0.412	(0.104)	0.074	0.338
118	9.83	0.73	0.432	(0.103)	0.078	0.354
119	9.92	0.73	0.432	(0.103)	0.078	0.354
120	10.00	0.73	0.432	(0.102)	0.078	0.354
121	10.08	0.50	0.295	(0.102)	0.053	0.242
122	10.17	0.50	0.295	(0.101)	0.053	0.242
123	10.25	0.50	0.295	(0.101)	0.053	0.242
124	10.33	0.50	0.295	(0.101)	0.053	0.242
125	10.42	0.50	0.295	(0.100)	0.053	0.242
126	10.50	0.50	0.295	(0.100)	0.053	0.242
127	10.58	0.67	0.393	(0.099)	0.071	0.322
128	10.67	0.67	0.393	(0.099)	0.071	0.322
129	10.75	0.67	0.393	(0.098)	0.071	0.322
130	10.83	0.67	0.393	(0.098)	0.071	0.322
131	10.92	0.67	0.393	(0.097)	0.071	0.322
132	11.00	0.67	0.393	(0.097)	0.071	0.322
133	11.08	0.63	0.373	(0.096)	0.067	0.306
134	11.17	0.63	0.373	(0.096)	0.067	0.306
135	11.25	0.63	0.373	(0.095)	0.067	0.306
136	11.33	0.63	0.373	(0.095)	0.067	0.306
137	11.42	0.63	0.373	(0.094)	0.067	0.306
138	11.50	0.63	0.373	(0.094)	0.067	0.306
139	11.58	0.57	0.334	(0.093)	0.060	0.274
140	11.67	0.57	0.334	(0.093)	0.060	0.274
141	11.75	0.57	0.334	(0.092)	0.060	0.274
142	11.83	0.60	0.354	(0.092)	0.064	0.290
143	11.92	0.60	0.354	(0.092)	0.064	0.290
144	12.00	0.60	0.354	(0.091)	0.064	0.290
145	12.08	0.83	0.491	(0.091)	0.088	0.403
146	12.17	0.83	0.491	(0.090)	0.088	0.403
147	12.25	0.83	0.491	(0.090)	0.088	0.403
148	12.33	0.87	0.511	0.089	(0.092)	0.421
149	12.42	0.87	0.511	0.089	(0.092)	0.422
150	12.50	0.87	0.511	0.088	(0.092)	0.422
151	12.58	0.93	0.550	0.088	(0.099)	0.462
152	12.67	0.93	0.550	0.087	(0.099)	0.462
153	12.75	0.93	0.550	0.087	(0.099)	0.463
154	12.83	0.97	0.570	0.087	(0.103)	0.483
155	12.92	0.97	0.570	0.086	(0.103)	0.483
156	13.00	0.97	0.570	0.086	(0.103)	0.484
157	13.08	1.13	0.668	0.085	(0.120)	0.582

158	13.17	1.13	0.668	0.085	(0.120)	0.583
159	13.25	1.13	0.668	0.084	(0.120)	0.583
160	13.33	1.13	0.668	0.084	(0.120)	0.584
161	13.42	1.13	0.668	0.084	(0.120)	0.584
162	13.50	1.13	0.668	0.083	(0.120)	0.585
163	13.58	0.77	0.452	(0.083)	0.081	0.370
164	13.67	0.77	0.452	(0.082)	0.081	0.370
165	13.75	0.77	0.452	(0.082)	0.081	0.370
166	13.83	0.77	0.452	(0.081)	0.081	0.370
167	13.92	0.77	0.452	0.081	(0.081)	0.371
168	14.00	0.77	0.452	0.081	(0.081)	0.371
169	14.08	0.90	0.530	0.080	(0.095)	0.450
170	14.17	0.90	0.530	0.080	(0.095)	0.450
171	14.25	0.90	0.530	0.079	(0.095)	0.451
172	14.33	0.87	0.511	0.079	(0.092)	0.432
173	14.42	0.87	0.511	0.079	(0.092)	0.432
174	14.50	0.87	0.511	0.078	(0.092)	0.432
175	14.58	0.87	0.511	0.078	(0.092)	0.433
176	14.67	0.87	0.511	0.077	(0.092)	0.433
177	14.75	0.87	0.511	0.077	(0.092)	0.434
178	14.83	0.83	0.491	0.077	(0.088)	0.414
179	14.92	0.83	0.491	0.076	(0.088)	0.415
180	15.00	0.83	0.491	0.076	(0.088)	0.415
181	15.08	0.80	0.471	0.075	(0.085)	0.396
182	15.17	0.80	0.471	0.075	(0.085)	0.396
183	15.25	0.80	0.471	0.075	(0.085)	0.397
184	15.33	0.77	0.452	0.074	(0.081)	0.377
185	15.42	0.77	0.452	0.074	(0.081)	0.378
186	15.50	0.77	0.452	0.073	(0.081)	0.378
187	15.58	0.63	0.373	(0.073)	0.067	0.306
188	15.67	0.63	0.373	(0.073)	0.067	0.306
189	15.75	0.63	0.373	(0.072)	0.067	0.306
190	15.83	0.63	0.373	(0.072)	0.067	0.306
191	15.92	0.63	0.373	(0.072)	0.067	0.306
192	16.00	0.63	0.373	(0.071)	0.067	0.306
193	16.08	0.13	0.079	(0.071)	0.014	0.064
194	16.17	0.13	0.079	(0.071)	0.014	0.064
195	16.25	0.13	0.079	(0.070)	0.014	0.064
196	16.33	0.13	0.079	(0.070)	0.014	0.064
197	16.42	0.13	0.079	(0.069)	0.014	0.064
198	16.50	0.13	0.079	(0.069)	0.014	0.064
199	16.58	0.10	0.059	(0.069)	0.011	0.048
200	16.67	0.10	0.059	(0.068)	0.011	0.048
201	16.75	0.10	0.059	(0.068)	0.011	0.048
202	16.83	0.10	0.059	(0.068)	0.011	0.048
203	16.92	0.10	0.059	(0.067)	0.011	0.048
204	17.00	0.10	0.059	(0.067)	0.011	0.048
205	17.08	0.17	0.098	(0.067)	0.018	0.081
206	17.17	0.17	0.098	(0.066)	0.018	0.081
207	17.25	0.17	0.098	(0.066)	0.018	0.081
208	17.33	0.17	0.098	(0.066)	0.018	0.081
209	17.42	0.17	0.098	(0.065)	0.018	0.081
210	17.50	0.17	0.098	(0.065)	0.018	0.081
211	17.58	0.17	0.098	(0.065)	0.018	0.081
212	17.67	0.17	0.098	(0.064)	0.018	0.081
213	17.75	0.17	0.098	(0.064)	0.018	0.081
214	17.83	0.13	0.079	(0.064)	0.014	0.064
215	17.92	0.13	0.079	(0.063)	0.014	0.064
216	18.00	0.13	0.079	(0.063)	0.014	0.064
217	18.08	0.13	0.079	(0.063)	0.014	0.064
218	18.17	0.13	0.079	(0.063)	0.014	0.064
219	18.25	0.13	0.079	(0.062)	0.014	0.064
220	18.33	0.13	0.079	(0.062)	0.014	0.064
221	18.42	0.13	0.079	(0.062)	0.014	0.064
222	18.50	0.13	0.079	(0.061)	0.014	0.064
223	18.58	0.10	0.059	(0.061)	0.011	0.048

224	18.67	0.10	0.059	(0.061)	0.011	0.048
225	18.75	0.10	0.059	(0.060)	0.011	0.048
226	18.83	0.07	0.039	(0.060)	0.007	0.032
227	18.92	0.07	0.039	(0.060)	0.007	0.032
228	19.00	0.07	0.039	(0.060)	0.007	0.032
229	19.08	0.10	0.059	(0.059)	0.011	0.048
230	19.17	0.10	0.059	(0.059)	0.011	0.048
231	19.25	0.10	0.059	(0.059)	0.011	0.048
232	19.33	0.13	0.079	(0.058)	0.014	0.064
233	19.42	0.13	0.079	(0.058)	0.014	0.064
234	19.50	0.13	0.079	(0.058)	0.014	0.064
235	19.58	0.10	0.059	(0.058)	0.011	0.048
236	19.67	0.10	0.059	(0.057)	0.011	0.048
237	19.75	0.10	0.059	(0.057)	0.011	0.048
238	19.83	0.07	0.039	(0.057)	0.007	0.032
239	19.92	0.07	0.039	(0.057)	0.007	0.032
240	20.00	0.07	0.039	(0.056)	0.007	0.032
241	20.08	0.10	0.059	(0.056)	0.011	0.048
242	20.17	0.10	0.059	(0.056)	0.011	0.048
243	20.25	0.10	0.059	(0.056)	0.011	0.048
244	20.33	0.10	0.059	(0.055)	0.011	0.048
245	20.42	0.10	0.059	(0.055)	0.011	0.048
246	20.50	0.10	0.059	(0.055)	0.011	0.048
247	20.58	0.10	0.059	(0.055)	0.011	0.048
248	20.67	0.10	0.059	(0.054)	0.011	0.048
249	20.75	0.10	0.059	(0.054)	0.011	0.048
250	20.83	0.07	0.039	(0.054)	0.007	0.032
251	20.92	0.07	0.039	(0.054)	0.007	0.032
252	21.00	0.07	0.039	(0.054)	0.007	0.032
253	21.08	0.10	0.059	(0.053)	0.011	0.048
254	21.17	0.10	0.059	(0.053)	0.011	0.048
255	21.25	0.10	0.059	(0.053)	0.011	0.048
256	21.33	0.07	0.039	(0.053)	0.007	0.032
257	21.42	0.07	0.039	(0.053)	0.007	0.032
258	21.50	0.07	0.039	(0.052)	0.007	0.032
259	21.58	0.10	0.059	(0.052)	0.011	0.048
260	21.67	0.10	0.059	(0.052)	0.011	0.048
261	21.75	0.10	0.059	(0.052)	0.011	0.048
262	21.83	0.07	0.039	(0.052)	0.007	0.032
263	21.92	0.07	0.039	(0.051)	0.007	0.032
264	22.00	0.07	0.039	(0.051)	0.007	0.032
265	22.08	0.10	0.059	(0.051)	0.011	0.048
266	22.17	0.10	0.059	(0.051)	0.011	0.048
267	22.25	0.10	0.059	(0.051)	0.011	0.048
268	22.33	0.07	0.039	(0.051)	0.007	0.032
269	22.42	0.07	0.039	(0.050)	0.007	0.032
270	22.50	0.07	0.039	(0.050)	0.007	0.032
271	22.58	0.07	0.039	(0.050)	0.007	0.032
272	22.67	0.07	0.039	(0.050)	0.007	0.032
273	22.75	0.07	0.039	(0.050)	0.007	0.032
274	22.83	0.07	0.039	(0.050)	0.007	0.032
275	22.92	0.07	0.039	(0.050)	0.007	0.032
276	23.00	0.07	0.039	(0.049)	0.007	0.032
277	23.08	0.07	0.039	(0.049)	0.007	0.032
278	23.17	0.07	0.039	(0.049)	0.007	0.032
279	23.25	0.07	0.039	(0.049)	0.007	0.032
280	23.33	0.07	0.039	(0.049)	0.007	0.032
281	23.42	0.07	0.039	(0.049)	0.007	0.032
282	23.50	0.07	0.039	(0.049)	0.007	0.032
283	23.58	0.07	0.039	(0.049)	0.007	0.032
284	23.67	0.07	0.039	(0.049)	0.007	0.032
285	23.75	0.07	0.039	(0.049)	0.007	0.032
286	23.83	0.07	0.039	(0.049)	0.007	0.032
287	23.92	0.07	0.039	(0.049)	0.007	0.032
288	24.00	0.07	0.039	(0.049)	0.007	0.032

(Loss Rate Not Used)

Sum = 100.0 Sum = 48.8
 Flood volume = Effective rainfall 4.07 (In)
 times area 20.8 (Ac.) / [(In) / (Ft.)] = 7.0 (Ac.Ft)
 Total soil loss = 0.84 (In)
 Total soil loss = 1.454 (Ac.Ft)
 Total rainfall = 4.91 (In)
 Flood volume = 307013.9 Cubic Feet
 Total soil loss = 63339.3 Cubic Feet

 Peak flow rate of this hydrograph = 12.202 (CFS)

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

 Hydrograph in 5 Minute intervals ((CFS))

Time (h+m)	Volume Ac.Ft	Q (CFS)	0	5.0	10.0	15.0	20.0
0+ 5	0.0011	0.16	Q				
0+10	0.0045	0.49	Q				
0+15	0.0085	0.58	VQ				
0+20	0.0134	0.71	VQ				
0+25	0.0195	0.89	VQ				
0+30	0.0261	0.95	VQ				
0+35	0.0329	0.99	VQ				
0+40	0.0398	1.00	VQ				
0+45	0.0467	1.01	V Q				
0+50	0.0542	1.09	V Q				
0+55	0.0629	1.26	V Q				
1+ 0	0.0719	1.30	V Q				
1+ 5	0.0804	1.24	V Q				
1+10	0.0880	1.09	V Q				
1+15	0.0952	1.05	V Q				
1+20	0.1024	1.04	V Q				
1+25	0.1094	1.03	V Q				
1+30	0.1164	1.02	V Q				
1+35	0.1234	1.01	V Q				
1+40	0.1304	1.01	V Q				
1+45	0.1373	1.01	V Q				
1+50	0.1449	1.09	V Q				
1+55	0.1535	1.26	V Q				
2+ 0	0.1625	1.30	V Q				
2+ 5	0.1716	1.32	V Q				
2+10	0.1808	1.34	VQ				
2+15	0.1901	1.34	VQ				
2+20	0.1994	1.35	VQ				
2+25	0.2087	1.35	VQ				
2+30	0.2180	1.35	VQ				
2+35	0.2278	1.43	VQ				
2+40	0.2388	1.59	V Q				
2+45	0.2501	1.64	V Q				
2+50	0.2616	1.66	V Q				
2+55	0.2731	1.67	V Q				
3+ 0	0.2847	1.68	V Q				
3+ 5	0.2963	1.69	V Q				
3+10	0.3079	1.69	V Q				
3+15	0.3195	1.69	V Q				
3+20	0.3312	1.69	V Q				
3+25	0.3428	1.69	V Q				
3+30	0.3544	1.69	VQ				
3+35	0.3660	1.69	VQ				
3+40	0.3776	1.69	VQ				
3+45	0.3892	1.69	VQ				
3+50	0.4014	1.77	VQ				

3+55	0.4147	1.93	VQ					
4+ 0	0.4284	1.98	VQ					
4+ 5	0.4421	2.00	VQ					
4+10	0.4560	2.01	V Q					
4+15	0.4699	2.02	V Q					
4+20	0.4844	2.11	V Q					
4+25	0.5000	2.27	V Q					
4+30	0.5160	2.32	V Q					
4+35	0.5321	2.34	VQ					
4+40	0.5482	2.35	VQ					
4+45	0.5645	2.36	VQ					
4+50	0.5813	2.44	VQ					
4+55	0.5992	2.61	V Q					
5+ 0	0.6175	2.65	V Q					
5+ 5	0.6348	2.51	V Q					
5+10	0.6500	2.20	VQ					
5+15	0.6645	2.11	VQ					
5+20	0.6793	2.15	VQ					
5+25	0.6951	2.30	VQ					
5+30	0.7112	2.33	Q					
5+35	0.7278	2.42	Q					
5+40	0.7457	2.59	VQ					
5+45	0.7639	2.65	VQ					
5+50	0.7823	2.67	VQ					
5+55	0.8009	2.69	VQ					
6+ 0	0.8194	2.69	VQ					
6+ 5	0.8385	2.78	VQ					
6+10	0.8588	2.94	VQ					
6+15	0.8794	2.99	VQ					
6+20	0.9002	3.01	VQ					
6+25	0.9210	3.02	VQ					
6+30	0.9419	3.03	VQ					
6+35	0.9633	3.12	VQ					
6+40	0.9859	3.28	VQ					
6+45	1.0089	3.33	VQ					
6+50	1.0319	3.35	VQ					
6+55	1.0551	3.36	VQ					
7+ 0	1.0783	3.37	Q					
7+ 5	1.1015	3.37	Q					
7+10	1.1248	3.37	Q					
7+15	1.1480	3.37	Q					
7+20	1.1718	3.45	Q					
7+25	1.1967	3.62	VQ					
7+30	1.2220	3.67	VQ					
7+35	1.2479	3.77	Q					
7+40	1.2751	3.94	Q					
7+45	1.3026	4.00	Q					
7+50	1.3309	4.10	VQ					
7+55	1.3604	4.28	VQ					
8+ 0	1.3902	4.33	VQ					
8+ 5	1.4214	4.52	VQ					
8+10	1.4549	4.86	VQ					
8+15	1.4890	4.96	VQ					
8+20	1.5236	5.01	V Q					
8+25	1.5582	5.04	V Q					
8+30	1.5930	5.05	VQ					
8+35	1.6284	5.14	VQ					
8+40	1.6650	5.31	VQ					
8+45	1.7019	5.35	VQ					
8+50	1.7394	5.45	VQ					
8+55	1.7782	5.63	VQ					
9+ 0	1.8173	5.68	VQ					
9+ 5	1.8578	5.87	VQ					
9+10	1.9006	6.21	V Q					
9+15	1.9441	6.31	VQ					
9+20	1.9884	6.44	VQ					

9+25	2.0341	6.63		V Q			
9+30	2.0802	6.69		V Q			
9+35	2.1270	6.80		VQ			
9+40	2.1751	6.98		VQ			
9+45	2.2236	7.03		V Q			
9+50	2.2727	7.14		V Q			
9+55	2.3232	7.32		VQ			
10+ 0	2.3739	7.37		VQ			
10+ 5	2.4210	6.84		Q			
10+10	2.4602	5.69		Q V			
10+15	2.4972	5.38		Q V			
10+20	2.5333	5.23		Q V			
10+25	2.5688	5.15		Q V			
10+30	2.6039	5.10		Q V			
10+35	2.6416	5.46		Q V			
10+40	2.6849	6.29		Q V			
10+45	2.7298	6.52		Q V			
10+50	2.7754	6.62		Q V			
10+55	2.8214	6.68		Q V			
11+ 0	2.8677	6.72		Q V			
11+ 5	2.9136	6.67		Q V			
11+10	2.9584	6.50		Q V			
11+15	3.0029	6.46		Q V			
11+20	3.0472	6.44		Q V			
11+25	3.0914	6.42		Q V			
11+30	3.1356	6.42		Q V			
11+35	3.1787	6.25		Q V			
11+40	3.2195	5.92		Q V			
11+45	3.2596	5.83		Q V			
11+50	3.3000	5.87		Q V			
11+55	3.3414	6.01		Q V			
12+ 0	3.3830	6.04		Q V			
12+ 5	3.4285	6.61		Q V			
12+10	3.4821	7.78		Q V			
12+15	3.5379	8.11		Q V			
12+20	3.5955	8.36		Q V			
12+25	3.6549	8.63		Q V			
12+30	3.7151	8.74		Q V			
12+35	3.7772	9.01		Q V			
12+40	3.8422	9.44		Q V			
12+45	3.9081	9.57		Q V			
12+50	3.9751	9.73		Q V			
12+55	4.0438	9.97		Q V			
13+ 0	4.1131	10.06		Q V			
13+ 5	4.1860	10.60		Q V			
13+10	4.2661	11.62		QV			
13+15	4.3482	11.92		QV			
13+20	4.4313	12.07		QV			
13+25	4.5150	12.15		QV			
13+30	4.5990	12.20		Q V			
13+35	4.6760	11.17		Q V			
13+40	4.7379	8.99		Q V			
13+45	4.7955	8.37		Q V			
13+50	4.8512	8.09		Q V			
13+55	4.9059	7.93		Q V			
14+ 0	4.9599	7.85		Q V			
14+ 5	5.0162	8.17		Q V			
14+10	5.0780	8.98		Q V			
14+15	5.1415	9.21		Q V			
14+20	5.2050	9.23		Q V			
14+25	5.2676	9.09		Q V			
14+30	5.3301	9.08		Q V			
14+35	5.3927	9.09		Q V			
14+40	5.4553	9.08		Q V			
14+45	5.5178	9.08		Q V			
14+50	5.5797	8.99		Q V			

14+55	5.6403	8.79			Q		V	
15+ 0	5.7005	8.74			Q		V	
15+ 5	5.7599	8.63			Q		V	
15+10	5.8179	8.42			Q		V	
15+15	5.8755	8.36			Q		V	
15+20	5.9323	8.24			Q		V	
15+25	5.9876	8.03			Q		V	
15+30	6.0426	7.98			Q		V	
15+35	6.0948	7.59			Q		V	
15+40	6.1419	6.84			Q		V	
15+45	6.1875	6.62			Q		V	
15+50	6.2325	6.52			Q		V	
15+55	6.2770	6.47			Q		V	
16+ 0	6.3214	6.44			Q		V	
16+ 5	6.3572	5.21		Q			V	
16+10	6.3760	2.73		Q			V	
16+15	6.3901	2.04		Q			V	
16+20	6.4019	1.72		Q			V	
16+25	6.4126	1.54		Q			V	
16+30	6.4225	1.44		Q			V	
16+35	6.4312	1.27		Q			V	
16+40	6.4388	1.10		Q			V	
16+45	6.4461	1.06		Q			V	
16+50	6.4532	1.04		Q			V	
16+55	6.4603	1.03		Q			V	
17+ 0	6.4673	1.02		Q			V	
17+ 5	6.4754	1.17		Q			V	
17+10	6.4857	1.50		Q			V	
17+15	6.4967	1.60		Q			V	
17+20	6.5080	1.64		Q			V	
17+25	6.5195	1.66		Q			V	
17+30	6.5310	1.68		Q			V	
17+35	6.5426	1.69		Q			V	
17+40	6.5542	1.69		Q			V	
17+45	6.5658	1.69		Q			V	
17+50	6.5769	1.61		Q			V	
17+55	6.5868	1.44		Q			V	
18+ 0	6.5965	1.40		Q			V	
18+ 5	6.6059	1.37		Q			V	
18+10	6.6153	1.36		Q			V	
18+15	6.6246	1.36		Q			V	
18+20	6.6339	1.35		Q			V	
18+25	6.6432	1.35		Q			V	
18+30	6.6525	1.35		Q			V	
18+35	6.6613	1.27		Q			V	
18+40	6.6689	1.10		Q			V	
18+45	6.6762	1.06		Q			V	
18+50	6.6828	0.96		Q			V	
18+55	6.6881	0.78		Q			V	
19+ 0	6.6931	0.73		Q			V	
19+ 5	6.6985	0.78		Q			V	
19+10	6.7049	0.93		Q			V	
19+15	6.7116	0.97		Q			V	
19+20	6.7190	1.07		Q			V	
19+25	6.7276	1.24		Q			V	
19+30	6.7365	1.30		Q			V	
19+35	6.7451	1.24		Q			V	
19+40	6.7526	1.09		Q			V	
19+45	6.7598	1.05		Q			V	
19+50	6.7664	0.96		Q			V	
19+55	6.7718	0.78		Q			V	
20+ 0	6.7768	0.73		Q			V	
20+ 5	6.7822	0.78		Q			V	
20+10	6.7886	0.93		Q			V	
20+15	6.7953	0.97		Q			V	
20+20	6.8021	0.99		Q			V	

20+25	6.8090	1.00	Q				V	
20+30	6.8159	1.01	Q				V	
20+35	6.8229	1.01	Q				V	
20+40	6.8298	1.01	Q				V	
20+45	6.8368	1.01	Q				V	
20+50	6.8432	0.93	Q				V	
20+55	6.8485	0.77	Q				V	
21+ 0	6.8535	0.72	Q				V	
21+ 5	6.8589	0.78	Q				V	
21+10	6.8653	0.93	Q				V	
21+15	6.8720	0.97	Q				V	
21+20	6.8782	0.91	Q				V	
21+25	6.8834	0.75	Q				V	
21+30	6.8883	0.71	Q				V	
21+35	6.8937	0.78	Q				V	
21+40	6.9001	0.93	Q				V	
21+45	6.9068	0.97	Q				V	
21+50	6.9131	0.91	Q				V	
21+55	6.9183	0.75	Q				V	
22+ 0	6.9232	0.71	Q				V	
22+ 5	6.9286	0.78	Q				V	
22+10	6.9350	0.93	Q				V	
22+15	6.9417	0.97	Q				V	
22+20	6.9479	0.91	Q				V	
22+25	6.9531	0.75	Q				V	
22+30	6.9581	0.71	Q				V	
22+35	6.9629	0.70	Q				V	
22+40	6.9676	0.69	Q				V	
22+45	6.9723	0.68	Q				V	
22+50	6.9770	0.67	Q				V	
22+55	6.9816	0.67	Q				V	
23+ 0	6.9862	0.67	Q				V	
23+ 5	6.9909	0.67	Q				V	
23+10	6.9955	0.67	Q				V	
23+15	7.0002	0.67	Q				V	
23+20	7.0048	0.67	Q				V	
23+25	7.0095	0.67	Q				V	
23+30	7.0141	0.67	Q				V	
23+35	7.0188	0.67	Q				V	
23+40	7.0234	0.67	Q				V	
23+45	7.0281	0.67	Q				V	
23+50	7.0327	0.67	Q				V	
23+55	7.0374	0.67	Q				V	
24+ 0	7.0420	0.67	Q				V	
24+ 5	7.0456	0.51	Q				V	
24+10	7.0468	0.18	Q				V	
24+15	7.0475	0.09	Q				V	
24+20	7.0478	0.05	Q				V	
24+25	7.0480	0.03	Q				V	
24+30	7.0481	0.01	Q				V	

Unit Hydrograph Analysis

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

Program License Serial Number 6490

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

English Units used in output format

RAMONA - WEBSTER
AREA 3 - INDUSTRIAL
100 YEAR STORMS
1391PRUH3

Drainage Area = 17.60(Ac.) = 0.028 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 17.60(Ac.) = 0.028 Sq. Mi.
Length along longest watercourse = 1095.00(Ft.)
Length along longest watercourse measured to centroid = 550.00(Ft.)
Length along longest watercourse = 0.207 Mi.
Length along longest watercourse measured to centroid = 0.104 Mi.
Difference in elevation = 9.10(Ft.)
Slope along watercourse = 43.8795 Ft./Mi.
Average Manning's 'N' = 0.015
Lag time = 0.041 Hr.
Lag time = 2.45 Min.
25% of lag time = 0.61 Min.
40% of lag time = 0.98 Min.
Unit time = 5.00 Min.
Duration of storm = 1 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall(In) [2]	Weighting[1*2]
17.60	0.46	8.04

100 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall(In) [2]	Weighting[1*2]
17.60	1.35	23.76

STORM EVENT (YEAR) = 100.00
Area Averaged 2-Year Rainfall = 0.457(In)
Area Averaged 100-Year Rainfall = 1.350(In)

Point rain (area averaged) = 1.350(In)
Areal adjustment factor = 99.98 %
Adjusted average point rain = 1.350(In)

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

 Hydrograph in 5 Minute intervals ((CFS))

Time (h+m)	Volume Ac.Ft	Q(CFS)	0	15.0	30.0	45.0	60.0
0+ 5	0.0314	4.56	V Q				
0+10	0.0944	9.15	V Q				
0+15	0.1705	11.05	V Q				
0+20	0.2558	12.38	V Q				
0+25	0.3493	13.58	V Q				
0+30	0.4564	15.54	VQ				
0+35	0.5786	17.75	QV				
0+40	0.7208	20.65	Q V				
0+45	0.9077	27.13	QV				
0+50	1.2755	53.41	V Q				
0+55	1.5994	47.03	Q V				
1+ 0	1.7492	21.74	Q				V
1+ 5	1.8210	10.43	Q				V
1+10	1.8337	1.84	Q				V
1+15	1.8373	0.53	Q				V

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

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Study date 09/06/21 File: 1391PRUH33100.out

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

Program License Serial Number 6490

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

English Units used in output format

RAMONA - WEBSTER
AREA 3 - INDUSTRIAL
100 YEAR STORMS
1391PRUH3

Drainage Area = 17.60(Ac.) = 0.028 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 17.60(Ac.) = 0.028 Sq. Mi.
Length along longest watercourse = 1095.00(Ft.)
Length along longest watercourse measured to centroid = 550.00(Ft.)
Length along longest watercourse = 0.207 Mi.
Length along longest watercourse measured to centroid = 0.104 Mi.
Difference in elevation = 9.10(Ft.)
Slope along watercourse = 43.8795 Ft./Mi.
Average Manning's 'N' = 0.015
Lag time = 0.041 Hr.
Lag time = 2.45 Min.
25% of lag time = 0.61 Min.
40% of lag time = 0.98 Min.
Unit time = 5.00 Min.
Duration of storm = 3 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall(In) [2]	Weighting[1*2]
17.60	0.80	14.06

100 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall(In) [2]	Weighting[1*2]
17.60	2.01	35.38

STORM EVENT (YEAR) = 100.00
Area Averaged 2-Year Rainfall = 0.799(In)
Area Averaged 100-Year Rainfall = 2.010(In)

Point rain (area averaged) = 2.010(In)
Areal adjustment factor = 99.99 %
Adjusted average point rain = 2.010(In)

Sub-Area Data:

Area(Ac.) Runoff Index Impervious %
 17.600 56.00 0.900
 Total Area Entered = 17.60(Ac.)

RI	RI	Infil. Rate	Impervious	Adj. Infil. Rate	Area%	F
AMC2	AMC-2	(In/Hr)	(Dec.%)	(In/Hr)	(Dec.)	(In/Hr)
56.0	56.0	0.511	0.900	0.097	1.000	0.097
						Sum (F) = 0.097

Area averaged mean soil loss (F) (In/Hr) = 0.097
 Minimum soil loss rate ((In/Hr)) = 0.049
 (for 24 hour storm duration)
 Soil low loss rate (decimal) = 0.180

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

Unit Hydrograph Data

Unit time period (hrs)	Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	203.907	7.817
2	0.167	407.814	7.644
3	0.250	611.721	1.532
4	0.333	815.629	0.745
		Sum = 100.000	Sum= 17.738

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

Unit Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr)		Effective (In/Hr)
			Max	Low	
1	0.08	1.30	(0.097)	0.056	0.257
2	0.17	1.30	(0.097)	0.056	0.257
3	0.25	1.10	(0.097)	0.048	0.218
4	0.33	1.50	(0.097)	0.065	0.297
5	0.42	1.50	(0.097)	0.065	0.297
6	0.50	1.80	(0.097)	0.078	0.356
7	0.58	1.50	(0.097)	0.065	0.297
8	0.67	1.80	(0.097)	0.078	0.356
9	0.75	1.80	(0.097)	0.078	0.356
10	0.83	1.50	(0.097)	0.065	0.297
11	0.92	1.60	(0.097)	0.069	0.316
12	1.00	1.80	(0.097)	0.078	0.356
13	1.08	2.20	(0.097)	0.096	0.435
14	1.17	2.20	(0.097)	0.096	0.435
15	1.25	2.20	(0.097)	0.096	0.435
16	1.33	2.00	(0.097)	0.087	0.396
17	1.42	2.60	0.097	(0.113)	0.530
18	1.50	2.70	0.097	(0.117)	0.554
19	1.58	2.40	0.097	(0.104)	0.482
20	1.67	2.70	0.097	(0.117)	0.554
21	1.75	3.30	0.097	(0.143)	0.699
22	1.83	3.10	0.097	(0.135)	0.651
23	1.92	2.90	0.097	(0.126)	0.602
24	2.00	3.00	0.097	(0.130)	0.626
25	2.08	3.10	0.097	(0.135)	0.651
26	2.17	4.20	0.097	(0.182)	0.916
27	2.25	5.00	0.097	(0.217)	1.109
28	2.33	3.50	0.097	(0.152)	0.747

29	2.42	6.80	1.640	0.097	(0.295)	1.543
30	2.50	7.30	1.761	0.097	(0.317)	1.664
31	2.58	8.20	1.978	0.097	(0.356)	1.881
32	2.67	5.90	1.423	0.097	(0.256)	1.326
33	2.75	2.00	0.482	(0.097)	0.087	0.396
34	2.83	1.80	0.434	(0.097)	0.078	0.356
35	2.92	1.80	0.434	(0.097)	0.078	0.356
36	3.00	0.60	0.145	(0.097)	0.026	0.119

(Loss Rate Not Used)

Sum = 100.0 Sum = 21.1

Flood volume = Effective rainfall 1.76(In)
times area 17.6(Ac.)/[In]/(Ft.)] = 2.6(Ac.Ft)
Total soil loss = 0.25(In)
Total soil loss = 0.366(Ac.Ft)
Total rainfall = 2.01(In)
Flood volume = 112441.1 Cubic Feet
Total soil loss = 15963.9 Cubic Feet

Peak flow rate of this hydrograph = 30.353(CFS)

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

Hydrograph in 5 Minute intervals ((CFS))

Time(h+m)	Volume Ac.Ft	Q(CFS)	0	10.0	20.0	30.0	40.0
0+ 5	0.0138	2.01	V Q				
0+10	0.0412	3.98	V Q				
0+15	0.0692	4.06	V Q				
0+20	0.1007	4.57	V Q				
0+25	0.1359	5.11	V Q				
0+30	0.1749	5.67	V Q				
0+35	0.2143	5.72	V Q				
0+40	0.2544	5.82	V Q				
0+45	0.2973	6.23	V Q				
0+50	0.3373	5.81	Q				
0+55	0.3756	5.55	Q				
1+ 0	0.4164	5.92	QV				
1+ 5	0.4634	6.83	QV				
1+10	0.5151	7.51	Q				
1+15	0.5679	7.66	QV				
1+20	0.6190	7.41	Q V				
1+25	0.6752	8.16	Q V				
1+30	0.7393	9.32	Q V				
1+35	0.8021	9.11	Q V				
1+40	0.8659	9.26	Q V				
1+45	0.9406	10.85	Q V				
1+50	1.0208	11.64	Q V				
1+55	1.0978	11.17	Q V				
2+ 0	1.1737	11.02	Q V				
2+ 5	1.2514	11.29	Q V				
2+10	1.3447	13.55	Q V				
2+15	1.4628	17.14	Q V				
2+20	1.5744	16.21	Q V				
2+25	1.7133	20.16	Q V				
2+30	1.8978	26.78	Q V				
2+35	2.1068	30.35	Q V				
2+40	2.3027	28.45	Q V				
2+45	2.4223	17.36	Q V				
2+50	2.4859	9.24	Q V				
2+55	2.5348	7.10	Q V				
3+ 0	2.5658	4.49	Q V				
3+ 5	2.5776	1.72	Q V				

3+10	2.5807	0.45	Q				V
3+15	2.5813	0.09	Q				V

Unit Hydrograph Analysis

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

Program License Serial Number 6490

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

English Units used in output format

RAMONA - WEBSTER
AREA 3 - INDUSTRIAL
100 YEAR STORMS
1391PRUH3

Drainage Area = 17.60(Ac.) = 0.028 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 17.60(Ac.) = 0.028 Sq. Mi.
Length along longest watercourse = 1095.00(Ft.)
Length along longest watercourse measured to centroid = 550.00(Ft.)
Length along longest watercourse = 0.207 Mi.
Length along longest watercourse measured to centroid = 0.104 Mi.
Difference in elevation = 9.10(Ft.)
Slope along watercourse = 43.8795 Ft./Mi.
Average Manning's 'N' = 0.015
Lag time = 0.041 Hr.
Lag time = 2.45 Min.
25% of lag time = 0.61 Min.
40% of lag time = 0.98 Min.
Unit time = 5.00 Min.
Duration of storm = 6 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall(In) [2]	Weighting[1*2]
17.60	1.11	19.54

100 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall(In) [2]	Weighting[1*2]
17.60	2.70	47.52

STORM EVENT (YEAR) = 100.00
Area Averaged 2-Year Rainfall = 1.110(In)
Area Averaged 100-Year Rainfall = 2.700(In)

Point rain (area averaged) = 2.700(In)
Areal adjustment factor = 99.99 %
Adjusted average point rain = 2.700(In)

Sub-Area Data:

Area(Ac.) Runoff Index Impervious %
 17.600 56.00 0.900
 Total Area Entered = 17.60(Ac.)

RI	RI	Infil. Rate	Impervious	Adj. Infil. Rate	Area%	F
AMC2	AMC-2	(In/Hr)	(Dec.%)	(In/Hr)	(Dec.)	(In/Hr)
56.0	56.0	0.511	0.900	0.097	1.000	0.097
						Sum (F) = 0.097

Area averaged mean soil loss (F) (In/Hr) = 0.097
 Minimum soil loss rate ((In/Hr)) = 0.049
 (for 24 hour storm duration)
 Soil low loss rate (decimal) = 0.180

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

Unit Hydrograph Data

Unit time period (hrs)	Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	203.907	44.069
2	0.167	407.814	43.096
3	0.250	611.721	8.636
4	0.333	815.629	4.199
			Sum = 100.000
			Sum= 17.738

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

Unit Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr)		Effective (In/Hr)
			Max	Low	
1	0.08	0.162	(0.097)	0.029	0.133
2	0.17	0.194	(0.097)	0.035	0.159
3	0.25	0.194	(0.097)	0.035	0.159
4	0.33	0.194	(0.097)	0.035	0.159
5	0.42	0.194	(0.097)	0.035	0.159
6	0.50	0.227	(0.097)	0.041	0.186
7	0.58	0.227	(0.097)	0.041	0.186
8	0.67	0.227	(0.097)	0.041	0.186
9	0.75	0.227	(0.097)	0.041	0.186
10	0.83	0.227	(0.097)	0.041	0.186
11	0.92	0.227	(0.097)	0.041	0.186
12	1.00	0.259	(0.097)	0.047	0.213
13	1.08	0.259	(0.097)	0.047	0.213
14	1.17	0.259	(0.097)	0.047	0.213
15	1.25	0.259	(0.097)	0.047	0.213
16	1.33	0.259	(0.097)	0.047	0.213
17	1.42	0.259	(0.097)	0.047	0.213
18	1.50	0.259	(0.097)	0.047	0.213
19	1.58	0.259	(0.097)	0.047	0.213
20	1.67	0.259	(0.097)	0.047	0.213
21	1.75	0.259	(0.097)	0.047	0.213
22	1.83	0.259	(0.097)	0.047	0.213
23	1.92	0.259	(0.097)	0.047	0.213
24	2.00	0.292	(0.097)	0.052	0.239
25	2.08	0.259	(0.097)	0.047	0.213
26	2.17	0.292	(0.097)	0.052	0.239
27	2.25	0.292	(0.097)	0.052	0.239
28	2.33	0.292	(0.097)	0.052	0.239

29	2.42	0.90	0.292	(0.097)	0.052	0.239
30	2.50	0.90	0.292	(0.097)	0.052	0.239
31	2.58	0.90	0.292	(0.097)	0.052	0.239
32	2.67	0.90	0.292	(0.097)	0.052	0.239
33	2.75	1.00	0.324	(0.097)	0.058	0.266
34	2.83	1.00	0.324	(0.097)	0.058	0.266
35	2.92	1.00	0.324	(0.097)	0.058	0.266
36	3.00	1.00	0.324	(0.097)	0.058	0.266
37	3.08	1.00	0.324	(0.097)	0.058	0.266
38	3.17	1.10	0.356	(0.097)	0.064	0.292
39	3.25	1.10	0.356	(0.097)	0.064	0.292
40	3.33	1.10	0.356	(0.097)	0.064	0.292
41	3.42	1.20	0.389	(0.097)	0.070	0.319
42	3.50	1.30	0.421	(0.097)	0.076	0.345
43	3.58	1.40	0.454	(0.097)	0.082	0.372
44	3.67	1.40	0.454	(0.097)	0.082	0.372
45	3.75	1.50	0.486	(0.097)	0.087	0.398
46	3.83	1.50	0.486	(0.097)	0.087	0.398
47	3.92	1.60	0.518	(0.097)	0.093	0.425
48	4.00	1.60	0.518	(0.097)	0.093	0.425
49	4.08	1.70	0.551	0.097 (0.099)		0.454
50	4.17	1.80	0.583	0.097 (0.105)		0.486
51	4.25	1.90	0.616	0.097 (0.111)		0.519
52	4.33	2.00	0.648	0.097 (0.117)		0.551
53	4.42	2.10	0.680	0.097 (0.122)		0.583
54	4.50	2.10	0.680	0.097 (0.122)		0.583
55	4.58	2.20	0.713	0.097 (0.128)		0.616
56	4.67	2.30	0.745	0.097 (0.134)		0.648
57	4.75	2.40	0.778	0.097 (0.140)		0.681
58	4.83	2.40	0.778	0.097 (0.140)		0.681
59	4.92	2.50	0.810	0.097 (0.146)		0.713
60	5.00	2.60	0.842	0.097 (0.152)		0.745
61	5.08	3.10	1.004	0.097 (0.181)		0.907
62	5.17	3.60	1.166	0.097 (0.210)		1.069
63	5.25	3.90	1.264	0.097 (0.227)		1.166
64	5.33	4.20	1.361	0.097 (0.245)		1.264
65	5.42	4.70	1.523	0.097 (0.274)		1.426
66	5.50	5.60	1.814	0.097 (0.327)		1.717
67	5.58	1.90	0.616	0.097 (0.111)		0.519
68	5.67	0.90	0.292	(0.097)	0.052	0.239
69	5.75	0.60	0.194	(0.097)	0.035	0.159
70	5.83	0.50	0.162	(0.097)	0.029	0.133
71	5.92	0.30	0.097	(0.097)	0.017	0.080
72	6.00	0.20	0.065	(0.097)	0.012	0.053

(Loss Rate Not Used)

Sum = 100.0 Sum = 27.8

Flood volume = Effective rainfall 2.32(In)
times area 17.6(Ac.) / [(In)/(Ft.)] = 3.4(Ac.Ft)
Total soil loss = 0.38(In)
Total soil loss = 0.560(Ac.Ft)
Total rainfall = 2.70(In)
Flood volume = 148077.4 Cubic Feet
Total soil loss = 24409.8 Cubic Feet

Peak flow rate of this hydrograph = 27.140(CFS)

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

Hydrograph in 5 Minute intervals ((CFS))

Time(h+m)	Volume Ac.Ft	Q(CFS)	0	7.5	15.0	22.5	30.0
0+ 5	0.0072	1.04	VQ				

0+10	0.0227	2.26	V Q						
0+15	0.0411	2.67	V Q						
0+20	0.0605	2.81	V Q						
0+25	0.0799	2.83	V Q						
0+30	0.1009	3.04	V Q						
0+35	0.1232	3.24	V Q						
0+40	0.1458	3.28	V Q						
0+45	0.1685	3.30	V Q						
0+50	0.1912	3.30	V Q						
0+55	0.2140	3.30	V Q						
1+ 0	0.2381	3.51	V Q						
1+ 5	0.2637	3.71	VQ						
1+10	0.2895	3.75	V Q						
1+15	0.3155	3.77	V Q						
1+20	0.3415	3.77	VQ						
1+25	0.3674	3.77	VQ						
1+30	0.3934	3.77	VQ						
1+35	0.4194	3.77	VQ						
1+40	0.4454	3.77	Q						
1+45	0.4713	3.77	Q						
1+50	0.4973	3.77	Q						
1+55	0.5233	3.77	QV						
2+ 0	0.5507	3.98	QV						
2+ 5	0.5781	3.97	QV						
2+10	0.6058	4.02	Q V						
2+15	0.6347	4.20	Q V						
2+20	0.6638	4.22	Q V						
2+25	0.6930	4.24	Q V						
2+30	0.7222	4.24	Q V						
2+35	0.7515	4.24	Q V						
2+40	0.7807	4.24	Q V						
2+45	0.8113	4.45	Q V						
2+50	0.8434	4.65	Q V						
2+55	0.8757	4.69	Q V						
3+ 0	0.9082	4.71	Q V						
3+ 5	0.9407	4.71	Q V						
3+10	0.9746	4.92	Q V						
3+15	1.0099	5.13	Q V						
3+20	1.0454	5.17	Q V						
3+25	1.0826	5.39	Q V						
3+30	1.1226	5.80	Q V						
3+35	1.1657	6.26	Q V						
3+40	1.2106	6.52	Q V						
3+45	1.2573	6.79	Q V						
3+50	1.3056	7.01	Q V						
3+55	1.3556	7.26	Q V						
4+ 0	1.4071	7.48	Q V						
4+ 5	1.4605	7.75	Q V						
4+10	1.5173	8.24	Q V						
4+15	1.5778	8.79	Q V						
4+20	1.6422	9.36	Q V						
4+25	1.7106	9.93	Q V						
4+30	1.7812	10.25	Q V						
4+35	1.8541	10.58	Q V						
4+40	1.9306	11.11	Q V						
4+45	2.0109	11.66	Q V						
4+50	2.0934	11.98	Q V						
4+55	2.1781	12.31	Q V						
5+ 0	2.2665	12.83	Q V						
5+ 5	2.3656	14.40	Q V						
5+10	2.4825	16.98	Q V						
5+15	2.6151	19.25	Q V						
5+20	2.7605	21.12	Q V						
5+25	2.9217	23.40	Q V						
5+30	3.1086	27.14	Q V						
5+35	3.2485	20.32	Q V						

5+40	3.3141	9.53				Q				V	
5+45	3.3496	5.15			Q					V	
5+50	3.3703	3.01			Q					V	
5+55	3.3845	2.06			Q					V	
6+ 0	3.3938	1.35		Q						V	
6+ 5	3.3981	0.63	Q							V	
6+10	3.3991	0.14	Q							V	
6+15	3.3994	0.04	Q							V	

Unit Hydrograph Analysis

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Study date 09/06/21 File: 1391PRUH324100.out

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

Program License Serial Number 6490

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

English Units used in output format

RAMONA - WEBSTER
AREA 3 - INDUSTRIAL
100 YEAR STORMS
1391PRUH3

Drainage Area = 17.60(Ac.) = 0.028 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 17.60(Ac.) = 0.028 Sq. Mi.
Length along longest watercourse = 1095.00(Ft.)
Length along longest watercourse measured to centroid = 550.00(Ft.)
Length along longest watercourse = 0.207 Mi.
Length along longest watercourse measured to centroid = 0.104 Mi.
Difference in elevation = 9.10(Ft.)
Slope along watercourse = 43.8795 Ft./Mi.
Average Manning's 'N' = 0.015
Lag time = 0.041 Hr.
Lag time = 2.45 Min.
25% of lag time = 0.61 Min.
40% of lag time = 0.98 Min.
Unit time = 5.00 Min.
Duration of storm = 24 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall(In) [2]	Weighting[1*2]
17.60	1.94	34.14

100 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall(In) [2]	Weighting[1*2]
17.60	4.91	86.42

STORM EVENT (YEAR) = 100.00
Area Averaged 2-Year Rainfall = 1.940(In)
Area Averaged 100-Year Rainfall = 4.910(In)

Point rain (area averaged) = 4.910(In)
Areal adjustment factor = 100.00 %
Adjusted average point rain = 4.910(In)

Sub-Area Data:

Area(Ac.) Runoff Index Impervious %
 17.600 56.00 0.900
 Total Area Entered = 17.60(Ac.)

RI	RI	Infil. Rate	Impervious	Adj. Infil. Rate	Area%	F
AMC2	AMC-2	(In/Hr)	(Dec.%)	(In/Hr)	(Dec.)	(In/Hr)
56.0	56.0	0.511	0.900	0.097	1.000	0.097
						Sum (F) = 0.097

Area averaged mean soil loss (F) (In/Hr) = 0.097
 Minimum soil loss rate ((In/Hr)) = 0.049
 (for 24 hour storm duration)
 Soil low loss rate (decimal) = 0.180

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

Unit Hydrograph Data

Unit time period (hrs)	Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	203.907	44.069
2	0.167	407.814	43.096
3	0.250	611.721	8.636
4	0.333	815.629	4.199
			Sum = 100.000
			Sum= 17.738

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

Unit Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr)		Effective (In/Hr)
			Max	Low	
1	0.08	0.039	(0.172)	0.007	0.032
2	0.17	0.039	(0.171)	0.007	0.032
3	0.25	0.039	(0.171)	0.007	0.032
4	0.33	0.059	(0.170)	0.011	0.048
5	0.42	0.059	(0.169)	0.011	0.048
6	0.50	0.059	(0.169)	0.011	0.048
7	0.58	0.059	(0.168)	0.011	0.048
8	0.67	0.059	(0.167)	0.011	0.048
9	0.75	0.059	(0.167)	0.011	0.048
10	0.83	0.079	(0.166)	0.014	0.064
11	0.92	0.079	(0.165)	0.014	0.064
12	1.00	0.079	(0.165)	0.014	0.064
13	1.08	0.059	(0.164)	0.011	0.048
14	1.17	0.059	(0.163)	0.011	0.048
15	1.25	0.059	(0.163)	0.011	0.048
16	1.33	0.059	(0.162)	0.011	0.048
17	1.42	0.059	(0.162)	0.011	0.048
18	1.50	0.059	(0.161)	0.011	0.048
19	1.58	0.059	(0.160)	0.011	0.048
20	1.67	0.059	(0.160)	0.011	0.048
21	1.75	0.059	(0.159)	0.011	0.048
22	1.83	0.079	(0.158)	0.014	0.064
23	1.92	0.079	(0.158)	0.014	0.064
24	2.00	0.079	(0.157)	0.014	0.064
25	2.08	0.079	(0.156)	0.014	0.064
26	2.17	0.079	(0.156)	0.014	0.064
27	2.25	0.079	(0.155)	0.014	0.064
28	2.33	0.079	(0.155)	0.014	0.064

29	2.42	0.13	0.079	(0.154)	0.014	0.064
30	2.50	0.13	0.079	(0.153)	0.014	0.064
31	2.58	0.17	0.098	(0.153)	0.018	0.081
32	2.67	0.17	0.098	(0.152)	0.018	0.081
33	2.75	0.17	0.098	(0.151)	0.018	0.081
34	2.83	0.17	0.098	(0.151)	0.018	0.081
35	2.92	0.17	0.098	(0.150)	0.018	0.081
36	3.00	0.17	0.098	(0.150)	0.018	0.081
37	3.08	0.17	0.098	(0.149)	0.018	0.081
38	3.17	0.17	0.098	(0.148)	0.018	0.081
39	3.25	0.17	0.098	(0.148)	0.018	0.081
40	3.33	0.17	0.098	(0.147)	0.018	0.081
41	3.42	0.17	0.098	(0.146)	0.018	0.081
42	3.50	0.17	0.098	(0.146)	0.018	0.081
43	3.58	0.17	0.098	(0.145)	0.018	0.081
44	3.67	0.17	0.098	(0.145)	0.018	0.081
45	3.75	0.17	0.098	(0.144)	0.018	0.081
46	3.83	0.20	0.118	(0.143)	0.021	0.097
47	3.92	0.20	0.118	(0.143)	0.021	0.097
48	4.00	0.20	0.118	(0.142)	0.021	0.097
49	4.08	0.20	0.118	(0.142)	0.021	0.097
50	4.17	0.20	0.118	(0.141)	0.021	0.097
51	4.25	0.20	0.118	(0.140)	0.021	0.097
52	4.33	0.23	0.137	(0.140)	0.025	0.113
53	4.42	0.23	0.137	(0.139)	0.025	0.113
54	4.50	0.23	0.137	(0.139)	0.025	0.113
55	4.58	0.23	0.137	(0.138)	0.025	0.113
56	4.67	0.23	0.137	(0.137)	0.025	0.113
57	4.75	0.23	0.137	(0.137)	0.025	0.113
58	4.83	0.27	0.157	(0.136)	0.028	0.129
59	4.92	0.27	0.157	(0.136)	0.028	0.129
60	5.00	0.27	0.157	(0.135)	0.028	0.129
61	5.08	0.20	0.118	(0.134)	0.021	0.097
62	5.17	0.20	0.118	(0.134)	0.021	0.097
63	5.25	0.20	0.118	(0.133)	0.021	0.097
64	5.33	0.23	0.137	(0.133)	0.025	0.113
65	5.42	0.23	0.137	(0.132)	0.025	0.113
66	5.50	0.23	0.137	(0.132)	0.025	0.113
67	5.58	0.27	0.157	(0.131)	0.028	0.129
68	5.67	0.27	0.157	(0.130)	0.028	0.129
69	5.75	0.27	0.157	(0.130)	0.028	0.129
70	5.83	0.27	0.157	(0.129)	0.028	0.129
71	5.92	0.27	0.157	(0.129)	0.028	0.129
72	6.00	0.27	0.157	(0.128)	0.028	0.129
73	6.08	0.30	0.177	(0.128)	0.032	0.145
74	6.17	0.30	0.177	(0.127)	0.032	0.145
75	6.25	0.30	0.177	(0.126)	0.032	0.145
76	6.33	0.30	0.177	(0.126)	0.032	0.145
77	6.42	0.30	0.177	(0.125)	0.032	0.145
78	6.50	0.30	0.177	(0.125)	0.032	0.145
79	6.58	0.33	0.196	(0.124)	0.035	0.161
80	6.67	0.33	0.196	(0.124)	0.035	0.161
81	6.75	0.33	0.196	(0.123)	0.035	0.161
82	6.83	0.33	0.196	(0.122)	0.035	0.161
83	6.92	0.33	0.196	(0.122)	0.035	0.161
84	7.00	0.33	0.196	(0.121)	0.035	0.161
85	7.08	0.33	0.196	(0.121)	0.035	0.161
86	7.17	0.33	0.196	(0.120)	0.035	0.161
87	7.25	0.33	0.196	(0.120)	0.035	0.161
88	7.33	0.37	0.216	(0.119)	0.039	0.177
89	7.42	0.37	0.216	(0.119)	0.039	0.177
90	7.50	0.37	0.216	(0.118)	0.039	0.177
91	7.58	0.40	0.236	(0.118)	0.042	0.193
92	7.67	0.40	0.236	(0.117)	0.042	0.193
93	7.75	0.40	0.236	(0.116)	0.042	0.193
94	7.83	0.43	0.255	(0.116)	0.046	0.209

95	7.92	0.43	0.255	(0.115)	0.046	0.209
96	8.00	0.43	0.255	(0.115)	0.046	0.209
97	8.08	0.50	0.295	(0.114)	0.053	0.242
98	8.17	0.50	0.295	(0.114)	0.053	0.242
99	8.25	0.50	0.295	(0.113)	0.053	0.242
100	8.33	0.50	0.295	(0.113)	0.053	0.242
101	8.42	0.50	0.295	(0.112)	0.053	0.242
102	8.50	0.50	0.295	(0.112)	0.053	0.242
103	8.58	0.53	0.314	(0.111)	0.057	0.258
104	8.67	0.53	0.314	(0.111)	0.057	0.258
105	8.75	0.53	0.314	(0.110)	0.057	0.258
106	8.83	0.57	0.334	(0.110)	0.060	0.274
107	8.92	0.57	0.334	(0.109)	0.060	0.274
108	9.00	0.57	0.334	(0.109)	0.060	0.274
109	9.08	0.63	0.373	(0.108)	0.067	0.306
110	9.17	0.63	0.373	(0.108)	0.067	0.306
111	9.25	0.63	0.373	(0.107)	0.067	0.306
112	9.33	0.67	0.393	(0.107)	0.071	0.322
113	9.42	0.67	0.393	(0.106)	0.071	0.322
114	9.50	0.67	0.393	(0.105)	0.071	0.322
115	9.58	0.70	0.412	(0.105)	0.074	0.338
116	9.67	0.70	0.412	(0.104)	0.074	0.338
117	9.75	0.70	0.412	(0.104)	0.074	0.338
118	9.83	0.73	0.432	(0.103)	0.078	0.354
119	9.92	0.73	0.432	(0.103)	0.078	0.354
120	10.00	0.73	0.432	(0.102)	0.078	0.354
121	10.08	0.50	0.295	(0.102)	0.053	0.242
122	10.17	0.50	0.295	(0.101)	0.053	0.242
123	10.25	0.50	0.295	(0.101)	0.053	0.242
124	10.33	0.50	0.295	(0.101)	0.053	0.242
125	10.42	0.50	0.295	(0.100)	0.053	0.242
126	10.50	0.50	0.295	(0.100)	0.053	0.242
127	10.58	0.67	0.393	(0.099)	0.071	0.322
128	10.67	0.67	0.393	(0.099)	0.071	0.322
129	10.75	0.67	0.393	(0.098)	0.071	0.322
130	10.83	0.67	0.393	(0.098)	0.071	0.322
131	10.92	0.67	0.393	(0.097)	0.071	0.322
132	11.00	0.67	0.393	(0.097)	0.071	0.322
133	11.08	0.63	0.373	(0.096)	0.067	0.306
134	11.17	0.63	0.373	(0.096)	0.067	0.306
135	11.25	0.63	0.373	(0.095)	0.067	0.306
136	11.33	0.63	0.373	(0.095)	0.067	0.306
137	11.42	0.63	0.373	(0.094)	0.067	0.306
138	11.50	0.63	0.373	(0.094)	0.067	0.306
139	11.58	0.57	0.334	(0.093)	0.060	0.274
140	11.67	0.57	0.334	(0.093)	0.060	0.274
141	11.75	0.57	0.334	(0.092)	0.060	0.274
142	11.83	0.60	0.354	(0.092)	0.064	0.290
143	11.92	0.60	0.354	(0.092)	0.064	0.290
144	12.00	0.60	0.354	(0.091)	0.064	0.290
145	12.08	0.83	0.491	(0.091)	0.088	0.403
146	12.17	0.83	0.491	(0.090)	0.088	0.403
147	12.25	0.83	0.491	(0.090)	0.088	0.403
148	12.33	0.87	0.511	0.089 (0.092)		0.421
149	12.42	0.87	0.511	0.089 (0.092)		0.422
150	12.50	0.87	0.511	0.088 (0.092)		0.422
151	12.58	0.93	0.550	0.088 (0.099)		0.462
152	12.67	0.93	0.550	0.087 (0.099)		0.462
153	12.75	0.93	0.550	0.087 (0.099)		0.463
154	12.83	0.97	0.570	0.087 (0.103)		0.483
155	12.92	0.97	0.570	0.086 (0.103)		0.483
156	13.00	0.97	0.570	0.086 (0.103)		0.484
157	13.08	1.13	0.668	0.085 (0.120)		0.582
158	13.17	1.13	0.668	0.085 (0.120)		0.583
159	13.25	1.13	0.668	0.084 (0.120)		0.583
160	13.33	1.13	0.668	0.084 (0.120)		0.584

161	13.42	1.13	0.668	0.084	(0.120)	0.584
162	13.50	1.13	0.668	0.083	(0.120)	0.585
163	13.58	0.77	0.452	(0.083)	0.081	0.370
164	13.67	0.77	0.452	(0.082)	0.081	0.370
165	13.75	0.77	0.452	(0.082)	0.081	0.370
166	13.83	0.77	0.452	(0.081)	0.081	0.370
167	13.92	0.77	0.452	0.081	(0.081)	0.371
168	14.00	0.77	0.452	0.081	(0.081)	0.371
169	14.08	0.90	0.530	0.080	(0.095)	0.450
170	14.17	0.90	0.530	0.080	(0.095)	0.450
171	14.25	0.90	0.530	0.079	(0.095)	0.451
172	14.33	0.87	0.511	0.079	(0.092)	0.432
173	14.42	0.87	0.511	0.079	(0.092)	0.432
174	14.50	0.87	0.511	0.078	(0.092)	0.432
175	14.58	0.87	0.511	0.078	(0.092)	0.433
176	14.67	0.87	0.511	0.077	(0.092)	0.433
177	14.75	0.87	0.511	0.077	(0.092)	0.434
178	14.83	0.83	0.491	0.077	(0.088)	0.414
179	14.92	0.83	0.491	0.076	(0.088)	0.415
180	15.00	0.83	0.491	0.076	(0.088)	0.415
181	15.08	0.80	0.471	0.075	(0.085)	0.396
182	15.17	0.80	0.471	0.075	(0.085)	0.396
183	15.25	0.80	0.471	0.075	(0.085)	0.397
184	15.33	0.77	0.452	0.074	(0.081)	0.377
185	15.42	0.77	0.452	0.074	(0.081)	0.378
186	15.50	0.77	0.452	0.073	(0.081)	0.378
187	15.58	0.63	0.373	(0.073)	0.067	0.306
188	15.67	0.63	0.373	(0.073)	0.067	0.306
189	15.75	0.63	0.373	(0.072)	0.067	0.306
190	15.83	0.63	0.373	(0.072)	0.067	0.306
191	15.92	0.63	0.373	(0.072)	0.067	0.306
192	16.00	0.63	0.373	(0.071)	0.067	0.306
193	16.08	0.13	0.079	(0.071)	0.014	0.064
194	16.17	0.13	0.079	(0.071)	0.014	0.064
195	16.25	0.13	0.079	(0.070)	0.014	0.064
196	16.33	0.13	0.079	(0.070)	0.014	0.064
197	16.42	0.13	0.079	(0.069)	0.014	0.064
198	16.50	0.13	0.079	(0.069)	0.014	0.064
199	16.58	0.10	0.059	(0.069)	0.011	0.048
200	16.67	0.10	0.059	(0.068)	0.011	0.048
201	16.75	0.10	0.059	(0.068)	0.011	0.048
202	16.83	0.10	0.059	(0.068)	0.011	0.048
203	16.92	0.10	0.059	(0.067)	0.011	0.048
204	17.00	0.10	0.059	(0.067)	0.011	0.048
205	17.08	0.17	0.098	(0.067)	0.018	0.081
206	17.17	0.17	0.098	(0.066)	0.018	0.081
207	17.25	0.17	0.098	(0.066)	0.018	0.081
208	17.33	0.17	0.098	(0.066)	0.018	0.081
209	17.42	0.17	0.098	(0.065)	0.018	0.081
210	17.50	0.17	0.098	(0.065)	0.018	0.081
211	17.58	0.17	0.098	(0.065)	0.018	0.081
212	17.67	0.17	0.098	(0.064)	0.018	0.081
213	17.75	0.17	0.098	(0.064)	0.018	0.081
214	17.83	0.13	0.079	(0.064)	0.014	0.064
215	17.92	0.13	0.079	(0.063)	0.014	0.064
216	18.00	0.13	0.079	(0.063)	0.014	0.064
217	18.08	0.13	0.079	(0.063)	0.014	0.064
218	18.17	0.13	0.079	(0.063)	0.014	0.064
219	18.25	0.13	0.079	(0.062)	0.014	0.064
220	18.33	0.13	0.079	(0.062)	0.014	0.064
221	18.42	0.13	0.079	(0.062)	0.014	0.064
222	18.50	0.13	0.079	(0.061)	0.014	0.064
223	18.58	0.10	0.059	(0.061)	0.011	0.048
224	18.67	0.10	0.059	(0.061)	0.011	0.048
225	18.75	0.10	0.059	(0.060)	0.011	0.048
226	18.83	0.07	0.039	(0.060)	0.007	0.032

227	18.92	0.07	0.039	(0.060)	0.007	0.032
228	19.00	0.07	0.039	(0.060)	0.007	0.032
229	19.08	0.10	0.059	(0.059)	0.011	0.048
230	19.17	0.10	0.059	(0.059)	0.011	0.048
231	19.25	0.10	0.059	(0.059)	0.011	0.048
232	19.33	0.13	0.079	(0.058)	0.014	0.064
233	19.42	0.13	0.079	(0.058)	0.014	0.064
234	19.50	0.13	0.079	(0.058)	0.014	0.064
235	19.58	0.10	0.059	(0.058)	0.011	0.048
236	19.67	0.10	0.059	(0.057)	0.011	0.048
237	19.75	0.10	0.059	(0.057)	0.011	0.048
238	19.83	0.07	0.039	(0.057)	0.007	0.032
239	19.92	0.07	0.039	(0.057)	0.007	0.032
240	20.00	0.07	0.039	(0.056)	0.007	0.032
241	20.08	0.10	0.059	(0.056)	0.011	0.048
242	20.17	0.10	0.059	(0.056)	0.011	0.048
243	20.25	0.10	0.059	(0.056)	0.011	0.048
244	20.33	0.10	0.059	(0.055)	0.011	0.048
245	20.42	0.10	0.059	(0.055)	0.011	0.048
246	20.50	0.10	0.059	(0.055)	0.011	0.048
247	20.58	0.10	0.059	(0.055)	0.011	0.048
248	20.67	0.10	0.059	(0.054)	0.011	0.048
249	20.75	0.10	0.059	(0.054)	0.011	0.048
250	20.83	0.07	0.039	(0.054)	0.007	0.032
251	20.92	0.07	0.039	(0.054)	0.007	0.032
252	21.00	0.07	0.039	(0.054)	0.007	0.032
253	21.08	0.10	0.059	(0.053)	0.011	0.048
254	21.17	0.10	0.059	(0.053)	0.011	0.048
255	21.25	0.10	0.059	(0.053)	0.011	0.048
256	21.33	0.07	0.039	(0.053)	0.007	0.032
257	21.42	0.07	0.039	(0.053)	0.007	0.032
258	21.50	0.07	0.039	(0.052)	0.007	0.032
259	21.58	0.10	0.059	(0.052)	0.011	0.048
260	21.67	0.10	0.059	(0.052)	0.011	0.048
261	21.75	0.10	0.059	(0.052)	0.011	0.048
262	21.83	0.07	0.039	(0.052)	0.007	0.032
263	21.92	0.07	0.039	(0.051)	0.007	0.032
264	22.00	0.07	0.039	(0.051)	0.007	0.032
265	22.08	0.10	0.059	(0.051)	0.011	0.048
266	22.17	0.10	0.059	(0.051)	0.011	0.048
267	22.25	0.10	0.059	(0.051)	0.011	0.048
268	22.33	0.07	0.039	(0.051)	0.007	0.032
269	22.42	0.07	0.039	(0.050)	0.007	0.032
270	22.50	0.07	0.039	(0.050)	0.007	0.032
271	22.58	0.07	0.039	(0.050)	0.007	0.032
272	22.67	0.07	0.039	(0.050)	0.007	0.032
273	22.75	0.07	0.039	(0.050)	0.007	0.032
274	22.83	0.07	0.039	(0.050)	0.007	0.032
275	22.92	0.07	0.039	(0.050)	0.007	0.032
276	23.00	0.07	0.039	(0.049)	0.007	0.032
277	23.08	0.07	0.039	(0.049)	0.007	0.032
278	23.17	0.07	0.039	(0.049)	0.007	0.032
279	23.25	0.07	0.039	(0.049)	0.007	0.032
280	23.33	0.07	0.039	(0.049)	0.007	0.032
281	23.42	0.07	0.039	(0.049)	0.007	0.032
282	23.50	0.07	0.039	(0.049)	0.007	0.032
283	23.58	0.07	0.039	(0.049)	0.007	0.032
284	23.67	0.07	0.039	(0.049)	0.007	0.032
285	23.75	0.07	0.039	(0.049)	0.007	0.032
286	23.83	0.07	0.039	(0.049)	0.007	0.032
287	23.92	0.07	0.039	(0.049)	0.007	0.032
288	24.00	0.07	0.039	(0.049)	0.007	0.032

(Loss Rate Not Used)

Sum = 100.0

Sum = 48.8

Flood volume = Effective rainfall 4.07(In)
times area 17.6(Ac.)/[(In)/(Ft.)] = 6.0(Ac.Ft)

Total soil loss = 0.84(In)
 Total soil loss = 1.232(Ac.Ft)
 Total rainfall = 4.91(In)
 Flood volume = 260032.7 Cubic Feet
 Total soil loss = 53646.6 Cubic Feet

 Peak flow rate of this hydrograph = 10.369(CFS)

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

 Hydrograph in 5 Minute intervals ((CFS))

Time(h+m)	Volume Ac.Ft	Q(CFS)	0	5.0	10.0	15.0	20.0
0+ 5	0.0017	0.25	Q				
0+10	0.0052	0.50	Q				
0+15	0.0089	0.55	VQ				
0+20	0.0137	0.70	VQ				
0+25	0.0194	0.82	VQ				
0+30	0.0252	0.85	VQ				
0+35	0.0311	0.86	VQ				
0+40	0.0370	0.86	VQ				
0+45	0.0429	0.86	VQ				
0+50	0.0497	0.98	VQ				
0+55	0.0573	1.11	V Q				
1+ 0	0.0651	1.13	V Q				
1+ 5	0.0721	1.02	V Q				
1+10	0.0783	0.89	VQ				
1+15	0.0843	0.87	VQ				
1+20	0.0902	0.86	VQ				
1+25	0.0961	0.86	VQ				
1+30	0.1020	0.86	VQ				
1+35	0.1079	0.86	VQ				
1+40	0.1138	0.86	VQ				
1+45	0.1197	0.86	VQ				
1+50	0.1265	0.98	VQ				
1+55	0.1341	1.11	V Q				
2+ 0	0.1419	1.13	V Q				
2+ 5	0.1498	1.14	VQ				
2+10	0.1576	1.14	VQ				
2+15	0.1655	1.14	VQ				
2+20	0.1734	1.14	VQ				
2+25	0.1812	1.14	VQ				
2+30	0.1891	1.14	VQ				
2+35	0.1979	1.27	VQ				
2+40	0.2074	1.39	VQ				
2+45	0.2172	1.42	VQ				
2+50	0.2270	1.43	VQ				
2+55	0.2369	1.43	VQ				
3+ 0	0.2467	1.43	VQ				
3+ 5	0.2566	1.43	VQ				
3+10	0.2664	1.43	VQ				
3+15	0.2763	1.43	VQ				
3+20	0.2861	1.43	VQ				
3+25	0.2959	1.43	VQ				
3+30	0.3058	1.43	Q				
3+35	0.3156	1.43	Q				
3+40	0.3255	1.43	Q				
3+45	0.3353	1.43	Q				
3+50	0.3460	1.55	VQ				
3+55	0.3576	1.68	VQ				
4+ 0	0.3693	1.70	VQ				
4+ 5	0.3811	1.71	VQ				

4+10	0.3929	1.71	VQ						
4+15	0.4047	1.71	VQ						
4+20	0.4174	1.84	VQ						
4+25	0.4309	1.96	VQ						
4+30	0.4446	1.99	VQ						
4+35	0.4584	2.00	VQ						
4+40	0.4722	2.00	VQ						
4+45	0.4860	2.00	VQ						
4+50	0.5006	2.13	VQ						
4+55	0.5161	2.25	VQ						
5+ 0	0.5318	2.27	VQ						
5+ 5	0.5458	2.03	VQ						
5+10	0.5581	1.79	Q						
5+15	0.5701	1.74	Q						
5+20	0.5827	1.84	Q						
5+25	0.5963	1.96	Q						
5+30	0.6100	1.99	QV						
5+35	0.6246	2.13	Q						
5+40	0.6401	2.25	Q						
5+45	0.6558	2.27	Q						
5+50	0.6715	2.29	Q						
5+55	0.6873	2.29	Q						
6+ 0	0.7030	2.29	Q						
6+ 5	0.7196	2.41	Q						
6+10	0.7371	2.54	VQ						
6+15	0.7547	2.56	Q						
6+20	0.7724	2.57	Q						
6+25	0.7901	2.57	Q						
6+30	0.8079	2.57	Q						
6+35	0.8264	2.70	Q						
6+40	0.8459	2.82	Q						
6+45	0.8655	2.85	Q						
6+50	0.8851	2.86	Q						
6+55	0.9048	2.86	QV						
7+ 0	0.9245	2.86	QV						
7+ 5	0.9442	2.86	QV						
7+10	0.9639	2.86	QV						
7+15	0.9836	2.86	QV						
7+20	1.0041	2.98	QV						
7+25	1.0255	3.11	Q						
7+30	1.0471	3.13	QV						
7+35	1.0696	3.27	QV						
7+40	1.0930	3.39	QV						
7+45	1.1165	3.42	QV						
7+50	1.1410	3.56	Q						
7+55	1.1663	3.68	Q						
8+ 0	1.1918	3.70	Q						
8+ 5	1.2192	3.97	QV						
8+10	1.2482	4.21	Q						
8+15	1.2775	4.26	Q						
8+20	1.3071	4.29	Q						
8+25	1.3366	4.29	Q						
8+30	1.3661	4.29	QV						
8+35	1.3965	4.41	QV						
8+40	1.4277	4.54	Q						
8+45	1.4591	4.56	Q						
8+50	1.4915	4.70	Q						
8+55	1.5247	4.82	QV						
9+ 0	1.5581	4.85	QV						
9+ 5	1.5933	5.11	Q						
9+10	1.6302	5.36	Q						
9+15	1.6674	5.41	QV						
9+20	1.7057	5.56	Q						
9+25	1.7448	5.68	Q						
9+30	1.7841	5.70	Q						
9+35	1.8243	5.84	QV						

9+40	1.8654	5.97		QV			
9+45	1.9066	5.99		QV			
9+50	1.9488	6.13		QV			
9+55	1.9919	6.25		QV			
10+ 0	2.0351	6.28		QV			
10+ 5	2.0723	5.41		Q V			
10+10	2.1036	4.54		Q V			
10+15	2.1337	4.37		Q V			
10+20	2.1633	4.29		Q V			
10+25	2.1928	4.29		Q V			
10+30	2.2223	4.29		Q V			
10+35	2.2562	4.92		Q V			
10+40	2.2943	5.53		Q V			
10+45	2.3332	5.66		Q V			
10+50	2.3726	5.72		Q V			
10+55	2.4120	5.72		Q V			
11+ 0	2.4513	5.72		Q V			
11+ 5	2.4898	5.59		Q V			
11+10	2.5275	5.47		Q V			
11+15	2.5650	5.44		Q V			
11+20	2.6024	5.43		Q V			
11+25	2.6398	5.43		Q V			
11+30	2.6772	5.43		Q V			
11+35	2.7128	5.18		Q V			
11+40	2.7468	4.93		Q V			
11+45	2.7804	4.88		Q V			
11+50	2.8147	4.98		Q V			
11+55	2.8499	5.11		Q V			
12+ 0	2.8853	5.13		Q V			
12+ 5	2.9268	6.03		Q V			
12+10	2.9742	6.89		Q V			
12+15	3.0228	7.06		Q V			
12+20	3.0730	7.29		Q V			
12+25	3.1243	7.44		Q V			
12+30	3.1758	7.47		Q V			
12+35	3.2295	7.80		Q V			
12+40	3.2854	8.11		Q V			
12+45	3.3417	8.18		Q V			
12+50	3.3993	8.37		Q V			
12+55	3.4581	8.53		Q V			
13+ 0	3.5171	8.57		Q V			
13+ 5	3.5815	9.36		Q V			
13+10	3.6512	10.12		Q V			
13+15	3.7219	10.27		Q V			
13+20	3.7932	10.35		Q V			
13+25	3.8646	10.36		Q V			
13+30	3.9360	10.37		Q V			
13+35	3.9959	8.70		Q V			
13+40	4.0446	7.06		Q V			
13+45	4.0909	6.73		Q V			
13+50	4.1362	6.57		Q V			
13+55	4.1815	6.58		Q V			
14+ 0	4.2268	6.58		Q V			
14+ 5	4.2764	7.20		Q V			
14+10	4.3302	7.81		Q V			
14+15	4.3849	7.94		Q V			
14+20	4.4389	7.85		Q V			
14+25	4.4920	7.71		Q V			
14+30	4.5449	7.68		Q V			
14+35	4.5978	7.68		Q V			
14+40	4.6507	7.68		Q V			
14+45	4.7037	7.69		Q V			
14+50	4.7556	7.54		Q V			
14+55	4.8066	7.40		Q V			
15+ 0	4.8574	7.38		Q V			
15+ 5	4.9071	7.22		Q V			

15+10	4.9558	7.07			Q		V	
15+15	5.0044	7.05			Q		V	
15+20	5.0518	6.89			Q		V	
15+25	5.0983	6.74			Q		V	
15+30	5.1446	6.72			Q		V	
15+35	5.1869	6.15			Q		V	
15+40	5.2254	5.59			Q		V	
15+45	5.2632	5.48			Q		V	
15+50	5.3006	5.43			Q		V	
15+55	5.3380	5.43			Q		V	
16+ 0	5.3754	5.43			Q		V	
16+ 5	5.3998	3.54		Q			V	
16+10	5.4114	1.69		Q			V	
16+15	5.4205	1.32		Q			V	
16+20	5.4284	1.14		Q			V	
16+25	5.4363	1.14		Q			V	
16+30	5.4442	1.14		Q			V	
16+35	5.4512	1.02		Q			V	
16+40	5.4573	0.89		Q			V	
16+45	5.4633	0.87		Q			V	
16+50	5.4692	0.86		Q			V	
16+55	5.4751	0.86		Q			V	
17+ 0	5.4810	0.86		Q			V	
17+ 5	5.4887	1.11		Q			V	
17+10	5.4980	1.36		Q			V	
17+15	5.5077	1.40		Q			V	
17+20	5.5175	1.43		Q			V	
17+25	5.5274	1.43		Q			V	
17+30	5.5372	1.43		Q			V	
17+35	5.5470	1.43		Q			V	
17+40	5.5569	1.43		Q			V	
17+45	5.5667	1.43		Q			V	
17+50	5.5757	1.30		Q			V	
17+55	5.5838	1.18		Q			V	
18+ 0	5.5918	1.16		Q			V	
18+ 5	5.5996	1.14		Q			V	
18+10	5.6075	1.14		Q			V	
18+15	5.6154	1.14		Q			V	
18+20	5.6233	1.14		Q			V	
18+25	5.6311	1.14		Q			V	
18+30	5.6390	1.14		Q			V	
18+35	5.6460	1.02		Q			V	
18+40	5.6522	0.89		Q			V	
18+45	5.6582	0.87		Q			V	
18+50	5.6632	0.73		Q			V	
18+55	5.6674	0.61		Q			V	
19+ 0	5.6714	0.58		Q			V	
19+ 5	5.6762	0.70		Q			V	
19+10	5.6819	0.82		Q			V	
19+15	5.6877	0.85		Q			V	
19+20	5.6945	0.98		Q			V	
19+25	5.7021	1.11		Q			V	
19+30	5.7099	1.13		Q			V	
19+35	5.7169	1.02		Q			V	
19+40	5.7230	0.89		Q			V	
19+45	5.7290	0.87		Q			V	
19+50	5.7341	0.73		Q			V	
19+55	5.7383	0.61		Q			V	
20+ 0	5.7423	0.58		Q			V	
20+ 5	5.7471	0.70		Q			V	
20+10	5.7527	0.82		Q			V	
20+15	5.7585	0.85		Q			V	
20+20	5.7645	0.86		Q			V	
20+25	5.7704	0.86		Q			V	
20+30	5.7763	0.86		Q			V	
20+35	5.7822	0.86		Q			V	

20+40	5.7881	0.86	Q				V	
20+45	5.7940	0.86	Q				V	
20+50	5.7990	0.73	Q				V	
20+55	5.8032	0.61	Q				V	
21+ 0	5.8072	0.58	Q				V	
21+ 5	5.8120	0.70	Q				V	
21+10	5.8177	0.82	Q				V	
21+15	5.8235	0.85	Q				V	
21+20	5.8285	0.73	Q				V	
21+25	5.8327	0.61	Q				V	
21+30	5.8367	0.58	Q				V	
21+35	5.8416	0.70	Q				V	
21+40	5.8472	0.82	Q				V	
21+45	5.8530	0.85	Q				V	
21+50	5.8581	0.73	Q				V	
21+55	5.8623	0.61	Q				V	
22+ 0	5.8663	0.58	Q				V	
22+ 5	5.8711	0.70	Q				V	
22+10	5.8767	0.82	Q				V	
22+15	5.8826	0.85	Q				V	
22+20	5.8876	0.73	Q				V	
22+25	5.8918	0.61	Q				V	
22+30	5.8958	0.58	Q				V	
22+35	5.8997	0.57	Q				V	
22+40	5.9037	0.57	Q				V	
22+45	5.9076	0.57	Q				V	
22+50	5.9115	0.57	Q				V	
22+55	5.9155	0.57	Q				V	
23+ 0	5.9194	0.57	Q				V	
23+ 5	5.9234	0.57	Q				V	
23+10	5.9273	0.57	Q				V	
23+15	5.9312	0.57	Q				V	
23+20	5.9352	0.57	Q				V	
23+25	5.9391	0.57	Q				V	
23+30	5.9430	0.57	Q				V	
23+35	5.9470	0.57	Q				V	
23+40	5.9509	0.57	Q				V	
23+45	5.9548	0.57	Q				V	
23+50	5.9588	0.57	Q				V	
23+55	5.9627	0.57	Q				V	
24+ 0	5.9667	0.57	Q				V	
24+ 5	5.9689	0.32	Q				V	
24+10	5.9694	0.07	Q				V	
24+15	5.9695	0.02	Q				V	

APPENDIX E

DETENTION SYSTEM VOLUME CALCULATIONS

PBLA ENGINEERING, INC.

1809 E. Dyer Rd., Suite 301
Santa Ana, CA 92705
(888)714-9642

981 Corporate Center Drive, Suite 150
Pomona, CA 91768
(626) 512-4934

1481 Ford Street, Suite 201
Redlands, CA 92373
(714) 620-4960

UNDERGROUND STORAGE

RAMONA - WEBSTER INDUSTRIAL
VOLUMES BY SYSTEM DEPTH

AREA 1 - RETAIL SITE

ROCK VOID RATIO = 0.4

SYSTEM LENGTH = 621

<u>DEPTH</u>	<u>AREA ROCK</u>	<u>AREA PIPE</u>	<u>ROCK VOLUME</u>	<u>PIPE VOLUME</u>	<u>TOTAL VOLUME</u>	<u>CUMULATIVE</u>	<u>CUMULATIVE</u>
(FT)	(SF)	(SF)	(CF)	(CF)	(CF)	(CF)	(AC-FT)
0	0	0	0	0	0	0	0
1	7.00	0	1738.8	0.00	1738.80	1,739	0.040
2	5.98	1.02	1485.4	633.42	2118.85	3,858	0.089
3	3.07	3.93	762.6	2440.53	3203.12	7,061	0.162
4	2.14	4.86	531.6	3018.06	3549.64	10,610	0.244
5	2.10	4.86	521.6	3018.06	3539.70	14,150	0.325
6	3.07	3.93	762.6	2440.53	3203.12	17,353	0.398
7	5.98	1.02	1485.4	633.42	2118.85	19,472	0.447
7.5	3.50	0	869.4	0.00	869.40	20,341	0.467

AREA 2 - WEST SIDE INDUSTRIAL

ROCK VOID RATIO = 0.4

SYSTEM LENGTH = 2000

<u>DEPTH</u>	<u>AREA ROCK</u>	<u>AREA PIPE</u>	<u>ROCK VOLUME</u>	<u>PIPE VOLUME</u>	<u>TOTAL VOLUME</u>	<u>CUMULATIVE</u>	<u>CUMULATIVE</u>
(FT)	(SF)	(SF)	(CF)	(CF)	(CF)	(CF)	(AC-FT)
0	0	0	0	0	0	0	0
1	7.00	0	5600.0	0.00	5600.00	5,600	0.129
2	5.98	1.02	4784.0	2040.00	6824.00	12,424	0.285
3	3.07	3.93	2456.0	7860.00	10316.00	22,740	0.522
4	2.14	4.86	1712.0	9720.00	11432.00	34,172	0.784
5	2.10	4.86	1680.0	9720.00	11400.00	45,572	1.046
6	3.07	3.93	2456.0	7860.00	10316.00	55,888	1.283
7	5.98	1.02	4784.0	2040.00	6824.00	62,712	1.440
7.5	3.50	0	2800.0	0.00	2800.00	65,512	1.504

AREA 3 - EAST SIDE INDUSTRIAL

ROCK VOID RATIO = 0.4

SYSTEM LENGTH = 2000

<u>DEPTH</u>	<u>AREA ROCK</u>	<u>AREA PIPE</u>	<u>ROCK VOLUME</u>	<u>PIPE VOLUME</u>	<u>TOTAL VOLUME</u>	<u>CUMULATIVE</u>	<u>CUMULATIVE</u>
(FT)	(SF)	(SF)	(CF)	(CF)	(CF)	(CF)	(AC-FT)
0	0	0	0	0	0	0	0
1	7.00	0	5600.0	0.00	5600.00	5,600	0.129
2	5.98	1.02	4784.0	2040.00	6824.00	12,424	0.285
3	3.07	3.93	2456.0	7860.00	10316.00	22,740	0.522
4	2.14	4.86	1712.0	9720.00	11432.00	34,172	0.784
5	2.10	4.86	1680.0	9720.00	11400.00	45,572	1.046
6	3.07	3.93	2456.0	7860.00	10316.00	55,888	1.283
7	5.98	1.02	4784.0	2040.00	6824.00	62,712	1.440
7.5	3.50	0	2800.0	0.00	2800.00	65,512	1.504

APPENDIX F
DETENTION SYSTEM
FLOOD ROUTING CALCULATIONS

PBLA ENGINEERING, INC.

1809 E. Dyer Rd., Suite 301
Santa Ana, CA 92705
(888)714-9642

981 Corporate Center Drive, Suite 150
Pomona, CA 91768
(626) 512-4934

1481 Ford Street, Suite 201
Redlands, CA 92373
(714) 620-4960

FLOOD HYDROGRAPH ROUTING PROGRAM
 Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2018
 Study date: 09/06/21

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RAMONA - WEBSTER
AREA 1 - RETAIL
100 YR - 1 HR
1391RTE1
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Program License Serial Number 6490

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

```

From study/file name: 1391PRUH11100.rte
*****HYDROGRAPH DATA*****
Number of intervals = 16
Time interval = 5.0 (Min.)
Maximum/Peak flow rate = 18.980 (CFS)
Total volume = 0.665 (Ac.Ft)
Status of hydrographs being held in storage
      Stream 1 Stream 2 Stream 3 Stream 4 Stream 5
Peak (CFS)    0.000   0.000   0.000   0.000   0.000
Vol (Ac.Ft)   0.000   0.000   0.000   0.000   0.000
*****

```

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+++++
Process from Point/Station 1.000 to Point/Station 2.000
**** RETARDING BASIN ROUTING ****

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User entry of depth-outflow-storage data

```
-----
Total number of inflow hydrograph intervals = 16
Hydrograph time unit = 5.000 (Min.)
Initial depth in storage basin = 0.00 (Ft.)
-----
```

```
-----
Initial basin depth = 0.00 (Ft.)
Initial basin storage = 0.00 (Ac.Ft)
Initial basin outflow = 0.00 (CFS)
-----
```

Depth vs. Storage and Depth vs. Discharge data:

Basin Depth (Ft.)	Storage (Ac.Ft)	Outflow (CFS)	(S-O*dt/2) (Ac.Ft)	(S+O*dt/2) (Ac.Ft)
0.000	0.000	0.000	0.000	0.000
1.000	0.040	0.220	0.039	0.041
2.000	0.089	0.220	0.088	0.090
3.000	0.162	0.220	0.161	0.163
4.000	0.244	0.220	0.243	0.245
5.000	0.325	0.220	0.324	0.326
6.000	0.398	0.220	0.397	0.399
7.000	0.447	0.220	0.446	0.448
7.500	0.467	0.220	0.466	0.468
8.000	0.468	30.000	0.365	0.571

Hydrograph Detention Basin Routing

 Graph values: 'I'= unit inflow; 'O'=outflow at time shown

Time (Hours)	Inflow (CFS)	Outflow (CFS)	Storage (Ac.Ft)	.0	4.7	9.49	14.23	18.98	Depth (Ft.)
0.083	1.52	0.03	0.005	O	I				0.13
0.167	3.18	0.11	0.021	O	I				0.52
0.250	3.87	0.22	0.044	O	I				1.08
0.333	4.35	0.22	0.071	O	I				1.63
0.417	4.83	0.22	0.101	O	I				2.16
0.500	5.54	0.22	0.135	O	I				2.63
0.583	6.35	0.22	0.174	O	I				3.15
0.667	7.40	0.22	0.220	O	I				3.71
0.750	9.71	0.22	0.278	O	I				4.42
0.833	18.98	0.22	0.375	O	I			I	5.68
0.917	17.48	9.41	0.467	I	O		I		7.65
1.000	8.07	16.07	0.468	I	I		O		7.77
1.083	3.88	0.22	0.453	O	I				7.14
1.167	1.10	0.57	0.467	O	I				7.51
1.250	0.26	0.79	0.467	O	I				7.51
1.333	0.07	0.22	0.465	O	I				7.44
1.417	0.00	0.22	0.463	O	I				7.41
1.500	0.00	0.22	0.462	O	I				7.37
1.583	0.00	0.22	0.460	O	I				7.33
1.667	0.00	0.22	0.459	O	I				7.30
1.750	0.00	0.22	0.457	O	I				7.26
1.833	0.00	0.22	0.456	O	I				7.22
1.917	0.00	0.22	0.454	O	I				7.18
2.000	0.00	0.22	0.453	O	I				7.14
2.083	0.00	0.22	0.451	O	I				7.11
2.167	0.00	0.22	0.450	O	I				7.07
2.250	0.00	0.22	0.448	O	I				7.03
2.333	0.00	0.22	0.447	O	I				6.99
2.417	0.00	0.22	0.445	O	I				6.96
2.500	0.00	0.22	0.444	O	I				6.93
2.583	0.00	0.22	0.442	O	I				6.90
2.667	0.00	0.22	0.441	O	I				6.87
2.750	0.00	0.22	0.439	O	I				6.84
2.833	0.00	0.22	0.438	O	I				6.81
2.917	0.00	0.22	0.436	O	I				6.78
3.000	0.00	0.22	0.435	O	I				6.75
3.083	0.00	0.22	0.433	O	I				6.72
3.167	0.00	0.22	0.432	O	I				6.69
3.250	0.00	0.22	0.430	O	I				6.65
3.333	0.00	0.22	0.429	O	I				6.62
3.417	0.00	0.22	0.427	O	I				6.59
3.500	0.00	0.22	0.426	O	I				6.56
3.583	0.00	0.22	0.424	O	I				6.53
3.667	0.00	0.22	0.422	O	I				6.50
3.750	0.00	0.22	0.421	O	I				6.47
3.833	0.00	0.22	0.419	O	I				6.44
3.917	0.00	0.22	0.418	O	I				6.41
4.000	0.00	0.22	0.416	O	I				6.38
4.083	0.00	0.22	0.415	O	I				6.35
4.167	0.00	0.22	0.413	O	I				6.31
4.250	0.00	0.22	0.412	O	I				6.28
4.333	0.00	0.22	0.410	O	I				6.25
4.417	0.00	0.22	0.409	O	I				6.22
4.500	0.00	0.22	0.407	O	I				6.19
4.583	0.00	0.22	0.406	O	I				6.16
4.667	0.00	0.22	0.404	O	I				6.13
4.750	0.00	0.22	0.403	O	I				6.10
4.833	0.00	0.22	0.401	O	I				6.07
4.917	0.00	0.22	0.400	O	I				6.04
5.000	0.00	0.22	0.398	O	I				6.00

5.083	0.00	0.22	0.397	0					5.98
5.167	0.00	0.22	0.395	0					5.96
5.250	0.00	0.22	0.394	0					5.94
5.333	0.00	0.22	0.392	0					5.92
5.417	0.00	0.22	0.391	0					5.90
5.500	0.00	0.22	0.389	0					5.88
5.583	0.00	0.22	0.388	0					5.86
5.667	0.00	0.22	0.386	0					5.84
5.750	0.00	0.22	0.385	0					5.82
5.833	0.00	0.22	0.383	0					5.80
5.917	0.00	0.22	0.382	0					5.77
6.000	0.00	0.22	0.380	0					5.75
6.083	0.00	0.22	0.379	0					5.73
6.167	0.00	0.22	0.377	0					5.71
6.250	0.00	0.22	0.376	0					5.69
6.333	0.00	0.22	0.374	0					5.67
6.417	0.00	0.22	0.372	0					5.65
6.500	0.00	0.22	0.371	0					5.63
6.583	0.00	0.22	0.369	0					5.61
6.667	0.00	0.22	0.368	0					5.59
6.750	0.00	0.22	0.366	0					5.57
6.833	0.00	0.22	0.365	0					5.55
6.917	0.00	0.22	0.363	0					5.53
7.000	0.00	0.22	0.362	0					5.51
7.083	0.00	0.22	0.360	0					5.48
7.167	0.00	0.22	0.359	0					5.46
7.250	0.00	0.22	0.357	0					5.44
7.333	0.00	0.22	0.356	0					5.42
7.417	0.00	0.22	0.354	0					5.40
7.500	0.00	0.22	0.353	0					5.38
7.583	0.00	0.22	0.351	0					5.36
7.667	0.00	0.22	0.350	0					5.34
7.750	0.00	0.22	0.348	0					5.32
7.833	0.00	0.22	0.347	0					5.30
7.917	0.00	0.22	0.345	0					5.28
8.000	0.00	0.22	0.344	0					5.26
8.083	0.00	0.22	0.342	0					5.24
8.167	0.00	0.22	0.341	0					5.21
8.250	0.00	0.22	0.339	0					5.19
8.333	0.00	0.22	0.338	0					5.17
8.417	0.00	0.22	0.336	0					5.15
8.500	0.00	0.22	0.335	0					5.13
8.583	0.00	0.22	0.333	0					5.11
8.667	0.00	0.22	0.332	0					5.09
8.750	0.00	0.22	0.330	0					5.07
8.833	0.00	0.22	0.329	0					5.05
8.917	0.00	0.22	0.327	0					5.03
9.000	0.00	0.22	0.326	0					5.01
9.083	0.00	0.22	0.324	0					4.99
9.167	0.00	0.22	0.322	0					4.97
9.250	0.00	0.22	0.321	0					4.95
9.333	0.00	0.22	0.319	0					4.93
9.417	0.00	0.22	0.318	0					4.91
9.500	0.00	0.22	0.316	0					4.89
9.583	0.00	0.22	0.315	0					4.88
9.667	0.00	0.22	0.313	0					4.86
9.750	0.00	0.22	0.312	0					4.84
9.833	0.00	0.22	0.310	0					4.82
9.917	0.00	0.22	0.309	0					4.80
10.000	0.00	0.22	0.307	0					4.78
10.083	0.00	0.22	0.306	0					4.76
10.167	0.00	0.22	0.304	0					4.74
10.250	0.00	0.22	0.303	0					4.73
10.333	0.00	0.22	0.301	0					4.71
10.417	0.00	0.22	0.300	0					4.69
10.500	0.00	0.22	0.298	0					4.67

10.583	0.00	0.22	0.297	0					4.65
10.667	0.00	0.22	0.295	0					4.63
10.750	0.00	0.22	0.294	0					4.61
10.833	0.00	0.22	0.292	0					4.59
10.917	0.00	0.22	0.291	0					4.58
11.000	0.00	0.22	0.289	0					4.56
11.083	0.00	0.22	0.288	0					4.54
11.167	0.00	0.22	0.286	0					4.52
11.250	0.00	0.22	0.285	0					4.50
11.333	0.00	0.22	0.283	0					4.48
11.417	0.00	0.22	0.282	0					4.46
11.500	0.00	0.22	0.280	0					4.45
11.583	0.00	0.22	0.279	0					4.43
11.667	0.00	0.22	0.277	0					4.41
11.750	0.00	0.22	0.276	0					4.39
11.833	0.00	0.22	0.274	0					4.37
11.917	0.00	0.22	0.272	0					4.35
12.000	0.00	0.22	0.271	0					4.33
12.083	0.00	0.22	0.269	0					4.31
12.167	0.00	0.22	0.268	0					4.30
12.250	0.00	0.22	0.266	0					4.28
12.333	0.00	0.22	0.265	0					4.26
12.417	0.00	0.22	0.263	0					4.24
12.500	0.00	0.22	0.262	0					4.22
12.583	0.00	0.22	0.260	0					4.20
12.667	0.00	0.22	0.259	0					4.18
12.750	0.00	0.22	0.257	0					4.16
12.833	0.00	0.22	0.256	0					4.15
12.917	0.00	0.22	0.254	0					4.13
13.000	0.00	0.22	0.253	0					4.11
13.083	0.00	0.22	0.251	0					4.09
13.167	0.00	0.22	0.250	0					4.07
13.250	0.00	0.22	0.248	0					4.05
13.333	0.00	0.22	0.247	0					4.03
13.417	0.00	0.22	0.245	0					4.01
13.500	0.00	0.22	0.244	0					4.00
13.583	0.00	0.22	0.242	0					3.98
13.667	0.00	0.22	0.241	0					3.96
13.750	0.00	0.22	0.239	0					3.94
13.833	0.00	0.22	0.238	0					3.92
13.917	0.00	0.22	0.236	0					3.90
14.000	0.00	0.22	0.235	0					3.89
14.083	0.00	0.22	0.233	0					3.87
14.167	0.00	0.22	0.232	0					3.85
14.250	0.00	0.22	0.230	0					3.83
14.333	0.00	0.22	0.229	0					3.81
14.417	0.00	0.22	0.227	0					3.79
14.500	0.00	0.22	0.226	0					3.77
14.583	0.00	0.22	0.224	0					3.76
14.667	0.00	0.22	0.222	0					3.74
14.750	0.00	0.22	0.221	0					3.72
14.833	0.00	0.22	0.219	0					3.70
14.917	0.00	0.22	0.218	0					3.68
15.000	0.00	0.22	0.216	0					3.66
15.083	0.00	0.22	0.215	0					3.65
15.167	0.00	0.22	0.213	0					3.63
15.250	0.00	0.22	0.212	0					3.61
15.333	0.00	0.22	0.210	0					3.59
15.417	0.00	0.22	0.209	0					3.57
15.500	0.00	0.22	0.207	0					3.55
15.583	0.00	0.22	0.206	0					3.53
15.667	0.00	0.22	0.204	0					3.52
15.750	0.00	0.22	0.203	0					3.50
15.833	0.00	0.22	0.201	0					3.48
15.917	0.00	0.22	0.200	0					3.46
16.000	0.00	0.22	0.198	0					3.44

16.083	0.00	0.22	0.197	0					3.42
16.167	0.00	0.22	0.195	0					3.40
16.250	0.00	0.22	0.194	0					3.39
16.333	0.00	0.22	0.192	0					3.37
16.417	0.00	0.22	0.191	0					3.35
16.500	0.00	0.22	0.189	0					3.33
16.583	0.00	0.22	0.188	0					3.31
16.667	0.00	0.22	0.186	0					3.29
16.750	0.00	0.22	0.185	0					3.28
16.833	0.00	0.22	0.183	0					3.26
16.917	0.00	0.22	0.182	0					3.24
17.000	0.00	0.22	0.180	0					3.22
17.083	0.00	0.22	0.179	0					3.20
17.167	0.00	0.22	0.177	0					3.18
17.250	0.00	0.22	0.176	0					3.16
17.333	0.00	0.22	0.174	0					3.15
17.417	0.00	0.22	0.172	0					3.13
17.500	0.00	0.22	0.171	0					3.11
17.583	0.00	0.22	0.169	0					3.09
17.667	0.00	0.22	0.168	0					3.07
17.750	0.00	0.22	0.166	0					3.05
17.833	0.00	0.22	0.165	0					3.04
17.917	0.00	0.22	0.163	0					3.02
18.000	0.00	0.22	0.162	0					3.00
18.083	0.00	0.22	0.160	0					2.98
18.167	0.00	0.22	0.159	0					2.96
18.250	0.00	0.22	0.157	0					2.94
18.333	0.00	0.22	0.156	0					2.92
18.417	0.00	0.22	0.154	0					2.89
18.500	0.00	0.22	0.153	0					2.87
18.583	0.00	0.22	0.151	0					2.85
18.667	0.00	0.22	0.150	0					2.83
18.750	0.00	0.22	0.148	0					2.81
18.833	0.00	0.22	0.147	0					2.79
18.917	0.00	0.22	0.145	0					2.77
19.000	0.00	0.22	0.144	0					2.75
19.083	0.00	0.22	0.142	0					2.73
19.167	0.00	0.22	0.141	0					2.71
19.250	0.00	0.22	0.139	0					2.69
19.333	0.00	0.22	0.138	0					2.67
19.417	0.00	0.22	0.136	0					2.65
19.500	0.00	0.22	0.135	0					2.62
19.583	0.00	0.22	0.133	0					2.60
19.667	0.00	0.22	0.132	0					2.58
19.750	0.00	0.22	0.130	0					2.56
19.833	0.00	0.22	0.129	0					2.54
19.917	0.00	0.22	0.127	0					2.52
20.000	0.00	0.22	0.126	0					2.50
20.083	0.00	0.22	0.124	0					2.48
20.167	0.00	0.22	0.122	0					2.46
20.250	0.00	0.22	0.121	0					2.44
20.333	0.00	0.22	0.119	0					2.42
20.417	0.00	0.22	0.118	0					2.40
20.500	0.00	0.22	0.116	0					2.38
20.583	0.00	0.22	0.115	0					2.35
20.667	0.00	0.22	0.113	0					2.33
20.750	0.00	0.22	0.112	0					2.31
20.833	0.00	0.22	0.110	0					2.29
20.917	0.00	0.22	0.109	0					2.27
21.000	0.00	0.22	0.107	0					2.25
21.083	0.00	0.22	0.106	0					2.23
21.167	0.00	0.22	0.104	0					2.21
21.250	0.00	0.22	0.103	0					2.19
21.333	0.00	0.22	0.101	0					2.17
21.417	0.00	0.22	0.100	0					2.15
21.500	0.00	0.22	0.098	0					2.13

21.583	0.00	0.22	0.097	0					2.11
21.667	0.00	0.22	0.095	0					2.09
21.750	0.00	0.22	0.094	0					2.06
21.833	0.00	0.22	0.092	0					2.04
21.917	0.00	0.22	0.091	0					2.02
22.000	0.00	0.22	0.089	0					2.00
22.083	0.00	0.22	0.088	0					1.97
22.167	0.00	0.22	0.086	0					1.94
22.250	0.00	0.22	0.085	0					1.91
22.333	0.00	0.22	0.083	0					1.88
22.417	0.00	0.22	0.082	0					1.85
22.500	0.00	0.22	0.080	0					1.82
22.583	0.00	0.22	0.079	0					1.79
22.667	0.00	0.22	0.077	0					1.76
22.750	0.00	0.22	0.076	0					1.72
22.833	0.00	0.22	0.074	0					1.69
22.917	0.00	0.22	0.072	0					1.66
23.000	0.00	0.22	0.071	0					1.63
23.083	0.00	0.22	0.069	0					1.60
23.167	0.00	0.22	0.068	0					1.57
23.250	0.00	0.22	0.066	0					1.54
23.333	0.00	0.22	0.065	0					1.51
23.417	0.00	0.22	0.063	0					1.48
23.500	0.00	0.22	0.062	0					1.45
23.583	0.00	0.22	0.060	0					1.42
23.667	0.00	0.22	0.059	0					1.38
23.750	0.00	0.22	0.057	0					1.35
23.833	0.00	0.22	0.056	0					1.32
23.917	0.00	0.22	0.054	0					1.29
24.000	0.00	0.22	0.053	0					1.26
24.083	0.00	0.22	0.051	0					1.23
24.167	0.00	0.22	0.050	0					1.20
24.250	0.00	0.22	0.048	0					1.17
24.333	0.00	0.22	0.047	0					1.14
24.417	0.00	0.22	0.045	0					1.11
24.500	0.00	0.22	0.044	0					1.08
24.583	0.00	0.22	0.042	0					1.04
24.667	0.00	0.22	0.041	0					1.01
24.750	0.00	0.22	0.039	0					0.98
24.833	0.00	0.21	0.038	0					0.94
24.917	0.00	0.20	0.036	0					0.91
25.000	0.00	0.19	0.035	0					0.87
25.083	0.00	0.19	0.034	0					0.84
25.167	0.00	0.18	0.032	0					0.81
25.250	0.00	0.17	0.031	0					0.78
25.333	0.00	0.17	0.030	0					0.75
25.417	0.00	0.16	0.029	0					0.72
25.500	0.00	0.15	0.028	0					0.70
25.583	0.00	0.15	0.027	0					0.67
25.667	0.00	0.14	0.026	0					0.65
25.750	0.00	0.14	0.025	0					0.62
25.833	0.00	0.13	0.024	0					0.60
25.917	0.00	0.13	0.023	0					0.58
26.000	0.00	0.12	0.022	0					0.55
26.083	0.00	0.12	0.021	0					0.53
26.167	0.00	0.11	0.021	0					0.51
26.250	0.00	0.11	0.020	0					0.50
26.333	0.00	0.10	0.019	0					0.48
26.417	0.00	0.10	0.018	0					0.46
26.500	0.00	0.10	0.018	0					0.44
26.583	0.00	0.09	0.017	0					0.43
26.667	0.00	0.09	0.016	0					0.41
26.750	0.00	0.09	0.016	0					0.39
26.833	0.00	0.08	0.015	0					0.38
26.917	0.00	0.08	0.015	0					0.37
27.000	0.00	0.08	0.014	0					0.35

27.083	0.00	0.07	0.014	0					0.34
27.167	0.00	0.07	0.013	0					0.33
27.250	0.00	0.07	0.013	0					0.31
27.333	0.00	0.07	0.012	0					0.30
27.417	0.00	0.06	0.012	0					0.29
27.500	0.00	0.06	0.011	0					0.28
27.583	0.00	0.06	0.011	0					0.27
27.667	0.00	0.06	0.010	0					0.26
27.750	0.00	0.06	0.010	0					0.25
27.833	0.00	0.05	0.010	0					0.24
27.917	0.00	0.05	0.009	0					0.23
28.000	0.00	0.05	0.009	0					0.22
28.083	0.00	0.05	0.009	0					0.22
28.167	0.00	0.05	0.008	0					0.21
28.250	0.00	0.04	0.008	0					0.20
28.333	0.00	0.04	0.008	0					0.19
28.417	0.00	0.04	0.007	0					0.18
28.500	0.00	0.04	0.007	0					0.18
28.583	0.00	0.04	0.007	0					0.17
28.667	0.00	0.04	0.007	0					0.17
28.750	0.00	0.03	0.006	0					0.16
28.833	0.00	0.03	0.006	0					0.15
28.917	0.00	0.03	0.006	0					0.15
29.000	0.00	0.03	0.006	0					0.14
29.083	0.00	0.03	0.005	0					0.14
29.167	0.00	0.03	0.005	0					0.13
29.250	0.00	0.03	0.005	0					0.13
29.333	0.00	0.03	0.005	0					0.12
29.417	0.00	0.03	0.005	0					0.12
29.500	0.00	0.02	0.005	0					0.11
29.583	0.00	0.02	0.004	0					0.11
29.667	0.00	0.02	0.004	0					0.10
29.750	0.00	0.02	0.004	0					0.10
29.833	0.00	0.02	0.004	0					0.10
29.917	0.00	0.02	0.004	0					0.09
30.000	0.00	0.02	0.004	0					0.09
30.083	0.00	0.02	0.003	0					0.09
30.167	0.00	0.02	0.003	0					0.08
30.250	0.00	0.02	0.003	0					0.08
30.333	0.00	0.02	0.003	0					0.08
30.417	0.00	0.02	0.003	0					0.07
30.500	0.00	0.02	0.003	0					0.07
30.583	0.00	0.02	0.003	0					0.07
30.667	0.00	0.01	0.003	0					0.07
30.750	0.00	0.01	0.003	0					0.06
30.833	0.00	0.01	0.002	0					0.06
30.917	0.00	0.01	0.002	0					0.06
31.000	0.00	0.01	0.002	0					0.06
31.083	0.00	0.01	0.002	0					0.06
31.167	0.00	0.01	0.002	0					0.05
31.250	0.00	0.01	0.002	0					0.05
31.333	0.00	0.01	0.002	0					0.05
31.417	0.00	0.01	0.002	0					0.05
31.500	0.00	0.01	0.002	0					0.05
31.583	0.00	0.01	0.002	0					0.04
31.667	0.00	0.01	0.002	0					0.04
31.750	0.00	0.01	0.002	0					0.04
31.833	0.00	0.01	0.002	0					0.04
31.917	0.00	0.01	0.002	0					0.04
32.000	0.00	0.01	0.001	0					0.04
32.083	0.00	0.01	0.001	0					0.03
32.167	0.00	0.01	0.001	0					0.03
32.250	0.00	0.01	0.001	0					0.03
32.333	0.00	0.01	0.001	0					0.03
32.417	0.00	0.01	0.001	0					0.03
32.500	0.00	0.01	0.001	0					0.03

32.583	0.00	0.01	0.001	0					0.03
32.667	0.00	0.01	0.001	0					0.03
32.750	0.00	0.01	0.001	0					0.03
32.833	0.00	0.01	0.001	0					0.02
32.917	0.00	0.01	0.001	0					0.02
33.000	0.00	0.01	0.001	0					0.02
33.083	0.00	0.00	0.001	0					0.02
33.167	0.00	0.00	0.001	0					0.02
33.250	0.00	0.00	0.001	0					0.02
33.333	0.00	0.00	0.001	0					0.02
33.417	0.00	0.00	0.001	0					0.02
33.500	0.00	0.00	0.001	0					0.02
33.583	0.00	0.00	0.001	0					0.02
33.667	0.00	0.00	0.001	0					0.02
33.750	0.00	0.00	0.001	0					0.02
33.833	0.00	0.00	0.001	0					0.02
33.917	0.00	0.00	0.001	0					0.02
34.000	0.00	0.00	0.001	0					0.01
34.083	0.00	0.00	0.001	0					0.01
34.167	0.00	0.00	0.001	0					0.01
34.250	0.00	0.00	0.001	0					0.01
34.333	0.00	0.00	0.001	0					0.01
34.417	0.00	0.00	0.000	0					0.01
34.500	0.00	0.00	0.000	0					0.01
34.583	0.00	0.00	0.000	0					0.01
34.667	0.00	0.00	0.000	0					0.01
34.750	0.00	0.00	0.000	0					0.01
34.833	0.00	0.00	0.000	0					0.01
34.917	0.00	0.00	0.000	0					0.01
35.000	0.00	0.00	0.000	0					0.01
35.083	0.00	0.00	0.000	0					0.01
35.167	0.00	0.00	0.000	0					0.01
35.250	0.00	0.00	0.000	0					0.01
35.333	0.00	0.00	0.000	0					0.01
35.417	0.00	0.00	0.000	0					0.01
35.500	0.00	0.00	0.000	0					0.01
35.583	0.00	0.00	0.000	0					0.01
35.667	0.00	0.00	0.000	0					0.01
35.750	0.00	0.00	0.000	0					0.01
35.833	0.00	0.00	0.000	0					0.01
35.917	0.00	0.00	0.000	0					0.01
36.000	0.00	0.00	0.000	0					0.01
36.083	0.00	0.00	0.000	0					0.01
36.167	0.00	0.00	0.000	0					0.01
36.250	0.00	0.00	0.000	0					0.01
36.333	0.00	0.00	0.000	0					0.01
36.417	0.00	0.00	0.000	0					0.00
36.500	0.00	0.00	0.000	0					0.00
36.583	0.00	0.00	0.000	0					0.00

*****HYDROGRAPH DATA*****

Number of intervals = 439
Time interval = 5.0 (Min.)
Maximum/Peak flow rate = 16.073 (CFS)
Total volume = 0.665 (Ac.Ft)

Status of hydrographs being held in storage

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

FLOOD HYDROGRAPH ROUTING PROGRAM
 Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2018
 Study date: 09/09/21

 RAMONA - WEBSTER
 AREA 1 - RETAIL
 100 YR - 3HR
 1391RTE1

Program License Serial Number 6490

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

From study/file name: 1391PRUH13100.rte
 *****HYDROGRAPH DATA*****
 Number of intervals = 40
 Time interval = 5.0 (Min.)
 Maximum/Peak flow rate = 10.976 (CFS)
 Total volume = 0.915 (Ac.Ft)
 Status of hydrographs being held in storage

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

+++++
 Process from Point/Station 1.000 to Point/Station 2.000
 **** RETARDING BASIN ROUTING ****

 User entry of depth-outflow-storage data

Total number of inflow hydrograph intervals = 40
 Hydrograph time unit = 5.000 (Min.)
 Initial depth in storage basin = 0.00 (Ft.)

Initial basin depth = 0.00 (Ft.)
 Initial basin storage = 0.00 (Ac.Ft)
 Initial basin outflow = 0.00 (CFS)

 Depth vs. Storage and Depth vs. Discharge data:

Basin Depth (Ft.)	Storage (Ac.Ft)	Outflow (CFS)	(S-O*dt/2) (Ac.Ft)	(S+O*dt/2) (Ac.Ft)
0.000	0.000	0.000	0.000	0.000
1.000	0.040	0.220	0.039	0.041
2.000	0.089	0.220	0.088	0.090
3.000	0.162	0.220	0.161	0.163
4.000	0.244	0.220	0.243	0.245
5.000	0.325	0.220	0.324	0.326
6.000	0.398	0.220	0.397	0.399
7.000	0.447	0.220	0.446	0.448
7.500	0.467	0.220	0.466	0.468

8.000 0.468 30.000 0.365 0.571

 Hydrograph Detention Basin Routing

Graph values: 'I'= unit inflow; 'O'=outflow at time shown

Time (Hours)	Inflow (CFS)	Outflow (CFS)	Storage (Ac.Ft)	.0	2.7	5.49	8.23	10.98	Depth (Ft.)
0.083	0.65	0.01	0.002	OI					0.05
0.167	1.33	0.05	0.009	O I					0.22
0.250	1.38	0.10	0.018	O I					0.44
0.333	1.53	0.15	0.027	O I					0.67
0.417	1.74	0.20	0.037	O I					0.92
0.500	1.93	0.22	0.048	O I					1.16
0.583	1.95	0.22	0.060	O I					1.41
0.667	1.98	0.22	0.072	O I					1.65
0.750	2.12	0.22	0.085	O I					1.91
0.833	2.00	0.22	0.097	O I					2.11
0.917	1.90	0.22	0.109	O I					2.28
1.000	2.02	0.22	0.121	O I					2.44
1.083	2.34	0.22	0.135	O I					2.62
1.167	2.60	0.22	0.150	O I					2.84
1.250	2.66	0.22	0.167	O I					3.06
1.333	2.56	0.22	0.183	O I					3.26
1.417	2.82	0.22	0.200	O I					3.46
1.500	3.27	0.22	0.220	O I					3.70
1.583	3.21	0.22	0.240	O I					3.96
1.667	3.25	0.22	0.261	O I					4.21
1.750	3.82	0.22	0.284	O I	I				4.49
1.833	4.14	0.22	0.310	O I	I				4.81
1.917	3.97	0.22	0.336	O I	I				5.15
2.000	3.91	0.22	0.362	O I	I				5.50
2.083	4.01	0.22	0.388	O I	I				5.86
2.167	4.80	0.22	0.416	O I	I				6.37
2.250	6.11	0.22	0.452	O I	I				7.13
2.333	5.85	7.42	0.467			I	O		7.62
2.417	7.15	5.60	0.467			O	I		7.59
2.500	9.63	11.12	0.467					I O	7.68
2.583	10.98	9.50	0.467				O	I	7.66
2.667	10.33	11.79	0.467					I O	7.69
2.750	6.43	5.04	0.467			O	I		7.58
2.833	3.35	4.75	0.467		I	O			7.58
2.917	2.56	1.20	0.467		O I				7.52
3.000	1.67	3.01	0.467		I O				7.55
3.083	0.63	0.22	0.464	OI					7.42
3.167	0.18	0.22	0.465	O					7.45
3.250	0.06	0.22	0.464	O					7.44
3.333	0.01	0.22	0.463	O					7.40
3.417	0.00	0.22	0.462	O					7.37
3.500	0.00	0.22	0.460	O					7.33
3.583	0.00	0.22	0.459	O					7.29
3.667	0.00	0.22	0.457	O					7.25
3.750	0.00	0.22	0.456	O					7.22
3.833	0.00	0.22	0.454	O					7.18
3.917	0.00	0.22	0.453	O					7.14
4.000	0.00	0.22	0.451	O					7.10
4.083	0.00	0.22	0.450	O					7.06
4.167	0.00	0.22	0.448	O					7.03
4.250	0.00	0.22	0.447	O					6.99
4.333	0.00	0.22	0.445	O					6.96
4.417	0.00	0.22	0.444	O					6.93
4.500	0.00	0.22	0.442	O					6.90
4.583	0.00	0.22	0.441	O					6.87
4.667	0.00	0.22	0.439	O					6.84
4.750	0.00	0.22	0.437	O					6.81

4.833	0.00	0.22	0.436	0					6.77
4.917	0.00	0.22	0.434	0					6.74
5.000	0.00	0.22	0.433	0					6.71
5.083	0.00	0.22	0.431	0					6.68
5.167	0.00	0.22	0.430	0					6.65
5.250	0.00	0.22	0.428	0					6.62
5.333	0.00	0.22	0.427	0					6.59
5.417	0.00	0.22	0.425	0					6.56
5.500	0.00	0.22	0.424	0					6.53
5.583	0.00	0.22	0.422	0					6.50
5.667	0.00	0.22	0.421	0					6.47
5.750	0.00	0.22	0.419	0					6.43
5.833	0.00	0.22	0.418	0					6.40
5.917	0.00	0.22	0.416	0					6.37
6.000	0.00	0.22	0.415	0					6.34
6.083	0.00	0.22	0.413	0					6.31
6.167	0.00	0.22	0.412	0					6.28
6.250	0.00	0.22	0.410	0					6.25
6.333	0.00	0.22	0.409	0					6.22
6.417	0.00	0.22	0.407	0					6.19
6.500	0.00	0.22	0.406	0					6.16
6.583	0.00	0.22	0.404	0					6.13
6.667	0.00	0.22	0.403	0					6.09
6.750	0.00	0.22	0.401	0					6.06
6.833	0.00	0.22	0.400	0					6.03
6.917	0.00	0.22	0.398	0					6.00
7.000	0.00	0.22	0.397	0					5.98
7.083	0.00	0.22	0.395	0					5.96
7.167	0.00	0.22	0.394	0					5.94
7.250	0.00	0.22	0.392	0					5.92
7.333	0.00	0.22	0.391	0					5.90
7.417	0.00	0.22	0.389	0					5.88
7.500	0.00	0.22	0.387	0					5.86
7.583	0.00	0.22	0.386	0					5.84
7.667	0.00	0.22	0.384	0					5.81
7.750	0.00	0.22	0.383	0					5.79
7.833	0.00	0.22	0.381	0					5.77
7.917	0.00	0.22	0.380	0					5.75
8.000	0.00	0.22	0.378	0					5.73
8.083	0.00	0.22	0.377	0					5.71
8.167	0.00	0.22	0.375	0					5.69
8.250	0.00	0.22	0.374	0					5.67
8.333	0.00	0.22	0.372	0					5.65
8.417	0.00	0.22	0.371	0					5.63
8.500	0.00	0.22	0.369	0					5.61
8.583	0.00	0.22	0.368	0					5.59
8.667	0.00	0.22	0.366	0					5.57
8.750	0.00	0.22	0.365	0					5.54
8.833	0.00	0.22	0.363	0					5.52
8.917	0.00	0.22	0.362	0					5.50
9.000	0.00	0.22	0.360	0					5.48
9.083	0.00	0.22	0.359	0					5.46
9.167	0.00	0.22	0.357	0					5.44
9.250	0.00	0.22	0.356	0					5.42
9.333	0.00	0.22	0.354	0					5.40
9.417	0.00	0.22	0.353	0					5.38
9.500	0.00	0.22	0.351	0					5.36
9.583	0.00	0.22	0.350	0					5.34
9.667	0.00	0.22	0.348	0					5.32
9.750	0.00	0.22	0.347	0					5.30
9.833	0.00	0.22	0.345	0					5.27
9.917	0.00	0.22	0.344	0					5.25
10.000	0.00	0.22	0.342	0					5.23
10.083	0.00	0.22	0.341	0					5.21
10.167	0.00	0.22	0.339	0					5.19
10.250	0.00	0.22	0.337	0					5.17

10.333	0.00	0.22	0.336	0					5.15
10.417	0.00	0.22	0.334	0					5.13
10.500	0.00	0.22	0.333	0					5.11
10.583	0.00	0.22	0.331	0					5.09
10.667	0.00	0.22	0.330	0					5.07
10.750	0.00	0.22	0.328	0					5.05
10.833	0.00	0.22	0.327	0					5.03
10.917	0.00	0.22	0.325	0					5.00
11.000	0.00	0.22	0.324	0					4.99
11.083	0.00	0.22	0.322	0					4.97
11.167	0.00	0.22	0.321	0					4.95
11.250	0.00	0.22	0.319	0					4.93
11.333	0.00	0.22	0.318	0					4.91
11.417	0.00	0.22	0.316	0					4.89
11.500	0.00	0.22	0.315	0					4.87
11.583	0.00	0.22	0.313	0					4.85
11.667	0.00	0.22	0.312	0					4.84
11.750	0.00	0.22	0.310	0					4.82
11.833	0.00	0.22	0.309	0					4.80
11.917	0.00	0.22	0.307	0					4.78
12.000	0.00	0.22	0.306	0					4.76
12.083	0.00	0.22	0.304	0					4.74
12.167	0.00	0.22	0.303	0					4.72
12.250	0.00	0.22	0.301	0					4.71
12.333	0.00	0.22	0.300	0					4.69
12.417	0.00	0.22	0.298	0					4.67
12.500	0.00	0.22	0.297	0					4.65
12.583	0.00	0.22	0.295	0					4.63
12.667	0.00	0.22	0.294	0					4.61
12.750	0.00	0.22	0.292	0					4.59
12.833	0.00	0.22	0.291	0					4.57
12.917	0.00	0.22	0.289	0					4.56
13.000	0.00	0.22	0.287	0					4.54
13.083	0.00	0.22	0.286	0					4.52
13.167	0.00	0.22	0.284	0					4.50
13.250	0.00	0.22	0.283	0					4.48
13.333	0.00	0.22	0.281	0					4.46
13.417	0.00	0.22	0.280	0					4.44
13.500	0.00	0.22	0.278	0					4.42
13.583	0.00	0.22	0.277	0					4.41
13.667	0.00	0.22	0.275	0					4.39
13.750	0.00	0.22	0.274	0					4.37
13.833	0.00	0.22	0.272	0					4.35
13.917	0.00	0.22	0.271	0					4.33
14.000	0.00	0.22	0.269	0					4.31
14.083	0.00	0.22	0.268	0					4.29
14.167	0.00	0.22	0.266	0					4.27
14.250	0.00	0.22	0.265	0					4.26
14.333	0.00	0.22	0.263	0					4.24
14.417	0.00	0.22	0.262	0					4.22
14.500	0.00	0.22	0.260	0					4.20
14.583	0.00	0.22	0.259	0					4.18
14.667	0.00	0.22	0.257	0					4.16
14.750	0.00	0.22	0.256	0					4.14
14.833	0.00	0.22	0.254	0					4.13
14.917	0.00	0.22	0.253	0					4.11
15.000	0.00	0.22	0.251	0					4.09
15.083	0.00	0.22	0.250	0					4.07
15.167	0.00	0.22	0.248	0					4.05
15.250	0.00	0.22	0.247	0					4.03
15.333	0.00	0.22	0.245	0					4.01
15.417	0.00	0.22	0.244	0					3.99
15.500	0.00	0.22	0.242	0					3.98
15.583	0.00	0.22	0.241	0					3.96
15.667	0.00	0.22	0.239	0					3.94
15.750	0.00	0.22	0.237	0					3.92

15.833	0.00	0.22	0.236	0					3.90
15.917	0.00	0.22	0.234	0					3.88
16.000	0.00	0.22	0.233	0					3.87
16.083	0.00	0.22	0.231	0					3.85
16.167	0.00	0.22	0.230	0					3.83
16.250	0.00	0.22	0.228	0					3.81
16.333	0.00	0.22	0.227	0					3.79
16.417	0.00	0.22	0.225	0					3.77
16.500	0.00	0.22	0.224	0					3.75
16.583	0.00	0.22	0.222	0					3.74
16.667	0.00	0.22	0.221	0					3.72
16.750	0.00	0.22	0.219	0					3.70
16.833	0.00	0.22	0.218	0					3.68
16.917	0.00	0.22	0.216	0					3.66
17.000	0.00	0.22	0.215	0					3.64
17.083	0.00	0.22	0.213	0					3.62
17.167	0.00	0.22	0.212	0					3.61
17.250	0.00	0.22	0.210	0					3.59
17.333	0.00	0.22	0.209	0					3.57
17.417	0.00	0.22	0.207	0					3.55
17.500	0.00	0.22	0.206	0					3.53
17.583	0.00	0.22	0.204	0					3.51
17.667	0.00	0.22	0.203	0					3.50
17.750	0.00	0.22	0.201	0					3.48
17.833	0.00	0.22	0.200	0					3.46
17.917	0.00	0.22	0.198	0					3.44
18.000	0.00	0.22	0.197	0					3.42
18.083	0.00	0.22	0.195	0					3.40
18.167	0.00	0.22	0.194	0					3.38
18.250	0.00	0.22	0.192	0					3.37
18.333	0.00	0.22	0.191	0					3.35
18.417	0.00	0.22	0.189	0					3.33
18.500	0.00	0.22	0.187	0					3.31
18.583	0.00	0.22	0.186	0					3.29
18.667	0.00	0.22	0.184	0					3.27
18.750	0.00	0.22	0.183	0					3.26
18.833	0.00	0.22	0.181	0					3.24
18.917	0.00	0.22	0.180	0					3.22
19.000	0.00	0.22	0.178	0					3.20
19.083	0.00	0.22	0.177	0					3.18
19.167	0.00	0.22	0.175	0					3.16
19.250	0.00	0.22	0.174	0					3.14
19.333	0.00	0.22	0.172	0					3.13
19.417	0.00	0.22	0.171	0					3.11
19.500	0.00	0.22	0.169	0					3.09
19.583	0.00	0.22	0.168	0					3.07
19.667	0.00	0.22	0.166	0					3.05
19.750	0.00	0.22	0.165	0					3.03
19.833	0.00	0.22	0.163	0					3.02
19.917	0.00	0.22	0.162	0					3.00
20.000	0.00	0.22	0.160	0					2.98
20.083	0.00	0.22	0.159	0					2.95
20.167	0.00	0.22	0.157	0					2.93
20.250	0.00	0.22	0.156	0					2.91
20.333	0.00	0.22	0.154	0					2.89
20.417	0.00	0.22	0.153	0					2.87
20.500	0.00	0.22	0.151	0					2.85
20.583	0.00	0.22	0.150	0					2.83
20.667	0.00	0.22	0.148	0					2.81
20.750	0.00	0.22	0.147	0					2.79
20.833	0.00	0.22	0.145	0					2.77
20.917	0.00	0.22	0.144	0					2.75
21.000	0.00	0.22	0.142	0					2.73
21.083	0.00	0.22	0.141	0					2.71
21.167	0.00	0.22	0.139	0					2.68
21.250	0.00	0.22	0.137	0					2.66

21.333	0.00	0.22	0.136	0					2.64
21.417	0.00	0.22	0.134	0					2.62
21.500	0.00	0.22	0.133	0					2.60
21.583	0.00	0.22	0.131	0					2.58
21.667	0.00	0.22	0.130	0					2.56
21.750	0.00	0.22	0.128	0					2.54
21.833	0.00	0.22	0.127	0					2.52
21.917	0.00	0.22	0.125	0					2.50
22.000	0.00	0.22	0.124	0					2.48
22.083	0.00	0.22	0.122	0					2.46
22.167	0.00	0.22	0.121	0					2.44
22.250	0.00	0.22	0.119	0					2.42
22.333	0.00	0.22	0.118	0					2.39
22.417	0.00	0.22	0.116	0					2.37
22.500	0.00	0.22	0.115	0					2.35
22.583	0.00	0.22	0.113	0					2.33
22.667	0.00	0.22	0.112	0					2.31
22.750	0.00	0.22	0.110	0					2.29
22.833	0.00	0.22	0.109	0					2.27
22.917	0.00	0.22	0.107	0					2.25
23.000	0.00	0.22	0.106	0					2.23
23.083	0.00	0.22	0.104	0					2.21
23.167	0.00	0.22	0.103	0					2.19
23.250	0.00	0.22	0.101	0					2.17
23.333	0.00	0.22	0.100	0					2.15
23.417	0.00	0.22	0.098	0					2.12
23.500	0.00	0.22	0.097	0					2.10
23.583	0.00	0.22	0.095	0					2.08
23.667	0.00	0.22	0.094	0					2.06
23.750	0.00	0.22	0.092	0					2.04
23.833	0.00	0.22	0.091	0					2.02
23.917	0.00	0.22	0.089	0					2.00
24.000	0.00	0.22	0.087	0					1.97
24.083	0.00	0.22	0.086	0					1.94
24.167	0.00	0.22	0.084	0					1.91
24.250	0.00	0.22	0.083	0					1.88
24.333	0.00	0.22	0.081	0					1.85
24.417	0.00	0.22	0.080	0					1.81
24.500	0.00	0.22	0.078	0					1.78
24.583	0.00	0.22	0.077	0					1.75
24.667	0.00	0.22	0.075	0					1.72
24.750	0.00	0.22	0.074	0					1.69
24.833	0.00	0.22	0.072	0					1.66
24.917	0.00	0.22	0.071	0					1.63
25.000	0.00	0.22	0.069	0					1.60
25.083	0.00	0.22	0.068	0					1.57
25.167	0.00	0.22	0.066	0					1.54
25.250	0.00	0.22	0.065	0					1.51
25.333	0.00	0.22	0.063	0					1.47
25.417	0.00	0.22	0.062	0					1.44
25.500	0.00	0.22	0.060	0					1.41
25.583	0.00	0.22	0.059	0					1.38
25.667	0.00	0.22	0.057	0					1.35
25.750	0.00	0.22	0.056	0					1.32
25.833	0.00	0.22	0.054	0					1.29
25.917	0.00	0.22	0.053	0					1.26
26.000	0.00	0.22	0.051	0					1.23
26.083	0.00	0.22	0.050	0					1.20
26.167	0.00	0.22	0.048	0					1.16
26.250	0.00	0.22	0.047	0					1.13
26.333	0.00	0.22	0.045	0					1.10
26.417	0.00	0.22	0.044	0					1.07
26.500	0.00	0.22	0.042	0					1.04
26.583	0.00	0.22	0.041	0					1.01
26.667	0.00	0.21	0.039	0					0.98
26.750	0.00	0.21	0.038	0					0.94

26.833	0.00	0.20	0.036	0					0.90
26.917	0.00	0.19	0.035	0					0.87
27.000	0.00	0.18	0.034	0					0.84
27.083	0.00	0.18	0.032	0					0.81
27.167	0.00	0.17	0.031	0					0.78
27.250	0.00	0.16	0.030	0					0.75
27.333	0.00	0.16	0.029	0					0.72
27.417	0.00	0.15	0.028	0					0.69
27.500	0.00	0.15	0.027	0					0.67
27.583	0.00	0.14	0.026	0					0.64
27.667	0.00	0.14	0.025	0					0.62
27.750	0.00	0.13	0.024	0					0.60
27.833	0.00	0.13	0.023	0					0.57
27.917	0.00	0.12	0.022	0					0.55
28.000	0.00	0.12	0.021	0					0.53
28.083	0.00	0.11	0.020	0					0.51
28.167	0.00	0.11	0.020	0					0.49
28.250	0.00	0.10	0.019	0					0.47
28.333	0.00	0.10	0.018	0					0.46
28.417	0.00	0.10	0.018	0					0.44
28.500	0.00	0.09	0.017	0					0.42
28.583	0.00	0.09	0.016	0					0.41
28.667	0.00	0.09	0.016	0					0.39
28.750	0.00	0.08	0.015	0					0.38
28.833	0.00	0.08	0.015	0					0.36
28.917	0.00	0.08	0.014	0					0.35
29.000	0.00	0.07	0.014	0					0.34
29.083	0.00	0.07	0.013	0					0.33
29.167	0.00	0.07	0.013	0					0.31
29.250	0.00	0.07	0.012	0					0.30
29.333	0.00	0.06	0.012	0					0.29
29.417	0.00	0.06	0.011	0					0.28
29.500	0.00	0.06	0.011	0					0.27
29.583	0.00	0.06	0.010	0					0.26
29.667	0.00	0.05	0.010	0					0.25
29.750	0.00	0.05	0.010	0					0.24
29.833	0.00	0.05	0.009	0					0.23
29.917	0.00	0.05	0.009	0					0.22
30.000	0.00	0.05	0.009	0					0.21
30.083	0.00	0.05	0.008	0					0.21
30.167	0.00	0.04	0.008	0					0.20
30.250	0.00	0.04	0.008	0					0.19
30.333	0.00	0.04	0.007	0					0.18
30.417	0.00	0.04	0.007	0					0.18
30.500	0.00	0.04	0.007	0					0.17
30.583	0.00	0.04	0.007	0					0.16
30.667	0.00	0.03	0.006	0					0.16
30.750	0.00	0.03	0.006	0					0.15
30.833	0.00	0.03	0.006	0					0.15
30.917	0.00	0.03	0.006	0					0.14
31.000	0.00	0.03	0.005	0					0.14
31.083	0.00	0.03	0.005	0					0.13
31.167	0.00	0.03	0.005	0					0.13
31.250	0.00	0.03	0.005	0					0.12
31.333	0.00	0.03	0.005	0					0.12
31.417	0.00	0.02	0.005	0					0.11
31.500	0.00	0.02	0.004	0					0.11
31.583	0.00	0.02	0.004	0					0.10
31.667	0.00	0.02	0.004	0					0.10
31.750	0.00	0.02	0.004	0					0.10
31.833	0.00	0.02	0.004	0					0.09
31.917	0.00	0.02	0.004	0					0.09
32.000	0.00	0.02	0.003	0					0.09
32.083	0.00	0.02	0.003	0					0.08
32.167	0.00	0.02	0.003	0					0.08
32.250	0.00	0.02	0.003	0					0.08

32.333	0.00	0.02	0.003	0					0.07
32.417	0.00	0.02	0.003	0					0.07
32.500	0.00	0.02	0.003	0					0.07
32.583	0.00	0.01	0.003	0					0.07
32.667	0.00	0.01	0.003	0					0.06
32.750	0.00	0.01	0.002	0					0.06
32.833	0.00	0.01	0.002	0					0.06
32.917	0.00	0.01	0.002	0					0.06
33.000	0.00	0.01	0.002	0					0.05
33.083	0.00	0.01	0.002	0					0.05
33.167	0.00	0.01	0.002	0					0.05
33.250	0.00	0.01	0.002	0					0.05
33.333	0.00	0.01	0.002	0					0.05
33.417	0.00	0.01	0.002	0					0.05
33.500	0.00	0.01	0.002	0					0.04
33.583	0.00	0.01	0.002	0					0.04
33.667	0.00	0.01	0.002	0					0.04
33.750	0.00	0.01	0.002	0					0.04
33.833	0.00	0.01	0.002	0					0.04
33.917	0.00	0.01	0.001	0					0.04
34.000	0.00	0.01	0.001	0					0.03
34.083	0.00	0.01	0.001	0					0.03
34.167	0.00	0.01	0.001	0					0.03
34.250	0.00	0.01	0.001	0					0.03
34.333	0.00	0.01	0.001	0					0.03
34.417	0.00	0.01	0.001	0					0.03
34.500	0.00	0.01	0.001	0					0.03
34.583	0.00	0.01	0.001	0					0.03
34.667	0.00	0.01	0.001	0					0.03
34.750	0.00	0.01	0.001	0					0.02
34.833	0.00	0.01	0.001	0					0.02
34.917	0.00	0.01	0.001	0					0.02
35.000	0.00	0.00	0.001	0					0.02
35.083	0.00	0.00	0.001	0					0.02
35.167	0.00	0.00	0.001	0					0.02
35.250	0.00	0.00	0.001	0					0.02
35.333	0.00	0.00	0.001	0					0.02
35.417	0.00	0.00	0.001	0					0.02
35.500	0.00	0.00	0.001	0					0.02
35.583	0.00	0.00	0.001	0					0.02
35.667	0.00	0.00	0.001	0					0.02
35.750	0.00	0.00	0.001	0					0.02
35.833	0.00	0.00	0.001	0					0.02
35.917	0.00	0.00	0.001	0					0.01
36.000	0.00	0.00	0.001	0					0.01
36.083	0.00	0.00	0.001	0					0.01
36.167	0.00	0.00	0.001	0					0.01
36.250	0.00	0.00	0.001	0					0.01
36.333	0.00	0.00	0.000	0					0.01
36.417	0.00	0.00	0.000	0					0.01
36.500	0.00	0.00	0.000	0					0.01
36.583	0.00	0.00	0.000	0					0.01
36.667	0.00	0.00	0.000	0					0.01
36.750	0.00	0.00	0.000	0					0.01
36.833	0.00	0.00	0.000	0					0.01
36.917	0.00	0.00	0.000	0					0.01
37.000	0.00	0.00	0.000	0					0.01
37.083	0.00	0.00	0.000	0					0.01
37.167	0.00	0.00	0.000	0					0.01
37.250	0.00	0.00	0.000	0					0.01
37.333	0.00	0.00	0.000	0					0.01
37.417	0.00	0.00	0.000	0					0.01
37.500	0.00	0.00	0.000	0					0.01
37.583	0.00	0.00	0.000	0					0.01
37.667	0.00	0.00	0.000	0					0.01
37.750	0.00	0.00	0.000	0					0.01

37.833	0.00	0.00	0.000	O					0.01
37.917	0.00	0.00	0.000	O					0.01
38.000	0.00	0.00	0.000	O					0.01
38.083	0.00	0.00	0.000	O					0.01
38.167	0.00	0.00	0.000	O					0.01
38.250	0.00	0.00	0.000	O					0.01
38.333	0.00	0.00	0.000	O					0.00
38.417	0.00	0.00	0.000	O					0.00
38.500	0.00	0.00	0.000	O					0.00

*****HYDROGRAPH DATA*****

Number of intervals = 462
Time interval = 5.0 (Min.)
Maximum/Peak flow rate = 11.789 (CFS)
Total volume = 0.914 (Ac.Ft)

Status of hydrographs being held in storage

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

FLOOD HYDROGRAPH ROUTING PROGRAM
 Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2018
 Study date: 09/09/21

 RAMONA - WEBSTER
 AREA 1 - RETAIL
 100 YR - 3HR
 1391RTE1

Program License Serial Number 6490

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

From study/file name: 1391PRUH13100.rte
 *****HYDROGRAPH DATA*****
 Number of intervals = 40
 Time interval = 5.0 (Min.)
 Maximum/Peak flow rate = 10.976 (CFS)
 Total volume = 0.915 (Ac.Ft)
 Status of hydrographs being held in storage

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

+++++
 Process from Point/Station 1.000 to Point/Station 2.000
 **** RETARDING BASIN ROUTING ****

 User entry of depth-outflow-storage data

 Total number of inflow hydrograph intervals = 40
 Hydrograph time unit = 5.000 (Min.)
 Initial depth in storage basin = 0.00 (Ft.)

 Initial basin depth = 0.00 (Ft.)
 Initial basin storage = 0.00 (Ac.Ft)
 Initial basin outflow = 0.00 (CFS)

 Depth vs. Storage and Depth vs. Discharge data:

Basin Depth (Ft.)	Storage (Ac.Ft)	Outflow (CFS)	(S-O*dt/2) (Ac.Ft)	(S+O*dt/2) (Ac.Ft)
0.000	0.000	0.000	0.000	0.000
1.000	0.040	0.220	0.039	0.041
2.000	0.089	0.220	0.088	0.090
3.000	0.162	0.220	0.161	0.163
4.000	0.244	0.220	0.243	0.245
5.000	0.325	0.220	0.324	0.326
6.000	0.398	0.220	0.397	0.399
7.000	0.447	0.220	0.446	0.448
7.500	0.467	0.220	0.466	0.468

8.000 0.468 30.000 0.365 0.571

 Hydrograph Detention Basin Routing

Graph values: 'I'= unit inflow; 'O'=outflow at time shown

Time (Hours)	Inflow (CFS)	Outflow (CFS)	Storage (Ac.Ft)							Depth (Ft.)
				.0	2.7	5.49	8.23	10.98		
0.083	0.65	0.01	0.002	OI					0.05	
0.167	1.33	0.05	0.009	O I					0.22	
0.250	1.38	0.10	0.018	O I					0.44	
0.333	1.53	0.15	0.027	O I					0.67	
0.417	1.74	0.20	0.037	O I					0.92	
0.500	1.93	0.22	0.048	O I					1.16	
0.583	1.95	0.22	0.060	O I					1.41	
0.667	1.98	0.22	0.072	O I					1.65	
0.750	2.12	0.22	0.085	O I					1.91	
0.833	2.00	0.22	0.097	O I					2.11	
0.917	1.90	0.22	0.109	O I					2.28	
1.000	2.02	0.22	0.121	O I					2.44	
1.083	2.34	0.22	0.135	O I					2.62	
1.167	2.60	0.22	0.150	O I					2.84	
1.250	2.66	0.22	0.167	O I					3.06	
1.333	2.56	0.22	0.183	O I					3.26	
1.417	2.82	0.22	0.200	O I					3.46	
1.500	3.27	0.22	0.220	O I					3.70	
1.583	3.21	0.22	0.240	O I					3.96	
1.667	3.25	0.22	0.261	O I					4.21	
1.750	3.82	0.22	0.284	O I	I				4.49	
1.833	4.14	0.22	0.310	O I	I				4.81	
1.917	3.97	0.22	0.336	O I	I				5.15	
2.000	3.91	0.22	0.362	O I	I				5.50	
2.083	4.01	0.22	0.388	O I	I				5.86	
2.167	4.80	0.22	0.416	O I	I				6.37	
2.250	6.11	0.22	0.452	O I	I				7.13	
2.333	5.85	7.42	0.467			I O			7.62	
2.417	7.15	5.60	0.467			O I			7.59	
2.500	9.63	11.12	0.467				I O		7.68	
2.583	10.98	9.50	0.467				O I		7.66	
2.667	10.33	11.79	0.467				I O		7.69	
2.750	6.43	5.04	0.467			O I			7.58	
2.833	3.35	4.75	0.467		I O				7.58	
2.917	2.56	1.20	0.467		O I				7.52	
3.000	1.67	3.01	0.467		I O				7.55	
3.083	0.63	0.22	0.464	OI					7.42	
3.167	0.18	0.22	0.465	O					7.45	
3.250	0.06	0.22	0.464	O					7.44	
3.333	0.01	0.22	0.463	O					7.40	
3.417	0.00	0.22	0.462	O					7.37	
3.500	0.00	0.22	0.460	O					7.33	
3.583	0.00	0.22	0.459	O					7.29	
3.667	0.00	0.22	0.457	O					7.25	
3.750	0.00	0.22	0.456	O					7.22	
3.833	0.00	0.22	0.454	O					7.18	
3.917	0.00	0.22	0.453	O					7.14	
4.000	0.00	0.22	0.451	O					7.10	
4.083	0.00	0.22	0.450	O					7.06	
4.167	0.00	0.22	0.448	O					7.03	
4.250	0.00	0.22	0.447	O					6.99	
4.333	0.00	0.22	0.445	O					6.96	
4.417	0.00	0.22	0.444	O					6.93	
4.500	0.00	0.22	0.442	O					6.90	
4.583	0.00	0.22	0.441	O					6.87	
4.667	0.00	0.22	0.439	O					6.84	
4.750	0.00	0.22	0.437	O					6.81	

4.833	0.00	0.22	0.436	0					6.77
4.917	0.00	0.22	0.434	0					6.74
5.000	0.00	0.22	0.433	0					6.71
5.083	0.00	0.22	0.431	0					6.68
5.167	0.00	0.22	0.430	0					6.65
5.250	0.00	0.22	0.428	0					6.62
5.333	0.00	0.22	0.427	0					6.59
5.417	0.00	0.22	0.425	0					6.56
5.500	0.00	0.22	0.424	0					6.53
5.583	0.00	0.22	0.422	0					6.50
5.667	0.00	0.22	0.421	0					6.47
5.750	0.00	0.22	0.419	0					6.43
5.833	0.00	0.22	0.418	0					6.40
5.917	0.00	0.22	0.416	0					6.37
6.000	0.00	0.22	0.415	0					6.34
6.083	0.00	0.22	0.413	0					6.31
6.167	0.00	0.22	0.412	0					6.28
6.250	0.00	0.22	0.410	0					6.25
6.333	0.00	0.22	0.409	0					6.22
6.417	0.00	0.22	0.407	0					6.19
6.500	0.00	0.22	0.406	0					6.16
6.583	0.00	0.22	0.404	0					6.13
6.667	0.00	0.22	0.403	0					6.09
6.750	0.00	0.22	0.401	0					6.06
6.833	0.00	0.22	0.400	0					6.03
6.917	0.00	0.22	0.398	0					6.00
7.000	0.00	0.22	0.397	0					5.98
7.083	0.00	0.22	0.395	0					5.96
7.167	0.00	0.22	0.394	0					5.94
7.250	0.00	0.22	0.392	0					5.92
7.333	0.00	0.22	0.391	0					5.90
7.417	0.00	0.22	0.389	0					5.88
7.500	0.00	0.22	0.387	0					5.86
7.583	0.00	0.22	0.386	0					5.84
7.667	0.00	0.22	0.384	0					5.81
7.750	0.00	0.22	0.383	0					5.79
7.833	0.00	0.22	0.381	0					5.77
7.917	0.00	0.22	0.380	0					5.75
8.000	0.00	0.22	0.378	0					5.73
8.083	0.00	0.22	0.377	0					5.71
8.167	0.00	0.22	0.375	0					5.69
8.250	0.00	0.22	0.374	0					5.67
8.333	0.00	0.22	0.372	0					5.65
8.417	0.00	0.22	0.371	0					5.63
8.500	0.00	0.22	0.369	0					5.61
8.583	0.00	0.22	0.368	0					5.59
8.667	0.00	0.22	0.366	0					5.57
8.750	0.00	0.22	0.365	0					5.54
8.833	0.00	0.22	0.363	0					5.52
8.917	0.00	0.22	0.362	0					5.50
9.000	0.00	0.22	0.360	0					5.48
9.083	0.00	0.22	0.359	0					5.46
9.167	0.00	0.22	0.357	0					5.44
9.250	0.00	0.22	0.356	0					5.42
9.333	0.00	0.22	0.354	0					5.40
9.417	0.00	0.22	0.353	0					5.38
9.500	0.00	0.22	0.351	0					5.36
9.583	0.00	0.22	0.350	0					5.34
9.667	0.00	0.22	0.348	0					5.32
9.750	0.00	0.22	0.347	0					5.30
9.833	0.00	0.22	0.345	0					5.27
9.917	0.00	0.22	0.344	0					5.25
10.000	0.00	0.22	0.342	0					5.23
10.083	0.00	0.22	0.341	0					5.21
10.167	0.00	0.22	0.339	0					5.19
10.250	0.00	0.22	0.337	0					5.17

10.333	0.00	0.22	0.336	0					5.15
10.417	0.00	0.22	0.334	0					5.13
10.500	0.00	0.22	0.333	0					5.11
10.583	0.00	0.22	0.331	0					5.09
10.667	0.00	0.22	0.330	0					5.07
10.750	0.00	0.22	0.328	0					5.05
10.833	0.00	0.22	0.327	0					5.03
10.917	0.00	0.22	0.325	0					5.00
11.000	0.00	0.22	0.324	0					4.99
11.083	0.00	0.22	0.322	0					4.97
11.167	0.00	0.22	0.321	0					4.95
11.250	0.00	0.22	0.319	0					4.93
11.333	0.00	0.22	0.318	0					4.91
11.417	0.00	0.22	0.316	0					4.89
11.500	0.00	0.22	0.315	0					4.87
11.583	0.00	0.22	0.313	0					4.85
11.667	0.00	0.22	0.312	0					4.84
11.750	0.00	0.22	0.310	0					4.82
11.833	0.00	0.22	0.309	0					4.80
11.917	0.00	0.22	0.307	0					4.78
12.000	0.00	0.22	0.306	0					4.76
12.083	0.00	0.22	0.304	0					4.74
12.167	0.00	0.22	0.303	0					4.72
12.250	0.00	0.22	0.301	0					4.71
12.333	0.00	0.22	0.300	0					4.69
12.417	0.00	0.22	0.298	0					4.67
12.500	0.00	0.22	0.297	0					4.65
12.583	0.00	0.22	0.295	0					4.63
12.667	0.00	0.22	0.294	0					4.61
12.750	0.00	0.22	0.292	0					4.59
12.833	0.00	0.22	0.291	0					4.57
12.917	0.00	0.22	0.289	0					4.56
13.000	0.00	0.22	0.287	0					4.54
13.083	0.00	0.22	0.286	0					4.52
13.167	0.00	0.22	0.284	0					4.50
13.250	0.00	0.22	0.283	0					4.48
13.333	0.00	0.22	0.281	0					4.46
13.417	0.00	0.22	0.280	0					4.44
13.500	0.00	0.22	0.278	0					4.42
13.583	0.00	0.22	0.277	0					4.41
13.667	0.00	0.22	0.275	0					4.39
13.750	0.00	0.22	0.274	0					4.37
13.833	0.00	0.22	0.272	0					4.35
13.917	0.00	0.22	0.271	0					4.33
14.000	0.00	0.22	0.269	0					4.31
14.083	0.00	0.22	0.268	0					4.29
14.167	0.00	0.22	0.266	0					4.27
14.250	0.00	0.22	0.265	0					4.26
14.333	0.00	0.22	0.263	0					4.24
14.417	0.00	0.22	0.262	0					4.22
14.500	0.00	0.22	0.260	0					4.20
14.583	0.00	0.22	0.259	0					4.18
14.667	0.00	0.22	0.257	0					4.16
14.750	0.00	0.22	0.256	0					4.14
14.833	0.00	0.22	0.254	0					4.13
14.917	0.00	0.22	0.253	0					4.11
15.000	0.00	0.22	0.251	0					4.09
15.083	0.00	0.22	0.250	0					4.07
15.167	0.00	0.22	0.248	0					4.05
15.250	0.00	0.22	0.247	0					4.03
15.333	0.00	0.22	0.245	0					4.01
15.417	0.00	0.22	0.244	0					3.99
15.500	0.00	0.22	0.242	0					3.98
15.583	0.00	0.22	0.241	0					3.96
15.667	0.00	0.22	0.239	0					3.94
15.750	0.00	0.22	0.237	0					3.92

15.833	0.00	0.22	0.236	0					3.90
15.917	0.00	0.22	0.234	0					3.88
16.000	0.00	0.22	0.233	0					3.87
16.083	0.00	0.22	0.231	0					3.85
16.167	0.00	0.22	0.230	0					3.83
16.250	0.00	0.22	0.228	0					3.81
16.333	0.00	0.22	0.227	0					3.79
16.417	0.00	0.22	0.225	0					3.77
16.500	0.00	0.22	0.224	0					3.75
16.583	0.00	0.22	0.222	0					3.74
16.667	0.00	0.22	0.221	0					3.72
16.750	0.00	0.22	0.219	0					3.70
16.833	0.00	0.22	0.218	0					3.68
16.917	0.00	0.22	0.216	0					3.66
17.000	0.00	0.22	0.215	0					3.64
17.083	0.00	0.22	0.213	0					3.62
17.167	0.00	0.22	0.212	0					3.61
17.250	0.00	0.22	0.210	0					3.59
17.333	0.00	0.22	0.209	0					3.57
17.417	0.00	0.22	0.207	0					3.55
17.500	0.00	0.22	0.206	0					3.53
17.583	0.00	0.22	0.204	0					3.51
17.667	0.00	0.22	0.203	0					3.50
17.750	0.00	0.22	0.201	0					3.48
17.833	0.00	0.22	0.200	0					3.46
17.917	0.00	0.22	0.198	0					3.44
18.000	0.00	0.22	0.197	0					3.42
18.083	0.00	0.22	0.195	0					3.40
18.167	0.00	0.22	0.194	0					3.38
18.250	0.00	0.22	0.192	0					3.37
18.333	0.00	0.22	0.191	0					3.35
18.417	0.00	0.22	0.189	0					3.33
18.500	0.00	0.22	0.187	0					3.31
18.583	0.00	0.22	0.186	0					3.29
18.667	0.00	0.22	0.184	0					3.27
18.750	0.00	0.22	0.183	0					3.26
18.833	0.00	0.22	0.181	0					3.24
18.917	0.00	0.22	0.180	0					3.22
19.000	0.00	0.22	0.178	0					3.20
19.083	0.00	0.22	0.177	0					3.18
19.167	0.00	0.22	0.175	0					3.16
19.250	0.00	0.22	0.174	0					3.14
19.333	0.00	0.22	0.172	0					3.13
19.417	0.00	0.22	0.171	0					3.11
19.500	0.00	0.22	0.169	0					3.09
19.583	0.00	0.22	0.168	0					3.07
19.667	0.00	0.22	0.166	0					3.05
19.750	0.00	0.22	0.165	0					3.03
19.833	0.00	0.22	0.163	0					3.02
19.917	0.00	0.22	0.162	0					3.00
20.000	0.00	0.22	0.160	0					2.98
20.083	0.00	0.22	0.159	0					2.95
20.167	0.00	0.22	0.157	0					2.93
20.250	0.00	0.22	0.156	0					2.91
20.333	0.00	0.22	0.154	0					2.89
20.417	0.00	0.22	0.153	0					2.87
20.500	0.00	0.22	0.151	0					2.85
20.583	0.00	0.22	0.150	0					2.83
20.667	0.00	0.22	0.148	0					2.81
20.750	0.00	0.22	0.147	0					2.79
20.833	0.00	0.22	0.145	0					2.77
20.917	0.00	0.22	0.144	0					2.75
21.000	0.00	0.22	0.142	0					2.73
21.083	0.00	0.22	0.141	0					2.71
21.167	0.00	0.22	0.139	0					2.68
21.250	0.00	0.22	0.137	0					2.66

21.333	0.00	0.22	0.136	0					2.64
21.417	0.00	0.22	0.134	0					2.62
21.500	0.00	0.22	0.133	0					2.60
21.583	0.00	0.22	0.131	0					2.58
21.667	0.00	0.22	0.130	0					2.56
21.750	0.00	0.22	0.128	0					2.54
21.833	0.00	0.22	0.127	0					2.52
21.917	0.00	0.22	0.125	0					2.50
22.000	0.00	0.22	0.124	0					2.48
22.083	0.00	0.22	0.122	0					2.46
22.167	0.00	0.22	0.121	0					2.44
22.250	0.00	0.22	0.119	0					2.42
22.333	0.00	0.22	0.118	0					2.39
22.417	0.00	0.22	0.116	0					2.37
22.500	0.00	0.22	0.115	0					2.35
22.583	0.00	0.22	0.113	0					2.33
22.667	0.00	0.22	0.112	0					2.31
22.750	0.00	0.22	0.110	0					2.29
22.833	0.00	0.22	0.109	0					2.27
22.917	0.00	0.22	0.107	0					2.25
23.000	0.00	0.22	0.106	0					2.23
23.083	0.00	0.22	0.104	0					2.21
23.167	0.00	0.22	0.103	0					2.19
23.250	0.00	0.22	0.101	0					2.17
23.333	0.00	0.22	0.100	0					2.15
23.417	0.00	0.22	0.098	0					2.12
23.500	0.00	0.22	0.097	0					2.10
23.583	0.00	0.22	0.095	0					2.08
23.667	0.00	0.22	0.094	0					2.06
23.750	0.00	0.22	0.092	0					2.04
23.833	0.00	0.22	0.091	0					2.02
23.917	0.00	0.22	0.089	0					2.00
24.000	0.00	0.22	0.087	0					1.97
24.083	0.00	0.22	0.086	0					1.94
24.167	0.00	0.22	0.084	0					1.91
24.250	0.00	0.22	0.083	0					1.88
24.333	0.00	0.22	0.081	0					1.85
24.417	0.00	0.22	0.080	0					1.81
24.500	0.00	0.22	0.078	0					1.78
24.583	0.00	0.22	0.077	0					1.75
24.667	0.00	0.22	0.075	0					1.72
24.750	0.00	0.22	0.074	0					1.69
24.833	0.00	0.22	0.072	0					1.66
24.917	0.00	0.22	0.071	0					1.63
25.000	0.00	0.22	0.069	0					1.60
25.083	0.00	0.22	0.068	0					1.57
25.167	0.00	0.22	0.066	0					1.54
25.250	0.00	0.22	0.065	0					1.51
25.333	0.00	0.22	0.063	0					1.47
25.417	0.00	0.22	0.062	0					1.44
25.500	0.00	0.22	0.060	0					1.41
25.583	0.00	0.22	0.059	0					1.38
25.667	0.00	0.22	0.057	0					1.35
25.750	0.00	0.22	0.056	0					1.32
25.833	0.00	0.22	0.054	0					1.29
25.917	0.00	0.22	0.053	0					1.26
26.000	0.00	0.22	0.051	0					1.23
26.083	0.00	0.22	0.050	0					1.20
26.167	0.00	0.22	0.048	0					1.16
26.250	0.00	0.22	0.047	0					1.13
26.333	0.00	0.22	0.045	0					1.10
26.417	0.00	0.22	0.044	0					1.07
26.500	0.00	0.22	0.042	0					1.04
26.583	0.00	0.22	0.041	0					1.01
26.667	0.00	0.21	0.039	0					0.98
26.750	0.00	0.21	0.038	0					0.94

26.833	0.00	0.20	0.036	0					0.90
26.917	0.00	0.19	0.035	0					0.87
27.000	0.00	0.18	0.034	0					0.84
27.083	0.00	0.18	0.032	0					0.81
27.167	0.00	0.17	0.031	0					0.78
27.250	0.00	0.16	0.030	0					0.75
27.333	0.00	0.16	0.029	0					0.72
27.417	0.00	0.15	0.028	0					0.69
27.500	0.00	0.15	0.027	0					0.67
27.583	0.00	0.14	0.026	0					0.64
27.667	0.00	0.14	0.025	0					0.62
27.750	0.00	0.13	0.024	0					0.60
27.833	0.00	0.13	0.023	0					0.57
27.917	0.00	0.12	0.022	0					0.55
28.000	0.00	0.12	0.021	0					0.53
28.083	0.00	0.11	0.020	0					0.51
28.167	0.00	0.11	0.020	0					0.49
28.250	0.00	0.10	0.019	0					0.47
28.333	0.00	0.10	0.018	0					0.46
28.417	0.00	0.10	0.018	0					0.44
28.500	0.00	0.09	0.017	0					0.42
28.583	0.00	0.09	0.016	0					0.41
28.667	0.00	0.09	0.016	0					0.39
28.750	0.00	0.08	0.015	0					0.38
28.833	0.00	0.08	0.015	0					0.36
28.917	0.00	0.08	0.014	0					0.35
29.000	0.00	0.07	0.014	0					0.34
29.083	0.00	0.07	0.013	0					0.33
29.167	0.00	0.07	0.013	0					0.31
29.250	0.00	0.07	0.012	0					0.30
29.333	0.00	0.06	0.012	0					0.29
29.417	0.00	0.06	0.011	0					0.28
29.500	0.00	0.06	0.011	0					0.27
29.583	0.00	0.06	0.010	0					0.26
29.667	0.00	0.05	0.010	0					0.25
29.750	0.00	0.05	0.010	0					0.24
29.833	0.00	0.05	0.009	0					0.23
29.917	0.00	0.05	0.009	0					0.22
30.000	0.00	0.05	0.009	0					0.21
30.083	0.00	0.05	0.008	0					0.21
30.167	0.00	0.04	0.008	0					0.20
30.250	0.00	0.04	0.008	0					0.19
30.333	0.00	0.04	0.007	0					0.18
30.417	0.00	0.04	0.007	0					0.18
30.500	0.00	0.04	0.007	0					0.17
30.583	0.00	0.04	0.007	0					0.16
30.667	0.00	0.03	0.006	0					0.16
30.750	0.00	0.03	0.006	0					0.15
30.833	0.00	0.03	0.006	0					0.15
30.917	0.00	0.03	0.006	0					0.14
31.000	0.00	0.03	0.005	0					0.14
31.083	0.00	0.03	0.005	0					0.13
31.167	0.00	0.03	0.005	0					0.13
31.250	0.00	0.03	0.005	0					0.12
31.333	0.00	0.03	0.005	0					0.12
31.417	0.00	0.02	0.005	0					0.11
31.500	0.00	0.02	0.004	0					0.11
31.583	0.00	0.02	0.004	0					0.10
31.667	0.00	0.02	0.004	0					0.10
31.750	0.00	0.02	0.004	0					0.10
31.833	0.00	0.02	0.004	0					0.09
31.917	0.00	0.02	0.004	0					0.09
32.000	0.00	0.02	0.003	0					0.09
32.083	0.00	0.02	0.003	0					0.08
32.167	0.00	0.02	0.003	0					0.08
32.250	0.00	0.02	0.003	0					0.08

32.333	0.00	0.02	0.003	0					0.07
32.417	0.00	0.02	0.003	0					0.07
32.500	0.00	0.02	0.003	0					0.07
32.583	0.00	0.01	0.003	0					0.07
32.667	0.00	0.01	0.003	0					0.06
32.750	0.00	0.01	0.002	0					0.06
32.833	0.00	0.01	0.002	0					0.06
32.917	0.00	0.01	0.002	0					0.06
33.000	0.00	0.01	0.002	0					0.05
33.083	0.00	0.01	0.002	0					0.05
33.167	0.00	0.01	0.002	0					0.05
33.250	0.00	0.01	0.002	0					0.05
33.333	0.00	0.01	0.002	0					0.05
33.417	0.00	0.01	0.002	0					0.05
33.500	0.00	0.01	0.002	0					0.04
33.583	0.00	0.01	0.002	0					0.04
33.667	0.00	0.01	0.002	0					0.04
33.750	0.00	0.01	0.002	0					0.04
33.833	0.00	0.01	0.002	0					0.04
33.917	0.00	0.01	0.001	0					0.04
34.000	0.00	0.01	0.001	0					0.03
34.083	0.00	0.01	0.001	0					0.03
34.167	0.00	0.01	0.001	0					0.03
34.250	0.00	0.01	0.001	0					0.03
34.333	0.00	0.01	0.001	0					0.03
34.417	0.00	0.01	0.001	0					0.03
34.500	0.00	0.01	0.001	0					0.03
34.583	0.00	0.01	0.001	0					0.03
34.667	0.00	0.01	0.001	0					0.03
34.750	0.00	0.01	0.001	0					0.02
34.833	0.00	0.01	0.001	0					0.02
34.917	0.00	0.01	0.001	0					0.02
35.000	0.00	0.00	0.001	0					0.02
35.083	0.00	0.00	0.001	0					0.02
35.167	0.00	0.00	0.001	0					0.02
35.250	0.00	0.00	0.001	0					0.02
35.333	0.00	0.00	0.001	0					0.02
35.417	0.00	0.00	0.001	0					0.02
35.500	0.00	0.00	0.001	0					0.02
35.583	0.00	0.00	0.001	0					0.02
35.667	0.00	0.00	0.001	0					0.02
35.750	0.00	0.00	0.001	0					0.02
35.833	0.00	0.00	0.001	0					0.02
35.917	0.00	0.00	0.001	0					0.01
36.000	0.00	0.00	0.001	0					0.01
36.083	0.00	0.00	0.001	0					0.01
36.167	0.00	0.00	0.001	0					0.01
36.250	0.00	0.00	0.001	0					0.01
36.333	0.00	0.00	0.000	0					0.01
36.417	0.00	0.00	0.000	0					0.01
36.500	0.00	0.00	0.000	0					0.01
36.583	0.00	0.00	0.000	0					0.01
36.667	0.00	0.00	0.000	0					0.01
36.750	0.00	0.00	0.000	0					0.01
36.833	0.00	0.00	0.000	0					0.01
36.917	0.00	0.00	0.000	0					0.01
37.000	0.00	0.00	0.000	0					0.01
37.083	0.00	0.00	0.000	0					0.01
37.167	0.00	0.00	0.000	0					0.01
37.250	0.00	0.00	0.000	0					0.01
37.333	0.00	0.00	0.000	0					0.01
37.417	0.00	0.00	0.000	0					0.01
37.500	0.00	0.00	0.000	0					0.01
37.583	0.00	0.00	0.000	0					0.01
37.667	0.00	0.00	0.000	0					0.01
37.750	0.00	0.00	0.000	0					0.01

37.833	0.00	0.00	0.000	O					0.01
37.917	0.00	0.00	0.000	O					0.01
38.000	0.00	0.00	0.000	O					0.01
38.083	0.00	0.00	0.000	O					0.01
38.167	0.00	0.00	0.000	O					0.01
38.250	0.00	0.00	0.000	O					0.01
38.333	0.00	0.00	0.000	O					0.00
38.417	0.00	0.00	0.000	O					0.00
38.500	0.00	0.00	0.000	O					0.00

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*****HYDROGRAPH DATA*****
      Number of intervals = 462
      Time interval = 5.0 (Min.)
      Maximum/Peak flow rate = 11.789 (CFS)
      Total volume = 0.914 (Ac.Ft)
      Status of hydrographs being held in storage
            Stream 1 Stream 2 Stream 3 Stream 4 Stream 5
      Peak (CFS)      0.000  0.000  0.000  0.000  0.000
      Vol (Ac.Ft)     0.000  0.000  0.000  0.000  0.000
*****

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FLOOD HYDROGRAPH ROUTING PROGRAM
 Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2018
 Study date: 09/09/21

 RAMONA - WEBSTER
 AREA 1 - RETAIL
 100 YR - 24 HR
 1391RTE1

Program License Serial Number 6490

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

From study/file name: 1391PRUH124100.rte
 *****HYDROGRAPH DATA*****
 Number of intervals = 292
 Time interval = 5.0 (Min.)
 Maximum/Peak flow rate = 3.694 (CFS)
 Total volume = 2.065 (Ac.Ft)
 Status of hydrographs being held in storage

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

+++++
 Process from Point/Station 1.000 to Point/Station 2.000
 **** RETARDING BASIN ROUTING ****

 User entry of depth-outflow-storage data

 Total number of inflow hydrograph intervals = 292
 Hydrograph time unit = 5.000 (Min.)
 Initial depth in storage basin = 0.00 (Ft.)

 Initial basin depth = 0.00 (Ft.)
 Initial basin storage = 0.00 (Ac.Ft)
 Initial basin outflow = 0.00 (CFS)

 Depth vs. Storage and Depth vs. Discharge data:

Basin Depth (Ft.)	Storage (Ac.Ft)	Outflow (CFS)	(S-O*dt/2) (Ac.Ft)	(S+O*dt/2) (Ac.Ft)
0.000	0.000	0.000	0.000	0.000
1.000	0.040	0.220	0.039	0.041
2.000	0.089	0.220	0.088	0.090
3.000	0.162	0.220	0.161	0.163
4.000	0.244	0.220	0.243	0.245
5.000	0.325	0.220	0.324	0.326
6.000	0.398	0.220	0.397	0.399
7.000	0.447	0.220	0.446	0.448
7.500	0.467	0.220	0.466	0.468

8.000 0.468 30.000 0.365 0.571

 Hydrograph Detention Basin Routing

Graph values: 'I'= unit inflow; 'O'=outflow at time shown

Time (Hours)	Inflow (CFS)	Outflow (CFS)	Storage (Ac.Ft)	.0	0.9	1.85	2.77	3.69	Depth (Ft.)
0.083	0.08	0.00	0.000	O					0.01
0.167	0.17	0.01	0.001	O I					0.03
0.250	0.19	0.01	0.002	O I					0.06
0.333	0.23	0.02	0.004	O I					0.09
0.417	0.28	0.03	0.005	O I					0.13
0.500	0.29	0.04	0.007	O I					0.17
0.583	0.29	0.05	0.009	O I					0.22
0.667	0.29	0.06	0.010	O I					0.26
0.750	0.29	0.07	0.012	O I					0.30
0.833	0.33	0.07	0.014	O I					0.34
0.917	0.38	0.08	0.015	O I					0.39
1.000	0.39	0.10	0.017	O I					0.44
1.083	0.35	0.11	0.019	O I					0.48
1.167	0.31	0.11	0.021	O I					0.52
1.250	0.30	0.12	0.022	O I					0.55
1.333	0.29	0.13	0.023	O I					0.58
1.417	0.29	0.13	0.024	O I					0.61
1.500	0.29	0.14	0.025	O I					0.64
1.583	0.29	0.15	0.026	O I					0.66
1.667	0.29	0.15	0.027	O I					0.69
1.750	0.29	0.16	0.028	O I					0.71
1.833	0.33	0.16	0.029	O I					0.74
1.917	0.38	0.17	0.031	O I					0.77
2.000	0.39	0.18	0.032	O I					0.81
2.083	0.39	0.18	0.034	O I					0.84
2.167	0.39	0.19	0.035	O I					0.88
2.250	0.39	0.20	0.036	O I					0.91
2.333	0.39	0.21	0.038	O I					0.94
2.417	0.39	0.21	0.039	O I					0.97
2.500	0.39	0.22	0.040	O I					1.00
2.583	0.43	0.22	0.041	O I					1.03
2.667	0.47	0.22	0.043	O I					1.06
2.750	0.48	0.22	0.045	O I					1.10
2.833	0.49	0.22	0.047	O I					1.13
2.917	0.49	0.22	0.048	O I					1.17
3.000	0.49	0.22	0.050	O I					1.21
3.083	0.49	0.22	0.052	O I					1.25
3.167	0.49	0.22	0.054	O I					1.29
3.250	0.49	0.22	0.056	O I					1.32
3.333	0.49	0.22	0.058	O I					1.36
3.417	0.49	0.22	0.060	O I					1.40
3.500	0.49	0.22	0.061	O I					1.44
3.583	0.49	0.22	0.063	O I					1.47
3.667	0.49	0.22	0.065	O I					1.51
3.750	0.49	0.22	0.067	O I					1.55
3.833	0.53	0.22	0.069	O I					1.59
3.917	0.57	0.22	0.071	O I					1.64
4.000	0.58	0.22	0.074	O I					1.69
4.083	0.58	0.22	0.076	O I					1.74
4.167	0.59	0.22	0.079	O I					1.79
4.250	0.59	0.22	0.081	O I					1.84
4.333	0.63	0.22	0.084	O I					1.89
4.417	0.67	0.22	0.087	O I					1.96
4.500	0.68	0.22	0.090	O I					2.01
4.583	0.68	0.22	0.093	O I					2.06
4.667	0.68	0.22	0.096	O I					2.10
4.750	0.68	0.22	0.099	O I					2.14

4.833	0.72	0.22	0.103	O	I					2.19
4.917	0.77	0.22	0.106	O	I					2.24
5.000	0.78	0.22	0.110	O	I					2.29
5.083	0.70	0.22	0.114	O	I					2.34
5.167	0.61	0.22	0.117	O	I					2.38
5.250	0.60	0.22	0.119	O	I					2.42
5.333	0.63	0.22	0.122	O	I					2.45
5.417	0.67	0.22	0.125	O	I					2.49
5.500	0.68	0.22	0.128	O	I					2.54
5.583	0.72	0.22	0.132	O	I					2.58
5.667	0.77	0.22	0.135	O	I					2.63
5.750	0.78	0.22	0.139	O	I					2.68
5.833	0.78	0.22	0.143	O	I					2.74
5.917	0.78	0.22	0.147	O	I					2.79
6.000	0.78	0.22	0.151	O	I					2.84
6.083	0.82	0.22	0.155	O	I					2.90
6.167	0.86	0.22	0.159	O	I					2.96
6.250	0.87	0.22	0.163	O	I					3.02
6.333	0.88	0.22	0.168	O	I					3.07
6.417	0.88	0.22	0.172	O	I					3.13
6.500	0.88	0.22	0.177	O	I					3.18
6.583	0.92	0.22	0.182	O	I					3.24
6.667	0.96	0.22	0.187	O	I					3.30
6.750	0.97	0.22	0.192	O	I					3.36
6.833	0.98	0.22	0.197	O	I					3.43
6.917	0.98	0.22	0.202	O	I					3.49
7.000	0.98	0.22	0.207	O	I					3.55
7.083	0.98	0.22	0.213	O	I					3.62
7.167	0.98	0.22	0.218	O	I					3.68
7.250	0.98	0.22	0.223	O	I					3.74
7.333	1.02	0.22	0.228	O	I					3.81
7.417	1.06	0.22	0.234	O	I					3.88
7.500	1.07	0.22	0.240	O	I					3.95
7.583	1.11	0.22	0.246	O	I					4.02
7.667	1.16	0.22	0.252	O	I					4.10
7.750	1.17	0.22	0.259	O	I					4.18
7.833	1.21	0.22	0.265	O	I					4.26
7.917	1.26	0.22	0.272	O	I					4.35
8.000	1.26	0.22	0.279	O	I					4.44
8.083	1.35	0.22	0.287	O	I					4.53
8.167	1.44	0.22	0.295	O	I					4.63
8.250	1.46	0.22	0.303	O	I					4.73
8.333	1.46	0.22	0.312	O	I					4.84
8.417	1.47	0.22	0.320	O	I					4.94
8.500	1.47	0.22	0.329	O	I					5.06
8.583	1.51	0.22	0.338	O	I					5.18
8.667	1.55	0.22	0.347	O	I					5.30
8.750	1.56	0.22	0.356	O	I					5.42
8.833	1.60	0.22	0.365	O	I					5.55
8.917	1.65	0.22	0.375	O	I					5.68
9.000	1.66	0.22	0.385	O	I					5.82
9.083	1.74	0.22	0.395	O	I					5.96
9.167	1.83	0.22	0.406	O	I					6.16
9.250	1.85	0.22	0.417	O	I					6.39
9.333	1.89	0.22	0.428	O	I					6.62
9.417	1.94	0.22	0.440	O	I					6.86
9.500	1.95	0.22	0.452	O	I					7.12
9.583	1.99	0.22	0.464	O	I					7.42
9.667	2.04	2.89	0.467			I		O		7.54
9.750	2.05	1.21	0.467		O	I				7.52
9.833	2.09	2.91	0.467			I		O		7.55
9.917	2.13	1.33	0.467		O	I				7.52
10.000	2.14	2.93	0.467			I		O		7.55
10.083	1.86	1.10	0.467		O	I				7.51
10.167	1.56	2.32	0.467			I		O		7.54
10.250	1.50	0.76	0.467		O	I				7.51

10.333	1.48	2.20	0.467			I		O				7.53	
10.417	1.47	0.75	0.467		O		I					7.51	
10.500	1.47	2.16	0.467			I		O				7.53	
10.583	1.67	0.98	0.467		O		I					7.51	
10.667	1.88	2.55	0.467				I		O			7.54	
10.750	1.93	1.27	0.467			O		I				7.52	
10.833	1.95	2.59	0.467				I		O			7.54	
10.917	1.95	1.32	0.467			O		I				7.52	
11.000	1.95	2.57	0.467				I		O			7.54	
11.083	1.91	1.30	0.467			O		I				7.52	
11.167	1.87	2.47	0.467				I		O			7.54	
11.250	1.86	1.28	0.467			O		I				7.52	
11.333	1.86	2.43	0.467				I		O			7.54	
11.417	1.86	1.29	0.467			O		I				7.52	
11.500	1.86	2.41	0.467				I		O			7.54	
11.583	1.78	1.23	0.467			O		I				7.52	
11.667	1.69	2.22	0.467				I		O			7.53	
11.750	1.67	1.15	0.467			O		I				7.52	
11.833	1.70	2.21	0.467				I		O			7.53	
11.917	1.74	1.24	0.467			O		I				7.52	
12.000	1.75	2.24	0.467				I		O			7.53	
12.083	2.06	1.57	0.467				O		I			7.52	
12.167	2.38	2.85	0.467						I	O		7.54	
12.250	2.45	1.98	0.467					O		I		7.53	
12.333	2.53	2.98	0.467						I		O	7.55	
12.417	2.60	2.16	0.467					O		I		7.53	
12.500	2.62	3.05	0.467						I		O	7.55	
12.583	2.73	2.30	0.467					O		I		7.53	
12.667	2.85	3.27	0.467						I		O	7.55	
12.750	2.88	2.47	0.467						O	I		7.54	
12.833	2.94	3.35	0.467							I	O	7.55	
12.917	3.01	2.61	0.467						O		I	7.54	
13.000	3.02	3.41	0.467							I	O	7.55	
13.083	3.30	2.91	0.467						O	I		7.55	
13.167	3.59	3.96	0.467								IO	7.56	
13.250	3.65	3.28	0.467							O	I	7.55	
13.333	3.68	4.04	0.467								IO	7.56	
13.417	3.69	3.34	0.467							O	I	7.55	
13.500	3.69	4.04	0.467								IO	7.56	
13.583	3.11	2.78	0.467							O	I	7.54	
13.667	2.49	2.83	0.467							I	O	7.54	
13.750	2.36	2.04	0.467					O	I			7.53	
13.833	2.32	2.64	0.467						I	O		7.54	
13.917	2.30	1.98	0.467					O	I			7.53	
14.000	2.30	2.61	0.467						I	O		7.54	
14.083	2.52	2.21	0.467						O	I		7.53	
14.167	2.75	3.04	0.467							I		O	7.55
14.250	2.80	2.51	0.467							O	I		7.54
14.333	2.77	3.05	0.467							I		O	7.55
14.417	2.72	2.44	0.467							O	I		7.54
14.500	2.71	2.99	0.467							I		O	7.55
14.583	2.71	2.44	0.467							O	I		7.54
14.667	2.71	2.98	0.467							I		O	7.55
14.750	2.72	2.46	0.467							O	I		7.54
14.833	2.67	2.92	0.467							I		O	7.55
14.917	2.61	2.36	0.467							O	I		7.54
15.000	2.60	2.85	0.467							I	O		7.54
15.083	2.55	2.31	0.467							O	I		7.54
15.167	2.49	2.73	0.467							I	O		7.54
15.250	2.48	2.25	0.467							O	I		7.53
15.333	2.43	2.66	0.467							I	O		7.54
15.417	2.37	2.15	0.467							O	I		7.53
15.500	2.37	2.58	0.467							I	O		7.54
15.583	2.15	1.94	0.467							O	I		7.53
15.667	1.93	2.14	0.467							I	O		7.53
15.750	1.88	1.68	0.467							O	I		7.52

15.833	1.86	2.07	0.467			IO			7.53
15.917	1.86	1.66	0.467			O I			7.52
16.000	1.86	2.06	0.467			IO			7.53
16.083	1.25	1.07	0.467			IOI			7.51
16.167	0.60	0.79	0.467		IO				7.51
16.250	0.47	0.29	0.467		O I				7.50
16.333	0.41	0.59	0.467		I O				7.51
16.417	0.39	0.22	0.467		O I				7.50
16.500	0.39	0.55	0.467		IO				7.51
16.583	0.35	0.22	0.467		O I				7.50
16.667	0.31	0.41	0.467		IO				7.50
16.750	0.30	0.22	0.467		IOI				7.50
16.833	0.29	0.35	0.467		IO				7.50
16.917	0.29	0.24	0.467		O				7.50
17.000	0.29	0.35	0.467		IO				7.50
17.083	0.37	0.32	0.467		OI				7.50
17.167	0.46	0.51	0.467		IO				7.50
17.250	0.48	0.43	0.467		OI				7.50
17.333	0.49	0.54	0.467		O				7.51
17.417	0.49	0.44	0.467		OI				7.50
17.500	0.49	0.54	0.467		O				7.51
17.583	0.49	0.44	0.467		OI				7.50
17.667	0.49	0.54	0.467		O				7.51
17.750	0.49	0.44	0.467		OI				7.50
17.833	0.45	0.49	0.467		IO				7.50
17.917	0.40	0.36	0.467		O				7.50
18.000	0.40	0.44	0.467		O				7.50
18.083	0.39	0.35	0.467		O				7.50
18.167	0.39	0.43	0.467		O				7.50
18.250	0.39	0.35	0.467		O				7.50
18.333	0.39	0.43	0.467		O				7.50
18.417	0.39	0.35	0.467		O				7.50
18.500	0.39	0.43	0.467		O				7.50
18.583	0.35	0.31	0.467		OI				7.50
18.667	0.31	0.35	0.467		O				7.50
18.750	0.30	0.26	0.467		O				7.50
18.833	0.25	0.29	0.467		O				7.50
18.917	0.21	0.22	0.467		O				7.50
19.000	0.20	0.22	0.467		IO				7.49
19.083	0.24	0.22	0.467		IOI				7.49
19.167	0.28	0.22	0.467		IOI				7.50
19.250	0.29	0.34	0.467		O				7.50
19.333	0.33	0.28	0.467		O				7.50
19.417	0.38	0.43	0.467		O				7.50
19.500	0.39	0.33	0.467		OI				7.50
19.583	0.35	0.40	0.467		O				7.50
19.667	0.31	0.26	0.467		O				7.50
19.750	0.30	0.35	0.467		IO				7.50
19.833	0.25	0.22	0.467		IOI				7.50
19.917	0.21	0.23	0.467		IO				7.50
20.000	0.20	0.22	0.467		IO				7.50
20.083	0.24	0.22	0.467		IOI				7.50
20.167	0.28	0.25	0.467		O				7.50
20.250	0.29	0.31	0.467		O				7.50
20.333	0.29	0.27	0.467		O				7.50
20.417	0.29	0.32	0.467		O				7.50
20.500	0.29	0.27	0.467		O				7.50
20.583	0.29	0.32	0.467		O				7.50
20.667	0.29	0.27	0.467		O				7.50
20.750	0.29	0.32	0.467		O				7.50
20.833	0.25	0.23	0.467		O				7.50
20.917	0.21	0.23	0.467		IO				7.50
21.000	0.20	0.22	0.467		IO				7.50
21.083	0.24	0.22	0.467		IOI				7.50
21.167	0.28	0.25	0.467		O				7.50
21.250	0.29	0.31	0.467		O				7.50

21.333	0.25	0.23	0.467	OI					7.50
21.417	0.21	0.23	0.467	IO					7.50
21.500	0.20	0.22	0.467	O					7.50
21.583	0.24	0.22	0.467	OI					7.50
21.667	0.28	0.25	0.467	O					7.50
21.750	0.29	0.32	0.467	O					7.50
21.833	0.25	0.22	0.467	OI					7.50
21.917	0.21	0.24	0.467	IO					7.50
22.000	0.20	0.22	0.467	O					7.50
22.083	0.24	0.22	0.467	OI					7.50
22.167	0.28	0.25	0.467	O					7.50
22.250	0.29	0.32	0.467	O					7.50
22.333	0.25	0.22	0.467	OI					7.50
22.417	0.21	0.24	0.467	IO					7.50
22.500	0.20	0.22	0.467	O					7.50
22.583	0.20	0.22	0.467	O					7.49
22.667	0.20	0.22	0.467	O					7.49
22.750	0.20	0.22	0.466	O					7.48
22.833	0.20	0.22	0.466	O					7.48
22.917	0.20	0.22	0.466	O					7.48
23.000	0.20	0.22	0.466	O					7.47
23.083	0.20	0.22	0.466	O					7.47
23.167	0.20	0.22	0.465	O					7.46
23.250	0.20	0.22	0.465	O					7.46
23.333	0.20	0.22	0.465	O					7.45
23.417	0.20	0.22	0.465	O					7.45
23.500	0.20	0.22	0.465	O					7.45
23.583	0.20	0.22	0.465	O					7.44
23.667	0.20	0.22	0.464	O					7.44
23.750	0.20	0.22	0.464	O					7.43
23.833	0.20	0.22	0.464	O					7.43
23.917	0.20	0.22	0.464	O					7.42
24.000	0.20	0.22	0.464	O					7.42
24.083	0.11	0.22	0.463	IO					7.41
24.167	0.03	0.22	0.462	IO					7.38
24.250	0.01	0.22	0.461	IO					7.35
24.333	0.00	0.22	0.459	IO					7.31
24.417	0.00	0.22	0.458	IO					7.27
24.500	0.00	0.22	0.456	IO					7.24
24.583	0.00	0.22	0.455	IO					7.20
24.667	0.00	0.22	0.453	IO					7.16
24.750	0.00	0.22	0.452	IO					7.12
24.833	0.00	0.22	0.450	IO					7.08
24.917	0.00	0.22	0.449	IO					7.05
25.000	0.00	0.22	0.447	IO					7.01
25.083	0.00	0.22	0.446	IO					6.98
25.167	0.00	0.22	0.444	IO					6.95
25.250	0.00	0.22	0.443	IO					6.91
25.333	0.00	0.22	0.441	IO					6.88
25.417	0.00	0.22	0.440	IO					6.85
25.500	0.00	0.22	0.438	IO					6.82
25.583	0.00	0.22	0.437	IO					6.79
25.667	0.00	0.22	0.435	IO					6.76
25.750	0.00	0.22	0.434	IO					6.73
25.833	0.00	0.22	0.432	IO					6.70
25.917	0.00	0.22	0.431	IO					6.67
26.000	0.00	0.22	0.429	IO					6.64
26.083	0.00	0.22	0.428	IO					6.61
26.167	0.00	0.22	0.426	IO					6.57
26.250	0.00	0.22	0.425	IO					6.54
26.333	0.00	0.22	0.423	IO					6.51
26.417	0.00	0.22	0.422	IO					6.48
26.500	0.00	0.22	0.420	IO					6.45
26.583	0.00	0.22	0.419	IO					6.42
26.667	0.00	0.22	0.417	IO					6.39
26.750	0.00	0.22	0.416	IO					6.36

26.833	0.00	0.22	0.414	IO					6.33
26.917	0.00	0.22	0.413	IO					6.30
27.000	0.00	0.22	0.411	IO					6.27
27.083	0.00	0.22	0.409	IO					6.23
27.167	0.00	0.22	0.408	IO					6.20
27.250	0.00	0.22	0.406	IO					6.17
27.333	0.00	0.22	0.405	IO					6.14
27.417	0.00	0.22	0.403	IO					6.11
27.500	0.00	0.22	0.402	IO					6.08
27.583	0.00	0.22	0.400	IO					6.05
27.667	0.00	0.22	0.399	IO					6.02
27.750	0.00	0.22	0.397	IO					5.99
27.833	0.00	0.22	0.396	IO					5.97
27.917	0.00	0.22	0.394	IO					5.95
28.000	0.00	0.22	0.393	IO					5.93
28.083	0.00	0.22	0.391	IO					5.91
28.167	0.00	0.22	0.390	IO					5.89
28.250	0.00	0.22	0.388	IO					5.87
28.333	0.00	0.22	0.387	IO					5.85
28.417	0.00	0.22	0.385	IO					5.83
28.500	0.00	0.22	0.384	IO					5.80
28.583	0.00	0.22	0.382	IO					5.78
28.667	0.00	0.22	0.381	IO					5.76
28.750	0.00	0.22	0.379	IO					5.74
28.833	0.00	0.22	0.378	IO					5.72
28.917	0.00	0.22	0.376	IO					5.70
29.000	0.00	0.22	0.375	IO					5.68
29.083	0.00	0.22	0.373	IO					5.66
29.167	0.00	0.22	0.372	IO					5.64
29.250	0.00	0.22	0.370	IO					5.62
29.333	0.00	0.22	0.369	IO					5.60
29.417	0.00	0.22	0.367	IO					5.58
29.500	0.00	0.22	0.366	IO					5.56
29.583	0.00	0.22	0.364	IO					5.53
29.667	0.00	0.22	0.363	IO					5.51
29.750	0.00	0.22	0.361	IO					5.49
29.833	0.00	0.22	0.359	IO					5.47
29.917	0.00	0.22	0.358	IO					5.45
30.000	0.00	0.22	0.356	IO					5.43
30.083	0.00	0.22	0.355	IO					5.41
30.167	0.00	0.22	0.353	IO					5.39
30.250	0.00	0.22	0.352	IO					5.37
30.333	0.00	0.22	0.350	IO					5.35
30.417	0.00	0.22	0.349	IO					5.33
30.500	0.00	0.22	0.347	IO					5.31
30.583	0.00	0.22	0.346	IO					5.29
30.667	0.00	0.22	0.344	IO					5.26
30.750	0.00	0.22	0.343	IO					5.24
30.833	0.00	0.22	0.341	IO					5.22
30.917	0.00	0.22	0.340	IO					5.20
31.000	0.00	0.22	0.338	IO					5.18
31.083	0.00	0.22	0.337	IO					5.16
31.167	0.00	0.22	0.335	IO					5.14
31.250	0.00	0.22	0.334	IO					5.12
31.333	0.00	0.22	0.332	IO					5.10
31.417	0.00	0.22	0.331	IO					5.08
31.500	0.00	0.22	0.329	IO					5.06
31.583	0.00	0.22	0.328	IO					5.04
31.667	0.00	0.22	0.326	IO					5.02
31.750	0.00	0.22	0.325	IO					5.00
31.833	0.00	0.22	0.323	IO					4.98
31.917	0.00	0.22	0.322	IO					4.96
32.000	0.00	0.22	0.320	IO					4.94
32.083	0.00	0.22	0.319	IO					4.92
32.167	0.00	0.22	0.317	IO					4.90
32.250	0.00	0.22	0.316	IO					4.88

32.333	0.00	0.22	0.314	IO					4.86
32.417	0.00	0.22	0.313	IO					4.85
32.500	0.00	0.22	0.311	IO					4.83
32.583	0.00	0.22	0.309	IO					4.81
32.667	0.00	0.22	0.308	IO					4.79
32.750	0.00	0.22	0.306	IO					4.77
32.833	0.00	0.22	0.305	IO					4.75
32.917	0.00	0.22	0.303	IO					4.73
33.000	0.00	0.22	0.302	IO					4.71
33.083	0.00	0.22	0.300	IO					4.70
33.167	0.00	0.22	0.299	IO					4.68
33.250	0.00	0.22	0.297	IO					4.66
33.333	0.00	0.22	0.296	IO					4.64
33.417	0.00	0.22	0.294	IO					4.62
33.500	0.00	0.22	0.293	IO					4.60
33.583	0.00	0.22	0.291	IO					4.58
33.667	0.00	0.22	0.290	IO					4.57
33.750	0.00	0.22	0.288	IO					4.55
33.833	0.00	0.22	0.287	IO					4.53
33.917	0.00	0.22	0.285	IO					4.51
34.000	0.00	0.22	0.284	IO					4.49
34.083	0.00	0.22	0.282	IO					4.47
34.167	0.00	0.22	0.281	IO					4.45
34.250	0.00	0.22	0.279	IO					4.43
34.333	0.00	0.22	0.278	IO					4.42
34.417	0.00	0.22	0.276	IO					4.40
34.500	0.00	0.22	0.275	IO					4.38
34.583	0.00	0.22	0.273	IO					4.36
34.667	0.00	0.22	0.272	IO					4.34
34.750	0.00	0.22	0.270	IO					4.32
34.833	0.00	0.22	0.269	IO					4.30
34.917	0.00	0.22	0.267	IO					4.28
35.000	0.00	0.22	0.266	IO					4.27
35.083	0.00	0.22	0.264	IO					4.25
35.167	0.00	0.22	0.263	IO					4.23
35.250	0.00	0.22	0.261	IO					4.21
35.333	0.00	0.22	0.259	IO					4.19
35.417	0.00	0.22	0.258	IO					4.17
35.500	0.00	0.22	0.256	IO					4.15
35.583	0.00	0.22	0.255	IO					4.14
35.667	0.00	0.22	0.253	IO					4.12
35.750	0.00	0.22	0.252	IO					4.10
35.833	0.00	0.22	0.250	IO					4.08
35.917	0.00	0.22	0.249	IO					4.06
36.000	0.00	0.22	0.247	IO					4.04
36.083	0.00	0.22	0.246	IO					4.02
36.167	0.00	0.22	0.244	IO					4.00
36.250	0.00	0.22	0.243	IO					3.99
36.333	0.00	0.22	0.241	IO					3.97
36.417	0.00	0.22	0.240	IO					3.95
36.500	0.00	0.22	0.238	IO					3.93
36.583	0.00	0.22	0.237	IO					3.91
36.667	0.00	0.22	0.235	IO					3.89
36.750	0.00	0.22	0.234	IO					3.87
36.833	0.00	0.22	0.232	IO					3.86
36.917	0.00	0.22	0.231	IO					3.84
37.000	0.00	0.22	0.229	IO					3.82
37.083	0.00	0.22	0.228	IO					3.80
37.167	0.00	0.22	0.226	IO					3.78
37.250	0.00	0.22	0.225	IO					3.76
37.333	0.00	0.22	0.223	IO					3.75
37.417	0.00	0.22	0.222	IO					3.73
37.500	0.00	0.22	0.220	IO					3.71
37.583	0.00	0.22	0.219	IO					3.69
37.667	0.00	0.22	0.217	IO					3.67
37.750	0.00	0.22	0.216	IO					3.65

37.833	0.00	0.22	0.214	IO					3.63
37.917	0.00	0.22	0.213	IO					3.62
38.000	0.00	0.22	0.211	IO					3.60
38.083	0.00	0.22	0.209	IO					3.58
38.167	0.00	0.22	0.208	IO					3.56
38.250	0.00	0.22	0.206	IO					3.54
38.333	0.00	0.22	0.205	IO					3.52
38.417	0.00	0.22	0.203	IO					3.51
38.500	0.00	0.22	0.202	IO					3.49
38.583	0.00	0.22	0.200	IO					3.47
38.667	0.00	0.22	0.199	IO					3.45
38.750	0.00	0.22	0.197	IO					3.43
38.833	0.00	0.22	0.196	IO					3.41
38.917	0.00	0.22	0.194	IO					3.39
39.000	0.00	0.22	0.193	IO					3.38
39.083	0.00	0.22	0.191	IO					3.36
39.167	0.00	0.22	0.190	IO					3.34
39.250	0.00	0.22	0.188	IO					3.32
39.333	0.00	0.22	0.187	IO					3.30
39.417	0.00	0.22	0.185	IO					3.28
39.500	0.00	0.22	0.184	IO					3.26
39.583	0.00	0.22	0.182	IO					3.25
39.667	0.00	0.22	0.181	IO					3.23
39.750	0.00	0.22	0.179	IO					3.21
39.833	0.00	0.22	0.178	IO					3.19
39.917	0.00	0.22	0.176	IO					3.17
40.000	0.00	0.22	0.175	IO					3.15
40.083	0.00	0.22	0.173	IO					3.14
40.167	0.00	0.22	0.172	IO					3.12
40.250	0.00	0.22	0.170	IO					3.10
40.333	0.00	0.22	0.169	IO					3.08
40.417	0.00	0.22	0.167	IO					3.06
40.500	0.00	0.22	0.166	IO					3.04
40.583	0.00	0.22	0.164	IO					3.02
40.667	0.00	0.22	0.163	IO					3.01
40.750	0.00	0.22	0.161	IO					2.99
40.833	0.00	0.22	0.159	IO					2.97
40.917	0.00	0.22	0.158	IO					2.94
41.000	0.00	0.22	0.156	IO					2.92
41.083	0.00	0.22	0.155	IO					2.90
41.167	0.00	0.22	0.153	IO					2.88
41.250	0.00	0.22	0.152	IO					2.86
41.333	0.00	0.22	0.150	IO					2.84
41.417	0.00	0.22	0.149	IO					2.82
41.500	0.00	0.22	0.147	IO					2.80
41.583	0.00	0.22	0.146	IO					2.78
41.667	0.00	0.22	0.144	IO					2.76
41.750	0.00	0.22	0.143	IO					2.74
41.833	0.00	0.22	0.141	IO					2.72
41.917	0.00	0.22	0.140	IO					2.70
42.000	0.00	0.22	0.138	IO					2.67
42.083	0.00	0.22	0.137	IO					2.65
42.167	0.00	0.22	0.135	IO					2.63
42.250	0.00	0.22	0.134	IO					2.61
42.333	0.00	0.22	0.132	IO					2.59
42.417	0.00	0.22	0.131	IO					2.57
42.500	0.00	0.22	0.129	IO					2.55
42.583	0.00	0.22	0.128	IO					2.53
42.667	0.00	0.22	0.126	IO					2.51
42.750	0.00	0.22	0.125	IO					2.49
42.833	0.00	0.22	0.123	IO					2.47
42.917	0.00	0.22	0.122	IO					2.45
43.000	0.00	0.22	0.120	IO					2.43
43.083	0.00	0.22	0.119	IO					2.41
43.167	0.00	0.22	0.117	IO					2.38
43.250	0.00	0.22	0.116	IO					2.36

43.333	0.00	0.22	0.114	IO					2.34
43.417	0.00	0.22	0.113	IO					2.32
43.500	0.00	0.22	0.111	IO					2.30
43.583	0.00	0.22	0.109	IO					2.28
43.667	0.00	0.22	0.108	IO					2.26
43.750	0.00	0.22	0.106	IO					2.24
43.833	0.00	0.22	0.105	IO					2.22
43.917	0.00	0.22	0.103	IO					2.20
44.000	0.00	0.22	0.102	IO					2.18
44.083	0.00	0.22	0.100	IO					2.16
44.167	0.00	0.22	0.099	IO					2.14
44.250	0.00	0.22	0.097	IO					2.11
44.333	0.00	0.22	0.096	IO					2.09
44.417	0.00	0.22	0.094	IO					2.07
44.500	0.00	0.22	0.093	IO					2.05
44.583	0.00	0.22	0.091	IO					2.03
44.667	0.00	0.22	0.090	IO					2.01
44.750	0.00	0.22	0.088	IO					1.99
44.833	0.00	0.22	0.087	IO					1.95
44.917	0.00	0.22	0.085	IO					1.92
45.000	0.00	0.22	0.084	IO					1.89
45.083	0.00	0.22	0.082	IO					1.86
45.167	0.00	0.22	0.081	IO					1.83
45.250	0.00	0.22	0.079	IO					1.80
45.333	0.00	0.22	0.078	IO					1.77
45.417	0.00	0.22	0.076	IO					1.74
45.500	0.00	0.22	0.075	IO					1.71
45.583	0.00	0.22	0.073	IO					1.68
45.667	0.00	0.22	0.072	IO					1.65
45.750	0.00	0.22	0.070	IO					1.61
45.833	0.00	0.22	0.069	IO					1.58
45.917	0.00	0.22	0.067	IO					1.55
46.000	0.00	0.22	0.066	IO					1.52
46.083	0.00	0.22	0.064	IO					1.49
46.167	0.00	0.22	0.063	IO					1.46
46.250	0.00	0.22	0.061	IO					1.43
46.333	0.00	0.22	0.059	IO					1.40
46.417	0.00	0.22	0.058	IO					1.37
46.500	0.00	0.22	0.056	IO					1.34
46.583	0.00	0.22	0.055	IO					1.30
46.667	0.00	0.22	0.053	IO					1.27
46.750	0.00	0.22	0.052	IO					1.24
46.833	0.00	0.22	0.050	IO					1.21
46.917	0.00	0.22	0.049	IO					1.18
47.000	0.00	0.22	0.047	IO					1.15
47.083	0.00	0.22	0.046	IO					1.12
47.167	0.00	0.22	0.044	IO					1.09
47.250	0.00	0.22	0.043	IO					1.06
47.333	0.00	0.22	0.041	IO					1.03
47.417	0.00	0.22	0.040	IO					0.99
47.500	0.00	0.21	0.038	IO					0.96
47.583	0.00	0.20	0.037	IO					0.92
47.667	0.00	0.20	0.036	IO					0.89
47.750	0.00	0.19	0.034	IO					0.85
47.833	0.00	0.18	0.033	IO					0.82
47.917	0.00	0.17	0.032	IO					0.79
48.000	0.00	0.17	0.031	IO					0.76
48.083	0.00	0.16	0.029	IO					0.73
48.167	0.00	0.16	0.028	IO					0.71
48.250	0.00	0.15	0.027	IO					0.68
48.333	0.00	0.14	0.026	IO					0.66
48.417	0.00	0.14	0.025	IO					0.63
48.500	0.00	0.13	0.024	IO					0.61
48.583	0.00	0.13	0.023	IO					0.59
48.667	0.00	0.12	0.023	IO					0.56
48.750	0.00	0.12	0.022	IO					0.54

48.833	0.00	0.11	0.021	0					0.52
48.917	0.00	0.11	0.020	0					0.50
49.000	0.00	0.11	0.019	0					0.48
49.083	0.00	0.10	0.019	0					0.47
49.167	0.00	0.10	0.018	0					0.45
49.250	0.00	0.10	0.017	0					0.43
49.333	0.00	0.09	0.017	0					0.42
49.417	0.00	0.09	0.016	0					0.40
49.500	0.00	0.08	0.015	0					0.39
49.583	0.00	0.08	0.015	0					0.37
49.667	0.00	0.08	0.014	0					0.36
49.750	0.00	0.08	0.014	0					0.34
49.833	0.00	0.07	0.013	0					0.33
49.917	0.00	0.07	0.013	0					0.32
50.000	0.00	0.07	0.012	0					0.31
50.083	0.00	0.07	0.012	0					0.30
50.167	0.00	0.06	0.011	0					0.28
50.250	0.00	0.06	0.011	0					0.27
50.333	0.00	0.06	0.011	0					0.26
50.417	0.00	0.06	0.010	0					0.25
50.500	0.00	0.05	0.010	0					0.24
50.583	0.00	0.05	0.009	0					0.24
50.667	0.00	0.05	0.009	0					0.23
50.750	0.00	0.05	0.009	0					0.22
50.833	0.00	0.05	0.008	0					0.21
50.917	0.00	0.04	0.008	0					0.20
51.000	0.00	0.04	0.008	0					0.20
51.083	0.00	0.04	0.008	0					0.19
51.167	0.00	0.04	0.007	0					0.18
51.250	0.00	0.04	0.007	0					0.17
51.333	0.00	0.04	0.007	0					0.17
51.417	0.00	0.04	0.006	0					0.16
51.500	0.00	0.03	0.006	0					0.16
51.583	0.00	0.03	0.006	0					0.15
51.667	0.00	0.03	0.006	0					0.14
51.750	0.00	0.03	0.006	0					0.14
51.833	0.00	0.03	0.005	0					0.13
51.917	0.00	0.03	0.005	0					0.13
52.000	0.00	0.03	0.005	0					0.12
52.083	0.00	0.03	0.005	0					0.12
52.167	0.00	0.03	0.005	0					0.11
52.250	0.00	0.02	0.004	0					0.11
52.333	0.00	0.02	0.004	0					0.11
52.417	0.00	0.02	0.004	0					0.10
52.500	0.00	0.02	0.004	0					0.10
52.583	0.00	0.02	0.004	0					0.09
52.667	0.00	0.02	0.004	0					0.09
52.750	0.00	0.02	0.004	0					0.09
52.833	0.00	0.02	0.003	0					0.08
52.917	0.00	0.02	0.003	0					0.08
53.000	0.00	0.02	0.003	0					0.08
53.083	0.00	0.02	0.003	0					0.08
53.167	0.00	0.02	0.003	0					0.07
53.250	0.00	0.02	0.003	0					0.07
53.333	0.00	0.01	0.003	0					0.07
53.417	0.00	0.01	0.003	0					0.07
53.500	0.00	0.01	0.003	0					0.06
53.583	0.00	0.01	0.002	0					0.06
53.667	0.00	0.01	0.002	0					0.06
53.750	0.00	0.01	0.002	0					0.06
53.833	0.00	0.01	0.002	0					0.05
53.917	0.00	0.01	0.002	0					0.05
54.000	0.00	0.01	0.002	0					0.05
54.083	0.00	0.01	0.002	0					0.05
54.167	0.00	0.01	0.002	0					0.05
54.250	0.00	0.01	0.002	0					0.04

54.333	0.00	0.01	0.002	0					0.04
54.417	0.00	0.01	0.002	0					0.04
54.500	0.00	0.01	0.002	0					0.04
54.583	0.00	0.01	0.002	0					0.04
54.667	0.00	0.01	0.001	0					0.04
54.750	0.00	0.01	0.001	0					0.04
54.833	0.00	0.01	0.001	0					0.03
54.917	0.00	0.01	0.001	0					0.03
55.000	0.00	0.01	0.001	0					0.03
55.083	0.00	0.01	0.001	0					0.03
55.167	0.00	0.01	0.001	0					0.03
55.250	0.00	0.01	0.001	0					0.03
55.333	0.00	0.01	0.001	0					0.03
55.417	0.00	0.01	0.001	0					0.03
55.500	0.00	0.01	0.001	0					0.03
55.583	0.00	0.01	0.001	0					0.02
55.667	0.00	0.01	0.001	0					0.02
55.750	0.00	0.00	0.001	0					0.02
55.833	0.00	0.00	0.001	0					0.02
55.917	0.00	0.00	0.001	0					0.02
56.000	0.00	0.00	0.001	0					0.02
56.083	0.00	0.00	0.001	0					0.02
56.167	0.00	0.00	0.001	0					0.02
56.250	0.00	0.00	0.001	0					0.02
56.333	0.00	0.00	0.001	0					0.02
56.417	0.00	0.00	0.001	0					0.02
56.500	0.00	0.00	0.001	0					0.02
56.583	0.00	0.00	0.001	0					0.02
56.667	0.00	0.00	0.001	0					0.01
56.750	0.00	0.00	0.001	0					0.01
56.833	0.00	0.00	0.001	0					0.01
56.917	0.00	0.00	0.001	0					0.01
57.000	0.00	0.00	0.001	0					0.01
57.083	0.00	0.00	0.000	0					0.01
57.167	0.00	0.00	0.000	0					0.01
57.250	0.00	0.00	0.000	0					0.01
57.333	0.00	0.00	0.000	0					0.01
57.417	0.00	0.00	0.000	0					0.01
57.500	0.00	0.00	0.000	0					0.01
57.583	0.00	0.00	0.000	0					0.01
57.667	0.00	0.00	0.000	0					0.01
57.750	0.00	0.00	0.000	0					0.01
57.833	0.00	0.00	0.000	0					0.01
57.917	0.00	0.00	0.000	0					0.01
58.000	0.00	0.00	0.000	0					0.01
58.083	0.00	0.00	0.000	0					0.01
58.167	0.00	0.00	0.000	0					0.01
58.250	0.00	0.00	0.000	0					0.01
58.333	0.00	0.00	0.000	0					0.01
58.417	0.00	0.00	0.000	0					0.01
58.500	0.00	0.00	0.000	0					0.01
58.583	0.00	0.00	0.000	0					0.01
58.667	0.00	0.00	0.000	0					0.01
58.750	0.00	0.00	0.000	0					0.01
58.833	0.00	0.00	0.000	0					0.01
58.917	0.00	0.00	0.000	0					0.01
59.000	0.00	0.00	0.000	0					0.01
59.083	0.00	0.00	0.000	0					0.00
59.167	0.00	0.00	0.000	0					0.00
59.250	0.00	0.00	0.000	0					0.00
59.333	0.00	0.00	0.000	0					0.00

*****HYDROGRAPH DATA*****

Number of intervals = 712
Time interval = 5.0 (Min.)
Maximum/Peak flow rate = 4.041 (CFS)

Total volume = 2.064 (Ac.Ft)
Status of hydrographs being held in storage

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

FLOOD HYDROGRAPH ROUTING PROGRAM
 Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2018
 Study date: 09/09/21

RAMONA - WEBSTER
 WEST INDUSTRIAL - AREA 2
 100 YR - 3 HR
 1391RTE2

Program License Serial Number 6490

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

From study/file name: 1391pruh23100.rte
 *****HYDROGRAPH DATA*****
 Number of intervals = 42
 Time interval = 5.0 (Min.)
 Maximum/Peak flow rate = 34.044 (CFS)
 Total volume = 3.048 (Ac.Ft)
 Status of hydrographs being held in storage

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

+++++
 Process from Point/Station 1.000 to Point/Station 2.000
 **** RETARDING BASIN ROUTING ****

User entry of depth-outflow-storage data

Total number of inflow hydrograph intervals = 42
 Hydrograph time unit = 5.000 (Min.)
 Initial depth in storage basin = 0.00 (Ft.)

Initial basin depth = 0.00 (Ft.)
 Initial basin storage = 0.00 (Ac.Ft)
 Initial basin outflow = 0.00 (CFS)

Depth vs. Storage and Depth vs. Discharge data:

Basin Depth (Ft.)	Storage (Ac.Ft)	Outflow (CFS)	(S-O*dt/2) (Ac.Ft)	(S+O*dt/2) (Ac.Ft)
0.000	0.000	0.000	0.000	0.000
1.000	0.129	0.693	0.127	0.131
2.000	0.285	0.693	0.283	0.287
3.000	0.522	0.693	0.520	0.524
4.000	0.784	0.693	0.782	0.786
5.000	1.046	0.693	1.044	1.048
6.000	1.283	0.693	1.281	1.285
7.000	1.440	0.693	1.438	1.442
7.500	1.504	20.000	1.435	1.573

8.000 1.505 50.000 1.333 1.677

 Hydrograph Detention Basin Routing

Graph values: 'I'= unit inflow; 'O'=outflow at time shown

Time (Hours)	Inflow (CFS)	Outflow (CFS)	Storage (Ac.Ft)						Depth (Ft.)
0.083	1.28	0.02	0.004	OI					0.03
0.167	3.91	0.12	0.022	O I					0.17
0.250	4.46	0.26	0.049	O I					0.38
0.333	4.78	0.42	0.079	O I					0.61
0.417	5.67	0.60	0.111	O I					0.86
0.500	6.25	0.69	0.148	O I					1.12
0.583	6.73	0.69	0.188	O I					1.38
0.667	6.63	0.69	0.229	O I					1.64
0.750	7.17	0.69	0.272	O I					1.92
0.833	7.04	0.69	0.316	O I					2.13
0.917	6.59	0.69	0.358	O I					2.31
1.000	6.86	0.69	0.400	O I					2.48
1.083	7.64	0.69	0.445	O I					2.67
1.167	8.57	0.69	0.496	O I					2.89
1.250	8.84	0.69	0.551	O I					3.11
1.333	8.76	0.69	0.607	O I					3.32
1.417	9.11	0.69	0.663	O I					3.54
1.500	10.54	0.69	0.726	O I					3.78
1.583	10.79	0.69	0.795	O I					4.04
1.667	10.63	0.69	0.864	O I					4.31
1.750	11.99	0.69	0.937	O I					4.58
1.833	13.41	0.69	1.020	O I					4.90
1.917	13.19	0.69	1.107	O I					5.26
2.000	12.90	0.69	1.192	O I					5.62
2.083	13.18	0.69	1.277	O I					5.97
2.167	14.81	0.69	1.368	O I					6.54
2.250	18.59	6.41	1.459	O I					7.15
2.333	19.53	19.30	1.502			O			7.48
2.417	20.71	20.26	1.504			O			7.50
2.500	28.88	29.25	1.504				O		7.65
2.583	33.28	32.89	1.504				OI		7.71
2.667	34.04	34.43	1.504				O		7.74
2.750	25.00	24.71	1.504			O			7.58
2.833	14.28	17.25	1.495		I	O			7.43
2.917	10.97	12.54	1.479		IO				7.31
3.000	8.18	9.52	1.469		IO				7.23
3.083	4.27	6.16	1.458		IO				7.14
3.167	1.73	2.94	1.447		IO				7.06
3.250	0.72	1.19	1.442		IO				7.01
3.333	0.37	0.69	1.439	O					6.99
3.417	0.18	0.69	1.436	O					6.97
3.500	0.04	0.69	1.432	O					6.95
3.583	0.00	0.69	1.427	O					6.92
3.667	0.00	0.69	1.423	O					6.89
3.750	0.00	0.69	1.418	O					6.86
3.833	0.00	0.69	1.413	O					6.83
3.917	0.00	0.69	1.408	O					6.80
4.000	0.00	0.69	1.404	O					6.77
4.083	0.00	0.69	1.399	O					6.74
4.167	0.00	0.69	1.394	O					6.71
4.250	0.00	0.69	1.389	O					6.68
4.333	0.00	0.69	1.384	O					6.65
4.417	0.00	0.69	1.380	O					6.62
4.500	0.00	0.69	1.375	O					6.59
4.583	0.00	0.69	1.370	O					6.56
4.667	0.00	0.69	1.365	O					6.52
4.750	0.00	0.69	1.361	O					6.49

4.833	0.00	0.69	1.356	0					6.46
4.917	0.00	0.69	1.351	0					6.43
5.000	0.00	0.69	1.346	0					6.40
5.083	0.00	0.69	1.342	0					6.37
5.167	0.00	0.69	1.337	0					6.34
5.250	0.00	0.69	1.332	0					6.31
5.333	0.00	0.69	1.327	0					6.28
5.417	0.00	0.69	1.322	0					6.25
5.500	0.00	0.69	1.318	0					6.22
5.583	0.00	0.69	1.313	0					6.19
5.667	0.00	0.69	1.308	0					6.16
5.750	0.00	0.69	1.303	0					6.13
5.833	0.00	0.69	1.299	0					6.10
5.917	0.00	0.69	1.294	0					6.07
6.000	0.00	0.69	1.289	0					6.04
6.083	0.00	0.69	1.284	0					6.01
6.167	0.00	0.69	1.279	0					5.99
6.250	0.00	0.69	1.275	0					5.97
6.333	0.00	0.69	1.270	0					5.94
6.417	0.00	0.69	1.265	0					5.92
6.500	0.00	0.69	1.260	0					5.90
6.583	0.00	0.69	1.256	0					5.88
6.667	0.00	0.69	1.251	0					5.86
6.750	0.00	0.69	1.246	0					5.84
6.833	0.00	0.69	1.241	0					5.82
6.917	0.00	0.69	1.237	0					5.80
7.000	0.00	0.69	1.232	0					5.78
7.083	0.00	0.69	1.227	0					5.76
7.167	0.00	0.69	1.222	0					5.74
7.250	0.00	0.69	1.217	0					5.72
7.333	0.00	0.69	1.213	0					5.70
7.417	0.00	0.69	1.208	0					5.68
7.500	0.00	0.69	1.203	0					5.66
7.583	0.00	0.69	1.198	0					5.64
7.667	0.00	0.69	1.194	0					5.62
7.750	0.00	0.69	1.189	0					5.60
7.833	0.00	0.69	1.184	0					5.58
7.917	0.00	0.69	1.179	0					5.56
8.000	0.00	0.69	1.174	0					5.54
8.083	0.00	0.69	1.170	0					5.52
8.167	0.00	0.69	1.165	0					5.50
8.250	0.00	0.69	1.160	0					5.48
8.333	0.00	0.69	1.155	0					5.46
8.417	0.00	0.69	1.151	0					5.44
8.500	0.00	0.69	1.146	0					5.42
8.583	0.00	0.69	1.141	0					5.40
8.667	0.00	0.69	1.136	0					5.38
8.750	0.00	0.69	1.132	0					5.36
8.833	0.00	0.69	1.127	0					5.34
8.917	0.00	0.69	1.122	0					5.32
9.000	0.00	0.69	1.117	0					5.30
9.083	0.00	0.69	1.112	0					5.28
9.167	0.00	0.69	1.108	0					5.26
9.250	0.00	0.69	1.103	0					5.24
9.333	0.00	0.69	1.098	0					5.22
9.417	0.00	0.69	1.093	0					5.20
9.500	0.00	0.69	1.089	0					5.18
9.583	0.00	0.69	1.084	0					5.16
9.667	0.00	0.69	1.079	0					5.14
9.750	0.00	0.69	1.074	0					5.12
9.833	0.00	0.69	1.069	0					5.10
9.917	0.00	0.69	1.065	0					5.08
10.000	0.00	0.69	1.060	0					5.06
10.083	0.00	0.69	1.055	0					5.04
10.167	0.00	0.69	1.050	0					5.02
10.250	0.00	0.69	1.046	0					5.00

10.333	0.00	0.69	1.041	0					4.98
10.417	0.00	0.69	1.036	0					4.96
10.500	0.00	0.69	1.031	0					4.94
10.583	0.00	0.69	1.027	0					4.93
10.667	0.00	0.69	1.022	0					4.91
10.750	0.00	0.69	1.017	0					4.89
10.833	0.00	0.69	1.012	0					4.87
10.917	0.00	0.69	1.007	0					4.85
11.000	0.00	0.69	1.003	0					4.83
11.083	0.00	0.69	0.998	0					4.82
11.167	0.00	0.69	0.993	0					4.80
11.250	0.00	0.69	0.988	0					4.78
11.333	0.00	0.69	0.984	0					4.76
11.417	0.00	0.69	0.979	0					4.74
11.500	0.00	0.69	0.974	0					4.73
11.583	0.00	0.69	0.969	0					4.71
11.667	0.00	0.69	0.964	0					4.69
11.750	0.00	0.69	0.960	0					4.67
11.833	0.00	0.69	0.955	0					4.65
11.917	0.00	0.69	0.950	0					4.63
12.000	0.00	0.69	0.945	0					4.62
12.083	0.00	0.69	0.941	0					4.60
12.167	0.00	0.69	0.936	0					4.58
12.250	0.00	0.69	0.931	0					4.56
12.333	0.00	0.69	0.926	0					4.54
12.417	0.00	0.69	0.922	0					4.52
12.500	0.00	0.69	0.917	0					4.51
12.583	0.00	0.69	0.912	0					4.49
12.667	0.00	0.69	0.907	0					4.47
12.750	0.00	0.69	0.902	0					4.45
12.833	0.00	0.69	0.898	0					4.43
12.917	0.00	0.69	0.893	0					4.42
13.000	0.00	0.69	0.888	0					4.40
13.083	0.00	0.69	0.883	0					4.38
13.167	0.00	0.69	0.879	0					4.36
13.250	0.00	0.69	0.874	0					4.34
13.333	0.00	0.69	0.869	0					4.32
13.417	0.00	0.69	0.864	0					4.31
13.500	0.00	0.69	0.859	0					4.29
13.583	0.00	0.69	0.855	0					4.27
13.667	0.00	0.69	0.850	0					4.25
13.750	0.00	0.69	0.845	0					4.23
13.833	0.00	0.69	0.840	0					4.22
13.917	0.00	0.69	0.836	0					4.20
14.000	0.00	0.69	0.831	0					4.18
14.083	0.00	0.69	0.826	0					4.16
14.167	0.00	0.69	0.821	0					4.14
14.250	0.00	0.69	0.817	0					4.12
14.333	0.00	0.69	0.812	0					4.11
14.417	0.00	0.69	0.807	0					4.09
14.500	0.00	0.69	0.802	0					4.07
14.583	0.00	0.69	0.797	0					4.05
14.667	0.00	0.69	0.793	0					4.03
14.750	0.00	0.69	0.788	0					4.01
14.833	0.00	0.69	0.783	0					4.00
14.917	0.00	0.69	0.778	0					3.98
15.000	0.00	0.69	0.774	0					3.96
15.083	0.00	0.69	0.769	0					3.94
15.167	0.00	0.69	0.764	0					3.92
15.250	0.00	0.69	0.759	0					3.91
15.333	0.00	0.69	0.754	0					3.89
15.417	0.00	0.69	0.750	0					3.87
15.500	0.00	0.69	0.745	0					3.85
15.583	0.00	0.69	0.740	0					3.83
15.667	0.00	0.69	0.735	0					3.81
15.750	0.00	0.69	0.731	0					3.80

15.833	0.00	0.69	0.726	0					3.78
15.917	0.00	0.69	0.721	0					3.76
16.000	0.00	0.69	0.716	0					3.74
16.083	0.00	0.69	0.712	0					3.72
16.167	0.00	0.69	0.707	0					3.71
16.250	0.00	0.69	0.702	0					3.69
16.333	0.00	0.69	0.697	0					3.67
16.417	0.00	0.69	0.692	0					3.65
16.500	0.00	0.69	0.688	0					3.63
16.583	0.00	0.69	0.683	0					3.61
16.667	0.00	0.69	0.678	0					3.60
16.750	0.00	0.69	0.673	0					3.58
16.833	0.00	0.69	0.669	0					3.56
16.917	0.00	0.69	0.664	0					3.54
17.000	0.00	0.69	0.659	0					3.52
17.083	0.00	0.69	0.654	0					3.50
17.167	0.00	0.69	0.649	0					3.49
17.250	0.00	0.69	0.645	0					3.47
17.333	0.00	0.69	0.640	0					3.45
17.417	0.00	0.69	0.635	0					3.43
17.500	0.00	0.69	0.630	0					3.41
17.583	0.00	0.69	0.626	0					3.40
17.667	0.00	0.69	0.621	0					3.38
17.750	0.00	0.69	0.616	0					3.36
17.833	0.00	0.69	0.611	0					3.34
17.917	0.00	0.69	0.607	0					3.32
18.000	0.00	0.69	0.602	0					3.30
18.083	0.00	0.69	0.597	0					3.29
18.167	0.00	0.69	0.592	0					3.27
18.250	0.00	0.69	0.587	0					3.25
18.333	0.00	0.69	0.583	0					3.23
18.417	0.00	0.69	0.578	0					3.21
18.500	0.00	0.69	0.573	0					3.20
18.583	0.00	0.69	0.568	0					3.18
18.667	0.00	0.69	0.564	0					3.16
18.750	0.00	0.69	0.559	0					3.14
18.833	0.00	0.69	0.554	0					3.12
18.917	0.00	0.69	0.549	0					3.10
19.000	0.00	0.69	0.544	0					3.09
19.083	0.00	0.69	0.540	0					3.07
19.167	0.00	0.69	0.535	0					3.05
19.250	0.00	0.69	0.530	0					3.03
19.333	0.00	0.69	0.525	0					3.01
19.417	0.00	0.69	0.521	0					2.99
19.500	0.00	0.69	0.516	0					2.97
19.583	0.00	0.69	0.511	0					2.95
19.667	0.00	0.69	0.506	0					2.93
19.750	0.00	0.69	0.502	0					2.91
19.833	0.00	0.69	0.497	0					2.89
19.917	0.00	0.69	0.492	0					2.87
20.000	0.00	0.69	0.487	0					2.85
20.083	0.00	0.69	0.482	0					2.83
20.167	0.00	0.69	0.478	0					2.81
20.250	0.00	0.69	0.473	0					2.79
20.333	0.00	0.69	0.468	0					2.77
20.417	0.00	0.69	0.463	0					2.75
20.500	0.00	0.69	0.459	0					2.73
20.583	0.00	0.69	0.454	0					2.71
20.667	0.00	0.69	0.449	0					2.69
20.750	0.00	0.69	0.444	0					2.67
20.833	0.00	0.69	0.439	0					2.65
20.917	0.00	0.69	0.435	0					2.63
21.000	0.00	0.69	0.430	0					2.61
21.083	0.00	0.69	0.425	0					2.59
21.167	0.00	0.69	0.420	0					2.57
21.250	0.00	0.69	0.416	0					2.55

21.333	0.00	0.69	0.411	0					2.53
21.417	0.00	0.69	0.406	0					2.51
21.500	0.00	0.69	0.401	0					2.49
21.583	0.00	0.69	0.397	0					2.47
21.667	0.00	0.69	0.392	0					2.45
21.750	0.00	0.69	0.387	0					2.43
21.833	0.00	0.69	0.382	0					2.41
21.917	0.00	0.69	0.377	0					2.39
22.000	0.00	0.69	0.373	0					2.37
22.083	0.00	0.69	0.368	0					2.35
22.167	0.00	0.69	0.363	0					2.33
22.250	0.00	0.69	0.358	0					2.31
22.333	0.00	0.69	0.354	0					2.29
22.417	0.00	0.69	0.349	0					2.27
22.500	0.00	0.69	0.344	0					2.25
22.583	0.00	0.69	0.339	0					2.23
22.667	0.00	0.69	0.334	0					2.21
22.750	0.00	0.69	0.330	0					2.19
22.833	0.00	0.69	0.325	0					2.17
22.917	0.00	0.69	0.320	0					2.15
23.000	0.00	0.69	0.315	0					2.13
23.083	0.00	0.69	0.311	0					2.11
23.167	0.00	0.69	0.306	0					2.09
23.250	0.00	0.69	0.301	0					2.07
23.333	0.00	0.69	0.296	0					2.05
23.417	0.00	0.69	0.292	0					2.03
23.500	0.00	0.69	0.287	0					2.01
23.583	0.00	0.69	0.282	0					1.98
23.667	0.00	0.69	0.277	0					1.95
23.750	0.00	0.69	0.272	0					1.92
23.833	0.00	0.69	0.268	0					1.89
23.917	0.00	0.69	0.263	0					1.86
24.000	0.00	0.69	0.258	0					1.83
24.083	0.00	0.69	0.253	0					1.80
24.167	0.00	0.69	0.249	0					1.77
24.250	0.00	0.69	0.244	0					1.74
24.333	0.00	0.69	0.239	0					1.71
24.417	0.00	0.69	0.234	0					1.67
24.500	0.00	0.69	0.229	0					1.64
24.583	0.00	0.69	0.225	0					1.61
24.667	0.00	0.69	0.220	0					1.58
24.750	0.00	0.69	0.215	0					1.55
24.833	0.00	0.69	0.210	0					1.52
24.917	0.00	0.69	0.206	0					1.49
25.000	0.00	0.69	0.201	0					1.46
25.083	0.00	0.69	0.196	0					1.43
25.167	0.00	0.69	0.191	0					1.40
25.250	0.00	0.69	0.187	0					1.37
25.333	0.00	0.69	0.182	0					1.34
25.417	0.00	0.69	0.177	0					1.31
25.500	0.00	0.69	0.172	0					1.28
25.583	0.00	0.69	0.167	0					1.25
25.667	0.00	0.69	0.163	0					1.22
25.750	0.00	0.69	0.158	0					1.19
25.833	0.00	0.69	0.153	0					1.15
25.917	0.00	0.69	0.148	0					1.12
26.000	0.00	0.69	0.144	0					1.09
26.083	0.00	0.69	0.139	0					1.06
26.167	0.00	0.69	0.134	0					1.03
26.250	0.00	0.69	0.129	0					1.00
26.333	0.00	0.67	0.125	0					0.97
26.417	0.00	0.64	0.120	0					0.93
26.500	0.00	0.62	0.116	0					0.90
26.583	0.00	0.60	0.111	0					0.86
26.667	0.00	0.58	0.107	0					0.83
26.750	0.00	0.56	0.104	0					0.80

26.833	0.00	0.54	0.100	0					0.77
26.917	0.00	0.52	0.096	0					0.75
27.000	0.00	0.50	0.093	0					0.72
27.083	0.00	0.48	0.089	0					0.69
27.167	0.00	0.46	0.086	0					0.67
27.250	0.00	0.45	0.083	0					0.64
27.333	0.00	0.43	0.080	0					0.62
27.417	0.00	0.41	0.077	0					0.60
27.500	0.00	0.40	0.074	0					0.58
27.583	0.00	0.38	0.072	0					0.55
27.667	0.00	0.37	0.069	0					0.53
27.750	0.00	0.36	0.066	0					0.51
27.833	0.00	0.34	0.064	0					0.50
27.917	0.00	0.33	0.062	0					0.48
28.000	0.00	0.32	0.059	0					0.46
28.083	0.00	0.31	0.057	0					0.44
28.167	0.00	0.30	0.055	0					0.43
28.250	0.00	0.29	0.053	0					0.41
28.333	0.00	0.28	0.051	0					0.40
28.417	0.00	0.27	0.049	0					0.38
28.500	0.00	0.26	0.048	0					0.37
28.583	0.00	0.25	0.046	0					0.36
28.667	0.00	0.24	0.044	0					0.34
28.750	0.00	0.23	0.043	0					0.33
28.833	0.00	0.22	0.041	0					0.32
28.917	0.00	0.21	0.040	0					0.31
29.000	0.00	0.20	0.038	0					0.30
29.083	0.00	0.20	0.037	0					0.28
29.167	0.00	0.19	0.035	0					0.27
29.250	0.00	0.18	0.034	0					0.26
29.333	0.00	0.18	0.033	0					0.25
29.417	0.00	0.17	0.032	0					0.25
29.500	0.00	0.16	0.031	0					0.24
29.583	0.00	0.16	0.029	0					0.23
29.667	0.00	0.15	0.028	0					0.22
29.750	0.00	0.15	0.027	0					0.21
29.833	0.00	0.14	0.026	0					0.20
29.917	0.00	0.14	0.025	0					0.20
30.000	0.00	0.13	0.024	0					0.19
30.083	0.00	0.13	0.024	0					0.18
30.167	0.00	0.12	0.023	0					0.18
30.250	0.00	0.12	0.022	0					0.17
30.333	0.00	0.11	0.021	0					0.16
30.417	0.00	0.11	0.020	0					0.16
30.500	0.00	0.11	0.020	0					0.15
30.583	0.00	0.10	0.019	0					0.15
30.667	0.00	0.10	0.018	0					0.14
30.750	0.00	0.09	0.018	0					0.14
30.833	0.00	0.09	0.017	0					0.13
30.917	0.00	0.09	0.016	0					0.13
31.000	0.00	0.08	0.016	0					0.12
31.083	0.00	0.08	0.015	0					0.12
31.167	0.00	0.08	0.015	0					0.11
31.250	0.00	0.08	0.014	0					0.11
31.333	0.00	0.07	0.014	0					0.10
31.417	0.00	0.07	0.013	0					0.10
31.500	0.00	0.07	0.013	0					0.10
31.583	0.00	0.07	0.012	0					0.09
31.667	0.00	0.06	0.012	0					0.09
31.750	0.00	0.06	0.011	0					0.09
31.833	0.00	0.06	0.011	0					0.08
31.917	0.00	0.06	0.010	0					0.08
32.000	0.00	0.05	0.010	0					0.08
32.083	0.00	0.05	0.010	0					0.08
32.167	0.00	0.05	0.009	0					0.07
32.250	0.00	0.05	0.009	0					0.07

32.333	0.00	0.05	0.009	o					0.07
32.417	0.00	0.04	0.008	o					0.06
32.500	0.00	0.04	0.008	o					0.06
32.583	0.00	0.04	0.008	o					0.06
32.667	0.00	0.04	0.007	o					0.06
32.750	0.00	0.04	0.007	o					0.06
32.833	0.00	0.04	0.007	o					0.05
32.917	0.00	0.04	0.007	o					0.05
33.000	0.00	0.03	0.006	o					0.05
33.083	0.00	0.03	0.006	o					0.05
33.167	0.00	0.03	0.006	o					0.05
33.250	0.00	0.03	0.006	o					0.04
33.333	0.00	0.03	0.006	o					0.04
33.417	0.00	0.03	0.005	o					0.04
33.500	0.00	0.03	0.005	o					0.04
33.583	0.00	0.03	0.005	o					0.04
33.667	0.00	0.03	0.005	o					0.04
33.750	0.00	0.02	0.005	o					0.04
33.833	0.00	0.02	0.004	o					0.03
33.917	0.00	0.02	0.004	o					0.03
34.000	0.00	0.02	0.004	o					0.03
34.083	0.00	0.02	0.004	o					0.03
34.167	0.00	0.02	0.004	o					0.03
34.250	0.00	0.02	0.004	o					0.03
34.333	0.00	0.02	0.004	o					0.03
34.417	0.00	0.02	0.003	o					0.03
34.500	0.00	0.02	0.003	o					0.03
34.583	0.00	0.02	0.003	o					0.02
34.667	0.00	0.02	0.003	o					0.02
34.750	0.00	0.02	0.003	o					0.02
34.833	0.00	0.02	0.003	o					0.02
34.917	0.00	0.01	0.003	o					0.02
35.000	0.00	0.01	0.003	o					0.02
35.083	0.00	0.01	0.003	o					0.02
35.167	0.00	0.01	0.002	o					0.02
35.250	0.00	0.01	0.002	o					0.02
35.333	0.00	0.01	0.002	o					0.02
35.417	0.00	0.01	0.002	o					0.02
35.500	0.00	0.01	0.002	o					0.02
35.583	0.00	0.01	0.002	o					0.02
35.667	0.00	0.01	0.002	o					0.02
35.750	0.00	0.01	0.002	o					0.01
35.833	0.00	0.01	0.002	o					0.01
35.917	0.00	0.01	0.002	o					0.01
36.000	0.00	0.01	0.002	o					0.01
36.083	0.00	0.01	0.002	o					0.01
36.167	0.00	0.01	0.002	o					0.01
36.250	0.00	0.01	0.002	o					0.01
36.333	0.00	0.01	0.001	o					0.01
36.417	0.00	0.01	0.001	o					0.01
36.500	0.00	0.01	0.001	o					0.01
36.583	0.00	0.01	0.001	o					0.01
36.667	0.00	0.01	0.001	o					0.01
36.750	0.00	0.01	0.001	o					0.01
36.833	0.00	0.01	0.001	o					0.01
36.917	0.00	0.01	0.001	o					0.01
37.000	0.00	0.01	0.001	o					0.01
37.083	0.00	0.01	0.001	o					0.01
37.167	0.00	0.01	0.001	o					0.01
37.250	0.00	0.01	0.001	o					0.01
37.333	0.00	0.01	0.001	o					0.01
37.417	0.00	0.00	0.001	o					0.01
37.500	0.00	0.00	0.001	o					0.01
37.583	0.00	0.00	0.001	o					0.01
37.667	0.00	0.00	0.001	o					0.01
37.750	0.00	0.00	0.001	o					0.01

37.833	0.00	0.00	0.001	0					0.01
37.917	0.00	0.00	0.001	0					0.01
38.000	0.00	0.00	0.001	0					0.01
38.083	0.00	0.00	0.001	0					0.01
38.167	0.00	0.00	0.001	0					0.01
38.250	0.00	0.00	0.001	0					0.00
38.333	0.00	0.00	0.001	0					0.00
38.417	0.00	0.00	0.001	0					0.00
38.500	0.00	0.00	0.001	0					0.00
38.583	0.00	0.00	0.001	0					0.00
38.667	0.00	0.00	0.001	0					0.00
38.750	0.00	0.00	0.001	0					0.00
38.833	0.00	0.00	0.000	0					0.00
38.917	0.00	0.00	0.000	0					0.00
39.000	0.00	0.00	0.000	0					0.00
39.083	0.00	0.00	0.000	0					0.00
39.167	0.00	0.00	0.000	0					0.00
39.250	0.00	0.00	0.000	0					0.00
39.333	0.00	0.00	0.000	0					0.00
39.417	0.00	0.00	0.000	0					0.00
39.500	0.00	0.00	0.000	0					0.00
39.583	0.00	0.00	0.000	0					0.00
39.667	0.00	0.00	0.000	0					0.00
39.750	0.00	0.00	0.000	0					0.00
39.833	0.00	0.00	0.000	0					0.00
39.917	0.00	0.00	0.000	0					0.00
40.000	0.00	0.00	0.000	0					0.00
40.083	0.00	0.00	0.000	0					0.00
40.167	0.00	0.00	0.000	0					0.00
40.250	0.00	0.00	0.000	0					0.00
40.333	0.00	0.00	0.000	0					0.00
40.417	0.00	0.00	0.000	0					0.00
40.500	0.00	0.00	0.000	0					0.00
40.583	0.00	0.00	0.000	0					0.00
40.667	0.00	0.00	0.000	0					0.00
40.750	0.00	0.00	0.000	0					0.00
40.833	0.00	0.00	0.000	0					0.00
40.917	0.00	0.00	0.000	0					0.00
41.000	0.00	0.00	0.000	0					0.00

*****HYDROGRAPH DATA*****

Number of intervals = 492
Time interval = 5.0 (Min.)
Maximum/Peak flow rate = 34.427 (CFS)
Total volume = 3.047 (Ac.Ft)

Status of hydrographs being held in storage

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

FLOOD HYDROGRAPH ROUTING PROGRAM
 Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2018
 Study date: 09/09/21

 RAMONA - WEBSTER
 WEST INDUSTRIAL - AREA 2
 100 YR - 6 HR
 1391RTE2

Program License Serial Number 6490

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

From study/file name: 1391PRUH26100.rte
 *****HYDROGRAPH DATA*****
 Number of intervals = 78
 Time interval = 5.0 (Min.)
 Maximum/Peak flow rate = 29.783 (CFS)
 Total volume = 4.014 (Ac.Ft)
 Status of hydrographs being held in storage
 Stream 1 Stream 2 Stream 3 Stream 4 Stream 5
 Peak (CFS) 0.000 0.000 0.000 0.000 0.000
 Vol (Ac.Ft) 0.000 0.000 0.000 0.000 0.000

+++++
 Process from Point/Station 1.000 to Point/Station 2.000
 **** RETARDING BASIN ROUTING ****

 User entry of depth-outflow-storage data

Total number of inflow hydrograph intervals = 78
 Hydrograph time unit = 5.000 (Min.)
 Initial depth in storage basin = 0.00 (Ft.)

Initial basin depth = 0.00 (Ft.)
 Initial basin storage = 0.00 (Ac.Ft)
 Initial basin outflow = 0.00 (CFS)

 Depth vs. Storage and Depth vs. Discharge data:

Basin Depth (Ft.)	Storage (Ac.Ft)	Outflow (CFS)	(S-O*dt/2) (Ac.Ft)	(S+O*dt/2) (Ac.Ft)
0.000	0.000	0.000	0.000	0.000
1.000	0.129	0.693	0.127	0.131
2.000	0.285	0.693	0.283	0.287
3.000	0.522	0.693	0.520	0.524
4.000	0.784	0.693	0.782	0.786
5.000	1.046	0.693	1.044	1.048
6.000	1.283	0.693	1.281	1.285
7.000	1.440	0.693	1.438	1.442
7.500	1.504	20.000	1.435	1.573

8.000 1.505 50.000 1.333 1.677

 Hydrograph Detention Basin Routing

Graph values: 'I'= unit inflow; 'O'=outflow at time shown

Time (Hours)	Inflow (CFS)	Outflow (CFS)	Storage (Ac.Ft)		7.4	14.89	22.34	29.78	Depth (Ft.)
0.083	0.66	0.01	0.002	O					0.02
0.167	2.15	0.06	0.012	O I					0.09
0.250	2.81	0.15	0.028	O I					0.22
0.333	3.06	0.25	0.047	O I					0.36
0.417	3.19	0.36	0.066	O I					0.51
0.500	3.40	0.46	0.086	O I					0.67
0.583	3.73	0.58	0.107	O I					0.83
0.667	3.82	0.69	0.129	O I					1.00
0.750	3.86	0.69	0.151	O I					1.14
0.833	3.88	0.69	0.172	O I					1.28
0.917	3.89	0.69	0.194	O I					1.42
1.000	4.03	0.69	0.217	O I					1.56
1.083	4.30	0.69	0.241	O I					1.72
1.167	4.38	0.69	0.266	O I					1.88
1.250	4.41	0.69	0.291	O I					2.03
1.333	4.43	0.69	0.317	O I					2.13
1.417	4.44	0.69	0.343	O I					2.24
1.500	4.45	0.69	0.369	O I					2.35
1.583	4.45	0.69	0.395	O I					2.46
1.667	4.45	0.69	0.420	O I					2.57
1.750	4.45	0.69	0.446	O I					2.68
1.833	4.45	0.69	0.472	O I					2.79
1.917	4.45	0.69	0.498	O I					2.90
2.000	4.59	0.69	0.524	O I					3.01
2.083	4.72	0.69	0.552	O I					3.11
2.167	4.66	0.69	0.579	O I					3.22
2.250	4.89	0.69	0.607	O I					3.33
2.333	4.95	0.69	0.637	O I					3.44
2.417	4.98	0.69	0.666	O I					3.55
2.500	5.00	0.69	0.696	O I					3.66
2.583	5.00	0.69	0.725	O I					3.78
2.667	5.01	0.69	0.755	O I					3.89
2.750	5.14	0.69	0.785	O I					4.00
2.833	5.41	0.69	0.817	O I					4.12
2.917	5.49	0.69	0.850	O I					4.25
3.000	5.53	0.69	0.883	O I					4.38
3.083	5.55	0.69	0.916	O I					4.50
3.167	5.69	0.69	0.950	O I					4.63
3.250	5.97	0.69	0.985	O I					4.77
3.333	6.05	0.69	1.022	O I					4.91
3.417	6.21	0.69	1.059	O I					5.06
3.500	6.64	0.69	1.099	O I					5.22
3.583	7.13	0.69	1.142	O I					5.40
3.667	7.52	0.69	1.187	O I					5.60
3.750	7.79	0.69	1.235	O I					5.80
3.833	8.13	0.69	1.285	O I					6.01
3.917	8.38	0.69	1.337	O I					6.35
4.000	8.70	0.69	1.391	O I					6.69
4.083	8.95	1.77	1.444	O I					7.03
4.167	9.45	9.34	1.469		O				7.22
4.250	10.06	9.76	1.470		O				7.23
4.333	10.69	10.39	1.472		O				7.25
4.417	11.35	11.04	1.474		O I				7.27
4.500	11.86	11.62	1.476		O				7.28
4.583	12.20	12.04	1.478		O I				7.29
4.667	12.79	12.51	1.479		O				7.31
4.750	13.43	13.12	1.481		O				7.32

4.833	13.92	13.68	1.483			O				7.34	
4.917	14.25	14.09	1.484			O				7.35	
5.000	14.83	14.55	1.486			O				7.36	
5.083	16.11	15.48	1.489			O	I			7.38	
5.167	18.74	17.46	1.496				O	I		7.43	
5.250	21.42	20.25	1.504					O	I	7.50	
5.333	23.62	24.75	1.504						I	7.58	
5.417	26.06	24.93	1.504						O	I	7.58
5.500	29.78	30.85	1.504							O	7.68
5.583	27.58	26.55	1.504						O	I	7.61
5.667	15.14	18.08	1.498			I	O				7.45
5.750	9.02	11.96	1.477			I	O				7.29
5.833	6.01	7.43	1.462			I	O				7.17
5.917	4.19	5.05	1.454			I	O				7.11
6.000	2.71	3.42	1.449		I	O					7.07
6.083	1.36	2.01	1.444		I	O					7.03
6.167	0.51	0.92	1.441	O							7.01
6.250	0.24	0.69	1.438	O							6.99
6.333	0.12	0.69	1.434	O							6.96
6.417	0.05	0.69	1.430	O							6.94
6.500	0.02	0.69	1.426	O							6.91
6.583	0.00	0.69	1.421	O							6.88
6.667	0.00	0.69	1.416	O							6.85
6.750	0.00	0.69	1.411	O							6.82
6.833	0.00	0.69	1.407	O							6.79
6.917	0.00	0.69	1.402	O							6.76
7.000	0.00	0.69	1.397	O							6.73
7.083	0.00	0.69	1.392	O							6.70
7.167	0.00	0.69	1.387	O							6.67
7.250	0.00	0.69	1.383	O							6.64
7.333	0.00	0.69	1.378	O							6.60
7.417	0.00	0.69	1.373	O							6.57
7.500	0.00	0.69	1.368	O							6.54
7.583	0.00	0.69	1.364	O							6.51
7.667	0.00	0.69	1.359	O							6.48
7.750	0.00	0.69	1.354	O							6.45
7.833	0.00	0.69	1.349	O							6.42
7.917	0.00	0.69	1.345	O							6.39
8.000	0.00	0.69	1.340	O							6.36
8.083	0.00	0.69	1.335	O							6.33
8.167	0.00	0.69	1.330	O							6.30
8.250	0.00	0.69	1.325	O							6.27
8.333	0.00	0.69	1.321	O							6.24
8.417	0.00	0.69	1.316	O							6.21
8.500	0.00	0.69	1.311	O							6.18
8.583	0.00	0.69	1.306	O							6.15
8.667	0.00	0.69	1.302	O							6.12
8.750	0.00	0.69	1.297	O							6.09
8.833	0.00	0.69	1.292	O							6.06
8.917	0.00	0.69	1.287	O							6.03
9.000	0.00	0.69	1.282	O							6.00
9.083	0.00	0.69	1.278	O							5.98
9.167	0.00	0.69	1.273	O							5.96
9.250	0.00	0.69	1.268	O							5.94
9.333	0.00	0.69	1.263	O							5.92
9.417	0.00	0.69	1.259	O							5.90
9.500	0.00	0.69	1.254	O							5.88
9.583	0.00	0.69	1.249	O							5.86
9.667	0.00	0.69	1.244	O							5.84
9.750	0.00	0.69	1.240	O							5.82
9.833	0.00	0.69	1.235	O							5.80
9.917	0.00	0.69	1.230	O							5.78
10.000	0.00	0.69	1.225	O							5.76
10.083	0.00	0.69	1.220	O							5.74
10.167	0.00	0.69	1.216	O							5.72
10.250	0.00	0.69	1.211	O							5.70

10.333	0.00	0.69	1.206	0					5.68
10.417	0.00	0.69	1.201	0					5.66
10.500	0.00	0.69	1.197	0					5.64
10.583	0.00	0.69	1.192	0					5.62
10.667	0.00	0.69	1.187	0					5.60
10.750	0.00	0.69	1.182	0					5.57
10.833	0.00	0.69	1.177	0					5.55
10.917	0.00	0.69	1.173	0					5.53
11.000	0.00	0.69	1.168	0					5.51
11.083	0.00	0.69	1.163	0					5.49
11.167	0.00	0.69	1.158	0					5.47
11.250	0.00	0.69	1.154	0					5.45
11.333	0.00	0.69	1.149	0					5.43
11.417	0.00	0.69	1.144	0					5.41
11.500	0.00	0.69	1.139	0					5.39
11.583	0.00	0.69	1.135	0					5.37
11.667	0.00	0.69	1.130	0					5.35
11.750	0.00	0.69	1.125	0					5.33
11.833	0.00	0.69	1.120	0					5.31
11.917	0.00	0.69	1.115	0					5.29
12.000	0.00	0.69	1.111	0					5.27
12.083	0.00	0.69	1.106	0					5.25
12.167	0.00	0.69	1.101	0					5.23
12.250	0.00	0.69	1.096	0					5.21
12.333	0.00	0.69	1.092	0					5.19
12.417	0.00	0.69	1.087	0					5.17
12.500	0.00	0.69	1.082	0					5.15
12.583	0.00	0.69	1.077	0					5.13
12.667	0.00	0.69	1.072	0					5.11
12.750	0.00	0.69	1.068	0					5.09
12.833	0.00	0.69	1.063	0					5.07
12.917	0.00	0.69	1.058	0					5.05
13.000	0.00	0.69	1.053	0					5.03
13.083	0.00	0.69	1.049	0					5.01
13.167	0.00	0.69	1.044	0					4.99
13.250	0.00	0.69	1.039	0					4.97
13.333	0.00	0.69	1.034	0					4.96
13.417	0.00	0.69	1.030	0					4.94
13.500	0.00	0.69	1.025	0					4.92
13.583	0.00	0.69	1.020	0					4.90
13.667	0.00	0.69	1.015	0					4.88
13.750	0.00	0.69	1.010	0					4.86
13.833	0.00	0.69	1.006	0					4.85
13.917	0.00	0.69	1.001	0					4.83
14.000	0.00	0.69	0.996	0					4.81
14.083	0.00	0.69	0.991	0					4.79
14.167	0.00	0.69	0.987	0					4.77
14.250	0.00	0.69	0.982	0					4.76
14.333	0.00	0.69	0.977	0					4.74
14.417	0.00	0.69	0.972	0					4.72
14.500	0.00	0.69	0.967	0					4.70
14.583	0.00	0.69	0.963	0					4.68
14.667	0.00	0.69	0.958	0					4.66
14.750	0.00	0.69	0.953	0					4.65
14.833	0.00	0.69	0.948	0					4.63
14.917	0.00	0.69	0.944	0					4.61
15.000	0.00	0.69	0.939	0					4.59
15.083	0.00	0.69	0.934	0					4.57
15.167	0.00	0.69	0.929	0					4.55
15.250	0.00	0.69	0.925	0					4.54
15.333	0.00	0.69	0.920	0					4.52
15.417	0.00	0.69	0.915	0					4.50
15.500	0.00	0.69	0.910	0					4.48
15.583	0.00	0.69	0.905	0					4.46
15.667	0.00	0.69	0.901	0					4.45
15.750	0.00	0.69	0.896	0					4.43

15.833	0.00	0.69	0.891	0					4.41
15.917	0.00	0.69	0.886	0					4.39
16.000	0.00	0.69	0.882	0					4.37
16.083	0.00	0.69	0.877	0					4.35
16.167	0.00	0.69	0.872	0					4.34
16.250	0.00	0.69	0.867	0					4.32
16.333	0.00	0.69	0.862	0					4.30
16.417	0.00	0.69	0.858	0					4.28
16.500	0.00	0.69	0.853	0					4.26
16.583	0.00	0.69	0.848	0					4.24
16.667	0.00	0.69	0.843	0					4.23
16.750	0.00	0.69	0.839	0					4.21
16.833	0.00	0.69	0.834	0					4.19
16.917	0.00	0.69	0.829	0					4.17
17.000	0.00	0.69	0.824	0					4.15
17.083	0.00	0.69	0.820	0					4.14
17.167	0.00	0.69	0.815	0					4.12
17.250	0.00	0.69	0.810	0					4.10
17.333	0.00	0.69	0.805	0					4.08
17.417	0.00	0.69	0.800	0					4.06
17.500	0.00	0.69	0.796	0					4.04
17.583	0.00	0.69	0.791	0					4.03
17.667	0.00	0.69	0.786	0					4.01
17.750	0.00	0.69	0.781	0					3.99
17.833	0.00	0.69	0.777	0					3.97
17.917	0.00	0.69	0.772	0					3.95
18.000	0.00	0.69	0.767	0					3.94
18.083	0.00	0.69	0.762	0					3.92
18.167	0.00	0.69	0.757	0					3.90
18.250	0.00	0.69	0.753	0					3.88
18.333	0.00	0.69	0.748	0					3.86
18.417	0.00	0.69	0.743	0					3.84
18.500	0.00	0.69	0.738	0					3.83
18.583	0.00	0.69	0.734	0					3.81
18.667	0.00	0.69	0.729	0					3.79
18.750	0.00	0.69	0.724	0					3.77
18.833	0.00	0.69	0.719	0					3.75
18.917	0.00	0.69	0.715	0					3.73
19.000	0.00	0.69	0.710	0					3.72
19.083	0.00	0.69	0.705	0					3.70
19.167	0.00	0.69	0.700	0					3.68
19.250	0.00	0.69	0.695	0					3.66
19.333	0.00	0.69	0.691	0					3.64
19.417	0.00	0.69	0.686	0					3.63
19.500	0.00	0.69	0.681	0					3.61
19.583	0.00	0.69	0.676	0					3.59
19.667	0.00	0.69	0.672	0					3.57
19.750	0.00	0.69	0.667	0					3.55
19.833	0.00	0.69	0.662	0					3.53
19.917	0.00	0.69	0.657	0					3.52
20.000	0.00	0.69	0.652	0					3.50
20.083	0.00	0.69	0.648	0					3.48
20.167	0.00	0.69	0.643	0					3.46
20.250	0.00	0.69	0.638	0					3.44
20.333	0.00	0.69	0.633	0					3.43
20.417	0.00	0.69	0.629	0					3.41
20.500	0.00	0.69	0.624	0					3.39
20.583	0.00	0.69	0.619	0					3.37
20.667	0.00	0.69	0.614	0					3.35
20.750	0.00	0.69	0.610	0					3.33
20.833	0.00	0.69	0.605	0					3.32
20.917	0.00	0.69	0.600	0					3.30
21.000	0.00	0.69	0.595	0					3.28
21.083	0.00	0.69	0.590	0					3.26
21.167	0.00	0.69	0.586	0					3.24
21.250	0.00	0.69	0.581	0					3.22

21.333	0.00	0.69	0.576	0					3.21
21.417	0.00	0.69	0.571	0					3.19
21.500	0.00	0.69	0.567	0					3.17
21.583	0.00	0.69	0.562	0					3.15
21.667	0.00	0.69	0.557	0					3.13
21.750	0.00	0.69	0.552	0					3.12
21.833	0.00	0.69	0.547	0					3.10
21.917	0.00	0.69	0.543	0					3.08
22.000	0.00	0.69	0.538	0					3.06
22.083	0.00	0.69	0.533	0					3.04
22.167	0.00	0.69	0.528	0					3.02
22.250	0.00	0.69	0.524	0					3.01
22.333	0.00	0.69	0.519	0					2.99
22.417	0.00	0.69	0.514	0					2.97
22.500	0.00	0.69	0.509	0					2.95
22.583	0.00	0.69	0.505	0					2.93
22.667	0.00	0.69	0.500	0					2.91
22.750	0.00	0.69	0.495	0					2.89
22.833	0.00	0.69	0.490	0					2.87
22.917	0.00	0.69	0.485	0					2.85
23.000	0.00	0.69	0.481	0					2.83
23.083	0.00	0.69	0.476	0					2.81
23.167	0.00	0.69	0.471	0					2.79
23.250	0.00	0.69	0.466	0					2.77
23.333	0.00	0.69	0.462	0					2.75
23.417	0.00	0.69	0.457	0					2.72
23.500	0.00	0.69	0.452	0					2.70
23.583	0.00	0.69	0.447	0					2.68
23.667	0.00	0.69	0.442	0					2.66
23.750	0.00	0.69	0.438	0					2.64
23.833	0.00	0.69	0.433	0					2.62
23.917	0.00	0.69	0.428	0					2.60
24.000	0.00	0.69	0.423	0					2.58
24.083	0.00	0.69	0.419	0					2.56
24.167	0.00	0.69	0.414	0					2.54
24.250	0.00	0.69	0.409	0					2.52
24.333	0.00	0.69	0.404	0					2.50
24.417	0.00	0.69	0.400	0					2.48
24.500	0.00	0.69	0.395	0					2.46
24.583	0.00	0.69	0.390	0					2.44
24.667	0.00	0.69	0.385	0					2.42
24.750	0.00	0.69	0.380	0					2.40
24.833	0.00	0.69	0.376	0					2.38
24.917	0.00	0.69	0.371	0					2.36
25.000	0.00	0.69	0.366	0					2.34
25.083	0.00	0.69	0.361	0					2.32
25.167	0.00	0.69	0.357	0					2.30
25.250	0.00	0.69	0.352	0					2.28
25.333	0.00	0.69	0.347	0					2.26
25.417	0.00	0.69	0.342	0					2.24
25.500	0.00	0.69	0.337	0					2.22
25.583	0.00	0.69	0.333	0					2.20
25.667	0.00	0.69	0.328	0					2.18
25.750	0.00	0.69	0.323	0					2.16
25.833	0.00	0.69	0.318	0					2.14
25.917	0.00	0.69	0.314	0					2.12
26.000	0.00	0.69	0.309	0					2.10
26.083	0.00	0.69	0.304	0					2.08
26.167	0.00	0.69	0.299	0					2.06
26.250	0.00	0.69	0.295	0					2.04
26.333	0.00	0.69	0.290	0					2.02
26.417	0.00	0.69	0.285	0					2.00
26.500	0.00	0.69	0.280	0					1.97
26.583	0.00	0.69	0.275	0					1.94
26.667	0.00	0.69	0.271	0					1.91
26.750	0.00	0.69	0.266	0					1.88

26.833	0.00	0.69	0.261	0					1.85
26.917	0.00	0.69	0.256	0					1.82
27.000	0.00	0.69	0.252	0					1.79
27.083	0.00	0.69	0.247	0					1.76
27.167	0.00	0.69	0.242	0					1.72
27.250	0.00	0.69	0.237	0					1.69
27.333	0.00	0.69	0.232	0					1.66
27.417	0.00	0.69	0.228	0					1.63
27.500	0.00	0.69	0.223	0					1.60
27.583	0.00	0.69	0.218	0					1.57
27.667	0.00	0.69	0.213	0					1.54
27.750	0.00	0.69	0.209	0					1.51
27.833	0.00	0.69	0.204	0					1.48
27.917	0.00	0.69	0.199	0					1.45
28.000	0.00	0.69	0.194	0					1.42
28.083	0.00	0.69	0.190	0					1.39
28.167	0.00	0.69	0.185	0					1.36
28.250	0.00	0.69	0.180	0					1.33
28.333	0.00	0.69	0.175	0					1.30
28.417	0.00	0.69	0.170	0					1.27
28.500	0.00	0.69	0.166	0					1.24
28.583	0.00	0.69	0.161	0					1.20
28.667	0.00	0.69	0.156	0					1.17
28.750	0.00	0.69	0.151	0					1.14
28.833	0.00	0.69	0.147	0					1.11
28.917	0.00	0.69	0.142	0					1.08
29.000	0.00	0.69	0.137	0					1.05
29.083	0.00	0.69	0.132	0					1.02
29.167	0.00	0.69	0.128	0					0.99
29.250	0.00	0.66	0.123	0					0.95
29.333	0.00	0.64	0.118	0					0.92
29.417	0.00	0.61	0.114	0					0.88
29.500	0.00	0.59	0.110	0					0.85
29.583	0.00	0.57	0.106	0					0.82
29.667	0.00	0.55	0.102	0					0.79
29.750	0.00	0.53	0.098	0					0.76
29.833	0.00	0.51	0.095	0					0.74
29.917	0.00	0.49	0.091	0					0.71
30.000	0.00	0.47	0.088	0					0.68
30.083	0.00	0.46	0.085	0					0.66
30.167	0.00	0.44	0.082	0					0.63
30.250	0.00	0.42	0.079	0					0.61
30.333	0.00	0.41	0.076	0					0.59
30.417	0.00	0.39	0.073	0					0.57
30.500	0.00	0.38	0.071	0					0.55
30.583	0.00	0.37	0.068	0					0.53
30.667	0.00	0.35	0.066	0					0.51
30.750	0.00	0.34	0.063	0					0.49
30.833	0.00	0.33	0.061	0					0.47
30.917	0.00	0.31	0.059	0					0.45
31.000	0.00	0.30	0.056	0					0.44
31.083	0.00	0.29	0.054	0					0.42
31.167	0.00	0.28	0.052	0					0.41
31.250	0.00	0.27	0.051	0					0.39
31.333	0.00	0.26	0.049	0					0.38
31.417	0.00	0.25	0.047	0					0.36
31.500	0.00	0.24	0.045	0					0.35
31.583	0.00	0.23	0.044	0					0.34
31.667	0.00	0.23	0.042	0					0.33
31.750	0.00	0.22	0.040	0					0.31
31.833	0.00	0.21	0.039	0					0.30
31.917	0.00	0.20	0.038	0					0.29
32.000	0.00	0.19	0.036	0					0.28
32.083	0.00	0.19	0.035	0					0.27
32.167	0.00	0.18	0.034	0					0.26
32.250	0.00	0.17	0.032	0					0.25

32.333	0.00	0.17	0.031	0					0.24
32.417	0.00	0.16	0.030	0					0.23
32.500	0.00	0.16	0.029	0					0.23
32.583	0.00	0.15	0.028	0					0.22
32.667	0.00	0.14	0.027	0					0.21
32.750	0.00	0.14	0.026	0					0.20
32.833	0.00	0.13	0.025	0					0.19
32.917	0.00	0.13	0.024	0					0.19
33.000	0.00	0.12	0.023	0					0.18
33.083	0.00	0.12	0.022	0					0.17
33.167	0.00	0.12	0.022	0					0.17
33.250	0.00	0.11	0.021	0					0.16
33.333	0.00	0.11	0.020	0					0.16
33.417	0.00	0.10	0.019	0					0.15
33.500	0.00	0.10	0.019	0					0.14
33.583	0.00	0.10	0.018	0					0.14
33.667	0.00	0.09	0.017	0					0.13
33.750	0.00	0.09	0.017	0					0.13
33.833	0.00	0.09	0.016	0					0.12
33.917	0.00	0.08	0.015	0					0.12
34.000	0.00	0.08	0.015	0					0.12
34.083	0.00	0.08	0.014	0					0.11
34.167	0.00	0.07	0.014	0					0.11
34.250	0.00	0.07	0.013	0					0.10
34.333	0.00	0.07	0.013	0					0.10
34.417	0.00	0.07	0.012	0					0.10
34.500	0.00	0.06	0.012	0					0.09
34.583	0.00	0.06	0.012	0					0.09
34.667	0.00	0.06	0.011	0					0.09
34.750	0.00	0.06	0.011	0					0.08
34.833	0.00	0.06	0.010	0					0.08
34.917	0.00	0.05	0.010	0					0.08
35.000	0.00	0.05	0.010	0					0.07
35.083	0.00	0.05	0.009	0					0.07
35.167	0.00	0.05	0.009	0					0.07
35.250	0.00	0.05	0.009	0					0.07
35.333	0.00	0.04	0.008	0					0.06
35.417	0.00	0.04	0.008	0					0.06
35.500	0.00	0.04	0.008	0					0.06
35.583	0.00	0.04	0.007	0					0.06
35.667	0.00	0.04	0.007	0					0.06
35.750	0.00	0.04	0.007	0					0.05
35.833	0.00	0.04	0.007	0					0.05
35.917	0.00	0.03	0.006	0					0.05
36.000	0.00	0.03	0.006	0					0.05
36.083	0.00	0.03	0.006	0					0.05
36.167	0.00	0.03	0.006	0					0.04
36.250	0.00	0.03	0.005	0					0.04
36.333	0.00	0.03	0.005	0					0.04
36.417	0.00	0.03	0.005	0					0.04
36.500	0.00	0.03	0.005	0					0.04
36.583	0.00	0.03	0.005	0					0.04
36.667	0.00	0.02	0.005	0					0.04
36.750	0.00	0.02	0.004	0					0.03
36.833	0.00	0.02	0.004	0					0.03
36.917	0.00	0.02	0.004	0					0.03
37.000	0.00	0.02	0.004	0					0.03
37.083	0.00	0.02	0.004	0					0.03
37.167	0.00	0.02	0.004	0					0.03
37.250	0.00	0.02	0.004	0					0.03
37.333	0.00	0.02	0.003	0					0.03
37.417	0.00	0.02	0.003	0					0.03
37.500	0.00	0.02	0.003	0					0.02
37.583	0.00	0.02	0.003	0					0.02
37.667	0.00	0.02	0.003	0					0.02
37.750	0.00	0.02	0.003	0					0.02

37.833	0.00	0.01	0.003	o					0.02
37.917	0.00	0.01	0.003	o					0.02
38.000	0.00	0.01	0.003	o					0.02
38.083	0.00	0.01	0.002	o					0.02
38.167	0.00	0.01	0.002	o					0.02
38.250	0.00	0.01	0.002	o					0.02
38.333	0.00	0.01	0.002	o					0.02
38.417	0.00	0.01	0.002	o					0.02
38.500	0.00	0.01	0.002	o					0.02
38.583	0.00	0.01	0.002	o					0.02
38.667	0.00	0.01	0.002	o					0.01
38.750	0.00	0.01	0.002	o					0.01
38.833	0.00	0.01	0.002	o					0.01
38.917	0.00	0.01	0.002	o					0.01
39.000	0.00	0.01	0.002	o					0.01
39.083	0.00	0.01	0.002	o					0.01
39.167	0.00	0.01	0.002	o					0.01
39.250	0.00	0.01	0.001	o					0.01
39.333	0.00	0.01	0.001	o					0.01
39.417	0.00	0.01	0.001	o					0.01
39.500	0.00	0.01	0.001	o					0.01
39.583	0.00	0.01	0.001	o					0.01
39.667	0.00	0.01	0.001	o					0.01
39.750	0.00	0.01	0.001	o					0.01
39.833	0.00	0.01	0.001	o					0.01
39.917	0.00	0.01	0.001	o					0.01
40.000	0.00	0.01	0.001	o					0.01
40.083	0.00	0.01	0.001	o					0.01
40.167	0.00	0.01	0.001	o					0.01
40.250	0.00	0.00	0.001	o					0.01
40.333	0.00	0.00	0.001	o					0.01
40.417	0.00	0.00	0.001	o					0.01
40.500	0.00	0.00	0.001	o					0.01
40.583	0.00	0.00	0.001	o					0.01
40.667	0.00	0.00	0.001	o					0.01
40.750	0.00	0.00	0.001	o					0.01
40.833	0.00	0.00	0.001	o					0.01
40.917	0.00	0.00	0.001	o					0.01
41.000	0.00	0.00	0.001	o					0.01
41.083	0.00	0.00	0.001	o					0.00
41.167	0.00	0.00	0.001	o					0.00
41.250	0.00	0.00	0.001	o					0.00
41.333	0.00	0.00	0.001	o					0.00
41.417	0.00	0.00	0.001	o					0.00
41.500	0.00	0.00	0.001	o					0.00
41.583	0.00	0.00	0.001	o					0.00
41.667	0.00	0.00	0.000	o					0.00
41.750	0.00	0.00	0.000	o					0.00
41.833	0.00	0.00	0.000	o					0.00
41.917	0.00	0.00	0.000	o					0.00
42.000	0.00	0.00	0.000	o					0.00
42.083	0.00	0.00	0.000	o					0.00
42.167	0.00	0.00	0.000	o					0.00
42.250	0.00	0.00	0.000	o					0.00
42.333	0.00	0.00	0.000	o					0.00
42.417	0.00	0.00	0.000	o					0.00
42.500	0.00	0.00	0.000	o					0.00
42.583	0.00	0.00	0.000	o					0.00
42.667	0.00	0.00	0.000	o					0.00
42.750	0.00	0.00	0.000	o					0.00
42.833	0.00	0.00	0.000	o					0.00
42.917	0.00	0.00	0.000	o					0.00
43.000	0.00	0.00	0.000	o					0.00
43.083	0.00	0.00	0.000	o					0.00
43.167	0.00	0.00	0.000	o					0.00
43.250	0.00	0.00	0.000	o					0.00

43.333	0.00	0.00	0.000	o					0.00
43.417	0.00	0.00	0.000	o					0.00
43.500	0.00	0.00	0.000	o					0.00
43.583	0.00	0.00	0.000	o					0.00
43.667	0.00	0.00	0.000	o					0.00
43.750	0.00	0.00	0.000	o					0.00
43.833	0.00	0.00	0.000	o					0.00
43.917	0.00	0.00	0.000	o					0.00

```

*****HYDROGRAPH DATA*****
      Number of intervals = 527
      Time interval = 5.0 (Min.)
      Maximum/Peak flow rate = 30.854 (CFS)
      Total volume = 4.013 (Ac.Ft)
      Status of hydrographs being held in storage
            Stream 1 Stream 2 Stream 3 Stream 4 Stream 5
      Peak (CFS)      0.000  0.000  0.000  0.000  0.000
      Vol (Ac.Ft)     0.000  0.000  0.000  0.000  0.000
*****

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FLOOD HYDROGRAPH ROUTING PROGRAM
 Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2018
 Study date: 09/09/21

RAMONA - WEBSTER
 WEST INDUSTRIAL - AREA 2
 100 YR - 24 YR
 1391RTE2

Program License Serial Number 6490

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

From study/file name: 1391PRUH224100.rte
 *****HYDROGRAPH DATA*****
 Number of intervals = 294
 Time interval = 5.0 (Min.)
 Maximum/Peak flow rate = 12.202 (CFS)
 Total volume = 7.048 (Ac.Ft)
 Status of hydrographs being held in storage

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

+++++
 Process from Point/Station 1.000 to Point/Station 2.000
 **** RETARDING BASIN ROUTING ****

User entry of depth-outflow-storage data

Total number of inflow hydrograph intervals = 294
 Hydrograph time unit = 5.000 (Min.)
 Initial depth in storage basin = 0.00 (Ft.)

Initial basin depth = 0.00 (Ft.)
 Initial basin storage = 0.00 (Ac.Ft)
 Initial basin outflow = 0.00 (CFS)

Depth vs. Storage and Depth vs. Discharge data:

Basin Depth (Ft.)	Storage (Ac.Ft)	Outflow (CFS)	(S-O*dt/2) (Ac.Ft)	(S+O*dt/2) (Ac.Ft)
0.000	0.000	0.000	0.000	0.000
1.000	0.129	0.693	0.127	0.131
2.000	0.285	0.693	0.283	0.287
3.000	0.522	0.693	0.520	0.524
4.000	0.784	0.693	0.782	0.786
5.000	1.046	0.693	1.044	1.048
6.000	1.283	0.693	1.281	1.285
7.000	1.440	0.693	1.438	1.442
7.500	1.504	20.000	1.435	1.573

8.000 1.505 50.000 1.333 1.677

 Hydrograph Detention Basin Routing

Graph values: 'I'= unit inflow; 'O'=outflow at time shown

Time (Hours)	Inflow (CFS)	Outflow (CFS)	Storage (Ac.Ft)		3.1	6.10	9.15	12.20	Depth (Ft.)
0.083	0.16	0.00	0.001	O					0.00
0.167	0.49	0.01	0.003	OI					0.02
0.250	0.58	0.03	0.006	OI					0.05
0.333	0.71	0.06	0.010	OI					0.08
0.417	0.89	0.08	0.015	O I					0.12
0.500	0.95	0.11	0.021	O I					0.16
0.583	0.99	0.14	0.027	O I					0.21
0.667	1.00	0.18	0.033	O I					0.25
0.750	1.01	0.21	0.038	O I					0.30
0.833	1.09	0.24	0.044	O I					0.34
0.917	1.26	0.27	0.050	O I					0.39
1.000	1.30	0.31	0.057	O I					0.44
1.083	1.24	0.34	0.064	O I					0.49
1.167	1.09	0.37	0.069	O I					0.54
1.250	1.05	0.40	0.074	OI					0.57
1.333	1.04	0.42	0.078	OI					0.61
1.417	1.03	0.44	0.082	OI					0.64
1.500	1.02	0.46	0.086	OI					0.67
1.583	1.01	0.48	0.090	OI					0.70
1.667	1.01	0.50	0.094	OI					0.73
1.750	1.01	0.52	0.097	OI					0.75
1.833	1.09	0.54	0.101	OI					0.78
1.917	1.26	0.56	0.105	O I					0.81
2.000	1.30	0.59	0.110	O I					0.85
2.083	1.32	0.62	0.115	O I					0.89
2.167	1.34	0.64	0.120	O I					0.93
2.250	1.34	0.67	0.124	O I					0.96
2.333	1.35	0.69	0.129	O I					1.00
2.417	1.35	0.69	0.133	O I					1.03
2.500	1.35	0.69	0.138	O I					1.06
2.583	1.43	0.69	0.143	O I					1.09
2.667	1.59	0.69	0.148	O I					1.12
2.750	1.64	0.69	0.155	O I					1.17
2.833	1.66	0.69	0.161	O I					1.21
2.917	1.67	0.69	0.168	O I					1.25
3.000	1.68	0.69	0.175	O I					1.29
3.083	1.69	0.69	0.182	O I					1.34
3.167	1.69	0.69	0.189	O I					1.38
3.250	1.69	0.69	0.195	O I					1.43
3.333	1.69	0.69	0.202	O I					1.47
3.417	1.69	0.69	0.209	O I					1.51
3.500	1.69	0.69	0.216	O I					1.56
3.583	1.69	0.69	0.223	O I					1.60
3.667	1.69	0.69	0.230	O I					1.65
3.750	1.69	0.69	0.236	O I					1.69
3.833	1.77	0.69	0.244	O I					1.73
3.917	1.93	0.69	0.252	O I					1.79
4.000	1.98	0.69	0.260	O I					1.84
4.083	2.00	0.69	0.269	O I					1.90
4.167	2.01	0.69	0.278	O I					1.96
4.250	2.02	0.69	0.287	O I					2.01
4.333	2.11	0.69	0.297	O I					2.05
4.417	2.27	0.69	0.307	O I					2.09
4.500	2.32	0.69	0.318	O I					2.14
4.583	2.34	0.69	0.329	O I					2.19
4.667	2.35	0.69	0.341	O I					2.23
4.750	2.36	0.69	0.352	O I					2.28

4.833	2.44	0.69	0.364	O	I					2.33
4.917	2.61	0.69	0.376	O	I					2.39
5.000	2.65	0.69	0.390	O	I					2.44
5.083	2.51	0.69	0.403	O	I					2.50
5.167	2.20	0.69	0.414	O	I					2.55
5.250	2.11	0.69	0.424	O	I					2.59
5.333	2.15	0.69	0.434	O	I					2.63
5.417	2.30	0.69	0.445	O	I					2.67
5.500	2.33	0.69	0.456	O	I					2.72
5.583	2.42	0.69	0.468	O	I					2.77
5.667	2.59	0.69	0.480	O	I					2.82
5.750	2.65	0.69	0.493	O	I					2.88
5.833	2.67	0.69	0.507	O	I					2.94
5.917	2.69	0.69	0.521	O	I					2.99
6.000	2.69	0.69	0.534	O	I					3.05
6.083	2.78	0.69	0.548	O	I					3.10
6.167	2.94	0.69	0.563	O	I					3.16
6.250	2.99	0.69	0.579	O	I					3.22
6.333	3.01	0.69	0.595	O	I					3.28
6.417	3.02	0.69	0.611	O	I					3.34
6.500	3.03	0.69	0.627	O	I					3.40
6.583	3.12	0.69	0.643	O	I					3.46
6.667	3.28	0.69	0.661	O	I					3.53
6.750	3.33	0.69	0.679	O	I					3.60
6.833	3.35	0.69	0.697	O	I					3.67
6.917	3.36	0.69	0.715	O	I					3.74
7.000	3.37	0.69	0.734	O	I					3.81
7.083	3.37	0.69	0.752	O	I					3.88
7.167	3.37	0.69	0.770	O	I					3.95
7.250	3.37	0.69	0.789	O	I					4.02
7.333	3.45	0.69	0.808	O	I					4.09
7.417	3.62	0.69	0.827	O	I					4.17
7.500	3.67	0.69	0.848	O	I					4.24
7.583	3.77	0.69	0.868	O	I					4.32
7.667	3.94	0.69	0.890	O	I					4.41
7.750	4.00	0.69	0.913	O	I					4.49
7.833	4.10	0.69	0.936	O	I					4.58
7.917	4.28	0.69	0.960	O	I					4.67
8.000	4.33	0.69	0.985	O	I					4.77
8.083	4.52	0.69	1.011	O	I					4.87
8.167	4.86	0.69	1.038	O	I					4.97
8.250	4.96	0.69	1.067	O	I					5.09
8.333	5.01	0.69	1.097	O	I					5.21
8.417	5.04	0.69	1.127	O	I					5.34
8.500	5.05	0.69	1.157	O	I					5.47
8.583	5.14	0.69	1.187	O	I					5.59
8.667	5.31	0.69	1.218	O	I					5.73
8.750	5.35	0.69	1.250	O	I					5.86
8.833	5.45	0.69	1.283	O	I					6.00
8.917	5.63	0.69	1.316	O	I					6.21
9.000	5.68	0.69	1.350	O	I					6.43
9.083	5.87	0.69	1.385	O	I					6.65
9.167	6.21	0.69	1.422	O	I					6.89
9.250	6.31	3.70	1.450		O	I				7.08
9.333	6.44	6.43	1.459			O				7.15
9.417	6.63	6.54	1.459			O				7.15
9.500	6.69	6.66	1.460			O				7.15
9.583	6.80	6.75	1.460			O				7.16
9.667	6.98	6.90	1.461			O				7.16
9.750	7.03	7.01	1.461			O				7.16
9.833	7.14	7.09	1.461			O				7.17
9.917	7.32	7.23	1.462			OI				7.17
10.000	7.37	7.35	1.462			O				7.17
10.083	6.84	7.10	1.461			IO				7.17
10.167	5.69	6.25	1.458			I O				7.14
10.250	5.38	5.52	1.456			O				7.13

10.333	5.23	5.30	1.455			O				7.12
10.417	5.15	5.19	1.455			O				7.12
10.500	5.10	5.13	1.455			O				7.11
10.583	5.46	5.29	1.455			OI				7.12
10.667	6.29	5.89	1.457			OI				7.13
10.750	6.52	6.41	1.459			OI				7.15
10.833	6.62	6.58	1.459			O				7.15
10.917	6.68	6.66	1.460			O				7.15
11.000	6.72	6.70	1.460			O				7.16
11.083	6.67	6.69	1.460			O				7.16
11.167	6.50	6.58	1.460			O				7.15
11.250	6.46	6.48	1.459			O				7.15
11.333	6.44	6.45	1.459			O				7.15
11.417	6.42	6.43	1.459			O				7.15
11.500	6.42	6.42	1.459			O				7.15
11.583	6.25	6.33	1.459			O				7.15
11.667	5.92	6.08	1.458			O				7.14
11.750	5.83	5.87	1.457			O				7.13
11.833	5.87	5.85	1.457			O				7.13
11.917	6.01	5.94	1.457			O				7.14
12.000	6.04	6.03	1.458			O				7.14
12.083	6.61	6.33	1.459			OI				7.15
12.167	7.78	7.21	1.462			O I				7.17
12.250	8.11	7.96	1.464			OI				7.19
12.333	8.36	8.24	1.465			O				7.20
12.417	8.63	8.50	1.466			O				7.20
12.500	8.74	8.69	1.467			O				7.21
12.583	9.01	8.88	1.467			O				7.21
12.667	9.44	9.23	1.468			O				7.22
12.750	9.57	9.51	1.469			OI				7.23
12.833	9.73	9.65	1.470			O				7.23
12.917	9.97	9.86	1.470			OI				7.24
13.000	10.06	10.02	1.471			O				7.24
13.083	10.60	10.33	1.472			O				7.25
13.167	11.62	11.12	1.475			OI				7.27
13.250	11.92	11.79	1.477			OI				7.29
13.333	12.07	12.00	1.477			O				7.29
13.417	12.15	12.11	1.478			O				7.30
13.500	12.20	12.18	1.478			OI				7.30
13.583	11.17	11.68	1.476			IO				7.28
13.667	8.99	10.05	1.471			I O				7.24
13.750	8.37	8.65	1.466			IO				7.21
13.833	8.09	8.22	1.465			O				7.19
13.917	7.93	8.01	1.464			IO				7.19
14.000	7.85	7.89	1.464			O				7.19
14.083	8.17	8.01	1.464			O				7.19
14.167	8.98	8.58	1.466			OI				7.20
14.250	9.21	9.10	1.468			OI				7.22
14.333	9.23	9.22	1.468			O				7.22
14.417	9.09	9.16	1.468			IO				7.22
14.500	9.08	9.08	1.468			O				7.22
14.583	9.09	9.08	1.468			O				7.22
14.667	9.08	9.09	1.468			O				7.22
14.750	9.08	9.08	1.468			O				7.22
14.833	8.99	9.03	1.468			O				7.22
14.917	8.79	8.89	1.467			O				7.21
15.000	8.74	8.77	1.467			O				7.21
15.083	8.63	8.69	1.466			O				7.21
15.167	8.42	8.52	1.466			O				7.20
15.250	8.36	8.39	1.466			IO				7.20
15.333	8.24	8.30	1.465			O				7.20
15.417	8.03	8.14	1.465			O				7.19
15.500	7.98	8.00	1.464			O				7.19
15.583	7.59	7.78	1.463			IO				7.18
15.667	6.84	7.20	1.462			IO				7.17
15.750	6.62	6.72	1.460			O				7.16

15.833	6.52	6.57	1.459				IO			7.15
15.917	6.47	6.49	1.459				IO			7.15
16.000	6.44	6.45	1.459				O			7.15
16.083	5.21	5.81	1.457				I O			7.13
16.167	2.73	3.93	1.451		I	O				7.08
16.250	2.04	2.36	1.446		IO					7.04
16.333	1.72	1.87	1.444		O					7.03
16.417	1.54	1.63	1.443		O					7.02
16.500	1.44	1.49	1.443		O					7.02
16.583	1.27	1.35	1.442		O					7.02
16.667	1.10	1.18	1.442		IO					7.01
16.750	1.06	1.08	1.441		O					7.01
16.833	1.04	1.05	1.441		O					7.01
16.917	1.03	1.03	1.441		O					7.01
17.000	1.02	1.02	1.441		O					7.01
17.083	1.17	1.10	1.441		OI					7.01
17.167	1.50	1.34	1.442		O					7.02
17.250	1.60	1.55	1.443		O					7.02
17.333	1.64	1.62	1.443		O					7.02
17.417	1.66	1.65	1.443		O					7.02
17.500	1.68	1.67	1.443		O					7.03
17.583	1.69	1.68	1.443		O					7.03
17.667	1.69	1.69	1.443		O					7.03
17.750	1.69	1.69	1.443		O					7.03
17.833	1.61	1.65	1.443		O					7.02
17.917	1.44	1.52	1.443		O					7.02
18.000	1.40	1.42	1.442		O					7.02
18.083	1.37	1.38	1.442		O					7.02
18.167	1.36	1.37	1.442		O					7.02
18.250	1.36	1.36	1.442		O					7.02
18.333	1.35	1.35	1.442		O					7.02
18.417	1.35	1.35	1.442		O					7.02
18.500	1.35	1.35	1.442		O					7.02
18.583	1.27	1.31	1.442		O					7.02
18.667	1.10	1.18	1.442		IO					7.01
18.750	1.06	1.08	1.441		O					7.01
18.833	0.96	1.01	1.441		O					7.01
18.917	0.78	0.87	1.441		O					7.00
19.000	0.73	0.75	1.440		IO					7.00
19.083	0.78	0.75	1.440		OI					7.00
19.167	0.93	0.86	1.441		O					7.00
19.250	0.97	0.95	1.441		O					7.01
19.333	1.07	1.02	1.441		O					7.01
19.417	1.24	1.16	1.442		O					7.01
19.500	1.30	1.27	1.442		O					7.02
19.583	1.24	1.27	1.442		O					7.01
19.667	1.09	1.17	1.442		IO					7.01
19.750	1.05	1.07	1.441		O					7.01
19.833	0.96	1.00	1.441		O					7.01
19.917	0.78	0.87	1.441		O					7.00
20.000	0.73	0.75	1.440		IO					7.00
20.083	0.78	0.75	1.440		OI					7.00
20.167	0.93	0.86	1.441		O					7.00
20.250	0.97	0.95	1.441		O					7.01
20.333	0.99	0.98	1.441		O					7.01
20.417	1.00	0.99	1.441		O					7.01
20.500	1.01	1.00	1.441		O					7.01
20.583	1.01	1.01	1.441		O					7.01
20.667	1.01	1.01	1.441		O					7.01
20.750	1.01	1.01	1.441		O					7.01
20.833	0.93	0.97	1.441		O					7.01
20.917	0.77	0.85	1.441		O					7.00
21.000	0.72	0.74	1.440		IO					7.00
21.083	0.78	0.75	1.440		OI					7.00
21.167	0.93	0.86	1.441		O					7.00
21.250	0.97	0.95	1.441		O					7.01

21.333	0.91	0.94	1.441	O				7.01
21.417	0.75	0.83	1.440	IO				7.00
21.500	0.71	0.73	1.440	O				7.00
21.583	0.78	0.75	1.440	OI				7.00
21.667	0.93	0.86	1.441	O				7.00
21.750	0.97	0.95	1.441	O				7.01
21.833	0.91	0.94	1.441	O				7.01
21.917	0.75	0.83	1.440	IO				7.00
22.000	0.71	0.73	1.440	O				7.00
22.083	0.78	0.75	1.440	OI				7.00
22.167	0.93	0.86	1.441	O				7.00
22.250	0.97	0.95	1.441	O				7.01
22.333	0.91	0.94	1.441	O				7.01
22.417	0.75	0.83	1.440	IO				7.00
22.500	0.71	0.73	1.440	O				7.00
22.583	0.70	0.71	1.440	O				7.00
22.667	0.69	0.69	1.440	O				7.00
22.750	0.68	0.69	1.440	O				7.00
22.833	0.67	0.69	1.440	O				7.00
22.917	0.67	0.69	1.440	O				7.00
23.000	0.67	0.69	1.440	O				7.00
23.083	0.67	0.69	1.439	O				7.00
23.167	0.67	0.69	1.439	O				7.00
23.250	0.67	0.69	1.439	O				6.99
23.333	0.67	0.69	1.439	O				6.99
23.417	0.67	0.69	1.439	O				6.99
23.500	0.67	0.69	1.439	O				6.99
23.583	0.67	0.69	1.439	O				6.99
23.667	0.67	0.69	1.439	O				6.99
23.750	0.67	0.69	1.438	O				6.99
23.833	0.67	0.69	1.438	O				6.99
23.917	0.67	0.69	1.438	O				6.99
24.000	0.67	0.69	1.438	O				6.99
24.083	0.51	0.69	1.437	O				6.98
24.167	0.18	0.69	1.435	IO				6.97
24.250	0.09	0.69	1.431	IO				6.94
24.333	0.05	0.69	1.427	IO				6.92
24.417	0.03	0.69	1.422	IO				6.89
24.500	0.01	0.69	1.418	IO				6.86
24.583	0.00	0.69	1.413	IO				6.83
24.667	0.00	0.69	1.408	IO				6.80
24.750	0.00	0.69	1.404	IO				6.77
24.833	0.00	0.69	1.399	IO				6.74
24.917	0.00	0.69	1.394	IO				6.71
25.000	0.00	0.69	1.389	IO				6.68
25.083	0.00	0.69	1.384	IO				6.65
25.167	0.00	0.69	1.380	IO				6.62
25.250	0.00	0.69	1.375	IO				6.59
25.333	0.00	0.69	1.370	IO				6.55
25.417	0.00	0.69	1.365	IO				6.52
25.500	0.00	0.69	1.361	IO				6.49
25.583	0.00	0.69	1.356	IO				6.46
25.667	0.00	0.69	1.351	IO				6.43
25.750	0.00	0.69	1.346	IO				6.40
25.833	0.00	0.69	1.341	IO				6.37
25.917	0.00	0.69	1.337	IO				6.34
26.000	0.00	0.69	1.332	IO				6.31
26.083	0.00	0.69	1.327	IO				6.28
26.167	0.00	0.69	1.322	IO				6.25
26.250	0.00	0.69	1.318	IO				6.22
26.333	0.00	0.69	1.313	IO				6.19
26.417	0.00	0.69	1.308	IO				6.16
26.500	0.00	0.69	1.303	IO				6.13
26.583	0.00	0.69	1.299	IO				6.10
26.667	0.00	0.69	1.294	IO				6.07
26.750	0.00	0.69	1.289	IO				6.04

26.833	0.00	0.69	1.284	IO					6.01
26.917	0.00	0.69	1.279	IO					5.98
27.000	0.00	0.69	1.275	IO					5.96
27.083	0.00	0.69	1.270	IO					5.94
27.167	0.00	0.69	1.265	IO					5.92
27.250	0.00	0.69	1.260	IO					5.90
27.333	0.00	0.69	1.256	IO					5.88
27.417	0.00	0.69	1.251	IO					5.86
27.500	0.00	0.69	1.246	IO					5.84
27.583	0.00	0.69	1.241	IO					5.82
27.667	0.00	0.69	1.236	IO					5.80
27.750	0.00	0.69	1.232	IO					5.78
27.833	0.00	0.69	1.227	IO					5.76
27.917	0.00	0.69	1.222	IO					5.74
28.000	0.00	0.69	1.217	IO					5.72
28.083	0.00	0.69	1.213	IO					5.70
28.167	0.00	0.69	1.208	IO					5.68
28.250	0.00	0.69	1.203	IO					5.66
28.333	0.00	0.69	1.198	IO					5.64
28.417	0.00	0.69	1.194	IO					5.62
28.500	0.00	0.69	1.189	IO					5.60
28.583	0.00	0.69	1.184	IO					5.58
28.667	0.00	0.69	1.179	IO					5.56
28.750	0.00	0.69	1.174	IO					5.54
28.833	0.00	0.69	1.170	IO					5.52
28.917	0.00	0.69	1.165	IO					5.50
29.000	0.00	0.69	1.160	IO					5.48
29.083	0.00	0.69	1.155	IO					5.46
29.167	0.00	0.69	1.151	IO					5.44
29.250	0.00	0.69	1.146	IO					5.42
29.333	0.00	0.69	1.141	IO					5.40
29.417	0.00	0.69	1.136	IO					5.38
29.500	0.00	0.69	1.131	IO					5.36
29.583	0.00	0.69	1.127	IO					5.34
29.667	0.00	0.69	1.122	IO					5.32
29.750	0.00	0.69	1.117	IO					5.30
29.833	0.00	0.69	1.112	IO					5.28
29.917	0.00	0.69	1.108	IO					5.26
30.000	0.00	0.69	1.103	IO					5.24
30.083	0.00	0.69	1.098	IO					5.22
30.167	0.00	0.69	1.093	IO					5.20
30.250	0.00	0.69	1.089	IO					5.18
30.333	0.00	0.69	1.084	IO					5.16
30.417	0.00	0.69	1.079	IO					5.14
30.500	0.00	0.69	1.074	IO					5.12
30.583	0.00	0.69	1.069	IO					5.10
30.667	0.00	0.69	1.065	IO					5.08
30.750	0.00	0.69	1.060	IO					5.06
30.833	0.00	0.69	1.055	IO					5.04
30.917	0.00	0.69	1.050	IO					5.02
31.000	0.00	0.69	1.046	IO					5.00
31.083	0.00	0.69	1.041	IO					4.98
31.167	0.00	0.69	1.036	IO					4.96
31.250	0.00	0.69	1.031	IO					4.94
31.333	0.00	0.69	1.026	IO					4.93
31.417	0.00	0.69	1.022	IO					4.91
31.500	0.00	0.69	1.017	IO					4.89
31.583	0.00	0.69	1.012	IO					4.87
31.667	0.00	0.69	1.007	IO					4.85
31.750	0.00	0.69	1.003	IO					4.83
31.833	0.00	0.69	0.998	IO					4.82
31.917	0.00	0.69	0.993	IO					4.80
32.000	0.00	0.69	0.988	IO					4.78
32.083	0.00	0.69	0.984	IO					4.76
32.167	0.00	0.69	0.979	IO					4.74
32.250	0.00	0.69	0.974	IO					4.73

32.333	0.00	0.69	0.969	IO					4.71
32.417	0.00	0.69	0.964	IO					4.69
32.500	0.00	0.69	0.960	IO					4.67
32.583	0.00	0.69	0.955	IO					4.65
32.667	0.00	0.69	0.950	IO					4.63
32.750	0.00	0.69	0.945	IO					4.62
32.833	0.00	0.69	0.941	IO					4.60
32.917	0.00	0.69	0.936	IO					4.58
33.000	0.00	0.69	0.931	IO					4.56
33.083	0.00	0.69	0.926	IO					4.54
33.167	0.00	0.69	0.921	IO					4.52
33.250	0.00	0.69	0.917	IO					4.51
33.333	0.00	0.69	0.912	IO					4.49
33.417	0.00	0.69	0.907	IO					4.47
33.500	0.00	0.69	0.902	IO					4.45
33.583	0.00	0.69	0.898	IO					4.43
33.667	0.00	0.69	0.893	IO					4.42
33.750	0.00	0.69	0.888	IO					4.40
33.833	0.00	0.69	0.883	IO					4.38
33.917	0.00	0.69	0.879	IO					4.36
34.000	0.00	0.69	0.874	IO					4.34
34.083	0.00	0.69	0.869	IO					4.32
34.167	0.00	0.69	0.864	IO					4.31
34.250	0.00	0.69	0.859	IO					4.29
34.333	0.00	0.69	0.855	IO					4.27
34.417	0.00	0.69	0.850	IO					4.25
34.500	0.00	0.69	0.845	IO					4.23
34.583	0.00	0.69	0.840	IO					4.21
34.667	0.00	0.69	0.836	IO					4.20
34.750	0.00	0.69	0.831	IO					4.18
34.833	0.00	0.69	0.826	IO					4.16
34.917	0.00	0.69	0.821	IO					4.14
35.000	0.00	0.69	0.816	IO					4.12
35.083	0.00	0.69	0.812	IO					4.11
35.167	0.00	0.69	0.807	IO					4.09
35.250	0.00	0.69	0.802	IO					4.07
35.333	0.00	0.69	0.797	IO					4.05
35.417	0.00	0.69	0.793	IO					4.03
35.500	0.00	0.69	0.788	IO					4.01
35.583	0.00	0.69	0.783	IO					4.00
35.667	0.00	0.69	0.778	IO					3.98
35.750	0.00	0.69	0.774	IO					3.96
35.833	0.00	0.69	0.769	IO					3.94
35.917	0.00	0.69	0.764	IO					3.92
36.000	0.00	0.69	0.759	IO					3.91
36.083	0.00	0.69	0.754	IO					3.89
36.167	0.00	0.69	0.750	IO					3.87
36.250	0.00	0.69	0.745	IO					3.85
36.333	0.00	0.69	0.740	IO					3.83
36.417	0.00	0.69	0.735	IO					3.81
36.500	0.00	0.69	0.731	IO					3.80
36.583	0.00	0.69	0.726	IO					3.78
36.667	0.00	0.69	0.721	IO					3.76
36.750	0.00	0.69	0.716	IO					3.74
36.833	0.00	0.69	0.711	IO					3.72
36.917	0.00	0.69	0.707	IO					3.70
37.000	0.00	0.69	0.702	IO					3.69
37.083	0.00	0.69	0.697	IO					3.67
37.167	0.00	0.69	0.692	IO					3.65
37.250	0.00	0.69	0.688	IO					3.63
37.333	0.00	0.69	0.683	IO					3.61
37.417	0.00	0.69	0.678	IO					3.60
37.500	0.00	0.69	0.673	IO					3.58
37.583	0.00	0.69	0.669	IO					3.56
37.667	0.00	0.69	0.664	IO					3.54
37.750	0.00	0.69	0.659	IO					3.52

37.833	0.00	0.69	0.654	IO					3.50
37.917	0.00	0.69	0.649	IO					3.49
38.000	0.00	0.69	0.645	IO					3.47
38.083	0.00	0.69	0.640	IO					3.45
38.167	0.00	0.69	0.635	IO					3.43
38.250	0.00	0.69	0.630	IO					3.41
38.333	0.00	0.69	0.626	IO					3.40
38.417	0.00	0.69	0.621	IO					3.38
38.500	0.00	0.69	0.616	IO					3.36
38.583	0.00	0.69	0.611	IO					3.34
38.667	0.00	0.69	0.606	IO					3.32
38.750	0.00	0.69	0.602	IO					3.30
38.833	0.00	0.69	0.597	IO					3.29
38.917	0.00	0.69	0.592	IO					3.27
39.000	0.00	0.69	0.587	IO					3.25
39.083	0.00	0.69	0.583	IO					3.23
39.167	0.00	0.69	0.578	IO					3.21
39.250	0.00	0.69	0.573	IO					3.19
39.333	0.00	0.69	0.568	IO					3.18
39.417	0.00	0.69	0.564	IO					3.16
39.500	0.00	0.69	0.559	IO					3.14
39.583	0.00	0.69	0.554	IO					3.12
39.667	0.00	0.69	0.549	IO					3.10
39.750	0.00	0.69	0.544	IO					3.09
39.833	0.00	0.69	0.540	IO					3.07
39.917	0.00	0.69	0.535	IO					3.05
40.000	0.00	0.69	0.530	IO					3.03
40.083	0.00	0.69	0.525	IO					3.01
40.167	0.00	0.69	0.521	IO					2.99
40.250	0.00	0.69	0.516	IO					2.97
40.333	0.00	0.69	0.511	IO					2.95
40.417	0.00	0.69	0.506	IO					2.93
40.500	0.00	0.69	0.501	IO					2.91
40.583	0.00	0.69	0.497	IO					2.89
40.667	0.00	0.69	0.492	IO					2.87
40.750	0.00	0.69	0.487	IO					2.85
40.833	0.00	0.69	0.482	IO					2.83
40.917	0.00	0.69	0.478	IO					2.81
41.000	0.00	0.69	0.473	IO					2.79
41.083	0.00	0.69	0.468	IO					2.77
41.167	0.00	0.69	0.463	IO					2.75
41.250	0.00	0.69	0.459	IO					2.73
41.333	0.00	0.69	0.454	IO					2.71
41.417	0.00	0.69	0.449	IO					2.69
41.500	0.00	0.69	0.444	IO					2.67
41.583	0.00	0.69	0.439	IO					2.65
41.667	0.00	0.69	0.435	IO					2.63
41.750	0.00	0.69	0.430	IO					2.61
41.833	0.00	0.69	0.425	IO					2.59
41.917	0.00	0.69	0.420	IO					2.57
42.000	0.00	0.69	0.416	IO					2.55
42.083	0.00	0.69	0.411	IO					2.53
42.167	0.00	0.69	0.406	IO					2.51
42.250	0.00	0.69	0.401	IO					2.49
42.333	0.00	0.69	0.396	IO					2.47
42.417	0.00	0.69	0.392	IO					2.45
42.500	0.00	0.69	0.387	IO					2.43
42.583	0.00	0.69	0.382	IO					2.41
42.667	0.00	0.69	0.377	IO					2.39
42.750	0.00	0.69	0.373	IO					2.37
42.833	0.00	0.69	0.368	IO					2.35
42.917	0.00	0.69	0.363	IO					2.33
43.000	0.00	0.69	0.358	IO					2.31
43.083	0.00	0.69	0.354	IO					2.29
43.167	0.00	0.69	0.349	IO					2.27
43.250	0.00	0.69	0.344	IO					2.25

43.333	0.00	0.69	0.339	IO					2.23
43.417	0.00	0.69	0.334	IO					2.21
43.500	0.00	0.69	0.330	IO					2.19
43.583	0.00	0.69	0.325	IO					2.17
43.667	0.00	0.69	0.320	IO					2.15
43.750	0.00	0.69	0.315	IO					2.13
43.833	0.00	0.69	0.311	IO					2.11
43.917	0.00	0.69	0.306	IO					2.09
44.000	0.00	0.69	0.301	IO					2.07
44.083	0.00	0.69	0.296	IO					2.05
44.167	0.00	0.69	0.291	IO					2.03
44.250	0.00	0.69	0.287	IO					2.01
44.333	0.00	0.69	0.282	IO					1.98
44.417	0.00	0.69	0.277	IO					1.95
44.500	0.00	0.69	0.272	IO					1.92
44.583	0.00	0.69	0.268	IO					1.89
44.667	0.00	0.69	0.263	IO					1.86
44.750	0.00	0.69	0.258	IO					1.83
44.833	0.00	0.69	0.253	IO					1.80
44.917	0.00	0.69	0.249	IO					1.77
45.000	0.00	0.69	0.244	IO					1.74
45.083	0.00	0.69	0.239	IO					1.70
45.167	0.00	0.69	0.234	IO					1.67
45.250	0.00	0.69	0.229	IO					1.64
45.333	0.00	0.69	0.225	IO					1.61
45.417	0.00	0.69	0.220	IO					1.58
45.500	0.00	0.69	0.215	IO					1.55
45.583	0.00	0.69	0.210	IO					1.52
45.667	0.00	0.69	0.206	IO					1.49
45.750	0.00	0.69	0.201	IO					1.46
45.833	0.00	0.69	0.196	IO					1.43
45.917	0.00	0.69	0.191	IO					1.40
46.000	0.00	0.69	0.186	IO					1.37
46.083	0.00	0.69	0.182	IO					1.34
46.167	0.00	0.69	0.177	IO					1.31
46.250	0.00	0.69	0.172	IO					1.28
46.333	0.00	0.69	0.167	IO					1.25
46.417	0.00	0.69	0.163	IO					1.22
46.500	0.00	0.69	0.158	IO					1.18
46.583	0.00	0.69	0.153	IO					1.15
46.667	0.00	0.69	0.148	IO					1.12
46.750	0.00	0.69	0.144	IO					1.09
46.833	0.00	0.69	0.139	IO					1.06
46.917	0.00	0.69	0.134	IO					1.03
47.000	0.00	0.69	0.129	IO					1.00
47.083	0.00	0.67	0.124	IO					0.97
47.167	0.00	0.64	0.120	IO					0.93
47.250	0.00	0.62	0.116	IO					0.90
47.333	0.00	0.60	0.111	IO					0.86
47.417	0.00	0.58	0.107	IO					0.83
47.500	0.00	0.56	0.103	IO					0.80
47.583	0.00	0.54	0.100	IO					0.77
47.667	0.00	0.52	0.096	IO					0.74
47.750	0.00	0.50	0.093	IO					0.72
47.833	0.00	0.48	0.089	IO					0.69
47.917	0.00	0.46	0.086	IO					0.67
48.000	0.00	0.45	0.083	IO					0.64
48.083	0.00	0.43	0.080	IO					0.62
48.167	0.00	0.41	0.077	IO					0.60
48.250	0.00	0.40	0.074	IO					0.57
48.333	0.00	0.38	0.071	IO					0.55
48.417	0.00	0.37	0.069	O					0.53
48.500	0.00	0.36	0.066	O					0.51
48.583	0.00	0.34	0.064	O					0.50
48.667	0.00	0.33	0.062	O					0.48
48.750	0.00	0.32	0.059	O					0.46

48.833	0.00	0.31	0.057	0					0.44
48.917	0.00	0.30	0.055	0					0.43
49.000	0.00	0.29	0.053	0					0.41
49.083	0.00	0.28	0.051	0					0.40
49.167	0.00	0.27	0.049	0					0.38
49.250	0.00	0.26	0.048	0					0.37
49.333	0.00	0.25	0.046	0					0.36
49.417	0.00	0.24	0.044	0					0.34
49.500	0.00	0.23	0.043	0					0.33
49.583	0.00	0.22	0.041	0					0.32
49.667	0.00	0.21	0.040	0					0.31
49.750	0.00	0.20	0.038	0					0.30
49.833	0.00	0.20	0.037	0					0.28
49.917	0.00	0.19	0.035	0					0.27
50.000	0.00	0.18	0.034	0					0.26
50.083	0.00	0.18	0.033	0					0.25
50.167	0.00	0.17	0.032	0					0.25
50.250	0.00	0.16	0.031	0					0.24
50.333	0.00	0.16	0.029	0					0.23
50.417	0.00	0.15	0.028	0					0.22
50.500	0.00	0.15	0.027	0					0.21
50.583	0.00	0.14	0.026	0					0.20
50.667	0.00	0.14	0.025	0					0.20
50.750	0.00	0.13	0.024	0					0.19
50.833	0.00	0.13	0.024	0					0.18
50.917	0.00	0.12	0.023	0					0.18
51.000	0.00	0.12	0.022	0					0.17
51.083	0.00	0.11	0.021	0					0.16
51.167	0.00	0.11	0.020	0					0.16
51.250	0.00	0.11	0.020	0					0.15
51.333	0.00	0.10	0.019	0					0.15
51.417	0.00	0.10	0.018	0					0.14
51.500	0.00	0.09	0.018	0					0.14
51.583	0.00	0.09	0.017	0					0.13
51.667	0.00	0.09	0.016	0					0.13
51.750	0.00	0.08	0.016	0					0.12
51.833	0.00	0.08	0.015	0					0.12
51.917	0.00	0.08	0.015	0					0.11
52.000	0.00	0.08	0.014	0					0.11
52.083	0.00	0.07	0.014	0					0.10
52.167	0.00	0.07	0.013	0					0.10
52.250	0.00	0.07	0.013	0					0.10
52.333	0.00	0.06	0.012	0					0.09
52.417	0.00	0.06	0.012	0					0.09
52.500	0.00	0.06	0.011	0					0.09
52.583	0.00	0.06	0.011	0					0.08
52.667	0.00	0.06	0.010	0					0.08
52.750	0.00	0.05	0.010	0					0.08
52.833	0.00	0.05	0.010	0					0.08
52.917	0.00	0.05	0.009	0					0.07
53.000	0.00	0.05	0.009	0					0.07
53.083	0.00	0.05	0.009	0					0.07
53.167	0.00	0.04	0.008	0					0.06
53.250	0.00	0.04	0.008	0					0.06
53.333	0.00	0.04	0.008	0					0.06
53.417	0.00	0.04	0.007	0					0.06
53.500	0.00	0.04	0.007	0					0.06
53.583	0.00	0.04	0.007	0					0.05
53.667	0.00	0.04	0.007	0					0.05
53.750	0.00	0.03	0.006	0					0.05
53.833	0.00	0.03	0.006	0					0.05
53.917	0.00	0.03	0.006	0					0.05
54.000	0.00	0.03	0.006	0					0.04
54.083	0.00	0.03	0.006	0					0.04
54.167	0.00	0.03	0.005	0					0.04
54.250	0.00	0.03	0.005	0					0.04

54.333	0.00	0.03	0.005	0					0.04
54.417	0.00	0.03	0.005	0					0.04
54.500	0.00	0.02	0.005	0					0.04
54.583	0.00	0.02	0.004	0					0.03
54.667	0.00	0.02	0.004	0					0.03
54.750	0.00	0.02	0.004	0					0.03
54.833	0.00	0.02	0.004	0					0.03
54.917	0.00	0.02	0.004	0					0.03
55.000	0.00	0.02	0.004	0					0.03
55.083	0.00	0.02	0.004	0					0.03
55.167	0.00	0.02	0.003	0					0.03
55.250	0.00	0.02	0.003	0					0.03
55.333	0.00	0.02	0.003	0					0.02
55.417	0.00	0.02	0.003	0					0.02
55.500	0.00	0.02	0.003	0					0.02
55.583	0.00	0.02	0.003	0					0.02
55.667	0.00	0.01	0.003	0					0.02
55.750	0.00	0.01	0.003	0					0.02
55.833	0.00	0.01	0.003	0					0.02
55.917	0.00	0.01	0.002	0					0.02
56.000	0.00	0.01	0.002	0					0.02
56.083	0.00	0.01	0.002	0					0.02
56.167	0.00	0.01	0.002	0					0.02
56.250	0.00	0.01	0.002	0					0.02
56.333	0.00	0.01	0.002	0					0.02
56.417	0.00	0.01	0.002	0					0.02
56.500	0.00	0.01	0.002	0					0.01
56.583	0.00	0.01	0.002	0					0.01
56.667	0.00	0.01	0.002	0					0.01
56.750	0.00	0.01	0.002	0					0.01
56.833	0.00	0.01	0.002	0					0.01
56.917	0.00	0.01	0.002	0					0.01
57.000	0.00	0.01	0.002	0					0.01
57.083	0.00	0.01	0.001	0					0.01
57.167	0.00	0.01	0.001	0					0.01
57.250	0.00	0.01	0.001	0					0.01
57.333	0.00	0.01	0.001	0					0.01
57.417	0.00	0.01	0.001	0					0.01
57.500	0.00	0.01	0.001	0					0.01
57.583	0.00	0.01	0.001	0					0.01
57.667	0.00	0.01	0.001	0					0.01
57.750	0.00	0.01	0.001	0					0.01
57.833	0.00	0.01	0.001	0					0.01
57.917	0.00	0.01	0.001	0					0.01
58.000	0.00	0.01	0.001	0					0.01
58.083	0.00	0.01	0.001	0					0.01
58.167	0.00	0.00	0.001	0					0.01
58.250	0.00	0.00	0.001	0					0.01
58.333	0.00	0.00	0.001	0					0.01
58.417	0.00	0.00	0.001	0					0.01
58.500	0.00	0.00	0.001	0					0.01
58.583	0.00	0.00	0.001	0					0.01
58.667	0.00	0.00	0.001	0					0.01
58.750	0.00	0.00	0.001	0					0.01
58.833	0.00	0.00	0.001	0					0.01
58.917	0.00	0.00	0.001	0					0.01
59.000	0.00	0.00	0.001	0					0.00
59.083	0.00	0.00	0.001	0					0.00
59.167	0.00	0.00	0.001	0					0.00
59.250	0.00	0.00	0.001	0					0.00
59.333	0.00	0.00	0.001	0					0.00
59.417	0.00	0.00	0.001	0					0.00
59.500	0.00	0.00	0.001	0					0.00
59.583	0.00	0.00	0.000	0					0.00
59.667	0.00	0.00	0.000	0					0.00
59.750	0.00	0.00	0.000	0					0.00

59.833	0.00	0.00	0.000	0					0.00
59.917	0.00	0.00	0.000	0					0.00
60.000	0.00	0.00	0.000	0					0.00
60.083	0.00	0.00	0.000	0					0.00
60.167	0.00	0.00	0.000	0					0.00
60.250	0.00	0.00	0.000	0					0.00
60.333	0.00	0.00	0.000	0					0.00
60.417	0.00	0.00	0.000	0					0.00
60.500	0.00	0.00	0.000	0					0.00
60.583	0.00	0.00	0.000	0					0.00
60.667	0.00	0.00	0.000	0					0.00
60.750	0.00	0.00	0.000	0					0.00
60.833	0.00	0.00	0.000	0					0.00
60.917	0.00	0.00	0.000	0					0.00
61.000	0.00	0.00	0.000	0					0.00
61.083	0.00	0.00	0.000	0					0.00
61.167	0.00	0.00	0.000	0					0.00
61.250	0.00	0.00	0.000	0					0.00
61.333	0.00	0.00	0.000	0					0.00
61.417	0.00	0.00	0.000	0					0.00
61.500	0.00	0.00	0.000	0					0.00
61.583	0.00	0.00	0.000	0					0.00
61.667	0.00	0.00	0.000	0					0.00
61.750	0.00	0.00	0.000	0					0.00

*****HYDROGRAPH DATA*****

Number of intervals = 741
Time interval = 5.0 (Min.)
Maximum/Peak flow rate = 12.177 (CFS)
Total volume = 7.048 (Ac.Ft)

Status of hydrographs being held in storage

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

FLOOD HYDROGRAPH ROUTING PROGRAM
 Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2018
 Study date: 09/08/21

 RAMONA - WEBSTER
 WEST INDUSTRIAL - AREA 2
 100 YR - 1 HR
 1391RTE2

Program License Serial Number 6490

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

From study/file name: 1391PRUH21100.rte
 *****HYDROGRAPH DATA*****
 Number of intervals = 18
 Time interval = 5.0 (Min.)
 Maximum/Peak flow rate = 60.933 (CFS)
 Total volume = 2.169 (Ac.Ft)
 Status of hydrographs being held in storage
 Stream 1 Stream 2 Stream 3 Stream 4 Stream 5
 Peak (CFS) 0.000 0.000 0.000 0.000 0.000
 Vol (Ac.Ft) 0.000 0.000 0.000 0.000 0.000

+++++
 Process from Point/Station 1.000 to Point/Station 2.000
 **** RETARDING BASIN ROUTING ****

 User entry of depth-outflow-storage data

Total number of inflow hydrograph intervals = 18
 Hydrograph time unit = 5.000 (Min.)
 Initial depth in storage basin = 0.00 (Ft.)

Initial basin depth = 0.00 (Ft.)
 Initial basin storage = 0.00 (Ac.Ft)
 Initial basin outflow = 0.00 (CFS)

 Depth vs. Storage and Depth vs. Discharge data:

Basin Depth (Ft.)	Storage (Ac.Ft)	Outflow (CFS)	(S-O*dt/2) (Ac.Ft)	(S+O*dt/2) (Ac.Ft)
0.000	0.000	0.000	0.000	0.000
1.000	0.129	0.693	0.127	0.131
2.000	0.285	0.693	0.283	0.287
3.000	0.522	0.693	0.520	0.524
4.000	0.784	0.693	0.782	0.786
5.000	1.046	0.693	1.044	1.048
6.000	1.283	0.693	1.281	1.285
7.000	1.440	0.693	1.438	1.442
7.500	1.504	20.000	1.435	1.573
8.000	1.505	50.000	1.333	1.677

Hydrograph Detention Basin Routing

 Graph values: 'I'= unit inflow; 'O'=outflow at time shown

Time (Hours)	Inflow (CFS)	Outflow (CFS)	Storage (Ac.Ft)	.0	15.2	30.47	45.70	60.93	Depth (Ft.)
0.083	2.91	0.05	0.010	OI					0.08
0.167	8.96	0.27	0.050	O	I				0.38
0.250	11.37	0.63	0.117	O	I				0.90
0.333	13.34	0.69	0.197	O	I				1.44
0.417	14.76	0.69	0.289	O	I				2.02
0.500	17.07	0.69	0.394	O	I				2.46
0.583	19.64	0.69	0.516	O		I			2.97
0.667	22.65	0.69	0.656	O		I			3.51
0.750	28.34	0.69	0.827	O		I			4.17
0.833	48.95	0.69	1.089	O				I	5.18
0.917	60.93	3.98	1.451		O			I	7.09
1.000	31.39	46.97	1.593			I	O		8.20
1.083	18.61	28.90	1.504			I	O		7.65
1.167	8.05	8.71	1.467		O				7.21
1.250	4.39	6.17	1.458		IO				7.14
1.333	2.66	3.47	1.449		O				7.07
1.417	0.68	1.64	1.443	O					7.02
1.500	0.26	0.69	1.438	O					6.99
1.583	0.00	0.69	1.434	O					6.96
1.667	0.00	0.69	1.430	O					6.93
1.750	0.00	0.69	1.425	O					6.90
1.833	0.00	0.69	1.420	O					6.87
1.917	0.00	0.69	1.415	O					6.84
2.000	0.00	0.69	1.411	O					6.81
2.083	0.00	0.69	1.406	O					6.78
2.167	0.00	0.69	1.401	O					6.75
2.250	0.00	0.69	1.396	O					6.72
2.333	0.00	0.69	1.392	O					6.69
2.417	0.00	0.69	1.387	O					6.66
2.500	0.00	0.69	1.382	O					6.63
2.583	0.00	0.69	1.377	O					6.60
2.667	0.00	0.69	1.372	O					6.57
2.750	0.00	0.69	1.368	O					6.54
2.833	0.00	0.69	1.363	O					6.51
2.917	0.00	0.69	1.358	O					6.48
3.000	0.00	0.69	1.353	O					6.45
3.083	0.00	0.69	1.349	O					6.42
3.167	0.00	0.69	1.344	O					6.39
3.250	0.00	0.69	1.339	O					6.36
3.333	0.00	0.69	1.334	O					6.33
3.417	0.00	0.69	1.329	O					6.30
3.500	0.00	0.69	1.325	O					6.27
3.583	0.00	0.69	1.320	O					6.24
3.667	0.00	0.69	1.315	O					6.20
3.750	0.00	0.69	1.310	O					6.17
3.833	0.00	0.69	1.306	O					6.14
3.917	0.00	0.69	1.301	O					6.11
4.000	0.00	0.69	1.296	O					6.08
4.083	0.00	0.69	1.291	O					6.05
4.167	0.00	0.69	1.287	O					6.02
4.250	0.00	0.69	1.282	O					5.99
4.333	0.00	0.69	1.277	O					5.97
4.417	0.00	0.69	1.272	O					5.95
4.500	0.00	0.69	1.267	O					5.93
4.583	0.00	0.69	1.263	O					5.91
4.667	0.00	0.69	1.258	O					5.89
4.750	0.00	0.69	1.253	O					5.87
4.833	0.00	0.69	1.248	O					5.85
4.917	0.00	0.69	1.244	O					5.83

5.000	0.00	0.69	1.239	0					5.81
5.083	0.00	0.69	1.234	0					5.79
5.167	0.00	0.69	1.229	0					5.77
5.250	0.00	0.69	1.224	0					5.75
5.333	0.00	0.69	1.220	0					5.73
5.417	0.00	0.69	1.215	0					5.71
5.500	0.00	0.69	1.210	0					5.69
5.583	0.00	0.69	1.205	0					5.67
5.667	0.00	0.69	1.201	0					5.65
5.750	0.00	0.69	1.196	0					5.63
5.833	0.00	0.69	1.191	0					5.61
5.917	0.00	0.69	1.186	0					5.59
6.000	0.00	0.69	1.182	0					5.57
6.083	0.00	0.69	1.177	0					5.55
6.167	0.00	0.69	1.172	0					5.53
6.250	0.00	0.69	1.167	0					5.51
6.333	0.00	0.69	1.162	0					5.49
6.417	0.00	0.69	1.158	0					5.47
6.500	0.00	0.69	1.153	0					5.45
6.583	0.00	0.69	1.148	0					5.43
6.667	0.00	0.69	1.143	0					5.41
6.750	0.00	0.69	1.139	0					5.39
6.833	0.00	0.69	1.134	0					5.37
6.917	0.00	0.69	1.129	0					5.35
7.000	0.00	0.69	1.124	0					5.33
7.083	0.00	0.69	1.119	0					5.31
7.167	0.00	0.69	1.115	0					5.29
7.250	0.00	0.69	1.110	0					5.27
7.333	0.00	0.69	1.105	0					5.25
7.417	0.00	0.69	1.100	0					5.23
7.500	0.00	0.69	1.096	0					5.21
7.583	0.00	0.69	1.091	0					5.19
7.667	0.00	0.69	1.086	0					5.17
7.750	0.00	0.69	1.081	0					5.15
7.833	0.00	0.69	1.077	0					5.13
7.917	0.00	0.69	1.072	0					5.11
8.000	0.00	0.69	1.067	0					5.09
8.083	0.00	0.69	1.062	0					5.07
8.167	0.00	0.69	1.057	0					5.05
8.250	0.00	0.69	1.053	0					5.03
8.333	0.00	0.69	1.048	0					5.01
8.417	0.00	0.69	1.043	0					4.99
8.500	0.00	0.69	1.038	0					4.97
8.583	0.00	0.69	1.034	0					4.95
8.667	0.00	0.69	1.029	0					4.93
8.750	0.00	0.69	1.024	0					4.92
8.833	0.00	0.69	1.019	0					4.90
8.917	0.00	0.69	1.014	0					4.88
9.000	0.00	0.69	1.010	0					4.86
9.083	0.00	0.69	1.005	0					4.84
9.167	0.00	0.69	1.000	0					4.83
9.250	0.00	0.69	0.995	0					4.81
9.333	0.00	0.69	0.991	0					4.79
9.417	0.00	0.69	0.986	0					4.77
9.500	0.00	0.69	0.981	0					4.75
9.583	0.00	0.69	0.976	0					4.73
9.667	0.00	0.69	0.972	0					4.72
9.750	0.00	0.69	0.967	0					4.70
9.833	0.00	0.69	0.962	0					4.68
9.917	0.00	0.69	0.957	0					4.66
10.000	0.00	0.69	0.952	0					4.64
10.083	0.00	0.69	0.948	0					4.62
10.167	0.00	0.69	0.943	0					4.61
10.250	0.00	0.69	0.938	0					4.59
10.333	0.00	0.69	0.933	0					4.57
10.417	0.00	0.69	0.929	0					4.55

10.500	0.00	0.69	0.924	0					4.53
10.583	0.00	0.69	0.919	0					4.52
10.667	0.00	0.69	0.914	0					4.50
10.750	0.00	0.69	0.909	0					4.48
10.833	0.00	0.69	0.905	0					4.46
10.917	0.00	0.69	0.900	0					4.44
11.000	0.00	0.69	0.895	0					4.42
11.083	0.00	0.69	0.890	0					4.41
11.167	0.00	0.69	0.886	0					4.39
11.250	0.00	0.69	0.881	0					4.37
11.333	0.00	0.69	0.876	0					4.35
11.417	0.00	0.69	0.871	0					4.33
11.500	0.00	0.69	0.867	0					4.32
11.583	0.00	0.69	0.862	0					4.30
11.667	0.00	0.69	0.857	0					4.28
11.750	0.00	0.69	0.852	0					4.26
11.833	0.00	0.69	0.847	0					4.24
11.917	0.00	0.69	0.843	0					4.22
12.000	0.00	0.69	0.838	0					4.21
12.083	0.00	0.69	0.833	0					4.19
12.167	0.00	0.69	0.828	0					4.17
12.250	0.00	0.69	0.824	0					4.15
12.333	0.00	0.69	0.819	0					4.13
12.417	0.00	0.69	0.814	0					4.11
12.500	0.00	0.69	0.809	0					4.10
12.583	0.00	0.69	0.804	0					4.08
12.667	0.00	0.69	0.800	0					4.06
12.750	0.00	0.69	0.795	0					4.04
12.833	0.00	0.69	0.790	0					4.02
12.917	0.00	0.69	0.785	0					4.01
13.000	0.00	0.69	0.781	0					3.99
13.083	0.00	0.69	0.776	0					3.97
13.167	0.00	0.69	0.771	0					3.95
13.250	0.00	0.69	0.766	0					3.93
13.333	0.00	0.69	0.762	0					3.91
13.417	0.00	0.69	0.757	0					3.90
13.500	0.00	0.69	0.752	0					3.88
13.583	0.00	0.69	0.747	0					3.86
13.667	0.00	0.69	0.742	0					3.84
13.750	0.00	0.69	0.738	0					3.82
13.833	0.00	0.69	0.733	0					3.80
13.917	0.00	0.69	0.728	0					3.79
14.000	0.00	0.69	0.723	0					3.77
14.083	0.00	0.69	0.719	0					3.75
14.167	0.00	0.69	0.714	0					3.73
14.250	0.00	0.69	0.709	0					3.71
14.333	0.00	0.69	0.704	0					3.70
14.417	0.00	0.69	0.699	0					3.68
14.500	0.00	0.69	0.695	0					3.66
14.583	0.00	0.69	0.690	0					3.64
14.667	0.00	0.69	0.685	0					3.62
14.750	0.00	0.69	0.680	0					3.60
14.833	0.00	0.69	0.676	0					3.59
14.917	0.00	0.69	0.671	0					3.57
15.000	0.00	0.69	0.666	0					3.55
15.083	0.00	0.69	0.661	0					3.53
15.167	0.00	0.69	0.657	0					3.51
15.250	0.00	0.69	0.652	0					3.50
15.333	0.00	0.69	0.647	0					3.48
15.417	0.00	0.69	0.642	0					3.46
15.500	0.00	0.69	0.637	0					3.44
15.583	0.00	0.69	0.633	0					3.42
15.667	0.00	0.69	0.628	0					3.40
15.750	0.00	0.69	0.623	0					3.39
15.833	0.00	0.69	0.618	0					3.37
15.917	0.00	0.69	0.614	0					3.35

16.000	0.00	0.69	0.609	0					3.33
16.083	0.00	0.69	0.604	0					3.31
16.167	0.00	0.69	0.599	0					3.29
16.250	0.00	0.69	0.594	0					3.28
16.333	0.00	0.69	0.590	0					3.26
16.417	0.00	0.69	0.585	0					3.24
16.500	0.00	0.69	0.580	0					3.22
16.583	0.00	0.69	0.575	0					3.20
16.667	0.00	0.69	0.571	0					3.19
16.750	0.00	0.69	0.566	0					3.17
16.833	0.00	0.69	0.561	0					3.15
16.917	0.00	0.69	0.556	0					3.13
17.000	0.00	0.69	0.552	0					3.11
17.083	0.00	0.69	0.547	0					3.09
17.167	0.00	0.69	0.542	0					3.08
17.250	0.00	0.69	0.537	0					3.06
17.333	0.00	0.69	0.532	0					3.04
17.417	0.00	0.69	0.528	0					3.02
17.500	0.00	0.69	0.523	0					3.00
17.583	0.00	0.69	0.518	0					2.98
17.667	0.00	0.69	0.513	0					2.96
17.750	0.00	0.69	0.509	0					2.94
17.833	0.00	0.69	0.504	0					2.92
17.917	0.00	0.69	0.499	0					2.90
18.000	0.00	0.69	0.494	0					2.88
18.083	0.00	0.69	0.489	0					2.86
18.167	0.00	0.69	0.485	0					2.84
18.250	0.00	0.69	0.480	0					2.82
18.333	0.00	0.69	0.475	0					2.80
18.417	0.00	0.69	0.470	0					2.78
18.500	0.00	0.69	0.466	0					2.76
18.583	0.00	0.69	0.461	0					2.74
18.667	0.00	0.69	0.456	0					2.72
18.750	0.00	0.69	0.451	0					2.70
18.833	0.00	0.69	0.447	0					2.68
18.917	0.00	0.69	0.442	0					2.66
19.000	0.00	0.69	0.437	0					2.64
19.083	0.00	0.69	0.432	0					2.62
19.167	0.00	0.69	0.427	0					2.60
19.250	0.00	0.69	0.423	0					2.58
19.333	0.00	0.69	0.418	0					2.56
19.417	0.00	0.69	0.413	0					2.54
19.500	0.00	0.69	0.408	0					2.52
19.583	0.00	0.69	0.404	0					2.50
19.667	0.00	0.69	0.399	0					2.48
19.750	0.00	0.69	0.394	0					2.46
19.833	0.00	0.69	0.389	0					2.44
19.917	0.00	0.69	0.384	0					2.42
20.000	0.00	0.69	0.380	0					2.40
20.083	0.00	0.69	0.375	0					2.38
20.167	0.00	0.69	0.370	0					2.36
20.250	0.00	0.69	0.365	0					2.34
20.333	0.00	0.69	0.361	0					2.32
20.417	0.00	0.69	0.356	0					2.30
20.500	0.00	0.69	0.351	0					2.28
20.583	0.00	0.69	0.346	0					2.26
20.667	0.00	0.69	0.342	0					2.24
20.750	0.00	0.69	0.337	0					2.22
20.833	0.00	0.69	0.332	0					2.20
20.917	0.00	0.69	0.327	0					2.18
21.000	0.00	0.69	0.322	0					2.16
21.083	0.00	0.69	0.318	0					2.14
21.167	0.00	0.69	0.313	0					2.12
21.250	0.00	0.69	0.308	0					2.10
21.333	0.00	0.69	0.303	0					2.08
21.417	0.00	0.69	0.299	0					2.06

21.500	0.00	0.69	0.294	0					2.04
21.583	0.00	0.69	0.289	0					2.02
21.667	0.00	0.69	0.284	0					2.00
21.750	0.00	0.69	0.279	0					1.96
21.833	0.00	0.69	0.275	0					1.93
21.917	0.00	0.69	0.270	0					1.90
22.000	0.00	0.69	0.265	0					1.87
22.083	0.00	0.69	0.260	0					1.84
22.167	0.00	0.69	0.256	0					1.81
22.250	0.00	0.69	0.251	0					1.78
22.333	0.00	0.69	0.246	0					1.75
22.417	0.00	0.69	0.241	0					1.72
22.500	0.00	0.69	0.237	0					1.69
22.583	0.00	0.69	0.232	0					1.66
22.667	0.00	0.69	0.227	0					1.63
22.750	0.00	0.69	0.222	0					1.60
22.833	0.00	0.69	0.217	0					1.57
22.917	0.00	0.69	0.213	0					1.54
23.000	0.00	0.69	0.208	0					1.51
23.083	0.00	0.69	0.203	0					1.48
23.167	0.00	0.69	0.198	0					1.44
23.250	0.00	0.69	0.194	0					1.41
23.333	0.00	0.69	0.189	0					1.38
23.417	0.00	0.69	0.184	0					1.35
23.500	0.00	0.69	0.179	0					1.32
23.583	0.00	0.69	0.174	0					1.29
23.667	0.00	0.69	0.170	0					1.26
23.750	0.00	0.69	0.165	0					1.23
23.833	0.00	0.69	0.160	0					1.20
23.917	0.00	0.69	0.155	0					1.17
24.000	0.00	0.69	0.151	0					1.14
24.083	0.00	0.69	0.146	0					1.11
24.167	0.00	0.69	0.141	0					1.08
24.250	0.00	0.69	0.136	0					1.05
24.333	0.00	0.69	0.132	0					1.02
24.417	0.00	0.68	0.127	0					0.98
24.500	0.00	0.66	0.122	0					0.95
24.583	0.00	0.63	0.118	0					0.91
24.667	0.00	0.61	0.113	0					0.88
24.750	0.00	0.59	0.109	0					0.85
24.833	0.00	0.57	0.105	0					0.82
24.917	0.00	0.55	0.102	0					0.79
25.000	0.00	0.53	0.098	0					0.76
25.083	0.00	0.51	0.094	0					0.73
25.167	0.00	0.49	0.091	0					0.70
25.250	0.00	0.47	0.088	0					0.68
25.333	0.00	0.45	0.084	0					0.65
25.417	0.00	0.44	0.081	0					0.63
25.500	0.00	0.42	0.078	0					0.61
25.583	0.00	0.41	0.076	0					0.59
25.667	0.00	0.39	0.073	0					0.56
25.750	0.00	0.38	0.070	0					0.54
25.833	0.00	0.36	0.068	0					0.52
25.917	0.00	0.35	0.065	0					0.50
26.000	0.00	0.34	0.063	0					0.49
26.083	0.00	0.32	0.060	0					0.47
26.167	0.00	0.31	0.058	0					0.45
26.250	0.00	0.30	0.056	0					0.44
26.333	0.00	0.29	0.054	0					0.42
26.417	0.00	0.28	0.052	0					0.40
26.500	0.00	0.27	0.050	0					0.39
26.583	0.00	0.26	0.048	0					0.38
26.667	0.00	0.25	0.047	0					0.36
26.750	0.00	0.24	0.045	0					0.35
26.833	0.00	0.23	0.043	0					0.34
26.917	0.00	0.22	0.042	0					0.32

27.000	0.00	0.22	0.040	0					0.31
27.083	0.00	0.21	0.039	0					0.30
27.167	0.00	0.20	0.037	0					0.29
27.250	0.00	0.19	0.036	0					0.28
27.333	0.00	0.19	0.035	0					0.27
27.417	0.00	0.18	0.033	0					0.26
27.500	0.00	0.17	0.032	0					0.25
27.583	0.00	0.17	0.031	0					0.24
27.667	0.00	0.16	0.030	0					0.23
27.750	0.00	0.16	0.029	0					0.22
27.833	0.00	0.15	0.028	0					0.22
27.917	0.00	0.14	0.027	0					0.21
28.000	0.00	0.14	0.026	0					0.20
28.083	0.00	0.13	0.025	0					0.19
28.167	0.00	0.13	0.024	0					0.19
28.250	0.00	0.12	0.023	0					0.18
28.333	0.00	0.12	0.022	0					0.17
28.417	0.00	0.12	0.021	0					0.17
28.500	0.00	0.11	0.021	0					0.16
28.583	0.00	0.11	0.020	0					0.15
28.667	0.00	0.10	0.019	0					0.15
28.750	0.00	0.10	0.019	0					0.14
28.833	0.00	0.10	0.018	0					0.14
28.917	0.00	0.09	0.017	0					0.13
29.000	0.00	0.09	0.017	0					0.13
29.083	0.00	0.09	0.016	0					0.12
29.167	0.00	0.08	0.015	0					0.12
29.250	0.00	0.08	0.015	0					0.11
29.333	0.00	0.08	0.014	0					0.11
29.417	0.00	0.07	0.014	0					0.11
29.500	0.00	0.07	0.013	0					0.10
29.583	0.00	0.07	0.013	0					0.10
29.667	0.00	0.07	0.012	0					0.10
29.750	0.00	0.06	0.012	0					0.09
29.833	0.00	0.06	0.011	0					0.09
29.917	0.00	0.06	0.011	0					0.09
30.000	0.00	0.06	0.011	0					0.08
30.083	0.00	0.06	0.010	0					0.08
30.167	0.00	0.05	0.010	0					0.08
30.250	0.00	0.05	0.010	0					0.07
30.333	0.00	0.05	0.009	0					0.07
30.417	0.00	0.05	0.009	0					0.07
30.500	0.00	0.05	0.009	0					0.07
30.583	0.00	0.04	0.008	0					0.06
30.667	0.00	0.04	0.008	0					0.06
30.750	0.00	0.04	0.008	0					0.06
30.833	0.00	0.04	0.007	0					0.06
30.917	0.00	0.04	0.007	0					0.05
31.000	0.00	0.04	0.007	0					0.05
31.083	0.00	0.04	0.007	0					0.05
31.167	0.00	0.03	0.006	0					0.05
31.250	0.00	0.03	0.006	0					0.05
31.333	0.00	0.03	0.006	0					0.05
31.417	0.00	0.03	0.006	0					0.04
31.500	0.00	0.03	0.005	0					0.04
31.583	0.00	0.03	0.005	0					0.04
31.667	0.00	0.03	0.005	0					0.04
31.750	0.00	0.03	0.005	0					0.04
31.833	0.00	0.03	0.005	0					0.04
31.917	0.00	0.02	0.005	0					0.04
32.000	0.00	0.02	0.004	0					0.03
32.083	0.00	0.02	0.004	0					0.03
32.167	0.00	0.02	0.004	0					0.03
32.250	0.00	0.02	0.004	0					0.03
32.333	0.00	0.02	0.004	0					0.03
32.417	0.00	0.02	0.004	0					0.03

32.500	0.00	0.02	0.004	o					0.03
32.583	0.00	0.02	0.003	o					0.03
32.667	0.00	0.02	0.003	o					0.03
32.750	0.00	0.02	0.003	o					0.02
32.833	0.00	0.02	0.003	o					0.02
32.917	0.00	0.02	0.003	o					0.02
33.000	0.00	0.02	0.003	o					0.02
33.083	0.00	0.01	0.003	o					0.02
33.167	0.00	0.01	0.003	o					0.02
33.250	0.00	0.01	0.003	o					0.02
33.333	0.00	0.01	0.002	o					0.02
33.417	0.00	0.01	0.002	o					0.02
33.500	0.00	0.01	0.002	o					0.02
33.583	0.00	0.01	0.002	o					0.02
33.667	0.00	0.01	0.002	o					0.02
33.750	0.00	0.01	0.002	o					0.02
33.833	0.00	0.01	0.002	o					0.02
33.917	0.00	0.01	0.002	o					0.01
34.000	0.00	0.01	0.002	o					0.01
34.083	0.00	0.01	0.002	o					0.01
34.167	0.00	0.01	0.002	o					0.01
34.250	0.00	0.01	0.002	o					0.01
34.333	0.00	0.01	0.002	o					0.01
34.417	0.00	0.01	0.001	o					0.01
34.500	0.00	0.01	0.001	o					0.01
34.583	0.00	0.01	0.001	o					0.01
34.667	0.00	0.01	0.001	o					0.01
34.750	0.00	0.01	0.001	o					0.01
34.833	0.00	0.01	0.001	o					0.01
34.917	0.00	0.01	0.001	o					0.01
35.000	0.00	0.01	0.001	o					0.01
35.083	0.00	0.01	0.001	o					0.01
35.167	0.00	0.01	0.001	o					0.01
35.250	0.00	0.01	0.001	o					0.01
35.333	0.00	0.01	0.001	o					0.01
35.417	0.00	0.01	0.001	o					0.01
35.500	0.00	0.00	0.001	o					0.01
35.583	0.00	0.00	0.001	o					0.01
35.667	0.00	0.00	0.001	o					0.01
35.750	0.00	0.00	0.001	o					0.01
35.833	0.00	0.00	0.001	o					0.01
35.917	0.00	0.00	0.001	o					0.01
36.000	0.00	0.00	0.001	o					0.01
36.083	0.00	0.00	0.001	o					0.01
36.167	0.00	0.00	0.001	o					0.01
36.250	0.00	0.00	0.001	o					0.01
36.333	0.00	0.00	0.001	o					0.00
36.417	0.00	0.00	0.001	o					0.00
36.500	0.00	0.00	0.001	o					0.00
36.583	0.00	0.00	0.001	o					0.00
36.667	0.00	0.00	0.001	o					0.00
36.750	0.00	0.00	0.001	o					0.00
36.833	0.00	0.00	0.001	o					0.00
36.917	0.00	0.00	0.000	o					0.00
37.000	0.00	0.00	0.000	o					0.00
37.083	0.00	0.00	0.000	o					0.00
37.167	0.00	0.00	0.000	o					0.00
37.250	0.00	0.00	0.000	o					0.00
37.333	0.00	0.00	0.000	o					0.00
37.417	0.00	0.00	0.000	o					0.00
37.500	0.00	0.00	0.000	o					0.00
37.583	0.00	0.00	0.000	o					0.00
37.667	0.00	0.00	0.000	o					0.00
37.750	0.00	0.00	0.000	o					0.00
37.833	0.00	0.00	0.000	o					0.00
37.917	0.00	0.00	0.000	o					0.00

38.000	0.00	0.00	0.000	O					0.00
38.083	0.00	0.00	0.000	O					0.00
38.167	0.00	0.00	0.000	O					0.00
38.250	0.00	0.00	0.000	O					0.00
38.333	0.00	0.00	0.000	O					0.00
38.417	0.00	0.00	0.000	O					0.00
38.500	0.00	0.00	0.000	O					0.00
38.583	0.00	0.00	0.000	O					0.00
38.667	0.00	0.00	0.000	O					0.00
38.750	0.00	0.00	0.000	O					0.00
38.833	0.00	0.00	0.000	O					0.00
38.917	0.00	0.00	0.000	O					0.00
39.000	0.00	0.00	0.000	O					0.00
39.083	0.00	0.00	0.000	O					0.00
39.167	0.00	0.00	0.000	O					0.00

*****HYDROGRAPH DATA*****

Number of intervals = 470
Time interval = 5.0 (Min.)
Maximum/Peak flow rate = 46.966 (CFS)
Total volume = 2.169 (Ac.Ft)

Status of hydrographs being held in storage

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

FLOOD HYDROGRAPH ROUTING PROGRAM
 Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2018
 Study date: 09/09/21

RAMONA - WEBSTER
 EAST SIDE INDUSTRIAL - AREA 3
 100 YR - 3 HR
 1391RTE3

Program License Serial Number 6490

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

From study/file name: 1391PRUH33100.rte
 *****HYDROGRAPH DATA*****
 Number of intervals = 39
 Time interval = 5.0 (Min.)
 Maximum/Peak flow rate = 30.353 (CFS)
 Total volume = 2.581 (Ac.Ft)
 Status of hydrographs being held in storage

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

+++++
 Process from Point/Station 1.000 to Point/Station 2.000
 **** RETARDING BASIN ROUTING ****

User entry of depth-outflow-storage data

Total number of inflow hydrograph intervals = 39
 Hydrograph time unit = 5.000 (Min.)
 Initial depth in storage basin = 0.00 (Ft.)

Initial basin depth = 0.00 (Ft.)
 Initial basin storage = 0.00 (Ac.Ft)
 Initial basin outflow = 0.00 (CFS)

Depth vs. Storage and Depth vs. Discharge data:

Basin Depth (Ft.)	Storage (Ac.Ft)	Outflow (CFS)	(S-O*dt/2) (Ac.Ft)	(S+O*dt/2) (Ac.Ft)
0.000	0.000	0.000	0.000	0.000
1.000	0.129	0.693	0.127	0.131
2.000	0.285	0.693	0.283	0.287
3.000	0.522	0.693	0.520	0.524
4.000	0.784	0.693	0.782	0.786
5.000	1.046	0.693	1.044	1.048
6.000	1.283	0.693	1.281	1.285
7.000	1.440	0.693	1.438	1.442
7.500	1.504	0.693	1.502	1.506

8.000 1.505 60.000 1.298 1.712

 Hydrograph Detention Basin Routing

Graph values: 'I'= unit inflow; 'O'=outflow at time shown

Time (Hours)	Inflow (CFS)	Outflow (CFS)	Storage (Ac.Ft)						Depth (Ft.)
			.0	7.6	15.18	22.76	30.35		
0.083	2.01	0.04	0.007	O I				0.05	
0.167	3.98	0.14	0.027	O I				0.21	
0.250	4.06	0.28	0.053	O I				0.41	
0.333	4.57	0.43	0.080	O I				0.62	
0.417	5.11	0.59	0.110	O I				0.85	
0.500	5.67	0.69	0.143	O I				1.09	
0.583	5.72	0.69	0.177	O I				1.31	
0.667	5.82	0.69	0.212	O I				1.53	
0.750	6.23	0.69	0.249	O I				1.77	
0.833	5.81	0.69	0.286	O I				2.00	
0.917	5.55	0.69	0.320	O I				2.15	
1.000	5.92	0.69	0.355	O I				2.29	
1.083	6.83	0.69	0.394	O I				2.46	
1.167	7.51	0.69	0.438	O I				2.65	
1.250	7.66	0.69	0.486	O I				2.85	
1.333	7.41	0.69	0.533	O I				3.04	
1.417	8.16	0.69	0.582	O I				3.23	
1.500	9.32	0.69	0.637	O I				3.44	
1.583	9.11	0.69	0.696	O I				3.66	
1.667	9.26	0.69	0.755	O I				3.89	
1.750	10.85	0.69	0.819	O I	I			4.13	
1.833	11.64	0.69	0.892	O I	I			4.41	
1.917	11.17	0.69	0.966	O I	I			4.69	
2.000	11.02	0.69	1.037	O I	I			4.97	
2.083	11.29	0.69	1.109	O I	I			5.27	
2.167	13.55	0.69	1.190	O I	I			5.61	
2.250	17.14	0.69	1.291	O I	I	I		6.05	
2.333	16.21	0.69	1.401	O I	I	I		6.75	
2.417	20.16	5.74	1.504	O I	I	I		7.54	
2.500	26.78	41.03	1.505	I	I	I	O	7.84	
2.583	30.35	16.22	1.504	I	O	I	I	7.63	
2.667	28.45	42.45	1.505	I	I	I	O	7.85	
2.750	17.36	3.55	1.504	O I	I	I	I	7.52	
2.833	9.24	22.96	1.504	I I	I	O	I	7.69	
2.917	7.10	0.69	1.479	O I	I	I	I	7.31	
3.000	4.49	3.69	1.504	O I	I	I	I	7.53	
3.083	1.72	2.53	1.504	O I	I	I	I	7.52	
3.167	0.45	0.69	1.500	O I	I	I	I	7.47	
3.250	0.09	0.69	1.497	O I	I	I	I	7.45	
3.333	0.00	0.69	1.493	O I	I	I	I	7.41	
3.417	0.00	0.69	1.488	O I	I	I	I	7.38	
3.500	0.00	0.69	1.483	O I	I	I	I	7.34	
3.583	0.00	0.69	1.479	O I	I	I	I	7.30	
3.667	0.00	0.69	1.474	O I	I	I	I	7.26	
3.750	0.00	0.69	1.469	O I	I	I	I	7.23	
3.833	0.00	0.69	1.464	O I	I	I	I	7.19	
3.917	0.00	0.69	1.460	O I	I	I	I	7.15	
4.000	0.00	0.69	1.455	O I	I	I	I	7.12	
4.083	0.00	0.69	1.450	O I	I	I	I	7.08	
4.167	0.00	0.69	1.445	O I	I	I	I	7.04	
4.250	0.00	0.69	1.440	O I	I	I	I	7.00	
4.333	0.00	0.69	1.436	O I	I	I	I	6.97	
4.417	0.00	0.69	1.431	O I	I	I	I	6.94	
4.500	0.00	0.69	1.426	O I	I	I	I	6.91	
4.583	0.00	0.69	1.421	O I	I	I	I	6.88	
4.667	0.00	0.69	1.417	O I	I	I	I	6.85	
4.750	0.00	0.69	1.412	O I	I	I	I	6.82	

4.833	0.00	0.69	1.407	0					6.79
4.917	0.00	0.69	1.402	0					6.76
5.000	0.00	0.69	1.398	0					6.73
5.083	0.00	0.69	1.393	0					6.70
5.167	0.00	0.69	1.388	0					6.67
5.250	0.00	0.69	1.383	0					6.64
5.333	0.00	0.69	1.378	0					6.61
5.417	0.00	0.69	1.374	0					6.58
5.500	0.00	0.69	1.369	0					6.55
5.583	0.00	0.69	1.364	0					6.52
5.667	0.00	0.69	1.359	0					6.49
5.750	0.00	0.69	1.355	0					6.46
5.833	0.00	0.69	1.350	0					6.43
5.917	0.00	0.69	1.345	0					6.40
6.000	0.00	0.69	1.340	0					6.36
6.083	0.00	0.69	1.335	0					6.33
6.167	0.00	0.69	1.331	0					6.30
6.250	0.00	0.69	1.326	0					6.27
6.333	0.00	0.69	1.321	0					6.24
6.417	0.00	0.69	1.316	0					6.21
6.500	0.00	0.69	1.312	0					6.18
6.583	0.00	0.69	1.307	0					6.15
6.667	0.00	0.69	1.302	0					6.12
6.750	0.00	0.69	1.297	0					6.09
6.833	0.00	0.69	1.293	0					6.06
6.917	0.00	0.69	1.288	0					6.03
7.000	0.00	0.69	1.283	0					6.00
7.083	0.00	0.69	1.278	0					5.98
7.167	0.00	0.69	1.273	0					5.96
7.250	0.00	0.69	1.269	0					5.94
7.333	0.00	0.69	1.264	0					5.92
7.417	0.00	0.69	1.259	0					5.90
7.500	0.00	0.69	1.254	0					5.88
7.583	0.00	0.69	1.250	0					5.86
7.667	0.00	0.69	1.245	0					5.84
7.750	0.00	0.69	1.240	0					5.82
7.833	0.00	0.69	1.235	0					5.80
7.917	0.00	0.69	1.230	0					5.78
8.000	0.00	0.69	1.226	0					5.76
8.083	0.00	0.69	1.221	0					5.74
8.167	0.00	0.69	1.216	0					5.72
8.250	0.00	0.69	1.211	0					5.70
8.333	0.00	0.69	1.207	0					5.68
8.417	0.00	0.69	1.202	0					5.66
8.500	0.00	0.69	1.197	0					5.64
8.583	0.00	0.69	1.192	0					5.62
8.667	0.00	0.69	1.188	0					5.60
8.750	0.00	0.69	1.183	0					5.58
8.833	0.00	0.69	1.178	0					5.56
8.917	0.00	0.69	1.173	0					5.54
9.000	0.00	0.69	1.168	0					5.52
9.083	0.00	0.69	1.164	0					5.50
9.167	0.00	0.69	1.159	0					5.48
9.250	0.00	0.69	1.154	0					5.46
9.333	0.00	0.69	1.149	0					5.44
9.417	0.00	0.69	1.145	0					5.42
9.500	0.00	0.69	1.140	0					5.40
9.583	0.00	0.69	1.135	0					5.38
9.667	0.00	0.69	1.130	0					5.36
9.750	0.00	0.69	1.125	0					5.34
9.833	0.00	0.69	1.121	0					5.32
9.917	0.00	0.69	1.116	0					5.30
10.000	0.00	0.69	1.111	0					5.28
10.083	0.00	0.69	1.106	0					5.25
10.167	0.00	0.69	1.102	0					5.23
10.250	0.00	0.69	1.097	0					5.21

10.333	0.00	0.69	1.092	O					5.19
10.417	0.00	0.69	1.087	O					5.17
10.500	0.00	0.69	1.083	O					5.15
10.583	0.00	0.69	1.078	O					5.13
10.667	0.00	0.69	1.073	O					5.11
10.750	0.00	0.69	1.068	O					5.09
10.833	0.00	0.69	1.063	O					5.07
10.917	0.00	0.69	1.059	O					5.05
11.000	0.00	0.69	1.054	O					5.03
11.083	0.00	0.69	1.049	O					5.01
11.167	0.00	0.69	1.044	O					4.99
11.250	0.00	0.69	1.040	O					4.98
11.333	0.00	0.69	1.035	O					4.96
11.417	0.00	0.69	1.030	O					4.94
11.500	0.00	0.69	1.025	O					4.92
11.583	0.00	0.69	1.020	O					4.90
11.667	0.00	0.69	1.016	O					4.88
11.750	0.00	0.69	1.011	O					4.87
11.833	0.00	0.69	1.006	O					4.85
11.917	0.00	0.69	1.001	O					4.83
12.000	0.00	0.69	0.997	O					4.81
12.083	0.00	0.69	0.992	O					4.79
12.167	0.00	0.69	0.987	O					4.78
12.250	0.00	0.69	0.982	O					4.76
12.333	0.00	0.69	0.978	O					4.74
12.417	0.00	0.69	0.973	O					4.72
12.500	0.00	0.69	0.968	O					4.70
12.583	0.00	0.69	0.963	O					4.68
12.667	0.00	0.69	0.958	O					4.67
12.750	0.00	0.69	0.954	O					4.65
12.833	0.00	0.69	0.949	O					4.63
12.917	0.00	0.69	0.944	O					4.61
13.000	0.00	0.69	0.939	O					4.59
13.083	0.00	0.69	0.935	O					4.57
13.167	0.00	0.69	0.930	O					4.56
13.250	0.00	0.69	0.925	O					4.54
13.333	0.00	0.69	0.920	O					4.52
13.417	0.00	0.69	0.915	O					4.50
13.500	0.00	0.69	0.911	O					4.48
13.583	0.00	0.69	0.906	O					4.47
13.667	0.00	0.69	0.901	O					4.45
13.750	0.00	0.69	0.896	O					4.43
13.833	0.00	0.69	0.892	O					4.41
13.917	0.00	0.69	0.887	O					4.39
14.000	0.00	0.69	0.882	O					4.37
14.083	0.00	0.69	0.877	O					4.36
14.167	0.00	0.69	0.873	O					4.34
14.250	0.00	0.69	0.868	O					4.32
14.333	0.00	0.69	0.863	O					4.30
14.417	0.00	0.69	0.858	O					4.28
14.500	0.00	0.69	0.853	O					4.27
14.583	0.00	0.69	0.849	O					4.25
14.667	0.00	0.69	0.844	O					4.23
14.750	0.00	0.69	0.839	O					4.21
14.833	0.00	0.69	0.834	O					4.19
14.917	0.00	0.69	0.830	O					4.17
15.000	0.00	0.69	0.825	O					4.16
15.083	0.00	0.69	0.820	O					4.14
15.167	0.00	0.69	0.815	O					4.12
15.250	0.00	0.69	0.810	O					4.10
15.333	0.00	0.69	0.806	O					4.08
15.417	0.00	0.69	0.801	O					4.06
15.500	0.00	0.69	0.796	O					4.05
15.583	0.00	0.69	0.791	O					4.03
15.667	0.00	0.69	0.787	O					4.01
15.750	0.00	0.69	0.782	O					3.99

15.833	0.00	0.69	0.777	0					3.97
15.917	0.00	0.69	0.772	0					3.96
16.000	0.00	0.69	0.768	0					3.94
16.083	0.00	0.69	0.763	0					3.92
16.167	0.00	0.69	0.758	0					3.90
16.250	0.00	0.69	0.753	0					3.88
16.333	0.00	0.69	0.748	0					3.86
16.417	0.00	0.69	0.744	0					3.85
16.500	0.00	0.69	0.739	0					3.83
16.583	0.00	0.69	0.734	0					3.81
16.667	0.00	0.69	0.729	0					3.79
16.750	0.00	0.69	0.725	0					3.77
16.833	0.00	0.69	0.720	0					3.76
16.917	0.00	0.69	0.715	0					3.74
17.000	0.00	0.69	0.710	0					3.72
17.083	0.00	0.69	0.705	0					3.70
17.167	0.00	0.69	0.701	0					3.68
17.250	0.00	0.69	0.696	0					3.66
17.333	0.00	0.69	0.691	0					3.65
17.417	0.00	0.69	0.686	0					3.63
17.500	0.00	0.69	0.682	0					3.61
17.583	0.00	0.69	0.677	0					3.59
17.667	0.00	0.69	0.672	0					3.57
17.750	0.00	0.69	0.667	0					3.55
17.833	0.00	0.69	0.663	0					3.54
17.917	0.00	0.69	0.658	0					3.52
18.000	0.00	0.69	0.653	0					3.50
18.083	0.00	0.69	0.648	0					3.48
18.167	0.00	0.69	0.643	0					3.46
18.250	0.00	0.69	0.639	0					3.45
18.333	0.00	0.69	0.634	0					3.43
18.417	0.00	0.69	0.629	0					3.41
18.500	0.00	0.69	0.624	0					3.39
18.583	0.00	0.69	0.620	0					3.37
18.667	0.00	0.69	0.615	0					3.35
18.750	0.00	0.69	0.610	0					3.34
18.833	0.00	0.69	0.605	0					3.32
18.917	0.00	0.69	0.600	0					3.30
19.000	0.00	0.69	0.596	0					3.28
19.083	0.00	0.69	0.591	0					3.26
19.167	0.00	0.69	0.586	0					3.24
19.250	0.00	0.69	0.581	0					3.23
19.333	0.00	0.69	0.577	0					3.21
19.417	0.00	0.69	0.572	0					3.19
19.500	0.00	0.69	0.567	0					3.17
19.583	0.00	0.69	0.562	0					3.15
19.667	0.00	0.69	0.558	0					3.14
19.750	0.00	0.69	0.553	0					3.12
19.833	0.00	0.69	0.548	0					3.10
19.917	0.00	0.69	0.543	0					3.08
20.000	0.00	0.69	0.538	0					3.06
20.083	0.00	0.69	0.534	0					3.04
20.167	0.00	0.69	0.529	0					3.03
20.250	0.00	0.69	0.524	0					3.01
20.333	0.00	0.69	0.519	0					2.99
20.417	0.00	0.69	0.515	0					2.97
20.500	0.00	0.69	0.510	0					2.95
20.583	0.00	0.69	0.505	0					2.93
20.667	0.00	0.69	0.500	0					2.91
20.750	0.00	0.69	0.495	0					2.89
20.833	0.00	0.69	0.491	0					2.87
20.917	0.00	0.69	0.486	0					2.85
21.000	0.00	0.69	0.481	0					2.83
21.083	0.00	0.69	0.476	0					2.81
21.167	0.00	0.69	0.472	0					2.79
21.250	0.00	0.69	0.467	0					2.77

21.333	0.00	0.69	0.462	0					2.75
21.417	0.00	0.69	0.457	0					2.73
21.500	0.00	0.69	0.453	0					2.71
21.583	0.00	0.69	0.448	0					2.69
21.667	0.00	0.69	0.443	0					2.67
21.750	0.00	0.69	0.438	0					2.65
21.833	0.00	0.69	0.433	0					2.63
21.917	0.00	0.69	0.429	0					2.61
22.000	0.00	0.69	0.424	0					2.59
22.083	0.00	0.69	0.419	0					2.57
22.167	0.00	0.69	0.414	0					2.55
22.250	0.00	0.69	0.410	0					2.53
22.333	0.00	0.69	0.405	0					2.51
22.417	0.00	0.69	0.400	0					2.49
22.500	0.00	0.69	0.395	0					2.47
22.583	0.00	0.69	0.390	0					2.45
22.667	0.00	0.69	0.386	0					2.42
22.750	0.00	0.69	0.381	0					2.40
22.833	0.00	0.69	0.376	0					2.38
22.917	0.00	0.69	0.371	0					2.36
23.000	0.00	0.69	0.367	0					2.34
23.083	0.00	0.69	0.362	0					2.32
23.167	0.00	0.69	0.357	0					2.30
23.250	0.00	0.69	0.352	0					2.28
23.333	0.00	0.69	0.348	0					2.26
23.417	0.00	0.69	0.343	0					2.24
23.500	0.00	0.69	0.338	0					2.22
23.583	0.00	0.69	0.333	0					2.20
23.667	0.00	0.69	0.328	0					2.18
23.750	0.00	0.69	0.324	0					2.16
23.833	0.00	0.69	0.319	0					2.14
23.917	0.00	0.69	0.314	0					2.12
24.000	0.00	0.69	0.309	0					2.10
24.083	0.00	0.69	0.305	0					2.08
24.167	0.00	0.69	0.300	0					2.06
24.250	0.00	0.69	0.295	0					2.04
24.333	0.00	0.69	0.290	0					2.02
24.417	0.00	0.69	0.285	0					2.00
24.500	0.00	0.69	0.281	0					1.97
24.583	0.00	0.69	0.276	0					1.94
24.667	0.00	0.69	0.271	0					1.91
24.750	0.00	0.69	0.266	0					1.88
24.833	0.00	0.69	0.262	0					1.85
24.917	0.00	0.69	0.257	0					1.82
25.000	0.00	0.69	0.252	0					1.79
25.083	0.00	0.69	0.247	0					1.76
25.167	0.00	0.69	0.243	0					1.73
25.250	0.00	0.69	0.238	0					1.70
25.333	0.00	0.69	0.233	0					1.67
25.417	0.00	0.69	0.228	0					1.64
25.500	0.00	0.69	0.223	0					1.61
25.583	0.00	0.69	0.219	0					1.57
25.667	0.00	0.69	0.214	0					1.54
25.750	0.00	0.69	0.209	0					1.51
25.833	0.00	0.69	0.204	0					1.48
25.917	0.00	0.69	0.200	0					1.45
26.000	0.00	0.69	0.195	0					1.42
26.083	0.00	0.69	0.190	0					1.39
26.167	0.00	0.69	0.185	0					1.36
26.250	0.00	0.69	0.180	0					1.33
26.333	0.00	0.69	0.176	0					1.30
26.417	0.00	0.69	0.171	0					1.27
26.500	0.00	0.69	0.166	0					1.24
26.583	0.00	0.69	0.161	0					1.21
26.667	0.00	0.69	0.157	0					1.18
26.750	0.00	0.69	0.152	0					1.15

26.833	0.00	0.69	0.147	0					1.12
26.917	0.00	0.69	0.142	0					1.09
27.000	0.00	0.69	0.138	0					1.05
27.083	0.00	0.69	0.133	0					1.02
27.167	0.00	0.69	0.128	0					0.99
27.250	0.00	0.66	0.123	0					0.96
27.333	0.00	0.64	0.119	0					0.92
27.417	0.00	0.62	0.115	0					0.89
27.500	0.00	0.59	0.110	0					0.86
27.583	0.00	0.57	0.106	0					0.82
27.667	0.00	0.55	0.103	0					0.79
27.750	0.00	0.53	0.099	0					0.77
27.833	0.00	0.51	0.095	0					0.74
27.917	0.00	0.49	0.092	0					0.71
28.000	0.00	0.48	0.088	0					0.69
28.083	0.00	0.46	0.085	0					0.66
28.167	0.00	0.44	0.082	0					0.64
28.250	0.00	0.43	0.079	0					0.61
28.333	0.00	0.41	0.076	0					0.59
28.417	0.00	0.39	0.073	0					0.57
28.500	0.00	0.38	0.071	0					0.55
28.583	0.00	0.37	0.068	0					0.53
28.667	0.00	0.35	0.066	0					0.51
28.750	0.00	0.34	0.063	0					0.49
28.833	0.00	0.33	0.061	0					0.47
28.917	0.00	0.32	0.059	0					0.46
29.000	0.00	0.30	0.057	0					0.44
29.083	0.00	0.29	0.055	0					0.42
29.167	0.00	0.28	0.053	0					0.41
29.250	0.00	0.27	0.051	0					0.39
29.333	0.00	0.26	0.049	0					0.38
29.417	0.00	0.25	0.047	0					0.37
29.500	0.00	0.24	0.045	0					0.35
29.583	0.00	0.24	0.044	0					0.34
29.667	0.00	0.23	0.042	0					0.33
29.750	0.00	0.22	0.041	0					0.32
29.833	0.00	0.21	0.039	0					0.30
29.917	0.00	0.20	0.038	0					0.29
30.000	0.00	0.20	0.036	0					0.28
30.083	0.00	0.19	0.035	0					0.27
30.167	0.00	0.18	0.034	0					0.26
30.250	0.00	0.17	0.033	0					0.25
30.333	0.00	0.17	0.031	0					0.24
30.417	0.00	0.16	0.030	0					0.23
30.500	0.00	0.16	0.029	0					0.23
30.583	0.00	0.15	0.028	0					0.22
30.667	0.00	0.15	0.027	0					0.21
30.750	0.00	0.14	0.026	0					0.20
30.833	0.00	0.13	0.025	0					0.19
30.917	0.00	0.13	0.024	0					0.19
31.000	0.00	0.13	0.023	0					0.18
31.083	0.00	0.12	0.022	0					0.17
31.167	0.00	0.12	0.022	0					0.17
31.250	0.00	0.11	0.021	0					0.16
31.333	0.00	0.11	0.020	0					0.16
31.417	0.00	0.10	0.019	0					0.15
31.500	0.00	0.10	0.019	0					0.14
31.583	0.00	0.10	0.018	0					0.14
31.667	0.00	0.09	0.017	0					0.13
31.750	0.00	0.09	0.017	0					0.13
31.833	0.00	0.09	0.016	0					0.12
31.917	0.00	0.08	0.016	0					0.12
32.000	0.00	0.08	0.015	0					0.12
32.083	0.00	0.08	0.014	0					0.11
32.167	0.00	0.07	0.014	0					0.11
32.250	0.00	0.07	0.013	0					0.10

32.333	0.00	0.07	0.013	0					0.10
32.417	0.00	0.07	0.012	0					0.10
32.500	0.00	0.06	0.012	0					0.09
32.583	0.00	0.06	0.012	0					0.09
32.667	0.00	0.06	0.011	0					0.09
32.750	0.00	0.06	0.011	0					0.08
32.833	0.00	0.06	0.010	0					0.08
32.917	0.00	0.05	0.010	0					0.08
33.000	0.00	0.05	0.010	0					0.07
33.083	0.00	0.05	0.009	0					0.07
33.167	0.00	0.05	0.009	0					0.07
33.250	0.00	0.05	0.009	0					0.07
33.333	0.00	0.04	0.008	0					0.06
33.417	0.00	0.04	0.008	0					0.06
33.500	0.00	0.04	0.008	0					0.06
33.583	0.00	0.04	0.007	0					0.06
33.667	0.00	0.04	0.007	0					0.06
33.750	0.00	0.04	0.007	0					0.05
33.833	0.00	0.04	0.007	0					0.05
33.917	0.00	0.03	0.006	0					0.05
34.000	0.00	0.03	0.006	0					0.05
34.083	0.00	0.03	0.006	0					0.05
34.167	0.00	0.03	0.006	0					0.04
34.250	0.00	0.03	0.006	0					0.04
34.333	0.00	0.03	0.005	0					0.04
34.417	0.00	0.03	0.005	0					0.04
34.500	0.00	0.03	0.005	0					0.04
34.583	0.00	0.03	0.005	0					0.04
34.667	0.00	0.02	0.005	0					0.04
34.750	0.00	0.02	0.004	0					0.03
34.833	0.00	0.02	0.004	0					0.03
34.917	0.00	0.02	0.004	0					0.03
35.000	0.00	0.02	0.004	0					0.03
35.083	0.00	0.02	0.004	0					0.03
35.167	0.00	0.02	0.004	0					0.03
35.250	0.00	0.02	0.004	0					0.03
35.333	0.00	0.02	0.003	0					0.03
35.417	0.00	0.02	0.003	0					0.03
35.500	0.00	0.02	0.003	0					0.02
35.583	0.00	0.02	0.003	0					0.02
35.667	0.00	0.02	0.003	0					0.02
35.750	0.00	0.02	0.003	0					0.02
35.833	0.00	0.01	0.003	0					0.02
35.917	0.00	0.01	0.003	0					0.02
36.000	0.00	0.01	0.003	0					0.02
36.083	0.00	0.01	0.002	0					0.02
36.167	0.00	0.01	0.002	0					0.02
36.250	0.00	0.01	0.002	0					0.02
36.333	0.00	0.01	0.002	0					0.02
36.417	0.00	0.01	0.002	0					0.02
36.500	0.00	0.01	0.002	0					0.02
36.583	0.00	0.01	0.002	0					0.02
36.667	0.00	0.01	0.002	0					0.01
36.750	0.00	0.01	0.002	0					0.01
36.833	0.00	0.01	0.002	0					0.01
36.917	0.00	0.01	0.002	0					0.01
37.000	0.00	0.01	0.002	0					0.01
37.083	0.00	0.01	0.002	0					0.01
37.167	0.00	0.01	0.002	0					0.01
37.250	0.00	0.01	0.001	0					0.01
37.333	0.00	0.01	0.001	0					0.01
37.417	0.00	0.01	0.001	0					0.01
37.500	0.00	0.01	0.001	0					0.01
37.583	0.00	0.01	0.001	0					0.01
37.667	0.00	0.01	0.001	0					0.01
37.750	0.00	0.01	0.001	0					0.01

37.833	0.00	0.01	0.001	0					0.01
37.917	0.00	0.01	0.001	0					0.01
38.000	0.00	0.01	0.001	0					0.01
38.083	0.00	0.01	0.001	0					0.01
38.167	0.00	0.01	0.001	0					0.01
38.250	0.00	0.01	0.001	0					0.01
38.333	0.00	0.00	0.001	0					0.01
38.417	0.00	0.00	0.001	0					0.01
38.500	0.00	0.00	0.001	0					0.01
38.583	0.00	0.00	0.001	0					0.01
38.667	0.00	0.00	0.001	0					0.01
38.750	0.00	0.00	0.001	0					0.01
38.833	0.00	0.00	0.001	0					0.01
38.917	0.00	0.00	0.001	0					0.01
39.000	0.00	0.00	0.001	0					0.01
39.083	0.00	0.00	0.001	0					0.00
39.167	0.00	0.00	0.001	0					0.00
39.250	0.00	0.00	0.001	0					0.00
39.333	0.00	0.00	0.001	0					0.00
39.417	0.00	0.00	0.001	0					0.00
39.500	0.00	0.00	0.001	0					0.00
39.583	0.00	0.00	0.001	0					0.00
39.667	0.00	0.00	0.000	0					0.00
39.750	0.00	0.00	0.000	0					0.00
39.833	0.00	0.00	0.000	0					0.00
39.917	0.00	0.00	0.000	0					0.00
40.000	0.00	0.00	0.000	0					0.00
40.083	0.00	0.00	0.000	0					0.00
40.167	0.00	0.00	0.000	0					0.00
40.250	0.00	0.00	0.000	0					0.00
40.333	0.00	0.00	0.000	0					0.00
40.417	0.00	0.00	0.000	0					0.00
40.500	0.00	0.00	0.000	0					0.00
40.583	0.00	0.00	0.000	0					0.00
40.667	0.00	0.00	0.000	0					0.00
40.750	0.00	0.00	0.000	0					0.00
40.833	0.00	0.00	0.000	0					0.00
40.917	0.00	0.00	0.000	0					0.00
41.000	0.00	0.00	0.000	0					0.00
41.083	0.00	0.00	0.000	0					0.00
41.167	0.00	0.00	0.000	0					0.00
41.250	0.00	0.00	0.000	0					0.00
41.333	0.00	0.00	0.000	0					0.00
41.417	0.00	0.00	0.000	0					0.00
41.500	0.00	0.00	0.000	0					0.00
41.583	0.00	0.00	0.000	0					0.00
41.667	0.00	0.00	0.000	0					0.00
41.750	0.00	0.00	0.000	0					0.00
41.833	0.00	0.00	0.000	0					0.00
41.917	0.00	0.00	0.000	0					0.00

*****HYDROGRAPH DATA*****

Number of intervals = 503
Time interval = 5.0 (Min.)
Maximum/Peak flow rate = 42.453 (CFS)
Total volume = 2.581 (Ac.Ft)

Status of hydrographs being held in storage

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

FLOOD HYDROGRAPH ROUTING PROGRAM
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Study date: 09/09/21

RAMONA - WEBSTER
EAST SIDE INDUSTRIAL - AREA 3
100 YR - 6 HR
1391RTE3

Program License Serial Number 6490

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

From study/file name: 1391PRUH36100.rte
*****HYDROGRAPH DATA*****
Number of intervals = 75
Time interval = 5.0 (Min.)
Maximum/Peak flow rate = 27.140 (CFS)
Total volume = 3.399 (Ac.Ft)
Status of hydrographs being held in storage
Stream 1 Stream 2 Stream 3 Stream 4 Stream 5
Peak (CFS) 0.000 0.000 0.000 0.000 0.000
Vol (Ac.Ft) 0.000 0.000 0.000 0.000 0.000

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Process from Point/Station 1.000 to Point/Station 2.000
**** RETARDING BASIN ROUTING ****

User entry of depth-outflow-storage data

Total number of inflow hydrograph intervals = 75
Hydrograph time unit = 5.000 (Min.)
Initial depth in storage basin = 0.00 (Ft.)

Initial basin depth = 0.00 (Ft.)
Initial basin storage = 0.00 (Ac.Ft)
Initial basin outflow = 0.00 (CFS)

Depth vs. Storage and Depth vs. Discharge data:

Basin Depth (Ft.)	Storage (Ac.Ft)	Outflow (CFS)	(S-O*dt/2) (Ac.Ft)	(S+O*dt/2) (Ac.Ft)
0.000	0.000	0.000	0.000	0.000
1.000	0.129	0.693	0.127	0.131
2.000	0.285	0.693	0.283	0.287
3.000	0.522	0.693	0.520	0.524
4.000	0.784	0.693	0.782	0.786
5.000	1.046	0.693	1.044	1.048
6.000	1.283	0.693	1.281	1.285
7.000	1.440	0.693	1.438	1.442
7.500	1.504	0.693	1.502	1.506

8.000 1.505 60.000 1.298 1.712

 Hydrograph Detention Basin Routing

Graph values: 'I'= unit inflow; 'O'=outflow at time shown

Time (Hours)	Inflow (CFS)	Outflow (CFS)	Storage (Ac.Ft)		6.8	13.57	20.35	27.14	Depth (Ft.)
0.083	1.04	0.02	0.004	O I					0.03
0.167	2.26	0.08	0.015	O I					0.11
0.250	2.67	0.16	0.031	O I					0.24
0.333	2.81	0.26	0.048	O I					0.37
0.417	2.83	0.35	0.065	O I					0.51
0.500	3.04	0.45	0.083	O I					0.64
0.583	3.24	0.54	0.101	O I					0.78
0.667	3.28	0.64	0.119	O I					0.93
0.750	3.30	0.69	0.138	O I					1.05
0.833	3.30	0.69	0.155	O I					1.17
0.917	3.30	0.69	0.173	O I					1.28
1.000	3.51	0.69	0.192	O I					1.40
1.083	3.71	0.69	0.212	O I					1.53
1.167	3.75	0.69	0.233	O I					1.67
1.250	3.77	0.69	0.254	O I					1.80
1.333	3.77	0.69	0.275	O I					1.94
1.417	3.77	0.69	0.297	O I					2.05
1.500	3.77	0.69	0.318	O I					2.14
1.583	3.77	0.69	0.339	O I					2.23
1.667	3.77	0.69	0.360	O I					2.32
1.750	3.77	0.69	0.381	O I					2.41
1.833	3.77	0.69	0.403	O I					2.50
1.917	3.77	0.69	0.424	O I					2.59
2.000	3.98	0.69	0.446	O I					2.68
2.083	3.97	0.69	0.468	O I					2.77
2.167	4.02	0.69	0.491	O I					2.87
2.250	4.20	0.69	0.515	O I					2.97
2.333	4.22	0.69	0.539	O I					3.06
2.417	4.24	0.69	0.563	O I					3.16
2.500	4.24	0.69	0.588	O I					3.25
2.583	4.24	0.69	0.612	O I					3.34
2.667	4.24	0.69	0.637	O I					3.44
2.750	4.45	0.69	0.662	O I					3.53
2.833	4.65	0.69	0.688	O I					3.64
2.917	4.69	0.69	0.716	O I					3.74
3.000	4.71	0.69	0.743	O I					3.85
3.083	4.71	0.69	0.771	O I					3.95
3.167	4.92	0.69	0.800	O I					4.06
3.250	5.13	0.69	0.829	O I					4.17
3.333	5.17	0.69	0.860	O I					4.29
3.417	5.39	0.69	0.892	O I					4.41
3.500	5.80	0.69	0.925	O I					4.54
3.583	6.26	0.69	0.962	O I					4.68
3.667	6.52	0.69	1.001	O I					4.83
3.750	6.79	0.69	1.043	O I					4.99
3.833	7.01	0.69	1.085	O I					5.17
3.917	7.26	0.69	1.130	O I					5.35
4.000	7.48	0.69	1.176	O I					5.55
4.083	7.75	0.69	1.223	O I					5.75
4.167	8.24	0.69	1.274	O I					5.96
4.250	8.79	0.69	1.327	O I					6.28
4.333	9.36	0.69	1.385	O I					6.65
4.417	9.93	0.69	1.447	O I					7.05
4.500	10.25	2.87	1.504	O I					7.52
4.583	10.58	17.89	1.504	O I			O		7.65
4.667	11.11	3.86	1.504	O I		I			7.53
4.750	11.66	18.83	1.504	O I		I	O		7.65

4.833	11.98	4.88	1.504		O		I				7.54
4.917	12.31	19.34	1.504				I		O		7.66
5.000	12.83	5.87	1.504		O		I				7.54
5.083	14.40	21.28	1.504				I		O		7.67
5.167	16.98	10.14	1.504			O		I			7.58
5.250	19.25	26.00	1.504					I		O	7.71
5.333	21.12	14.42	1.504				O		I		7.62
5.417	23.40	30.02	1.504						I	O	7.75
5.500	27.14	20.56	1.504						O	I	7.67
5.583	20.32	26.86	1.504					I		O	7.72
5.667	9.53	3.10	1.504		O		I				7.52
5.750	5.15	11.54	1.504		I		O				7.59
5.833	3.01	0.69	1.490	O	I						7.39
5.917	2.06	0.69	1.503	O	I						7.49
6.000	1.35	2.38	1.504		IO						7.51
6.083	0.63	0.69	1.500	O							7.47
6.167	0.14	0.69	1.498	O							7.45
6.250	0.04	0.69	1.494	O							7.42
6.333	0.00	0.69	1.489	O							7.39
6.417	0.00	0.69	1.485	O							7.35
6.500	0.00	0.69	1.480	O							7.31
6.583	0.00	0.69	1.475	O							7.27
6.667	0.00	0.69	1.470	O							7.24
6.750	0.00	0.69	1.465	O							7.20
6.833	0.00	0.69	1.461	O							7.16
6.917	0.00	0.69	1.456	O							7.12
7.000	0.00	0.69	1.451	O							7.09
7.083	0.00	0.69	1.446	O							7.05
7.167	0.00	0.69	1.442	O							7.01
7.250	0.00	0.69	1.437	O							6.98
7.333	0.00	0.69	1.432	O							6.95
7.417	0.00	0.69	1.427	O							6.92
7.500	0.00	0.69	1.423	O							6.89
7.583	0.00	0.69	1.418	O							6.86
7.667	0.00	0.69	1.413	O							6.83
7.750	0.00	0.69	1.408	O							6.80
7.833	0.00	0.69	1.403	O							6.77
7.917	0.00	0.69	1.399	O							6.74
8.000	0.00	0.69	1.394	O							6.71
8.083	0.00	0.69	1.389	O							6.68
8.167	0.00	0.69	1.384	O							6.65
8.250	0.00	0.69	1.380	O							6.62
8.333	0.00	0.69	1.375	O							6.58
8.417	0.00	0.69	1.370	O							6.55
8.500	0.00	0.69	1.365	O							6.52
8.583	0.00	0.69	1.360	O							6.49
8.667	0.00	0.69	1.356	O							6.46
8.750	0.00	0.69	1.351	O							6.43
8.833	0.00	0.69	1.346	O							6.40
8.917	0.00	0.69	1.341	O							6.37
9.000	0.00	0.69	1.337	O							6.34
9.083	0.00	0.69	1.332	O							6.31
9.167	0.00	0.69	1.327	O							6.28
9.250	0.00	0.69	1.322	O							6.25
9.333	0.00	0.69	1.318	O							6.22
9.417	0.00	0.69	1.313	O							6.19
9.500	0.00	0.69	1.308	O							6.16
9.583	0.00	0.69	1.303	O							6.13
9.667	0.00	0.69	1.298	O							6.10
9.750	0.00	0.69	1.294	O							6.07
9.833	0.00	0.69	1.289	O							6.04
9.917	0.00	0.69	1.284	O							6.01
10.000	0.00	0.69	1.279	O							5.98
10.083	0.00	0.69	1.275	O							5.96
10.167	0.00	0.69	1.270	O							5.94
10.250	0.00	0.69	1.265	O							5.92

10.333	0.00	0.69	1.260	0					5.90
10.417	0.00	0.69	1.255	0					5.88
10.500	0.00	0.69	1.251	0					5.86
10.583	0.00	0.69	1.246	0					5.84
10.667	0.00	0.69	1.241	0					5.82
10.750	0.00	0.69	1.236	0					5.80
10.833	0.00	0.69	1.232	0					5.78
10.917	0.00	0.69	1.227	0					5.76
11.000	0.00	0.69	1.222	0					5.74
11.083	0.00	0.69	1.217	0					5.72
11.167	0.00	0.69	1.213	0					5.70
11.250	0.00	0.69	1.208	0					5.68
11.333	0.00	0.69	1.203	0					5.66
11.417	0.00	0.69	1.198	0					5.64
11.500	0.00	0.69	1.193	0					5.62
11.583	0.00	0.69	1.189	0					5.60
11.667	0.00	0.69	1.184	0					5.58
11.750	0.00	0.69	1.179	0					5.56
11.833	0.00	0.69	1.174	0					5.54
11.917	0.00	0.69	1.170	0					5.52
12.000	0.00	0.69	1.165	0					5.50
12.083	0.00	0.69	1.160	0					5.48
12.167	0.00	0.69	1.155	0					5.46
12.250	0.00	0.69	1.150	0					5.44
12.333	0.00	0.69	1.146	0					5.42
12.417	0.00	0.69	1.141	0					5.40
12.500	0.00	0.69	1.136	0					5.38
12.583	0.00	0.69	1.131	0					5.36
12.667	0.00	0.69	1.127	0					5.34
12.750	0.00	0.69	1.122	0					5.32
12.833	0.00	0.69	1.117	0					5.30
12.917	0.00	0.69	1.112	0					5.28
13.000	0.00	0.69	1.108	0					5.26
13.083	0.00	0.69	1.103	0					5.24
13.167	0.00	0.69	1.098	0					5.22
13.250	0.00	0.69	1.093	0					5.20
13.333	0.00	0.69	1.088	0					5.18
13.417	0.00	0.69	1.084	0					5.16
13.500	0.00	0.69	1.079	0					5.14
13.583	0.00	0.69	1.074	0					5.12
13.667	0.00	0.69	1.069	0					5.10
13.750	0.00	0.69	1.065	0					5.08
13.833	0.00	0.69	1.060	0					5.06
13.917	0.00	0.69	1.055	0					5.04
14.000	0.00	0.69	1.050	0					5.02
14.083	0.00	0.69	1.045	0					5.00
14.167	0.00	0.69	1.041	0					4.98
14.250	0.00	0.69	1.036	0					4.96
14.333	0.00	0.69	1.031	0					4.94
14.417	0.00	0.69	1.026	0					4.93
14.500	0.00	0.69	1.022	0					4.91
14.583	0.00	0.69	1.017	0					4.89
14.667	0.00	0.69	1.012	0					4.87
14.750	0.00	0.69	1.007	0					4.85
14.833	0.00	0.69	1.003	0					4.83
14.917	0.00	0.69	0.998	0					4.82
15.000	0.00	0.69	0.993	0					4.80
15.083	0.00	0.69	0.988	0					4.78
15.167	0.00	0.69	0.983	0					4.76
15.250	0.00	0.69	0.979	0					4.74
15.333	0.00	0.69	0.974	0					4.72
15.417	0.00	0.69	0.969	0					4.71
15.500	0.00	0.69	0.964	0					4.69
15.583	0.00	0.69	0.960	0					4.67
15.667	0.00	0.69	0.955	0					4.65
15.750	0.00	0.69	0.950	0					4.63

15.833	0.00	0.69	0.945	0					4.62
15.917	0.00	0.69	0.940	0					4.60
16.000	0.00	0.69	0.936	0					4.58
16.083	0.00	0.69	0.931	0					4.56
16.167	0.00	0.69	0.926	0					4.54
16.250	0.00	0.69	0.921	0					4.52
16.333	0.00	0.69	0.917	0					4.51
16.417	0.00	0.69	0.912	0					4.49
16.500	0.00	0.69	0.907	0					4.47
16.583	0.00	0.69	0.902	0					4.45
16.667	0.00	0.69	0.898	0					4.43
16.750	0.00	0.69	0.893	0					4.42
16.833	0.00	0.69	0.888	0					4.40
16.917	0.00	0.69	0.883	0					4.38
17.000	0.00	0.69	0.878	0					4.36
17.083	0.00	0.69	0.874	0					4.34
17.167	0.00	0.69	0.869	0					4.32
17.250	0.00	0.69	0.864	0					4.31
17.333	0.00	0.69	0.859	0					4.29
17.417	0.00	0.69	0.855	0					4.27
17.500	0.00	0.69	0.850	0					4.25
17.583	0.00	0.69	0.845	0					4.23
17.667	0.00	0.69	0.840	0					4.21
17.750	0.00	0.69	0.835	0					4.20
17.833	0.00	0.69	0.831	0					4.18
17.917	0.00	0.69	0.826	0					4.16
18.000	0.00	0.69	0.821	0					4.14
18.083	0.00	0.69	0.816	0					4.12
18.167	0.00	0.69	0.812	0					4.11
18.250	0.00	0.69	0.807	0					4.09
18.333	0.00	0.69	0.802	0					4.07
18.417	0.00	0.69	0.797	0					4.05
18.500	0.00	0.69	0.793	0					4.03
18.583	0.00	0.69	0.788	0					4.01
18.667	0.00	0.69	0.783	0					4.00
18.750	0.00	0.69	0.778	0					3.98
18.833	0.00	0.69	0.773	0					3.96
18.917	0.00	0.69	0.769	0					3.94
19.000	0.00	0.69	0.764	0					3.92
19.083	0.00	0.69	0.759	0					3.91
19.167	0.00	0.69	0.754	0					3.89
19.250	0.00	0.69	0.750	0					3.87
19.333	0.00	0.69	0.745	0					3.85
19.417	0.00	0.69	0.740	0					3.83
19.500	0.00	0.69	0.735	0					3.81
19.583	0.00	0.69	0.730	0					3.80
19.667	0.00	0.69	0.726	0					3.78
19.750	0.00	0.69	0.721	0					3.76
19.833	0.00	0.69	0.716	0					3.74
19.917	0.00	0.69	0.711	0					3.72
20.000	0.00	0.69	0.707	0					3.70
20.083	0.00	0.69	0.702	0					3.69
20.167	0.00	0.69	0.697	0					3.67
20.250	0.00	0.69	0.692	0					3.65
20.333	0.00	0.69	0.688	0					3.63
20.417	0.00	0.69	0.683	0					3.61
20.500	0.00	0.69	0.678	0					3.60
20.583	0.00	0.69	0.673	0					3.58
20.667	0.00	0.69	0.668	0					3.56
20.750	0.00	0.69	0.664	0					3.54
20.833	0.00	0.69	0.659	0					3.52
20.917	0.00	0.69	0.654	0					3.50
21.000	0.00	0.69	0.649	0					3.49
21.083	0.00	0.69	0.645	0					3.47
21.167	0.00	0.69	0.640	0					3.45
21.250	0.00	0.69	0.635	0					3.43

21.333	0.00	0.69	0.630	0					3.41
21.417	0.00	0.69	0.625	0					3.39
21.500	0.00	0.69	0.621	0					3.38
21.583	0.00	0.69	0.616	0					3.36
21.667	0.00	0.69	0.611	0					3.34
21.750	0.00	0.69	0.606	0					3.32
21.833	0.00	0.69	0.602	0					3.30
21.917	0.00	0.69	0.597	0					3.29
22.000	0.00	0.69	0.592	0					3.27
22.083	0.00	0.69	0.587	0					3.25
22.167	0.00	0.69	0.583	0					3.23
22.250	0.00	0.69	0.578	0					3.21
22.333	0.00	0.69	0.573	0					3.19
22.417	0.00	0.69	0.568	0					3.18
22.500	0.00	0.69	0.563	0					3.16
22.583	0.00	0.69	0.559	0					3.14
22.667	0.00	0.69	0.554	0					3.12
22.750	0.00	0.69	0.549	0					3.10
22.833	0.00	0.69	0.544	0					3.09
22.917	0.00	0.69	0.540	0					3.07
23.000	0.00	0.69	0.535	0					3.05
23.083	0.00	0.69	0.530	0					3.03
23.167	0.00	0.69	0.525	0					3.01
23.250	0.00	0.69	0.520	0					2.99
23.333	0.00	0.69	0.516	0					2.97
23.417	0.00	0.69	0.511	0					2.95
23.500	0.00	0.69	0.506	0					2.93
23.583	0.00	0.69	0.501	0					2.91
23.667	0.00	0.69	0.497	0					2.89
23.750	0.00	0.69	0.492	0					2.87
23.833	0.00	0.69	0.487	0					2.85
23.917	0.00	0.69	0.482	0					2.83
24.000	0.00	0.69	0.478	0					2.81
24.083	0.00	0.69	0.473	0					2.79
24.167	0.00	0.69	0.468	0					2.77
24.250	0.00	0.69	0.463	0					2.75
24.333	0.00	0.69	0.458	0					2.73
24.417	0.00	0.69	0.454	0					2.71
24.500	0.00	0.69	0.449	0					2.69
24.583	0.00	0.69	0.444	0					2.67
24.667	0.00	0.69	0.439	0					2.65
24.750	0.00	0.69	0.435	0					2.63
24.833	0.00	0.69	0.430	0					2.61
24.917	0.00	0.69	0.425	0					2.59
25.000	0.00	0.69	0.420	0					2.57
25.083	0.00	0.69	0.415	0					2.55
25.167	0.00	0.69	0.411	0					2.53
25.250	0.00	0.69	0.406	0					2.51
25.333	0.00	0.69	0.401	0					2.49
25.417	0.00	0.69	0.396	0					2.47
25.500	0.00	0.69	0.392	0					2.45
25.583	0.00	0.69	0.387	0					2.43
25.667	0.00	0.69	0.382	0					2.41
25.750	0.00	0.69	0.377	0					2.39
25.833	0.00	0.69	0.373	0					2.37
25.917	0.00	0.69	0.368	0					2.35
26.000	0.00	0.69	0.363	0					2.33
26.083	0.00	0.69	0.358	0					2.31
26.167	0.00	0.69	0.353	0					2.29
26.250	0.00	0.69	0.349	0					2.27
26.333	0.00	0.69	0.344	0					2.25
26.417	0.00	0.69	0.339	0					2.23
26.500	0.00	0.69	0.334	0					2.21
26.583	0.00	0.69	0.330	0					2.19
26.667	0.00	0.69	0.325	0					2.17
26.750	0.00	0.69	0.320	0					2.15

26.833	0.00	0.69	0.315	0					2.13
26.917	0.00	0.69	0.310	0					2.11
27.000	0.00	0.69	0.306	0					2.09
27.083	0.00	0.69	0.301	0					2.07
27.167	0.00	0.69	0.296	0					2.05
27.250	0.00	0.69	0.291	0					2.03
27.333	0.00	0.69	0.287	0					2.01
27.417	0.00	0.69	0.282	0					1.98
27.500	0.00	0.69	0.277	0					1.95
27.583	0.00	0.69	0.272	0					1.92
27.667	0.00	0.69	0.268	0					1.89
27.750	0.00	0.69	0.263	0					1.86
27.833	0.00	0.69	0.258	0					1.83
27.917	0.00	0.69	0.253	0					1.80
28.000	0.00	0.69	0.248	0					1.77
28.083	0.00	0.69	0.244	0					1.74
28.167	0.00	0.69	0.239	0					1.70
28.250	0.00	0.69	0.234	0					1.67
28.333	0.00	0.69	0.229	0					1.64
28.417	0.00	0.69	0.225	0					1.61
28.500	0.00	0.69	0.220	0					1.58
28.583	0.00	0.69	0.215	0					1.55
28.667	0.00	0.69	0.210	0					1.52
28.750	0.00	0.69	0.205	0					1.49
28.833	0.00	0.69	0.201	0					1.46
28.917	0.00	0.69	0.196	0					1.43
29.000	0.00	0.69	0.191	0					1.40
29.083	0.00	0.69	0.186	0					1.37
29.167	0.00	0.69	0.182	0					1.34
29.250	0.00	0.69	0.177	0					1.31
29.333	0.00	0.69	0.172	0					1.28
29.417	0.00	0.69	0.167	0					1.25
29.500	0.00	0.69	0.163	0					1.21
29.583	0.00	0.69	0.158	0					1.18
29.667	0.00	0.69	0.153	0					1.15
29.750	0.00	0.69	0.148	0					1.12
29.833	0.00	0.69	0.143	0					1.09
29.917	0.00	0.69	0.139	0					1.06
30.000	0.00	0.69	0.134	0					1.03
30.083	0.00	0.69	0.129	0					1.00
30.167	0.00	0.67	0.124	0					0.96
30.250	0.00	0.64	0.120	0					0.93
30.333	0.00	0.62	0.116	0					0.90
30.417	0.00	0.60	0.111	0					0.86
30.500	0.00	0.58	0.107	0					0.83
30.583	0.00	0.56	0.103	0					0.80
30.667	0.00	0.54	0.100	0					0.77
30.750	0.00	0.52	0.096	0					0.74
30.833	0.00	0.50	0.093	0					0.72
30.917	0.00	0.48	0.089	0					0.69
31.000	0.00	0.46	0.086	0					0.67
31.083	0.00	0.44	0.083	0					0.64
31.167	0.00	0.43	0.080	0					0.62
31.250	0.00	0.41	0.077	0					0.60
31.333	0.00	0.40	0.074	0					0.57
31.417	0.00	0.38	0.071	0					0.55
31.500	0.00	0.37	0.069	0					0.53
31.583	0.00	0.36	0.066	0					0.51
31.667	0.00	0.34	0.064	0					0.50
31.750	0.00	0.33	0.062	0					0.48
31.833	0.00	0.32	0.059	0					0.46
31.917	0.00	0.31	0.057	0					0.44
32.000	0.00	0.30	0.055	0					0.43
32.083	0.00	0.29	0.053	0					0.41
32.167	0.00	0.28	0.051	0					0.40
32.250	0.00	0.27	0.049	0					0.38

32.333	0.00	0.26	0.048	0					0.37
32.417	0.00	0.25	0.046	0					0.36
32.500	0.00	0.24	0.044	0					0.34
32.583	0.00	0.23	0.043	0					0.33
32.667	0.00	0.22	0.041	0					0.32
32.750	0.00	0.21	0.040	0					0.31
32.833	0.00	0.20	0.038	0					0.30
32.917	0.00	0.20	0.037	0					0.28
33.000	0.00	0.19	0.035	0					0.27
33.083	0.00	0.18	0.034	0					0.26
33.167	0.00	0.18	0.033	0					0.25
33.250	0.00	0.17	0.032	0					0.25
33.333	0.00	0.16	0.030	0					0.24
33.417	0.00	0.16	0.029	0					0.23
33.500	0.00	0.15	0.028	0					0.22
33.583	0.00	0.15	0.027	0					0.21
33.667	0.00	0.14	0.026	0					0.20
33.750	0.00	0.14	0.025	0					0.20
33.833	0.00	0.13	0.024	0					0.19
33.917	0.00	0.13	0.024	0					0.18
34.000	0.00	0.12	0.023	0					0.18
34.083	0.00	0.12	0.022	0					0.17
34.167	0.00	0.11	0.021	0					0.16
34.250	0.00	0.11	0.020	0					0.16
34.333	0.00	0.11	0.020	0					0.15
34.417	0.00	0.10	0.019	0					0.15
34.500	0.00	0.10	0.018	0					0.14
34.583	0.00	0.09	0.018	0					0.14
34.667	0.00	0.09	0.017	0					0.13
34.750	0.00	0.09	0.016	0					0.13
34.833	0.00	0.08	0.016	0					0.12
34.917	0.00	0.08	0.015	0					0.12
35.000	0.00	0.08	0.015	0					0.11
35.083	0.00	0.08	0.014	0					0.11
35.167	0.00	0.07	0.014	0					0.10
35.250	0.00	0.07	0.013	0					0.10
35.333	0.00	0.07	0.013	0					0.10
35.417	0.00	0.06	0.012	0					0.09
35.500	0.00	0.06	0.012	0					0.09
35.583	0.00	0.06	0.011	0					0.09
35.667	0.00	0.06	0.011	0					0.08
35.750	0.00	0.06	0.010	0					0.08
35.833	0.00	0.05	0.010	0					0.08
35.917	0.00	0.05	0.010	0					0.08
36.000	0.00	0.05	0.009	0					0.07
36.083	0.00	0.05	0.009	0					0.07
36.167	0.00	0.05	0.009	0					0.07
36.250	0.00	0.04	0.008	0					0.06
36.333	0.00	0.04	0.008	0					0.06
36.417	0.00	0.04	0.008	0					0.06
36.500	0.00	0.04	0.007	0					0.06
36.583	0.00	0.04	0.007	0					0.06
36.667	0.00	0.04	0.007	0					0.05
36.750	0.00	0.04	0.007	0					0.05
36.833	0.00	0.03	0.006	0					0.05
36.917	0.00	0.03	0.006	0					0.05
37.000	0.00	0.03	0.006	0					0.05
37.083	0.00	0.03	0.006	0					0.04
37.167	0.00	0.03	0.006	0					0.04
37.250	0.00	0.03	0.005	0					0.04
37.333	0.00	0.03	0.005	0					0.04
37.417	0.00	0.03	0.005	0					0.04
37.500	0.00	0.03	0.005	0					0.04
37.583	0.00	0.02	0.005	0					0.04
37.667	0.00	0.02	0.004	0					0.03
37.750	0.00	0.02	0.004	0					0.03

37.833	0.00	0.02	0.004	0					0.03
37.917	0.00	0.02	0.004	0					0.03
38.000	0.00	0.02	0.004	0					0.03
38.083	0.00	0.02	0.004	0					0.03
38.167	0.00	0.02	0.004	0					0.03
38.250	0.00	0.02	0.003	0					0.03
38.333	0.00	0.02	0.003	0					0.03
38.417	0.00	0.02	0.003	0					0.02
38.500	0.00	0.02	0.003	0					0.02
38.583	0.00	0.02	0.003	0					0.02
38.667	0.00	0.02	0.003	0					0.02
38.750	0.00	0.01	0.003	0					0.02
38.833	0.00	0.01	0.003	0					0.02
38.917	0.00	0.01	0.003	0					0.02
39.000	0.00	0.01	0.002	0					0.02
39.083	0.00	0.01	0.002	0					0.02
39.167	0.00	0.01	0.002	0					0.02
39.250	0.00	0.01	0.002	0					0.02
39.333	0.00	0.01	0.002	0					0.02
39.417	0.00	0.01	0.002	0					0.02
39.500	0.00	0.01	0.002	0					0.02
39.583	0.00	0.01	0.002	0					0.01
39.667	0.00	0.01	0.002	0					0.01
39.750	0.00	0.01	0.002	0					0.01
39.833	0.00	0.01	0.002	0					0.01
39.917	0.00	0.01	0.002	0					0.01
40.000	0.00	0.01	0.002	0					0.01
40.083	0.00	0.01	0.002	0					0.01
40.167	0.00	0.01	0.001	0					0.01
40.250	0.00	0.01	0.001	0					0.01
40.333	0.00	0.01	0.001	0					0.01
40.417	0.00	0.01	0.001	0					0.01
40.500	0.00	0.01	0.001	0					0.01
40.583	0.00	0.01	0.001	0					0.01
40.667	0.00	0.01	0.001	0					0.01
40.750	0.00	0.01	0.001	0					0.01
40.833	0.00	0.01	0.001	0					0.01
40.917	0.00	0.01	0.001	0					0.01
41.000	0.00	0.01	0.001	0					0.01
41.083	0.00	0.01	0.001	0					0.01
41.167	0.00	0.01	0.001	0					0.01
41.250	0.00	0.00	0.001	0					0.01
41.333	0.00	0.00	0.001	0					0.01
41.417	0.00	0.00	0.001	0					0.01
41.500	0.00	0.00	0.001	0					0.01
41.583	0.00	0.00	0.001	0					0.01
41.667	0.00	0.00	0.001	0					0.01
41.750	0.00	0.00	0.001	0					0.01
41.833	0.00	0.00	0.001	0					0.01
41.917	0.00	0.00	0.001	0					0.01
42.000	0.00	0.00	0.001	0					0.01
42.083	0.00	0.00	0.001	0					0.00
42.167	0.00	0.00	0.001	0					0.00
42.250	0.00	0.00	0.001	0					0.00
42.333	0.00	0.00	0.001	0					0.00
42.417	0.00	0.00	0.001	0					0.00
42.500	0.00	0.00	0.001	0					0.00
42.583	0.00	0.00	0.001	0					0.00
42.667	0.00	0.00	0.000	0					0.00
42.750	0.00	0.00	0.000	0					0.00
42.833	0.00	0.00	0.000	0					0.00
42.917	0.00	0.00	0.000	0					0.00
43.000	0.00	0.00	0.000	0					0.00
43.083	0.00	0.00	0.000	0					0.00
43.167	0.00	0.00	0.000	0					0.00
43.250	0.00	0.00	0.000	0					0.00

43.333	0.00	0.00	0.000	o					0.00
43.417	0.00	0.00	0.000	o					0.00
43.500	0.00	0.00	0.000	o					0.00
43.583	0.00	0.00	0.000	o					0.00
43.667	0.00	0.00	0.000	o					0.00
43.750	0.00	0.00	0.000	o					0.00
43.833	0.00	0.00	0.000	o					0.00
43.917	0.00	0.00	0.000	o					0.00
44.000	0.00	0.00	0.000	o					0.00
44.083	0.00	0.00	0.000	o					0.00
44.167	0.00	0.00	0.000	o					0.00
44.250	0.00	0.00	0.000	o					0.00
44.333	0.00	0.00	0.000	o					0.00
44.417	0.00	0.00	0.000	o					0.00
44.500	0.00	0.00	0.000	o					0.00
44.583	0.00	0.00	0.000	o					0.00
44.667	0.00	0.00	0.000	o					0.00
44.750	0.00	0.00	0.000	o					0.00
44.833	0.00	0.00	0.000	o					0.00

*****HYDROGRAPH DATA*****

Number of intervals = 538

Time interval = 5.0 (Min.)

Maximum/Peak flow rate = 30.023 (CFS)

Total volume = 3.399 (Ac.Ft)

Status of hydrographs being held in storage

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

FLOOD HYDROGRAPH ROUTING PROGRAM
 Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2018
 Study date: 09/09/21

RAMONA - WEBSTER
 EAST SIDE INDUSTRIAL - AREA 3
 100 YR - 24 HR
 1391RTE3

Program License Serial Number 6490

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

From study/file name: 1391PRUH324100.rte
 *****HYDROGRAPH DATA*****
 Number of intervals = 291
 Time interval = 5.0 (Min.)
 Maximum/Peak flow rate = 10.369 (CFS)
 Total volume = 5.970 (Ac.Ft)
 Status of hydrographs being held in storage

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

+++++
 Process from Point/Station 1.000 to Point/Station 2.000
 **** RETARDING BASIN ROUTING ****

User entry of depth-outflow-storage data

Total number of inflow hydrograph intervals = 291
 Hydrograph time unit = 5.000 (Min.)
 Initial depth in storage basin = 0.00 (Ft.)

Initial basin depth = 0.00 (Ft.)
 Initial basin storage = 0.00 (Ac.Ft)
 Initial basin outflow = 0.00 (CFS)

Depth vs. Storage and Depth vs. Discharge data:

Basin Depth (Ft.)	Storage (Ac.Ft)	Outflow (CFS)	(S-O*dt/2) (Ac.Ft)	(S+O*dt/2) (Ac.Ft)
0.000	0.000	0.000	0.000	0.000
1.000	0.129	0.693	0.127	0.131
2.000	0.285	0.693	0.283	0.287
3.000	0.522	0.693	0.520	0.524
4.000	0.784	0.693	0.782	0.786
5.000	1.046	0.693	1.044	1.048
6.000	1.283	0.693	1.281	1.285
7.000	1.440	0.693	1.438	1.442
7.500	1.504	0.693	1.502	1.506

8.000 1.505 60.000 1.298 1.712

 Hydrograph Detention Basin Routing

Graph values: 'I'= unit inflow; 'O'=outflow at time shown

Time (Hours)	Inflow (CFS)	Outflow (CFS)	Storage (Ac.Ft)		2.6	5.18	7.78	10.37	Depth (Ft.)
0.083	0.25	0.00	0.001	O					0.01
0.167	0.50	0.02	0.003	O I					0.03
0.250	0.55	0.04	0.007	O I					0.05
0.333	0.70	0.06	0.011	O I					0.08
0.417	0.82	0.08	0.015	O I					0.12
0.500	0.85	0.11	0.021	O I					0.16
0.583	0.86	0.14	0.026	O I					0.20
0.667	0.86	0.16	0.030	O I					0.24
0.750	0.86	0.19	0.035	O I					0.27
0.833	0.98	0.22	0.040	O I					0.31
0.917	1.11	0.25	0.046	O I					0.35
1.000	1.13	0.28	0.052	O I					0.40
1.083	1.02	0.31	0.057	O I					0.44
1.167	0.89	0.33	0.061	O I					0.48
1.250	0.87	0.35	0.065	O I					0.50
1.333	0.86	0.37	0.069	O I					0.53
1.417	0.86	0.39	0.072	O I					0.56
1.500	0.86	0.40	0.075	O I					0.58
1.583	0.86	0.42	0.078	O I					0.61
1.667	0.86	0.44	0.081	O I					0.63
1.750	0.86	0.45	0.084	O I					0.65
1.833	0.98	0.47	0.087	O I					0.68
1.917	1.11	0.49	0.091	O I					0.71
2.000	1.13	0.51	0.095	O I					0.74
2.083	1.14	0.53	0.100	O I					0.77
2.167	1.14	0.56	0.104	O I					0.80
2.250	1.14	0.58	0.108	O I					0.83
2.333	1.14	0.60	0.111	O I					0.86
2.417	1.14	0.62	0.115	O I					0.89
2.500	1.14	0.64	0.119	O I					0.92
2.583	1.27	0.66	0.122	O I					0.95
2.667	1.39	0.68	0.127	O I					0.98
2.750	1.42	0.69	0.132	O I					1.02
2.833	1.43	0.69	0.137	O I					1.05
2.917	1.43	0.69	0.142	O I					1.08
3.000	1.43	0.69	0.147	O I					1.12
3.083	1.43	0.69	0.152	O I					1.15
3.167	1.43	0.69	0.157	O I					1.18
3.250	1.43	0.69	0.162	O I					1.21
3.333	1.43	0.69	0.167	O I					1.25
3.417	1.43	0.69	0.172	O I					1.28
3.500	1.43	0.69	0.178	O I					1.31
3.583	1.43	0.69	0.183	O I					1.34
3.667	1.43	0.69	0.188	O I					1.38
3.750	1.43	0.69	0.193	O I					1.41
3.833	1.55	0.69	0.198	O I					1.44
3.917	1.68	0.69	0.205	O I					1.48
4.000	1.70	0.69	0.211	O I					1.53
4.083	1.71	0.69	0.218	O I					1.57
4.167	1.71	0.69	0.226	O I					1.62
4.250	1.71	0.69	0.233	O I					1.66
4.333	1.84	0.69	0.240	O I					1.71
4.417	1.96	0.69	0.248	O I					1.77
4.500	1.99	0.69	0.257	O I					1.82
4.583	2.00	0.69	0.266	O I					1.88
4.667	2.00	0.69	0.275	O I					1.94
4.750	2.00	0.69	0.284	O I					1.99

4.833	2.13	0.69	0.294		O	I					2.04
4.917	2.25	0.69	0.304		O	I					2.08
5.000	2.27	0.69	0.315		O	I					2.13
5.083	2.03	0.69	0.325		O	I					2.17
5.167	1.79	0.69	0.333		O	I					2.20
5.250	1.74	0.69	0.341		O	I					2.23
5.333	1.84	0.69	0.348		O	I					2.27
5.417	1.96	0.69	0.356		O	I					2.30
5.500	1.99	0.69	0.365		O	I					2.34
5.583	2.13	0.69	0.375		O	I					2.38
5.667	2.25	0.69	0.385		O	I					2.42
5.750	2.27	0.69	0.396		O	I					2.47
5.833	2.29	0.69	0.407		O	I					2.51
5.917	2.29	0.69	0.418		O	I					2.56
6.000	2.29	0.69	0.429		O	I					2.61
6.083	2.41	0.69	0.440		O	I					2.65
6.167	2.54	0.69	0.452		O	I					2.71
6.250	2.56	0.69	0.465		O	I					2.76
6.333	2.57	0.69	0.478		O	I					2.81
6.417	2.57	0.69	0.491		O	I					2.87
6.500	2.57	0.69	0.504		O	I					2.92
6.583	2.70	0.69	0.517		O	I					2.98
6.667	2.82	0.69	0.531		O	I					3.04
6.750	2.85	0.69	0.546		O	I					3.09
6.833	2.86	0.69	0.561		O	I					3.15
6.917	2.86	0.69	0.576		O	I					3.21
7.000	2.86	0.69	0.591		O	I					3.26
7.083	2.86	0.69	0.606		O	I					3.32
7.167	2.86	0.69	0.621		O	I					3.38
7.250	2.86	0.69	0.636		O	I					3.43
7.333	2.98	0.69	0.651		O	I					3.49
7.417	3.11	0.69	0.667		O	I					3.55
7.500	3.13	0.69	0.684		O	I					3.62
7.583	3.27	0.69	0.701		O	I					3.68
7.667	3.39	0.69	0.719		O	I					3.75
7.750	3.42	0.69	0.738		O	I					3.82
7.833	3.56	0.69	0.757		O	I					3.90
7.917	3.68	0.69	0.777		O	I					3.97
8.000	3.70	0.69	0.798		O	I					4.05
8.083	3.97	0.69	0.820		O	I					4.14
8.167	4.21	0.69	0.843		O	I					4.23
8.250	4.26	0.69	0.868		O	I					4.32
8.333	4.29	0.69	0.892		O	I					4.41
8.417	4.29	0.69	0.917		O	I					4.51
8.500	4.29	0.69	0.942		O	I					4.60
8.583	4.41	0.69	0.967		O	I					4.70
8.667	4.54	0.69	0.993		O	I					4.80
8.750	4.56	0.69	1.019		O	I					4.90
8.833	4.70	0.69	1.047		O	I					5.00
8.917	4.82	0.69	1.075		O	I					5.12
9.000	4.85	0.69	1.103		O	I					5.24
9.083	5.11	0.69	1.133		O	I					5.37
9.167	5.36	0.69	1.164		O	I					5.50
9.250	5.41	0.69	1.196		O	I					5.63
9.333	5.56	0.69	1.229		O	I					5.77
9.417	5.68	0.69	1.263		O	I					5.92
9.500	5.70	0.69	1.297		O	I					6.09
9.583	5.84	0.69	1.332		O	I			I		6.32
9.667	5.97	0.69	1.368		O	I			I		6.54
9.750	5.99	0.69	1.405		O	I			I		6.78
9.833	6.13	0.69	1.442		O	I			I		7.01
9.917	6.25	0.69	1.480		O	I			I		7.31
10.000	6.28	4.72	1.504					O	I		7.53
10.083	5.41	6.95	1.504					I	O		7.55
10.167	4.54	3.02	1.504			O	I				7.52
10.250	4.37	5.88	1.504				I		O		7.54

10.333	4.29	2.79	1.504		O	I				7.52
10.417	4.29	5.77	1.504			I		O		7.54
10.500	4.29	2.82	1.504		O	I				7.52
10.583	4.92	6.37	1.504			I		O		7.55
10.667	5.53	4.09	1.504			O		I		7.53
10.750	5.66	7.08	1.504					I		7.55
10.833	5.72	4.30	1.504			O		I		7.53
10.917	5.72	7.11	1.504					I		7.55
11.000	5.72	4.33	1.504			O		I		7.53
11.083	5.59	6.96	1.504					I		7.55
11.167	5.47	4.11	1.504			O		I		7.53
11.250	5.44	6.79	1.504					I		7.55
11.333	5.43	4.10	1.504			O		I		7.53
11.417	5.43	6.75	1.504					I		7.55
11.500	5.43	4.12	1.504			O		I		7.53
11.583	5.18	6.47	1.504					I		7.55
11.667	4.93	3.65	1.504			O		I		7.52
11.750	4.88	6.15	1.504					I		7.55
11.833	4.98	3.73	1.504			O		I		7.53
11.917	5.11	6.35	1.504					I		7.55
12.000	5.13	3.90	1.504			O		I		7.53
12.083	6.03	7.24	1.504					I		7.56
12.167	6.89	5.68	1.504					O		7.54
12.250	7.06	8.26	1.504					I		7.56
12.333	7.29	6.11	1.504					O		7.55
12.417	7.44	8.61	1.504					I		7.57
12.500	7.47	6.31	1.504					O		7.55
12.583	7.80	8.95	1.504					I		7.57
12.667	8.11	6.97	1.504					O		7.55
12.750	8.18	9.31	1.504							7.57
12.833	8.37	7.25	1.504					O		7.56
12.917	8.53	9.63	1.504							7.58
13.000	8.57	7.47	1.504					O		7.56
13.083	9.36	10.44	1.504							7.58
13.167	10.12	9.04	1.504							7.57
13.250	10.27	11.33	1.504							7.59
13.333	10.35	9.30	1.504							7.57
13.417	10.36	11.40	1.504							7.59
13.500	10.37	9.34	1.504							7.57
13.583	8.70	9.73	1.504							7.58
13.667	7.06	6.05	1.504					O		7.55
13.750	6.73	7.74	1.504					I		7.56
13.833	6.57	5.58	1.504					O		7.54
13.917	6.58	7.56	1.504					I		7.56
14.000	6.58	5.61	1.504					O		7.54
14.083	7.20	8.16	1.504					I		7.56
14.167	7.81	6.86	1.504					O		7.55
14.250	7.94	8.88	1.504					I		7.57
14.333	7.85	6.92	1.504					O		7.55
14.417	7.71	8.63	1.504					I		7.57
14.500	7.68	6.77	1.504					O		7.55
14.583	7.68	8.58	1.504					I		7.57
14.667	7.68	6.78	1.504					O		7.55
14.750	7.69	8.58	1.504					I		7.57
14.833	7.54	6.66	1.504					O		7.55
14.917	7.40	8.27	1.504					I		7.56
15.000	7.38	6.51	1.504					O		7.55
15.083	7.22	8.07	1.504					I		7.56
15.167	7.07	6.22	1.504					O		7.55
15.250	7.05	7.89	1.504					I		7.56
15.333	6.89	6.06	1.504					O		7.55
15.417	6.74	7.57	1.504					I		7.56
15.500	6.72	5.91	1.504					O		7.54
15.583	6.15	6.96	1.504					I		7.55
15.667	5.59	4.79	1.504			O		I		7.53
15.750	5.48	6.28	1.504			I		O		7.55

15.833	5.43	4.65	1.504			o	I			7.53
15.917	5.43	6.21	1.504			I	o			7.55
16.000	5.43	4.66	1.504			o	I			7.53
16.083	3.54	4.31	1.504			I	o			7.53
16.167	1.69	0.94	1.504		o	I				7.50
16.250	1.32	2.07	1.504		I	o				7.51
16.333	1.14	0.69	1.503		oI					7.49
16.417	1.14	1.30	1.504		Io					7.51
16.500	1.14	0.99	1.504		o					7.50
16.583	1.02	1.17	1.504		o					7.50
16.667	0.89	0.74	1.504		o					7.50
16.750	0.87	1.02	1.504		Io					7.50
16.833	0.86	0.71	1.504		o					7.50
16.917	0.86	1.00	1.504		Io					7.50
17.000	0.86	0.71	1.504		o					7.50
17.083	1.11	1.25	1.504		o					7.50
17.167	1.36	1.21	1.504		oI					7.50
17.250	1.40	1.55	1.504		o					7.51
17.333	1.43	1.29	1.504		oI					7.51
17.417	1.43	1.57	1.504		o					7.51
17.500	1.43	1.29	1.504		oI					7.51
17.583	1.43	1.56	1.504		o					7.51
17.667	1.43	1.30	1.504		oI					7.51
17.750	1.43	1.56	1.504		o					7.51
17.833	1.30	1.17	1.504		oI					7.50
17.917	1.18	1.31	1.504		Io					7.51
18.000	1.16	1.03	1.504		o					7.50
18.083	1.14	1.27	1.504		o					7.50
18.167	1.14	1.02	1.504		o					7.50
18.250	1.14	1.27	1.504		o					7.50
18.333	1.14	1.02	1.504		o					7.50
18.417	1.14	1.27	1.504		o					7.50
18.500	1.14	1.02	1.504		o					7.50
18.583	1.02	1.14	1.504		o					7.50
18.667	0.89	0.78	1.504		o					7.50
18.750	0.87	0.99	1.504		Io					7.50
18.833	0.73	0.69	1.504		o					7.50
18.917	0.61	0.69	1.504		Io					7.50
19.000	0.58	0.69	1.503		Io					7.49
19.083	0.70	0.69	1.503		o					7.49
19.167	0.82	0.69	1.503		o					7.49
19.250	0.85	0.69	1.504		o					7.50
19.333	0.98	1.12	1.504		o					7.50
19.417	1.11	0.97	1.504		oI					7.50
19.500	1.13	1.27	1.504		o					7.50
19.583	1.02	0.88	1.504		oI					7.50
19.667	0.89	1.03	1.504		Io					7.50
19.750	0.87	0.74	1.504		o					7.50
19.833	0.73	0.86	1.504		o					7.50
19.917	0.61	0.69	1.503		Io					7.49
20.000	0.58	0.69	1.503		Io					7.49
20.083	0.70	0.69	1.502		o					7.49
20.167	0.82	0.69	1.503		o					7.49
20.250	0.85	0.69	1.504		o					7.50
20.333	0.86	0.91	1.504		o					7.50
20.417	0.86	0.81	1.504		o					7.50
20.500	0.86	0.90	1.504		o					7.50
20.583	0.86	0.81	1.504		o					7.50
20.667	0.86	0.90	1.504		o					7.50
20.750	0.86	0.81	1.504		o					7.50
20.833	0.73	0.78	1.504		o					7.50
20.917	0.61	0.69	1.504		Io					7.50
21.000	0.58	0.69	1.503		Io					7.49
21.083	0.70	0.69	1.503		o					7.49
21.167	0.82	0.69	1.503		o					7.49
21.250	0.85	0.69	1.504		o					7.50

21.333	0.73	0.87	1.504	O				7.50
21.417	0.61	0.69	1.503	IO				7.49
21.500	0.58	0.69	1.503	IO				7.49
21.583	0.70	0.69	1.502	O				7.49
21.667	0.82	0.69	1.503	O				7.49
21.750	0.85	0.69	1.504	O				7.50
21.833	0.73	0.78	1.504	O				7.50
21.917	0.61	0.69	1.504	IO				7.50
22.000	0.58	0.69	1.503	IO				7.49
22.083	0.70	0.69	1.503	O				7.49
22.167	0.82	0.69	1.503	O				7.49
22.250	0.85	0.69	1.504	O				7.50
22.333	0.73	0.86	1.504	O				7.50
22.417	0.61	0.69	1.503	IO				7.49
22.500	0.58	0.69	1.503	IO				7.49
22.583	0.57	0.69	1.502	IO				7.48
22.667	0.57	0.69	1.501	IO				7.48
22.750	0.57	0.69	1.500	IO				7.47
22.833	0.57	0.69	1.499	IO				7.46
22.917	0.57	0.69	1.498	IO				7.46
23.000	0.57	0.69	1.498	IO				7.45
23.083	0.57	0.69	1.497	IO				7.44
23.167	0.57	0.69	1.496	IO				7.44
23.250	0.57	0.69	1.495	IO				7.43
23.333	0.57	0.69	1.494	IO				7.42
23.417	0.57	0.69	1.493	IO				7.42
23.500	0.57	0.69	1.493	IO				7.41
23.583	0.57	0.69	1.492	IO				7.40
23.667	0.57	0.69	1.491	IO				7.40
23.750	0.57	0.69	1.490	IO				7.39
23.833	0.57	0.69	1.489	IO				7.38
23.917	0.57	0.69	1.488	IO				7.38
24.000	0.57	0.69	1.488	IO				7.37
24.083	0.32	0.69	1.486	I O				7.36
24.167	0.07	0.69	1.482	I O				7.33
24.250	0.02	0.69	1.478	I O				7.30
24.333	0.00	0.69	1.473	I O				7.26
24.417	0.00	0.69	1.469	I O				7.22
24.500	0.00	0.69	1.464	I O				7.19
24.583	0.00	0.69	1.459	I O				7.15
24.667	0.00	0.69	1.454	I O				7.11
24.750	0.00	0.69	1.449	I O				7.07
24.833	0.00	0.69	1.445	I O				7.04
24.917	0.00	0.69	1.440	I O				7.00
25.000	0.00	0.69	1.435	I O				6.97
25.083	0.00	0.69	1.430	I O				6.94
25.167	0.00	0.69	1.426	I O				6.91
25.250	0.00	0.69	1.421	I O				6.88
25.333	0.00	0.69	1.416	I O				6.85
25.417	0.00	0.69	1.411	I O				6.82
25.500	0.00	0.69	1.407	I O				6.79
25.583	0.00	0.69	1.402	I O				6.76
25.667	0.00	0.69	1.397	I O				6.73
25.750	0.00	0.69	1.392	I O				6.70
25.833	0.00	0.69	1.387	I O				6.67
25.917	0.00	0.69	1.383	I O				6.63
26.000	0.00	0.69	1.378	I O				6.60
26.083	0.00	0.69	1.373	I O				6.57
26.167	0.00	0.69	1.368	I O				6.54
26.250	0.00	0.69	1.364	I O				6.51
26.333	0.00	0.69	1.359	I O				6.48
26.417	0.00	0.69	1.354	I O				6.45
26.500	0.00	0.69	1.349	I O				6.42
26.583	0.00	0.69	1.344	I O				6.39
26.667	0.00	0.69	1.340	I O				6.36
26.750	0.00	0.69	1.335	I O				6.33

26.833	0.00	0.69	1.330	I O					6.30
26.917	0.00	0.69	1.325	I O					6.27
27.000	0.00	0.69	1.321	I O					6.24
27.083	0.00	0.69	1.316	I O					6.21
27.167	0.00	0.69	1.311	I O					6.18
27.250	0.00	0.69	1.306	I O					6.15
27.333	0.00	0.69	1.302	I O					6.12
27.417	0.00	0.69	1.297	I O					6.09
27.500	0.00	0.69	1.292	I O					6.06
27.583	0.00	0.69	1.287	I O					6.03
27.667	0.00	0.69	1.282	I O					6.00
27.750	0.00	0.69	1.278	I O					5.98
27.833	0.00	0.69	1.273	I O					5.96
27.917	0.00	0.69	1.268	I O					5.94
28.000	0.00	0.69	1.263	I O					5.92
28.083	0.00	0.69	1.259	I O					5.90
28.167	0.00	0.69	1.254	I O					5.88
28.250	0.00	0.69	1.249	I O					5.86
28.333	0.00	0.69	1.244	I O					5.84
28.417	0.00	0.69	1.239	I O					5.82
28.500	0.00	0.69	1.235	I O					5.80
28.583	0.00	0.69	1.230	I O					5.78
28.667	0.00	0.69	1.225	I O					5.76
28.750	0.00	0.69	1.220	I O					5.74
28.833	0.00	0.69	1.216	I O					5.72
28.917	0.00	0.69	1.211	I O					5.70
29.000	0.00	0.69	1.206	I O					5.68
29.083	0.00	0.69	1.201	I O					5.66
29.167	0.00	0.69	1.197	I O					5.64
29.250	0.00	0.69	1.192	I O					5.61
29.333	0.00	0.69	1.187	I O					5.59
29.417	0.00	0.69	1.182	I O					5.57
29.500	0.00	0.69	1.177	I O					5.55
29.583	0.00	0.69	1.173	I O					5.53
29.667	0.00	0.69	1.168	I O					5.51
29.750	0.00	0.69	1.163	I O					5.49
29.833	0.00	0.69	1.158	I O					5.47
29.917	0.00	0.69	1.154	I O					5.45
30.000	0.00	0.69	1.149	I O					5.43
30.083	0.00	0.69	1.144	I O					5.41
30.167	0.00	0.69	1.139	I O					5.39
30.250	0.00	0.69	1.134	I O					5.37
30.333	0.00	0.69	1.130	I O					5.35
30.417	0.00	0.69	1.125	I O					5.33
30.500	0.00	0.69	1.120	I O					5.31
30.583	0.00	0.69	1.115	I O					5.29
30.667	0.00	0.69	1.111	I O					5.27
30.750	0.00	0.69	1.106	I O					5.25
30.833	0.00	0.69	1.101	I O					5.23
30.917	0.00	0.69	1.096	I O					5.21
31.000	0.00	0.69	1.092	I O					5.19
31.083	0.00	0.69	1.087	I O					5.17
31.167	0.00	0.69	1.082	I O					5.15
31.250	0.00	0.69	1.077	I O					5.13
31.333	0.00	0.69	1.072	I O					5.11
31.417	0.00	0.69	1.068	I O					5.09
31.500	0.00	0.69	1.063	I O					5.07
31.583	0.00	0.69	1.058	I O					5.05
31.667	0.00	0.69	1.053	I O					5.03
31.750	0.00	0.69	1.049	I O					5.01
31.833	0.00	0.69	1.044	I O					4.99
31.917	0.00	0.69	1.039	I O					4.97
32.000	0.00	0.69	1.034	I O					4.96
32.083	0.00	0.69	1.029	I O					4.94
32.167	0.00	0.69	1.025	I O					4.92
32.250	0.00	0.69	1.020	I O					4.90

32.333	0.00	0.69	1.015	I O					4.88
32.417	0.00	0.69	1.010	I O					4.86
32.500	0.00	0.69	1.006	I O					4.85
32.583	0.00	0.69	1.001	I O					4.83
32.667	0.00	0.69	0.996	I O					4.81
32.750	0.00	0.69	0.991	I O					4.79
32.833	0.00	0.69	0.987	I O					4.77
32.917	0.00	0.69	0.982	I O					4.75
33.000	0.00	0.69	0.977	I O					4.74
33.083	0.00	0.69	0.972	I O					4.72
33.167	0.00	0.69	0.967	I O					4.70
33.250	0.00	0.69	0.963	I O					4.68
33.333	0.00	0.69	0.958	I O					4.66
33.417	0.00	0.69	0.953	I O					4.65
33.500	0.00	0.69	0.948	I O					4.63
33.583	0.00	0.69	0.944	I O					4.61
33.667	0.00	0.69	0.939	I O					4.59
33.750	0.00	0.69	0.934	I O					4.57
33.833	0.00	0.69	0.929	I O					4.55
33.917	0.00	0.69	0.924	I O					4.54
34.000	0.00	0.69	0.920	I O					4.52
34.083	0.00	0.69	0.915	I O					4.50
34.167	0.00	0.69	0.910	I O					4.48
34.250	0.00	0.69	0.905	I O					4.46
34.333	0.00	0.69	0.901	I O					4.45
34.417	0.00	0.69	0.896	I O					4.43
34.500	0.00	0.69	0.891	I O					4.41
34.583	0.00	0.69	0.886	I O					4.39
34.667	0.00	0.69	0.882	I O					4.37
34.750	0.00	0.69	0.877	I O					4.35
34.833	0.00	0.69	0.872	I O					4.34
34.917	0.00	0.69	0.867	I O					4.32
35.000	0.00	0.69	0.862	I O					4.30
35.083	0.00	0.69	0.858	I O					4.28
35.167	0.00	0.69	0.853	I O					4.26
35.250	0.00	0.69	0.848	I O					4.24
35.333	0.00	0.69	0.843	I O					4.23
35.417	0.00	0.69	0.839	I O					4.21
35.500	0.00	0.69	0.834	I O					4.19
35.583	0.00	0.69	0.829	I O					4.17
35.667	0.00	0.69	0.824	I O					4.15
35.750	0.00	0.69	0.819	I O					4.14
35.833	0.00	0.69	0.815	I O					4.12
35.917	0.00	0.69	0.810	I O					4.10
36.000	0.00	0.69	0.805	I O					4.08
36.083	0.00	0.69	0.800	I O					4.06
36.167	0.00	0.69	0.796	I O					4.04
36.250	0.00	0.69	0.791	I O					4.03
36.333	0.00	0.69	0.786	I O					4.01
36.417	0.00	0.69	0.781	I O					3.99
36.500	0.00	0.69	0.777	I O					3.97
36.583	0.00	0.69	0.772	I O					3.95
36.667	0.00	0.69	0.767	I O					3.93
36.750	0.00	0.69	0.762	I O					3.92
36.833	0.00	0.69	0.757	I O					3.90
36.917	0.00	0.69	0.753	I O					3.88
37.000	0.00	0.69	0.748	I O					3.86
37.083	0.00	0.69	0.743	I O					3.84
37.167	0.00	0.69	0.738	I O					3.83
37.250	0.00	0.69	0.734	I O					3.81
37.333	0.00	0.69	0.729	I O					3.79
37.417	0.00	0.69	0.724	I O					3.77
37.500	0.00	0.69	0.719	I O					3.75
37.583	0.00	0.69	0.714	I O					3.73
37.667	0.00	0.69	0.710	I O					3.72
37.750	0.00	0.69	0.705	I O					3.70

37.833	0.00	0.69	0.700	I O					3.68
37.917	0.00	0.69	0.695	I O					3.66
38.000	0.00	0.69	0.691	I O					3.64
38.083	0.00	0.69	0.686	I O					3.63
38.167	0.00	0.69	0.681	I O					3.61
38.250	0.00	0.69	0.676	I O					3.59
38.333	0.00	0.69	0.672	I O					3.57
38.417	0.00	0.69	0.667	I O					3.55
38.500	0.00	0.69	0.662	I O					3.53
38.583	0.00	0.69	0.657	I O					3.52
38.667	0.00	0.69	0.652	I O					3.50
38.750	0.00	0.69	0.648	I O					3.48
38.833	0.00	0.69	0.643	I O					3.46
38.917	0.00	0.69	0.638	I O					3.44
39.000	0.00	0.69	0.633	I O					3.42
39.083	0.00	0.69	0.629	I O					3.41
39.167	0.00	0.69	0.624	I O					3.39
39.250	0.00	0.69	0.619	I O					3.37
39.333	0.00	0.69	0.614	I O					3.35
39.417	0.00	0.69	0.609	I O					3.33
39.500	0.00	0.69	0.605	I O					3.32
39.583	0.00	0.69	0.600	I O					3.30
39.667	0.00	0.69	0.595	I O					3.28
39.750	0.00	0.69	0.590	I O					3.26
39.833	0.00	0.69	0.586	I O					3.24
39.917	0.00	0.69	0.581	I O					3.22
40.000	0.00	0.69	0.576	I O					3.21
40.083	0.00	0.69	0.571	I O					3.19
40.167	0.00	0.69	0.567	I O					3.17
40.250	0.00	0.69	0.562	I O					3.15
40.333	0.00	0.69	0.557	I O					3.13
40.417	0.00	0.69	0.552	I O					3.12
40.500	0.00	0.69	0.547	I O					3.10
40.583	0.00	0.69	0.543	I O					3.08
40.667	0.00	0.69	0.538	I O					3.06
40.750	0.00	0.69	0.533	I O					3.04
40.833	0.00	0.69	0.528	I O					3.02
40.917	0.00	0.69	0.524	I O					3.01
41.000	0.00	0.69	0.519	I O					2.99
41.083	0.00	0.69	0.514	I O					2.97
41.167	0.00	0.69	0.509	I O					2.95
41.250	0.00	0.69	0.504	I O					2.93
41.333	0.00	0.69	0.500	I O					2.91
41.417	0.00	0.69	0.495	I O					2.89
41.500	0.00	0.69	0.490	I O					2.87
41.583	0.00	0.69	0.485	I O					2.85
41.667	0.00	0.69	0.481	I O					2.83
41.750	0.00	0.69	0.476	I O					2.81
41.833	0.00	0.69	0.471	I O					2.79
41.917	0.00	0.69	0.466	I O					2.76
42.000	0.00	0.69	0.462	I O					2.74
42.083	0.00	0.69	0.457	I O					2.72
42.167	0.00	0.69	0.452	I O					2.70
42.250	0.00	0.69	0.447	I O					2.68
42.333	0.00	0.69	0.442	I O					2.66
42.417	0.00	0.69	0.438	I O					2.64
42.500	0.00	0.69	0.433	I O					2.62
42.583	0.00	0.69	0.428	I O					2.60
42.667	0.00	0.69	0.423	I O					2.58
42.750	0.00	0.69	0.419	I O					2.56
42.833	0.00	0.69	0.414	I O					2.54
42.917	0.00	0.69	0.409	I O					2.52
43.000	0.00	0.69	0.404	I O					2.50
43.083	0.00	0.69	0.399	I O					2.48
43.167	0.00	0.69	0.395	I O					2.46
43.250	0.00	0.69	0.390	I O					2.44

43.333	0.00	0.69	0.385	I O					2.42
43.417	0.00	0.69	0.380	I O					2.40
43.500	0.00	0.69	0.376	I O					2.38
43.583	0.00	0.69	0.371	I O					2.36
43.667	0.00	0.69	0.366	I O					2.34
43.750	0.00	0.69	0.361	I O					2.32
43.833	0.00	0.69	0.357	I O					2.30
43.917	0.00	0.69	0.352	I O					2.28
44.000	0.00	0.69	0.347	I O					2.26
44.083	0.00	0.69	0.342	I O					2.24
44.167	0.00	0.69	0.337	I O					2.22
44.250	0.00	0.69	0.333	I O					2.20
44.333	0.00	0.69	0.328	I O					2.18
44.417	0.00	0.69	0.323	I O					2.16
44.500	0.00	0.69	0.318	I O					2.14
44.583	0.00	0.69	0.314	I O					2.12
44.667	0.00	0.69	0.309	I O					2.10
44.750	0.00	0.69	0.304	I O					2.08
44.833	0.00	0.69	0.299	I O					2.06
44.917	0.00	0.69	0.294	I O					2.04
45.000	0.00	0.69	0.290	I O					2.02
45.083	0.00	0.69	0.285	I O					2.00
45.167	0.00	0.69	0.280	I O					1.97
45.250	0.00	0.69	0.275	I O					1.94
45.333	0.00	0.69	0.271	I O					1.91
45.417	0.00	0.69	0.266	I O					1.88
45.500	0.00	0.69	0.261	I O					1.85
45.583	0.00	0.69	0.256	I O					1.82
45.667	0.00	0.69	0.252	I O					1.79
45.750	0.00	0.69	0.247	I O					1.75
45.833	0.00	0.69	0.242	I O					1.72
45.917	0.00	0.69	0.237	I O					1.69
46.000	0.00	0.69	0.232	I O					1.66
46.083	0.00	0.69	0.228	I O					1.63
46.167	0.00	0.69	0.223	I O					1.60
46.250	0.00	0.69	0.218	I O					1.57
46.333	0.00	0.69	0.213	I O					1.54
46.417	0.00	0.69	0.209	I O					1.51
46.500	0.00	0.69	0.204	I O					1.48
46.583	0.00	0.69	0.199	I O					1.45
46.667	0.00	0.69	0.194	I O					1.42
46.750	0.00	0.69	0.189	I O					1.39
46.833	0.00	0.69	0.185	I O					1.36
46.917	0.00	0.69	0.180	I O					1.33
47.000	0.00	0.69	0.175	I O					1.30
47.083	0.00	0.69	0.170	I O					1.27
47.167	0.00	0.69	0.166	I O					1.23
47.250	0.00	0.69	0.161	I O					1.20
47.333	0.00	0.69	0.156	I O					1.17
47.417	0.00	0.69	0.151	I O					1.14
47.500	0.00	0.69	0.147	I O					1.11
47.583	0.00	0.69	0.142	I O					1.08
47.667	0.00	0.69	0.137	I O					1.05
47.750	0.00	0.69	0.132	I O					1.02
47.833	0.00	0.68	0.127	I O					0.99
47.917	0.00	0.66	0.123	I O					0.95
48.000	0.00	0.64	0.118	IO					0.92
48.083	0.00	0.61	0.114	IO					0.88
48.167	0.00	0.59	0.110	IO					0.85
48.250	0.00	0.57	0.106	IO					0.82
48.333	0.00	0.55	0.102	IO					0.79
48.417	0.00	0.53	0.098	IO					0.76
48.500	0.00	0.51	0.095	IO					0.73
48.583	0.00	0.49	0.091	IO					0.71
48.667	0.00	0.47	0.088	IO					0.68
48.750	0.00	0.46	0.085	IO					0.66

48.833	0.00	0.44	0.082	IO					0.63
48.917	0.00	0.42	0.079	IO					0.61
49.000	0.00	0.41	0.076	IO					0.59
49.083	0.00	0.39	0.073	IO					0.57
49.167	0.00	0.38	0.071	IO					0.55
49.250	0.00	0.36	0.068	IO					0.53
49.333	0.00	0.35	0.065	IO					0.51
49.417	0.00	0.34	0.063	IO					0.49
49.500	0.00	0.33	0.061	IO					0.47
49.583	0.00	0.31	0.059	O					0.45
49.667	0.00	0.30	0.056	O					0.44
49.750	0.00	0.29	0.054	O					0.42
49.833	0.00	0.28	0.052	O					0.41
49.917	0.00	0.27	0.051	O					0.39
50.000	0.00	0.26	0.049	O					0.38
50.083	0.00	0.25	0.047	O					0.36
50.167	0.00	0.24	0.045	O					0.35
50.250	0.00	0.23	0.044	O					0.34
50.333	0.00	0.23	0.042	O					0.33
50.417	0.00	0.22	0.040	O					0.31
50.500	0.00	0.21	0.039	O					0.30
50.583	0.00	0.20	0.038	O					0.29
50.667	0.00	0.19	0.036	O					0.28
50.750	0.00	0.19	0.035	O					0.27
50.833	0.00	0.18	0.034	O					0.26
50.917	0.00	0.17	0.032	O					0.25
51.000	0.00	0.17	0.031	O					0.24
51.083	0.00	0.16	0.030	O					0.23
51.167	0.00	0.16	0.029	O					0.22
51.250	0.00	0.15	0.028	O					0.22
51.333	0.00	0.14	0.027	O					0.21
51.417	0.00	0.14	0.026	O					0.20
51.500	0.00	0.13	0.025	O					0.19
51.583	0.00	0.13	0.024	O					0.19
51.667	0.00	0.12	0.023	O					0.18
51.750	0.00	0.12	0.022	O					0.17
51.833	0.00	0.12	0.022	O					0.17
51.917	0.00	0.11	0.021	O					0.16
52.000	0.00	0.11	0.020	O					0.16
52.083	0.00	0.10	0.019	O					0.15
52.167	0.00	0.10	0.019	O					0.14
52.250	0.00	0.10	0.018	O					0.14
52.333	0.00	0.09	0.017	O					0.13
52.417	0.00	0.09	0.017	O					0.13
52.500	0.00	0.09	0.016	O					0.12
52.583	0.00	0.08	0.015	O					0.12
52.667	0.00	0.08	0.015	O					0.12
52.750	0.00	0.08	0.014	O					0.11
52.833	0.00	0.07	0.014	O					0.11
52.917	0.00	0.07	0.013	O					0.10
53.000	0.00	0.07	0.013	O					0.10
53.083	0.00	0.07	0.012	O					0.10
53.167	0.00	0.06	0.012	O					0.09
53.250	0.00	0.06	0.012	O					0.09
53.333	0.00	0.06	0.011	O					0.09
53.417	0.00	0.06	0.011	O					0.08
53.500	0.00	0.06	0.010	O					0.08
53.583	0.00	0.05	0.010	O					0.08
53.667	0.00	0.05	0.010	O					0.07
53.750	0.00	0.05	0.009	O					0.07
53.833	0.00	0.05	0.009	O					0.07
53.917	0.00	0.05	0.009	O					0.07
54.000	0.00	0.04	0.008	O					0.06
54.083	0.00	0.04	0.008	O					0.06
54.167	0.00	0.04	0.008	O					0.06
54.250	0.00	0.04	0.007	O					0.06

54.333	0.00	0.04	0.007	0					0.06
54.417	0.00	0.04	0.007	0					0.05
54.500	0.00	0.04	0.007	0					0.05
54.583	0.00	0.03	0.006	0					0.05
54.667	0.00	0.03	0.006	0					0.05
54.750	0.00	0.03	0.006	0					0.05
54.833	0.00	0.03	0.006	0					0.04
54.917	0.00	0.03	0.005	0					0.04
55.000	0.00	0.03	0.005	0					0.04
55.083	0.00	0.03	0.005	0					0.04
55.167	0.00	0.03	0.005	0					0.04
55.250	0.00	0.03	0.005	0					0.04
55.333	0.00	0.02	0.005	0					0.04
55.417	0.00	0.02	0.004	0					0.03
55.500	0.00	0.02	0.004	0					0.03
55.583	0.00	0.02	0.004	0					0.03
55.667	0.00	0.02	0.004	0					0.03
55.750	0.00	0.02	0.004	0					0.03
55.833	0.00	0.02	0.004	0					0.03
55.917	0.00	0.02	0.004	0					0.03
56.000	0.00	0.02	0.003	0					0.03
56.083	0.00	0.02	0.003	0					0.03
56.167	0.00	0.02	0.003	0					0.02
56.250	0.00	0.02	0.003	0					0.02
56.333	0.00	0.02	0.003	0					0.02
56.417	0.00	0.02	0.003	0					0.02
56.500	0.00	0.01	0.003	0					0.02
56.583	0.00	0.01	0.003	0					0.02
56.667	0.00	0.01	0.003	0					0.02
56.750	0.00	0.01	0.002	0					0.02
56.833	0.00	0.01	0.002	0					0.02
56.917	0.00	0.01	0.002	0					0.02
57.000	0.00	0.01	0.002	0					0.02
57.083	0.00	0.01	0.002	0					0.02
57.167	0.00	0.01	0.002	0					0.02
57.250	0.00	0.01	0.002	0					0.02
57.333	0.00	0.01	0.002	0					0.01
57.417	0.00	0.01	0.002	0					0.01
57.500	0.00	0.01	0.002	0					0.01
57.583	0.00	0.01	0.002	0					0.01
57.667	0.00	0.01	0.002	0					0.01
57.750	0.00	0.01	0.002	0					0.01
57.833	0.00	0.01	0.002	0					0.01
57.917	0.00	0.01	0.001	0					0.01
58.000	0.00	0.01	0.001	0					0.01
58.083	0.00	0.01	0.001	0					0.01
58.167	0.00	0.01	0.001	0					0.01
58.250	0.00	0.01	0.001	0					0.01
58.333	0.00	0.01	0.001	0					0.01
58.417	0.00	0.01	0.001	0					0.01
58.500	0.00	0.01	0.001	0					0.01
58.583	0.00	0.01	0.001	0					0.01
58.667	0.00	0.01	0.001	0					0.01
58.750	0.00	0.01	0.001	0					0.01
58.833	0.00	0.01	0.001	0					0.01
58.917	0.00	0.00	0.001	0					0.01
59.000	0.00	0.00	0.001	0					0.01
59.083	0.00	0.00	0.001	0					0.01
59.167	0.00	0.00	0.001	0					0.01
59.250	0.00	0.00	0.001	0					0.01
59.333	0.00	0.00	0.001	0					0.01
59.417	0.00	0.00	0.001	0					0.01
59.500	0.00	0.00	0.001	0					0.01
59.583	0.00	0.00	0.001	0					0.01
59.667	0.00	0.00	0.001	0					0.01
59.750	0.00	0.00	0.001	0					0.00

59.833	0.00	0.00	0.001	O					0.00
59.917	0.00	0.00	0.001	O					0.00
60.000	0.00	0.00	0.001	O					0.00
60.083	0.00	0.00	0.001	O					0.00
60.167	0.00	0.00	0.001	O					0.00
60.250	0.00	0.00	0.001	O					0.00
60.333	0.00	0.00	0.000	O					0.00
60.417	0.00	0.00	0.000	O					0.00
60.500	0.00	0.00	0.000	O					0.00
60.583	0.00	0.00	0.000	O					0.00
60.667	0.00	0.00	0.000	O					0.00
60.750	0.00	0.00	0.000	O					0.00
60.833	0.00	0.00	0.000	O					0.00
60.917	0.00	0.00	0.000	O					0.00
61.000	0.00	0.00	0.000	O					0.00
61.083	0.00	0.00	0.000	O					0.00
61.167	0.00	0.00	0.000	O					0.00
61.250	0.00	0.00	0.000	O					0.00
61.333	0.00	0.00	0.000	O					0.00
61.417	0.00	0.00	0.000	O					0.00
61.500	0.00	0.00	0.000	O					0.00
61.583	0.00	0.00	0.000	O					0.00
61.667	0.00	0.00	0.000	O					0.00
61.750	0.00	0.00	0.000	O					0.00
61.833	0.00	0.00	0.000	O					0.00
61.917	0.00	0.00	0.000	O					0.00
62.000	0.00	0.00	0.000	O					0.00
62.083	0.00	0.00	0.000	O					0.00
62.167	0.00	0.00	0.000	O					0.00
62.250	0.00	0.00	0.000	O					0.00
62.333	0.00	0.00	0.000	O					0.00
62.417	0.00	0.00	0.000	O					0.00
62.500	0.00	0.00	0.000	O					0.00
62.583	0.00	0.00	0.000	O					0.00

*****HYDROGRAPH DATA*****

Number of intervals = 751
Time interval = 5.0 (Min.)
Maximum/Peak flow rate = 11.403 (CFS)
Total volume = 5.969 (Ac.Ft)

Status of hydrographs being held in storage

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

FLOOD HYDROGRAPH ROUTING PROGRAM
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 Study date: 09/08/21

 RAMONA - WEBSTER
 EAST SIDE INDUSTRIAL - AREA 3
 100 YR - 1 HR
 1391RTE3

Program License Serial Number 6490

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

From study/file name: 1391PRUH31100.rte
 *****HYDROGRAPH DATA*****
 Number of intervals = 15
 Time interval = 5.0 (Min.)
 Maximum/Peak flow rate = 53.406 (CFS)
 Total volume = 1.837 (Ac.Ft)
 Status of hydrographs being held in storage
 Stream 1 Stream 2 Stream 3 Stream 4 Stream 5
 Peak (CFS) 0.000 0.000 0.000 0.000 0.000
 Vol (Ac.Ft) 0.000 0.000 0.000 0.000 0.000

+++++
 Process from Point/Station 1.000 to Point/Station 2.000
 **** RETARDING BASIN ROUTING ****

 User entry of depth-outflow-storage data

Total number of inflow hydrograph intervals = 15
 Hydrograph time unit = 5.000 (Min.)
 Initial depth in storage basin = 0.00 (Ft.)

Initial basin depth = 0.00 (Ft.)
 Initial basin storage = 0.00 (Ac.Ft)
 Initial basin outflow = 0.00 (CFS)

 Depth vs. Storage and Depth vs. Discharge data:

Basin Depth (Ft.)	Storage (Ac.Ft)	Outflow (CFS)	(S-O*dt/2) (Ac.Ft)	(S+O*dt/2) (Ac.Ft)
0.000	0.000	0.000	0.000	0.000
1.000	0.129	0.693	0.127	0.131
2.000	0.285	0.693	0.283	0.287
3.000	0.522	0.693	0.520	0.524
4.000	0.784	0.693	0.782	0.786
5.000	1.046	0.693	1.044	1.048
6.000	1.283	0.693	1.281	1.285
7.000	1.440	0.693	1.438	1.442
7.500	1.504	0.693	1.502	1.506
8.000	1.505	60.000	1.298	1.712

 Hydrograph Detention Basin Routing

Graph values: 'I'= unit inflow; 'O'=outflow at time shown

Time (Hours)	Inflow (CFS)	Outflow (CFS)	Storage (Ac.Ft)						Depth (Ft.)
0.083	4.56	0.08	0.015	O	I				0.12
0.167	9.15	0.33	0.061	O	I				0.47
0.250	11.05	0.68	0.127	O	I				0.99
0.333	12.38	0.69	0.203	O	I				1.48
0.417	13.58	0.69	0.288	O	I				2.01
0.500	15.54	0.69	0.383	O	I				2.42
0.583	17.75	0.69	0.493	O	I				2.88
0.667	20.65	0.69	0.621	O	I				3.38
0.750	27.13	0.69	0.780	O	I				3.99
0.833	53.41	0.69	1.053	O				I	5.03
0.917	47.03	0.69	1.394	O				I	6.71
1.000	21.74	36.00	1.505	I		I	O		7.80
1.083	10.43	0.69	1.489	O	I				7.38
1.167	1.84	7.20	1.504	I	O				7.55
1.250	0.53	0.69	1.485	O					7.35
1.333	0.00	0.69	1.482	O					7.33
1.417	0.00	0.69	1.477	O					7.29
1.500	0.00	0.69	1.473	O					7.25
1.583	0.00	0.69	1.468	O					7.22
1.667	0.00	0.69	1.463	O					7.18
1.750	0.00	0.69	1.458	O					7.14
1.833	0.00	0.69	1.454	O					7.11
1.917	0.00	0.69	1.449	O					7.07
2.000	0.00	0.69	1.444	O					7.03
2.083	0.00	0.69	1.439	O					6.99
2.167	0.00	0.69	1.434	O					6.96
2.250	0.00	0.69	1.430	O					6.93
2.333	0.00	0.69	1.425	O					6.90
2.417	0.00	0.69	1.420	O					6.87
2.500	0.00	0.69	1.415	O					6.84
2.583	0.00	0.69	1.411	O					6.81
2.667	0.00	0.69	1.406	O					6.78
2.750	0.00	0.69	1.401	O					6.75
2.833	0.00	0.69	1.396	O					6.72
2.917	0.00	0.69	1.391	O					6.69
3.000	0.00	0.69	1.387	O					6.66
3.083	0.00	0.69	1.382	O					6.63
3.167	0.00	0.69	1.377	O					6.60
3.250	0.00	0.69	1.372	O					6.57
3.333	0.00	0.69	1.368	O					6.54
3.417	0.00	0.69	1.363	O					6.51
3.500	0.00	0.69	1.358	O					6.48
3.583	0.00	0.69	1.353	O					6.45
3.667	0.00	0.69	1.349	O					6.42
3.750	0.00	0.69	1.344	O					6.39
3.833	0.00	0.69	1.339	O					6.36
3.917	0.00	0.69	1.334	O					6.33
4.000	0.00	0.69	1.329	O					6.30
4.083	0.00	0.69	1.325	O					6.27
4.167	0.00	0.69	1.320	O					6.23
4.250	0.00	0.69	1.315	O					6.20
4.333	0.00	0.69	1.310	O					6.17
4.417	0.00	0.69	1.306	O					6.14
4.500	0.00	0.69	1.301	O					6.11
4.583	0.00	0.69	1.296	O					6.08
4.667	0.00	0.69	1.291	O					6.05
4.750	0.00	0.69	1.286	O					6.02
4.833	0.00	0.69	1.282	O					5.99

4.917	0.00	0.69	1.277	0					5.97
5.000	0.00	0.69	1.272	0					5.95
5.083	0.00	0.69	1.267	0					5.93
5.167	0.00	0.69	1.263	0					5.91
5.250	0.00	0.69	1.258	0					5.89
5.333	0.00	0.69	1.253	0					5.87
5.417	0.00	0.69	1.248	0					5.85
5.500	0.00	0.69	1.244	0					5.83
5.583	0.00	0.69	1.239	0					5.81
5.667	0.00	0.69	1.234	0					5.79
5.750	0.00	0.69	1.229	0					5.77
5.833	0.00	0.69	1.224	0					5.75
5.917	0.00	0.69	1.220	0					5.73
6.000	0.00	0.69	1.215	0					5.71
6.083	0.00	0.69	1.210	0					5.69
6.167	0.00	0.69	1.205	0					5.67
6.250	0.00	0.69	1.201	0					5.65
6.333	0.00	0.69	1.196	0					5.63
6.417	0.00	0.69	1.191	0					5.61
6.500	0.00	0.69	1.186	0					5.59
6.583	0.00	0.69	1.181	0					5.57
6.667	0.00	0.69	1.177	0					5.55
6.750	0.00	0.69	1.172	0					5.53
6.833	0.00	0.69	1.167	0					5.51
6.917	0.00	0.69	1.162	0					5.49
7.000	0.00	0.69	1.158	0					5.47
7.083	0.00	0.69	1.153	0					5.45
7.167	0.00	0.69	1.148	0					5.43
7.250	0.00	0.69	1.143	0					5.41
7.333	0.00	0.69	1.139	0					5.39
7.417	0.00	0.69	1.134	0					5.37
7.500	0.00	0.69	1.129	0					5.35
7.583	0.00	0.69	1.124	0					5.33
7.667	0.00	0.69	1.119	0					5.31
7.750	0.00	0.69	1.115	0					5.29
7.833	0.00	0.69	1.110	0					5.27
7.917	0.00	0.69	1.105	0					5.25
8.000	0.00	0.69	1.100	0					5.23
8.083	0.00	0.69	1.096	0					5.21
8.167	0.00	0.69	1.091	0					5.19
8.250	0.00	0.69	1.086	0					5.17
8.333	0.00	0.69	1.081	0					5.15
8.417	0.00	0.69	1.076	0					5.13
8.500	0.00	0.69	1.072	0					5.11
8.583	0.00	0.69	1.067	0					5.09
8.667	0.00	0.69	1.062	0					5.07
8.750	0.00	0.69	1.057	0					5.05
8.833	0.00	0.69	1.053	0					5.03
8.917	0.00	0.69	1.048	0					5.01
9.000	0.00	0.69	1.043	0					4.99
9.083	0.00	0.69	1.038	0					4.97
9.167	0.00	0.69	1.034	0					4.95
9.250	0.00	0.69	1.029	0					4.93
9.333	0.00	0.69	1.024	0					4.92
9.417	0.00	0.69	1.019	0					4.90
9.500	0.00	0.69	1.014	0					4.88
9.583	0.00	0.69	1.010	0					4.86
9.667	0.00	0.69	1.005	0					4.84
9.750	0.00	0.69	1.000	0					4.82
9.833	0.00	0.69	0.995	0					4.81
9.917	0.00	0.69	0.991	0					4.79
10.000	0.00	0.69	0.986	0					4.77
10.083	0.00	0.69	0.981	0					4.75
10.167	0.00	0.69	0.976	0					4.73
10.250	0.00	0.69	0.971	0					4.72
10.333	0.00	0.69	0.967	0					4.70

10.417	0.00	0.69	0.962	0					4.68
10.500	0.00	0.69	0.957	0					4.66
10.583	0.00	0.69	0.952	0					4.64
10.667	0.00	0.69	0.948	0					4.62
10.750	0.00	0.69	0.943	0					4.61
10.833	0.00	0.69	0.938	0					4.59
10.917	0.00	0.69	0.933	0					4.57
11.000	0.00	0.69	0.929	0					4.55
11.083	0.00	0.69	0.924	0					4.53
11.167	0.00	0.69	0.919	0					4.52
11.250	0.00	0.69	0.914	0					4.50
11.333	0.00	0.69	0.909	0					4.48
11.417	0.00	0.69	0.905	0					4.46
11.500	0.00	0.69	0.900	0					4.44
11.583	0.00	0.69	0.895	0					4.42
11.667	0.00	0.69	0.890	0					4.41
11.750	0.00	0.69	0.886	0					4.39
11.833	0.00	0.69	0.881	0					4.37
11.917	0.00	0.69	0.876	0					4.35
12.000	0.00	0.69	0.871	0					4.33
12.083	0.00	0.69	0.866	0					4.31
12.167	0.00	0.69	0.862	0					4.30
12.250	0.00	0.69	0.857	0					4.28
12.333	0.00	0.69	0.852	0					4.26
12.417	0.00	0.69	0.847	0					4.24
12.500	0.00	0.69	0.843	0					4.22
12.583	0.00	0.69	0.838	0					4.21
12.667	0.00	0.69	0.833	0					4.19
12.750	0.00	0.69	0.828	0					4.17
12.833	0.00	0.69	0.824	0					4.15
12.917	0.00	0.69	0.819	0					4.13
13.000	0.00	0.69	0.814	0					4.11
13.083	0.00	0.69	0.809	0					4.10
13.167	0.00	0.69	0.804	0					4.08
13.250	0.00	0.69	0.800	0					4.06
13.333	0.00	0.69	0.795	0					4.04
13.417	0.00	0.69	0.790	0					4.02
13.500	0.00	0.69	0.785	0					4.01
13.583	0.00	0.69	0.781	0					3.99
13.667	0.00	0.69	0.776	0					3.97
13.750	0.00	0.69	0.771	0					3.95
13.833	0.00	0.69	0.766	0					3.93
13.917	0.00	0.69	0.761	0					3.91
14.000	0.00	0.69	0.757	0					3.90
14.083	0.00	0.69	0.752	0					3.88
14.167	0.00	0.69	0.747	0					3.86
14.250	0.00	0.69	0.742	0					3.84
14.333	0.00	0.69	0.738	0					3.82
14.417	0.00	0.69	0.733	0					3.80
14.500	0.00	0.69	0.728	0					3.79
14.583	0.00	0.69	0.723	0					3.77
14.667	0.00	0.69	0.719	0					3.75
14.750	0.00	0.69	0.714	0					3.73
14.833	0.00	0.69	0.709	0					3.71
14.917	0.00	0.69	0.704	0					3.70
15.000	0.00	0.69	0.699	0					3.68
15.083	0.00	0.69	0.695	0					3.66
15.167	0.00	0.69	0.690	0					3.64
15.250	0.00	0.69	0.685	0					3.62
15.333	0.00	0.69	0.680	0					3.60
15.417	0.00	0.69	0.676	0					3.59
15.500	0.00	0.69	0.671	0					3.57
15.583	0.00	0.69	0.666	0					3.55
15.667	0.00	0.69	0.661	0					3.53
15.750	0.00	0.69	0.656	0					3.51
15.833	0.00	0.69	0.652	0					3.49

15.917	0.00	0.69	0.647	0					3.48
16.000	0.00	0.69	0.642	0					3.46
16.083	0.00	0.69	0.637	0					3.44
16.167	0.00	0.69	0.633	0					3.42
16.250	0.00	0.69	0.628	0					3.40
16.333	0.00	0.69	0.623	0					3.39
16.417	0.00	0.69	0.618	0					3.37
16.500	0.00	0.69	0.614	0					3.35
16.583	0.00	0.69	0.609	0					3.33
16.667	0.00	0.69	0.604	0					3.31
16.750	0.00	0.69	0.599	0					3.29
16.833	0.00	0.69	0.594	0					3.28
16.917	0.00	0.69	0.590	0					3.26
17.000	0.00	0.69	0.585	0					3.24
17.083	0.00	0.69	0.580	0					3.22
17.167	0.00	0.69	0.575	0					3.20
17.250	0.00	0.69	0.571	0					3.19
17.333	0.00	0.69	0.566	0					3.17
17.417	0.00	0.69	0.561	0					3.15
17.500	0.00	0.69	0.556	0					3.13
17.583	0.00	0.69	0.551	0					3.11
17.667	0.00	0.69	0.547	0					3.09
17.750	0.00	0.69	0.542	0					3.08
17.833	0.00	0.69	0.537	0					3.06
17.917	0.00	0.69	0.532	0					3.04
18.000	0.00	0.69	0.528	0					3.02
18.083	0.00	0.69	0.523	0					3.00
18.167	0.00	0.69	0.518	0					2.98
18.250	0.00	0.69	0.513	0					2.96
18.333	0.00	0.69	0.509	0					2.94
18.417	0.00	0.69	0.504	0					2.92
18.500	0.00	0.69	0.499	0					2.90
18.583	0.00	0.69	0.494	0					2.88
18.667	0.00	0.69	0.489	0					2.86
18.750	0.00	0.69	0.485	0					2.84
18.833	0.00	0.69	0.480	0					2.82
18.917	0.00	0.69	0.475	0					2.80
19.000	0.00	0.69	0.470	0					2.78
19.083	0.00	0.69	0.466	0					2.76
19.167	0.00	0.69	0.461	0					2.74
19.250	0.00	0.69	0.456	0					2.72
19.333	0.00	0.69	0.451	0					2.70
19.417	0.00	0.69	0.446	0					2.68
19.500	0.00	0.69	0.442	0					2.66
19.583	0.00	0.69	0.437	0					2.64
19.667	0.00	0.69	0.432	0					2.62
19.750	0.00	0.69	0.427	0					2.60
19.833	0.00	0.69	0.423	0					2.58
19.917	0.00	0.69	0.418	0					2.56
20.000	0.00	0.69	0.413	0					2.54
20.083	0.00	0.69	0.408	0					2.52
20.167	0.00	0.69	0.404	0					2.50
20.250	0.00	0.69	0.399	0					2.48
20.333	0.00	0.69	0.394	0					2.46
20.417	0.00	0.69	0.389	0					2.44
20.500	0.00	0.69	0.384	0					2.42
20.583	0.00	0.69	0.380	0					2.40
20.667	0.00	0.69	0.375	0					2.38
20.750	0.00	0.69	0.370	0					2.36
20.833	0.00	0.69	0.365	0					2.34
20.917	0.00	0.69	0.361	0					2.32
21.000	0.00	0.69	0.356	0					2.30
21.083	0.00	0.69	0.351	0					2.28
21.167	0.00	0.69	0.346	0					2.26
21.250	0.00	0.69	0.341	0					2.24
21.333	0.00	0.69	0.337	0					2.22

21.417	0.00	0.69	0.332	0					2.20
21.500	0.00	0.69	0.327	0					2.18
21.583	0.00	0.69	0.322	0					2.16
21.667	0.00	0.69	0.318	0					2.14
21.750	0.00	0.69	0.313	0					2.12
21.833	0.00	0.69	0.308	0					2.10
21.917	0.00	0.69	0.303	0					2.08
22.000	0.00	0.69	0.299	0					2.06
22.083	0.00	0.69	0.294	0					2.04
22.167	0.00	0.69	0.289	0					2.02
22.250	0.00	0.69	0.284	0					1.99
22.333	0.00	0.69	0.279	0					1.96
22.417	0.00	0.69	0.275	0					1.93
22.500	0.00	0.69	0.270	0					1.90
22.583	0.00	0.69	0.265	0					1.87
22.667	0.00	0.69	0.260	0					1.84
22.750	0.00	0.69	0.256	0					1.81
22.833	0.00	0.69	0.251	0					1.78
22.917	0.00	0.69	0.246	0					1.75
23.000	0.00	0.69	0.241	0					1.72
23.083	0.00	0.69	0.236	0					1.69
23.167	0.00	0.69	0.232	0					1.66
23.250	0.00	0.69	0.227	0					1.63
23.333	0.00	0.69	0.222	0					1.60
23.417	0.00	0.69	0.217	0					1.57
23.500	0.00	0.69	0.213	0					1.54
23.583	0.00	0.69	0.208	0					1.51
23.667	0.00	0.69	0.203	0					1.47
23.750	0.00	0.69	0.198	0					1.44
23.833	0.00	0.69	0.194	0					1.41
23.917	0.00	0.69	0.189	0					1.38
24.000	0.00	0.69	0.184	0					1.35
24.083	0.00	0.69	0.179	0					1.32
24.167	0.00	0.69	0.174	0					1.29
24.250	0.00	0.69	0.170	0					1.26
24.333	0.00	0.69	0.165	0					1.23
24.417	0.00	0.69	0.160	0					1.20
24.500	0.00	0.69	0.155	0					1.17
24.583	0.00	0.69	0.151	0					1.14
24.667	0.00	0.69	0.146	0					1.11
24.750	0.00	0.69	0.141	0					1.08
24.833	0.00	0.69	0.136	0					1.05
24.917	0.00	0.69	0.131	0					1.02
25.000	0.00	0.68	0.127	0					0.98
25.083	0.00	0.66	0.122	0					0.95
25.167	0.00	0.63	0.118	0					0.91
25.250	0.00	0.61	0.113	0					0.88
25.333	0.00	0.59	0.109	0					0.85
25.417	0.00	0.57	0.105	0					0.82
25.500	0.00	0.55	0.101	0					0.79
25.583	0.00	0.53	0.098	0					0.76
25.667	0.00	0.51	0.094	0					0.73
25.750	0.00	0.49	0.091	0					0.70
25.833	0.00	0.47	0.088	0					0.68
25.917	0.00	0.45	0.084	0					0.65
26.000	0.00	0.44	0.081	0					0.63
26.083	0.00	0.42	0.078	0					0.61
26.167	0.00	0.41	0.075	0					0.59
26.250	0.00	0.39	0.073	0					0.56
26.333	0.00	0.38	0.070	0					0.54
26.417	0.00	0.36	0.068	0					0.52
26.500	0.00	0.35	0.065	0					0.50
26.583	0.00	0.34	0.063	0					0.49
26.667	0.00	0.32	0.060	0					0.47
26.750	0.00	0.31	0.058	0					0.45
26.833	0.00	0.30	0.056	0					0.44

26.917	0.00	0.29	0.054	0					0.42
27.000	0.00	0.28	0.052	0					0.40
27.083	0.00	0.27	0.050	0					0.39
27.167	0.00	0.26	0.048	0					0.38
27.250	0.00	0.25	0.047	0					0.36
27.333	0.00	0.24	0.045	0					0.35
27.417	0.00	0.23	0.043	0					0.34
27.500	0.00	0.22	0.042	0					0.32
27.583	0.00	0.22	0.040	0					0.31
27.667	0.00	0.21	0.039	0					0.30
27.750	0.00	0.20	0.037	0					0.29
27.833	0.00	0.19	0.036	0					0.28
27.917	0.00	0.19	0.035	0					0.27
28.000	0.00	0.18	0.033	0					0.26
28.083	0.00	0.17	0.032	0					0.25
28.167	0.00	0.17	0.031	0					0.24
28.250	0.00	0.16	0.030	0					0.23
28.333	0.00	0.15	0.029	0					0.22
28.417	0.00	0.15	0.028	0					0.22
28.500	0.00	0.14	0.027	0					0.21
28.583	0.00	0.14	0.026	0					0.20
28.667	0.00	0.13	0.025	0					0.19
28.750	0.00	0.13	0.024	0					0.19
28.833	0.00	0.12	0.023	0					0.18
28.917	0.00	0.12	0.022	0					0.17
29.000	0.00	0.12	0.021	0					0.17
29.083	0.00	0.11	0.021	0					0.16
29.167	0.00	0.11	0.020	0					0.15
29.250	0.00	0.10	0.019	0					0.15
29.333	0.00	0.10	0.019	0					0.14
29.417	0.00	0.10	0.018	0					0.14
29.500	0.00	0.09	0.017	0					0.13
29.583	0.00	0.09	0.017	0					0.13
29.667	0.00	0.09	0.016	0					0.12
29.750	0.00	0.08	0.015	0					0.12
29.833	0.00	0.08	0.015	0					0.11
29.917	0.00	0.08	0.014	0					0.11
30.000	0.00	0.07	0.014	0					0.11
30.083	0.00	0.07	0.013	0					0.10
30.167	0.00	0.07	0.013	0					0.10
30.250	0.00	0.07	0.012	0					0.10
30.333	0.00	0.06	0.012	0					0.09
30.417	0.00	0.06	0.011	0					0.09
30.500	0.00	0.06	0.011	0					0.09
30.583	0.00	0.06	0.011	0					0.08
30.667	0.00	0.05	0.010	0					0.08
30.750	0.00	0.05	0.010	0					0.08
30.833	0.00	0.05	0.010	0					0.07
30.917	0.00	0.05	0.009	0					0.07
31.000	0.00	0.05	0.009	0					0.07
31.083	0.00	0.05	0.009	0					0.07
31.167	0.00	0.04	0.008	0					0.06
31.250	0.00	0.04	0.008	0					0.06
31.333	0.00	0.04	0.008	0					0.06
31.417	0.00	0.04	0.007	0					0.06
31.500	0.00	0.04	0.007	0					0.05
31.583	0.00	0.04	0.007	0					0.05
31.667	0.00	0.04	0.007	0					0.05
31.750	0.00	0.03	0.006	0					0.05
31.833	0.00	0.03	0.006	0					0.05
31.917	0.00	0.03	0.006	0					0.05
32.000	0.00	0.03	0.006	0					0.04
32.083	0.00	0.03	0.005	0					0.04
32.167	0.00	0.03	0.005	0					0.04
32.250	0.00	0.03	0.005	0					0.04
32.333	0.00	0.03	0.005	0					0.04

32.417	0.00	0.03	0.005	o					0.04
32.500	0.00	0.02	0.005	o					0.04
32.583	0.00	0.02	0.004	o					0.03
32.667	0.00	0.02	0.004	o					0.03
32.750	0.00	0.02	0.004	o					0.03
32.833	0.00	0.02	0.004	o					0.03
32.917	0.00	0.02	0.004	o					0.03
33.000	0.00	0.02	0.004	o					0.03
33.083	0.00	0.02	0.004	o					0.03
33.167	0.00	0.02	0.003	o					0.03
33.250	0.00	0.02	0.003	o					0.03
33.333	0.00	0.02	0.003	o					0.02
33.417	0.00	0.02	0.003	o					0.02
33.500	0.00	0.02	0.003	o					0.02
33.583	0.00	0.02	0.003	o					0.02
33.667	0.00	0.01	0.003	o					0.02
33.750	0.00	0.01	0.003	o					0.02
33.833	0.00	0.01	0.003	o					0.02
33.917	0.00	0.01	0.002	o					0.02
34.000	0.00	0.01	0.002	o					0.02
34.083	0.00	0.01	0.002	o					0.02
34.167	0.00	0.01	0.002	o					0.02
34.250	0.00	0.01	0.002	o					0.02
34.333	0.00	0.01	0.002	o					0.02
34.417	0.00	0.01	0.002	o					0.02
34.500	0.00	0.01	0.002	o					0.01
34.583	0.00	0.01	0.002	o					0.01
34.667	0.00	0.01	0.002	o					0.01
34.750	0.00	0.01	0.002	o					0.01
34.833	0.00	0.01	0.002	o					0.01
34.917	0.00	0.01	0.002	o					0.01
35.000	0.00	0.01	0.001	o					0.01
35.083	0.00	0.01	0.001	o					0.01
35.167	0.00	0.01	0.001	o					0.01
35.250	0.00	0.01	0.001	o					0.01
35.333	0.00	0.01	0.001	o					0.01
35.417	0.00	0.01	0.001	o					0.01
35.500	0.00	0.01	0.001	o					0.01
35.583	0.00	0.01	0.001	o					0.01
35.667	0.00	0.01	0.001	o					0.01
35.750	0.00	0.01	0.001	o					0.01
35.833	0.00	0.01	0.001	o					0.01
35.917	0.00	0.01	0.001	o					0.01
36.000	0.00	0.01	0.001	o					0.01
36.083	0.00	0.00	0.001	o					0.01
36.167	0.00	0.00	0.001	o					0.01
36.250	0.00	0.00	0.001	o					0.01
36.333	0.00	0.00	0.001	o					0.01
36.417	0.00	0.00	0.001	o					0.01
36.500	0.00	0.00	0.001	o					0.01
36.583	0.00	0.00	0.001	o					0.01
36.667	0.00	0.00	0.001	o					0.01
36.750	0.00	0.00	0.001	o					0.01
36.833	0.00	0.00	0.001	o					0.01
36.917	0.00	0.00	0.001	o					0.00
37.000	0.00	0.00	0.001	o					0.00
37.083	0.00	0.00	0.001	o					0.00
37.167	0.00	0.00	0.001	o					0.00
37.250	0.00	0.00	0.001	o					0.00
37.333	0.00	0.00	0.001	o					0.00
37.417	0.00	0.00	0.001	o					0.00
37.500	0.00	0.00	0.000	o					0.00
37.583	0.00	0.00	0.000	o					0.00
37.667	0.00	0.00	0.000	o					0.00
37.750	0.00	0.00	0.000	o					0.00
37.833	0.00	0.00	0.000	o					0.00

37.917	0.00	0.00	0.000	0					0.00
38.000	0.00	0.00	0.000	0					0.00
38.083	0.00	0.00	0.000	0					0.00
38.167	0.00	0.00	0.000	0					0.00
38.250	0.00	0.00	0.000	0					0.00
38.333	0.00	0.00	0.000	0					0.00
38.417	0.00	0.00	0.000	0					0.00
38.500	0.00	0.00	0.000	0					0.00
38.583	0.00	0.00	0.000	0					0.00
38.667	0.00	0.00	0.000	0					0.00
38.750	0.00	0.00	0.000	0					0.00
38.833	0.00	0.00	0.000	0					0.00
38.917	0.00	0.00	0.000	0					0.00
39.000	0.00	0.00	0.000	0					0.00
39.083	0.00	0.00	0.000	0					0.00
39.167	0.00	0.00	0.000	0					0.00
39.250	0.00	0.00	0.000	0					0.00
39.333	0.00	0.00	0.000	0					0.00
39.417	0.00	0.00	0.000	0					0.00
39.500	0.00	0.00	0.000	0					0.00
39.583	0.00	0.00	0.000	0					0.00
39.667	0.00	0.00	0.000	0					0.00
39.750	0.00	0.00	0.000	0					0.00

*****HYDROGRAPH DATA*****

Number of intervals = 477
Time interval = 5.0 (Min.)
Maximum/Peak flow rate = 35.999 (CFS)
Total volume = 1.837 (Ac.Ft)

Status of hydrographs being held in storage

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

APPENDIX G
EMERGENCY BYPASS
CHANNEL CALCULATIONS

PBLA ENGINEERING, INC.

1809 E. Dyer Rd., Suite 301
Santa Ana, CA 92705
(888)714-9642

981 Corporate Center Drive, Suite 150
Pomona, CA 91768
(626) 512-4934

1481 Ford Street, Suite 201
Redlands, CA 92373
(714) 620-4960

BASIN OUTFLOW CALCULATIONS

BYPASS CHANNEL DESIGN DESIGN

R & W INDUSTRIAL

OUTFLOW OVER BASIN TOP

SHARP EDGED WEIR ABOVE WATER QUALITY SCREEN

$$Q=CLH^{3/2}$$

WHERE:

C=WEIR COEFFICIENT (3.087)

L=WEIR LENGTH (250'-PERIM)

H=HEAD (FT)

W/S ELEV	DEPTH	HEAD (h)	Q (cfs)
81.9	0.00	0.00	0.00
82	0.10	0.10	24.40
82.5	0.60	0.60	358.68
83	1.10	1.10	890.36

T1 R & W INDUSTRIAL 0
T2 BYPASS CHANNEL
T3 1391BYPASSCH
SO 100.0001476.000 1 1483.000
R 170.0001476.080 1 .014 .000
JX 336.0001481.700 2 .014
R 1236.0001483.850 2 .014 .000
R 1313.7501484.140 2 .014 90.000
R 1386.2101485.340 2 .014 .000
R 1422.4501485.340 2 .014 22.500
R 1458.6901485.730 2 .014 -22.500
R 2100.9201487.340 2 .014 .000
SH 2100.9201487.340 2 1487.340
CD 1 1 0 .000 7.000 39.200 1.000 1.000 .00
CD 2 1 0 .000 5.000 11.000 2.000 2.000 .00
Q 800.000 .0

R & W INDUSTRIAL
BYPASS CHANNEL
1391BYPASSCH

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*****
| Invert | Depth | Water | Q | Vel | Vel | Energy | Super | Critical | Flow Top | Height/ | Base Wt | | No Wth
Station | Elev | (FT) | Elev | (CFS) | (FPS) | Head | Grd.El. | Elev | Depth | Width | Dia.-FT | or I.D. | ZL | Prs/Pip
-|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|-
L/Elem |Ch Slope |
*****|*****|*****|*****|*****|*****|*****|*****|*****|*****|*****|*****|*****|*****|*****
|
1134.300 1483.607 3.447 1487.054 800.00 12.97 2.61 1489.67 .00 4.22 24.79 5.000 11.000 2.00 0 .0
-|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|-
52.076 .0024 .0052 .27 3.45 1.45 4.13 .014 .00 2.00 TRAP
|
1186.377 1483.731 3.331 1487.062 800.00 13.60 2.87 1489.93 .00 4.22 24.32 5.000 11.000 2.00 0 .0
-|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|-
49.623 .0024 .0059 .29 3.33 1.54 4.13 .014 .00 2.00 TRAP
|
1236.000 1483.850 3.217 1487.067 800.00 14.26 3.16 1490.23 3.96 4.22 23.87 5.000 11.000 2.00 0 .0
-|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|-
10.334 .0037 .0063 .07 7.18 1.64 3.68 .014 .00 2.00 TRAP
|
1246.334 1483.889 3.201 1487.089 800.00 14.36 3.20 1490.29 4.00 4.22 23.80 5.000 11.000 2.00 0 .0
-|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|-
67.416 .0037 .0069 .46 7.21 1.65 3.68 .014 .00 2.00 TRAP
|
1313.750 1484.140 3.091 1487.231 800.00 15.06 3.52 1490.75 .00 4.22 23.36 5.000 11.000 2.00 0 .0
-|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|-
11.549 .0166 .0071 .08 3.09 1.76 2.48 .014 .00 2.00 TRAP
|
1325.299 1484.331 3.145 1487.477 800.00 14.71 3.36 1490.84 .00 4.22 23.58 5.000 11.000 2.00 0 .0
-|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|-
19.116 .0166 .0064 .12 3.15 1.71 2.48 .014 .00 2.00 TRAP
|
1344.415 1484.648 3.257 1487.905 800.00 14.03 3.05 1490.96 .00 4.22 24.03 5.000 11.000 2.00 0 .0
-|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|-
14.890 .0166 .0056 .08 3.26 1.60 2.48 .014 .00 2.00 TRAP
|
1359.304 1484.894 3.372 1488.266 800.00 13.37 2.78 1491.04 .00 4.22 24.49 5.000 11.000 2.00 0 .0
-|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|-
11.544 .0166 .0049 .06 3.37 1.51 2.48 .014 .00 2.00 TRAP
|
1370.848 1485.086 3.490 1488.575 800.00 12.75 2.52 1491.10 .00 4.22 24.96 5.000 11.000 2.00 0 .0
-|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|-
8.818 .0166 .0043 .04 3.49 1.42 2.48 .014 .00 2.00 TRAP

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R & W INDUSTRIAL
BYPASS CHANNEL
1391BYPASSCH

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*****
| Invert | Depth | Water | Q | Vel | Vel | Energy | Super | Critical | Flow Top | Height/ | Base Wt | | No Wth
Station | Elev | (FT) | Elev | (CFS) | (FPS) | Head | Grd.El. | Elev | Depth | Width | Dia.-FT | or I.D. | ZL | Prs/Pip
-|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|-
L/Elem |Ch Slope |
*****|*****|*****|*****|*****|*****|*****|*****|*****|*****|*****|*****|*****|*****|*****
|
1379.665 1485.232 3.611 1488.843 800.00 12.16 2.30 1491.14 .00 4.22 25.44 5.000 11.000 2.00 0 .0
-|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|-
6.545 .0166 .0038 .02 3.61 1.33 2.48 .014 .00 2.00 TRAP
|
1386.210 1485.340 3.736 1489.076 800.00 11.59 2.09 1491.16 1.53 4.22 25.94 5.000 11.000 2.00 0 .0
-|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|-
12.343 .0000 .0037 .05 5.26 1.25 .00 .014 .00 2.00 TRAP
|
1398.553 1485.340 3.663 1489.003 800.00 11.92 2.20 1491.21 1.59 4.22 25.65 5.000 11.000 2.00 0 .0
-|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|-
23.897 .0000 .0041 .10 5.26 1.30 .00 .014 .00 2.00 TRAP
|
1422.450 1485.340 3.540 1488.880 800.00 12.50 2.43 1491.31 1.72 4.22 25.16 5.000 11.000 2.00 0 .0
-|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|-
3.231 .0108 .0043 .01 5.26 1.38 2.79 .014 .00 2.00 TRAP
|
1425.681 1485.375 3.564 1488.938 800.00 12.38 2.38 1491.32 1.69 4.22 25.25 5.000 11.000 2.00 0 .0
-|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|-
13.693 .0108 .0040 .05 5.26 1.36 2.79 .014 .00 2.00 TRAP
|
1439.373 1485.522 3.687 1489.209 800.00 11.81 2.17 1491.37 1.57 4.22 25.75 5.000 11.000 2.00 0 .0
-|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|-
9.577 .0108 .0035 .03 5.26 1.28 2.79 .014 .00 2.00 TRAP
|
1448.950 1485.625 3.814 1489.439 800.00 11.26 1.97 1491.41 1.46 4.22 26.26 5.000 11.000 2.00 0 .0
-|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|-
6.251 .0108 .0031 .02 5.27 1.21 2.79 .014 .00 2.00 TRAP
|
1455.201 1485.692 3.945 1489.638 800.00 10.73 1.79 1491.43 1.35 4.22 26.78 5.000 11.000 2.00 0 .0
-|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|-
3.489 .0108 .0027 .01 5.30 1.13 2.79 .014 .00 2.00 TRAP
|
1458.690 1485.730 4.080 1489.810 800.00 10.24 1.63 1491.44 .00 4.22 27.32 5.000 11.000 2.00 0 .0
-|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|-
475.846 .0025 .0025 1.19 4.08 1.07 4.08 .014 .00 2.00 TRAP

```


R & W INDUSTRIAL
 BYPASS CHANNEL
 1391BYPASSCH

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*****
| Invert | Depth | Water | Q | Vel | Vel | Energy | Super | Critical | Flow Top | Height/ | Base Wt | | No Wth
Station | Elev | (FT) | Elev | (CFS) | (FPS) | Head | Grd.El. | Elev | Depth | Width | Dia.-FT | or I.D. | ZL | Prs/Pip
-|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|-
L/Elem |Ch Slope | | | | | SF Ave | HF | SE Dpth | Froude N | Norm Dp | "N" | X-Fall | ZR | Type Ch
*****|*****|*****|*****|*****|*****|*****|*****|*****|*****|*****|*****|*****|*****|*****|*****
| | | | | | | | | | | | | | | | |
1934.536 1486.923 4.080 1491.002 800.00 10.24 1.63 1492.63 .00 4.22 27.32 5.000 11.000 2.00 0 .0
-|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|-
112.043 .0025 | | | | | .0025 .28 4.08 1.07 4.08 .014 .00 2.00 TRAP
| | | | | | | | | | | | | | | | |
2046.579 1487.204 4.085 1491.288 800.00 10.22 1.62 1492.91 .00 4.22 27.34 5.000 11.000 2.00 0 .0
-|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|-
54.341 .0025 | | | | | .0023 .13 4.08 1.06 4.08 .014 .00 2.00 TRAP
| | | | | | | | | | | | | | | | |
2100.920 1487.340 4.224 1491.564 800.00 9.74 1.47 1493.04 .00 4.22 27.90 5.000 11.000 2.00 0 .0
-|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|-
    
```

APPENDIX H
PUBLIC 60 INCH STORM DRAIN
SYSTEM HYDRAULIC CALCULATIONS

PBLA ENGINEERING, INC.

1809 E. Dyer Rd., Suite 301
Santa Ana, CA 92705
(888)714-9642

981 Corporate Center Drive, Suite 150
Pomona, CA 91768
(626) 512-4934

1481 Ford Street, Suite 201
Redlands, CA 92373
(714) 620-4960

T1 R & W INDUSTRIAL										0
T2 60 IN BYPASS STORM DRAIN										
T3 139160IN										
SO	1003.1601472.060	1							1478.000	
R	1494.4301476.170	1		.013				45.000	.000	0
JX	1500.4301476.210	2		.013						
R	2003.2201479.050	2		.013				.000	.000	0
JX	2009.2201479.090	2		.013						
R	2331.1301480.910	2		.013				.000	.000	0
JX	2337.1301480.940	2		.013						
R	2680.0901482.370	2		.013				.000	.000	0
JX	2686.0901482.400	2		.013						
R	3071.1101484.000	2		.013				30.000	.000	0
WE	3071.1101484.000	3		.200						
SH	3071.1101484.000	3							1484.000	
CD	1 4 1	.000	5.000	.000	.000	.000	.000	.00		
CD	2 4 1	.000	5.000	.000	.000	.000	.000	.00		
CD	3 3 0	.000	9.000	150.000	.000	.000	.00			
Q		200.000	.0							

R & W INDUSTRIAL
60 IN BYPASS STORM DRAIN
139160IN

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*****
| Invert | Depth | Water | Q | Vel | Vel | Energy | Super | Critical | Flow Top | Height/ | Base Wt | | No Wth
Station | Elev | (FT) | Elev | (CFS) | (FPS) | Head | Grd.El. | Elev | Depth | Width | Dia.-FT | or I.D. | ZL | Prs/Pip
-|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|-
L/Elem |Ch Slope |
*****|*****|*****|*****|*****|*****|*****|*****|*****|*****|*****|*****|*****|*****|*****
|
1003.160 1472.060 5.940 1478.000 200.00 10.19 1.61 1479.61 .00 4.04 .00 5.000 .000 .00 1 .0
-|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|-
471.063 .0084 .0059 2.76 .00 .00 3.51 .013 .00 .00 PIPE
|
1474.223 1476.001 5.000 1481.001 200.00 10.19 1.61 1482.61 5.00 4.04 .00 5.000 .000 .00 1 .0
-|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|-
20.207 .0084 .0056 .11 5.00 .00 3.51 .013 .00 .00 PIPE
|
1494.430 1476.170 4.935 1481.105 200.00 10.21 1.62 1482.72 .00 4.04 1.13 5.000 .000 .00 1 .0
-|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|-
JUNCT STR .0067 .0054 .03 4.94 .43 .013 .00 .00 PIPE
|
1500.430 1476.210 4.926 1481.136 200.00 10.22 1.62 1482.76 .00 4.04 1.21 5.000 .000 .00 1 .0
-|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|-
502.790 .0056 .0052 2.63 4.93 .45 4.20 .013 .00 .00 PIPE
|
2003.220 1479.050 4.599 1483.649 200.00 10.58 1.74 1485.39 .00 4.04 2.71 5.000 .000 .00 1 .0
-|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|-
JUNCT STR .0067 .0051 .03 4.60 .71 .013 .00 .00 PIPE
|
2009.220 1479.090 4.580 1483.670 200.00 10.61 1.75 1485.42 .00 4.04 2.77 5.000 .000 .00 1 .0
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290.335 .0057 .0053 1.54 4.58 .72 4.20 .013 .00 .00 PIPE
|
2299.555 1480.732 4.301 1485.032 200.00 11.13 1.92 1486.96 .00 4.04 3.47 5.000 .000 .00 1 .0
-|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|-
31.575 .0057 .0055 .17 4.30 .86 4.20 .013 .00 .00 PIPE
|
2331.130 1480.910 4.279 1485.189 200.00 11.18 1.94 1487.13 .00 4.04 3.51 5.000 .000 .00 1 .0
-|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|-
JUNCT STR .0050 .0055 .03 4.28 .87 .013 .00 .00 PIPE
|
2337.130 1480.940 4.291 1485.231 200.00 11.15 1.93 1487.16 .00 4.04 3.49 5.000 .000 .00 1 .0
-|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|-
88.183 .0042 .0053 .47 4.29 .87 5.00 .013 .00 .00 PIPE

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R & W INDUSTRIAL
60 IN BYPASS STORM DRAIN
139160IN

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*****
| Invert | Depth | Water | Q | Vel | Vel | Energy | Super | Critical | Flow Top | Height/ | Base Wt | | No Wth
Station | Elev | (FT) | Elev | (CFS) | (FPS) | Head | Grd.El. | Elev | Depth | Width | Dia.-FT | or I.D. | ZL | Prs/Pip
-|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|-
L/Elem |Ch Slope |
*****|*****|*****|*****|*****|*****|*****|*****|*****|*****|*****|*****|*****|*****|*****
|
2425.313 1481.308 4.567 1485.874 200.00 10.63 1.76 1487.63 .00 4.04 2.81 5.000 .000 .00 1 .0
-|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|-
233.192 .0042 .0054 1.26 4.57 .72 5.00 .013 .00 .00 PIPE
|
2658.504 1482.280 5.000 1487.280 200.00 10.19 1.61 1488.89 .00 4.04 .00 5.000 .000 .00 1 .0
-|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|-
21.586 .0042 .0058 .12 5.00 .00 5.00 .013 .00 .00 PIPE
|
2680.090 1482.370 5.037 1487.407 200.00 10.19 1.61 1489.02 .00 4.04 .00 5.000 .000 .00 1 .0
-|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|-
JUNCT STR .0050 .0059 .04 .00 .00 .013 .00 .00 PIPE
|
2686.090 1482.400 5.043 1487.443 200.00 10.19 1.61 1489.05 .00 4.04 .00 5.000 .000 .00 1 .0
-|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|-
385.020 .0042 .0059 2.27 .00 .00 5.00 .013 .00 .00 PIPE
|
3071.110 1484.000 5.899 1489.899 200.00 10.19 1.61 1491.51 .00 4.04 .00 5.000 .000 .00 1 .0
-|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|-
WALL ENTRANCE
|
3071.110 1484.000 7.832 1491.832 200.00 .17 .00 1491.83 .00 .38 150.00 9.000 150.000 .00 0 .0
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APPENDIX I

PUBLIC 60 INCH STORM DRAIN

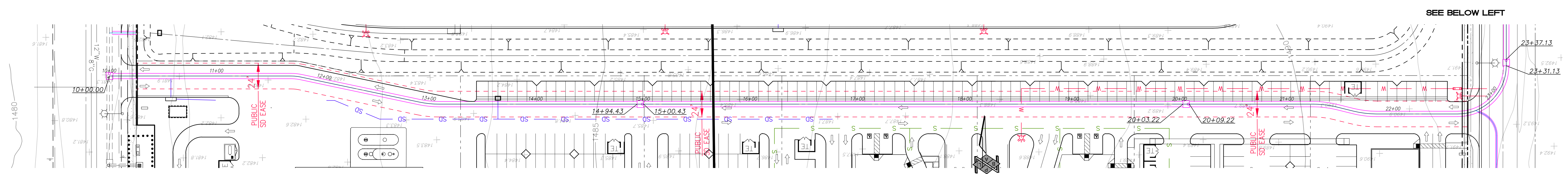
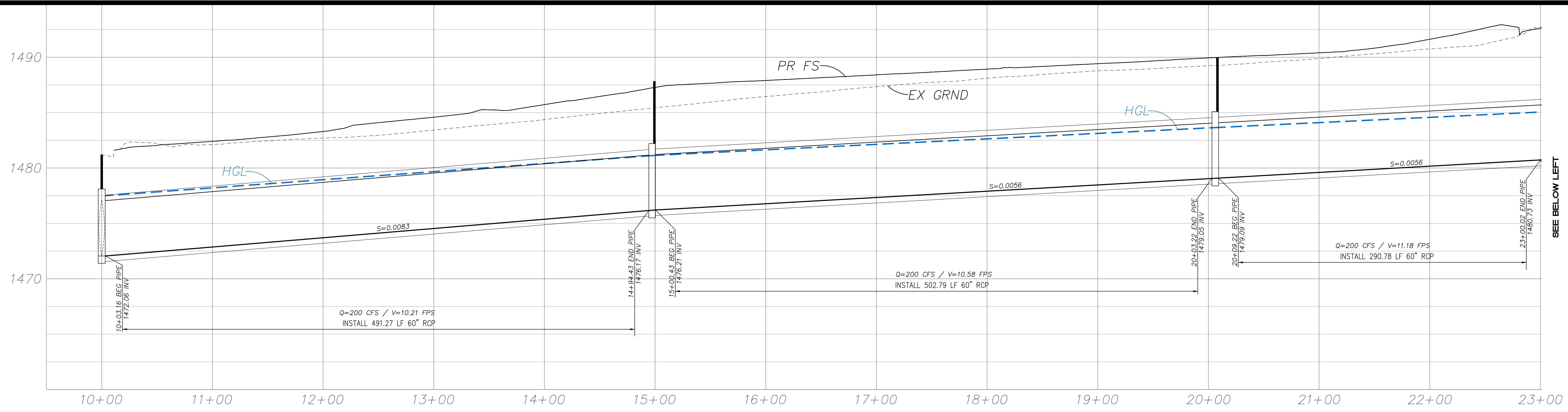
PRELIMINARY PROFILE

PBLA ENGINEERING, INC.

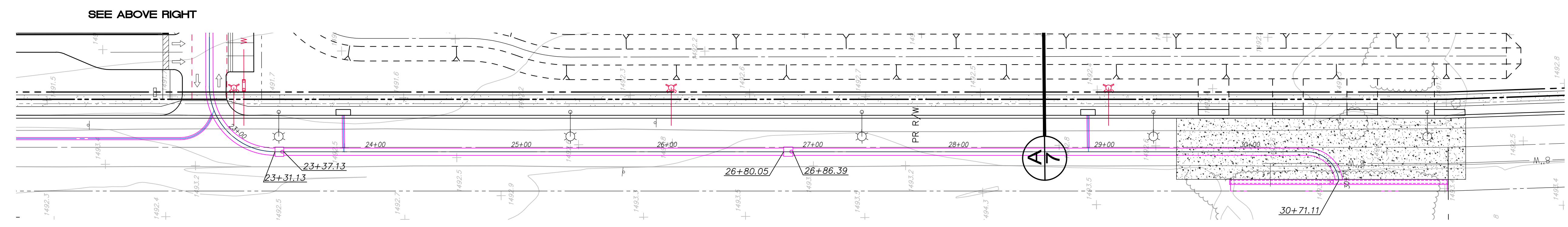
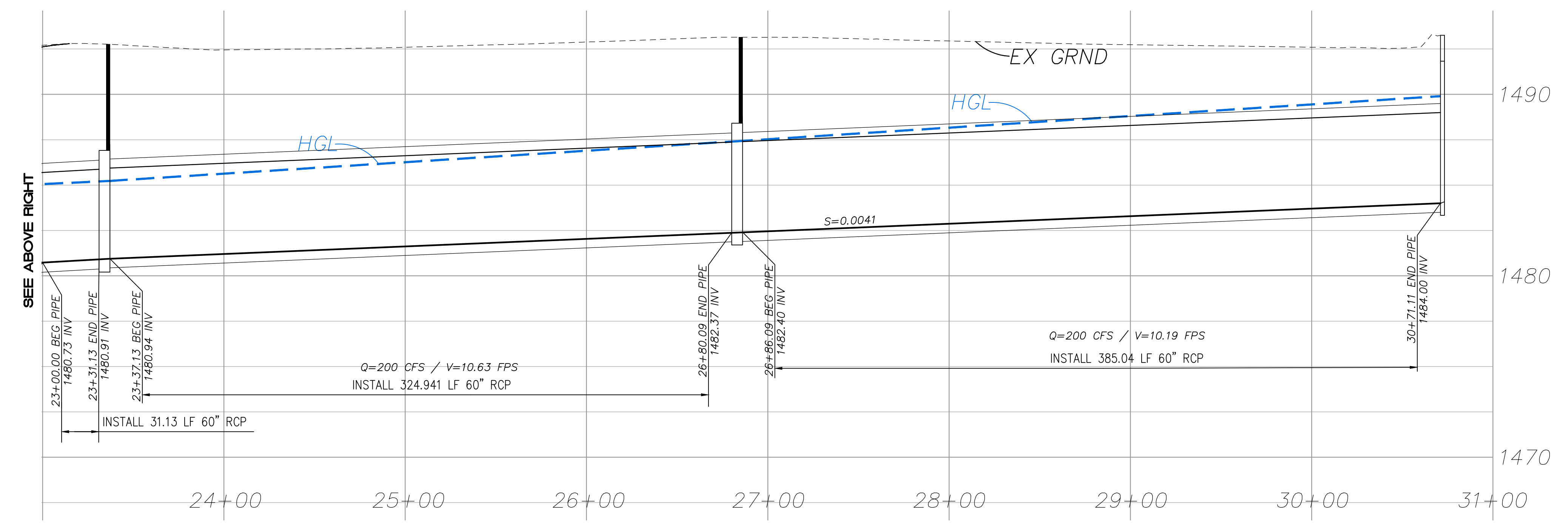
1809 E. Dyer Rd., Suite 301
Santa Ana, CA 92705
(888)714-9642

981 Corporate Center Drive, Suite 150
Pomona, CA 91768
(626) 512-4934

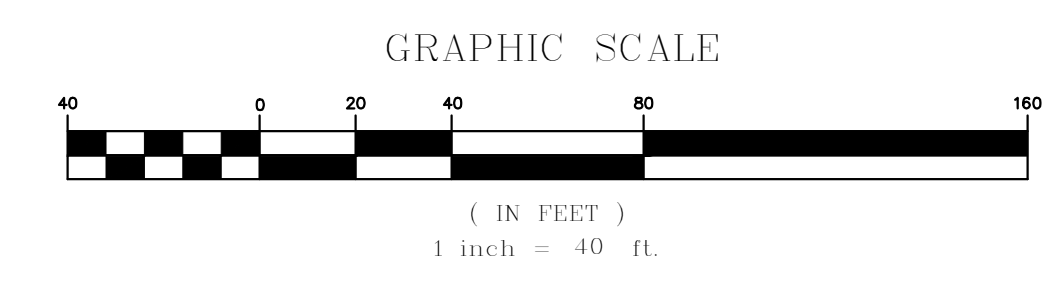
1481 Ford Street, Suite 201
Redlands, CA 92373
(714) 620-4960



60" STORM DRAIN PLAN



60" STORM DRAIN PLAN



Sep 21 2021

DATE	BY	REVISION
4-15-21	SDL	1st Release

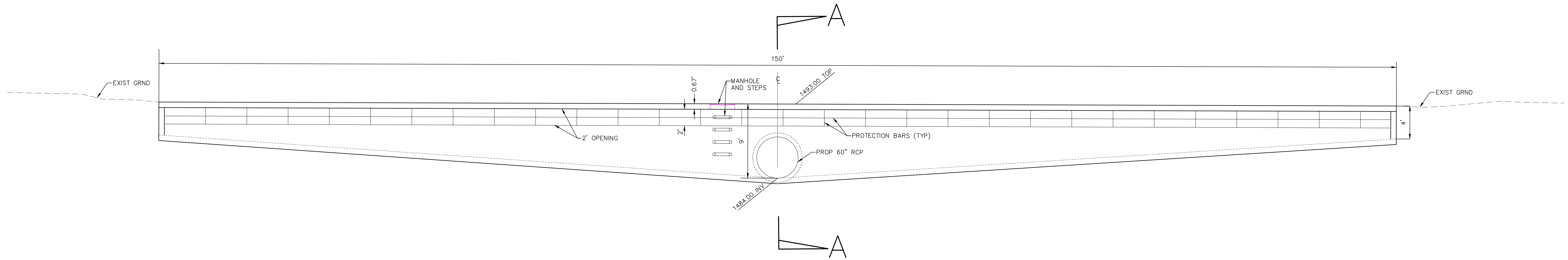
PREPARED FOR:
PERRIS LANDCO, LLC
 201 SPEAR STREET #100
 SAN FRANCISCO, CA 94105

PREPARED BY:

PBLA ENGINEERING, INC.
 Planning • Engineering • Surveying
 1809 E. DYER ROAD, STE 301
 SANTA ANA, CALIF. 92705
 (888) 714-9642 • (714) 389-9191 FAX

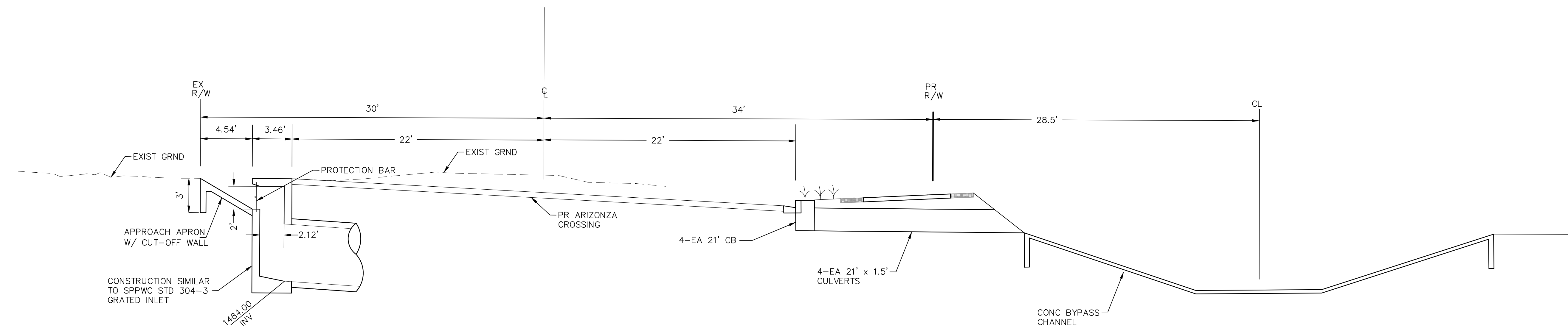
TOPOGRAPHY DATE: 12-23-20
 CITY OF PERRIS
CONCEPT BYPASS PLAN
RAMONA GATEWAY COMMERCE CENTER

WO
 139-1
 Sht. 1 of 2



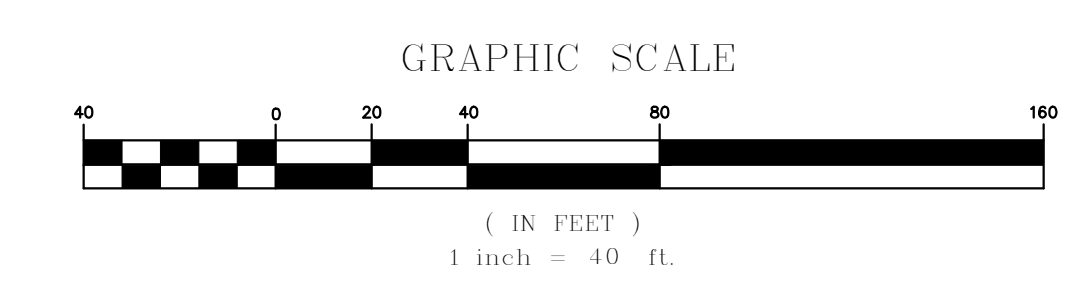
INLET STRUCTURE DETAIL

SCALE: 1" = 5'



SECTION A-A

SCALE: 1" = 5'



TOPOGRAPHY DATE: 12-23-20

Sep 21 2021

DATE	BY	REVISION
4-15-21	SDL	1st Release

PREPARED FOR:
PERRIS LANDCO, LLC
 201 SPEAR STREET #100
 SAN FRANCISCO, CA 94105

PREPARED BY:

PBLA ENGINEERING, INC.
 Planning • Engineering • Surveying
 1809 E. DYER ROAD, STE 301
 SANTA ANA, CALIF. 92705
 (888) 714-9642 • (714) 389-9191 FAX

CITY OF PERRIS
CONCEPT BYPASS PLAN
RAMONA GATEWAY COMMERCE CENTER

WO
 139-1
 Sht. 2 of 2

APPENDIX J

EXISTING PUBLIC STORM DRAIN PLAN & PROFILE
RAMONA EXPRESSWAY

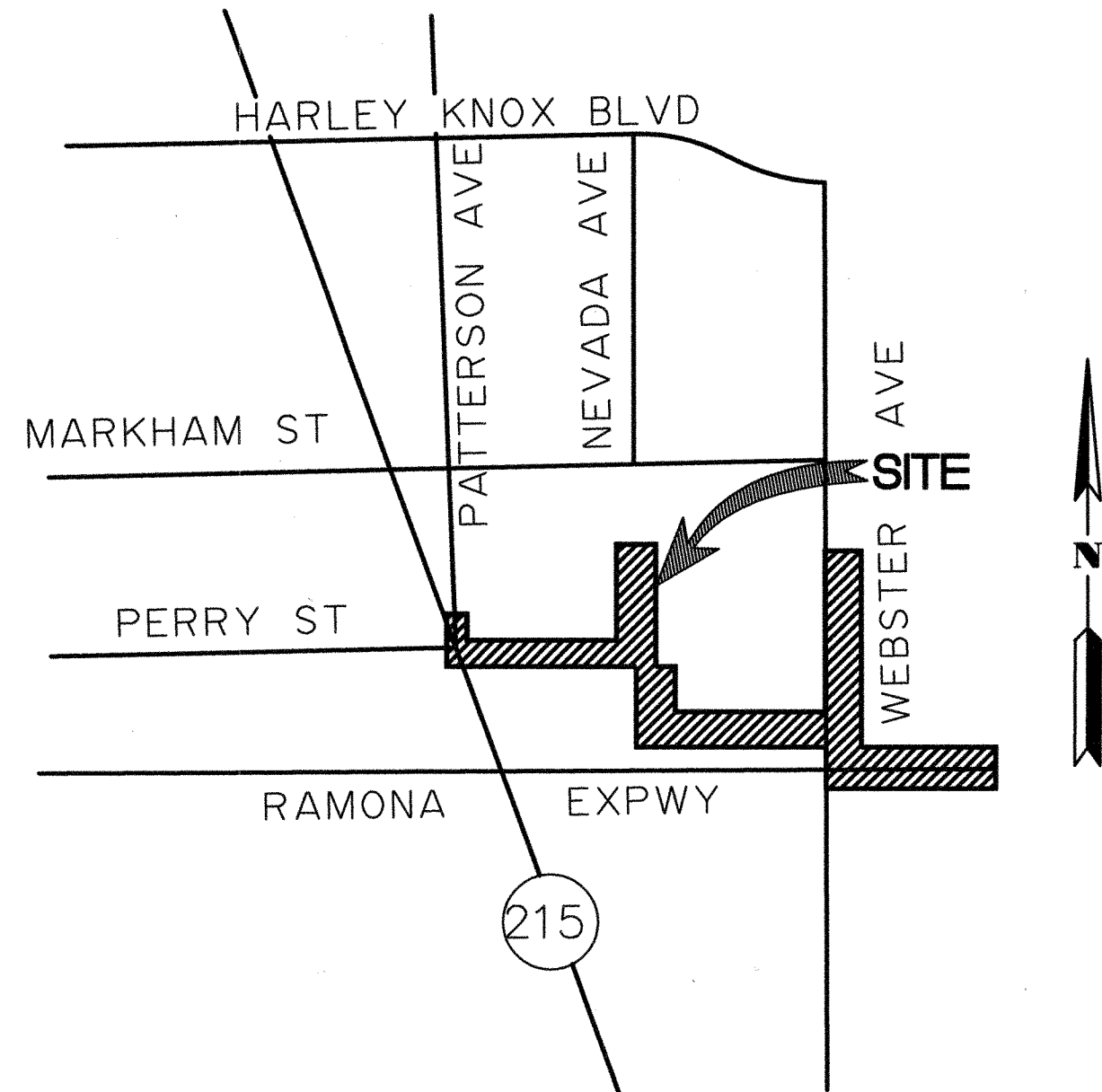
PBLA ENGINEERING, INC.

1809 E. Dyer Rd., Suite 301
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(888)714-9642

981 Corporate Center Drive, Suite 150
Pomona, CA 91768
(626) 512-4934

1481 Ford Street, Suite 201
Redlands, CA 92373
(714) 620-4960

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT



VICINITY MAP
N.T.S.

T.4S, R.4W, S.1
T.4S, R.3W, S.7

INDEX

TITLE	SHEET NO.
TITLE SHEET	1
INDEX MAP	2
LINE E STA 9+99.94 TO STA 17+00	3
LINE E STA 17+00 TO STA 24+32.56	4
LINE F STA 10+00 TO STA 16+00	5
LINE F STA 16+00 TO STA 22+00	6
LINE F STA 22+00 TO STA 27+50	7
LINE F STA 27+50 TO STA 33+50	8
LINE F STA 33+50 TO STA 41+00	9
LINE F STA 41+00 TO 46+50	10
LINE F STA 46+50 TO 50+75.06	11
LINE B5.1 STA 10+00 TO STA 17+26.39	12
LINE F5 STA 10+00 TO STA 17+00	13
LINE F5 STA 17+00 TO STA 25+00	14
LINE F5 STA 25+00 TO STA 27+41.61	15
LINE F-3	16
LINE F-1, F-6, F-5.1, F-5.2 & F-5.3	17
LINE F-2, F-4, F-5.4 & F-6.1	18
LINE F-7, F-8, F-9 & FUTURE LINE E STUB	19
DETAIL SHEET	20

GENERAL NOTES:

- THE CONTRACTOR SHALL CONSTRUCT THE FLOOD CONTROL IMPROVEMENTS SHOWN ON THE DRAWINGS IN CONFORMANCE WITH THE REQUIREMENTS OF THE RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT'S M.O.U. STANDARD SPECIFICATIONS DATED JUNE 24, 2008, AND RCFC&WCD STANDARD MANUAL. FOR THE LATEST DRAWINGS OF THE STANDARD MANUAL, PLEASE REFER TO THE "PUBLICATIONS AND RECORDS" PAGE FOUND ON THE DISTRICT'S WEBSITE.
- CONTACT THE ENCROACHMENT PERMIT ENGINEER AT 951.955.1266 IF AN ENCROACHMENT PERMIT IS REQUIRED FROM RIVERSIDE COUNTY FLOOD CONTROL. AFTER THE PERMIT IS ISSUED THE DISTRICT MUST BE NOTIFIED ONE WEEK PRIOR TO CONSTRUCTION.
- CONTACT CONTRACT ADMINISTRATION AT 951.955.1288 IF CONSTRUCTION INSPECTION WILL BE PERFORMED BY RIVERSIDE COUNTY FLOOD CONTROL. THE DISTRICT MUST BE NOTIFIED TWENTY DAYS (20) PRIOR TO CONSTRUCTION.
- ALL STATIONING REFERS TO CENTERLINE OF CONSTRUCTION UNLESS OTHERWISE NOTED.
- STATIONING FOR LATERALS AND CONNECTOR PIPE REFER TO THE CENTERLINE INTERSECTION STATIONS.
- FORTY-EIGHT HOURS BEFORE EXCAVATION, CALL UNDERGROUND SERVICE ALERT 1.800.227.2600 OR 811.
- ALL ELEVATIONS SHOWN ARE IN FEET AND DECIMALS THEREOF BASED ON THE NORTH AMERICAN VERTICAL DATUM (NAVD 88).
- ALL COORDINATES ARE SHOWN IN FEET AND DECIMALS THEREOF BASED ON THE NORTH AMERICAN DATUM (NAD 83), CALIFORNIA COORDINATE SYSTEM (CCS), ZONE 6, EPOCH 1992.88.
- ALL CROSS SECTIONS ARE TAKEN LOOKING DOWNSTREAM.
- ELEVATIONS OF UTILITIES ARE APPROXIMATE UNLESS OTHERWISE NOTED.
- UNLESS OTHERWISE SPECIFIED, MINIMUM STREET RECONSTRUCTION SHALL BE 4" TYPE "B" HOT MIX ASPHALT OVER 6" CLASS 2 AGGREGATE BASE OR AS SPECIFIED BY THE ENGINEER.
- OPENINGS RESULTING FROM THE CUTTING OR PARTIAL REMOVAL OF EXISTING CULVERTS, PIPES OR SIMILAR STRUCTURES TO BE ABANDONED SHALL BE SEALED WITH 6" CLASS "B" CONCRETE.
- PIPE CONNECTED TO THE MAINLINE PIPE SHALL CONFORM TO JUNCTION STRUCTURE NO. 4 (JS229) UNLESS OTHERWISE NOTED.
- PIPE BEDDING SHALL CONFORM TO RCFC&WCD STANDARD DRAWING NO. M815 EXCEPT FOR COVER <2 FEET. FOR COVER <2 FEET, CONCRETE SLURRY (2000 PSI) SHALL BE USED. THE ENTIRE TRENCH SHALL BE SLURRY EXTENDING 4 INCHES MINIMUM AND 12 INCHES MAXIMUM ABOVE THE TOP OF PIPE.
- ◆ INDICATES SOIL BORING LOCATIONS BASED ON THE SOILS REPORT DATED MAY 9, 2016. LOCATIONS SHOWN ARE APPROXIMATE.
- "V" IS THE DEPTH OF CATCH BASINS MEASURED FROM THE TOP OF CURB TO INVERT OF CONNECTOR PIPE.
- ALL CURB INLET STATIONING REPRESENTS THE LOCATION WHERE THE PROPOSED STORM DRAIN INTERSECTS THE INSIDE OF THE CURB INLET.
- CATCH BASINS SHALL BE LOCATED SO THAT LOCAL DEPRESSION SHALL BEGIN AT EXISTING CURB RETURN JOINT, UNLESS OTHERWISE SPECIFIED.
- ALL CURBS, GUTTERS, SIDEWALKS, DRIVEWAYS AND OTHER EXISTING IMPROVEMENTS TO BE RECONSTRUCTED IN KIND AND AT THE SAME ELEVATION AND LOCATION AS THE EXISTING IMPROVEMENTS UNLESS OTHERWISE NOTED.
- STANDARD DRAWINGS CALLED FOR ON THE PLAN AND PROFILE SHALL CONFORM TO DISTRICT STANDARD DRAWINGS UNLESS NOTED OTHERWISE.
- THE CONTRACTOR IS REQUIRED TO CALL ALL UTILITY AGENCIES REGARDING TEMPORARY SHORING AND SUPPORT REQUIREMENTS FOR THE VARIOUS UTILITY LINES SHOWN ON THESE PLANS.
- DURING ROUGH GRADING OPERATIONS AND PRIOR TO CONSTRUCTION OF PERMANENT DRAINAGE STRUCTURES, TEMPORARY DRAINAGE CONTROL SHOULD BE PROVIDED TO PREVENT PONDING WATER AND DAMAGE TO ADJACENT PROPERTIES.
- APPROVAL OF THESE PLANS BY THE RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT DOES NOT RELIEVE THE DEVELOPER'S ENGINEER OF RESPONSIBILITY FOR THE ENGINEERING DESIGN. IF FIELD CHANGES ARE REQUIRED, IT WILL BE THE RESPONSIBILITY OF THE DESIGN ENGINEER TO MAKE THE NECESSARY CORRECTIONS.
- THE CONTRACTOR OR DEVELOPER SHALL SECURE ALL REQUIRED ENCROACHMENT AND/OR STATE AND FEDERAL REGULATORY PERMITS PRIOR TO THE COMMENCEMENT OF ANY WORK.
- THE CONCRETE COATING ON THE INSIDE OF ALL REINFORCED CONCRETE PIPES MUST BE INCREASED TO PROVIDE A MINIMUM OF 1-1/2 INCHES OVER THE REINFORCING AND INCREASED TO A MINIMUM OF 3-1/2 INCHES OVER REINFORCING FOR BOX CULVERT, WHEN DESIGN VELOCITIES EXCEED 20 FEET PER SECOND. THE CONCRETE DESIGN STRENGTH IN THESE REACHES SHALL BE F'C=5,000 PSI FOR VELOCITIES EXCEEDING 20 FEET PER SECOND AND F'C=6,000 PSI FOR VELOCITIES EXCEEDING 30 FEET PER SECOND.
- CONSTRUCTION JOINTS FOR CALTRANS STANDARD REINFORCED CONCRETE BOX SHALL BE PLACED ACCORDING TO RCFC&WCD STANDARD DRAWING NO. BX401.
- ALL STATION OFFSETS ARE TAKEN LOOKING UPSTREAM UNLESS OTHERWISE NOTED.

CALTRANS STANDARD DRAWINGS

D80	CAST-IN-PLACE REINFORCED CONCRETE SINGLE BOX CULVERT
D89	PIPE CULVERT HEADWALLS
D90	PIPE CULVERT HEADWALLS, ENDWALLS AND WINGWALLS

R.C.F.C. & W.C.D. STANDARD DRAWINGS

BX401	SINGLE CELL REINFORCED CONCRETE BOX (STRUCTURAL DETAILS)
CB100	CATCH BASIN NO. 1
JS226	JUNCTION STRUCTURE NO. 1
JS229	JUNCTION STRUCTURE NO. 4
LD201	LOCAL DEPRESSION NO. 2
M807	SANITARY SEWER PROTECTION
M815	BEDDING AND PAYLINES
M816	CONCRETE BULKHEAD
MH252	MANHOLE NO. 2
MH253	MANHOLE NO. 3
MH254	MANHOLE NO. 4
TS301	TRANSITION STRUCTURE NO. 1
TS303	TRANSITION STRUCTURE NO. 3


WORK TO BE DONE

THE IMPROVEMENTS CONSIST OF THE FOLLOWING WORK TO BE DONE ACCORDING TO THESE PLANS AND THE FOLLOWING SPECIFICATIONS AND STANDARD DRAWINGS:

- RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT STANDARD DRAWINGS (REVISED FEBRUARY 2011)
- CALIFORNIA DEPARTMENT OF TRANSPORTATION REVISION 1 OF "CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (2014 EDITION)
- STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION, STANDARD SPECIFICATIONS (2015 EDITION)
- STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION, STANDARD PLANS (2015 EDITION)
- RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT'S M.O.U. STANDARD SPECIFICATIONS (DATED JUNE 2008)
- COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, COUNTY ROAD IMPROVEMENT STANDARDS AND SPECIFICATIONS, FILED DECEMBER, 2007.
- STANDARD PLANS FOR PUBLIC WORKS CONSTRUCTION (2012 EDITION)

NOTE: STORM DRAIN VIDEO SHALL BE SUBMITTED TO THE CITY ENGINEER FOR REVIEW AND APPROVAL PRIOR TO PAVEMENT CAPPING OR CONCRETING.


CITY OF PERRIS

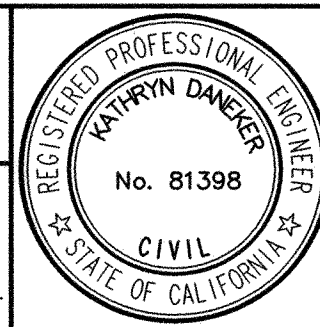
APPROVED BY: 
CITY ENGINEER DATE: 7/13/17

CAUTION!! LOCATION OF EXISTING UTILITIES ON THESE PLANS ARE APPROXIMATE AND SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.

Kimley Horn

401 B STREET, SUITE 600, SAN DIEGO, CA 92101
TEL (619) 234-9411

PREPARED BY: 
KATHRYN DANEKER R.C.E. 81398 DATE: 7/12/17

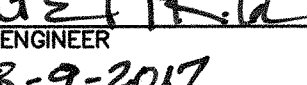



Know what's below.
Call before you dig.

AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA

BENCHMARK: COUNTY BENCHMARK 600-40-68 APPEARS TO HAVE BEEN DESTROYED BY THE CONSTRUCTION OF THE METROLINK TRACK. BENCHMARK UTILIZED IS NGS PID: DX9442, BEING A BRASS DISK SET IN TOP OF CURB MARKED "B.M. 435 METROPOLITAN WATER DISTRICT", LOCATED 300' WEST OF THE INTERSECTION OF HARVILL AVENUE AND RIDER STREET, PERRIS, CA. ELEVATION: 1515.12 FEET DATUM: NAVD 88

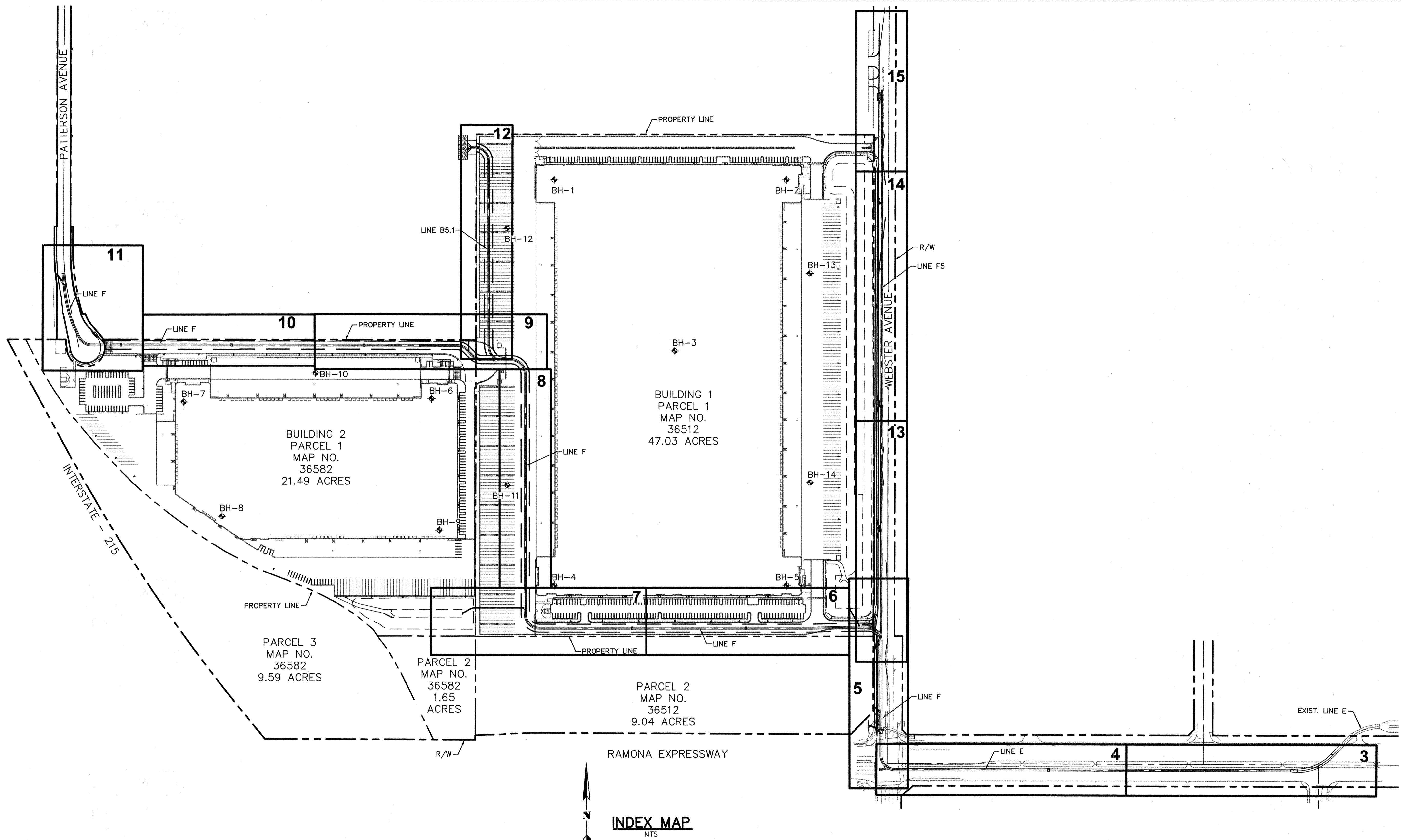
REF.	DESCRIPTION	APPR.	DATE

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT
RECOMMENDED FOR APPROVAL BY:  PLANNING ENGINEER DATE: 8-9-2017
APPROVED BY:  CHIEF ENGINEER DATE: 8-9-2017

PM 36512, PM 36582
PERRIS VALLEY MDP LINE E, STAGE 3
PERRIS VALLEY - PERRY STREET SD, STAGE 1
PERRIS VALLEY - WEBSTER AVENUE SD, STAGE 1
PERRIS VALLEY MDP LINE F, STAGE 1
TITLE SHEET

MDC
CITY FILE NO. P8-1226
PROJECT NO. 4-0-00488, 4-0-00448, 4-0-00449, 4-0-00450
DRAWING NO. 4-1117
SHEET NO. 1 OF 20

July 12, 2017 01:51:07pm K:\SND_L0EVA\195034000 - Rockefeller_Optimus\Desian\RCFCD\INDEX_MAP.dwg
 Plotted By: Spensson, Matthew



NOTE: STORM DRAIN VIDEO SHALL BE SUBMITTED TO THE CITY ENGINEER FOR REVIEW AND APPROVAL PRIOR TO PAVEMENT CAPPING OR CONCRETING.

PM 36512, PM 36582

CITY FILE NO. P8-1226	
PROJECT NO.	4-0-00488, 4-0-00448, 4-0-00449, 4-0-00450
DRAWING NO.	4-1117
SHEET NO.	2 OF 20

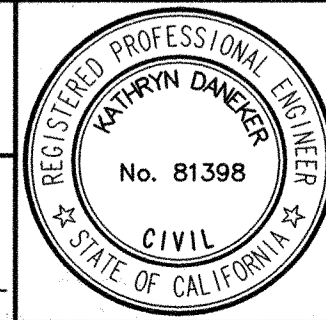
PERRIS VALLEY MDP LINE E, STAGE 3
PERRIS VALLEY - PERRY STREET SD, STAGE 1
PERRIS VALLEY - WEBSTER AVENUE SD, STAGE 1
PERRIS VALLEY MDP LINE F, STAGE 1
 INDEX MAP

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT	
RECOMMENDED FOR APPROVAL BY:	APPROVED BY:
<i>Deborah de Chambeau</i>	<i>Scott E. Kell</i>
DATE: 8/8/17	DATE: 8-9-2017

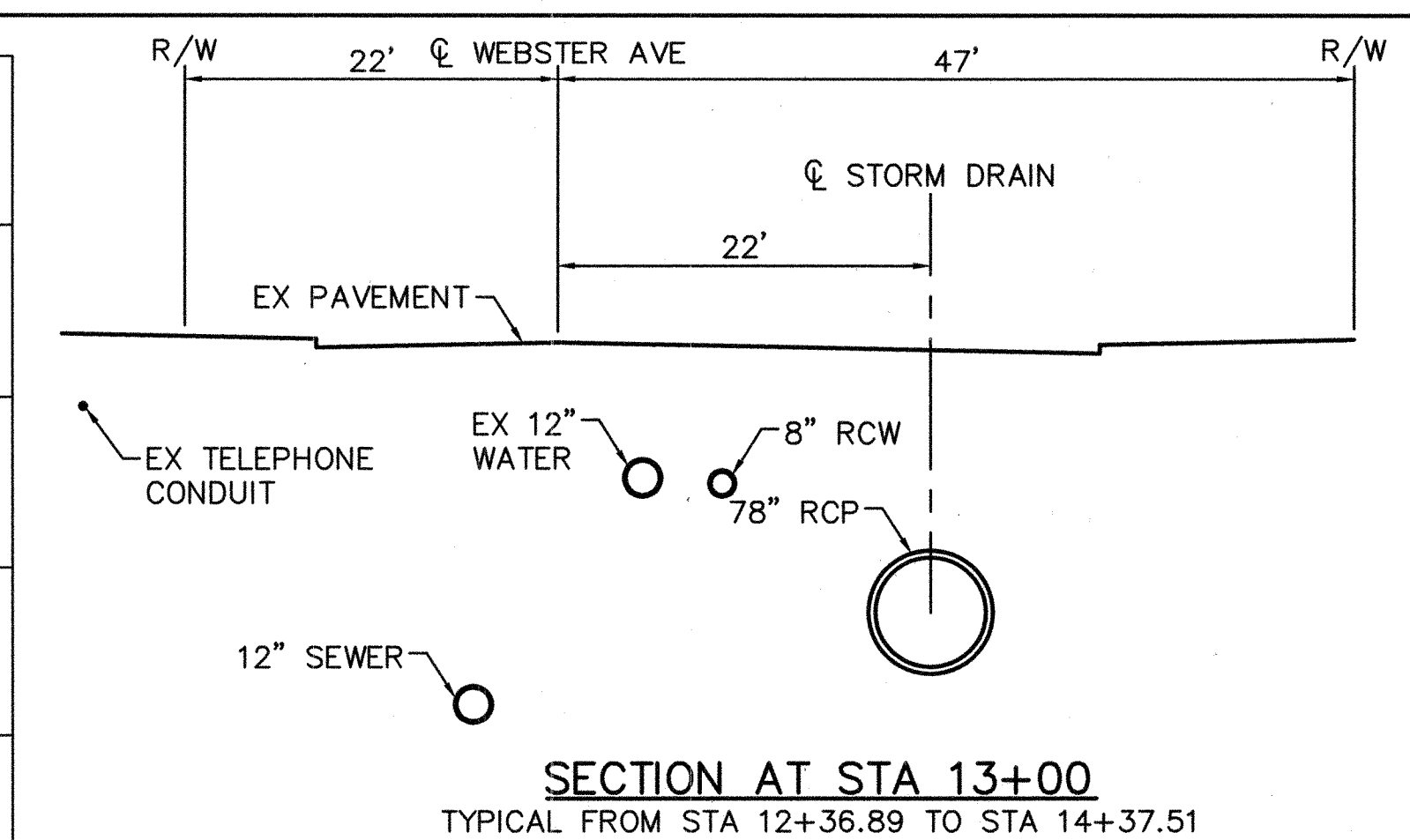
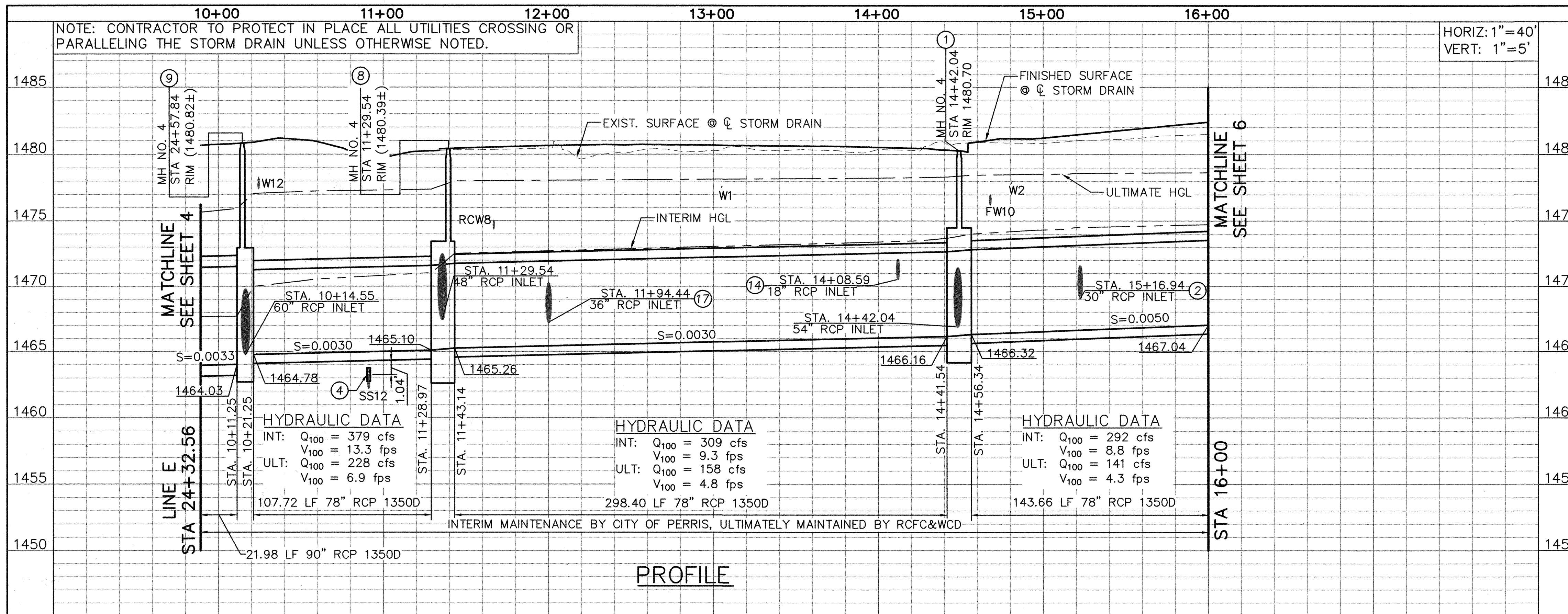
REF.	DESCRIPTION	APPR.	DATE

BENCHMARK: COUNTY BENCHMARK 600-40-68 APPEARS TO HAVE BEEN DESTROYED BY THE CONSTRUCTION OF THE METROLINK TRACK. BENCHMARK UTILIZED IS NOS PID: 0X9442, BEING A BRASS DISK SET IN TOP OF CURB MARKED "B.M. 435 METROPOLITAN WATER DISTRICT", LOCATED 300' WEST OF THE INTERSECTION OF HARVILL AVENUE AND RIDER STREET, PERRIS, CA. ELEVATION: 1515.12 FEET DATUM: NAVD 88

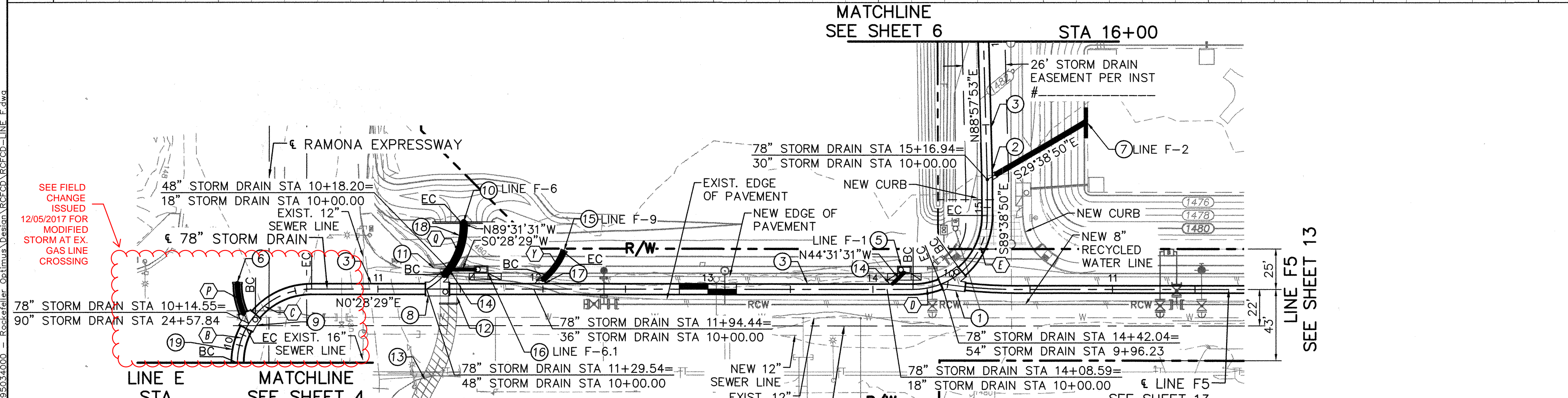
811
 DIAL TOLL FREE 811
 AT LEAST TWO DAYS BEFORE YOU DIG
 UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA
 Know what's below. Call before you dig.



Kimley»Horn
 401 B STREET, SUITE 600, SAN DIEGO, CA 92101
 TEL (619) 234-9411
 PREPARED BY: *Kathryn Daneker*
 KATHRYN DANEKER R.C.E. 81398 DATE: 11/20/17



- NOTES
- CONSTRUCT MANHOLE NO. 4 PER RCFC&WCD MH254 D1=78", D2=78", L=15.63'
LINE F: A=30', B=54', C=14.70', R=1466.91, S=1466.89
 - CONSTRUCT JUNCTION STRUCTURE NO. 2 PER RCFC&WCD JS227
LINE F1: A=60', B=30', C=6.40', D=78", E=4.20', F=3.43', G=2.98', L=4.50'
 - CONSTRUCT 78" RCP. D-LOAD PER PROFILE.
 - PROVIDE SANITARY SEWER PROTECTION PER RCFC&WCD M807
 - CONSTRUCT CATCH BASIN NO. 1 PER RCFC&WCD CB100 WITH LOCAL DEPRESSION PER RCFC&WCD LD 201. 10.37' - 18" RCP, SEE PROFILE SHEET 17
 - CONSTRUCT CONCRETE BULKHEAD PER RCFC&WCD M816. 18.23' - 60" RCP, SEE PROFILE SHEET 19
 - PRIVATE DETENTION BASIN RISER PER OPTIMUS LOGISTICS CENTER ON-SITE GRADING PLANS (CITY OF PERRIS PB-1226), 62.22' - 30" RCP. SEE PROFILE SHEET 18
 - CONSTRUCT MANHOLE NO. 4 PER RCFC&WCD MH254 D1=78", D2=78", L=15.00'
LINE F-6: A=30', B=48", C=14.10', R=1469.10, S=1467.61
 - CONSTRUCT MANHOLE NO. 4 PER RCFC&WCD MH254 D1=78", D2=90", L=10.83'
LAT: A=65', B=60", C=7.60', R=1464.78, S=1464.75
 - CONSTRUCT STRAIGHT HEADWALL PER CALTRANS STD. PLAN D89. SEE DETAIL C SHEET 20 AND PROFILE SHEET 17
 - REMOVE EXIST. HEADWALL
 - REMOVE 22LF EXIST. DOUBLE 5'(W)x2'(H) RCB
 - ABANDON AND SLURRY FILL EXIST. DOUBLE 5'(W)x2'(H) RCB AND INSTALL CONCRETE BULKHEAD ON THE UPSTREAM AND DOWNSTREAM ENDS PER DETAIL A ON SHEET 20
 - CONSTRUCT JUNCTION STRUCTURE NO. 4 PER RCFC&WCD JS229 CASE 1
 - CONSTRUCT CONCRETE BULKHEAD PER RCFC&WCD M816. 21.30' - 30" RCP, SEE PROFILE SHEET 19
 - CONSTRUCT CATCH BASIN NO. 1 PER RCFC&WCD CB100 WITH LOCAL DEPRESSION PER RCFC&WCD LD 201. 11.52' - 18" RCP, SEE PROFILE SHEET 18
 - CONSTRUCT JUNCTION STRUCTURE NO. 2 PER RCFC&WCD JS227
LINE F1: A=45', B=36", C=8.40', D=78", E=6.70', F=3.35', G=2.90', L=6.30'
 - CONSTRUCT 48" RCP. D-LOAD PER PROFILE
 - CONSTRUCT 90" RCP. D-LOAD PER PROFILE



ε CURVE DATA

CURVE	DELTA	RADIUS	LENGTH	BC	EC	PI NORTHING	PI EASTING
B	27°59'05"	45.00'	21.98'	STA 24+32.56	STA 24+54.54	2252355.18	6259868.44
C	49°09'05"	45.00'	38.60'	STA 10+21.25	STA 10+59.85	2252355.18	6259868.44
D	21°53'38"	45.00'	17.20'	STA 14+24.34	STA 14+41.54	2252809.64	6259872.20
E	49°23'03"	45.00'	38.79'	STA 14+56.34	STA 14+95.13	2252809.64	6259872.20
P	23°12'22"	45.00'	18.23'	N: 2252358.59 E: 6259883.04	N: 2252355.13 E: 6259865.27	2252355.02	6259876.10
Q	42°34'40"	45.00'	33.44'	N: 2252481.00 E: 6259860.36	N: 2252492.57 E: 6259830.60	2252492.40	6259851.21
Y	22°08'34"	45.00'	17.39'	N: 2252543.13 E: 6259861.58	N: 2252552.89 E: 6259847.33	2252549.40	6259855.41

NOTE: STORM DRAIN VIDEO SHALL BE SUBMITTED TO THE CITY ENGINEER FOR REVIEW AND APPROVAL PRIOR TO PAVEMENT CAPPING OR CONCRETING.

NOTE: RESURFACE STORM DRAIN TRENCH PER CITY OF PERRIS UTILITY TRENCH SURFACE REPAIR STANDARD ON SHEET 20.

SEE FIELD CHANGE ISSUED 12/05/2017 FOR MODIFIED STORM AT EX. GAS LINE CROSSING

Kimley-Horn
401 B STREET, SUITE 600, SAN DIEGO, CA 92101
TEL (619) 234-9411

PREPARED BY: *Kathryn Daneker*
KATHRYN DANEKER R.C.E. 81398 DATE: 11/20/17

811
Know what's below. Call before you dig.
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA

BENCHMARK: COUNTY BENCHMARK 600-40-68 APPEARS TO HAVE BEEN DESTROYED BY THE CONSTRUCTION OF THE METROLINK TRACK. BENCHMARK UTILIZED IS NGS PID: 0X5442, BEING A BRASS DISK SET IN TOP OF CURB MARKED "B.M. 435 METROPOLITAN WATER DISTRICT", LOCATED 300' WEST OF THE INTERSECTION OF HARVILL AVENUE AND RIDER STREET, PERRIS, CA. ELEVATION: 1515.12 FEET DATUM: NAVD 88

REVISIONS

REF.	DESCRIPTION	APPR.	DATE

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

RECOMMENDED FOR APPROVAL BY: *Nikolai de Chambray* DATE: 8/8/17

APPROVED BY: *Shawn ETK* DATE: 8-9-2017

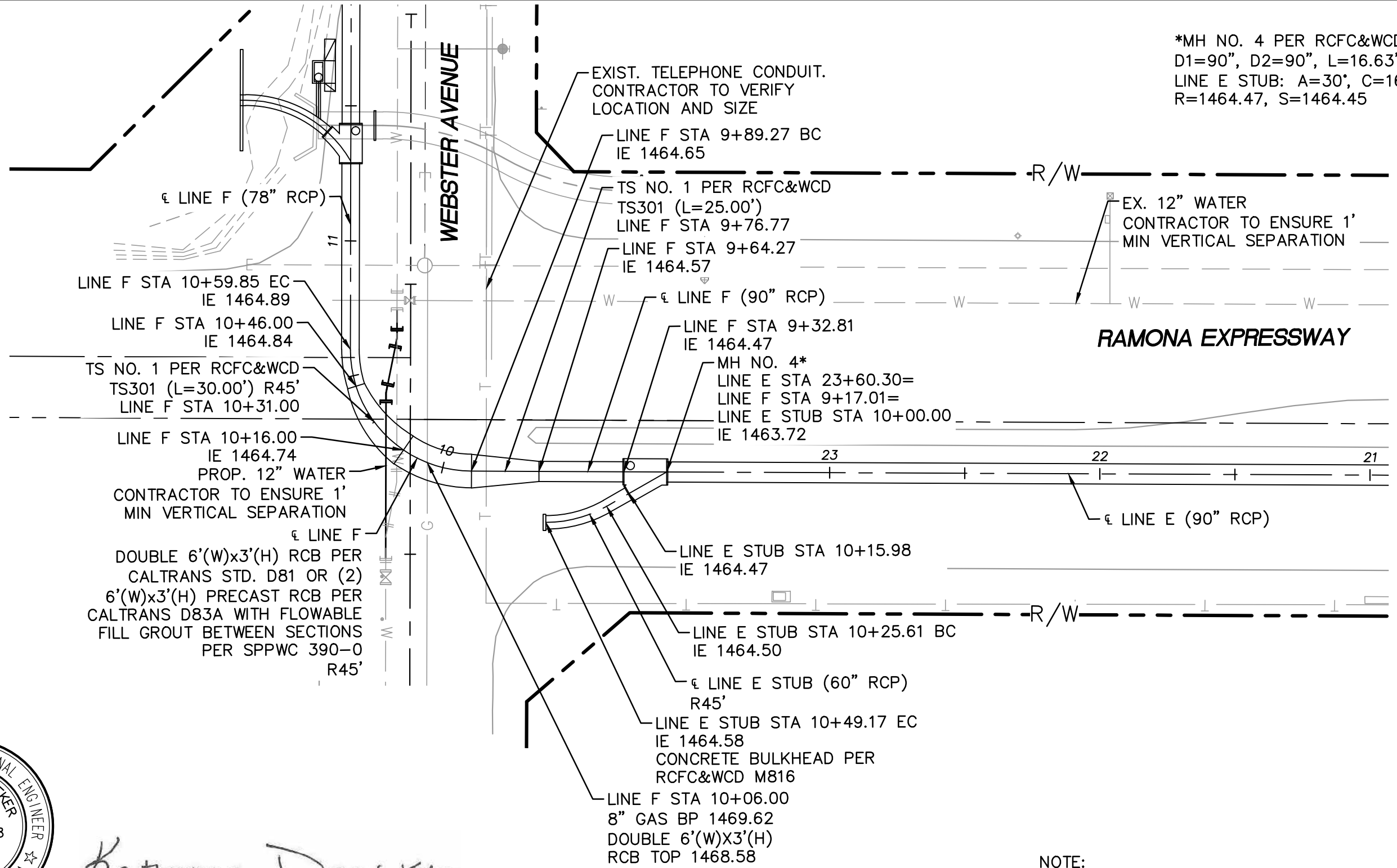
PM 36512, PM 36582

PERRIS VALLEY MDP LINE E STAGE 3
PERRIS VALLEY MDP LINE F STAGE 1
LINE F STA 10+00 TO STA 16+00

CITY FILE NO. P8-1226

PROJECT NO. 4-0-00488
DRAWING NO. 4-1117
SHEET NO. 5 OF 20

K:\SND_LDEV\195034000 - Rockefeller Optimus\Design\Exhibits\2017.12.04 - Line F RCB\2017.11.29 - RCFC Line F RCB.dwg 12-05-17-6:07 PM



*MH NO. 4 PER RCFC&WCD MH254
 D1=90", D2=90", L=16.63'
 LINE E STUB: A=30', C=16.40',
 R=1464.47, S=1464.45

LINE F STA 10+59.85 EC
 IE 1464.89
 LINE F STA 10+46.00
 IE 1464.84
 TS NO. 1 PER RCFC&WCD
 TS301 (L=30.00') R45'
 LINE F STA 10+31.00
 LINE F STA 10+16.00
 IE 1464.74
 PROP. 12" WATER
 CONTRACTOR TO ENSURE 1'
 MIN VERTICAL SEPARATION
 LINE F
 DOUBLE 6'(W)x3'(H) RCB PER
 CALTRANS STD. D81 OR (2)
 6'(W)x3'(H) PRECAST RCB PER
 CALTRANS D83A WITH FLOWABLE
 FILL GROUT BETWEEN SECTIONS
 PER SPPWC 390-0
 R45'

EXIST. TELEPHONE CONDUIT.
 CONTRACTOR TO VERIFY
 LOCATION AND SIZE
 LINE F STA 9+89.27 BC
 IE 1464.65

TS NO. 1 PER RCFC&WCD
 TS301 (L=25.00')
 LINE F STA 9+76.77
 LINE F STA 9+64.27
 IE 1464.57

LINE F (90" RCP)
 LINE F STA 9+32.81
 IE 1464.47
 MH NO. 4*
 LINE E STA 23+60.30=
 LINE F STA 9+17.01=
 LINE E STUB STA 10+00.00
 IE 1463.72

LINE E STUB STA 10+15.98
 IE 1464.47
 LINE E STUB STA 10+25.61 BC
 IE 1464.50

LINE E STUB (60" RCP)
 R45'
 LINE E STUB STA 10+49.17 EC
 IE 1464.58
 CONCRETE BULKHEAD PER
 RCFC&WCD M816

LINE F STA 10+06.00
 8" GAS BP 1469.62
 DOUBLE 6'(W)x3'(H)
 RCB TOP 1468.58



Kathryn Daneker
 KATHRYN DANEKER R.C.E. 81398

12/5/2017
 DATE

NOTE:
 LOCATION OF 8" GAS LINE PER RFI
 # 016 BY FULLMER ON 11/17/2017



SCALE: 1" = 40'

APPENDIX K
RIVERSIDE COUNTY HYDROLOGY
REFERENCE DATA

PBLA ENGINEERING, INC.

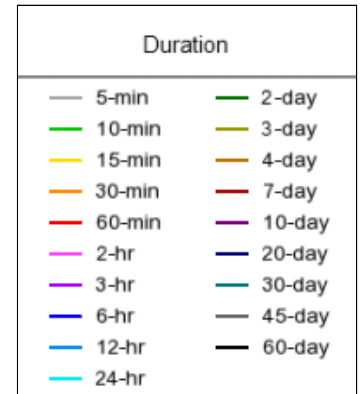
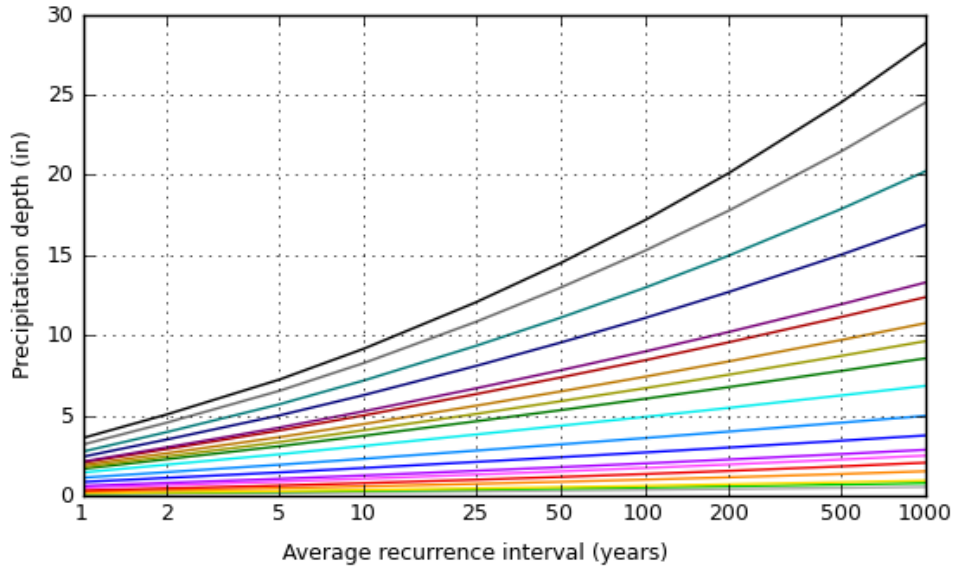
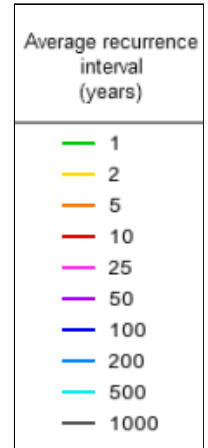
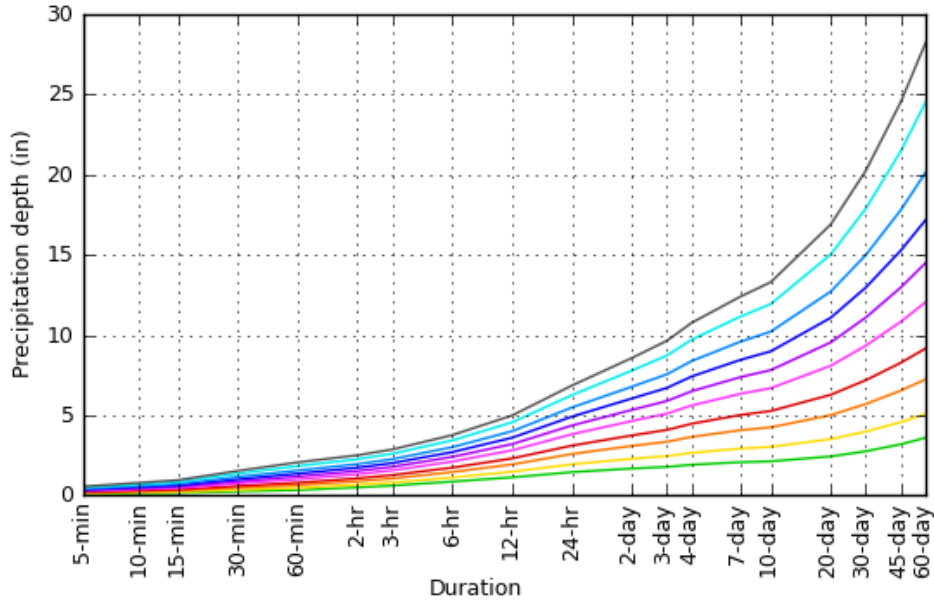
1809 E. Dyer Rd., Suite 301
Santa Ana, CA 92705
(888)714-9642

981 Corporate Center Drive, Suite 150
Pomona, CA 91768
(626) 512-4934

1481 Ford Street, Suite 201
Redlands, CA 92373
(714) 620-4960

PDS-based depth-duration-frequency (DDF) curves

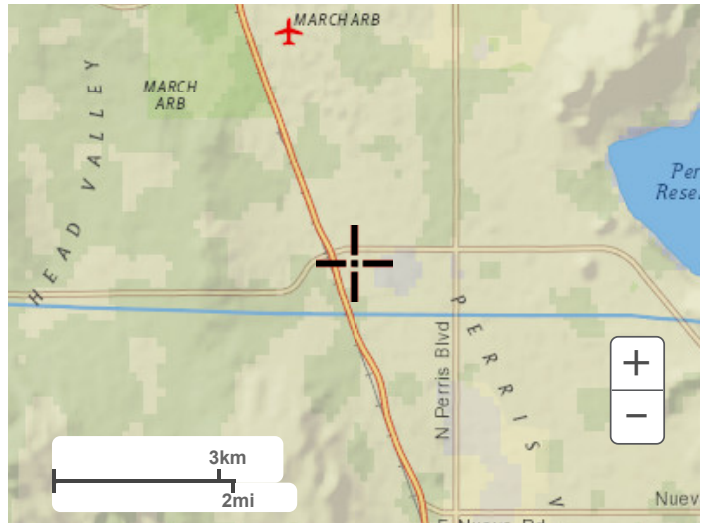
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[Back to Top](#)

Maps & aerials

Small scale terrain



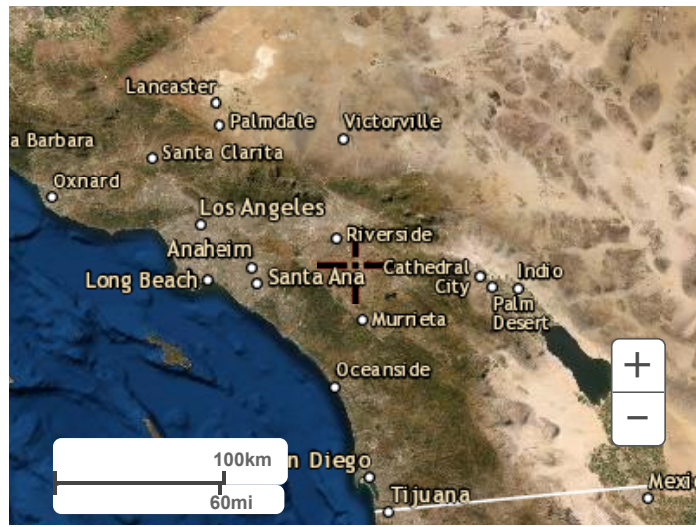
Large scale terrain



Large scale map



Large scale aerial



[Back to Top](#)

[US Department of Commerce](#)
[National Oceanic and Atmospheric Administration](#)
[National Weather Service](#)
[National Water Center](#)
1325 East West Highway
Silver Spring, MD 20910
Questions?: HDSC.Questions@noaa.gov

[Disclaimer](#)

RUNOFF INDEX NUMBERS OF HYDROLOGIC SOIL-COVER COMPLEXES FOR PERVIOUS AREAS-AMC II

Cover Type (3)	Quality of Cover (2)	Soil Group			
		A	B	C	D
<u>NATURAL COVERS -</u>					
Barren (Rockland, eroded and graded land)		78	86	91	93
Chaparrel, Broadleaf (Manzonita, ceanothus and scrub oak)	Poor	53	70	80	85
	Fair	40	63	75	81
	Good	31	57	71	78
Chaparrel, Narrowleaf (Chamise and redshank)	Poor	71	82	88	91
	Fair	55	72	81	86
Grass, Annual or Perennial	Poor	67	78	86	89
	Fair	50	69	79	84
	Good	38	61	74	80
Meadows or Cienegas (Areas with seasonally high water table, principal vegetation is sod forming grass)	Poor	63	77	85	88
	Fair	51	70	80	84
	Good	30	58	72	78
Open Brush (Soft wood shrubs - buckwheat, sage, etc.)	Poor	62	76	84	88
	Fair	46	66	77	83
	Good	41	63	75	81
Woodland (Coniferous or broadleaf trees predominate. Canopy density is at least 50 percent)	Poor	45	66	77	83
	Fair	36	60	73	79
	Good	28	55	70	77
Woodland, Grass (Coniferous or broadleaf trees with canopy density from 20 to 50 percent)	Poor	57	73	82	86
	Fair	44	65	77	82
	Good	33	58	72	79
<u>URBAN COVERS -</u>					
Residential or Commercial Landscaping (Lawn, shrubs, etc.)	Good	32	56	69	75
Turf (Irrigated and mowed grass)	Poor	58	74	83	87
	Fair	44	65	77	82
	Good	33	58	72	79
<u>AGRICULTURAL COVERS -</u>					
Fallow (Land plowed but not tilled or seeded)		76	85	90	92

RCFC & WCD
HYDROLOGY MANUAL

**RUNOFF INDEX NUMBERS
FOR
PERVIOUS AREAS**

RUNOFF INDEX NUMBERS OF HYDROLOGIC SOIL-COVER COMPLEXES FOR PERVIOUS AREAS-AMC II

Cover Type (3)	Quality of Cover (2)	Soil Group			
		A	B	C	D
<u>AGRICULTURAL COVERS</u> (cont.) -					
Legumes, Close Seeded (Alfalfa, sweetclover, timothy, etc.)	Poor	66	77	85	89
	Good	58	72	81	85
Orchards, Deciduous (Apples, apricots, pears, walnuts, etc.)	See Note 4				
Orchards, Evergreen (Citrus, avocados, etc.)	Poor	57	73	82	86
	Fair	44	65	77	82
	Good	33	58	72	79
Pasture, Dryland (Annual grasses)	Poor	67	78	86	89
	Fair	50	69	79	84
	Good	38	61	74	80
Pasture, Irrigated (Legumes and perennial grass)	Poor	58	74	83	87
	Fair	44	65	77	82
	Good	33	58	72	79
Row Crops (Field crops - tomatoes, sugar beets, etc.)	Poor	72	81	88	91
	Good	67	78	85	89
Small Grain (Wheat, oats, barley, etc.)	Poor	65	76	84	88
	Good	63	75	83	87
Vineyard	See Note 4				

Notes:

1. All runoff index (RI) numbers are for Antecedent Moisture Condition (AMC) II.
2. Quality of cover definitions:
 Poor-Heavily grazed or regularly burned areas. Less than 50 percent of the ground surface is protected by plant cover or brush and tree canopy.
 Fair-Moderate cover with 50 percent to 75 percent of the ground surface protected.
 Good-Heavy or dense cover with more than 75 percent of the ground surface protected.
3. See Plate C-2 for a detailed description of cover types.
4. Use runoff index numbers based on ground cover type. See discussion under "Cover Type Descriptions" on Plate C-2.
5. Reference Bibliography item 17.

RCFC & WCD
 HYDROLOGY MANUAL

**RUNOFF INDEX NUMBERS
 FOR
 PERVIOUS AREAS**

ACTUAL IMPERVIOUS COVER

Land Use (1)	Range-Percent	Recommended Value For Average Conditions-Percent (2)
Natural or Agriculture	0 - 10	0
Single Family Residential: (3)		
40,000 S. F. (1 Acre) Lots	10 - 25	20
20,000 S. F. (½ Acre) Lots	30 - 45	40
7,200 - 10,000 S. F. Lots	45 - 55	50
Multiple Family Residential:		
Condominiums	45 - 70	65
Apartments	65 - 90	80
Mobile Home Park	60 - 85	75
Commercial, Downtown Business or Industrial	80 -100	90

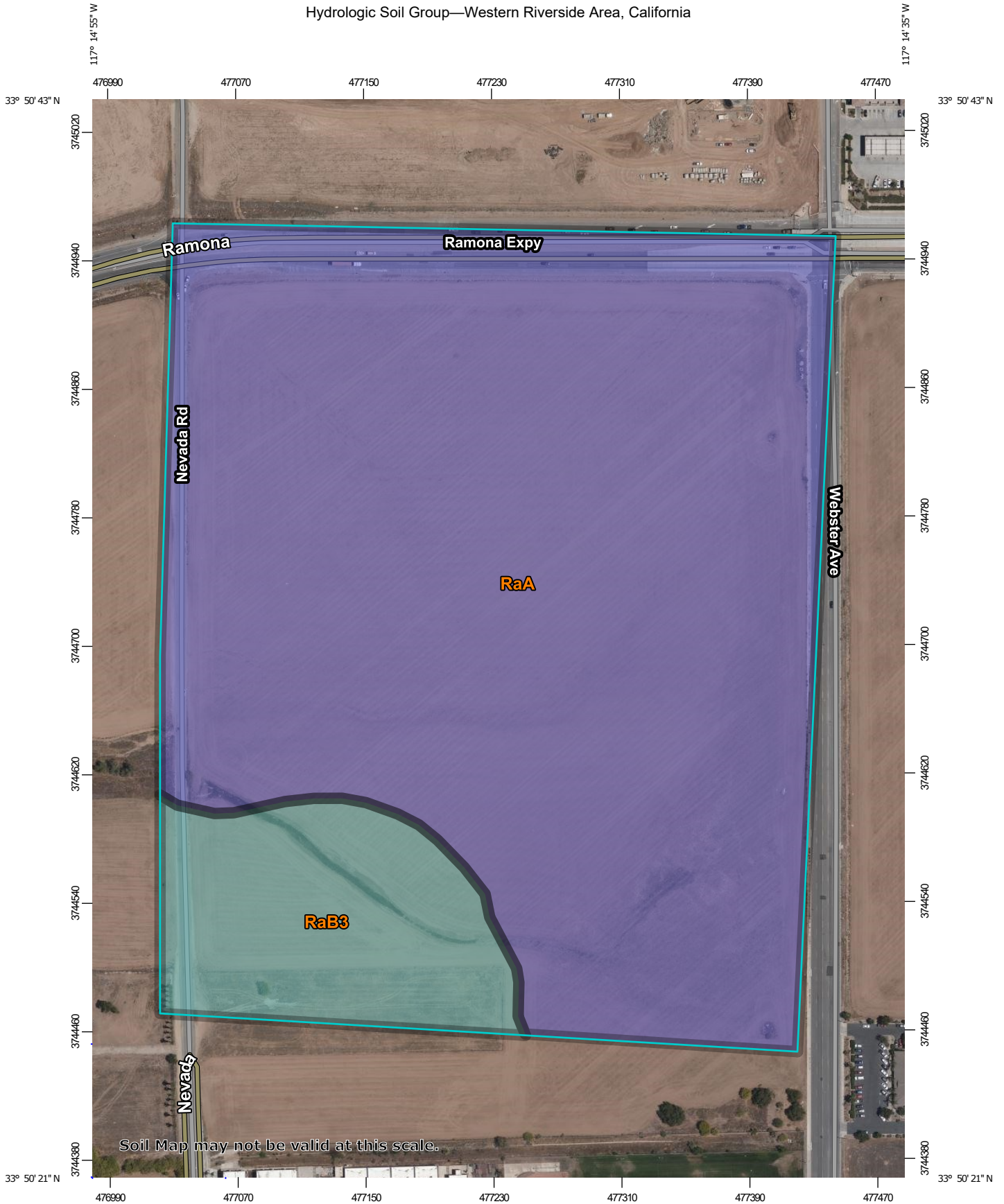
Notes:

1. Land use should be based on ultimate development of the watershed. Long range master plans for the County and incorporated cities should be reviewed to insure reasonable land use assumptions.
2. Recommended values are based on average conditions which may not apply to a particular study area. The percentage impervious may vary greatly even on comparable sized lots due to differences in dwelling size, improvements, etc. Landscape practices should also be considered as it is common in some areas to use ornamental gravels underlain by impervious plastic materials in place of lawns and shrubs. A field investigation of a study area should always be made, and a review of aerial photos, where available may assist in estimating the percentage of impervious cover in developed areas.
3. For typical horse ranch subdivisions increase impervious area 5 percent over the values recommended in the table above.

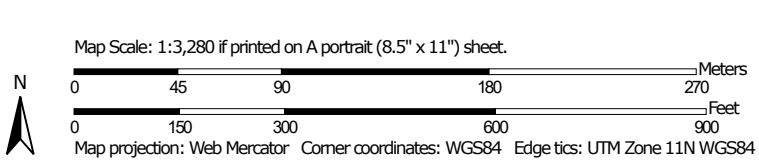
RCFC & WCD
HYDROLOGY MANUAL

**IMPERVIOUS COVER
FOR
DEVELOPED AREAS**

Hydrologic Soil Group—Western Riverside Area, California



Soil Map may not be valid at this scale.



MAP LEGEND

Area of Interest (AOI)









 Area of Interest (AOI)

Soils

Soil Rating Polygons





 A
 A/D
 B
 B/D
 C
 C/D
 D
 Not rated or not available

Soil Rating Lines


 A
 A/D
 B
 B/D
 C
 C/D
 D
 Not rated or not available

Soil Rating Points






 A
 A/D
 B
 B/D

 C
 C/D
 D
 Not rated or not available


Water Features

 Streams and Canals

Transportation

 Rails
 Interstate Highways
 US Routes
 Major Roads
 Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL:
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Western Riverside Area, California
 Survey Area Data: Version 13, May 27, 2020

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: May 25, 2019—Jun 25, 2019

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
RaA	Ramona sandy loam, 0 to 2 percent slopes, MLRA 19	B	43.9	86.6%
RaB3	Ramona sandy loam, 0 to 5 percent slopes, severely eroded	C	6.8	13.4%
Totals for Area of Interest			50.7	100.0%

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher