STORMWATER MANAGEMENT REPORT

FOR

SAINT SHARBEL MARONITE CHURCH

LOTS 1, 2, 3, 4, 5 AND 6 IN BLOCK 261
526 EASTON AVENUE
TOWNSHIP OF FRANKLIN, SOMERSET COUNTY
NEW JERSEY

REMO ENGINEERING, LLC
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FranklinTwp526EastonAveSwmRpt3-1-21

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1. INTRODUCTION

This report provides the supportive data necessary to analyze the hydrologic conditions of the proposed development.

This project consists of 72,527.0 SF or 1.66 AC of land located in the Township of Franklin, Somerset County, New Jersey. The property consist of Lots 1, 2, 3, 4, 5 and 6 in Block 261. The site is located at 526 Easton Avenue.

Currently, the site is developed and contains a 1 story brick church building and an associated asphalt paved parking lot, and 5 single family dwellings and associated paved driveways. The remainder of the site is predominantly grass.

The applicant for the project proposes to consolidate the lots and demolish 4 of the dwellings and the existing church building, and construct a church building and an asphalt paved parking lot to serve the development. A total of 100 parking spaces are planned. Access/Egress will be from Franklin Boulevard, Reeve Street and Blake Avenue. Impervious coverage for pre-development and post-development will increase from approximately 45.0% to 72.2% of the total site area.

Since the impervious coverage will increase 27.2% and site runoff will increase after development, an onsite subsurface detention system is planned so as to not adversely impact downstream properties and drainage facilities.

2. METHODOLOGIES UTILIZED

The methodologies utilized in addressing the stormwater management standards of the Township of Franklin and Somerset County include the following:

1. Peak flow rates were developed for the 2, 10, 25, 50 and 100 year storm frequencies for the pre-development and post-development hydrologic conditions based upon the Rational Method.

2. The subsurface detention system was sized to provide the required maximum storage volume for the specified outflow rate as determined by the Rational Method.

3. The detention facility was designed to limit the 2, 10 and 100-year runoff to less than or equal to 50%, 75% and 80% respectively, of the pre-development runoff. In addition, the detention facility was designed to limit the 25 and 50-year post-development runoff to less than that of which existed prior to development for the 25 and 50-year storm frequencies.

4. The storm sewer was designed for a 25-year storm frequency using the Rational Method for computing runoff and the Manning's formula for computing pipe flow parameters. The storm sewer was designed to convey the peak runoff with a hydraulic slope that will provide a mean velocity between 2 FPS and 10 FPS based on the Manning's formula with roughness coefficient, n = 0.013.

3. PROPOSED DRAINAGE IMPROVEMENTS

Proposed drainage improvements planned for the project include the construction of a subsurface detention facility on the site and a storm sewer system to collect surface runoff from the area being developed.

Drainage areas for the various portions of the site were determined using the topography obtained for this site.

The development of the site will not substantially alter the drainage pattern in the area, however, the rate of runoff will increase.

All of the site runoff from the area being improved will be collected and directed to the subsurface detention facility and will be controlled.

4. PROPOSED DETENTION FACILITY

The subsurface detention facility is located in the parking lot area of the site. The detention facility will have a total storage capacity of 6,967 cubic feet based on 97% void ratio. This was determined by routing the design storms through the detention facility to determine the critical storm duration and maximum storage required for that duration.

The detention facility consist of 21 FT x 114 FT x 3 FT deep Brentwood Stormtank Stormwater Storage Modules. The outflow structure will consist of a 2.50 IN orifice at elevation 36.89 and a 6.00 FT long weir at crest elevation 39.39. The outflow pipe will be a 15 IN diameter reinforced concrete pipe (RCP). The outflow pipe has been sized accordingly so as to convey outflow without having an effect on the outflow structure's hydraulic performance, also to minimize the chance of clogging and to facilitate cleaning. The outflow pipe will connect to an existing storm sewer inlet located on Franklin Boulevard. The detention facility will have sufficient storage capacity and attenuate and convey the runoff without significant adverse impact on downstream erosion and without adverse impact on flooding since the post-development runoff with detention will be attenuated to less than

the pre-development runoff for the various storms.

A catch basin trap will be installed and a 2 FT sump will be provided in each proposed onsite inlet for water quality control. The catch basin trap and sump will remove sediment, debris, trash and petroleum hydrocarbons (oil and grease) from runoff flowing into the detention system.

The detention facility will be a dry facility and will fully evacuate all stored runoff.

The detention facility will provide the required storage and reduce the peak rate of inflow from the post-development area to less than that of which existed prior to development to address the Township of Franklin and Somerset County stormwater management standards.

5. PRE-DEVELOPMENT HYDROLOGIC CONDITIONS

Drainage Area, A = 1.66 Acres
Weighted Runoff Coefficient, Cw = 0.58
Time of Concentration, Tc = 10.0 Minutes
2-year Rainfall Intensity, I = 4.20 IN/HR
2-year Rate of Runoff, Q = 4.04 CFS
10-year Rainfall Intensity, I = 5.80 IN/HR
10-year Rate of Runoff, Q = 5.58 CFS
25-year Rainfall Intensity, I = 6.70 IN/HR
25-year Rate of Runoff, Q = 6.45 CFS
50-year Rainfall Intensity, I = 7.20 IN/HR
50-year Rainfall Rate of Runoff, Q = 6.93 CFS
100-year Rainfall Intensity, I = 8.00 IN/HR
100-year Rate of Runoff, Q = 7.70 CFS

6. POST-DEVELOPMENT HYDROLOGIC CONDITIONS

Drainage Area, A = 1.66 Acres
Weighted Runoff Coefficient, Cw = 0.73
Time of Concentration, Tc = 10.0 Minutes
2-year Rainfall Intensity, I = 4.20 IN/HR
2-year Rate of Runoff, Q = 5.09 CFS
10-year Rainfall Intensity, I = 5.80 IN/HR
10-year Rate of Runoff, Q = 7.03 CFS
25-year Rainfall Intensity, I = 6.70 IN/HR
25-year Rate of Runoff, Q = 8.12 CFS
50-year Rainfall Intensity, I = 7.20 IN/HR
50-year Rate of Runoff, Q = 8.72 CFS
100-year Rainfall Intensity, I = 8.00 IN/HR
100-year Rate of Runoff, Q = 9.69 CFS

7. **SUMMARY OF PRE-DEVELOPMENT AND POST-DEVELOPMENT RUNOFF FROM DETENTION FACILITY**

2-YR. PRE-DEVELOPMENT RUNOFF (CFS)	2-YR. POST-DEVELOPMENT RUNOFF W/O DETENTION (CFS)	2-YR. POST-DEVELOPMENT RUNOFF WITH DETENTION (CFS)	NET INCREASE (CFS)
4.04	5.09	0.18	-3.86

10-YR. PRE-DEVELOPMENT RUNOFF (CFS)	10-YR. POST-DEVELOPMENT RUNOFF W/O DETENTION (CFS)	10-YR. POST-DEVELOPMENT RUNOFF WITH DETENTION (CFS)	NET INCREASE (CFS)
5.58	7.03	0.21	-5.37

25-YR. PRE-DEVELOPMENT RUNOFF (CFS)	25-YR. POST-DEVELOPMENT RUNOFF W/O DETENTION (CFS)	25-YR. POST-DEVELOPMENT RUNOFF WITH DETENTION (CFS)	NET INCREASE (CFS)
6.45	8.12	0.23	-6.22

50-YR. PRE-DEVELOPMENT RUNOFF (CFS)	50-YR. POST-DEVELOPMENT RUNOFF W/O DETENTION (CFS)	50-YR. POST-DEVELOPMENT RUNOFF WITH DETENTION (CFS)	NET INCREASE (CFS)
6.93	8.72	0.24	-6.69

100-YR. PRE-DEVELOPMENT RUNOFF (CFS)	100-YR. POST-DEVELOPMENT RUNOFF W/O DETENTION (CFS)	100-YR. POST-DEVELOPMENT RUNOFF WITH DETENTION (CFS)	NET INCREASE (CFS)
7.70	9.69	0.25	-7.45

8. SUMMARY

The foregoing report demonstrates that the standards of stormwater management have been addressed by the planned subsurface detention facility.

Since the detention facility attenuates the post-development runoff from the site, it can be concluded that there should be no significant adverse impact on downstream areas from development of this project.

APPENDIX 1

SUPPORTING DESIGN COMPUTATIONS USING
THE RATIONAL METHOD

Rational Method

Pre-development Hydrologic Conditions

Drainage Area (A) = 72,527.0 SF OR 1.66 AC

Computation for Weighted Runoff Coefficient (Cw)

Character of Land	Runoff Coeff.	Area (SF)	Product (SF)
Asphalt Pavement	0.88	15,403.0	13,554.6
Roofs	0.85	13,536.6	11,506.1
Concrete	0.80	3,733.6	2,986.9
Lawns, Heavy Soil Steep Slope	0.36	39,853.8	14,347.4
		72,527.0	42,395.0

$$Cw = \frac{\text{Product}}{\text{Area}} = \frac{42,395.0 \text{ SF}}{72,527.0 \text{ SF}} = 0.58$$

Determination for Time of Concentration (Tc)

Use a Time of Concentration, Tc = 10.0 minutes (Minimum)

Determination of Rainfall Intensity (I)

Using a recurrence interval of 2 years and Tc = 10.0 Minutes,

I = 4.20 IN/HR

Using a recurrence interval of 10 years and Tc = 10.0 Minutes,

I = 5.80 IN/HR

Using a recurrence interval of 25 years and Tc = 10.0 Minutes,

I = 6.70 IN/HR

Using a recurrence interval of 50 years and Tc = 10.0 Minutes,

I = 7.20 IN/HR

Using a recurrence interval of 100 years and Tc = 10.0 Minutes,

I = 8.00 IN/HR

Computation for Rate of Runoff (Q)

Using The Rational Equation, Q = CIA

Where: Q = Rate of Runoff (CFS)
C = Runoff Coefficient (Dimensionless)
I = Rainfall Intensity (IN./HR.)
A = Drainage Area (AC.)

Q2 = (0.58)(4.20 IN/HR)(1.66 AC) = 4.04 CFS

Q10 = (0.58)(5.80 IN/HR)(1.66 AC) = 5.58 CFS

Q25 = (0.58)(6.70 IN/HR)(1.66 AC) = 6.45 CFS

Q50 = (0.58)(7.20 IN/HR)(1.66 AC) = 6.93 CFS

Q100 = (0.58)(8.00 IN/HR)(1.66 AC) = 7.70 CFS

Post-development Hydrologic Conditions

Drainage Area (A) = 72,527.0 SF or 1.66 AC

Computation for Weighted Runoff Coefficient (Cw)

Character of Land	Runoff Coeff.	Area (SF)	Product (SF)
Asphalt Pavement	0.88	35,058.8	30,851.7
Roofs	0.85	14,848.6	12,621.3
Concrete	0.80	2,458.0	1,966.4
Lawns, Heavy Soil Steep Slope	0.36	20,161.6	7,258.2
		72,527.0	52,697.6

$$Cw = \frac{\text{Product}}{\text{Area}} = \frac{52,697.6 \text{ SF}}{72,527.0 \text{ SF}} = 0.73$$

Determination of Time of Concentration (Tc)

Use a Time of Concentration, Tc = 10.0 Minutes (Minimum)

Determination of Rainfall Intensity (I)

Using a recurrence interval of 2 years and Tc = 10.0 Minutes,

I = 4.20 IN/HR

Using a recurrence interval of 10 years and Tc = 10.0 Minutes,

I = 5.80 IN/HR

Using a recurrence interval of 25 years and Tc = 10.0 Minutes,

I = 6.70 IN/HR

Using a recurrence interval of 50 years and Tc = 10.0 Minutes,

I = 7.20 IN/HR

Using a recurrence interval of 100 years and Tc = 10.0 Minutes,

I = 8.00 IN/HR

Computation for Rate of Runoff (Q)

Using The Rational Equation, Q = CIA

Where: Q = Rate of Runoff (CFS)
C = Runoff Coefficient (Dimensionless)
I = Rainfall Intensity (IN/HR)
A = Drainage Area (AC)

Q2 = (0.73)(4.20 IN/HR)(1.66 AC) = 5.09 CFS

Q10 = (0.73)(5.80 IN/HR)(1.66 AC) = 7.03 CFS

Q25 = (0.73)(6.70 IN/HR)(1.66 AC) = 8.12 CFS

Q50 = (0.73)(7.20 IN/HR)(1.66 AC) = 8.72 CFS

Q100 = (0.73)(8.00 IN/HR)(1.66 AC) = 9.69 CFS

Increase In Runoff Due To Development of Site

Qinc = Qpost - Qpre

Q2inc = 5.09 CFS - 4.04 CFS = 1.05 CFS

Q10inc = 7.03 CFS - 5.58 CFS = 1.45 CFS

Q25inc = 8.12 CFS - 6.45 CFS = 1.67 CFS

Q50inc = 8.72 CFS - 6.93 CFS = 1.79 CFS

Q100inc = 9.69 CFS - 7.70 CFS = 1.99 CFS

APPENDIX 2

PRE-DEVELOPMENT RUNOFF HYDROGRAPHS

Summary for Subcatchment 1: 2-Year Pre-Development Runoff

Runoff = 4.02 cfs @ 0.17 hrs, Volume= 2,453 cf, Depth= 0.41"

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
NJ-DEP 2-Year Duration=10 min, Inten=4.20 in/hr

Area (sf)	C	Description	Land Use
72,527	0.58		

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Events for Subcatchment 1: 2-Year Pre-Development Runoff

Event	Runoff (cfs)	Volume (cubic-feet)	Depth (inches)
2-Year	**4.02**	**2,453**	**0.41**

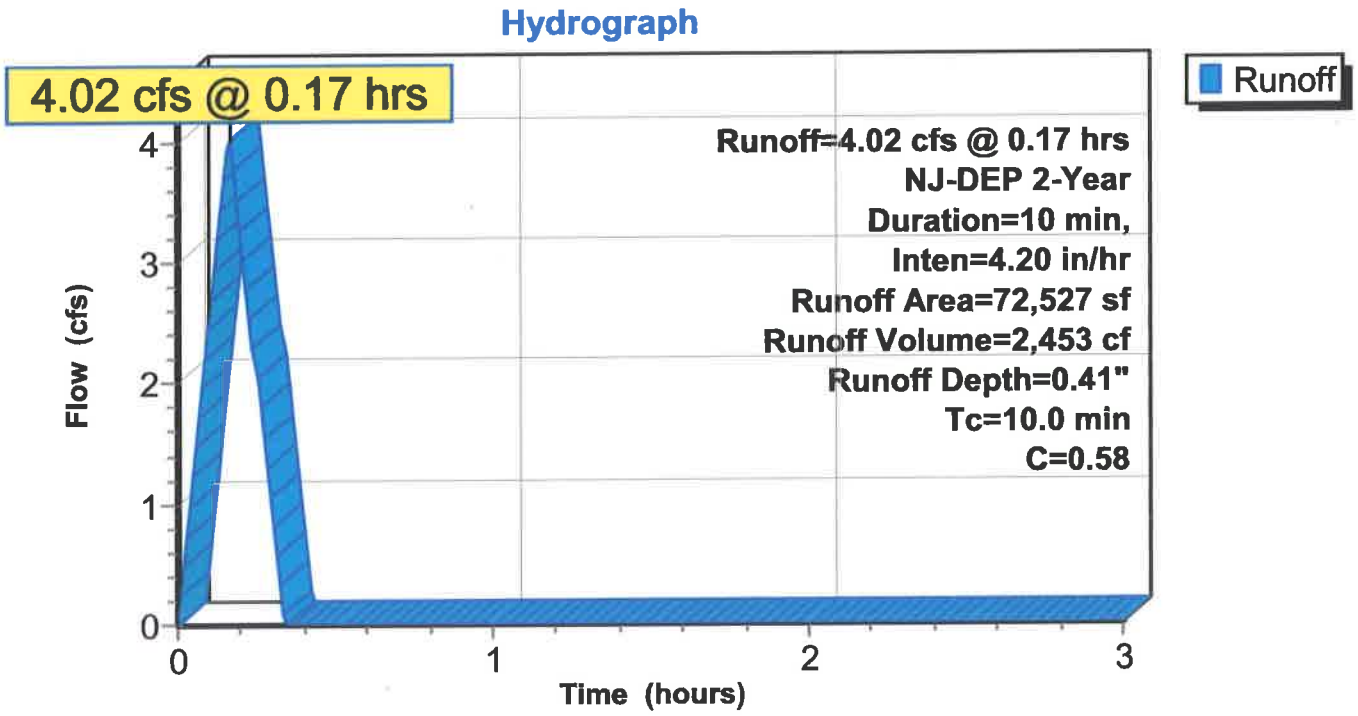
Hydrograph for Subcatchment 1: 2-Year Pre-Development Runoff

Time (hours)	Runoff (cfs)	Time (hours)	Runoff (cfs)	Time (hours)	Runoff (cfs)	Time (hours)	Runoff (cfs)
0.00	0.00	0.52	0.00	1.04	0.00	1.56	0.00
0.01	0.25	0.53	0.00	1.05	0.00	1.57	0.00
0.02	0.49	0.54	0.00	1.06	0.00	1.58	0.00
0.03	0.74	0.55	0.00	1.07	0.00	1.59	0.00
0.04	0.98	0.56	0.00	1.08	0.00	1.60	0.00
0.05	1.23	0.57	0.00	1.09	0.00	1.61	0.00
0.06	1.47	0.58	0.00	1.10	0.00	1.62	0.00
0.07	1.72	0.59	0.00	1.11	0.00	1.63	0.00
0.08	1.96	0.60	0.00	1.12	0.00	1.64	0.00
0.09	2.21	0.61	0.00	1.13	0.00	1.65	0.00
0.10	2.45	0.62	0.00	1.14	0.00	1.66	0.00
0.11	2.70	0.63	0.00	1.15	0.00	1.67	0.00
0.12	2.94	0.64	0.00	1.16	0.00	1.68	0.00
0.13	3.19	0.65	0.00	1.17	0.00	1.69	0.00
0.14	3.44	0.66	0.00	1.18	0.00	1.70	0.00
0.15	3.68	0.67	0.00	1.19	0.00	1.71	0.00
0.16	3.93	0.68	0.00	1.20	0.00	1.72	0.00
0.17	**4.01**	0.69	0.00	1.21	0.00	1.73	0.00
0.18	3.76	0.70	0.00	1.22	0.00	1.74	0.00
0.19	3.52	0.71	0.00	1.23	0.00	1.75	0.00
0.20	3.27	0.72	0.00	1.24	0.00	1.76	0.00
0.21	3.03	0.73	0.00	1.25	0.00	1.77	0.00
0.22	2.78	0.74	0.00	1.26	0.00	1.78	0.00
0.23	2.54	0.75	0.00	1.27	0.00	1.79	0.00
0.24	2.29	0.76	0.00	1.28	0.00	1.80	0.00
0.25	2.04	0.77	0.00	1.29	0.00	1.81	0.00
0.26	1.80	0.78	0.00	1.30	0.00	1.82	0.00
0.27	1.55	0.79	0.00	1.31	0.00	1.83	0.00
0.28	1.31	0.80	0.00	1.32	0.00	1.84	0.00
0.29	1.06	0.81	0.00	1.33	0.00	1.85	0.00
0.30	0.82	0.82	0.00	1.34	0.00	1.86	0.00
0.31	0.57	0.83	0.00	1.35	0.00	1.87	0.00
0.32	0.33	0.84	0.00	1.36	0.00	1.88	0.00
0.33	0.08	0.85	0.00	1.37	0.00	1.89	0.00
0.34	0.00	0.86	0.00	1.38	0.00	1.90	0.00
0.35	0.00	0.87	0.00	1.39	0.00	1.91	0.00
0.36	0.00	0.88	0.00	1.40	0.00	1.92	0.00
0.37	0.00	0.89	0.00	1.41	0.00	1.93	0.00
0.38	0.00	0.90	0.00	1.42	0.00	1.94	0.00
0.39	0.00	0.91	0.00	1.43	0.00	1.95	0.00
0.40	0.00	0.92	0.00	1.44	0.00	1.96	0.00
0.41	0.00	0.93	0.00	1.45	0.00	1.97	0.00
0.42	0.00	0.94	0.00	1.46	0.00	1.98	0.00
0.43	0.00	0.95	0.00	1.47	0.00	1.99	0.00
0.44	0.00	0.96	0.00	1.48	0.00	2.00	0.00
0.45	0.00	0.97	0.00	1.49	0.00	2.01	0.00
0.46	0.00	0.98	0.00	1.50	0.00	2.02	0.00
0.47	0.00	0.99	0.00	1.51	0.00	2.03	0.00
0.48	0.00	1.00	0.00	1.52	0.00	2.04	0.00
0.49	0.00	1.01	0.00	1.53	0.00	2.05	0.00
0.50	0.00	1.02	0.00	1.54	0.00	2.06	0.00
0.51	0.00	1.03	0.00	1.55	0.00	2.07	0.00

Hydrograph for Subcatchment 1: 2-Year Pre-Development Runoff (continued)

Time (hours)	Runoff (cfs)	Time (hours)	Runoff (cfs)
2.08	0.00	2.60	0.00
2.09	0.00	2.61	0.00
2.10	0.00	2.62	0.00
2.11	0.00	2.63	0.00
2.12	0.00	2.64	0.00
2.13	0.00	2.65	0.00
2.14	0.00	2.66	0.00
2.15	0.00	2.67	0.00
2.16	0.00	2.68	0.00
2.17	0.00	2.69	0.00
2.18	0.00	2.70	0.00
2.19	0.00	2.71	0.00
2.20	0.00	2.72	0.00
2.21	0.00	2.73	0.00
2.22	0.00	2.74	0.00
2.23	0.00	2.75	0.00
2.24	0.00	2.76	0.00
2.25	0.00	2.77	0.00
2.26	0.00	2.78	0.00
2.27	0.00	2.79	0.00
2.28	0.00	2.80	0.00
2.29	0.00	2.81	0.00
2.30	0.00	2.82	0.00
2.31	0.00	2.83	0.00
2.32	0.00	2.84	0.00
2.33	0.00	2.85	0.00
2.34	0.00	2.86	0.00
2.35	0.00	2.87	0.00
2.36	0.00	2.88	0.00
2.37	0.00	2.89	0.00
2.38	0.00	2.90	0.00
2.39	0.00	2.91	0.00
2.40	0.00	2.92	0.00
2.41	0.00	2.93	0.00
2.42	0.00	2.94	0.00
2.43	0.00	2.95	0.00
2.44	0.00	2.96	0.00
2.45	0.00	2.97	0.00
2.46	0.00	2.98	0.00
2.47	0.00	2.99	0.00
2.48	0.00	3.00	0.00
2.49	0.00		
2.50	0.00		
2.51	0.00		
2.52	0.00		
2.53	0.00		
2.54	0.00		
2.55	0.00		
2.56	0.00		
2.57	0.00		
2.58	0.00		
2.59	0.00		

Subcatchment 1: 2-Year Pre-Development Runoff



Summary for Subcatchment 2: 10-Year Pre-Development Runoff

Runoff = 5.55 cfs @ 0.17 hrs, Volume= 3,387 cf, Depth= 0.56"

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
NJ-DEP 10-Year Duration=10 min, Inten=5.80 in/hr

Area (sf)	C	Description	Land Use
72,527	0.58		

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Events for Subcatchment 2: 10-Year Pre-Development Runoff

Event	Runoff (cfs)	Volume (cubic-feet)	Depth (inches)
10-Year	**5.55**	**3,387**	**0.56**

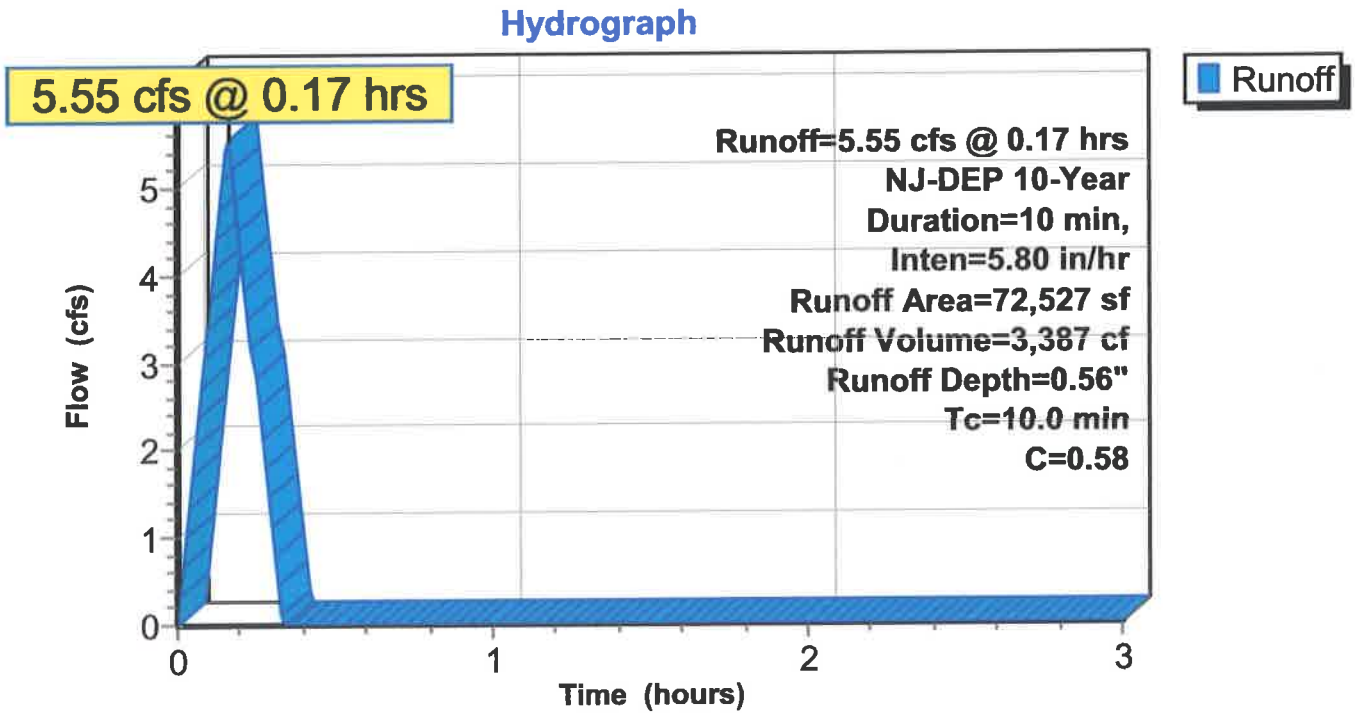
Hydrograph for Subcatchment 2: 10-Year Pre-Development Runoff

Time (hours)	Runoff (cfs)	Time (hours)	Runoff (cfs)	Time (hours)	Runoff (cfs)	Time (hours)	Runoff (cfs)
0.00	0.00	0.52	0.00	1.04	0.00	1.56	0.00
0.01	0.34	0.53	0.00	1.05	0.00	1.57	0.00
0.02	0.68	0.54	0.00	1.06	0.00	1.58	0.00
0.03	1.02	0.55	0.00	1.07	0.00	1.59	0.00
0.04	1.36	0.56	0.00	1.08	0.00	1.60	0.00
0.05	1.69	0.57	0.00	1.09	0.00	1.61	0.00
0.06	2.03	0.58	0.00	1.10	0.00	1.62	0.00
0.07	2.37	0.59	0.00	1.11	0.00	1.63	0.00
0.08	2.71	0.60	0.00	1.12	0.00	1.64	0.00
0.09	3.05	0.61	0.00	1.13	0.00	1.65	0.00
0.10	3.39	0.62	0.00	1.14	0.00	1.66	0.00
0.11	3.73	0.63	0.00	1.15	0.00	1.67	0.00
0.12	4.07	0.64	0.00	1.16	0.00	1.68	0.00
0.13	4.41	0.65	0.00	1.17	0.00	1.69	0.00
0.14	4.74	0.66	0.00	1.18	0.00	1.70	0.00
0.15	5.08	0.67	0.00	1.19	0.00	1.71	0.00
0.16	5.42	0.68	0.00	1.20	0.00	1.72	0.00
0.17	**5.53**	0.69	0.00	1.21	0.00	1.73	0.00
0.18	5.20	0.70	0.00	1.22	0.00	1.74	0.00
0.19	4.86	0.71	0.00	1.23	0.00	1.75	0.00
0.20	4.52	0.72	0.00	1.24	0.00	1.76	0.00
0.21	4.18	0.73	0.00	1.25	0.00	1.77	0.00
0.22	3.84	0.74	0.00	1.26	0.00	1.78	0.00
0.23	3.50	0.75	0.00	1.27	0.00	1.79	0.00
0.24	3.16	0.76	0.00	1.28	0.00	1.80	0.00
0.25	2.82	0.77	0.00	1.29	0.00	1.81	0.00
0.26	2.48	0.78	0.00	1.30	0.00	1.82	0.00
0.27	2.15	0.79	0.00	1.31	0.00	1.83	0.00
0.28	1.81	0.80	0.00	1.32	0.00	1.84	0.00
0.29	1.47	0.81	0.00	1.33	0.00	1.85	0.00
0.30	1.13	0.82	0.00	1.34	0.00	1.86	0.00
0.31	0.79	0.83	0.00	1.35	0.00	1.87	0.00
0.32	0.45	0.84	0.00	1.36	0.00	1.88	0.00
0.33	0.11	0.85	0.00	1.37	0.00	1.89	0.00
0.34	0.00	0.86	0.00	1.38	0.00	1.90	0.00
0.35	0.00	0.87	0.00	1.39	0.00	1.91	0.00
0.36	0.00	0.88	0.00	1.40	0.00	1.92	0.00
0.37	0.00	0.89	0.00	1.41	0.00	1.93	0.00
0.38	0.00	0.90	0.00	1.42	0.00	1.94	0.00
0.39	0.00	0.91	0.00	1.43	0.00	1.95	0.00
0.40	0.00	0.92	0.00	1.44	0.00	1.96	0.00
0.41	0.00	0.93	0.00	1.45	0.00	1.97	0.00
0.42	0.00	0.94	0.00	1.46	0.00	1.98	0.00
0.43	0.00	0.95	0.00	1.47	0.00	1.99	0.00
0.44	0.00	0.96	0.00	1.48	0.00	2.00	0.00
0.45	0.00	0.97	0.00	1.49	0.00	2.01	0.00
0.46	0.00	0.98	0.00	1.50	0.00	2.02	0.00
0.47	0.00	0.99	0.00	1.51	0.00	2.03	0.00
0.48	0.00	1.00	0.00	1.52	0.00	2.04	0.00
0.49	0.00	1.01	0.00	1.53	0.00	2.05	0.00
0.50	0.00	1.02	0.00	1.54	0.00	2.06	0.00
0.51	0.00	1.03	0.00	1.55	0.00	2.07	0.00

Hydrograph for Subcatchment 2: 10-Year Pre-Development Runoff (continued)

Time (hours)	Runoff (cfs)	Time (hours)	Runoff (cfs)
2.08	0.00	2.60	0.00
2.09	0.00	2.61	0.00
2.10	0.00	2.62	0.00
2.11	0.00	2.63	0.00
2.12	0.00	2.64	0.00
2.13	0.00	2.65	0.00
2.14	0.00	2.66	0.00
2.15	0.00	2.67	0.00
2.16	0.00	2.68	0.00
2.17	0.00	2.69	0.00
2.18	0.00	2.70	0.00
2.19	0.00	2.71	0.00
2.20	0.00	2.72	0.00
2.21	0.00	2.73	0.00
2.22	0.00	2.74	0.00
2.23	0.00	2.75	0.00
2.24	0.00	2.76	0.00
2.25	0.00	2.77	0.00
2.26	0.00	2.78	0.00
2.27	0.00	2.79	0.00
2.28	0.00	2.80	0.00
2.29	0.00	2.81	0.00
2.30	0.00	2.82	0.00
2.31	0.00	2.83	0.00
2.32	0.00	2.84	0.00
2.33	0.00	2.85	0.00
2.34	0.00	2.86	0.00
2.35	0.00	2.87	0.00
2.36	0.00	2.88	0.00
2.37	0.00	2.89	0.00
2.38	0.00	2.90	0.00
2.39	0.00	2.91	0.00
2.40	0.00	2.92	0.00
2.41	0.00	2.93	0.00
2.42	0.00	2.94	0.00
2.43	0.00	2.95	0.00
2.44	0.00	2.96	0.00
2.45	0.00	2.97	0.00
2.46	0.00	2.98	0.00
2.47	0.00	2.99	0.00
2.48	0.00	3.00	0.00
2.49	0.00		
2.50	0.00		
2.51	0.00		
2.52	0.00		
2.53	0.00		
2.54	0.00		
2.55	0.00		
2.56	0.00		
2.57	0.00		
2.58	0.00		
2.59	0.00		

Subcatchment 2: 10-Year Pre-Development Runoff



Summary for Subcatchment 3: 25-Year Pre-Development Runoff

Runoff = 6.41 cfs @ 0.17 hrs, Volume= 3,913 cf, Depth= 0.65"

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
NJ-DEP 25-Year Duration=10 min, Inten=6.70 in/hr

Area (sf)	C	Description	Land Use
72,527	0.58		

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Events for Subcatchment 3: 25-Year Pre-Development Runoff

Event	Runoff (cfs)	Volume (cubic-feet)	Depth (inches)
25-Year	**6.41**	**3,913**	**0.65**

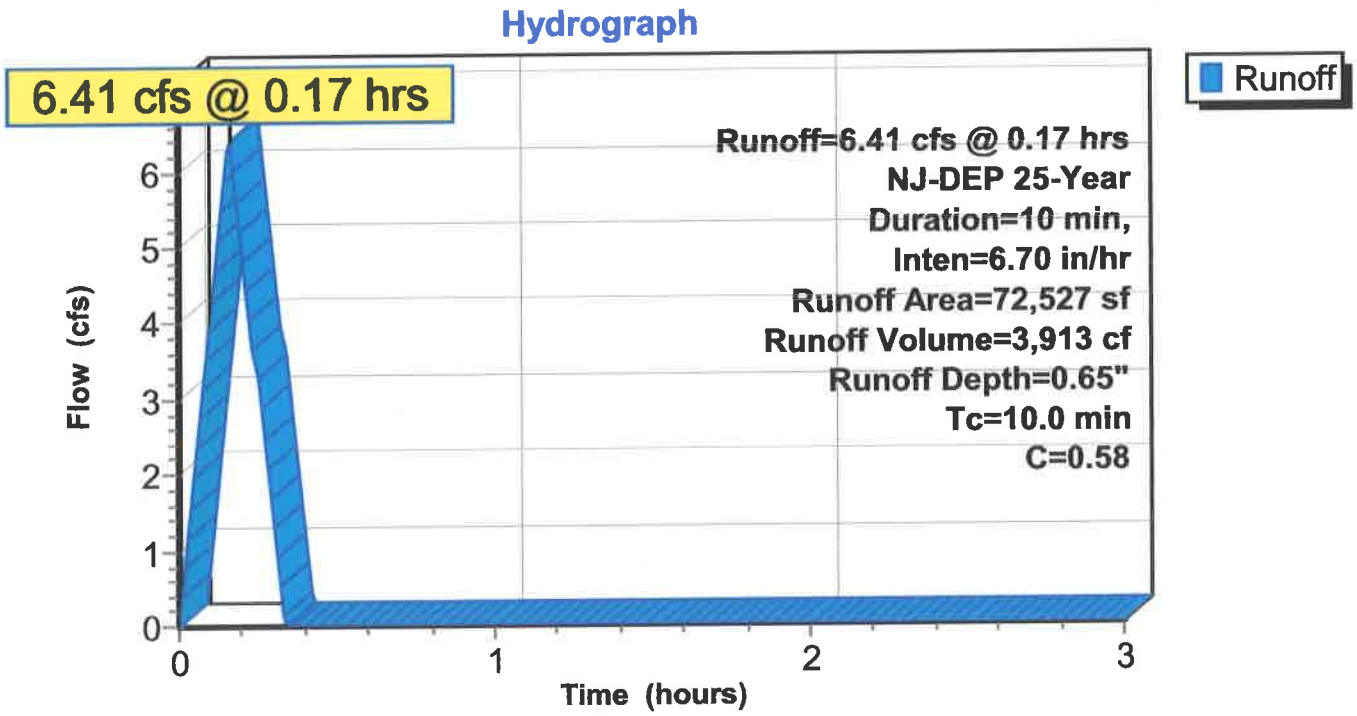
Hydrograph for Subcatchment 3: 25-Year Pre-Development Runoff

Time (hours)	Runoff (cfs)	Time (hours)	Runoff (cfs)	Time (hours)	Runoff (cfs)	Time (hours)	Runoff (cfs)
0.00	0.00	0.52	0.00	1.04	0.00	1.56	0.00
0.01	0.39	0.53	0.00	1.05	0.00	1.57	0.00
0.02	0.78	0.54	0.00	1.06	0.00	1.58	0.00
0.03	1.17	0.55	0.00	1.07	0.00	1.59	0.00
0.04	1.57	0.56	0.00	1.08	0.00	1.60	0.00
0.05	1.96	0.57	0.00	1.09	0.00	1.61	0.00
0.06	2.35	0.58	0.00	1.10	0.00	1.62	0.00
0.07	2.74	0.59	0.00	1.11	0.00	1.63	0.00
0.08	3.13	0.60	0.00	1.12	0.00	1.64	0.00
0.09	3.52	0.61	0.00	1.13	0.00	1.65	0.00
0.10	3.91	0.62	0.00	1.14	0.00	1.66	0.00
0.11	4.31	0.63	0.00	1.15	0.00	1.67	0.00
0.12	4.70	0.64	0.00	1.16	0.00	1.68	0.00
0.13	5.09	0.65	0.00	1.17	0.00	1.69	0.00
0.14	5.48	0.66	0.00	1.18	0.00	1.70	0.00
0.15	5.87	0.67	0.00	1.19	0.00	1.71	0.00
0.16	6.26	0.68	0.00	1.20	0.00	1.72	0.00
0.17	**6.39**	0.69	0.00	1.21	0.00	1.73	0.00
0.18	6.00	0.70	0.00	1.22	0.00	1.74	0.00
0.19	5.61	0.71	0.00	1.23	0.00	1.75	0.00
0.20	5.22	0.72	0.00	1.24	0.00	1.76	0.00
0.21	4.83	0.73	0.00	1.25	0.00	1.77	0.00
0.22	4.44	0.74	0.00	1.26	0.00	1.78	0.00
0.23	4.04	0.75	0.00	1.27	0.00	1.79	0.00
0.24	3.65	0.76	0.00	1.28	0.00	1.80	0.00
0.25	3.26	0.77	0.00	1.29	0.00	1.81	0.00
0.26	2.87	0.78	0.00	1.30	0.00	1.82	0.00
0.27	2.48	0.79	0.00	1.31	0.00	1.83	0.00
0.28	2.09	0.80	0.00	1.32	0.00	1.84	0.00
0.29	1.70	0.81	0.00	1.33	0.00	1.85	0.00
0.30	1.30	0.82	0.00	1.34	0.00	1.86	0.00
0.31	0.91	0.83	0.00	1.35	0.00	1.87	0.00
0.32	0.52	0.84	0.00	1.36	0.00	1.88	0.00
0.33	0.13	0.85	0.00	1.37	0.00	1.89	0.00
0.34	0.00	0.86	0.00	1.38	0.00	1.90	0.00
0.35	0.00	0.87	0.00	1.39	0.00	1.91	0.00
0.36	0.00	0.88	0.00	1.40	0.00	1.92	0.00
0.37	0.00	0.89	0.00	1.41	0.00	1.93	0.00
0.38	0.00	0.90	0.00	1.42	0.00	1.94	0.00
0.39	0.00	0.91	0.00	1.43	0.00	1.95	0.00
0.40	0.00	0.92	0.00	1.44	0.00	1.96	0.00
0.41	0.00	0.93	0.00	1.45	0.00	1.97	0.00
0.42	0.00	0.94	0.00	1.46	0.00	1.98	0.00
0.43	0.00	0.95	0.00	1.47	0.00	1.99	0.00
0.44	0.00	0.96	0.00	1.48	0.00	2.00	0.00
0.45	0.00	0.97	0.00	1.49	0.00	2.01	0.00
0.46	0.00	0.98	0.00	1.50	0.00	2.02	0.00
0.47	0.00	0.99	0.00	1.51	0.00	2.03	0.00
0.48	0.00	1.00	0.00	1.52	0.00	2.04	0.00
0.49	0.00	1.01	0.00	1.53	0.00	2.05	0.00
0.50	0.00	1.02	0.00	1.54	0.00	2.06	0.00
0.51	0.00	1.03	0.00	1.55	0.00	2.07	0.00

Hydrograph for Subcatchment 3: 25-Year Pre-Development Runoff (continued)

Time (hours)	Runoff (cfs)	Time (hours)	Runoff (cfs)
2.08	0.00	2.60	0.00
2.09	0.00	2.61	0.00
2.10	0.00	2.62	0.00
2.11	0.00	2.63	0.00
2.12	0.00	2.64	0.00
2.13	0.00	2.65	0.00
2.14	0.00	2.66	0.00
2.15	0.00	2.67	0.00
2.16	0.00	2.68	0.00
2.17	0.00	2.69	0.00
2.18	0.00	2.70	0.00
2.19	0.00	2.71	0.00
2.20	0.00	2.72	0.00
2.21	0.00	2.73	0.00
2.22	0.00	2.74	0.00
2.23	0.00	2.75	0.00
2.24	0.00	2.76	0.00
2.25	0.00	2.77	0.00
2.26	0.00	2.78	0.00
2.27	0.00	2.79	0.00
2.28	0.00	2.80	0.00
2.29	0.00	2.81	0.00
2.30	0.00	2.82	0.00
2.31	0.00	2.83	0.00
2.32	0.00	2.84	0.00
2.33	0.00	2.85	0.00
2.34	0.00	2.86	0.00
2.35	0.00	2.87	0.00
2.36	0.00	2.88	0.00
2.37	0.00	2.89	0.00
2.38	0.00	2.90	0.00
2.39	0.00	2.91	0.00
2.40	0.00	2.92	0.00
2.41	0.00	2.93	0.00
2.42	0.00	2.94	0.00
2.43	0.00	2.95	0.00
2.44	0.00	2.96	0.00
2.45	0.00	2.97	0.00
2.46	0.00	2.98	0.00
2.47	0.00	2.99	0.00
2.48	0.00	3.00	0.00
2.49	0.00		
2.50	0.00		
2.51	0.00		
2.52	0.00		
2.53	0.00		
2.54	0.00		
2.55	0.00		
2.56	0.00		
2.57	0.00		
2.58	0.00		
2.59	0.00		

Subcatchment 3: 25-Year Pre-Development Runoff



Summary for Subcatchment 4: 50-Year Pre-Development Runoff

Runoff = 6.89 cfs @ 0.17 hrs, Volume= 4,205 cf, Depth= 0.70"

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
NJ-DEP 50-Year Duration=10 min, Inten=7.20 in/hr

Area (sf)	C	Description	Land Use
72,527	0.58		

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Events for Subcatchment 4: 50-Year Pre-Development Runoff

Event	Runoff (cfs)	Volume (cubic-feet)	Depth (inches)
50-Year	**6.89**	**4,205**	**0.70**

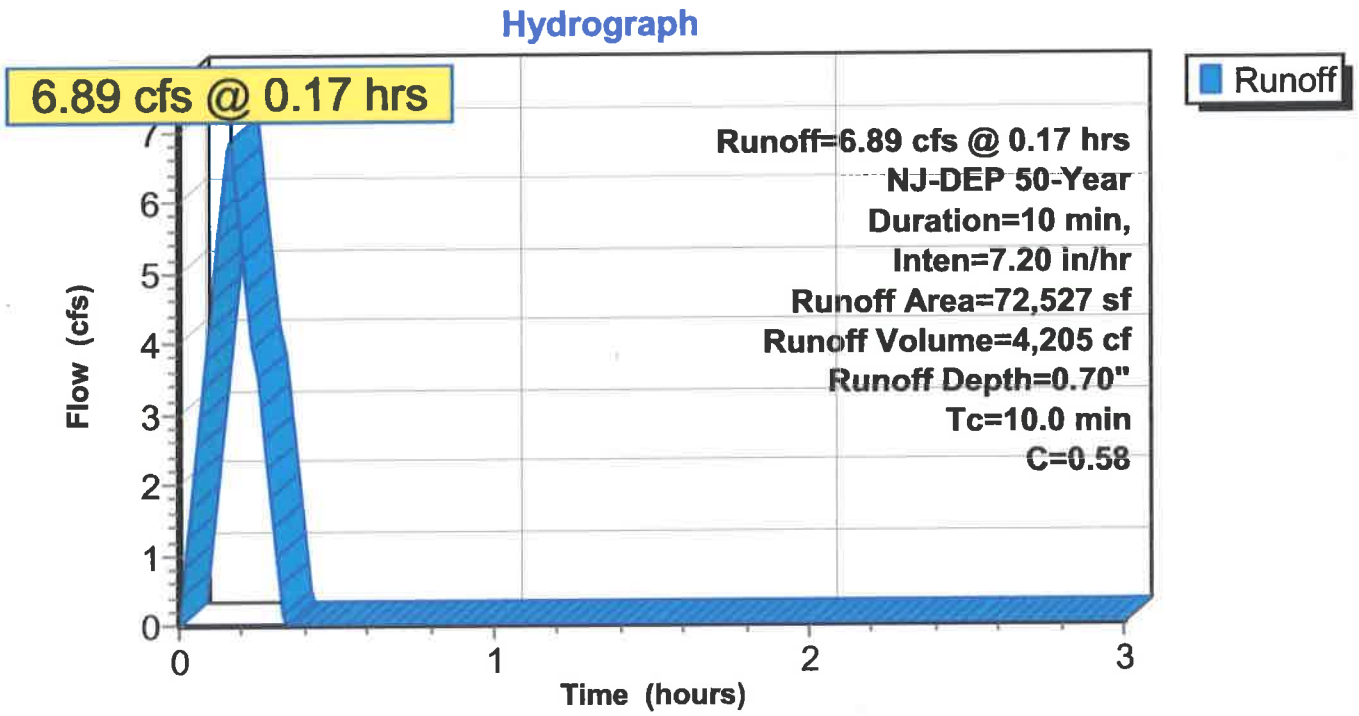
Hydrograph for Subcatchment 4: 50-Year Pre-Development Runoff

Time (hours)	Runoff (cfs)	Time (hours)	Runoff (cfs)	Time (hours)	Runoff (cfs)	Time (hours)	Runoff (cfs)
0.00	0.00	0.52	0.00	1.04	0.00	1.56	0.00
0.01	0.42	0.53	0.00	1.05	0.00	1.57	0.00
0.02	0.84	0.54	0.00	1.06	0.00	1.58	0.00
0.03	1.26	0.55	0.00	1.07	0.00	1.59	0.00
0.04	1.68	0.56	0.00	1.08	0.00	1.60	0.00
0.05	2.10	0.57	0.00	1.09	0.00	1.61	0.00
0.06	2.52	0.58	0.00	1.10	0.00	1.62	0.00
0.07	2.94	0.59	0.00	1.11	0.00	1.63	0.00
0.08	3.37	0.60	0.00	1.12	0.00	1.64	0.00
0.09	3.79	0.61	0.00	1.13	0.00	1.65	0.00
0.10	4.21	0.62	0.00	1.14	0.00	1.66	0.00
0.11	4.63	0.63	0.00	1.15	0.00	1.67	0.00
0.12	5.05	0.64	0.00	1.16	0.00	1.68	0.00
0.13	5.47	0.65	0.00	1.17	0.00	1.69	0.00
0.14	5.89	0.66	0.00	1.18	0.00	1.70	0.00
0.15	6.31	0.67	0.00	1.19	0.00	1.71	0.00
0.16	6.73	0.68	0.00	1.20	0.00	1.72	0.00
0.17	**6.87**	0.69	0.00	1.21	0.00	1.73	0.00
0.18	6.45	0.70	0.00	1.22	0.00	1.74	0.00
0.19	6.03	0.71	0.00	1.23	0.00	1.75	0.00
0.20	5.61	0.72	0.00	1.24	0.00	1.76	0.00
0.21	5.19	0.73	0.00	1.25	0.00	1.77	0.00
0.22	4.77	0.74	0.00	1.26	0.00	1.78	0.00
0.23	4.35	0.75	0.00	1.27	0.00	1.79	0.00
0.24	3.93	0.76	0.00	1.28	0.00	1.80	0.00
0.25	3.51	0.77	0.00	1.29	0.00	1.81	0.00
0.26	3.08	0.78	0.00	1.30	0.00	1.82	0.00
0.27	2.66	0.79	0.00	1.31	0.00	1.83	0.00
0.28	2.24	0.80	0.00	1.32	0.00	1.84	0.00
0.29	1.82	0.81	0.00	1.33	0.00	1.85	0.00
0.30	1.40	0.82	0.00	1.34	0.00	1.86	0.00
0.31	0.98	0.83	0.00	1.35	0.00	1.87	0.00
0.32	0.56	0.84	0.00	1.36	0.00	1.88	0.00
0.33	0.14	0.85	0.00	1.37	0.00	1.89	0.00
0.34	0.00	0.86	0.00	1.38	0.00	1.90	0.00
0.35	0.00	0.87	0.00	1.39	0.00	1.91	0.00
0.36	0.00	0.88	0.00	1.40	0.00	1.92	0.00
0.37	0.00	0.89	0.00	1.41	0.00	1.93	0.00
0.38	0.00	0.90	0.00	1.42	0.00	1.94	0.00
0.39	0.00	0.91	0.00	1.43	0.00	1.95	0.00
0.40	0.00	0.92	0.00	1.44	0.00	1.96	0.00
0.41	0.00	0.93	0.00	1.45	0.00	1.97	0.00
0.42	0.00	0.94	0.00	1.46	0.00	1.98	0.00
0.43	0.00	0.95	0.00	1.47	0.00	1.99	0.00
0.44	0.00	0.96	0.00	1.48	0.00	2.00	0.00
0.45	0.00	0.97	0.00	1.49	0.00	2.01	0.00
0.46	0.00	0.98	0.00	1.50	0.00	2.02	0.00
0.47	0.00	0.99	0.00	1.51	0.00	2.03	0.00
0.48	0.00	1.00	0.00	1.52	0.00	2.04	0.00
0.49	0.00	1.01	0.00	1.53	0.00	2.05	0.00
0.50	0.00	1.02	0.00	1.54	0.00	2.06	0.00
0.51	0.00	1.03	0.00	1.55	0.00	2.07	0.00

Hydrograph for Subcatchment 4: 50-Year Pre-Development Runoff (continued)

Time (hours)	Runoff (cfs)	Time (hours)	Runoff (cfs)
2.08	0.00	2.60	0.00
2.09	0.00	2.61	0.00
2.10	0.00	2.62	0.00
2.11	0.00	2.63	0.00
2.12	0.00	2.64	0.00
2.13	0.00	2.65	0.00
2.14	0.00	2.66	0.00
2.15	0.00	2.67	0.00
2.16	0.00	2.68	0.00
2.17	0.00	2.69	0.00
2.18	0.00	2.70	0.00
2.19	0.00	2.71	0.00
2.20	0.00	2.72	0.00
2.21	0.00	2.73	0.00
2.22	0.00	2.74	0.00
2.23	0.00	2.75	0.00
2.24	0.00	2.76	0.00
2.25	0.00	2.77	0.00
2.26	0.00	2.78	0.00
2.27	0.00	2.79	0.00
2.28	0.00	2.80	0.00
2.29	0.00	2.81	0.00
2.30	0.00	2.82	0.00
2.31	0.00	2.83	0.00
2.32	0.00	2.84	0.00
2.33	0.00	2.85	0.00
2.34	0.00	2.86	0.00
2.35	0.00	2.87	0.00
2.36	0.00	2.88	0.00
2.37	0.00	2.89	0.00
2.38	0.00	2.90	0.00
2.39	0.00	2.91	0.00
2.40	0.00	2.92	0.00
2.41	0.00	2.93	0.00
2.42	0.00	2.94	0.00
2.43	0.00	2.95	0.00
2.44	0.00	2.96	0.00
2.45	0.00	2.97	0.00
2.46	0.00	2.98	0.00
2.47	0.00	2.99	0.00
2.48	0.00	3.00	0.00
2.49	0.00		
2.50	0.00		
2.51	0.00		
2.52	0.00		
2.53	0.00		
2.54	0.00		
2.55	0.00		
2.56	0.00		
2.57	0.00		
2.58	0.00		
2.59	0.00		

Subcatchment 4: 50-Year Pre-Development Runoff



Summary for Subcatchment 5: 100-Year Pre-Development Runoff

Runoff = 7.65 cfs @ 0.17 hrs, Volume= 4,672 cf, Depth= 0.77"

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
NJ-DEP 100-Year Duration=10 min, Inten=8.00 in/hr

Area (sf)	C	Description	Land Use
72,527	0.58		

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Events for Subcatchment 5: 100-Year Pre-Development Runoff

Event	Runoff (cfs)	Volume (cubic-feet)	Depth (inches)
100-Year	**7.65**	**4,672**	**0.77**

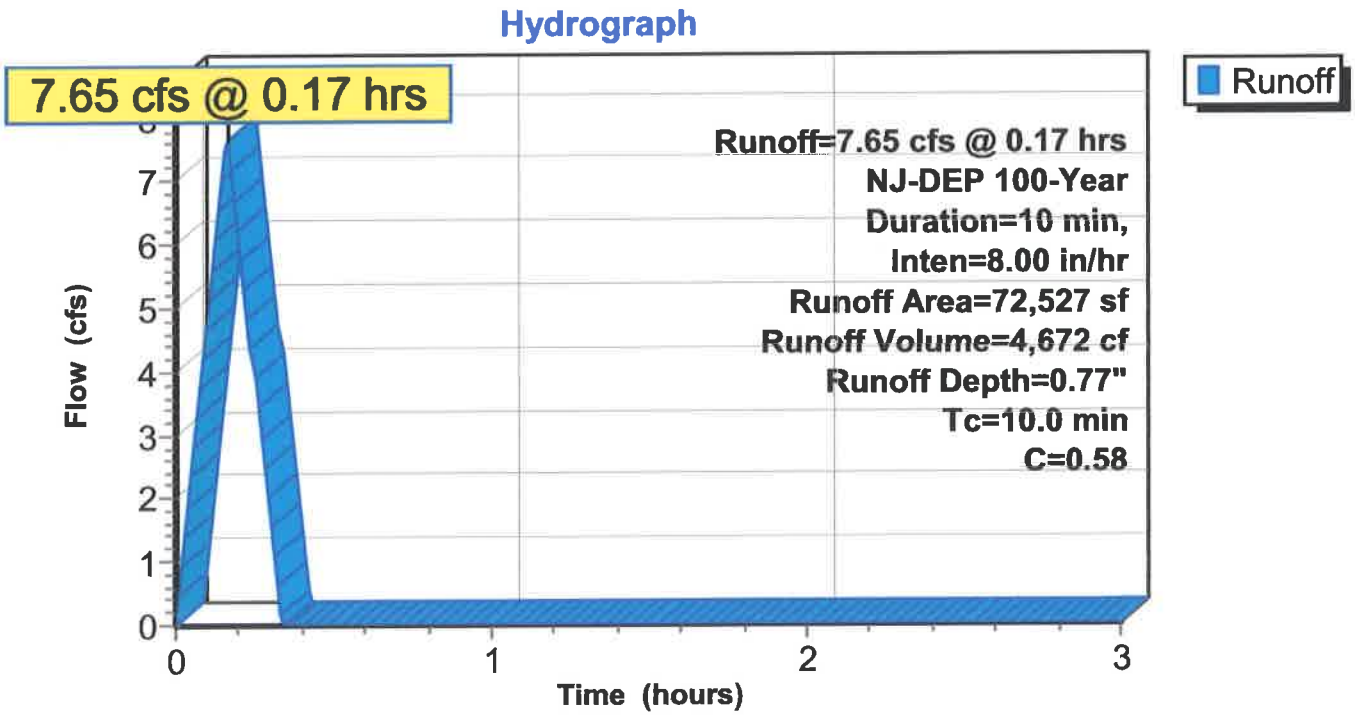
Hydrograph for Subcatchment 5: 100-Year Pre-Development Runoff

Time (hours)	Runoff (cfs)	Time (hours)	Runoff (cfs)	Time (hours)	Runoff (cfs)	Time (hours)	Runoff (cfs)
0.00	0.00	0.52	0.00	1.04	0.00	1.56	0.00
0.01	0.47	0.53	0.00	1.05	0.00	1.57	0.00
0.02	0.93	0.54	0.00	1.06	0.00	1.58	0.00
0.03	1.40	0.55	0.00	1.07	0.00	1.59	0.00
0.04	1.87	0.56	0.00	1.08	0.00	1.60	0.00
0.05	2.34	0.57	0.00	1.09	0.00	1.61	0.00
0.06	2.80	0.58	0.00	1.10	0.00	1.62	0.00
0.07	3.27	0.59	0.00	1.11	0.00	1.63	0.00
0.08	3.74	0.60	0.00	1.12	0.00	1.64	0.00
0.09	4.21	0.61	0.00	1.13	0.00	1.65	0.00
0.10	4.67	0.62	0.00	1.14	0.00	1.66	0.00
0.11	5.14	0.63	0.00	1.15	0.00	1.67	0.00
0.12	5.61	0.64	0.00	1.16	0.00	1.68	0.00
0.13	6.08	0.65	0.00	1.17	0.00	1.69	0.00
0.14	6.54	0.66	0.00	1.18	0.00	1.70	0.00
0.15	7.01	0.67	0.00	1.19	0.00	1.71	0.00
0.16	7.48	0.68	0.00	1.20	0.00	1.72	0.00
0.17	**7.63**	0.69	0.00	1.21	0.00	1.73	0.00
0.18	7.17	0.70	0.00	1.22	0.00	1.74	0.00
0.19	6.70	0.71	0.00	1.23	0.00	1.75	0.00
0.20	6.23	0.72	0.00	1.24	0.00	1.76	0.00
0.21	5.76	0.73	0.00	1.25	0.00	1.77	0.00
0.22	5.30	0.74	0.00	1.26	0.00	1.78	0.00
0.23	4.83	0.75	0.00	1.27	0.00	1.79	0.00
0.24	4.36	0.76	0.00	1.28	0.00	1.80	0.00
0.25	3.89	0.77	0.00	1.29	0.00	1.81	0.00
0.26	3.43	0.78	0.00	1.30	0.00	1.82	0.00
0.27	2.96	0.79	0.00	1.31	0.00	1.83	0.00
0.28	2.49	0.80	0.00	1.32	0.00	1.84	0.00
0.29	2.03	0.81	0.00	1.33	0.00	1.85	0.00
0.30	1.56	0.82	0.00	1.34	0.00	1.86	0.00
0.31	1.09	0.83	0.00	1.35	0.00	1.87	0.00
0.32	0.62	0.84	0.00	1.36	0.00	1.88	0.00
0.33	0.16	0.85	0.00	1.37	0.00	1.89	0.00
0.34	0.00	0.86	0.00	1.38	0.00	1.90	0.00
0.35	0.00	0.87	0.00	1.39	0.00	1.91	0.00
0.36	0.00	0.88	0.00	1.40	0.00	1.92	0.00
0.37	0.00	0.89	0.00	1.41	0.00	1.93	0.00
0.38	0.00	0.90	0.00	1.42	0.00	1.94	0.00
0.39	0.00	0.91	0.00	1.43	0.00	1.95	0.00
0.40	0.00	0.92	0.00	1.44	0.00	1.96	0.00
0.41	0.00	0.93	0.00	1.45	0.00	1.97	0.00
0.42	0.00	0.94	0.00	1.46	0.00	1.98	0.00
0.43	0.00	0.95	0.00	1.47	0.00	1.99	0.00
0.44	0.00	0.96	0.00	1.48	0.00	2.00	0.00
0.45	0.00	0.97	0.00	1.49	0.00	2.01	0.00
0.46	0.00	0.98	0.00	1.50	0.00	2.02	0.00
0.47	0.00	0.99	0.00	1.51	0.00	2.03	0.00
0.48	0.00	1.00	0.00	1.52	0.00	2.04	0.00
0.49	0.00	1.01	0.00	1.53	0.00	2.05	0.00
0.50	0.00	1.02	0.00	1.54	0.00	2.06	0.00
0.51	0.00	1.03	0.00	1.55	0.00	2.07	0.00

Hydrograph for Subcatchment 5: 100-Year Pre-Development Runoff (continued)

Time (hours)	Runoff (cfs)	Time (hours)	Runoff (cfs)
2.08	0.00	2.60	0.00
2.09	0.00	2.61	0.00
2.10	0.00	2.62	0.00
2.11	0.00	2.63	0.00
2.12	0.00	2.64	0.00
2.13	0.00	2.65	0.00
2.14	0.00	2.66	0.00
2.15	0.00	2.67	0.00
2.16	0.00	2.68	0.00
2.17	0.00	2.69	0.00
2.18	0.00	2.70	0.00
2.19	0.00	2.71	0.00
2.20	0.00	2.72	0.00
2.21	0.00	2.73	0.00
2.22	0.00	2.74	0.00
2.23	0.00	2.75	0.00
2.24	0.00	2.76	0.00
2.25	0.00	2.77	0.00
2.26	0.00	2.78	0.00
2.27	0.00	2.79	0.00
2.28	0.00	2.80	0.00
2.29	0.00	2.81	0.00
2.30	0.00	2.82	0.00
2.31	0.00	2.83	0.00
2.32	0.00	2.84	0.00
2.33	0.00	2.85	0.00
2.34	0.00	2.86	0.00
2.35	0.00	2.87	0.00
2.36	0.00	2.88	0.00
2.37	0.00	2.89	0.00
2.38	0.00	2.90	0.00
2.39	0.00	2.91	0.00
2.40	0.00	2.92	0.00
2.41	0.00	2.93	0.00
2.42	0.00	2.94	0.00
2.43	0.00	2.95	0.00
2.44	0.00	2.96	0.00
2.45	0.00	2.97	0.00
2.46	0.00	2.98	0.00
2.47	0.00	2.99	0.00
2.48	0.00	3.00	0.00
2.49	0.00		
2.50	0.00		
2.51	0.00		
2.52	0.00		
2.53	0.00		
2.54	0.00		
2.55	0.00		
2.56	0.00		
2.57	0.00		
2.58	0.00		
2.59	0.00		

Subcatchment 5: 100-Year Pre-Development Runoff



APPENDIX 3

POST-DEVELOPMENT RUNOFF HYDROGRAPHS

Summary for Subcatchment 6: 2-Year Post-Development Runoff

Runoff = 5.06 cfs @ 0.17 hrs, Volume= 3,087 cf, Depth= 0.51"

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
NJ-DEP 2-Year Duration=10 min, Inten=4.20 in/hr

Area (sf)	C	Description	Land Use
72,527	0.73		

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Events for Subcatchment 6: 2-Year Post-Development Runoff

Event	Runoff (cfs)	Volume (cubic-feet)	Depth (inches)
2-Year	**5.06**	**3,087**	**0.51**

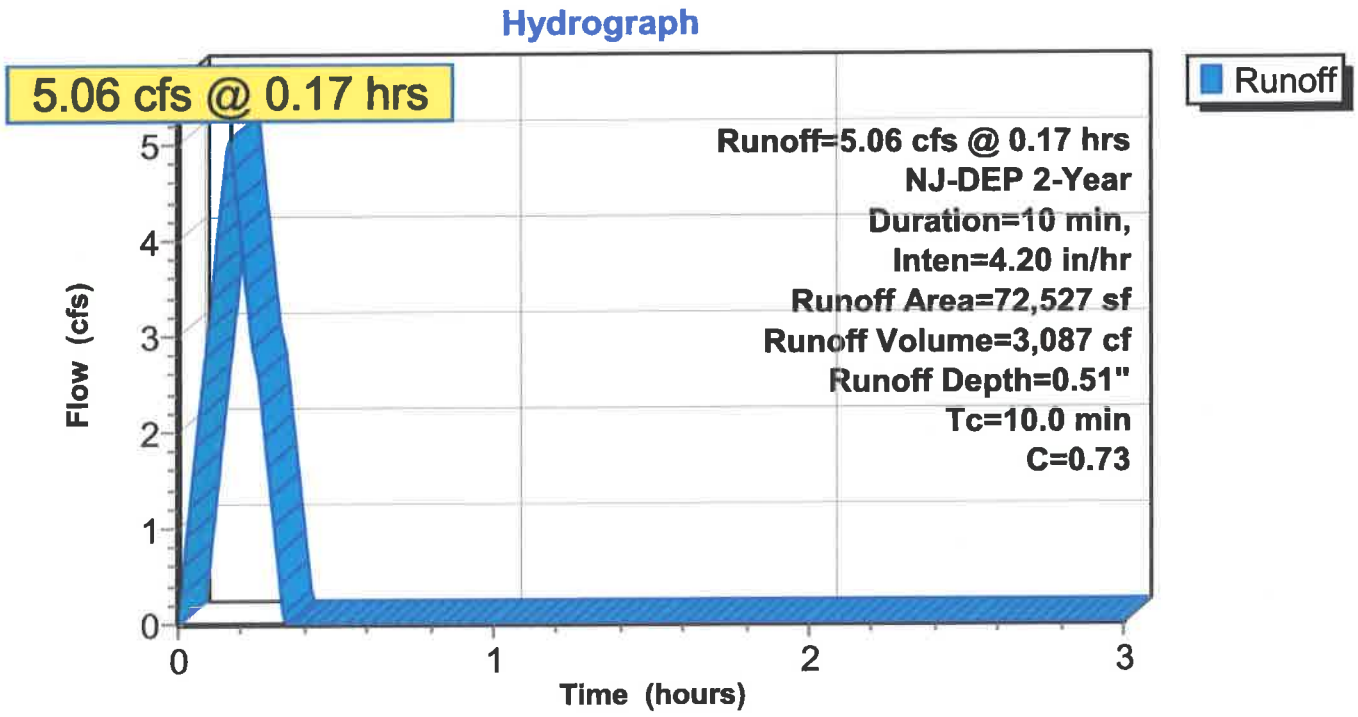
Hydrograph for Subcatchment 6: 2-Year Post-Development Runoff

Time (hours)	Runoff (cfs)	Time (hours)	Runoff (cfs)	Time (hours)	Runoff (cfs)	Time (hours)	Runoff (cfs)
0.00	0.00	0.52	0.00	1.04	0.00	1.56	0.00
0.01	0.31	0.53	0.00	1.05	0.00	1.57	0.00
0.02	0.62	0.54	0.00	1.06	0.00	1.58	0.00
0.03	0.93	0.55	0.00	1.07	0.00	1.59	0.00
0.04	1.24	0.56	0.00	1.08	0.00	1.60	0.00
0.05	1.54	0.57	0.00	1.09	0.00	1.61	0.00
0.06	1.85	0.58	0.00	1.10	0.00	1.62	0.00
0.07	2.16	0.59	0.00	1.11	0.00	1.63	0.00
0.08	2.47	0.60	0.00	1.12	0.00	1.64	0.00
0.09	2.78	0.61	0.00	1.13	0.00	1.65	0.00
0.10	3.09	0.62	0.00	1.14	0.00	1.66	0.00
0.11	3.40	0.63	0.00	1.15	0.00	1.67	0.00
0.12	3.71	0.64	0.00	1.16	0.00	1.68	0.00
0.13	4.01	0.65	0.00	1.17	0.00	1.69	0.00
0.14	4.32	0.66	0.00	1.18	0.00	1.70	0.00
0.15	4.63	0.67	0.00	1.19	0.00	1.71	0.00
0.16	4.94	0.68	0.00	1.20	0.00	1.72	0.00
0.17	**5.04**	0.69	0.00	1.21	0.00	1.73	0.00
0.18	4.74	0.70	0.00	1.22	0.00	1.74	0.00
0.19	4.43	0.71	0.00	1.23	0.00	1.75	0.00
0.20	4.12	0.72	0.00	1.24	0.00	1.76	0.00
0.21	3.81	0.73	0.00	1.25	0.00	1.77	0.00
0.22	3.50	0.74	0.00	1.26	0.00	1.78	0.00
0.23	3.19	0.75	0.00	1.27	0.00	1.79	0.00
0.24	2.88	0.76	0.00	1.28	0.00	1.80	0.00
0.25	2.57	0.77	0.00	1.29	0.00	1.81	0.00
0.26	2.26	0.78	0.00	1.30	0.00	1.82	0.00
0.27	1.96	0.79	0.00	1.31	0.00	1.83	0.00
0.28	1.65	0.80	0.00	1.32	0.00	1.84	0.00
0.29	1.34	0.81	0.00	1.33	0.00	1.85	0.00
0.30	1.03	0.82	0.00	1.34	0.00	1.86	0.00
0.31	0.72	0.83	0.00	1.35	0.00	1.87	0.00
0.32	0.41	0.84	0.00	1.36	0.00	1.88	0.00
0.33	0.10	0.85	0.00	1.37	0.00	1.89	0.00
0.34	0.00	0.86	0.00	1.38	0.00	1.90	0.00
0.35	0.00	0.87	0.00	1.39	0.00	1.91	0.00
0.36	0.00	0.88	0.00	1.40	0.00	1.92	0.00
0.37	0.00	0.89	0.00	1.41	0.00	1.93	0.00
0.38	0.00	0.90	0.00	1.42	0.00	1.94	0.00
0.39	0.00	0.91	0.00	1.43	0.00	1.95	0.00
0.40	0.00	0.92	0.00	1.44	0.00	1.96	0.00
0.41	0.00	0.93	0.00	1.45	0.00	1.97	0.00
0.42	0.00	0.94	0.00	1.46	0.00	1.98	0.00
0.43	0.00	0.95	0.00	1.47	0.00	1.99	0.00
0.44	0.00	0.96	0.00	1.48	0.00	2.00	0.00
0.45	0.00	0.97	0.00	1.49	0.00	2.01	0.00
0.46	0.00	0.98	0.00	1.50	0.00	2.02	0.00
0.47	0.00	0.99	0.00	1.51	0.00	2.03	0.00
0.48	0.00	1.00	0.00	1.52	0.00	2.04	0.00
0.49	0.00	1.01	0.00	1.53	0.00	2.05	0.00
0.50	0.00	1.02	0.00	1.54	0.00	2.06	0.00
0.51	0.00	1.03	0.00	1.55	0.00	2.07	0.00

Hydrograph for Subcatchment 6: 2-Year Post-Development Runoff (continued)

Time (hours)	Runoff (cfs)	Time (hours)	Runoff (cfs)
2.08	0.00	2.60	0.00
2.09	0.00	2.61	0.00
2.10	0.00	2.62	0.00
2.11	0.00	2.63	0.00
2.12	0.00	2.64	0.00
2.13	0.00	2.65	0.00
2.14	0.00	2.66	0.00
2.15	0.00	2.67	0.00
2.16	0.00	2.68	0.00
2.17	0.00	2.69	0.00
2.18	0.00	2.70	0.00
2.19	0.00	2.71	0.00
2.20	0.00	2.72	0.00
2.21	0.00	2.73	0.00
2.22	0.00	2.74	0.00
2.23	0.00	2.75	0.00
2.24	0.00	2.76	0.00
2.25	0.00	2.77	0.00
2.26	0.00	2.78	0.00
2.27	0.00	2.79	0.00
2.28	0.00	2.80	0.00
2.29	0.00	2.81	0.00
2.30	0.00	2.82	0.00
2.31	0.00	2.83	0.00
2.32	0.00	2.84	0.00
2.33	0.00	2.85	0.00
2.34	0.00	2.86	0.00
2.35	0.00	2.87	0.00
2.36	0.00	2.88	0.00
2.37	0.00	2.89	0.00
2.38	0.00	2.90	0.00
2.39	0.00	2.91	0.00
2.40	0.00	2.92	0.00
2.41	0.00	2.93	0.00
2.42	0.00	2.94	0.00
2.43	0.00	2.95	0.00
2.44	0.00	2.96	0.00
2.45	0.00	2.97	0.00
2.46	0.00	2.98	0.00
2.47	0.00	2.99	0.00
2.48	0.00	3.00	0.00
2.49	0.00		
2.50	0.00		
2.51	0.00		
2.52	0.00		
2.53	0.00		
2.54	0.00		
2.55	0.00		
2.56	0.00		
2.57	0.00		
2.58	0.00		
2.59	0.00		

Subcatchment 6: 2-Year Post-Development Runoff



Summary for Subcatchment 7: 10-Year Post-Development Runoff

Runoff = 6.98 cfs @ 0.17 hrs, Volume= 4,263 cf, Depth= 0.71"

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
NJ-DEP 10-Year Duration=10 min, Inten=5.80 in/hr

Area (sf)	C	Description	Land Use
72,527	0.73		

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Events for Subcatchment 7: 10-Year Post-Development Runoff

Event	Runoff (cfs)	Volume (cubic-feet)	Depth (inches)
10-Year	**6.98**	**4,263**	**0.71**

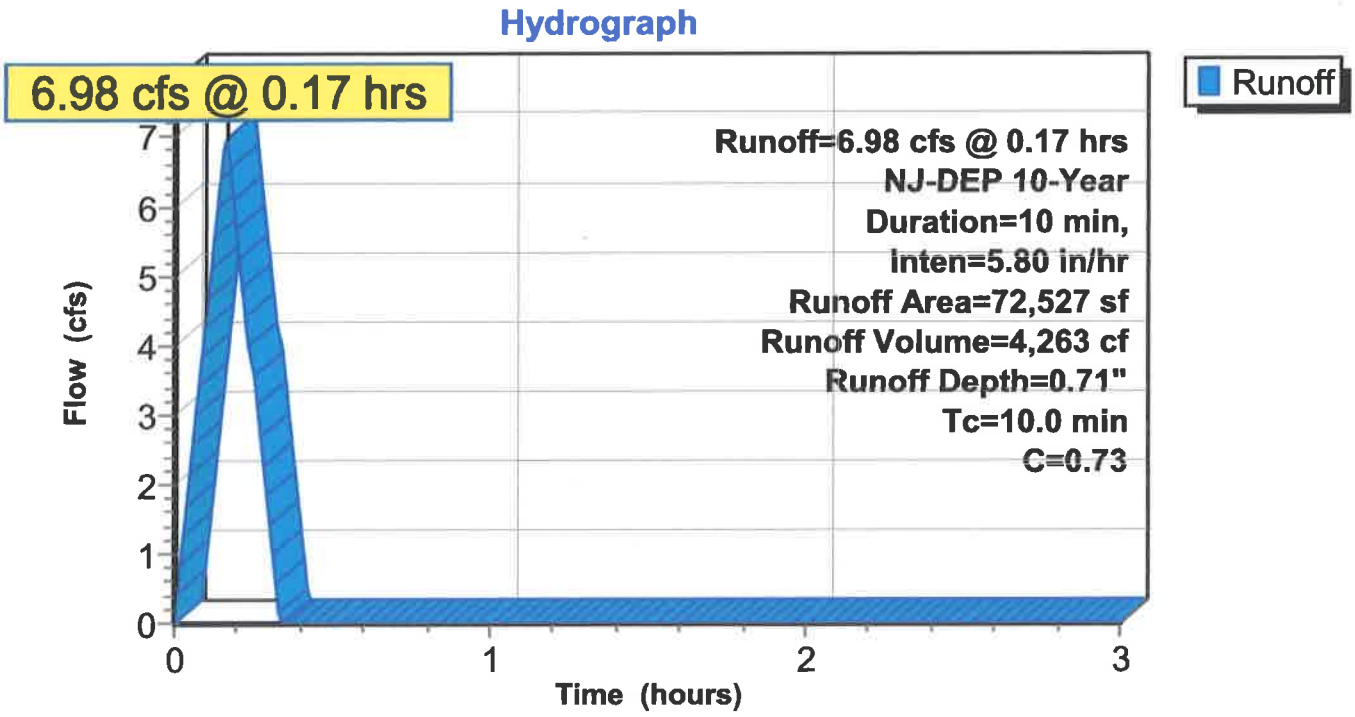
Hydrograph for Subcatchment 7: 10-Year Post-Development Runoff

Time (hours)	Runoff (cfs)	Time (hours)	Runoff (cfs)	Time (hours)	Runoff (cfs)	Time (hours)	Runoff (cfs)
0.00	0.00	0.52	0.00	1.04	0.00	1.56	0.00
0.01	0.43	0.53	0.00	1.05	0.00	1.57	0.00
0.02	0.85	0.54	0.00	1.06	0.00	1.58	0.00
0.03	1.28	0.55	0.00	1.07	0.00	1.59	0.00
0.04	1.71	0.56	0.00	1.08	0.00	1.60	0.00
0.05	2.13	0.57	0.00	1.09	0.00	1.61	0.00
0.06	2.56	0.58	0.00	1.10	0.00	1.62	0.00
0.07	2.99	0.59	0.00	1.11	0.00	1.63	0.00
0.08	3.41	0.60	0.00	1.12	0.00	1.64	0.00
0.09	3.84	0.61	0.00	1.13	0.00	1.65	0.00
0.10	4.26	0.62	0.00	1.14	0.00	1.66	0.00
0.11	4.69	0.63	0.00	1.15	0.00	1.67	0.00
0.12	5.12	0.64	0.00	1.16	0.00	1.68	0.00
0.13	5.54	0.65	0.00	1.17	0.00	1.69	0.00
0.14	5.97	0.66	0.00	1.18	0.00	1.70	0.00
0.15	6.40	0.67	0.00	1.19	0.00	1.71	0.00
0.16	6.82	0.68	0.00	1.20	0.00	1.72	0.00
0.17	**6.97**	0.69	0.00	1.21	0.00	1.73	0.00
0.18	6.54	0.70	0.00	1.22	0.00	1.74	0.00
0.19	6.11	0.71	0.00	1.23	0.00	1.75	0.00
0.20	5.69	0.72	0.00	1.24	0.00	1.76	0.00
0.21	5.26	0.73	0.00	1.25	0.00	1.77	0.00
0.22	4.83	0.74	0.00	1.26	0.00	1.78	0.00
0.23	4.41	0.75	0.00	1.27	0.00	1.79	0.00
0.24	3.98	0.76	0.00	1.28	0.00	1.80	0.00
0.25	3.55	0.77	0.00	1.29	0.00	1.81	0.00
0.26	3.13	0.78	0.00	1.30	0.00	1.82	0.00
0.27	2.70	0.79	0.00	1.31	0.00	1.83	0.00
0.28	2.27	0.80	0.00	1.32	0.00	1.84	0.00
0.29	1.85	0.81	0.00	1.33	0.00	1.85	0.00
0.30	1.42	0.82	0.00	1.34	0.00	1.86	0.00
0.31	1.00	0.83	0.00	1.35	0.00	1.87	0.00
0.32	0.57	0.84	0.00	1.36	0.00	1.88	0.00
0.33	0.14	0.85	0.00	1.37	0.00	1.89	0.00
0.34	0.00	0.86	0.00	1.38	0.00	1.90	0.00
0.35	0.00	0.87	0.00	1.39	0.00	1.91	0.00
0.36	0.00	0.88	0.00	1.40	0.00	1.92	0.00
0.37	0.00	0.89	0.00	1.41	0.00	1.93	0.00
0.38	0.00	0.90	0.00	1.42	0.00	1.94	0.00
0.39	0.00	0.91	0.00	1.43	0.00	1.95	0.00
0.40	0.00	0.92	0.00	1.44	0.00	1.96	0.00
0.41	0.00	0.93	0.00	1.45	0.00	1.97	0.00
0.42	0.00	0.94	0.00	1.46	0.00	1.98	0.00
0.43	0.00	0.95	0.00	1.47	0.00	1.99	0.00
0.44	0.00	0.96	0.00	1.48	0.00	2.00	0.00
0.45	0.00	0.97	0.00	1.49	0.00	2.01	0.00
0.46	0.00	0.98	0.00	1.50	0.00	2.02	0.00
0.47	0.00	0.99	0.00	1.51	0.00	2.03	0.00
0.48	0.00	1.00	0.00	1.52	0.00	2.04	0.00
0.49	0.00	1.01	0.00	1.53	0.00	2.05	0.00
0.50	0.00	1.02	0.00	1.54	0.00	2.06	0.00
0.51	0.00	1.03	0.00	1.55	0.00	2.07	0.00

Hydrograph for Subcatchment 7: 10-Year Post-Development Runoff (continued)

Time (hours)	Runoff (cfs)	Time (hours)	Runoff (cfs)
2.08	0.00	2.60	0.00
2.09	0.00	2.61	0.00
2.10	0.00	2.62	0.00
2.11	0.00	2.63	0.00
2.12	0.00	2.64	0.00
2.13	0.00	2.65	0.00
2.14	0.00	2.66	0.00
2.15	0.00	2.67	0.00
2.16	0.00	2.68	0.00
2.17	0.00	2.69	0.00
2.18	0.00	2.70	0.00
2.19	0.00	2.71	0.00
2.20	0.00	2.72	0.00
2.21	0.00	2.73	0.00
2.22	0.00	2.74	0.00
2.23	0.00	2.75	0.00
2.24	0.00	2.76	0.00
2.25	0.00	2.77	0.00
2.26	0.00	2.78	0.00
2.27	0.00	2.79	0.00
2.28	0.00	2.80	0.00
2.29	0.00	2.81	0.00
2.30	0.00	2.82	0.00
2.31	0.00	2.83	0.00
2.32	0.00	2.84	0.00
2.33	0.00	2.85	0.00
2.34	0.00	2.86	0.00
2.35	0.00	2.87	0.00
2.36	0.00	2.88	0.00
2.37	0.00	2.89	0.00
2.38	0.00	2.90	0.00
2.39	0.00	2.91	0.00
2.40	0.00	2.92	0.00
2.41	0.00	2.93	0.00
2.42	0.00	2.94	0.00
2.43	0.00	2.95	0.00
2.44	0.00	2.96	0.00
2.45	0.00	2.97	0.00
2.46	0.00	2.98	0.00
2.47	0.00	2.99	0.00
2.48	0.00	3.00	0.00
2.49	0.00		
2.50	0.00		
2.51	0.00		
2.52	0.00		
2.53	0.00		
2.54	0.00		
2.55	0.00		
2.56	0.00		
2.57	0.00		
2.58	0.00		
2.59	0.00		

Subcatchment 7: 10-Year Post-Development Runoff



Summary for Subcatchment 8: 25-Year Post-Development Runoff

Runoff = 8.07 cfs @ 0.17 hrs, Volume= 4,925 cf, Depth= 0.81"

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
NJ-DEP 25-Year Duration=10 min, Inten=6.70 in/hr

Area (sf)	C	Description	Land Use
72,527	0.73		

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Events for Subcatchment 8: 25-Year Post-Development Runoff

Event	Runoff (cfs)	Volume (cubic-feet)	Depth (inches)
25-Year	**8.07**	**4,925**	**0.81**

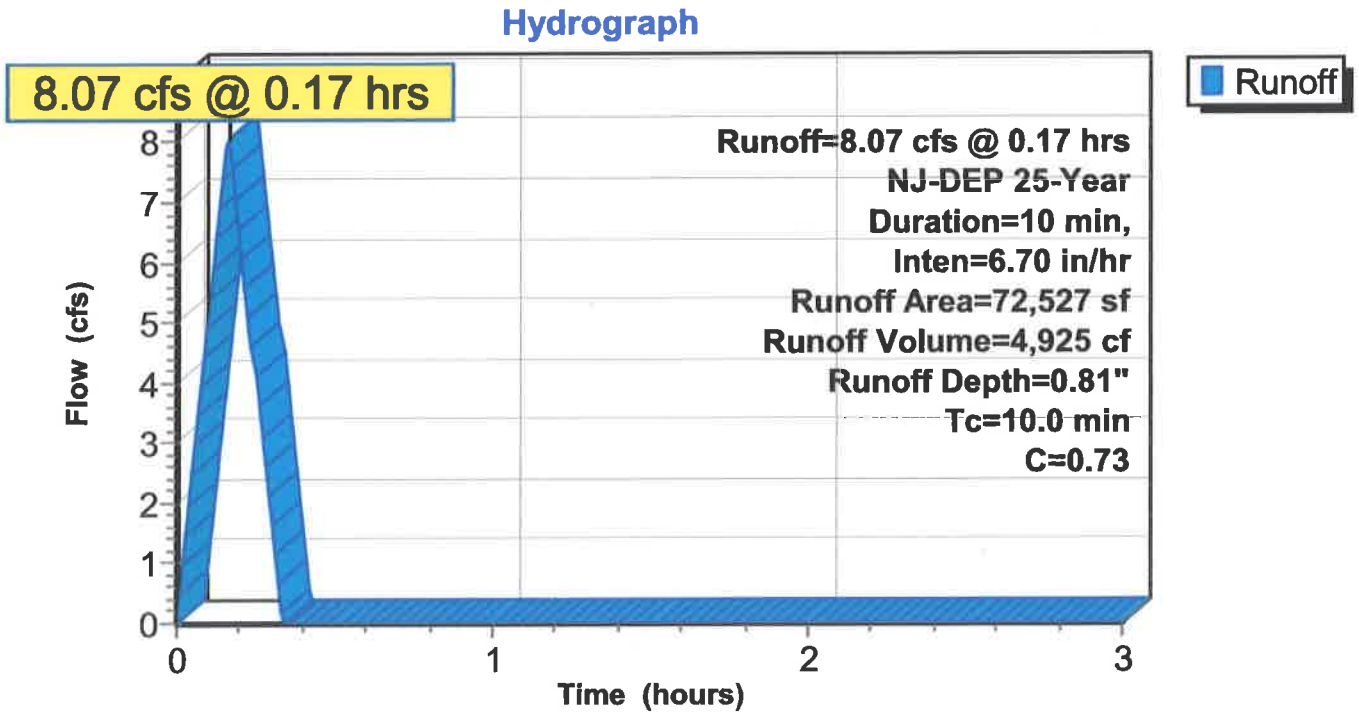
Hydrograph for Subcatchment 8: 25-Year Post-Development Runoff

Time (hours)	Runoff (cfs)	Time (hours)	Runoff (cfs)	Time (hours)	Runoff (cfs)	Time (hours)	Runoff (cfs)
0.00	0.00	0.52	0.00	1.04	0.00	1.56	0.00
0.01	0.49	0.53	0.00	1.05	0.00	1.57	0.00
0.02	0.99	0.54	0.00	1.06	0.00	1.58	0.00
0.03	1.48	0.55	0.00	1.07	0.00	1.59	0.00
0.04	1.97	0.56	0.00	1.08	0.00	1.60	0.00
0.05	2.46	0.57	0.00	1.09	0.00	1.61	0.00
0.06	2.96	0.58	0.00	1.10	0.00	1.62	0.00
0.07	3.45	0.59	0.00	1.11	0.00	1.63	0.00
0.08	3.94	0.60	0.00	1.12	0.00	1.64	0.00
0.09	4.43	0.61	0.00	1.13	0.00	1.65	0.00
0.10	4.93	0.62	0.00	1.14	0.00	1.66	0.00
0.11	5.42	0.63	0.00	1.15	0.00	1.67	0.00
0.12	5.91	0.64	0.00	1.16	0.00	1.68	0.00
0.13	6.40	0.65	0.00	1.17	0.00	1.69	0.00
0.14	6.90	0.66	0.00	1.18	0.00	1.70	0.00
0.15	7.39	0.67	0.00	1.19	0.00	1.71	0.00
0.16	7.88	0.68	0.00	1.20	0.00	1.72	0.00
0.17	**8.05**	0.69	0.00	1.21	0.00	1.73	0.00
0.18	7.55	0.70	0.00	1.22	0.00	1.74	0.00
0.19	7.06	0.71	0.00	1.23	0.00	1.75	0.00
0.20	6.57	0.72	0.00	1.24	0.00	1.76	0.00
0.21	6.08	0.73	0.00	1.25	0.00	1.77	0.00
0.22	5.58	0.74	0.00	1.26	0.00	1.78	0.00
0.23	5.09	0.75	0.00	1.27	0.00	1.79	0.00
0.24	4.60	0.76	0.00	1.28	0.00	1.80	0.00
0.25	4.11	0.77	0.00	1.29	0.00	1.81	0.00
0.26	3.61	0.78	0.00	1.30	0.00	1.82	0.00
0.27	3.12	0.79	0.00	1.31	0.00	1.83	0.00
0.28	2.63	0.80	0.00	1.32	0.00	1.84	0.00
0.29	2.13	0.81	0.00	1.33	0.00	1.85	0.00
0.30	1.64	0.82	0.00	1.34	0.00	1.86	0.00
0.31	1.15	0.83	0.00	1.35	0.00	1.87	0.00
0.32	0.66	0.84	0.00	1.36	0.00	1.88	0.00
0.33	0.16	0.85	0.00	1.37	0.00	1.89	0.00
0.34	0.00	0.86	0.00	1.38	0.00	1.90	0.00
0.35	0.00	0.87	0.00	1.39	0.00	1.91	0.00
0.36	0.00	0.88	0.00	1.40	0.00	1.92	0.00
0.37	0.00	0.89	0.00	1.41	0.00	1.93	0.00
0.38	0.00	0.90	0.00	1.42	0.00	1.94	0.00
0.39	0.00	0.91	0.00	1.43	0.00	1.95	0.00
0.40	0.00	0.92	0.00	1.44	0.00	1.96	0.00
0.41	0.00	0.93	0.00	1.45	0.00	1.97	0.00
0.42	0.00	0.94	0.00	1.46	0.00	1.98	0.00
0.43	0.00	0.95	0.00	1.47	0.00	1.99	0.00
0.44	0.00	0.96	0.00	1.48	0.00	2.00	0.00
0.45	0.00	0.97	0.00	1.49	0.00	2.01	0.00
0.46	0.00	0.98	0.00	1.50	0.00	2.02	0.00
0.47	0.00	0.99	0.00	1.51	0.00	2.03	0.00
0.48	0.00	1.00	0.00	1.52	0.00	2.04	0.00
0.49	0.00	1.01	0.00	1.53	0.00	2.05	0.00
0.50	0.00	1.02	0.00	1.54	0.00	2.06	0.00
0.51	0.00	1.03	0.00	1.55	0.00	2.07	0.00

Hydrograph for Subcatchment 8: 25-Year Post-Development Runoff (continued)

Time (hours)	Runoff (cfs)	Time (hours)	Runoff (cfs)
2.08	0.00	2.60	0.00
2.09	0.00	2.61	0.00
2.10	0.00	2.62	0.00
2.11	0.00	2.63	0.00
2.12	0.00	2.64	0.00
2.13	0.00	2.65	0.00
2.14	0.00	2.66	0.00
2.15	0.00	2.67	0.00
2.16	0.00	2.68	0.00
2.17	0.00	2.69	0.00
2.18	0.00	2.70	0.00
2.19	0.00	2.71	0.00
2.20	0.00	2.72	0.00
2.21	0.00	2.73	0.00
2.22	0.00	2.74	0.00
2.23	0.00	2.75	0.00
2.24	0.00	2.76	0.00
2.25	0.00	2.77	0.00
2.26	0.00	2.78	0.00
2.27	0.00	2.79	0.00
2.28	0.00	2.80	0.00
2.29	0.00	2.81	0.00
2.30	0.00	2.82	0.00
2.31	0.00	2.83	0.00
2.32	0.00	2.84	0.00
2.33	0.00	2.85	0.00
2.34	0.00	2.86	0.00
2.35	0.00	2.87	0.00
2.36	0.00	2.88	0.00
2.37	0.00	2.89	0.00
2.38	0.00	2.90	0.00
2.39	0.00	2.91	0.00
2.40	0.00	2.92	0.00
2.41	0.00	2.93	0.00
2.42	0.00	2.94	0.00
2.43	0.00	2.95	0.00
2.44	0.00	2.96	0.00
2.45	0.00	2.97	0.00
2.46	0.00	2.98	0.00
2.47	0.00	2.99	0.00
2.48	0.00	3.00	0.00
2.49	0.00		
2.50	0.00		
2.51	0.00		
2.52	0.00		
2.53	0.00		
2.54	0.00		
2.55	0.00		
2.56	0.00		
2.57	0.00		
2.58	0.00		
2.59	0.00		

Subcatchment 8: 25-Year Post-Development Runoff



Summary for Subcatchment 9: 50-Year Post-Development Runoff

Runoff = 8.67 cfs @ 0.17 hrs, Volume= 5,292 cf, Depth= 0.88"

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
NJ-DEP 50-Year Duration=10 min, Inten=7.20 in/hr

Area (sf)	C	Description	Land Use
72,527	0.73		

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Events for Subcatchment 9: 50-Year Post-Development Runoff

Event	Runoff (cfs)	Volume (cubic-feet)	Depth (inches)
50-Year	**8.67**	**5,292**	**0.88**

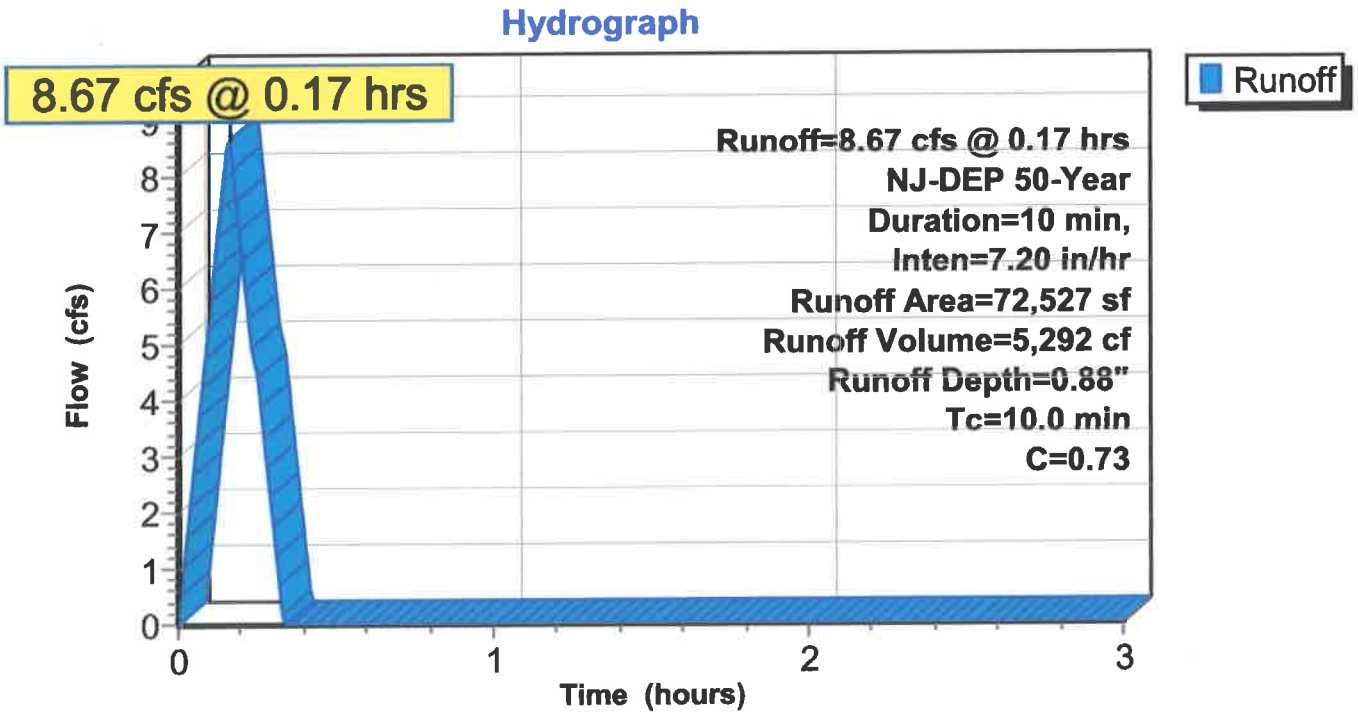
Hydrograph for Subcatchment 9: 50-Year Post-Development Runoff

Time (hours)	Runoff (cfs)	Time (hours)	Runoff (cfs)	Time (hours)	Runoff (cfs)	Time (hours)	Runoff (cfs)
0.00	0.00	0.52	0.00	1.04	0.00	1.56	0.00
0.01	0.53	0.53	0.00	1.05	0.00	1.57	0.00
0.02	1.06	0.54	0.00	1.06	0.00	1.58	0.00
0.03	1.59	0.55	0.00	1.07	0.00	1.59	0.00
0.04	2.12	0.56	0.00	1.08	0.00	1.60	0.00
0.05	2.65	0.57	0.00	1.09	0.00	1.61	0.00
0.06	3.18	0.58	0.00	1.10	0.00	1.62	0.00
0.07	3.71	0.59	0.00	1.11	0.00	1.63	0.00
0.08	4.24	0.60	0.00	1.12	0.00	1.64	0.00
0.09	4.77	0.61	0.00	1.13	0.00	1.65	0.00
0.10	5.29	0.62	0.00	1.14	0.00	1.66	0.00
0.11	5.82	0.63	0.00	1.15	0.00	1.67	0.00
0.12	6.35	0.64	0.00	1.16	0.00	1.68	0.00
0.13	6.88	0.65	0.00	1.17	0.00	1.69	0.00
0.14	7.41	0.66	0.00	1.18	0.00	1.70	0.00
0.15	7.94	0.67	0.00	1.19	0.00	1.71	0.00
0.16	8.47	0.68	0.00	1.20	0.00	1.72	0.00
0.17	**8.65**	0.69	0.00	1.21	0.00	1.73	0.00
0.18	8.12	0.70	0.00	1.22	0.00	1.74	0.00
0.19	7.59	0.71	0.00	1.23	0.00	1.75	0.00
0.20	7.06	0.72	0.00	1.24	0.00	1.76	0.00
0.21	6.53	0.73	0.00	1.25	0.00	1.77	0.00
0.22	6.00	0.74	0.00	1.26	0.00	1.78	0.00
0.23	5.47	0.75	0.00	1.27	0.00	1.79	0.00
0.24	4.94	0.76	0.00	1.28	0.00	1.80	0.00
0.25	4.41	0.77	0.00	1.29	0.00	1.81	0.00
0.26	3.88	0.78	0.00	1.30	0.00	1.82	0.00
0.27	3.35	0.79	0.00	1.31	0.00	1.83	0.00
0.28	2.82	0.80	0.00	1.32	0.00	1.84	0.00
0.29	2.29	0.81	0.00	1.33	0.00	1.85	0.00
0.30	1.76	0.82	0.00	1.34	0.00	1.86	0.00
0.31	1.24	0.83	0.00	1.35	0.00	1.87	0.00
0.32	0.71	0.84	0.00	1.36	0.00	1.88	0.00
0.33	0.18	0.85	0.00	1.37	0.00	1.89	0.00
0.34	0.00	0.86	0.00	1.38	0.00	1.90	0.00
0.35	0.00	0.87	0.00	1.39	0.00	1.91	0.00
0.36	0.00	0.88	0.00	1.40	0.00	1.92	0.00
0.37	0.00	0.89	0.00	1.41	0.00	1.93	0.00
0.38	0.00	0.90	0.00	1.42	0.00	1.94	0.00
0.39	0.00	0.91	0.00	1.43	0.00	1.95	0.00
0.40	0.00	0.92	0.00	1.44	0.00	1.96	0.00
0.41	0.00	0.93	0.00	1.45	0.00	1.97	0.00
0.42	0.00	0.94	0.00	1.46	0.00	1.98	0.00
0.43	0.00	0.95	0.00	1.47	0.00	1.99	0.00
0.44	0.00	0.96	0.00	1.48	0.00	2.00	0.00
0.45	0.00	0.97	0.00	1.49	0.00	2.01	0.00
0.46	0.00	0.98	0.00	1.50	0.00	2.02	0.00
0.47	0.00	0.99	0.00	1.51	0.00	2.03	0.00
0.48	0.00	1.00	0.00	1.52	0.00	2.04	0.00
0.49	0.00	1.01	0.00	1.53	0.00	2.05	0.00
0.50	0.00	1.02	0.00	1.54	0.00	2.06	0.00
0.51	0.00	1.03	0.00	1.55	0.00	2.07	0.00

Hydrograph for Subcatchment 9: 50-Year Post-Development Runoff (continued)

Time (hours)	Runoff (cfs)	Time (hours)	Runoff (cfs)
2.08	0.00	2.60	0.00
2.09	0.00	2.61	0.00
2.10	0.00	2.62	0.00
2.11	0.00	2.63	0.00
2.12	0.00	2.64	0.00
2.13	0.00	2.65	0.00
2.14	0.00	2.66	0.00
2.15	0.00	2.67	0.00
2.16	0.00	2.68	0.00
2.17	0.00	2.69	0.00
2.18	0.00	2.70	0.00
2.19	0.00	2.71	0.00
2.20	0.00	2.72	0.00
2.21	0.00	2.73	0.00
2.22	0.00	2.74	0.00
2.23	0.00	2.75	0.00
2.24	0.00	2.76	0.00
2.25	0.00	2.77	0.00
2.26	0.00	2.78	0.00
2.27	0.00	2.79	0.00
2.28	0.00	2.80	0.00
2.29	0.00	2.81	0.00
2.30	0.00	2.82	0.00
2.31	0.00	2.83	0.00
2.32	0.00	2.84	0.00
2.33	0.00	2.85	0.00
2.34	0.00	2.86	0.00
2.35	0.00	2.87	0.00
2.36	0.00	2.88	0.00
2.37	0.00	2.89	0.00
2.38	0.00	2.90	0.00
2.39	0.00	2.91	0.00
2.40	0.00	2.92	0.00
2.41	0.00	2.93	0.00
2.42	0.00	2.94	0.00
2.43	0.00	2.95	0.00
2.44	0.00	2.96	0.00
2.45	0.00	2.97	0.00
2.46	0.00	2.98	0.00
2.47	0.00	2.99	0.00
2.48	0.00	3.00	0.00
2.49	0.00		
2.50	0.00		
2.51	0.00		
2.52	0.00		
2.53	0.00		
2.54	0.00		
2.55	0.00		
2.56	0.00		
2.57	0.00		
2.58	0.00		
2.59	0.00		

Subcatchment 9: 50-Year Post-Development Runoff



Summary for Subcatchment 10: 100-Year Post-Development Runoff

Runoff = 9.63 cfs @ 0.17 hrs, Volume= 5,880 cf, Depth= 0.97"

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
NJ-DEP 100-Year Duration=10 min, Inten=8.00 in/hr

Area (sf)	C	Description	Land Use
72,527	0.73		

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Events for Subcatchment 10: 100-Year Post-Development Runoff

Event	Runoff (cfs)	Volume (cubic-feet)	Depth (inches)
100-Year	**9.63**	**5,880**	**0.97**

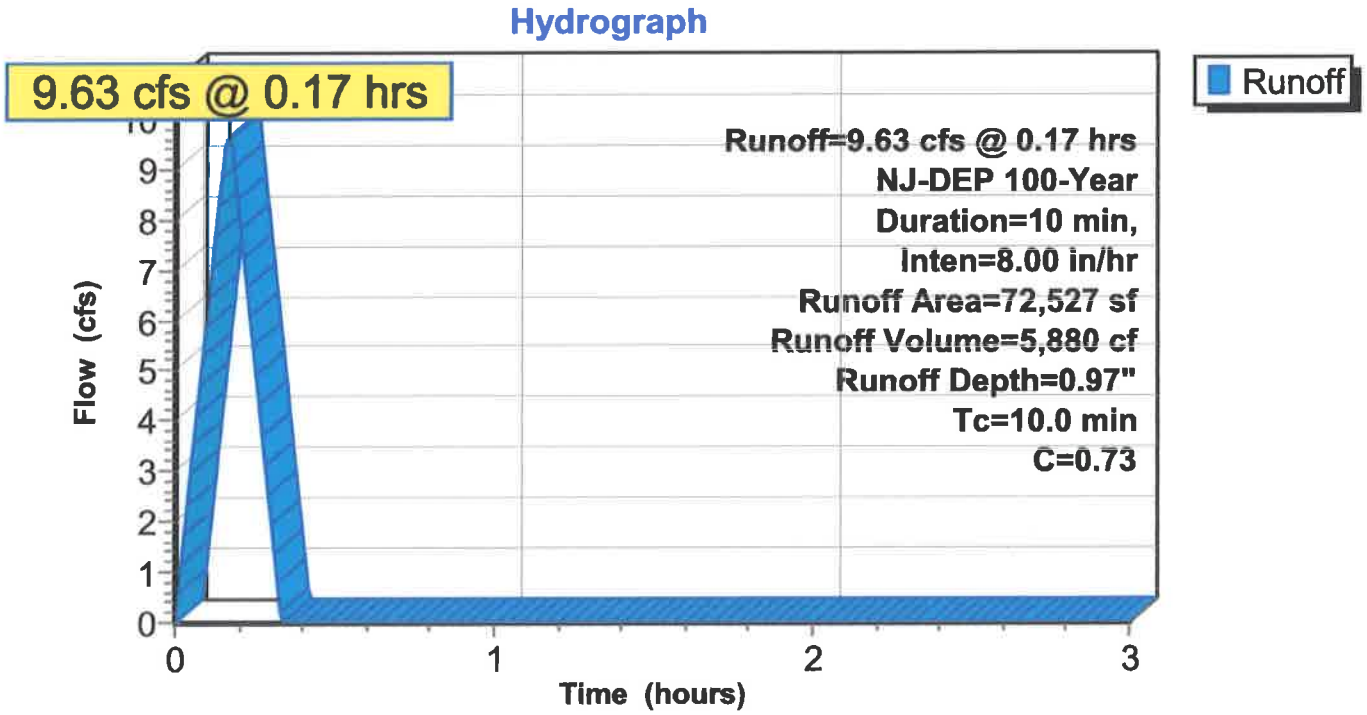
Hydrograph for Subcatchment 10: 100-Year Post-Development Runoff

Time (hours)	Runoff (cfs)	Time (hours)	Runoff (cfs)	Time (hours)	Runoff (cfs)	Time (hours)	Runoff (cfs)
0.00	0.00	0.52	0.00	1.04	0.00	1.56	0.00
0.01	0.59	0.53	0.00	1.05	0.00	1.57	0.00
0.02	1.18	0.54	0.00	1.06	0.00	1.58	0.00
0.03	1.76	0.55	0.00	1.07	0.00	1.59	0.00
0.04	2.35	0.56	0.00	1.08	0.00	1.60	0.00
0.05	2.94	0.57	0.00	1.09	0.00	1.61	0.00
0.06	3.53	0.58	0.00	1.10	0.00	1.62	0.00
0.07	4.12	0.59	0.00	1.11	0.00	1.63	0.00
0.08	4.71	0.60	0.00	1.12	0.00	1.64	0.00
0.09	5.29	0.61	0.00	1.13	0.00	1.65	0.00
0.10	5.88	0.62	0.00	1.14	0.00	1.66	0.00
0.11	6.47	0.63	0.00	1.15	0.00	1.67	0.00
0.12	7.06	0.64	0.00	1.16	0.00	1.68	0.00
0.13	7.65	0.65	0.00	1.17	0.00	1.69	0.00
0.14	8.24	0.66	0.00	1.18	0.00	1.70	0.00
0.15	8.82	0.67	0.00	1.19	0.00	1.71	0.00
0.16	9.41	0.68	0.00	1.20	0.00	1.72	0.00
0.17	**9.61**	0.69	0.00	1.21	0.00	1.73	0.00
0.18	9.02	0.70	0.00	1.22	0.00	1.74	0.00
0.19	8.43	0.71	0.00	1.23	0.00	1.75	0.00
0.20	7.84	0.72	0.00	1.24	0.00	1.76	0.00
0.21	7.26	0.73	0.00	1.25	0.00	1.77	0.00
0.22	6.67	0.74	0.00	1.26	0.00	1.78	0.00
0.23	6.08	0.75	0.00	1.27	0.00	1.79	0.00
0.24	5.49	0.76	0.00	1.28	0.00	1.80	0.00
0.25	4.90	0.77	0.00	1.29	0.00	1.81	0.00
0.26	4.31	0.78	0.00	1.30	0.00	1.82	0.00
0.27	3.73	0.79	0.00	1.31	0.00	1.83	0.00
0.28	3.14	0.80	0.00	1.32	0.00	1.84	0.00
0.29	2.55	0.81	0.00	1.33	0.00	1.85	0.00
0.30	1.96	0.82	0.00	1.34	0.00	1.86	0.00
0.31	1.37	0.83	0.00	1.35	0.00	1.87	0.00
0.32	0.78	0.84	0.00	1.36	0.00	1.88	0.00
0.33	0.20	0.85	0.00	1.37	0.00	1.89	0.00
0.34	0.00	0.86	0.00	1.38	0.00	1.90	0.00
0.35	0.00	0.87	0.00	1.39	0.00	1.91	0.00
0.36	0.00	0.88	0.00	1.40	0.00	1.92	0.00
0.37	0.00	0.89	0.00	1.41	0.00	1.93	0.00
0.38	0.00	0.90	0.00	1.42	0.00	1.94	0.00
0.39	0.00	0.91	0.00	1.43	0.00	1.95	0.00
0.40	0.00	0.92	0.00	1.44	0.00	1.96	0.00
0.41	0.00	0.93	0.00	1.45	0.00	1.97	0.00
0.42	0.00	0.94	0.00	1.46	0.00	1.98	0.00
0.43	0.00	0.95	0.00	1.47	0.00	1.99	0.00
0.44	0.00	0.96	0.00	1.48	0.00	2.00	0.00
0.45	0.00	0.97	0.00	1.49	0.00	2.01	0.00
0.46	0.00	0.98	0.00	1.50	0.00	2.02	0.00
0.47	0.00	0.99	0.00	1.51	0.00	2.03	0.00
0.48	0.00	1.00	0.00	1.52	0.00	2.04	0.00
0.49	0.00	1.01	0.00	1.53	0.00	2.05	0.00
0.50	0.00	1.02	0.00	1.54	0.00	2.06	0.00
0.51	0.00	1.03	0.00	1.55	0.00	2.07	0.00

Hydrograph for Subcatchment 10: 100-Year Post-Development Runoff (continued)

Time (hours)	Runoff (cfs)	Time (hours)	Runoff (cfs)
2.08	0.00	2.60	0.00
2.09	0.00	2.61	0.00
2.10	0.00	2.62	0.00
2.11	0.00	2.63	0.00
2.12	0.00	2.64	0.00
2.13	0.00	2.65	0.00
2.14	0.00	2.66	0.00
2.15	0.00	2.67	0.00
2.16	0.00	2.68	0.00
2.17	0.00	2.69	0.00
2.18	0.00	2.70	0.00
2.19	0.00	2.71	0.00
2.20	0.00	2.72	0.00
2.21	0.00	2.73	0.00
2.22	0.00	2.74	0.00
2.23	0.00	2.75	0.00
2.24	0.00	2.76	0.00
2.25	0.00	2.77	0.00
2.26	0.00	2.78	0.00
2.27	0.00	2.79	0.00
2.28	0.00	2.80	0.00
2.29	0.00	2.81	0.00
2.30	0.00	2.82	0.00
2.31	0.00	2.83	0.00
2.32	0.00	2.84	0.00
2.33	0.00	2.85	0.00
2.34	0.00	2.86	0.00
2.35	0.00	2.87	0.00
2.36	0.00	2.88	0.00
2.37	0.00	2.89	0.00
2.38	0.00	2.90	0.00
2.39	0.00	2.91	0.00
2.40	0.00	2.92	0.00
2.41	0.00	2.93	0.00
2.42	0.00	2.94	0.00
2.43	0.00	2.95	0.00
2.44	0.00	2.96	0.00
2.45	0.00	2.97	0.00
2.46	0.00	2.98	0.00
2.47	0.00	2.99	0.00
2.48	0.00	3.00	0.00
2.49	0.00		
2.50	0.00		
2.51	0.00		
2.52	0.00		
2.53	0.00		
2.54	0.00		
2.55	0.00		
2.56	0.00		
2.57	0.00		
2.58	0.00		
2.59	0.00		

Subcatchment 10: 100-Year Post-Development Runoff



APPENDIX 4

RESERVOIR ROUTINGS

Summary for Pond 1P: 2-Year Storm Routing

Inflow Area = 72,527 sf, Inflow Depth = 0.51" for 2-Year event
Inflow = 5.06 cfs @ 0.17 hrs, Volume= 3,087 cf
Outflow = 0.18 cfs @ 0.33 hrs, Volume= 1,565 cf, Atten= 96%, Lag= 9.7 min
Primary = 0.18 cfs @ 0.33 hrs, Volume= 1,565 cf

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
Peak Elev= 1.28' @ 0.33 hrs Surf.Area= 2,394 sf Storage= 2,963 cf

Plug-Flow detention time= 81.7 min calculated for 1,560 cf (51% of inflow)
Center-of-Mass det. time= 78.7 min (88.7 - 10.0)

Volume	Invert	Avail.Storage	Storage Description
#1	0.00'	6,967 cf	**Custom Stage Data (Irregular)** Listed below (Recalc) 7,182 cf Overall x 97.0% Voids

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
0.00	2,394	270.0	0	0	2,394
0.50	2,394	270.0	1,197	1,197	2,529
1.00	2,394	270.0	1,197	2,394	2,664
1.50	2,394	270.0	1,197	3,591	2,799
2.00	2,394	270.0	1,197	4,788	2,934
2.50	2,394	270.0	1,197	5,985	3,069
3.00	2,394	270.0	1,197	7,182	3,204

Device	Routing	Invert	Outlet Devices
#1	Primary	0.00'	**2.5" Vert. Orifice/Grate** C= 0.600
#2	Primary	2.50'	**6.0' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

Primary OutFlow Max=0.18 cfs @ 0.33 hrs HW=1.28' (Free Discharge)
↑—**1=Orifice/Grate** (Orifice Controls 0.18 cfs @ 5.21 fps)
└—**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Events for Pond 1P: 2-Year Storm Routing

Event	Inflow (cfs)	Primary (cfs)	Elevation (feet)	Storage (cubic-feet)
2-Year	**5.06**	**0.18**	**1.28**	**2,963**

Hydrograph for Pond 1P: 2-Year Storm Routing

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Primary (cfs)
0.00	0.00	0	0.00	0.00
0.01	0.31	6	0.00	0.00
0.02	0.62	22	0.01	0.00
0.03	0.93	50	0.02	0.00
0.04	1.24	89	0.04	0.00
0.05	1.54	139	0.06	0.01
0.06	1.85	199	0.09	0.01
0.07	2.16	271	0.12	0.02
0.08	2.47	353	0.15	0.04
0.09	2.78	446	0.19	0.05
0.10	3.09	550	0.24	0.06
0.11	3.40	664	0.29	0.07
0.12	3.71	790	0.34	0.08
0.13	4.01	926	0.40	0.09
0.14	4.32	1,072	0.46	0.10
0.15	4.63	1,230	0.53	0.11
0.16	4.94	1,398	0.60	0.12
0.17	**5.04**	1,574	0.68	0.12
0.18	4.74	1,745	0.75	0.13
0.19	4.43	1,905	0.82	0.14
0.20	4.12	2,054	0.88	0.14
0.21	3.81	2,191	0.94	0.15
0.22	3.50	2,317	1.00	0.16
0.23	3.19	2,432	1.05	0.16
0.24	2.88	2,536	1.09	0.16
0.25	2.57	2,628	1.13	0.17
0.26	2.26	2,709	1.17	0.17
0.27	1.96	2,779	1.20	0.17
0.28	1.65	2,837	1.22	0.17
0.29	1.34	2,885	1.24	0.18
0.30	1.03	2,921	1.26	0.18
0.31	0.72	2,946	1.27	0.18
0.32	0.41	2,960	1.27	0.18
0.33	0.10	**2,963**	**1.28**	**0.18**
0.34	0.00	2,959	1.27	0.18
0.35	0.00	2,952	1.27	0.18
0.36	0.00	2,946	1.27	0.18
0.37	0.00	2,939	1.27	0.18
0.38	0.00	2,933	1.26	0.18
0.39	0.00	2,927	1.26	0.18
0.40	0.00	2,920	1.26	0.18
0.41	0.00	2,914	1.25	0.18
0.42	0.00	2,908	1.25	0.18
0.43	0.00	2,901	1.25	0.18
0.44	0.00	2,895	1.25	0.18
0.45	0.00	2,889	1.24	0.18
0.46	0.00	2,882	1.24	0.18
0.47	0.00	2,876	1.24	0.17
0.48	0.00	2,870	1.24	0.17
0.49	0.00	2,864	1.23	0.17
0.50	0.00	2,857	1.23	0.17
0.51	0.00	2,851	1.23	0.17

Hydrograph for Pond 1P: 2-Year Storm Routing (continued)

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Primary (cfs)
0.52	0.00	2,845	1.23	0.17
0.53	0.00	2,839	1.22	0.17
0.54	0.00	2,832	1.22	0.17
0.55	0.00	2,826	1.22	0.17
0.56	0.00	2,820	1.21	0.17
0.57	0.00	2,814	1.21	0.17
0.58	0.00	2,807	1.21	0.17
0.59	0.00	2,801	1.21	0.17
0.60	0.00	2,795	1.20	0.17
0.61	0.00	2,789	1.20	0.17
0.62	0.00	2,783	1.20	0.17
0.63	0.00	2,776	1.20	0.17
0.64	0.00	2,770	1.19	0.17
0.65	0.00	2,764	1.19	0.17
0.66	0.00	2,758	1.19	0.17
0.67	0.00	2,752	1.18	0.17
0.68	0.00	2,746	1.18	0.17
0.69	0.00	2,739	1.18	0.17
0.70	0.00	2,733	1.18	0.17
0.71	0.00	2,727	1.17	0.17
0.72	0.00	2,721	1.17	0.17
0.73	0.00	2,715	1.17	0.17
0.74	0.00	2,709	1.17	0.17
0.75	0.00	2,703	1.16	0.17
0.76	0.00	2,697	1.16	0.17
0.77	0.00	2,691	1.16	0.17
0.78	0.00	2,685	1.16	0.17
0.79	0.00	2,679	1.15	0.17
0.80	0.00	2,673	1.15	0.17
0.81	0.00	2,667	1.15	0.17
0.82	0.00	2,660	1.15	0.17
0.83	0.00	2,654	1.14	0.17
0.84	0.00	2,648	1.14	0.17
0.85	0.00	2,642	1.14	0.17
0.86	0.00	2,636	1.14	0.17
0.87	0.00	2,630	1.13	0.17
0.88	0.00	2,624	1.13	0.17
0.89	0.00	2,618	1.13	0.17
0.90	0.00	2,612	1.13	0.17
0.91	0.00	2,607	1.12	0.17
0.92	0.00	2,601	1.12	0.17
0.93	0.00	2,595	1.12	0.17
0.94	0.00	2,589	1.11	0.16
0.95	0.00	2,583	1.11	0.16
0.96	0.00	2,577	1.11	0.16
0.97	0.00	2,571	1.11	0.16
0.98	0.00	2,565	1.10	0.16
0.99	0.00	2,559	1.10	0.16
1.00	0.00	2,553	1.10	0.16
1.01	0.00	2,547	1.10	0.16
1.02	0.00	2,541	1.09	0.16
1.03	0.00	2,535	1.09	0.16

Hydrograph for Pond 1P: 2-Year Storm Routing (continued)

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Primary (cfs)
1.04	0.00	2,530	1.09	0.16
1.05	0.00	2,524	1.09	0.16
1.06	0.00	2,518	1.08	0.16
1.07	0.00	2,512	1.08	0.16
1.08	0.00	2,506	1.08	0.16
1.09	0.00	2,500	1.08	0.16
1.10	0.00	2,495	1.07	0.16
1.11	0.00	2,489	1.07	0.16
1.12	0.00	2,483	1.07	0.16
1.13	0.00	2,477	1.07	0.16
1.14	0.00	2,471	1.06	0.16
1.15	0.00	2,466	1.06	0.16
1.16	0.00	2,460	1.06	0.16
1.17	0.00	2,454	1.06	0.16
1.18	0.00	2,448	1.05	0.16
1.19	0.00	2,442	1.05	0.16
1.20	0.00	2,437	1.05	0.16
1.21	0.00	2,431	1.05	0.16
1.22	0.00	2,425	1.04	0.16
1.23	0.00	2,420	1.04	0.16
1.24	0.00	2,414	1.04	0.16
1.25	0.00	2,408	1.04	0.16
1.26	0.00	2,402	1.03	0.16
1.27	0.00	2,397	1.03	0.16
1.28	0.00	2,391	1.03	0.16
1.29	0.00	2,385	1.03	0.16
1.30	0.00	2,380	1.02	0.16
1.31	0.00	2,374	1.02	0.16
1.32	0.00	2,368	1.02	0.16
1.33	0.00	2,363	1.02	0.16
1.34	0.00	2,357	1.02	0.16
1.35	0.00	2,351	1.01	0.16
1.36	0.00	2,346	1.01	0.16
1.37	0.00	2,340	1.01	0.16
1.38	0.00	2,335	1.01	0.16
1.39	0.00	2,329	1.00	0.16
1.40	0.00	2,323	1.00	0.16
1.41	0.00	2,318	1.00	0.16
1.42	0.00	2,312	1.00	0.15
1.43	0.00	2,307	0.99	0.15
1.44	0.00	2,301	0.99	0.15
1.45	0.00	2,295	0.99	0.15
1.46	0.00	2,290	0.99	0.15
1.47	0.00	2,284	0.98	0.15
1.48	0.00	2,279	0.98	0.15
1.49	0.00	2,273	0.98	0.15
1.50	0.00	2,268	0.98	0.15
1.51	0.00	2,262	0.97	0.15
1.52	0.00	2,257	0.97	0.15
1.53	0.00	2,251	0.97	0.15
1.54	0.00	2,246	0.97	0.15
1.55	0.00	2,240	0.96	0.15

Hydrograph for Pond 1P: 2-Year Storm Routing (continued)

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Primary (cfs)
1.56	0.00	2,235	0.96	0.15
1.57	0.00	2,229	0.96	0.15
1.58	0.00	2,224	0.96	0.15
1.59	0.00	2,218	0.96	0.15
1.60	0.00	2,213	0.95	0.15
1.61	0.00	2,208	0.95	0.15
1.62	0.00	2,202	0.95	0.15
1.63	0.00	2,197	0.95	0.15
1.64	0.00	2,191	0.94	0.15
1.65	0.00	2,186	0.94	0.15
1.66	0.00	2,180	0.94	0.15
1.67	0.00	2,175	0.94	0.15
1.68	0.00	2,170	0.93	0.15
1.69	0.00	2,164	0.93	0.15
1.70	0.00	2,159	0.93	0.15
1.71	0.00	2,154	0.93	0.15
1.72	0.00	2,148	0.93	0.15
1.73	0.00	2,143	0.92	0.15
1.74	0.00	2,138	0.92	0.15
1.75	0.00	2,132	0.92	0.15
1.76	0.00	2,127	0.92	0.15
1.77	0.00	2,122	0.91	0.15
1.78	0.00	2,116	0.91	0.15
1.79	0.00	2,111	0.91	0.15
1.80	0.00	2,106	0.91	0.15
1.81	0.00	2,100	0.90	0.15
1.82	0.00	2,095	0.90	0.15
1.83	0.00	2,090	0.90	0.15
1.84	0.00	2,085	0.90	0.15
1.85	0.00	2,079	0.90	0.15
1.86	0.00	2,074	0.89	0.15
1.87	0.00	2,069	0.89	0.15
1.88	0.00	2,064	0.89	0.15
1.89	0.00	2,058	0.89	0.15
1.90	0.00	2,053	0.88	0.14
1.91	0.00	2,048	0.88	0.14
1.92	0.00	2,043	0.88	0.14
1.93	0.00	2,037	0.88	0.14
1.94	0.00	2,032	0.88	0.14
1.95	0.00	2,027	0.87	0.14
1.96	0.00	2,022	0.87	0.14
1.97	0.00	2,017	0.87	0.14
1.98	0.00	2,012	0.87	0.14
1.99	0.00	2,006	0.86	0.14
2.00	0.00	2,001	0.86	0.14
2.01	0.00	1,996	0.86	0.14
2.02	0.00	1,991	0.86	0.14
2.03	0.00	1,986	0.86	0.14
2.04	0.00	1,981	0.85	0.14
2.05	0.00	1,976	0.85	0.14
2.06	0.00	1,971	0.85	0.14
2.07	0.00	1,965	0.85	0.14

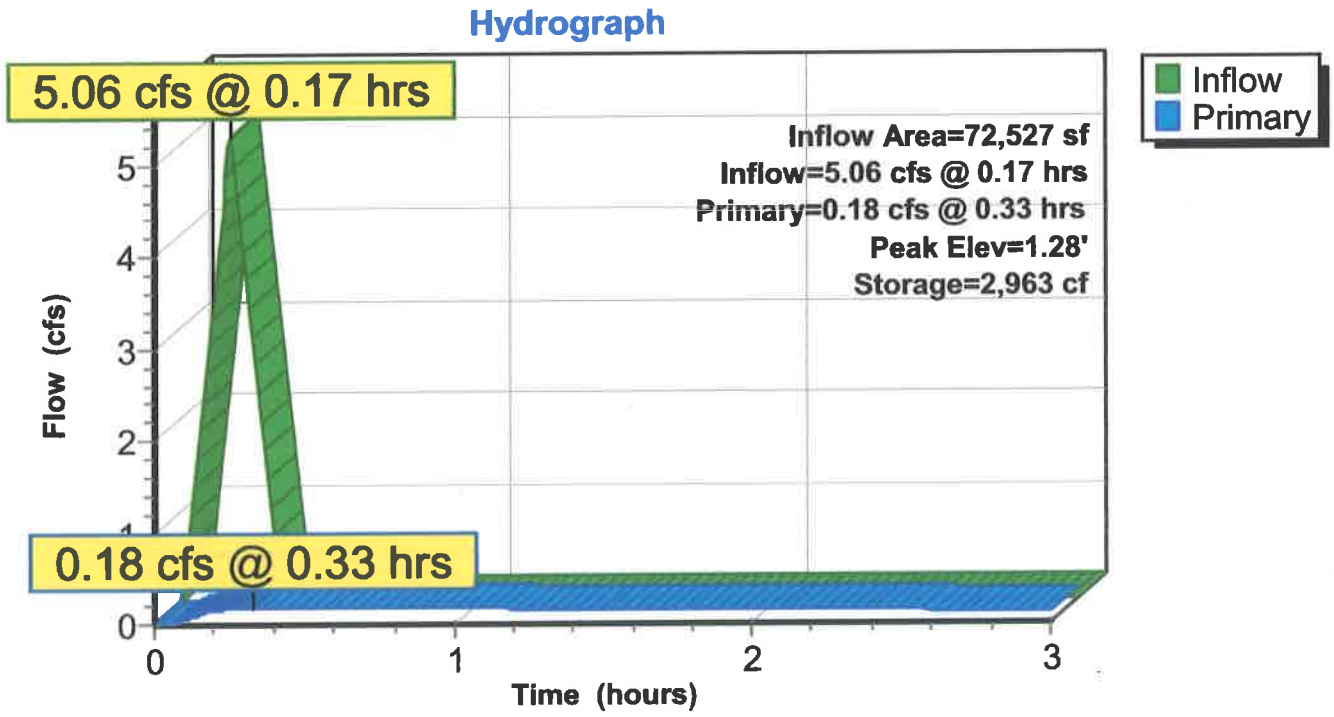
Hydrograph for Pond 1P: 2-Year Storm Routing (continued)

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Primary (cfs)
2.08	0.00	1,960	0.84	0.14
2.09	0.00	1,955	0.84	0.14
2.10	0.00	1,950	0.84	0.14
2.11	0.00	1,945	0.84	0.14
2.12	0.00	1,940	0.84	0.14
2.13	0.00	1,935	0.83	0.14
2.14	0.00	1,930	0.83	0.14
2.15	0.00	1,925	0.83	0.14
2.16	0.00	1,920	0.83	0.14
2.17	0.00	1,915	0.82	0.14
2.18	0.00	1,910	0.82	0.14
2.19	0.00	1,905	0.82	0.14
2.20	0.00	1,900	0.82	0.14
2.21	0.00	1,895	0.82	0.14
2.22	0.00	1,890	0.81	0.14
2.23	0.00	1,885	0.81	0.14
2.24	0.00	1,880	0.81	0.14
2.25	0.00	1,875	0.81	0.14
2.26	0.00	1,870	0.81	0.14
2.27	0.00	1,865	0.80	0.14
2.28	0.00	1,860	0.80	0.14
2.29	0.00	1,855	0.80	0.14
2.30	0.00	1,850	0.80	0.14
2.31	0.00	1,845	0.79	0.14
2.32	0.00	1,841	0.79	0.14
2.33	0.00	1,836	0.79	0.14
2.34	0.00	1,831	0.79	0.14
2.35	0.00	1,826	0.79	0.14
2.36	0.00	1,821	0.78	0.14
2.37	0.00	1,816	0.78	0.14
2.38	0.00	1,811	0.78	0.13
2.39	0.00	1,806	0.78	0.13
2.40	0.00	1,802	0.78	0.13
2.41	0.00	1,797	0.77	0.13
2.42	0.00	1,792	0.77	0.13
2.43	0.00	1,787	0.77	0.13
2.44	0.00	1,782	0.77	0.13
2.45	0.00	1,777	0.77	0.13
2.46	0.00	1,773	0.76	0.13
2.47	0.00	1,768	0.76	0.13
2.48	0.00	1,763	0.76	0.13
2.49	0.00	1,758	0.76	0.13
2.50	0.00	1,753	0.76	0.13
2.51	0.00	1,749	0.75	0.13
2.52	0.00	1,744	0.75	0.13
2.53	0.00	1,739	0.75	0.13
2.54	0.00	1,734	0.75	0.13
2.55	0.00	1,730	0.74	0.13
2.56	0.00	1,725	0.74	0.13
2.57	0.00	1,720	0.74	0.13
2.58	0.00	1,716	0.74	0.13
2.59	0.00	1,711	0.74	0.13

Hydrograph for Pond 1P: 2-Year Storm Routing (continued)

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Primary (cfs)
2.60	0.00	1,706	0.73	0.13
2.61	0.00	1,702	0.73	0.13
2.62	0.00	1,697	0.73	0.13
2.63	0.00	1,692	0.73	0.13
2.64	0.00	1,687	0.73	0.13
2.65	0.00	1,683	0.72	0.13
2.66	0.00	1,678	0.72	0.13
2.67	0.00	1,674	0.72	0.13
2.68	0.00	1,669	0.72	0.13
2.69	0.00	1,664	0.72	0.13
2.70	0.00	1,660	0.71	0.13
2.71	0.00	1,655	0.71	0.13
2.72	0.00	1,650	0.71	0.13
2.73	0.00	1,646	0.71	0.13
2.74	0.00	1,641	0.71	0.13
2.75	0.00	1,637	0.70	0.13
2.76	0.00	1,632	0.70	0.13
2.77	0.00	1,628	0.70	0.13
2.78	0.00	1,623	0.70	0.13
2.79	0.00	1,618	0.70	0.13
2.80	0.00	1,614	0.69	0.13
2.81	0.00	1,609	0.69	0.13
2.82	0.00	1,605	0.69	0.13
2.83	0.00	1,600	0.69	0.13
2.84	0.00	1,596	0.69	0.13
2.85	0.00	1,591	0.69	0.13
2.86	0.00	1,587	0.68	0.12
2.87	0.00	1,582	0.68	0.12
2.88	0.00	1,578	0.68	0.12
2.89	0.00	1,573	0.68	0.12
2.90	0.00	1,569	0.68	0.12
2.91	0.00	1,564	0.67	0.12
2.92	0.00	1,560	0.67	0.12
2.93	0.00	1,555	0.67	0.12
2.94	0.00	1,551	0.67	0.12
2.95	0.00	1,547	0.67	0.12
2.96	0.00	1,542	0.66	0.12
2.97	0.00	1,538	0.66	0.12
2.98	0.00	1,533	0.66	0.12
2.99	0.00	1,529	0.66	0.12
3.00	0.00	1,525	0.66	0.12

Pond 1P: 2-Year Storm Routing



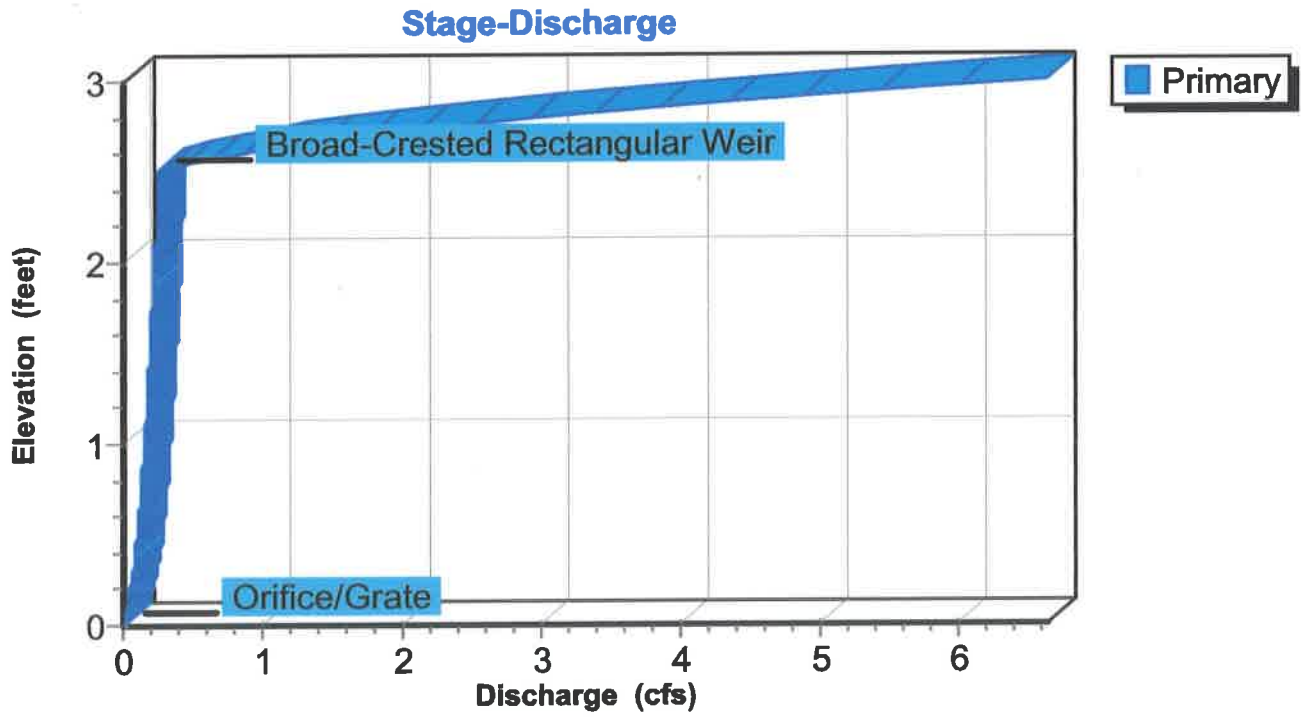
Stage-Discharge for Pond 1P: 2-Year Storm Routing

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
0.00	0.00	0.52	0.11	1.04	0.16	1.56	0.20
0.01	0.00	0.53	0.11	1.05	0.16	1.57	0.20
0.02	0.00	0.54	0.11	1.06	0.16	1.58	0.20
0.03	0.00	0.55	0.11	1.07	0.16	1.59	0.20
0.04	0.00	0.56	0.11	1.08	0.16	1.60	0.20
0.05	0.00	0.57	0.11	1.09	0.16	1.61	0.20
0.06	0.01	0.58	0.11	1.10	0.16	1.62	0.20
0.07	0.01	0.59	0.11	1.11	0.16	1.63	0.20
0.08	0.01	0.60	0.12	1.12	0.17	1.64	0.20
0.09	0.01	0.61	0.12	1.13	0.17	1.65	0.20
0.10	0.02	0.62	0.12	1.14	0.17	1.66	0.20
0.11	0.02	0.63	0.12	1.15	0.17	1.67	0.21
0.12	0.02	0.64	0.12	1.16	0.17	1.68	0.21
0.13	0.03	0.65	0.12	1.17	0.17	1.69	0.21
0.14	0.03	0.66	0.12	1.18	0.17	1.70	0.21
0.15	0.03	0.67	0.12	1.19	0.17	1.71	0.21
0.16	0.04	0.68	0.12	1.20	0.17	1.72	0.21
0.17	0.04	0.69	0.13	1.21	0.17	1.73	0.21
0.18	0.05	0.70	0.13	1.22	0.17	1.74	0.21
0.19	0.05	0.71	0.13	1.23	0.17	1.75	0.21
0.20	0.05	0.72	0.13	1.24	0.17	1.76	0.21
0.21	0.05	0.73	0.13	1.25	0.18	1.77	0.21
0.22	0.06	0.74	0.13	1.26	0.18	1.78	0.21
0.23	0.06	0.75	0.13	1.27	0.18	1.79	0.21
0.24	0.06	0.76	0.13	1.28	0.18	1.80	0.21
0.25	0.06	0.77	0.13	1.29	0.18	1.81	0.21
0.26	0.06	0.78	0.13	1.30	0.18	1.82	0.22
0.27	0.07	0.79	0.14	1.31	0.18	1.83	0.22
0.28	0.07	0.80	0.14	1.32	0.18	1.84	0.22
0.29	0.07	0.81	0.14	1.33	0.18	1.85	0.22
0.30	0.07	0.82	0.14	1.34	0.18	1.86	0.22
0.31	0.07	0.83	0.14	1.35	0.18	1.87	0.22
0.32	0.08	0.84	0.14	1.36	0.18	1.88	0.22
0.33	0.08	0.85	0.14	1.37	0.18	1.89	0.22
0.34	0.08	0.86	0.14	1.38	0.19	1.90	0.22
0.35	0.08	0.87	0.14	1.39	0.19	1.91	0.22
0.36	0.08	0.88	0.14	1.40	0.19	1.92	0.22
0.37	0.08	0.89	0.15	1.41	0.19	1.93	0.22
0.38	0.09	0.90	0.15	1.42	0.19	1.94	0.22
0.39	0.09	0.91	0.15	1.43	0.19	1.95	0.22
0.40	0.09	0.92	0.15	1.44	0.19	1.96	0.22
0.41	0.09	0.93	0.15	1.45	0.19	1.97	0.22
0.42	0.09	0.94	0.15	1.46	0.19	1.98	0.22
0.43	0.09	0.95	0.15	1.47	0.19	1.99	0.23
0.44	0.10	0.96	0.15	1.48	0.19	2.00	0.23
0.45	0.10	0.97	0.15	1.49	0.19	2.01	0.23
0.46	0.10	0.98	0.15	1.50	0.19	2.02	0.23
0.47	0.10	0.99	0.15	1.51	0.19	2.03	0.23
0.48	0.10	1.00	0.16	1.52	0.20	2.04	0.23
0.49	0.10	1.01	0.16	1.53	0.20	2.05	0.23
0.50	0.10	1.02	0.16	1.54	0.20	2.06	0.23
0.51	0.10	1.03	0.16	1.55	0.20	2.07	0.23

Stage-Discharge for Pond 1P: 2-Year Storm Routing (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
2.08	0.23	2.60	0.79
2.09	0.23	2.61	0.87
2.10	0.23	2.62	0.96
2.11	0.23	2.63	1.05
2.12	0.23	2.64	1.14
2.13	0.23	2.65	1.24
2.14	0.23	2.66	1.34
2.15	0.23	2.67	1.44
2.16	0.24	2.68	1.55
2.17	0.24	2.69	1.66
2.18	0.24	2.70	1.77
2.19	0.24	2.71	1.89
2.20	0.24	2.72	2.01
2.21	0.24	2.73	2.13
2.22	0.24	2.74	2.26
2.23	0.24	2.75	2.39
2.24	0.24	2.76	2.52
2.25	0.24	2.77	2.66
2.26	0.24	2.78	2.80
2.27	0.24	2.79	2.94
2.28	0.24	2.80	3.09
2.29	0.24	2.81	3.24
2.30	0.24	2.82	3.39
2.31	0.24	2.83	3.54
2.32	0.24	2.84	3.70
2.33	0.24	2.85	3.86
2.34	0.25	2.86	4.03
2.35	0.25	2.87	4.19
2.36	0.25	2.88	4.36
2.37	0.25	2.89	4.53
2.38	0.25	2.90	4.71
2.39	0.25	2.91	4.89
2.40	0.25	2.92	5.07
2.41	0.25	2.93	5.26
2.42	0.25	2.94	5.45
2.43	0.25	2.95	5.64
2.44	0.25	2.96	5.83
2.45	0.25	2.97	6.03
2.46	0.25	2.98	6.23
2.47	0.25	2.99	6.44
2.48	0.25	3.00	**6.64**
2.49	0.25		
2.50	0.25		
2.51	0.27		
2.52	0.30		
2.53	0.34		
2.54	0.39		
2.55	0.44		
2.56	0.50		
2.57	0.57		
2.58	0.64		
2.59	0.71		

Pond 1P: 2-Year Storm Routing



Stage-Area-Storage for Pond 1P: 2-Year Storm Routing

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
0.00	**2,394**	0	0.52	2,394	1,208
0.01	2,394	23	0.53	2,394	1,231
0.02	2,394	46	0.54	2,394	1,254
0.03	2,394	70	0.55	2,394	1,277
0.04	2,394	93	0.56	2,394	1,300
0.05	2,394	116	0.57	2,394	1,324
0.06	2,394	139	0.58	2,394	1,347
0.07	2,394	163	0.59	2,394	1,370
0.08	2,394	186	0.60	2,394	1,393
0.09	2,394	209	0.61	2,394	1,417
0.10	2,394	232	0.62	2,394	1,440
0.11	2,394	255	0.63	2,394	1,463
0.12	2,394	279	0.64	2,394	1,486
0.13	2,394	302	0.65	2,394	1,509
0.14	2,394	325	0.66	2,394	1,533
0.15	2,394	348	0.67	2,394	1,556
0.16	2,394	372	0.68	2,394	1,579
0.17	2,394	395	0.69	2,394	1,602
0.18	2,394	418	0.70	2,394	1,626
0.19	2,394	441	0.71	2,394	1,649
0.20	2,394	464	0.72	2,394	1,672
0.21	2,394	488	0.73	2,394	1,695
0.22	2,394	511	0.74	2,394	1,718
0.23	2,394	534	0.75	2,394	1,742
0.24	2,394	557	0.76	2,394	1,765
0.25	2,394	581	0.77	2,394	1,788
0.26	2,394	604	0.78	2,394	1,811
0.27	2,394	627	0.79	2,394	1,835
0.28	2,394	650	0.80	2,394	1,858
0.29	2,394	673	0.81	2,394	1,881
0.30	2,394	697	0.82	2,394	1,904
0.31	2,394	720	0.83	2,394	1,927
0.32	2,394	743	0.84	2,394	1,951
0.33	2,394	766	0.85	2,394	1,974
0.34	2,394	790	0.86	2,394	1,997
0.35	2,394	813	0.87	2,394	2,020
0.36	2,394	836	0.88	2,394	2,044
0.37	2,394	859	0.89	2,394	2,067
0.38	2,394	882	0.90	2,394	2,090
0.39	2,394	906	0.91	2,394	2,113
0.40	2,394	929	0.92	2,394	2,136
0.41	2,394	952	0.93	2,394	2,160
0.42	2,394	975	0.94	2,394	2,183
0.43	2,394	999	0.95	2,394	2,206
0.44	2,394	1,022	0.96	2,394	2,229
0.45	2,394	1,045	0.97	2,394	2,253
0.46	2,394	1,068	0.98	2,394	2,276
0.47	2,394	1,091	0.99	2,394	2,299
0.48	2,394	1,115	1.00	2,394	2,322
0.49	2,394	1,138	1.01	2,394	2,345
0.50	2,394	1,161	1.02	2,394	2,369
0.51	2,394	1,184	1.03	2,394	2,392

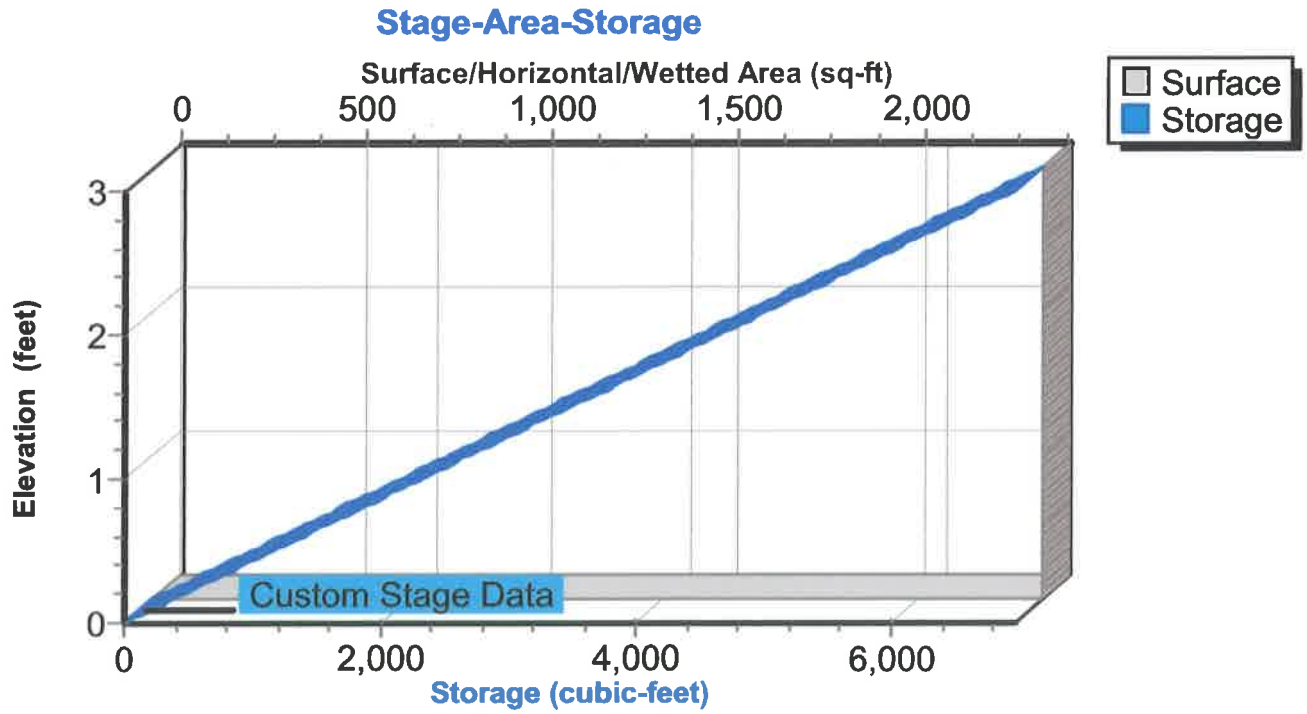
Stage-Area-Storage for Pond 1P: 2-Year Storm Routing (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
1.04	2,394	2,415
1.05	2,394	2,438
1.06	2,394	2,462
1.07	2,394	2,485
1.08	2,394	2,508
1.09	2,394	2,531
1.10	2,394	2,554
1.11	2,394	2,578
1.12	2,394	2,601
1.13	2,394	2,624
1.14	2,394	2,647
1.15	2,394	2,671
1.16	2,394	2,694
1.17	2,394	2,717
1.18	2,394	2,740
1.19	2,394	2,763
1.20	2,394	2,787
1.21	2,394	2,810
1.22	2,394	2,833
1.23	2,394	2,856
1.24	2,394	2,880
1.25	2,394	2,903
1.26	2,394	2,926
1.27	2,394	2,949
1.28	2,394	2,972
1.29	2,394	2,996
1.30	2,394	3,019
1.31	2,394	3,042
1.32	2,394	3,065
1.33	2,394	3,088
1.34	2,394	3,112
1.35	2,394	3,135
1.36	2,394	3,158
1.37	2,394	3,181
1.38	2,394	3,205
1.39	2,394	3,228
1.40	2,394	3,251
1.41	2,394	3,274
1.42	2,394	3,297
1.43	2,394	3,321
1.44	2,394	3,344
1.45	2,394	3,367
1.46	2,394	3,390
1.47	2,394	3,414
1.48	2,394	3,437
1.49	2,394	3,460
1.50	2,394	3,483
1.51	2,394	3,506
1.52	2,394	3,530
1.53	2,394	3,553
1.54	2,394	3,576
1.55	2,394	3,599
1.56	2,394	3,623
1.57	2,394	3,646
1.58	2,394	3,669
1.59	2,394	3,692
1.60	2,394	3,715
1.61	2,394	3,739
1.62	2,394	3,762
1.63	2,394	3,785
1.64	2,394	3,808
1.65	2,394	3,832
1.66	2,394	3,855
1.67	2,394	3,878
1.68	2,394	3,901
1.69	2,394	3,924
1.70	2,394	3,948
1.71	2,394	3,971
1.72	2,394	3,994
1.73	2,394	4,017
1.74	2,394	4,041
1.75	2,394	4,064
1.76	2,394	4,087
1.77	2,394	4,110
1.78	2,394	4,133
1.79	2,394	4,157
1.80	2,394	4,180
1.81	2,394	4,203
1.82	2,394	4,226
1.83	2,394	4,250
1.84	2,394	4,273
1.85	2,394	4,296
1.86	2,394	4,319
1.87	2,394	4,342
1.88	2,394	4,366
1.89	2,394	4,389
1.90	2,394	4,412
1.91	2,394	4,435
1.92	2,394	4,459
1.93	2,394	4,482
1.94	2,394	4,505
1.95	2,394	4,528
1.96	2,394	4,551
1.97	2,394	4,575
1.98	2,394	4,598
1.99	2,394	4,621
2.00	2,394	4,644
2.01	2,394	4,668
2.02	2,394	4,691
2.03	2,394	4,714
2.04	2,394	4,737
2.05	2,394	4,760
2.06	2,394	4,784
2.07	2,394	4,807

Stage-Area-Storage for Pond 1P: 2-Year Storm Routing (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
2.08	2,394	4,830
2.09	2,394	4,853
2.10	2,394	4,877
2.11	2,394	4,900
2.12	2,394	4,923
2.13	2,394	4,946
2.14	2,394	4,969
2.15	2,394	4,993
2.16	2,394	5,016
2.17	2,394	5,039
2.18	2,394	5,062
2.19	2,394	5,086
2.20	2,394	5,109
2.21	2,394	5,132
2.22	2,394	5,155
2.23	2,394	5,178
2.24	2,394	5,202
2.25	2,394	5,225
2.26	2,394	5,248
2.27	2,394	5,271
2.28	2,394	5,295
2.29	2,394	5,318
2.30	2,394	5,341
2.31	2,394	5,364
2.32	2,394	5,387
2.33	2,394	5,411
2.34	2,394	5,434
2.35	2,394	5,457
2.36	2,394	5,480
2.37	2,394	5,504
2.38	2,394	5,527
2.39	2,394	5,550
2.40	2,394	5,573
2.41	2,394	5,596
2.42	2,394	5,620
2.43	2,394	5,643
2.44	2,394	5,666
2.45	2,394	5,689
2.46	2,394	5,713
2.47	2,394	5,736
2.48	2,394	5,759
2.49	2,394	5,782
2.50	2,394	5,805
2.51	2,394	5,829
2.52	2,394	5,852
2.53	2,394	5,875
2.54	2,394	5,898
2.55	2,394	5,922
2.56	2,394	5,945
2.57	2,394	5,968
2.58	2,394	5,991
2.59	2,394	6,014
2.60	2,394	6,038
2.61	2,394	6,061
2.62	2,394	6,084
2.63	2,394	6,107
2.64	2,394	6,131
2.65	2,394	6,154
2.66	2,394	6,177
2.67	2,394	6,200
2.68	2,394	6,223
2.69	2,394	6,247
2.70	2,394	6,270
2.71	2,394	6,293
2.72	2,394	6,316
2.73	2,394	6,340
2.74	2,394	6,363
2.75	2,394	6,386
2.76	2,394	6,409
2.77	2,394	6,432
2.78	2,394	6,456
2.79	2,394	6,479
2.80	2,394	6,502
2.81	2,394	6,525
2.82	2,394	6,549
2.83	2,394	6,572
2.84	2,394	6,595
2.85	2,394	6,618
2.86	2,394	6,641
2.87	2,394	6,665
2.88	2,394	6,688
2.89	2,394	6,711
2.90	2,394	6,734
2.91	2,394	6,758
2.92	2,394	6,781
2.93	2,394	6,804
2.94	2,394	6,827
2.95	2,394	6,850
2.96	2,394	6,874
2.97	2,394	6,897
2.98	2,394	6,920
2.99	2,394	6,943
3.00	2,394	**6,967**

Pond 1P: 2-Year Storm Routing



Summary for Pond 1P: 10-Year Storm Routing

Inflow Area = 72,527 sf, Inflow Depth = 0.71" for 10-Year event
Inflow = 6.98 cfs @ 0.17 hrs, Volume= 4,263 cf
Outflow = 0.21 cfs @ 0.33 hrs, Volume= 1,921 cf, Atten= 97%, Lag= 9.8 min
Primary = 0.21 cfs @ 0.33 hrs, Volume= 1,921 cf

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
Peak Elev= 1.77' @ 0.33 hrs Surf.Area= 2,394 sf Storage= 4,112 cf

Plug-Flow detention time= 83.3 min calculated for 1,921 cf (45% of inflow)
Center-of-Mass det. time= 79.6 min (89.6 - 10.0)

Volume	Invert	Avail.Storage	Storage Description
#1	0.00'	6,967 cf	**Custom Stage Data (Irregular)** Listed below (Recalc) 7,182 cf Overall x 97.0% Voids

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
0.00	2,394	270.0	0	0	2,394
0.50	2,394	270.0	1,197	1,197	2,529
1.00	2,394	270.0	1,197	2,394	2,664
1.50	2,394	270.0	1,197	3,591	2,799
2.00	2,394	270.0	1,197	4,788	2,934
2.50	2,394	270.0	1,197	5,985	3,069
3.00	2,394	270.0	1,197	7,182	3,204

Device	Routing	Invert	Outlet Devices
#1	Primary	0.00'	**2.5" Vert. Orifice/Grate** C= 0.600
#2	Primary	2.50'	**6.0' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

Primary OutFlow Max=0.21 cfs @ 0.33 hrs HW=1.77' (Free Discharge)
↑—**1=Orifice/Grate** (Orifice Controls 0.21 cfs @ 6.22 fps)
└—**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Events for Pond 1P: 10-Year Storm Routing

Event	Inflow (cfs)	Primary (cfs)	Elevation (feet)	Storage (cubic-feet)
10-Year	**6.98**	**0.21**	**1.77**	**4,112**

Hydrograph for Pond 1P: 10-Year Storm Routing

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Primary (cfs)
0.00	0.00	0	0.00	0.00
0.01	0.43	8	0.00	0.00
0.02	0.85	31	0.01	0.00
0.03	1.28	69	0.03	0.00
0.04	1.71	123	0.05	0.01
0.05	2.13	191	0.08	0.01
0.06	2.56	275	0.12	0.02
0.07	2.99	374	0.16	0.04
0.08	3.41	487	0.21	0.05
0.09	3.84	616	0.27	0.07
0.10	4.26	759	0.33	0.08
0.11	4.69	917	0.40	0.09
0.12	5.12	1,090	0.47	0.10
0.13	5.54	1,279	0.55	0.11
0.14	5.97	1,482	0.64	0.12
0.15	6.40	1,700	0.73	0.13
0.16	6.82	1,933	0.83	0.14
0.17	**6.97**	2,176	0.94	0.15
0.18	6.54	2,414	1.04	0.16
0.19	6.11	2,635	1.13	0.17
0.20	5.69	2,842	1.22	0.17
0.21	5.26	3,032	1.31	0.18
0.22	4.83	3,208	1.38	0.19
0.23	4.41	3,367	1.45	0.19
0.24	3.98	3,511	1.51	0.19
0.25	3.55	3,640	1.57	0.20
0.26	3.13	3,753	1.62	0.20
0.27	2.70	3,850	1.66	0.20
0.28	2.27	3,933	1.69	0.21
0.29	1.85	3,999	1.72	0.21
0.30	1.42	4,051	1.74	0.21
0.31	1.00	4,086	1.76	0.21
0.32	0.57	4,107	1.77	0.21
0.33	0.14	**4,112**	**1.77**	**0.21**
0.34	0.00	4,107	1.77	0.21
0.35	0.00	4,100	1.77	0.21
0.36	0.00	4,092	1.76	0.21
0.37	0.00	4,084	1.76	0.21
0.38	0.00	4,077	1.76	0.21
0.39	0.00	4,069	1.75	0.21
0.40	0.00	4,062	1.75	0.21
0.41	0.00	4,054	1.75	0.21
0.42	0.00	4,046	1.74	0.21
0.43	0.00	4,039	1.74	0.21
0.44	0.00	4,031	1.74	0.21
0.45	0.00	4,024	1.73	0.21
0.46	0.00	4,016	1.73	0.21
0.47	0.00	4,009	1.73	0.21
0.48	0.00	4,001	1.72	0.21
0.49	0.00	3,994	1.72	0.21
0.50	0.00	3,986	1.72	0.21
0.51	0.00	3,979	1.71	0.21

Hydrograph for Pond 1P: 10-Year Storm Routing (continued)

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Primary (cfs)
0.52	0.00	3,971	1.71	0.21
0.53	0.00	3,964	1.71	0.21
0.54	0.00	3,956	1.70	0.21
0.55	0.00	3,949	1.70	0.21
0.56	0.00	3,941	1.70	0.21
0.57	0.00	3,934	1.69	0.21
0.58	0.00	3,926	1.69	0.21
0.59	0.00	3,919	1.69	0.21
0.60	0.00	3,911	1.68	0.21
0.61	0.00	3,904	1.68	0.21
0.62	0.00	3,897	1.68	0.21
0.63	0.00	3,889	1.67	0.21
0.64	0.00	3,882	1.67	0.21
0.65	0.00	3,874	1.67	0.21
0.66	0.00	3,867	1.67	0.21
0.67	0.00	3,860	1.66	0.20
0.68	0.00	3,852	1.66	0.20
0.69	0.00	3,845	1.66	0.20
0.70	0.00	3,838	1.65	0.20
0.71	0.00	3,830	1.65	0.20
0.72	0.00	3,823	1.65	0.20
0.73	0.00	3,816	1.64	0.20
0.74	0.00	3,808	1.64	0.20
0.75	0.00	3,801	1.64	0.20
0.76	0.00	3,794	1.63	0.20
0.77	0.00	3,786	1.63	0.20
0.78	0.00	3,779	1.63	0.20
0.79	0.00	3,772	1.62	0.20
0.80	0.00	3,764	1.62	0.20
0.81	0.00	3,757	1.62	0.20
0.82	0.00	3,750	1.61	0.20
0.83	0.00	3,743	1.61	0.20
0.84	0.00	3,735	1.61	0.20
0.85	0.00	3,728	1.61	0.20
0.86	0.00	3,721	1.60	0.20
0.87	0.00	3,714	1.60	0.20
0.88	0.00	3,706	1.60	0.20
0.89	0.00	3,699	1.59	0.20
0.90	0.00	3,692	1.59	0.20
0.91	0.00	3,685	1.59	0.20
0.92	0.00	3,678	1.58	0.20
0.93	0.00	3,670	1.58	0.20
0.94	0.00	3,663	1.58	0.20
0.95	0.00	3,656	1.57	0.20
0.96	0.00	3,649	1.57	0.20
0.97	0.00	3,642	1.57	0.20
0.98	0.00	3,635	1.57	0.20
0.99	0.00	3,627	1.56	0.20
1.00	0.00	3,620	1.56	0.20
1.01	0.00	3,613	1.56	0.20
1.02	0.00	3,606	1.55	0.20
1.03	0.00	3,599	1.55	0.20

Hydrograph for Pond 1P: 10-Year Storm Routing (continued)

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Primary (cfs)
1.04	0.00	3,592	1.55	0.20
1.05	0.00	3,585	1.54	0.20
1.06	0.00	3,578	1.54	0.20
1.07	0.00	3,571	1.54	0.20
1.08	0.00	3,564	1.53	0.20
1.09	0.00	3,557	1.53	0.20
1.10	0.00	3,549	1.53	0.20
1.11	0.00	3,542	1.53	0.20
1.12	0.00	3,535	1.52	0.20
1.13	0.00	3,528	1.52	0.20
1.14	0.00	3,521	1.52	0.20
1.15	0.00	3,514	1.51	0.19
1.16	0.00	3,507	1.51	0.19
1.17	0.00	3,500	1.51	0.19
1.18	0.00	3,493	1.50	0.19
1.19	0.00	3,486	1.50	0.19
1.20	0.00	3,479	1.50	0.19
1.21	0.00	3,472	1.50	0.19
1.22	0.00	3,465	1.49	0.19
1.23	0.00	3,458	1.49	0.19
1.24	0.00	3,451	1.49	0.19
1.25	0.00	3,445	1.48	0.19
1.26	0.00	3,438	1.48	0.19
1.27	0.00	3,431	1.48	0.19
1.28	0.00	3,424	1.47	0.19
1.29	0.00	3,417	1.47	0.19
1.30	0.00	3,410	1.47	0.19
1.31	0.00	3,403	1.47	0.19
1.32	0.00	3,396	1.46	0.19
1.33	0.00	3,389	1.46	0.19
1.34	0.00	3,382	1.46	0.19
1.35	0.00	3,376	1.45	0.19
1.36	0.00	3,369	1.45	0.19
1.37	0.00	3,362	1.45	0.19
1.38	0.00	3,355	1.44	0.19
1.39	0.00	3,348	1.44	0.19
1.40	0.00	3,341	1.44	0.19
1.41	0.00	3,334	1.44	0.19
1.42	0.00	3,328	1.43	0.19
1.43	0.00	3,321	1.43	0.19
1.44	0.00	3,314	1.43	0.19
1.45	0.00	3,307	1.42	0.19
1.46	0.00	3,300	1.42	0.19
1.47	0.00	3,294	1.42	0.19
1.48	0.00	3,287	1.42	0.19
1.49	0.00	3,280	1.41	0.19
1.50	0.00	3,273	1.41	0.19
1.51	0.00	3,267	1.41	0.19
1.52	0.00	3,260	1.40	0.19
1.53	0.00	3,253	1.40	0.19
1.54	0.00	3,246	1.40	0.19
1.55	0.00	3,240	1.40	0.19

Hydrograph for Pond 1P: 10-Year Storm Routing (continued)

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Primary (cfs)
1.56	0.00	3,233	1.39	0.19
1.57	0.00	3,226	1.39	0.19
1.58	0.00	3,220	1.39	0.19
1.59	0.00	3,213	1.38	0.19
1.60	0.00	3,206	1.38	0.19
1.61	0.00	3,200	1.38	0.19
1.62	0.00	3,193	1.37	0.19
1.63	0.00	3,186	1.37	0.18
1.64	0.00	3,180	1.37	0.18
1.65	0.00	3,173	1.37	0.18
1.66	0.00	3,166	1.36	0.18
1.67	0.00	3,160	1.36	0.18
1.68	0.00	3,153	1.36	0.18
1.69	0.00	3,146	1.35	0.18
1.70	0.00	3,140	1.35	0.18
1.71	0.00	3,133	1.35	0.18
1.72	0.00	3,127	1.35	0.18
1.73	0.00	3,120	1.34	0.18
1.74	0.00	3,114	1.34	0.18
1.75	0.00	3,107	1.34	0.18
1.76	0.00	3,100	1.34	0.18
1.77	0.00	3,094	1.33	0.18
1.78	0.00	3,087	1.33	0.18
1.79	0.00	3,081	1.33	0.18
1.80	0.00	3,074	1.32	0.18
1.81	0.00	3,068	1.32	0.18
1.82	0.00	3,061	1.32	0.18
1.83	0.00	3,055	1.32	0.18
1.84	0.00	3,048	1.31	0.18
1.85	0.00	3,042	1.31	0.18
1.86	0.00	3,035	1.31	0.18
1.87	0.00	3,029	1.30	0.18
1.88	0.00	3,022	1.30	0.18
1.89	0.00	3,016	1.30	0.18
1.90	0.00	3,009	1.30	0.18
1.91	0.00	3,003	1.29	0.18
1.92	0.00	2,996	1.29	0.18
1.93	0.00	2,990	1.29	0.18
1.94	0.00	2,984	1.28	0.18
1.95	0.00	2,977	1.28	0.18
1.96	0.00	2,971	1.28	0.18
1.97	0.00	2,964	1.28	0.18
1.98	0.00	2,958	1.27	0.18
1.99	0.00	2,952	1.27	0.18
2.00	0.00	2,945	1.27	0.18
2.01	0.00	2,939	1.27	0.18
2.02	0.00	2,933	1.26	0.18
2.03	0.00	2,926	1.26	0.18
2.04	0.00	2,920	1.26	0.18
2.05	0.00	2,913	1.25	0.18
2.06	0.00	2,907	1.25	0.18
2.07	0.00	2,901	1.25	0.18

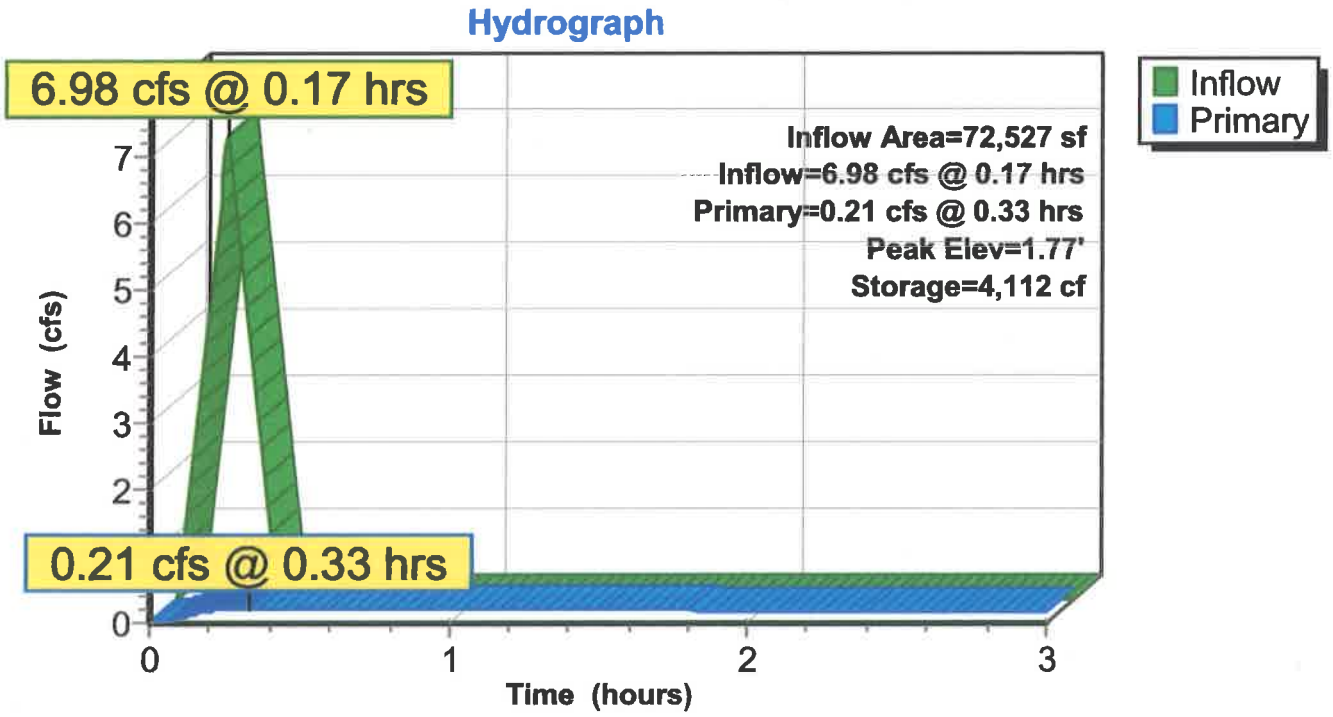
Hydrograph for Pond 1P: 10-Year Storm Routing (continued)

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Primary (cfs)
2.08	0.00	2,894	1.25	0.18
2.09	0.00	2,888	1.24	0.18
2.10	0.00	2,882	1.24	0.18
2.11	0.00	2,876	1.24	0.17
2.12	0.00	2,869	1.24	0.17
2.13	0.00	2,863	1.23	0.17
2.14	0.00	2,857	1.23	0.17
2.15	0.00	2,850	1.23	0.17
2.16	0.00	2,844	1.22	0.17
2.17	0.00	2,838	1.22	0.17
2.18	0.00	2,832	1.22	0.17
2.19	0.00	2,825	1.22	0.17
2.20	0.00	2,819	1.21	0.17
2.21	0.00	2,813	1.21	0.17
2.22	0.00	2,807	1.21	0.17
2.23	0.00	2,801	1.21	0.17
2.24	0.00	2,794	1.20	0.17
2.25	0.00	2,788	1.20	0.17
2.26	0.00	2,782	1.20	0.17
2.27	0.00	2,776	1.20	0.17
2.28	0.00	2,770	1.19	0.17
2.29	0.00	2,764	1.19	0.17
2.30	0.00	2,757	1.19	0.17
2.31	0.00	2,751	1.18	0.17
2.32	0.00	2,745	1.18	0.17
2.33	0.00	2,739	1.18	0.17
2.34	0.00	2,733	1.18	0.17
2.35	0.00	2,727	1.17	0.17
2.36	0.00	2,721	1.17	0.17
2.37	0.00	2,715	1.17	0.17
2.38	0.00	2,708	1.17	0.17
2.39	0.00	2,702	1.16	0.17
2.40	0.00	2,696	1.16	0.17
2.41	0.00	2,690	1.16	0.17
2.42	0.00	2,684	1.16	0.17
2.43	0.00	2,678	1.15	0.17
2.44	0.00	2,672	1.15	0.17
2.45	0.00	2,666	1.15	0.17
2.46	0.00	2,660	1.15	0.17
2.47	0.00	2,654	1.14	0.17
2.48	0.00	2,648	1.14	0.17
2.49	0.00	2,642	1.14	0.17
2.50	0.00	2,636	1.14	0.17
2.51	0.00	2,630	1.13	0.17
2.52	0.00	2,624	1.13	0.17
2.53	0.00	2,618	1.13	0.17
2.54	0.00	2,612	1.12	0.17
2.55	0.00	2,606	1.12	0.17
2.56	0.00	2,600	1.12	0.17
2.57	0.00	2,594	1.12	0.17
2.58	0.00	2,588	1.11	0.16
2.59	0.00	2,582	1.11	0.16

Hydrograph for Pond 1P: 10-Year Storm Routing (continued)

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Primary (cfs)
2.60	0.00	2,576	1.11	0.16
2.61	0.00	2,570	1.11	0.16
2.62	0.00	2,564	1.10	0.16
2.63	0.00	2,559	1.10	0.16
2.64	0.00	2,553	1.10	0.16
2.65	0.00	2,547	1.10	0.16
2.66	0.00	2,541	1.09	0.16
2.67	0.00	2,535	1.09	0.16
2.68	0.00	2,529	1.09	0.16
2.69	0.00	2,523	1.09	0.16
2.70	0.00	2,517	1.08	0.16
2.71	0.00	2,512	1.08	0.16
2.72	0.00	2,506	1.08	0.16
2.73	0.00	2,500	1.08	0.16
2.74	0.00	2,494	1.07	0.16
2.75	0.00	2,488	1.07	0.16
2.76	0.00	2,482	1.07	0.16
2.77	0.00	2,477	1.07	0.16
2.78	0.00	2,471	1.06	0.16
2.79	0.00	2,465	1.06	0.16
2.80	0.00	2,459	1.06	0.16
2.81	0.00	2,454	1.06	0.16
2.82	0.00	2,448	1.05	0.16
2.83	0.00	2,442	1.05	0.16
2.84	0.00	2,436	1.05	0.16
2.85	0.00	2,430	1.05	0.16
2.86	0.00	2,425	1.04	0.16
2.87	0.00	2,419	1.04	0.16
2.88	0.00	2,413	1.04	0.16
2.89	0.00	2,408	1.04	0.16
2.90	0.00	2,402	1.03	0.16
2.91	0.00	2,396	1.03	0.16
2.92	0.00	2,391	1.03	0.16
2.93	0.00	2,385	1.03	0.16
2.94	0.00	2,379	1.02	0.16
2.95	0.00	2,374	1.02	0.16
2.96	0.00	2,368	1.02	0.16
2.97	0.00	2,362	1.02	0.16
2.98	0.00	2,357	1.01	0.16
2.99	0.00	2,351	1.01	0.16
3.00	0.00	2,345	1.01	0.16

Pond 1P: 10-Year Storm Routing



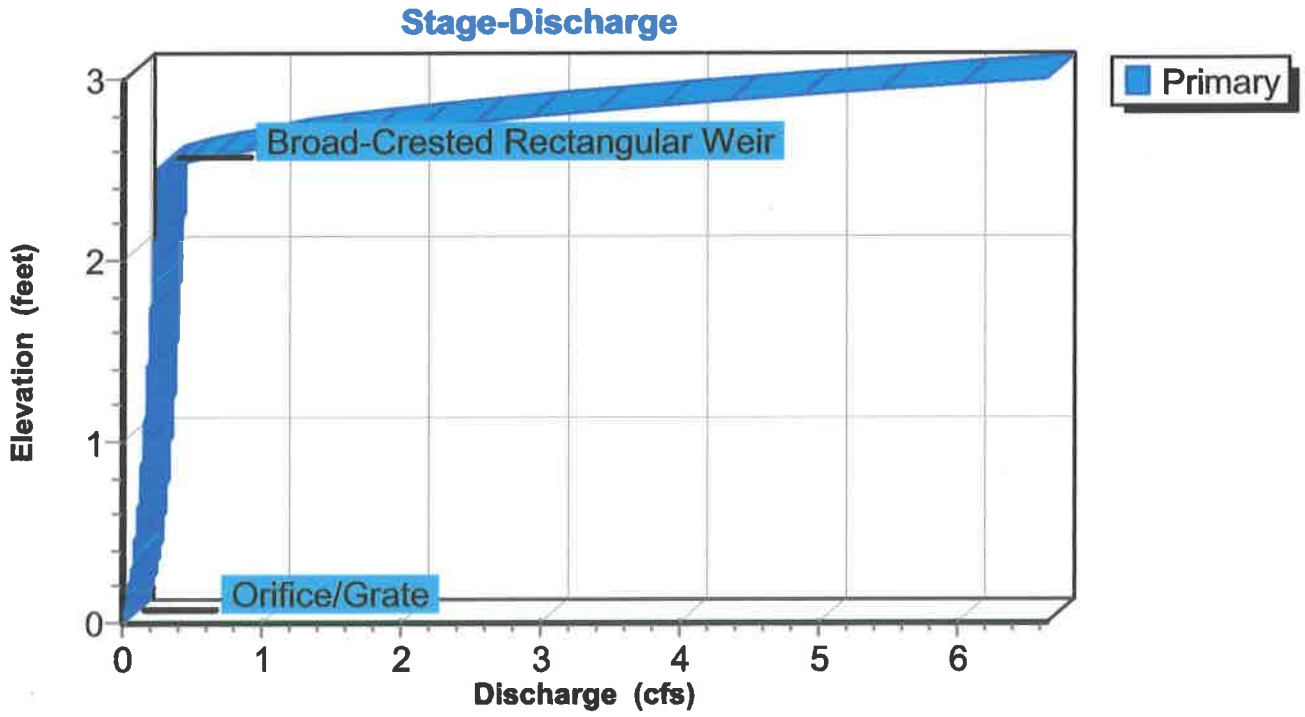
Stage-Discharge for Pond 1P: 10-Year Storm Routing

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
0.00	0.00	0.52	0.11	1.04	0.16	1.56	0.20
0.01	0.00	0.53	0.11	1.05	0.16	1.57	0.20
0.02	0.00	0.54	0.11	1.06	0.16	1.58	0.20
0.03	0.00	0.55	0.11	1.07	0.16	1.59	0.20
0.04	0.00	0.56	0.11	1.08	0.16	1.60	0.20
0.05	0.00	0.57	0.11	1.09	0.16	1.61	0.20
0.06	0.01	0.58	0.11	1.10	0.16	1.62	0.20
0.07	0.01	0.59	0.11	1.11	0.16	1.63	0.20
0.08	0.01	0.60	0.12	1.12	0.17	1.64	0.20
0.09	0.01	0.61	0.12	1.13	0.17	1.65	0.20
0.10	0.02	0.62	0.12	1.14	0.17	1.66	0.20
0.11	0.02	0.63	0.12	1.15	0.17	1.67	0.21
0.12	0.02	0.64	0.12	1.16	0.17	1.68	0.21
0.13	0.03	0.65	0.12	1.17	0.17	1.69	0.21
0.14	0.03	0.66	0.12	1.18	0.17	1.70	0.21
0.15	0.03	0.67	0.12	1.19	0.17	1.71	0.21
0.16	0.04	0.68	0.12	1.20	0.17	1.72	0.21
0.17	0.04	0.69	0.13	1.21	0.17	1.73	0.21
0.18	0.05	0.70	0.13	1.22	0.17	1.74	0.21
0.19	0.05	0.71	0.13	1.23	0.17	1.75	0.21
0.20	0.05	0.72	0.13	1.24	0.17	1.76	0.21
0.21	0.05	0.73	0.13	1.25	0.18	1.77	0.21
0.22	0.06	0.74	0.13	1.26	0.18	1.78	0.21
0.23	0.06	0.75	0.13	1.27	0.18	1.79	0.21
0.24	0.06	0.76	0.13	1.28	0.18	1.80	0.21
0.25	0.06	0.77	0.13	1.29	0.18	1.81	0.21
0.26	0.06	0.78	0.13	1.30	0.18	1.82	0.22
0.27	0.07	0.79	0.14	1.31	0.18	1.83	0.22
0.28	0.07	0.80	0.14	1.32	0.18	1.84	0.22
0.29	0.07	0.81	0.14	1.33	0.18	1.85	0.22
0.30	0.07	0.82	0.14	1.34	0.18	1.86	0.22
0.31	0.07	0.83	0.14	1.35	0.18	1.87	0.22
0.32	0.08	0.84	0.14	1.36	0.18	1.88	0.22
0.33	0.08	0.85	0.14	1.37	0.18	1.89	0.22
0.34	0.08	0.86	0.14	1.38	0.19	1.90	0.22
0.35	0.08	0.87	0.14	1.39	0.19	1.91	0.22
0.36	0.08	0.88	0.14	1.40	0.19	1.92	0.22
0.37	0.08	0.89	0.15	1.41	0.19	1.93	0.22
0.38	0.09	0.90	0.15	1.42	0.19	1.94	0.22
0.39	0.09	0.91	0.15	1.43	0.19	1.95	0.22
0.40	0.09	0.92	0.15	1.44	0.19	1.96	0.22
0.41	0.09	0.93	0.15	1.45	0.19	1.97	0.22
0.42	0.09	0.94	0.15	1.46	0.19	1.98	0.22
0.43	0.09	0.95	0.15	1.47	0.19	1.99	0.23
0.44	0.10	0.96	0.15	1.48	0.19	2.00	0.23
0.45	0.10	0.97	0.15	1.49	0.19	2.01	0.23
0.46	0.10	0.98	0.15	1.50	0.19	2.02	0.23
0.47	0.10	0.99	0.15	1.51	0.19	2.03	0.23
0.48	0.10	1.00	0.16	1.52	0.20	2.04	0.23
0.49	0.10	1.01	0.16	1.53	0.20	2.05	0.23
0.50	0.10	1.02	0.16	1.54	0.20	2.06	0.23
0.51	0.10	1.03	0.16	1.55	0.20	2.07	0.23

Stage-Discharge for Pond 1P: 10-Year Storm Routing (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
2.08	0.23	2.60	0.79
2.09	0.23	2.61	0.87
2.10	0.23	2.62	0.96
2.11	0.23	2.63	1.05
2.12	0.23	2.64	1.14
2.13	0.23	2.65	1.24
2.14	0.23	2.66	1.34
2.15	0.23	2.67	1.44
2.16	0.24	2.68	1.55
2.17	0.24	2.69	1.66
2.18	0.24	2.70	1.77
2.19	0.24	2.71	1.89
2.20	0.24	2.72	2.01
2.21	0.24	2.73	2.13
2.22	0.24	2.74	2.26
2.23	0.24	2.75	2.39
2.24	0.24	2.76	2.52
2.25	0.24	2.77	2.66
2.26	0.24	2.78	2.80
2.27	0.24	2.79	2.94
2.28	0.24	2.80	3.09
2.29	0.24	2.81	3.24
2.30	0.24	2.82	3.39
2.31	0.24	2.83	3.54
2.32	0.24	2.84	3.70
2.33	0.24	2.85	3.86
2.34	0.25	2.86	4.03
2.35	0.25	2.87	4.19
2.36	0.25	2.88	4.36
2.37	0.25	2.89	4.53
2.38	0.25	2.90	4.71
2.39	0.25	2.91	4.89
2.40	0.25	2.92	5.07
2.41	0.25	2.93	5.26
2.42	0.25	2.94	5.45
2.43	0.25	2.95	5.64
2.44	0.25	2.96	5.83
2.45	0.25	2.97	6.03
2.46	0.25	2.98	6.23
2.47	0.25	2.99	6.44
2.48	0.25	3.00	**6.64**
2.49	0.25		
2.50	0.25		
2.51	0.27		
2.52	0.30		
2.53	0.34		
2.54	0.39		
2.55	0.44		
2.56	0.50		
2.57	0.57		
2.58	0.64		
2.59	0.71		

Pond 1P: 10-Year Storm Routing



Stage-Area-Storage for Pond 1P: 10-Year Storm Routing

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
0.00	**2,394**	0
0.01	2,394	23
0.02	2,394	46
0.03	2,394	70
0.04	2,394	93
0.05	2,394	116
0.06	2,394	139
0.07	2,394	163
0.08	2,394	186
0.09	2,394	209
0.10	2,394	232
0.11	2,394	255
0.12	2,394	279
0.13	2,394	302
0.14	2,394	325
0.15	2,394	348
0.16	2,394	372
0.17	2,394	395
0.18	2,394	418
0.19	2,394	441
0.20	2,394	464
0.21	2,394	488
0.22	2,394	511
0.23	2,394	534
0.24	2,394	557
0.25	2,394	581
0.26	2,394	604
0.27	2,394	627
0.28	2,394	650
0.29	2,394	673
0.30	2,394	697
0.31	2,394	720
0.32	2,394	743
0.33	2,394	766
0.34	2,394	790
0.35	2,394	813
0.36	2,394	836
0.37	2,394	859
0.38	2,394	882
0.39	2,394	906
0.40	2,394	929
0.41	2,394	952
0.42	2,394	975
0.43	2,394	999
0.44	2,394	1,022
0.45	2,394	1,045
0.46	2,394	1,068
0.47	2,394	1,091
0.48	2,394	1,115
0.49	2,394	1,138
0.50	2,394	1,161
0.51	2,394	1,184
0.52	2,394	1,208
0.53	2,394	1,231
0.54	2,394	1,254
0.55	2,394	1,277
0.56	2,394	1,300
0.57	2,394	1,324
0.58	2,394	1,347
0.59	2,394	1,370
0.60	2,394	1,393
0.61	2,394	1,417
0.62	2,394	1,440
0.63	2,394	1,463
0.64	2,394	1,486
0.65	2,394	1,509
0.66	2,394	1,533
0.67	2,394	1,556
0.68	2,394	1,579
0.69	2,394	1,602
0.70	2,394	1,626
0.71	2,394	1,649
0.72	2,394	1,672
0.73	2,394	1,695
0.74	2,394	1,718
0.75	2,394	1,742
0.76	2,394	1,765
0.77	2,394	1,788
0.78	2,394	1,811
0.79	2,394	1,835
0.80	2,394	1,858
0.81	2,394	1,881
0.82	2,394	1,904
0.83	2,394	1,927
0.84	2,394	1,951
0.85	2,394	1,974
0.86	2,394	1,997
0.87	2,394	2,020
0.88	2,394	2,044
0.89	2,394	2,067
0.90	2,394	2,090
0.91	2,394	2,113
0.92	2,394	2,136
0.93	2,394	2,160
0.94	2,394	2,183
0.95	2,394	2,206
0.96	2,394	2,229
0.97	2,394	2,253
0.98	2,394	2,276
0.99	2,394	2,299
1.00	2,394	2,322
1.01	2,394	2,345
1.02	2,394	2,369
1.03	2,394	2,392

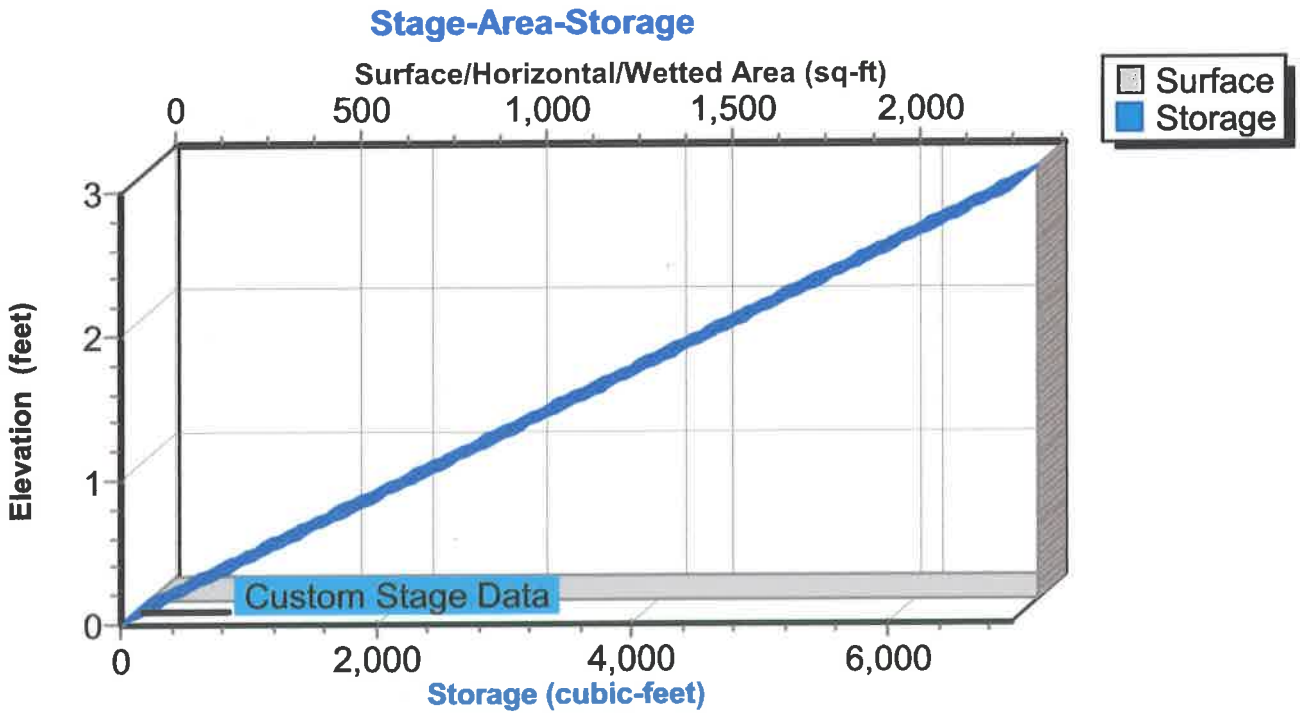
Stage-Area-Storage for Pond 1P: 10-Year Storm Routing (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
1.04	2,394	2,415
1.05	2,394	2,438
1.06	2,394	2,462
1.07	2,394	2,485
1.08	2,394	2,508
1.09	2,394	2,531
1.10	2,394	2,554
1.11	2,394	2,578
1.12	2,394	2,601
1.13	2,394	2,624
1.14	2,394	2,647
1.15	2,394	2,671
1.16	2,394	2,694
1.17	2,394	2,717
1.18	2,394	2,740
1.19	2,394	2,763
1.20	2,394	2,787
1.21	2,394	2,810
1.22	2,394	2,833
1.23	2,394	2,856
1.24	2,394	2,880
1.25	2,394	2,903
1.26	2,394	2,926
1.27	2,394	2,949
1.28	2,394	2,972
1.29	2,394	2,996
1.30	2,394	3,019
1.31	2,394	3,042
1.32	2,394	3,065
1.33	2,394	3,088
1.34	2,394	3,112
1.35	2,394	3,135
1.36	2,394	3,158
1.37	2,394	3,181
1.38	2,394	3,205
1.39	2,394	3,228
1.40	2,394	3,251
1.41	2,394	3,274
1.42	2,394	3,297
1.43	2,394	3,321
1.44	2,394	3,344
1.45	2,394	3,367
1.46	2,394	3,390
1.47	2,394	3,414
1.48	2,394	3,437
1.49	2,394	3,460
1.50	2,394	3,483
1.51	2,394	3,506
1.52	2,394	3,530
1.53	2,394	3,553
1.54	2,394	3,576
1.55	2,394	3,599
1.56	2,394	3,623
1.57	2,394	3,646
1.58	2,394	3,669
1.59	2,394	3,692
1.60	2,394	3,715
1.61	2,394	3,739
1.62	2,394	3,762
1.63	2,394	3,785
1.64	2,394	3,808
1.65	2,394	3,832
1.66	2,394	3,855
1.67	2,394	3,878
1.68	2,394	3,901
1.69	2,394	3,924
1.70	2,394	3,948
1.71	2,394	3,971
1.72	2,394	3,994
1.73	2,394	4,017
1.74	2,394	4,041
1.75	2,394	4,064
1.76	2,394	4,087
1.77	2,394	4,110
1.78	2,394	4,133
1.79	2,394	4,157
1.80	2,394	4,180
1.81	2,394	4,203
1.82	2,394	4,226
1.83	2,394	4,250
1.84	2,394	4,273
1.85	2,394	4,296
1.86	2,394	4,319
1.87	2,394	4,342
1.88	2,394	4,366
1.89	2,394	4,389
1.90	2,394	4,412
1.91	2,394	4,435
1.92	2,394	4,459
1.93	2,394	4,482
1.94	2,394	4,505
1.95	2,394	4,528
1.96	2,394	4,551
1.97	2,394	4,575
1.98	2,394	4,598
1.99	2,394	4,621
2.00	2,394	4,644
2.01	2,394	4,668
2.02	2,394	4,691
2.03	2,394	4,714
2.04	2,394	4,737
2.05	2,394	4,760
2.06	2,394	4,784
2.07	2,394	4,807

Stage-Area-Storage for Pond 1P: 10-Year Storm Routing (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
2.08	2,394	4,830
2.09	2,394	4,853
2.10	2,394	4,877
2.11	2,394	4,900
2.12	2,394	4,923
2.13	2,394	4,946
2.14	2,394	4,969
2.15	2,394	4,993
2.16	2,394	5,016
2.17	2,394	5,039
2.18	2,394	5,062
2.19	2,394	5,086
2.20	2,394	5,109
2.21	2,394	5,132
2.22	2,394	5,155
2.23	2,394	5,178
2.24	2,394	5,202
2.25	2,394	5,225
2.26	2,394	5,248
2.27	2,394	5,271
2.28	2,394	5,295
2.29	2,394	5,318
2.30	2,394	5,341
2.31	2,394	5,364
2.32	2,394	5,387
2.33	2,394	5,411
2.34	2,394	5,434
2.35	2,394	5,457
2.36	2,394	5,480
2.37	2,394	5,504
2.38	2,394	5,527
2.39	2,394	5,550
2.40	2,394	5,573
2.41	2,394	5,596
2.42	2,394	5,620
2.43	2,394	5,643
2.44	2,394	5,666
2.45	2,394	5,689
2.46	2,394	5,713
2.47	2,394	5,736
2.48	2,394	5,759
2.49	2,394	5,782
2.50	2,394	5,805
2.51	2,394	5,829
2.52	2,394	5,852
2.53	2,394	5,875
2.54	2,394	5,898
2.55	2,394	5,922
2.56	2,394	5,945
2.57	2,394	5,968
2.58	2,394	5,991
2.59	2,394	6,014
2.60	2,394	6,038
2.61	2,394	6,061
2.62	2,394	6,084
2.63	2,394	6,107
2.64	2,394	6,131
2.65	2,394	6,154
2.66	2,394	6,177
2.67	2,394	6,200
2.68	2,394	6,223
2.69	2,394	6,247
2.70	2,394	6,270
2.71	2,394	6,293
2.72	2,394	6,316
2.73	2,394	6,340
2.74	2,394	6,363
2.75	2,394	6,386
2.76	2,394	6,409
2.77	2,394	6,432
2.78	2,394	6,456
2.79	2,394	6,479
2.80	2,394	6,502
2.81	2,394	6,525
2.82	2,394	6,549
2.83	2,394	6,572
2.84	2,394	6,595
2.85	2,394	6,618
2.86	2,394	6,641
2.87	2,394	6,665
2.88	2,394	6,688
2.89	2,394	6,711
2.90	2,394	6,734
2.91	2,394	6,758
2.92	2,394	6,781
2.93	2,394	6,804
2.94	2,394	6,827
2.95	2,394	6,850
2.96	2,394	6,874
2.97	2,394	6,897
2.98	2,394	6,920
2.99	2,394	6,943
3.00	2,394	**6,967**

Pond 1P: 10-Year Storm Routing



Summary for Pond 1P: 25-Year Storm Routing

Inflow Area = 72,527 sf, Inflow Depth = 0.81" for 25-Year event
Inflow = 8.07 cfs @ 0.17 hrs, Volume= 4,925 cf
Outflow = 0.23 cfs @ 0.33 hrs, Volume= 2,098 cf, Atten= 97%, Lag= 9.8 min
Primary = 0.23 cfs @ 0.33 hrs, Volume= 2,098 cf

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
Peak Elev= 2.05' @ 0.33 hrs Surf.Area= 2,394 sf Storage= 4,760 cf

Plug-Flow detention time= 83.5 min calculated for 2,091 cf (42% of inflow)
Center-of-Mass det. time= 79.9 min (89.9 - 10.0)

Volume	Invert	Avail.Storage	Storage Description
#1	0.00'	6,967 cf	**Custom Stage Data (Irregular)** Listed below (Recalc) 7,182 cf Overall x 97.0% Voids

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
0.00	2,394	270.0	0	0	2,394
0.50	2,394	270.0	1,197	1,197	2,529
1.00	2,394	270.0	1,197	2,394	2,664
1.50	2,394	270.0	1,197	3,591	2,799
2.00	2,394	270.0	1,197	4,788	2,934
2.50	2,394	270.0	1,197	5,985	3,069
3.00	2,394	270.0	1,197	7,182	3,204

Device	Routing	Invert	Outlet Devices
#1	Primary	0.00'	**2.5" Vert. Orifice/Grate** C= 0.600
#2	Primary	2.50'	**6.0' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

Primary OutFlow Max=0.23 cfs @ 0.33 hrs HW=2.05' (Free Discharge)
↑—**1=Orifice/Grate** (Orifice Controls 0.23 cfs @ 6.72 fps)
└—**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Events for Pond 1P: 25-Year Storm Routing

Event	Inflow (cfs)	Primary (cfs)	Elevation (feet)	Storage (cubic-feet)
25-Year	**8.07**	**0.23**	**2.05**	**4,760**

Hydrograph for Pond 1P: 25-Year Storm Routing

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Primary (cfs)
0.00	0.00	0	0.00	0.00
0.01	0.49	9	0.00	0.00
0.02	0.99	35	0.02	0.00
0.03	1.48	80	0.03	0.00
0.04	1.97	142	0.06	0.01
0.05	2.46	221	0.10	0.02
0.06	2.96	318	0.14	0.03
0.07	3.45	432	0.19	0.05
0.08	3.94	563	0.24	0.06
0.09	4.43	711	0.31	0.07
0.10	4.93	877	0.38	0.09
0.11	5.42	1,060	0.46	0.10
0.12	5.91	1,260	0.54	0.11
0.13	6.40	1,477	0.64	0.12
0.14	6.90	1,712	0.74	0.13
0.15	7.39	1,965	0.85	0.14
0.16	7.88	2,234	0.96	0.15
0.17	**8.05**	2,515	1.08	0.16
0.18	7.55	2,790	1.20	0.17
0.19	7.06	3,047	1.31	0.18
0.20	6.57	3,286	1.41	0.19
0.21	6.08	3,506	1.51	0.19
0.22	5.58	3,709	1.60	0.20
0.23	5.09	3,894	1.68	0.21
0.24	4.60	4,061	1.75	0.21
0.25	4.11	4,210	1.81	0.21
0.26	3.61	4,341	1.87	0.22
0.27	3.12	4,454	1.92	0.22
0.28	2.63	4,550	1.96	0.22
0.29	2.13	4,628	1.99	0.23
0.30	1.64	4,687	2.02	0.23
0.31	1.15	4,729	2.04	0.23
0.32	0.66	4,754	2.05	0.23
0.33	0.16	**4,760**	**2.05**	**0.23**
0.34	0.00	4,755	2.05	0.23
0.35	0.00	4,747	2.04	0.23
0.36	0.00	4,739	2.04	0.23
0.37	0.00	4,730	2.04	0.23
0.38	0.00	4,722	2.03	0.23
0.39	0.00	4,714	2.03	0.23
0.40	0.00	4,706	2.03	0.23
0.41	0.00	4,697	2.02	0.23
0.42	0.00	4,689	2.02	0.23
0.43	0.00	4,681	2.02	0.23
0.44	0.00	4,673	2.01	0.23
0.45	0.00	4,665	2.01	0.23
0.46	0.00	4,657	2.01	0.23
0.47	0.00	4,649	2.00	0.23
0.48	0.00	4,640	2.00	0.23
0.49	0.00	4,632	1.99	0.23
0.50	0.00	4,624	1.99	0.23
0.51	0.00	4,616	1.99	0.23

Hydrograph for Pond 1P: 25-Year Storm Routing (continued)

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Primary (cfs)
0.52	0.00	4,608	1.98	0.23
0.53	0.00	4,600	1.98	0.22
0.54	0.00	4,592	1.98	0.22
0.55	0.00	4,584	1.97	0.22
0.56	0.00	4,576	1.97	0.22
0.57	0.00	4,568	1.97	0.22
0.58	0.00	4,559	1.96	0.22
0.59	0.00	4,551	1.96	0.22
0.60	0.00	4,543	1.96	0.22
0.61	0.00	4,535	1.95	0.22
0.62	0.00	4,527	1.95	0.22
0.63	0.00	4,519	1.95	0.22
0.64	0.00	4,511	1.94	0.22
0.65	0.00	4,503	1.94	0.22
0.66	0.00	4,495	1.94	0.22
0.67	0.00	4,487	1.93	0.22
0.68	0.00	4,479	1.93	0.22
0.69	0.00	4,471	1.93	0.22
0.70	0.00	4,463	1.92	0.22
0.71	0.00	4,455	1.92	0.22
0.72	0.00	4,447	1.92	0.22
0.73	0.00	4,439	1.91	0.22
0.74	0.00	4,431	1.91	0.22
0.75	0.00	4,424	1.90	0.22
0.76	0.00	4,416	1.90	0.22
0.77	0.00	4,408	1.90	0.22
0.78	0.00	4,400	1.89	0.22
0.79	0.00	4,392	1.89	0.22
0.80	0.00	4,384	1.89	0.22
0.81	0.00	4,376	1.88	0.22
0.82	0.00	4,368	1.88	0.22
0.83	0.00	4,360	1.88	0.22
0.84	0.00	4,353	1.87	0.22
0.85	0.00	4,345	1.87	0.22
0.86	0.00	4,337	1.87	0.22
0.87	0.00	4,329	1.86	0.22
0.88	0.00	4,321	1.86	0.22
0.89	0.00	4,313	1.86	0.22
0.90	0.00	4,305	1.85	0.22
0.91	0.00	4,298	1.85	0.22
0.92	0.00	4,290	1.85	0.22
0.93	0.00	4,282	1.84	0.22
0.94	0.00	4,274	1.84	0.22
0.95	0.00	4,266	1.84	0.22
0.96	0.00	4,259	1.83	0.22
0.97	0.00	4,251	1.83	0.22
0.98	0.00	4,243	1.83	0.22
0.99	0.00	4,235	1.82	0.22
1.00	0.00	4,228	1.82	0.22
1.01	0.00	4,220	1.82	0.21
1.02	0.00	4,212	1.81	0.21
1.03	0.00	4,204	1.81	0.21

Hydrograph for Pond 1P: 25-Year Storm Routing (continued)

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Primary (cfs)
1.04	0.00	4,197	1.81	0.21
1.05	0.00	4,189	1.80	0.21
1.06	0.00	4,181	1.80	0.21
1.07	0.00	4,174	1.80	0.21
1.08	0.00	4,166	1.79	0.21
1.09	0.00	4,158	1.79	0.21
1.10	0.00	4,151	1.79	0.21
1.11	0.00	4,143	1.78	0.21
1.12	0.00	4,135	1.78	0.21
1.13	0.00	4,128	1.78	0.21
1.14	0.00	4,120	1.77	0.21
1.15	0.00	4,112	1.77	0.21
1.16	0.00	4,105	1.77	0.21
1.17	0.00	4,097	1.76	0.21
1.18	0.00	4,090	1.76	0.21
1.19	0.00	4,082	1.76	0.21
1.20	0.00	4,074	1.75	0.21
1.21	0.00	4,067	1.75	0.21
1.22	0.00	4,059	1.75	0.21
1.23	0.00	4,052	1.74	0.21
1.24	0.00	4,044	1.74	0.21
1.25	0.00	4,036	1.74	0.21
1.26	0.00	4,029	1.73	0.21
1.27	0.00	4,021	1.73	0.21
1.28	0.00	4,014	1.73	0.21
1.29	0.00	4,006	1.73	0.21
1.30	0.00	3,999	1.72	0.21
1.31	0.00	3,991	1.72	0.21
1.32	0.00	3,984	1.72	0.21
1.33	0.00	3,976	1.71	0.21
1.34	0.00	3,969	1.71	0.21
1.35	0.00	3,961	1.71	0.21
1.36	0.00	3,954	1.70	0.21
1.37	0.00	3,946	1.70	0.21
1.38	0.00	3,939	1.70	0.21
1.39	0.00	3,931	1.69	0.21
1.40	0.00	3,924	1.69	0.21
1.41	0.00	3,917	1.69	0.21
1.42	0.00	3,909	1.68	0.21
1.43	0.00	3,902	1.68	0.21
1.44	0.00	3,894	1.68	0.21
1.45	0.00	3,887	1.67	0.21
1.46	0.00	3,880	1.67	0.21
1.47	0.00	3,872	1.67	0.21
1.48	0.00	3,865	1.66	0.21
1.49	0.00	3,857	1.66	0.20
1.50	0.00	3,850	1.66	0.20
1.51	0.00	3,843	1.65	0.20
1.52	0.00	3,835	1.65	0.20
1.53	0.00	3,828	1.65	0.20
1.54	0.00	3,821	1.65	0.20
1.55	0.00	3,813	1.64	0.20

Hydrograph for Pond 1P: 25-Year Storm Routing (continued)

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Primary (cfs)
1.56	0.00	3,806	1.64	0.20
1.57	0.00	3,799	1.64	0.20
1.58	0.00	3,791	1.63	0.20
1.59	0.00	3,784	1.63	0.20
1.60	0.00	3,777	1.63	0.20
1.61	0.00	3,769	1.62	0.20
1.62	0.00	3,762	1.62	0.20
1.63	0.00	3,755	1.62	0.20
1.64	0.00	3,748	1.61	0.20
1.65	0.00	3,740	1.61	0.20
1.66	0.00	3,733	1.61	0.20
1.67	0.00	3,726	1.60	0.20
1.68	0.00	3,719	1.60	0.20
1.69	0.00	3,711	1.60	0.20
1.70	0.00	3,704	1.60	0.20
1.71	0.00	3,697	1.59	0.20
1.72	0.00	3,690	1.59	0.20
1.73	0.00	3,683	1.59	0.20
1.74	0.00	3,675	1.58	0.20
1.75	0.00	3,668	1.58	0.20
1.76	0.00	3,661	1.58	0.20
1.77	0.00	3,654	1.57	0.20
1.78	0.00	3,647	1.57	0.20
1.79	0.00	3,640	1.57	0.20
1.80	0.00	3,632	1.56	0.20
1.81	0.00	3,625	1.56	0.20
1.82	0.00	3,618	1.56	0.20
1.83	0.00	3,611	1.56	0.20
1.84	0.00	3,604	1.55	0.20
1.85	0.00	3,597	1.55	0.20
1.86	0.00	3,590	1.55	0.20
1.87	0.00	3,583	1.54	0.20
1.88	0.00	3,576	1.54	0.20
1.89	0.00	3,568	1.54	0.20
1.90	0.00	3,561	1.53	0.20
1.91	0.00	3,554	1.53	0.20
1.92	0.00	3,547	1.53	0.20
1.93	0.00	3,540	1.52	0.20
1.94	0.00	3,533	1.52	0.20
1.95	0.00	3,526	1.52	0.20
1.96	0.00	3,519	1.52	0.19
1.97	0.00	3,512	1.51	0.19
1.98	0.00	3,505	1.51	0.19
1.99	0.00	3,498	1.51	0.19
2.00	0.00	3,491	1.50	0.19
2.01	0.00	3,484	1.50	0.19
2.02	0.00	3,477	1.50	0.19
2.03	0.00	3,470	1.49	0.19
2.04	0.00	3,463	1.49	0.19
2.05	0.00	3,456	1.49	0.19
2.06	0.00	3,449	1.49	0.19
2.07	0.00	3,442	1.48	0.19

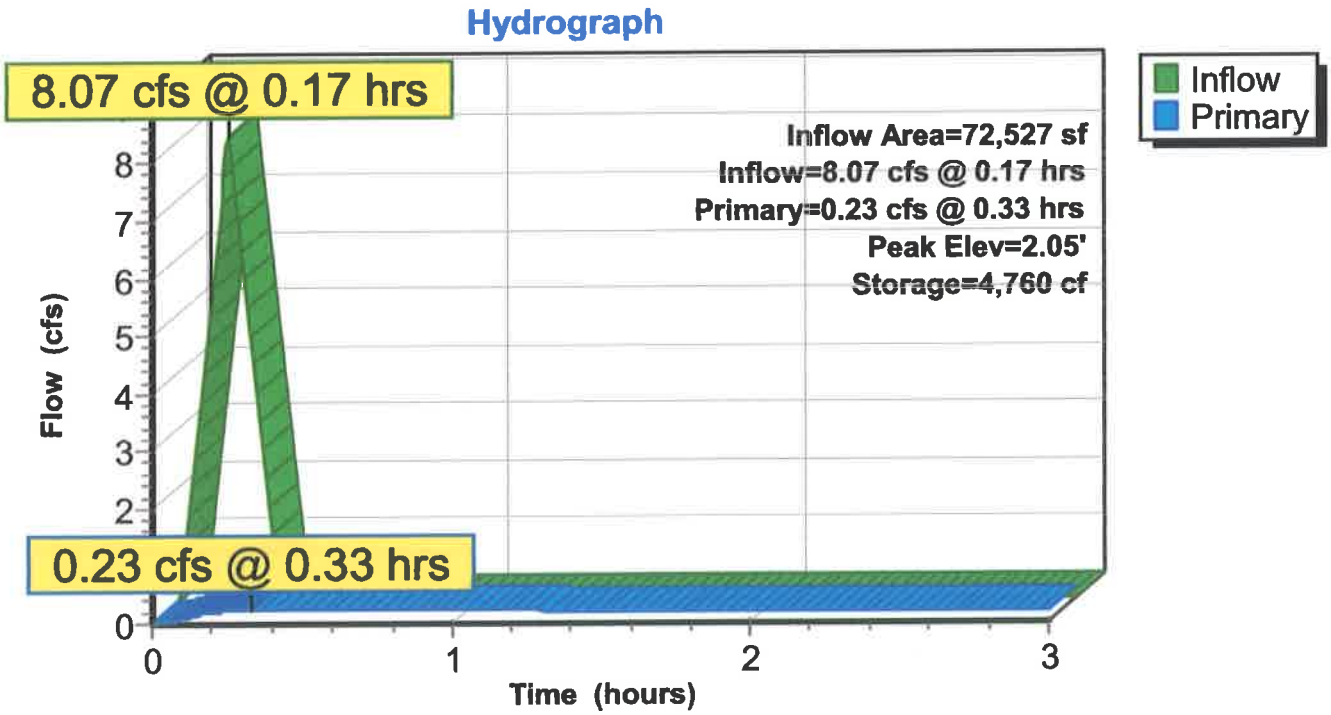
Hydrograph for Pond 1P: 25-Year Storm Routing (continued)

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Primary (cfs)
2.08	0.00	3,435	1.48	0.19
2.09	0.00	3,429	1.48	0.19
2.10	0.00	3,422	1.47	0.19
2.11	0.00	3,415	1.47	0.19
2.12	0.00	3,408	1.47	0.19
2.13	0.00	3,401	1.46	0.19
2.14	0.00	3,394	1.46	0.19
2.15	0.00	3,387	1.46	0.19
2.16	0.00	3,380	1.46	0.19
2.17	0.00	3,373	1.45	0.19
2.18	0.00	3,367	1.45	0.19
2.19	0.00	3,360	1.45	0.19
2.20	0.00	3,353	1.44	0.19
2.21	0.00	3,346	1.44	0.19
2.22	0.00	3,339	1.44	0.19
2.23	0.00	3,332	1.44	0.19
2.24	0.00	3,326	1.43	0.19
2.25	0.00	3,319	1.43	0.19
2.26	0.00	3,312	1.43	0.19
2.27	0.00	3,305	1.42	0.19
2.28	0.00	3,298	1.42	0.19
2.29	0.00	3,292	1.42	0.19
2.30	0.00	3,285	1.41	0.19
2.31	0.00	3,278	1.41	0.19
2.32	0.00	3,271	1.41	0.19
2.33	0.00	3,265	1.41	0.19
2.34	0.00	3,258	1.40	0.19
2.35	0.00	3,251	1.40	0.19
2.36	0.00	3,244	1.40	0.19
2.37	0.00	3,238	1.39	0.19
2.38	0.00	3,231	1.39	0.19
2.39	0.00	3,224	1.39	0.19
2.40	0.00	3,218	1.39	0.19
2.41	0.00	3,211	1.38	0.19
2.42	0.00	3,204	1.38	0.19
2.43	0.00	3,198	1.38	0.19
2.44	0.00	3,191	1.37	0.18
2.45	0.00	3,184	1.37	0.18
2.46	0.00	3,178	1.37	0.18
2.47	0.00	3,171	1.37	0.18
2.48	0.00	3,164	1.36	0.18
2.49	0.00	3,158	1.36	0.18
2.50	0.00	3,151	1.36	0.18
2.51	0.00	3,144	1.35	0.18
2.52	0.00	3,138	1.35	0.18
2.53	0.00	3,131	1.35	0.18
2.54	0.00	3,125	1.35	0.18
2.55	0.00	3,118	1.34	0.18
2.56	0.00	3,112	1.34	0.18
2.57	0.00	3,105	1.34	0.18
2.58	0.00	3,098	1.33	0.18
2.59	0.00	3,092	1.33	0.18

Hydrograph for Pond 1P: 25-Year Storm Routing (continued)

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Primary (cfs)
2.60	0.00	3,085	1.33	0.18
2.61	0.00	3,079	1.33	0.18
2.62	0.00	3,072	1.32	0.18
2.63	0.00	3,066	1.32	0.18
2.64	0.00	3,059	1.32	0.18
2.65	0.00	3,053	1.31	0.18
2.66	0.00	3,046	1.31	0.18
2.67	0.00	3,040	1.31	0.18
2.68	0.00	3,033	1.31	0.18
2.69	0.00	3,027	1.30	0.18
2.70	0.00	3,020	1.30	0.18
2.71	0.00	3,014	1.30	0.18
2.72	0.00	3,007	1.30	0.18
2.73	0.00	3,001	1.29	0.18
2.74	0.00	2,995	1.29	0.18
2.75	0.00	2,988	1.29	0.18
2.76	0.00	2,982	1.28	0.18
2.77	0.00	2,975	1.28	0.18
2.78	0.00	2,969	1.28	0.18
2.79	0.00	2,962	1.28	0.18
2.80	0.00	2,956	1.27	0.18
2.81	0.00	2,950	1.27	0.18
2.82	0.00	2,943	1.27	0.18
2.83	0.00	2,937	1.26	0.18
2.84	0.00	2,931	1.26	0.18
2.85	0.00	2,924	1.26	0.18
2.86	0.00	2,918	1.26	0.18
2.87	0.00	2,912	1.25	0.18
2.88	0.00	2,905	1.25	0.18
2.89	0.00	2,899	1.25	0.18
2.90	0.00	2,893	1.25	0.18
2.91	0.00	2,886	1.24	0.18
2.92	0.00	2,880	1.24	0.17
2.93	0.00	2,874	1.24	0.17
2.94	0.00	2,867	1.23	0.17
2.95	0.00	2,861	1.23	0.17
2.96	0.00	2,855	1.23	0.17
2.97	0.00	2,849	1.23	0.17
2.98	0.00	2,842	1.22	0.17
2.99	0.00	2,836	1.22	0.17
3.00	0.00	2,830	1.22	0.17

Pond 1P: 25-Year Storm Routing



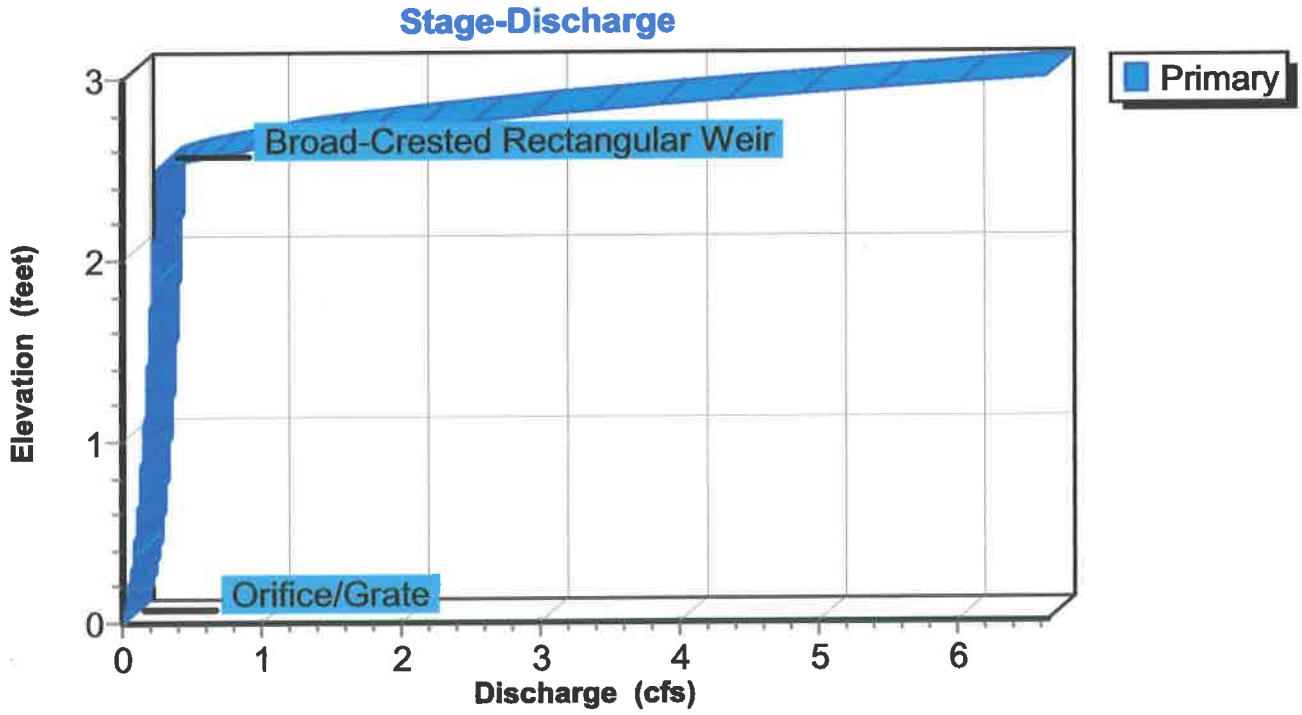
Stage-Discharge for Pond 1P: 25-Year Storm Routing

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
0.00	0.00	0.52	0.11	1.04	0.16	1.56	0.20
0.01	0.00	0.53	0.11	1.05	0.16	1.57	0.20
0.02	0.00	0.54	0.11	1.06	0.16	1.58	0.20
0.03	0.00	0.55	0.11	1.07	0.16	1.59	0.20
0.04	0.00	0.56	0.11	1.08	0.16	1.60	0.20
0.05	0.00	0.57	0.11	1.09	0.16	1.61	0.20
0.06	0.01	0.58	0.11	1.10	0.16	1.62	0.20
0.07	0.01	0.59	0.11	1.11	0.16	1.63	0.20
0.08	0.01	0.60	0.12	1.12	0.17	1.64	0.20
0.09	0.01	0.61	0.12	1.13	0.17	1.65	0.20
0.10	0.02	0.62	0.12	1.14	0.17	1.66	0.20
0.11	0.02	0.63	0.12	1.15	0.17	1.67	0.21
0.12	0.02	0.64	0.12	1.16	0.17	1.68	0.21
0.13	0.03	0.65	0.12	1.17	0.17	1.69	0.21
0.14	0.03	0.66	0.12	1.18	0.17	1.70	0.21
0.15	0.03	0.67	0.12	1.19	0.17	1.71	0.21
0.16	0.04	0.68	0.12	1.20	0.17	1.72	0.21
0.17	0.04	0.69	0.13	1.21	0.17	1.73	0.21
0.18	0.05	0.70	0.13	1.22	0.17	1.74	0.21
0.19	0.05	0.71	0.13	1.23	0.17	1.75	0.21
0.20	0.05	0.72	0.13	1.24	0.17	1.76	0.21
0.21	0.05	0.73	0.13	1.25	0.18	1.77	0.21
0.22	0.06	0.74	0.13	1.26	0.18	1.78	0.21
0.23	0.06	0.75	0.13	1.27	0.18	1.79	0.21
0.24	0.06	0.76	0.13	1.28	0.18	1.80	0.21
0.25	0.06	0.77	0.13	1.29	0.18	1.81	0.21
0.26	0.06	0.78	0.13	1.30	0.18	1.82	0.22
0.27	0.07	0.79	0.14	1.31	0.18	1.83	0.22
0.28	0.07	0.80	0.14	1.32	0.18	1.84	0.22
0.29	0.07	0.81	0.14	1.33	0.18	1.85	0.22
0.30	0.07	0.82	0.14	1.34	0.18	1.86	0.22
0.31	0.07	0.83	0.14	1.35	0.18	1.87	0.22
0.32	0.08	0.84	0.14	1.36	0.18	1.88	0.22
0.33	0.08	0.85	0.14	1.37	0.18	1.89	0.22
0.34	0.08	0.86	0.14	1.38	0.19	1.90	0.22
0.35	0.08	0.87	0.14	1.39	0.19	1.91	0.22
0.36	0.08	0.88	0.14	1.40	0.19	1.92	0.22
0.37	0.08	0.89	0.15	1.41	0.19	1.93	0.22
0.38	0.09	0.90	0.15	1.42	0.19	1.94	0.22
0.39	0.09	0.91	0.15	1.43	0.19	1.95	0.22
0.40	0.09	0.92	0.15	1.44	0.19	1.96	0.22
0.41	0.09	0.93	0.15	1.45	0.19	1.97	0.22
0.42	0.09	0.94	0.15	1.46	0.19	1.98	0.22
0.43	0.09	0.95	0.15	1.47	0.19	1.99	0.23
0.44	0.10	0.96	0.15	1.48	0.19	2.00	0.23
0.45	0.10	0.97	0.15	1.49	0.19	2.01	0.23
0.46	0.10	0.98	0.15	1.50	0.19	2.02	0.23
0.47	0.10	0.99	0.15	1.51	0.19	2.03	0.23
0.48	0.10	1.00	0.16	1.52	0.20	2.04	0.23
0.49	0.10	1.01	0.16	1.53	0.20	2.05	0.23
0.50	0.10	1.02	0.16	1.54	0.20	2.06	0.23
0.51	0.10	1.03	0.16	1.55	0.20	2.07	0.23

Stage-Discharge for Pond 1P: 25-Year Storm Routing (continued)

Elevation (feet)	Primary (cfs)
2.08	0.23
2.09	0.23
2.10	0.23
2.11	0.23
2.12	0.23
2.13	0.23
2.14	0.23
2.15	0.23
2.16	0.24
2.17	0.24
2.18	0.24
2.19	0.24
2.20	0.24
2.21	0.24
2.22	0.24
2.23	0.24
2.24	0.24
2.25	0.24
2.26	0.24
2.27	0.24
2.28	0.24
2.29	0.24
2.30	0.24
2.31	0.24
2.32	0.24
2.33	0.24
2.34	0.25
2.35	0.25
2.36	0.25
2.37	0.25
2.38	0.25
2.39	0.25
2.40	0.25
2.41	0.25
2.42	0.25
2.43	0.25
2.44	0.25
2.45	0.25
2.46	0.25
2.47	0.25
2.48	0.25
2.49	0.25
2.50	0.25
2.51	0.27
2.52	0.30
2.53	0.34
2.54	0.39
2.55	0.44
2.56	0.50
2.57	0.57
2.58	0.64
2.59	0.71
2.60	0.79
2.61	0.87
2.62	0.96
2.63	1.05
2.64	1.14
2.65	1.24
2.66	1.34
2.67	1.44
2.68	1.55
2.69	1.66
2.70	1.77
2.71	1.89
2.72	2.01
2.73	2.13
2.74	2.26
2.75	2.39
2.76	2.52
2.77	2.66
2.78	2.80
2.79	2.94
2.80	3.09
2.81	3.24
2.82	3.39
2.83	3.54
2.84	3.70
2.85	3.86
2.86	4.03
2.87	4.19
2.88	4.36
2.89	4.53
2.90	4.71
2.91	4.89
2.92	5.07
2.93	5.26
2.94	5.45
2.95	5.64
2.96	5.83
2.97	6.03
2.98	6.23
2.99	6.44
3.00	**6.64**

Pond 1P: 25-Year Storm Routing



Stage-Area-Storage for Pond 1P: 25-Year Storm Routing

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
0.00	**2,394**	0	0.52	2,394	1,208
0.01	2,394	23	0.53	2,394	1,231
0.02	2,394	46	0.54	2,394	1,254
0.03	2,394	70	0.55	2,394	1,277
0.04	2,394	93	0.56	2,394	1,300
0.05	2,394	116	0.57	2,394	1,324
0.06	2,394	139	0.58	2,394	1,347
0.07	2,394	163	0.59	2,394	1,370
0.08	2,394	186	0.60	2,394	1,393
0.09	2,394	209	0.61	2,394	1,417
0.10	2,394	232	0.62	2,394	1,440
0.11	2,394	255	0.63	2,394	1,463
0.12	2,394	279	0.64	2,394	1,486
0.13	2,394	302	0.65	2,394	1,509
0.14	2,394	325	0.66	2,394	1,533
0.15	2,394	348	0.67	2,394	1,556
0.16	2,394	372	0.68	2,394	1,579
0.17	2,394	395	0.69	2,394	1,602
0.18	2,394	418	0.70	2,394	1,626
0.19	2,394	441	0.71	2,394	1,649
0.20	2,394	464	0.72	2,394	1,672
0.21	2,394	488	0.73	2,394	1,695
0.22	2,394	511	0.74	2,394	1,718
0.23	2,394	534	0.75	2,394	1,742
0.24	2,394	557	0.76	2,394	1,765
0.25	2,394	581	0.77	2,394	1,788
0.26	2,394	604	0.78	2,394	1,811
0.27	2,394	627	0.79	2,394	1,835
0.28	2,394	650	0.80	2,394	1,858
0.29	2,394	673	0.81	2,394	1,881
0.30	2,394	697	0.82	2,394	1,904
0.31	2,394	720	0.83	2,394	1,927
0.32	2,394	743	0.84	2,394	1,951
0.33	2,394	766	0.85	2,394	1,974
0.34	2,394	790	0.86	2,394	1,997
0.35	2,394	813	0.87	2,394	2,020
0.36	2,394	836	0.88	2,394	2,044
0.37	2,394	859	0.89	2,394	2,067
0.38	2,394	882	0.90	2,394	2,090
0.39	2,394	906	0.91	2,394	2,113
0.40	2,394	929	0.92	2,394	2,136
0.41	2,394	952	0.93	2,394	2,160
0.42	2,394	975	0.94	2,394	2,183
0.43	2,394	999	0.95	2,394	2,206
0.44	2,394	1,022	0.96	2,394	2,229
0.45	2,394	1,045	0.97	2,394	2,253
0.46	2,394	1,068	0.98	2,394	2,276
0.47	2,394	1,091	0.99	2,394	2,299
0.48	2,394	1,115	1.00	2,394	2,322
0.49	2,394	1,138	1.01	2,394	2,345
0.50	2,394	1,161	1.02	2,394	2,369
0.51	2,394	1,184	1.03	2,394	2,392

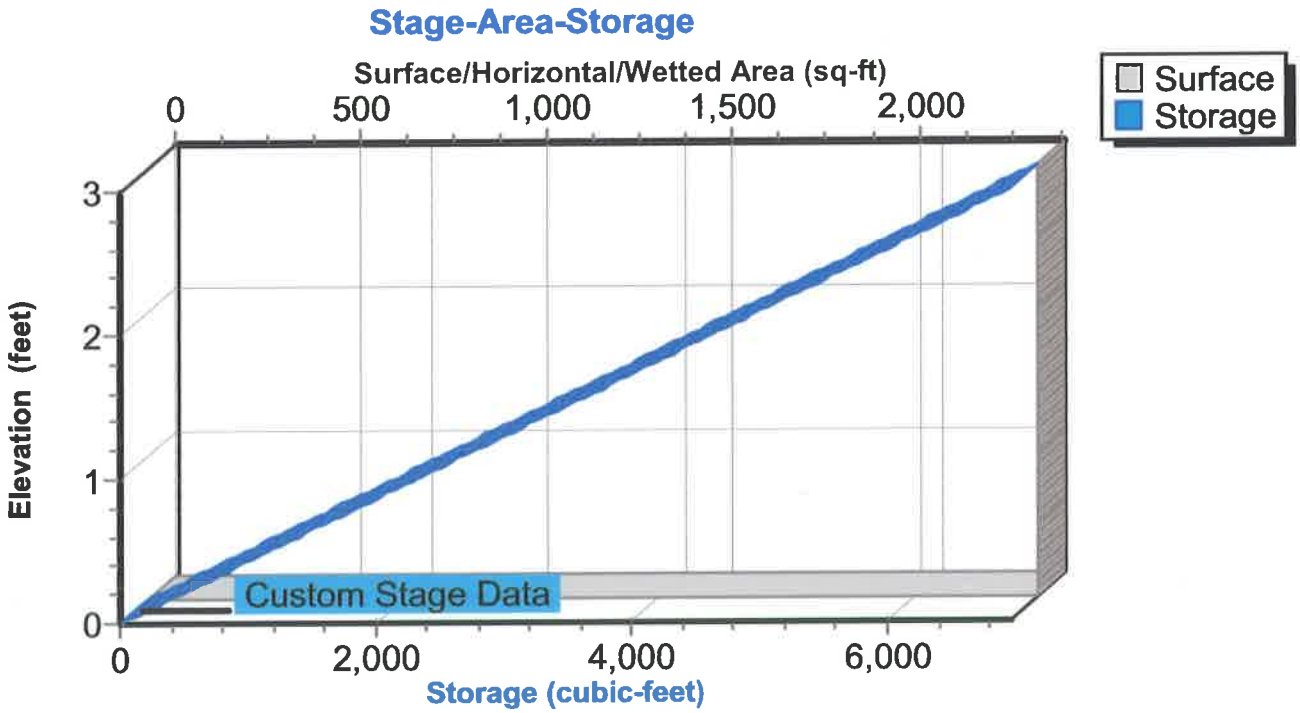
Stage-Area-Storage for Pond 1P: 25-Year Storm Routing (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
1.04	2,394	2,415
1.05	2,394	2,438
1.06	2,394	2,462
1.07	2,394	2,485
1.08	2,394	2,508
1.09	2,394	2,531
1.10	2,394	2,554
1.11	2,394	2,578
1.12	2,394	2,601
1.13	2,394	2,624
1.14	2,394	2,647
1.15	2,394	2,671
1.16	2,394	2,694
1.17	2,394	2,717
1.18	2,394	2,740
1.19	2,394	2,763
1.20	2,394	2,787
1.21	2,394	2,810
1.22	2,394	2,833
1.23	2,394	2,856
1.24	2,394	2,880
1.25	2,394	2,903
1.26	2,394	2,926
1.27	2,394	2,949
1.28	2,394	2,972
1.29	2,394	2,996
1.30	2,394	3,019
1.31	2,394	3,042
1.32	2,394	3,065
1.33	2,394	3,088
1.34	2,394	3,112
1.35	2,394	3,135
1.36	2,394	3,158
1.37	2,394	3,181
1.38	2,394	3,205
1.39	2,394	3,228
1.40	2,394	3,251
1.41	2,394	3,274
1.42	2,394	3,297
1.43	2,394	3,321
1.44	2,394	3,344
1.45	2,394	3,367
1.46	2,394	3,390
1.47	2,394	3,414
1.48	2,394	3,437
1.49	2,394	3,460
1.50	2,394	3,483
1.51	2,394	3,506
1.52	2,394	3,530
1.53	2,394	3,553
1.54	2,394	3,576
1.55	2,394	3,599
1.56	2,394	3,623
1.57	2,394	3,646
1.58	2,394	3,669
1.59	2,394	3,692
1.60	2,394	3,715
1.61	2,394	3,739
1.62	2,394	3,762
1.63	2,394	3,785
1.64	2,394	3,808
1.65	2,394	3,832
1.66	2,394	3,855
1.67	2,394	3,878
1.68	2,394	3,901
1.69	2,394	3,924
1.70	2,394	3,948
1.71	2,394	3,971
1.72	2,394	3,994
1.73	2,394	4,017
1.74	2,394	4,041
1.75	2,394	4,064
1.76	2,394	4,087
1.77	2,394	4,110
1.78	2,394	4,133
1.79	2,394	4,157
1.80	2,394	4,180
1.81	2,394	4,203
1.82	2,394	4,226
1.83	2,394	4,250
1.84	2,394	4,273
1.85	2,394	4,296
1.86	2,394	4,319
1.87	2,394	4,342
1.88	2,394	4,366
1.89	2,394	4,389
1.90	2,394	4,412
1.91	2,394	4,435
1.92	2,394	4,459
1.93	2,394	4,482
1.94	2,394	4,505
1.95	2,394	4,528
1.96	2,394	4,551
1.97	2,394	4,575
1.98	2,394	4,598
1.99	2,394	4,621
2.00	2,394	4,644
2.01	2,394	4,668
2.02	2,394	4,691
2.03	2,394	4,714
2.04	2,394	4,737
2.05	2,394	4,760
2.06	2,394	4,784
2.07	2,394	4,807

Stage-Area-Storage for Pond 1P: 25-Year Storm Routing (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
2.08	2,394	4,830
2.09	2,394	4,853
2.10	2,394	4,877
2.11	2,394	4,900
2.12	2,394	4,923
2.13	2,394	4,946
2.14	2,394	4,969
2.15	2,394	4,993
2.16	2,394	5,016
2.17	2,394	5,039
2.18	2,394	5,062
2.19	2,394	5,086
2.20	2,394	5,109
2.21	2,394	5,132
2.22	2,394	5,155
2.23	2,394	5,178
2.24	2,394	5,202
2.25	2,394	5,225
2.26	2,394	5,248
2.27	2,394	5,271
2.28	2,394	5,295
2.29	2,394	5,318
2.30	2,394	5,341
2.31	2,394	5,364
2.32	2,394	5,387
2.33	2,394	5,411
2.34	2,394	5,434
2.35	2,394	5,457
2.36	2,394	5,480
2.37	2,394	5,504
2.38	2,394	5,527
2.39	2,394	5,550
2.40	2,394	5,573
2.41	2,394	5,596
2.42	2,394	5,620
2.43	2,394	5,643
2.44	2,394	5,666
2.45	2,394	5,689
2.46	2,394	5,713
2.47	2,394	5,736
2.48	2,394	5,759
2.49	2,394	5,782
2.50	2,394	5,805
2.51	2,394	5,829
2.52	2,394	5,852
2.53	2,394	5,875
2.54	2,394	5,898
2.55	2,394	5,922
2.56	2,394	5,945
2.57	2,394	5,968
2.58	2,394	5,991
2.59	2,394	6,014
2.60	2,394	6,038
2.61	2,394	6,061
2.62	2,394	6,084
2.63	2,394	6,107
2.64	2,394	6,131
2.65	2,394	6,154
2.66	2,394	6,177
2.67	2,394	6,200
2.68	2,394	6,223
2.69	2,394	6,247
2.70	2,394	6,270
2.71	2,394	6,293
2.72	2,394	6,316
2.73	2,394	6,340
2.74	2,394	6,363
2.75	2,394	6,386
2.76	2,394	6,409
2.77	2,394	6,432
2.78	2,394	6,456
2.79	2,394	6,479
2.80	2,394	6,502
2.81	2,394	6,525
2.82	2,394	6,549
2.83	2,394	6,572
2.84	2,394	6,595
2.85	2,394	6,618
2.86	2,394	6,641
2.87	2,394	6,665
2.88	2,394	6,688
2.89	2,394	6,711
2.90	2,394	6,734
2.91	2,394	6,758
2.92	2,394	6,781
2.93	2,394	6,804
2.94	2,394	6,827
2.95	2,394	6,850
2.96	2,394	6,874
2.97	2,394	6,897
2.98	2,394	6,920
2.99	2,394	6,943
3.00	2,394	**6,967**

Pond 1P: 25-Year Storm Routing



Summary for Pond 1P: 50-Year Storm Routing

Inflow Area = 72,527 sf, Inflow Depth = 0.88" for 50-Year event
Inflow = 8.67 cfs @ 0.17 hrs, Volume= 5,292 cf
Outflow = 0.24 cfs @ 0.33 hrs, Volume= 2,191 cf, Atten= 97%, Lag= 9.8 min
Primary = 0.24 cfs @ 0.33 hrs, Volume= 2,191 cf

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
Peak Elev= 2.21' @ 0.33 hrs Surf.Area= 2,394 sf Storage= 5,121 cf

Plug-Flow detention time= 84.0 min calculated for 2,191 cf (41% of inflow)
Center-of-Mass det. time= 80.1 min (90.1 - 10.0)

Volume	Invert	Avail.Storage	Storage Description
#1	0.00'	6,967 cf	**Custom Stage Data (Irregular)** Listed below (Recalc) 7,182 cf Overall x 97.0% Voids

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
0.00	2,394	270.0	0	0	2,394
0.50	2,394	270.0	1,197	1,197	2,529
1.00	2,394	270.0	1,197	2,394	2,664
1.50	2,394	270.0	1,197	3,591	2,799
2.00	2,394	270.0	1,197	4,788	2,934
2.50	2,394	270.0	1,197	5,985	3,069
3.00	2,394	270.0	1,197	7,182	3,204

Device	Routing	Invert	Outlet Devices
#1	Primary	0.00'	**2.5" Vert. Orifice/Grate** C= 0.600
#2	Primary	2.50'	**6.0' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

Primary OutFlow Max=0.24 cfs @ 0.33 hrs HW=2.20' (Free Discharge)
↑—**1=Orifice/Grate** (Orifice Controls 0.24 cfs @ 6.98 fps)
└—**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Events for Pond 1P: 50-Year Storm Routing

Event	Inflow (cfs)	Primary (cfs)	Elevation (feet)	Storage (cubic-feet)
50-Year	**8.67**	**0.24**	**2.21**	**5,121**

Hydrograph for Pond 1P: 50-Year Storm Routing

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Primary (cfs)
0.00	0.00	0	0.00	0.00
0.01	0.53	10	0.00	0.00
0.02	1.06	38	0.02	0.00
0.03	1.59	86	0.04	0.00
0.04	2.12	152	0.07	0.01
0.05	2.65	237	0.10	0.02
0.06	3.18	341	0.15	0.03
0.07	3.71	464	0.20	0.05
0.08	4.24	605	0.26	0.06
0.09	4.77	764	0.33	0.08
0.10	5.29	942	0.41	0.09
0.11	5.82	1,139	0.49	0.10
0.12	6.35	1,354	0.58	0.11
0.13	6.88	1,588	0.68	0.12
0.14	7.41	1,841	0.79	0.14
0.15	7.94	2,112	0.91	0.15
0.16	8.47	2,402	1.03	0.16
0.17	**8.65**	2,704	1.16	0.17
0.18	8.12	3,000	1.29	0.18
0.19	7.59	3,276	1.41	0.19
0.20	7.06	3,533	1.52	0.20
0.21	6.53	3,770	1.62	0.20
0.22	6.00	3,988	1.72	0.21
0.23	5.47	4,187	1.80	0.21
0.24	4.94	4,367	1.88	0.22
0.25	4.41	4,527	1.95	0.22
0.26	3.88	4,668	2.01	0.23
0.27	3.35	4,790	2.06	0.23
0.28	2.82	4,893	2.11	0.23
0.29	2.29	4,977	2.14	0.23
0.30	1.76	5,041	2.17	0.24
0.31	1.24	5,087	2.19	0.24
0.32	0.71	5,113	2.20	0.24
0.33	0.18	**5,121**	**2.21**	**0.24**
0.34	0.00	5,115	2.20	0.24
0.35	0.00	5,107	2.20	0.24
0.36	0.00	5,098	2.20	0.24
0.37	0.00	5,090	2.19	0.24
0.38	0.00	5,081	2.19	0.24
0.39	0.00	5,073	2.18	0.24
0.40	0.00	5,064	2.18	0.24
0.41	0.00	5,056	2.18	0.24
0.42	0.00	5,047	2.17	0.24
0.43	0.00	5,039	2.17	0.24
0.44	0.00	5,030	2.17	0.24
0.45	0.00	5,022	2.16	0.24
0.46	0.00	5,013	2.16	0.24
0.47	0.00	5,005	2.16	0.24
0.48	0.00	4,996	2.15	0.23
0.49	0.00	4,988	2.15	0.23
0.50	0.00	4,979	2.14	0.23
0.51	0.00	4,971	2.14	0.23

Hydrograph for Pond 1P: 50-Year Storm Routing (continued)

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Primary (cfs)
0.52	0.00	4,962	2.14	0.23
0.53	0.00	4,954	2.13	0.23
0.54	0.00	4,946	2.13	0.23
0.55	0.00	4,937	2.13	0.23
0.56	0.00	4,929	2.12	0.23
0.57	0.00	4,920	2.12	0.23
0.58	0.00	4,912	2.12	0.23
0.59	0.00	4,904	2.11	0.23
0.60	0.00	4,895	2.11	0.23
0.61	0.00	4,887	2.10	0.23
0.62	0.00	4,879	2.10	0.23
0.63	0.00	4,870	2.10	0.23
0.64	0.00	4,862	2.09	0.23
0.65	0.00	4,854	2.09	0.23
0.66	0.00	4,845	2.09	0.23
0.67	0.00	4,837	2.08	0.23
0.68	0.00	4,829	2.08	0.23
0.69	0.00	4,820	2.08	0.23
0.70	0.00	4,812	2.07	0.23
0.71	0.00	4,804	2.07	0.23
0.72	0.00	4,795	2.07	0.23
0.73	0.00	4,787	2.06	0.23
0.74	0.00	4,779	2.06	0.23
0.75	0.00	4,771	2.05	0.23
0.76	0.00	4,762	2.05	0.23
0.77	0.00	4,754	2.05	0.23
0.78	0.00	4,746	2.04	0.23
0.79	0.00	4,738	2.04	0.23
0.80	0.00	4,730	2.04	0.23
0.81	0.00	4,721	2.03	0.23
0.82	0.00	4,713	2.03	0.23
0.83	0.00	4,705	2.03	0.23
0.84	0.00	4,697	2.02	0.23
0.85	0.00	4,689	2.02	0.23
0.86	0.00	4,680	2.02	0.23
0.87	0.00	4,672	2.01	0.23
0.88	0.00	4,664	2.01	0.23
0.89	0.00	4,656	2.00	0.23
0.90	0.00	4,648	2.00	0.23
0.91	0.00	4,640	2.00	0.23
0.92	0.00	4,631	1.99	0.23
0.93	0.00	4,623	1.99	0.23
0.94	0.00	4,615	1.99	0.23
0.95	0.00	4,607	1.98	0.23
0.96	0.00	4,599	1.98	0.22
0.97	0.00	4,591	1.98	0.22
0.98	0.00	4,583	1.97	0.22
0.99	0.00	4,575	1.97	0.22
1.00	0.00	4,567	1.97	0.22
1.01	0.00	4,559	1.96	0.22
1.02	0.00	4,551	1.96	0.22
1.03	0.00	4,543	1.96	0.22

Hydrograph for Pond 1P: 50-Year Storm Routing (continued)

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Primary (cfs)
1.04	0.00	4,535	1.95	0.22
1.05	0.00	4,527	1.95	0.22
1.06	0.00	4,518	1.95	0.22
1.07	0.00	4,510	1.94	0.22
1.08	0.00	4,502	1.94	0.22
1.09	0.00	4,494	1.94	0.22
1.10	0.00	4,486	1.93	0.22
1.11	0.00	4,478	1.93	0.22
1.12	0.00	4,471	1.93	0.22
1.13	0.00	4,463	1.92	0.22
1.14	0.00	4,455	1.92	0.22
1.15	0.00	4,447	1.91	0.22
1.16	0.00	4,439	1.91	0.22
1.17	0.00	4,431	1.91	0.22
1.18	0.00	4,423	1.90	0.22
1.19	0.00	4,415	1.90	0.22
1.20	0.00	4,407	1.90	0.22
1.21	0.00	4,399	1.89	0.22
1.22	0.00	4,391	1.89	0.22
1.23	0.00	4,383	1.89	0.22
1.24	0.00	4,375	1.88	0.22
1.25	0.00	4,367	1.88	0.22
1.26	0.00	4,360	1.88	0.22
1.27	0.00	4,352	1.87	0.22
1.28	0.00	4,344	1.87	0.22
1.29	0.00	4,336	1.87	0.22
1.30	0.00	4,328	1.86	0.22
1.31	0.00	4,320	1.86	0.22
1.32	0.00	4,313	1.86	0.22
1.33	0.00	4,305	1.85	0.22
1.34	0.00	4,297	1.85	0.22
1.35	0.00	4,289	1.85	0.22
1.36	0.00	4,281	1.84	0.22
1.37	0.00	4,274	1.84	0.22
1.38	0.00	4,266	1.84	0.22
1.39	0.00	4,258	1.83	0.22
1.40	0.00	4,250	1.83	0.22
1.41	0.00	4,242	1.83	0.22
1.42	0.00	4,235	1.82	0.22
1.43	0.00	4,227	1.82	0.22
1.44	0.00	4,219	1.82	0.21
1.45	0.00	4,211	1.81	0.21
1.46	0.00	4,204	1.81	0.21
1.47	0.00	4,196	1.81	0.21
1.48	0.00	4,188	1.80	0.21
1.49	0.00	4,181	1.80	0.21
1.50	0.00	4,173	1.80	0.21
1.51	0.00	4,165	1.79	0.21
1.52	0.00	4,158	1.79	0.21
1.53	0.00	4,150	1.79	0.21
1.54	0.00	4,142	1.78	0.21
1.55	0.00	4,135	1.78	0.21

Hydrograph for Pond 1P: 50-Year Storm Routing (continued)

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Primary (cfs)
1.56	0.00	4,127	1.78	0.21
1.57	0.00	4,119	1.77	0.21
1.58	0.00	4,112	1.77	0.21
1.59	0.00	4,104	1.77	0.21
1.60	0.00	4,096	1.76	0.21
1.61	0.00	4,089	1.76	0.21
1.62	0.00	4,081	1.76	0.21
1.63	0.00	4,074	1.75	0.21
1.64	0.00	4,066	1.75	0.21
1.65	0.00	4,058	1.75	0.21
1.66	0.00	4,051	1.74	0.21
1.67	0.00	4,043	1.74	0.21
1.68	0.00	4,036	1.74	0.21
1.69	0.00	4,028	1.73	0.21
1.70	0.00	4,021	1.73	0.21
1.71	0.00	4,013	1.73	0.21
1.72	0.00	4,006	1.72	0.21
1.73	0.00	3,998	1.72	0.21
1.74	0.00	3,991	1.72	0.21
1.75	0.00	3,983	1.72	0.21
1.76	0.00	3,976	1.71	0.21
1.77	0.00	3,968	1.71	0.21
1.78	0.00	3,961	1.71	0.21
1.79	0.00	3,953	1.70	0.21
1.80	0.00	3,946	1.70	0.21
1.81	0.00	3,938	1.70	0.21
1.82	0.00	3,931	1.69	0.21
1.83	0.00	3,923	1.69	0.21
1.84	0.00	3,916	1.69	0.21
1.85	0.00	3,908	1.68	0.21
1.86	0.00	3,901	1.68	0.21
1.87	0.00	3,894	1.68	0.21
1.88	0.00	3,886	1.67	0.21
1.89	0.00	3,879	1.67	0.21
1.90	0.00	3,871	1.67	0.21
1.91	0.00	3,864	1.66	0.20
1.92	0.00	3,857	1.66	0.20
1.93	0.00	3,849	1.66	0.20
1.94	0.00	3,842	1.65	0.20
1.95	0.00	3,835	1.65	0.20
1.96	0.00	3,827	1.65	0.20
1.97	0.00	3,820	1.64	0.20
1.98	0.00	3,813	1.64	0.20
1.99	0.00	3,805	1.64	0.20
2.00	0.00	3,798	1.64	0.20
2.01	0.00	3,791	1.63	0.20
2.02	0.00	3,783	1.63	0.20
2.03	0.00	3,776	1.63	0.20
2.04	0.00	3,769	1.62	0.20
2.05	0.00	3,761	1.62	0.20
2.06	0.00	3,754	1.62	0.20
2.07	0.00	3,747	1.61	0.20

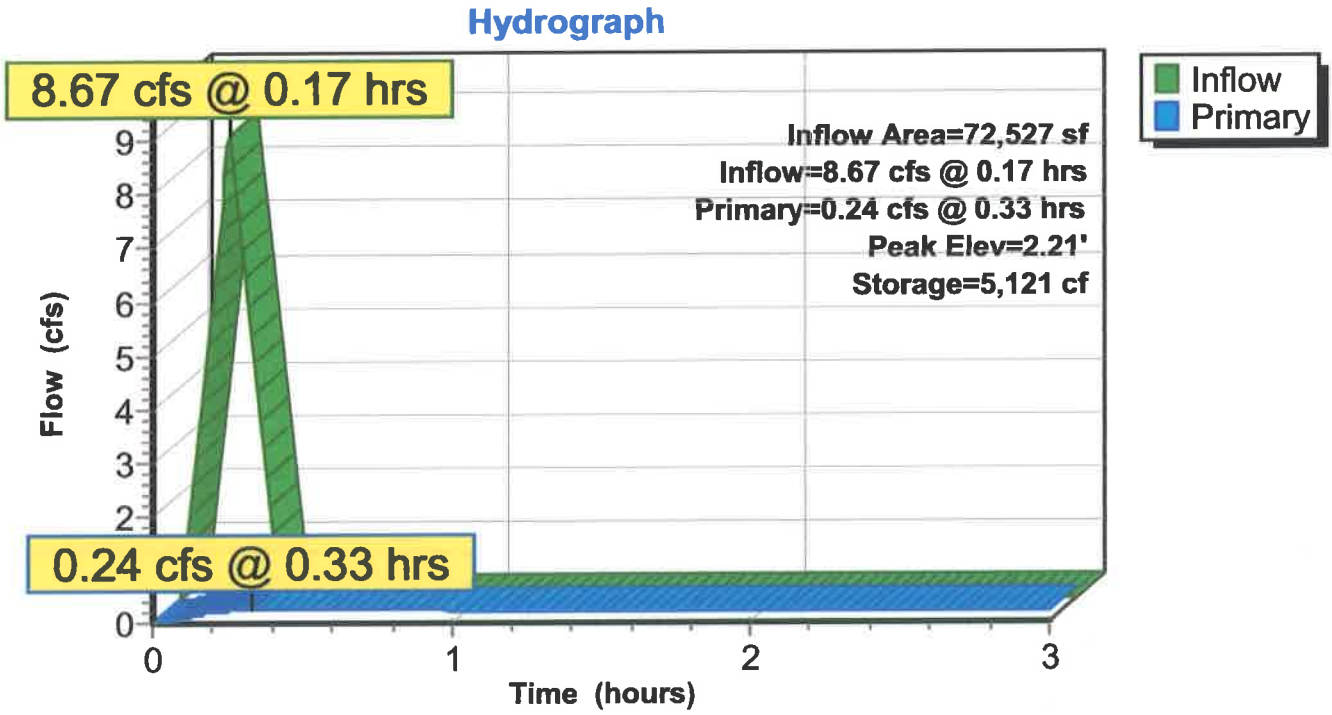
Hydrograph for Pond 1P: 50-Year Storm Routing (continued)

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Primary (cfs)
2.08	0.00	3,740	1.61	0.20
2.09	0.00	3,732	1.61	0.20
2.10	0.00	3,725	1.60	0.20
2.11	0.00	3,718	1.60	0.20
2.12	0.00	3,711	1.60	0.20
2.13	0.00	3,704	1.59	0.20
2.14	0.00	3,696	1.59	0.20
2.15	0.00	3,689	1.59	0.20
2.16	0.00	3,682	1.59	0.20
2.17	0.00	3,675	1.58	0.20
2.18	0.00	3,668	1.58	0.20
2.19	0.00	3,660	1.58	0.20
2.20	0.00	3,653	1.57	0.20
2.21	0.00	3,646	1.57	0.20
2.22	0.00	3,639	1.57	0.20
2.23	0.00	3,632	1.56	0.20
2.24	0.00	3,625	1.56	0.20
2.25	0.00	3,617	1.56	0.20
2.26	0.00	3,610	1.55	0.20
2.27	0.00	3,603	1.55	0.20
2.28	0.00	3,596	1.55	0.20
2.29	0.00	3,589	1.55	0.20
2.30	0.00	3,582	1.54	0.20
2.31	0.00	3,575	1.54	0.20
2.32	0.00	3,568	1.54	0.20
2.33	0.00	3,561	1.53	0.20
2.34	0.00	3,554	1.53	0.20
2.35	0.00	3,547	1.53	0.20
2.36	0.00	3,540	1.52	0.20
2.37	0.00	3,533	1.52	0.20
2.38	0.00	3,526	1.52	0.20
2.39	0.00	3,518	1.52	0.19
2.40	0.00	3,511	1.51	0.19
2.41	0.00	3,504	1.51	0.19
2.42	0.00	3,497	1.51	0.19
2.43	0.00	3,490	1.50	0.19
2.44	0.00	3,483	1.50	0.19
2.45	0.00	3,477	1.50	0.19
2.46	0.00	3,470	1.49	0.19
2.47	0.00	3,463	1.49	0.19
2.48	0.00	3,456	1.49	0.19
2.49	0.00	3,449	1.49	0.19
2.50	0.00	3,442	1.48	0.19
2.51	0.00	3,435	1.48	0.19
2.52	0.00	3,428	1.48	0.19
2.53	0.00	3,421	1.47	0.19
2.54	0.00	3,414	1.47	0.19
2.55	0.00	3,407	1.47	0.19
2.56	0.00	3,400	1.46	0.19
2.57	0.00	3,393	1.46	0.19
2.58	0.00	3,386	1.46	0.19
2.59	0.00	3,380	1.46	0.19

Hydrograph for Pond 1P: 50-Year Storm Routing (continued)

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Primary (cfs)
2.60	0.00	3,373	1.45	0.19
2.61	0.00	3,366	1.45	0.19
2.62	0.00	3,359	1.45	0.19
2.63	0.00	3,352	1.44	0.19
2.64	0.00	3,345	1.44	0.19
2.65	0.00	3,339	1.44	0.19
2.66	0.00	3,332	1.43	0.19
2.67	0.00	3,325	1.43	0.19
2.68	0.00	3,318	1.43	0.19
2.69	0.00	3,311	1.43	0.19
2.70	0.00	3,305	1.42	0.19
2.71	0.00	3,298	1.42	0.19
2.72	0.00	3,291	1.42	0.19
2.73	0.00	3,284	1.41	0.19
2.74	0.00	3,277	1.41	0.19
2.75	0.00	3,271	1.41	0.19
2.76	0.00	3,264	1.41	0.19
2.77	0.00	3,257	1.40	0.19
2.78	0.00	3,250	1.40	0.19
2.79	0.00	3,244	1.40	0.19
2.80	0.00	3,237	1.39	0.19
2.81	0.00	3,230	1.39	0.19
2.82	0.00	3,224	1.39	0.19
2.83	0.00	3,217	1.39	0.19
2.84	0.00	3,210	1.38	0.19
2.85	0.00	3,204	1.38	0.19
2.86	0.00	3,197	1.38	0.19
2.87	0.00	3,190	1.37	0.18
2.88	0.00	3,184	1.37	0.18
2.89	0.00	3,177	1.37	0.18
2.90	0.00	3,170	1.37	0.18
2.91	0.00	3,164	1.36	0.18
2.92	0.00	3,157	1.36	0.18
2.93	0.00	3,150	1.36	0.18
2.94	0.00	3,144	1.35	0.18
2.95	0.00	3,137	1.35	0.18
2.96	0.00	3,131	1.35	0.18
2.97	0.00	3,124	1.35	0.18
2.98	0.00	3,117	1.34	0.18
2.99	0.00	3,111	1.34	0.18
3.00	0.00	3,104	1.34	0.18

Pond 1P: 50-Year Storm Routing



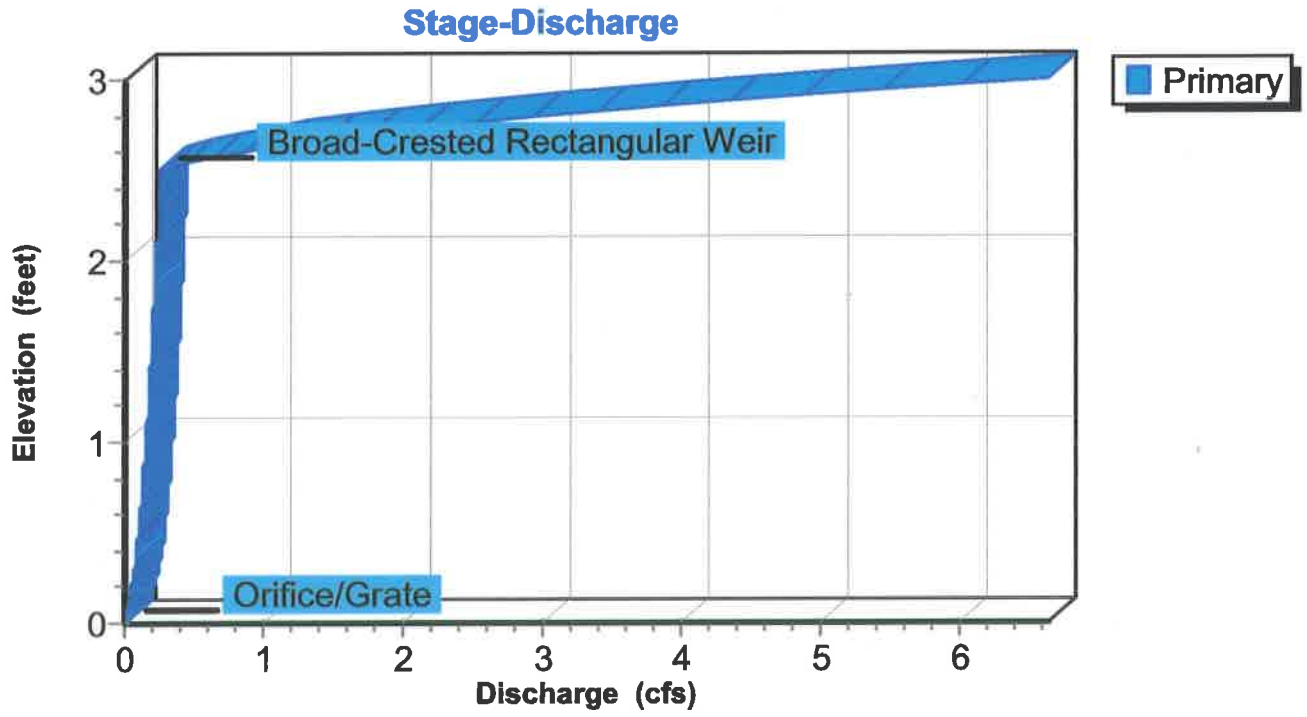
Stage-Discharge for Pond 1P: 50-Year Storm Routing

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
0.00	0.00	0.52	0.11	1.04	0.16	1.56	0.20
0.01	0.00	0.53	0.11	1.05	0.16	1.57	0.20
0.02	0.00	0.54	0.11	1.06	0.16	1.58	0.20
0.03	0.00	0.55	0.11	1.07	0.16	1.59	0.20
0.04	0.00	0.56	0.11	1.08	0.16	1.60	0.20
0.05	0.00	0.57	0.11	1.09	0.16	1.61	0.20
0.06	0.01	0.58	0.11	1.10	0.16	1.62	0.20
0.07	0.01	0.59	0.11	1.11	0.16	1.63	0.20
0.08	0.01	0.60	0.12	1.12	0.17	1.64	0.20
0.09	0.01	0.61	0.12	1.13	0.17	1.65	0.20
0.10	0.02	0.62	0.12	1.14	0.17	1.66	0.20
0.11	0.02	0.63	0.12	1.15	0.17	1.67	0.21
0.12	0.02	0.64	0.12	1.16	0.17	1.68	0.21
0.13	0.03	0.65	0.12	1.17	0.17	1.69	0.21
0.14	0.03	0.66	0.12	1.18	0.17	1.70	0.21
0.15	0.03	0.67	0.12	1.19	0.17	1.71	0.21
0.16	0.04	0.68	0.12	1.20	0.17	1.72	0.21
0.17	0.04	0.69	0.13	1.21	0.17	1.73	0.21
0.18	0.05	0.70	0.13	1.22	0.17	1.74	0.21
0.19	0.05	0.71	0.13	1.23	0.17	1.75	0.21
0.20	0.05	0.72	0.13	1.24	0.17	1.76	0.21
0.21	0.05	0.73	0.13	1.25	0.18	1.77	0.21
0.22	0.06	0.74	0.13	1.26	0.18	1.78	0.21
0.23	0.06	0.75	0.13	1.27	0.18	1.79	0.21
0.24	0.06	0.76	0.13	1.28	0.18	1.80	0.21
0.25	0.06	0.77	0.13	1.29	0.18	1.81	0.21
0.26	0.06	0.78	0.13	1.30	0.18	1.82	0.22
0.27	0.07	0.79	0.14	1.31	0.18	1.83	0.22
0.28	0.07	0.80	0.14	1.32	0.18	1.84	0.22
0.29	0.07	0.81	0.14	1.33	0.18	1.85	0.22
0.30	0.07	0.82	0.14	1.34	0.18	1.86	0.22
0.31	0.07	0.83	0.14	1.35	0.18	1.87	0.22
0.32	0.08	0.84	0.14	1.36	0.18	1.88	0.22
0.33	0.08	0.85	0.14	1.37	0.18	1.89	0.22
0.34	0.08	0.86	0.14	1.38	0.19	1.90	0.22
0.35	0.08	0.87	0.14	1.39	0.19	1.91	0.22
0.36	0.08	0.88	0.14	1.40	0.19	1.92	0.22
0.37	0.08	0.89	0.15	1.41	0.19	1.93	0.22
0.38	0.09	0.90	0.15	1.42	0.19	1.94	0.22
0.39	0.09	0.91	0.15	1.43	0.19	1.95	0.22
0.40	0.09	0.92	0.15	1.44	0.19	1.96	0.22
0.41	0.09	0.93	0.15	1.45	0.19	1.97	0.22
0.42	0.09	0.94	0.15	1.46	0.19	1.98	0.22
0.43	0.09	0.95	0.15	1.47	0.19	1.99	0.23
0.44	0.10	0.96	0.15	1.48	0.19	2.00	0.23
0.45	0.10	0.97	0.15	1.49	0.19	2.01	0.23
0.46	0.10	0.98	0.15	1.50	0.19	2.02	0.23
0.47	0.10	0.99	0.15	1.51	0.19	2.03	0.23
0.48	0.10	1.00	0.16	1.52	0.20	2.04	0.23
0.49	0.10	1.01	0.16	1.53	0.20	2.05	0.23
0.50	0.10	1.02	0.16	1.54	0.20	2.06	0.23
0.51	0.10	1.03	0.16	1.55	0.20	2.07	0.23

Stage-Discharge for Pond 1P: 50-Year Storm Routing (continued)

Elevation (feet)	Primary (cfs)
2.08	0.23
2.09	0.23
2.10	0.23
2.11	0.23
2.12	0.23
2.13	0.23
2.14	0.23
2.15	0.23
2.16	0.24
2.17	0.24
2.18	0.24
2.19	0.24
2.20	0.24
2.21	0.24
2.22	0.24
2.23	0.24
2.24	0.24
2.25	0.24
2.26	0.24
2.27	0.24
2.28	0.24
2.29	0.24
2.30	0.24
2.31	0.24
2.32	0.24
2.33	0.24
2.34	0.25
2.35	0.25
2.36	0.25
2.37	0.25
2.38	0.25
2.39	0.25
2.40	0.25
2.41	0.25
2.42	0.25
2.43	0.25
2.44	0.25
2.45	0.25
2.46	0.25
2.47	0.25
2.48	0.25
2.49	0.25
2.50	0.25
2.51	0.27
2.52	0.30
2.53	0.34
2.54	0.39
2.55	0.44
2.56	0.50
2.57	0.57
2.58	0.64
2.59	0.71
2.60	0.79
2.61	0.87
2.62	0.96
2.63	1.05
2.64	1.14
2.65	1.24
2.66	1.34
2.67	1.44
2.68	1.55
2.69	1.66
2.70	1.77
2.71	1.89
2.72	2.01
2.73	2.13
2.74	2.26
2.75	2.39
2.76	2.52
2.77	2.66
2.78	2.80
2.79	2.94
2.80	3.09
2.81	3.24
2.82	3.39
2.83	3.54
2.84	3.70
2.85	3.86
2.86	4.03
2.87	4.19
2.88	4.36
2.89	4.53
2.90	4.71
2.91	4.89
2.92	5.07
2.93	5.26
2.94	5.45
2.95	5.64
2.96	5.83
2.97	6.03
2.98	6.23
2.99	6.44
3.00	**6.64**

Pond 1P: 50-Year Storm Routing



Stage-Area-Storage for Pond 1P: 50-Year Storm Routing

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
0.00	**2,394**	0	0.52	2,394	1,208
0.01	2,394	23	0.53	2,394	1,231
0.02	2,394	46	0.54	2,394	1,254
0.03	2,394	70	0.55	2,394	1,277
0.04	2,394	93	0.56	2,394	1,300
0.05	2,394	116	0.57	2,394	1,324
0.06	2,394	139	0.58	2,394	1,347
0.07	2,394	163	0.59	2,394	1,370
0.08	2,394	186	0.60	2,394	1,393
0.09	2,394	209	0.61	2,394	1,417
0.10	2,394	232	0.62	2,394	1,440
0.11	2,394	255	0.63	2,394	1,463
0.12	2,394	279	0.64	2,394	1,486
0.13	2,394	302	0.65	2,394	1,509
0.14	2,394	325	0.66	2,394	1,533
0.15	2,394	348	0.67	2,394	1,556
0.16	2,394	372	0.68	2,394	1,579
0.17	2,394	395	0.69	2,394	1,602
0.18	2,394	418	0.70	2,394	1,626
0.19	2,394	441	0.71	2,394	1,649
0.20	2,394	464	0.72	2,394	1,672
0.21	2,394	488	0.73	2,394	1,695
0.22	2,394	511	0.74	2,394	1,718
0.23	2,394	534	0.75	2,394	1,742
0.24	2,394	557	0.76	2,394	1,765
0.25	2,394	581	0.77	2,394	1,788
0.26	2,394	604	0.78	2,394	1,811
0.27	2,394	627	0.79	2,394	1,835
0.28	2,394	650	0.80	2,394	1,858
0.29	2,394	673	0.81	2,394	1,881
0.30	2,394	697	0.82	2,394	1,904
0.31	2,394	720	0.83	2,394	1,927
0.32	2,394	743	0.84	2,394	1,951
0.33	2,394	766	0.85	2,394	1,974
0.34	2,394	790	0.86	2,394	1,997
0.35	2,394	813	0.87	2,394	2,020
0.36	2,394	836	0.88	2,394	2,044
0.37	2,394	859	0.89	2,394	2,067
0.38	2,394	882	0.90	2,394	2,090
0.39	2,394	906	0.91	2,394	2,113
0.40	2,394	929	0.92	2,394	2,136
0.41	2,394	952	0.93	2,394	2,160
0.42	2,394	975	0.94	2,394	2,183
0.43	2,394	999	0.95	2,394	2,206
0.44	2,394	1,022	0.96	2,394	2,229
0.45	2,394	1,045	0.97	2,394	2,253
0.46	2,394	1,068	0.98	2,394	2,276
0.47	2,394	1,091	0.99	2,394	2,299
0.48	2,394	1,115	1.00	2,394	2,322
0.49	2,394	1,138	1.01	2,394	2,345
0.50	2,394	1,161	1.02	2,394	2,369
0.51	2,394	1,184	1.03	2,394	2,392

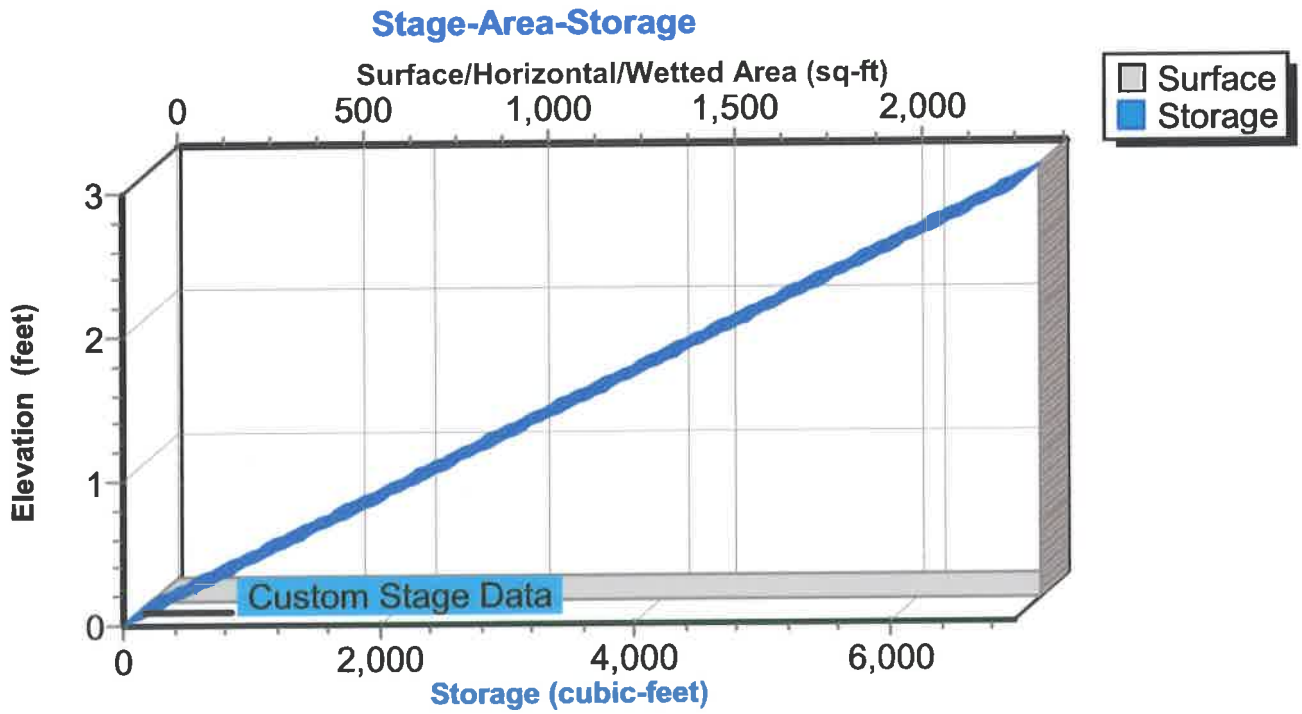
Stage-Area-Storage for Pond 1P: 50-Year Storm Routing (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
1.04	2,394	2,415
1.05	2,394	2,438
1.06	2,394	2,462
1.07	2,394	2,485
1.08	2,394	2,508
1.09	2,394	2,531
1.10	2,394	2,554
1.11	2,394	2,578
1.12	2,394	2,601
1.13	2,394	2,624
1.14	2,394	2,647
1.15	2,394	2,671
1.16	2,394	2,694
1.17	2,394	2,717
1.18	2,394	2,740
1.19	2,394	2,763
1.20	2,394	2,787
1.21	2,394	2,810
1.22	2,394	2,833
1.23	2,394	2,856
1.24	2,394	2,880
1.25	2,394	2,903
1.26	2,394	2,926
1.27	2,394	2,949
1.28	2,394	2,972
1.29	2,394	2,996
1.30	2,394	3,019
1.31	2,394	3,042
1.32	2,394	3,065
1.33	2,394	3,088
1.34	2,394	3,112
1.35	2,394	3,135
1.36	2,394	3,158
1.37	2,394	3,181
1.38	2,394	3,205
1.39	2,394	3,228
1.40	2,394	3,251
1.41	2,394	3,274
1.42	2,394	3,297
1.43	2,394	3,321
1.44	2,394	3,344
1.45	2,394	3,367
1.46	2,394	3,390
1.47	2,394	3,414
1.48	2,394	3,437
1.49	2,394	3,460
1.50	2,394	3,483
1.51	2,394	3,506
1.52	2,394	3,530
1.53	2,394	3,553
1.54	2,394	3,576
1.55	2,394	3,599
1.56	2,394	3,623
1.57	2,394	3,646
1.58	2,394	3,669
1.59	2,394	3,692
1.60	2,394	3,715
1.61	2,394	3,739
1.62	2,394	3,762
1.63	2,394	3,785
1.64	2,394	3,808
1.65	2,394	3,832
1.66	2,394	3,855
1.67	2,394	3,878
1.68	2,394	3,901
1.69	2,394	3,924
1.70	2,394	3,948
1.71	2,394	3,971
1.72	2,394	3,994
1.73	2,394	4,017
1.74	2,394	4,041
1.75	2,394	4,064
1.76	2,394	4,087
1.77	2,394	4,110
1.78	2,394	4,133
1.79	2,394	4,157
1.80	2,394	4,180
1.81	2,394	4,203
1.82	2,394	4,226
1.83	2,394	4,250
1.84	2,394	4,273
1.85	2,394	4,296
1.86	2,394	4,319
1.87	2,394	4,342
1.88	2,394	4,366
1.89	2,394	4,389
1.90	2,394	4,412
1.91	2,394	4,435
1.92	2,394	4,459
1.93	2,394	4,482
1.94	2,394	4,505
1.95	2,394	4,528
1.96	2,394	4,551
1.97	2,394	4,575
1.98	2,394	4,598
1.99	2,394	4,621
2.00	2,394	4,644
2.01	2,394	4,668
2.02	2,394	4,691
2.03	2,394	4,714
2.04	2,394	4,737
2.05	2,394	4,760
2.06	2,394	4,784
2.07	2,394	4,807

Stage-Area-Storage for Pond 1P: 50-Year Storm Routing (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
2.08	2,394	4,830
2.09	2,394	4,853
2.10	2,394	4,877
2.11	2,394	4,900
2.12	2,394	4,923
2.13	2,394	4,946
2.14	2,394	4,969
2.15	2,394	4,993
2.16	2,394	5,016
2.17	2,394	5,039
2.18	2,394	5,062
2.19	2,394	5,086
2.20	2,394	5,109
2.21	2,394	5,132
2.22	2,394	5,155
2.23	2,394	5,178
2.24	2,394	5,202
2.25	2,394	5,225
2.26	2,394	5,248
2.27	2,394	5,271
2.28	2,394	5,295
2.29	2,394	5,318
2.30	2,394	5,341
2.31	2,394	5,364
2.32	2,394	5,387
2.33	2,394	5,411
2.34	2,394	5,434
2.35	2,394	5,457
2.36	2,394	5,480
2.37	2,394	5,504
2.38	2,394	5,527
2.39	2,394	5,550
2.40	2,394	5,573
2.41	2,394	5,596
2.42	2,394	5,620
2.43	2,394	5,643
2.44	2,394	5,666
2.45	2,394	5,689
2.46	2,394	5,713
2.47	2,394	5,736
2.48	2,394	5,759
2.49	2,394	5,782
2.50	2,394	5,805
2.51	2,394	5,829
2.52	2,394	5,852
2.53	2,394	5,875
2.54	2,394	5,898
2.55	2,394	5,922
2.56	2,394	5,945
2.57	2,394	5,968
2.58	2,394	5,991
2.59	2,394	6,014
2.60	2,394	6,038
2.61	2,394	6,061
2.62	2,394	6,084
2.63	2,394	6,107
2.64	2,394	6,131
2.65	2,394	6,154
2.66	2,394	6,177
2.67	2,394	6,200
2.68	2,394	6,223
2.69	2,394	6,247
2.70	2,394	6,270
2.71	2,394	6,293
2.72	2,394	6,316
2.73	2,394	6,340
2.74	2,394	6,363
2.75	2,394	6,386
2.76	2,394	6,409
2.77	2,394	6,432
2.78	2,394	6,456
2.79	2,394	6,479
2.80	2,394	6,502
2.81	2,394	6,525
2.82	2,394	6,549
2.83	2,394	6,572
2.84	2,394	6,595
2.85	2,394	6,618
2.86	2,394	6,641
2.87	2,394	6,665
2.88	2,394	6,688
2.89	2,394	6,711
2.90	2,394	6,734
2.91	2,394	6,758
2.92	2,394	6,781
2.93	2,394	6,804
2.94	2,394	6,827
2.95	2,394	6,850
2.96	2,394	6,874
2.97	2,394	6,897
2.98	2,394	6,920
2.99	2,394	6,943
3.00	2,394	**6,967**

Pond 1P: 50-Year Storm Routing



Summary for Pond 1P: 100-Year Storm Routing

Inflow Area = 72,527 sf, Inflow Depth = 0.97" for 100-Year event
Inflow = 9.63 cfs @ 0.17 hrs, Volume= 5,880 cf
Outflow = 0.25 cfs @ 0.33 hrs, Volume= 2,334 cf, Atten= 97%, Lag= 9.8 min
Primary = 0.25 cfs @ 0.33 hrs, Volume= 2,334 cf

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
Peak Elev= 2.45' @ 0.33 hrs Surf.Area= 2,394 sf Storage= 5,698 cf

Plug-Flow detention time= 84.4 min calculated for 2,334 cf (40% of inflow)
Center-of-Mass det. time= 80.3 min (90.3 - 10.0)

Volume	Invert	Avail.Storage	Storage Description
#1	0.00'	6,967 cf	**Custom Stage Data (Irregular)** Listed below (Recalc) 7,182 cf Overall x 97.0% Voids

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
0.00	2,394	270.0	0	0	2,394
0.50	2,394	270.0	1,197	1,197	2,529
1.00	2,394	270.0	1,197	2,394	2,664
1.50	2,394	270.0	1,197	3,591	2,799
2.00	2,394	270.0	1,197	4,788	2,934
2.50	2,394	270.0	1,197	5,985	3,069
3.00	2,394	270.0	1,197	7,182	3,204

Device	Routing	Invert	Outlet Devices
#1	Primary	0.00'	**2.5" Vert. Orifice/Grate** C= 0.600
#2	Primary	2.50'	**6.0' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

Primary OutFlow Max=0.25 cfs @ 0.33 hrs HW=2.45' (Free Discharge)
↑—**1=Orifice/Grate** (Orifice Controls 0.25 cfs @ 7.38 fps)
└—**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Events for Pond 1P: 100-Year Storm Routing

Event	Inflow (cfs)	Primary (cfs)	Elevation (feet)	Storage (cubic-feet)
100-Year	**9.63**	**0.25**	**2.45**	**5,698**

Hydrograph for Pond 1P: 100-Year Storm Routing

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Primary (cfs)
0.00	0.00	0	0.00	0.00
0.01	0.59	11	0.00	0.00
0.02	1.18	42	0.02	0.00
0.03	1.76	95	0.04	0.00
0.04	2.35	169	0.07	0.01
0.05	2.94	264	0.11	0.02
0.06	3.53	379	0.16	0.04
0.07	4.12	515	0.22	0.06
0.08	4.71	672	0.29	0.07
0.09	5.29	849	0.37	0.08
0.10	5.88	1,047	0.45	0.10
0.11	6.47	1,265	0.54	0.11
0.12	7.06	1,505	0.65	0.12
0.13	7.65	1,765	0.76	0.13
0.14	8.24	2,046	0.88	0.14
0.15	8.82	2,348	1.01	0.16
0.16	9.41	2,670	1.15	0.17
0.17	**9.61**	3,006	1.29	0.18
0.18	9.02	3,335	1.44	0.19
0.19	8.43	3,642	1.57	0.20
0.20	7.84	3,928	1.69	0.21
0.21	7.26	4,192	1.81	0.21
0.22	6.67	4,435	1.91	0.22
0.23	6.08	4,656	2.01	0.23
0.24	5.49	4,856	2.09	0.23
0.25	4.90	5,035	2.17	0.24
0.26	4.31	5,192	2.24	0.24
0.27	3.73	5,328	2.29	0.24
0.28	3.14	5,443	2.34	0.25
0.29	2.55	5,536	2.38	0.25
0.30	1.96	5,609	2.42	0.25
0.31	1.37	5,660	2.44	0.25
0.32	0.78	5,689	2.45	0.25
0.33	0.20	**5,698**	**2.45**	**0.25**
0.34	0.00	5,692	2.45	0.25
0.35	0.00	5,683	2.45	0.25
0.36	0.00	5,674	2.44	0.25
0.37	0.00	5,665	2.44	0.25
0.38	0.00	5,656	2.44	0.25
0.39	0.00	5,647	2.43	0.25
0.40	0.00	5,638	2.43	0.25
0.41	0.00	5,629	2.42	0.25
0.42	0.00	5,620	2.42	0.25
0.43	0.00	5,611	2.42	0.25
0.44	0.00	5,602	2.41	0.25
0.45	0.00	5,593	2.41	0.25
0.46	0.00	5,584	2.40	0.25
0.47	0.00	5,575	2.40	0.25
0.48	0.00	5,566	2.40	0.25
0.49	0.00	5,557	2.39	0.25
0.50	0.00	5,549	2.39	0.25
0.51	0.00	5,540	2.39	0.25

Hydrograph for Pond 1P: 100-Year Storm Routing (continued)

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Primary (cfs)
0.52	0.00	5,531	2.38	0.25
0.53	0.00	5,522	2.38	0.25
0.54	0.00	5,513	2.37	0.25
0.55	0.00	5,504	2.37	0.25
0.56	0.00	5,495	2.37	0.25
0.57	0.00	5,486	2.36	0.25
0.58	0.00	5,477	2.36	0.25
0.59	0.00	5,468	2.35	0.25
0.60	0.00	5,460	2.35	0.25
0.61	0.00	5,451	2.35	0.25
0.62	0.00	5,442	2.34	0.25
0.63	0.00	5,433	2.34	0.25
0.64	0.00	5,424	2.34	0.25
0.65	0.00	5,415	2.33	0.24
0.66	0.00	5,407	2.33	0.24
0.67	0.00	5,398	2.32	0.24
0.68	0.00	5,389	2.32	0.24
0.69	0.00	5,380	2.32	0.24
0.70	0.00	5,371	2.31	0.24
0.71	0.00	5,363	2.31	0.24
0.72	0.00	5,354	2.31	0.24
0.73	0.00	5,345	2.30	0.24
0.74	0.00	5,336	2.30	0.24
0.75	0.00	5,328	2.29	0.24
0.76	0.00	5,319	2.29	0.24
0.77	0.00	5,310	2.29	0.24
0.78	0.00	5,301	2.28	0.24
0.79	0.00	5,293	2.28	0.24
0.80	0.00	5,284	2.28	0.24
0.81	0.00	5,275	2.27	0.24
0.82	0.00	5,267	2.27	0.24
0.83	0.00	5,258	2.26	0.24
0.84	0.00	5,249	2.26	0.24
0.85	0.00	5,240	2.26	0.24
0.86	0.00	5,232	2.25	0.24
0.87	0.00	5,223	2.25	0.24
0.88	0.00	5,215	2.25	0.24
0.89	0.00	5,206	2.24	0.24
0.90	0.00	5,197	2.24	0.24
0.91	0.00	5,189	2.23	0.24
0.92	0.00	5,180	2.23	0.24
0.93	0.00	5,171	2.23	0.24
0.94	0.00	5,163	2.22	0.24
0.95	0.00	5,154	2.22	0.24
0.96	0.00	5,146	2.22	0.24
0.97	0.00	5,137	2.21	0.24
0.98	0.00	5,128	2.21	0.24
0.99	0.00	5,120	2.20	0.24
1.00	0.00	5,111	2.20	0.24
1.01	0.00	5,103	2.20	0.24
1.02	0.00	5,094	2.19	0.24
1.03	0.00	5,086	2.19	0.24

Hydrograph for Pond 1P: 100-Year Storm Routing (continued)

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Primary (cfs)
1.04	0.00	5,077	2.19	0.24
1.05	0.00	5,069	2.18	0.24
1.06	0.00	5,060	2.18	0.24
1.07	0.00	5,052	2.18	0.24
1.08	0.00	5,043	2.17	0.24
1.09	0.00	5,035	2.17	0.24
1.10	0.00	5,026	2.16	0.24
1.11	0.00	5,018	2.16	0.24
1.12	0.00	5,009	2.16	0.24
1.13	0.00	5,001	2.15	0.23
1.14	0.00	4,992	2.15	0.23
1.15	0.00	4,984	2.15	0.23
1.16	0.00	4,975	2.14	0.23
1.17	0.00	4,967	2.14	0.23
1.18	0.00	4,958	2.14	0.23
1.19	0.00	4,950	2.13	0.23
1.20	0.00	4,942	2.13	0.23
1.21	0.00	4,933	2.12	0.23
1.22	0.00	4,925	2.12	0.23
1.23	0.00	4,916	2.12	0.23
1.24	0.00	4,908	2.11	0.23
1.25	0.00	4,900	2.11	0.23
1.26	0.00	4,891	2.11	0.23
1.27	0.00	4,883	2.10	0.23
1.28	0.00	4,875	2.10	0.23
1.29	0.00	4,866	2.10	0.23
1.30	0.00	4,858	2.09	0.23
1.31	0.00	4,850	2.09	0.23
1.32	0.00	4,841	2.08	0.23
1.33	0.00	4,833	2.08	0.23
1.34	0.00	4,825	2.08	0.23
1.35	0.00	4,816	2.07	0.23
1.36	0.00	4,808	2.07	0.23
1.37	0.00	4,800	2.07	0.23
1.38	0.00	4,792	2.06	0.23
1.39	0.00	4,783	2.06	0.23
1.40	0.00	4,775	2.06	0.23
1.41	0.00	4,767	2.05	0.23
1.42	0.00	4,759	2.05	0.23
1.43	0.00	4,750	2.05	0.23
1.44	0.00	4,742	2.04	0.23
1.45	0.00	4,734	2.04	0.23
1.46	0.00	4,726	2.04	0.23
1.47	0.00	4,717	2.03	0.23
1.48	0.00	4,709	2.03	0.23
1.49	0.00	4,701	2.02	0.23
1.50	0.00	4,693	2.02	0.23
1.51	0.00	4,685	2.02	0.23
1.52	0.00	4,677	2.01	0.23
1.53	0.00	4,668	2.01	0.23
1.54	0.00	4,660	2.01	0.23
1.55	0.00	4,652	2.00	0.23

Hydrograph for Pond 1P: 100-Year Storm Routing (continued)

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Primary (cfs)
1.56	0.00	4,644	2.00	0.23
1.57	0.00	4,636	2.00	0.23
1.58	0.00	4,628	1.99	0.23
1.59	0.00	4,620	1.99	0.23
1.60	0.00	4,611	1.99	0.23
1.61	0.00	4,603	1.98	0.22
1.62	0.00	4,595	1.98	0.22
1.63	0.00	4,587	1.98	0.22
1.64	0.00	4,579	1.97	0.22
1.65	0.00	4,571	1.97	0.22
1.66	0.00	4,563	1.96	0.22
1.67	0.00	4,555	1.96	0.22
1.68	0.00	4,547	1.96	0.22
1.69	0.00	4,539	1.95	0.22
1.70	0.00	4,531	1.95	0.22
1.71	0.00	4,523	1.95	0.22
1.72	0.00	4,515	1.94	0.22
1.73	0.00	4,507	1.94	0.22
1.74	0.00	4,499	1.94	0.22
1.75	0.00	4,491	1.93	0.22
1.76	0.00	4,483	1.93	0.22
1.77	0.00	4,475	1.93	0.22
1.78	0.00	4,467	1.92	0.22
1.79	0.00	4,459	1.92	0.22
1.80	0.00	4,451	1.92	0.22
1.81	0.00	4,443	1.91	0.22
1.82	0.00	4,435	1.91	0.22
1.83	0.00	4,427	1.91	0.22
1.84	0.00	4,419	1.90	0.22
1.85	0.00	4,411	1.90	0.22
1.86	0.00	4,403	1.90	0.22
1.87	0.00	4,395	1.89	0.22
1.88	0.00	4,387	1.89	0.22
1.89	0.00	4,380	1.89	0.22
1.90	0.00	4,372	1.88	0.22
1.91	0.00	4,364	1.88	0.22
1.92	0.00	4,356	1.88	0.22
1.93	0.00	4,348	1.87	0.22
1.94	0.00	4,340	1.87	0.22
1.95	0.00	4,332	1.87	0.22
1.96	0.00	4,325	1.86	0.22
1.97	0.00	4,317	1.86	0.22
1.98	0.00	4,309	1.86	0.22
1.99	0.00	4,301	1.85	0.22
2.00	0.00	4,293	1.85	0.22
2.01	0.00	4,285	1.85	0.22
2.02	0.00	4,278	1.84	0.22
2.03	0.00	4,270	1.84	0.22
2.04	0.00	4,262	1.84	0.22
2.05	0.00	4,254	1.83	0.22
2.06	0.00	4,247	1.83	0.22
2.07	0.00	4,239	1.83	0.22

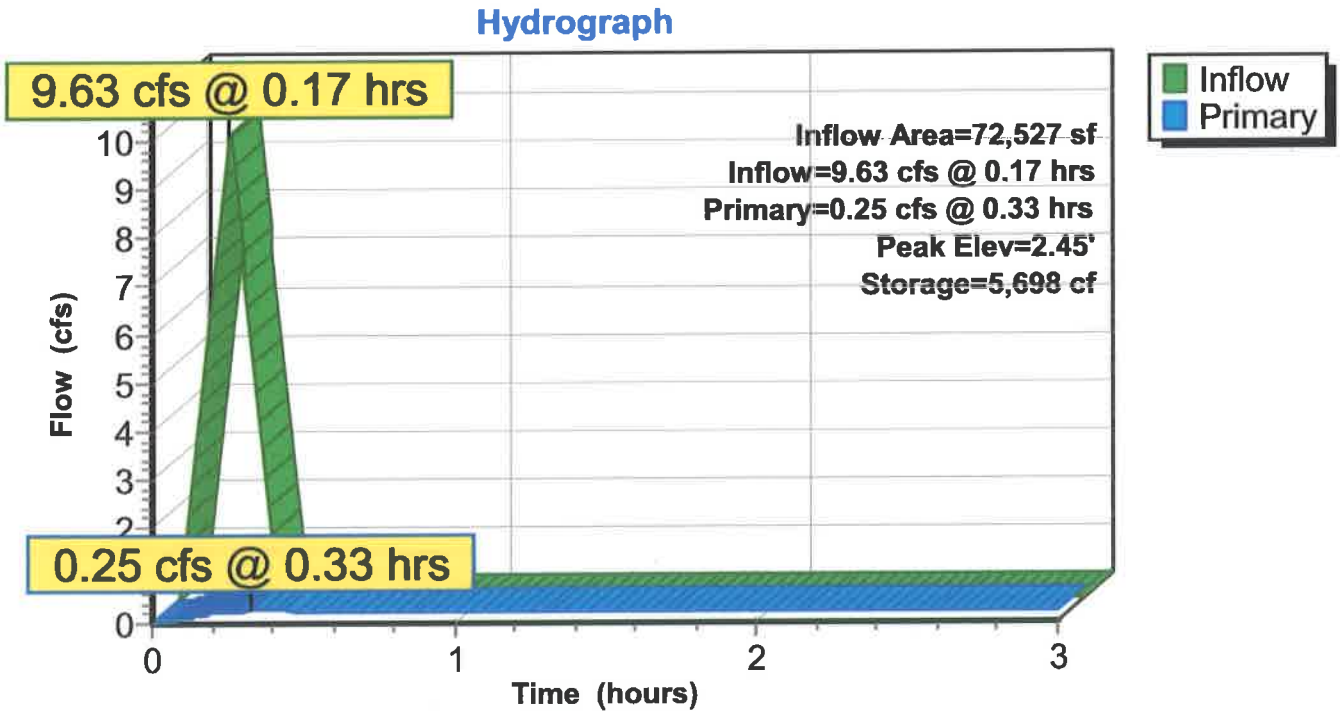
Hydrograph for Pond 1P: 100-Year Storm Routing (continued)

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Primary (cfs)
2.08	0.00	4,231	1.82	0.22
2.09	0.00	4,223	1.82	0.21
2.10	0.00	4,216	1.82	0.21
2.11	0.00	4,208	1.81	0.21
2.12	0.00	4,200	1.81	0.21
2.13	0.00	4,192	1.81	0.21
2.14	0.00	4,185	1.80	0.21
2.15	0.00	4,177	1.80	0.21
2.16	0.00	4,169	1.80	0.21
2.17	0.00	4,162	1.79	0.21
2.18	0.00	4,154	1.79	0.21
2.19	0.00	4,146	1.79	0.21
2.20	0.00	4,139	1.78	0.21
2.21	0.00	4,131	1.78	0.21
2.22	0.00	4,123	1.78	0.21
2.23	0.00	4,116	1.77	0.21
2.24	0.00	4,108	1.77	0.21
2.25	0.00	4,100	1.77	0.21
2.26	0.00	4,093	1.76	0.21
2.27	0.00	4,085	1.76	0.21
2.28	0.00	4,078	1.76	0.21
2.29	0.00	4,070	1.75	0.21
2.30	0.00	4,062	1.75	0.21
2.31	0.00	4,055	1.75	0.21
2.32	0.00	4,047	1.74	0.21
2.33	0.00	4,040	1.74	0.21
2.34	0.00	4,032	1.74	0.21
2.35	0.00	4,025	1.73	0.21
2.36	0.00	4,017	1.73	0.21
2.37	0.00	4,010	1.73	0.21
2.38	0.00	4,002	1.72	0.21
2.39	0.00	3,995	1.72	0.21
2.40	0.00	3,987	1.72	0.21
2.41	0.00	3,980	1.71	0.21
2.42	0.00	3,972	1.71	0.21
2.43	0.00	3,965	1.71	0.21
2.44	0.00	3,957	1.70	0.21
2.45	0.00	3,950	1.70	0.21
2.46	0.00	3,942	1.70	0.21
2.47	0.00	3,935	1.69	0.21
2.48	0.00	3,927	1.69	0.21
2.49	0.00	3,920	1.69	0.21
2.50	0.00	3,912	1.68	0.21
2.51	0.00	3,905	1.68	0.21
2.52	0.00	3,898	1.68	0.21
2.53	0.00	3,890	1.68	0.21
2.54	0.00	3,883	1.67	0.21
2.55	0.00	3,875	1.67	0.21
2.56	0.00	3,868	1.67	0.21
2.57	0.00	3,861	1.66	0.20
2.58	0.00	3,853	1.66	0.20
2.59	0.00	3,846	1.66	0.20

Hydrograph for Pond 1P: 100-Year Storm Routing (continued)

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Primary (cfs)
2.60	0.00	3,838	1.65	0.20
2.61	0.00	3,831	1.65	0.20
2.62	0.00	3,824	1.65	0.20
2.63	0.00	3,816	1.64	0.20
2.64	0.00	3,809	1.64	0.20
2.65	0.00	3,802	1.64	0.20
2.66	0.00	3,795	1.63	0.20
2.67	0.00	3,787	1.63	0.20
2.68	0.00	3,780	1.63	0.20
2.69	0.00	3,773	1.62	0.20
2.70	0.00	3,765	1.62	0.20
2.71	0.00	3,758	1.62	0.20
2.72	0.00	3,751	1.62	0.20
2.73	0.00	3,744	1.61	0.20
2.74	0.00	3,736	1.61	0.20
2.75	0.00	3,729	1.61	0.20
2.76	0.00	3,722	1.60	0.20
2.77	0.00	3,715	1.60	0.20
2.78	0.00	3,707	1.60	0.20
2.79	0.00	3,700	1.59	0.20
2.80	0.00	3,693	1.59	0.20
2.81	0.00	3,686	1.59	0.20
2.82	0.00	3,679	1.58	0.20
2.83	0.00	3,671	1.58	0.20
2.84	0.00	3,664	1.58	0.20
2.85	0.00	3,657	1.57	0.20
2.86	0.00	3,650	1.57	0.20
2.87	0.00	3,643	1.57	0.20
2.88	0.00	3,636	1.57	0.20
2.89	0.00	3,628	1.56	0.20
2.90	0.00	3,621	1.56	0.20
2.91	0.00	3,614	1.56	0.20
2.92	0.00	3,607	1.55	0.20
2.93	0.00	3,600	1.55	0.20
2.94	0.00	3,593	1.55	0.20
2.95	0.00	3,586	1.54	0.20
2.96	0.00	3,579	1.54	0.20
2.97	0.00	3,572	1.54	0.20
2.98	0.00	3,564	1.53	0.20
2.99	0.00	3,557	1.53	0.20
3.00	0.00	3,550	1.53	0.20

Pond 1P: 100-Year Storm Routing



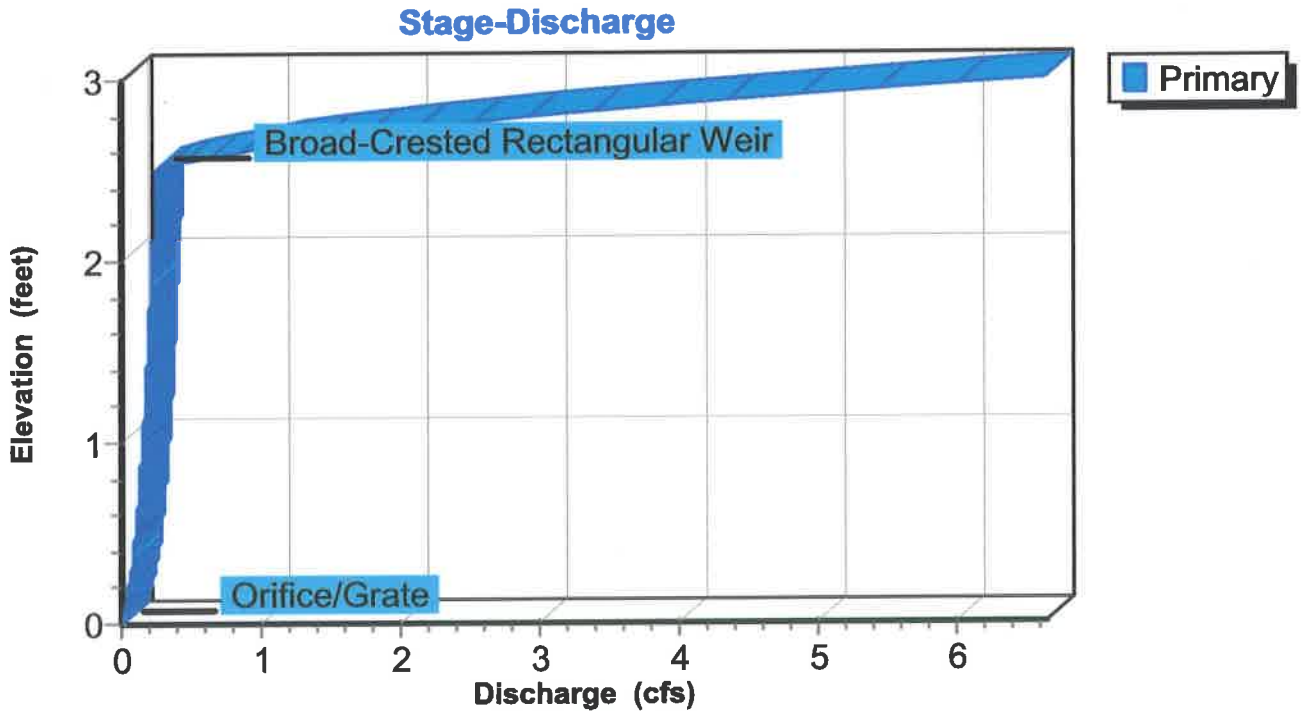
Stage-Discharge for Pond 1P: 100-Year Storm Routing

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
0.00	0.00	0.52	0.11	1.04	0.16	1.56	0.20
0.01	0.00	0.53	0.11	1.05	0.16	1.57	0.20
0.02	0.00	0.54	0.11	1.06	0.16	1.58	0.20
0.03	0.00	0.55	0.11	1.07	0.16	1.59	0.20
0.04	0.00	0.56	0.11	1.08	0.16	1.60	0.20
0.05	0.00	0.57	0.11	1.09	0.16	1.61	0.20
0.06	0.01	0.58	0.11	1.10	0.16	1.62	0.20
0.07	0.01	0.59	0.11	1.11	0.16	1.63	0.20
0.08	0.01	0.60	0.12	1.12	0.17	1.64	0.20
0.09	0.01	0.61	0.12	1.13	0.17	1.65	0.20
0.10	0.02	0.62	0.12	1.14	0.17	1.66	0.20
0.11	0.02	0.63	0.12	1.15	0.17	1.67	0.21
0.12	0.02	0.64	0.12	1.16	0.17	1.68	0.21
0.13	0.03	0.65	0.12	1.17	0.17	1.69	0.21
0.14	0.03	0.66	0.12	1.18	0.17	1.70	0.21
0.15	0.03	0.67	0.12	1.19	0.17	1.71	0.21
0.16	0.04	0.68	0.12	1.20	0.17	1.72	0.21
0.17	0.04	0.69	0.13	1.21	0.17	1.73	0.21
0.18	0.05	0.70	0.13	1.22	0.17	1.74	0.21
0.19	0.05	0.71	0.13	1.23	0.17	1.75	0.21
0.20	0.05	0.72	0.13	1.24	0.17	1.76	0.21
0.21	0.05	0.73	0.13	1.25	0.18	1.77	0.21
0.22	0.06	0.74	0.13	1.26	0.18	1.78	0.21
0.23	0.06	0.75	0.13	1.27	0.18	1.79	0.21
0.24	0.06	0.76	0.13	1.28	0.18	1.80	0.21
0.25	0.06	0.77	0.13	1.29	0.18	1.81	0.21
0.26	0.06	0.78	0.13	1.30	0.18	1.82	0.22
0.27	0.07	0.79	0.14	1.31	0.18	1.83	0.22
0.28	0.07	0.80	0.14	1.32	0.18	1.84	0.22
0.29	0.07	0.81	0.14	1.33	0.18	1.85	0.22
0.30	0.07	0.82	0.14	1.34	0.18	1.86	0.22
0.31	0.07	0.83	0.14	1.35	0.18	1.87	0.22
0.32	0.08	0.84	0.14	1.36	0.18	1.88	0.22
0.33	0.08	0.85	0.14	1.37	0.18	1.89	0.22
0.34	0.08	0.86	0.14	1.38	0.19	1.90	0.22
0.35	0.08	0.87	0.14	1.39	0.19	1.91	0.22
0.36	0.08	0.88	0.14	1.40	0.19	1.92	0.22
0.37	0.08	0.89	0.15	1.41	0.19	1.93	0.22
0.38	0.09	0.90	0.15	1.42	0.19	1.94	0.22
0.39	0.09	0.91	0.15	1.43	0.19	1.95	0.22
0.40	0.09	0.92	0.15	1.44	0.19	1.96	0.22
0.41	0.09	0.93	0.15	1.45	0.19	1.97	0.22
0.42	0.09	0.94	0.15	1.46	0.19	1.98	0.22
0.43	0.09	0.95	0.15	1.47	0.19	1.99	0.23
0.44	0.10	0.96	0.15	1.48	0.19	2.00	0.23
0.45	0.10	0.97	0.15	1.49	0.19	2.01	0.23
0.46	0.10	0.98	0.15	1.50	0.19	2.02	0.23
0.47	0.10	0.99	0.15	1.51	0.19	2.03	0.23
0.48	0.10	1.00	0.16	1.52	0.20	2.04	0.23
0.49	0.10	1.01	0.16	1.53	0.20	2.05	0.23
0.50	0.10	1.02	0.16	1.54	0.20	2.06	0.23
0.51	0.10	1.03	0.16	1.55	0.20	2.07	0.23

Stage-Discharge for Pond 1P: 100-Year Storm Routing (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
2.08	0.23	2.60	0.79
2.09	0.23	2.61	0.87
2.10	0.23	2.62	0.96
2.11	0.23	2.63	1.05
2.12	0.23	2.64	1.14
2.13	0.23	2.65	1.24
2.14	0.23	2.66	1.34
2.15	0.23	2.67	1.44
2.16	0.24	2.68	1.55
2.17	0.24	2.69	1.66
2.18	0.24	2.70	1.77
2.19	0.24	2.71	1.89
2.20	0.24	2.72	2.01
2.21	0.24	2.73	2.13
2.22	0.24	2.74	2.26
2.23	0.24	2.75	2.39
2.24	0.24	2.76	2.52
2.25	0.24	2.77	2.66
2.26	0.24	2.78	2.80
2.27	0.24	2.79	2.94
2.28	0.24	2.80	3.09
2.29	0.24	2.81	3.24
2.30	0.24	2.82	3.39
2.31	0.24	2.83	3.54
2.32	0.24	2.84	3.70
2.33	0.24	2.85	3.86
2.34	0.25	2.86	4.03
2.35	0.25	2.87	4.19
2.36	0.25	2.88	4.36
2.37	0.25	2.89	4.53
2.38	0.25	2.90	4.71
2.39	0.25	2.91	4.89
2.40	0.25	2.92	5.07
2.41	0.25	2.93	5.26
2.42	0.25	2.94	5.45
2.43	0.25	2.95	5.64
2.44	0.25	2.96	5.83
2.45	0.25	2.97	6.03
2.46	0.25	2.98	6.23
2.47	0.25	2.99	6.44
2.48	0.25	3.00	**6.64**
2.49	0.25		
2.50	0.25		
2.51	0.27		
2.52	0.30		
2.53	0.34		
2.54	0.39		
2.55	0.44		
2.56	0.50		
2.57	0.57		
2.58	0.64		
2.59	0.71		

Pond 1P: 100-Year Storm Routing



Stage-Area-Storage for Pond 1P: 100-Year Storm Routing

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
0.00	**2,394**	0	0.52	2,394	1,208
0.01	2,394	23	0.53	2,394	1,231
0.02	2,394	46	0.54	2,394	1,254
0.03	2,394	70	0.55	2,394	1,277
0.04	2,394	93	0.56	2,394	1,300
0.05	2,394	116	0.57	2,394	1,324
0.06	2,394	139	0.58	2,394	1,347
0.07	2,394	163	0.59	2,394	1,370
0.08	2,394	186	0.60	2,394	1,393
0.09	2,394	209	0.61	2,394	1,417
0.10	2,394	232	0.62	2,394	1,440
0.11	2,394	255	0.63	2,394	1,463
0.12	2,394	279	0.64	2,394	1,486
0.13	2,394	302	0.65	2,394	1,509
0.14	2,394	325	0.66	2,394	1,533
0.15	2,394	348	0.67	2,394	1,556
0.16	2,394	372	0.68	2,394	1,579
0.17	2,394	395	0.69	2,394	1,602
0.18	2,394	418	0.70	2,394	1,626
0.19	2,394	441	0.71	2,394	1,649
0.20	2,394	464	0.72	2,394	1,672
0.21	2,394	488	0.73	2,394	1,695
0.22	2,394	511	0.74	2,394	1,718
0.23	2,394	534	0.75	2,394	1,742
0.24	2,394	557	0.76	2,394	1,765
0.25	2,394	581	0.77	2,394	1,788
0.26	2,394	604	0.78	2,394	1,811
0.27	2,394	627	0.79	2,394	1,835
0.28	2,394	650	0.80	2,394	1,858
0.29	2,394	673	0.81	2,394	1,881
0.30	2,394	697	0.82	2,394	1,904
0.31	2,394	720	0.83	2,394	1,927
0.32	2,394	743	0.84	2,394	1,951
0.33	2,394	766	0.85	2,394	1,974
0.34	2,394	790	0.86	2,394	1,997
0.35	2,394	813	0.87	2,394	2,020
0.36	2,394	836	0.88	2,394	2,044
0.37	2,394	859	0.89	2,394	2,067
0.38	2,394	882	0.90	2,394	2,090
0.39	2,394	906	0.91	2,394	2,113
0.40	2,394	929	0.92	2,394	2,136
0.41	2,394	952	0.93	2,394	2,160
0.42	2,394	975	0.94	2,394	2,183
0.43	2,394	999	0.95	2,394	2,206
0.44	2,394	1,022	0.96	2,394	2,229
0.45	2,394	1,045	0.97	2,394	2,253
0.46	2,394	1,068	0.98	2,394	2,276
0.47	2,394	1,091	0.99	2,394	2,299
0.48	2,394	1,115	1.00	2,394	2,322
0.49	2,394	1,138	1.01	2,394	2,345
0.50	2,394	1,161	1.02	2,394	2,369
0.51	2,394	1,184	1.03	2,394	2,392

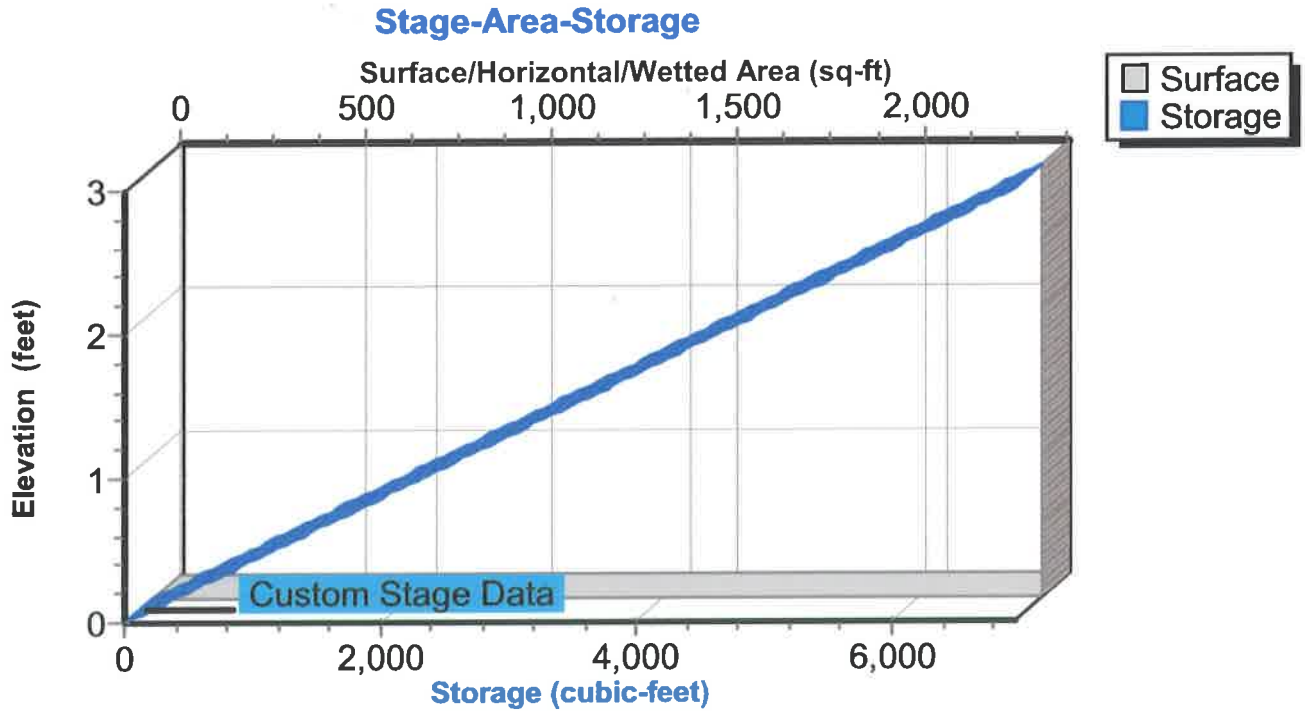
Stage-Area-Storage for Pond 1P: 100-Year Storm Routing (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
1.04	2,394	2,415
1.05	2,394	2,438
1.06	2,394	2,462
1.07	2,394	2,485
1.08	2,394	2,508
1.09	2,394	2,531
1.10	2,394	2,554
1.11	2,394	2,578
1.12	2,394	2,601
1.13	2,394	2,624
1.14	2,394	2,647
1.15	2,394	2,671
1.16	2,394	2,694
1.17	2,394	2,717
1.18	2,394	2,740
1.19	2,394	2,763
1.20	2,394	2,787
1.21	2,394	2,810
1.22	2,394	2,833
1.23	2,394	2,856
1.24	2,394	2,880
1.25	2,394	2,903
1.26	2,394	2,926
1.27	2,394	2,949
1.28	2,394	2,972
1.29	2,394	2,996
1.30	2,394	3,019
1.31	2,394	3,042
1.32	2,394	3,065
1.33	2,394	3,088
1.34	2,394	3,112
1.35	2,394	3,135
1.36	2,394	3,158
1.37	2,394	3,181
1.38	2,394	3,205
1.39	2,394	3,228
1.40	2,394	3,251
1.41	2,394	3,274
1.42	2,394	3,297
1.43	2,394	3,321
1.44	2,394	3,344
1.45	2,394	3,367
1.46	2,394	3,390
1.47	2,394	3,414
1.48	2,394	3,437
1.49	2,394	3,460
1.50	2,394	3,483
1.51	2,394	3,506
1.52	2,394	3,530
1.53	2,394	3,553
1.54	2,394	3,576
1.55	2,394	3,599
1.56	2,394	3,623
1.57	2,394	3,646
1.58	2,394	3,669
1.59	2,394	3,692
1.60	2,394	3,715
1.61	2,394	3,739
1.62	2,394	3,762
1.63	2,394	3,785
1.64	2,394	3,808
1.65	2,394	3,832
1.66	2,394	3,855
1.67	2,394	3,878
1.68	2,394	3,901
1.69	2,394	3,924
1.70	2,394	3,948
1.71	2,394	3,971
1.72	2,394	3,994
1.73	2,394	4,017
1.74	2,394	4,041
1.75	2,394	4,064
1.76	2,394	4,087
1.77	2,394	4,110
1.78	2,394	4,133
1.79	2,394	4,157
1.80	2,394	4,180
1.81	2,394	4,203
1.82	2,394	4,226
1.83	2,394	4,250
1.84	2,394	4,273
1.85	2,394	4,296
1.86	2,394	4,319
1.87	2,394	4,342
1.88	2,394	4,366
1.89	2,394	4,389
1.90	2,394	4,412
1.91	2,394	4,435
1.92	2,394	4,459
1.93	2,394	4,482
1.94	2,394	4,505
1.95	2,394	4,528
1.96	2,394	4,551
1.97	2,394	4,575
1.98	2,394	4,598
1.99	2,394	4,621
2.00	2,394	4,644
2.01	2,394	4,668
2.02	2,394	4,691
2.03	2,394	4,714
2.04	2,394	4,737
2.05	2,394	4,760
2.06	2,394	4,784
2.07	2,394	4,807

Stage-Area-Storage for Pond 1P: 100-Year Storm Routing (continued)

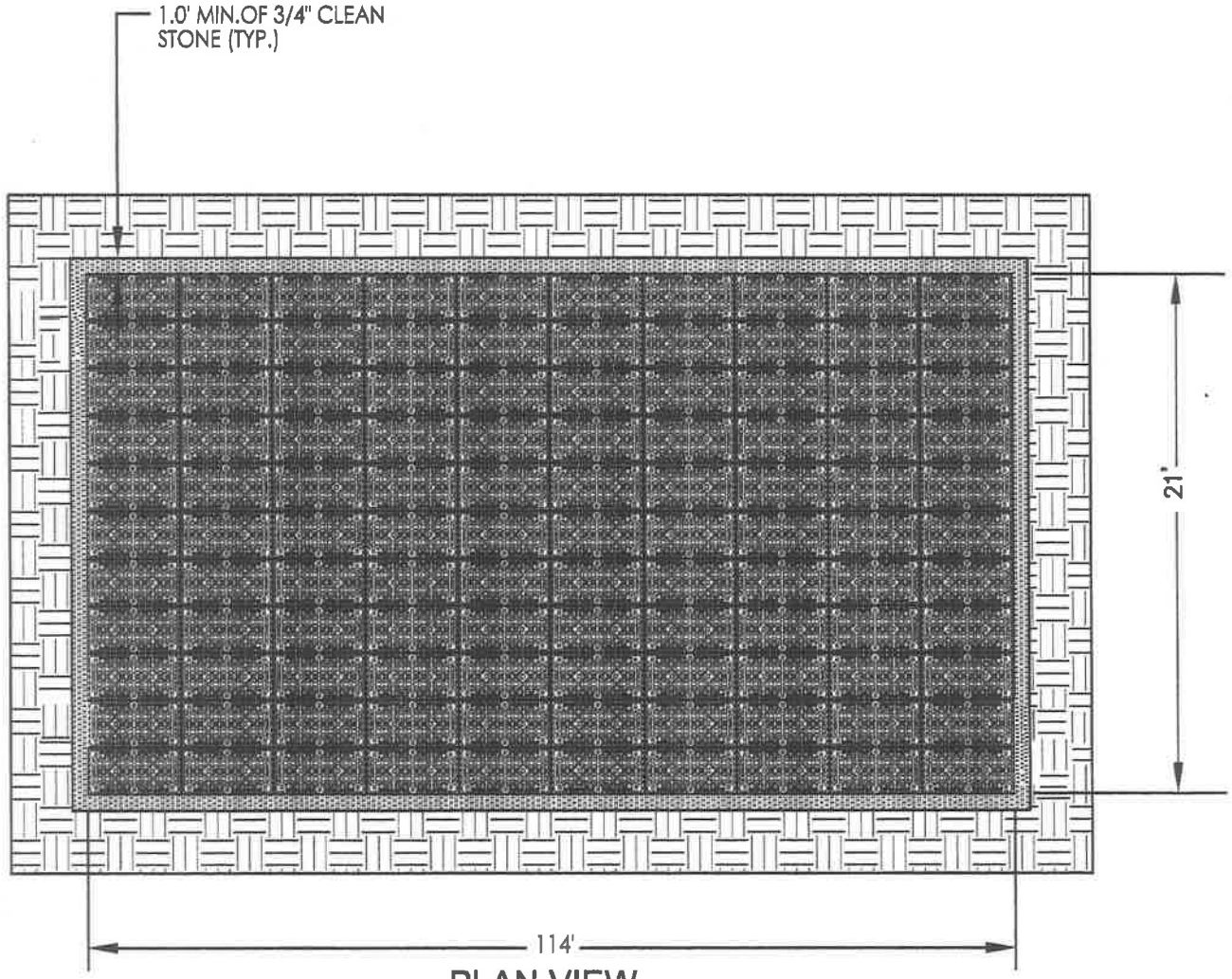
Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
2.08	2,394	4,830
2.09	2,394	4,853
2.10	2,394	4,877
2.11	2,394	4,900
2.12	2,394	4,923
2.13	2,394	4,946
2.14	2,394	4,969
2.15	2,394	4,993
2.16	2,394	5,016
2.17	2,394	5,039
2.18	2,394	5,062
2.19	2,394	5,086
2.20	2,394	5,109
2.21	2,394	5,132
2.22	2,394	5,155
2.23	2,394	5,178
2.24	2,394	5,202
2.25	2,394	5,225
2.26	2,394	5,248
2.27	2,394	5,271
2.28	2,394	5,295
2.29	2,394	5,318
2.30	2,394	5,341
2.31	2,394	5,364
2.32	2,394	5,387
2.33	2,394	5,411
2.34	2,394	5,434
2.35	2,394	5,457
2.36	2,394	5,480
2.37	2,394	5,504
2.38	2,394	5,527
2.39	2,394	5,550
2.40	2,394	5,573
2.41	2,394	5,596
2.42	2,394	5,620
2.43	2,394	5,643
2.44	2,394	5,666
2.45	2,394	5,689
2.46	2,394	5,713
2.47	2,394	5,736
2.48	2,394	5,759
2.49	2,394	5,782
2.50	2,394	5,805
2.51	2,394	5,829
2.52	2,394	5,852
2.53	2,394	5,875
2.54	2,394	5,898
2.55	2,394	5,922
2.56	2,394	5,945
2.57	2,394	5,968
2.58	2,394	5,991
2.59	2,394	6,014
2.60	2,394	6,038
2.61	2,394	6,061
2.62	2,394	6,084
2.63	2,394	6,107
2.64	2,394	6,131
2.65	2,394	6,154
2.66	2,394	6,177
2.67	2,394	6,200
2.68	2,394	6,223
2.69	2,394	6,247
2.70	2,394	6,270
2.71	2,394	6,293
2.72	2,394	6,316
2.73	2,394	6,340
2.74	2,394	6,363
2.75	2,394	6,386
2.76	2,394	6,409
2.77	2,394	6,432
2.78	2,394	6,456
2.79	2,394	6,479
2.80	2,394	6,502
2.81	2,394	6,525
2.82	2,394	6,549
2.83	2,394	6,572
2.84	2,394	6,595
2.85	2,394	6,618
2.86	2,394	6,641
2.87	2,394	6,665
2.88	2,394	6,688
2.89	2,394	6,711
2.90	2,394	6,734
2.91	2,394	6,758
2.92	2,394	6,781
2.93	2,394	6,804
2.94	2,394	6,827
2.95	2,394	6,850
2.96	2,394	6,874
2.97	2,394	6,897
2.98	2,394	6,920
2.99	2,394	6,943
3.00	2,394	**6,967**

Pond 1P: 100-Year Storm Routing



APPENDIX 5

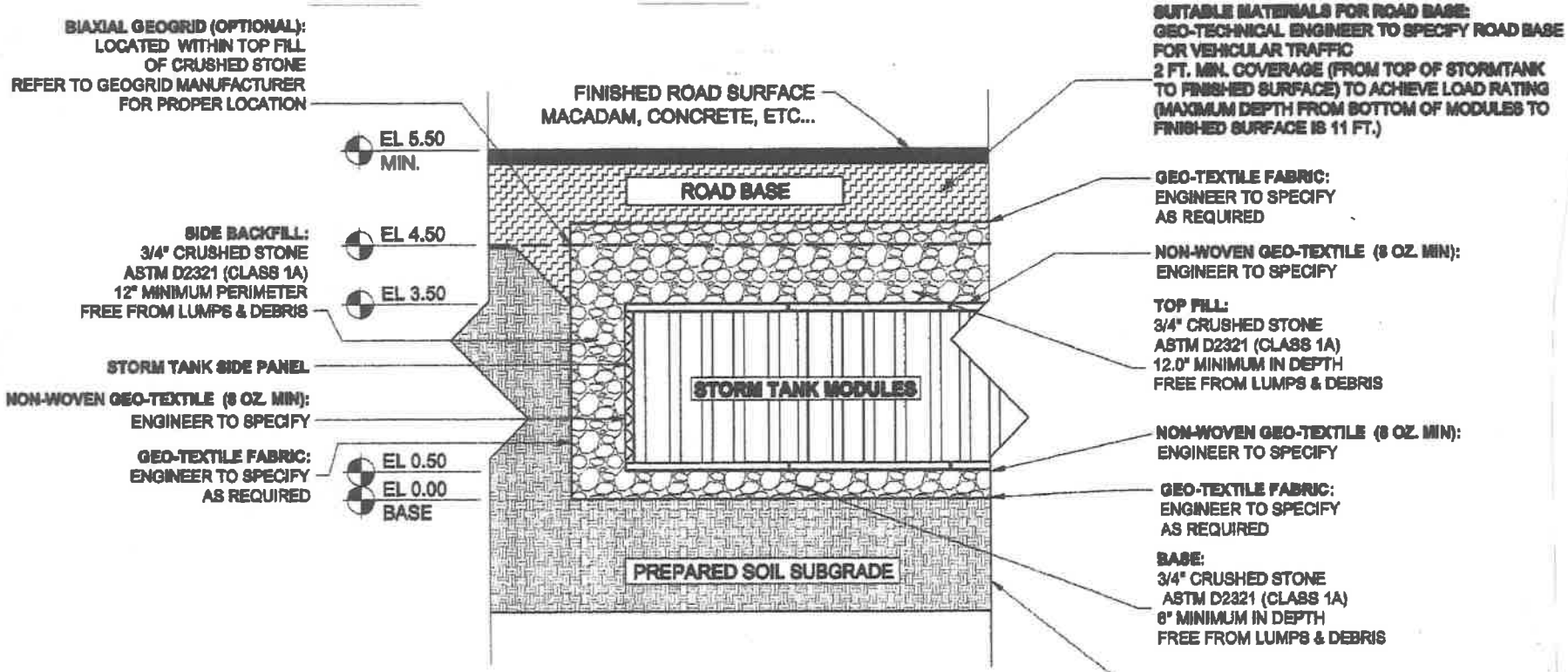
DETENTION FACILITY DETAILS



PLAN VIEW

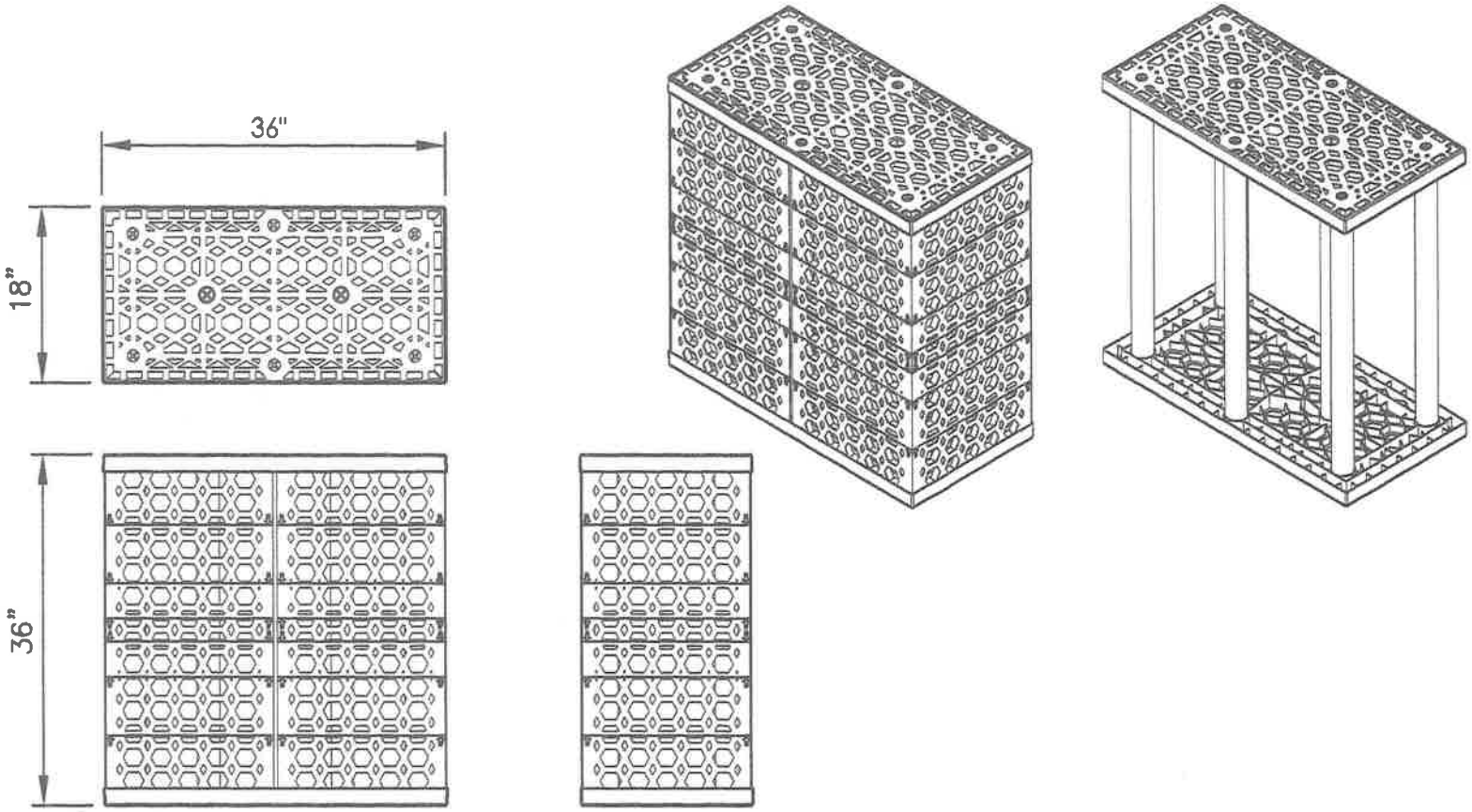
N.T.S.

STORMTANK STORMWATER DETENTION SYSTEM DETAIL



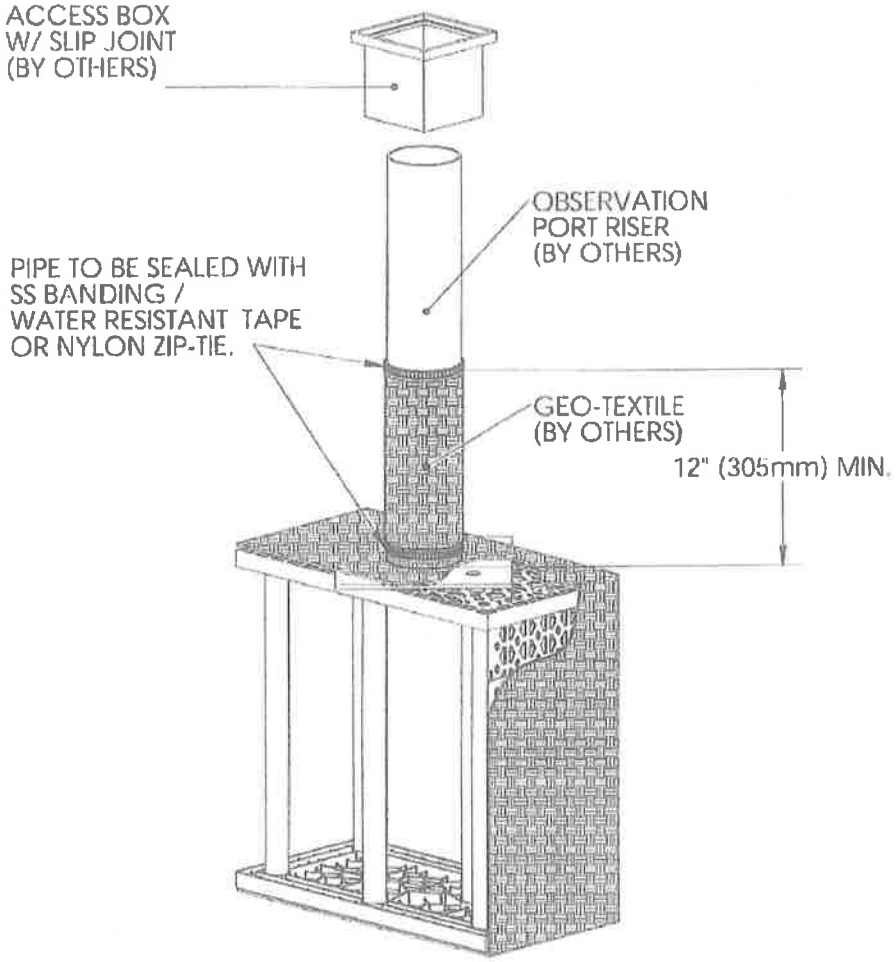
STORM TANK CROSS SECTION - VEHICULAR TRAFFIC AREAS

N.T.S.



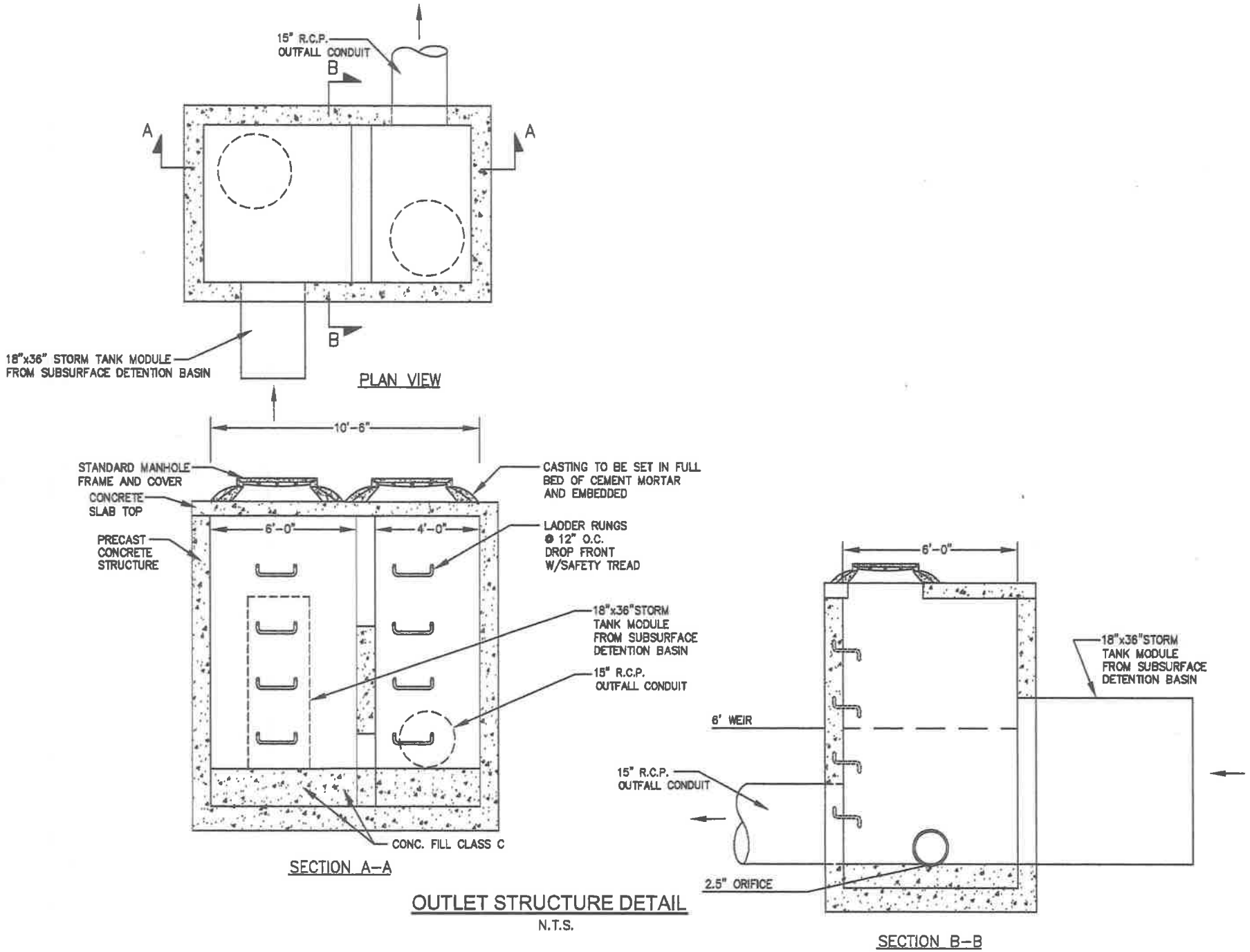
STORMTANK MODULE DETAIL

N.T.S.



STORMTANK 10" DIA. OBSERVATION PORT DETAIL

N.T.S.



OUTLET STRUCTURE DETAIL

N.T.S.

APPENDIX 6

NOMOGRAPHS, CHARTS, GRAPHS AND FIGURES

Prepared by Remo Engineering, LLC

NJ-DEP Intensity vs. Duration

Duration (hours)	Quality (in/hr)	2-Year (in/hr)	5-Year (in/hr)	10-Year (in/hr)	25-Year (in/hr)	50-Year (in/hr)	100-Year (in/hr)
0.10	**4.20**	**5.20**	**6.10**	**6.70**	**7.70**	**8.30**	**9.10**
0.11	3.99	5.00	5.90	6.52	7.50	8.08	8.88
0.12	3.81	4.82	5.72	6.36	7.33	7.89	8.69
0.13	3.65	4.66	5.56	6.22	7.17	7.72	8.52
0.14	3.51	4.52	5.42	6.09	7.03	7.56	8.36
0.15	3.38	4.39	5.29	5.98	6.90	7.41	8.22
0.16	3.27	4.27	5.17	5.87	6.77	7.28	8.08
0.17	3.17	4.17	5.06	5.75	6.65	7.14	7.94
0.18	3.08	4.08	4.94	5.62	6.50	6.99	7.76
0.19	2.99	4.00	4.83	5.49	6.36	6.84	7.59
0.20	2.91	3.92	4.72	5.38	6.23	6.71	7.44
0.21	2.84	3.85	4.63	5.27	6.11	6.58	7.29
0.22	2.78	3.78	4.54	5.17	6.00	6.46	7.16
0.23	2.71	3.72	4.45	5.07	5.89	6.35	7.03
0.24	2.65	3.66	4.37	4.98	5.79	6.25	6.91
0.25	2.60	3.60	4.30	4.90	5.70	6.15	6.80
0.26	2.54	3.51	4.21	4.78	5.56	6.00	6.65
0.27	2.49	3.43	4.13	4.67	5.43	5.85	6.52
0.28	2.43	3.35	4.05	4.57	5.30	5.71	6.39
0.29	2.39	3.28	3.98	4.47	5.19	5.58	6.26
0.30	2.34	3.21	3.91	4.38	5.08	5.46	6.15
0.31	2.29	3.14	3.84	4.29	4.97	5.35	6.04
0.32	2.25	3.08	3.78	4.21	4.87	5.24	5.93
0.33	2.21	3.02	3.72	4.13	4.78	5.13	5.83
0.34	2.17	2.97	3.65	4.05	4.70	5.05	5.74
0.35	2.13	2.92	3.58	3.98	4.62	4.98	5.66
0.36	2.09	2.88	3.51	3.91	4.55	4.90	5.57
0.37	2.06	2.83	3.44	3.85	4.48	4.84	5.49
0.38	2.02	2.79	3.38	3.78	4.42	4.77	5.42
0.39	1.99	2.75	3.32	3.72	4.36	4.71	5.35
0.40	1.96	2.71	3.26	3.67	4.30	4.65	5.28
0.41	1.93	2.68	3.21	3.61	4.24	4.59	5.21
0.42	1.90	2.64	3.16	3.56	4.18	4.53	5.14
0.43	1.87	2.61	3.11	3.51	4.13	4.48	5.08
0.44	1.84	2.57	3.06	3.46	4.08	4.43	5.02
0.45	1.82	2.54	3.01	3.41	4.03	4.38	4.96
0.46	1.79	2.51	2.97	3.37	3.98	4.33	4.91
0.47	1.77	2.48	2.92	3.32	3.93	4.28	4.85
0.48	1.74	2.45	2.88	3.28	3.89	4.24	4.80
0.49	1.72	2.43	2.84	3.24	3.84	4.19	4.75
0.50	1.70	2.40	2.80	3.20	3.80	4.15	4.70
0.51	1.68	2.37	2.77	3.16	3.75	4.10	4.64
0.52	1.65	2.33	2.74	3.12	3.70	4.05	4.58
0.53	1.63	2.30	2.70	3.09	3.66	4.00	4.52
0.54	1.61	2.27	2.67	3.05	3.61	3.95	4.47
0.55	1.58	2.24	2.65	3.02	3.57	3.90	4.41
0.56	1.56	2.21	2.62	2.99	3.52	3.86	4.36
0.57	1.54	2.19	2.59	2.95	3.48	3.82	4.31
0.58	1.52	2.16	2.56	2.92	3.44	3.77	4.26
0.59	1.50	2.13	2.54	2.89	3.40	3.73	4.22
0.60	1.49	2.11	2.51	2.86	3.37	3.69	4.17
0.61	1.47	2.08	2.49	2.84	3.33	3.65	4.12

NJ-DEP Intensity vs. Duration (continued)

Duration (hours)	Quality (in/hr)	2-Year (in/hr)	5-Year (in/hr)	10-Year (in/hr)	25-Year (in/hr)	50-Year (in/hr)	100-Year (in/hr)
0.62	1.45	2.06	2.46	2.81	3.29	3.62	4.08
0.63	1.43	2.04	2.44	2.78	3.26	3.58	4.04
0.64	1.42	2.01	2.42	2.75	3.22	3.54	4.00
0.65	1.40	1.99	2.40	2.73	3.19	3.51	3.96
0.66	1.38	1.97	2.37	2.70	3.16	3.47	3.92
0.67	1.37	1.95	2.35	2.68	3.13	3.44	3.88
0.68	1.35	1.93	2.33	2.65	3.10	3.41	3.84
0.69	1.34	1.91	2.31	2.63	3.07	3.38	3.80
0.70	1.33	1.89	2.29	2.61	3.04	3.34	3.77
0.71	1.31	1.87	2.27	2.58	3.01	3.31	3.73
0.72	1.30	1.85	2.25	2.56	2.98	3.28	3.70
0.73	1.29	1.83	2.24	2.54	2.95	3.26	3.66
0.74	1.27	1.82	2.22	2.52	2.93	3.23	3.63
0.75	1.26	1.80	2.20	2.50	2.90	3.20	3.60
0.76	1.25	1.78	2.18	2.48	2.87	3.17	3.57
0.77	1.24	1.76	2.16	2.46	2.85	3.14	3.54
0.78	1.23	1.75	2.14	2.43	2.83	3.11	3.50
0.79	1.22	1.73	2.12	2.41	2.80	3.08	3.47
0.80	1.21	1.71	2.10	2.39	2.78	3.05	3.44
0.81	1.20	1.70	2.09	2.37	2.76	3.03	3.41
0.82	1.19	1.68	2.07	2.35	2.73	3.00	3.38
0.83	1.18	1.67	2.05	2.33	2.71	2.97	3.36
0.84	1.17	1.65	2.03	2.31	2.69	2.95	3.33
0.85	1.16	1.64	2.02	2.29	2.67	2.92	3.30
0.86	1.15	1.62	2.00	2.27	2.65	2.90	3.27
0.87	1.14	1.61	1.98	2.26	2.63	2.87	3.25
0.88	1.13	1.60	1.97	2.24	2.61	2.85	3.22
0.89	1.12	1.58	1.95	2.22	2.59	2.83	3.20
0.90	1.12	1.57	1.94	2.20	2.57	2.81	3.17
0.91	1.11	1.56	1.92	2.19	2.55	2.78	3.15
0.92	1.10	1.54	1.91	2.17	2.54	2.76	3.13
0.93	1.09	1.53	1.89	2.16	2.52	2.74	3.10
0.94	1.08	1.52	1.88	2.14	2.50	2.72	3.08
0.95	1.08	1.51	1.87	2.12	2.48	2.70	3.06
0.96	1.07	1.50	1.85	2.11	2.47	2.68	3.03
0.97	1.06	1.48	1.84	2.09	2.45	2.66	3.01
0.98	1.05	1.47	1.83	2.08	2.43	2.64	2.99
0.99	1.05	1.46	1.81	2.06	2.42	2.62	2.97
1.00	1.04	1.45	1.80	2.05	2.40	2.60	2.95
1.01	1.03	1.44	1.79	2.04	2.38	2.58	2.93
1.02	1.03	1.43	1.77	2.02	2.37	2.56	2.91
1.03	1.02	1.42	1.76	2.01	2.35	2.55	2.89
1.04	1.01	1.41	1.75	2.00	2.33	2.53	2.87
1.05	1.01	1.40	1.74	1.98	2.32	2.51	2.85
1.06	1.00	1.39	1.73	1.97	2.30	2.49	2.83
1.07	1.00	1.38	1.72	1.96	2.29	2.48	2.81
1.08	0.99	1.38	1.70	1.94	2.27	2.46	2.79
1.09	0.98	1.37	1.69	1.93	2.26	2.45	2.77
1.10	0.98	1.36	1.68	1.92	2.24	2.43	2.75
1.11	0.97	1.35	1.67	1.91	2.23	2.41	2.74
1.12	0.97	1.34	1.66	1.90	2.21	2.40	2.72
1.13	0.96	1.33	1.65	1.88	2.20	2.38	2.70

NJ-DEP Intensity vs. Duration (continued)

Duration (hours)	Quality (in/hr)	2-Year (in/hr)	5-Year (in/hr)	10-Year (in/hr)	25-Year (in/hr)	50-Year (in/hr)	100-Year (in/hr)
1.14	0.96	1.33	1.64	1.87	2.19	2.37	2.68
1.15	0.95	1.32	1.63	1.86	2.17	2.35	2.67
1.16	0.94	1.31	1.62	1.85	2.16	2.34	2.65
1.17	0.94	1.30	1.61	1.84	2.15	2.33	2.63
1.18	0.93	1.30	1.60	1.83	2.13	2.31	2.62
1.19	0.93	1.29	1.59	1.82	2.12	2.30	2.60
1.20	0.92	1.28	1.58	1.81	2.11	2.28	2.59
1.21	0.92	1.27	1.57	1.80	2.10	2.27	2.57
1.22	0.91	1.27	1.56	1.79	2.08	2.26	2.55
1.23	0.91	1.26	1.55	1.78	2.07	2.24	2.54
1.24	0.90	1.25	1.55	1.77	2.06	2.23	2.52
1.25	0.90	1.25	1.54	1.76	2.05	2.22	2.51
1.26	0.90	1.24	1.53	1.75	2.04	2.21	2.50
1.27	0.89	1.23	1.52	1.74	2.03	2.19	2.48
1.28	0.89	1.23	1.51	1.73	2.01	2.18	2.47
1.29	0.88	1.22	1.50	1.72	2.00	2.17	2.45
1.30	0.88	1.21	1.49	1.71	1.99	2.16	2.44
1.31	0.87	1.21	1.49	1.70	1.98	2.15	2.43
1.32	0.87	1.20	1.48	1.69	1.97	2.14	2.41
1.33	0.86	1.19	1.47	1.68	1.96	2.12	2.40
1.34	0.86	1.19	1.46	1.68	1.95	2.11	2.39
1.35	0.86	1.18	1.45	1.67	1.94	2.10	2.37
1.36	0.85	1.18	1.45	1.66	1.93	2.09	2.36
1.37	0.85	1.17	1.44	1.65	1.92	2.08	2.35
1.38	0.84	1.16	1.43	1.64	1.91	2.07	2.34
1.39	0.84	1.16	1.42	1.63	1.90	2.06	2.32
1.40	0.84	1.15	1.42	1.63	1.89	2.05	2.31
1.41	0.83	1.15	1.41	1.62	1.88	2.04	2.30
1.42	0.83	1.14	1.40	1.61	1.87	2.03	2.29
1.43	0.83	1.14	1.40	1.60	1.86	2.02	2.28
1.44	0.82	1.13	1.39	1.59	1.85	2.01	2.27
1.45	0.82	1.13	1.38	1.59	1.84	2.00	2.25
1.46	0.81	1.12	1.38	1.58	1.83	1.99	2.24
1.47	0.81	1.12	1.37	1.57	1.83	1.98	2.23
1.48	0.81	1.11	1.36	1.56	1.82	1.97	2.22
1.49	0.80	1.11	1.36	1.56	1.81	1.96	2.21
1.50	0.80	1.10	1.35	1.55	1.80	1.95	2.20
1.51	0.80	1.09	1.34	1.54	1.79	1.94	2.19
1.52	0.79	1.09	1.34	1.53	1.78	1.93	2.18
1.53	0.79	1.08	1.33	1.53	1.77	1.92	2.17
1.54	0.78	1.08	1.32	1.52	1.76	1.92	2.16
1.55	0.78	1.07	1.32	1.51	1.76	1.91	2.15
1.56	0.77	1.07	1.31	1.51	1.75	1.90	2.14
1.57	0.77	1.06	1.31	1.50	1.74	1.89	2.13
1.58	0.76	1.05	1.30	1.49	1.73	1.88	2.12
1.59	0.76	1.05	1.30	1.48	1.72	1.87	2.11
1.60	0.76	1.04	1.29	1.48	1.71	1.87	2.10
1.61	0.75	1.04	1.28	1.47	1.71	1.86	2.09
1.62	0.75	1.03	1.28	1.46	1.70	1.85	2.09
1.63	0.74	1.03	1.27	1.46	1.69	1.84	2.08
1.64	0.74	1.02	1.27	1.45	1.68	1.83	2.07
1.65	0.74	1.02	1.26	1.44	1.68	1.83	2.06

NJ-DEP Intensity vs. Duration (continued)

Duration (hours)	Quality (in/hr)	2-Year (in/hr)	5-Year (in/hr)	10-Year (in/hr)	25-Year (in/hr)	50-Year (in/hr)	100-Year (in/hr)
1.66	0.73	1.01	1.26	1.44	1.67	1.82	2.05
1.67	0.73	1.01	1.25	1.43	1.66	1.81	2.04
1.68	0.72	1.00	1.25	1.42	1.65	1.80	2.03
1.69	0.72	1.00	1.24	1.42	1.65	1.80	2.02
1.70	0.72	0.99	1.23	1.41	1.64	1.79	2.02
1.71	0.71	0.99	1.23	1.41	1.63	1.78	2.01
1.72	0.71	0.98	1.22	1.40	1.62	1.77	2.00
1.73	0.71	0.98	1.22	1.39	1.62	1.77	1.99
1.74	0.70	0.97	1.21	1.39	1.61	1.76	1.98
1.75	0.70	0.97	1.21	1.38	1.60	1.75	1.98
1.76	0.69	0.97	1.20	1.38	1.60	1.75	1.97
1.77	0.69	0.96	1.20	1.37	1.59	1.74	1.96
1.78	0.69	0.96	1.20	1.36	1.58	1.73	1.95
1.79	0.68	0.95	1.19	1.36	1.58	1.73	1.94
1.80	0.68	0.95	1.19	1.35	1.57	1.72	1.94
1.81	0.68	0.94	1.18	1.35	1.56	1.71	1.93
1.82	0.67	0.94	1.18	1.34	1.56	1.71	1.92
1.83	0.67	0.94	1.17	1.34	1.55	1.70	1.92
1.84	0.67	0.93	1.17	1.33	1.54	1.69	1.91
1.85	0.66	0.93	1.16	1.33	1.54	1.69	1.90
1.86	0.66	0.92	1.16	1.32	1.53	1.68	1.89
1.87	0.66	0.92	1.15	1.31	1.53	1.68	1.89
1.88	0.65	0.92	1.15	1.31	1.52	1.67	1.88
1.89	0.65	0.91	1.15	1.30	1.51	1.66	1.87
1.90	0.65	0.91	1.14	1.30	1.51	1.66	1.87
1.91	0.65	0.90	1.14	1.29	1.50	1.65	1.86
1.92	0.64	0.90	1.13	1.29	1.50	1.65	1.85
1.93	0.64	0.90	1.13	1.28	1.49	1.64	1.85
1.94	0.64	0.89	1.12	1.28	1.48	1.63	1.84
1.95	0.63	0.89	1.12	1.27	1.48	1.63	1.83
1.96	0.63	0.88	1.12	1.27	1.47	1.62	1.83
1.97	0.63	0.88	1.11	1.26	1.47	1.62	1.82
1.98	0.63	0.88	1.11	1.26	1.46	1.61	1.81
1.99	0.62	0.87	1.10	1.25	1.46	1.61	1.81
2.00	0.62	0.87	1.10	1.25	1.45	1.60	1.80
2.01	0.62	0.87	1.10	1.25	1.44	1.59	1.79
2.02	0.62	0.86	1.09	1.24	1.44	1.59	1.79
2.03	0.61	0.86	1.09	1.24	1.43	1.58	1.78
2.04	0.61	0.86	1.08	1.23	1.43	1.58	1.77
2.05	0.61	0.85	1.08	1.23	1.42	1.57	1.77
2.06	0.61	0.85	1.08	1.22	1.42	1.57	1.76
2.07	0.60	0.85	1.07	1.22	1.41	1.56	1.76
2.08	0.60	0.84	1.07	1.21	1.41	1.56	1.75
2.09	0.60	0.84	1.06	1.21	1.40	1.55	1.74
2.10	0.60	0.84	1.06	1.20	1.40	1.55	1.74
2.11	0.60	0.84	1.06	1.20	1.39	1.54	1.73
2.12	0.59	0.83	1.05	1.20	1.39	1.54	1.73
2.13	0.59	0.83	1.05	1.19	1.39	1.53	1.72
2.14	0.59	0.83	1.05	1.19	1.38	1.53	1.72
2.15	0.59	0.82	1.04	1.18	1.38	1.52	1.71
2.16	0.59	0.82	1.04	1.18	1.37	1.51	1.70
2.17	0.58	0.82	1.03	1.18	1.37	1.51	1.70

NJ-DEP Intensity vs. Duration (continued)

Duration (hours)	Quality (in/hr)	2-Year (in/hr)	5-Year (in/hr)	10-Year (in/hr)	25-Year (in/hr)	50-Year (in/hr)	100-Year (in/hr)
2.18	0.58	0.82	1.03	1.17	1.36	1.51	1.69
2.19	0.58	0.81	1.03	1.17	1.36	1.50	1.69
2.20	0.58	0.81	1.02	1.16	1.35	1.50	1.68
2.21	0.58	0.81	1.02	1.16	1.35	1.49	1.68
2.22	0.57	0.80	1.02	1.16	1.34	1.49	1.67
2.23	0.57	0.80	1.01	1.15	1.34	1.48	1.67
2.24	0.57	0.80	1.01	1.15	1.34	1.48	1.66
2.25	0.57	0.80	1.01	1.14	1.33	1.47	1.66
2.26	0.57	0.79	1.00	1.14	1.33	1.47	1.65
2.27	0.56	0.79	1.00	1.14	1.32	1.46	1.65
2.28	0.56	0.79	1.00	1.13	1.32	1.46	1.64
2.29	0.56	0.79	0.99	1.13	1.31	1.45	1.64
2.30	0.56	0.78	0.99	1.12	1.31	1.45	1.63
2.31	0.56	0.78	0.99	1.12	1.31	1.44	1.63
2.32	0.56	0.78	0.98	1.12	1.30	1.44	1.62
2.33	0.55	0.77	0.98	1.11	1.30	1.44	1.62
2.34	0.55	0.77	0.98	1.11	1.29	1.43	1.61
2.35	0.55	0.77	0.97	1.11	1.29	1.43	1.61
2.36	0.55	0.77	0.97	1.10	1.29	1.42	1.60
2.37	0.55	0.77	0.97	1.10	1.28	1.42	1.60
2.38	0.55	0.76	0.96	1.10	1.28	1.41	1.59
2.39	0.54	0.76	0.96	1.09	1.27	1.41	1.59
2.40	0.54	0.76	0.96	1.09	1.27	1.41	1.58
2.41	0.54	0.76	0.96	1.09	1.27	1.40	1.58
2.42	0.54	0.75	0.95	1.08	1.26	1.40	1.57
2.43	0.54	0.75	0.95	1.08	1.26	1.39	1.57
2.44	0.54	0.75	0.95	1.08	1.25	1.39	1.56
2.45	0.53	0.75	0.94	1.07	1.25	1.39	1.56
2.46	0.53	0.74	0.94	1.07	1.25	1.38	1.55
2.47	0.53	0.74	0.94	1.07	1.24	1.38	1.55
2.48	0.53	0.74	0.94	1.06	1.24	1.37	1.55
2.49	0.53	0.74	0.93	1.06	1.24	1.37	1.54
2.50	0.53	0.73	0.93	1.06	1.23	1.37	1.54
2.51	0.52	0.73	0.93	1.05	1.23	1.36	1.53
2.52	0.52	0.73	0.92	1.05	1.23	1.36	1.53
2.53	0.52	0.73	0.92	1.05	1.22	1.35	1.52
2.54	0.52	0.73	0.92	1.04	1.22	1.35	1.52
2.55	0.52	0.72	0.92	1.04	1.22	1.35	1.51
2.56	0.52	0.72	0.91	1.04	1.21	1.34	1.51
2.57	0.52	0.72	0.91	1.03	1.21	1.34	1.51
2.58	0.51	0.72	0.91	1.03	1.21	1.34	1.50
2.59	0.51	0.72	0.91	1.03	1.20	1.33	1.50
2.60	0.51	0.71	0.90	1.03	1.20	1.33	1.49
2.61	0.51	0.71	0.90	1.02	1.19	1.32	1.49
2.62	0.51	0.71	0.90	1.02	1.19	1.32	1.49
2.63	0.51	0.71	0.89	1.02	1.19	1.32	1.48
2.64	0.51	0.71	0.89	1.01	1.19	1.31	1.48
2.65	0.50	0.70	0.89	1.01	1.18	1.31	1.47
2.66	0.50	0.70	0.89	1.01	1.18	1.31	1.47
2.67	0.50	0.70	0.88	1.00	1.18	1.30	1.47
2.68	0.50	0.70	0.88	1.00	1.17	1.30	1.46
2.69	0.50	0.70	0.88	1.00	1.17	1.30	1.46

NJ-DEP Intensity vs. Duration (continued)

Duration (hours)	Quality (in/hr)	2-Year (in/hr)	5-Year (in/hr)	10-Year (in/hr)	25-Year (in/hr)	50-Year (in/hr)	100-Year (in/hr)
2.70	0.50	0.69	0.88	1.00	1.17	1.29	1.45
2.71	0.50	0.69	0.87	0.99	1.16	1.29	1.45
2.72	0.49	0.69	0.87	0.99	1.16	1.29	1.45
2.73	0.49	0.69	0.87	0.99	1.16	1.28	1.44
2.74	0.49	0.69	0.87	0.99	1.15	1.28	1.44
2.75	0.49	0.68	0.86	0.98	1.15	1.28	1.44
2.76	0.49	0.68	0.86	0.98	1.15	1.27	1.43
2.77	0.49	0.68	0.86	0.98	1.14	1.27	1.43
2.78	0.49	0.68	0.86	0.97	1.14	1.27	1.42
2.79	0.49	0.68	0.86	0.97	1.14	1.26	1.42
2.80	0.48	0.67	0.85	0.97	1.14	1.26	1.42
2.81	0.48	0.67	0.85	0.97	1.13	1.26	1.41
2.82	0.48	0.67	0.85	0.96	1.13	1.25	1.41
2.83	0.48	0.67	0.85	0.96	1.13	1.25	1.41
2.84	0.48	0.67	0.84	0.96	1.12	1.25	1.40
2.85	0.48	0.67	0.84	0.96	1.12	1.24	1.40
2.86	0.48	0.66	0.84	0.95	1.12	1.24	1.40
2.87	0.48	0.66	0.84	0.95	1.12	1.24	1.39
2.88	0.47	0.66	0.84	0.95	1.11	1.24	1.39
2.89	0.47	0.66	0.83	0.95	1.11	1.23	1.39
2.90	0.47	0.66	0.83	0.94	1.11	1.23	1.38
2.91	0.47	0.65	0.83	0.94	1.10	1.23	1.38
2.92	0.47	0.65	0.83	0.94	1.10	1.22	1.38
2.93	0.47	0.65	0.82	0.94	1.10	1.22	1.37
2.94	0.47	0.65	0.82	0.93	1.10	1.22	1.37
2.95	0.47	0.65	0.82	0.93	1.09	1.21	1.37
2.96	0.46	0.65	0.82	0.93	1.09	1.21	1.36
2.97	0.46	0.64	0.82	0.93	1.09	1.21	1.36
2.98	0.46	0.64	0.81	0.92	1.09	1.21	1.36
2.99	0.46	0.64	0.81	0.92	1.08	1.20	1.35
3.00	0.46	0.64	0.81	0.92	1.08	1.20	1.35
3.01	0.46	0.64	0.81	0.92	1.08	1.20	1.35
3.02	0.46	0.64	0.81	0.92	1.07	1.19	1.34
3.03	0.46	0.63	0.80	0.91	1.07	1.19	1.34
3.04	0.46	0.63	0.80	0.91	1.07	1.19	1.34
3.05	0.45	0.63	0.80	0.91	1.07	1.19	1.33
3.06	0.45	0.63	0.80	0.91	1.06	1.18	1.33
3.07	0.45	0.63	0.80	0.91	1.06	1.18	1.33
3.08	0.45	0.63	0.80	0.90	1.06	1.18	1.32
3.09	0.45	0.63	0.79	0.90	1.06	1.17	1.32
3.10	0.45	0.62	0.79	0.90	1.05	1.17	1.32
3.11	0.45	0.62	0.79	0.90	1.05	1.17	1.32
3.12	0.45	0.62	0.79	0.89	1.05	1.17	1.31
3.13	0.45	0.62	0.79	0.89	1.05	1.16	1.31
3.14	0.44	0.62	0.79	0.89	1.04	1.16	1.31
3.15	0.44	0.62	0.78	0.89	1.04	1.16	1.30
3.16	0.44	0.61	0.78	0.89	1.04	1.15	1.30
3.17	0.44	0.61	0.78	0.88	1.04	1.15	1.30
3.18	0.44	0.61	0.78	0.88	1.03	1.15	1.30
3.19	0.44	0.61	0.78	0.88	1.03	1.15	1.29
3.20	0.44	0.61	0.78	0.88	1.03	1.14	1.29
3.21	0.44	0.61	0.77	0.88	1.03	1.14	1.29

NJ-DEP Intensity vs. Duration (continued)

Duration (hours)	Quality (in/hr)	2-Year (in/hr)	5-Year (in/hr)	10-Year (in/hr)	25-Year (in/hr)	50-Year (in/hr)	100-Year (in/hr)
3.22	0.44	0.61	0.77	0.87	1.02	1.14	1.28
3.23	0.43	0.60	0.77	0.87	1.02	1.14	1.28
3.24	0.43	0.60	0.77	0.87	1.02	1.13	1.28
3.25	0.43	0.60	0.77	0.87	1.02	1.13	1.28
3.26	0.43	0.60	0.77	0.87	1.01	1.13	1.27
3.27	0.43	0.60	0.77	0.87	1.01	1.13	1.27
3.28	0.43	0.60	0.76	0.86	1.01	1.12	1.27
3.29	0.43	0.60	0.76	0.86	1.01	1.12	1.26
3.30	0.43	0.59	0.76	0.86	1.01	1.12	1.26
3.31	0.43	0.59	0.76	0.86	1.00	1.12	1.26
3.32	0.43	0.59	0.76	0.86	1.00	1.11	1.26
3.33	0.43	0.59	0.76	0.85	1.00	1.11	1.25
3.34	0.42	0.59	0.75	0.85	1.00	1.11	1.25
3.35	0.42	0.59	0.75	0.85	0.99	1.11	1.25
3.36	0.42	0.59	0.75	0.85	0.99	1.10	1.25
3.37	0.42	0.58	0.75	0.85	0.99	1.10	1.24
3.38	0.42	0.58	0.75	0.85	0.99	1.10	1.24
3.39	0.42	0.58	0.75	0.84	0.99	1.10	1.24
3.40	0.42	0.58	0.75	0.84	0.98	1.09	1.23
3.41	0.42	0.58	0.74	0.84	0.98	1.09	1.23
3.42	0.42	0.58	0.74	0.84	0.98	1.09	1.23
3.43	0.42	0.58	0.74	0.84	0.98	1.09	1.23
3.44	0.41	0.57	0.74	0.83	0.97	1.08	1.22
3.45	0.41	0.57	0.74	0.83	0.97	1.08	1.22
3.46	0.41	0.57	0.74	0.83	0.97	1.08	1.22
3.47	0.41	0.57	0.74	0.83	0.97	1.08	1.22
3.48	0.41	0.57	0.73	0.83	0.97	1.08	1.21
3.49	0.41	0.57	0.73	0.83	0.96	1.07	1.21
3.50	0.41	0.57	0.73	0.82	0.96	1.07	1.21
3.51	0.41	0.57	0.73	0.82	0.96	1.07	1.21
3.52	0.41	0.56	0.73	0.82	0.96	1.07	1.20
3.53	0.41	0.56	0.73	0.82	0.96	1.06	1.20
3.54	0.41	0.56	0.73	0.82	0.95	1.06	1.20
3.55	0.40	0.56	0.72	0.82	0.95	1.06	1.20
3.56	0.40	0.56	0.72	0.81	0.95	1.06	1.20
3.57	0.40	0.56	0.72	0.81	0.95	1.06	1.19
3.58	0.40	0.56	0.72	0.81	0.95	1.05	1.19
3.59	0.40	0.56	0.72	0.81	0.94	1.05	1.19
3.60	0.40	0.55	0.72	0.81	0.94	1.05	1.19
3.61	0.40	0.55	0.72	0.81	0.94	1.05	1.18
3.62	0.40	0.55	0.72	0.81	0.94	1.04	1.18
3.63	0.40	0.55	0.71	0.80	0.94	1.04	1.18
3.64	0.40	0.55	0.71	0.80	0.93	1.04	1.18
3.65	0.40	0.55	0.71	0.80	0.93	1.04	1.17
3.66	0.40	0.55	0.71	0.80	0.93	1.04	1.17
3.67	0.39	0.55	0.71	0.80	0.93	1.03	1.17
3.68	0.39	0.54	0.71	0.80	0.93	1.03	1.17
3.69	0.39	0.54	0.71	0.79	0.92	1.03	1.17
3.70	0.39	0.54	0.71	0.79	0.92	1.03	1.16
3.71	0.39	0.54	0.70	0.79	0.92	1.03	1.16
3.72	0.39	0.54	0.70	0.79	0.92	1.02	1.16
3.73	0.39	0.54	0.70	0.79	0.92	1.02	1.16

NJ-DEP Intensity vs. Duration (continued)

Duration (hours)	Quality (in/hr)	2-Year (in/hr)	5-Year (in/hr)	10-Year (in/hr)	25-Year (in/hr)	50-Year (in/hr)	100-Year (in/hr)
3.74	0.39	0.54	0.70	0.79	0.92	1.02	1.15
3.75	0.39	0.54	0.70	0.79	0.91	1.02	1.15
3.76	0.39	0.54	0.70	0.78	0.91	1.02	1.15
3.77	0.39	0.53	0.70	0.78	0.91	1.01	1.15
3.78	0.39	0.53	0.70	0.78	0.91	1.01	1.15
3.79	0.39	0.53	0.69	0.78	0.91	1.01	1.14
3.80	0.38	0.53	0.69	0.78	0.90	1.01	1.14
3.81	0.38	0.53	0.69	0.78	0.90	1.01	1.14
3.82	0.38	0.53	0.69	0.77	0.90	1.00	1.14
3.83	0.38	0.53	0.69	0.77	0.90	1.00	1.13
3.84	0.38	0.53	0.69	0.77	0.90	1.00	1.13
3.85	0.38	0.53	0.69	0.77	0.90	1.00	1.13
3.86	0.38	0.52	0.69	0.77	0.89	1.00	1.13
3.87	0.38	0.52	0.68	0.77	0.89	0.99	1.13
3.88	0.38	0.52	0.68	0.77	0.89	0.99	1.12
3.89	0.38	0.52	0.68	0.77	0.89	0.99	1.12
3.90	0.38	0.52	0.68	0.76	0.89	0.99	1.12
3.91	0.38	0.52	0.68	0.76	0.89	0.99	1.12
3.92	0.38	0.52	0.68	0.76	0.88	0.98	1.12
3.93	0.37	0.52	0.68	0.76	0.88	0.98	1.11
3.94	0.37	0.52	0.68	0.76	0.88	0.98	1.11
3.95	0.37	0.52	0.68	0.76	0.88	0.98	1.11
3.96	0.37	0.51	0.67	0.76	0.88	0.98	1.11
3.97	0.37	0.51	0.67	0.75	0.87	0.98	1.11
3.98	0.37	0.51	0.67	0.75	0.87	0.97	1.10
3.99	0.37	0.51	0.67	0.75	0.87	0.97	1.10

Prepared by Remo Engineering, LLC

IDF Curve Report

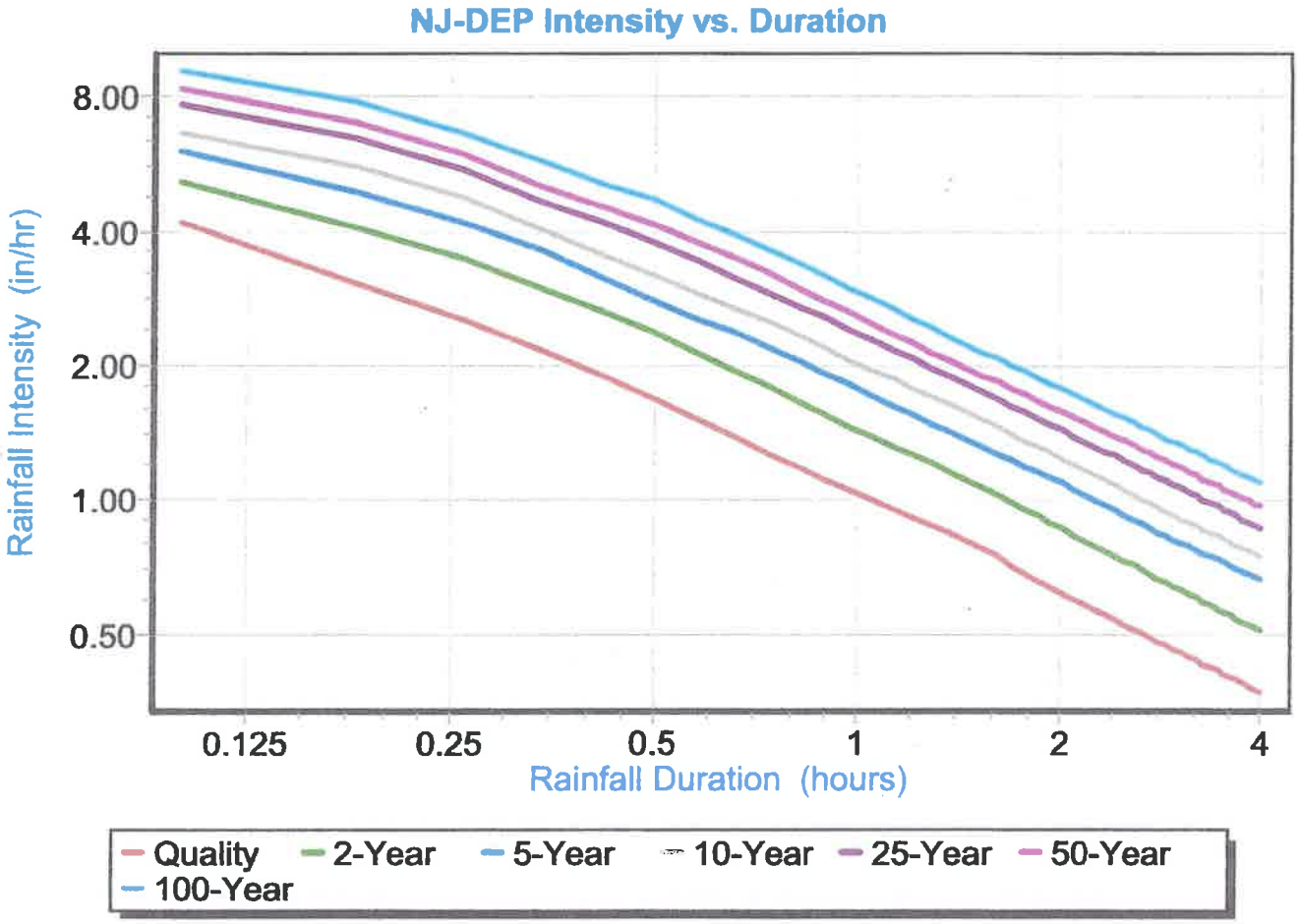


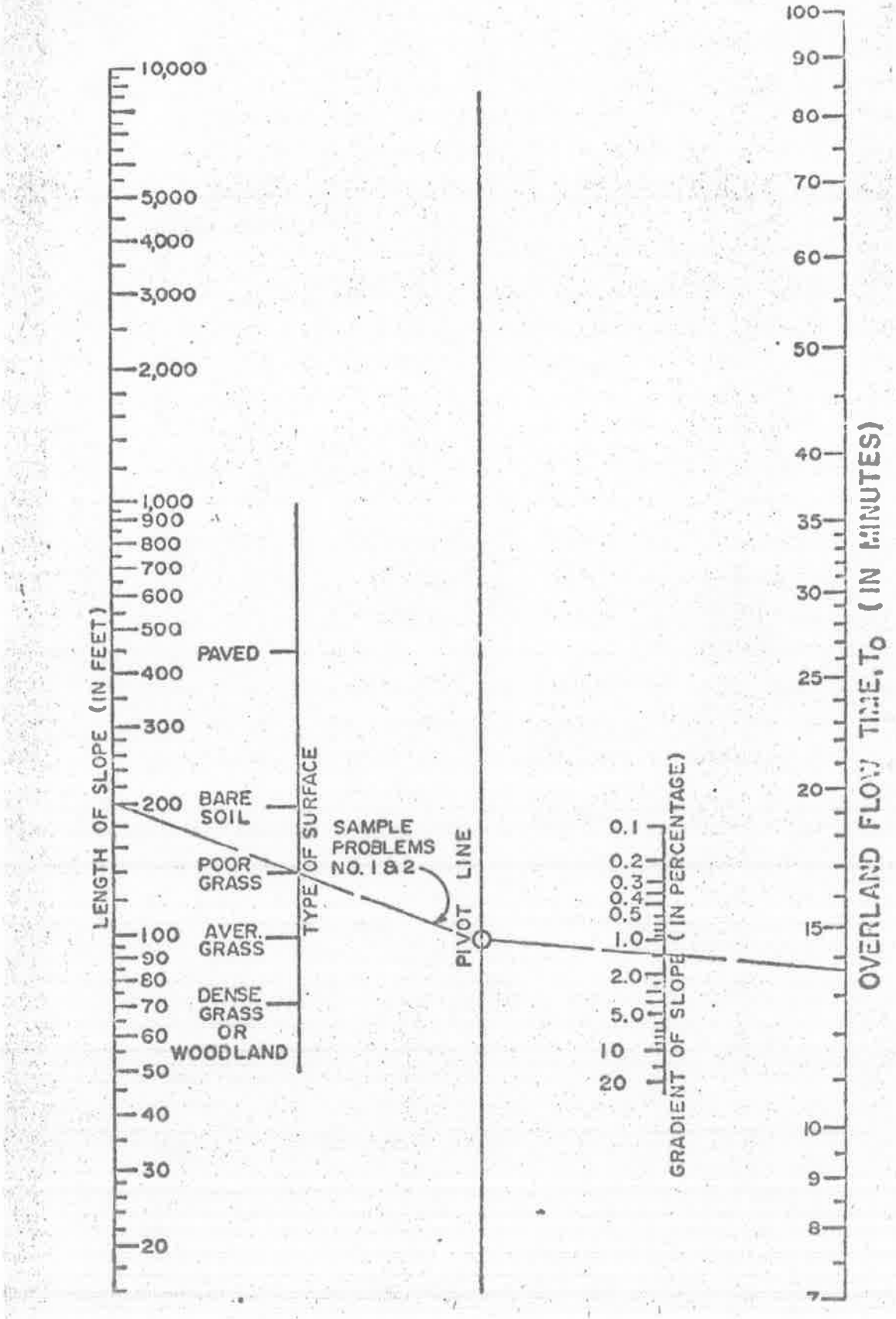
TABLE OF RUNOFF COEFFICIENTS

CHARACTER OF THE LAND	RUNOFF COEFFICIENTS
Asphalt Pavement	0.80-0.95
Concrete	0.70-0.90
Brick Pavement	0.70-0.85
Roofs	0.75-0.95
Gravel	0.35-0.70
Cultivated or No Cover, Sandy Soil	
Flat (under 3%)	0.25-0.32
Average (3%-8%)	0.33-0.39
Steep (over 8%)	0.40-0.50
Cultivated or No Cover, Heavy Soil	
Flat (under 3%)	0.40-0.50
Average (3%-8%)	0.50-0.65
Steep (over 8%)	0.65-0.75
Woodland, Sandy Soil	
Flat (under 3%)	0.10-0.20
Average (3%-8%)	0.20-0.25
Steep (over 8%)	0.25-0.30
Woodland, Heavy Soil	
Flat (under 3%)	0.22-0.32
Average (3%-8%)	0.32-0.40
Steep (over 8%)	0.40-0.50
Lawns or Pasture, Sandy Soil	
Flat (under 3%)	0.07-0.13
Average (3%-8%)	0.13-0.18
Steep (over 8%)	0.18-0.25
Lawns or Pasture, Heavy Soil	
Flat (under 3%)	0.21-0.25
Average (3%-8%)	0.25-0.32
Steep (over 8%)	0.32-0.40

Source: Design and Construction of Sanitary and Storm Sewers; ASCE and Water Control Guide for Suburban and Rural Residential New Jersey; Rutgers State University

Nomograph For The Calculation Of "T_o"

(NEW JERSEY HIGHWAY AUTHORITY - GARDEN STATE PARKWAY, 1952)



APPENDIX 7

DRAINAGE AREA MAPS