



**Lockport-Batavia Line #112
Rebuild Project**

Appendix G

Stormwater Pollution Prevention Plan

Part 4 of 8

Summary for Pond 9P: Culvert 026

[57] Hint: Peaked at 607.92' (Flood elevation advised)

Inflow Area = 2.726 ac, 0.00% Impervious, Inflow Depth = 3.00" for 100-yr event
 Inflow = 3.67 cfs @ 13.04 hrs, Volume= 0.681 af
 Outflow = 3.67 cfs @ 13.04 hrs, Volume= 0.681 af, Atten= 0%, Lag= 0.0 min
 Primary = 3.67 cfs @ 13.04 hrs, Volume= 0.681 af

Routing by Stor-Ind method, Time Span= 5.00-48.00 hrs, dt= 0.05 hrs

Peak Elev= 607.92' @ 13.04 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	606.90'	18.0" Round Culvert 026 w/ 3.6" inside fill L= 46.2' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 606.60' / 605.40' S= 0.0260 ' S= 0.0260 ' Cc= 0.900 n= 0.010 PVC, smooth interior, Flow Area= 1.52 sf
#2	Primary	609.60'	100.0' long + 3.0 ' SideZ x 20.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63

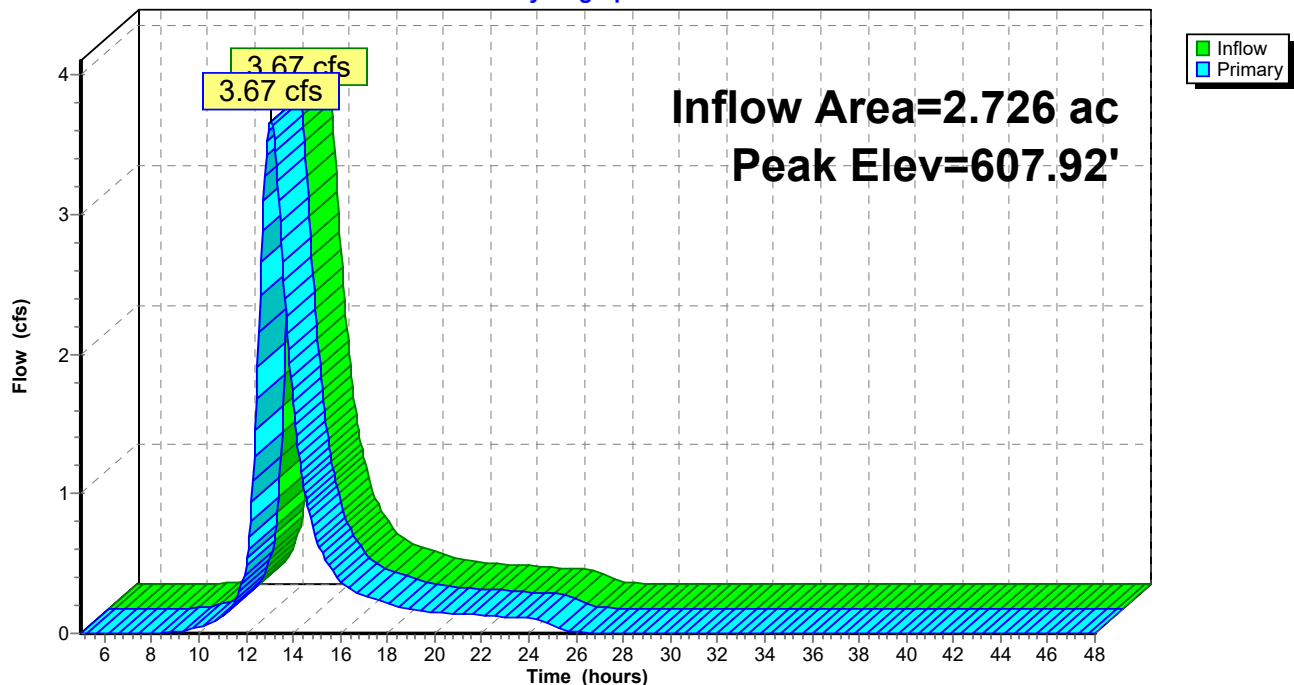
Primary OutFlow Max=3.66 cfs @ 13.04 hrs HW=607.92' (Free Discharge)

1=Culvert 026 (Inlet Controls 3.66 cfs @ 2.62 fps)

2=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond 9P: Culvert 026

Hydrograph



Summary for Pond 15P: Culvert 024

[57] Hint: Peaked at 613.41' (Flood elevation advised)

Inflow Area = 12.746 ac, 0.00% Impervious, Inflow Depth = 2.81" for 100-yr event
 Inflow = 18.81 cfs @ 12.83 hrs, Volume= 2.989 af
 Outflow = 18.81 cfs @ 12.83 hrs, Volume= 2.989 af, Atten= 0%, Lag= 0.0 min
 Primary = 18.81 cfs @ 12.83 hrs, Volume= 2.989 af

Routing by Stor-Ind method, Time Span= 5.00-48.00 hrs, dt= 0.05 hrs

Peak Elev= 613.41' @ 12.83 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	610.60'	18.0" Round Culvert 024 w/ 3.6" inside fill L= 46.2' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 610.30' / 608.50' S= 0.0390 ' / ' Cc= 0.900 n= 0.012 Steel, smooth, Flow Area= 1.52 sf
#2	Primary	613.30'	100.0' long + 3.0 ' SideZ x 20.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63

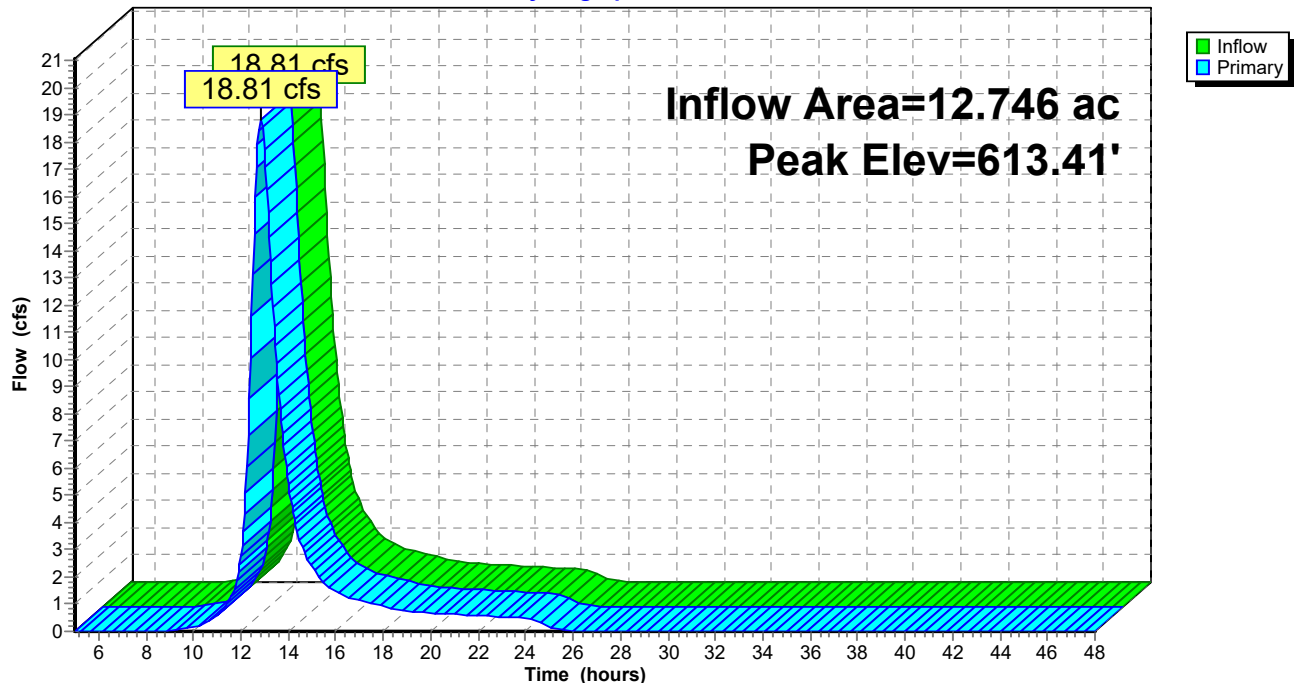
Primary OutFlow Max=18.76 cfs @ 12.83 hrs HW=613.41' (Free Discharge)

1=Culvert 024 (Inlet Controls 8.65 cfs @ 5.71 fps)

2=Broad-Crested Rectangular Weir (Weir Controls 10.11 cfs @ 0.90 fps)

Pond 15P: Culvert 024

Hydrograph



Summary for Pond 17P: Culvert 023

Inflow Area = 0.392 ac, 0.00% Impervious, Inflow Depth = 2.55" for 100-yr event
 Inflow = 0.73 cfs @ 12.50 hrs, Volume= 0.083 af
 Outflow = 0.73 cfs @ 12.50 hrs, Volume= 0.083 af, Atten= 0%, Lag= 0.0 min
 Primary = 0.73 cfs @ 12.50 hrs, Volume= 0.083 af

Routing by Stor-Ind method, Time Span= 5.00-48.00 hrs, dt= 0.05 hrs

Peak Elev= 612.43' @ 12.50 hrs

Flood Elev= 920.00'

Device	Routing	Invert	Outlet Devices
#1	Primary	612.22'	18.0" Round Culvert 023 w/ 3.6" inside fill L= 27.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 611.92' / 611.15' S= 0.0285 ' S= 0.0285 ' Cc= 0.900 n= 0.012 Steel, smooth, Flow Area= 1.52 sf
#2	Primary	614.15'	100.0' long + 3.0 ' SideZ x 20.0' breadth Road Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63

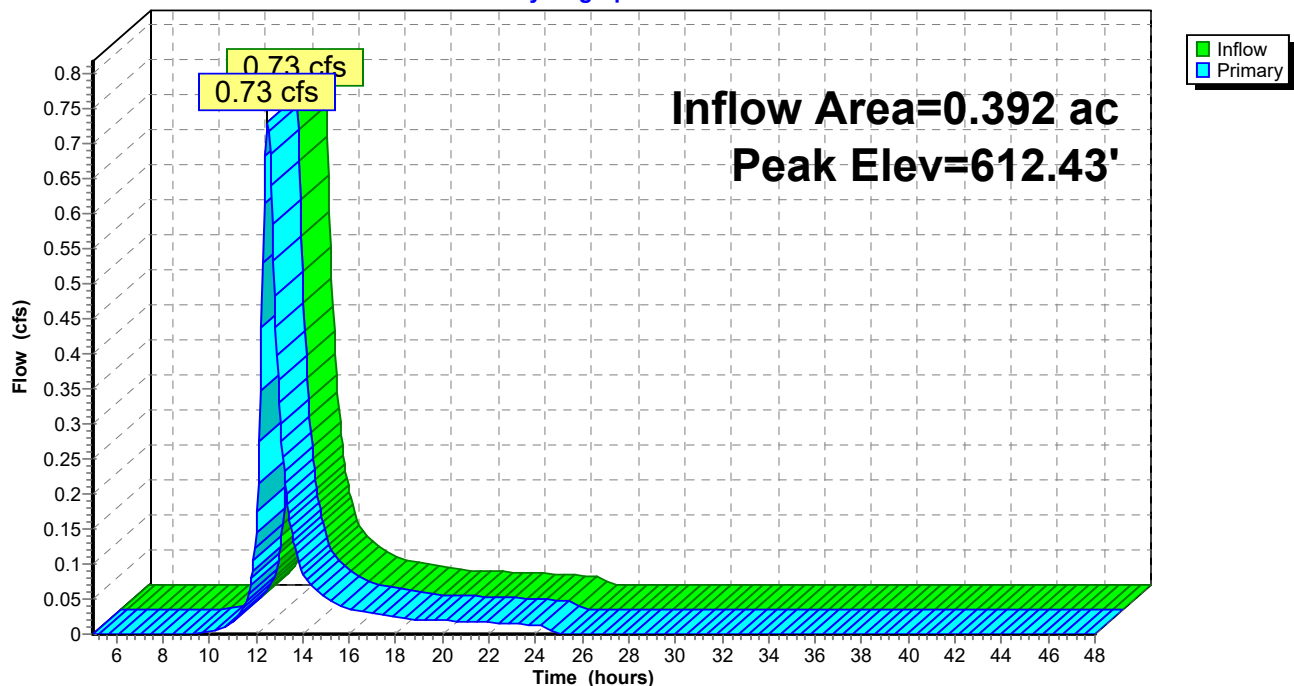
Primary OutFlow Max=0.32 cfs @ 12.50 hrs HW=612.43' (Free Discharge)

1=Culvert 023 (Inlet Controls 0.32 cfs @ 1.14 fps)

2=Road (Controls 0.00 cfs)

Pond 17P: Culvert 023

Hydrograph



Summary for Pond 18P: Culvert 021

[57] Hint: Peaked at 615.71' (Flood elevation advised)

Inflow Area = 0.382 ac, 0.00% Impervious, Inflow Depth = 2.55" for 100-yr event
 Inflow = 0.58 cfs @ 12.70 hrs, Volume= 0.081 af
 Outflow = 0.58 cfs @ 12.70 hrs, Volume= 0.081 af, Atten= 0%, Lag= 0.0 min
 Primary = 0.58 cfs @ 12.70 hrs, Volume= 0.081 af

Routing by Stor-Ind method, Time Span= 5.00-48.00 hrs, dt= 0.05 hrs

Peak Elev= 615.71' @ 12.70 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	615.40'	18.0" Round Culvert 021 w/ 3.6" inside fill L= 27.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 614.90' / 615.10' S= -0.0074 '/' Cc= 0.900 n= 0.012 Steel, smooth, Flow Area= 1.52 sf
#2	Primary	617.90'	100.0' long + 3.0' SideZ x 20.0' breadth Road Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63

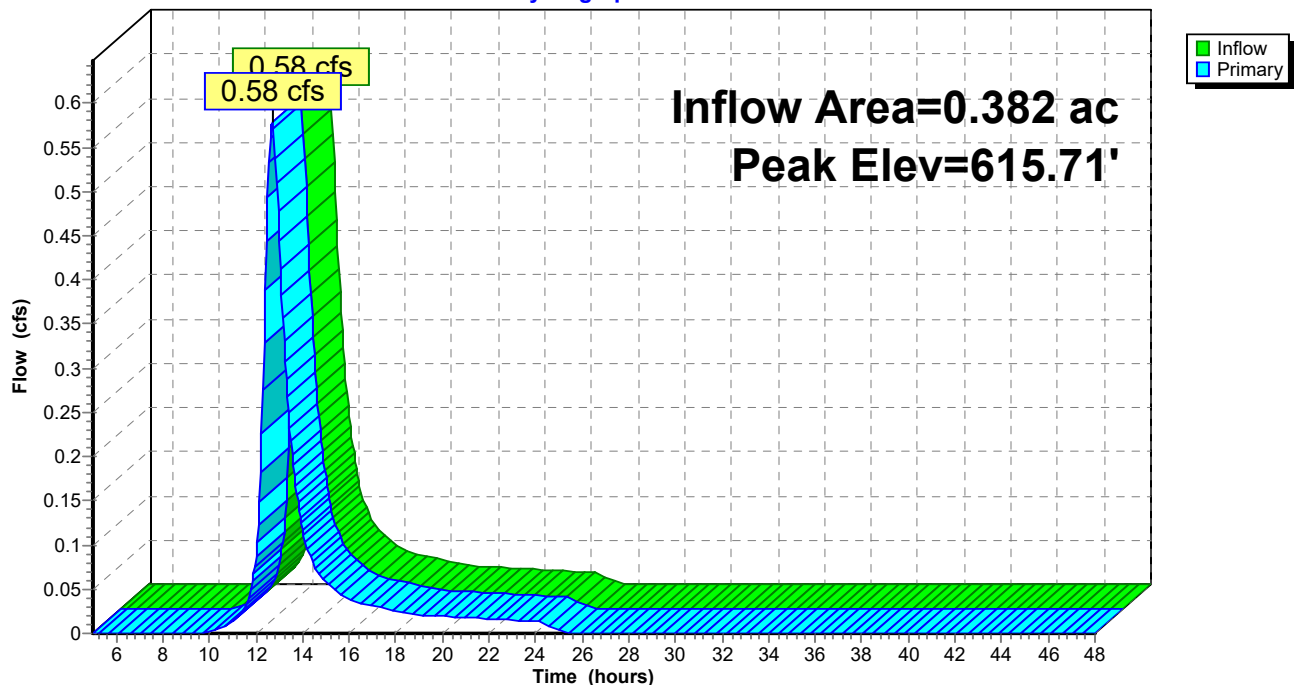
Primary OutFlow Max=0.58 cfs @ 12.70 hrs HW=615.71' (Free Discharge)

1=Culvert 021 (Inlet Controls 0.58 cfs @ 1.38 fps)

2=Road (Controls 0.00 cfs)

Pond 18P: Culvert 021

Hydrograph



Summary for Pond 19P: Culvert 022

[57] Hint: Peaked at 616.11' (Flood elevation advised)

Inflow Area = 110.818 ac, 0.00% Impervious, Inflow Depth = 2.72" for 100-yr event
 Inflow = 99.41 cfs @ 13.66 hrs, Volume= 25.159 af
 Outflow = 99.41 cfs @ 13.66 hrs, Volume= 25.159 af, Atten= 0%, Lag= 0.0 min
 Primary = 99.41 cfs @ 13.66 hrs, Volume= 25.159 af

Routing by Stor-Ind method, Time Span= 5.00-48.00 hrs, dt= 0.05 hrs

Peak Elev= 616.11' @ 13.66 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	611.50'	60.0" Round Culvert 022 w/ 12.0" inside fill L= 37.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 610.50' / 610.40' S= 0.0027 ' S Cc= 0.900 n= 0.012, Flow Area= 16.84 sf
#2	Primary	617.00'	100.0' long + 3.0 ' SideZ x 20.0' breadth Road Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63

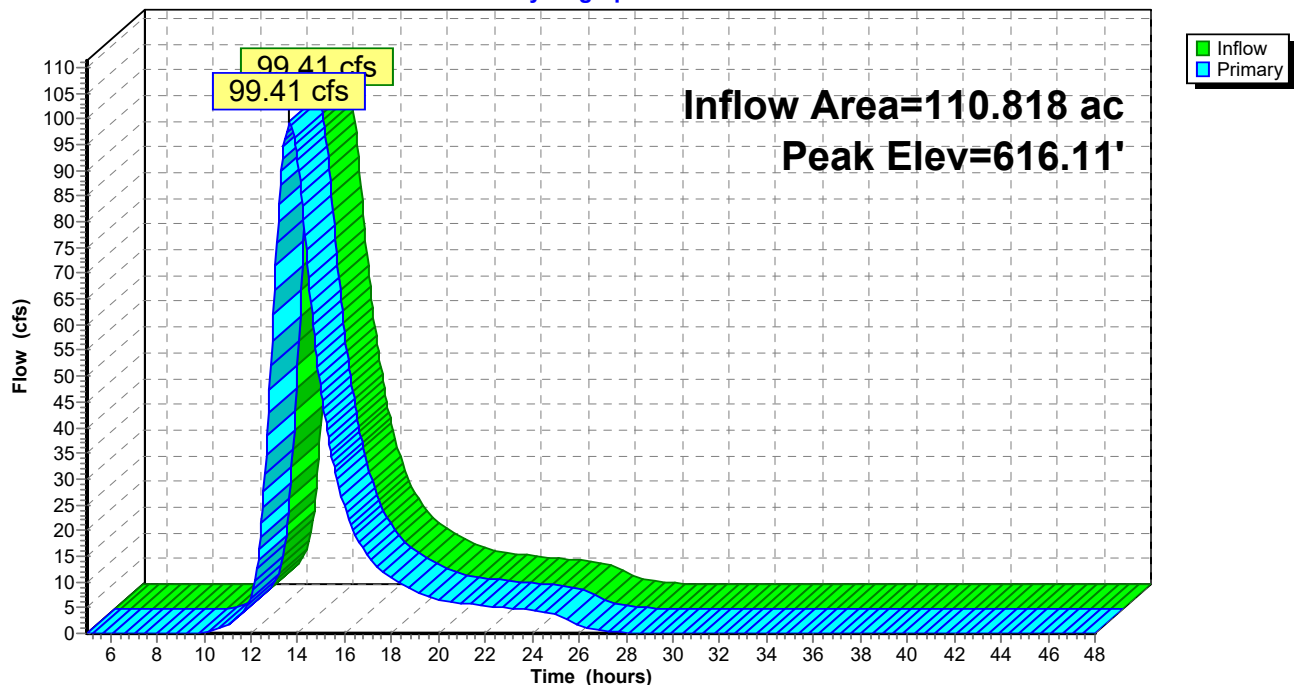
Primary OutFlow Max=99.36 cfs @ 13.66 hrs HW=616.10' (Free Discharge)

1=Culvert 022 (Barrel Controls 99.36 cfs @ 6.34 fps)

2=Road (Controls 0.00 cfs)

Pond 19P: Culvert 022

Hydrograph



Summary for Pond 20P: Culvert 020

[57] Hint: Peaked at 619.47' (Flood elevation advised)

Inflow Area = 0.088 ac, 0.00% Impervious, Inflow Depth = 2.81" for 100-yr event
 Inflow = 0.24 cfs @ 12.30 hrs, Volume= 0.021 af
 Outflow = 0.24 cfs @ 12.30 hrs, Volume= 0.021 af, Atten= 0%, Lag= 0.0 min
 Primary = 0.24 cfs @ 12.30 hrs, Volume= 0.021 af

Routing by Stor-Ind method, Time Span= 5.00-48.00 hrs, dt= 0.05 hrs

Peak Elev= 619.47' @ 12.30 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	619.30'	18.0" Round Culvert 020 w/ 3.6" inside fill L= 46.2' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 618.60' / 619.00' S= -0.0087 ' S Cc= 0.900 n= 0.012 Steel, smooth, Flow Area= 1.52 sf
#2	Primary	622.00'	100.0' long + 3.0 ' SideZ x 20.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63

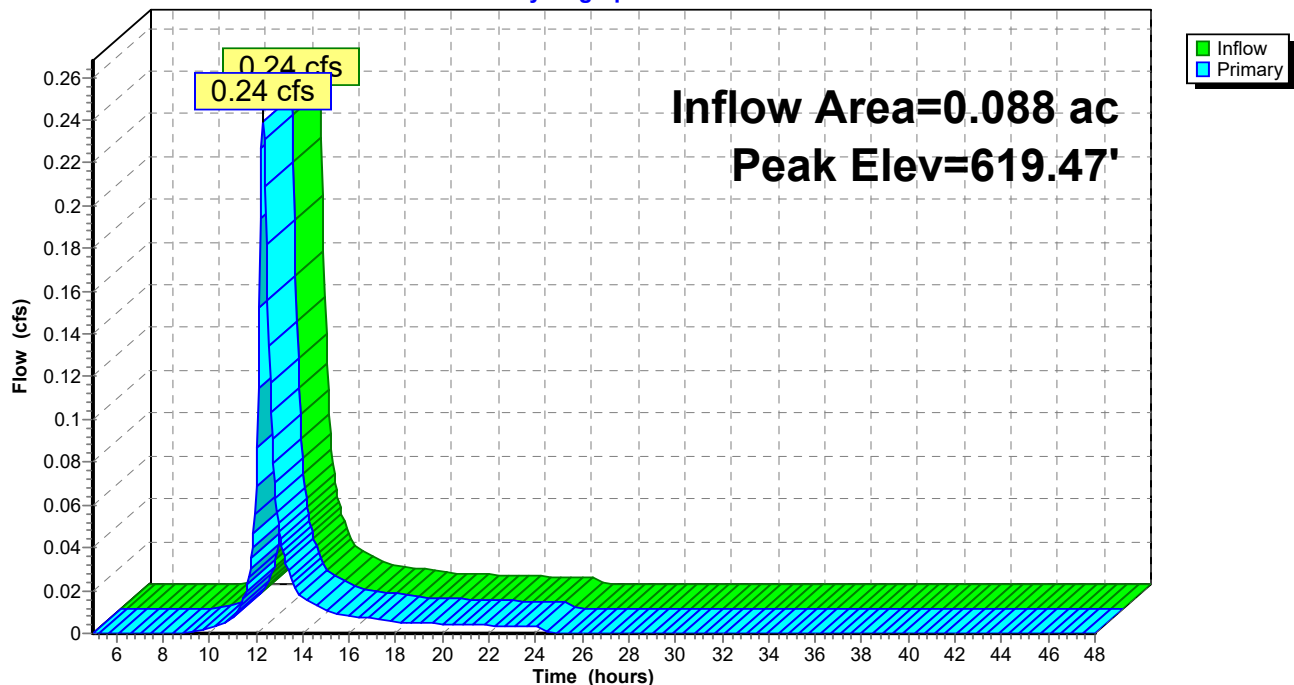
Primary OutFlow Max=0.24 cfs @ 12.30 hrs HW=619.47' (Free Discharge)

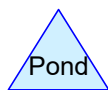
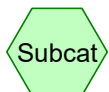
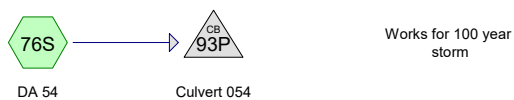
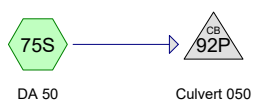
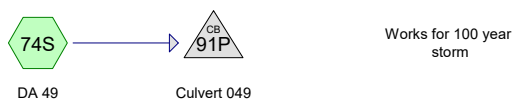
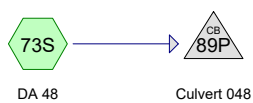
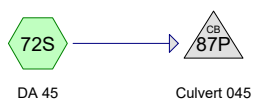
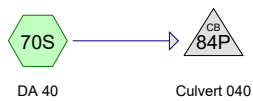
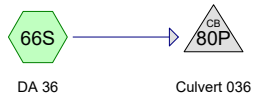
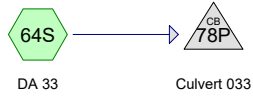
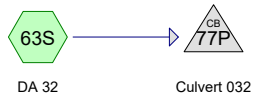
1=Culvert 020 (Inlet Controls 0.24 cfs @ 1.04 fps)

2=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond 20P: Culvert 020

Hydrograph





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Project Notes

Rainfall events imported from "NRCS-Rain.txt" for 7076 NY Niagara

Rainfall events imported from "NRCS-Rain.txt" for 7076 NY Niagara

Defined 7 rainfall events from NY-LB-DA1-5 IDF

Defined 7 rainfall events from NY-LB-DA1-5 IDF

Defined 7 rainfall events from NY - Lockport IDF

Defined 7 rainfall events from NY - Lockport IDF

Defined 10 rainfall events from NY - Lockport IDF

Defined 10 rainfall events from NY - Lockport IDF

Copied 10 events from NY - Lockport 24-hr S1 storm

Copied 10 events from NY - Lockport 24-hr S1 storm

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Rainfall Events Listing (selected events)

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	1-yr	NY - Lockport 24-hr S1	1-yr	Default	24.00	1	1.87	2
2	10-yr	NY - Lockport 24-hr S1	10-yr	Default	24.00	1	3.25	2
3	100-yr	NY - Lockport 24-hr S1	100-yr	Default	24.00	1	4.88	2

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Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
0.504	49	A-50-75% GRASS COVER, FAIR (68S, 69S, 70S)
0.011	39	A-75% GRASS COVER, GOOD (68S)
7.943	30	A-MEADOW, NON-GRAZED (66S, 67S, 68S, 69S, 70S)
3.907	69	B-50-75% GRASS COVER, FAIR (64S, 68S, 69S, 73S, 74S, 75S)
1.338	61	B-75% GRASS COVER, GOOD (64S, 73S, 74S, 75S)
0.446	82	B-MEADOW, NON-GRAZED (63S)
10.119	58	B-MEADOW, NON-GRAZED (64S, 65S, 68S, 69S, 73S, 74S, 75S)
1.133	71	C-MEADOW, NON-GRAZED (65S)
3.463	22	D-50-75% GRASS COVER, FAIR (63S)
1.738	84	D-50-75% GRASS COVER, FAIR (64S, 65S, 70S, 72S, 76S)
1.048	84	D-50-75% GRASS COVER, FAIR (74S, 75S)
1.784	21	D-75% GRASS COVER, GOOD (63S)
3.517	80	D-75% GRASS COVER, GOOD (64S, 65S, 70S, 72S, 73S, 74S, 75S)
56.671	81	D-MEADOW, NON-GRAZED (63S)
21.367	82	D-MEADOW, NON-GRAZED (63S)
47.320	78	D-MEADOW, NON-GRAZED (64S, 65S, 66S, 67S, 68S, 70S, 71S, 72S, 73S, 76S)
0.085	98	D-WATER SURFACE, 0% IMP (73S)
0.043	90	D-WATER SURFACE, 0% IMP (63S)
2.681	98	D-WATER SURFACE, 0% IMP (66S, 70S, 73S)
0.267	79	D-WOOD/GRASS COMB., GOOD (70S)
1.741	79	D-WOODS/GRASS COMB., FAIR (72S)
0.142	43	D-WOODS/GRASS COMB., GOOD (63S)
167.268	74	TOTAL AREA

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Soil Listing (all nodes)

Area (acres)	Soil Group	Subcatchment Numbers
0.000	HSG A	
0.000	HSG B	
0.000	HSG C	
0.000	HSG D	
167.268	Other	63S, 64S, 65S, 66S, 67S, 68S, 69S, 70S, 71S, 72S, 73S, 74S, 75S, 76S
167.268		TOTAL AREA

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Ground Covers (all nodes)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchm Numbers
0.000	0.000	0.000	0.000	0.504	0.504	A-50-75% GRASS COVER, FAIR	
0.000	0.000	0.000	0.000	0.011	0.011	A-75% GRASS COVER, GOOD	
0.000	0.000	0.000	0.000	7.943	7.943	A-MEADOW, NON-GRAZED	
0.000	0.000	0.000	0.000	3.907	3.907	B-50-75% GRASS COVER, FAIR	
0.000	0.000	0.000	0.000	1.338	1.338	B-75% GRASS COVER, GOOD	
0.000	0.000	0.000	0.000	10.565	10.565	B-MEADOW, NON-GRAZED	
0.000	0.000	0.000	0.000	1.133	1.133	C-MEADOW, NON-GRAZED	
0.000	0.000	0.000	0.000	5.201	5.201	D-50-75% GRASS COVER, FAIR	
0.000	0.000	0.000	0.000	1.048	1.048	D-50-75% GRASS COVER, FAIR	
0.000	0.000	0.000	0.000	5.301	5.301	D-75% GRASS COVER, GOOD	
0.000	0.000	0.000	0.000	125.358	125.358	D-MEADOW, NON-GRAZED	
0.000	0.000	0.000	0.000	0.085	0.085	D-WATER SURFACE, 0% IMP	
0.000	0.000	0.000	0.000	2.724	2.724	D-WATER SURFACE, 0% IMP	
0.000	0.000	0.000	0.000	0.267	0.267	D-WOOD/GRASS COMB., GOOD	
0.000	0.000	0.000	0.000	1.741	1.741	D-WOODS/GRASS COMB., FAIR	
0.000	0.000	0.000	0.000	0.142	0.142	D-WOODS/GRASS COMB., GOOD	
0.000	0.000	0.000	0.000	167.268	167.268	TOTAL AREA	

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Pipe Listing (all nodes)

Line#	Node Number	In-Invert (feet)	Out-Invert (feet)	Length (feet)	Slope (ft/ft)	n	Width (inches)	Diam/Height (inches)	Inside-Fill (inches)	Node Name
1	77P	615.00	614.48	30.0	0.0173	0.012	0.0	24.0	2.4	
2	78P	645.00	644.22	30.0	0.0260	0.012	0.0	18.0	2.4	
3	79P	646.50	645.72	30.0	0.0260	0.012	0.0	15.0	3.0	
4	80P	632.80	632.02	30.0	0.0260	0.012	0.0	18.0	2.4	
5	81P	651.31	650.53	30.0	0.0260	0.012	0.0	18.0	2.4	
6	82P	644.44	643.66	30.0	0.0260	0.012	0.0	15.0	3.0	
7	83P	641.92	641.14	30.0	0.0260	0.012	0.0	15.0	3.0	
8	84P	635.05	634.27	36.0	0.0217	0.012	0.0	36.0	2.4	
9	86P	637.00	636.22	36.0	0.0217	0.012	0.0	18.0	2.4	
10	87P	635.00	634.22	30.0	0.0260	0.012	0.0	18.0	2.4	
11	89P	635.00	634.22	30.0	0.0260	0.012	0.0	36.0	2.4	
12	91P	637.00	636.22	30.0	0.0260	0.012	0.0	24.0	2.4	
13	92P	637.00	636.22	30.0	0.0260	0.012	0.0	24.0	2.4	
14	93P	641.00	640.22	30.0	0.0260	0.012	0.0	24.0	2.4	

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NY - Lockport 24-hr S1 1-yr Rainfall=1.87"

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Time span=5.00-48.00 hrs, dt=0.05 hrs, 861 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 63S: DA 32	Runoff Area=83.916 ac 0.00% Impervious Runoff Depth=0.38" Flow Length=3,167' Tc=219.6 min CN=77 Runoff=5.02 cfs 2.659 af
Subcatchment 64S: DA 33	Runoff Area=8.458 ac 0.00% Impervious Runoff Depth=0.07" Flow Length=1,546' Tc=38.9 min CN=63 Runoff=0.09 cfs 0.052 af
Subcatchment 65S: DA 34	Runoff Area=3.000 ac 0.00% Impervious Runoff Depth=0.22" Flow Length=915' Tc=184.4 min CN=71 Runoff=0.10 cfs 0.054 af
Subcatchment 66S: DA 36	Runoff Area=7.023 ac 21.33% Impervious Runoff Depth=0.26" Flow Length=1,365' Tc=34.8 min CN=73 Runoff=0.79 cfs 0.155 af
Subcatchment 67S: DA 37	Runoff Area=2.575 ac 0.00% Impervious Runoff Depth=0.00" Flow Length=497' Tc=12.2 min CN=53 Runoff=0.00 cfs 0.000 af
Subcatchment 68S: DA 38	Runoff Area=5.423 ac 0.00% Impervious Runoff Depth=0.00" Flow Length=1,009' Tc=22.2 min CN=33 Runoff=0.00 cfs 0.000 af
Subcatchment 69S: DA 39	Runoff Area=0.717 ac 0.00% Impervious Runoff Depth=0.03" Flow Length=394' Tc=15.2 min CN=59 Runoff=0.00 cfs 0.002 af
Subcatchment 70S: DA 40	Runoff Area=20.817 ac 2.01% Impervious Runoff Depth=0.41" Flow Length=1,139' Tc=84.9 min CN=78 Runoff=2.72 cfs 0.717 af
Subcatchment 71S: DA 41	Runoff Area=1.015 ac 0.00% Impervious Runoff Depth=0.41" Flow Length=465' Tc=110.2 min CN=78 Runoff=0.11 cfs 0.035 af
Subcatchment 72S: DA 45	Runoff Area=13.208 ac 0.00% Impervious Runoff Depth=0.45" Flow Length=1,379' Tc=135.3 min CN=79 Runoff=1.37 cfs 0.493 af
Subcatchment 73S: DA 48	Runoff Area=15.708 ac 5.41% Impervious Runoff Depth=0.35" Flow Length=1,032' Tc=34.0 min CN=76 Runoff=2.76 cfs 0.457 af
Subcatchment 74S: DA 49	Runoff Area=2.625 ac 0.00% Impervious Runoff Depth=0.19" Flow Length=1,106' Tc=121.3 min CN=70 Runoff=0.09 cfs 0.042 af
Subcatchment 75S: DA 50	Runoff Area=2.625 ac 0.00% Impervious Runoff Depth=0.19" Flow Length=619' Tc=30.2 min CN=70 Runoff=0.18 cfs 0.042 af
Subcatchment 76S: DA 54	Runoff Area=0.158 ac 0.00% Impervious Runoff Depth=0.52" Flow Length=100' Slope=0.0001 '/' Tc=98.2 min CN=81 Runoff=0.03 cfs 0.007 af
Pond 77P: Culvert 032	Peak Elev=616.03' Inflow=5.02 cfs 2.659 af Outflow=5.02 cfs 2.659 af
Pond 78P: Culvert 033	Peak Elev=645.30' Inflow=0.09 cfs 0.052 af Outflow=0.09 cfs 0.052 af

CULVERTS 27-47*NY - Lockport 24-hr S1 1-yr Rainfall=1.87"*

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Pond 79P: Culvert 034	Peak Elev=646.86' Inflow=0.10 cfs 0.054 af Outflow=0.10 cfs 0.054 af
Pond 80P: Culvert 036	Peak Elev=633.40' Inflow=0.79 cfs 0.155 af Outflow=0.79 cfs 0.155 af
Pond 81P: Culvert 037	Peak Elev=651.51' Inflow=0.00 cfs 0.000 af Outflow=0.00 cfs 0.000 af
Pond 82P: Culvert 038	Peak Elev=644.69' Inflow=0.00 cfs 0.000 af Outflow=0.00 cfs 0.000 af
Pond 83P: Culvert 039	Peak Elev=642.18' Inflow=0.00 cfs 0.002 af Outflow=0.00 cfs 0.002 af
Pond 84P: Culvert 040	Peak Elev=635.89' Inflow=2.72 cfs 0.717 af Outflow=2.72 cfs 0.717 af
Pond 86P: Culvert 041	Peak Elev=637.31' Inflow=0.11 cfs 0.035 af Outflow=0.11 cfs 0.035 af
Pond 87P: Culvert 045	Peak Elev=635.75' Inflow=1.37 cfs 0.493 af Outflow=1.37 cfs 0.493 af
Pond 89P: Culvert 048	Peak Elev=635.84' Inflow=2.76 cfs 0.457 af Outflow=2.76 cfs 0.457 af
Pond 91P: Culvert 049	Peak Elev=637.29' Inflow=0.09 cfs 0.042 af Outflow=0.09 cfs 0.042 af
Pond 92P: Culvert 050	Peak Elev=637.34' Inflow=0.18 cfs 0.042 af Outflow=0.18 cfs 0.042 af
Pond 93P: Culvert 054	Peak Elev=641.24' Inflow=0.03 cfs 0.007 af Outflow=0.03 cfs 0.007 af

Total Runoff Area = 167.268 ac Runoff Volume = 4.715 af Average Runoff Depth = 0.34"
98.35% Pervious = 164.502 ac 1.65% Impervious = 2.766 ac

CULVERTS 27-47

NY - Lockport 24-hr S1 1-yr Rainfall=1.87"

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Summary for Subcatchment 63S: DA 32

Runoff = 5.02 cfs @ 15.35 hrs, Volume= 2.659 af, Depth= 0.38"
Routed to Pond 77P : Culvert 032

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-48.00 hrs, dt= 0.05 hrs
NY - Lockport 24-hr S1 1-yr Rainfall=1.87"

Area (ac)	CN	Description
* 0.446	82	B-MEADOW, NON-GRAZED
* 0.142	43	D-WOODS/GRASS COMB., GOOD
* 13.840	81	D-MEADOW, NON-GRAZED
* 8.160	82	D-MEADOW, NON-GRAZED
* 1.781	21	D-75% GRASS COVER, GOOD
* 3.035	22	D-50-75% GRASS COVER, FAIR
* 24.498	81	D-MEADOW, NON-GRAZED
* 5.711	82	D-MEADOW, NON-GRAZED
* 0.003	21	D-75% GRASS COVER, GOOD
* 0.428	22	D-50-75% GRASS COVER, FAIR
* 18.333	81	D-MEADOW, NON-GRAZED
* 7.496	82	D-MEADOW, NON-GRAZED
* 0.043	90	D-WATER SURFACE, 0% IMP
83.916	77	Weighted Average
83.916		100.00% Pervious Area

CULVERTS 27-47

NY - Lockport 24-hr S1 1-yr Rainfall=1.87"

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Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.5	100	0.0610	0.22		Sheet Flow, 100 Grass: Short n= 0.150 P2= 2.21"
3.0	144	0.0130	0.80		Shallow Concentrated Flow, 144 Short Grass Pasture Kv= 7.0 fps
22.6	300	0.0010	0.22		Shallow Concentrated Flow, 300 Short Grass Pasture Kv= 7.0 fps
9.2	300	0.0060	0.54		Shallow Concentrated Flow, 300 Short Grass Pasture Kv= 7.0 fps
22.6	300	0.0010	0.22		Shallow Concentrated Flow, 300 Short Grass Pasture Kv= 7.0 fps
22.6	300	0.0010	0.22		Shallow Concentrated Flow, 300 Short Grass Pasture Kv= 7.0 fps
71.4	300	0.0001	0.07		Shallow Concentrated Flow, 300 Short Grass Pasture Kv= 7.0 fps
12.2	162	0.0010	0.22		Shallow Concentrated Flow, 162 Short Grass Pasture Kv= 7.0 fps
10.1	300	0.0050	0.49		Shallow Concentrated Flow, 300 Short Grass Pasture Kv= 7.0 fps
8.3	290	0.0070	0.59		Shallow Concentrated Flow, 290 Short Grass Pasture Kv= 7.0 fps
0.6	50	0.0400	1.40		Shallow Concentrated Flow, 50 Short Grass Pasture Kv= 7.0 fps
4.4	242	0.0170	0.91		Shallow Concentrated Flow, 242 Short Grass Pasture Kv= 7.0 fps
6.3	300	0.0130	0.80		Shallow Concentrated Flow, 300 Short Grass Pasture Kv= 7.0 fps
18.8	79	0.0001	0.07		Shallow Concentrated Flow, 79 Short Grass Pasture Kv= 7.0 fps
219.6	3,167	Total			

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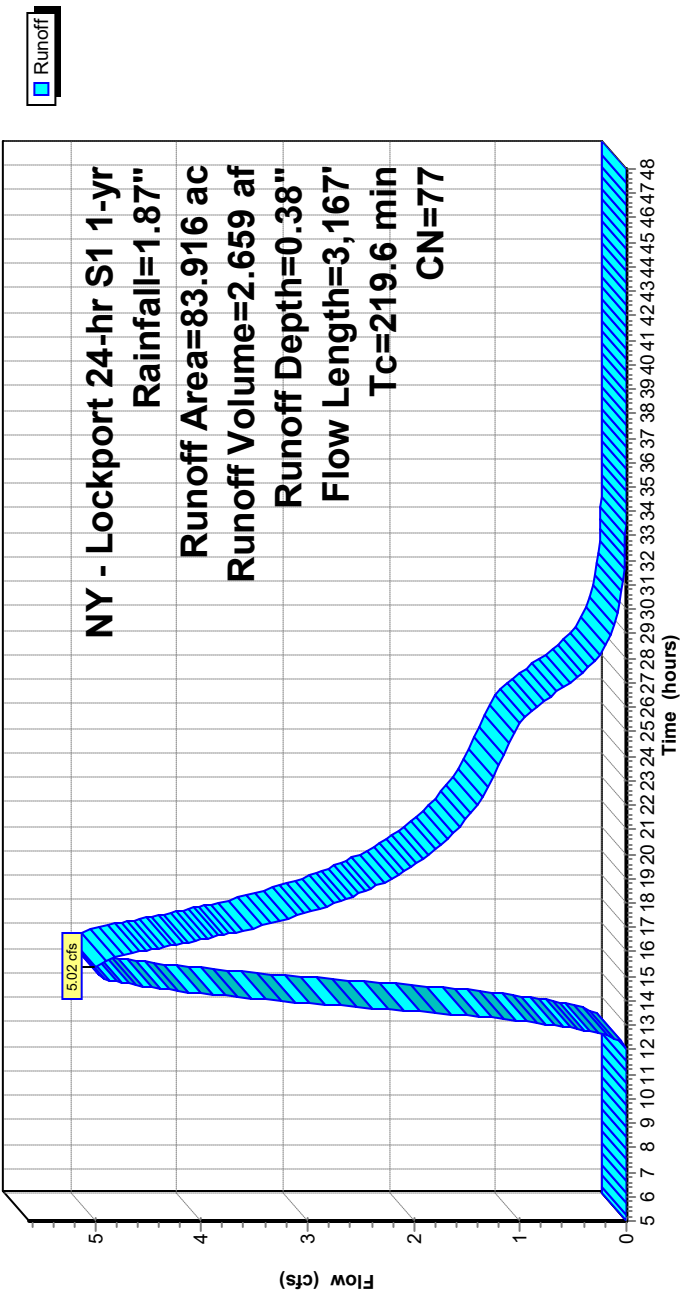
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Subcatchment 63S: DA 32

Hydrograph



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Summary for Subcatchment 64S: DA 33

Runoff = 0.09 cfs @ 13.16 hrs, Volume= 0.052 af, Depth= 0.07"
 Routed to Pond 78P : Culvert 033

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-48.00 hrs, dt= 0.05 hrs
 NY - Lockport 24-hr S1 1-yr Rainfall=1.87"

Area (ac)	CN	Description
* 0.131	61	B-75% GRASS COVER, GOOD
* 0.456	69	B-50-75% GRASS COVER, FAIR
* 2.999	58	B-MEADOW, NON-GRAZED
* 3.353	58	B-MEADOW, NON-GRAZED
* 0.019	80	D-75% GRASS COVER, GOOD
* 0.541	84	D-50-75% GRASS COVER, FAIR
* 0.959	78	D-MEADOW, NON-GRAZED
8.458	63	Weighted Average
8.458		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.5	100	0.0340	0.17		Sheet Flow, 100
					Grass: Short n= 0.150 P2= 2.21"
2.3	150	0.0250	1.11		Shallow Concentrated Flow, 150
					Short Grass Pasture Kv= 7.0 fps
2.1	147	0.0290	1.19		Shallow Concentrated Flow, 147
					Short Grass Pasture Kv= 7.0 fps
2.1	160	0.0320	1.25		Shallow Concentrated Flow, 160
					Short Grass Pasture Kv= 7.0 fps
2.1	160	0.0320	1.25		Shallow Concentrated Flow, 160
					Short Grass Pasture Kv= 7.0 fps
4.2	167	0.0090	0.66		Shallow Concentrated Flow, 167
					Short Grass Pasture Kv= 7.0 fps
13.6	362	0.0040	0.44		Shallow Concentrated Flow, 362
					Short Grass Pasture Kv= 7.0 fps
3.0	300	0.0560	1.66		Shallow Concentrated Flow, 300
					Short Grass Pasture Kv= 7.0 fps
38.9	1,546	Total			

CULVERTS 27-47

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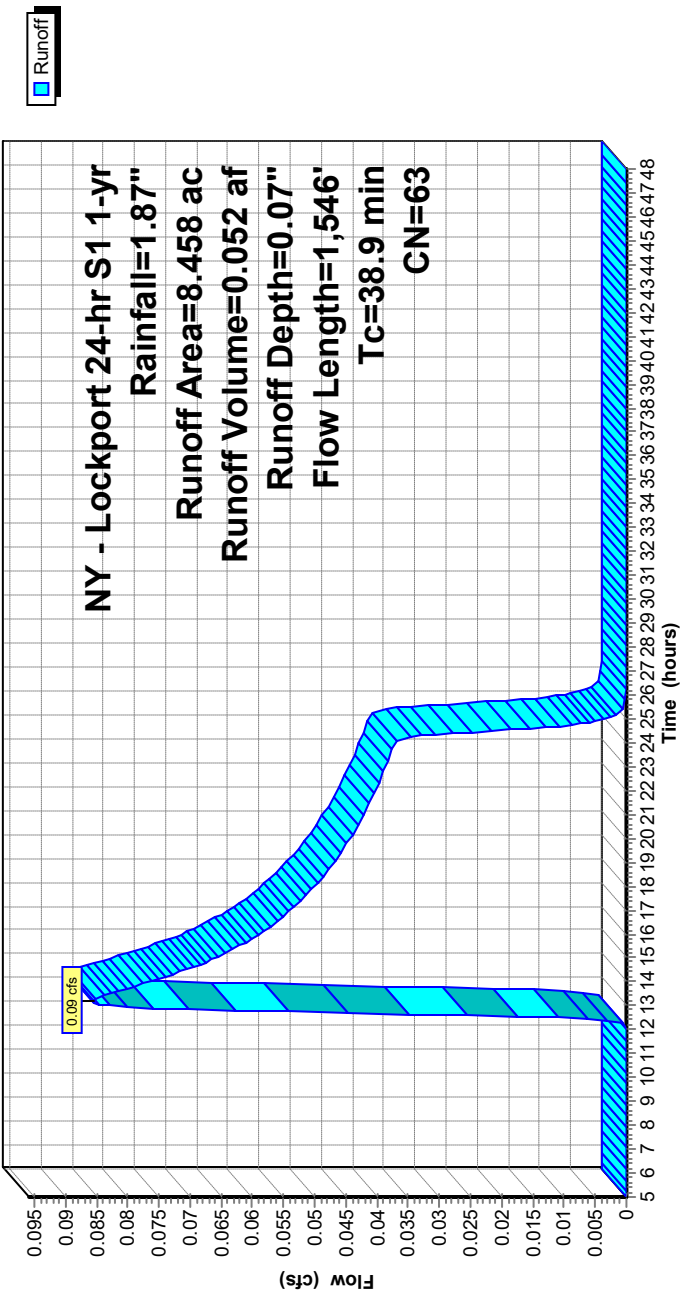
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Subcatchment 64S: DA 33

Hydrograph



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NY - Lockport 24-hr S1 1-yr Rainfall=1.87"

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Summary for Subcatchment 65S: DA 34

Runoff = 0.10 cfs @ 15.00 hrs, Volume= 0.054 af, Depth= 0.22"
 Routed to Pond 79P : Culvert 034

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-48.00 hrs, dt= 0.05 hrs
 NY - Lockport 24-hr S1 1-yr Rainfall=1.87"

Area (ac)	CN	Description
* 0.033	58	B-MEADOW, NON-GRAZED
* 0.719	58	B-MEADOW, NON-GRAZED
* 0.039	80	D-75% GRASS COVER, GOOD
* 0.086	84	D-50-75% GRASS COVER, FAIR
* 0.864	78	D-MEADOW, NON-GRAZED
* 0.126	78	D-MEADOW, NON-GRAZED
* 1.133	71	C-MEADOW, NON-GRAZED
3.000	71	Weighted Average
3.000		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
98.2	100	0.0001	0.02		Sheet Flow, 100
					Grass: Short n= 0.150 P2= 2.21"
3.6	164	0.0120	0.77		Shallow Concentrated Flow, 164
					Short Grass Pasture Kv= 7.0 fps
8.5	300	0.0070	0.59		Shallow Concentrated Flow, 300
					Short Grass Pasture Kv= 7.0 fps
71.4	300	0.0001	0.07		Shallow Concentrated Flow, 300
					Short Grass Pasture Kv= 7.0 fps
2.7	51	0.0020	0.31		Shallow Concentrated Flow, 51
					Short Grass Pasture Kv= 7.0 fps
184.4	915	Total			

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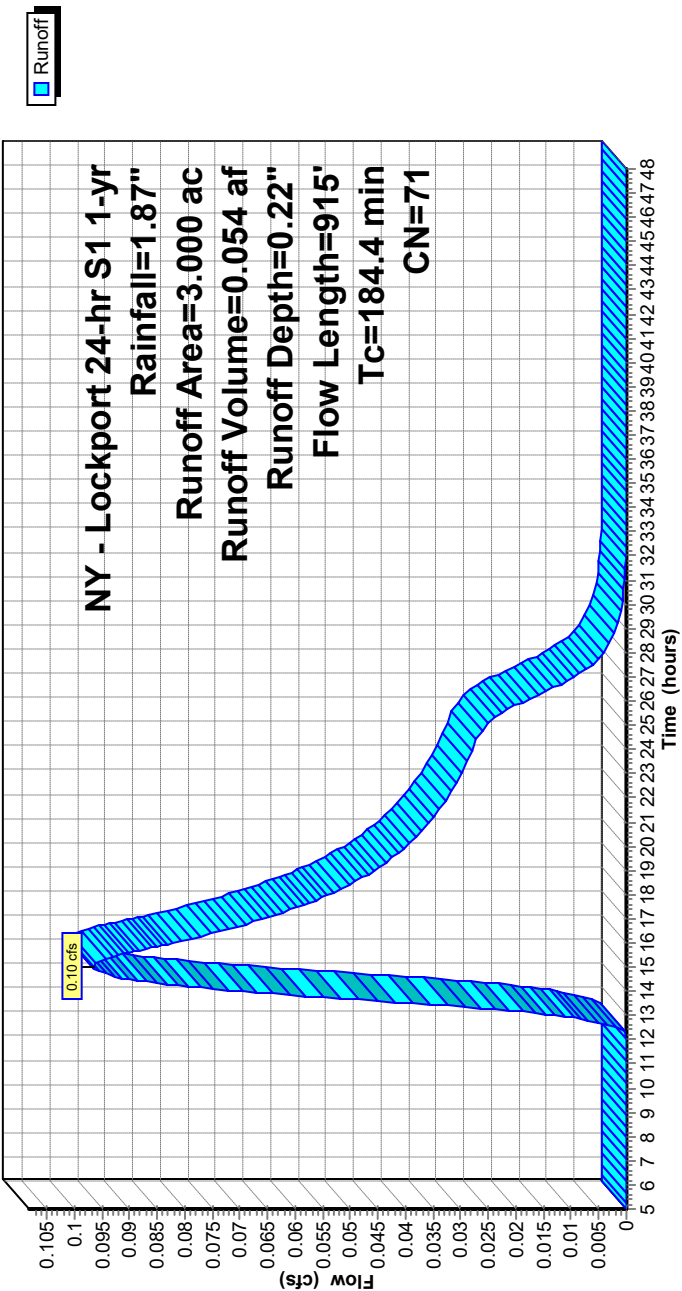
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Subcatchment 65S: DA 34

Hydrograph



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Summary for Subcatchment 66S: DA 36

Runoff = 0.79 cfs @ 12.57 hrs, Volume= 0.155 af, Depth= 0.26"
 Routed to Pond 80P : Culvert 036

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-48.00 hrs, dt= 0.05 hrs
 NY - Lockport 24-hr S1 1-yr Rainfall=1.87"

Area (ac)	CN	Description
* 1.408	30	A-MEADOW, NON-GRAZED
* 3.440	78	D-MEADOW, NON-GRAZED
* 0.677	78	D-MEADOW, NON-GRAZED
* 1.498	98	D-WATER SURFACE, 0% IMP
7.023	73	Weighted Average
5.525		78.67% Pervious Area
1.498		21.33% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.0	100	0.0390	0.18		Sheet Flow, 100
					Grass: Short n= 0.150 P2= 2.21"
0.9	77	0.0420	1.43		Shallow Concentrated Flow, 77
					Short Grass Pasture Kv= 7.0 fps
2.2	234	0.0640	1.77		Shallow Concentrated Flow, 234
					Short Grass Pasture Kv= 7.0 fps
2.8	268	0.0520	1.60		Shallow Concentrated Flow, 268
					Short Grass Pasture Kv= 7.0 fps
4.0	256	0.0230	1.06		Shallow Concentrated Flow, 256
					Short Grass Pasture Kv= 7.0 fps
8.5	225	0.0040	0.44		Shallow Concentrated Flow, 225
					Short Grass Pasture Kv= 7.0 fps
5.0	114	0.0030	0.38		Shallow Concentrated Flow, 114
					Short Grass Pasture Kv= 7.0 fps
2.4	91	0.0080	0.63		Shallow Concentrated Flow, 91
					Short Grass Pasture Kv= 7.0 fps
34.8	1,365	Total			

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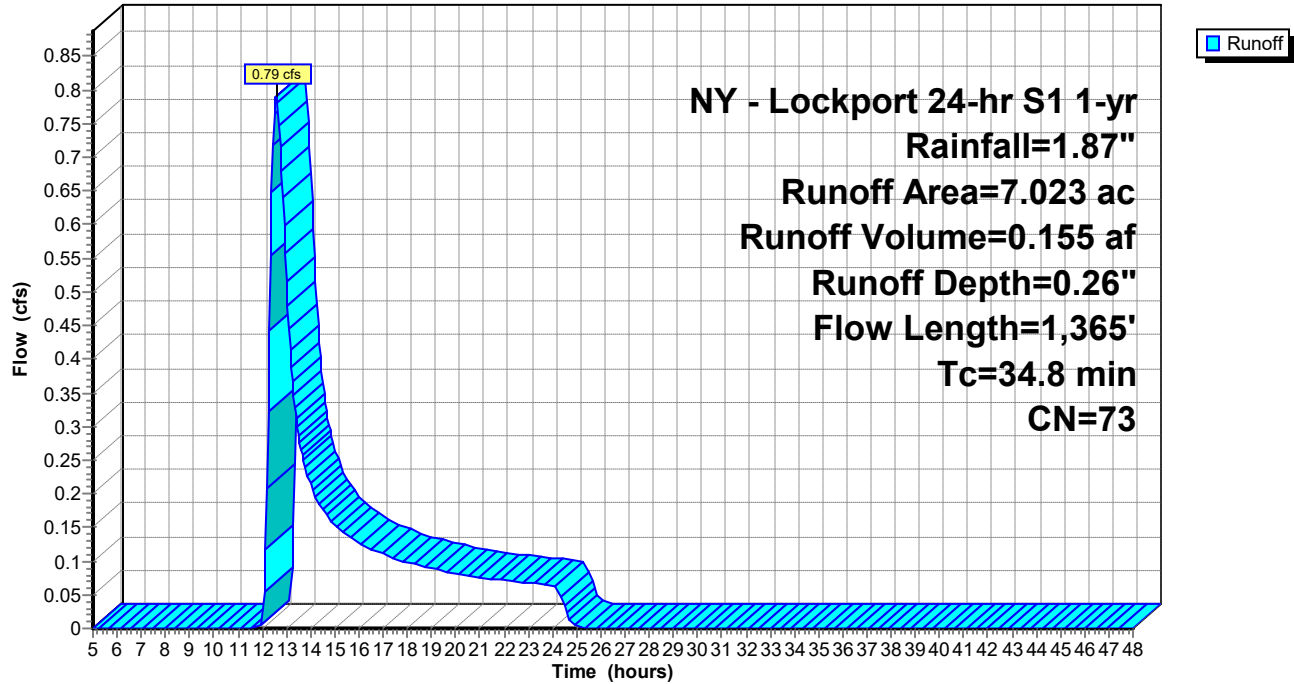
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Subcatchment 66S: DA 36

Hydrograph



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NY - Lockport 24-hr S1 1-yr Rainfall=1.87"

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Summary for Subcatchment 67S: DA 37

Runoff = 0.00 cfs @ 24.00 hrs, Volume= 0.000 af, Depth= 0.00"
 Routed to Pond 81P : Culvert 037

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-48.00 hrs, dt= 0.05 hrs
 NY - Lockport 24-hr S1 1-yr Rainfall=1.87"

Area (ac)	CN	Description
* 1.353	30	A-MEADOW, NON-GRAZED
* 1.222	78	D-MEADOW, NON-GRAZED
2.575	53	Weighted Average
2.575		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.6	100	0.0590	0.22		Sheet Flow, 100 Grass: Short n= 0.150 P2= 2.21"
0.4	41	0.0520	1.60		Shallow Concentrated Flow, 41 Short Grass Pasture Kv= 7.0 fps
0.6	48	0.0420	1.43		Shallow Concentrated Flow, 48 Short Grass Pasture Kv= 7.0 fps
0.6	76	0.0800	1.98		Shallow Concentrated Flow, 76 Short Grass Pasture Kv= 7.0 fps
1.0	71	0.0290	1.19		Shallow Concentrated Flow, 71 Short Grass Pasture Kv= 7.0 fps
0.9	82	0.0470	1.52		Shallow Concentrated Flow, 82 Short Grass Pasture Kv= 7.0 fps
1.1	79	0.0290	1.19		Shallow Concentrated Flow, 79 Short Grass Pasture Kv= 7.0 fps
12.2	497	Total			

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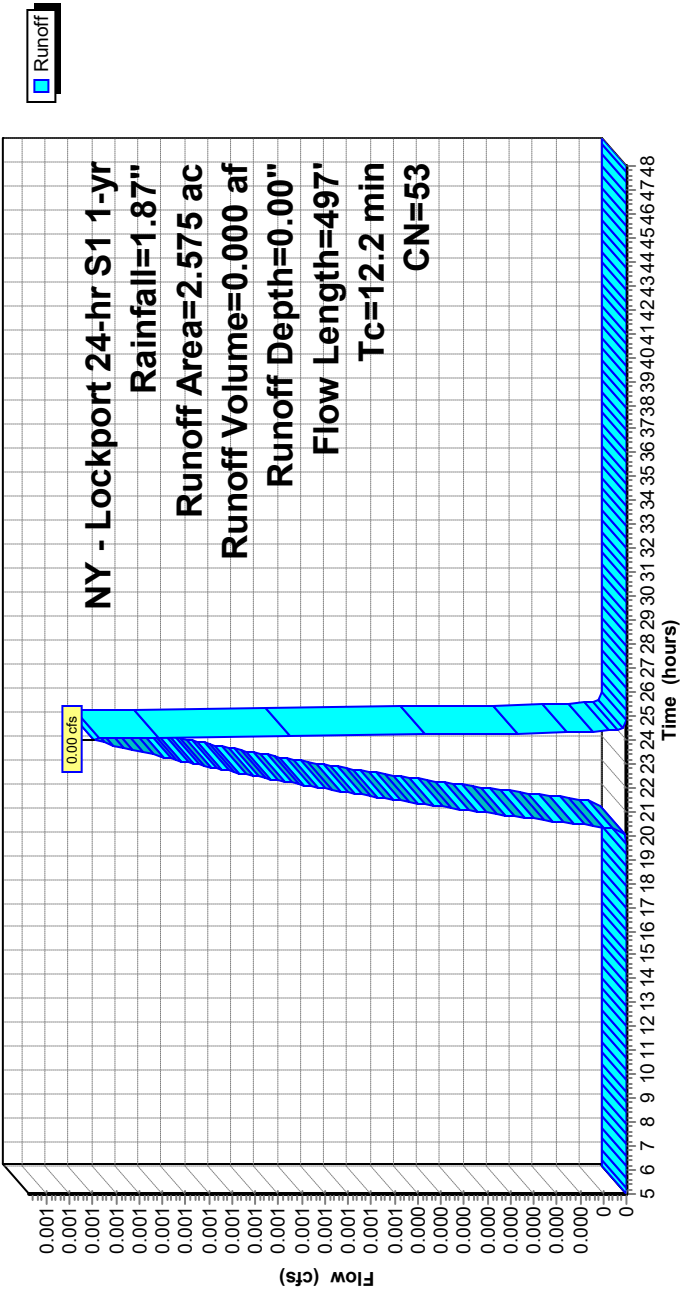
NY - Lockport 24-hr S1 1-yr Rainfall=1.87"

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Subcatchment 67S: DA 37

Hydrograph



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NY - Lockport 24-hr S1 1-yr Rainfall=1.87"

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Summary for Subcatchment 68S: DA 38

[45] Hint: Runoff=Zero

Runoff = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af, Depth= 0.00"
 Routed to Pond 82P : Culvert 038

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-48.00 hrs, dt= 0.05 hrs
 NY - Lockport 24-hr S1 1-yr Rainfall=1.87"

Area (ac)	CN	Description
* 0.011	39	A-75% GRASS COVER, GOOD
* 0.256	49	A-50-75% GRASS COVER, FAIR
* 4.945	30	A-MEADOW, NON-GRAZED
* 0.148	69	B-50-75% GRASS COVER, FAIR
* 0.007	58	B-MEADOW, NON-GRAZED
* 0.056	78	D-MEADOW, NON-GRAZED
5.423	33	Weighted Average
5.423		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.9	100	0.0400	0.19		Sheet Flow, 100
					Grass: Short n= 0.150 P2= 2.21"
2.3	130	0.0180	0.94		Shallow Concentrated Flow, 130
					Short Grass Pasture Kv= 7.0 fps
2.3	179	0.0350	1.31		Shallow Concentrated Flow, 179
					Short Grass Pasture Kv= 7.0 fps
2.8	236	0.0410	1.42		Shallow Concentrated Flow, 236
					Short Grass Pasture Kv= 7.0 fps
0.9	80	0.0470	1.52		Shallow Concentrated Flow, 80
					Short Grass Pasture Kv= 7.0 fps
1.8	132	0.0310	1.23		Shallow Concentrated Flow, 132
					Short Grass Pasture Kv= 7.0 fps
3.2	152	0.0130	0.80		Shallow Concentrated Flow, 152
					Short Grass Pasture Kv= 7.0 fps
22.2	1,009	Total			

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Subcatchment 68S: DA 38

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Summary for Subcatchment 69S: DA 39

Runoff = 0.00 cfs @ 16.65 hrs, Volume= 0.002 af, Depth= 0.03"
Routed to Pond 83P : Culvert 039

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-48.00 hrs, dt= 0.05 hrs
NY - Lockport 24-hr S1 1-yr Rainfall=1.87"

Area (ac)	CN	Description
* 0.131	49	A-50-75% GRASS COVER, FAIR
* 0.104	30	A-MEADOW, NON-GRAZED
* 0.443	69	B-50-75% GRASS COVER, FAIR
* 0.039	58	B-MEADOW, NON-GRAZED

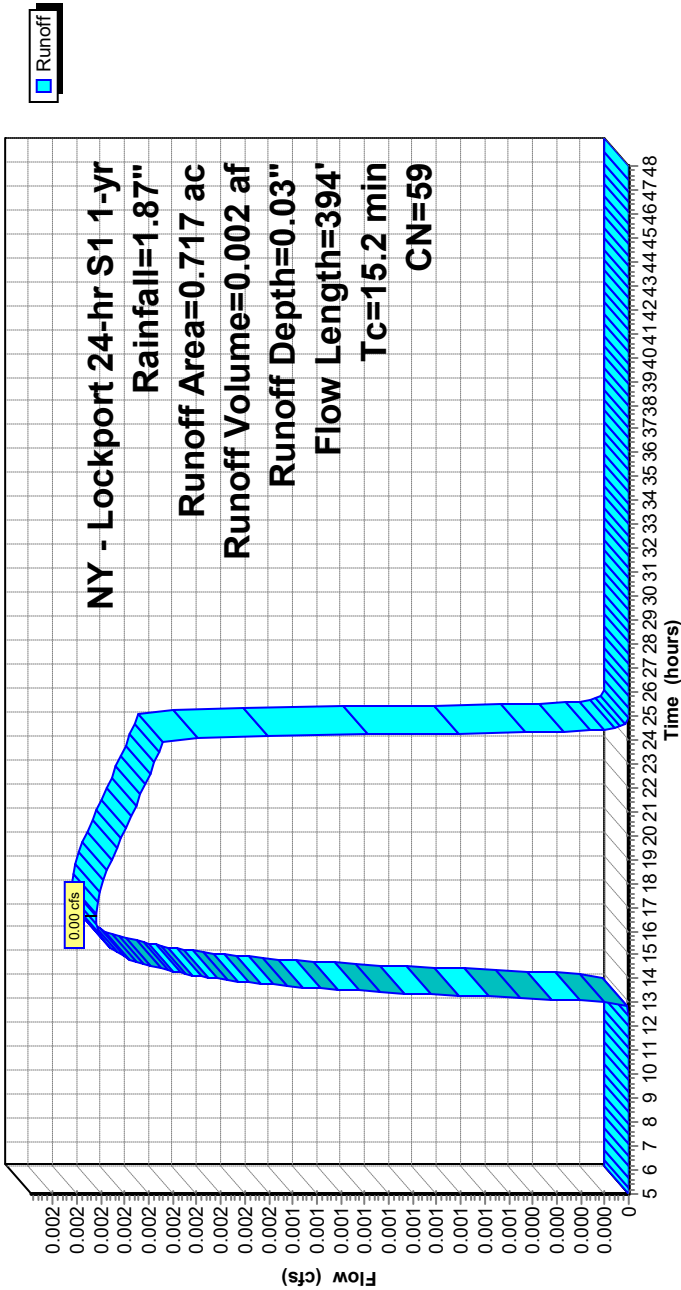
0.717 59 Weighted Average
0.717 100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.6	100	0.0330	0.17		Sheet Flow, 100 Grass: Short n= 0.150 P2= 2.21"
1.3	123	0.0480	1.53		Shallow Concentrated Flow, 123 Short Grass Pasture Kv= 7.0 fps
4.3	171	0.0090	0.66		Shallow Concentrated Flow, 171 Short Grass Pasture Kv= 7.0 fps

15.2 394 Total

Subcatchment 69S: DA 39

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Summary for Subcatchment 70S: DA 40

Runoff = 2.72 cfs @ 13.26 hrs, Volume= 0.717 af, Depth= 0.41"
 Routed to Pond 84P : Culvert 040

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-48.00 hrs, dt= 0.05 hrs
 NY - Lockport 24-hr S1 1-yr Rainfall=1.87"

Area (ac)	CN	Description
* 0.117	49	A-50-75% GRASS COVER, FAIR
* 0.133	30	A-MEADOW, NON-GRAZED
* 0.857	80	D-75% GRASS COVER, GOOD
* 0.371	84	D-50-75% GRASS COVER, FAIR
* 0.267	79	D-WOOD/GRASS COMC., GOOD
* 18.654	78	D-MEADOW, NON-GRAZED
* 0.418	98	D-WATER SURFACE, 0% IMP
20.817	78	Weighted Average
20.399		97.99% Pervious Area
0.418		2.01% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
25.2	100	0.0030	0.07		Sheet Flow, 100
					Grass: Short n= 0.150 P2= 2.21"
11.2	258	0.0030	0.38		Shallow Concentrated Flow, 258
					Short Grass Pasture Kv= 7.0 fps
31.4	132	0.0001	0.07		Shallow Concentrated Flow, 132
					Short Grass Pasture Kv= 7.0 fps
4.0	176	0.0110	0.73		Shallow Concentrated Flow, 176
					Short Grass Pasture Kv= 7.0 fps
7.7	270	0.0070	0.59		Shallow Concentrated Flow, 270
					Short Grass Pasture Kv= 7.0 fps
5.4	203	0.0080	0.63		Shallow Concentrated Flow, 203
					Short Grass Pasture Kv= 7.0 fps
84.9	1,139	Total			

CULVERTS 27-47

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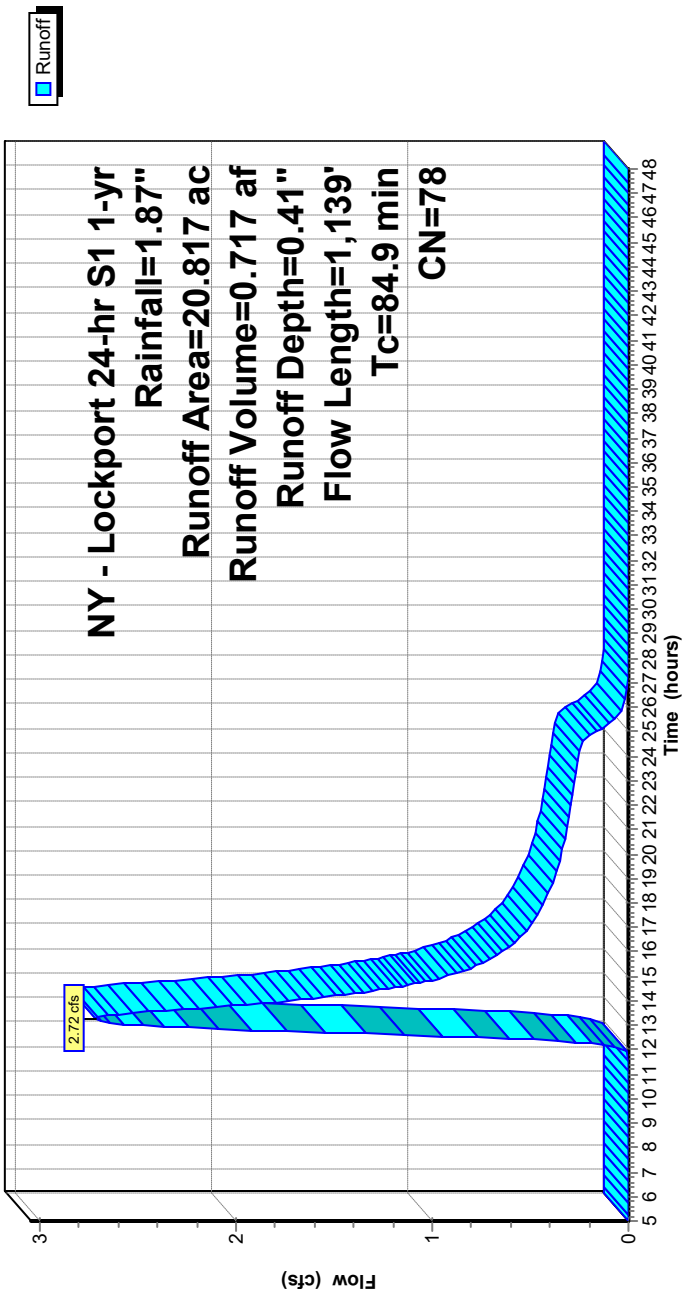
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Subcatchment 70S: DA 40

Hydrograph



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Summary for Subcatchment 71S: DA 41

Runoff = 0.11 cfs @ 13.60 hrs, Volume= 0.035 af, Depth= 0.41"
Routed to Pond 86P : Culvert 041

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-48.00 hrs, dt= 0.05 hrs
NY - Lockport 24-hr S1 1-yr Rainfall=1.87"

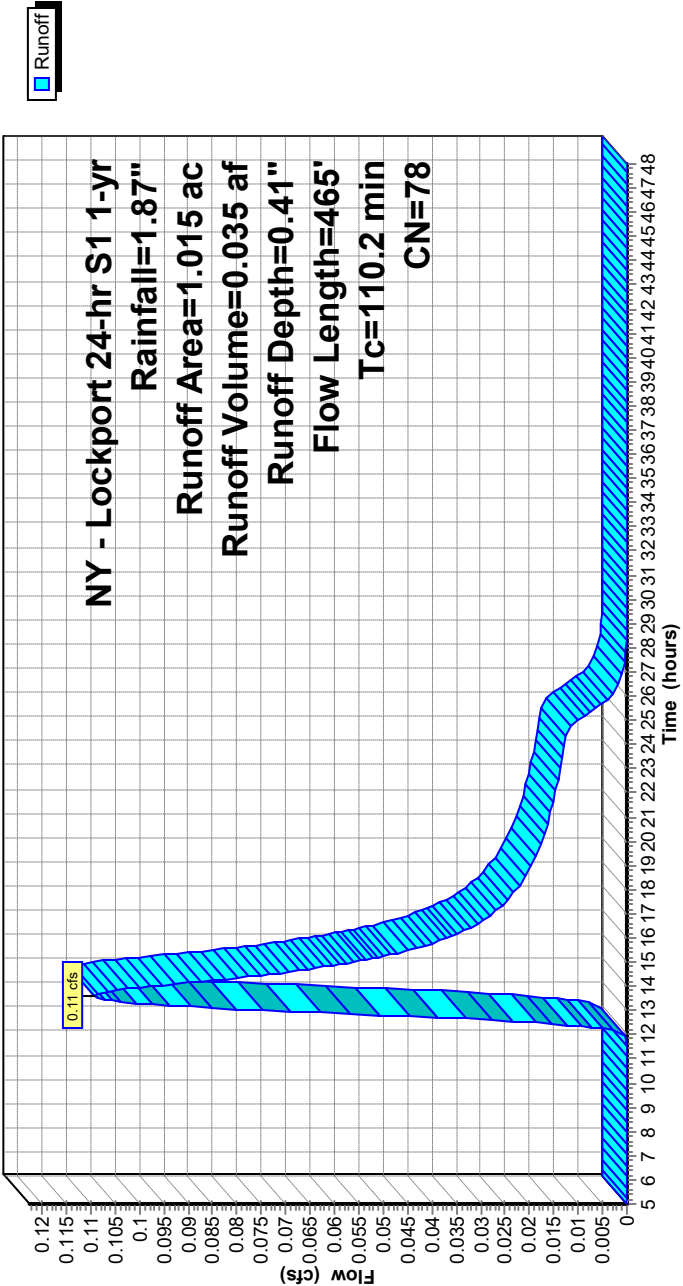
Area (ac)	CN	Description
* 0.185	78	D-MEADOW, NON-GRAZED
* 0.830	78	D-MEADOW, NON-GRAZED
1.015	78	Weighted Average
1.015		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
98.2	100	0.0001	0.02		Sheet Flow, 100
					Grass: Short n= 0.150 P2= 2.21"
8.5	252	0.0050	0.49		Shallow Concentrated Flow, 252
					Short Grass Pasture Kv= 7.0 fps
3.5	113	0.0060	0.54		Shallow Concentrated Flow, 113
					Short Grass Pasture Kv= 7.0 fps

110.2	465	Total
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Subcatchment 71S: DA 41

Hydrograph



CULVERTS 27-47

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NY - Lockport 24-hr S1 1-yr Rainfall=1.87"

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Summary for Subcatchment 72S: DA 45

Runoff = 1.37 cfs @ 13.97 hrs, Volume= 0.493 af, Depth= 0.45"
 Routed to Pond 87P : Culvert 045

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-48.00 hrs, dt= 0.05 hrs
 NY - Lockport 24-hr S1 1-yr Rainfall=1.87"

Area (ac)	CN	Description
* 0.839	80	D-75% GRASS COVER, GOOD
* 0.532	84	D-50-75% GRASS COVER, FAIR
* 1.189	79	D-WOODS/GRASS COMB., FAIR
* 0.421	78	D-MEADOW, NON-GRAZED
* 0.610	80	D-75% GRASS COVER, GOOD
* 0.552	79	D-WOODS/GRASS COMB., FAIR
* 1.693	78	D-MEADOW, NON-GRAZED
* 0.909	80	D-75% GRASS COVER, GOOD
* 0.118	84	D-50-75% GRASS COVER, FAIR
* 6.345	78	D-MEADOW, NON-GRAZED
13.208	79	Weighted Average
13.208		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.6	100	0.0330	0.17		Sheet Flow, 100
					Grass: Short n= 0.150 P2= 2.21"
0.9	53	0.0220	1.04		Shallow Concentrated Flow, 53
					Short Grass Pasture Kv= 7.0 fps
2.3	140	0.0210	1.01		Shallow Concentrated Flow, 140
					Short Grass Pasture Kv= 7.0 fps
2.2	140	0.0220	1.04		Shallow Concentrated Flow, 140
					Short Grass Pasture Kv= 7.0 fps
5.8	230	0.0090	0.66		Shallow Concentrated Flow, 230
					Short Grass Pasture Kv= 7.0 fps
7.6	267	0.0070	0.59		Shallow Concentrated Flow, 267
					Short Grass Pasture Kv= 7.0 fps
43.8	184	0.0001	0.07		Shallow Concentrated Flow, 184
					Short Grass Pasture Kv= 7.0 fps
63.1	265	0.0001	0.07		Shallow Concentrated Flow, 265
					Short Grass Pasture Kv= 7.0 fps
135.3	1,379	Total			

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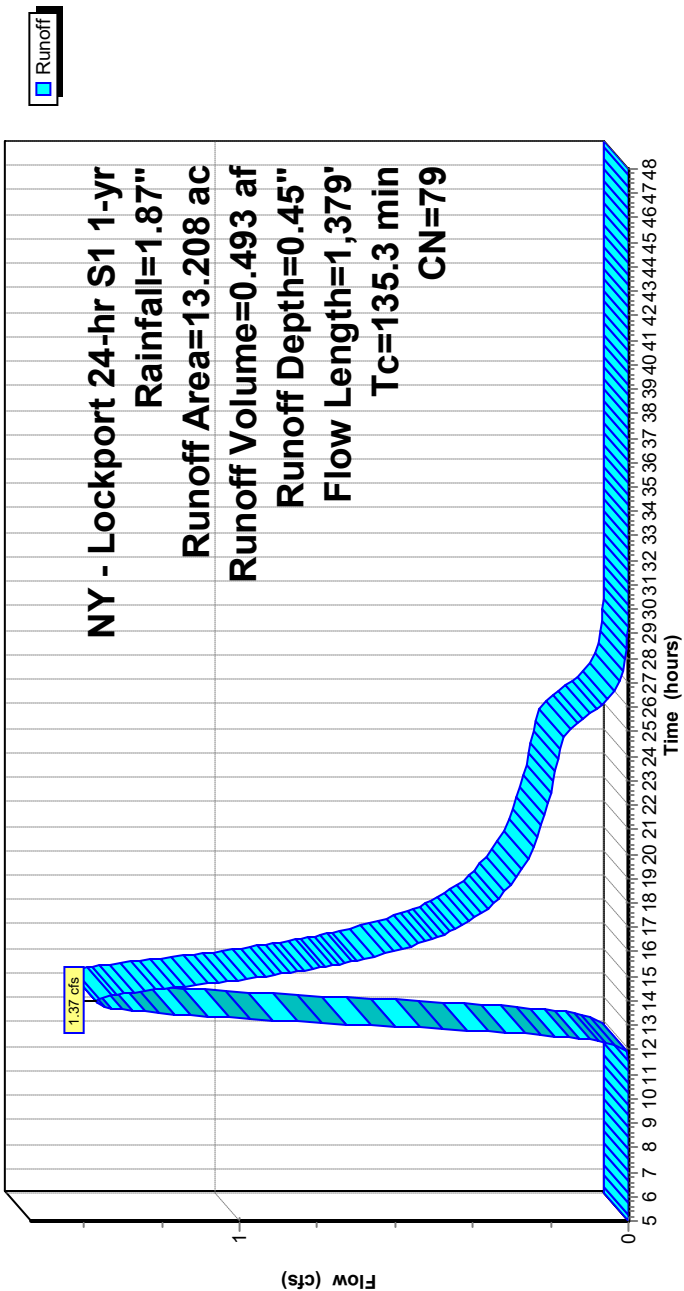
NY - Lockport 24-hr S1 1-yr Rainfall=1.87"

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Subcatchment 72S: DA 45

Hydrograph



CULVERTS 27-47

NY - Lockport 24-hr S1 1-yr Rainfall=1.87"

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Summary for Subcatchment 73S: DA 48

Runoff = 2.76 cfs @ 12.51 hrs, Volume= 0.457 af, Depth= 0.35"
 Routed to Pond 89P : Culvert 048

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-48.00 hrs, dt= 0.05 hrs
 NY - Lockport 24-hr S1 1-yr Rainfall=1.87"

Area (ac)	CN	Description
* 0.687	61	B-75% GRASS COVER, GOOD
* 0.310	69	B-50-75% GRASS COVER, FAIR
* 2.053	58	B-MEADOW, NON-GRAZED
* 0.028	80	D-75% GRASS COVER, GOOD
* 2.330	78	D-MEADOW, NON-GRAZED
* 9.450	78	D-MEADOW, NON-GRAZED
* 0.765	98	D-WATER SURFACE, 0% IMP
* 0.085	98	D-WATER SURFACE, 0% IMP
15.708	76	Weighted Average
14.858		94.59% Pervious Area
0.850		5.41% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.5	100	0.0120	0.12		Sheet Flow, 100 Grass: Short n= 0.150 P2= 2.21"
2.1	148	0.0270	1.15		Shallow Concentrated Flow, 148 Short Grass Pasture Kv= 7.0 fps
3.4	204	0.0200	0.99		Shallow Concentrated Flow, 204 Short Grass Pasture Kv= 7.0 fps
6.0	300	0.0140	0.83		Shallow Concentrated Flow, 300 Short Grass Pasture Kv= 7.0 fps
8.0	280	0.0070	0.59		Shallow Concentrated Flow, 280 Short Grass Pasture Kv= 7.0 fps
34.0	1,032	Total			

CULVERTS 27-47

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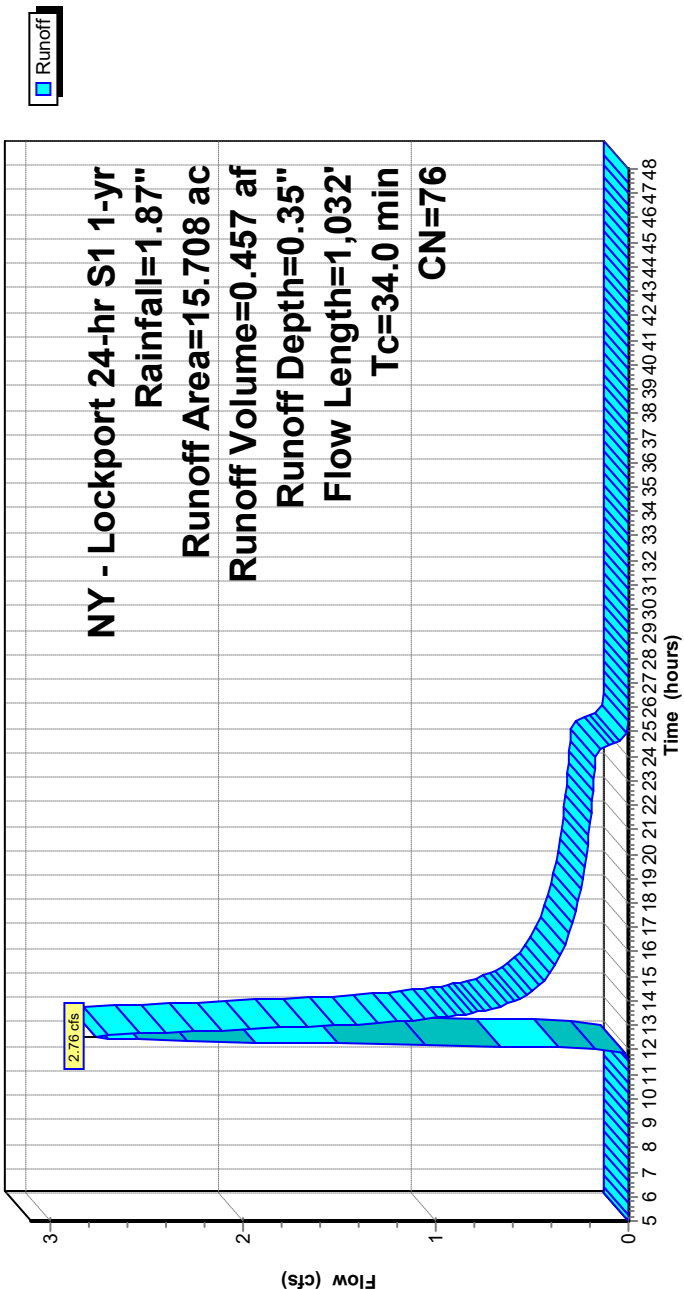
NY - Lockport 24-hr S1 1-yr Rainfall=1.87"

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Subcatchment 73S: DA 48

Hydrograph



CULVERTS 27-47

NY - Lockport 24-hr S1 1-yr Rainfall=1.87"

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Summary for Subcatchment 74S: DA 49

Runoff = 0.09 cfs @ 14.04 hrs, Volume= 0.042 af, Depth= 0.19"
 Routed to Pond 91P : Culvert 049

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-48.00 hrs, dt= 0.05 hrs
 NY - Lockport 24-hr S1 1-yr Rainfall=1.87"

Area (ac)	CN	Description
* 0.260	61	B-75% GRASS COVER, GOOD
* 1.275	69	B-50-75% GRASS COVER, FAIR
* 0.458	58	B-MEADOW, NON-GRAZED
* 0.108	80	D-75% GRASS COVER, GOOD
* 0.524	84	D-50-75% GRASS COVER, FAIR
* 0.000	78	D-MEADOW, NON-GRAZED
2.625	70	Weighted Average
2.625		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
98.2	100	0.0001	0.02		Sheet Flow, 100 Grass: Short n= 0.150 P2= 2.21"
6.5	300	0.0120	0.77		Shallow Concentrated Flow, 300 Short Grass Pasture Kv= 7.0 fps
5.1	204	0.0090	0.66		Shallow Concentrated Flow, 204 Short Grass Pasture Kv= 7.0 fps
7.2	235	0.0060	0.54		Shallow Concentrated Flow, 235 Short Grass Pasture Kv= 7.0 fps
4.3	267	0.0220	1.04		Shallow Concentrated Flow, 267 Short Grass Pasture Kv= 7.0 fps
121.3	1,106	Total			

CULVERTS 27-47

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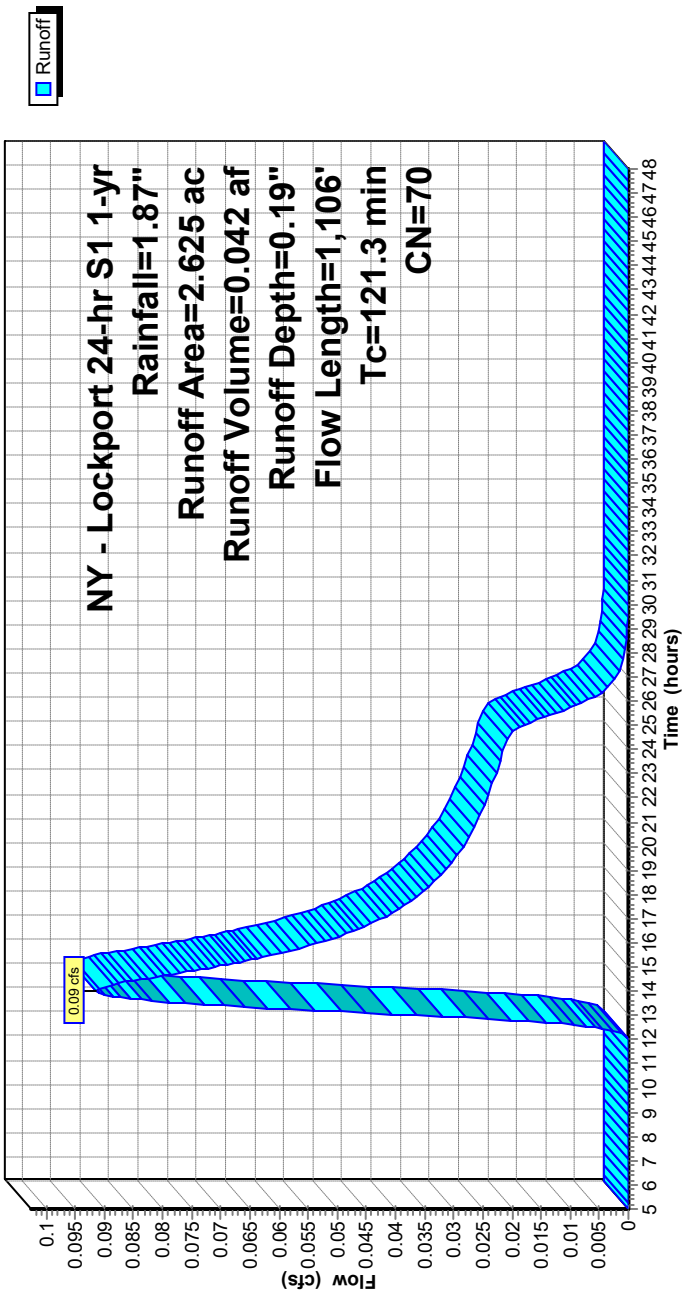
NY - Lockport 24-hr S1 1-yr Rainfall=1.87"

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Subcatchment 74S: DA 49

Hydrograph



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NY - Lockport 24-hr S1 1-yr Rainfall=1.87"

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Summary for Subcatchment 75S: DA 50

Runoff = 0.18 cfs @ 12.59 hrs, Volume= 0.042 af, Depth= 0.19"
 Routed to Pond 92P : Culvert 050

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-48.00 hrs, dt= 0.05 hrs
 NY - Lockport 24-hr S1 1-yr Rainfall=1.87"

Area (ac)	CN	Description
* 0.260	61	B-75% GRASS COVER, GOOD
* 1.275	69	B-50-75% GRASS COVER, FAIR
* 0.458	58	B-MEADOW, NON-GRAZED
* 0.108	80	D-75% GRASS COVER, GOOD
* 0.524	84	D-50-75% GRASS COVER, FAIR
* 0.000	78	D-MEADOW, NON-GRAZED
2.625	70	Weighted Average
2.625		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
17.9	100	0.0070	0.09		Sheet Flow, 100 Grass: Short n= 0.150 P2= 2.21"
3.4	222	0.0240	1.08		Shallow Concentrated Flow, 222 Short Grass Pasture Kv= 7.0 fps
4.1	154	0.0080	0.63		Shallow Concentrated Flow, 154 Short Grass Pasture Kv= 7.0 fps
4.8	143	0.0050	0.49		Shallow Concentrated Flow, 143 Short Grass Pasture Kv= 7.0 fps
30.2	619	Total			

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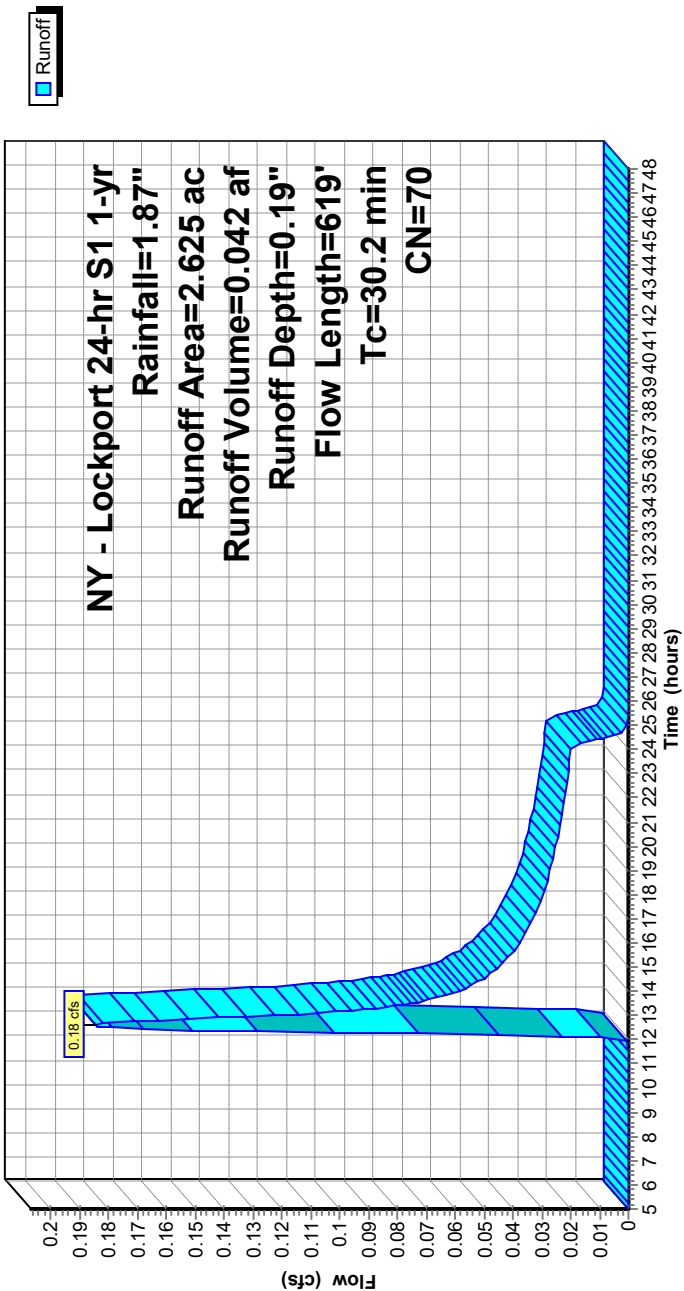
NY - Lockport 24-hr S1 1-yr Rainfall=1.87"

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Subcatchment 75S: DA 50

Hydrograph



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Summary for Subcatchment 76S: DA 54

Runoff = 0.03 cfs @ 13.39 hrs, Volume= 0.007 af, Depth= 0.52"
Routed to Pond 93P : Culvert 054

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-48.00 hrs, dt= 0.05 hrs
NY - Lockport 24-hr S1 1-yr Rainfall=1.87"

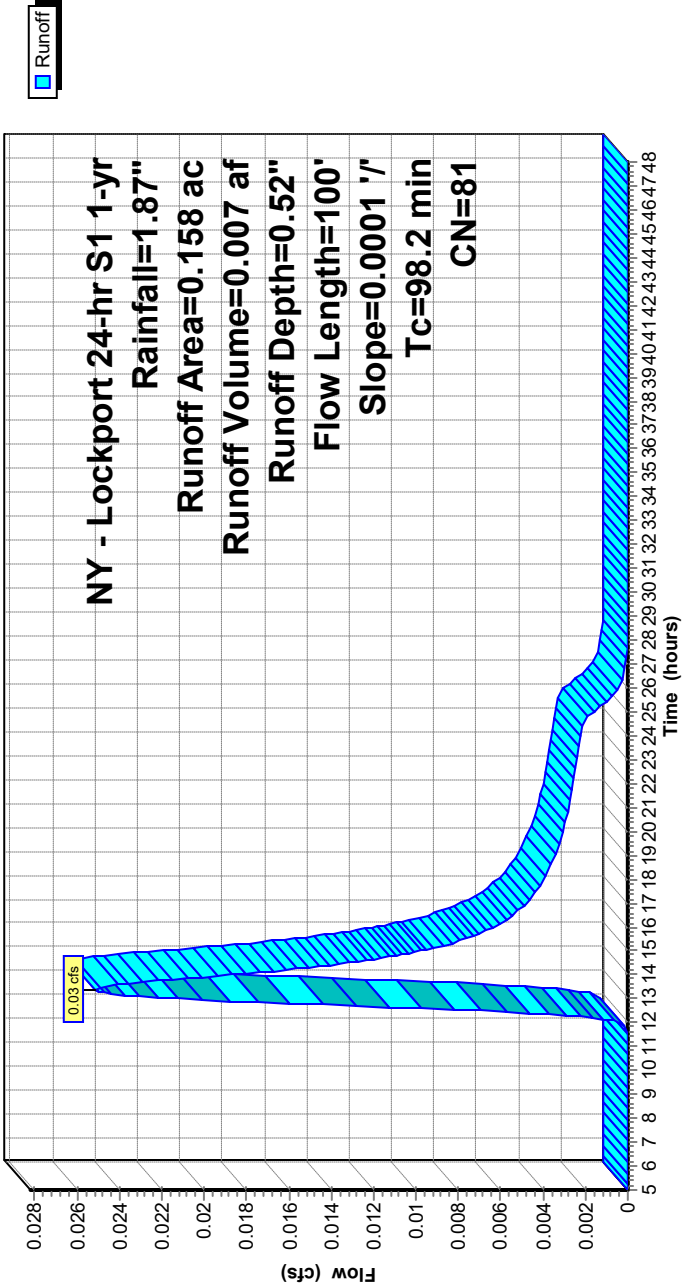
Area (ac)	CN	Description
* 0.090	84	D-50-75% GRASS COVER, FAIR
* 0.067	78	D-MEADOW, NON-GRAZED
* 0.001	78	D-MEADOW, NON-GRAZED

0.158 81 Weighted Average
0.158 100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
98.2	100	0.0001	0.02		
Sheet Flow, 100					
Grass: Short n= 0.150 P2= 2.21"					

Subcatchment 76S: DA 54

Hydrograph



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Summary for Pond 77P: Culvert 032

[58] Hint: Peaked 0.03' above defined flood level

Inflow Area = 83.916 ac, 0.00% Impervious, Inflow Depth = 0.38" for 1-yr event
Inflow = 5.02 cfs @ 15.35 hrs, Volume= 2.659 af
Outflow = 5.02 cfs @ 15.35 hrs, Volume= 2.659 af, Atten= 0%, Lag= 0.0 min
Primary = 5.02 cfs @ 15.35 hrs, Volume= 2.659 af

Routing by Stor-Ind method, Time Span= 5.00-48.00 hrs, dt= 0.05 hrs

Peak Elev= 616.03' @ 15.35 hrs

Flood Elev= 616.00'

Device	Routing	Invert	Outlet Devices
#1	Primary	615.20'	24.0" Round Culvert 001 w/ 2.4" inside fill L= 30.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 615.00' / 614.48' S= 0.0173 '/' Cc= 0.900 n= 0.012 Steel, smooth, Flow Area= 2.98 sf
#2	Primary	616.00'	100.0' long + 3.0 ' SideZ x 20.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63

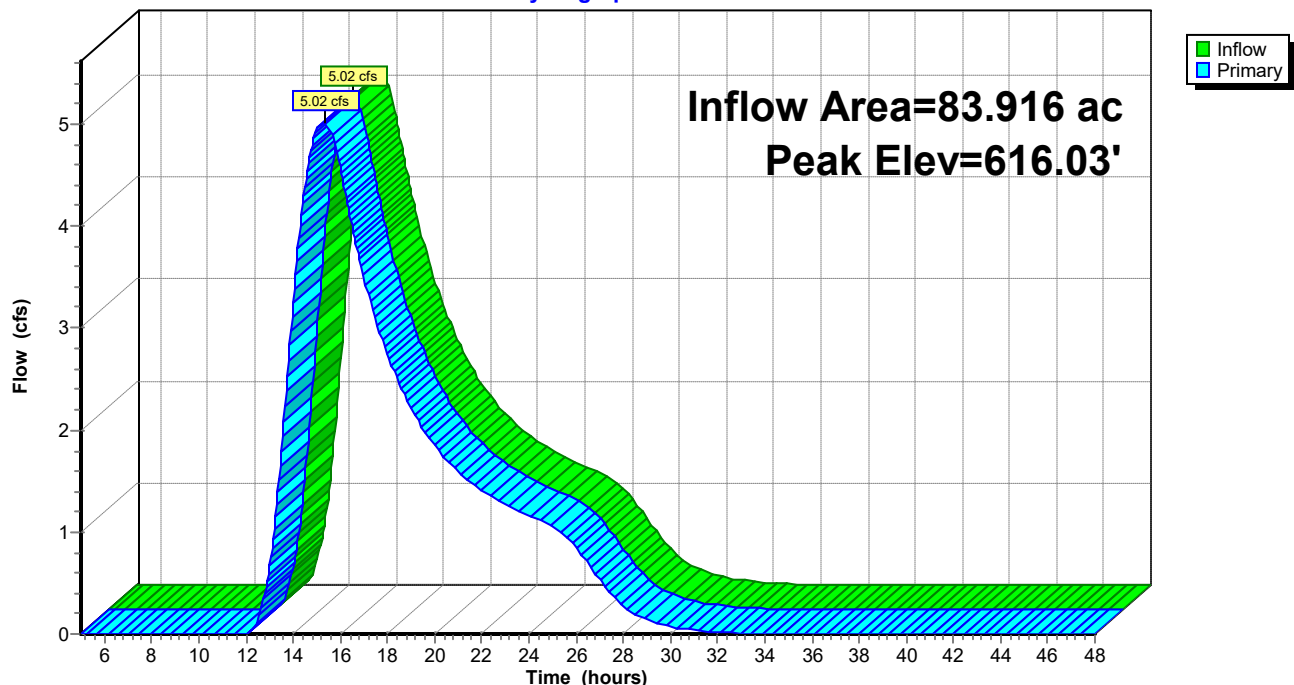
Primary OutFlow Max=4.98 cfs @ 15.35 hrs HW=616.03' (Free Discharge)

1=Culvert 001 (Inlet Controls 3.28 cfs @ 2.22 fps)

2=Broad-Crested Rectangular Weir (Weir Controls 1.70 cfs @ 0.50 fps)

Pond 77P: Culvert 032

Hydrograph



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Summary for Pond 78P: Culvert 033

Inflow Area = 8.458 ac, 0.00% Impervious, Inflow Depth = 0.07" for 1-yr event
Inflow = 0.09 cfs @ 13.16 hrs, Volume= 0.052 af
Outflow = 0.09 cfs @ 13.16 hrs, Volume= 0.052 af, Atten= 0%, Lag= 0.0 min
Primary = 0.09 cfs @ 13.16 hrs, Volume= 0.052 af

Routing by Stor-Ind method, Time Span= 5.00-48.00 hrs, dt= 0.05 hrs

Peak Elev= 645.30' @ 13.16 hrs

Flood Elev= 646.00'

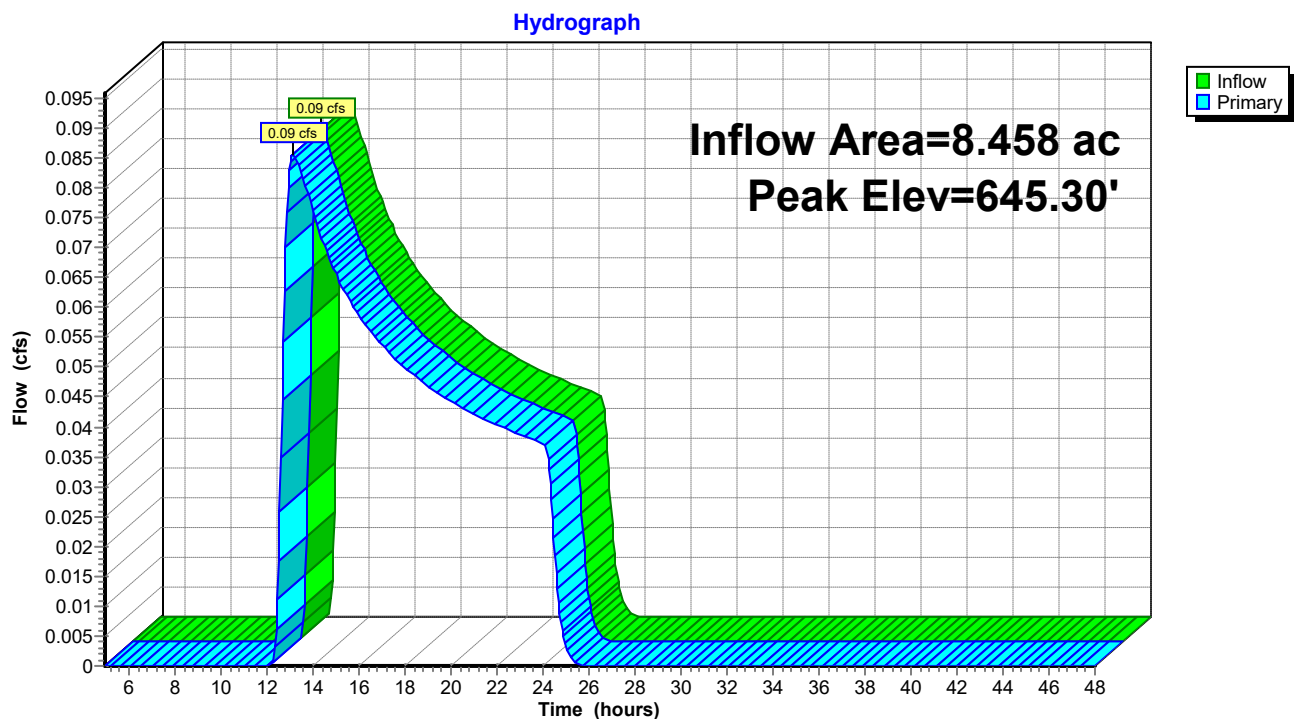
Device	Routing	Invert	Outlet Devices
#1	Primary	645.20'	18.0" Round Culvert 001 w/ 2.4" inside fill L= 30.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 645.00' / 644.22' S= 0.0260 '/' Cc= 0.900 n= 0.012 Steel, smooth, Flow Area= 1.63 sf
#2	Primary	646.00'	100.0' long + 3.0 ' SideZ x 20.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63

Primary OutFlow Max=0.09 cfs @ 13.16 hrs HW=645.30' (Free Discharge)

1=Culvert 001 (Inlet Controls 0.09 cfs @ 0.79 fps)

2=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond 78P: Culvert 033



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Summary for Pond 79P: Culvert 034

Inflow Area = 3.000 ac, 0.00% Impervious, Inflow Depth = 0.22" for 1-yr event
Inflow = 0.10 cfs @ 15.00 hrs, Volume= 0.054 af
Outflow = 0.10 cfs @ 15.00 hrs, Volume= 0.054 af, Atten= 0%, Lag= 0.0 min
Primary = 0.10 cfs @ 15.00 hrs, Volume= 0.054 af

Routing by Stor-Ind method, Time Span= 5.00-48.00 hrs, dt= 0.05 hrs

Peak Elev= 646.86' @ 15.00 hrs

Flood Elev= 647.50'

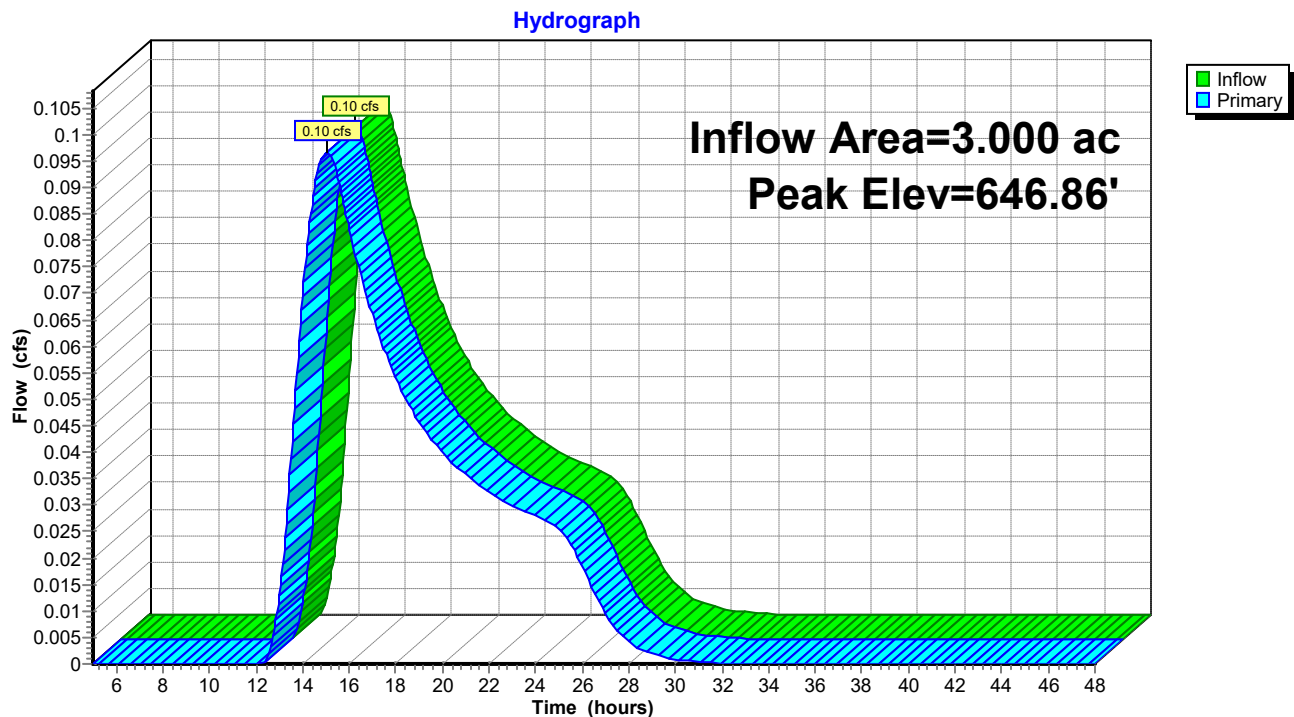
Device	Routing	Invert	Outlet Devices
#1	Primary	646.75'	15.0" Round Culvert 001 w/ 3.0" inside fill L= 30.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 646.50' / 645.72' S= 0.0260 '/' Cc= 0.900 n= 0.012 Steel, smooth, Flow Area= 1.05 sf
#2	Primary	647.50'	100.0' long + 3.0 ' SideZ x 20.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63

Primary OutFlow Max=0.10 cfs @ 15.00 hrs HW=646.86' (Free Discharge)

1=Culvert 001 (Inlet Controls 0.10 cfs @ 0.83 fps)

2=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond 79P: Culvert 034



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Summary for Pond 80P: Culvert 036

Inflow Area = 7.023 ac, 21.33% Impervious, Inflow Depth = 0.26" for 1-yr event
Inflow = 0.79 cfs @ 12.57 hrs, Volume= 0.155 af
Outflow = 0.79 cfs @ 12.57 hrs, Volume= 0.155 af, Atten= 0%, Lag= 0.0 min
Primary = 0.79 cfs @ 12.57 hrs, Volume= 0.155 af

Routing by Stor-Ind method, Time Span= 5.00-48.00 hrs, dt= 0.05 hrs

Peak Elev= 633.40' @ 12.57 hrs

Flood Elev= 634.00'

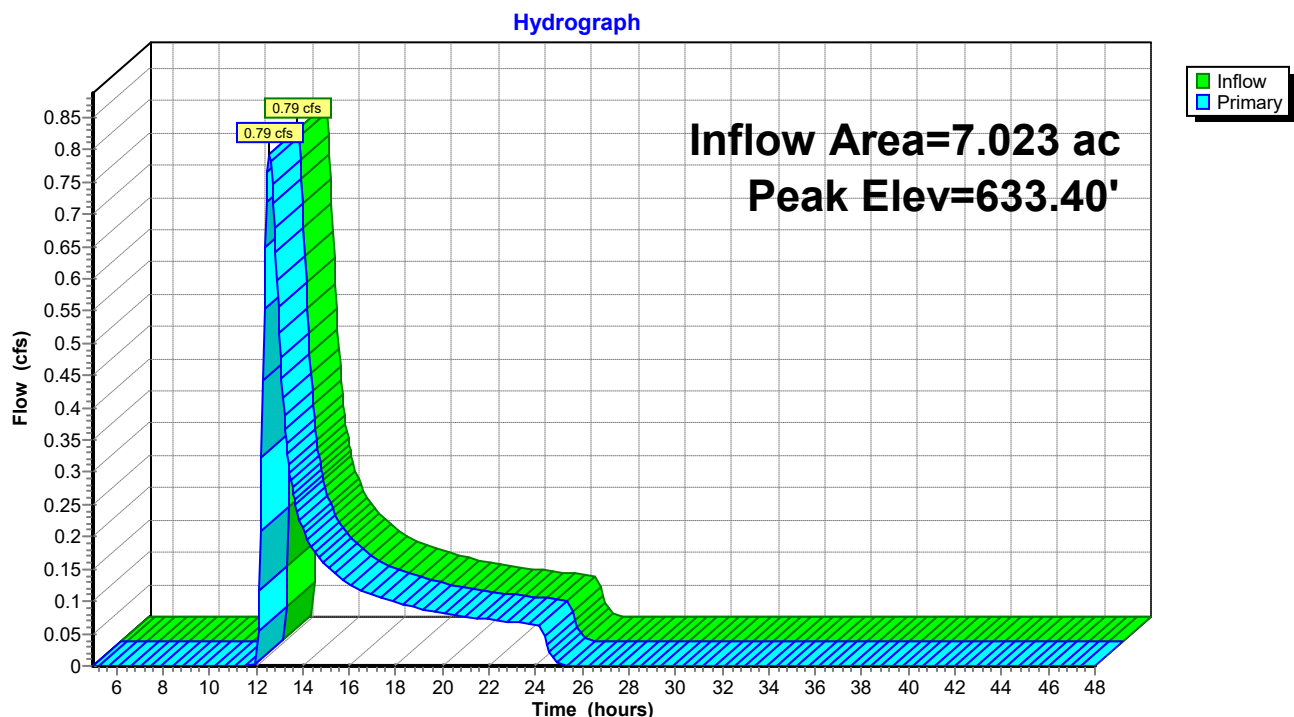
Device	Routing	Invert	Outlet Devices
#1	Primary	633.00'	18.0" Round Culvert 001 w/ 2.4" inside fill L= 30.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 632.80' / 632.02' S= 0.0260 ' / Cc= 0.900 n= 0.012 Steel, smooth, Flow Area= 1.63 sf
#2	Primary	634.00'	100.0' long + 3.0 ' SideZ x 20.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63

Primary OutFlow Max=0.79 cfs @ 12.57 hrs HW=633.39' (Free Discharge)

1=Culvert 001 (Inlet Controls 0.79 cfs @ 1.54 fps)

2=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond 80P: Culvert 036



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Summary for Pond 81P: Culvert 037

Inflow Area = 2.575 ac, 0.00% Impervious, Inflow Depth = 0.00" for 1-yr event
Inflow = 0.00 cfs @ 24.00 hrs, Volume= 0.000 af
Outflow = 0.00 cfs @ 24.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min
Primary = 0.00 cfs @ 24.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 5.00-48.00 hrs, dt= 0.05 hrs

Peak Elev= 651.51' @ 24.00 hrs

Flood Elev= 652.31'

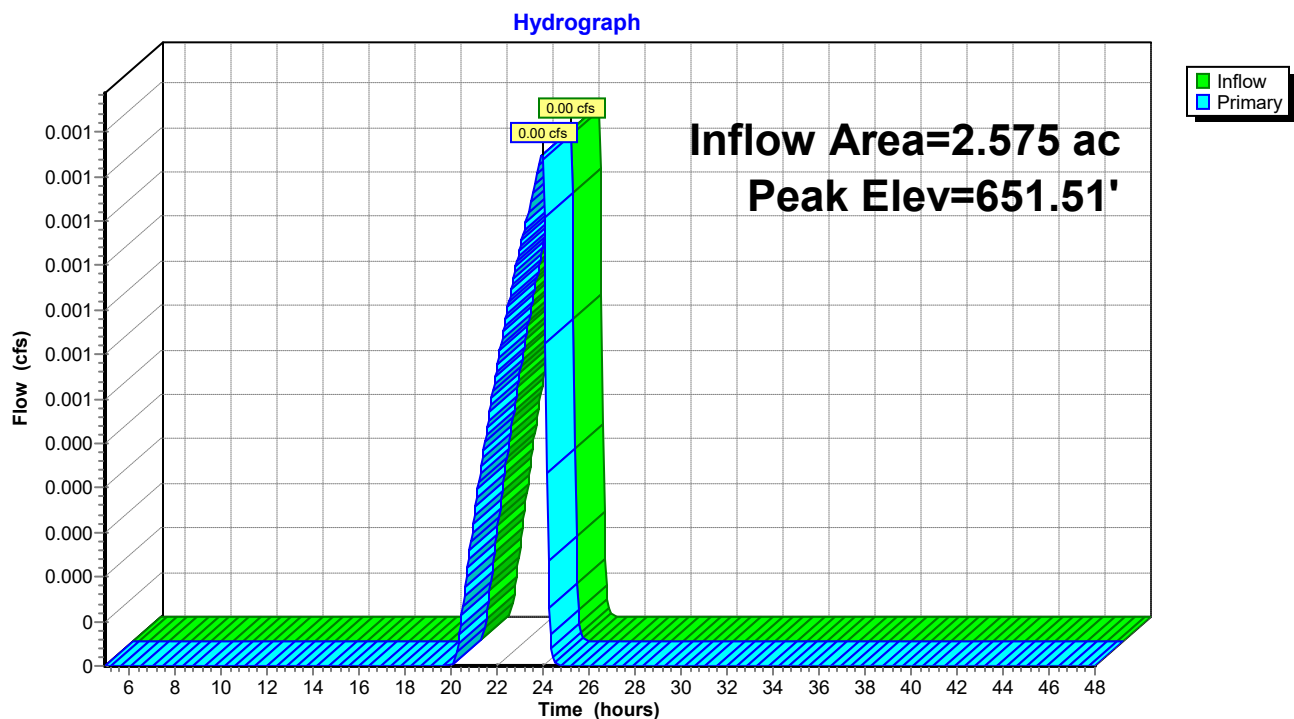
Device	Routing	Invert	Outlet Devices
#1	Primary	651.51'	18.0" Round Culvert 001 w/ 2.4" inside fill L= 30.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 651.31' / 650.53' S= 0.0260 '/' Cc= 0.900 n= 0.012 Steel, smooth, Flow Area= 1.63 sf
#2	Primary	652.31'	100.0' long + 3.0 ' SideZ x 20.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63

Primary OutFlow Max=0.00 cfs @ 24.00 hrs HW=651.51' (Free Discharge)

1=Culvert 001 (Inlet Controls 0.00 cfs @ 0.25 fps)

2=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond 81P: Culvert 037



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Summary for Pond 82P: Culvert 038

Inflow Area = 5.423 ac, 0.00% Impervious, Inflow Depth = 0.00" for 1-yr event
Inflow = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af
Outflow = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min
Primary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 5.00-48.00 hrs, dt= 0.05 hrs

Peak Elev= 644.69' @ 5.00 hrs

Flood Elev= 645.44'

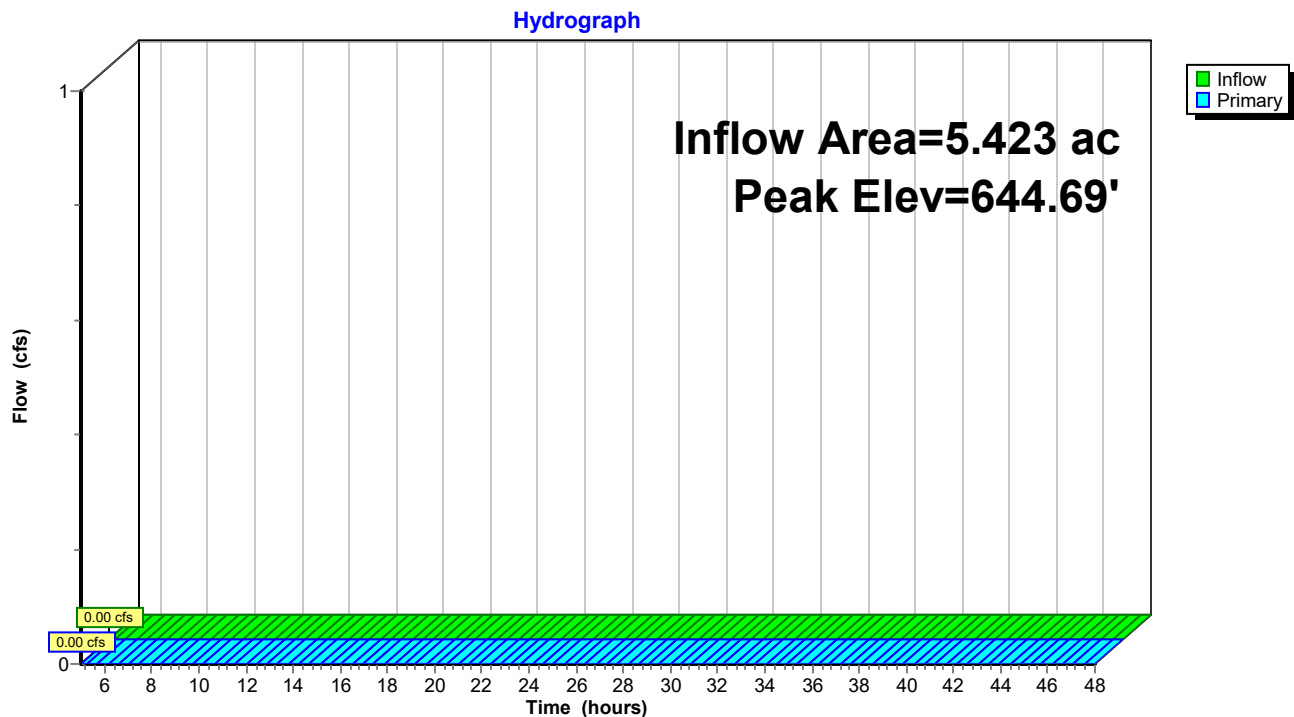
Device	Routing	Invert	Outlet Devices
#1	Primary	644.69'	15.0" Round Culvert 001 w/ 3.0" inside fill L= 30.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 644.44' / 643.66' S= 0.0260 '/' Cc= 0.900 n= 0.012 Steel, smooth, Flow Area= 1.05 sf
#2	Primary	645.44'	100.0' long + 3.0 ' SideZ x 20.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63

Primary OutFlow Max=0.00 cfs @ 5.00 hrs HW=644.69' (Free Discharge)

1=Culvert 001 (Controls 0.00 cfs)

2=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond 82P: Culvert 038



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Summary for Pond 83P: Culvert 039

Inflow Area = 0.717 ac, 0.00% Impervious, Inflow Depth = 0.03" for 1-yr event
Inflow = 0.00 cfs @ 16.65 hrs, Volume= 0.002 af
Outflow = 0.00 cfs @ 16.65 hrs, Volume= 0.002 af, Atten= 0%, Lag= 0.0 min
Primary = 0.00 cfs @ 16.65 hrs, Volume= 0.002 af

Routing by Stor-Ind method, Time Span= 5.00-48.00 hrs, dt= 0.05 hrs

Peak Elev= 642.18' @ 16.65 hrs

Flood Elev= 642.92'

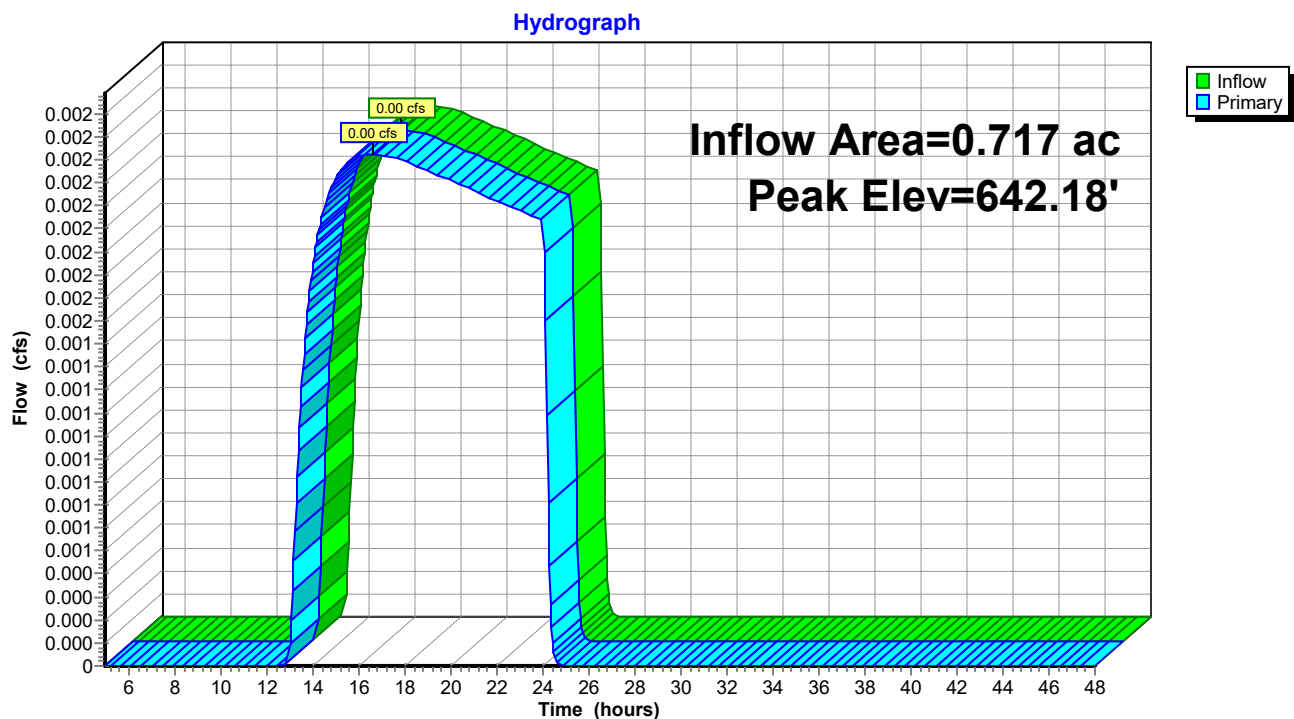
Device	Routing	Invert	Outlet Devices
#1	Primary	642.17'	15.0" Round Culvert 001 w/ 3.0" inside fill L= 30.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 641.92' / 641.14' S= 0.0260 '/' Cc= 0.900 n= 0.012 Steel, smooth, Flow Area= 1.05 sf
#2	Primary	642.92'	100.0' long + 3.0 ' SideZ x 20.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63

Primary OutFlow Max=0.00 cfs @ 16.65 hrs HW=642.18' (Free Discharge)

1=Culvert 001 (Inlet Controls 0.00 cfs @ 0.24 fps)

2=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond 83P: Culvert 039



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Summary for Pond 84P: Culvert 040

Inflow Area = 20.817 ac, 2.01% Impervious, Inflow Depth = 0.41" for 1-yr event
Inflow = 2.72 cfs @ 13.26 hrs, Volume= 0.717 af
Outflow = 2.72 cfs @ 13.26 hrs, Volume= 0.717 af, Atten= 0%, Lag= 0.0 min
Primary = 2.72 cfs @ 13.26 hrs, Volume= 0.717 af

Routing by Stor-Ind method, Time Span= 5.00-48.00 hrs, dt= 0.05 hrs

Peak Elev= 635.89' @ 13.26 hrs

Flood Elev= 636.05'

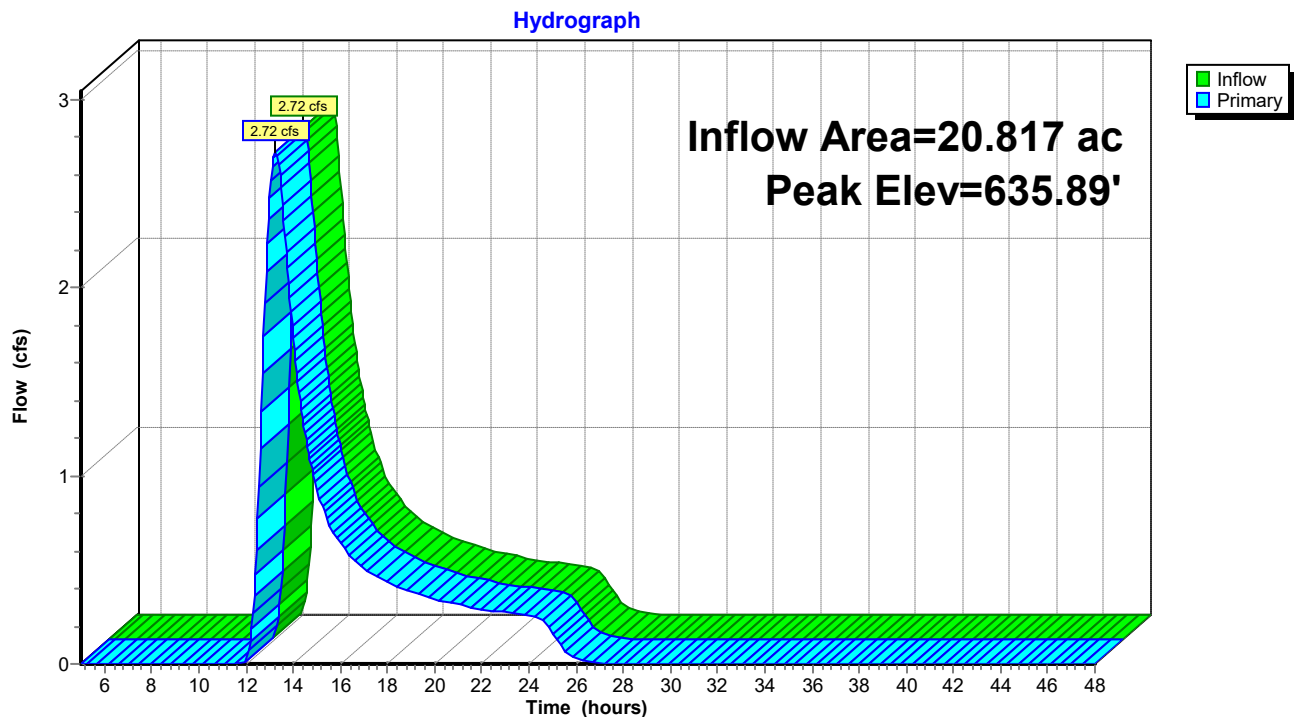
Device	Routing	Invert	Outlet Devices
#1	Primary	635.25'	36.0" Round Culvert 001 w/ 2.4" inside fill L= 36.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 635.05' / 634.27' S= 0.0217 ' S= 0.0217 ' Cc= 0.900 n= 0.012 Steel, smooth, Flow Area= 6.87 sf
#2	Primary	636.05'	100.0' long + 3.0 ' SideZ x 20.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63

Primary OutFlow Max=2.72 cfs @ 13.26 hrs HW=635.89' (Free Discharge)

1=Culvert 001 (Inlet Controls 2.72 cfs @ 1.92 fps)

2=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond 84P: Culvert 040



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Summary for Pond 86P: Culvert 041

Inflow Area = 1.015 ac, 0.00% Impervious, Inflow Depth = 0.41" for 1-yr event
Inflow = 0.11 cfs @ 13.60 hrs, Volume= 0.035 af
Outflow = 0.11 cfs @ 13.60 hrs, Volume= 0.035 af, Atten= 0%, Lag= 0.0 min
Primary = 0.11 cfs @ 13.60 hrs, Volume= 0.035 af

Routing by Stor-Ind method, Time Span= 5.00-48.00 hrs, dt= 0.05 hrs

Peak Elev= 637.31' @ 13.60 hrs

Flood Elev= 638.00'

Device	Routing	Invert	Outlet Devices
#1	Primary	637.20'	18.0" Round Culvert 001 w/ 2.4" inside fill L= 36.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 637.00' / 636.22' S= 0.0217 ' S= 0.0217 ' Cc= 0.900 n= 0.012 Steel, smooth, Flow Area= 1.63 sf
#2	Primary	638.00'	100.0' long + 3.0 ' SideZ x 20.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63

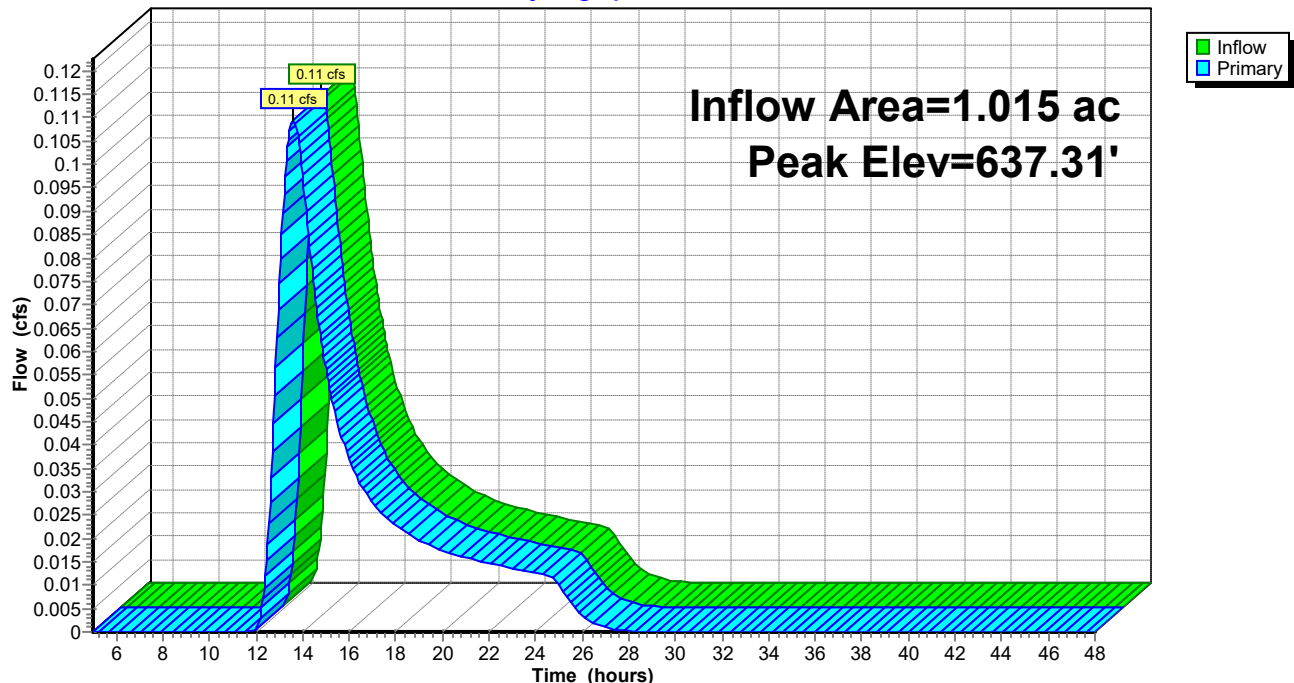
Primary OutFlow Max=0.11 cfs @ 13.60 hrs HW=637.31' (Free Discharge)

1=Culvert 001 (Inlet Controls 0.11 cfs @ 0.85 fps)

2=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond 86P: Culvert 041

Hydrograph



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Summary for Pond 87P: Culvert 045

Inflow Area = 13.208 ac, 0.00% Impervious, Inflow Depth = 0.45" for 1-yr event
Inflow = 1.37 cfs @ 13.97 hrs, Volume= 0.493 af
Outflow = 1.37 cfs @ 13.97 hrs, Volume= 0.493 af, Atten= 0%, Lag= 0.0 min
Primary = 1.37 cfs @ 13.97 hrs, Volume= 0.493 af

Routing by Stor-Ind method, Time Span= 5.00-48.00 hrs, dt= 0.05 hrs

Peak Elev= 635.75' @ 13.97 hrs

Flood Elev= 636.00'

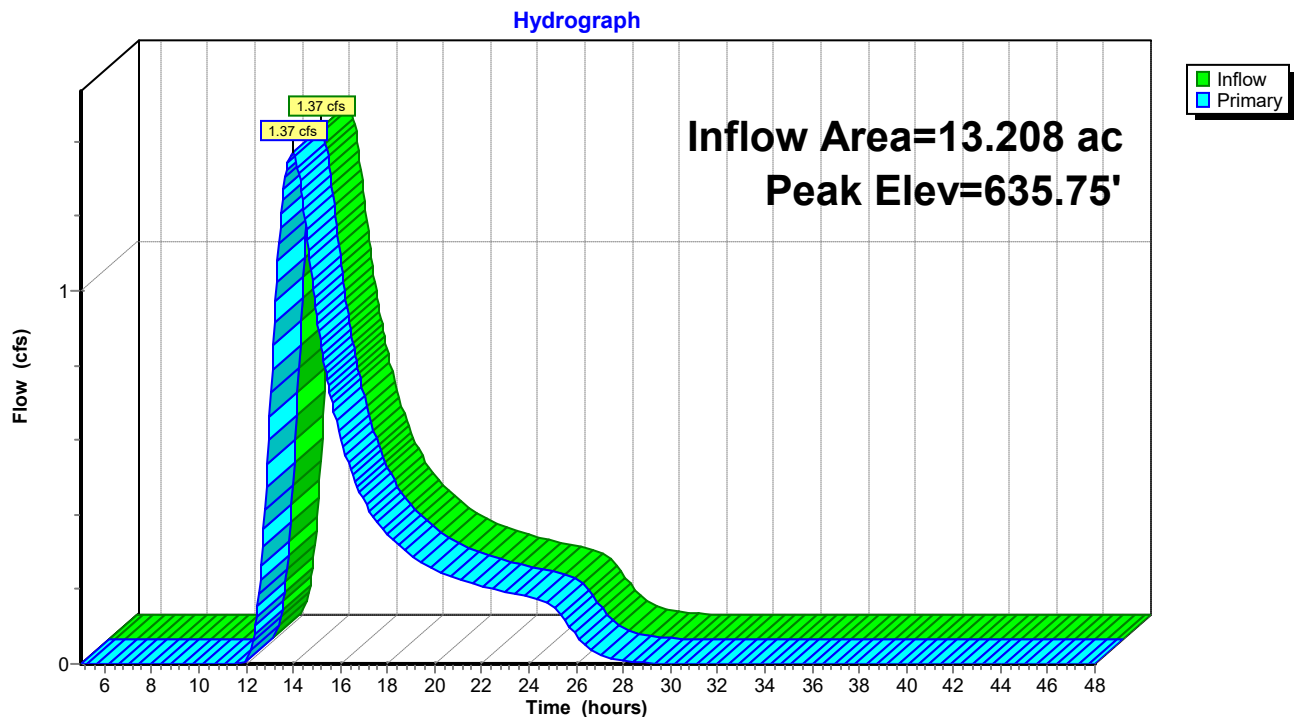
Device	Routing	Invert	Outlet Devices
#1	Primary	635.20'	18.0" Round Culvert 001 w/ 2.4" inside fill L= 30.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 635.00' / 634.22' S= 0.0260 '/' Cc= 0.900 n= 0.012 Steel, smooth, Flow Area= 1.63 sf
#2	Primary	636.00'	100.0' long + 3.0 ' SideZ x 20.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63

Primary OutFlow Max=1.37 cfs @ 13.97 hrs HW=635.75' (Free Discharge)

1=Culvert 001 (Inlet Controls 1.37 cfs @ 1.83 fps)

2=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond 87P: Culvert 045



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Summary for Pond 89P: Culvert 048

Inflow Area = 15.708 ac, 5.41% Impervious, Inflow Depth = 0.35" for 1-yr event
Inflow = 2.76 cfs @ 12.51 hrs, Volume= 0.457 af
Outflow = 2.76 cfs @ 12.51 hrs, Volume= 0.457 af, Atten= 0%, Lag= 0.0 min
Primary = 2.76 cfs @ 12.51 hrs, Volume= 0.457 af

Routing by Stor-Ind method, Time Span= 5.00-48.00 hrs, dt= 0.05 hrs

Peak Elev= 635.84' @ 12.51 hrs

Flood Elev= 636.00'

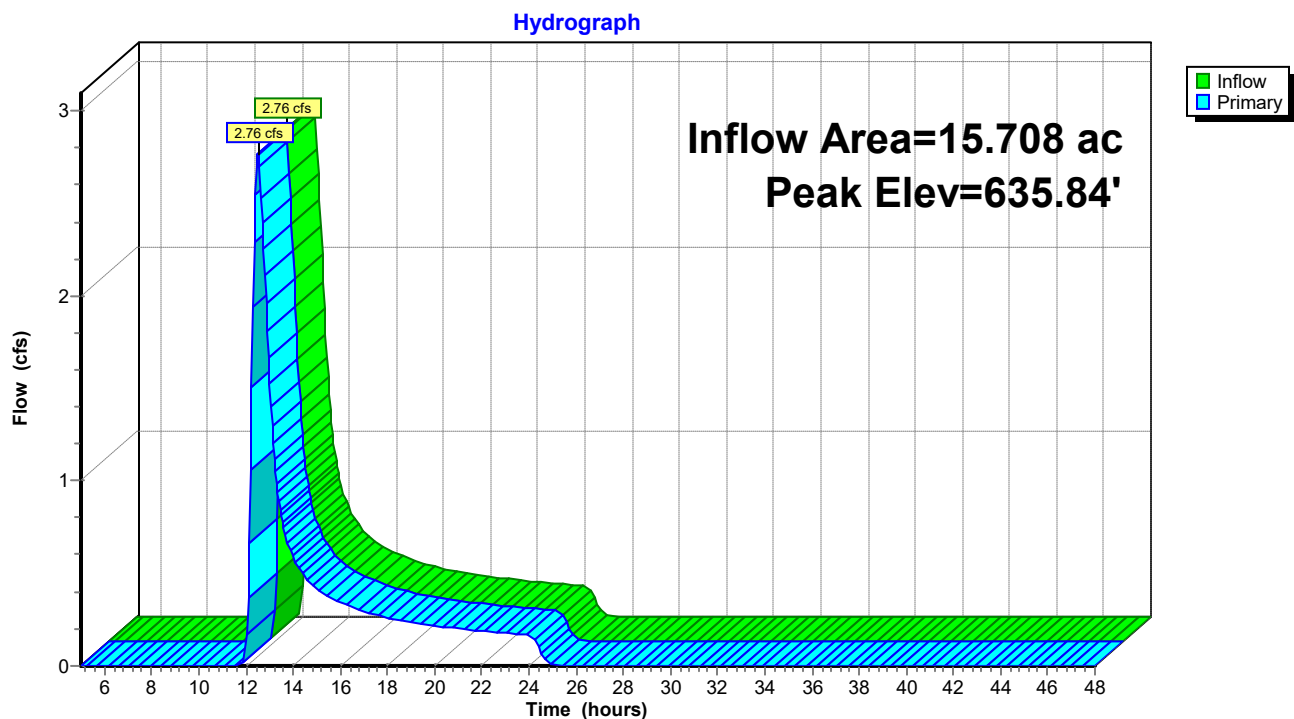
Device	Routing	Invert	Outlet Devices
#1	Primary	635.20'	36.0" Round Culvert w/ 2.4" inside fill L= 30.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 635.00' / 634.22' S= 0.0260 '/' Cc= 0.900 n= 0.012 Steel, smooth, Flow Area= 6.87 sf
#2	Primary	636.00'	100.0' long + 3.0 ' SideZ x 20.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63

Primary OutFlow Max=2.76 cfs @ 12.51 hrs HW=635.84' (Free Discharge)

1=Culvert (Inlet Controls 2.76 cfs @ 1.93 fps)

2=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond 89P: Culvert 048



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Summary for Pond 91P: Culvert 049

Inflow Area = 2.625 ac, 0.00% Impervious, Inflow Depth = 0.19" for 1-yr event
Inflow = 0.09 cfs @ 14.04 hrs, Volume= 0.042 af
Outflow = 0.09 cfs @ 14.04 hrs, Volume= 0.042 af, Atten= 0%, Lag= 0.0 min
Primary = 0.09 cfs @ 14.04 hrs, Volume= 0.042 af

Routing by Stor-Ind method, Time Span= 5.00-48.00 hrs, dt= 0.05 hrs

Peak Elev= 637.29' @ 14.04 hrs

Flood Elev= 638.00'

Device	Routing	Invert	Outlet Devices
#1	Primary	637.20'	24.0" Round Culvert 001 w/ 2.4" inside fill L= 30.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 637.00' / 636.22' S= 0.0260 '/' Cc= 0.900 n= 0.012 Steel, smooth, Flow Area= 2.98 sf
#2	Primary	638.00'	100.0' long + 3.0 ' SideZ x 20.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63

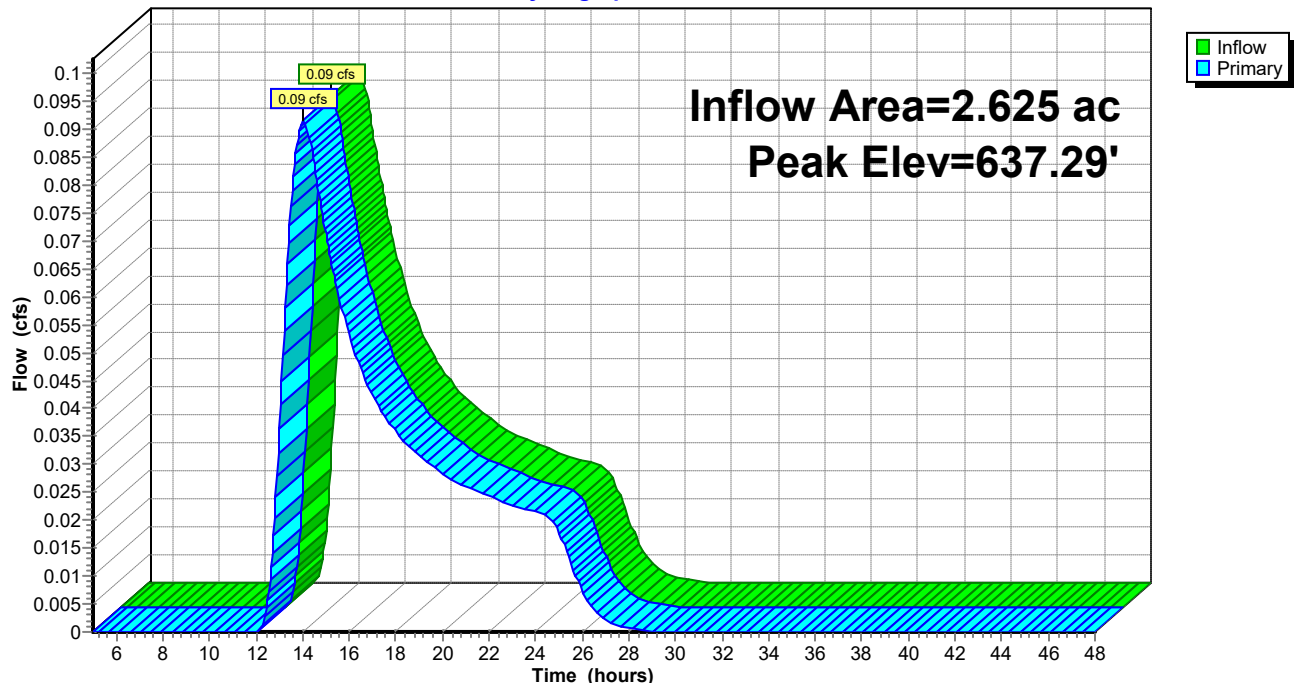
Primary OutFlow Max=0.09 cfs @ 14.04 hrs HW=637.29' (Free Discharge)

1=Culvert 001 (Inlet Controls 0.09 cfs @ 0.76 fps)

2=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond 91P: Culvert 049

Hydrograph



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Summary for Pond 92P: Culvert 050

Inflow Area = 2.625 ac, 0.00% Impervious, Inflow Depth = 0.19" for 1-yr event
Inflow = 0.18 cfs @ 12.59 hrs, Volume= 0.042 af
Outflow = 0.18 cfs @ 12.59 hrs, Volume= 0.042 af, Atten= 0%, Lag= 0.0 min
Primary = 0.18 cfs @ 12.59 hrs, Volume= 0.042 af

Routing by Stor-Ind method, Time Span= 5.00-48.00 hrs, dt= 0.05 hrs

Peak Elev= 637.34' @ 12.59 hrs

Flood Elev= 638.00'

Device	Routing	Invert	Outlet Devices
#1	Primary	637.20'	24.0" Round Culvert 039 w/ 2.4" inside fill L= 30.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 637.00' / 636.22' S= 0.0260 ' / Cc= 0.900 n= 0.012 Steel, smooth, Flow Area= 2.98 sf
#2	Primary	638.00'	100.0' long + 3.0 ' SideZ x 20.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63

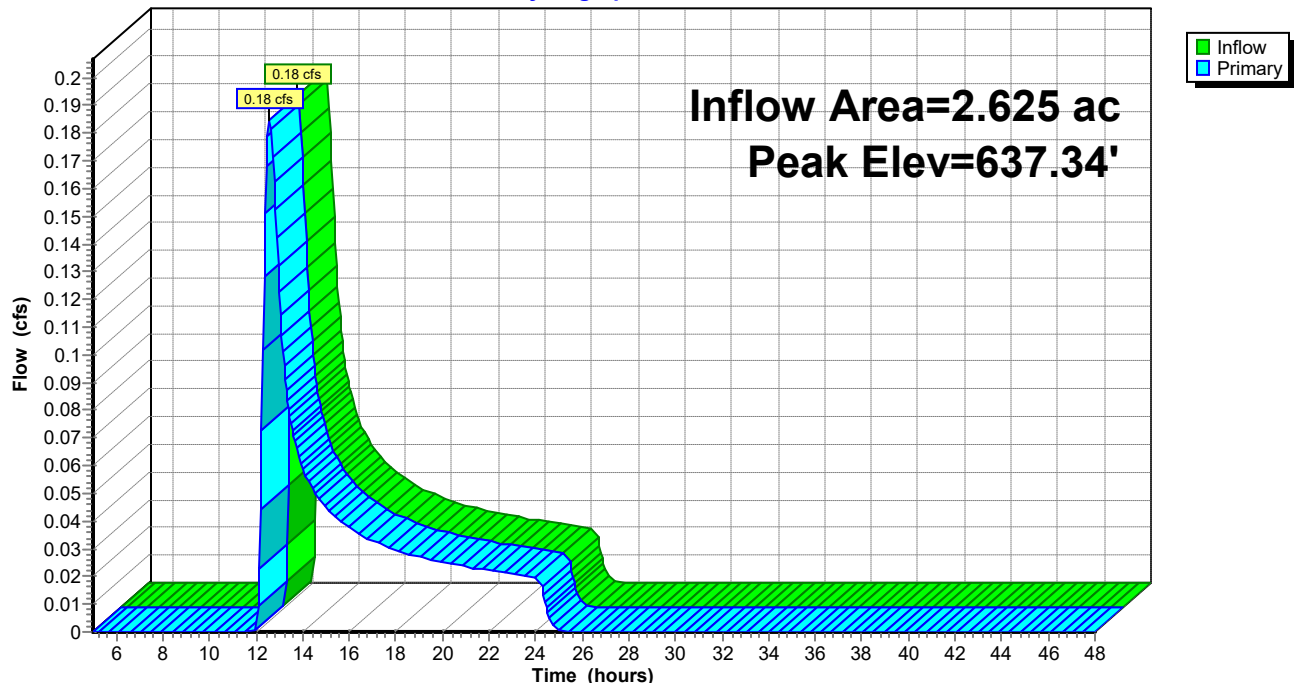
Primary OutFlow Max=0.18 cfs @ 12.59 hrs HW=637.34' (Free Discharge)

1=Culvert 039 (Inlet Controls 0.18 cfs @ 0.94 fps)

2=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond 92P: Culvert 050

Hydrograph



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Summary for Pond 93P: Culvert 054

Inflow Area = 0.158 ac, 0.00% Impervious, Inflow Depth = 0.52" for 1-yr event
Inflow = 0.03 cfs @ 13.39 hrs, Volume= 0.007 af
Outflow = 0.03 cfs @ 13.39 hrs, Volume= 0.007 af, Atten= 0%, Lag= 0.0 min
Primary = 0.03 cfs @ 13.39 hrs, Volume= 0.007 af

Routing by Stor-Ind method, Time Span= 5.00-48.00 hrs, dt= 0.05 hrs

Peak Elev= 641.24' @ 13.39 hrs

Flood Elev= 642.00'

Device	Routing	Invert	Outlet Devices
#1	Primary	641.20'	24.0" Round Culvert 001 w/ 2.4" inside fill L= 30.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 641.00' / 640.22' S= 0.0260 '/' Cc= 0.900 n= 0.012 Steel, smooth, Flow Area= 2.98 sf
#2	Primary	642.00'	100.0' long + 3.0 ' SideZ x 20.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63

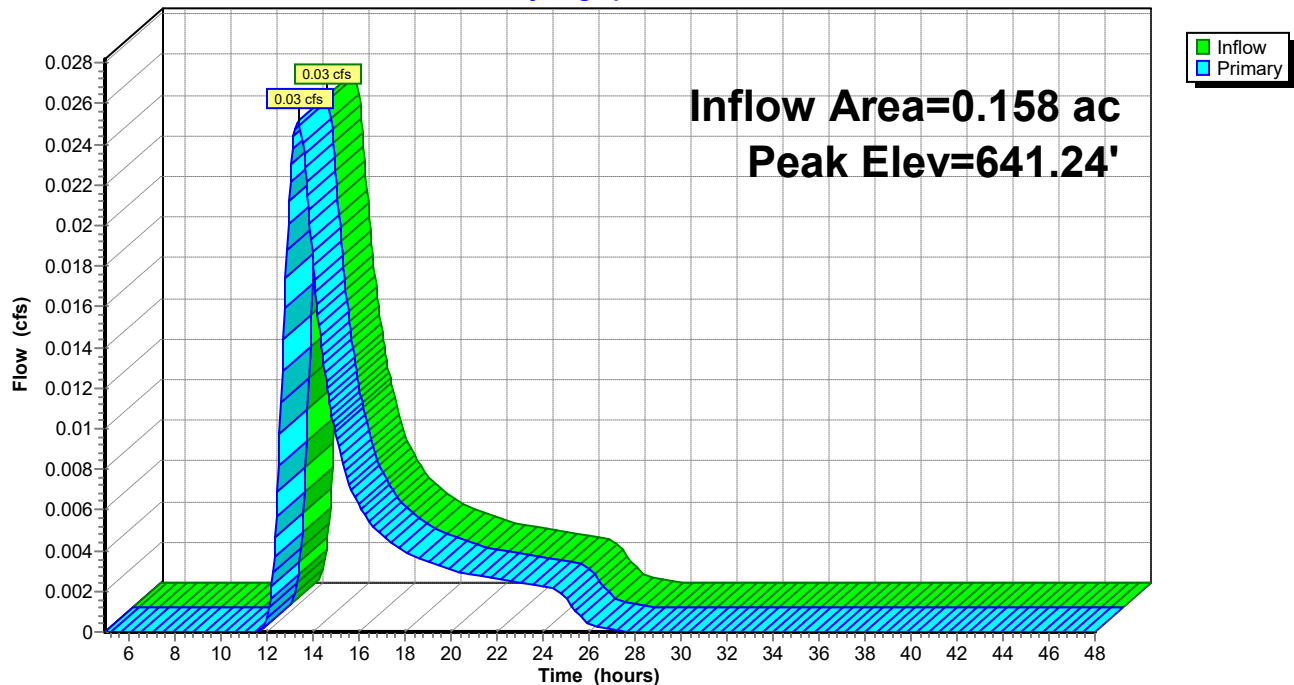
Primary OutFlow Max=0.02 cfs @ 13.39 hrs HW=641.24' (Free Discharge)

1=Culvert 001 (Inlet Controls 0.02 cfs @ 0.51 fps)

2=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond 93P: Culvert 054

Hydrograph



CULVERTS 27-47*NY - Lockport 24-hr S1 10-yr Rainfall=3.25"*

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Time span=5.00-48.00 hrs, dt=0.05 hrs, 861 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 63S: DA 32	Runoff Area=83.916 ac 0.00% Impervious Runoff Depth=1.25" Flow Length=3,167' Tc=219.6 min CN=77 Runoff=20.08 cfs 8.725 af
Subcatchment 64S: DA 33	Runoff Area=8.458 ac 0.00% Impervious Runoff Depth=0.54" Flow Length=1,546' Tc=38.9 min CN=63 Runoff=2.27 cfs 0.382 af
Subcatchment 65S: DA 34	Runoff Area=3.000 ac 0.00% Impervious Runoff Depth=0.91" Flow Length=915' Tc=184.4 min CN=71 Runoff=0.57 cfs 0.227 af
Subcatchment 66S: DA 36	Runoff Area=7.023 ac 21.33% Impervious Runoff Depth=1.01" Flow Length=1,365' Tc=34.8 min CN=73 Runoff=4.72 cfs 0.594 af
Subcatchment 67S: DA 37	Runoff Area=2.575 ac 0.00% Impervious Runoff Depth=0.21" Flow Length=497' Tc=12.2 min CN=53 Runoff=0.20 cfs 0.045 af
Subcatchment 68S: DA 38	Runoff Area=5.423 ac 0.00% Impervious Runoff Depth=0.00" Flow Length=1,009' Tc=22.2 min CN=33 Runoff=0.00 cfs 0.000 af
Subcatchment 69S: DA 39	Runoff Area=0.717 ac 0.00% Impervious Runoff Depth=0.39" Flow Length=394' Tc=15.2 min CN=59 Runoff=0.17 cfs 0.023 af
Subcatchment 70S: DA 40	Runoff Area=20.817 ac 2.01% Impervious Runoff Depth=1.31" Flow Length=1,139' Tc=84.9 min CN=78 Runoff=10.88 cfs 2.273 af
Subcatchment 71S: DA 41	Runoff Area=1.015 ac 0.00% Impervious Runoff Depth=1.31" Flow Length=465' Tc=110.2 min CN=78 Runoff=0.43 cfs 0.111 af
Subcatchment 72S: DA 45	Runoff Area=13.208 ac 0.00% Impervious Runoff Depth=1.37" Flow Length=1,379' Tc=135.3 min CN=79 Runoff=5.09 cfs 1.513 af
Subcatchment 73S: DA 48	Runoff Area=15.708 ac 5.41% Impervious Runoff Depth=1.19" Flow Length=1,032' Tc=34.0 min CN=76 Runoff=12.93 cfs 1.554 af
Subcatchment 74S: DA 49	Runoff Area=2.625 ac 0.00% Impervious Runoff Depth=0.86" Flow Length=1,106' Tc=121.3 min CN=70 Runoff=0.63 cfs 0.188 af
Subcatchment 75S: DA 50	Runoff Area=2.625 ac 0.00% Impervious Runoff Depth=0.86" Flow Length=619' Tc=30.2 min CN=70 Runoff=1.54 cfs 0.188 af
Subcatchment 76S: DA 54	Runoff Area=0.158 ac 0.00% Impervious Runoff Depth=1.51" Flow Length=100' Slope=0.0001 '/' Tc=98.2 min CN=81 Runoff=0.09 cfs 0.020 af
Pond 77P: Culvert 032	Peak Elev=616.15' Inflow=20.08 cfs 8.725 af Outflow=20.08 cfs 8.725 af
Pond 78P: Culvert 033	Peak Elev=645.96' Inflow=2.27 cfs 0.382 af Outflow=2.27 cfs 0.382 af

CULVERTS 27-47*NY - Lockport 24-hr S1 10-yr Rainfall=3.25"*

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Pond 79P: Culvert 034	Peak Elev=647.09' Inflow=0.57 cfs 0.227 af Outflow=0.57 cfs 0.227 af
Pond 80P: Culvert 036	Peak Elev=634.03' Inflow=4.72 cfs 0.594 af Outflow=4.72 cfs 0.594 af
Pond 81P: Culvert 037	Peak Elev=651.68' Inflow=0.20 cfs 0.045 af Outflow=0.20 cfs 0.045 af
Pond 82P: Culvert 038	Peak Elev=644.69' Inflow=0.00 cfs 0.000 af Outflow=0.00 cfs 0.000 af
Pond 83P: Culvert 039	Peak Elev=642.32' Inflow=0.17 cfs 0.023 af Outflow=0.17 cfs 0.023 af
Pond 84P: Culvert 040	Peak Elev=636.13' Inflow=10.88 cfs 2.273 af Outflow=10.88 cfs 2.273 af
Pond 86P: Culvert 041	Peak Elev=637.47' Inflow=0.43 cfs 0.111 af Outflow=0.43 cfs 0.111 af
Pond 87P: Culvert 045	Peak Elev=636.04' Inflow=5.09 cfs 1.513 af Outflow=5.09 cfs 1.513 af
Pond 89P: Culvert 048	Peak Elev=636.10' Inflow=12.93 cfs 1.554 af Outflow=12.93 cfs 1.554 af
Pond 91P: Culvert 049	Peak Elev=637.51' Inflow=0.63 cfs 0.188 af Outflow=0.63 cfs 0.188 af
Pond 92P: Culvert 050	Peak Elev=637.73' Inflow=1.54 cfs 0.188 af Outflow=1.54 cfs 0.188 af
Pond 93P: Culvert 054	Peak Elev=641.29' Inflow=0.09 cfs 0.020 af Outflow=0.09 cfs 0.020 af

Total Runoff Area = 167.268 ac Runoff Volume = 15.841 af Average Runoff Depth = 1.14"
98.35% Pervious = 164.502 ac 1.65% Impervious = 2.766 ac

CULVERTS 27-47

NY - Lockport 24-hr S1 10-yr Rainfall=3.25"

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Summary for Subcatchment 63S: DA 32

Runoff = 20.08 cfs @ 14.91 hrs, Volume= 8.725 af, Depth= 1.25"
Routed to Pond 77P : Culvert 032

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-48.00 hrs, dt= 0.05 hrs
NY - Lockport 24-hr S1 10-yr Rainfall=3.25"

Area (ac)	CN	Description
* 0.446	82	B-MEADOW, NON-GRAZED
* 0.142	43	D-WOODS/GRASS COMB., GOOD
* 13.840	81	D-MEADOW, NON-GRAZED
* 8.160	82	D-MEADOW, NON-GRAZED
* 1.781	21	D-75% GRASS COVER, GOOD
* 3.035	22	D-50-75% GRASS COVER, FAIR
* 24.498	81	D-MEADOW, NON-GRAZED
* 5.711	82	D-MEADOW, NON-GRAZED
* 0.003	21	D-75% GRASS COVER, GOOD
* 0.428	22	D-50-75% GRASS COVER, FAIR
* 18.333	81	D-MEADOW, NON-GRAZED
* 7.496	82	D-MEADOW, NON-GRAZED
* 0.043	90	D-WATER SURFACE, 0% IMP
83.916	77	Weighted Average
83.916		100.00% Pervious Area

CULVERTS 27-47

NY - Lockport 24-hr S1 10-yr Rainfall=3.25"

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Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.5	100	0.0610	0.22		Sheet Flow, 100 Grass: Short n= 0.150 P2= 2.21"
3.0	144	0.0130	0.80		Shallow Concentrated Flow, 144 Short Grass Pasture Kv= 7.0 fps
22.6	300	0.0010	0.22		Shallow Concentrated Flow, 300 Short Grass Pasture Kv= 7.0 fps
9.2	300	0.0060	0.54		Shallow Concentrated Flow, 300 Short Grass Pasture Kv= 7.0 fps
22.6	300	0.0010	0.22		Shallow Concentrated Flow, 300 Short Grass Pasture Kv= 7.0 fps
22.6	300	0.0010	0.22		Shallow Concentrated Flow, 300 Short Grass Pasture Kv= 7.0 fps
71.4	300	0.0001	0.07		Shallow Concentrated Flow, 300 Short Grass Pasture Kv= 7.0 fps
12.2	162	0.0010	0.22		Shallow Concentrated Flow, 162 Short Grass Pasture Kv= 7.0 fps
10.1	300	0.0050	0.49		Shallow Concentrated Flow, 300 Short Grass Pasture Kv= 7.0 fps
8.3	290	0.0070	0.59		Shallow Concentrated Flow, 290 Short Grass Pasture Kv= 7.0 fps
0.6	50	0.0400	1.40		Shallow Concentrated Flow, 50 Short Grass Pasture Kv= 7.0 fps
4.4	242	0.0170	0.91		Shallow Concentrated Flow, 242 Short Grass Pasture Kv= 7.0 fps
6.3	300	0.0130	0.80		Shallow Concentrated Flow, 300 Short Grass Pasture Kv= 7.0 fps
18.8	79	0.0001	0.07		Shallow Concentrated Flow, 79 Short Grass Pasture Kv= 7.0 fps
219.6	3,167	Total			