



TOWNSHIP of HOPEWELL
MERCER COUNTY

201 WASHINGTON CROSSING – PENNINGTON ROAD
TITUSVILLE, NEW JERSEY 08560-1410

PROJECT / APPLICATION

BLOCK:

LOT:

ADDRESS:

PROJECT NAME:

**REPORTS AND SUPPORTING
DOCUMENTS**

STORMWATER MANAGEMENT - FILE 5

Summary for Pond B-57: Basin #57

Inflow Area = 1.297 ac, 51.37% Impervious, Inflow Depth = 0.57" for WQ Storm event
 Inflow = 1.75 cfs @ 1.15 hrs, Volume= 0.061 af
 Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 100%, Lag= 0.0 min
 Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
 Routed to Link PDA-6 : Proposed Drainage Area #6

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 202.32' @ 2.60 hrs Surf.Area= 4,133 sf Storage= 2,670 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
 Center-of-Mass det. time= (not calculated: no outflow)

Volume	Invert	Avail.Storage	Storage Description
#1	201.30'	15,700 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
201.30	0	0	0
202.00	3,969	1,389	1,389
203.00	4,488	4,229	5,618
204.00	5,034	4,761	10,379
205.00	5,608	5,321	15,700

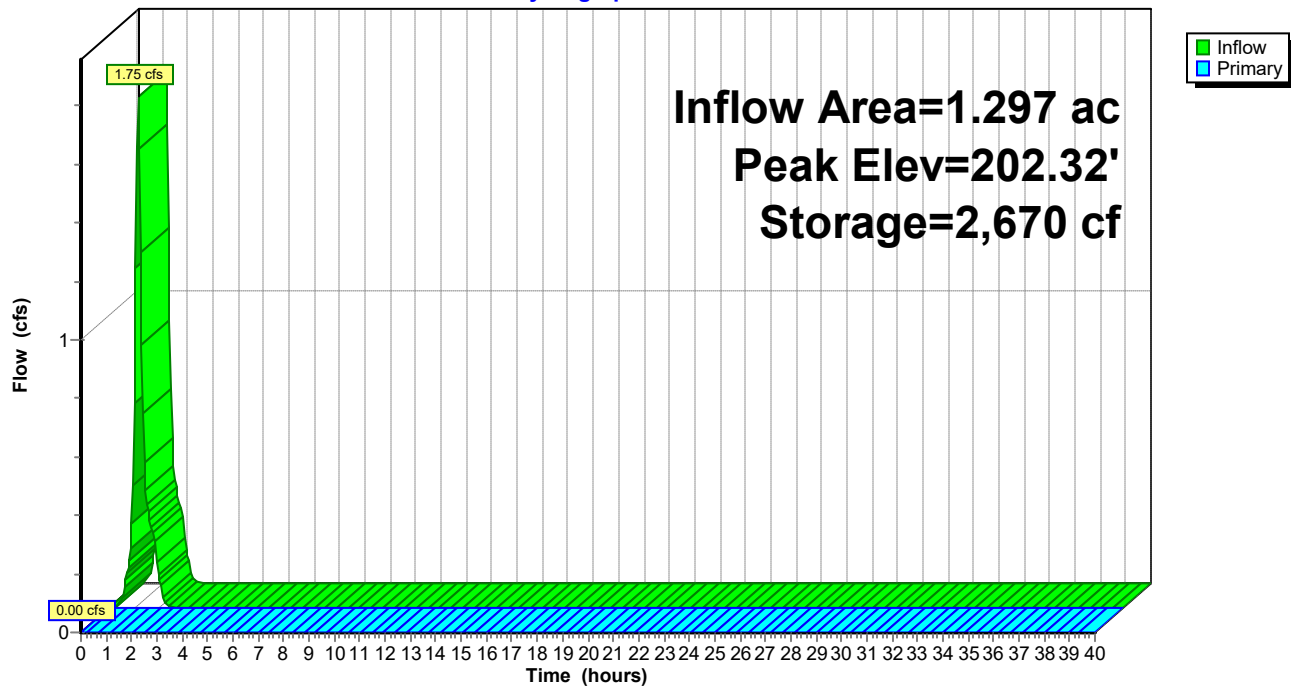
Device	Routing	Invert	Outlet Devices
#1	Primary	200.65'	18.0" Round Culvert L= 207.0' Ke= 0.500 Inlet / Outlet Invert= 200.65' / 198.00' S= 0.0128 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	202.33'	10.0" W x 2.5" H Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	203.15'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	203.98'	50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=201.30' (Free Discharge)

1=Culvert (Passes 0.00 cfs of 2.01 cfs potential flow)
 2=Orifice/Grate (Controls 0.00 cfs)
 3=Sharp-Crested Rectangular Weir (Controls 0.00 cfs)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-57: Basin #57

Hydrograph



Summary for Pond B-58: Basin #58

Inflow Area = 2.371 ac, 32.26% Impervious, Inflow Depth = 0.38" for WQ Storm event
 Inflow = 2.06 cfs @ 1.15 hrs, Volume= 0.076 af
 Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 100%, Lag= 0.0 min
 Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
 Routed to Link PDA-6 : Proposed Drainage Area #6

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 199.18' @ 2.60 hrs Surf.Area= 6,355 sf Storage= 3,303 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
 Center-of-Mass det. time= (not calculated: no outflow)

Volume	Invert	Avail.Storage	Storage Description
#1	198.30'	32,924 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
198.30	0	0	0
199.00	6,230	2,180	2,180
200.00	6,932	6,581	8,761
201.00	7,670	7,301	16,062
202.00	8,426	8,048	24,110
203.00	9,201	8,814	32,924

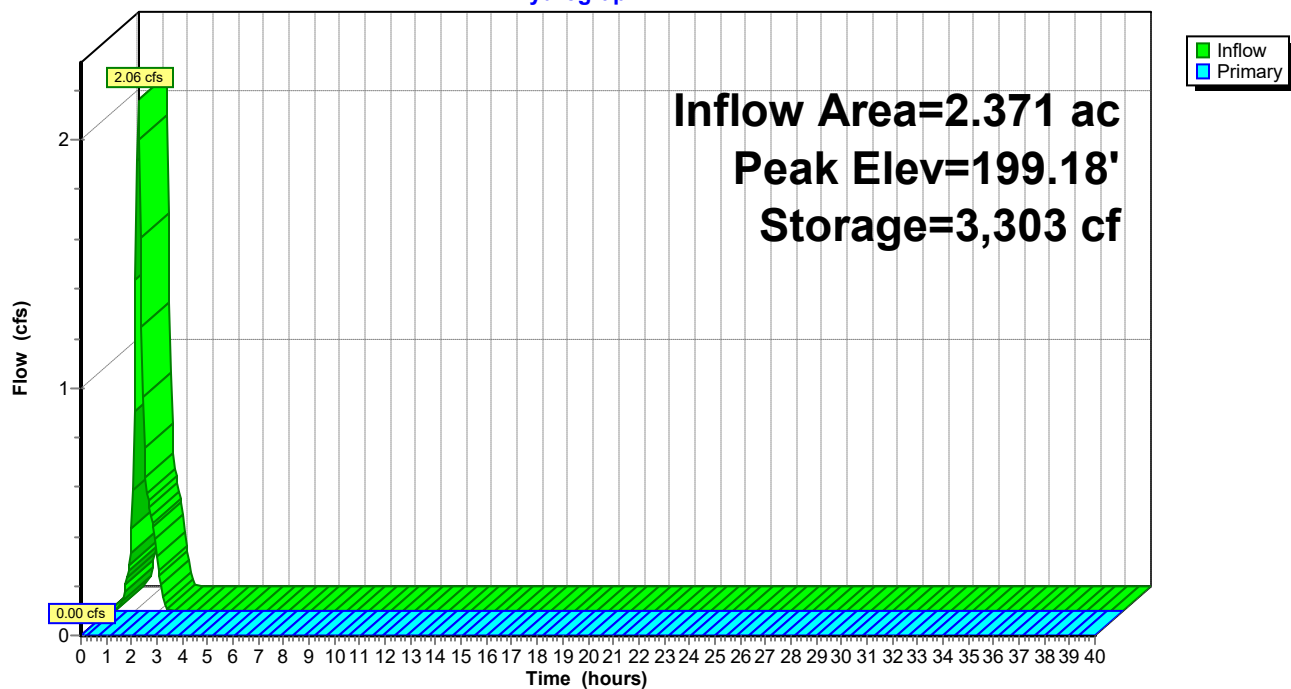
Device	Routing	Invert	Outlet Devices
#1	Primary	198.30'	18.0" Round Culvert L= 48.0' Ke= 0.500 Inlet / Outlet Invert= 198.30' / 198.00' S= 0.0063 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	199.19'	2.5" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	200.60'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	201.90'	50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=198.30' (Free Discharge)

1=Culvert (Controls 0.00 cfs)
 2=Orifice/Grate (Controls 0.00 cfs)
 3=Sharp-Crested Rectangular Weir (Controls 0.00 cfs)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-58: Basin #58

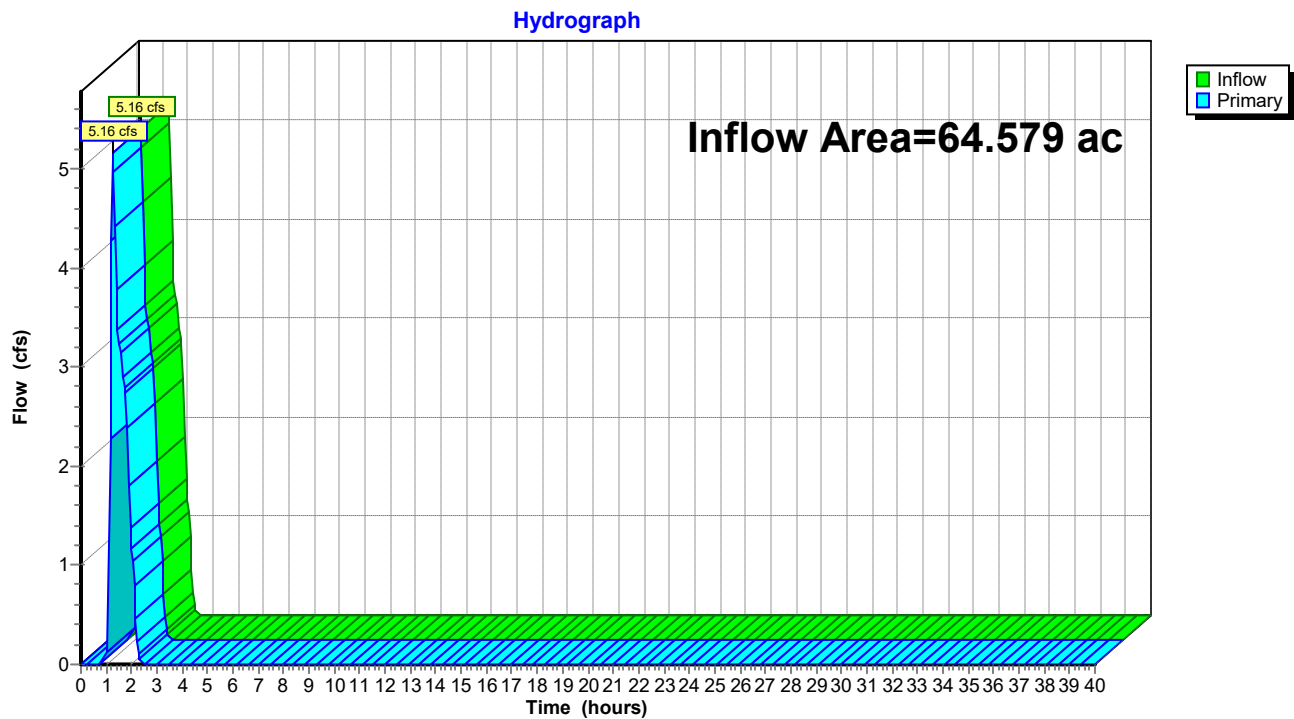
Hydrograph



Summary for Link DP-3: Design Pont #3 (Woolsey Creek)

Inflow Area = 64.579 ac, 17.83% Impervious, Inflow Depth = 0.05" for WQ Storm event
Inflow = 5.16 cfs @ 1.27 hrs, Volume= 0.243 af
Primary = 5.16 cfs @ 1.27 hrs, Volume= 0.243 af, Atten= 0%, Lag= 0.0 min

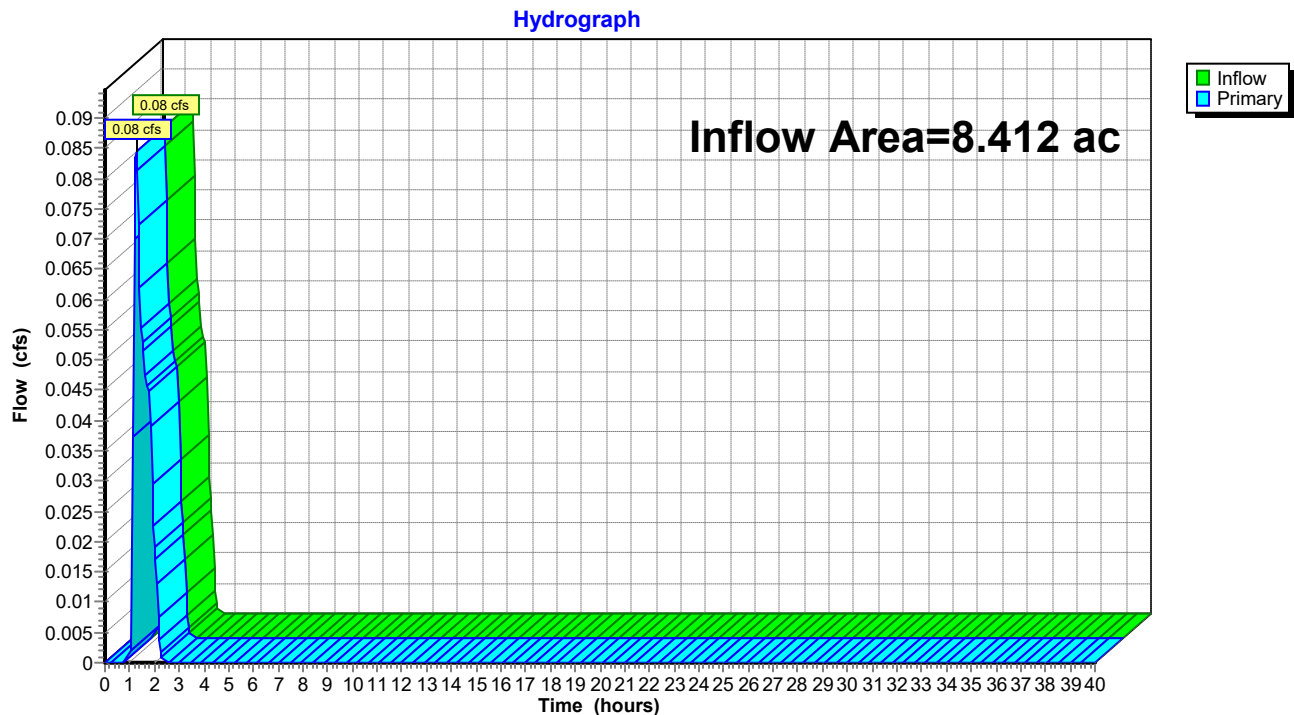
Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link DP-3: Design Pont #3 (Woolsey Creek)

Summary for Link PDA-5: Proposed Drainage Area #5

Inflow Area = 8.412 ac, 42.77% Impervious, Inflow Depth = 0.01" for WQ Storm event
Inflow = 0.08 cfs @ 1.27 hrs, Volume= 0.004 af
Primary = 0.08 cfs @ 1.27 hrs, Volume= 0.004 af, Atten= 0%, Lag= 0.0 min
Routed to Link DP-3 : Design Pont #3 (Woolsey Creek)

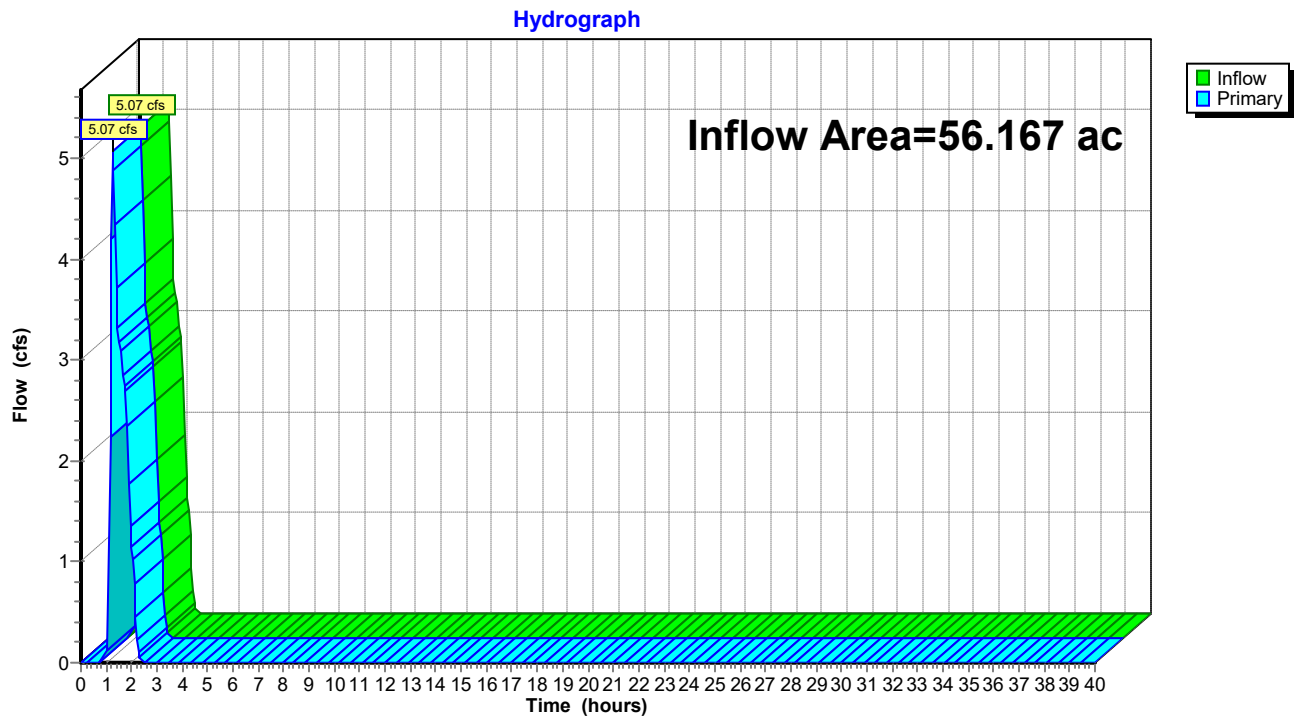
Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link PDA-5: Proposed Drainage Area #5

Summary for Link PDA-6: Proposed Drainage Area #6

Inflow Area = 56.167 ac, 14.10% Impervious, Inflow Depth = 0.05" for WQ Storm event
Inflow = 5.07 cfs @ 1.27 hrs, Volume= 0.239 af
Primary = 5.07 cfs @ 1.27 hrs, Volume= 0.239 af, Atten= 0%, Lag= 0.0 min
Routed to Link DP-3 : Design Pont #3 (Woolsey Creek)

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link PDA-6: Proposed Drainage Area #6

Summary for Subcatchment 48I: PDA-48 (impervious)

Runoff = 2.70 cfs @ 12.17 hrs, Volume= 0.232 af, Depth= 3.12"
 Routed to Pond B-48 : Basin #48

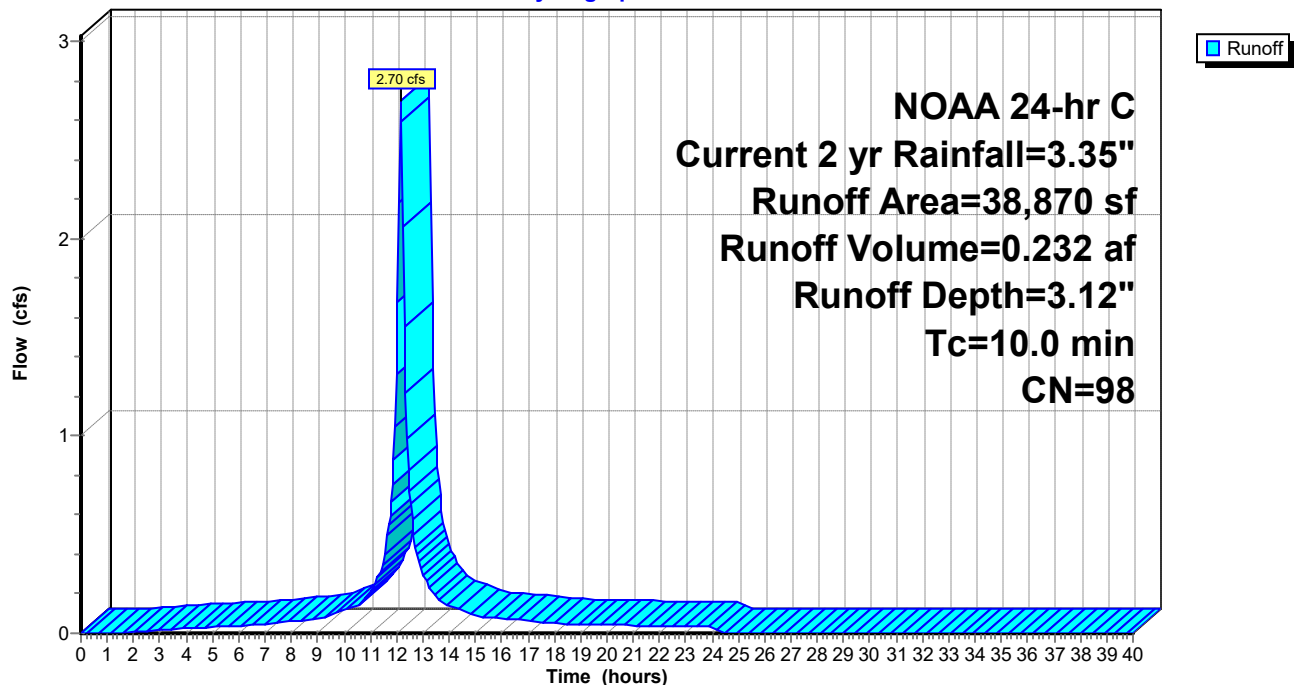
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 2 yr Rainfall=3.35"

	Area (sf)	CN	Description
*	16,283	98	Pavement, HSG C
*	21,350	98	Roof, HSG C
*	1,237	98	Concrete, HSG C
	38,870	98	Weighted Average
	38,870		100.00% Impervious Area

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

Subcatchment 48I: PDA-48 (impervious)

Hydrograph



Summary for Subcatchment 48P: PDA-48 (pervious)

Runoff = 1.86 cfs @ 12.18 hrs, Volume= 0.144 af, Depth= 1.14"
 Routed to Pond B-48 : Basin #48

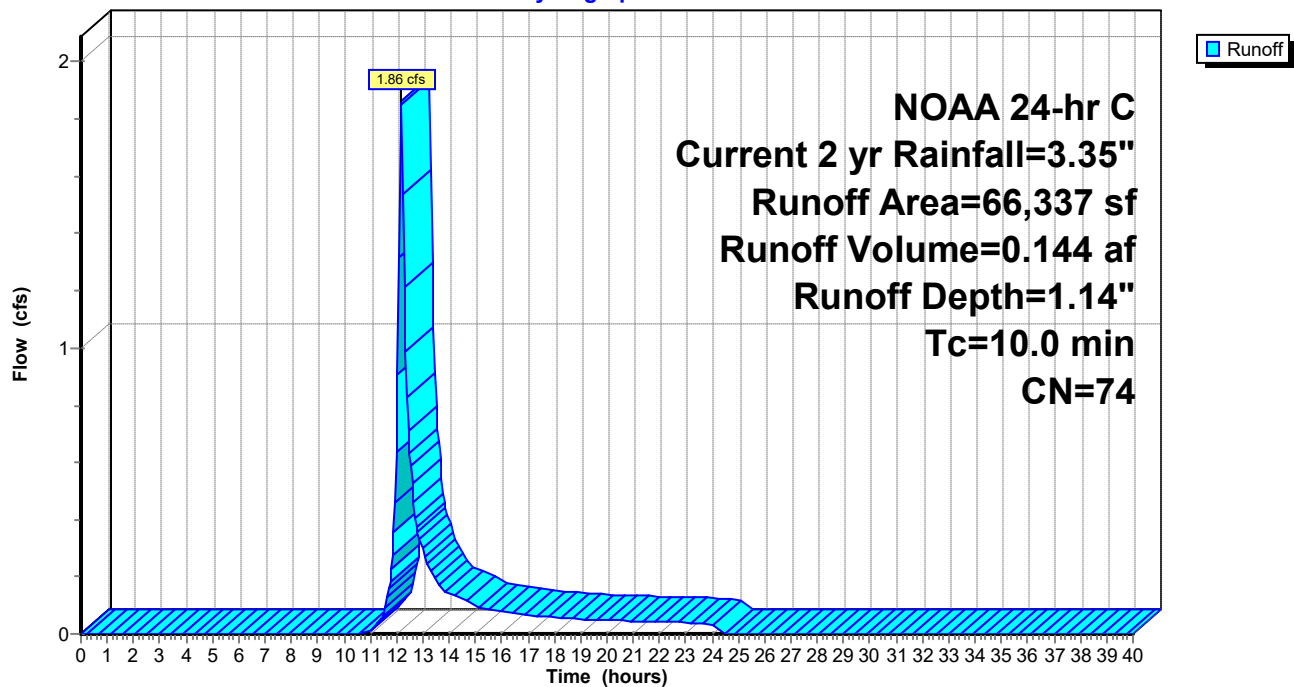
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (sf)	CN	Description
66,337	74	>75% Grass cover, Good, HSG C
66,337		100.00% Pervious Area

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

Subcatchment 48P: PDA-48 (pervious)

Hydrograph



Summary for Subcatchment 49I: PDA-49 (impervious)

Runoff = 4.40 cfs @ 12.17 hrs, Volume= 0.377 af, Depth= 3.12"
 Routed to Pond B-49 : Basin #49

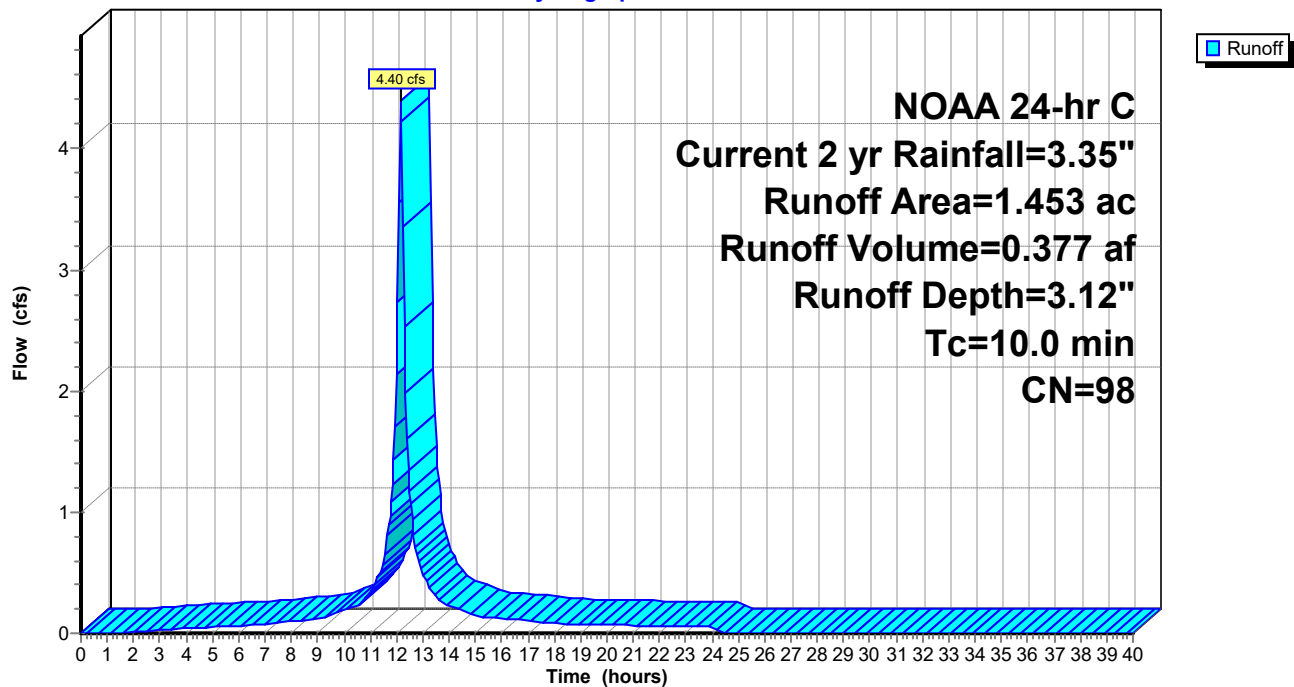
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
* 0.454	98	Pavement, HSG C
* 0.940	98	Roof, HSG C
* 0.059	98	Concrete, HSG C
1.453	98	Weighted Average
1.453		100.00% Impervious Area

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

Subcatchment 49I: PDA-49 (impervious)

Hydrograph



Summary for Subcatchment 49P: PDA-49 (pervious)

Runoff = 1.50 cfs @ 12.18 hrs, Volume= 0.116 af, Depth= 1.14"
 Routed to Pond B-49 : Basin #49

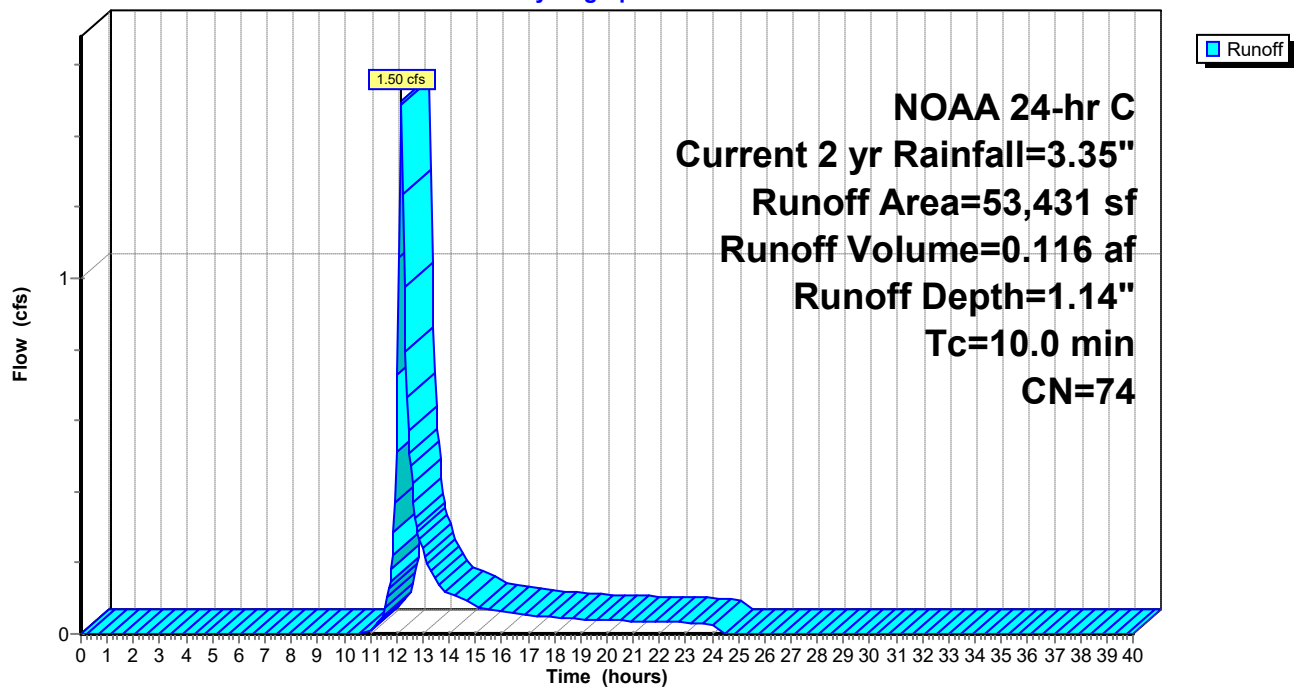
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (sf)	CN	Description
53,431	74	>75% Grass cover, Good, HSG C
53,431		100.00% Pervious Area

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

Subcatchment 49P: PDA-49 (pervious)

Hydrograph



Summary for Subcatchment 50I: PDA-50 (impervious)

Runoff = 3.79 cfs @ 12.17 hrs, Volume= 0.325 af, Depth= 3.12"
 Routed to Pond B-50 : Basin #50

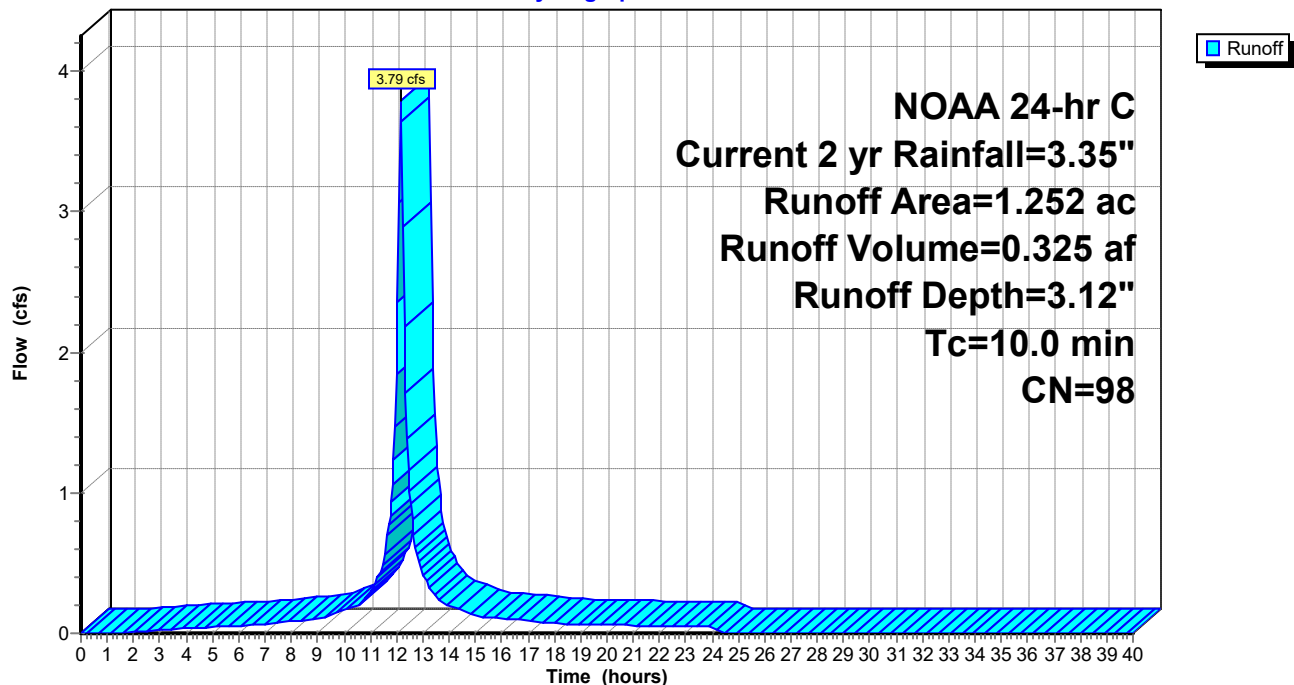
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
* 0.633	98	Pavement, HSG C
* 0.546	98	Roof, HSG C
* 0.073	98	Concrete, HSG C
1.252	98	Weighted Average
1.252		100.00% Impervious Area

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

Subcatchment 50I: PDA-50 (impervious)

Hydrograph



Summary for Subcatchment 50P: PDA-50 (pervious)

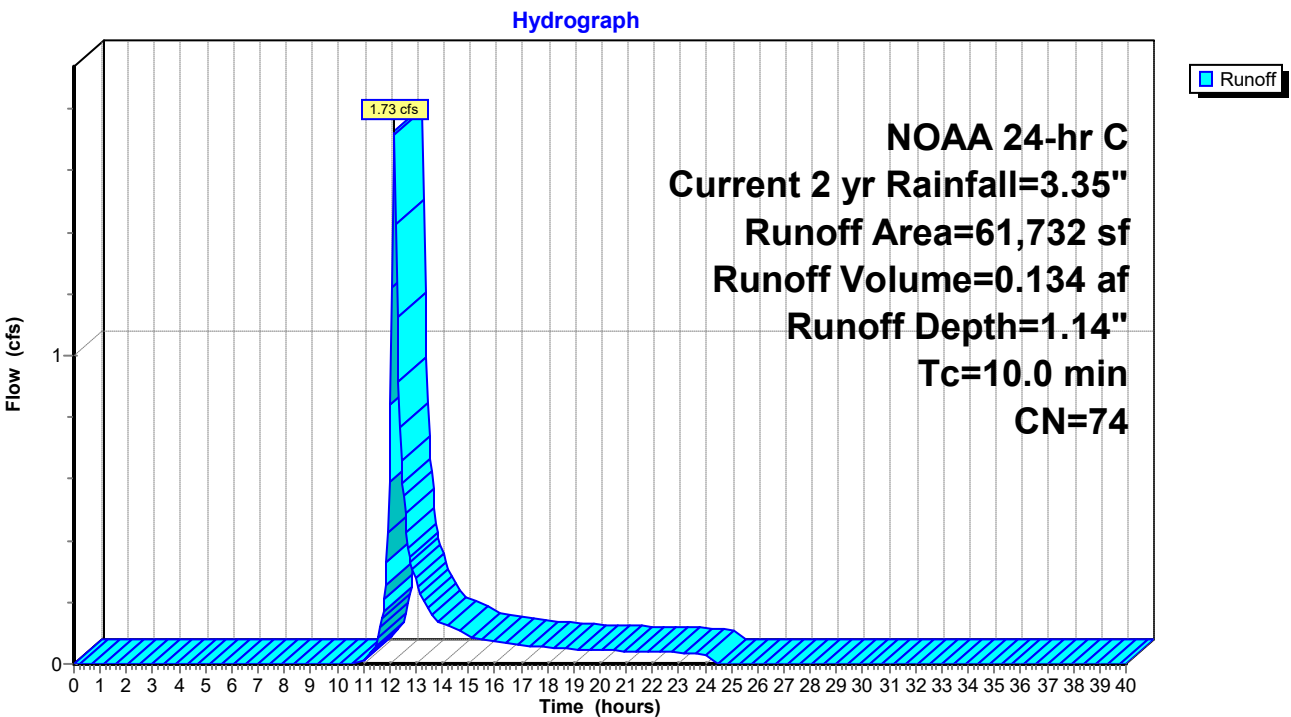
Runoff = 1.73 cfs @ 12.18 hrs, Volume= 0.134 af, Depth= 1.14"
Routed to Pond B-50 : Basin #50

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (sf)	CN	Description
61,732	74	>75% Grass cover, Good, HSG C
61,732		100.00% Pervious Area

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

Subcatchment 50P: PDA-50 (pervious)



Summary for Subcatchment 51I: PDA-51 (impervious)

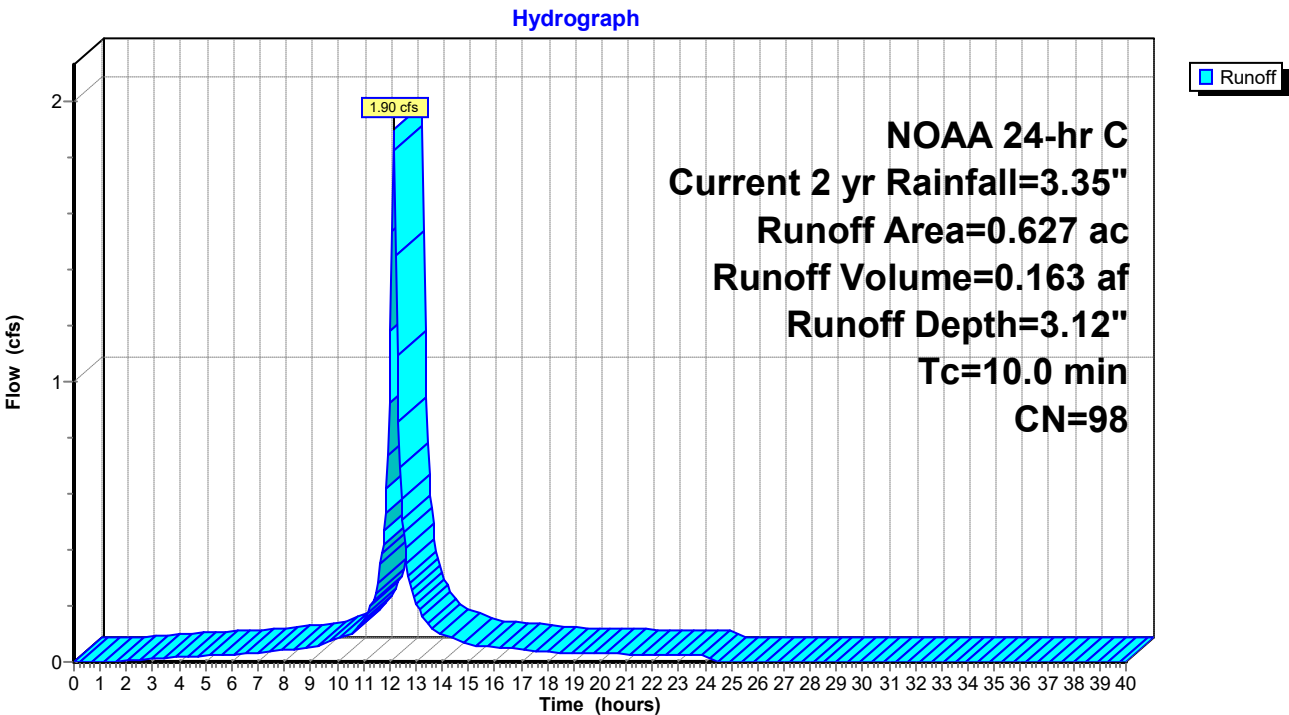
Runoff = 1.90 cfs @ 12.17 hrs, Volume= 0.163 af, Depth= 3.12"
Routed to Pond B-51 : Basin #51

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
* 0.627	98	Roof, HSG C
0.627		100.00% Impervious Area

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

Subcatchment 51I: PDA-51 (impervious)



Summary for Subcatchment 51P: PDA-51 (pervious)

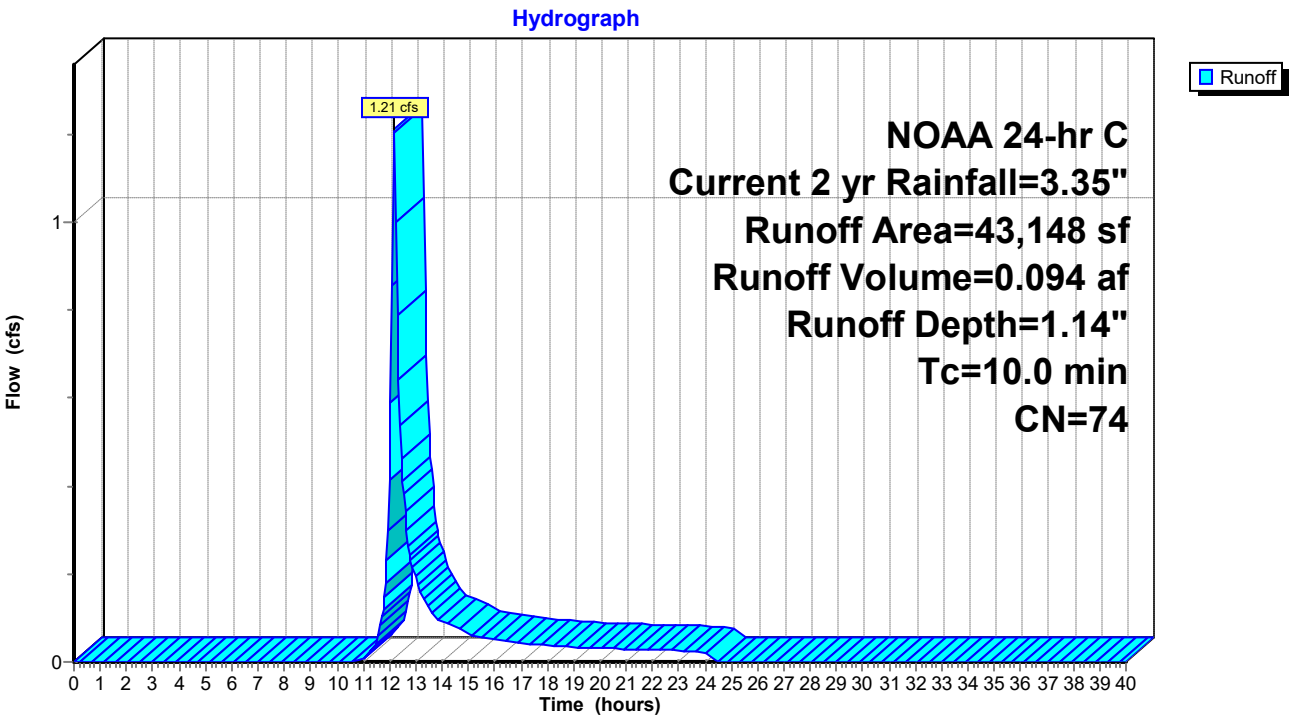
Runoff = 1.21 cfs @ 12.18 hrs, Volume= 0.094 af, Depth= 1.14"
Routed to Pond B-51 : Basin #51

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (sf)	CN	Description
43,148	74	>75% Grass cover, Good, HSG C
43,148		100.00% Pervious Area

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

Subcatchment 51P: PDA-51 (pervious)



Summary for Subcatchment 52I: PDA-52 (impervious)

Runoff = 3.18 cfs @ 12.17 hrs, Volume= 0.273 af, Depth= 3.12"
 Routed to Pond B-52 : Basin #52

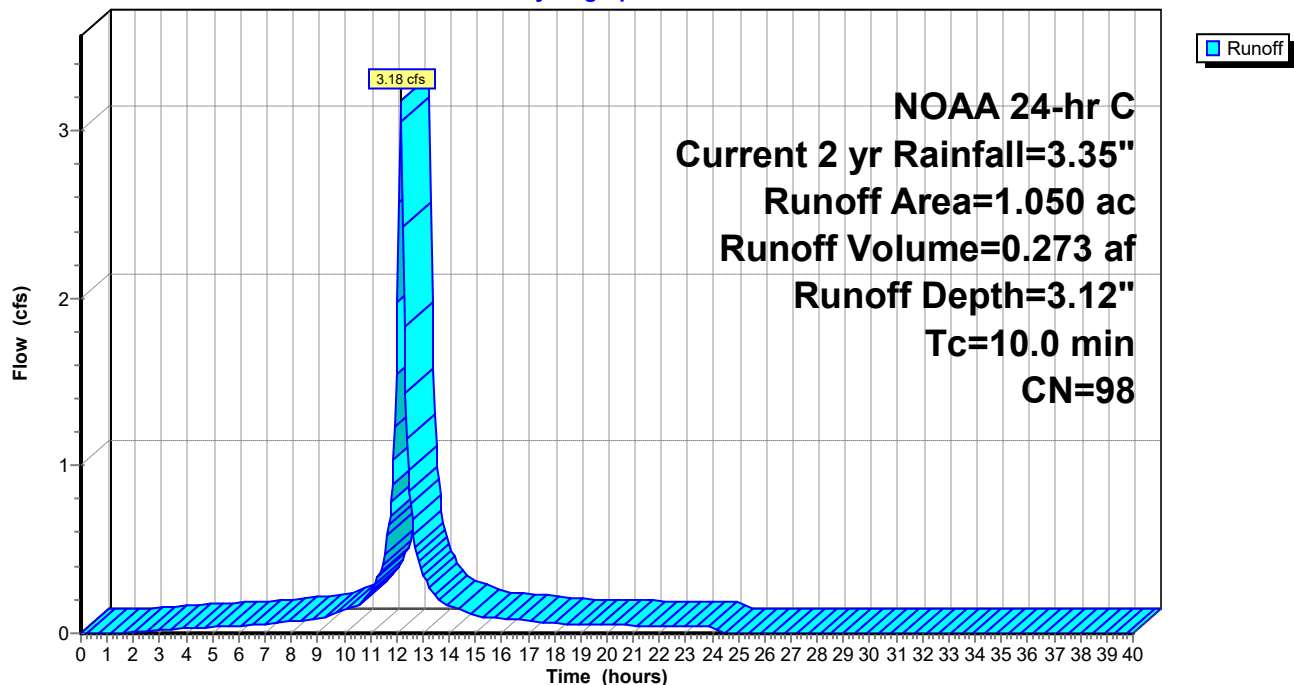
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
* 0.350	98	Pavement, HSG C
* 0.659	98	Roof, HSG C
* 0.041	98	Concrete, HSG C
1.050	98	Weighted Average
1.050		100.00% Impervious Area

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

Subcatchment 52I: PDA-52 (impervious)

Hydrograph



Summary for Subcatchment 52P: PDA-52 (pervious)

Runoff = 1.82 cfs @ 12.18 hrs, Volume= 0.141 af, Depth= 1.14"
 Routed to Pond B-52 : Basin #52

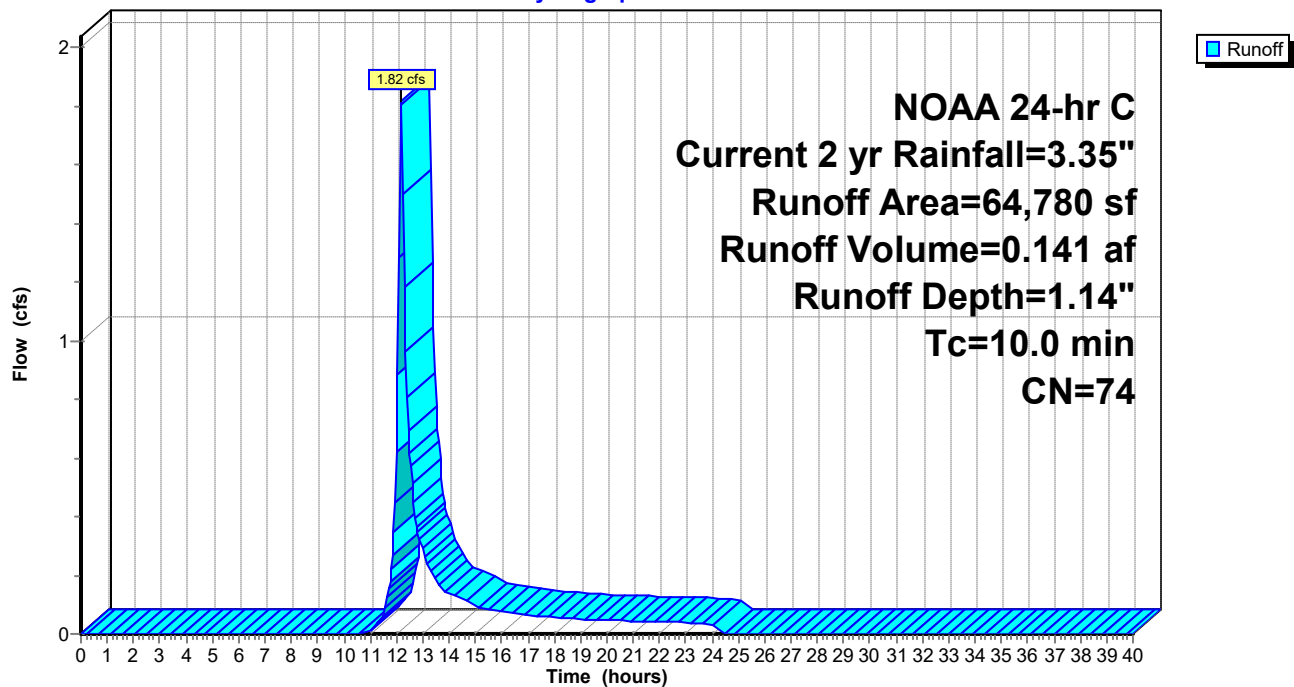
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (sf)	CN	Description
64,780	74	>75% Grass cover, Good, HSG C
64,780		100.00% Pervious Area

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

Subcatchment 52P: PDA-52 (pervious)

Hydrograph



Summary for Subcatchment 53I: PDA-53 (impervious)

Runoff = 3.68 cfs @ 12.17 hrs, Volume= 0.315 af, Depth= 3.12"
 Routed to Pond B-53 : Basin #53

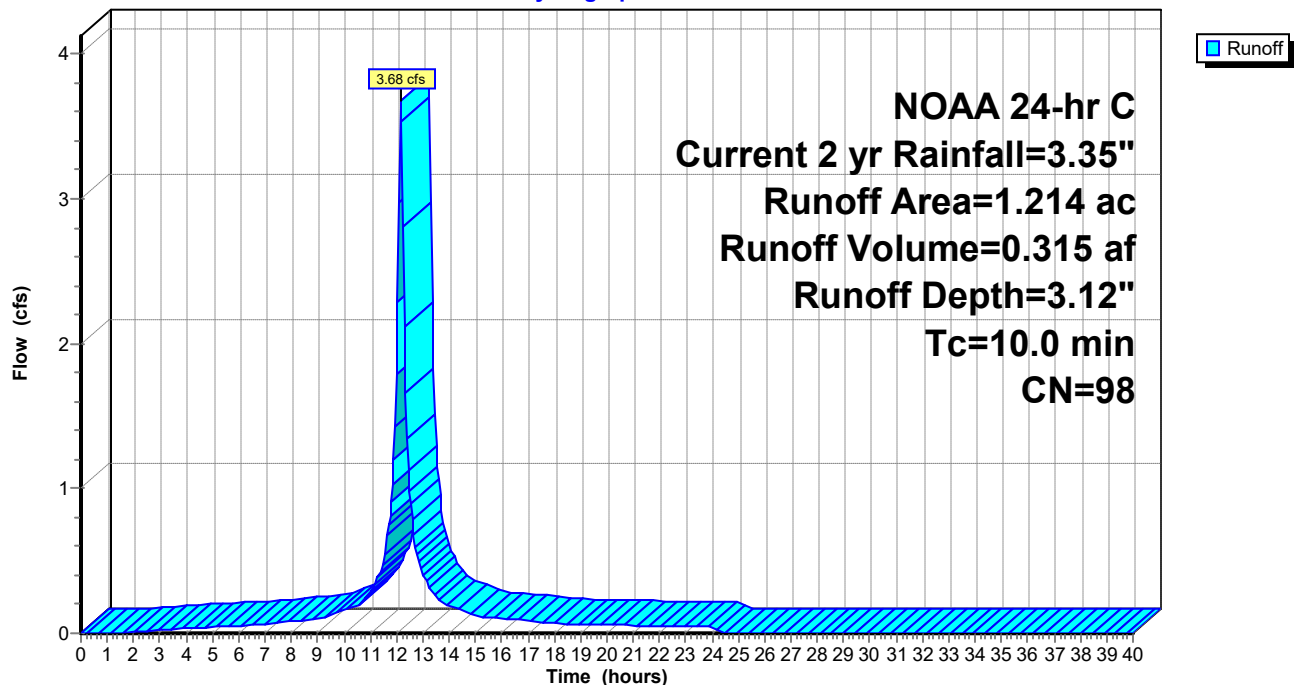
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
* 0.628	98	Pavement, HSG C
* 0.450	98	Roof, HSG C
* 0.136	98	Concrete, HSG C
1.214	98	Weighted Average
1.214		100.00% Impervious Area

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

Subcatchment 53I: PDA-53 (impervious)

Hydrograph



Summary for Subcatchment 53P: PDA-53 (pervious)

Runoff = 1.62 cfs @ 12.18 hrs, Volume= 0.126 af, Depth= 1.14"
 Routed to Pond B-53 : Basin #53

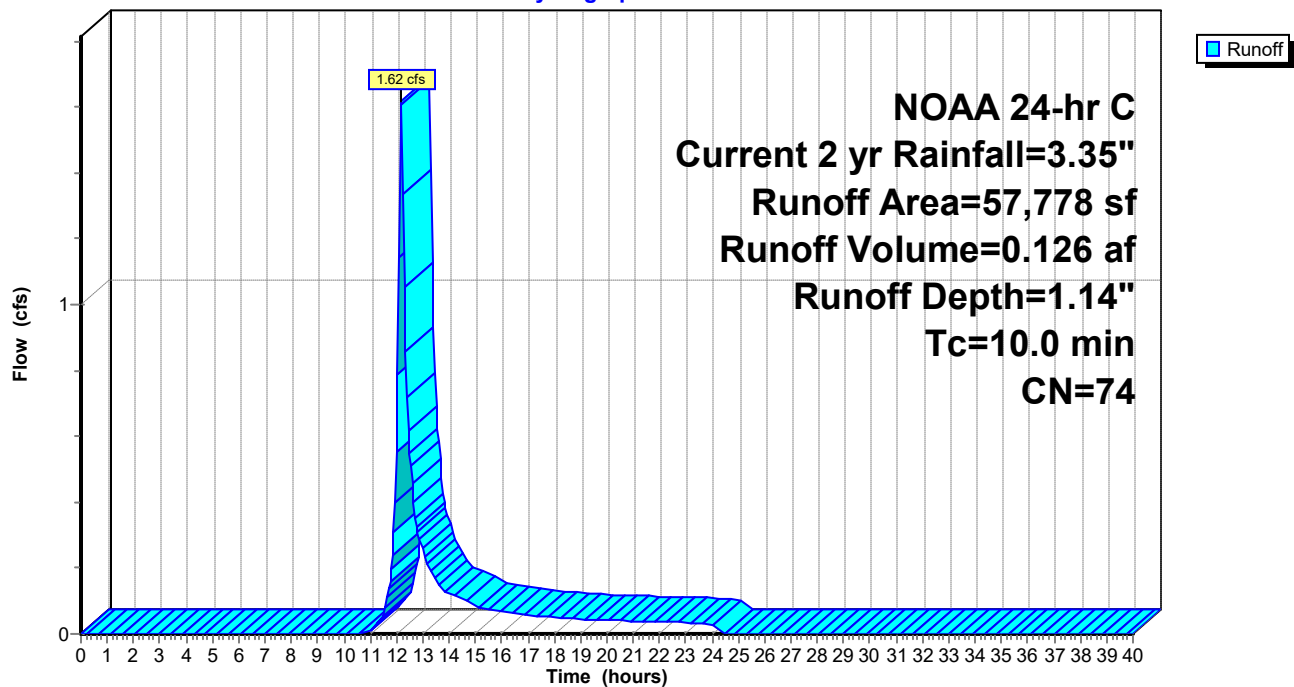
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (sf)	CN	Description
57,778	74	>75% Grass cover, Good, HSG C
57,778		100.00% Pervious Area

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

Subcatchment 53P: PDA-53 (pervious)

Hydrograph



Summary for Subcatchment 54I: PDA-54 (impervious)

Runoff = 4.71 cfs @ 12.17 hrs, Volume= 0.404 af, Depth= 3.12"
 Routed to Pond B-54 : Basin #54

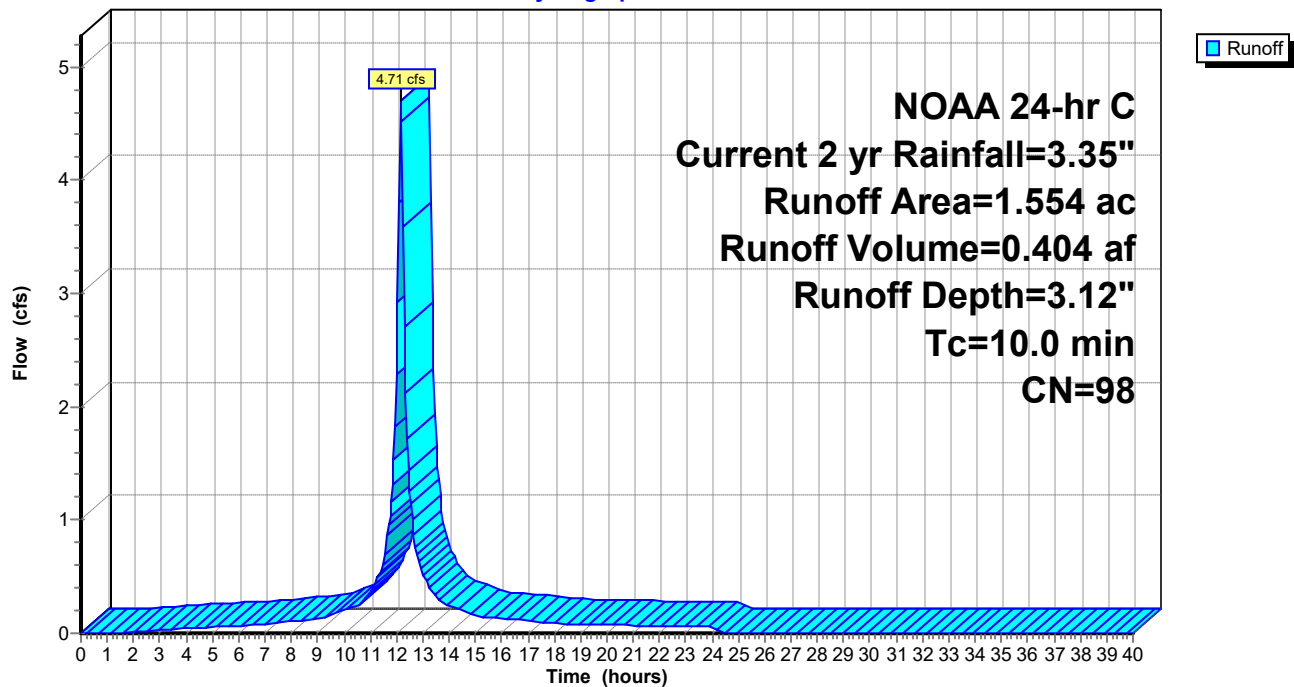
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
* 0.983	98	Pavement, HSG C
* 0.361	98	Roof, HSG C
* 0.210	98	Concrete, HSG C
1.554	98	Weighted Average
1.554		100.00% Impervious Area

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

Subcatchment 54I: PDA-54 (impervious)

Hydrograph



Summary for Subcatchment 54P: PDA-54 (pervious)

Runoff = 1.24 cfs @ 12.18 hrs, Volume= 0.096 af, Depth= 1.14"
 Routed to Pond B-54 : Basin #54

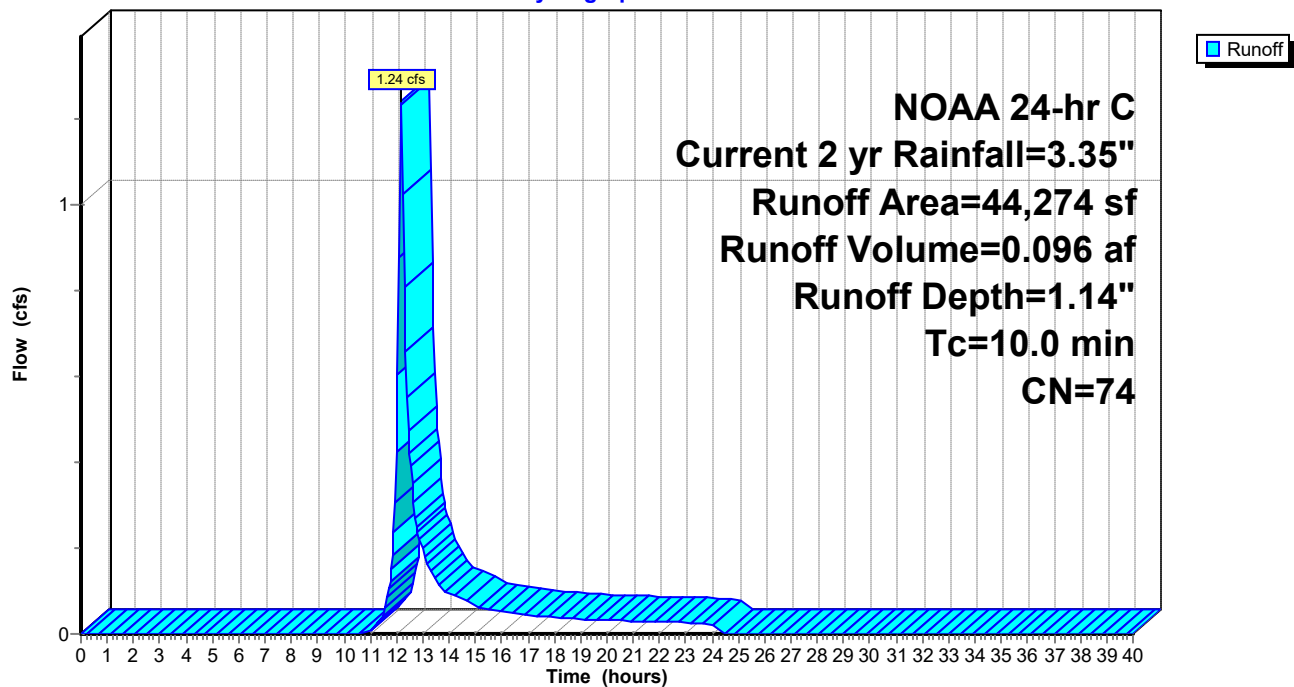
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (sf)	CN	Description
44,274	74	>75% Grass cover, Good, HSG C
44,274		100.00% Pervious Area

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

Subcatchment 54P: PDA-54 (pervious)

Hydrograph



Summary for Subcatchment 55I: PDA-55 (impervious)

Runoff = 3.05 cfs @ 12.17 hrs, Volume= 0.262 af, Depth= 3.12"
 Routed to Pond B-55 : Basin #55

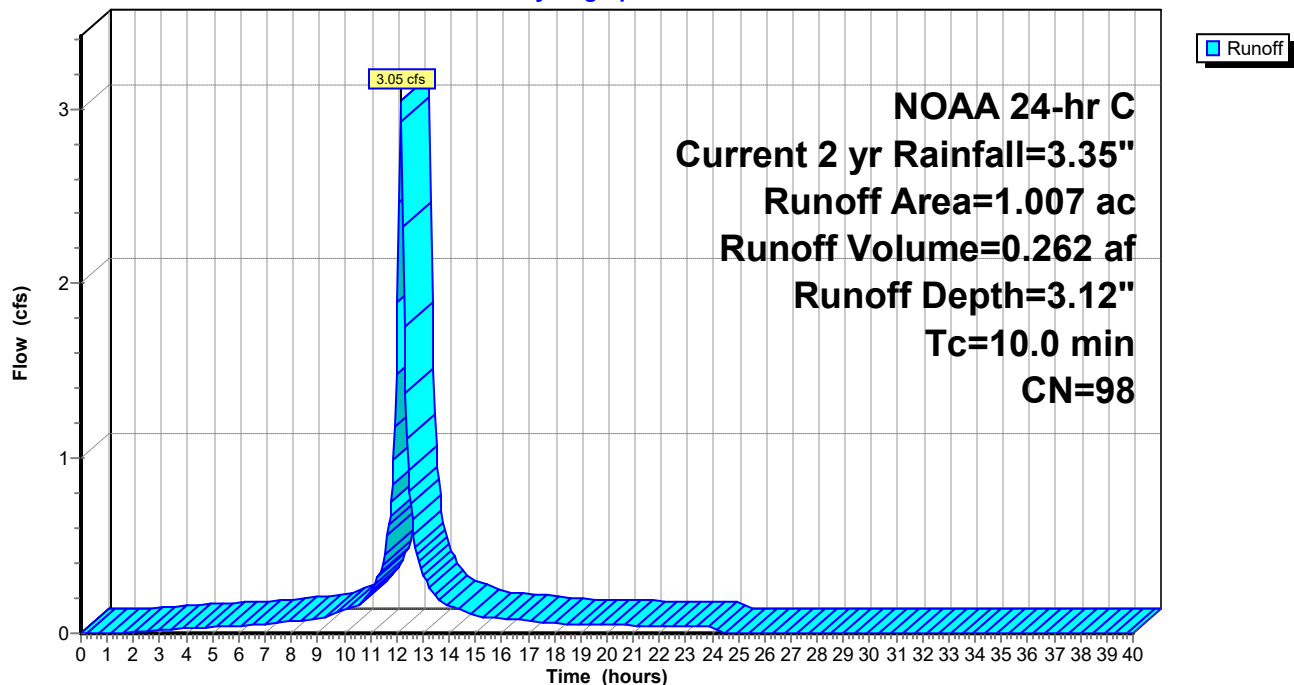
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
* 0.771	98	Pavement, HSG C
* 0.169	98	Roof, HSG C
* 0.067	98	Concrete, HSG C
1.007	98	Weighted Average
1.007		100.00% Impervious Area

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

Subcatchment 55I: PDA-55 (impervious)

Hydrograph



Summary for Subcatchment 55P: PDA-55 (pervious)

Runoff = 1.24 cfs @ 12.18 hrs, Volume= 0.096 af, Depth= 1.14"
 Routed to Pond B-55 : Basin #55

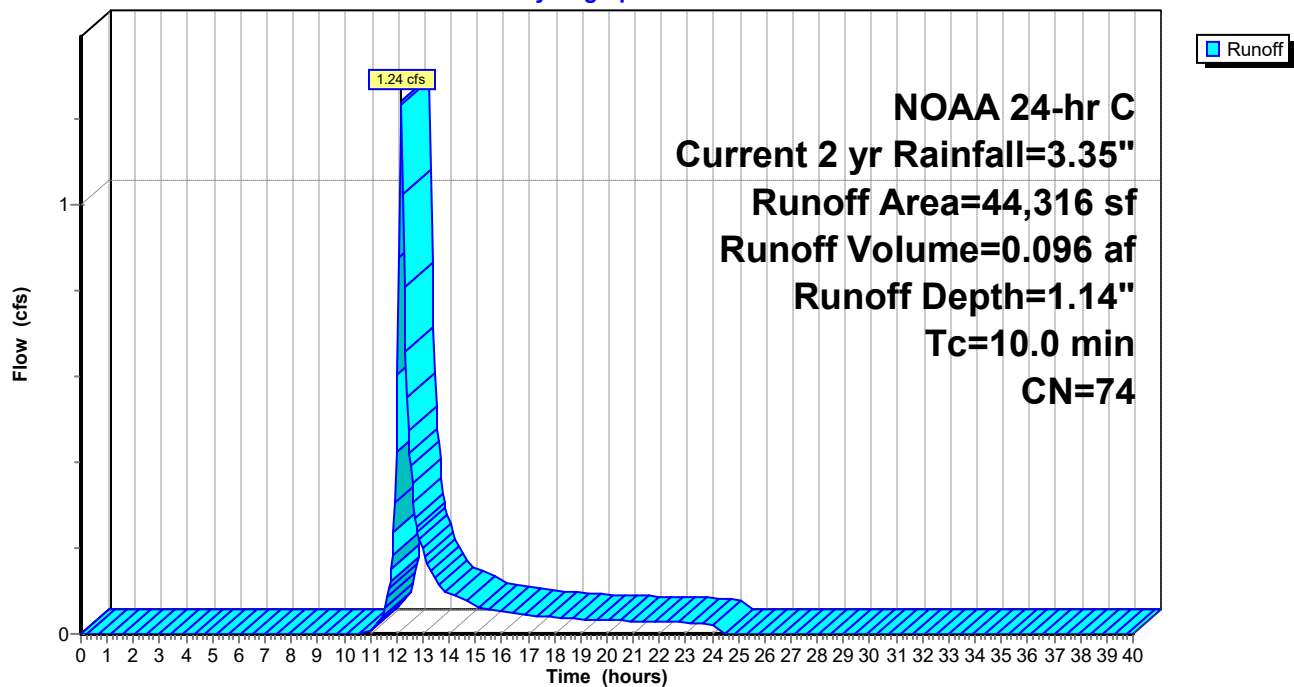
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (sf)	CN	Description
44,316	74	>75% Grass cover, Good, HSG C
44,316		100.00% Pervious Area

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

Subcatchment 55P: PDA-55 (pervious)

Hydrograph



Summary for Subcatchment 56I: PDA-56 (impervious)

Runoff = 3.14 cfs @ 12.17 hrs, Volume= 0.269 af, Depth= 3.12"
 Routed to Pond B-56 : Basin #56

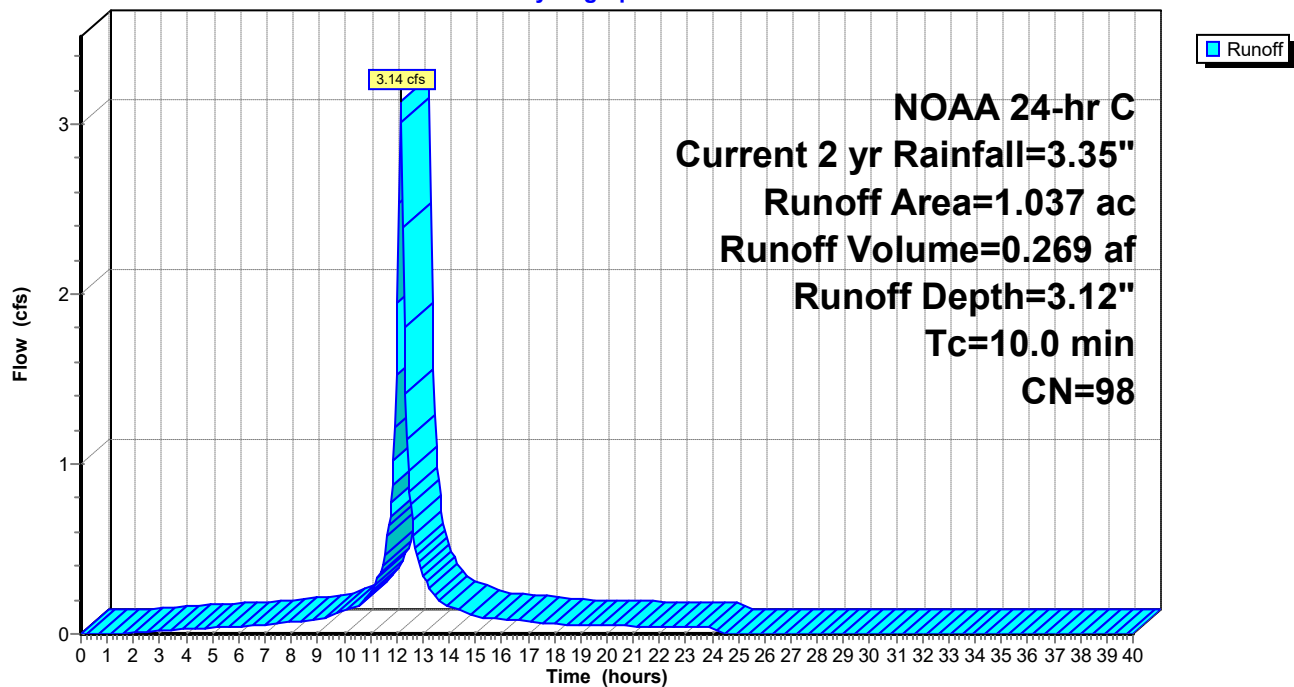
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
* 1.037	98	Roof, HSG C
1.037		100.00% Impervious Area

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

Subcatchment 56I: PDA-56 (impervious)

Hydrograph



Summary for Subcatchment 56P: PDA-56 (pervious)

Runoff = 1.56 cfs @ 12.18 hrs, Volume= 0.121 af, Depth= 1.14"
 Routed to Pond B-56 : Basin #56

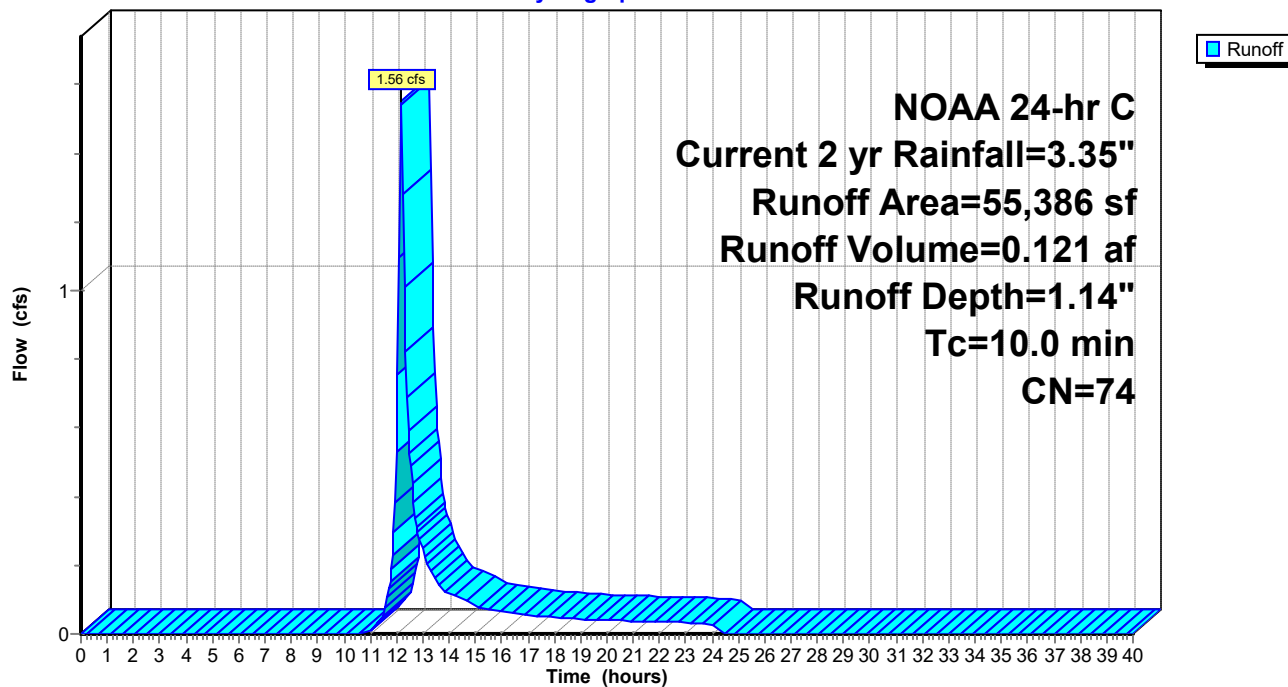
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (sf)	CN	Description
55,386	74	>75% Grass cover, Good, HSG C
55,386		100.00% Pervious Area

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

Subcatchment 56P: PDA-56 (pervious)

Hydrograph



Summary for Subcatchment 57I: PDA-57 (impervious)

Runoff = 2.02 cfs @ 12.17 hrs, Volume= 0.173 af, Depth= 3.12"
 Routed to Pond B-57 : Basin #57

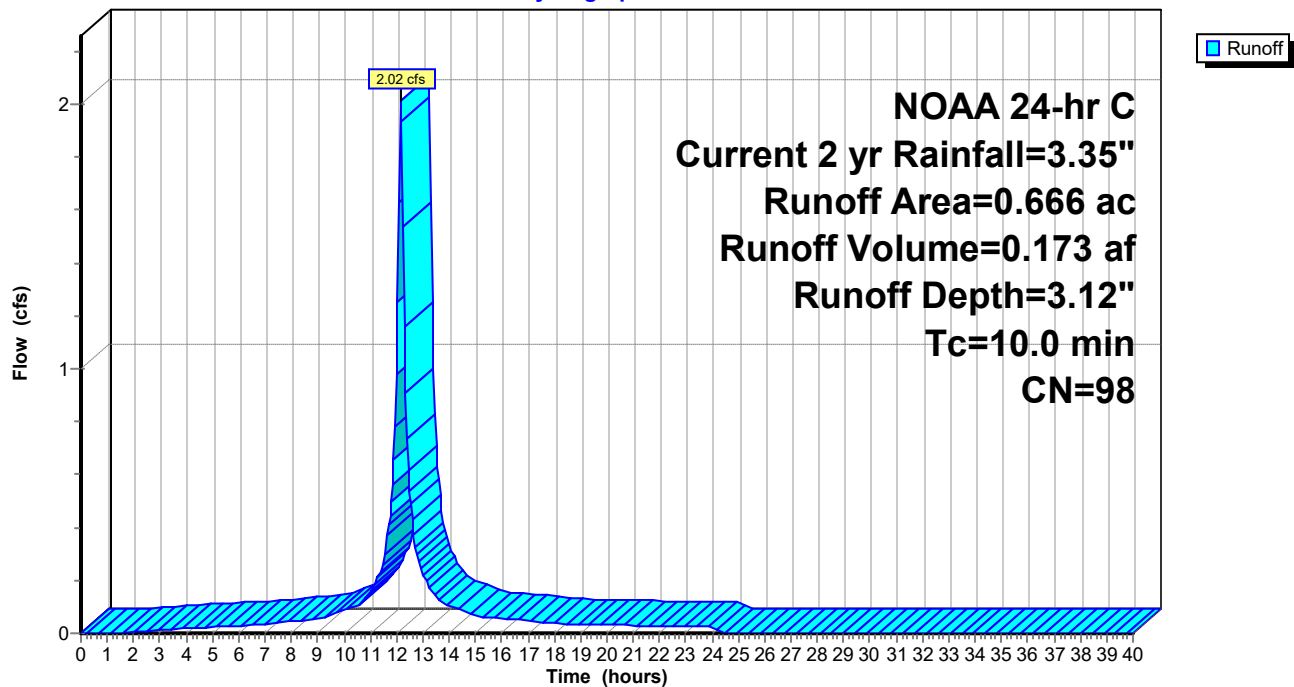
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
* 0.311	98	Pavement, HSG C
* 0.313	98	Roof, HSG C
* 0.042	98	Concrete, HSG C
0.666	98	Weighted Average
0.666		100.00% Impervious Area

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

Subcatchment 57I: PDA-57 (impervious)

Hydrograph



Summary for Subcatchment 57P: PDA-57 (pervious)

Runoff = 0.77 cfs @ 12.18 hrs, Volume= 0.060 af, Depth= 1.14"
 Routed to Pond B-57 : Basin #57

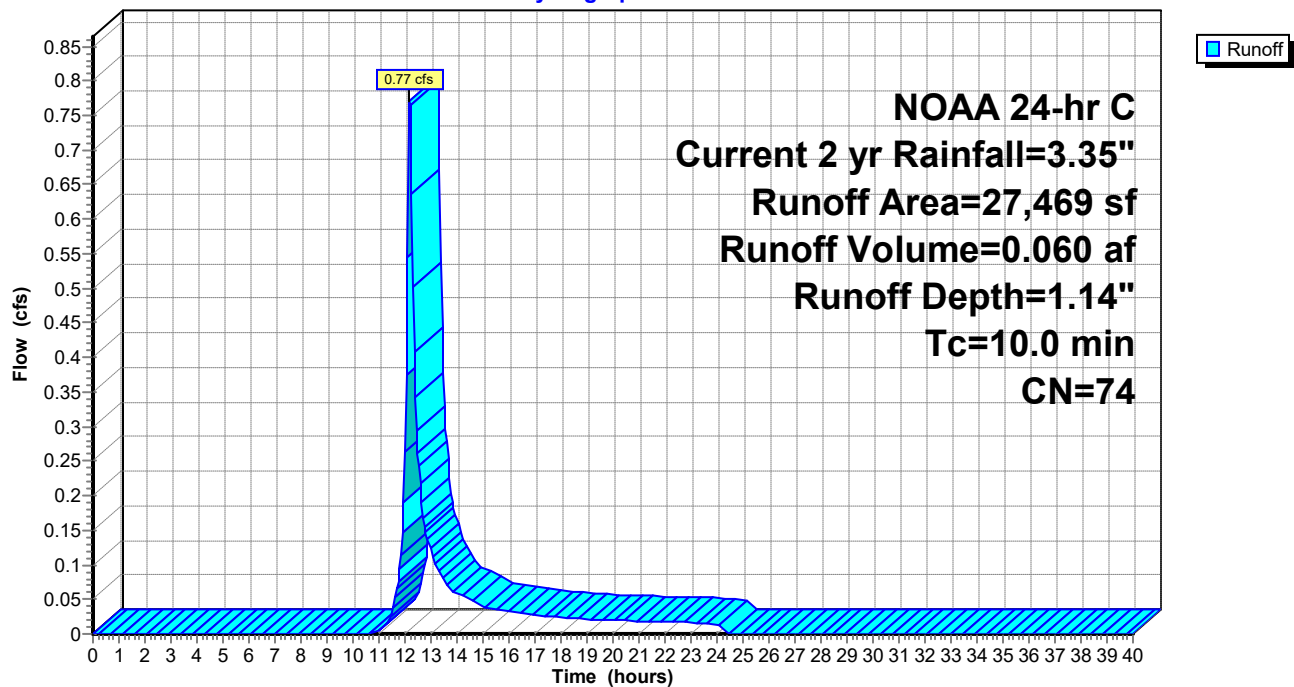
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (sf)	CN	Description
27,469	74	>75% Grass cover, Good, HSG C
27,469		100.00% Pervious Area

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

Subcatchment 57P: PDA-57 (pervious)

Hydrograph



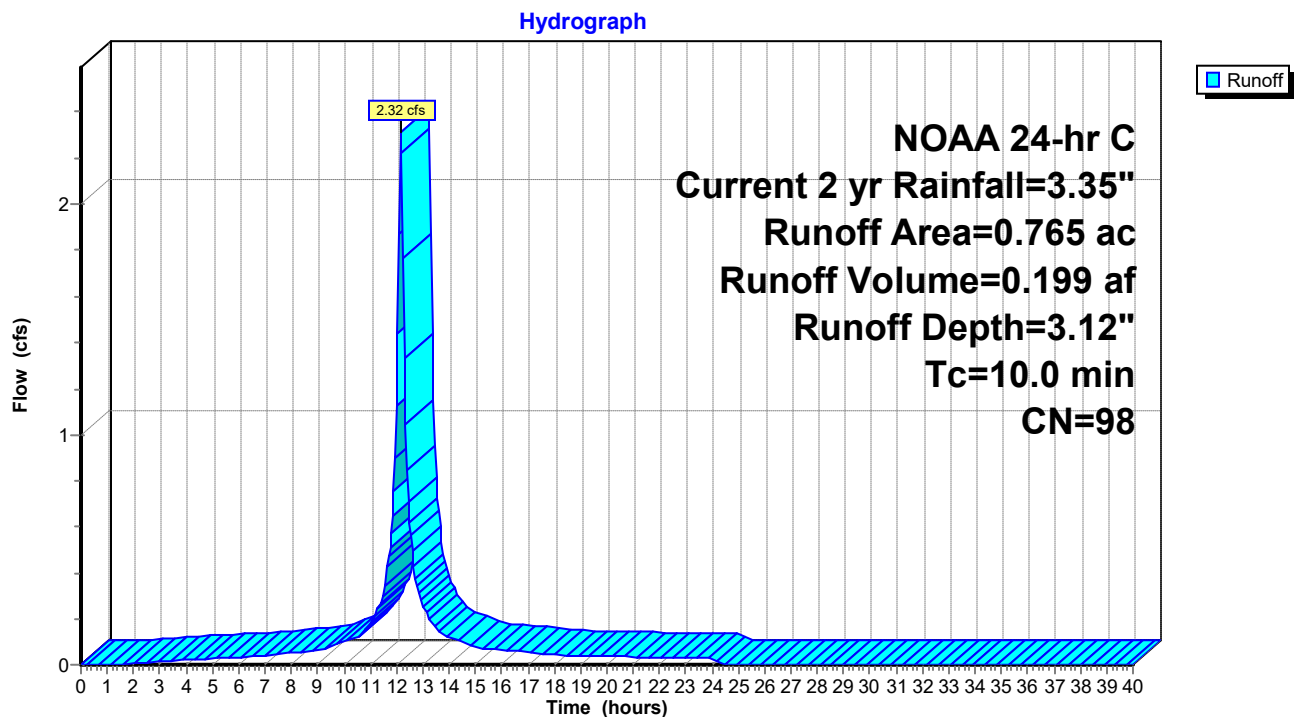
Summary for Subcatchment 58I: PDA-58 (impervious)

Runoff = 2.32 cfs @ 12.17 hrs, Volume= 0.199 af, Depth= 3.12"
 Routed to Pond B-58 : Basin #58

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
* 0.763	98	Roof, HSG C
* 0.002	98	Concrete, HSG C
0.765	98	Weighted Average
0.765		100.00% Impervious Area

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

Subcatchment 58I: PDA-58 (impervious)

Summary for Subcatchment 58P: PDA-58 (pervious)

Runoff = 1.97 cfs @ 12.18 hrs, Volume= 0.152 af, Depth= 1.14"
 Routed to Pond B-58 : Basin #58

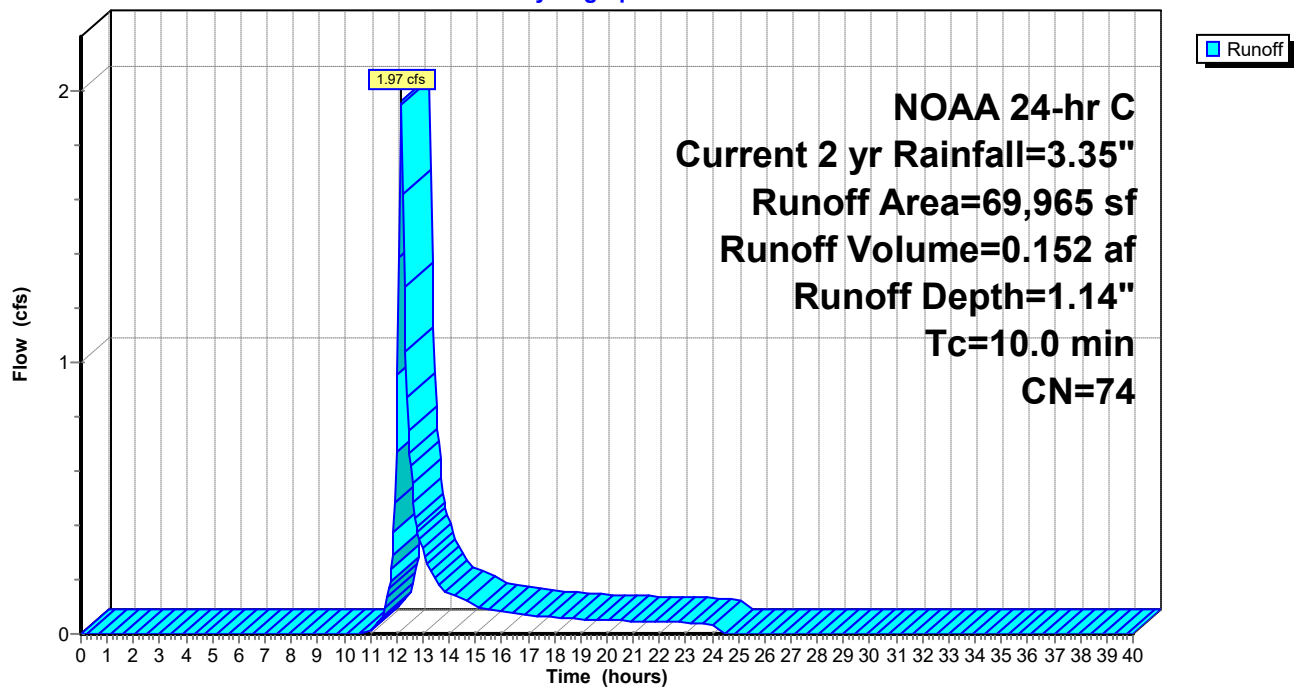
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (sf)	CN	Description
69,965	74	>75% Grass cover, Good, HSG C
69,965		100.00% Pervious Area

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

Subcatchment 58P: PDA-58 (pervious)

Hydrograph



Summary for Subcatchment UPDA-5: PDA-5 (undetained)

Runoff = 0.79 cfs @ 12.18 hrs, Volume= 0.061 af, Depth= 1.14"

Routed to Link PDA-5 : Proposed Drainage Area #5

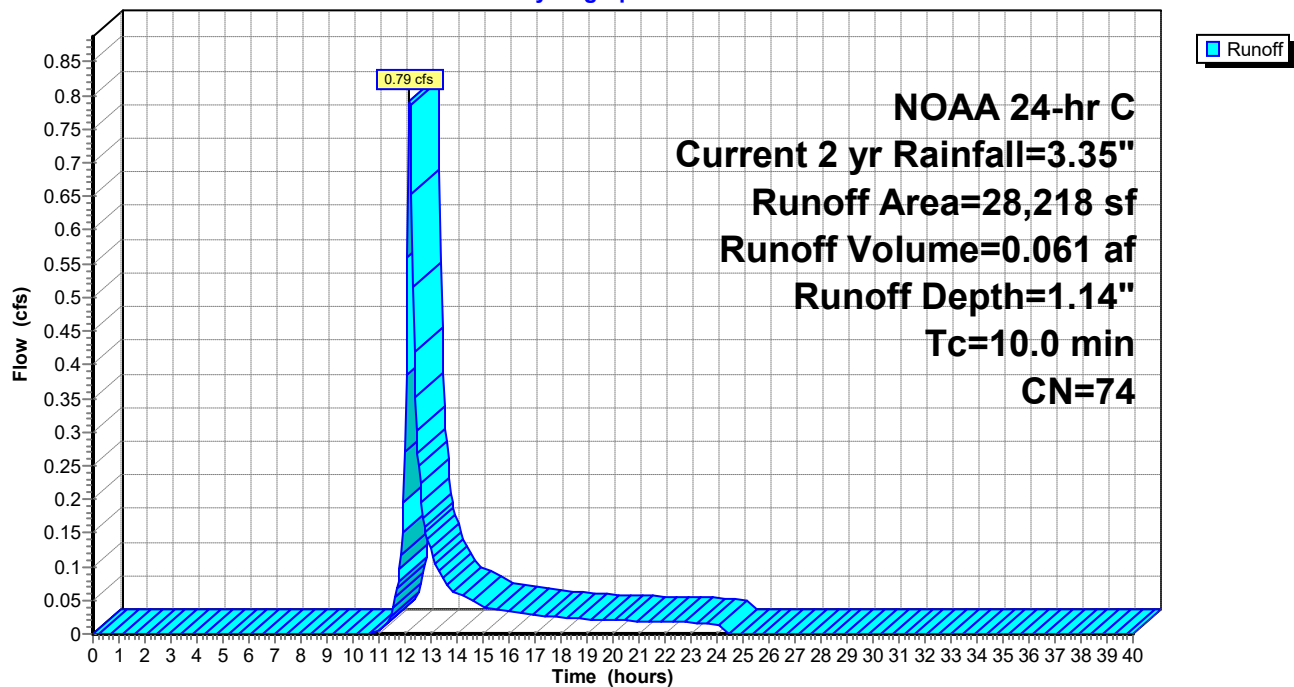
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (sf)	CN	Description
28,218	74	>75% Grass cover, Good, HSG C
28,218		100.00% Pervious Area

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

Subcatchment UPDA-5: PDA-5 (undetained)

Hydrograph



Summary for Subcatchment UPDA-6: PDA-6 (undetained)

Runoff = 47.59 cfs @ 12.18 hrs, Volume= 3.688 af, Depth= 1.14"

Routed to Link PDA-6 : Proposed Drainage Area #6

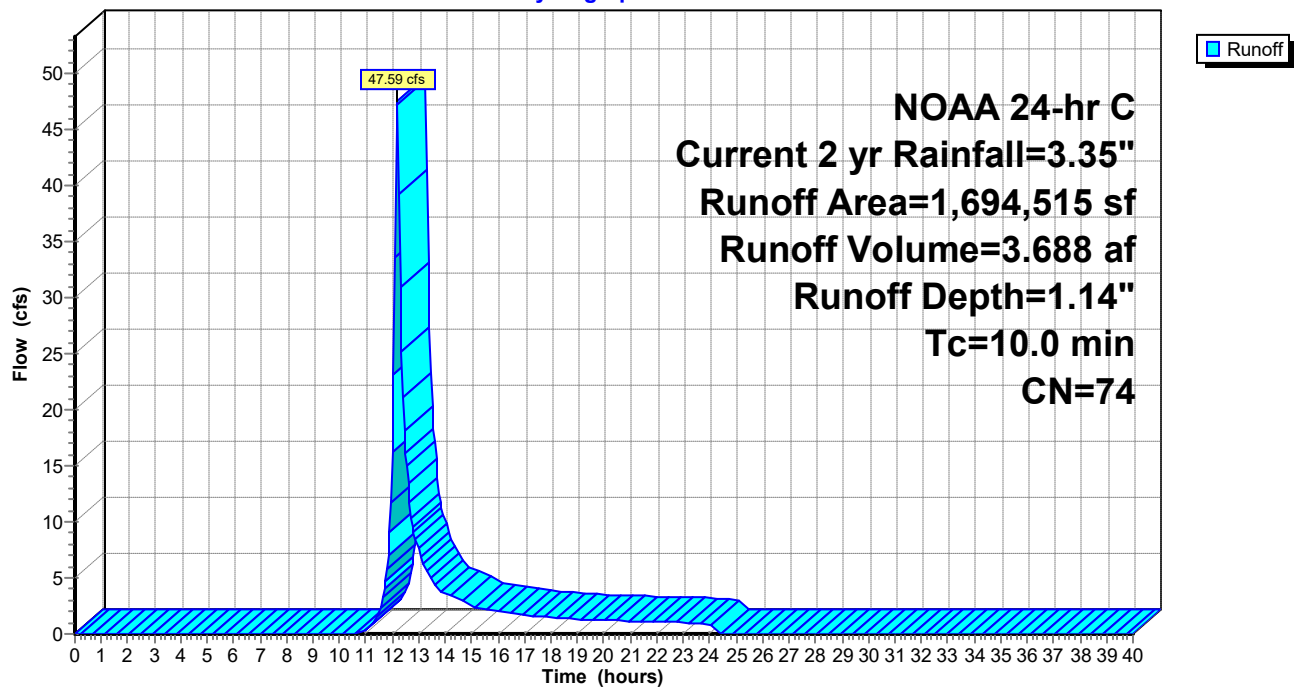
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (sf)	CN	Description
1,694,515	74	>75% Grass cover, Good, HSG C
1,694,515		100.00% Pervious Area

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

Subcatchment UPDA-6: PDA-6 (undetained)

Hydrograph



Summary for Pond B-48: Basin #48

Inflow Area = 2.415 ac, 36.95% Impervious, Inflow Depth = 1.87" for Current 2 yr event
 Inflow = 4.55 cfs @ 12.18 hrs, Volume= 0.376 af
 Outflow = 0.12 cfs @ 17.29 hrs, Volume= 0.229 af, Atten= 97%, Lag= 306.8 min
 Primary = 0.12 cfs @ 17.29 hrs, Volume= 0.229 af
 Routed to Link PDA-5 : Proposed Drainage Area #5

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 187.94' @ 17.29 hrs Surf.Area= 12,210 sf Storage= 12,058 cf

Plug-Flow detention time= 783.5 min calculated for 0.229 af (61% of inflow)
 Center-of-Mass det. time= 667.5 min (1,468.6 - 801.1)

Volume	Invert	Avail.Storage	Storage Description
#1	186.85'	81,173 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
186.85	0	0	0
187.00	11,678	876	876
188.00	12,246	11,962	12,838
189.00	12,814	12,530	25,368
190.00	13,382	13,098	38,466
191.00	13,951	13,667	52,132
192.00	14,520	14,236	66,368
193.00	15,090	14,805	81,173

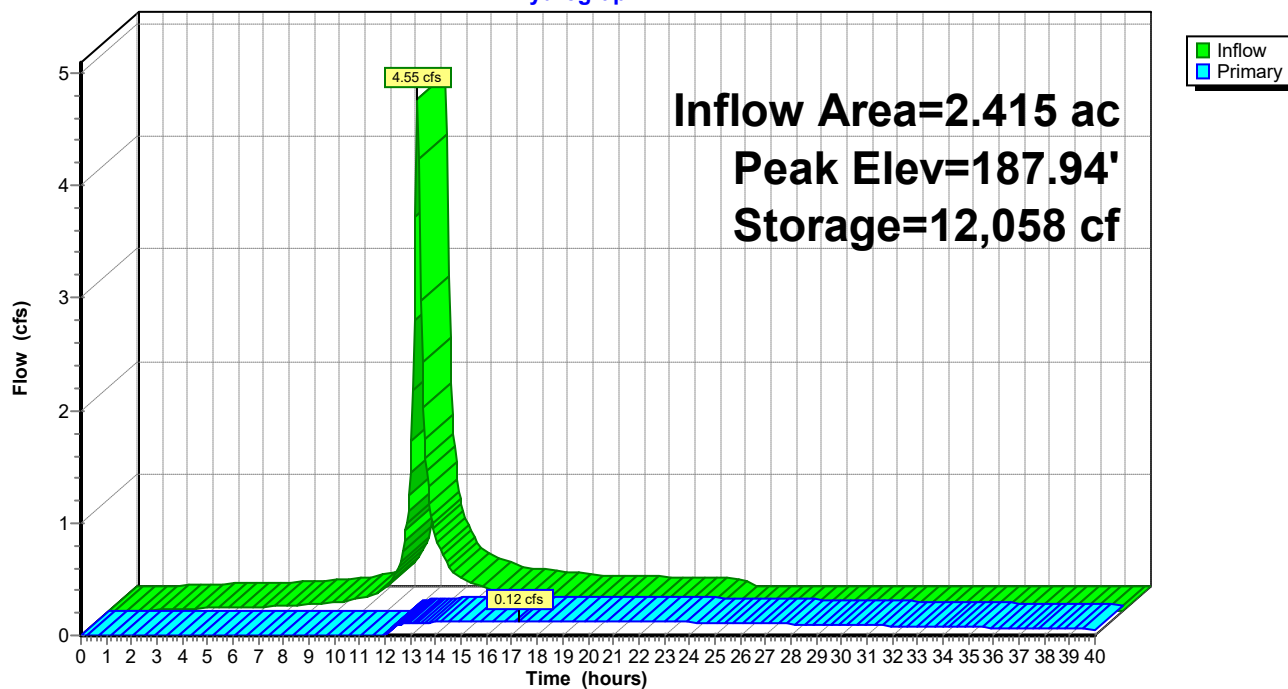
Device	Routing	Invert	Outlet Devices
#1	Primary	186.85'	18.0" Round Culvert L= 121.0' Ke= 0.500 Inlet / Outlet Invert= 186.85' / 186.25' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	187.26'	2.5" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	188.75'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	189.46'	50.0' long + 3.0 ' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.12 cfs @ 17.29 hrs HW=187.94' (Free Discharge)

- 1=Culvert (Passes 0.12 cfs of 3.89 cfs potential flow)
- 2=Orifice/Grate (Orifice Controls 0.12 cfs @ 3.64 fps)
- 3=Sharp-Crested Rectangular Weir (Controls 0.00 cfs)
- 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-48: Basin #48

Hydrograph



Summary for Pond B-49: Basin #49

Inflow Area = 2.680 ac, 54.22% Impervious, Inflow Depth = 2.21" for Current 2 yr event
 Inflow = 5.89 cfs @ 12.17 hrs, Volume= 0.494 af
 Outflow = 0.17 cfs @ 16.38 hrs, Volume= 0.315 af, Atten= 97%, Lag= 252.6 min
 Primary = 0.17 cfs @ 16.38 hrs, Volume= 0.315 af
 Routed to Link PDA-5 : Proposed Drainage Area #5

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 184.88' @ 16.38 hrs Surf.Area= 8,736 sf Storage= 15,839 cf

Plug-Flow detention time= 775.0 min calculated for 0.315 af (64% of inflow)
 Center-of-Mass det. time= 665.7 min (1,451.0 - 785.3)

Volume	Invert	Avail.Storage	Storage Description
#1	182.60'	55,030 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
182.60	0	0	0
183.00	6,698	1,340	1,340
184.00	7,766	7,232	8,572
185.00	8,867	8,317	16,888
186.00	10,002	9,435	26,323
187.00	11,172	10,587	36,910
188.00	12,378	11,775	48,685
188.50	13,004	6,346	55,030

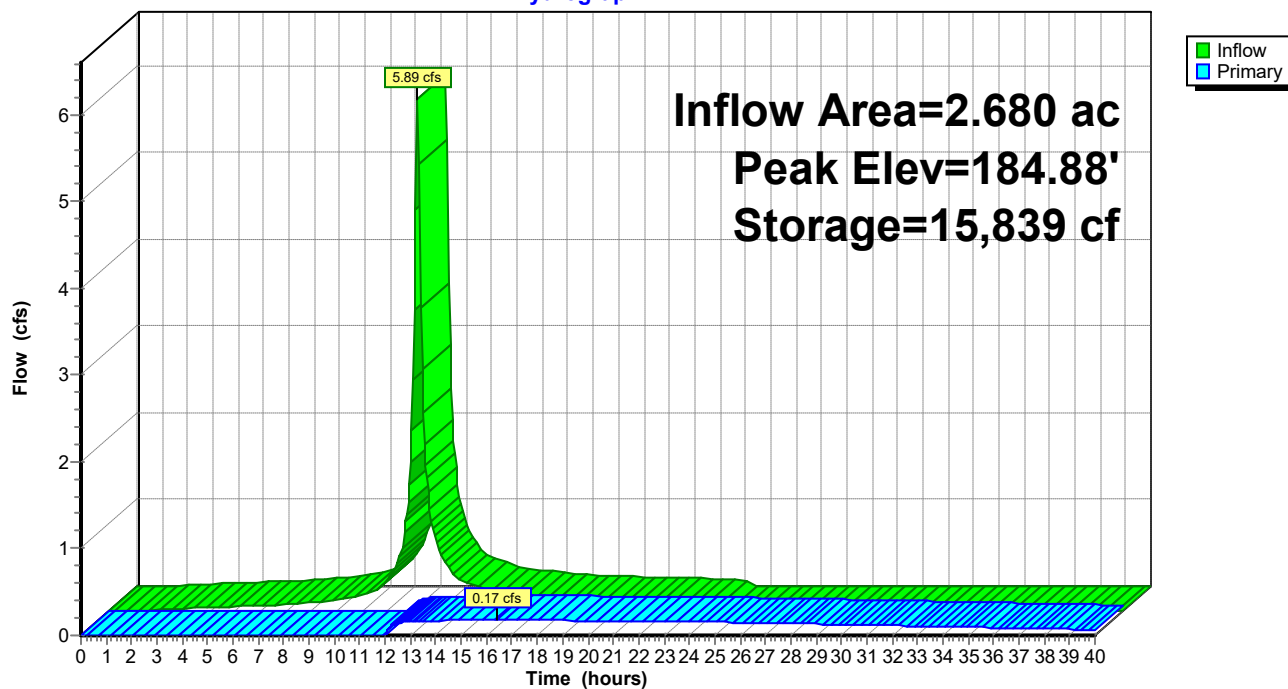
Device	Routing	Invert	Outlet Devices
#1	Primary	182.60'	18.0" Round Culvert L= 112.0' Ke= 0.500 Inlet / Outlet Invert= 182.60' / 182.00' S= 0.0054 '/ Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	183.64'	2.5" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	185.25'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	186.75'	50.0' long + 3.0 ' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.17 cfs @ 16.38 hrs HW=184.88' (Free Discharge)

- 1=Culvert (Passes 0.17 cfs of 8.85 cfs potential flow)
- 2=Orifice/Grate (Orifice Controls 0.17 cfs @ 5.13 fps)
- 3=Sharp-Crested Rectangular Weir (Controls 0.00 cfs)
- 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-49: Basin #49

Hydrograph



Summary for Pond B-50: Basin #50

Inflow Area = 2.669 ac, 46.91% Impervious, Inflow Depth = 2.07" for Current 2 yr event
 Inflow = 5.52 cfs @ 12.17 hrs, Volume= 0.460 af
 Outflow = 0.15 cfs @ 16.89 hrs, Volume= 0.285 af, Atten= 97%, Lag= 283.1 min
 Primary = 0.15 cfs @ 16.89 hrs, Volume= 0.285 af
 Routed to Link PDA-5 : Proposed Drainage Area #5

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 185.22' @ 16.89 hrs Surf.Area= 10,403 sf Storage= 14,794 cf

Plug-Flow detention time= 788.4 min calculated for 0.285 af (62% of inflow)
 Center-of-Mass det. time= 674.6 min (1,466.0 - 791.3)

Volume	Invert	Avail.Storage	Storage Description
#1	183.30'	56,291 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
183.30	0	0	0
184.00	8,805	3,082	3,082
185.00	10,108	9,457	12,538
186.00	11,448	10,778	23,316
187.00	12,826	12,137	35,453
188.00	14,244	13,535	48,988
188.50	14,966	7,303	56,291

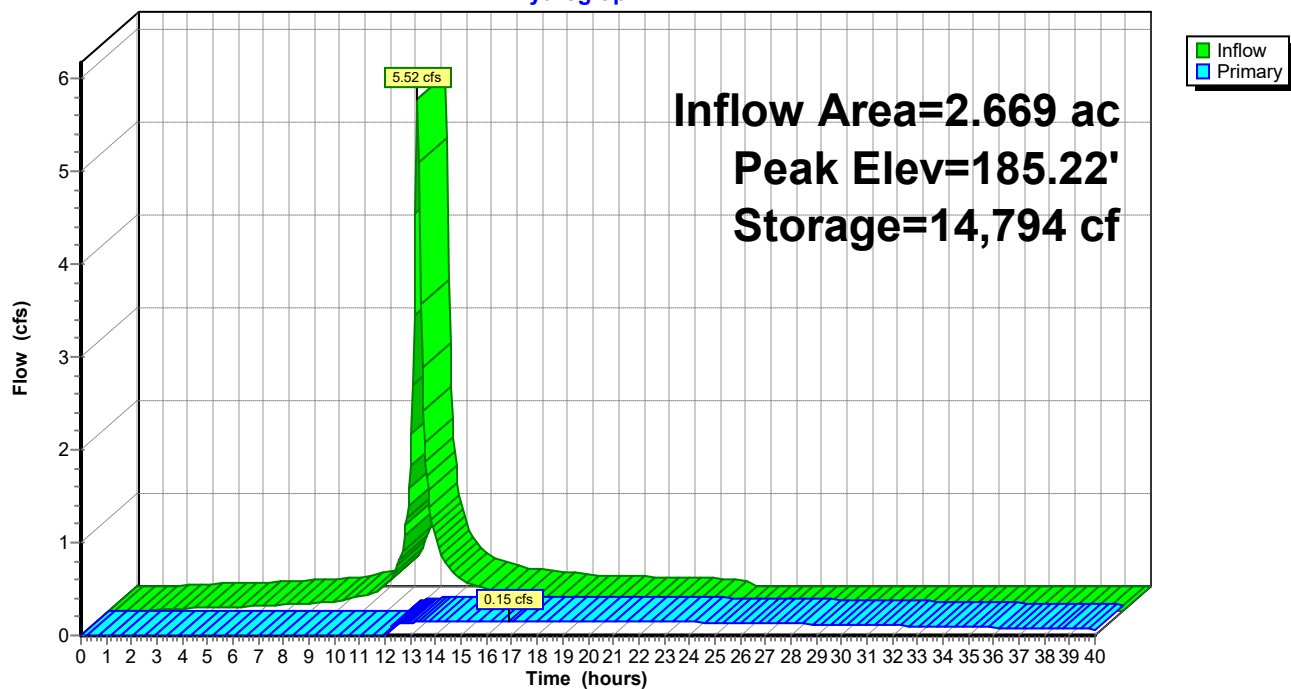
Device	Routing	Invert	Outlet Devices
#1	Primary	183.17'	18.0" Round Culvert L= 23.0' Ke= 0.500 Inlet / Outlet Invert= 183.17' / 183.05' S= 0.0052 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	184.23'	2.5" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	185.53'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	186.82'	50.0' long + 3.0' /' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.15 cfs @ 16.89 hrs HW=185.22' (Free Discharge)

1=Culvert (Passes 0.15 cfs of 8.38 cfs potential flow)
 2=Orifice/Grate (Orifice Controls 0.15 cfs @ 4.53 fps)
 3=Sharp-Crested Rectangular Weir (Controls 0.00 cfs)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-50: Basin #50

Hydrograph



Summary for Pond B-51: Basin #51

Inflow Area = 1.618 ac, 38.76% Impervious, Inflow Depth = 1.90" for Current 2 yr event
 Inflow = 3.10 cfs @ 12.17 hrs, Volume= 0.257 af
 Outflow = 1.93 cfs @ 12.30 hrs, Volume= 0.196 af, Atten= 38%, Lag= 7.7 min
 Primary = 1.93 cfs @ 12.30 hrs, Volume= 0.196 af
 Routed to Link PDA-6 : Proposed Drainage Area #6

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 188.57' @ 12.30 hrs Surf.Area= 3,395 sf Storage= 4,224 cf

Plug-Flow detention time= 178.1 min calculated for 0.196 af (76% of inflow)
 Center-of-Mass det. time= 86.3 min (885.5 - 799.1)

Volume	Invert	Avail.Storage	Storage Description
#1	186.86'	16,158 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
186.86	0	0	0
187.00	1,882	132	132
188.00	2,798	2,340	2,472
189.00	3,853	3,326	5,797
190.00	5,083	4,468	10,265
191.00	6,703	5,893	16,158

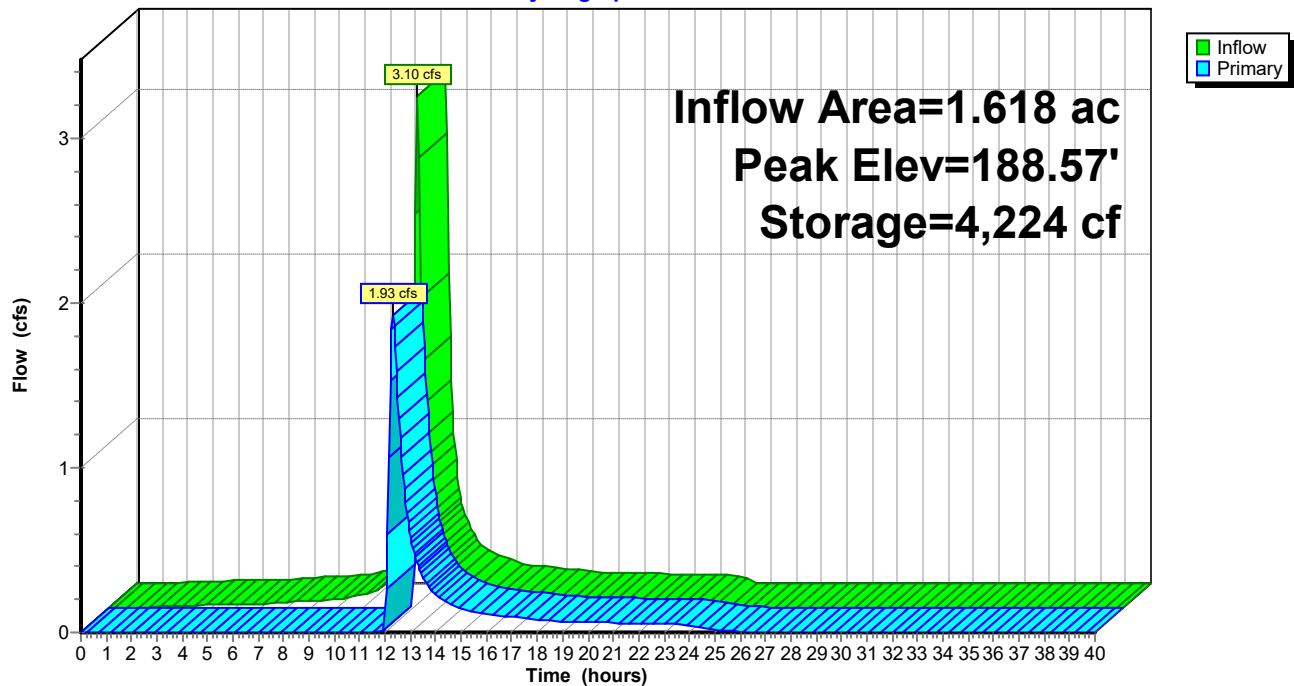
Device	Routing	Invert	Outlet Devices
#1	Primary	186.86'	18.0" Round Culvert L= 172.0' Ke= 0.500 Inlet / Outlet Invert= 186.86' / 186.00' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	188.06'	20.0" W x 8.0" H Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	188.68'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	189.71'	50.0' long + 3.0' /' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=1.92 cfs @ 12.30 hrs HW=188.56' (Free Discharge)

1=Culvert (Passes 1.92 cfs of 7.36 cfs potential flow)
 2=Orifice/Grate (Orifice Controls 1.92 cfs @ 2.28 fps)
 3=Sharp-Crested Rectangular Weir (Controls 0.00 cfs)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-51: Basin #51

Hydrograph



Summary for Pond B-52: Basin #52

Inflow Area = 2.537 ac, 41.39% Impervious, Inflow Depth = 1.96" for Current 2 yr event
 Inflow = 4.99 cfs @ 12.17 hrs, Volume= 0.414 af
 Outflow = 1.78 cfs @ 12.43 hrs, Volume= 0.313 af, Atten= 64%, Lag= 15.5 min
 Primary = 1.78 cfs @ 12.43 hrs, Volume= 0.313 af
 Routed to Link PDA-6 : Proposed Drainage Area #6

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 194.92' @ 12.43 hrs Surf.Area= 4,185 sf Storage= 7,839 cf

Plug-Flow detention time= 186.3 min calculated for 0.313 af (76% of inflow)
 Center-of-Mass det. time= 93.5 min (890.0 - 796.5)

Volume	Invert	Avail.Storage	Storage Description
#1	192.30'	23,897 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
192.30	0	0	0
193.00	2,920	1,022	1,022
194.00	3,579	3,250	4,271
195.00	4,239	3,909	8,180
196.00	4,898	4,569	12,749
197.00	5,558	5,228	17,977
198.00	6,282	5,920	23,897

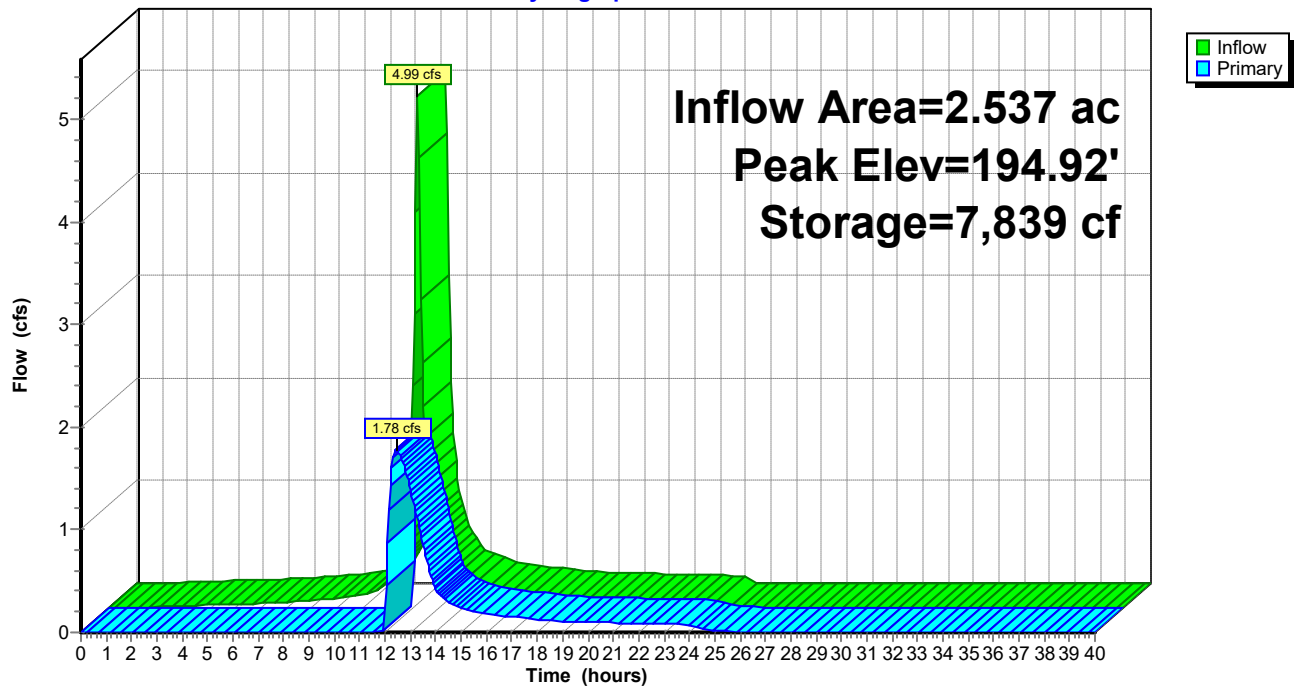
Device	Routing	Invert	Outlet Devices
#1	Primary	192.00'	18.0" Round Culvert L= 163.0' Ke= 0.500 Inlet / Outlet Invert= 192.00' / 191.00' S= 0.0061 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	194.03'	24.0" W x 2.5" H Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	195.24'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	196.99'	50.0' long + 3.0 ' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=1.77 cfs @ 12.43 hrs HW=194.92' (Free Discharge)

1=Culvert (Passes 1.77 cfs of 10.42 cfs potential flow)
 2=Orifice/Grate (Orifice Controls 1.77 cfs @ 4.26 fps)
 3=Sharp-Crested Rectangular Weir (Controls 0.00 cfs)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-52: Basin #52

Hydrograph



Summary for Pond B-53: Basin #53

Inflow Area = 2.540 ac, 47.79% Impervious, Inflow Depth = 2.08" for Current 2 yr event
 Inflow = 5.29 cfs @ 12.17 hrs, Volume= 0.441 af
 Outflow = 0.27 cfs @ 14.39 hrs, Volume= 0.322 af, Atten= 95%, Lag= 133.3 min
 Primary = 0.27 cfs @ 14.39 hrs, Volume= 0.322 af
 Routed to Link PDA-6 : Proposed Drainage Area #6

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 202.48' @ 14.39 hrs Surf.Area= 5,842 sf Storage= 12,798 cf

Plug-Flow detention time= 534.5 min calculated for 0.321 af (73% of inflow)
 Center-of-Mass det. time= 438.0 min (1,228.6 - 790.6)

Volume	Invert	Avail.Storage	Storage Description
#1	199.75'	33,011 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
199.75	0	0	0
200.00	4,035	504	504
201.00	4,695	4,365	4,869
202.00	5,685	5,190	10,059
203.00	6,015	5,850	15,909
204.00	6,676	6,346	22,255
205.00	7,336	7,006	29,261
205.50	7,666	3,751	33,011

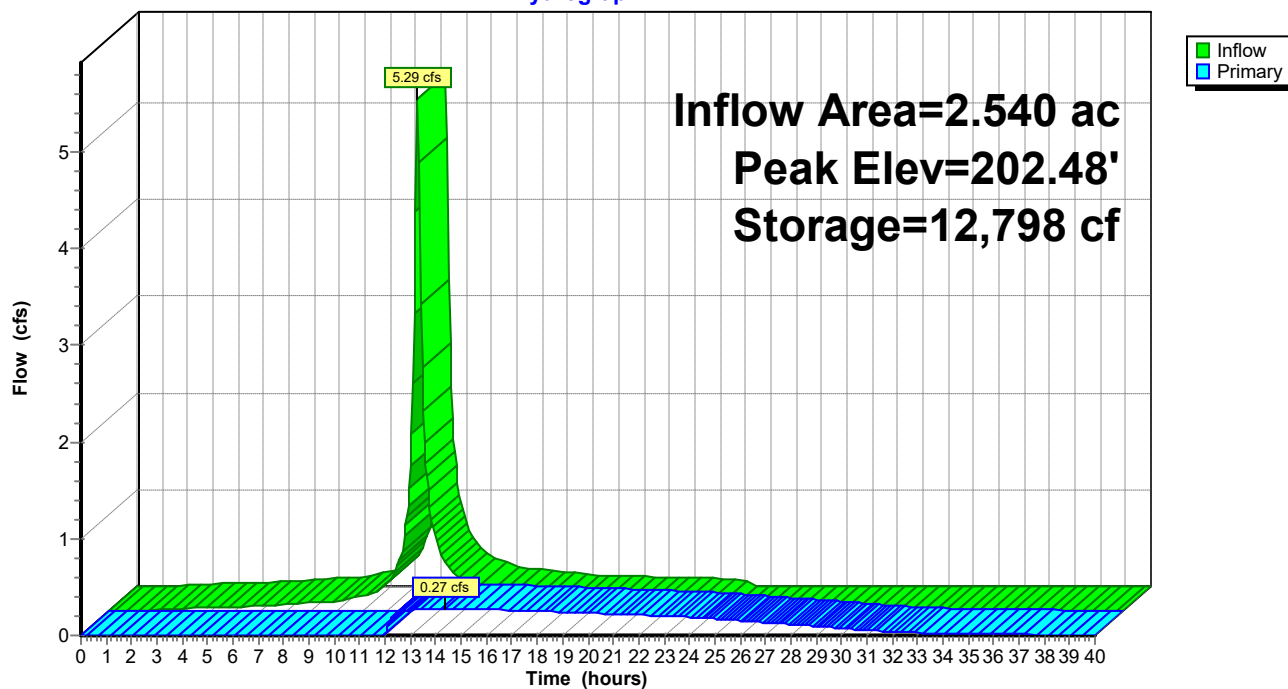
Device	Routing	Invert	Outlet Devices
#1	Primary	198.75'	18.0" Round Culvert L= 122.0' Ke= 0.500 Inlet / Outlet Invert= 198.75' / 198.00' S= 0.0061 ' / Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	201.02'	3.0" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	202.94'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	204.43'	50.0' long + 3.0 ' / SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.27 cfs @ 14.39 hrs HW=202.48' (Free Discharge)

1=Culvert (Passes 0.27 cfs of 12.66 cfs potential flow)
 2=Orifice/Grate (Orifice Controls 0.27 cfs @ 5.55 fps)
 3=Sharp-Crested Rectangular Weir (Controls 0.00 cfs)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-53: Basin #53

Hydrograph



Summary for Pond B-54: Basin #54

Inflow Area = 2.570 ac, 60.46% Impervious, Inflow Depth = 2.33" for Current 2 yr event
 Inflow = 5.94 cfs @ 12.17 hrs, Volume= 0.500 af
 Outflow = 0.21 cfs @ 15.14 hrs, Volume= 0.343 af, Atten= 96%, Lag= 178.0 min
 Primary = 0.21 cfs @ 15.14 hrs, Volume= 0.343 af
 Routed to Link PDA-6 : Proposed Drainage Area #6

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 203.20' @ 15.14 hrs Surf.Area= 5,889 sf Storage= 15,659 cf

Plug-Flow detention time= 709.1 min calculated for 0.343 af (69% of inflow)
 Center-of-Mass det. time= 607.7 min (1,388.5 - 780.8)

Volume	Invert	Avail.Storage	Storage Description
#1	199.89'	30,982 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
199.89	0	0	0
200.00	3,780	208	208
201.00	4,440	4,110	4,318
202.00	5,100	4,770	9,088
203.00	5,760	5,430	14,518
204.00	6,421	6,091	20,608
205.00	7,081	6,751	27,359
205.50	7,411	3,623	30,982

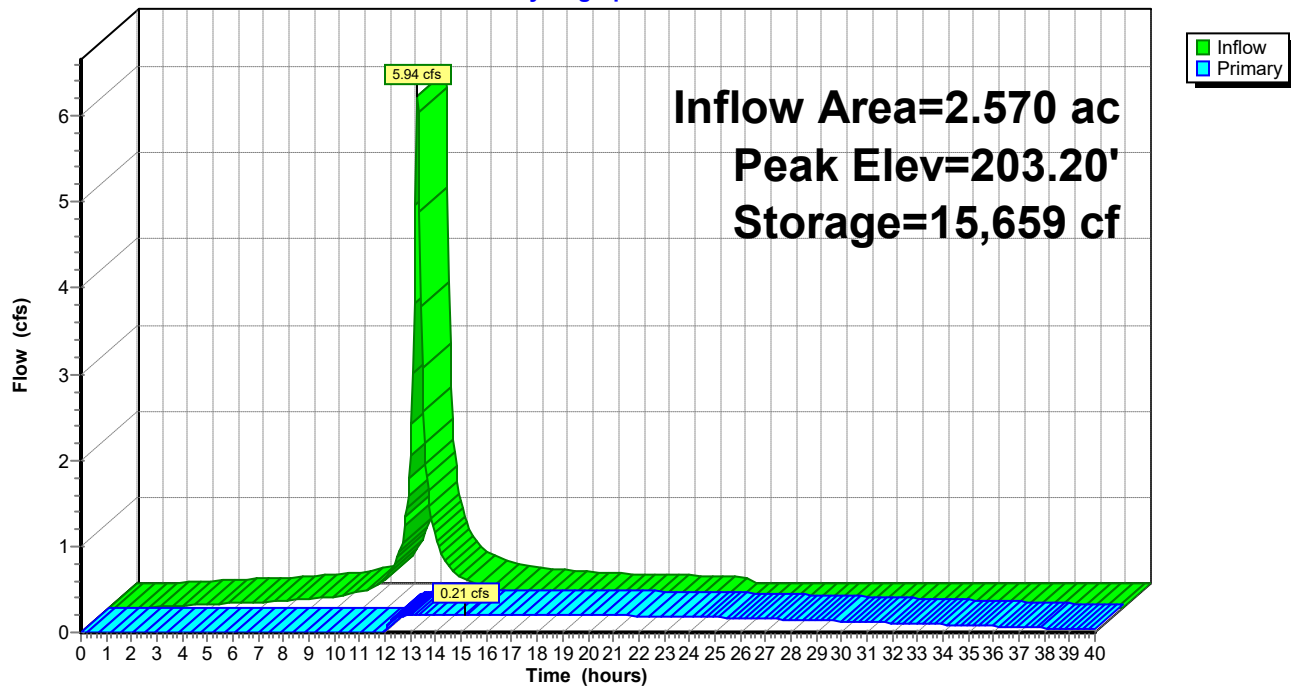
Device	Routing	Invert	Outlet Devices
#1	Primary	198.89'	18.0" Round Culvert L= 178.0' Ke= 0.500 Inlet / Outlet Invert= 198.89' / 198.00' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	201.40'	2.5" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	203.70'	4.0' long 1 2 End Contraction(s)
#4	Primary	204.47'	50.0' long + 3.0 ' /' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.21 cfs @ 15.14 hrs HW=203.20' (Free Discharge)

1=Culvert (Passes 0.21 cfs of 12.50 cfs potential flow)
 2=Orifice/Grate (Orifice Controls 0.21 cfs @ 6.26 fps)
 3=1 (Controls 0.00 cfs)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-54: Basin #54

Hydrograph



Summary for Pond B-55: Basin #55

Inflow Area = 2.024 ac, 49.74% Impervious, Inflow Depth = 2.12" for Current 2 yr event
 Inflow = 4.29 cfs @ 12.17 hrs, Volume= 0.358 af
 Outflow = 1.39 cfs @ 12.46 hrs, Volume= 0.264 af, Atten= 68%, Lag= 17.2 min
 Primary = 1.39 cfs @ 12.46 hrs, Volume= 0.264 af
 Routed to Link PDA-6 : Proposed Drainage Area #6

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 193.38' @ 12.46 hrs Surf.Area= 4,942 sf Storage= 7,291 cf

Plug-Flow detention time= 204.8 min calculated for 0.264 af (74% of inflow)
 Center-of-Mass det. time= 108.7 min (897.6 - 788.9)

Volume	Invert	Avail.Storage	Storage Description
#1	191.56'	22,010 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
191.56	0	0	0
192.00	4,250	935	935
193.00	4,746	4,498	5,433
194.00	5,257	5,002	10,434
195.00	5,784	5,521	15,955
196.00	6,327	6,056	22,010

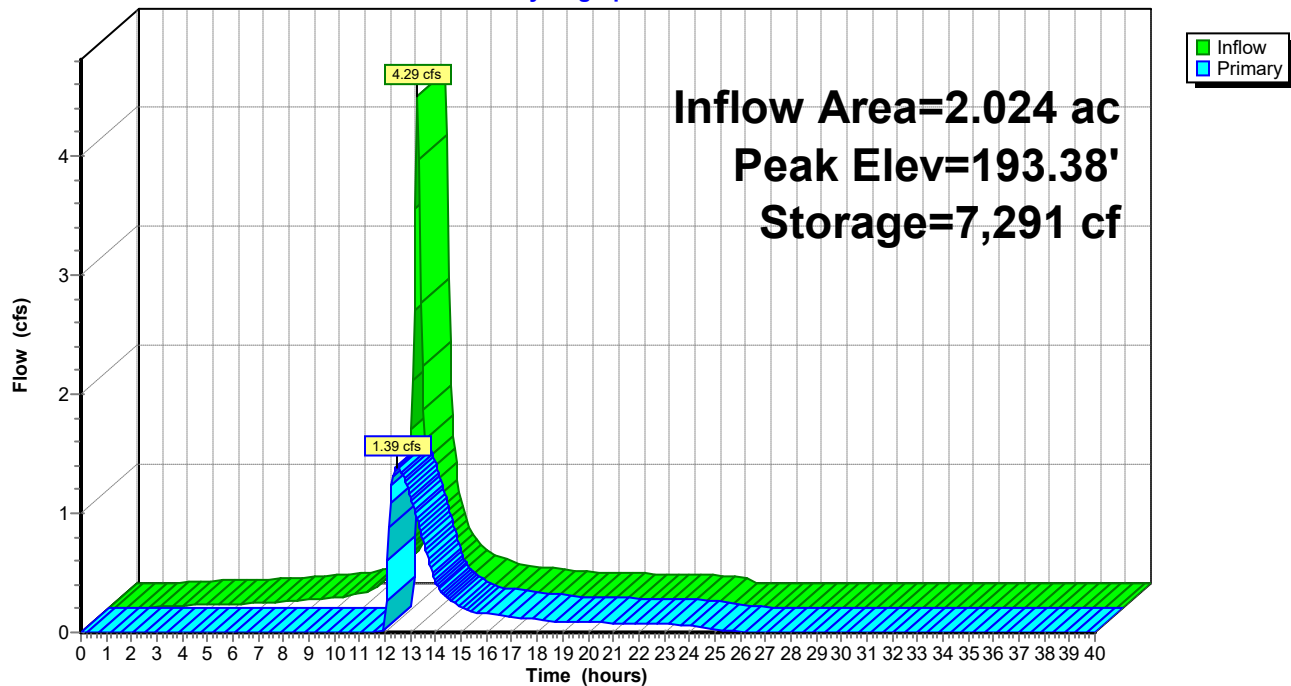
Device	Routing	Invert	Outlet Devices
#1	Primary	191.56'	18.0" Round Culvert L= 112.0' Ke= 0.500 Inlet / Outlet Invert= 191.56' / 191.00' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	192.71'	22.0" W x 2.5" H Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	193.63'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	194.99'	50.0' long + 3.0' /' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=1.38 cfs @ 12.46 hrs HW=193.38' (Free Discharge)

1=Culvert (Passes 1.38 cfs of 7.72 cfs potential flow)
 2=Orifice/Grate (Orifice Controls 1.38 cfs @ 3.63 fps)
 3=Sharp-Crested Rectangular Weir (Controls 0.00 cfs)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-55: Basin #55

Hydrograph



Summary for Pond B-56: Basin #56

Inflow Area = 2.308 ac, 44.92% Impervious, Inflow Depth = 2.03" for Current 2 yr event
 Inflow = 4.69 cfs @ 12.17 hrs, Volume= 0.390 af
 Outflow = 1.24 cfs @ 12.55 hrs, Volume= 0.292 af, Atten= 74%, Lag= 22.7 min
 Primary = 1.24 cfs @ 12.55 hrs, Volume= 0.292 af
 Routed to Link PDA-6 : Proposed Drainage Area #6

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 193.33' @ 12.55 hrs Surf.Area= 5,652 sf Storage= 8,198 cf

Plug-Flow detention time= 213.1 min calculated for 0.292 af (75% of inflow)
 Center-of-Mass det. time= 118.1 min (911.2 - 793.1)

Volume	Invert	Avail.Storage	Storage Description
#1	191.57'	25,032 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
191.57	0	0	0
192.00	5,021	1,080	1,080
193.00	5,490	5,256	6,335
194.00	5,976	5,733	12,068
195.00	6,478	6,227	18,295
196.00	6,995	6,737	25,032

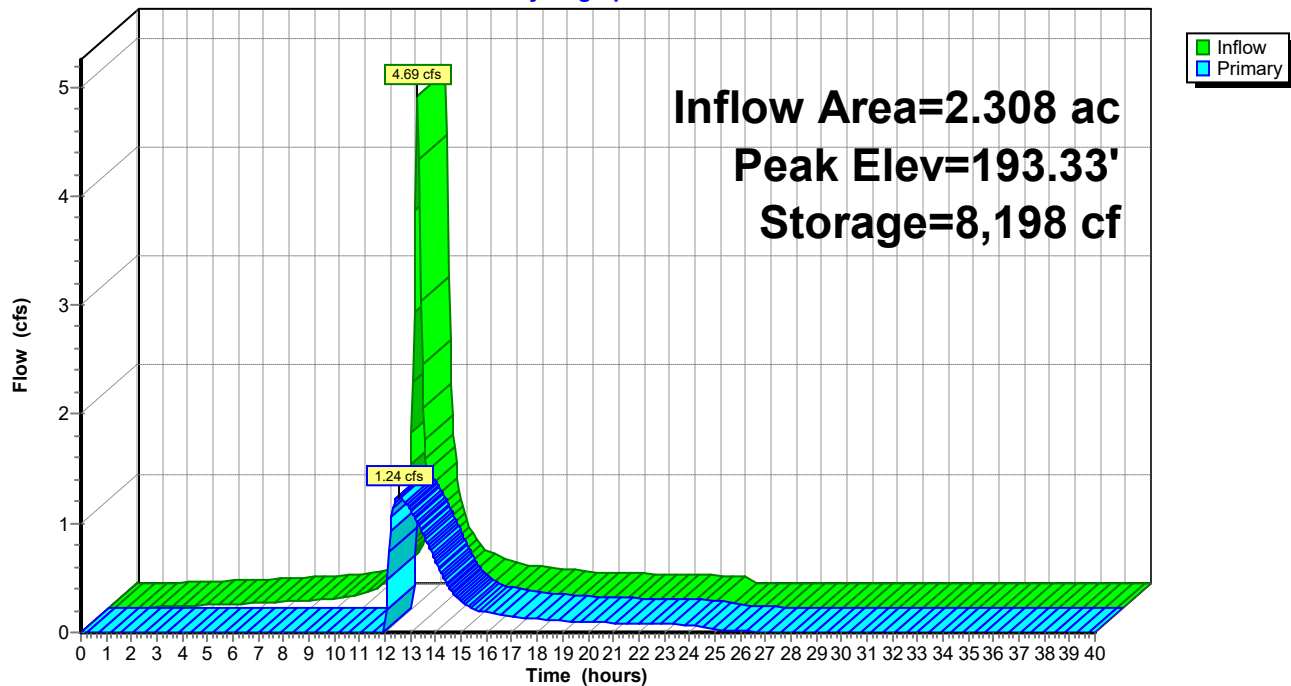
Device	Routing	Invert	Outlet Devices
#1	Primary	191.57'	18.0" Round Culvert L= 29.0' Ke= 0.500 Inlet / Outlet Invert= 191.57' / 191.42' S= 0.0052 ' / Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	192.62'	19.0" W x 2.5" H Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	193.60'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	194.99'	50.0' long + 3.0 ' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=1.24 cfs @ 12.55 hrs HW=193.33' (Free Discharge)

1=Culvert (Passes 1.24 cfs of 7.36 cfs potential flow)
 2=Orifice/Grate (Orifice Controls 1.24 cfs @ 3.76 fps)
 3=Sharp-Crested Rectangular Weir (Controls 0.00 cfs)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-56: Basin #56

Hydrograph



Summary for Pond B-57: Basin #57

Inflow Area = 1.297 ac, 51.37% Impervious, Inflow Depth = 2.15" for Current 2 yr event
 Inflow = 2.78 cfs @ 12.17 hrs, Volume= 0.233 af
 Outflow = 0.59 cfs @ 12.64 hrs, Volume= 0.170 af, Atten= 79%, Lag= 27.8 min
 Primary = 0.59 cfs @ 12.64 hrs, Volume= 0.170 af
 Routed to Link PDA-6 : Proposed Drainage Area #6

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 202.93' @ 12.64 hrs Surf.Area= 4,452 sf Storage= 5,305 cf

Plug-Flow detention time= 239.8 min calculated for 0.170 af (73% of inflow)
 Center-of-Mass det. time= 144.2 min (931.7 - 787.6)

Volume	Invert	Avail.Storage	Storage Description
#1	201.30'	15,700 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
201.30	0	0	0
202.00	3,969	1,389	1,389
203.00	4,488	4,229	5,618
204.00	5,034	4,761	10,379
205.00	5,608	5,321	15,700

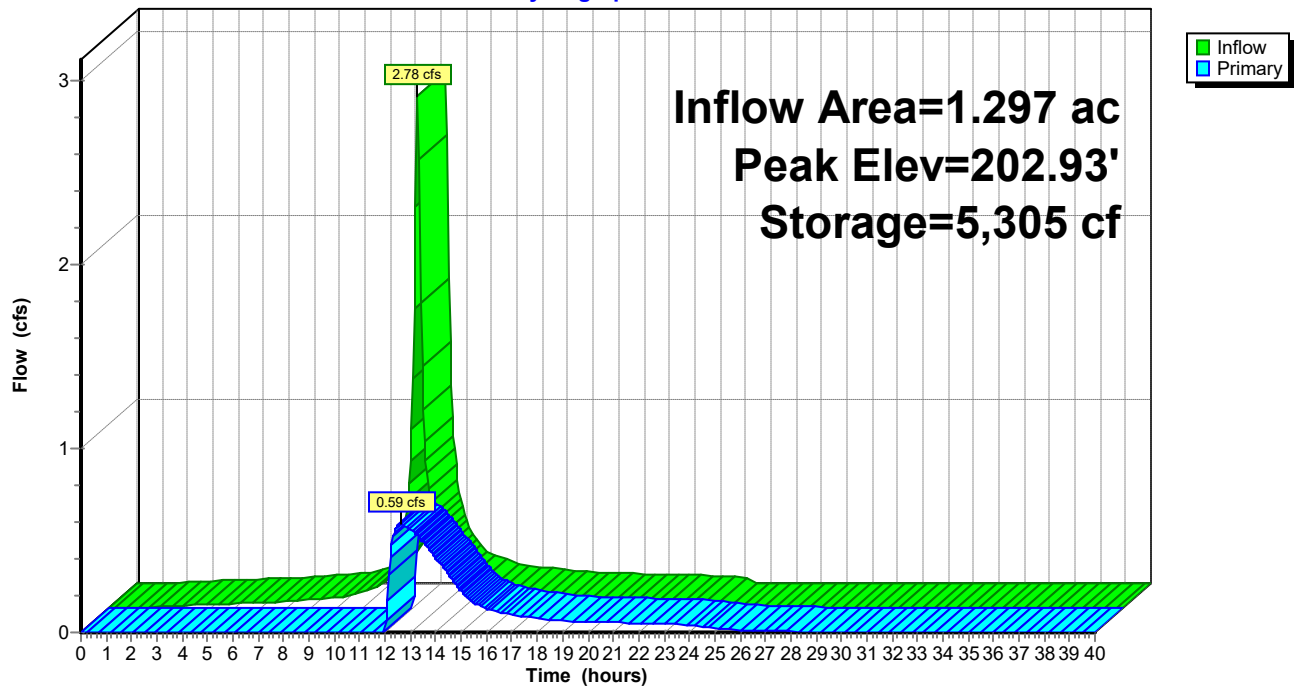
Device	Routing	Invert	Outlet Devices
#1	Primary	200.65'	18.0" Round Culvert L= 207.0' Ke= 0.500 Inlet / Outlet Invert= 200.65' / 198.00' S= 0.0128 ' / Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	202.33'	10.0" W x 2.5" H Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	203.15'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	203.98'	50.0' long + 3.0 ' / SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.59 cfs @ 12.64 hrs HW=202.93' (Free Discharge)

1=Culvert (Passes 0.59 cfs of 10.52 cfs potential flow)
 2=Orifice/Grate (Orifice Controls 0.59 cfs @ 3.38 fps)
 3=Sharp-Crested Rectangular Weir (Controls 0.00 cfs)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-57: Basin #57

Hydrograph



Summary for Pond B-58: Basin #58

Inflow Area = 2.371 ac, 32.26% Impervious, Inflow Depth = 1.78" for Current 2 yr event
 Inflow = 4.26 cfs @ 12.18 hrs, Volume= 0.351 af
 Outflow = 0.16 cfs @ 15.48 hrs, Volume= 0.256 af, Atten= 96%, Lag= 198.4 min
 Primary = 0.16 cfs @ 15.48 hrs, Volume= 0.256 af
 Routed to Link PDA-6 : Proposed Drainage Area #6

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 200.24' @ 15.48 hrs Surf.Area= 7,112 sf Storage= 10,478 cf

Plug-Flow detention time= 679.9 min calculated for 0.256 af (73% of inflow)
 Center-of-Mass det. time= 579.7 min (1,386.1 - 806.4)

Volume	Invert	Avail.Storage	Storage Description
#1	198.30'	32,924 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
198.30	0	0	0
199.00	6,230	2,180	2,180
200.00	6,932	6,581	8,761
201.00	7,670	7,301	16,062
202.00	8,426	8,048	24,110
203.00	9,201	8,814	32,924

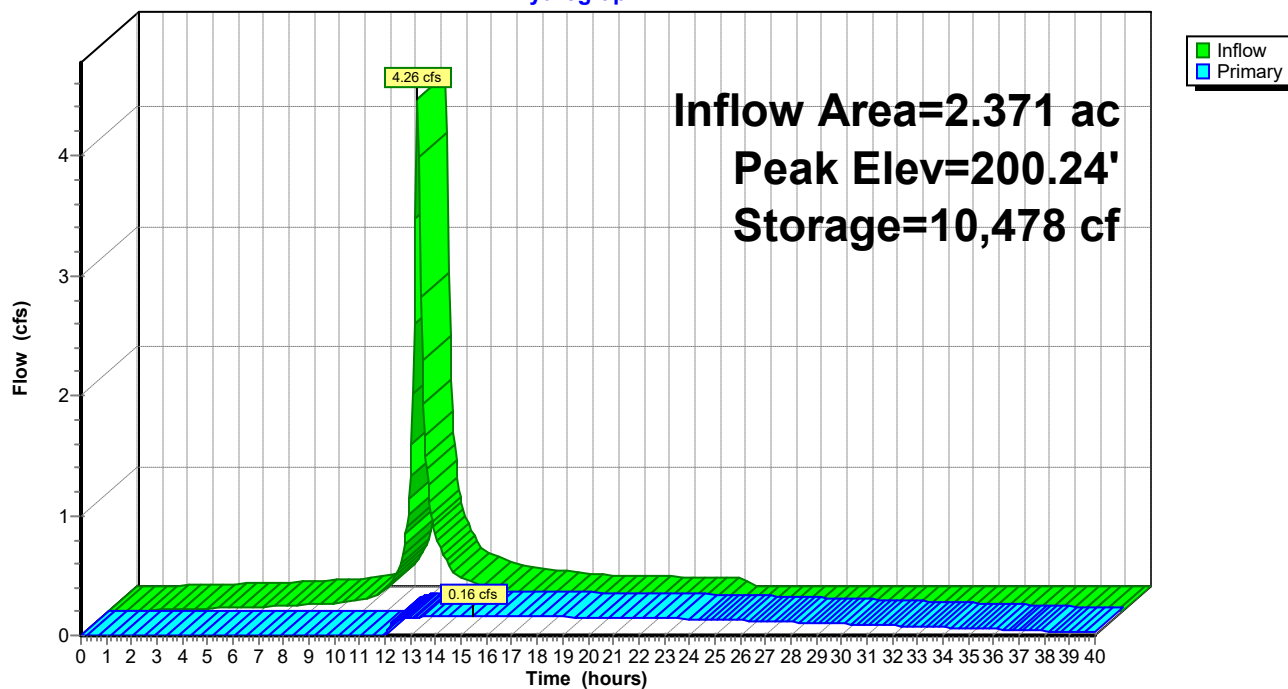
Device	Routing	Invert	Outlet Devices
#1	Primary	198.30'	18.0" Round Culvert L= 48.0' Ke= 0.500 Inlet / Outlet Invert= 198.30' / 198.00' S= 0.0063 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	199.19'	2.5" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	200.60'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	201.90'	50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.16 cfs @ 15.48 hrs HW=200.24' (Free Discharge)

1=Culvert (Passes 0.16 cfs of 8.29 cfs potential flow)
 2=Orifice/Grate (Orifice Controls 0.16 cfs @ 4.69 fps)
 3=Sharp-Crested Rectangular Weir (Controls 0.00 cfs)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-58: Basin #58

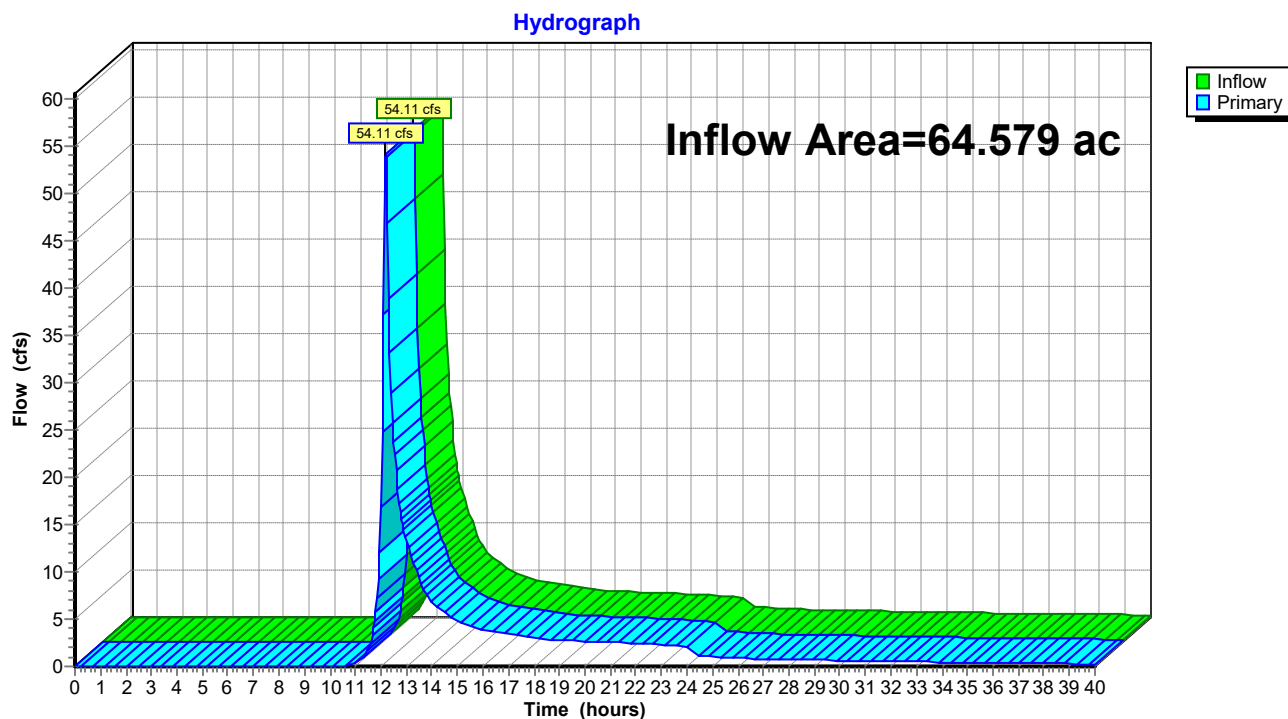
Hydrograph



Summary for Link DP-3: Design Pont #3 (Woolsey Creek)

Inflow Area = 64.579 ac, 17.83% Impervious, Inflow Depth > 1.25" for Current 2 yr event
Inflow = 54.11 cfs @ 12.19 hrs, Volume= 6.735 af
Primary = 54.11 cfs @ 12.19 hrs, Volume= 6.735 af, Atten= 0%, Lag= 0.0 min

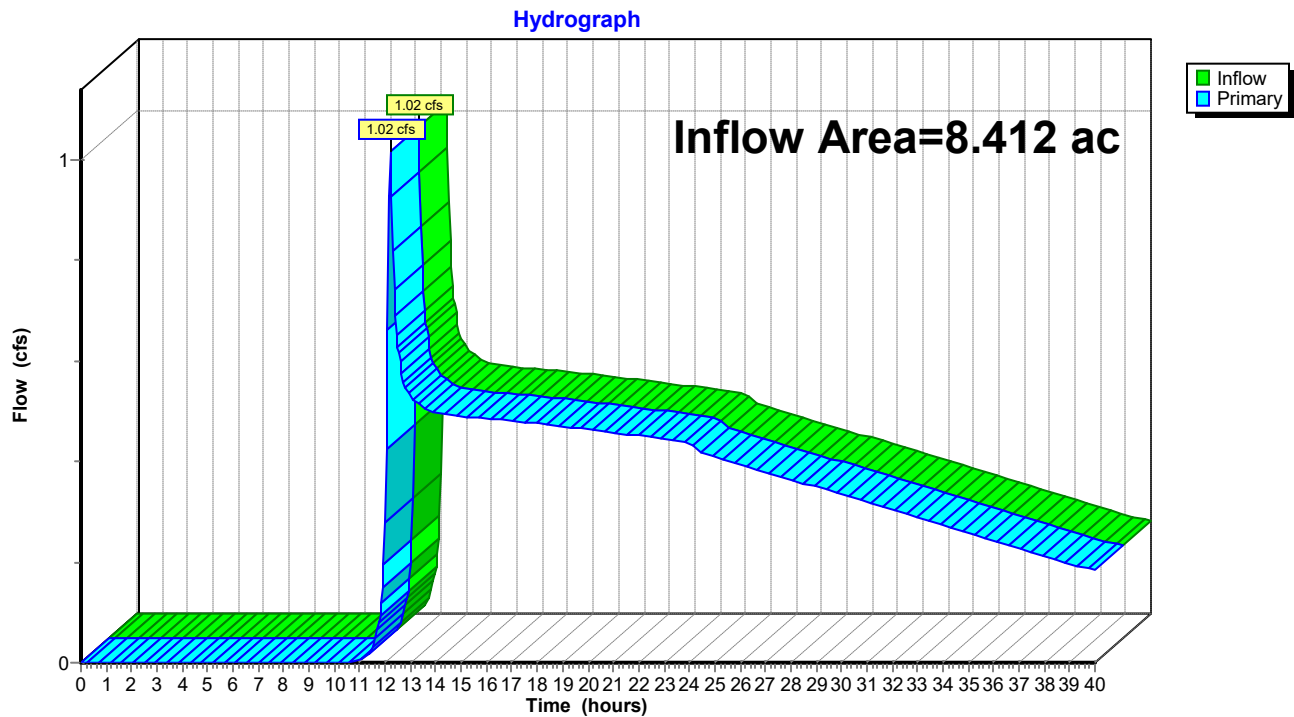
Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link DP-3: Design Pont #3 (Woolsey Creek)

Summary for Link PDA-5: Proposed Drainage Area #5

Inflow Area = 8.412 ac, 42.77% Impervious, Inflow Depth > 1.27" for Current 2 yr event
Inflow = 1.02 cfs @ 12.20 hrs, Volume= 0.891 af
Primary = 1.02 cfs @ 12.20 hrs, Volume= 0.891 af, Atten= 0%, Lag= 0.0 min
Routed to Link DP-3 : Design Pont #3 (Woolsey Creek)

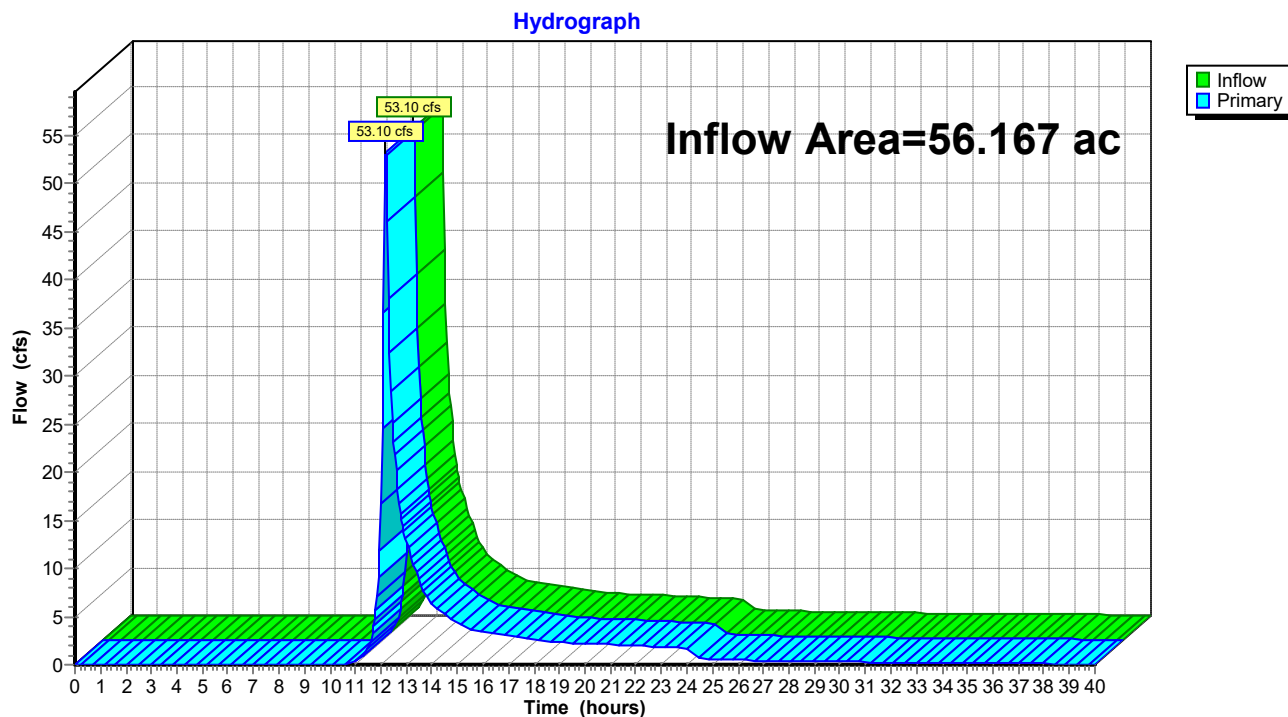
Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link PDA-5: Proposed Drainage Area #5

Summary for Link PDA-6: Proposed Drainage Area #6

Inflow Area = 56.167 ac, 14.10% Impervious, Inflow Depth > 1.25" for Current 2 yr event
Inflow = 53.10 cfs @ 12.19 hrs, Volume= 5.843 af
Primary = 53.10 cfs @ 12.19 hrs, Volume= 5.843 af, Atten= 0%, Lag= 0.0 min
Routed to Link DP-3 : Design Pont #3 (Woolsey Creek)

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link PDA-6: Proposed Drainage Area #6

Summary for Subcatchment 48I: PDA-48 (impervious)

Runoff = 4.14 cfs @ 12.17 hrs, Volume= 0.362 af, Depth= 4.86"
 Routed to Pond B-48 : Basin #48

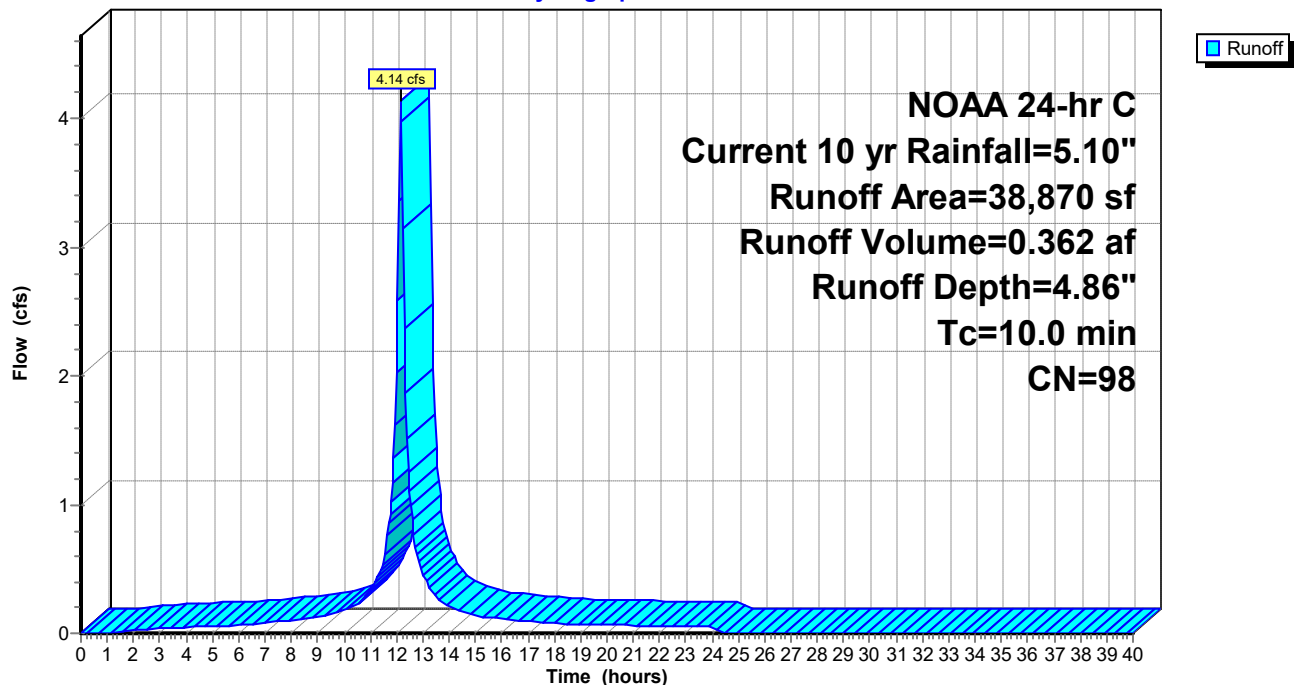
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 10 yr Rainfall=5.10"

	Area (sf)	CN	Description
*	16,283	98	Pavement, HSG C
*	21,350	98	Roof, HSG C
*	1,237	98	Concrete, HSG C
	38,870	98	Weighted Average
	38,870		100.00% Impervious Area

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

Subcatchment 48I: PDA-48 (impervious)

Hydrograph



Summary for Subcatchment 48P: PDA-48 (pervious)

Runoff = 4.11 cfs @ 12.18 hrs, Volume= 0.310 af, Depth= 2.44"
 Routed to Pond B-48 : Basin #48

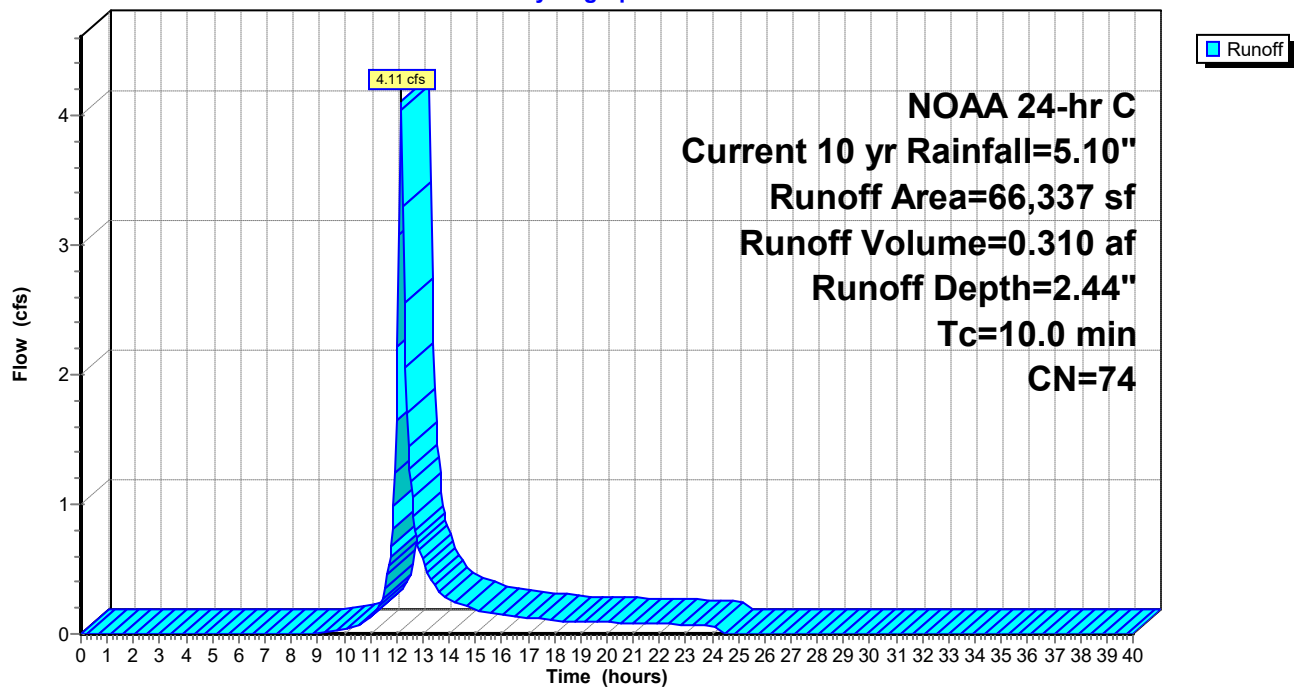
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (sf)	CN	Description
66,337	74	>75% Grass cover, Good, HSG C
66,337		100.00% Pervious Area

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

Subcatchment 48P: PDA-48 (pervious)

Hydrograph



Summary for Subcatchment 49I: PDA-49 (impervious)

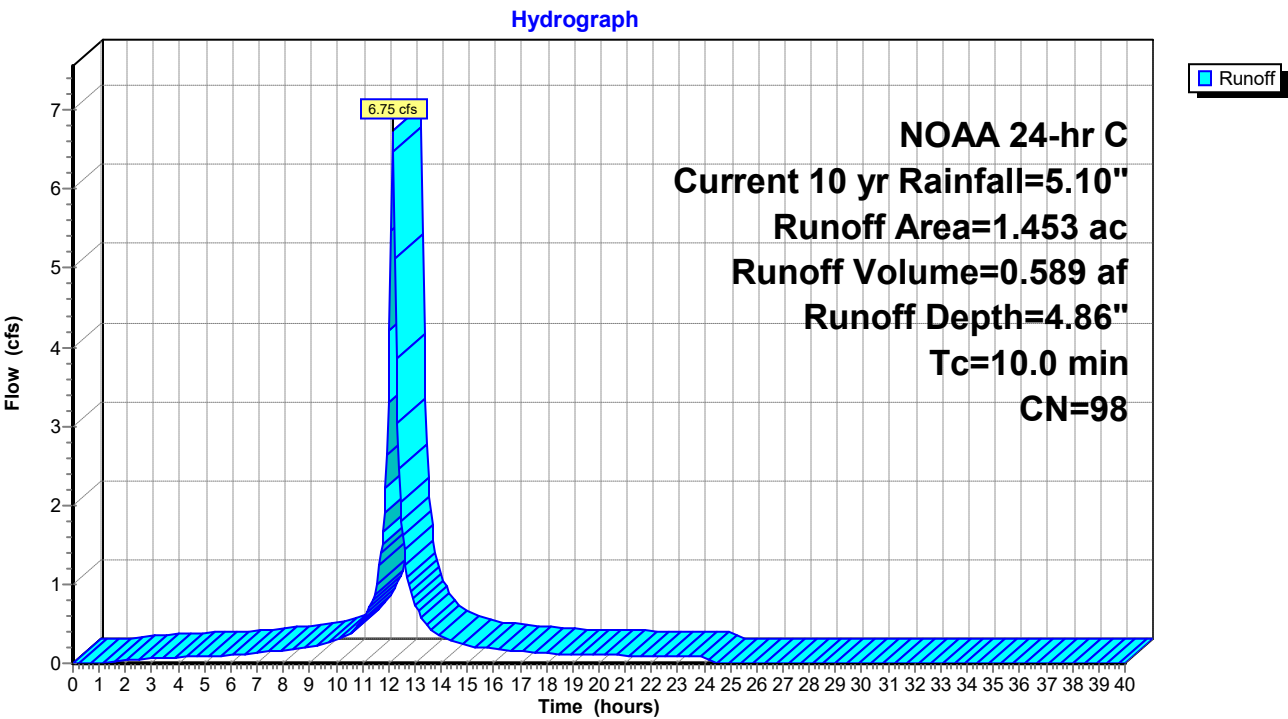
Runoff = 6.75 cfs @ 12.17 hrs, Volume= 0.589 af, Depth= 4.86"
Routed to Pond B-49 : Basin #49

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (ac)	CN	Description
* 0.454	98	Pavement, HSG C
* 0.940	98	Roof, HSG C
* 0.059	98	Concrete, HSG C
1.453	98	Weighted Average
1.453		100.00% Impervious Area

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

Subcatchment 49I: PDA-49 (impervious)



Summary for Subcatchment 49P: PDA-49 (pervious)

Runoff = 3.31 cfs @ 12.18 hrs, Volume= 0.250 af, Depth= 2.44"
 Routed to Pond B-49 : Basin #49

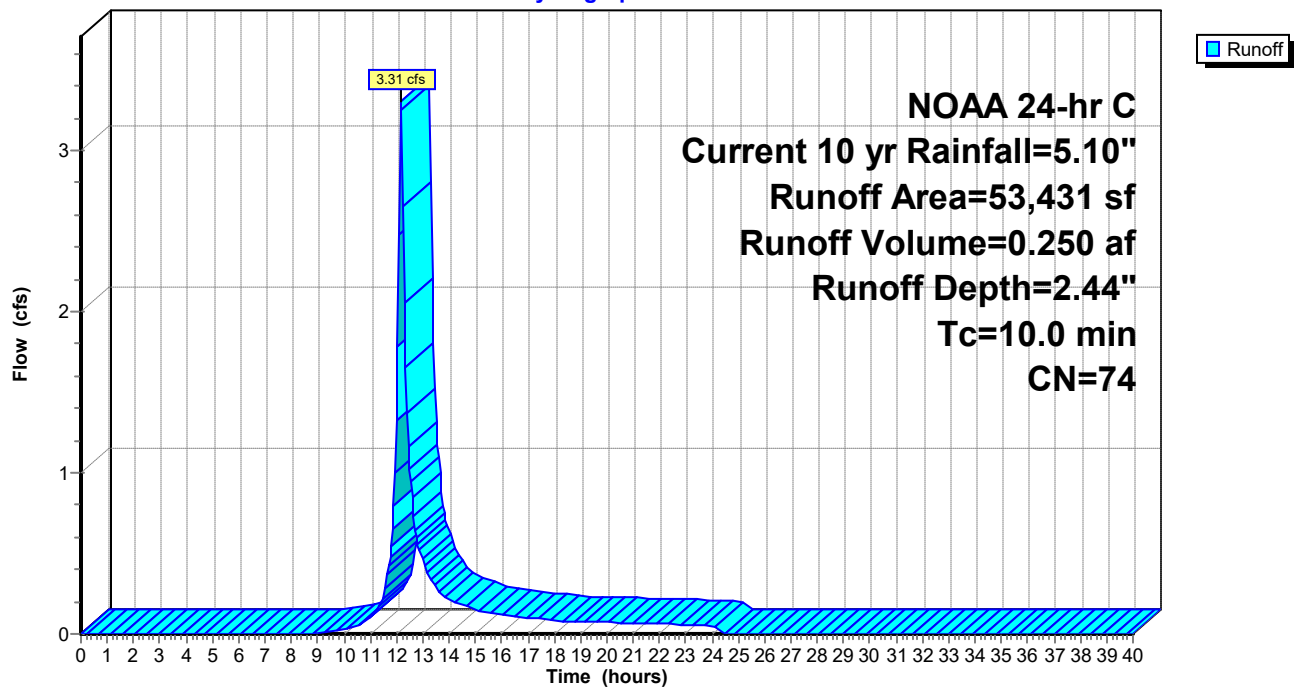
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (sf)	CN	Description
53,431	74	>75% Grass cover, Good, HSG C
53,431		100.00% Pervious Area

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

Subcatchment 49P: PDA-49 (pervious)

Hydrograph



Summary for Subcatchment 50I: PDA-50 (impervious)

Runoff = 5.82 cfs @ 12.17 hrs, Volume= 0.507 af, Depth= 4.86"
 Routed to Pond B-50 : Basin #50

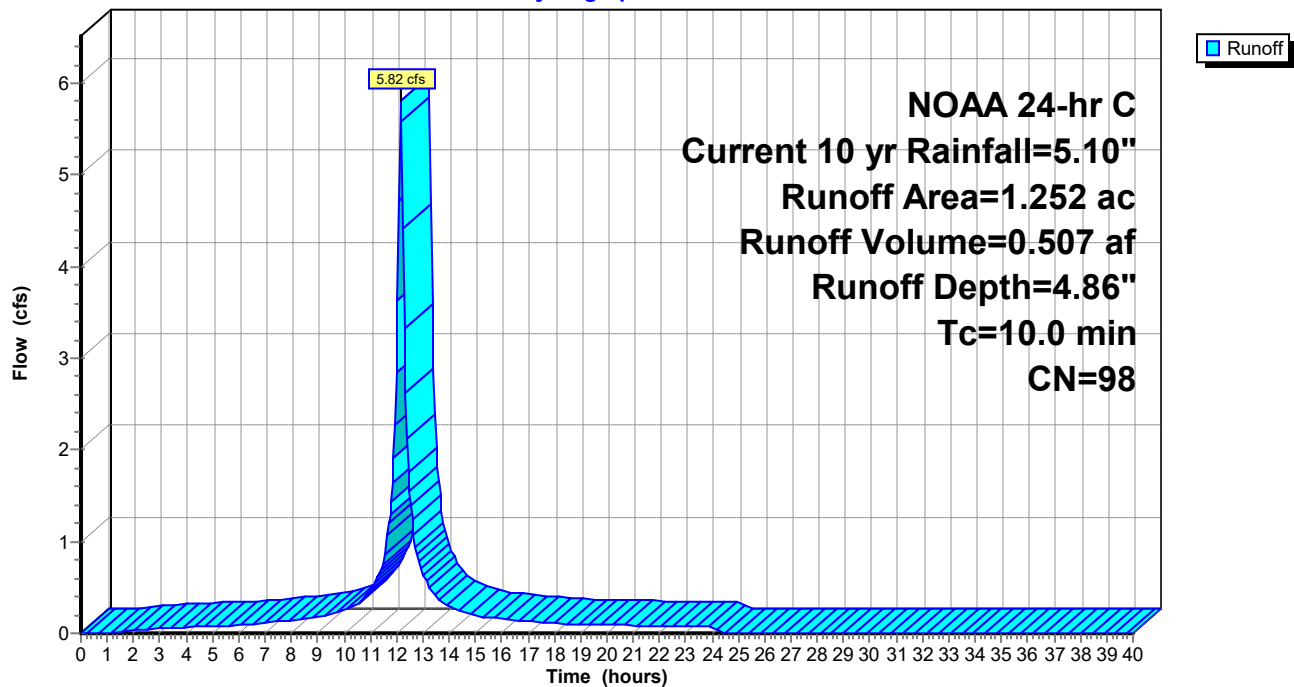
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (ac)	CN	Description
* 0.633	98	Pavement, HSG C
* 0.546	98	Roof, HSG C
* 0.073	98	Concrete, HSG C
1.252	98	Weighted Average
1.252		100.00% Impervious Area

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

Subcatchment 50I: PDA-50 (impervious)

Hydrograph



Summary for Subcatchment 50P: PDA-50 (pervious)

Runoff = 3.83 cfs @ 12.18 hrs, Volume= 0.289 af, Depth= 2.44"
 Routed to Pond B-50 : Basin #50

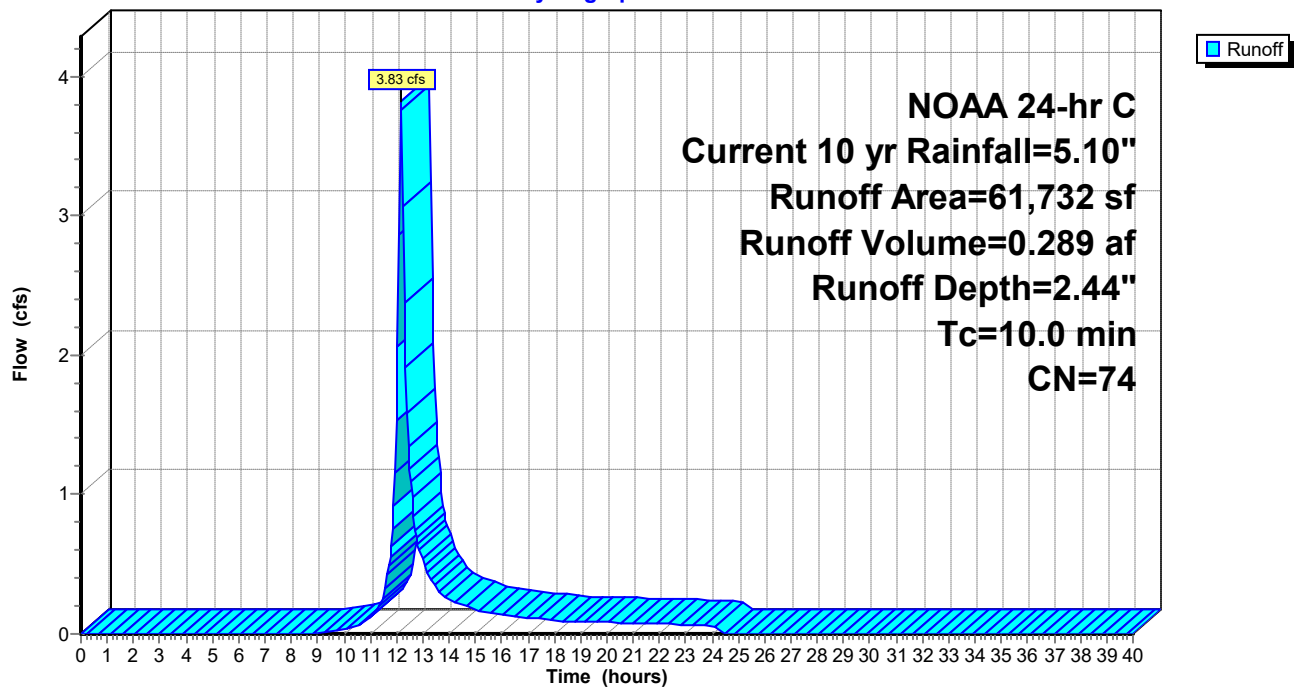
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (sf)	CN	Description
61,732	74	>75% Grass cover, Good, HSG C
61,732		100.00% Pervious Area

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

Subcatchment 50P: PDA-50 (pervious)

Hydrograph



Summary for Subcatchment 51I: PDA-51 (impervious)

Runoff = 2.91 cfs @ 12.17 hrs, Volume= 0.254 af, Depth= 4.86"
 Routed to Pond B-51 : Basin #51

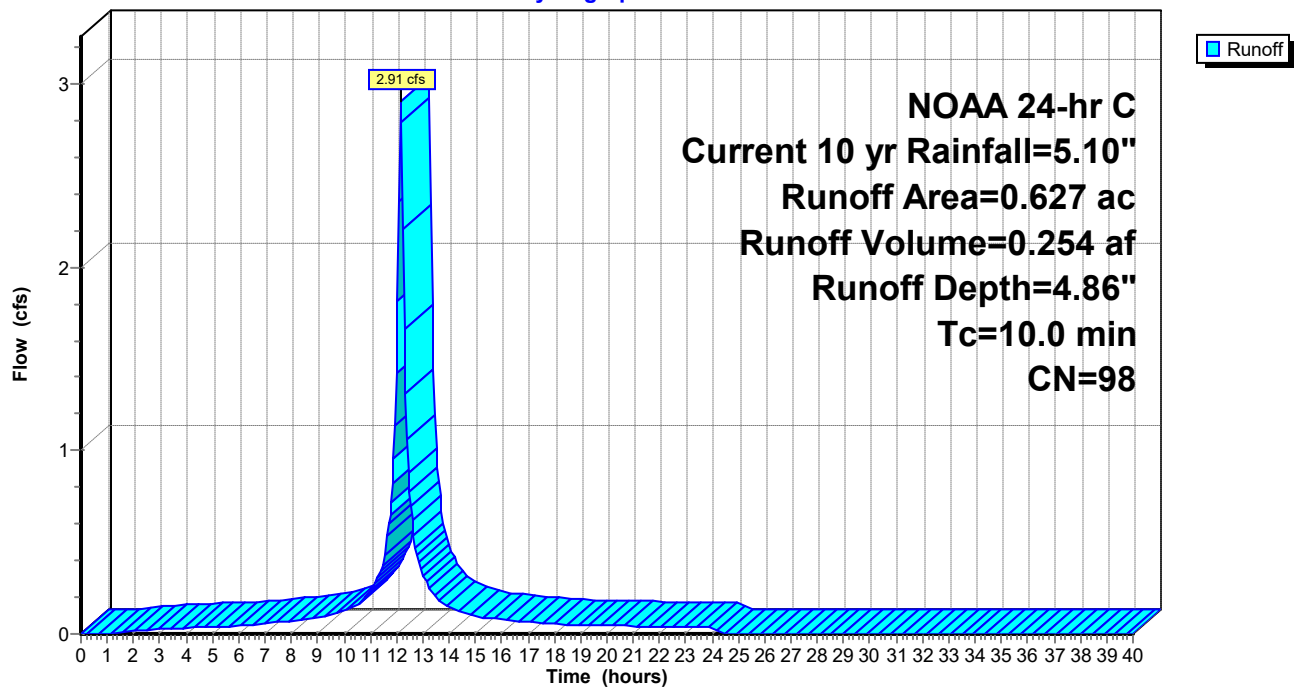
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (ac)	CN	Description
* 0.627	98	Roof, HSG C
0.627		100.00% Impervious Area

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

Subcatchment 51I: PDA-51 (impervious)

Hydrograph



Summary for Subcatchment 51P: PDA-51 (pervious)

Runoff = 2.67 cfs @ 12.18 hrs, Volume= 0.202 af, Depth= 2.44"
 Routed to Pond B-51 : Basin #51

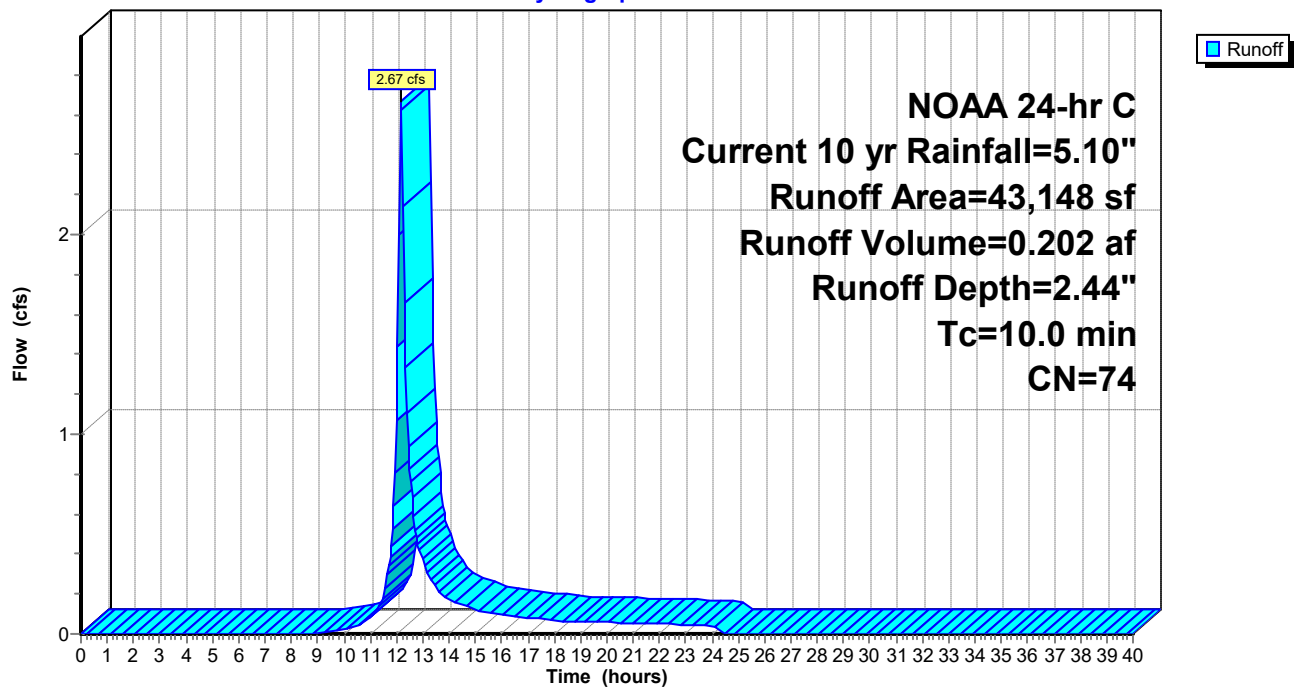
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (sf)	CN	Description
43,148	74	>75% Grass cover, Good, HSG C
43,148		100.00% Pervious Area

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

Subcatchment 51P: PDA-51 (pervious)

Hydrograph



Summary for Subcatchment 52I: PDA-52 (impervious)

Runoff = 4.88 cfs @ 12.17 hrs, Volume= 0.426 af, Depth= 4.86"
 Routed to Pond B-52 : Basin #52

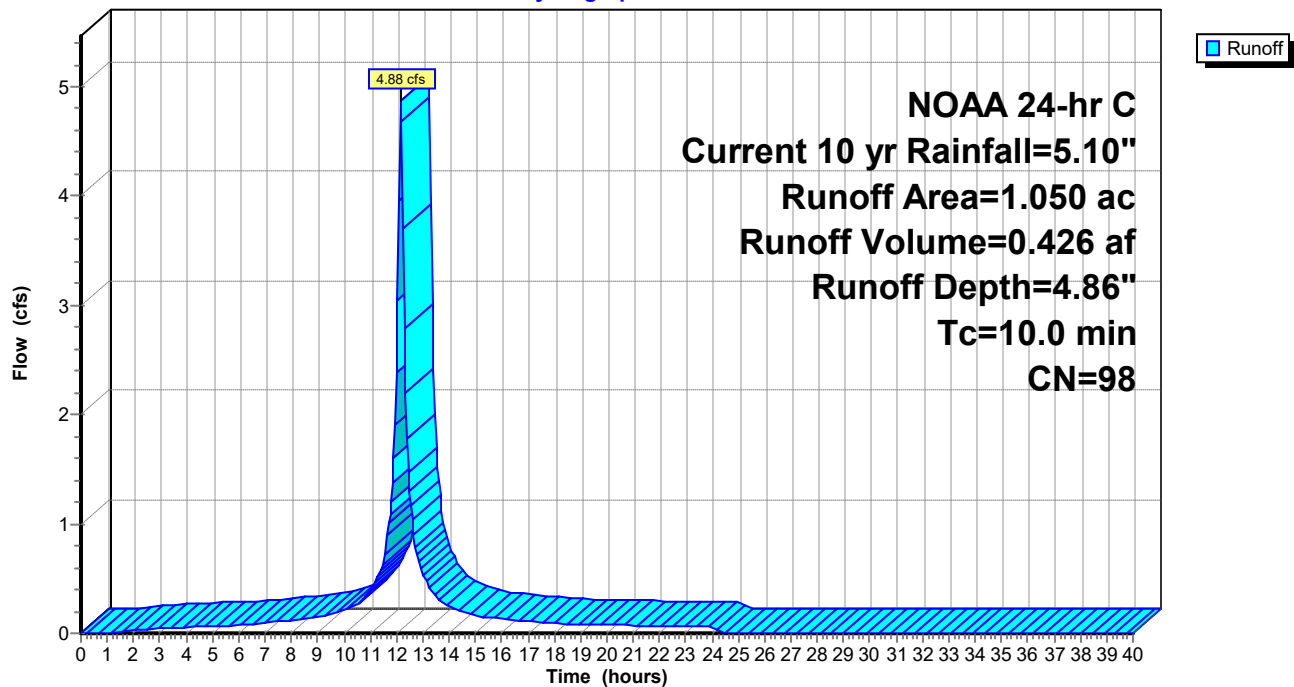
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (ac)	CN	Description
* 0.350	98	Pavement, HSG C
* 0.659	98	Roof, HSG C
* 0.041	98	Concrete, HSG C
1.050	98	Weighted Average
1.050		100.00% Impervious Area

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

Subcatchment 52I: PDA-52 (impervious)

Hydrograph



Summary for Subcatchment 52P: PDA-52 (pervious)

Runoff = 4.02 cfs @ 12.18 hrs, Volume= 0.303 af, Depth= 2.44"
 Routed to Pond B-52 : Basin #52

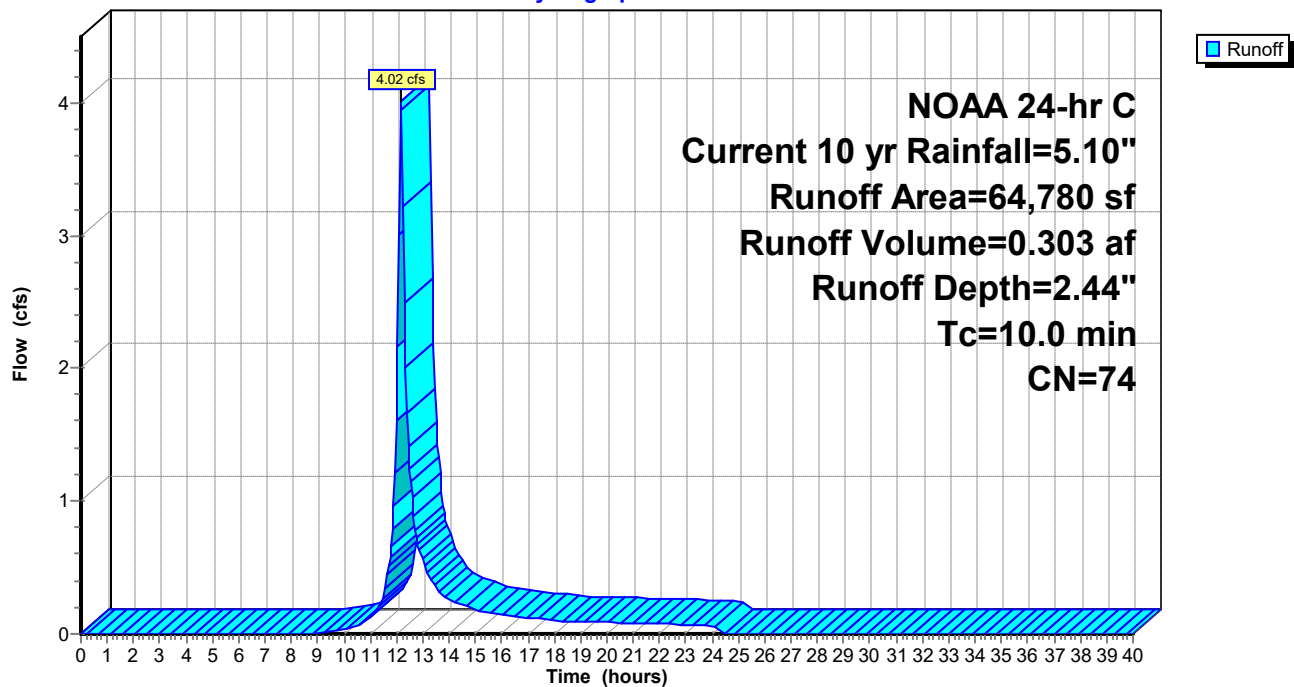
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (sf)	CN	Description
64,780	74	>75% Grass cover, Good, HSG C
64,780		100.00% Pervious Area

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

Subcatchment 52P: PDA-52 (pervious)

Hydrograph



Summary for Subcatchment 53I: PDA-53 (impervious)

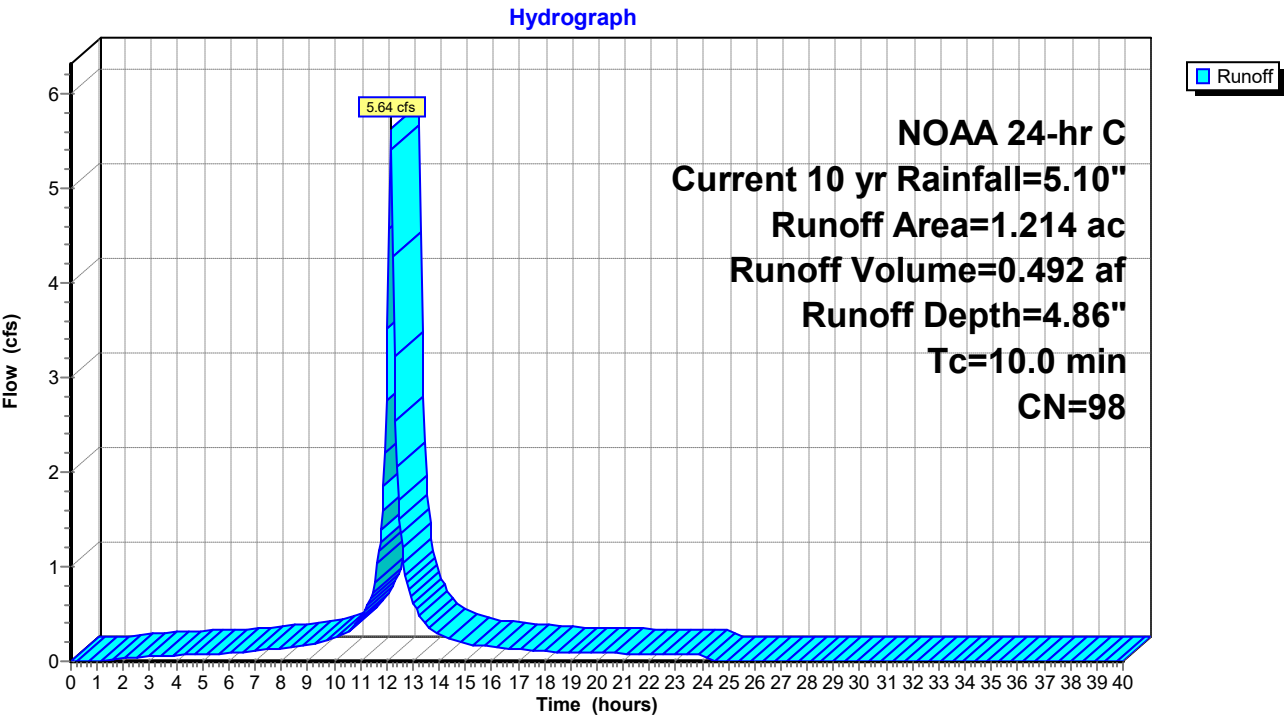
Runoff = 5.64 cfs @ 12.17 hrs, Volume= 0.492 af, Depth= 4.86"
Routed to Pond B-53 : Basin #53

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (ac)	CN	Description
* 0.628	98	Pavement, HSG C
* 0.450	98	Roof, HSG C
* 0.136	98	Concrete, HSG C
1.214	98	Weighted Average
1.214		100.00% Impervious Area

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

Subcatchment 53I: PDA-53 (impervious)



Summary for Subcatchment 53P: PDA-53 (pervious)

Runoff = 3.58 cfs @ 12.18 hrs, Volume= 0.270 af, Depth= 2.44"
 Routed to Pond B-53 : Basin #53

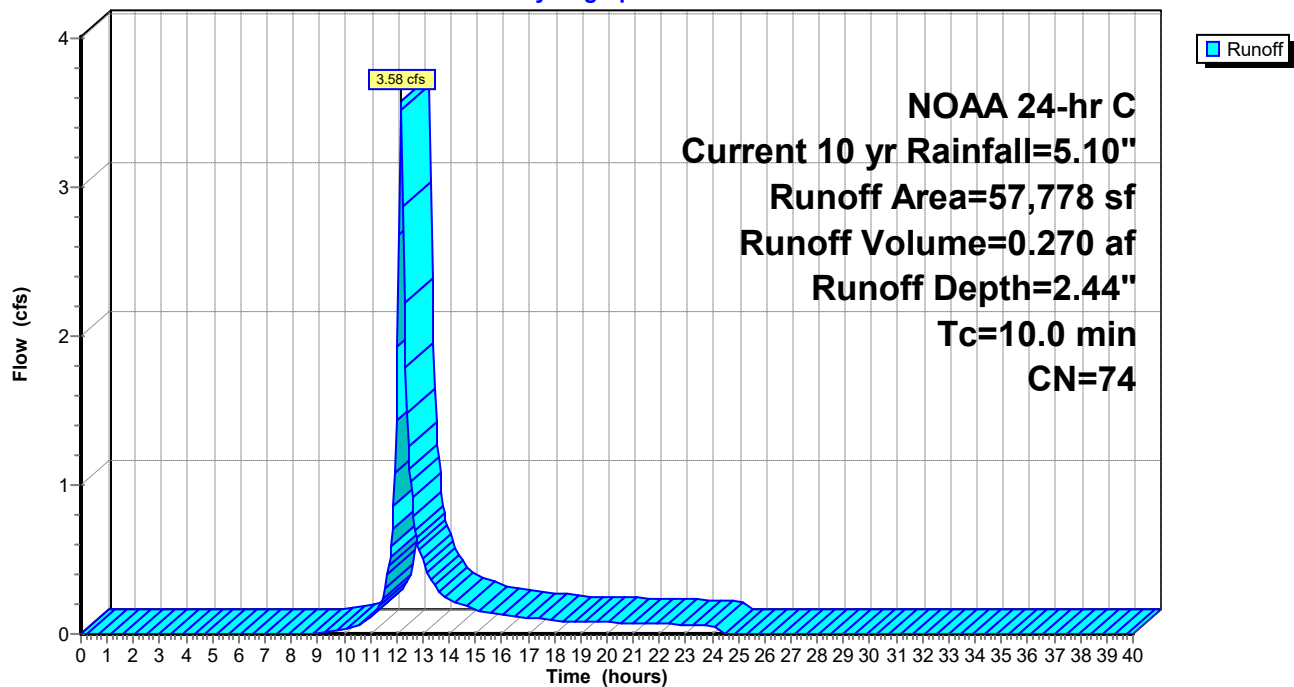
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (sf)	CN	Description
57,778	74	>75% Grass cover, Good, HSG C
57,778		100.00% Pervious Area

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

Subcatchment 53P: PDA-53 (pervious)

Hydrograph



Summary for Subcatchment 54I: PDA-54 (impervious)

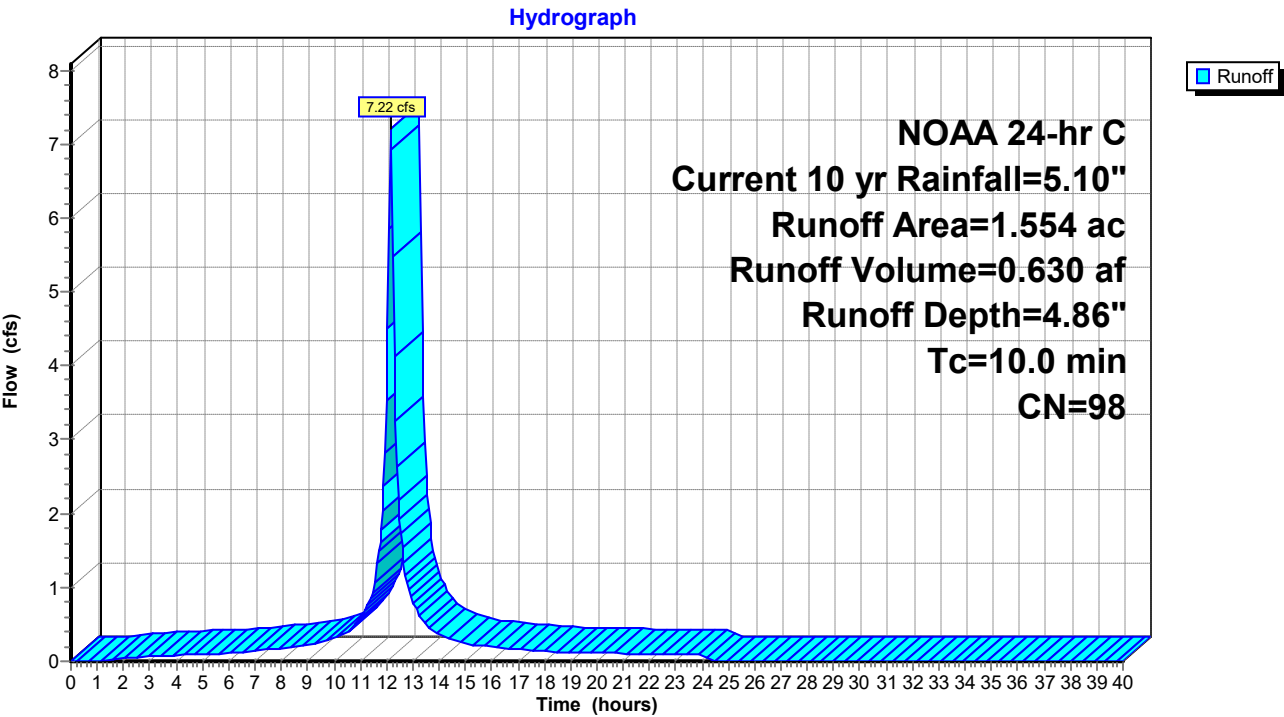
Runoff = 7.22 cfs @ 12.17 hrs, Volume= 0.630 af, Depth= 4.86"
Routed to Pond B-54 : Basin #54

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (ac)	CN	Description
* 0.983	98	Pavement, HSG C
* 0.361	98	Roof, HSG C
* 0.210	98	Concrete, HSG C
1.554	98	Weighted Average
1.554		100.00% Impervious Area

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

Subcatchment 54I: PDA-54 (impervious)



Summary for Subcatchment 54P: PDA-54 (pervious)

Runoff = 2.74 cfs @ 12.18 hrs, Volume= 0.207 af, Depth= 2.44"
 Routed to Pond B-54 : Basin #54

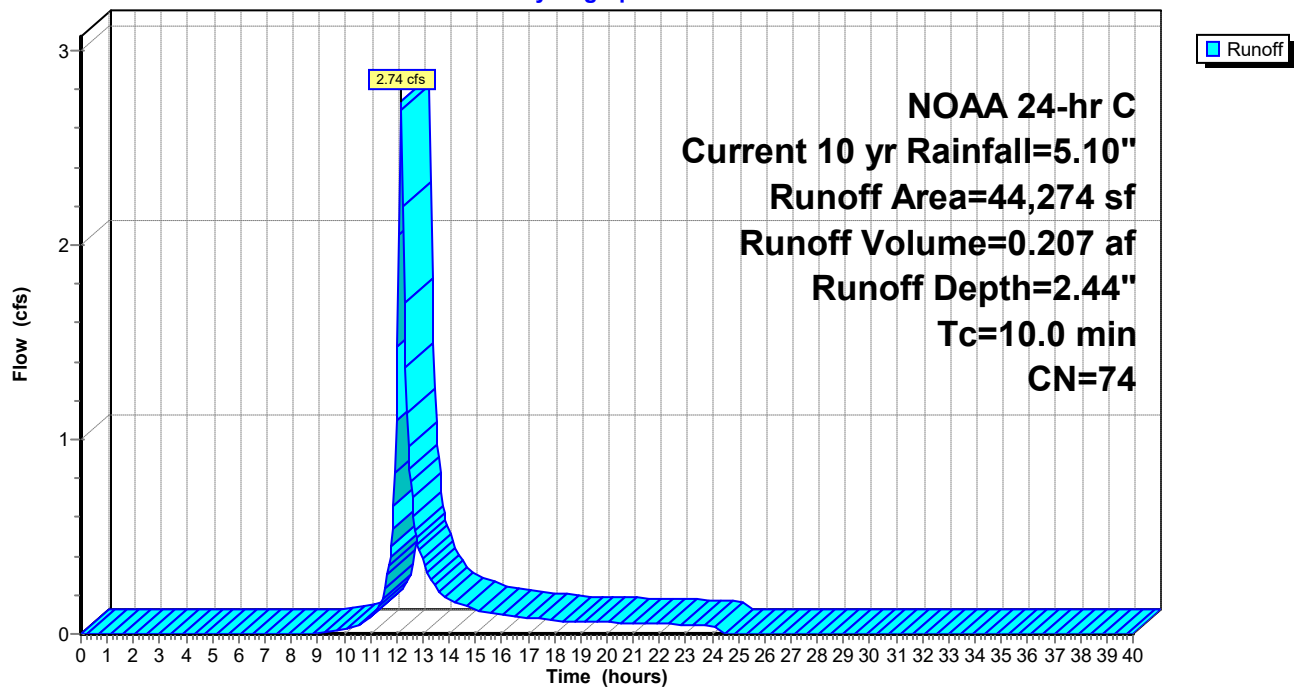
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (sf)	CN	Description
44,274	74	>75% Grass cover, Good, HSG C
44,274		100.00% Pervious Area

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

Subcatchment 54P: PDA-54 (pervious)

Hydrograph



Summary for Subcatchment 55I: PDA-55 (impervious)

Runoff = 4.68 cfs @ 12.17 hrs, Volume= 0.408 af, Depth= 4.86"
 Routed to Pond B-55 : Basin #55

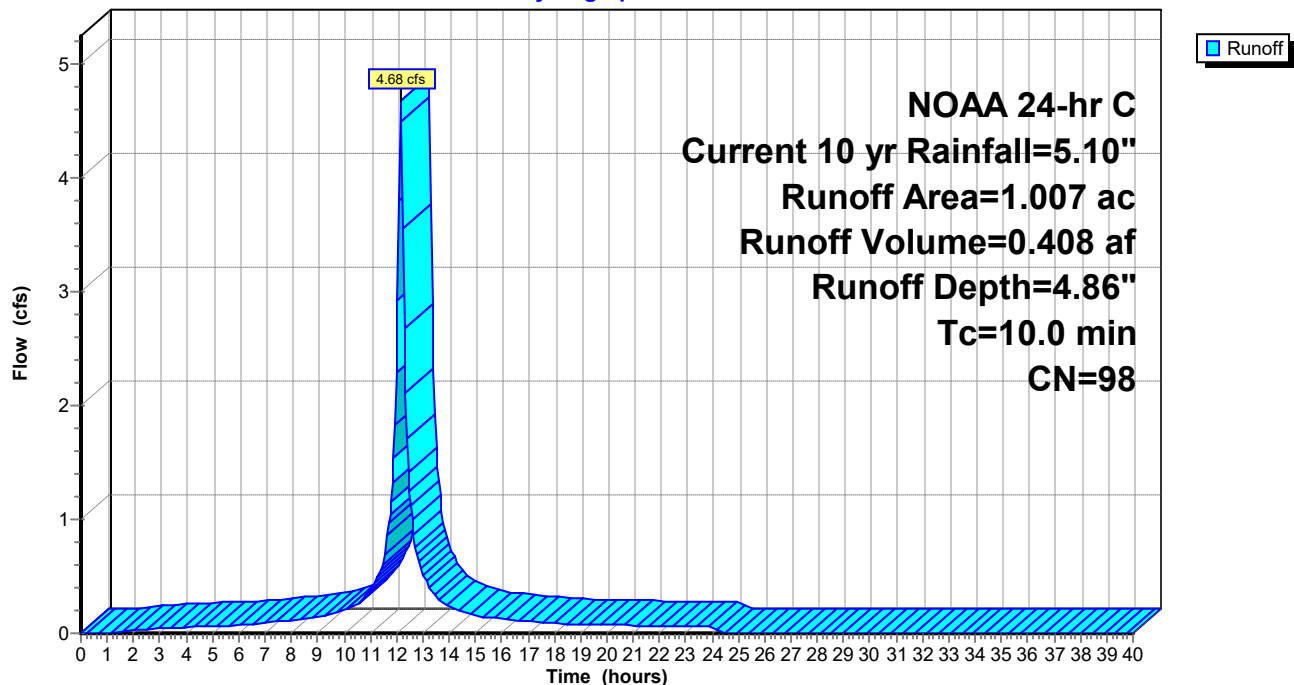
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (ac)	CN	Description
* 0.771	98	Pavement, HSG C
* 0.169	98	Roof, HSG C
* 0.067	98	Concrete, HSG C
1.007	98	Weighted Average
1.007		100.00% Impervious Area

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

Subcatchment 55I: PDA-55 (impervious)

Hydrograph



Summary for Subcatchment 55P: PDA-55 (pervious)

Runoff = 2.75 cfs @ 12.18 hrs, Volume= 0.207 af, Depth= 2.44"
 Routed to Pond B-55 : Basin #55

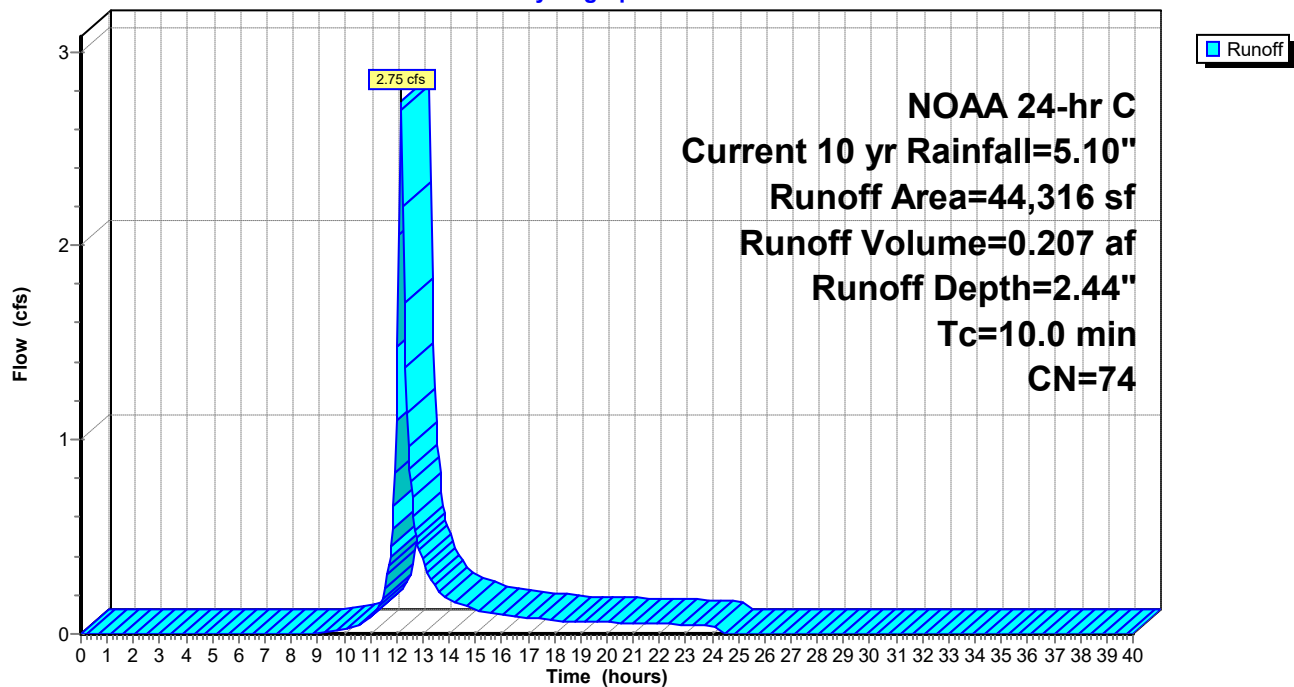
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (sf)	CN	Description
44,316	74	>75% Grass cover, Good, HSG C
44,316		100.00% Pervious Area

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

Subcatchment 55P: PDA-55 (pervious)

Hydrograph



Summary for Subcatchment 56I: PDA-56 (impervious)

Runoff = 4.82 cfs @ 12.17 hrs, Volume= 0.420 af, Depth= 4.86"
 Routed to Pond B-56 : Basin #56

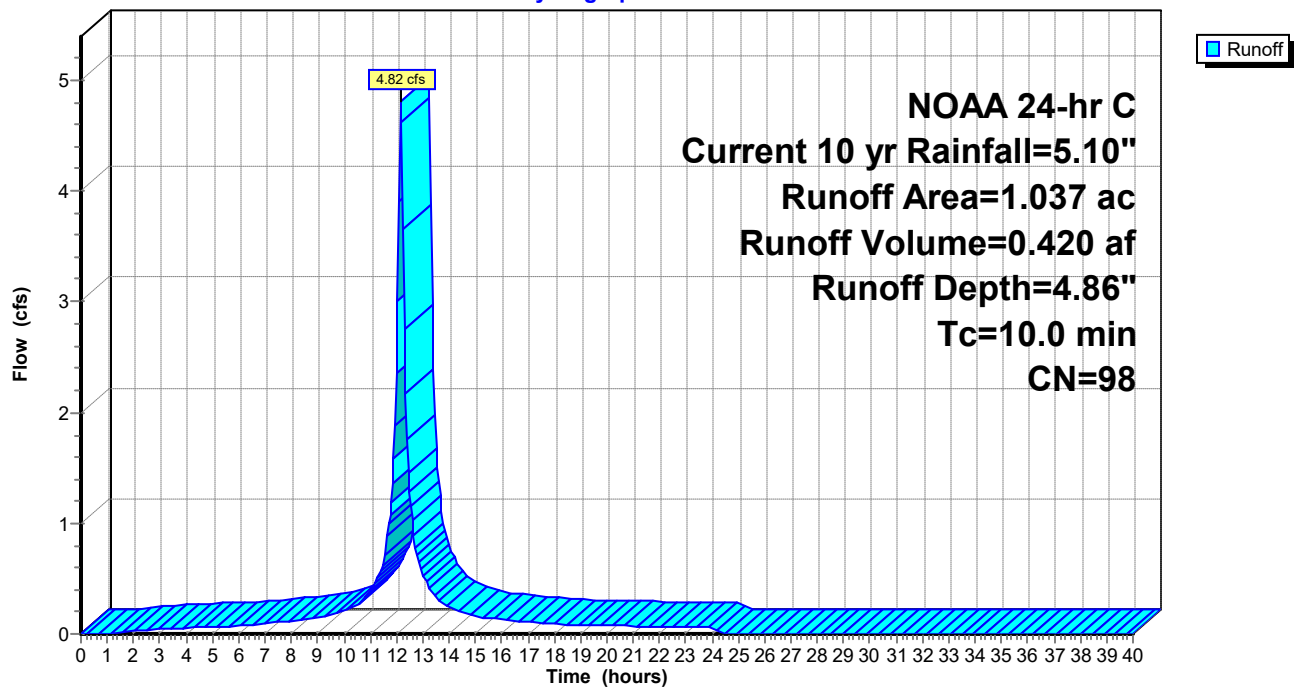
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (ac)	CN	Description
* 1.037	98	Roof, HSG C
1.037		100.00% Impervious Area

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

Subcatchment 56I: PDA-56 (impervious)

Hydrograph



Summary for Subcatchment 56P: PDA-56 (pervious)

Runoff = 3.43 cfs @ 12.18 hrs, Volume= 0.259 af, Depth= 2.44"
 Routed to Pond B-56 : Basin #56

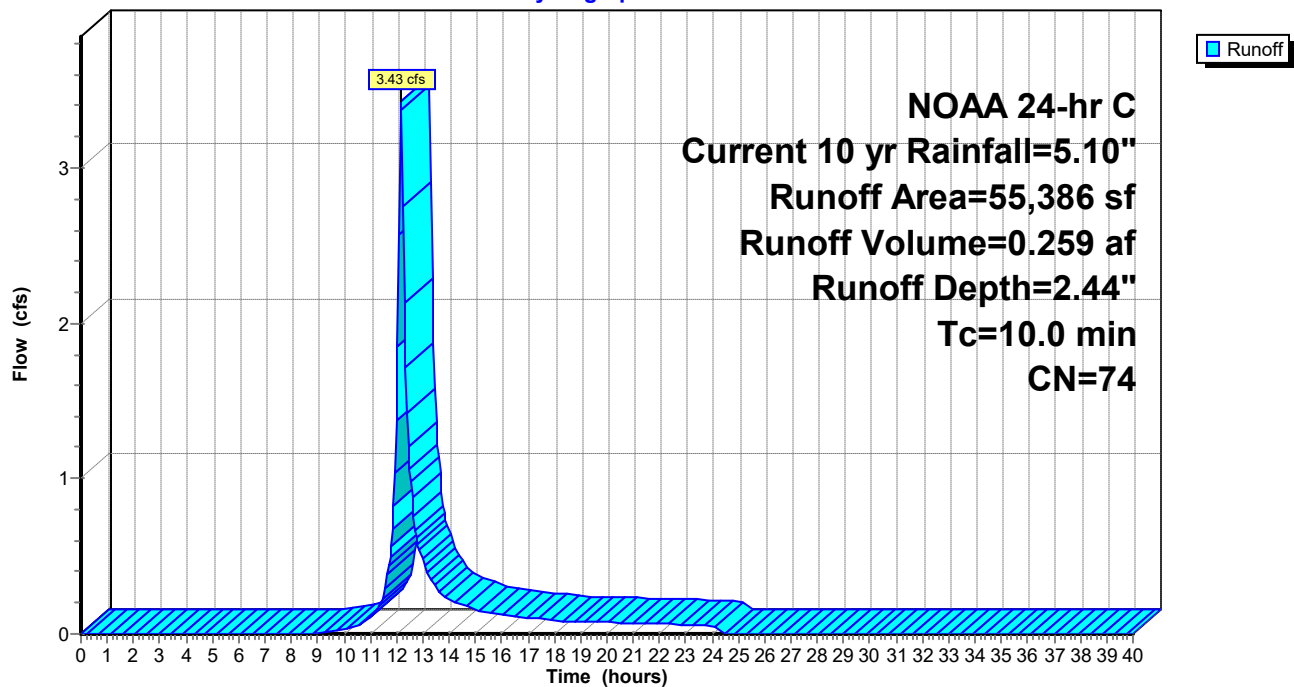
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (sf)	CN	Description
55,386	74	>75% Grass cover, Good, HSG C
55,386		100.00% Pervious Area

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

Subcatchment 56P: PDA-56 (pervious)

Hydrograph



Summary for Subcatchment 57I: PDA-57 (impervious)

Runoff = 3.09 cfs @ 12.17 hrs, Volume= 0.270 af, Depth= 4.86"
 Routed to Pond B-57 : Basin #57

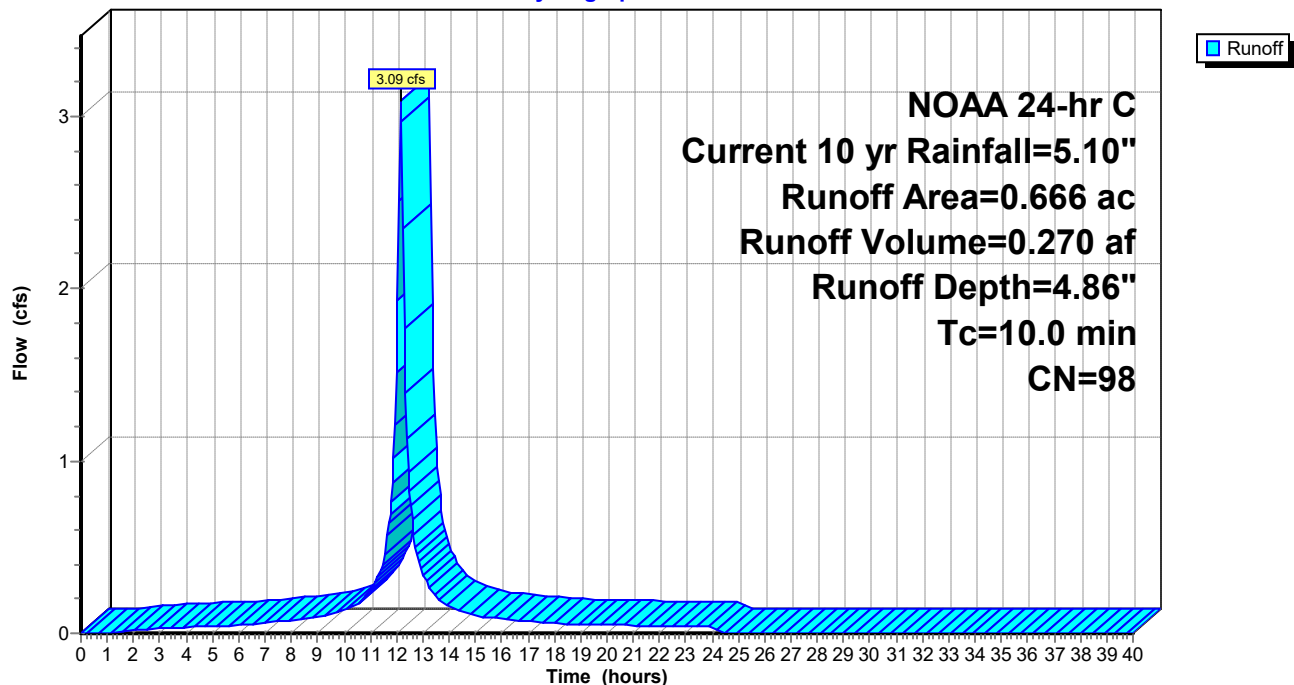
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (ac)	CN	Description
* 0.311	98	Pavement, HSG C
* 0.313	98	Roof, HSG C
* 0.042	98	Concrete, HSG C
0.666	98	Weighted Average
0.666		100.00% Impervious Area

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

Subcatchment 57I: PDA-57 (impervious)

Hydrograph



Summary for Subcatchment 57P: PDA-57 (pervious)

Runoff = 1.70 cfs @ 12.18 hrs, Volume= 0.128 af, Depth= 2.44"
 Routed to Pond B-57 : Basin #57

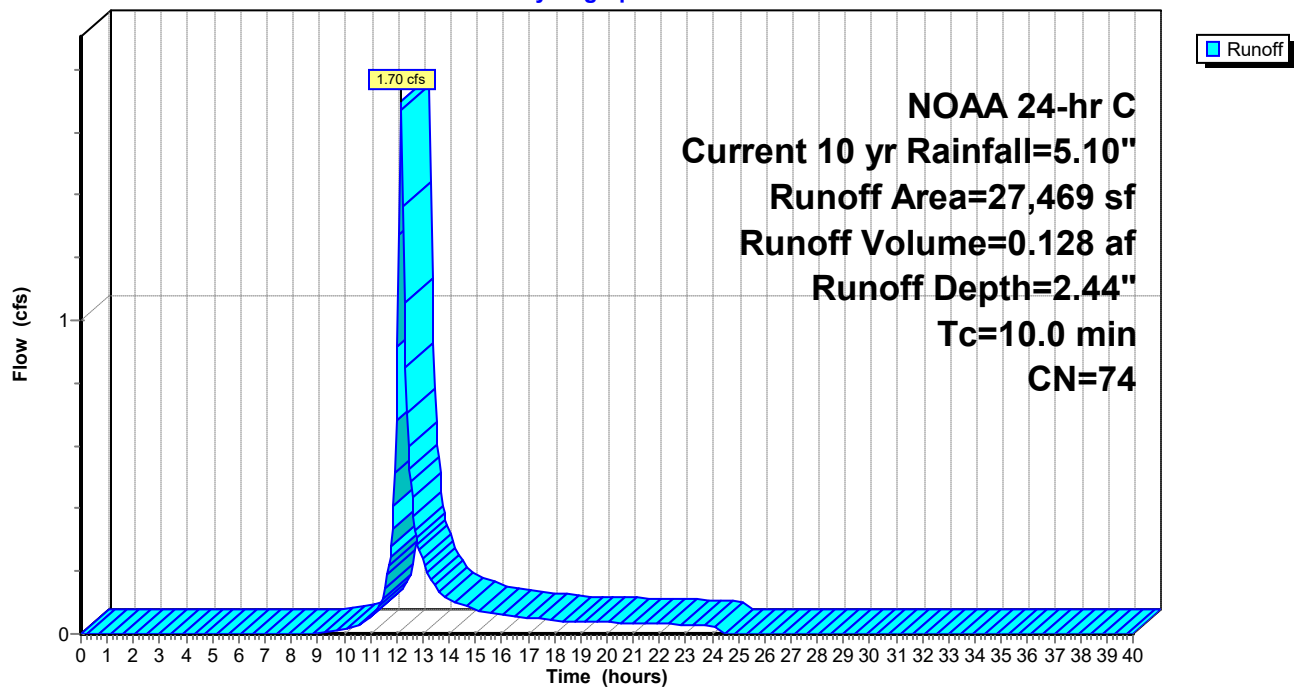
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (sf)	CN	Description
27,469	74	>75% Grass cover, Good, HSG C
27,469		100.00% Pervious Area

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

Subcatchment 57P: PDA-57 (pervious)

Hydrograph



Summary for Subcatchment 58I: PDA-58 (impervious)

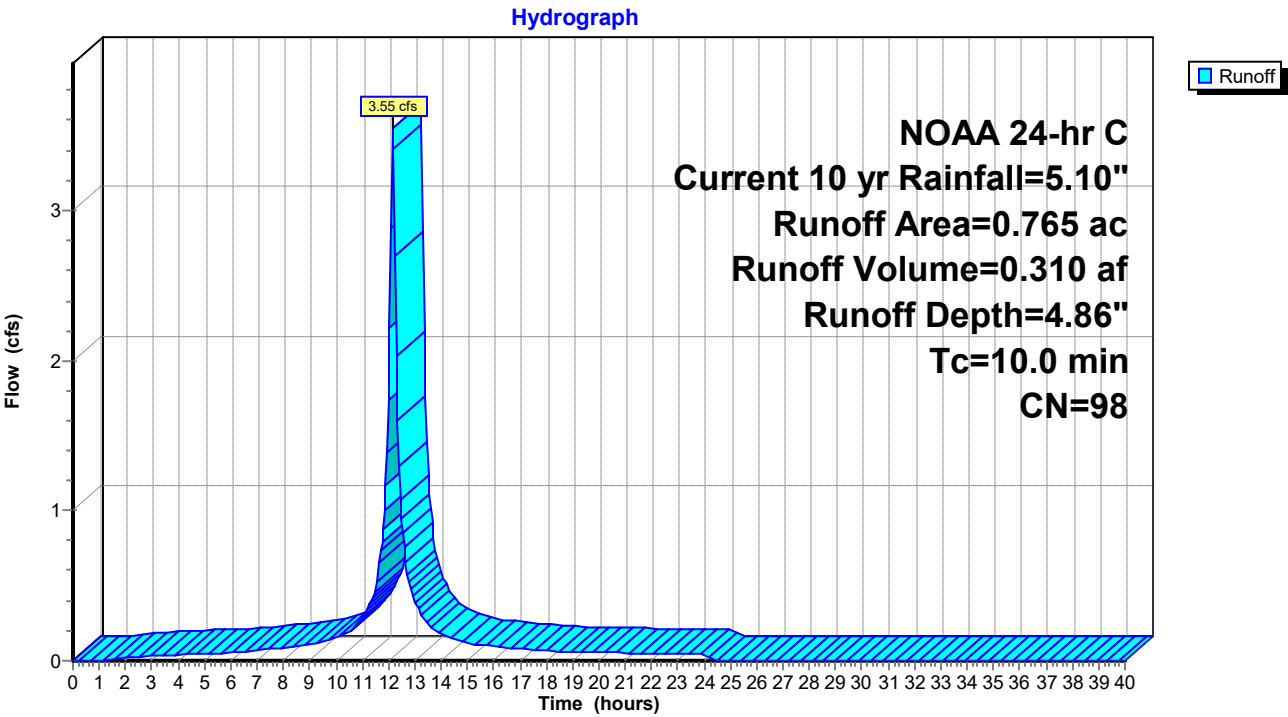
Runoff = 3.55 cfs @ 12.17 hrs, Volume= 0.310 af, Depth= 4.86"
Routed to Pond B-58 : Basin #58

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (ac)	CN	Description
* 0.763	98	Roof, HSG C
* 0.002	98	Concrete, HSG C
0.765	98	Weighted Average
0.765		100.00% Impervious Area

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

Subcatchment 58I: PDA-58 (impervious)



Summary for Subcatchment 58P: PDA-58 (pervious)

Runoff = 4.34 cfs @ 12.18 hrs, Volume= 0.327 af, Depth= 2.44"
 Routed to Pond B-58 : Basin #58

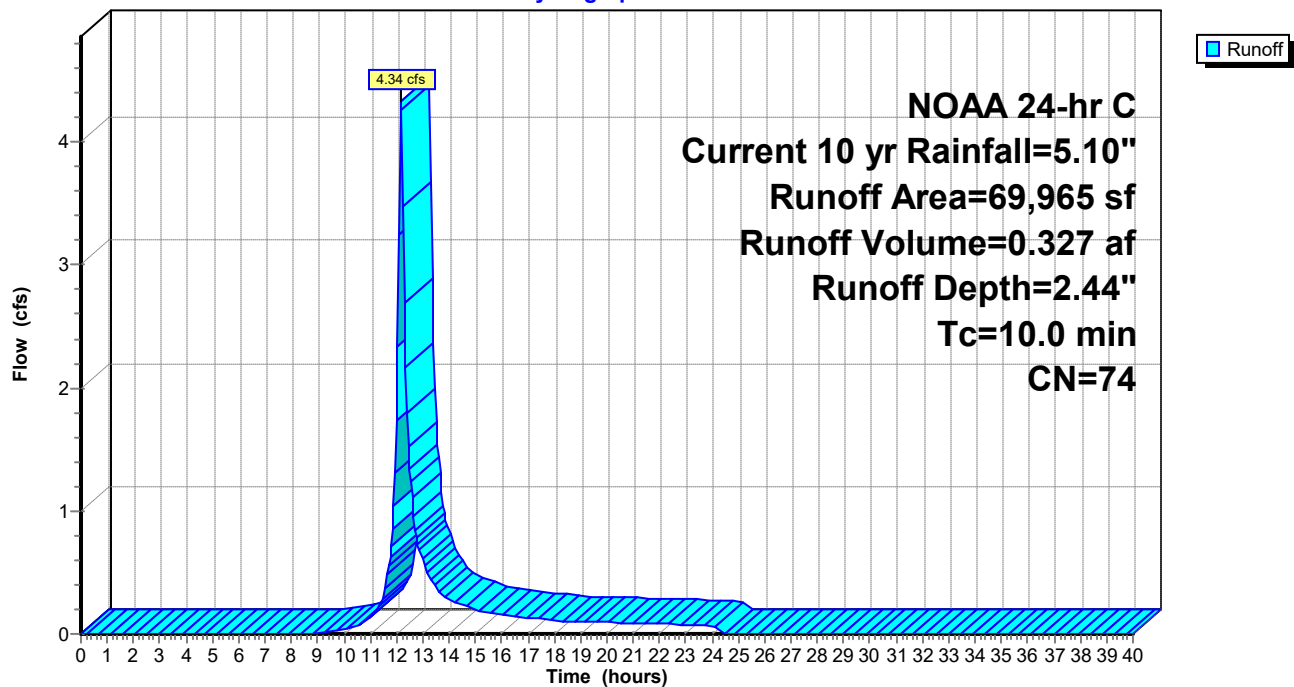
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (sf)	CN	Description
69,965	74	>75% Grass cover, Good, HSG C
69,965		100.00% Pervious Area

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

Subcatchment 58P: PDA-58 (pervious)

Hydrograph



Summary for Subcatchment UPDA-5: PDA-5 (undetained)

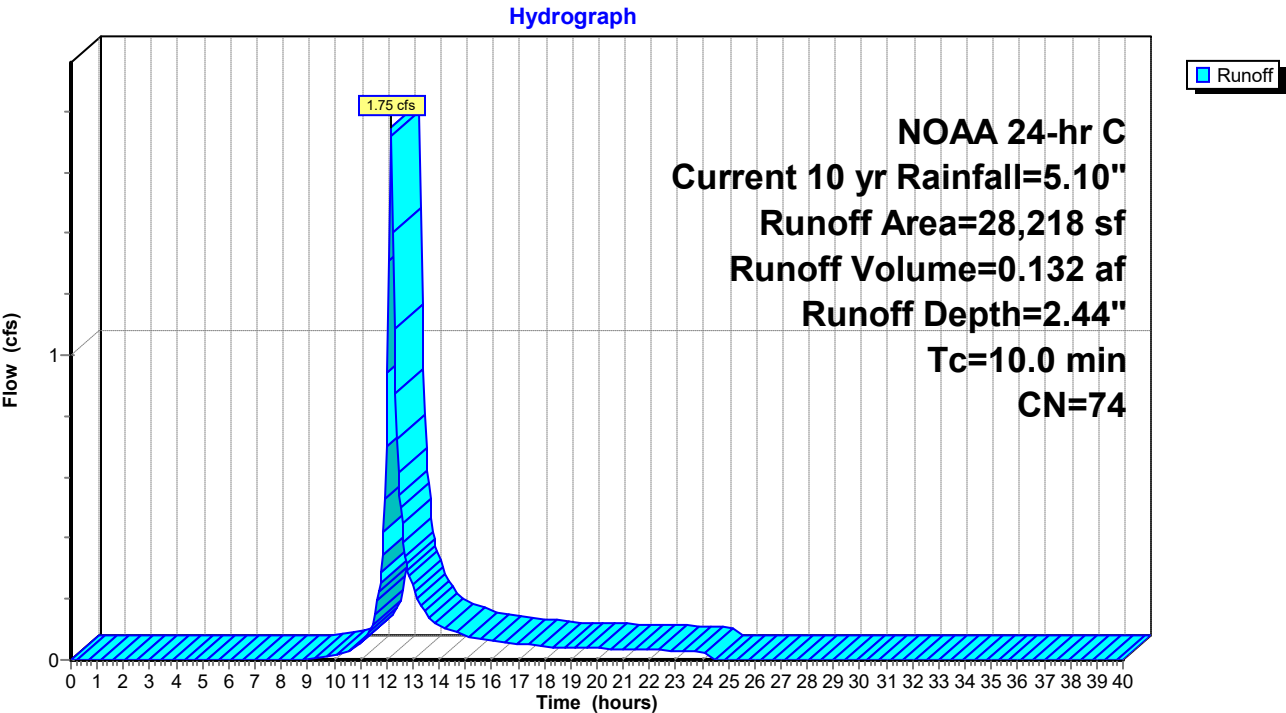
Runoff = 1.75 cfs @ 12.18 hrs, Volume= 0.132 af, Depth= 2.44"
Routed to Link PDA-5 : Proposed Drainage Area #5

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (sf)	CN	Description
28,218	74	>75% Grass cover, Good, HSG C
28,218		100.00% Pervious Area

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

Subcatchment UPDA-5: PDA-5 (undetained)



Summary for Subcatchment UPDA-6: PDA-6 (undetained)

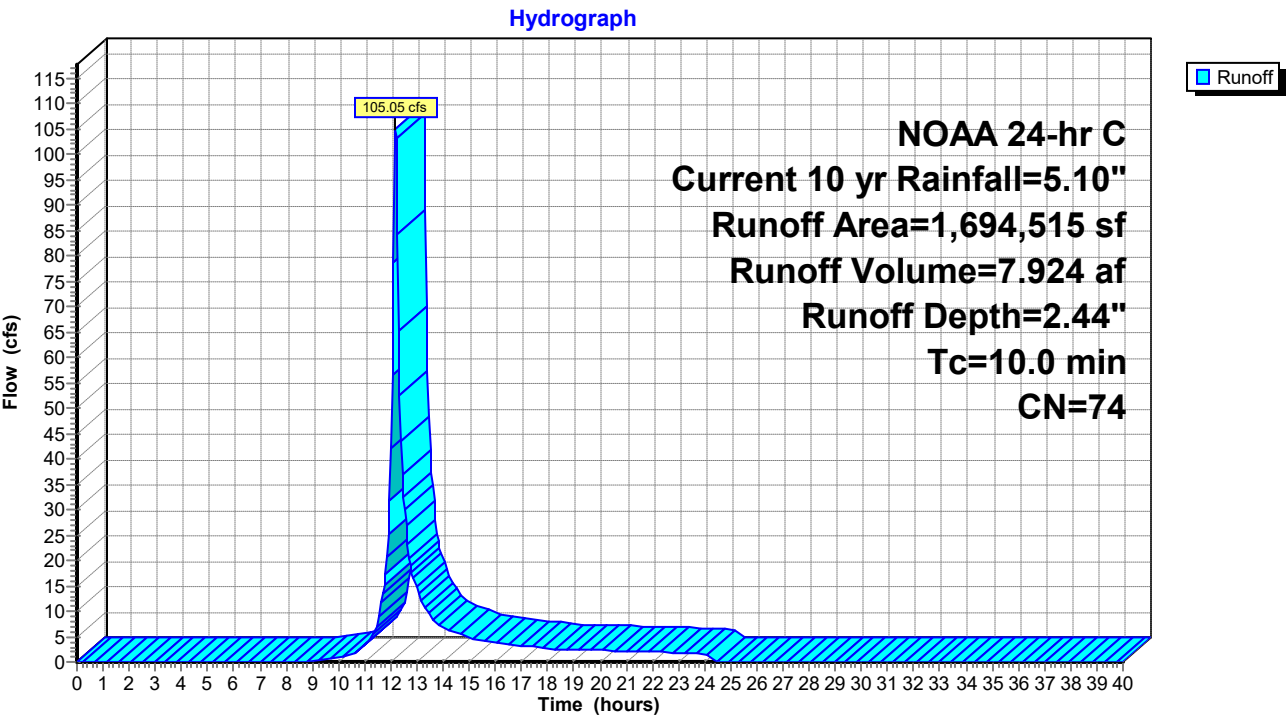
Runoff = 105.05 cfs @ 12.18 hrs, Volume= 7.924 af, Depth= 2.44"
Routed to Link PDA-6 : Proposed Drainage Area #6

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (sf)	CN	Description
1,694,515	74	>75% Grass cover, Good, HSG C
1,694,515		100.00% Pervious Area

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

Subcatchment UPDA-6: PDA-6 (undetained)



Summary for Pond B-48: Basin #48

Inflow Area = 2.415 ac, 36.95% Impervious, Inflow Depth = 3.34" for Current 10 yr event
 Inflow = 8.26 cfs @ 12.17 hrs, Volume= 0.672 af
 Outflow = 0.19 cfs @ 17.72 hrs, Volume= 0.393 af, Atten= 98%, Lag= 332.6 min
 Primary = 0.19 cfs @ 17.72 hrs, Volume= 0.393 af
 Routed to Link PDA-5 : Proposed Drainage Area #5

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 188.74' @ 17.72 hrs Surf.Area= 12,668 sf Storage= 22,104 cf

Plug-Flow detention time= 829.5 min calculated for 0.393 af (58% of inflow)
 Center-of-Mass det. time= 713.7 min (1,508.1 - 794.4)

Volume	Invert	Avail.Storage	Storage Description
#1	186.85'	81,173 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
186.85	0	0	0
187.00	11,678	876	876
188.00	12,246	11,962	12,838
189.00	12,814	12,530	25,368
190.00	13,382	13,098	38,466
191.00	13,951	13,667	52,132
192.00	14,520	14,236	66,368
193.00	15,090	14,805	81,173

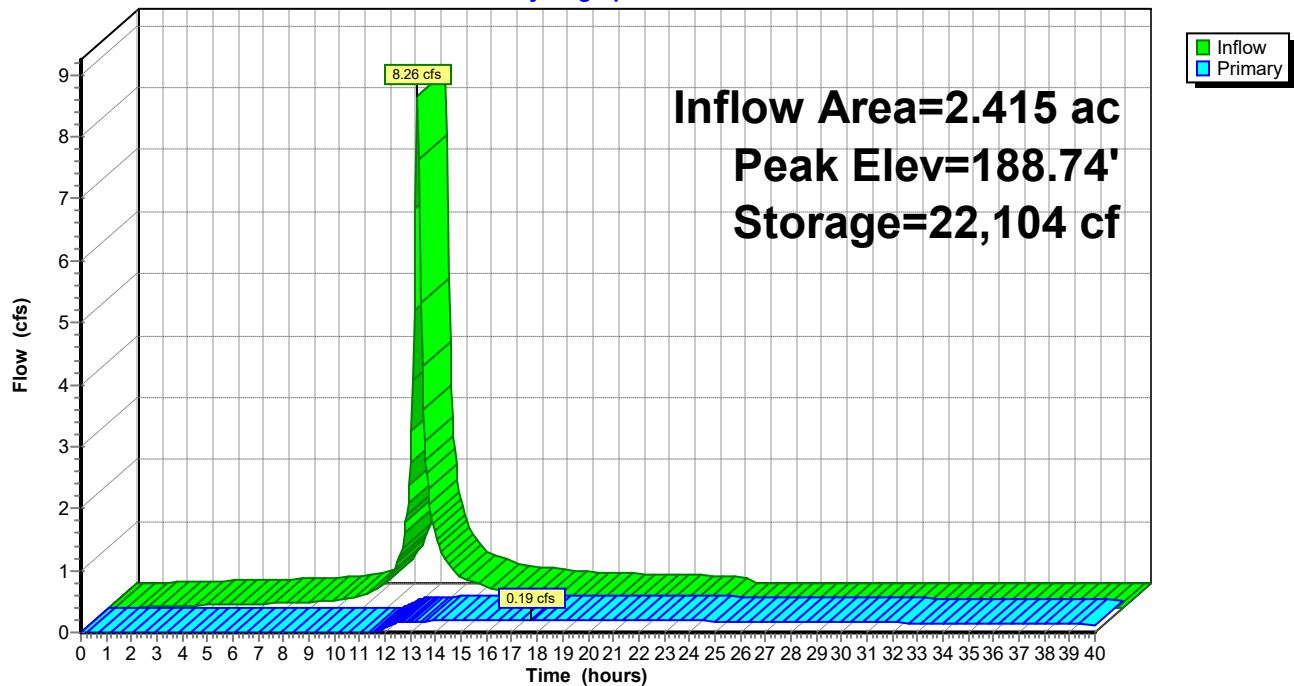
Device	Routing	Invert	Outlet Devices
#1	Primary	186.85'	18.0" Round Culvert L= 121.0' Ke= 0.500 Inlet / Outlet Invert= 186.85' / 186.25' S= 0.0050 '/ Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	187.26'	2.5" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	188.75'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	189.46'	50.0' long + 3.0 ' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.19 cfs @ 17.72 hrs HW=188.74' (Free Discharge)

- 1=Culvert (Passes 0.19 cfs of 7.88 cfs potential flow)
 2=Orifice/Grate (Orifice Controls 0.19 cfs @ 5.66 fps)
 3=Sharp-Crested Rectangular Weir (Controls 0.00 cfs)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-48: Basin #48

Hydrograph



Summary for Pond B-49: Basin #49

Inflow Area = 2.680 ac, 54.22% Impervious, Inflow Depth = 3.76" for Current 10 yr event
 Inflow = 10.06 cfs @ 12.17 hrs, Volume= 0.839 af
 Outflow = 1.89 cfs @ 12.67 hrs, Volume= 0.614 af, Atten= 81%, Lag= 29.8 min
 Primary = 1.89 cfs @ 12.67 hrs, Volume= 0.614 af
 Routed to Link PDA-5 : Proposed Drainage Area #5

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 185.51' @ 12.67 hrs Surf.Area= 9,441 sf Storage= 21,516 cf

Plug-Flow detention time= 566.4 min calculated for 0.614 af (73% of inflow)
 Center-of-Mass det. time= 471.2 min (1,250.6 - 779.4)

Volume	Invert	Avail.Storage	Storage Description
#1	182.60'	55,030 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
182.60	0	0	0
183.00	6,698	1,340	1,340
184.00	7,766	7,232	8,572
185.00	8,867	8,317	16,888
186.00	10,002	9,435	26,323
187.00	11,172	10,587	36,910
188.00	12,378	11,775	48,685
188.50	13,004	6,346	55,030

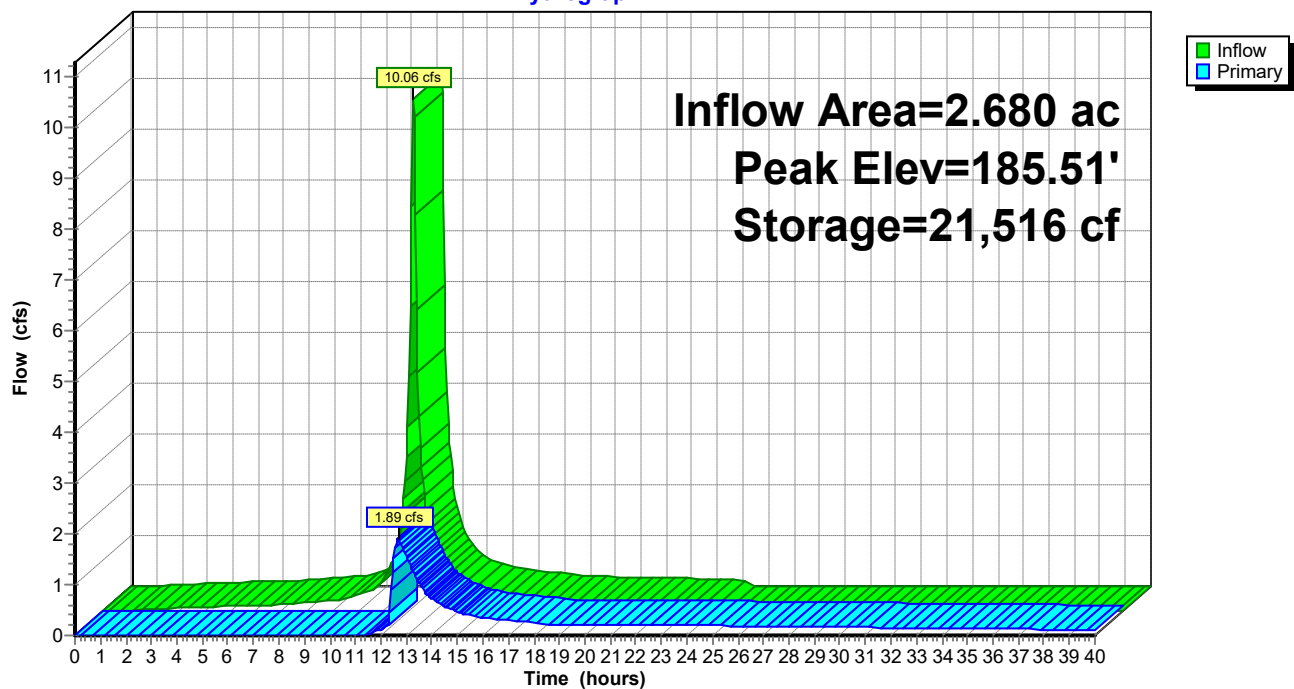
Device	Routing	Invert	Outlet Devices
#1	Primary	182.60'	18.0" Round Culvert L= 112.0' Ke= 0.500 Inlet / Outlet Invert= 182.60' / 182.00' S= 0.0054 '/ Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	183.64'	2.5" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	185.25'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	186.75'	50.0' long + 3.0 ' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=1.88 cfs @ 12.67 hrs HW=185.50' (Free Discharge)

- 1=Culvert (Passes 1.88 cfs of 10.66 cfs potential flow)
 2=Orifice/Grate (Orifice Controls 0.22 cfs @ 6.39 fps)
 3=Sharp-Crested Rectangular Weir (Weir Controls 1.66 cfs @ 1.65 fps)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-49: Basin #49

Hydrograph



Summary for Pond B-50: Basin #50

Inflow Area = 2.669 ac, 46.91% Impervious, Inflow Depth = 3.58" for Current 10 yr event
 Inflow = 9.64 cfs @ 12.17 hrs, Volume= 0.796 af
 Outflow = 1.55 cfs @ 12.75 hrs, Volume= 0.573 af, Atten= 84%, Lag= 34.8 min
 Primary = 1.55 cfs @ 12.75 hrs, Volume= 0.573 af
 Routed to Link PDA-5 : Proposed Drainage Area #5

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 185.75' @ 12.75 hrs Surf.Area= 11,116 sf Storage= 20,520 cf

Plug-Flow detention time= 563.6 min calculated for 0.573 af (72% of inflow)
 Center-of-Mass det. time= 465.8 min (1,251.1 - 785.3)

Volume	Invert	Avail.Storage	Storage Description
#1	183.30'	56,291 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
183.30	0	0	0
184.00	8,805	3,082	3,082
185.00	10,108	9,457	12,538
186.00	11,448	10,778	23,316
187.00	12,826	12,137	35,453
188.00	14,244	13,535	48,988
188.50	14,966	7,303	56,291

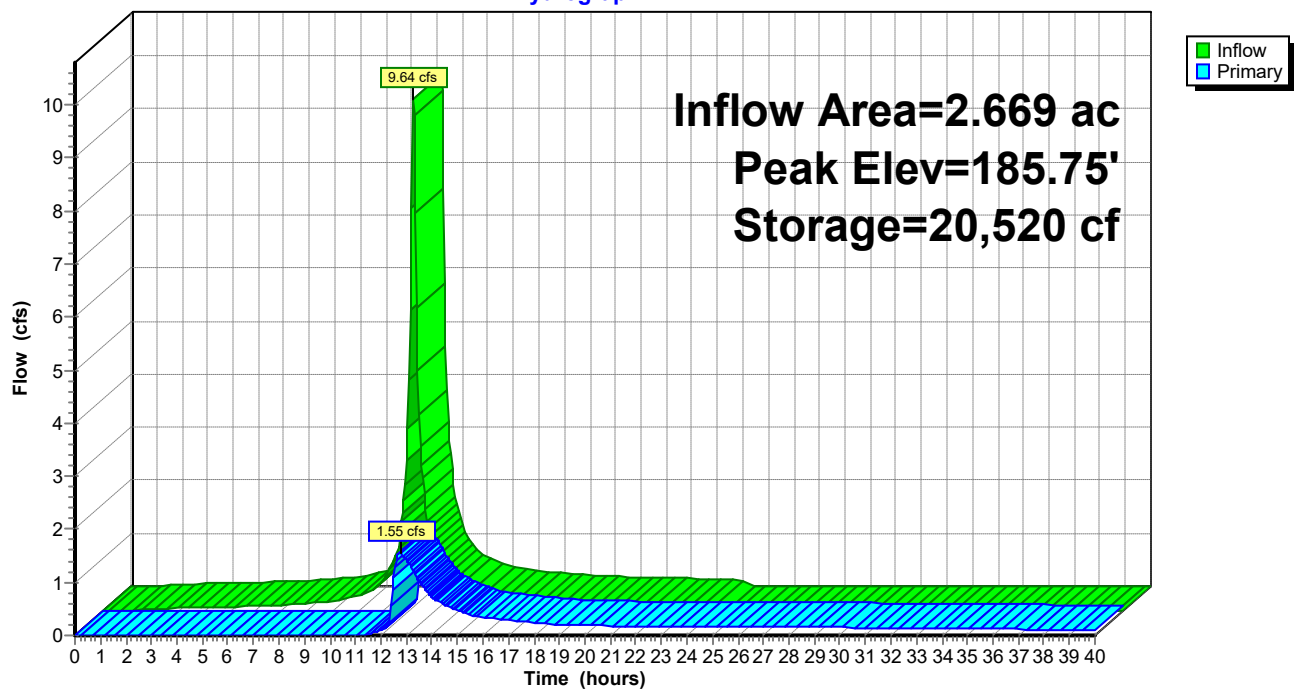
Device	Routing	Invert	Outlet Devices
#1	Primary	183.17'	18.0" Round Culvert L= 23.0' Ke= 0.500 Inlet / Outlet Invert= 183.17' / 183.05' S= 0.0052 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	184.23'	2.5" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	185.53'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	186.82'	50.0' long + 3.0' /' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=1.55 cfs @ 12.75 hrs HW=185.75' (Free Discharge)

1=Culvert (Passes 1.55 cfs of 11.22 cfs potential flow)
 2=Orifice/Grate (Orifice Controls 0.20 cfs @ 5.73 fps)
 3=Sharp-Crested Rectangular Weir (Weir Controls 1.35 cfs @ 1.54 fps)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-50: Basin #50

Hydrograph



Summary for Pond B-51: Basin #51

Inflow Area = 1.618 ac, 38.76% Impervious, Inflow Depth = 3.38" for Current 10 yr event
 Inflow = 5.59 cfs @ 12.17 hrs, Volume= 0.456 af
 Outflow = 4.51 cfs @ 12.25 hrs, Volume= 0.395 af, Atten= 19%, Lag= 4.7 min
 Primary = 4.51 cfs @ 12.25 hrs, Volume= 0.395 af
 Routed to Link PDA-6 : Proposed Drainage Area #6

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 188.86' @ 12.25 hrs Surf.Area= 3,701 sf Storage= 5,253 cf

Plug-Flow detention time= 126.3 min calculated for 0.395 af (87% of inflow)
 Center-of-Mass det. time= 62.8 min (855.5 - 792.6)

Volume	Invert	Avail.Storage	Storage Description
#1	186.86'	16,158 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
186.86	0	0	0
187.00	1,882	132	132
188.00	2,798	2,340	2,472
189.00	3,853	3,326	5,797
190.00	5,083	4,468	10,265
191.00	6,703	5,893	16,158

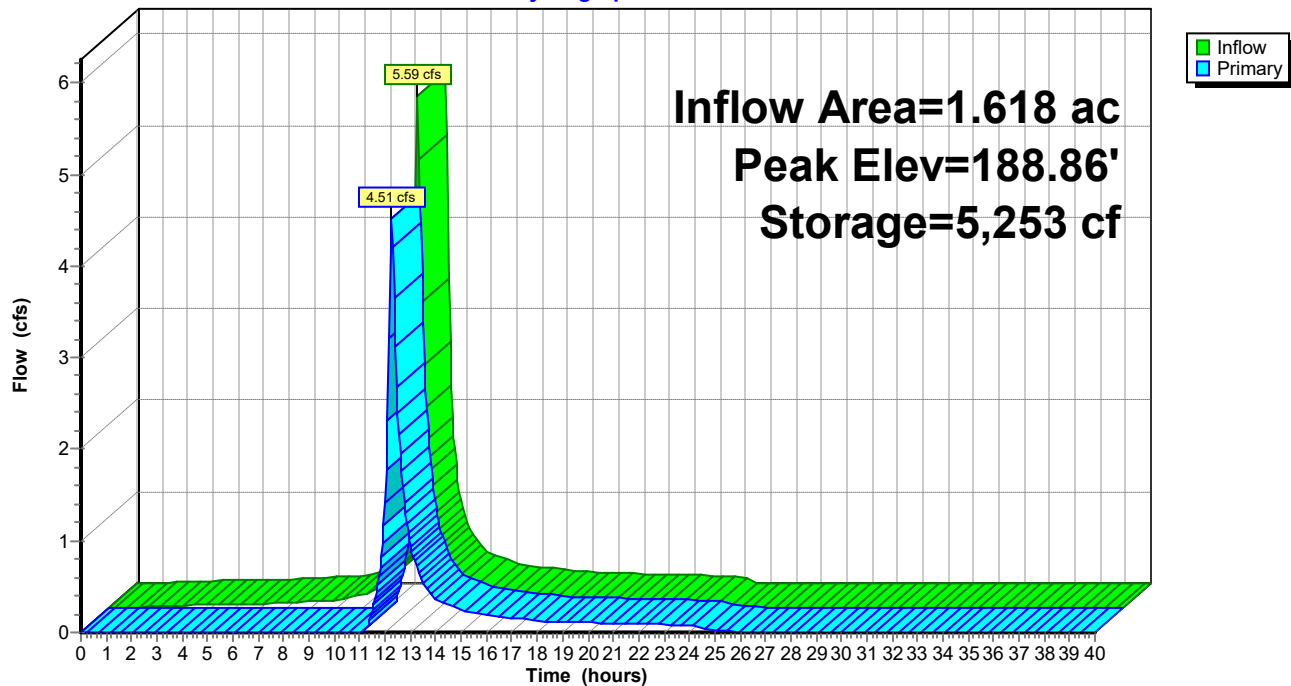
Device	Routing	Invert	Outlet Devices
#1	Primary	186.86'	18.0" Round Culvert L= 172.0' Ke= 0.500 Inlet / Outlet Invert= 186.86' / 186.00' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	188.06'	20.0" W x 8.0" H Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	188.68'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	189.71'	50.0' long + 3.0' /' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=4.50 cfs @ 12.25 hrs HW=188.86' (Free Discharge)

1=Culvert (Passes 4.50 cfs of 7.77 cfs potential flow)
 2=Orifice/Grate (Orifice Controls 3.55 cfs @ 3.19 fps)
 3=Sharp-Crested Rectangular Weir (Weir Controls 0.95 cfs @ 1.37 fps)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-51: Basin #51

Hydrograph



Summary for Pond B-52: Basin #52

Inflow Area = 2.537 ac, 41.39% Impervious, Inflow Depth = 3.45" for Current 10 yr event
 Inflow = 8.89 cfs @ 12.17 hrs, Volume= 0.728 af
 Outflow = 5.49 cfs @ 12.30 hrs, Volume= 0.628 af, Atten= 38%, Lag= 7.9 min
 Primary = 5.49 cfs @ 12.30 hrs, Volume= 0.628 af
 Routed to Link PDA-6 : Proposed Drainage Area #6

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 195.62' @ 12.30 hrs Surf.Area= 4,649 sf Storage= 10,948 cf

Plug-Flow detention time= 139.6 min calculated for 0.628 af (86% of inflow)
 Center-of-Mass det. time= 73.4 min (863.6 - 790.2)

Volume	Invert	Avail.Storage	Storage Description
#1	192.30'	23,897 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
192.30	0	0	0
193.00	2,920	1,022	1,022
194.00	3,579	3,250	4,271
195.00	4,239	3,909	8,180
196.00	4,898	4,569	12,749
197.00	5,558	5,228	17,977
198.00	6,282	5,920	23,897

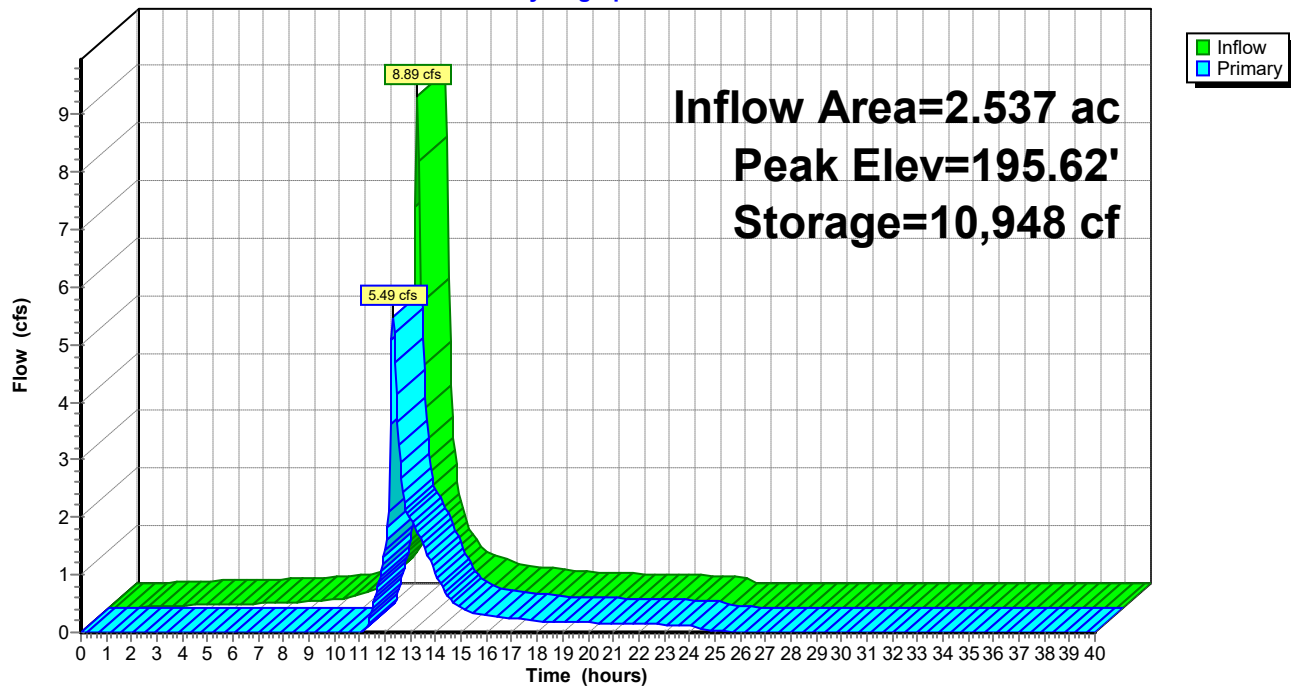
Device	Routing	Invert	Outlet Devices
#1	Primary	192.00'	18.0" Round Culvert L= 163.0' Ke= 0.500 Inlet / Outlet Invert= 192.00' / 191.00' S= 0.0061 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	194.03'	24.0" W x 2.5" H Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	195.24'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	196.99'	50.0' long + 3.0 ' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=5.46 cfs @ 12.30 hrs HW=195.62' (Free Discharge)

1=Culvert (Passes 5.46 cfs of 11.84 cfs potential flow)
 2=Orifice/Grate (Orifice Controls 2.45 cfs @ 5.87 fps)
 3=Sharp-Crested Rectangular Weir (Weir Controls 3.02 cfs @ 2.02 fps)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-52: Basin #52

Hydrograph



Summary for Pond B-53: Basin #53

Inflow Area = 2.540 ac, 47.79% Impervious, Inflow Depth = 3.60" for Current 10 yr event
 Inflow = 9.22 cfs @ 12.17 hrs, Volume= 0.762 af
 Outflow = 2.72 cfs @ 12.49 hrs, Volume= 0.640 af, Atten= 70%, Lag= 19.1 min
 Primary = 2.72 cfs @ 12.49 hrs, Volume= 0.640 af
 Routed to Link PDA-6 : Proposed Drainage Area #6

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 203.26' @ 12.49 hrs Surf.Area= 6,190 sf Storage= 17,520 cf

Plug-Flow detention time= 441.8 min calculated for 0.640 af (84% of inflow)
 Center-of-Mass det. time= 369.3 min (1,153.9 - 784.6)

Volume	Invert	Avail.Storage	Storage Description
#1	199.75'	33,011 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
199.75	0	0	0
200.00	4,035	504	504
201.00	4,695	4,365	4,869
202.00	5,685	5,190	10,059
203.00	6,015	5,850	15,909
204.00	6,676	6,346	22,255
205.00	7,336	7,006	29,261
205.50	7,666	3,751	33,011

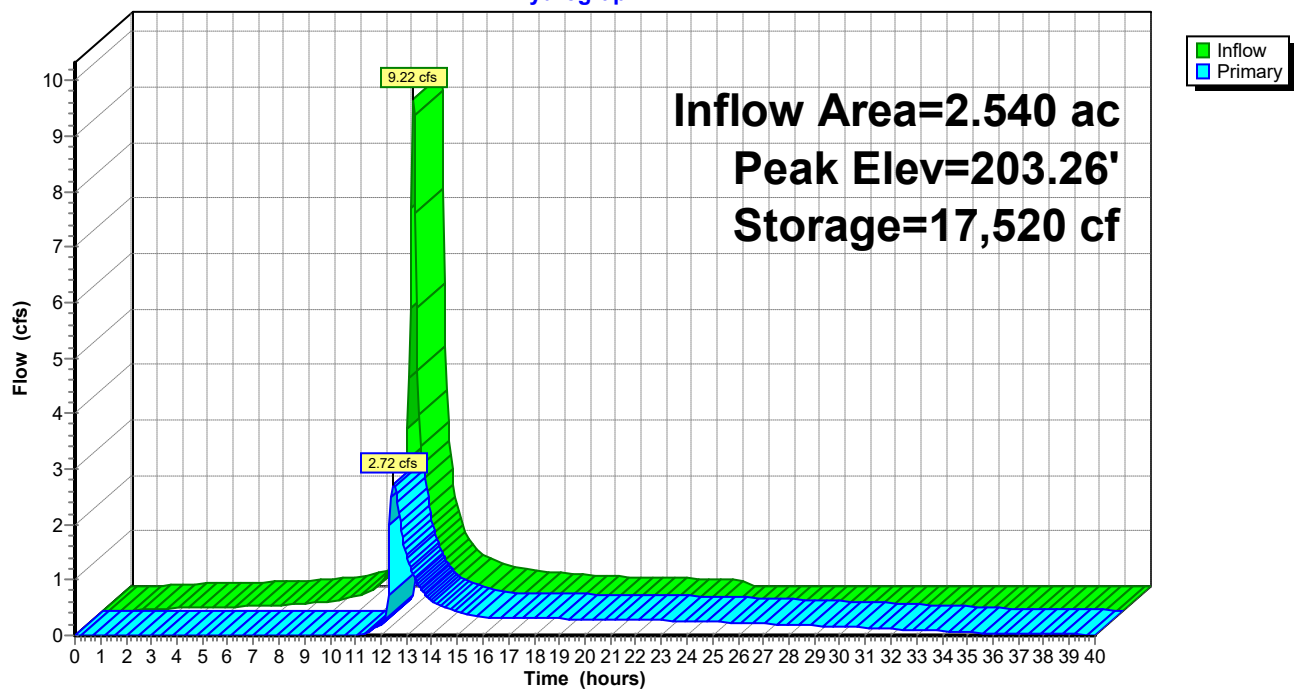
Device	Routing	Invert	Outlet Devices
#1	Primary	198.75'	18.0" Round Culvert L= 122.0' Ke= 0.500 Inlet / Outlet Invert= 198.75' / 198.00' S= 0.0061 ' / Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	201.02'	3.0" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	202.94'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	204.43'	50.0' long + 3.0 ' / SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=2.71 cfs @ 12.49 hrs HW=203.26' (Free Discharge)

1=Culvert (Passes 2.71 cfs of 14.24 cfs potential flow)
 2=Orifice/Grate (Orifice Controls 0.34 cfs @ 7.01 fps)
 3=Sharp-Crested Rectangular Weir (Weir Controls 2.37 cfs @ 1.86 fps)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-53: Basin #53

Hydrograph



Summary for Pond B-54: Basin #54

Inflow Area = 2.570 ac, 60.46% Impervious, Inflow Depth = 3.91" for Current 10 yr event
 Inflow = 9.96 cfs @ 12.17 hrs, Volume= 0.837 af
 Outflow = 2.52 cfs @ 12.55 hrs, Volume= 0.654 af, Atten= 75%, Lag= 22.9 min
 Primary = 2.52 cfs @ 12.55 hrs, Volume= 0.654 af
 Routed to Link PDA-6 : Proposed Drainage Area #6

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 204.01' @ 12.55 hrs Surf.Area= 6,430 sf Storage= 20,693 cf

Plug-Flow detention time= 549.7 min calculated for 0.654 af (78% of inflow)
 Center-of-Mass det. time= 464.0 min (1,238.8 - 774.8)

Volume	Invert	Avail.Storage	Storage Description
#1	199.89'	30,982 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
199.89	0	0	0
200.00	3,780	208	208
201.00	4,440	4,110	4,318
202.00	5,100	4,770	9,088
203.00	5,760	5,430	14,518
204.00	6,421	6,091	20,608
205.00	7,081	6,751	27,359
205.50	7,411	3,623	30,982

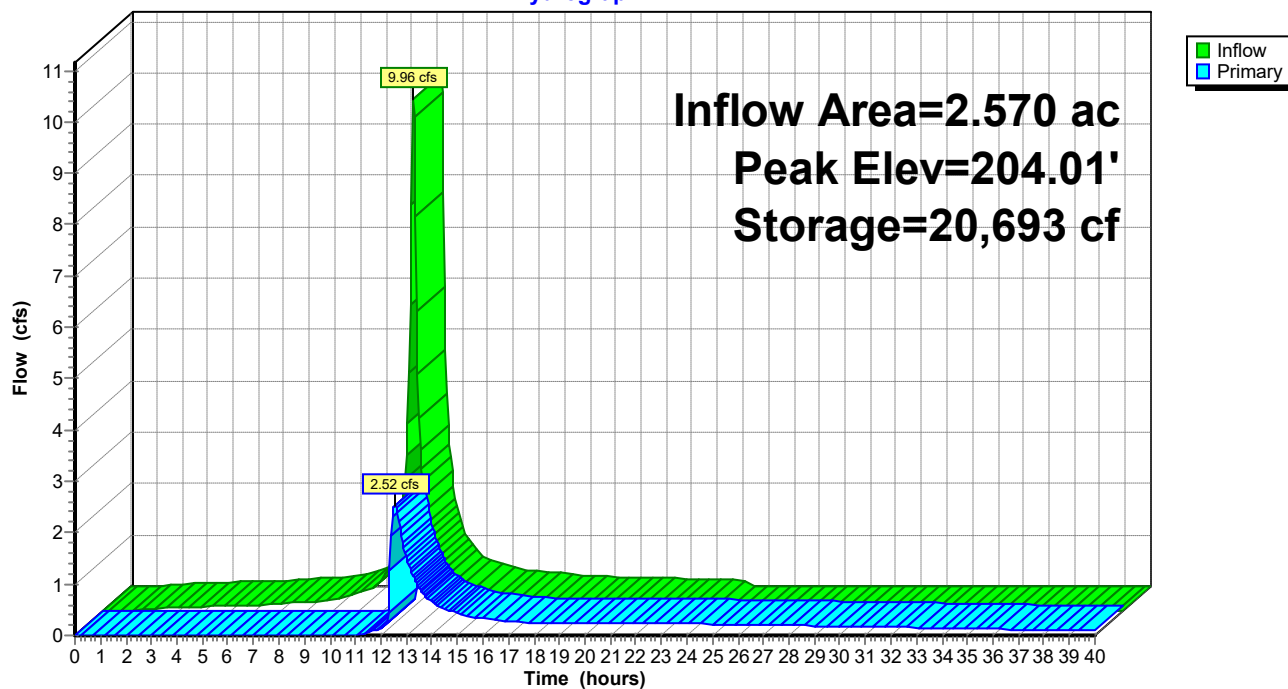
Device	Routing	Invert	Outlet Devices
#1	Primary	198.89'	18.0" Round Culvert L= 178.0' Ke= 0.500 Inlet / Outlet Invert= 198.89' / 198.00' S= 0.0050 ' / Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	201.40'	2.5" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	203.70'	4.0' long 1 2 End Contraction(s)
#4	Primary	204.47'	50.0' long + 3.0 ' / SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=2.51 cfs @ 12.55 hrs HW=204.01' (Free Discharge)

1=Culvert (Passes 2.51 cfs of 13.82 cfs potential flow)
 2=Orifice/Grate (Orifice Controls 0.26 cfs @ 7.63 fps)
 3=1 (Weir Controls 2.25 cfs @ 1.83 fps)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-54: Basin #54

Hydrograph



Summary for Pond B-55: Basin #55

Inflow Area = 2.024 ac, 49.74% Impervious, Inflow Depth = 3.65" for Current 10 yr event
 Inflow = 7.42 cfs @ 12.17 hrs, Volume= 0.615 af
 Outflow = 4.22 cfs @ 12.32 hrs, Volume= 0.522 af, Atten= 43%, Lag= 8.7 min
 Primary = 4.22 cfs @ 12.32 hrs, Volume= 0.522 af
 Routed to Link PDA-6 : Proposed Drainage Area #6

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 193.94' @ 12.32 hrs Surf.Area= 5,228 sf Storage= 10,142 cf

Plug-Flow detention time= 155.6 min calculated for 0.521 af (85% of inflow)
 Center-of-Mass det. time= 86.4 min (869.4 - 783.0)

Volume	Invert	Avail.Storage	Storage Description
#1	191.56'	22,010 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
191.56	0	0	0
192.00	4,250	935	935
193.00	4,746	4,498	5,433
194.00	5,257	5,002	10,434
195.00	5,784	5,521	15,955
196.00	6,327	6,056	22,010

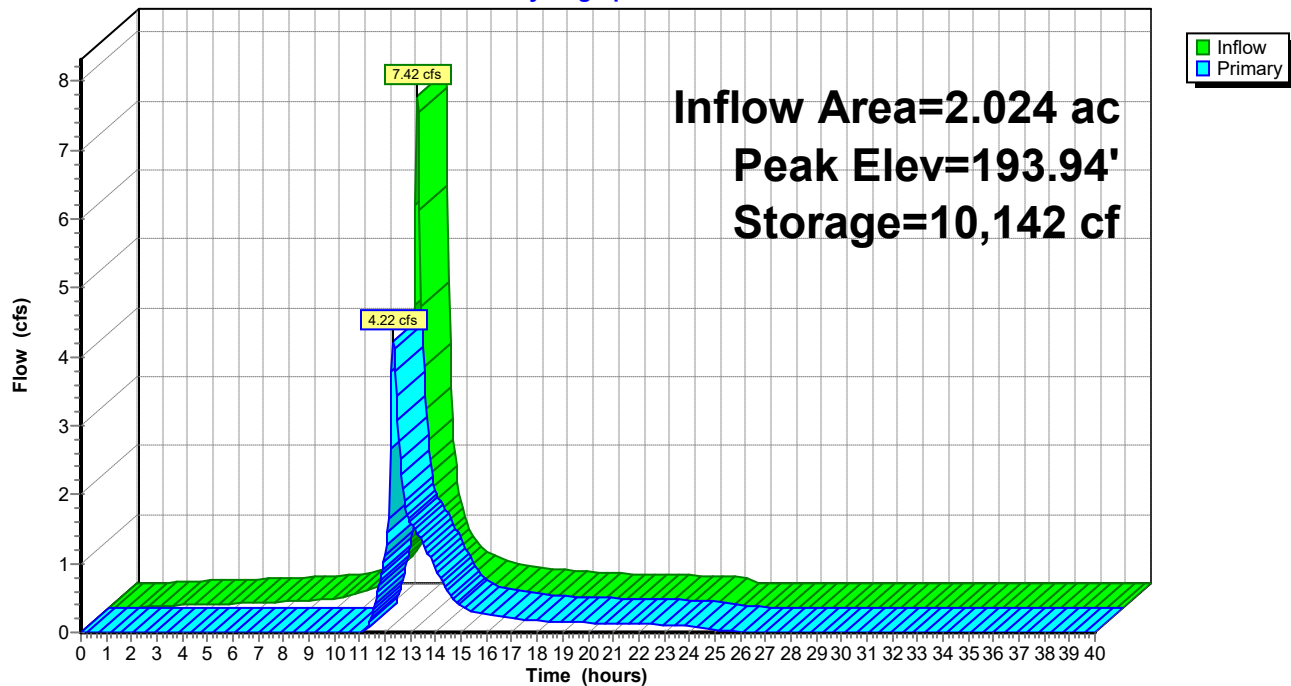
Device	Routing	Invert	Outlet Devices
#1	Primary	191.56'	18.0" Round Culvert L= 112.0' Ke= 0.500 Inlet / Outlet Invert= 191.56' / 191.00' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	192.71'	22.0" W x 2.5" H Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	193.63'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	194.99'	50.0' long + 3.0' /' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=4.16 cfs @ 12.32 hrs HW=193.94' (Free Discharge)

1=Culvert (Passes 4.16 cfs of 9.03 cfs potential flow)
 2=Orifice/Grate (Orifice Controls 1.95 cfs @ 5.11 fps)
 3=Sharp-Crested Rectangular Weir (Weir Controls 2.21 cfs @ 1.82 fps)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-55: Basin #55

Hydrograph



Summary for Pond B-56: Basin #56

Inflow Area = 2.308 ac, 44.92% Impervious, Inflow Depth = 3.53" for Current 10 yr event
 Inflow = 8.25 cfs @ 12.17 hrs, Volume= 0.679 af
 Outflow = 4.28 cfs @ 12.33 hrs, Volume= 0.581 af, Atten= 48%, Lag= 9.7 min
 Primary = 4.28 cfs @ 12.33 hrs, Volume= 0.581 af
 Routed to Link PDA-6 : Proposed Drainage Area #6

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 193.94' @ 12.33 hrs Surf.Area= 5,946 sf Storage= 11,700 cf

Plug-Flow detention time= 161.5 min calculated for 0.580 af (85% of inflow)
 Center-of-Mass det. time= 94.5 min (881.6 - 787.0)

Volume	Invert	Avail.Storage	Storage Description
#1	191.57'	25,032 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
191.57	0	0	0
192.00	5,021	1,080	1,080
193.00	5,490	5,256	6,335
194.00	5,976	5,733	12,068
195.00	6,478	6,227	18,295
196.00	6,995	6,737	25,032

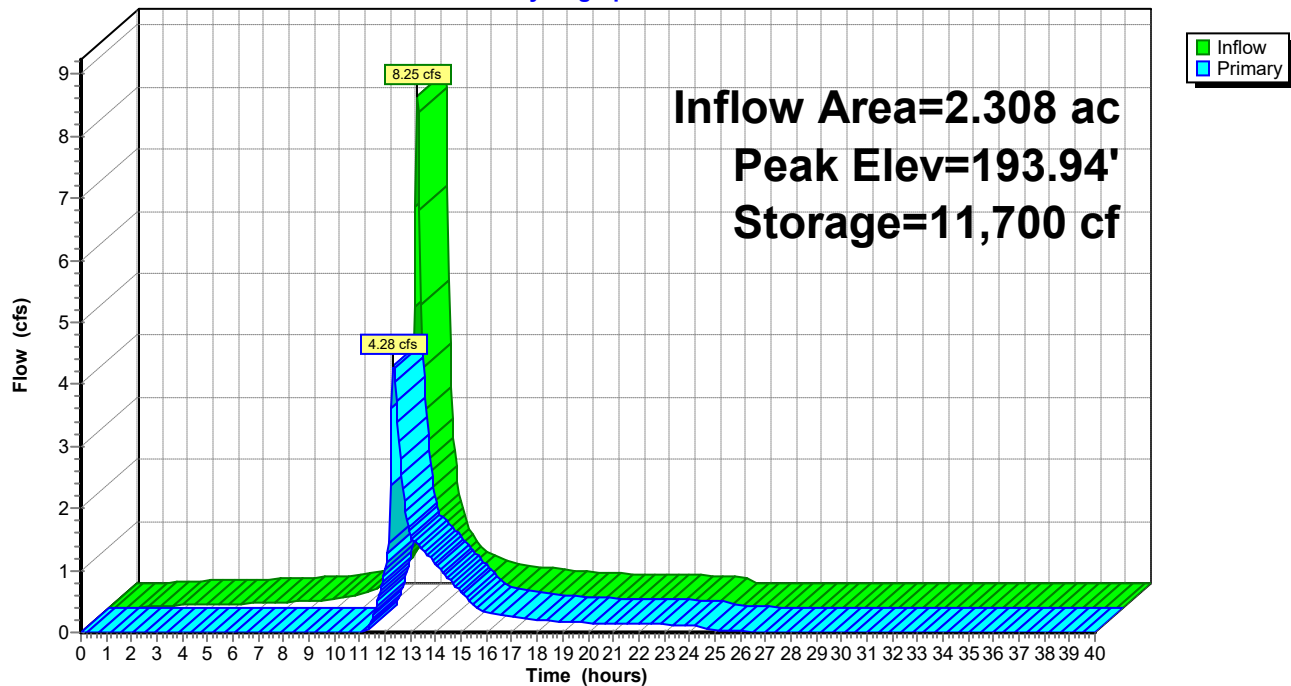
Device	Routing	Invert	Outlet Devices
#1	Primary	191.57'	18.0" Round Culvert L= 29.0' Ke= 0.500 Inlet / Outlet Invert= 191.57' / 191.42' S= 0.0052 ' / Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	192.62'	19.0" W x 2.5" H Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	193.60'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	194.99'	50.0' long + 3.0 ' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=4.25 cfs @ 12.33 hrs HW=193.94' (Free Discharge)

1=Culvert (Passes 4.25 cfs of 10.03 cfs potential flow)
 2=Orifice/Grate (Orifice Controls 1.75 cfs @ 5.30 fps)
 3=Sharp-Crested Rectangular Weir (Weir Controls 2.50 cfs @ 1.89 fps)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-56: Basin #56

Hydrograph



Summary for Pond B-57: Basin #57

Inflow Area = 1.297 ac, 51.37% Impervious, Inflow Depth = 3.69" for Current 10 yr event
 Inflow = 4.79 cfs @ 12.17 hrs, Volume= 0.398 af
 Outflow = 2.40 cfs @ 12.34 hrs, Volume= 0.336 af, Atten= 50%, Lag= 10.2 min
 Primary = 2.40 cfs @ 12.34 hrs, Volume= 0.336 af
 Routed to Link PDA-6 : Proposed Drainage Area #6

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 203.40' @ 12.34 hrs Surf.Area= 4,705 sf Storage= 7,440 cf

Plug-Flow detention time= 186.4 min calculated for 0.335 af (84% of inflow)
 Center-of-Mass det. time= 116.1 min (897.7 - 781.7)

Volume	Invert	Avail.Storage	Storage Description
#1	201.30'	15,700 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
201.30	0	0	0
202.00	3,969	1,389	1,389
203.00	4,488	4,229	5,618
204.00	5,034	4,761	10,379
205.00	5,608	5,321	15,700

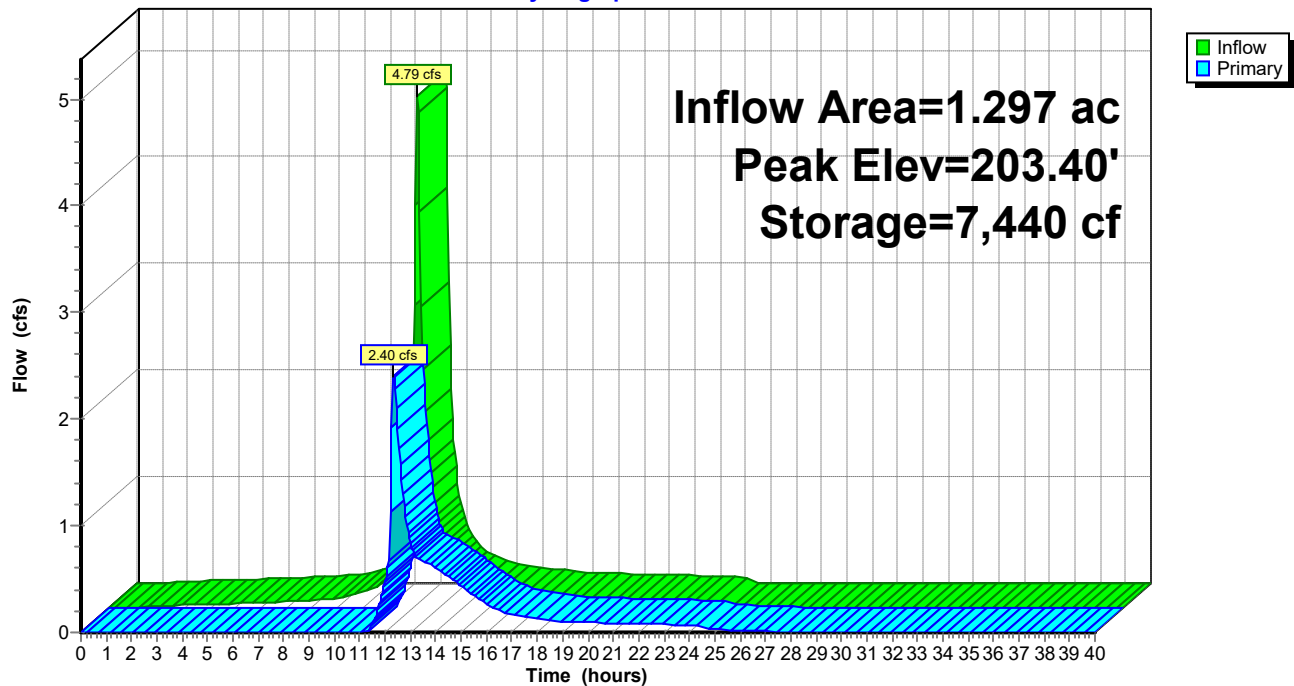
Device	Routing	Invert	Outlet Devices
#1	Primary	200.65'	18.0" Round Culvert L= 207.0' Ke= 0.500 Inlet / Outlet Invert= 200.65' / 198.00' S= 0.0128 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	202.33'	10.0" W x 2.5" H Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	203.15'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	203.98'	50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=2.39 cfs @ 12.34 hrs HW=203.40' (Free Discharge)

1=Culvert (Passes 2.39 cfs of 12.02 cfs potential flow)
 2=Orifice/Grate (Orifice Controls 0.82 cfs @ 4.72 fps)
 3=Sharp-Crested Rectangular Weir (Weir Controls 1.57 cfs @ 1.62 fps)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-57: Basin #57

Hydrograph



Summary for Pond B-58: Basin #58

Inflow Area = 2.371 ac, 32.26% Impervious, Inflow Depth = 3.22" for Current 10 yr event
 Inflow = 7.89 cfs @ 12.17 hrs, Volume= 0.637 af
 Outflow = 1.78 cfs @ 12.62 hrs, Volume= 0.520 af, Atten= 77%, Lag= 26.6 min
 Primary = 1.78 cfs @ 12.62 hrs, Volume= 0.520 af
 Routed to Link PDA-6 : Proposed Drainage Area #6

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 200.85' @ 12.62 hrs Surf.Area= 7,556 sf Storage= 14,890 cf

Plug-Flow detention time= 511.0 min calculated for 0.520 af (82% of inflow)
 Center-of-Mass det. time= 432.1 min (1,231.2 - 799.1)

Volume	Invert	Avail.Storage	Storage Description
#1	198.30'	32,924 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
198.30	0	0	0
199.00	6,230	2,180	2,180
200.00	6,932	6,581	8,761
201.00	7,670	7,301	16,062
202.00	8,426	8,048	24,110
203.00	9,201	8,814	32,924

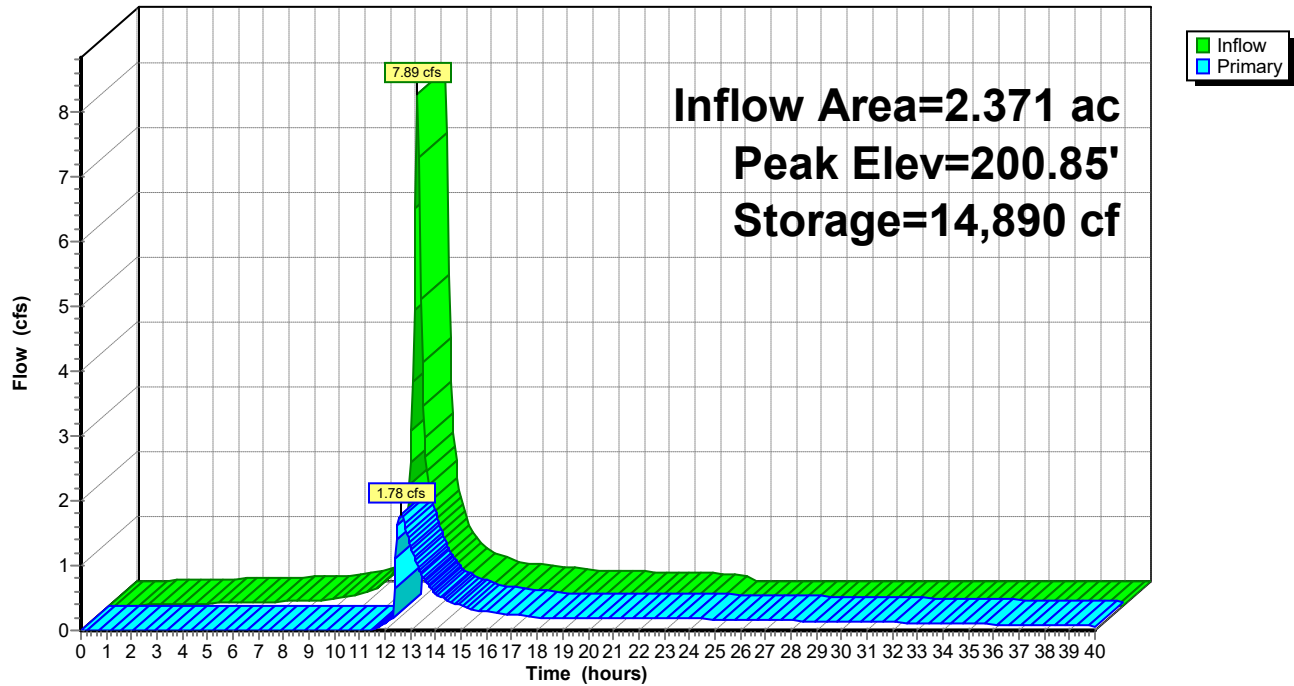
Device	Routing	Invert	Outlet Devices
#1	Primary	198.30'	18.0" Round Culvert L= 48.0' Ke= 0.500 Inlet / Outlet Invert= 198.30' / 198.00' S= 0.0063 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	199.19'	2.5" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	200.60'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	201.90'	50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=1.77 cfs @ 12.62 hrs HW=200.85' (Free Discharge)

1=Culvert (Passes 1.77 cfs of 10.67 cfs potential flow)
 2=Orifice/Grate (Orifice Controls 0.20 cfs @ 6.00 fps)
 3=Sharp-Crested Rectangular Weir (Weir Controls 1.57 cfs @ 1.62 fps)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-58: Basin #58

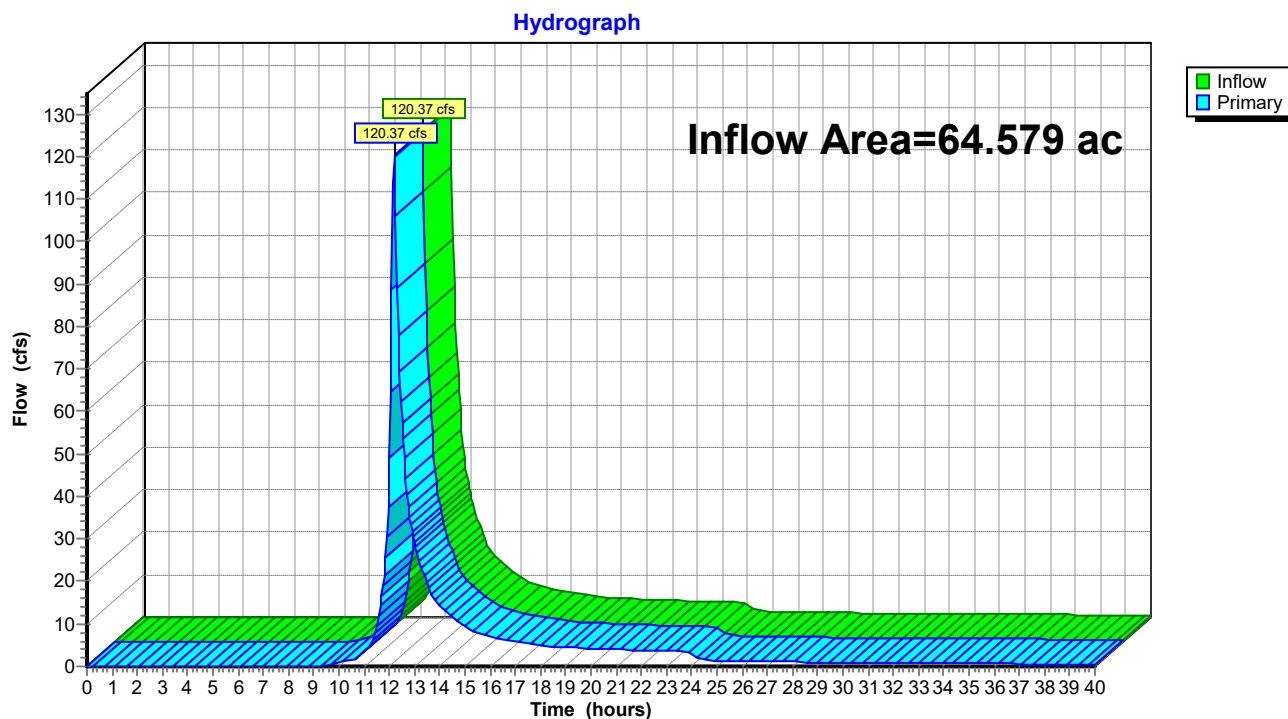
Hydrograph



Summary for Link DP-3: Design Pont #3 (Woolsey Creek)

Inflow Area = 64.579 ac, 17.83% Impervious, Inflow Depth > 2.59" for Current 10 yr event
Inflow = 120.37 cfs @ 12.19 hrs, Volume= 13.911 af
Primary = 120.37 cfs @ 12.19 hrs, Volume= 13.911 af, Atten= 0%, Lag= 0.0 min

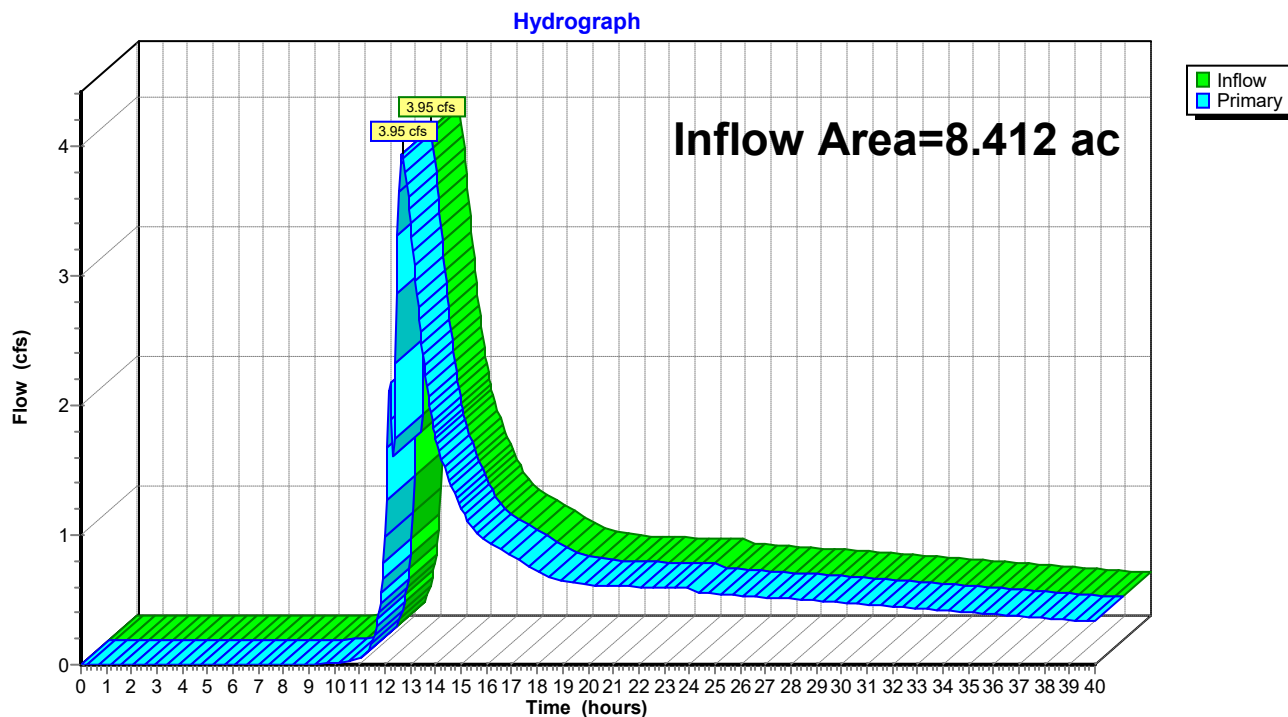
Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link DP-3: Design Pont #3 (Woolsey Creek)

Summary for Link PDA-5: Proposed Drainage Area #5

Inflow Area = 8.412 ac, 42.77% Impervious, Inflow Depth > 2.44" for Current 10 yr event
Inflow = 3.95 cfs @ 12.67 hrs, Volume= 1.712 af
Primary = 3.95 cfs @ 12.67 hrs, Volume= 1.712 af, Atten= 0%, Lag= 0.0 min
Routed to Link DP-3 : Design Pont #3 (Woolsey Creek)

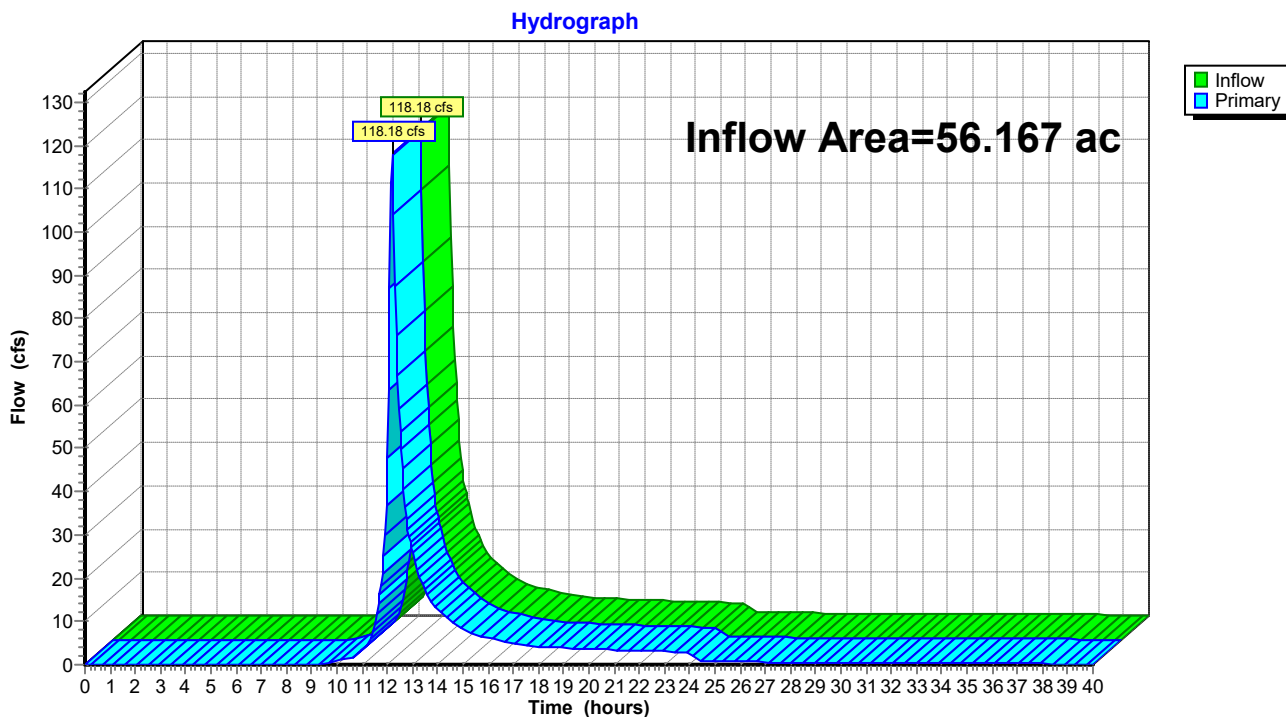
Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link PDA-5: Proposed Drainage Area #5

Summary for Link PDA-6: Proposed Drainage Area #6

Inflow Area = 56.167 ac, 14.10% Impervious, Inflow Depth > 2.61" for Current 10 yr event
Inflow = 118.18 cfs @ 12.19 hrs, Volume= 12.199 af
Primary = 118.18 cfs @ 12.19 hrs, Volume= 12.199 af, Atten= 0%, Lag= 0.0 min
Routed to Link DP-3 : Design Pont #3 (Woolsey Creek)

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link PDA-6: Proposed Drainage Area #6

Summary for Subcatchment 48I: PDA-48 (impervious)

Runoff = 7.01 cfs @ 12.17 hrs, Volume= 0.621 af, Depth= 8.35"
 Routed to Pond B-48 : Basin #48

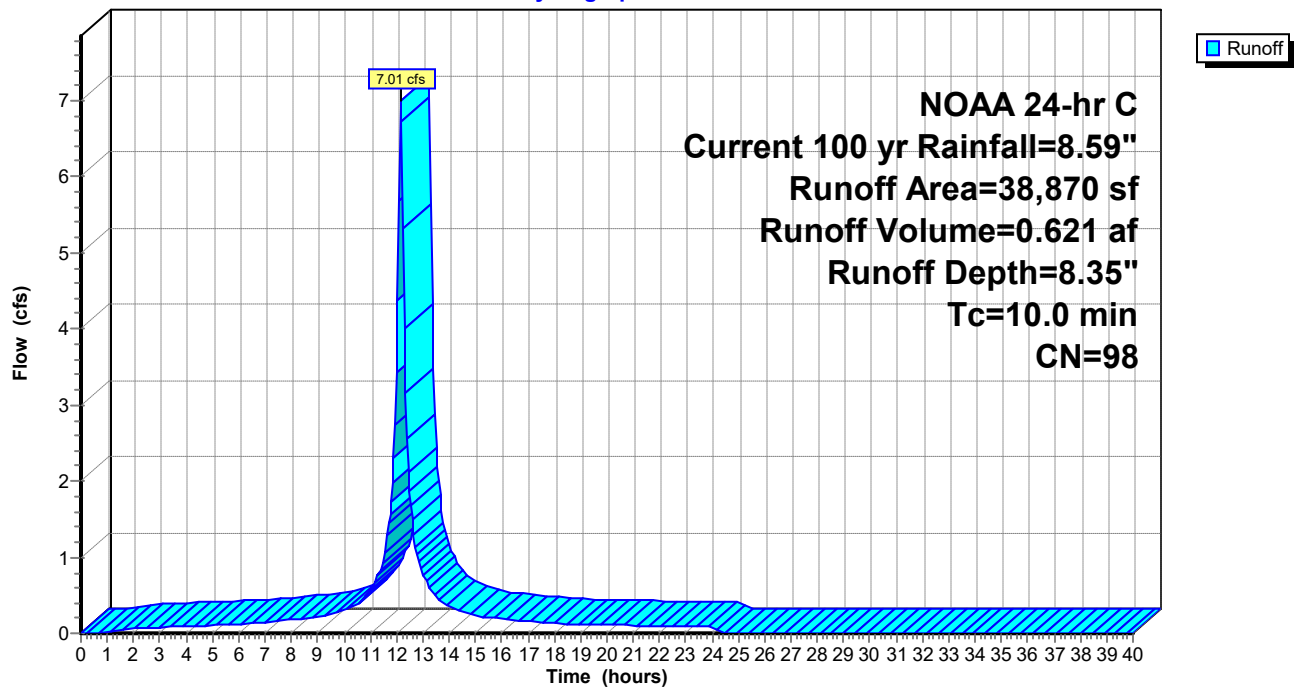
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 100 yr Rainfall=8.59"

	Area (sf)	CN	Description
*	16,283	98	Pavement, HSG C
*	21,350	98	Roof, HSG C
*	1,237	98	Concrete, HSG C
	38,870	98	Weighted Average
	38,870		100.00% Impervious Area

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

Subcatchment 48I: PDA-48 (impervious)

Hydrograph



Summary for Subcatchment 48P: PDA-48 (pervious)

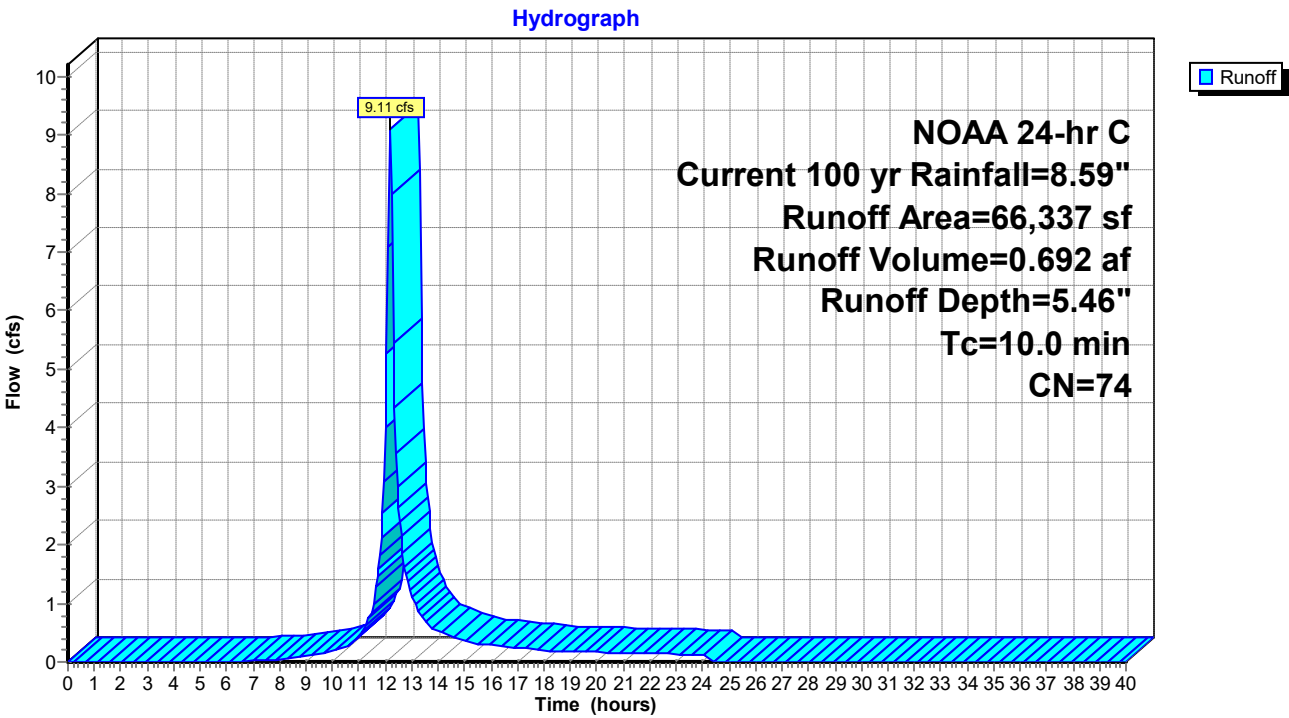
Runoff = 9.11 cfs @ 12.17 hrs, Volume= 0.692 af, Depth= 5.46"
Routed to Pond B-48 : Basin #48

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (sf)	CN	Description
66,337	74	>75% Grass cover, Good, HSG C
66,337		100.00% Pervious Area

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

Subcatchment 48P: PDA-48 (pervious)



Summary for Subcatchment 49I: PDA-49 (impervious)

Runoff = 11.41 cfs @ 12.17 hrs, Volume= 1.011 af, Depth= 8.35"
 Routed to Pond B-49 : Basin #49

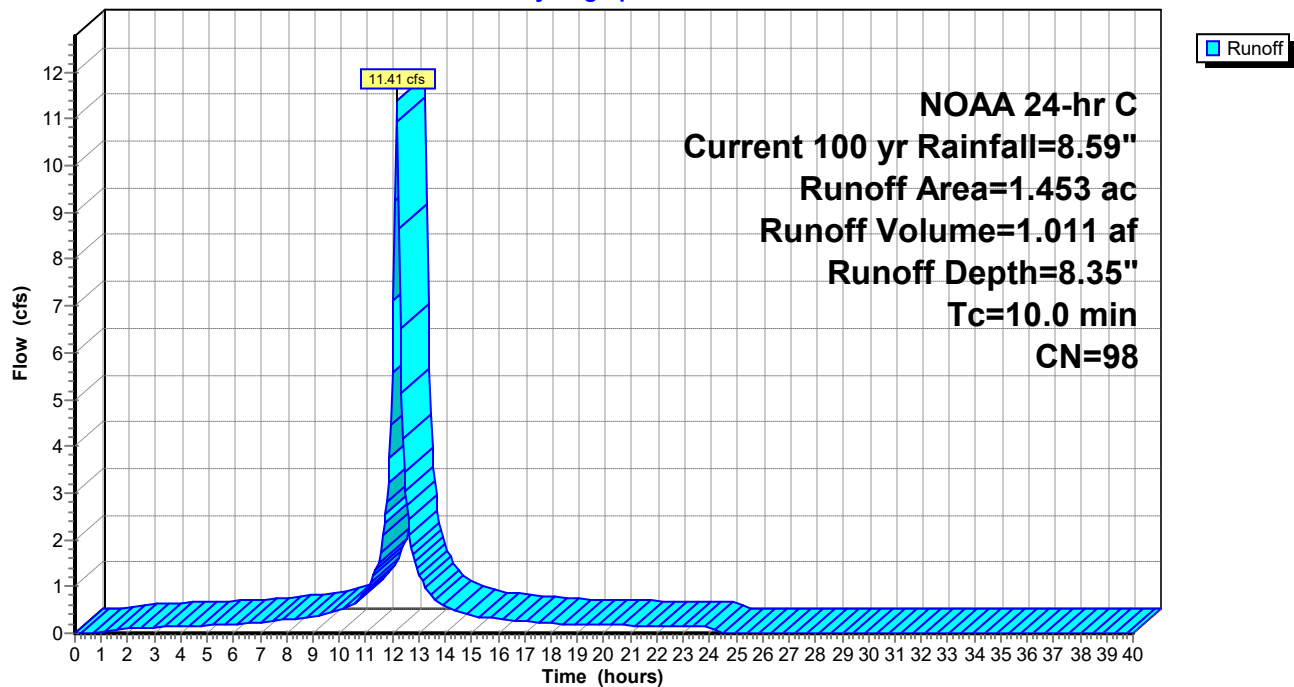
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (ac)	CN	Description
* 0.454	98	Pavement, HSG C
* 0.940	98	Roof, HSG C
* 0.059	98	Concrete, HSG C
1.453	98	Weighted Average
1.453		100.00% Impervious Area

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

Subcatchment 49I: PDA-49 (impervious)

Hydrograph



Summary for Subcatchment 49P: PDA-49 (pervious)

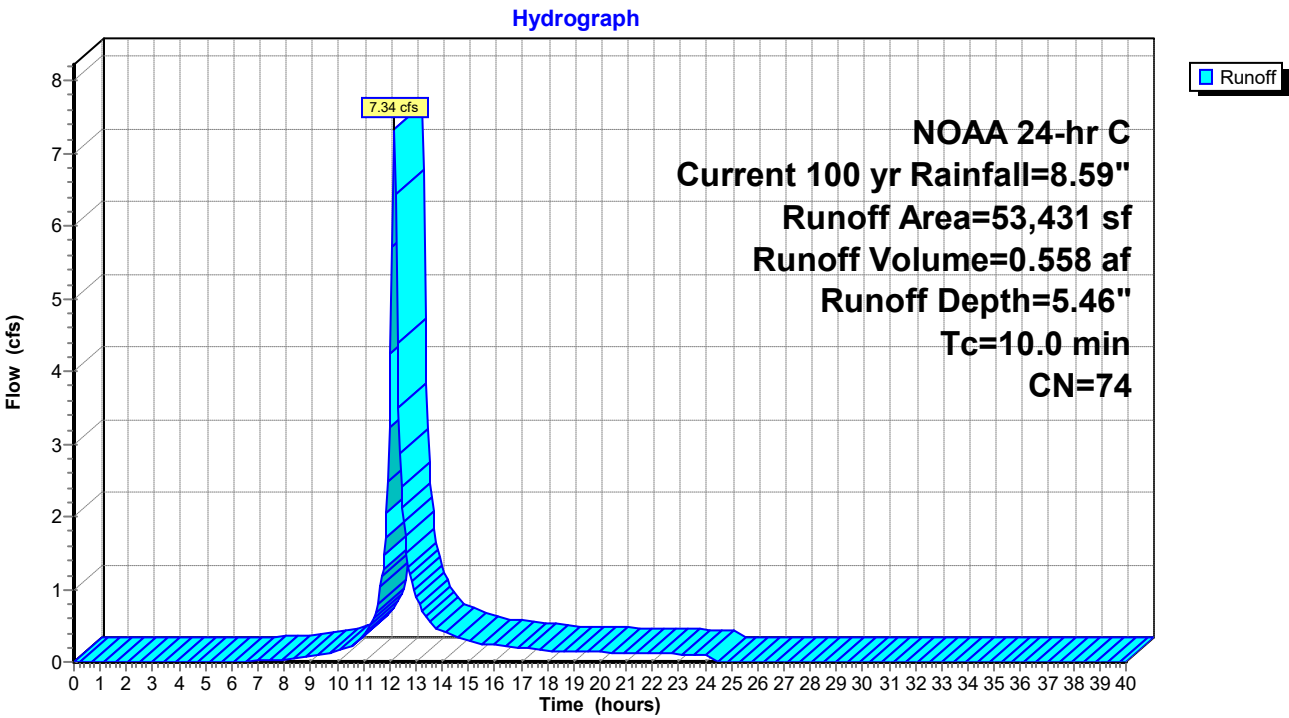
Runoff = 7.34 cfs @ 12.17 hrs, Volume= 0.558 af, Depth= 5.46"
Routed to Pond B-49 : Basin #49

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (sf)	CN	Description
53,431	74	>75% Grass cover, Good, HSG C
53,431		100.00% Pervious Area

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

Subcatchment 49P: PDA-49 (pervious)



Summary for Subcatchment 50I: PDA-50 (impervious)

Runoff = 9.83 cfs @ 12.17 hrs, Volume= 0.871 af, Depth= 8.35"
 Routed to Pond B-50 : Basin #50

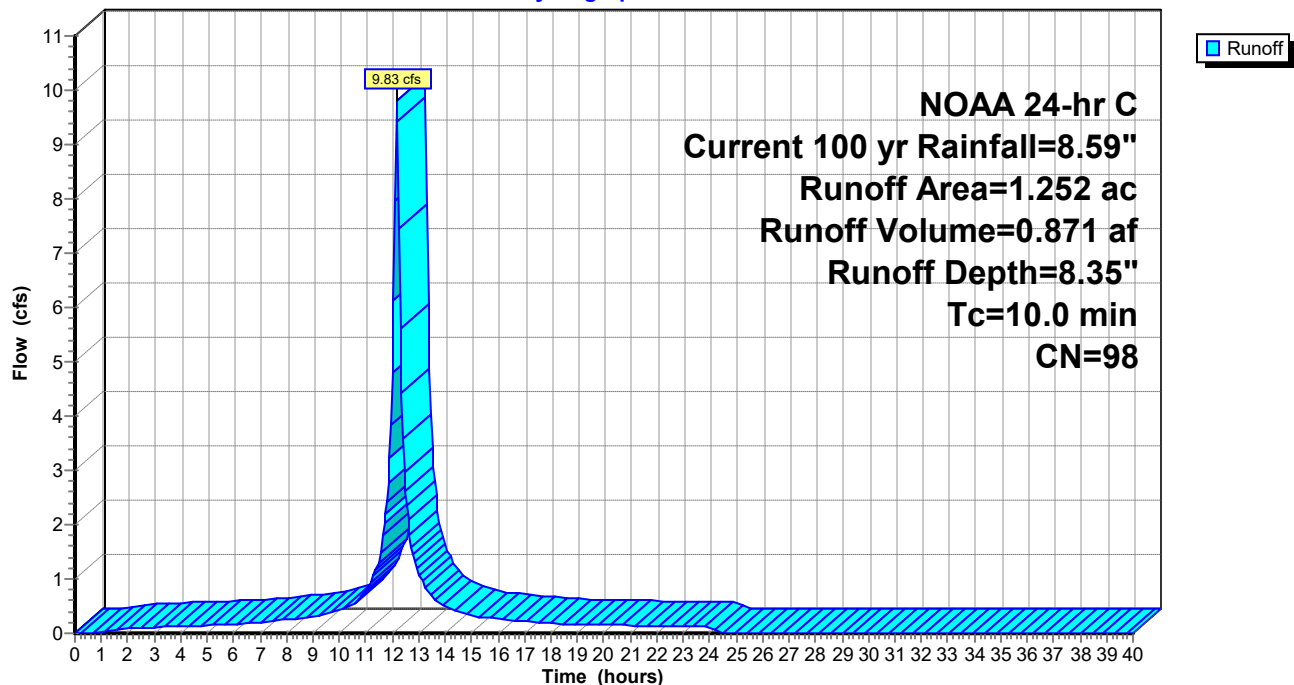
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (ac)	CN	Description
* 0.633	98	Pavement, HSG C
* 0.546	98	Roof, HSG C
* 0.073	98	Concrete, HSG C
1.252	98	Weighted Average
1.252		100.00% Impervious Area

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

Subcatchment 50I: PDA-50 (impervious)

Hydrograph



Summary for Subcatchment 50P: PDA-50 (pervious)

Runoff = 8.48 cfs @ 12.17 hrs, Volume= 0.644 af, Depth= 5.46"
 Routed to Pond B-50 : Basin #50

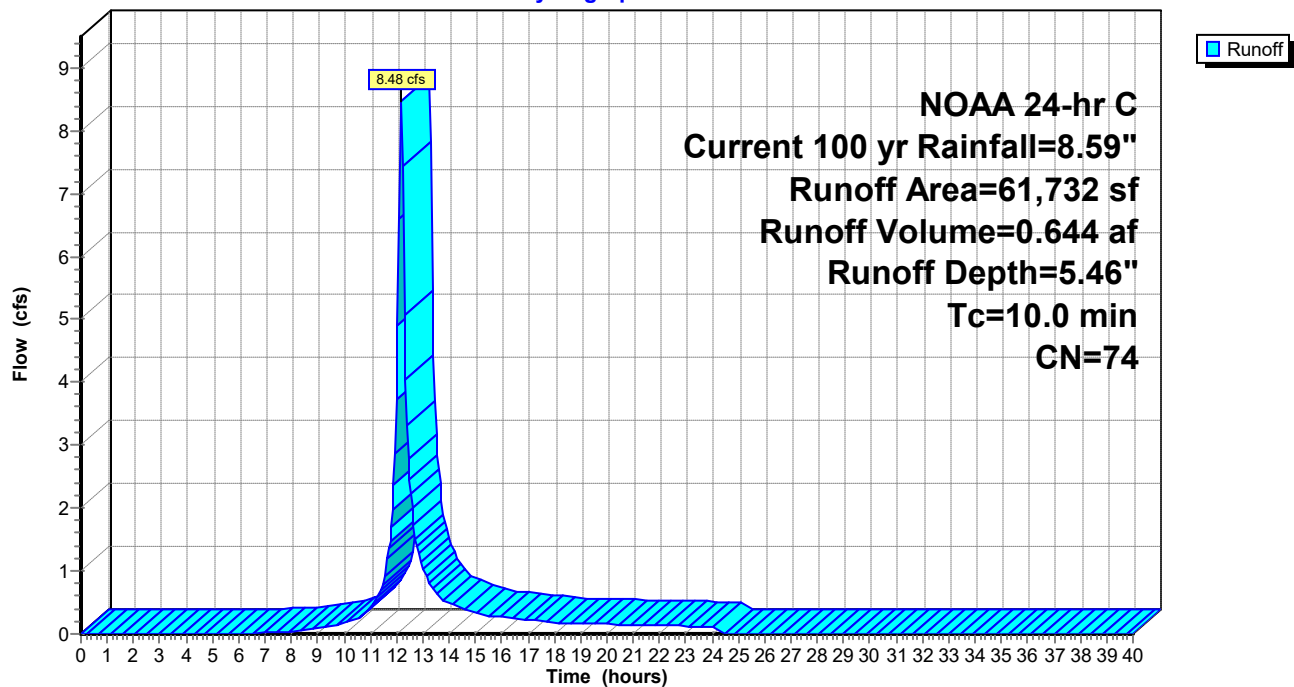
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (sf)	CN	Description
61,732	74	>75% Grass cover, Good, HSG C
61,732		100.00% Pervious Area

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

Subcatchment 50P: PDA-50 (pervious)

Hydrograph



Summary for Subcatchment 51I: PDA-51 (impervious)

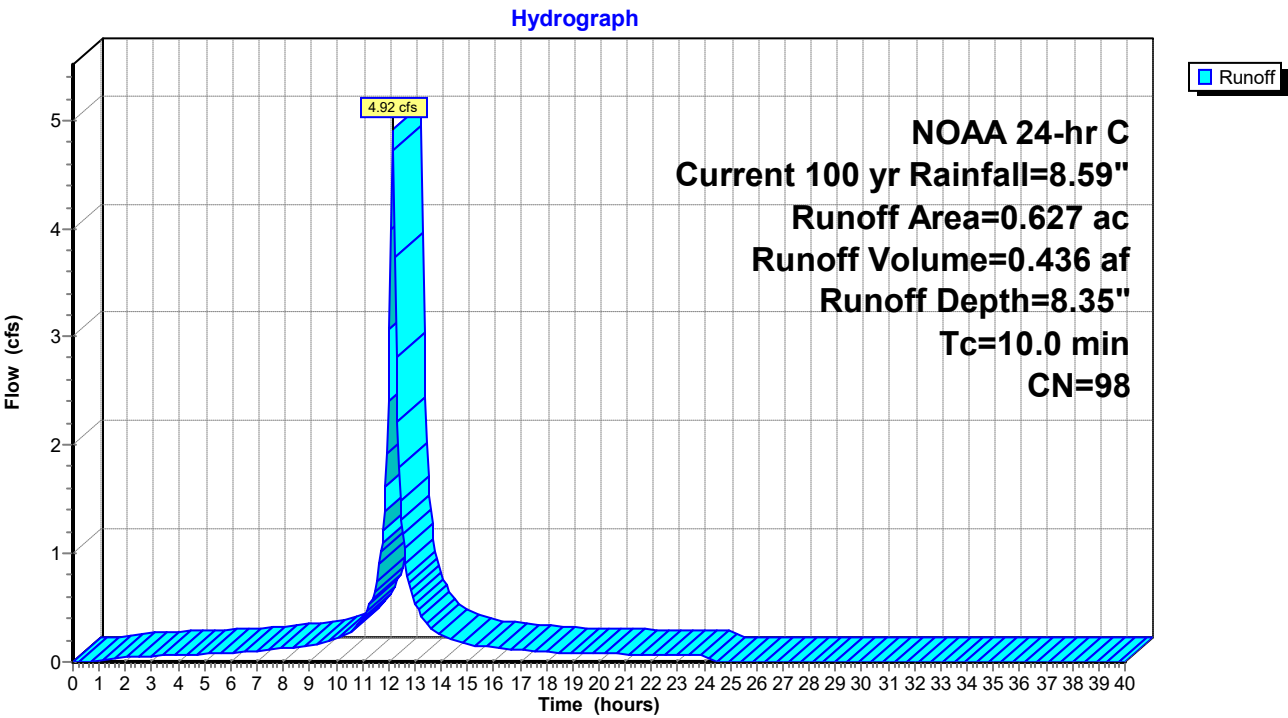
Runoff = 4.92 cfs @ 12.17 hrs, Volume= 0.436 af, Depth= 8.35"
Routed to Pond B-51 : Basin #51

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (ac)	CN	Description
* 0.627	98	Roof, HSG C
0.627		100.00% Impervious Area

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

Subcatchment 51I: PDA-51 (impervious)



Summary for Subcatchment 51P: PDA-51 (pervious)

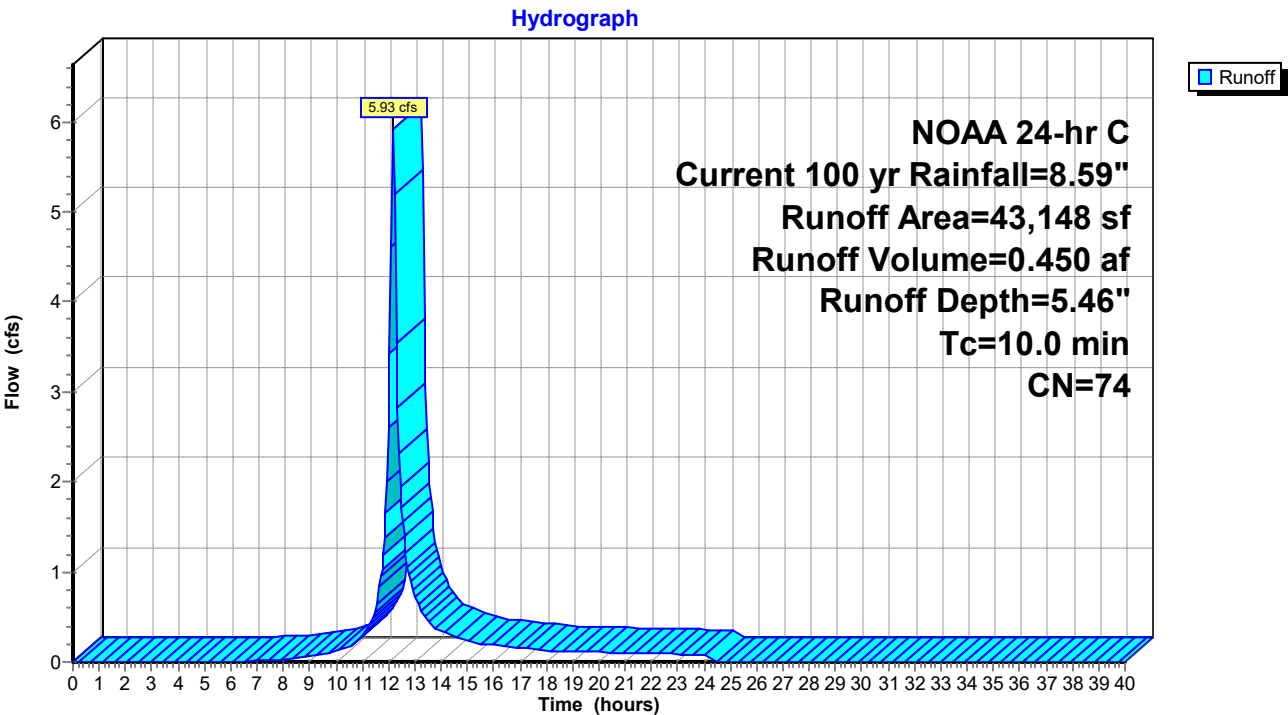
Runoff = 5.93 cfs @ 12.17 hrs, Volume= 0.450 af, Depth= 5.46"
Routed to Pond B-51 : Basin #51

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (sf)	CN	Description
43,148	74	>75% Grass cover, Good, HSG C
43,148		100.00% Pervious Area

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

Subcatchment 51P: PDA-51 (pervious)



Summary for Subcatchment 52I: PDA-52 (impervious)

Runoff = 8.24 cfs @ 12.17 hrs, Volume= 0.731 af, Depth= 8.35"
 Routed to Pond B-52 : Basin #52

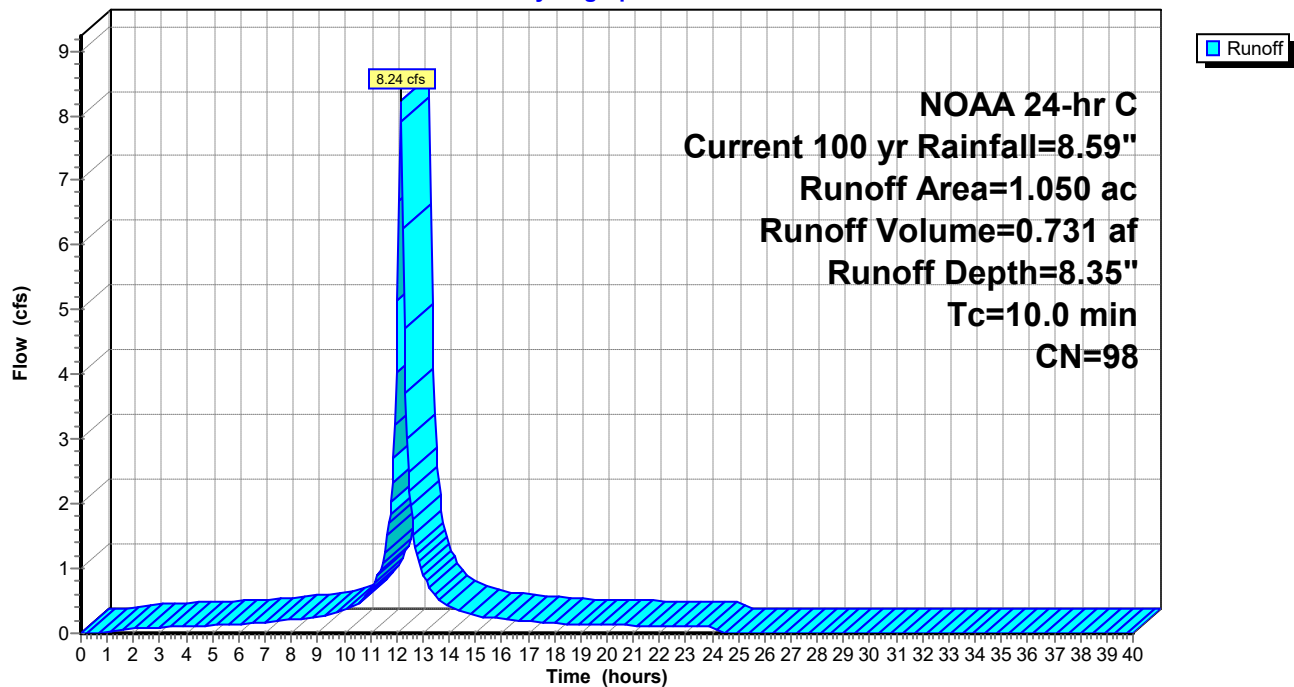
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (ac)	CN	Description
* 0.350	98	Pavement, HSG C
* 0.659	98	Roof, HSG C
* 0.041	98	Concrete, HSG C
1.050	98	Weighted Average
1.050		100.00% Impervious Area

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

Subcatchment 52I: PDA-52 (impervious)

Hydrograph



Summary for Subcatchment 52P: PDA-52 (pervious)

Runoff = 8.90 cfs @ 12.17 hrs, Volume= 0.676 af, Depth= 5.46"
Routed to Pond B-52 : Basin #52

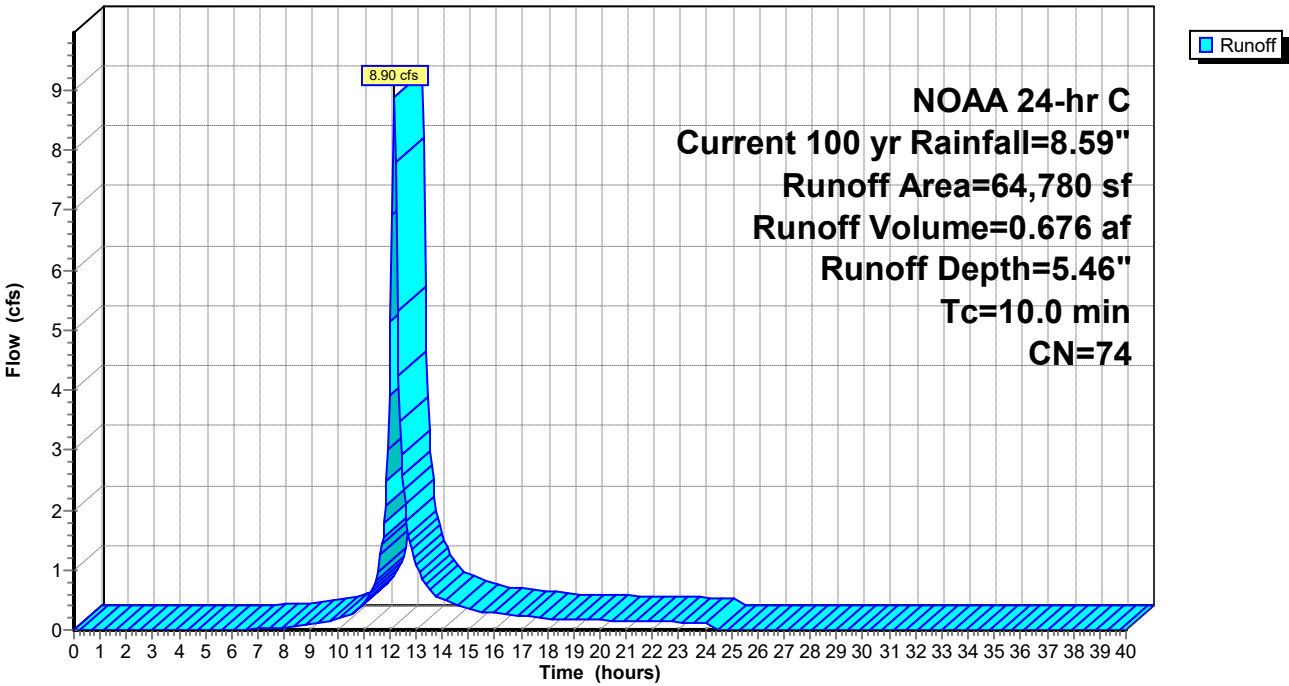
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (sf)	CN	Description
64,780	74	>75% Grass cover, Good, HSG C
64,780		100.00% Pervious Area

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

Subcatchment 52P: PDA-52 (pervious)

Hydrograph



Summary for Subcatchment 53I: PDA-53 (impervious)

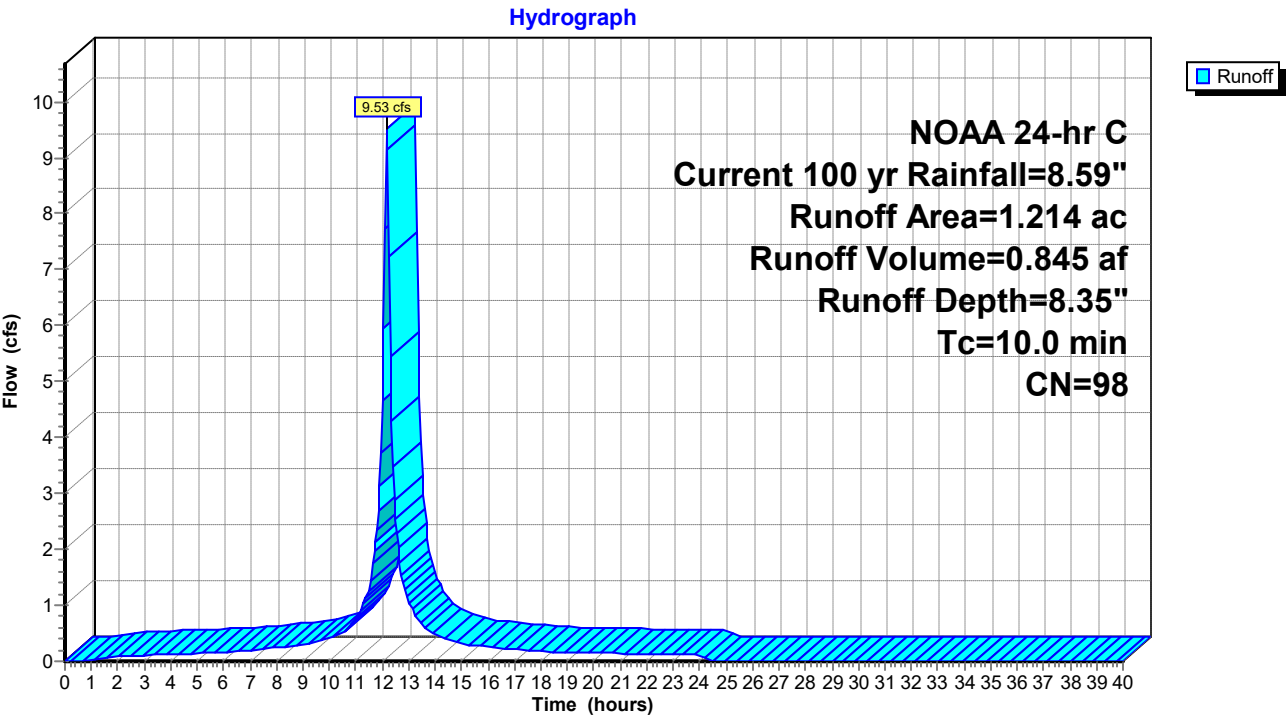
Runoff = 9.53 cfs @ 12.17 hrs, Volume= 0.845 af, Depth= 8.35"
Routed to Pond B-53 : Basin #53

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (ac)	CN	Description
* 0.628	98	Pavement, HSG C
* 0.450	98	Roof, HSG C
* 0.136	98	Concrete, HSG C
1.214	98	Weighted Average
1.214		100.00% Impervious Area

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

Subcatchment 53I: PDA-53 (impervious)



Summary for Subcatchment 53P: PDA-53 (pervious)

Runoff = 7.93 cfs @ 12.17 hrs, Volume= 0.603 af, Depth= 5.46"
 Routed to Pond B-53 : Basin #53

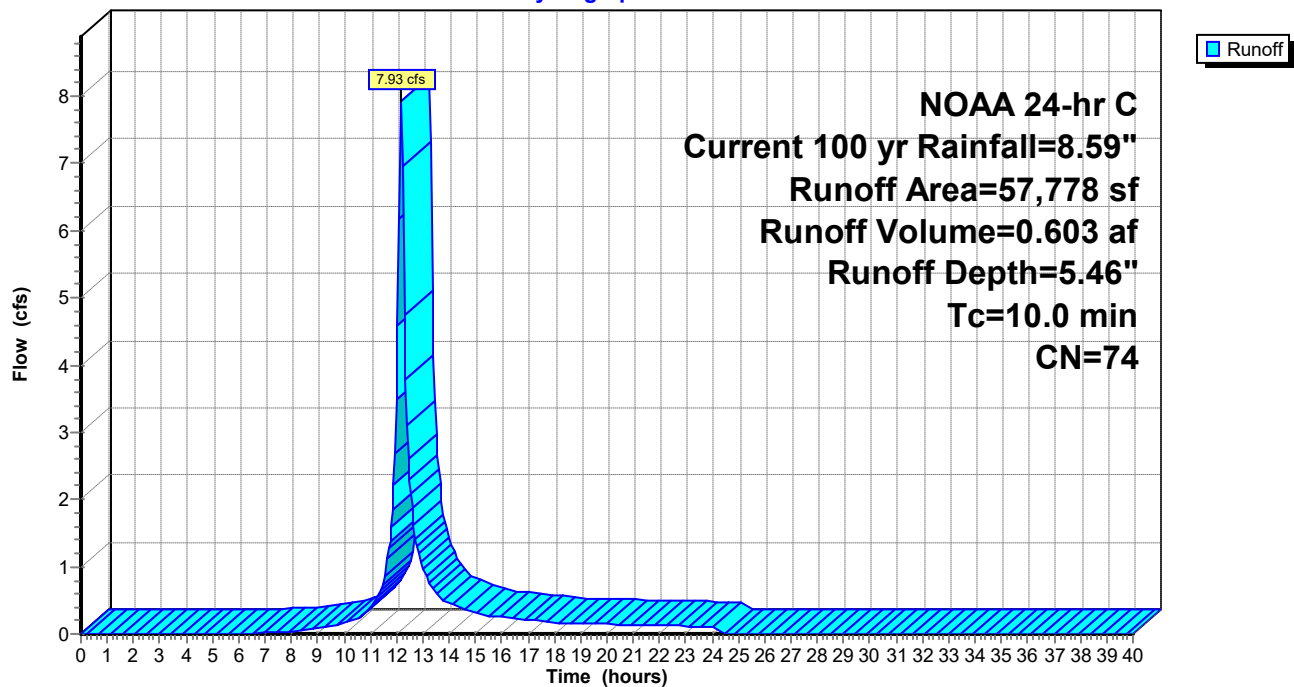
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (sf)	CN	Description
57,778	74	>75% Grass cover, Good, HSG C
57,778		100.00% Pervious Area

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

Subcatchment 53P: PDA-53 (pervious)

Hydrograph



Summary for Subcatchment 54I: PDA-54 (impervious)

Runoff = 12.20 cfs @ 12.17 hrs, Volume= 1.081 af, Depth= 8.35"
 Routed to Pond B-54 : Basin #54

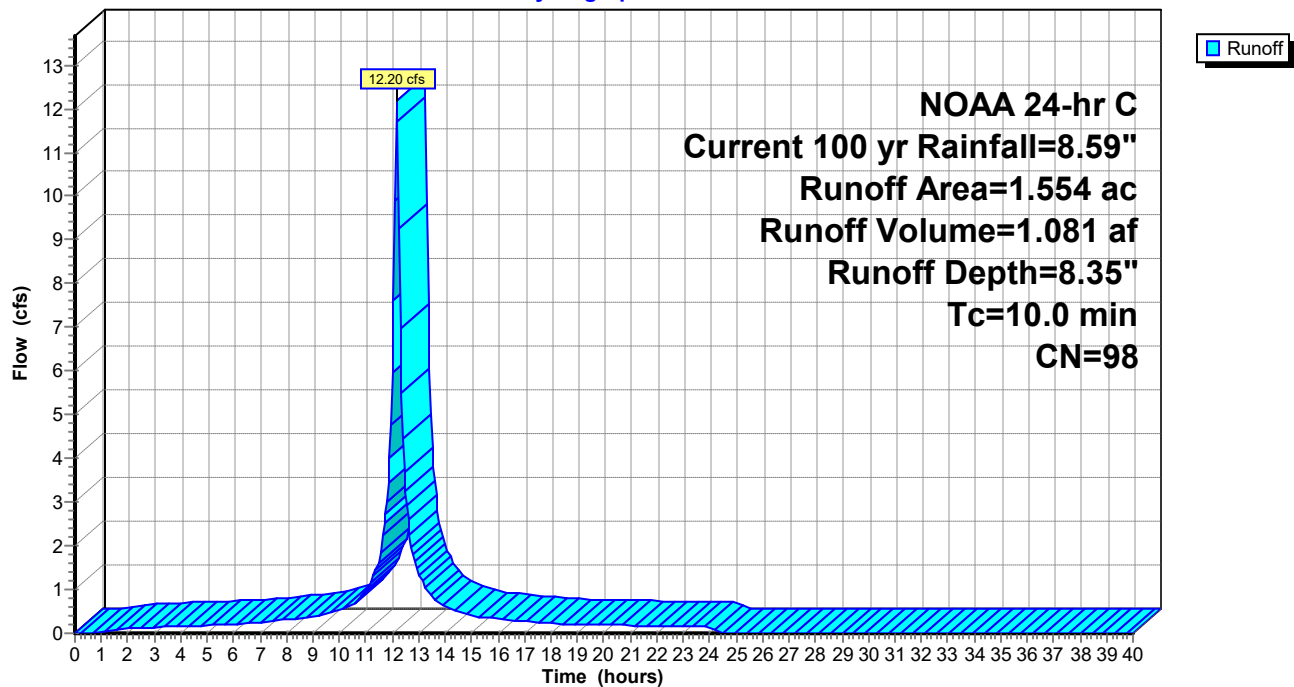
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (ac)	CN	Description
* 0.983	98	Pavement, HSG C
* 0.361	98	Roof, HSG C
* 0.210	98	Concrete, HSG C
1.554	98	Weighted Average
1.554		100.00% Impervious Area

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

Subcatchment 54I: PDA-54 (impervious)

Hydrograph



Summary for Subcatchment 54P: PDA-54 (pervious)

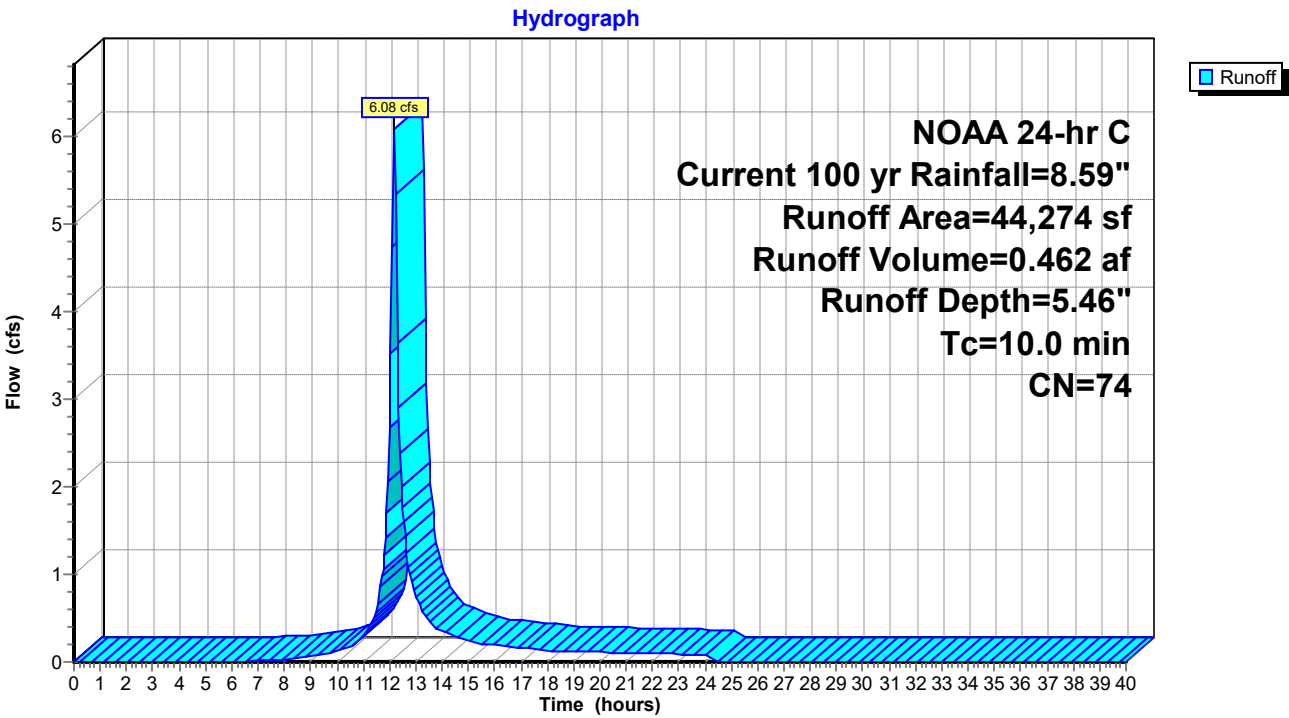
Runoff = 6.08 cfs @ 12.17 hrs, Volume= 0.462 af, Depth= 5.46"
Routed to Pond B-54 : Basin #54

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (sf)	CN	Description
44,274	74	>75% Grass cover, Good, HSG C
44,274		100.00% Pervious Area

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

Subcatchment 54P: PDA-54 (pervious)



Summary for Subcatchment 55I: PDA-55 (impervious)

Runoff = 7.91 cfs @ 12.17 hrs, Volume= 0.701 af, Depth= 8.35"
 Routed to Pond B-55 : Basin #55

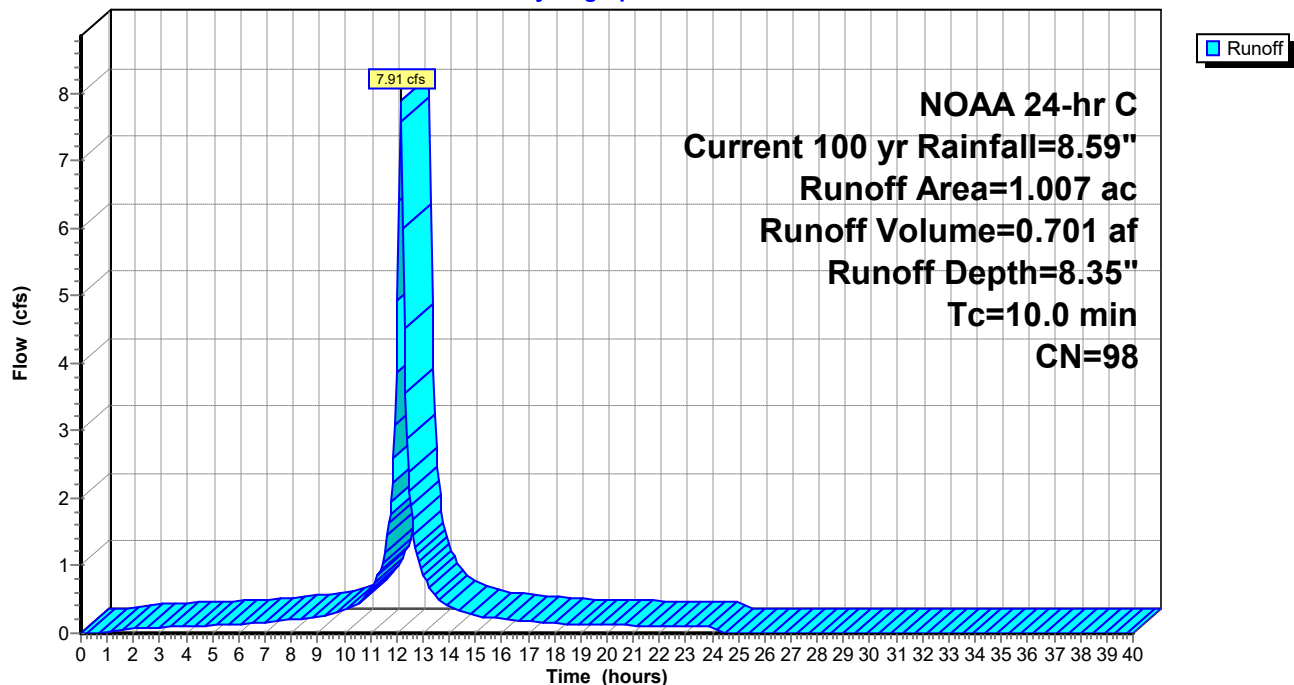
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (ac)	CN	Description
* 0.771	98	Pavement, HSG C
* 0.169	98	Roof, HSG C
* 0.067	98	Concrete, HSG C
1.007	98	Weighted Average
1.007		100.00% Impervious Area

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

Subcatchment 55I: PDA-55 (impervious)

Hydrograph



Summary for Subcatchment 55P: PDA-55 (pervious)

Runoff = 6.09 cfs @ 12.17 hrs, Volume= 0.463 af, Depth= 5.46"
 Routed to Pond B-55 : Basin #55

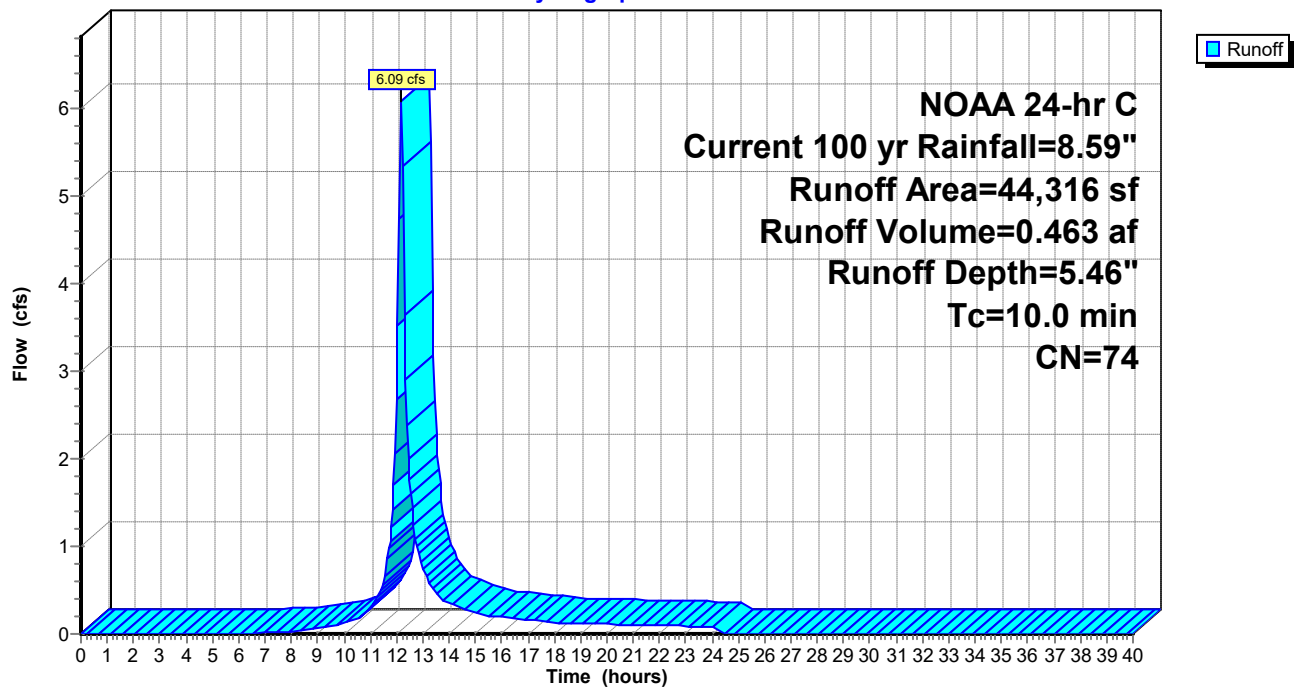
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (sf)	CN	Description
44,316	74	>75% Grass cover, Good, HSG C
44,316		100.00% Pervious Area

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

Subcatchment 55P: PDA-55 (pervious)

Hydrograph



Summary for Subcatchment 56I: PDA-56 (impervious)

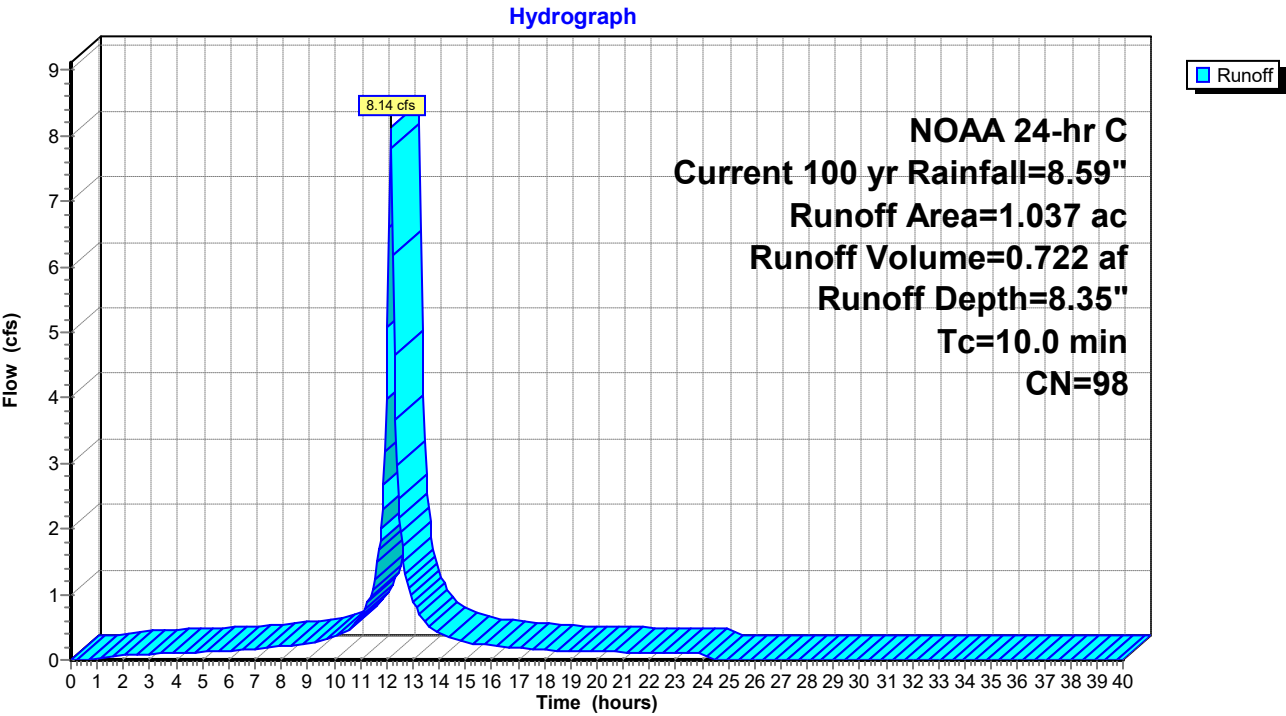
Runoff = 8.14 cfs @ 12.17 hrs, Volume= 0.722 af, Depth= 8.35"
Routed to Pond B-56 : Basin #56

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (ac)	CN	Description
* 1.037	98	Roof, HSG C
1.037		100.00% Impervious Area

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

Subcatchment 56I: PDA-56 (impervious)



Summary for Subcatchment 56P: PDA-56 (pervious)

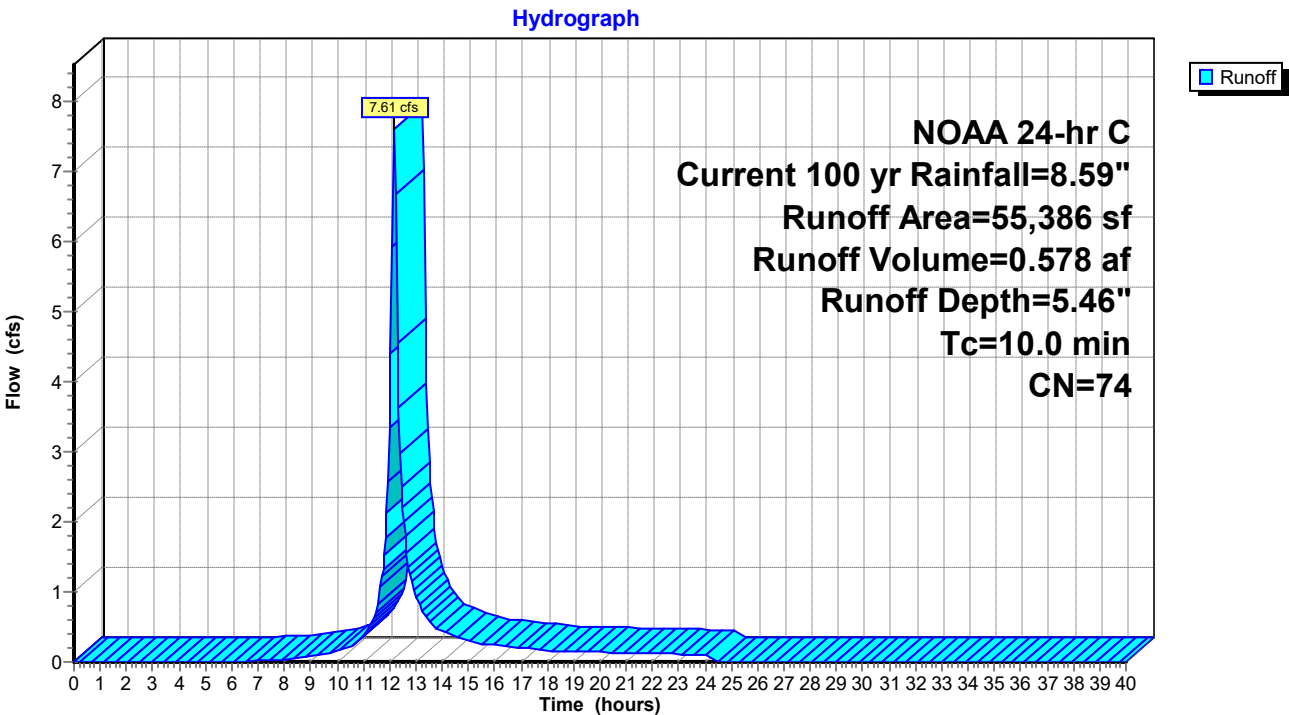
Runoff = 7.61 cfs @ 12.17 hrs, Volume= 0.578 af, Depth= 5.46"
Routed to Pond B-56 : Basin #56

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (sf)	CN	Description
55,386	74	>75% Grass cover, Good, HSG C
55,386		100.00% Pervious Area

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

Subcatchment 56P: PDA-56 (pervious)



Summary for Subcatchment 57I: PDA-57 (impervious)

Runoff = 5.23 cfs @ 12.17 hrs, Volume= 0.463 af, Depth= 8.35"
 Routed to Pond B-57 : Basin #57

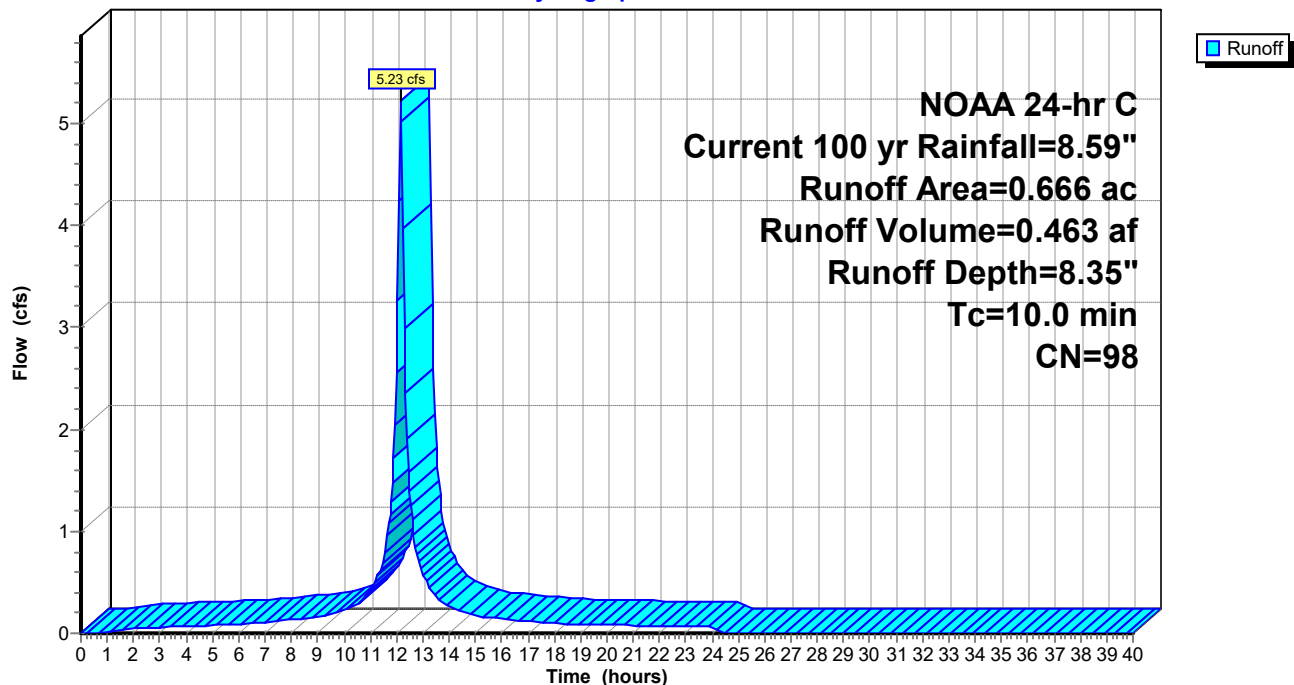
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (ac)	CN	Description
* 0.311	98	Pavement, HSG C
* 0.313	98	Roof, HSG C
* 0.042	98	Concrete, HSG C
0.666	98	Weighted Average
0.666		100.00% Impervious Area

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

Subcatchment 57I: PDA-57 (impervious)

Hydrograph



Summary for Subcatchment 57P: PDA-57 (pervious)

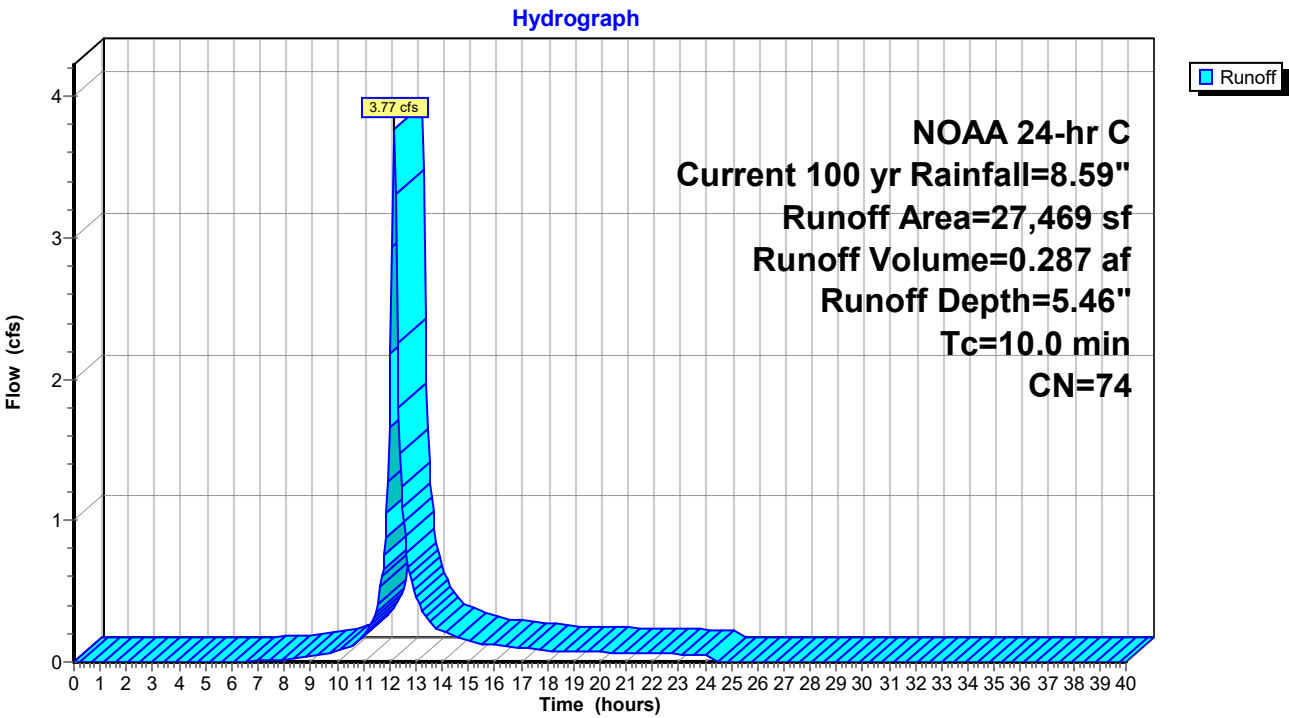
Runoff = 3.77 cfs @ 12.17 hrs, Volume= 0.287 af, Depth= 5.46"
Routed to Pond B-57 : Basin #57

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (sf)	CN	Description
27,469	74	>75% Grass cover, Good, HSG C
27,469		100.00% Pervious Area

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

Subcatchment 57P: PDA-57 (pervious)



Summary for Subcatchment 58I: PDA-58 (impervious)

Runoff = 6.01 cfs @ 12.17 hrs, Volume= 0.532 af, Depth= 8.35"
 Routed to Pond B-58 : Basin #58

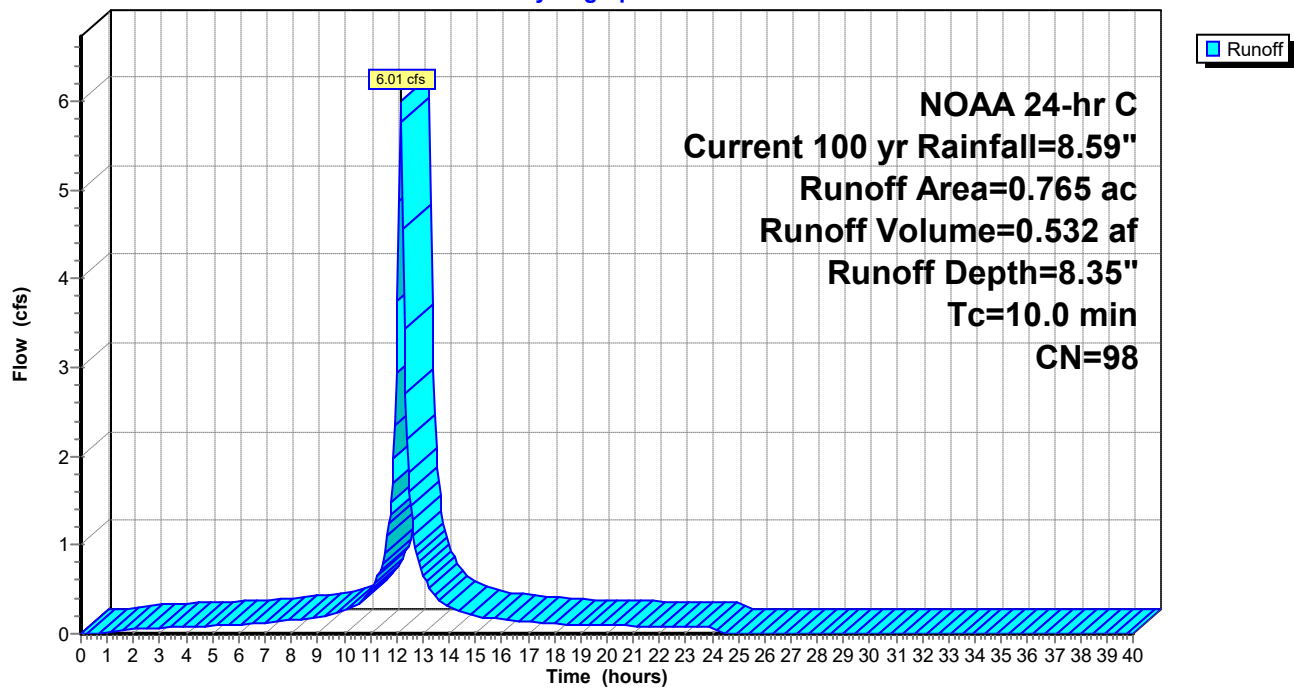
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (ac)	CN	Description
* 0.763	98	Roof, HSG C
* 0.002	98	Concrete, HSG C
0.765	98	Weighted Average
0.765		100.00% Impervious Area

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

Subcatchment 58I: PDA-58 (impervious)

Hydrograph



Summary for Subcatchment 58P: PDA-58 (pervious)

Runoff = 9.61 cfs @ 12.17 hrs, Volume= 0.730 af, Depth= 5.46"
 Routed to Pond B-58 : Basin #58

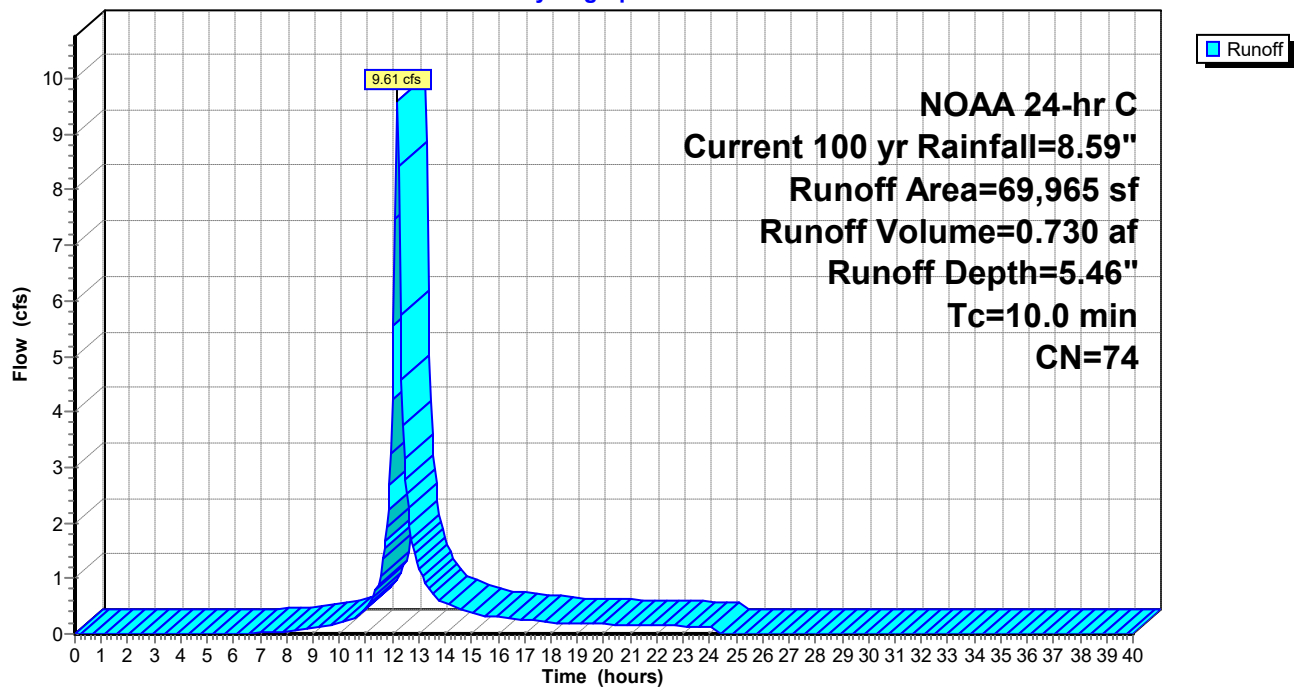
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (sf)	CN	Description
69,965	74	>75% Grass cover, Good, HSG C
69,965		100.00% Pervious Area

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

Subcatchment 58P: PDA-58 (pervious)

Hydrograph



Summary for Subcatchment UPDA-5: PDA-5 (undetained)

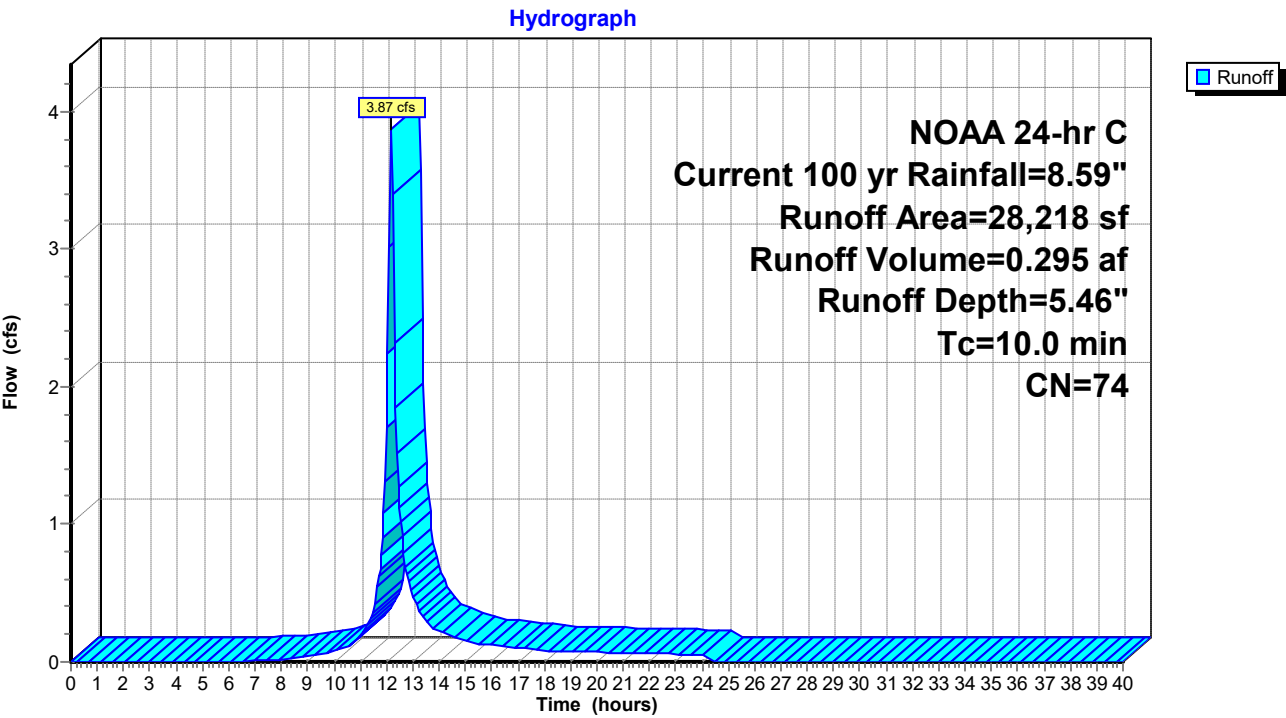
Runoff = 3.87 cfs @ 12.17 hrs, Volume= 0.295 af, Depth= 5.46"
Routed to Link PDA-5 : Proposed Drainage Area #5

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (sf)	CN	Description
28,218	74	>75% Grass cover, Good, HSG C
28,218		100.00% Pervious Area

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

Subcatchment UPDA-5: PDA-5 (undetained)



Summary for Subcatchment UPDA-6: PDA-6 (undetained)

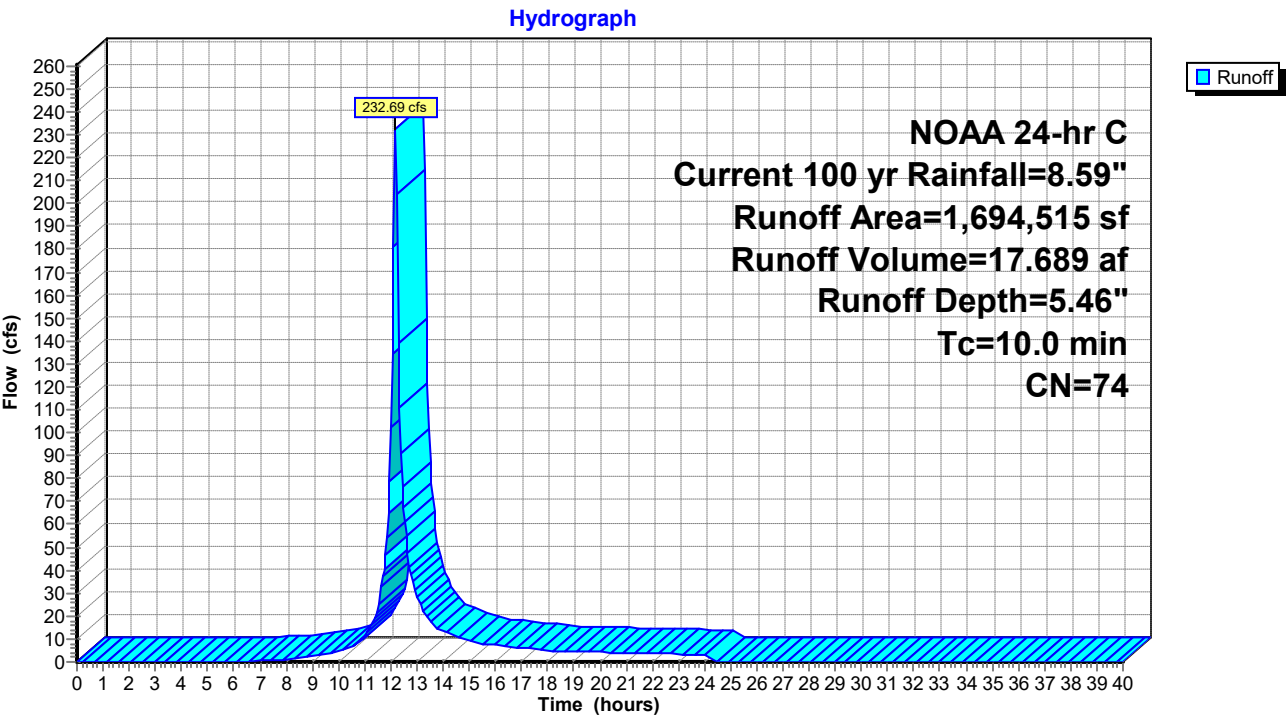
Runoff = 232.69 cfs @ 12.17 hrs, Volume= 17.689 af, Depth= 5.46"
Routed to Link PDA-6 : Proposed Drainage Area #6

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (sf)	CN	Description
1,694,515	74	>75% Grass cover, Good, HSG C
1,694,515		100.00% Pervious Area

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

Subcatchment UPDA-6: PDA-6 (undetained)



Summary for Pond B-48: Basin #48

Inflow Area = 2.415 ac, 36.95% Impervious, Inflow Depth = 6.53" for Current 100 yr event
 Inflow = 16.11 cfs @ 12.17 hrs, Volume= 1.313 af
 Outflow = 5.28 cfs @ 12.45 hrs, Volume= 1.015 af, Atten= 67%, Lag= 16.6 min
 Primary = 5.28 cfs @ 12.45 hrs, Volume= 1.015 af
 Routed to Link PDA-5 : Proposed Drainage Area #5

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 189.29' @ 12.45 hrs Surf.Area= 12,978 sf Storage= 29,102 cf

Plug-Flow detention time= 413.1 min calculated for 1.015 af (77% of inflow)
 Center-of-Mass det. time= 326.2 min (1,110.7 - 784.4)

Volume	Invert	Avail.Storage	Storage Description
#1	186.85'	81,173 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
186.85	0	0	0
187.00	11,678	876	876
188.00	12,246	11,962	12,838
189.00	12,814	12,530	25,368
190.00	13,382	13,098	38,466
191.00	13,951	13,667	52,132
192.00	14,520	14,236	66,368
193.00	15,090	14,805	81,173

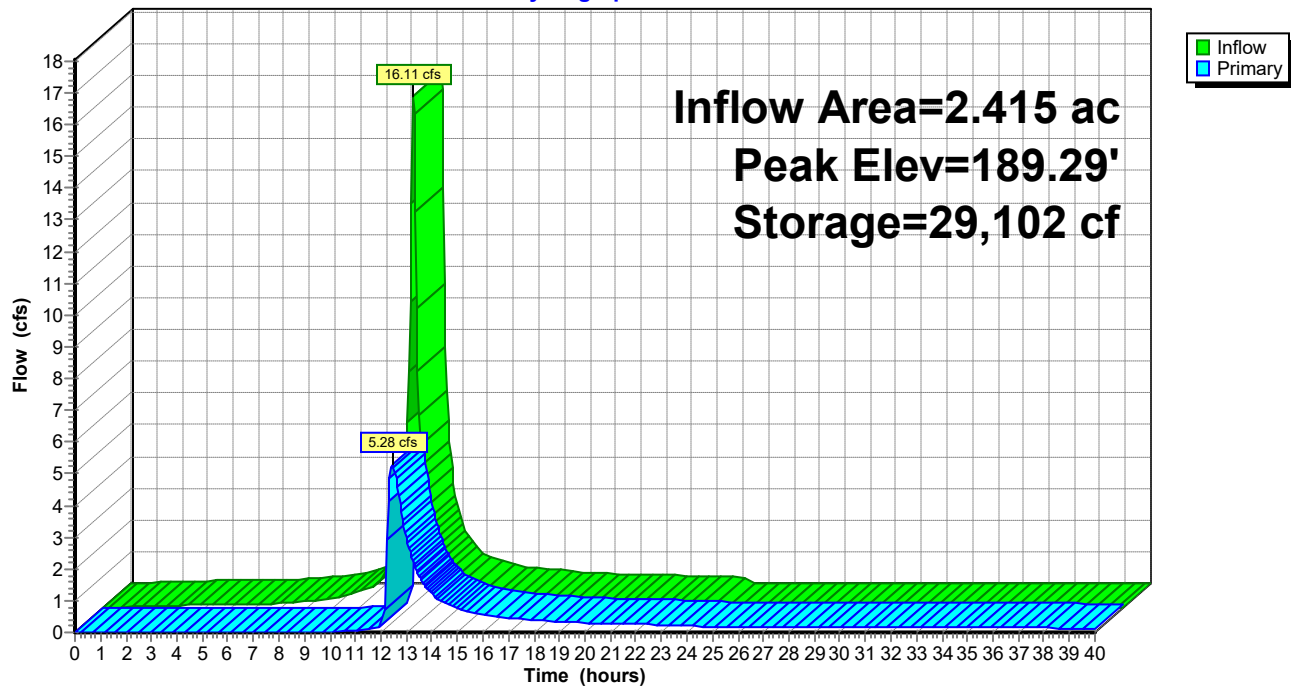
Device	Routing	Invert	Outlet Devices
#1	Primary	186.85'	18.0" Round Culvert L= 121.0' Ke= 0.500 Inlet / Outlet Invert= 186.85' / 186.25' S= 0.0050 '/ Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	187.26'	2.5" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	188.75'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	189.46'	50.0' long + 3.0 ' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=5.27 cfs @ 12.45 hrs HW=189.29' (Free Discharge)

- 1=Culvert (Passes 5.27 cfs of 9.13 cfs potential flow)
 2=Orifice/Grate (Orifice Controls 0.23 cfs @ 6.68 fps)
 3=Sharp-Crested Rectangular Weir (Weir Controls 5.04 cfs @ 2.40 fps)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-48: Basin #48

Hydrograph



Summary for Pond B-49: Basin #49

Inflow Area = 2.680 ac, 54.22% Impervious, Inflow Depth = 7.03" for Current 100 yr event
 Inflow = 18.74 cfs @ 12.17 hrs, Volume= 1.569 af
 Outflow = 11.95 cfs @ 12.29 hrs, Volume= 1.334 af, Atten= 36%, Lag= 7.1 min
 Primary = 11.95 cfs @ 12.29 hrs, Volume= 1.334 af
 Routed to Link PDA-5 : Proposed Drainage Area #5

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 186.21' @ 12.29 hrs Surf.Area= 10,251 sf Storage= 28,475 cf

Plug-Flow detention time= 318.3 min calculated for 1.334 af (85% of inflow)
 Center-of-Mass det. time= 249.6 min (1,021.1 - 771.5)

Volume	Invert	Avail.Storage	Storage Description
#1	182.60'	55,030 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
182.60	0	0	0
183.00	6,698	1,340	1,340
184.00	7,766	7,232	8,572
185.00	8,867	8,317	16,888
186.00	10,002	9,435	26,323
187.00	11,172	10,587	36,910
188.00	12,378	11,775	48,685
188.50	13,004	6,346	55,030

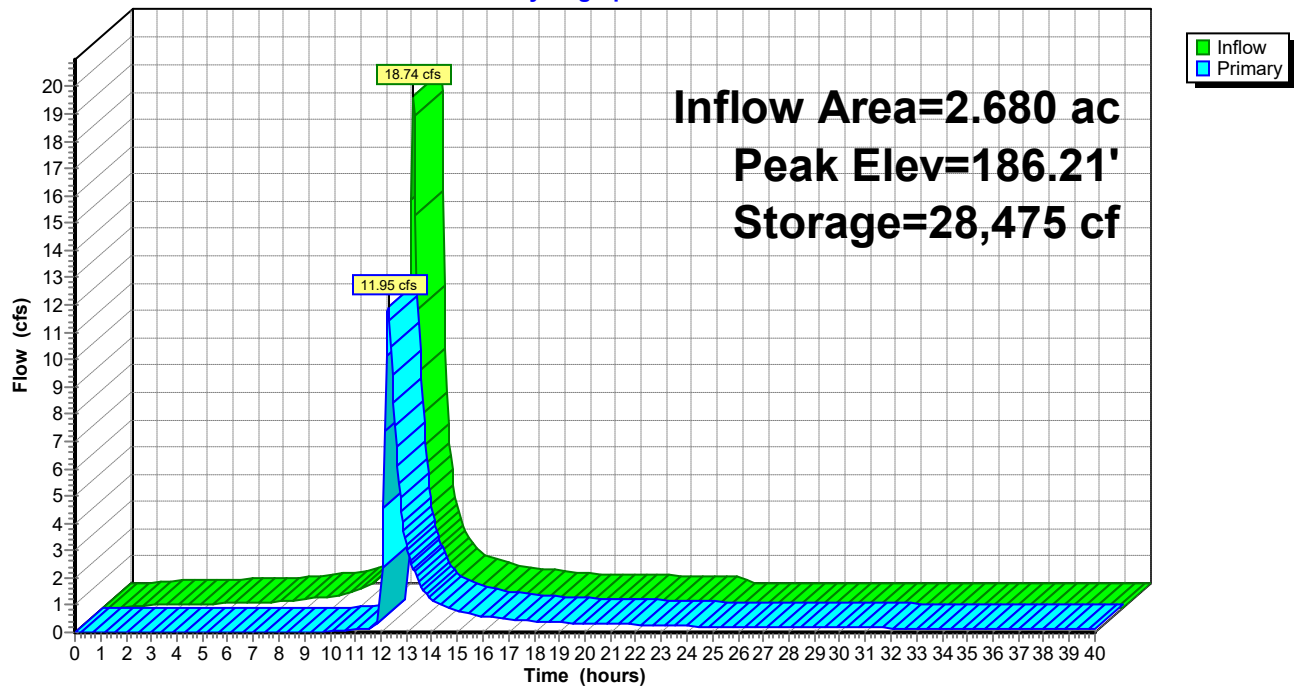
Device	Routing	Invert	Outlet Devices
#1	Primary	182.60'	18.0" Round Culvert L= 112.0' Ke= 0.500 Inlet / Outlet Invert= 182.60' / 182.00' S= 0.0054 '/ Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	183.64'	2.5" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	185.25'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	186.75'	50.0' long + 3.0 ' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=11.94 cfs @ 12.29 hrs HW=186.21' (Free Discharge)

- 1=Culvert (Passes 11.94 cfs of 12.39 cfs potential flow)
 2=Orifice/Grate (Orifice Controls 0.26 cfs @ 7.56 fps)
 3=Sharp-Crested Rectangular Weir (Weir Controls 11.68 cfs @ 3.20 fps)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-49: Basin #49

Hydrograph



Summary for Pond B-50: Basin #50

Inflow Area = 2.669 ac, 46.91% Impervious, Inflow Depth = 6.81" for Current 100 yr event
 Inflow = 18.30 cfs @ 12.17 hrs, Volume= 1.516 af
 Outflow = 10.59 cfs @ 12.31 hrs, Volume= 1.284 af, Atten= 42%, Lag= 8.4 min
 Primary = 10.59 cfs @ 12.31 hrs, Volume= 1.284 af
 Routed to Link PDA-5 : Proposed Drainage Area #5

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 186.41' @ 12.31 hrs Surf.Area= 12,015 sf Storage= 28,144 cf

Plug-Flow detention time= 308.8 min calculated for 1.283 af (85% of inflow)
 Center-of-Mass det. time= 240.7 min (1,017.5 - 776.7)

Volume	Invert	Avail.Storage	Storage Description
#1	183.30'	56,291 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
183.30	0	0	0
184.00	8,805	3,082	3,082
185.00	10,108	9,457	12,538
186.00	11,448	10,778	23,316
187.00	12,826	12,137	35,453
188.00	14,244	13,535	48,988
188.50	14,966	7,303	56,291

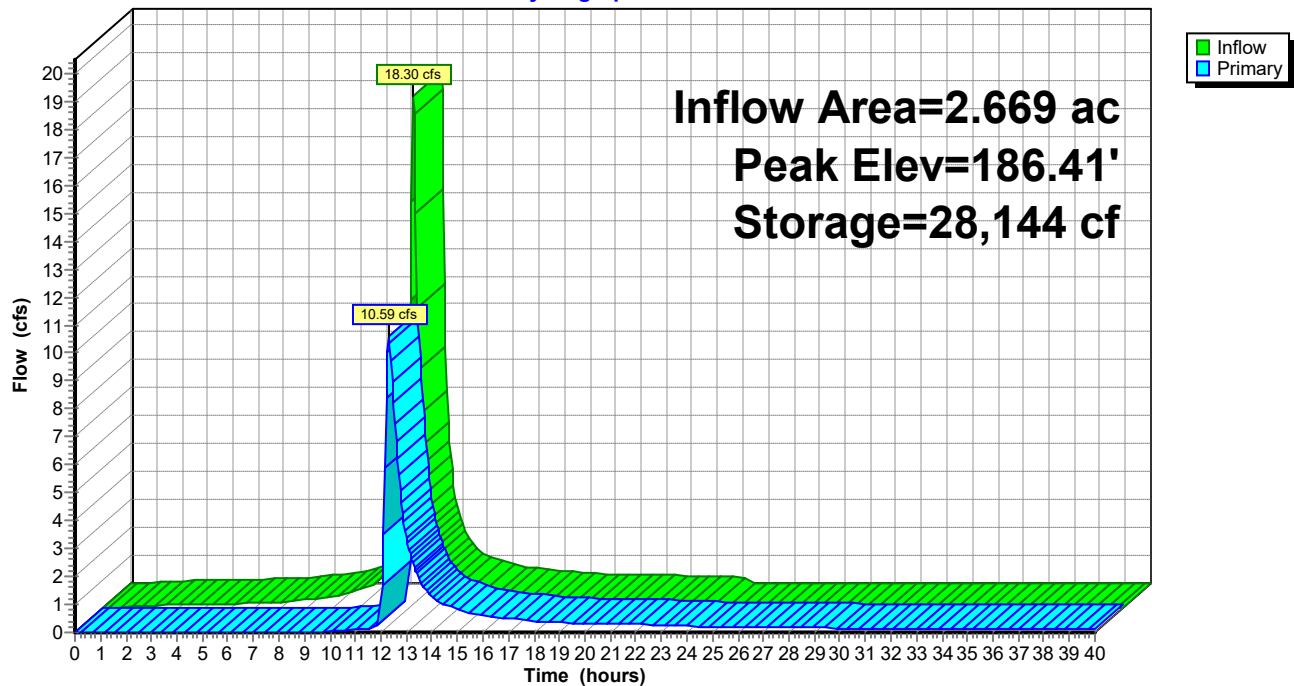
Device	Routing	Invert	Outlet Devices
#1	Primary	183.17'	18.0" Round Culvert L= 23.0' Ke= 0.500 Inlet / Outlet Invert= 183.17' / 183.05' S= 0.0052 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	184.23'	2.5" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	185.53'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	186.82'	50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=10.52 cfs @ 12.31 hrs HW=186.41' (Free Discharge)

1=Culvert (Passes 10.52 cfs of 13.42 cfs potential flow)
 2=Orifice/Grate (Orifice Controls 0.24 cfs @ 6.93 fps)
 3=Sharp-Crested Rectangular Weir (Weir Controls 10.29 cfs @ 3.06 fps)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-50: Basin #50

Hydrograph



Summary for Pond B-51: Basin #51

Inflow Area = 1.618 ac, 38.76% Impervious, Inflow Depth = 6.58" for Current 100 yr event
 Inflow = 10.84 cfs @ 12.17 hrs, Volume= 0.887 af
 Outflow = 8.66 cfs @ 12.24 hrs, Volume= 0.826 af, Atten= 20%, Lag= 4.4 min
 Primary = 8.66 cfs @ 12.24 hrs, Volume= 0.826 af
 Routed to Link PDA-6 : Proposed Drainage Area #6

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 189.23' @ 12.24 hrs Surf.Area= 4,139 sf Storage= 6,728 cf

Plug-Flow detention time= 83.5 min calculated for 0.825 af (93% of inflow)
 Center-of-Mass det. time= 45.6 min (828.6 - 783.0)

Volume	Invert	Avail.Storage	Storage Description
#1	186.86'	16,158 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
186.86	0	0	0
187.00	1,882	132	132
188.00	2,798	2,340	2,472
189.00	3,853	3,326	5,797
190.00	5,083	4,468	10,265
191.00	6,703	5,893	16,158

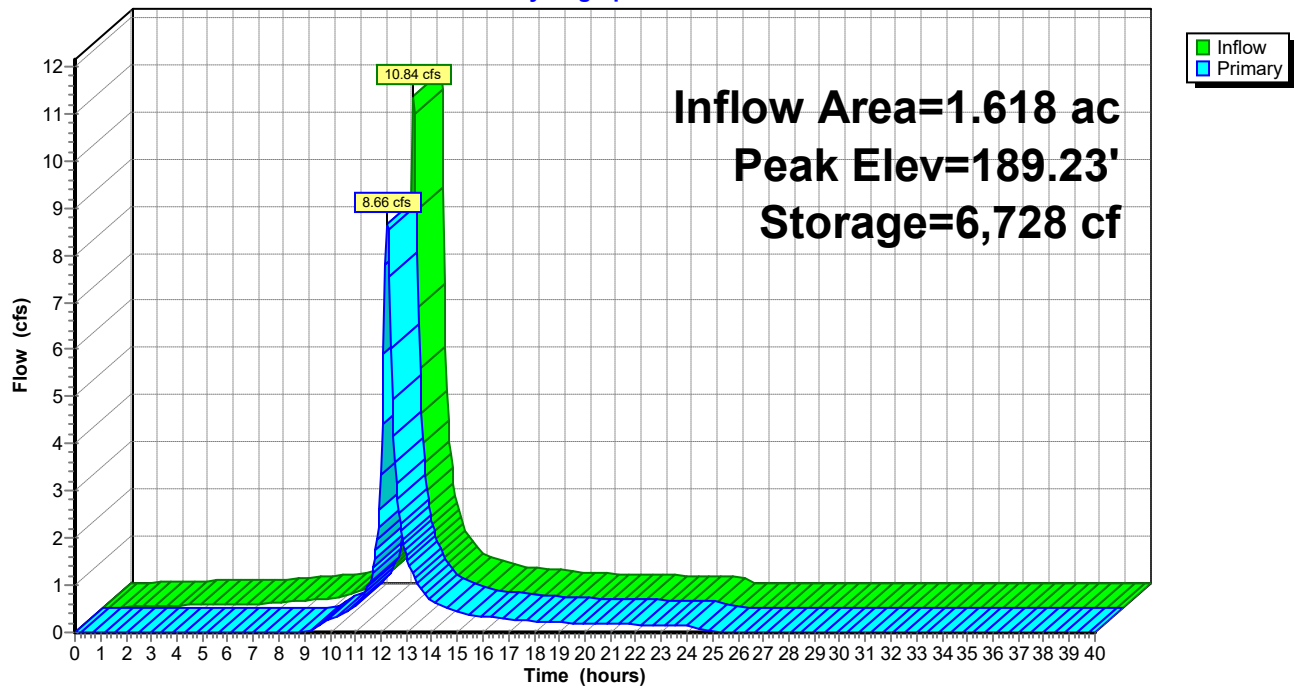
Device	Routing	Invert	Outlet Devices
#1	Primary	186.86'	18.0" Round Culvert L= 172.0' Ke= 0.500 Inlet / Outlet Invert= 186.86' / 186.00' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	188.06'	20.0" W x 8.0" H Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	188.68'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	189.71'	50.0' long + 3.0' /' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=8.65 cfs @ 12.24 hrs HW=189.23' (Free Discharge)

1=Culvert (Barrel Controls 8.65 cfs @ 4.90 fps)
 2=Orifice/Grate (Passes < 4.86 cfs potential flow)
 3=Sharp-Crested Rectangular Weir (Passes < 5.17 cfs potential flow)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-51: Basin #51

Hydrograph



Summary for Pond B-52: Basin #52

Inflow Area = 2.537 ac, 41.39% Impervious, Inflow Depth = 6.65" for Current 100 yr event
 Inflow = 17.13 cfs @ 12.17 hrs, Volume= 1.407 af
 Outflow = 12.98 cfs @ 12.26 hrs, Volume= 1.306 af, Atten= 24%, Lag= 5.0 min
 Primary = 12.98 cfs @ 12.26 hrs, Volume= 1.306 af
 Routed to Link PDA-6 : Proposed Drainage Area #6

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 196.25' @ 12.26 hrs Surf.Area= 5,065 sf Storage= 14,010 cf

Plug-Flow detention time= 93.5 min calculated for 1.305 af (93% of inflow)
 Center-of-Mass det. time= 54.1 min (835.1 - 780.9)

Volume	Invert	Avail.Storage	Storage Description
#1	192.30'	23,897 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
192.30	0	0	0
193.00	2,920	1,022	1,022
194.00	3,579	3,250	4,271
195.00	4,239	3,909	8,180
196.00	4,898	4,569	12,749
197.00	5,558	5,228	17,977
198.00	6,282	5,920	23,897

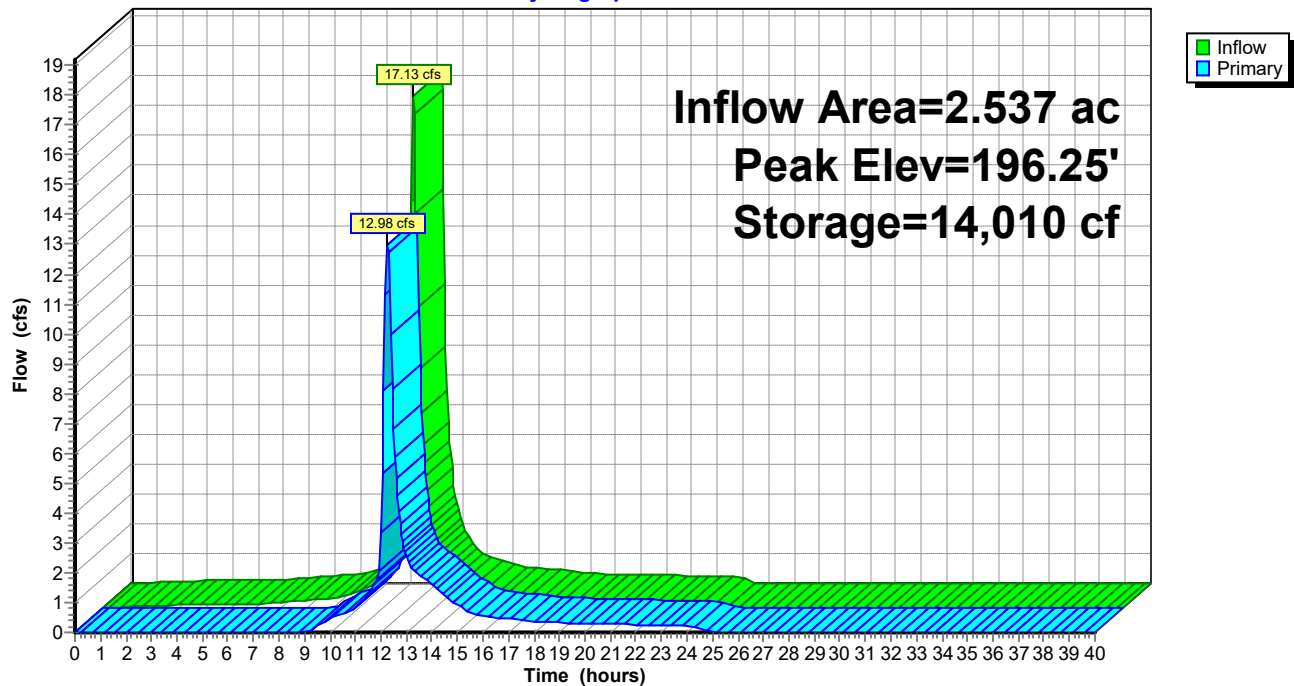
Device	Routing	Invert	Outlet Devices
#1	Primary	192.00'	18.0" Round Culvert L= 163.0' Ke= 0.500 Inlet / Outlet Invert= 192.00' / 191.00' S= 0.0061 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	194.03'	24.0" W x 2.5" H Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	195.24'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	196.99'	50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=12.97 cfs @ 12.26 hrs HW=196.25' (Free Discharge)

1=Culvert (Barrel Controls 12.97 cfs @ 7.34 fps)
 2=Orifice/Grate (Passes < 2.92 cfs potential flow)
 3=Sharp-Crested Rectangular Weir (Passes < 12.57 cfs potential flow)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-52: Basin #52

Hydrograph



Summary for Pond B-53: Basin #53

Inflow Area = 2.540 ac, 47.79% Impervious, Inflow Depth = 6.84" for Current 100 yr event
 Inflow = 17.46 cfs @ 12.17 hrs, Volume= 1.448 af
 Outflow = 13.71 cfs @ 12.25 hrs, Volume= 1.322 af, Atten= 21%, Lag= 4.9 min
 Primary = 13.71 cfs @ 12.25 hrs, Volume= 1.322 af
 Routed to Link PDA-6 : Proposed Drainage Area #6

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 203.99' @ 12.25 hrs Surf.Area= 6,669 sf Storage= 22,180 cf

Plug-Flow detention time= 278.6 min calculated for 1.322 af (91% of inflow)
 Center-of-Mass det. time= 231.8 min (1,007.9 - 776.1)

Volume	Invert	Avail.Storage	Storage Description
#1	199.75'	33,011 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
199.75	0	0	0
200.00	4,035	504	504
201.00	4,695	4,365	4,869
202.00	5,685	5,190	10,059
203.00	6,015	5,850	15,909
204.00	6,676	6,346	22,255
205.00	7,336	7,006	29,261
205.50	7,666	3,751	33,011

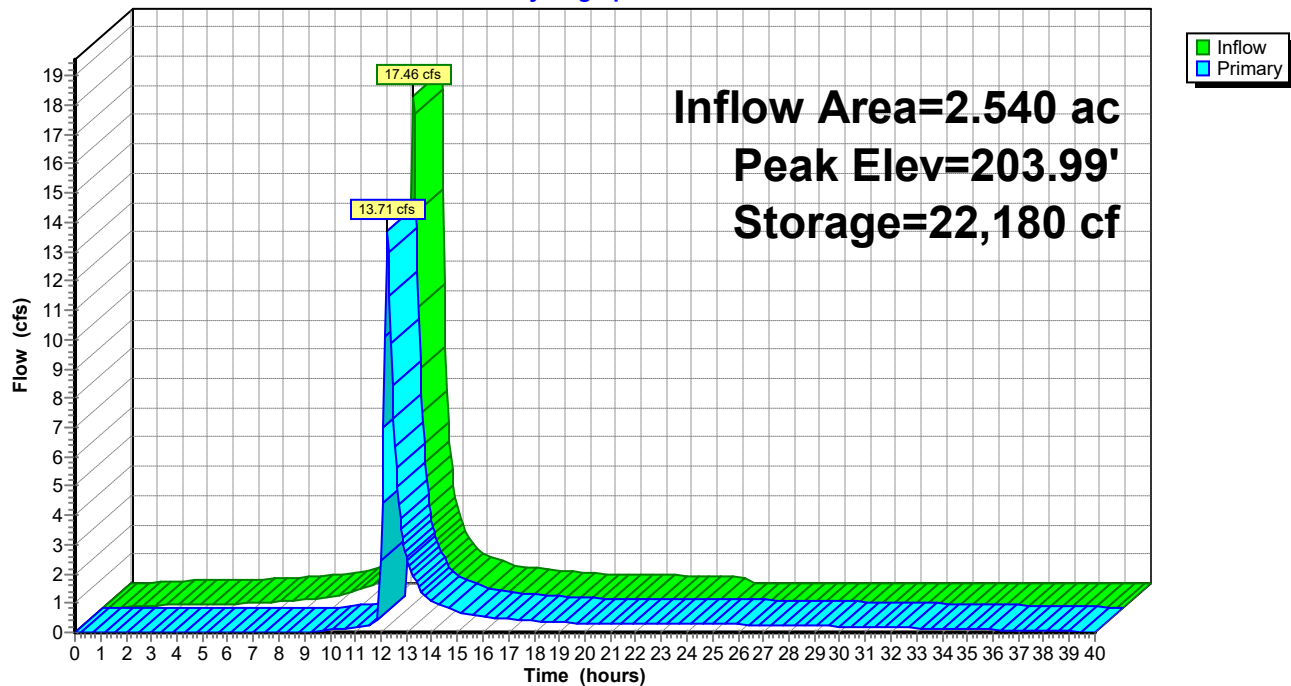
Device	Routing	Invert	Outlet Devices
#1	Primary	198.75'	18.0" Round Culvert L= 122.0' Ke= 0.500 Inlet / Outlet Invert= 198.75' / 198.00' S= 0.0061 ' / Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	201.02'	3.0" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	202.94'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	204.43'	50.0' long + 3.0 ' / SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=13.66 cfs @ 12.25 hrs HW=203.99' (Free Discharge)

- 1=Culvert (Passes 13.66 cfs of 15.55 cfs potential flow)
 2=Orifice/Grate (Orifice Controls 0.40 cfs @ 8.12 fps)
 3=Sharp-Crested Rectangular Weir (Weir Controls 13.27 cfs @ 3.34 fps)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-53: Basin #53

Hydrograph



Summary for Pond B-54: Basin #54

Inflow Area = 2.570 ac, 60.46% Impervious, Inflow Depth = 7.21" for Current 100 yr event
 Inflow = 18.28 cfs @ 12.17 hrs, Volume= 1.543 af
 Outflow = 17.94 cfs @ 12.21 hrs, Volume= 1.345 af, Atten= 2%, Lag= 2.5 min
 Primary = 17.94 cfs @ 12.21 hrs, Volume= 1.345 af
 Routed to Link PDA-6 : Proposed Drainage Area #6

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 204.62' @ 12.21 hrs Surf.Area= 6,829 sf Storage= 24,701 cf

Plug-Flow detention time= 321.3 min calculated for 1.344 af (87% of inflow)
 Center-of-Mass det. time= 260.4 min (1,027.7 - 767.2)

Volume	Invert	Avail.Storage	Storage Description
#1	199.89'	30,982 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
199.89	0	0	0
200.00	3,780	208	208
201.00	4,440	4,110	4,318
202.00	5,100	4,770	9,088
203.00	5,760	5,430	14,518
204.00	6,421	6,091	20,608
205.00	7,081	6,751	27,359
205.50	7,411	3,623	30,982

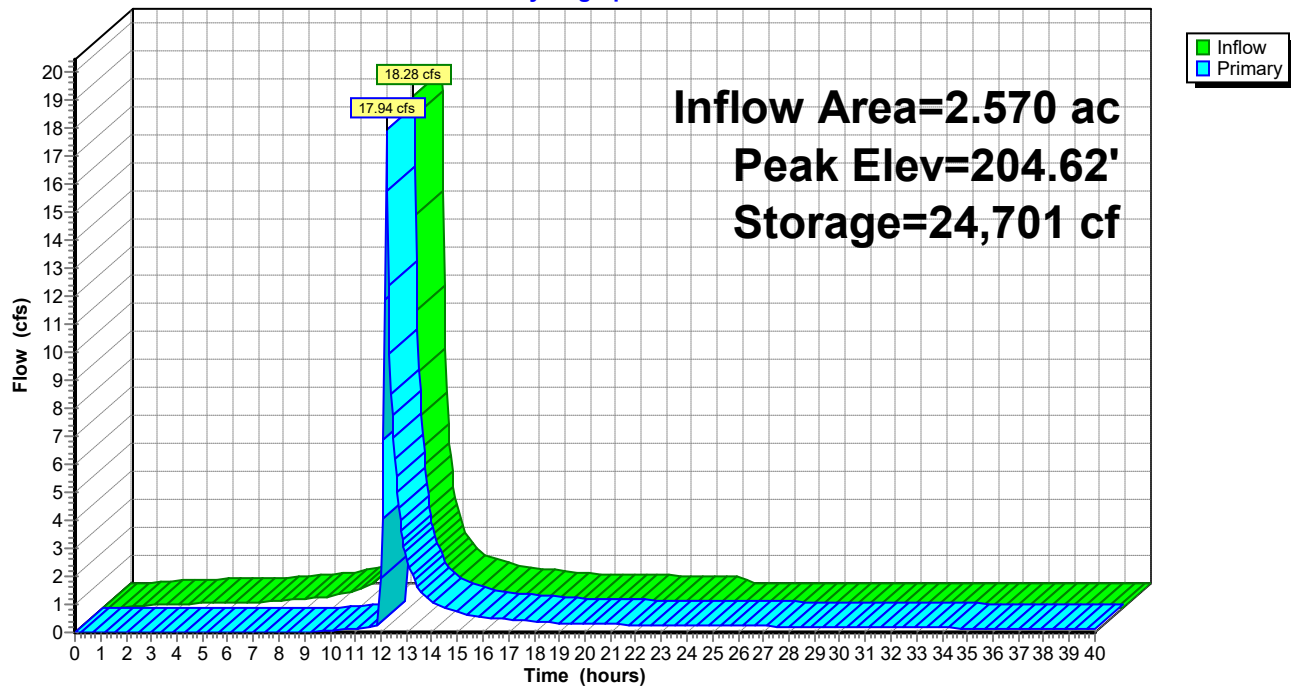
Device	Routing	Invert	Outlet Devices
#1	Primary	198.89'	18.0" Round Culvert L= 178.0' Ke= 0.500 Inlet / Outlet Invert= 198.89' / 198.00' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	201.40'	2.5" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	203.70'	4.0' long 1 2 End Contraction(s)
#4	Primary	204.47'	50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=17.13 cfs @ 12.21 hrs HW=204.61' (Free Discharge)

- 1=Culvert (Passes 11.09 cfs of 14.70 cfs potential flow)
- 2=Orifice/Grate (Orifice Controls 0.29 cfs @ 8.48 fps)
- 3=1 (Weir Controls 10.80 cfs @ 3.12 fps)
- 4=Broad-Crested Rectangular Weir (Weir Controls 6.04 cfs @ 0.87 fps)

Pond B-54: Basin #54

Hydrograph



Summary for Pond B-55: Basin #55

Inflow Area = 2.024 ac, 49.74% Impervious, Inflow Depth = 6.90" for Current 100 yr event
 Inflow = 13.99 cfs @ 12.17 hrs, Volume= 1.163 af
 Outflow = 10.53 cfs @ 12.26 hrs, Volume= 1.070 af, Atten= 25%, Lag= 5.2 min
 Primary = 10.53 cfs @ 12.26 hrs, Volume= 1.070 af
 Routed to Link PDA-6 : Proposed Drainage Area #6

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 194.45' @ 12.26 hrs Surf.Area= 5,497 sf Storage= 12,879 cf

Plug-Flow detention time= 108.7 min calculated for 1.070 af (92% of inflow)
 Center-of-Mass det. time= 64.4 min (839.0 - 774.7)

Volume	Invert	Avail.Storage	Storage Description
#1	191.56'	22,010 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
191.56	0	0	0
192.00	4,250	935	935
193.00	4,746	4,498	5,433
194.00	5,257	5,002	10,434
195.00	5,784	5,521	15,955
196.00	6,327	6,056	22,010

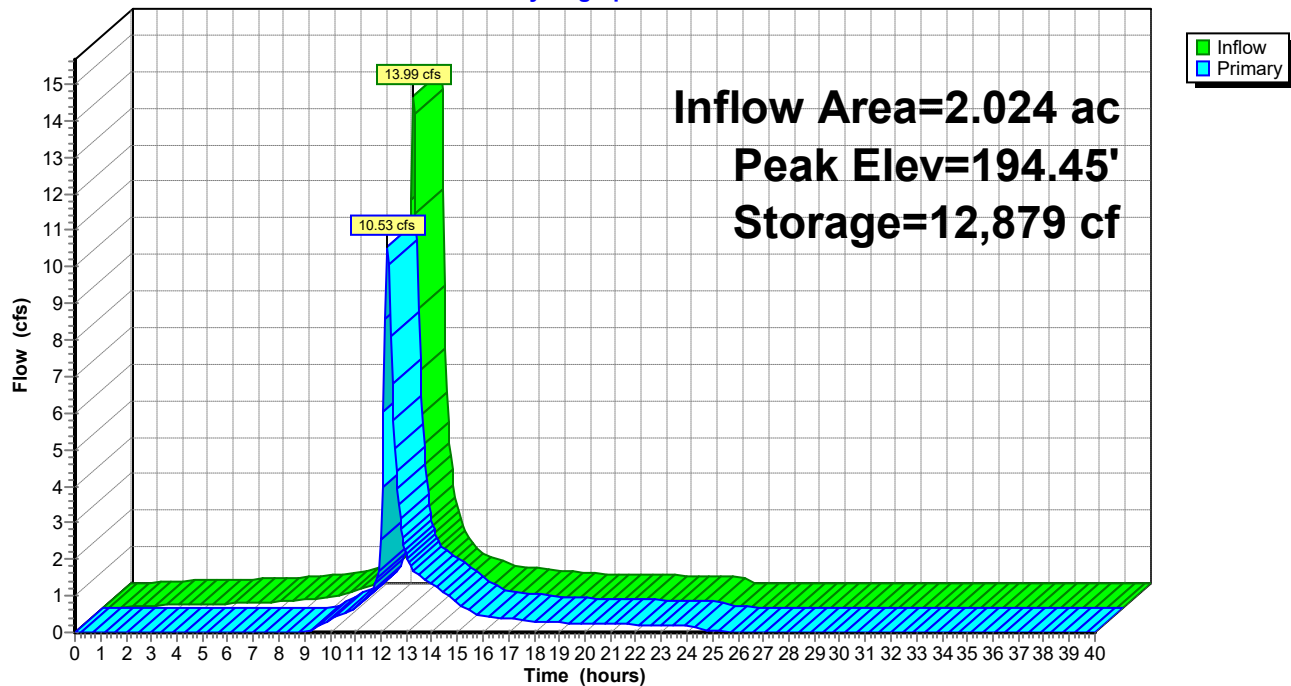
Device	Routing	Invert	Outlet Devices
#1	Primary	191.56'	18.0" Round Culvert L= 112.0' Ke= 0.500 Inlet / Outlet Invert= 191.56' / 191.00' S= 0.0050 ' / Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	192.71'	22.0" W x 2.5" H Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	193.63'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	194.99'	50.0' long + 3.0 ' / SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=10.51 cfs @ 12.26 hrs HW=194.45' (Free Discharge)

1=Culvert (Barrel Controls 10.51 cfs @ 5.95 fps)
 2=Orifice/Grate (Passes < 2.35 cfs potential flow)
 3=Sharp-Crested Rectangular Weir (Passes < 9.30 cfs potential flow)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-55: Basin #55

Hydrograph



Summary for Pond B-56: Basin #56

Inflow Area = 2.308 ac, 44.92% Impervious, Inflow Depth = 6.76" for Current 100 yr event
 Inflow = 15.74 cfs @ 12.17 hrs, Volume= 1.300 af
 Outflow = 12.35 cfs @ 12.25 hrs, Volume= 1.201 af, Atten= 22%, Lag= 4.9 min
 Primary = 12.35 cfs @ 12.25 hrs, Volume= 1.201 af
 Routed to Link PDA-6 : Proposed Drainage Area #6

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 194.48' @ 12.25 hrs Surf.Area= 6,219 sf Storage= 15,015 cf

Plug-Flow detention time= 111.9 min calculated for 1.201 af (92% of inflow)
 Center-of-Mass det. time= 69.9 min (848.1 - 778.2)

Volume	Invert	Avail.Storage	Storage Description
#1	191.57'	25,032 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
191.57	0	0	0
192.00	5,021	1,080	1,080
193.00	5,490	5,256	6,335
194.00	5,976	5,733	12,068
195.00	6,478	6,227	18,295
196.00	6,995	6,737	25,032

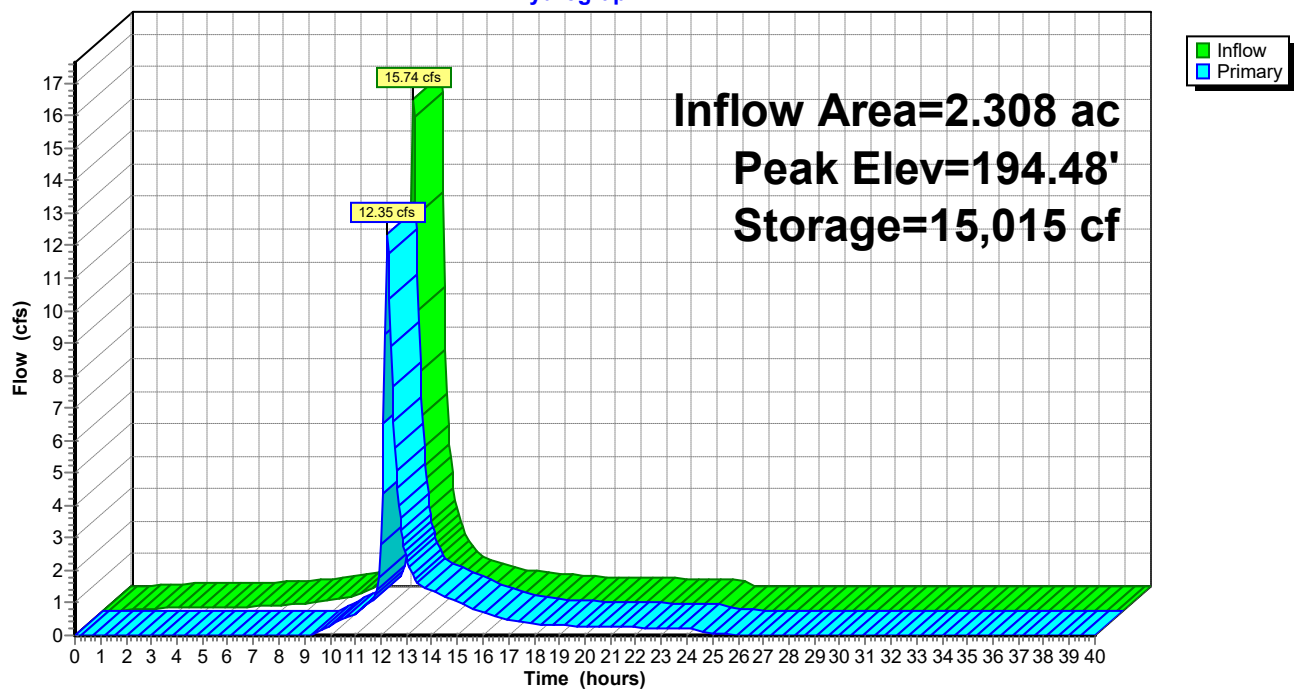
Device	Routing	Invert	Outlet Devices
#1	Primary	191.57'	18.0" Round Culvert L= 29.0' Ke= 0.500 Inlet / Outlet Invert= 191.57' / 191.42' S= 0.0052 ' / Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	192.62'	19.0" W x 2.5" H Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	193.60'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	194.99'	50.0' long + 3.0 ' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=12.43 cfs @ 12.25 hrs HW=194.48' (Free Discharge)

1=Culvert (Barrel Controls 12.43 cfs @ 7.04 fps)
 2=Orifice/Grate (Passes < 2.10 cfs potential flow)
 3=Sharp-Crested Rectangular Weir (Passes < 10.34 cfs potential flow)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-56: Basin #56

Hydrograph



Summary for Pond B-57: Basin #57

Inflow Area = 1.297 ac, 51.37% Impervious, Inflow Depth = 6.94" for Current 100 yr event
 Inflow = 9.00 cfs @ 12.17 hrs, Volume= 0.750 af
 Outflow = 7.28 cfs @ 12.25 hrs, Volume= 0.687 af, Atten= 19%, Lag= 4.6 min
 Primary = 7.28 cfs @ 12.25 hrs, Volume= 0.687 af
 Routed to Link PDA-6 : Proposed Drainage Area #6

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 203.78' @ 12.25 hrs Surf.Area= 4,913 sf Storage= 9,277 cf

Plug-Flow detention time= 130.0 min calculated for 0.687 af (92% of inflow)
 Center-of-Mass det. time= 85.5 min (859.0 - 773.5)

Volume	Invert	Avail.Storage	Storage Description
#1	201.30'	15,700 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
201.30	0	0	0
202.00	3,969	1,389	1,389
203.00	4,488	4,229	5,618
204.00	5,034	4,761	10,379
205.00	5,608	5,321	15,700

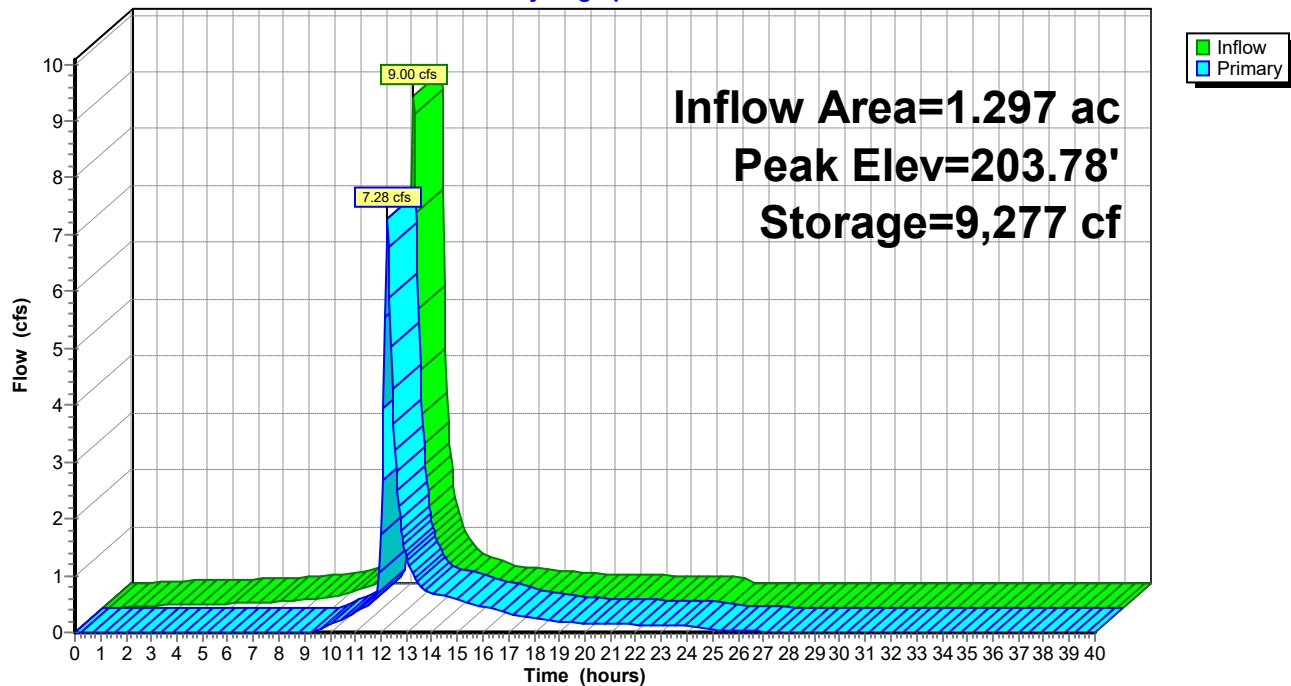
Device	Routing	Invert	Outlet Devices
#1	Primary	200.65'	18.0" Round Culvert L= 207.0' Ke= 0.500 Inlet / Outlet Invert= 200.65' / 198.00' S= 0.0128 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	202.33'	10.0" W x 2.5" H Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	203.15'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	203.98'	50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=7.25 cfs @ 12.25 hrs HW=203.78' (Free Discharge)

1=Culvert (Passes 7.25 cfs of 12.76 cfs potential flow)
 2=Orifice/Grate (Orifice Controls 0.97 cfs @ 5.58 fps)
 3=Sharp-Crested Rectangular Weir (Weir Controls 6.29 cfs @ 2.59 fps)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-57: Basin #57

Hydrograph



Summary for Pond B-58: Basin #58

Inflow Area = 2.371 ac, 32.26% Impervious, Inflow Depth = 6.39" for Current 100 yr event
 Inflow = 15.61 cfs @ 12.17 hrs, Volume= 1.263 af
 Outflow = 11.06 cfs @ 12.27 hrs, Volume= 1.137 af, Atten= 29%, Lag= 6.0 min
 Primary = 11.06 cfs @ 12.27 hrs, Volume= 1.137 af
 Routed to Link PDA-6 : Proposed Drainage Area #6

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 201.51' @ 12.27 hrs Surf.Area= 8,055 sf Storage= 20,062 cf

Plug-Flow detention time= 277.4 min calculated for 1.135 af (90% of inflow)
 Center-of-Mass det. time= 227.2 min (1,015.6 - 788.3)

Volume	Invert	Avail.Storage	Storage Description
#1	198.30'	32,924 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
198.30	0	0	0
199.00	6,230	2,180	2,180
200.00	6,932	6,581	8,761
201.00	7,670	7,301	16,062
202.00	8,426	8,048	24,110
203.00	9,201	8,814	32,924

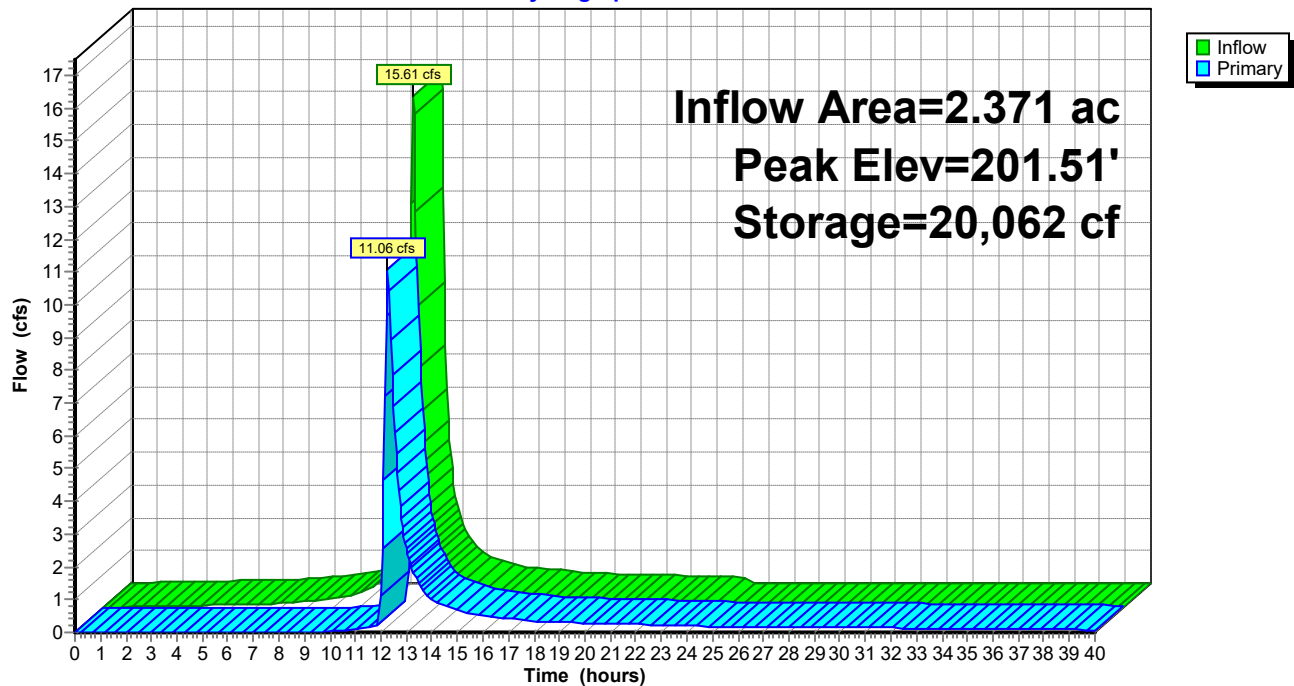
Device	Routing	Invert	Outlet Devices
#1	Primary	198.30'	18.0" Round Culvert L= 48.0' Ke= 0.500 Inlet / Outlet Invert= 198.30' / 198.00' S= 0.0063 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	199.19'	2.5" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	200.60'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	201.90'	50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=10.89 cfs @ 12.27 hrs HW=201.50' (Free Discharge)

1=Culvert (Passes 10.89 cfs of 13.00 cfs potential flow)
 2=Orifice/Grate (Orifice Controls 0.24 cfs @ 7.15 fps)
 3=Sharp-Crested Rectangular Weir (Weir Controls 10.65 cfs @ 3.10 fps)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-58: Basin #58

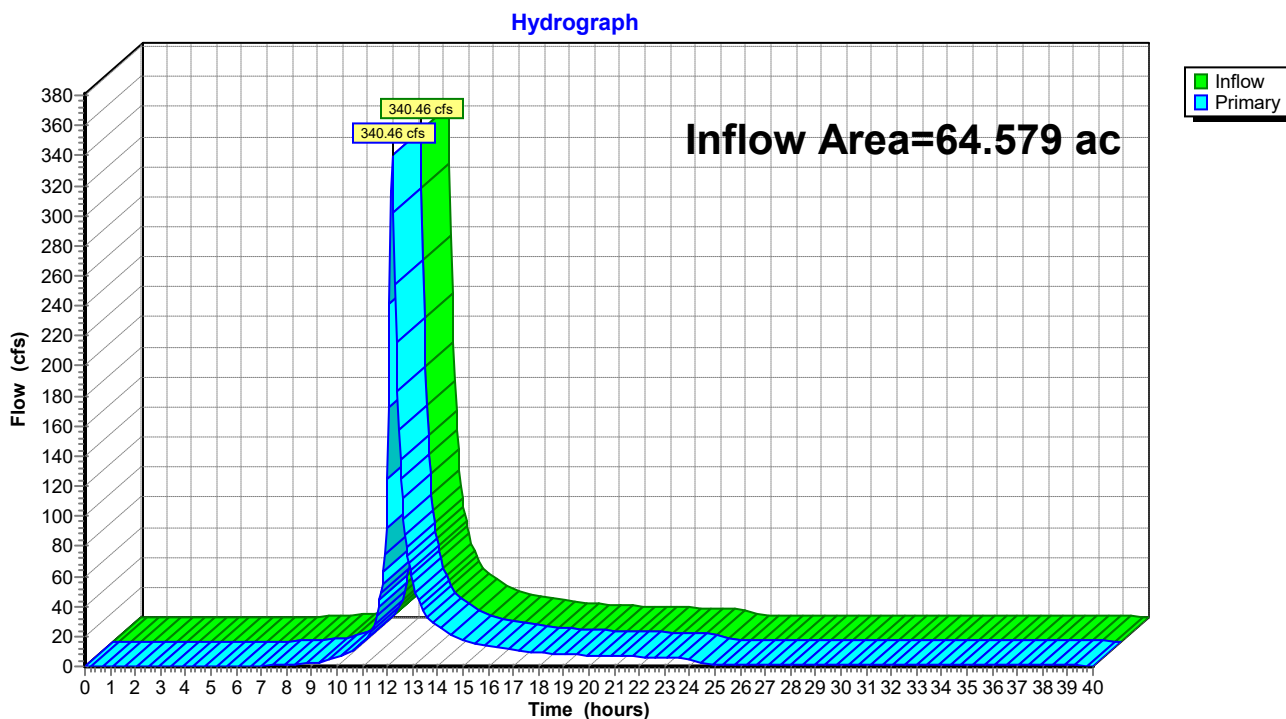
Hydrograph



Summary for Link DP-3: Design Pont #3 (Woolsey Creek)

Inflow Area = 64.579 ac, 17.83% Impervious, Inflow Depth > 5.67" for Current 100 yr event
Inflow = 340.46 cfs @ 12.19 hrs, Volume= 30.511 af
Primary = 340.46 cfs @ 12.19 hrs, Volume= 30.511 af, Atten= 0%, Lag= 0.0 min

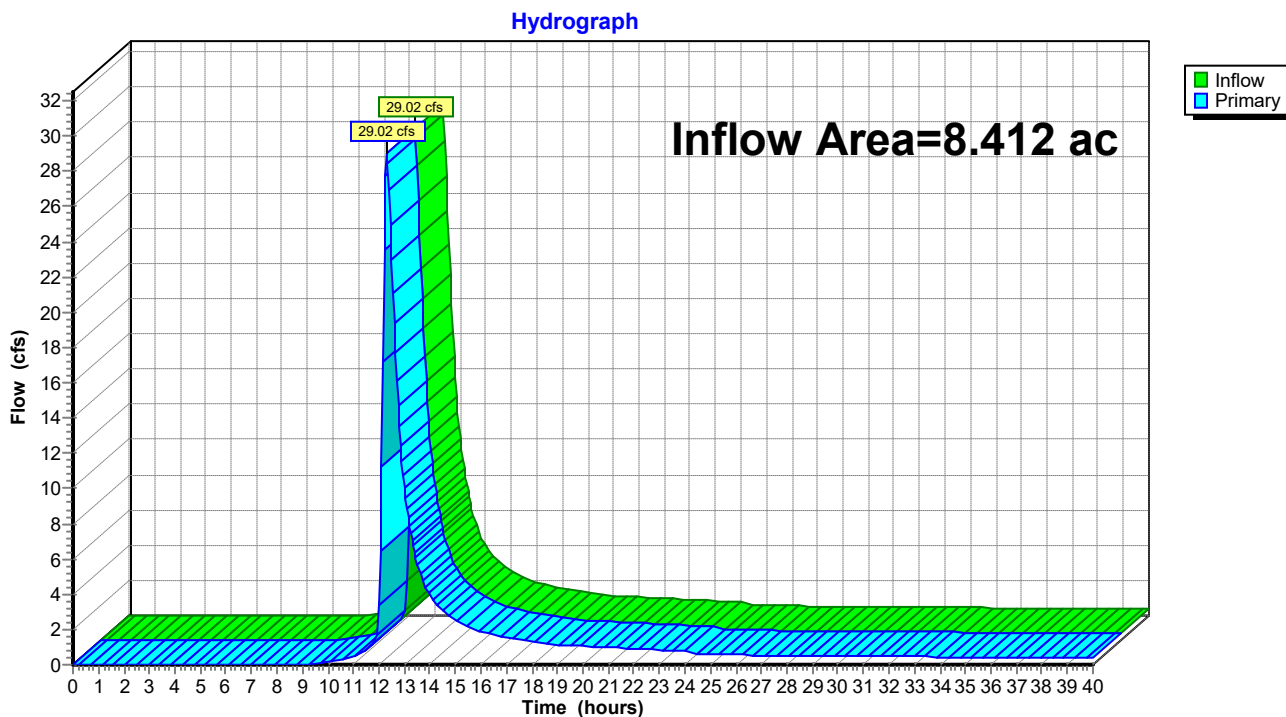
Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link DP-3: Design Pont #3 (Woolsey Creek)

Summary for Link PDA-5: Proposed Drainage Area #5

Inflow Area = 8.412 ac, 42.77% Impervious, Inflow Depth > 5.60" for Current 100 yr event
Inflow = 29.02 cfs @ 12.31 hrs, Volume= 3.927 af
Primary = 29.02 cfs @ 12.31 hrs, Volume= 3.927 af, Atten= 0%, Lag= 0.0 min
Routed to Link DP-3 : Design Pont #3 (Woolsey Creek)

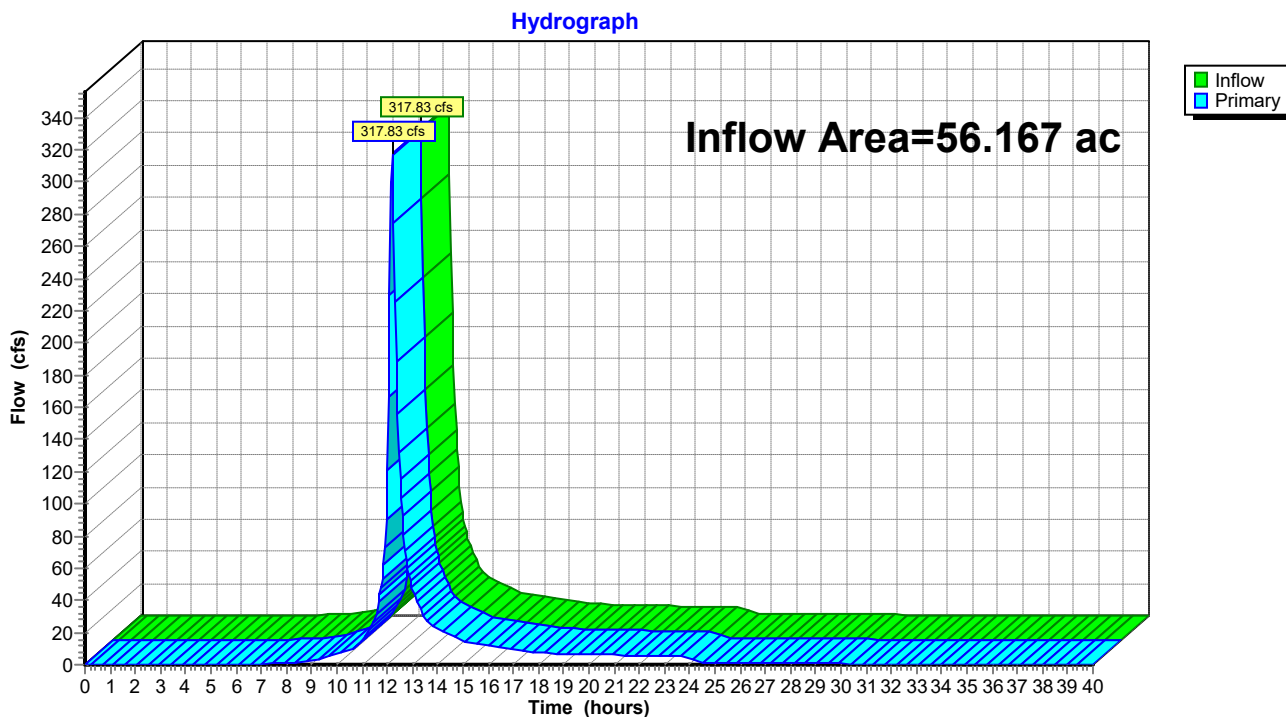
Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link PDA-5: Proposed Drainage Area #5

Summary for Link PDA-6: Proposed Drainage Area #6

Inflow Area = 56.167 ac, 14.10% Impervious, Inflow Depth > 5.68" for Current 100 yr event
Inflow = 317.83 cfs @ 12.19 hrs, Volume= 26.583 af
Primary = 317.83 cfs @ 12.19 hrs, Volume= 26.583 af, Atten= 0%, Lag= 0.0 min
Routed to Link DP-3 : Design Pont #3 (Woolsey Creek)

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link PDA-6: Proposed Drainage Area #6

Summary for Subcatchment 48I: PDA-48 (impervious)

Runoff = 3.12 cfs @ 12.17 hrs, Volume= 0.269 af, Depth= 3.62"
 Routed to Pond B-48 : Basin #48

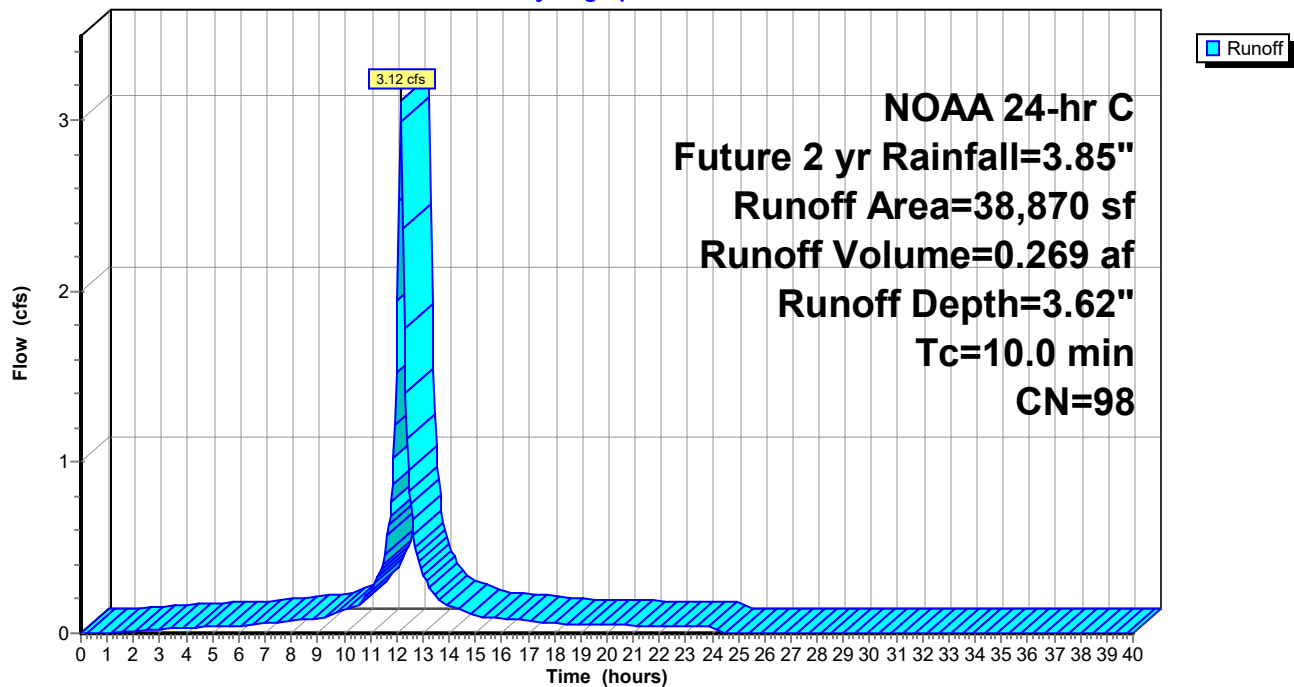
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 2 yr Rainfall=3.85"

	Area (sf)	CN	Description
*	16,283	98	Pavement, HSG C
*	21,350	98	Roof, HSG C
*	1,237	98	Concrete, HSG C
	38,870	98	Weighted Average
	38,870		100.00% Impervious Area

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

Subcatchment 48I: PDA-48 (impervious)

Hydrograph



Summary for Subcatchment 48P: PDA-48 (pervious)

Runoff = 2.47 cfs @ 12.18 hrs, Volume= 0.189 af, Depth= 1.49"
 Routed to Pond B-48 : Basin #48

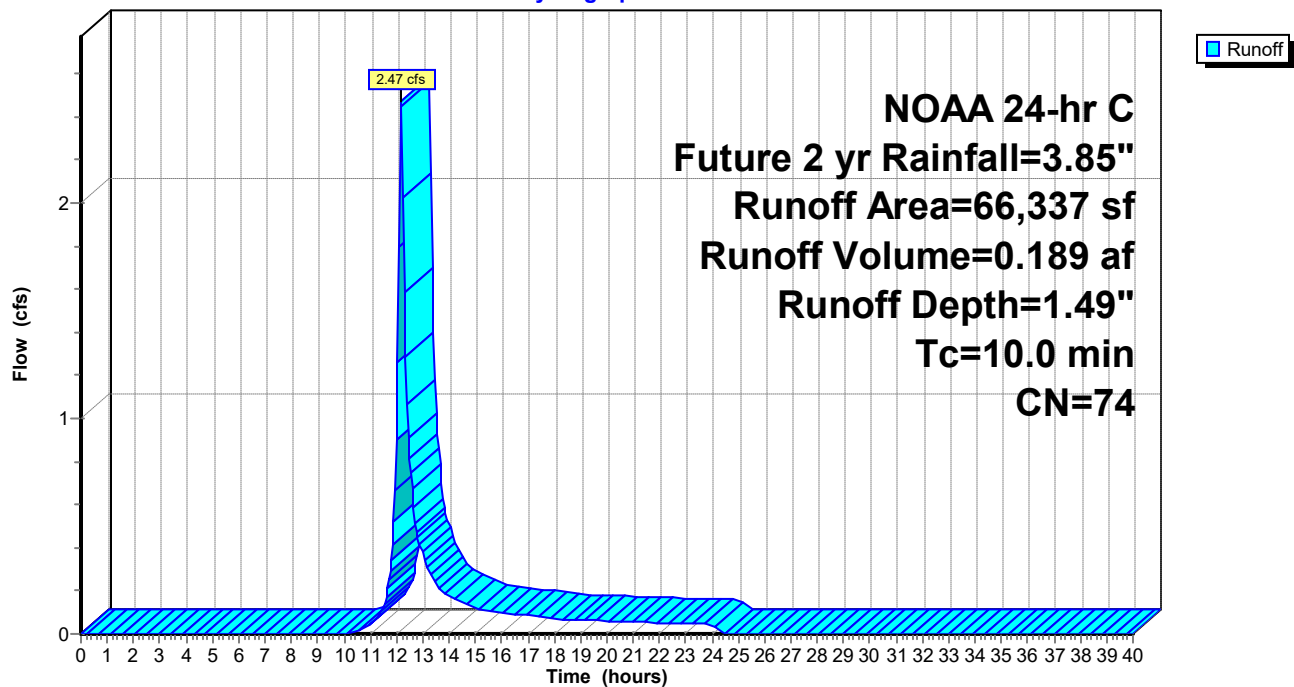
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (sf)	CN	Description
66,337	74	>75% Grass cover, Good, HSG C
66,337		100.00% Pervious Area

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

Subcatchment 48P: PDA-48 (pervious)

Hydrograph



Summary for Subcatchment 49I: PDA-49 (impervious)

Runoff = 5.08 cfs @ 12.17 hrs, Volume= 0.438 af, Depth= 3.62"
 Routed to Pond B-49 : Basin #49

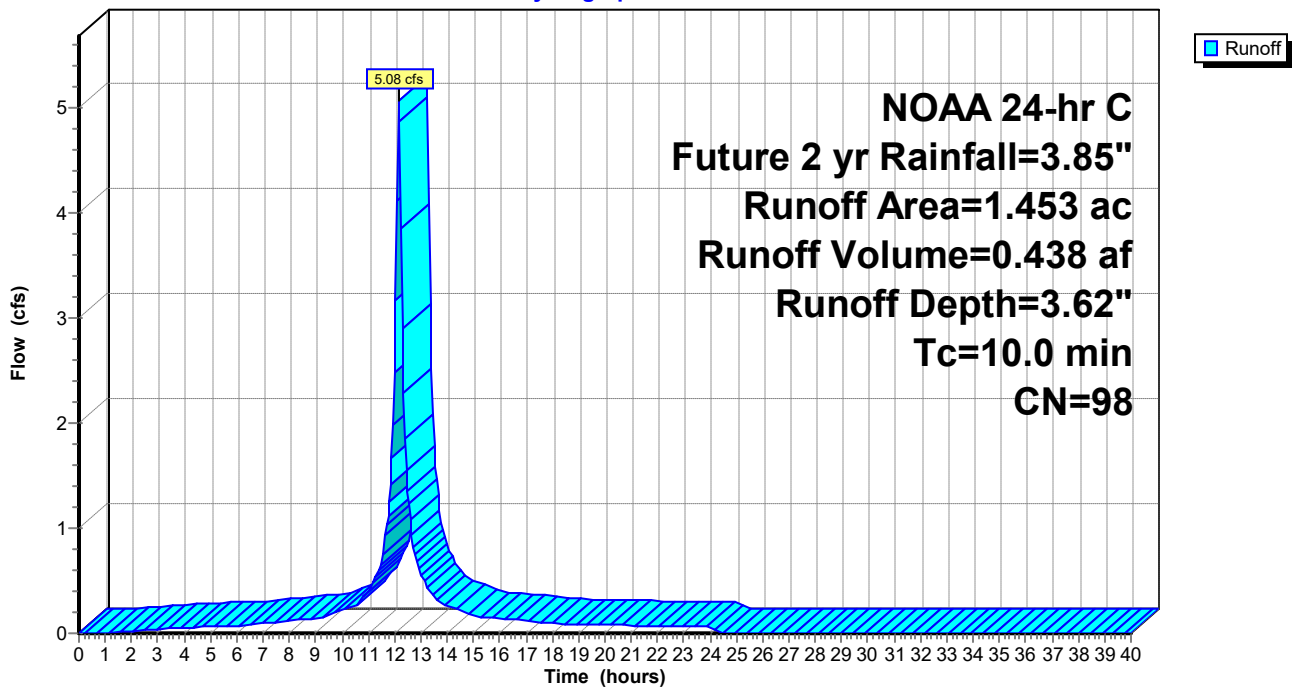
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
* 0.454	98	Pavement, HSG C
* 0.940	98	Roof, HSG C
* 0.059	98	Concrete, HSG C
1.453	98	Weighted Average
1.453		100.00% Impervious Area

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

Subcatchment 49I: PDA-49 (impervious)

Hydrograph



Summary for Subcatchment 49P: PDA-49 (pervious)

Runoff = 1.99 cfs @ 12.18 hrs, Volume= 0.152 af, Depth= 1.49"
 Routed to Pond B-49 : Basin #49

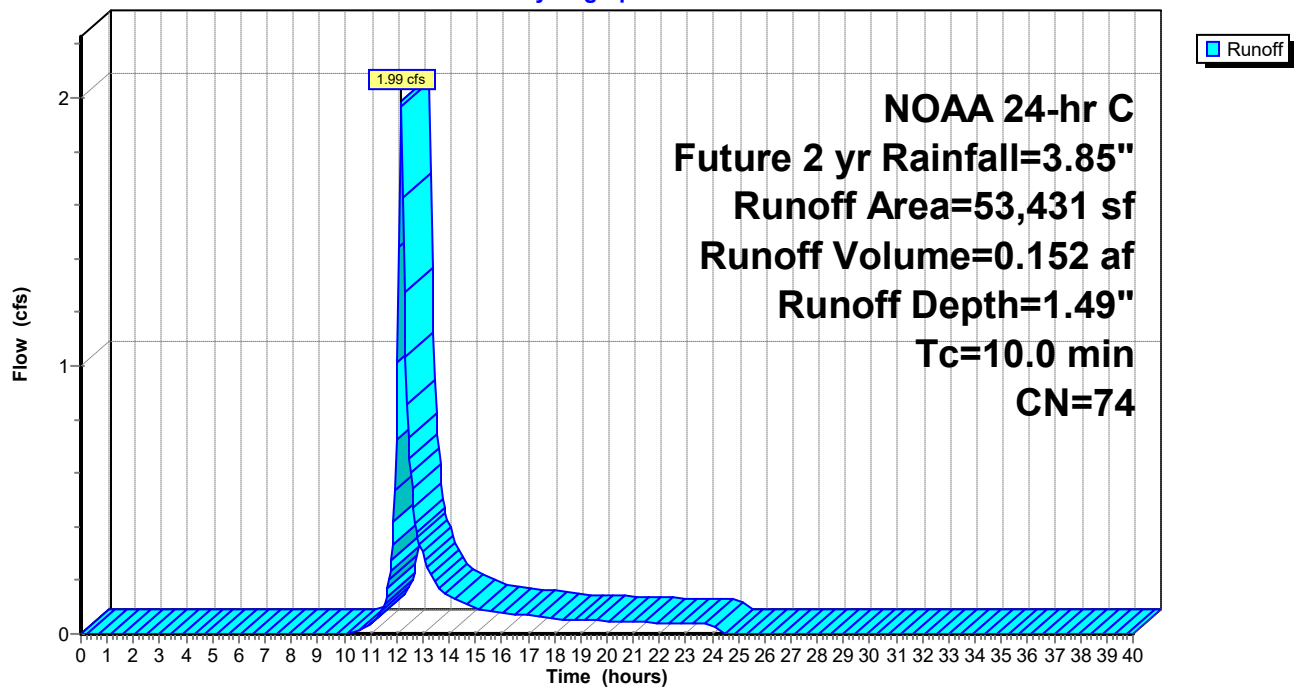
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (sf)	CN	Description
53,431	74	>75% Grass cover, Good, HSG C
53,431		100.00% Pervious Area

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

Subcatchment 49P: PDA-49 (pervious)

Hydrograph



Summary for Subcatchment 50I: PDA-50 (impervious)

Runoff = 4.37 cfs @ 12.17 hrs, Volume= 0.377 af, Depth= 3.62"
 Routed to Pond B-50 : Basin #50

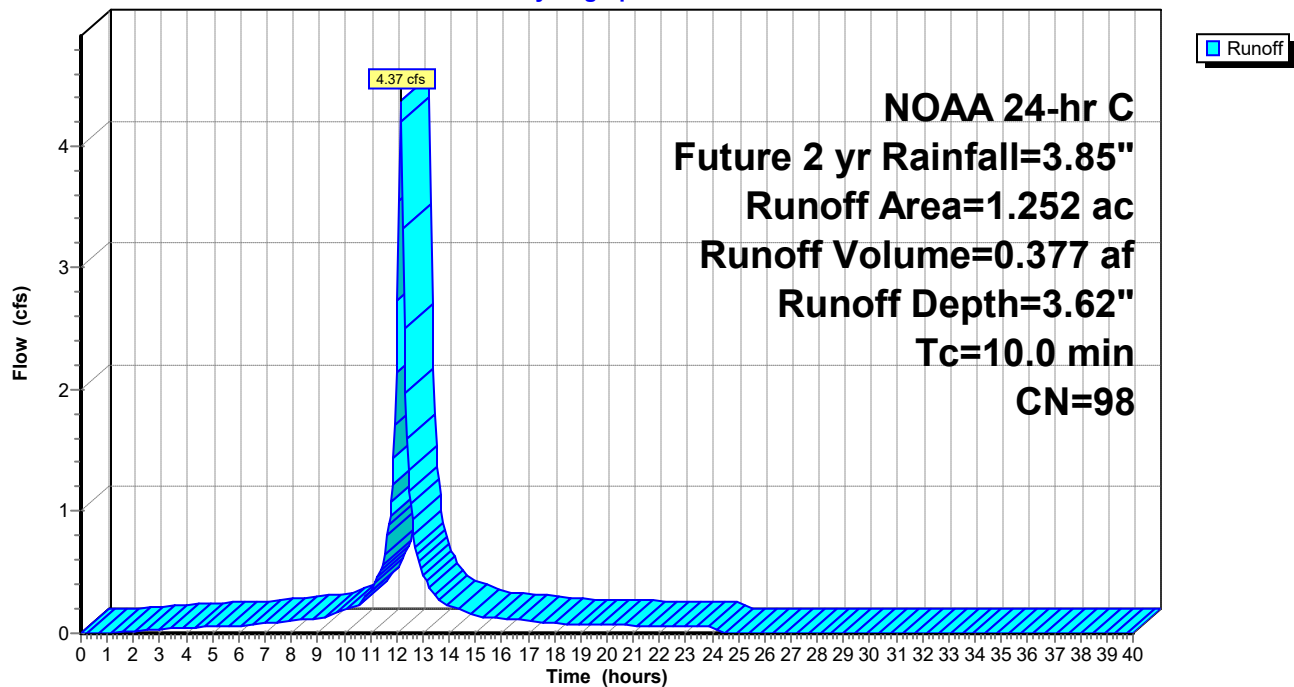
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
* 0.633	98	Pavement, HSG C
* 0.546	98	Roof, HSG C
* 0.073	98	Concrete, HSG C
1.252	98	Weighted Average
1.252		100.00% Impervious Area

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

Subcatchment 50I: PDA-50 (impervious)

Hydrograph



Summary for Subcatchment 50P: PDA-50 (pervious)

Runoff = 2.30 cfs @ 12.18 hrs, Volume= 0.176 af, Depth= 1.49"
 Routed to Pond B-50 : Basin #50

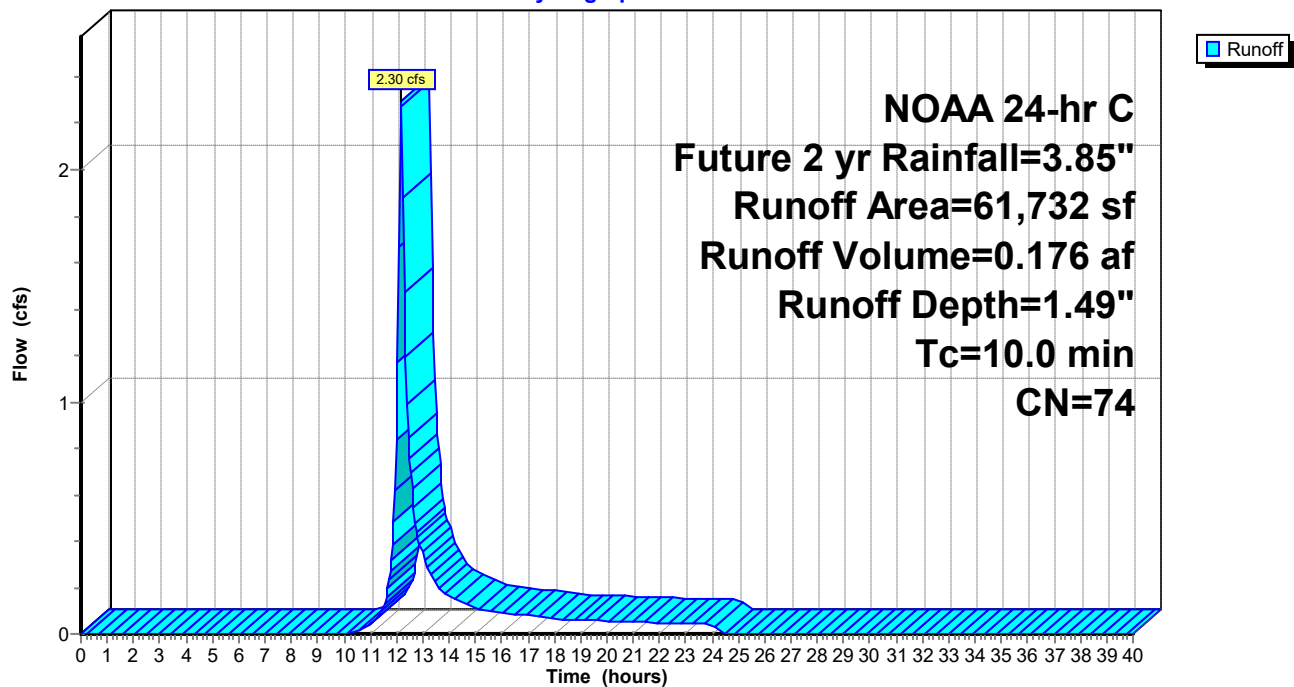
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (sf)	CN	Description
61,732	74	>75% Grass cover, Good, HSG C
61,732		100.00% Pervious Area

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

Subcatchment 50P: PDA-50 (pervious)

Hydrograph



Summary for Subcatchment 51I: PDA-51 (impervious)

Runoff = 2.19 cfs @ 12.17 hrs, Volume= 0.189 af, Depth= 3.62"
 Routed to Pond B-51 : Basin #51

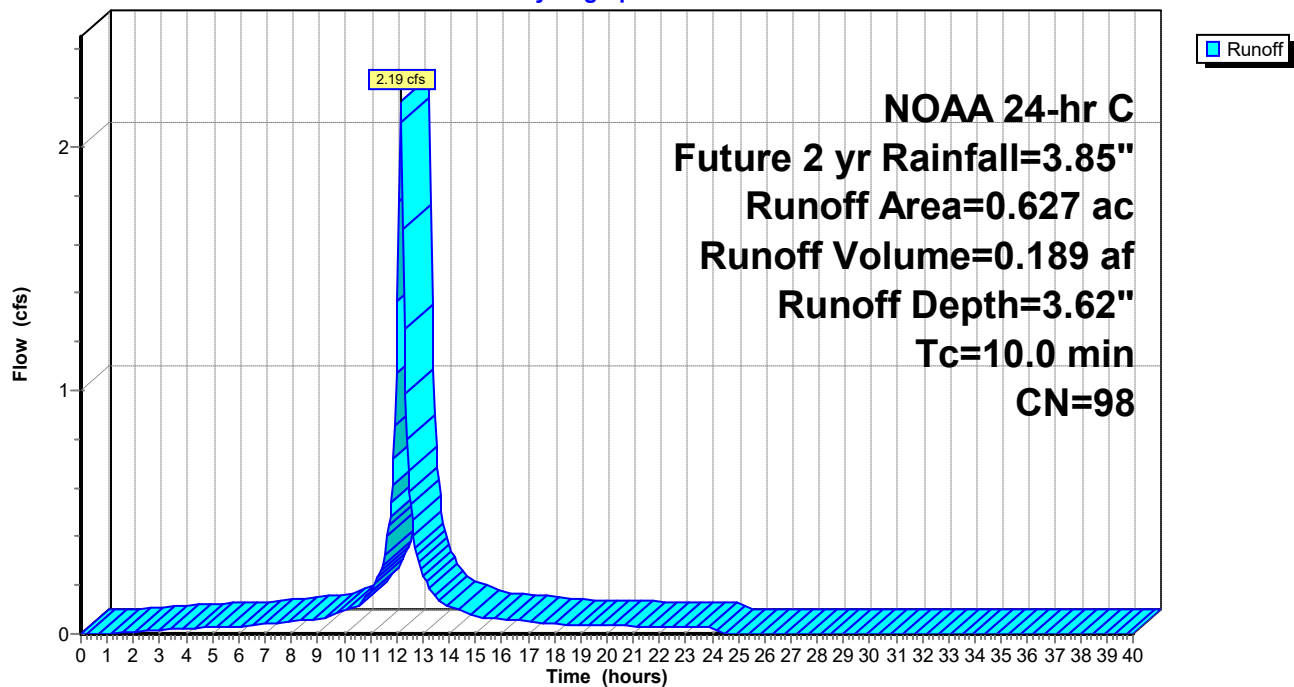
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
* 0.627	98	Roof, HSG C
0.627		100.00% Impervious Area

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

Subcatchment 51I: PDA-51 (impervious)

Hydrograph



Summary for Subcatchment 51P: PDA-51 (pervious)

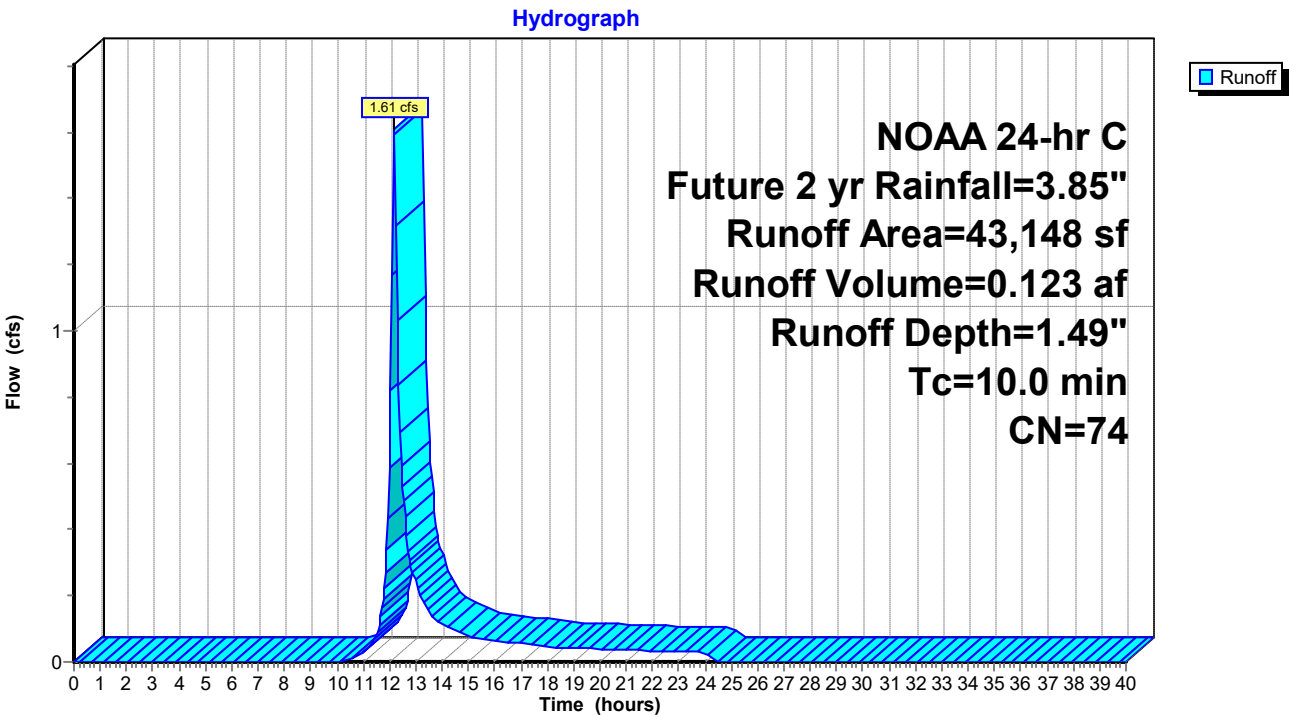
Runoff = 1.61 cfs @ 12.18 hrs, Volume= 0.123 af, Depth= 1.49"
Routed to Pond B-51 : Basin #51

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (sf)	CN	Description
43,148	74	>75% Grass cover, Good, HSG C
43,148		100.00% Pervious Area

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

Subcatchment 51P: PDA-51 (pervious)



Summary for Subcatchment 52I: PDA-52 (impervious)

Runoff = 3.67 cfs @ 12.17 hrs, Volume= 0.316 af, Depth= 3.62"
 Routed to Pond B-52 : Basin #52

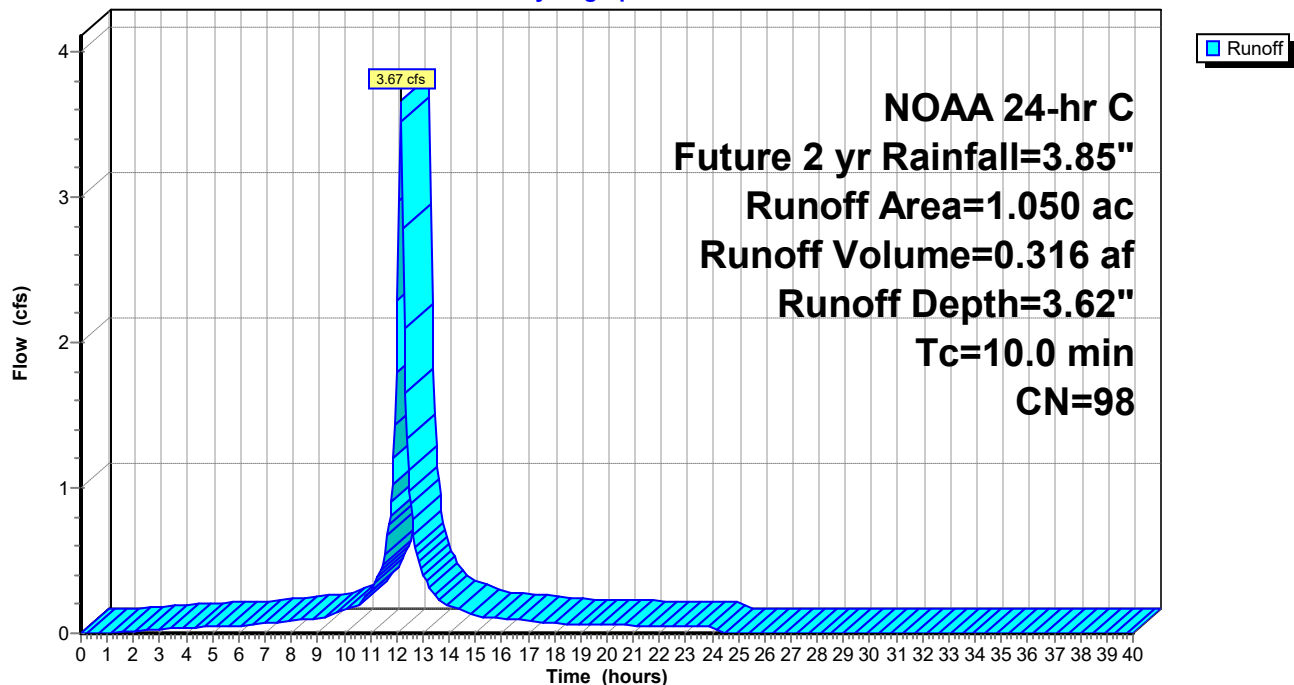
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
* 0.350	98	Pavement, HSG C
* 0.659	98	Roof, HSG C
* 0.041	98	Concrete, HSG C
1.050	98	Weighted Average
1.050		100.00% Impervious Area

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

Subcatchment 52I: PDA-52 (impervious)

Hydrograph



Summary for Subcatchment 52P: PDA-52 (pervious)

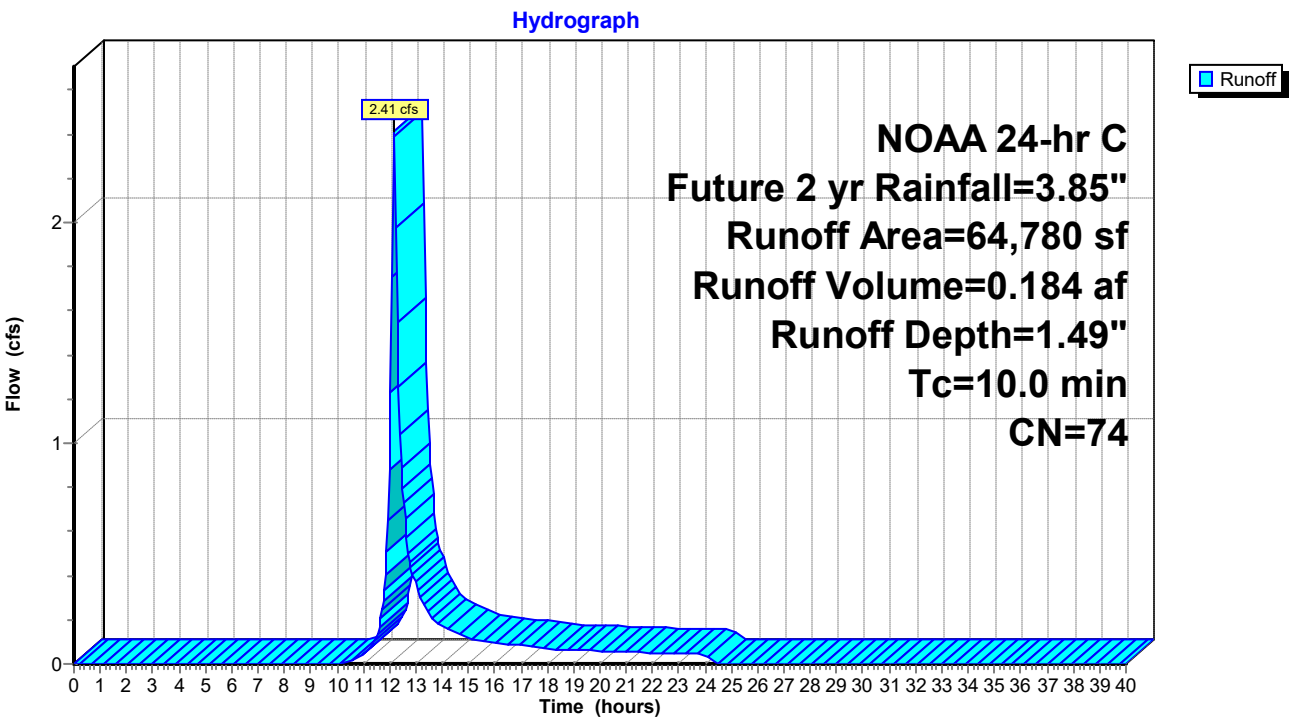
Runoff = 2.41 cfs @ 12.18 hrs, Volume= 0.184 af, Depth= 1.49"
Routed to Pond B-52 : Basin #52

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (sf)	CN	Description
64,780	74	>75% Grass cover, Good, HSG C
64,780		100.00% Pervious Area

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

Subcatchment 52P: PDA-52 (pervious)



Summary for Subcatchment 53I: PDA-53 (impervious)

Runoff = 4.24 cfs @ 12.17 hrs, Volume= 0.366 af, Depth= 3.62"
 Routed to Pond B-53 : Basin #53

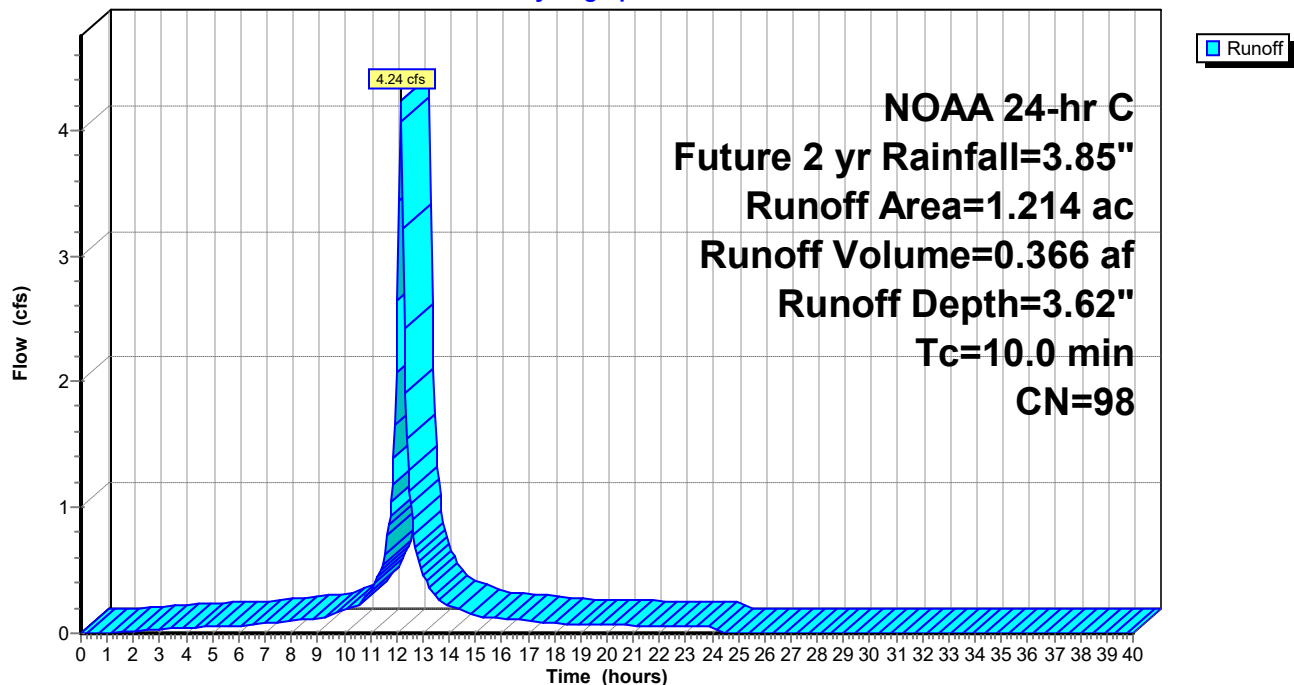
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
* 0.628	98	Pavement, HSG C
* 0.450	98	Roof, HSG C
* 0.136	98	Concrete, HSG C
1.214	98	Weighted Average
1.214		100.00% Impervious Area

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

Subcatchment 53I: PDA-53 (impervious)

Hydrograph



Summary for Subcatchment 53P: PDA-53 (pervious)

Runoff = 2.15 cfs @ 12.18 hrs, Volume= 0.164 af, Depth= 1.49"
 Routed to Pond B-53 : Basin #53

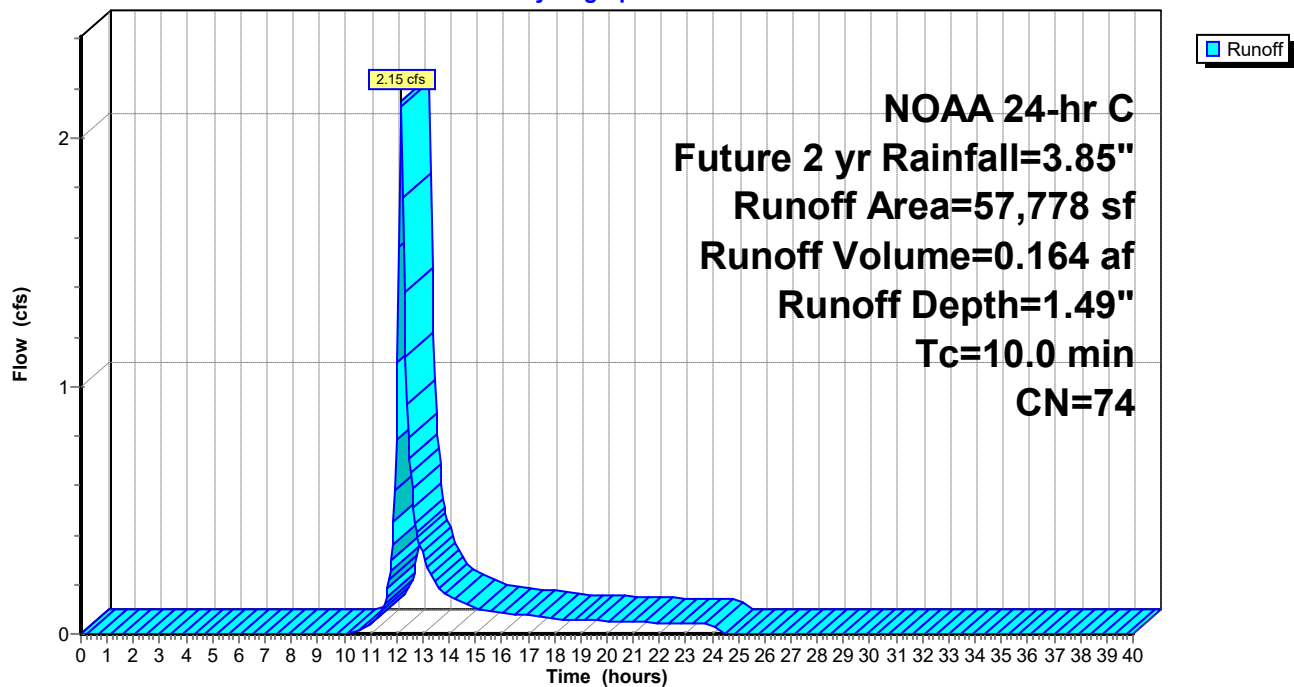
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (sf)	CN	Description
57,778	74	>75% Grass cover, Good, HSG C
57,778		100.00% Pervious Area

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

Subcatchment 53P: PDA-53 (pervious)

Hydrograph



Summary for Subcatchment 54I: PDA-54 (impervious)

Runoff = 5.43 cfs @ 12.17 hrs, Volume= 0.468 af, Depth= 3.62"
 Routed to Pond B-54 : Basin #54

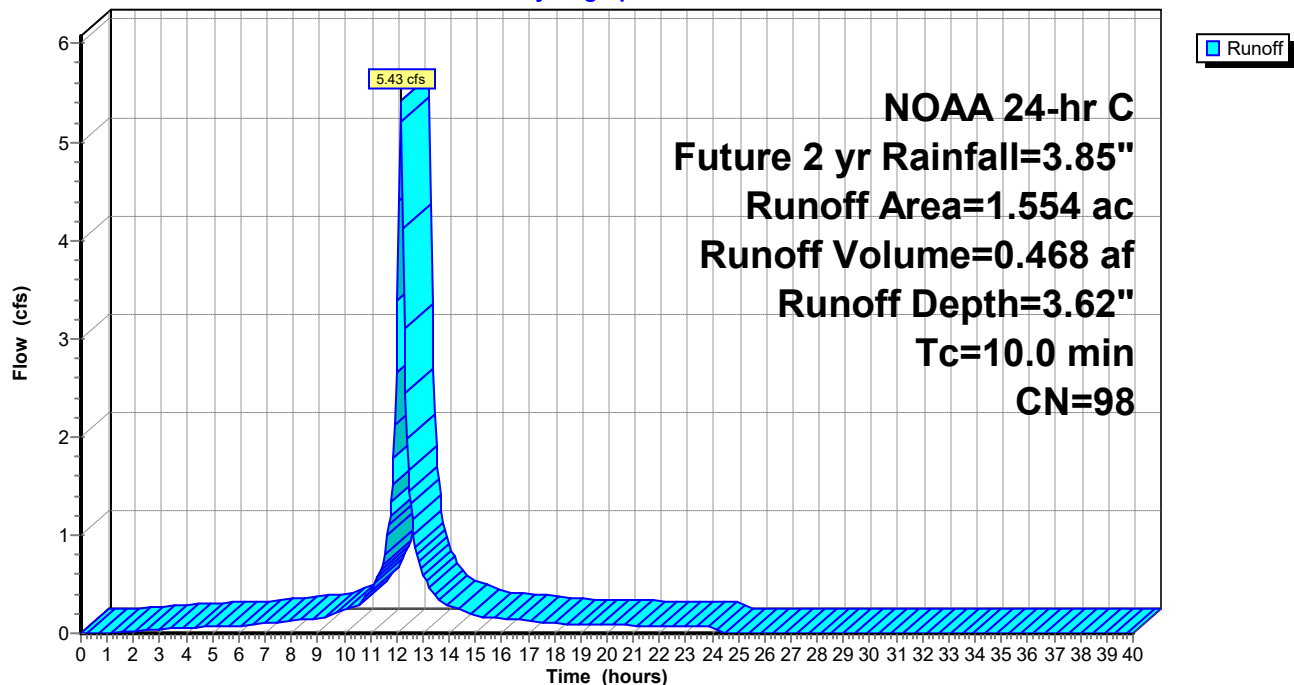
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
* 0.983	98	Pavement, HSG C
* 0.361	98	Roof, HSG C
* 0.210	98	Concrete, HSG C
1.554	98	Weighted Average
1.554		100.00% Impervious Area

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

Subcatchment 54I: PDA-54 (impervious)

Hydrograph



Summary for Subcatchment 54P: PDA-54 (pervious)

Runoff = 1.65 cfs @ 12.18 hrs, Volume= 0.126 af, Depth= 1.49"
 Routed to Pond B-54 : Basin #54

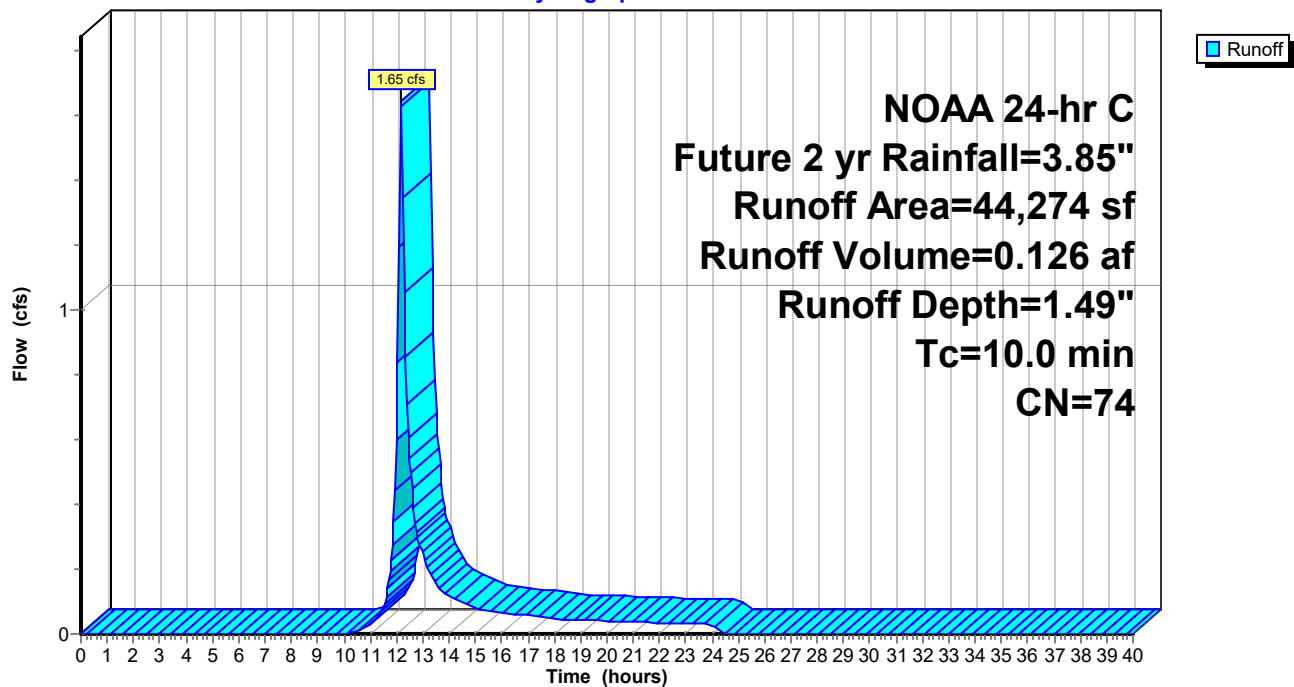
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (sf)	CN	Description
44,274	74	>75% Grass cover, Good, HSG C
44,274		100.00% Pervious Area

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

Subcatchment 54P: PDA-54 (pervious)

Hydrograph



Summary for Subcatchment 55I: PDA-55 (impervious)

Runoff = 3.52 cfs @ 12.17 hrs, Volume= 0.303 af, Depth= 3.62"
 Routed to Pond B-55 : Basin #55

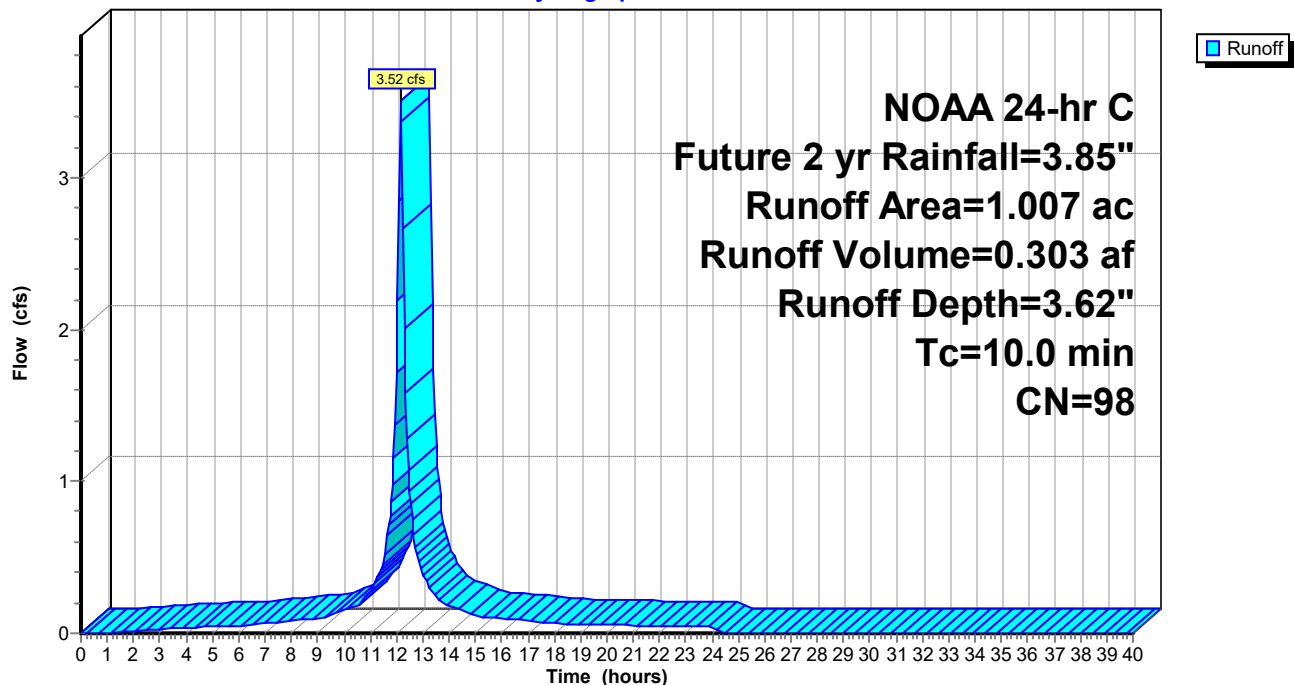
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
* 0.771	98	Pavement, HSG C
* 0.169	98	Roof, HSG C
* 0.067	98	Concrete, HSG C
1.007	98	Weighted Average
1.007		100.00% Impervious Area

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

Subcatchment 55I: PDA-55 (impervious)

Hydrograph



Summary for Subcatchment 55P: PDA-55 (pervious)

Runoff = 1.65 cfs @ 12.18 hrs, Volume= 0.126 af, Depth= 1.49"
 Routed to Pond B-55 : Basin #55

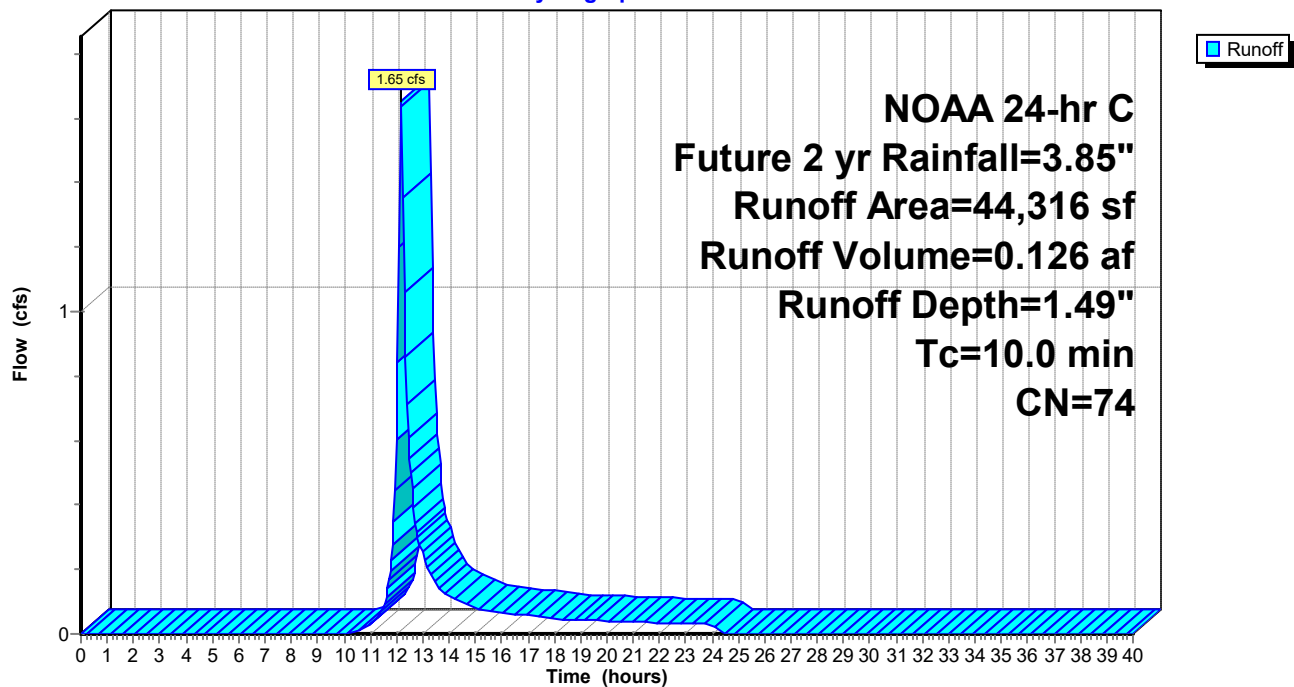
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (sf)	CN	Description
44,316	74	>75% Grass cover, Good, HSG C
44,316		100.00% Pervious Area

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

Subcatchment 55P: PDA-55 (pervious)

Hydrograph



Summary for Subcatchment 56I: PDA-56 (impervious)

Runoff = 3.62 cfs @ 12.17 hrs, Volume= 0.312 af, Depth= 3.62"
 Routed to Pond B-56 : Basin #56

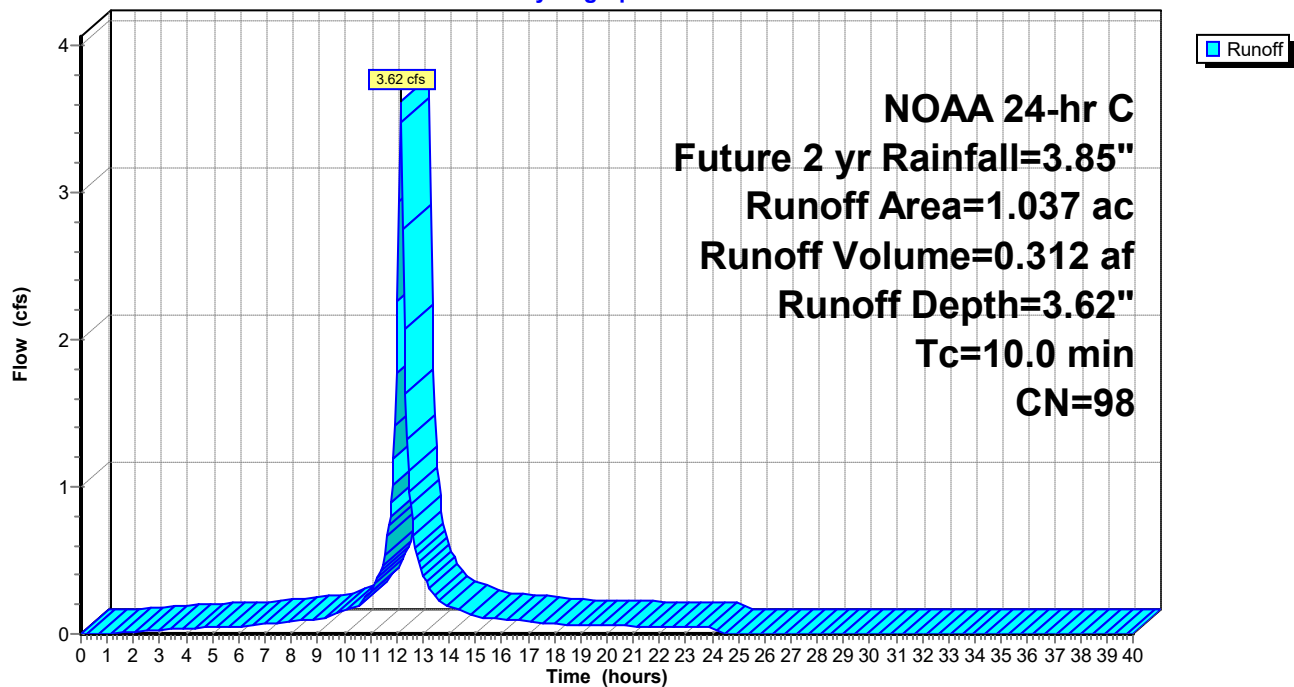
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
* 1.037	98	Roof, HSG C
1.037		100.00% Impervious Area

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

Subcatchment 56I: PDA-56 (impervious)

Hydrograph



Summary for Subcatchment 56P: PDA-56 (pervious)

Runoff = 2.06 cfs @ 12.18 hrs, Volume= 0.158 af, Depth= 1.49"
 Routed to Pond B-56 : Basin #56

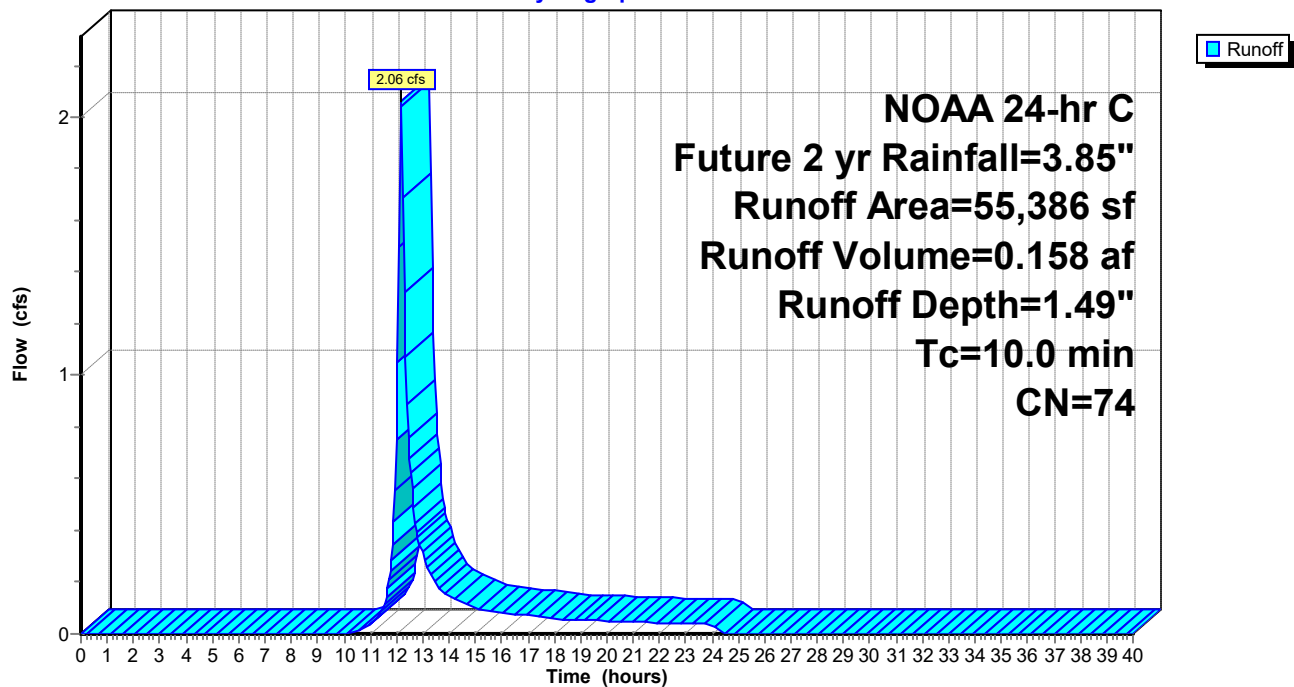
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (sf)	CN	Description
55,386	74	>75% Grass cover, Good, HSG C
55,386		100.00% Pervious Area

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

Subcatchment 56P: PDA-56 (pervious)

Hydrograph



Summary for Subcatchment 57I: PDA-57 (impervious)

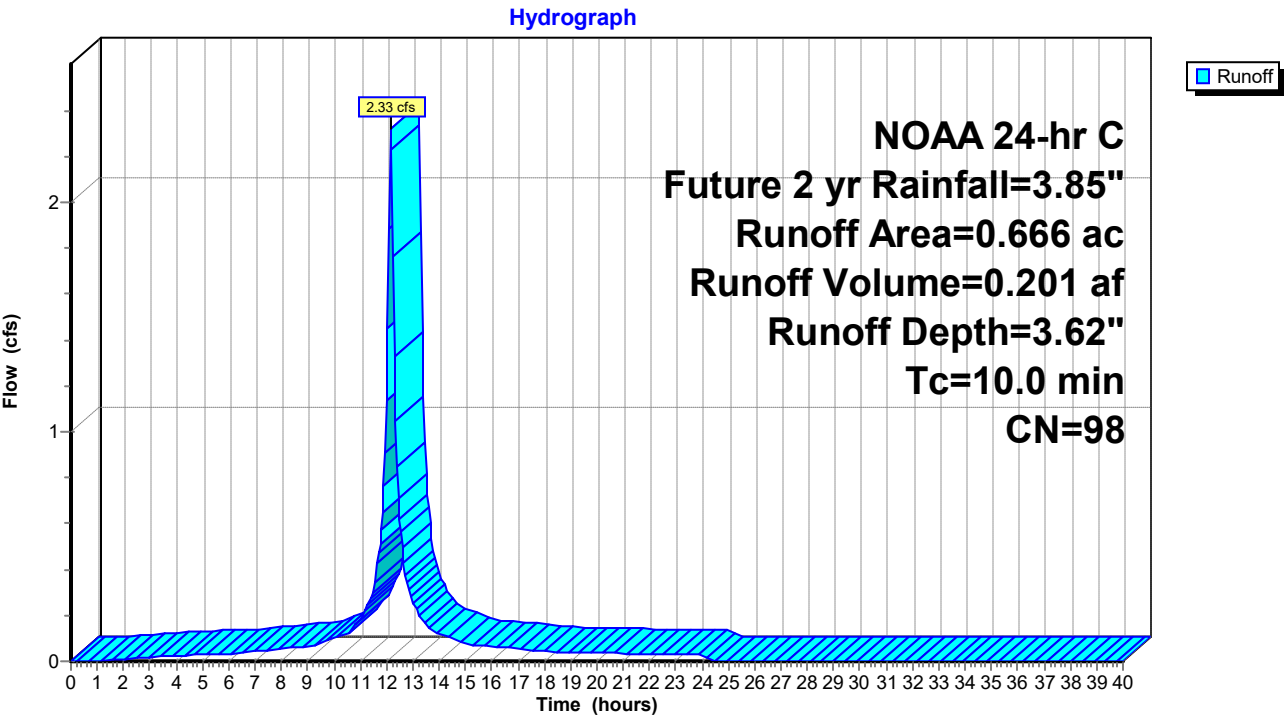
Runoff = 2.33 cfs @ 12.17 hrs, Volume= 0.201 af, Depth= 3.62"
Routed to Pond B-57 : Basin #57

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
* 0.311	98	Pavement, HSG C
* 0.313	98	Roof, HSG C
* 0.042	98	Concrete, HSG C
0.666	98	Weighted Average
0.666		100.00% Impervious Area

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

Subcatchment 57I: PDA-57 (impervious)



Summary for Subcatchment 57P: PDA-57 (pervious)

Runoff = 1.02 cfs @ 12.18 hrs, Volume= 0.078 af, Depth= 1.49"
 Routed to Pond B-57 : Basin #57

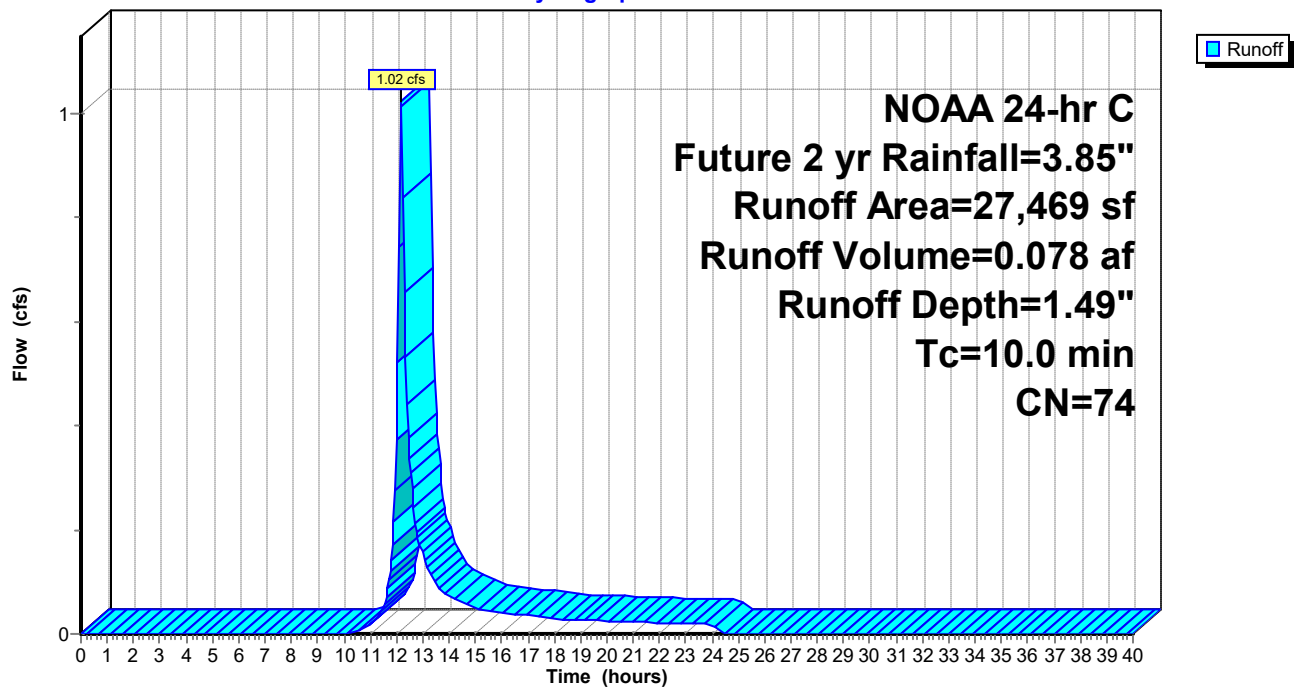
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (sf)	CN	Description
27,469	74	>75% Grass cover, Good, HSG C
27,469		100.00% Pervious Area

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

Subcatchment 57P: PDA-57 (pervious)

Hydrograph



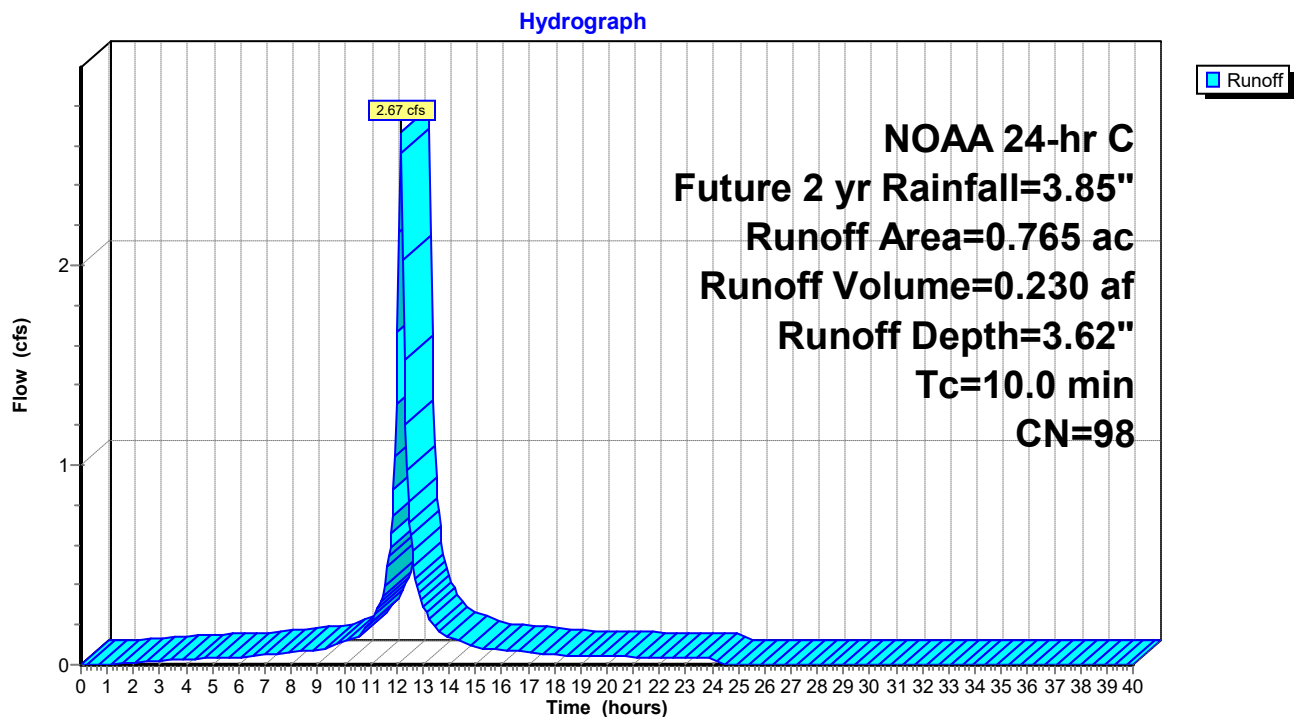
Summary for Subcatchment 58I: PDA-58 (impervious)

Runoff = 2.67 cfs @ 12.17 hrs, Volume= 0.230 af, Depth= 3.62"
 Routed to Pond B-58 : Basin #58

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
* 0.763	98	Roof, HSG C
* 0.002	98	Concrete, HSG C
0.765	98	Weighted Average
0.765		100.00% Impervious Area

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

Subcatchment 58I: PDA-58 (impervious)

Summary for Subcatchment 58P: PDA-58 (pervious)

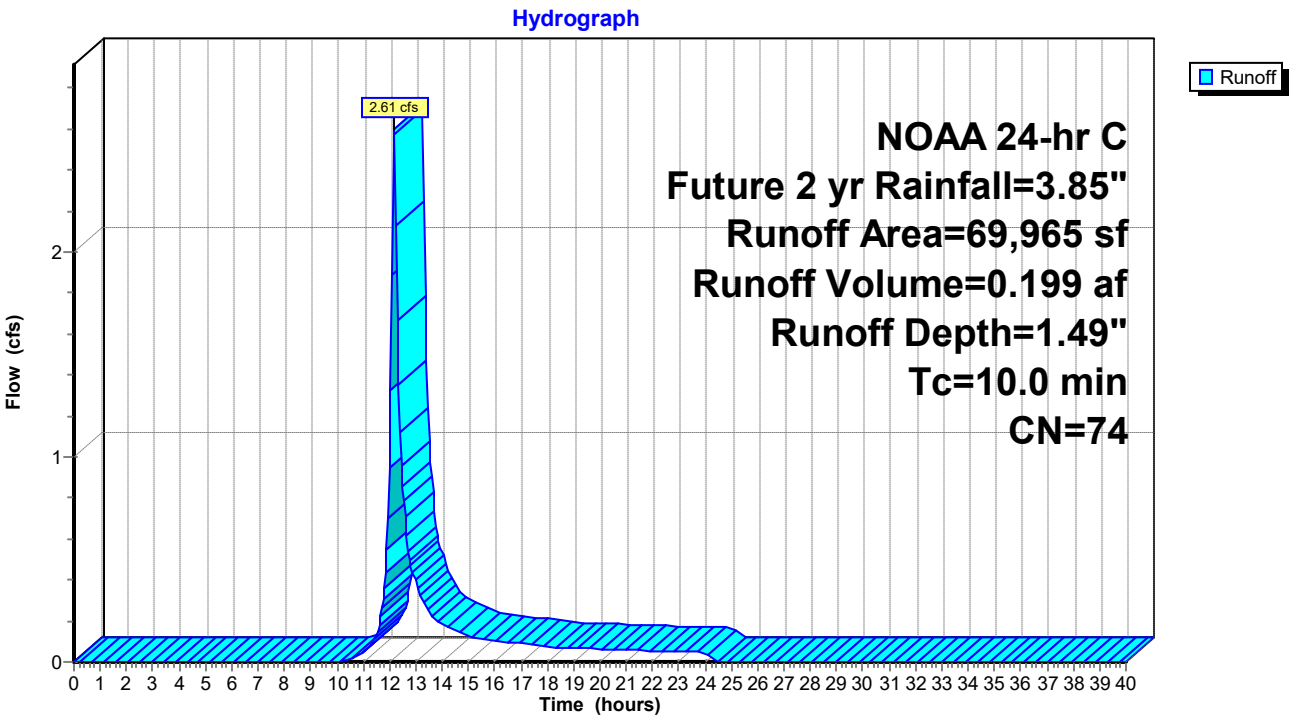
Runoff = 2.61 cfs @ 12.18 hrs, Volume= 0.199 af, Depth= 1.49"
Routed to Pond B-58 : Basin #58

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (sf)	CN	Description
69,965	74	>75% Grass cover, Good, HSG C
69,965		100.00% Pervious Area

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

Subcatchment 58P: PDA-58 (pervious)



Summary for Subcatchment UPDA-5: PDA-5 (undetained)

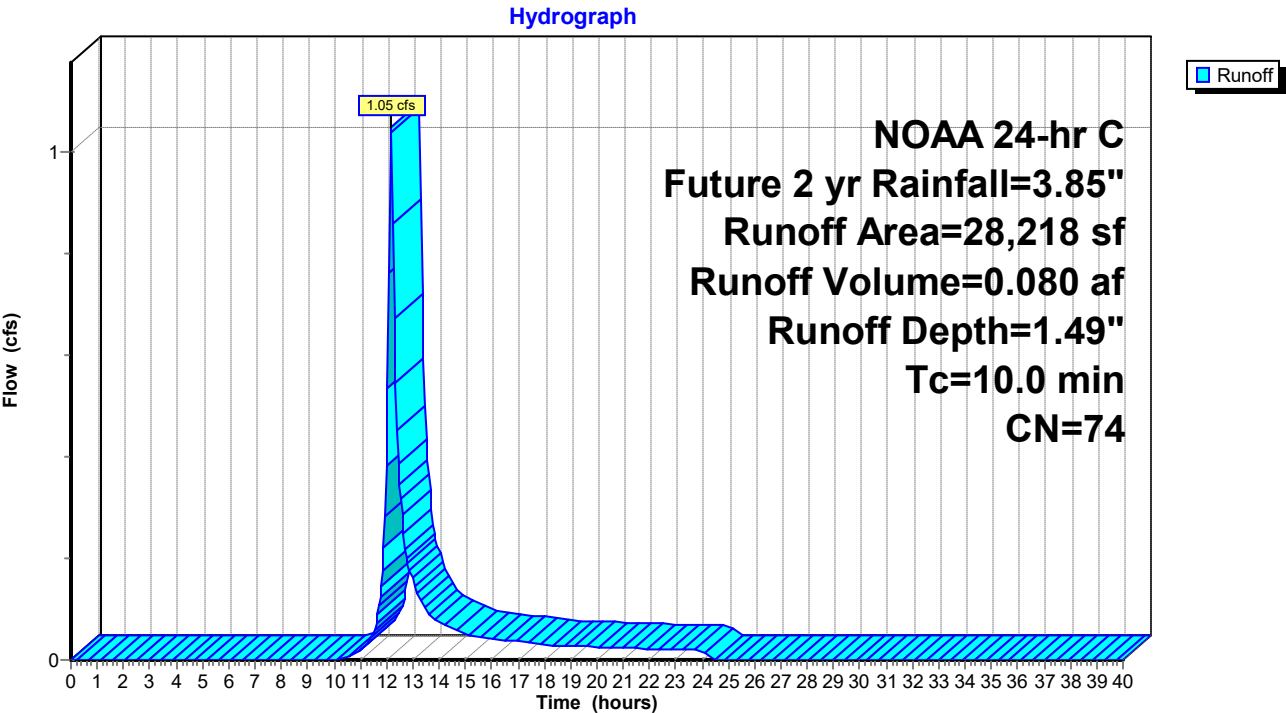
Runoff = 1.05 cfs @ 12.18 hrs, Volume= 0.080 af, Depth= 1.49"
Routed to Link PDA-5 : Proposed Drainage Area #5

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (sf)	CN	Description
28,218	74	>75% Grass cover, Good, HSG C
28,218		100.00% Pervious Area

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

Subcatchment UPDA-5: PDA-5 (undetained)



Summary for Subcatchment UPDA-6: PDA-6 (undetained)

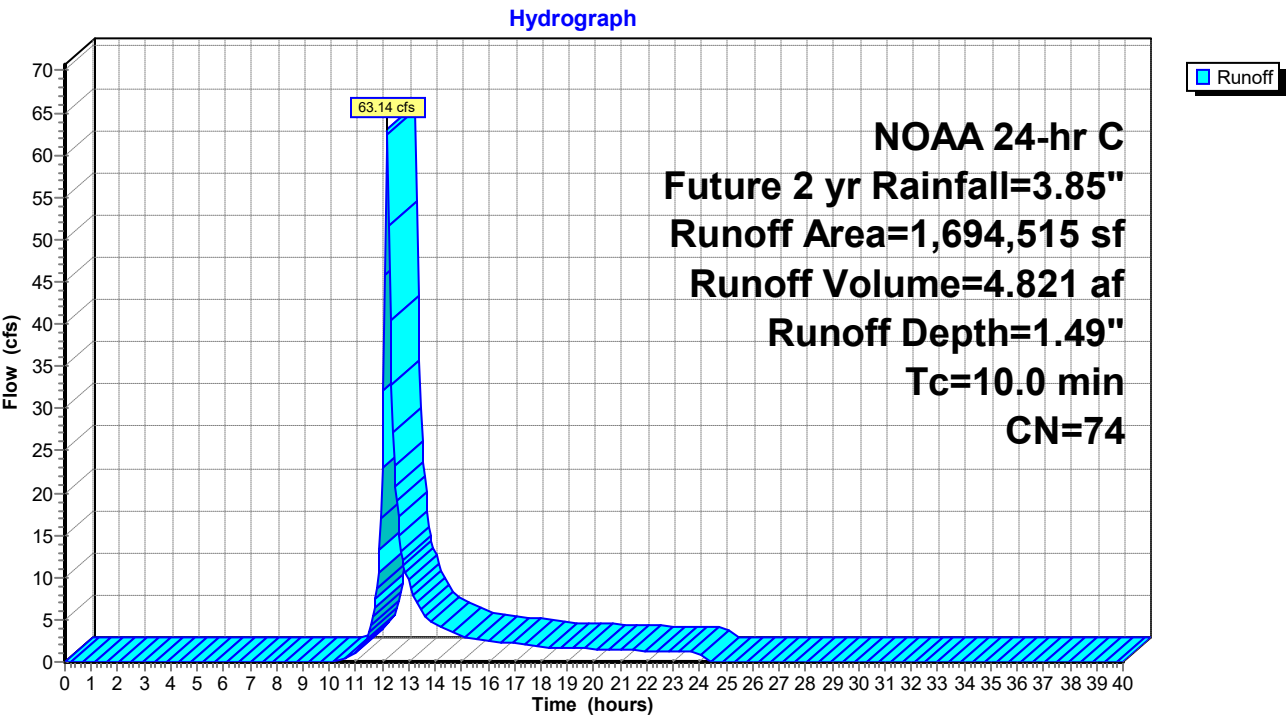
Runoff = 63.14 cfs @ 12.18 hrs, Volume= 4.821 af, Depth= 1.49"
Routed to Link PDA-6 : Proposed Drainage Area #6

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (sf)	CN	Description
1,694,515	74	>75% Grass cover, Good, HSG C
1,694,515		100.00% Pervious Area

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

Subcatchment UPDA-6: PDA-6 (undetained)



Summary for Pond B-48: Basin #48

Inflow Area = 2.415 ac, 36.95% Impervious, Inflow Depth = 2.27" for Future 2 yr event
 Inflow = 5.58 cfs @ 12.17 hrs, Volume= 0.458 af
 Outflow = 0.15 cfs @ 17.37 hrs, Volume= 0.281 af, Atten= 97%, Lag= 311.4 min
 Primary = 0.15 cfs @ 17.37 hrs, Volume= 0.281 af
 Routed to Link PDA-5 : Proposed Drainage Area #5

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 188.16' @ 17.37 hrs Surf.Area= 12,335 sf Storage= 14,760 cf

Plug-Flow detention time= 801.6 min calculated for 0.281 af (61% of inflow)
 Center-of-Mass det. time= 687.3 min (1,486.3 - 799.0)

Volume	Invert	Avail.Storage	Storage Description
#1	186.85'	81,173 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
186.85	0	0	0
187.00	11,678	876	876
188.00	12,246	11,962	12,838
189.00	12,814	12,530	25,368
190.00	13,382	13,098	38,466
191.00	13,951	13,667	52,132
192.00	14,520	14,236	66,368
193.00	15,090	14,805	81,173

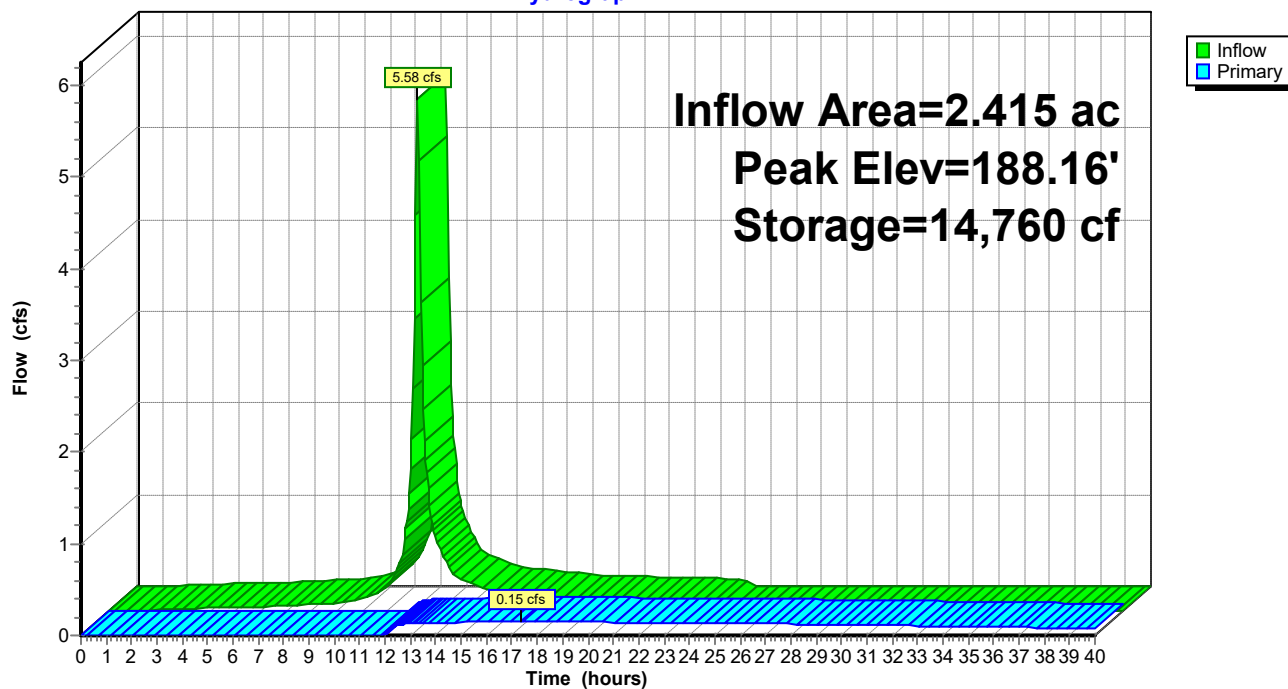
Device	Routing	Invert	Outlet Devices
#1	Primary	186.85'	18.0" Round Culvert L= 121.0' Ke= 0.500 Inlet / Outlet Invert= 186.85' / 186.25' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	187.26'	2.5" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	188.75'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	189.46'	50.0' long + 3.0 ' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.15 cfs @ 17.37 hrs HW=188.16' (Free Discharge)

- 1=Culvert (Passes 0.15 cfs of 5.18 cfs potential flow)
- 2=Orifice/Grate (Orifice Controls 0.15 cfs @ 4.29 fps)
- 3=Sharp-Crested Rectangular Weir (Controls 0.00 cfs)
- 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-48: Basin #48

Hydrograph



Summary for Pond B-49: Basin #49

Inflow Area = 2.680 ac, 54.22% Impervious, Inflow Depth = 2.64" for Future 2 yr event
 Inflow = 7.06 cfs @ 12.17 hrs, Volume= 0.590 af
 Outflow = 0.20 cfs @ 16.56 hrs, Volume= 0.379 af, Atten= 97%, Lag= 263.3 min
 Primary = 0.20 cfs @ 16.56 hrs, Volume= 0.379 af
 Routed to Link PDA-5 : Proposed Drainage Area #5

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 185.24' @ 16.56 hrs Surf.Area= 9,138 sf Storage= 19,038 cf

Plug-Flow detention time= 799.0 min calculated for 0.379 af (64% of inflow)
 Center-of-Mass det. time= 689.7 min (1,473.1 - 783.4)

Volume	Invert	Avail.Storage	Storage Description
#1	182.60'	55,030 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
182.60	0	0	0
183.00	6,698	1,340	1,340
184.00	7,766	7,232	8,572
185.00	8,867	8,317	16,888
186.00	10,002	9,435	26,323
187.00	11,172	10,587	36,910
188.00	12,378	11,775	48,685
188.50	13,004	6,346	55,030

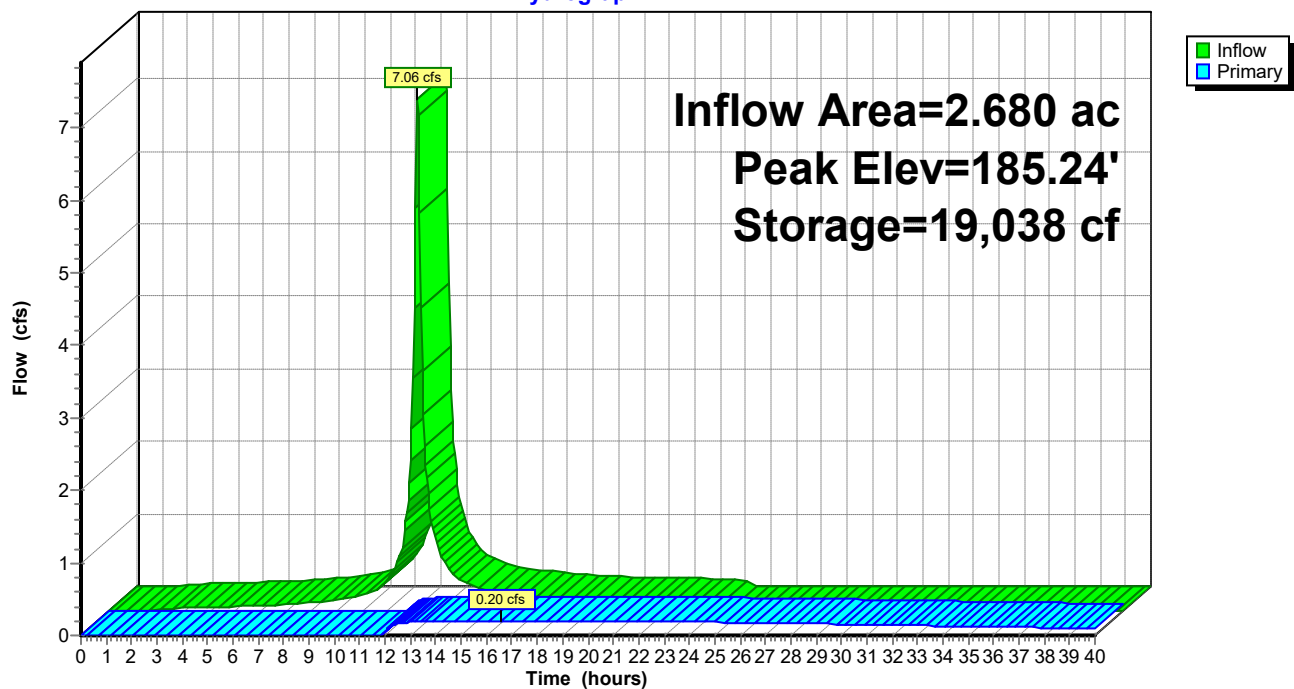
Device	Routing	Invert	Outlet Devices
#1	Primary	182.60'	18.0" Round Culvert L= 112.0' Ke= 0.500 Inlet / Outlet Invert= 182.60' / 182.00' S= 0.0054 '/ Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	183.64'	2.5" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	185.25'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	186.75'	50.0' long + 3.0 '/ SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.20 cfs @ 16.56 hrs HW=185.24' (Free Discharge)

- 1=Culvert (Passes 0.20 cfs of 9.93 cfs potential flow)
- 2=Orifice/Grate (Orifice Controls 0.20 cfs @ 5.89 fps)
- 3=Sharp-Crested Rectangular Weir (Controls 0.00 cfs)
- 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-49: Basin #49

Hydrograph



Summary for Pond B-50: Basin #50

Inflow Area = 2.669 ac, 46.91% Impervious, Inflow Depth = 2.49" for Future 2 yr event
 Inflow = 6.66 cfs @ 12.17 hrs, Volume= 0.553 af
 Outflow = 0.18 cfs @ 17.06 hrs, Volume= 0.344 af, Atten= 97%, Lag= 293.1 min
 Primary = 0.18 cfs @ 17.06 hrs, Volume= 0.344 af
 Routed to Link PDA-5 : Proposed Drainage Area #5

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 185.51' @ 17.06 hrs Surf.Area= 10,798 sf Storage= 17,919 cf

Plug-Flow detention time= 808.4 min calculated for 0.344 af (62% of inflow)
 Center-of-Mass det. time= 695.4 min (1,484.8 - 789.5)

Volume	Invert	Avail.Storage	Storage Description
#1	183.30'	56,291 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
183.30	0	0	0
184.00	8,805	3,082	3,082
185.00	10,108	9,457	12,538
186.00	11,448	10,778	23,316
187.00	12,826	12,137	35,453
188.00	14,244	13,535	48,988
188.50	14,966	7,303	56,291

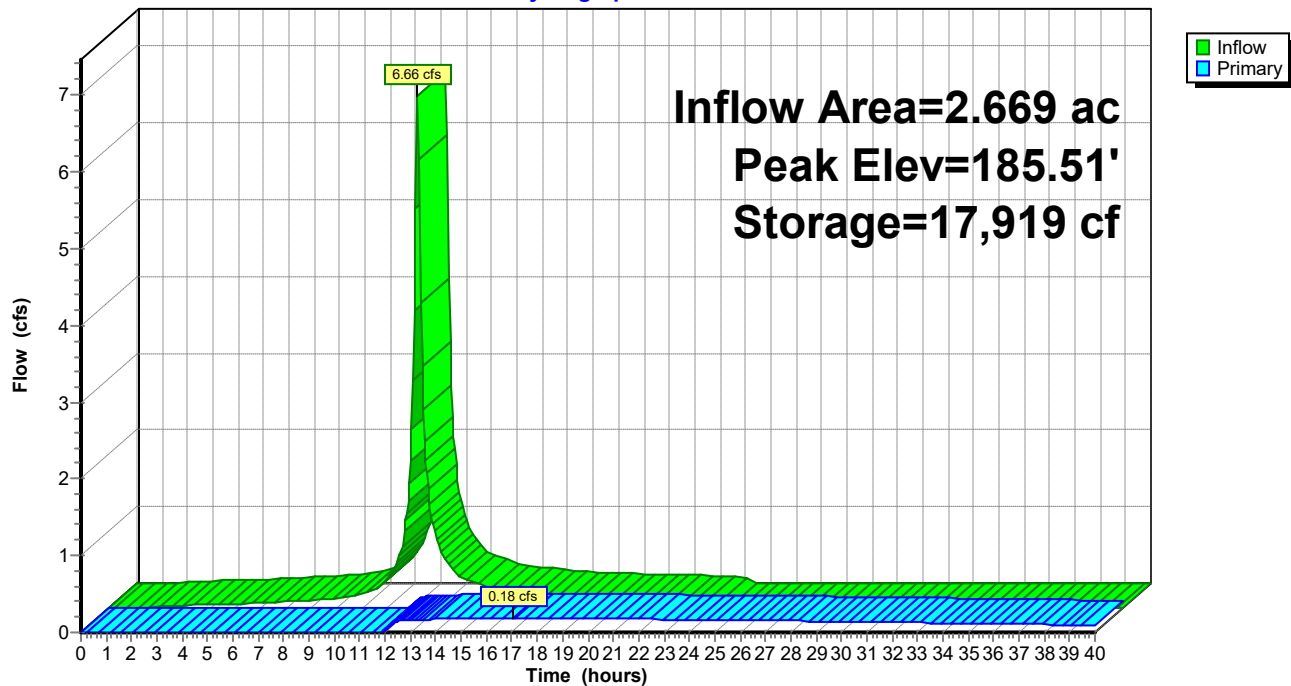
Device	Routing	Invert	Outlet Devices
#1	Primary	183.17'	18.0" Round Culvert L= 23.0' Ke= 0.500 Inlet / Outlet Invert= 183.17' / 183.05' S= 0.0052 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	184.23'	2.5" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	185.53'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	186.82'	50.0' long + 3.0' /' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.18 cfs @ 17.06 hrs HW=185.51' (Free Discharge)

1=Culvert (Passes 0.18 cfs of 10.05 cfs potential flow)
 2=Orifice/Grate (Orifice Controls 0.18 cfs @ 5.23 fps)
 3=Sharp-Crested Rectangular Weir (Controls 0.00 cfs)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-50: Basin #50

Hydrograph



Summary for Pond B-51: Basin #51

Inflow Area = 1.618 ac, 38.76% Impervious, Inflow Depth = 2.31" for Future 2 yr event
 Inflow = 3.79 cfs @ 12.17 hrs, Volume= 0.312 af
 Outflow = 2.59 cfs @ 12.28 hrs, Volume= 0.251 af, Atten= 32%, Lag= 6.4 min
 Primary = 2.59 cfs @ 12.28 hrs, Volume= 0.251 af
 Routed to Link PDA-6 : Proposed Drainage Area #6

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 188.68' @ 12.28 hrs Surf.Area= 3,511 sf Storage= 4,605 cf

Plug-Flow detention time= 159.7 min calculated for 0.251 af (81% of inflow)
 Center-of-Mass det. time= 76.7 min (873.9 - 797.1)

Volume	Invert	Avail.Storage	Storage Description
#1	186.86'	16,158 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
186.86	0	0	0
187.00	1,882	132	132
188.00	2,798	2,340	2,472
189.00	3,853	3,326	5,797
190.00	5,083	4,468	10,265
191.00	6,703	5,893	16,158

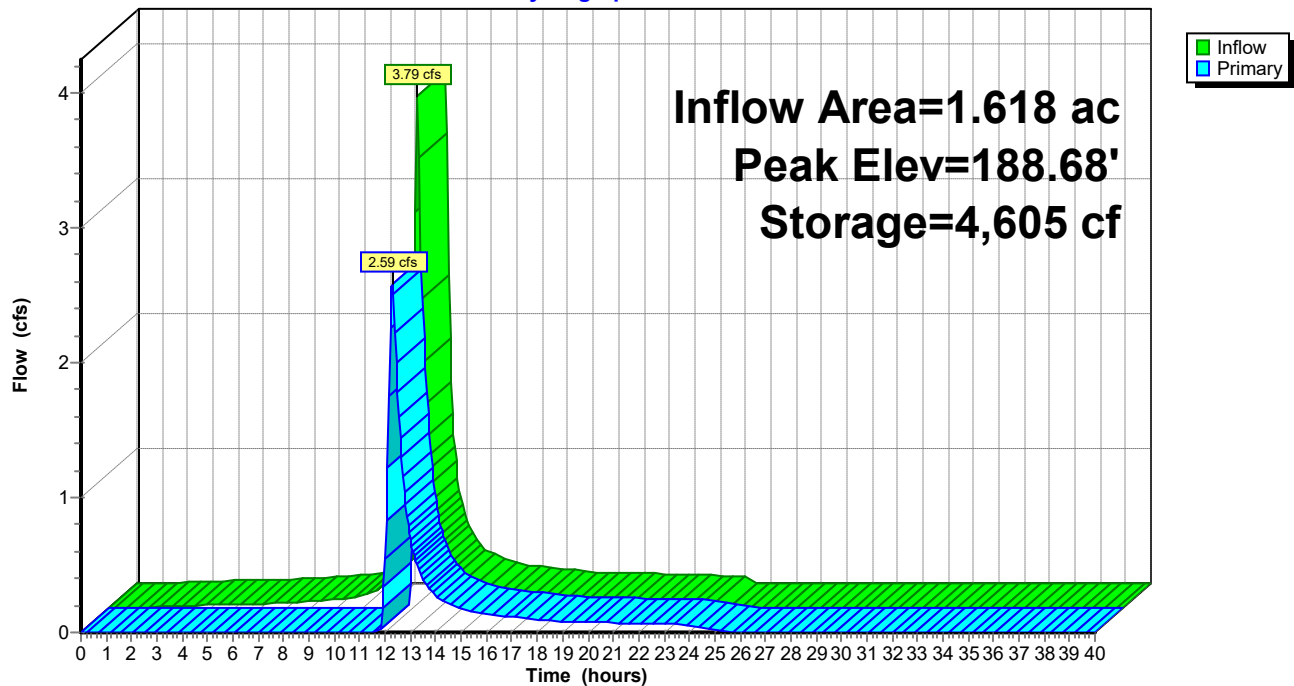
Device	Routing	Invert	Outlet Devices
#1	Primary	186.86'	18.0" Round Culvert L= 172.0' Ke= 0.500 Inlet / Outlet Invert= 186.86' / 186.00' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	188.06'	20.0" W x 8.0" H Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	188.68'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	189.71'	50.0' long + 3.0' /' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=2.57 cfs @ 12.28 hrs HW=188.67' (Free Discharge)

1=Culvert (Passes 2.57 cfs of 7.74 cfs potential flow)
 2=Orifice/Grate (Orifice Controls 2.57 cfs @ 2.51 fps)
 3=Sharp-Crested Rectangular Weir (Controls 0.00 cfs)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-51: Basin #51

Hydrograph



Summary for Pond B-52: Basin #52

Inflow Area = 2.537 ac, 41.39% Impervious, Inflow Depth = 2.37" for Future 2 yr event
 Inflow = 6.07 cfs @ 12.17 hrs, Volume= 0.501 af
 Outflow = 2.10 cfs @ 12.44 hrs, Volume= 0.400 af, Atten= 65%, Lag= 16.0 min
 Primary = 2.10 cfs @ 12.44 hrs, Volume= 0.400 af
 Routed to Link PDA-6 : Proposed Drainage Area #6

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 195.23' @ 12.44 hrs Surf.Area= 4,390 sf Storage= 9,171 cf

Plug-Flow detention time= 171.7 min calculated for 0.400 af (80% of inflow)
 Center-of-Mass det. time= 87.3 min (881.9 - 794.5)

Volume	Invert	Avail.Storage	Storage Description
#1	192.30'	23,897 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
192.30	0	0	0
193.00	2,920	1,022	1,022
194.00	3,579	3,250	4,271
195.00	4,239	3,909	8,180
196.00	4,898	4,569	12,749
197.00	5,558	5,228	17,977
198.00	6,282	5,920	23,897

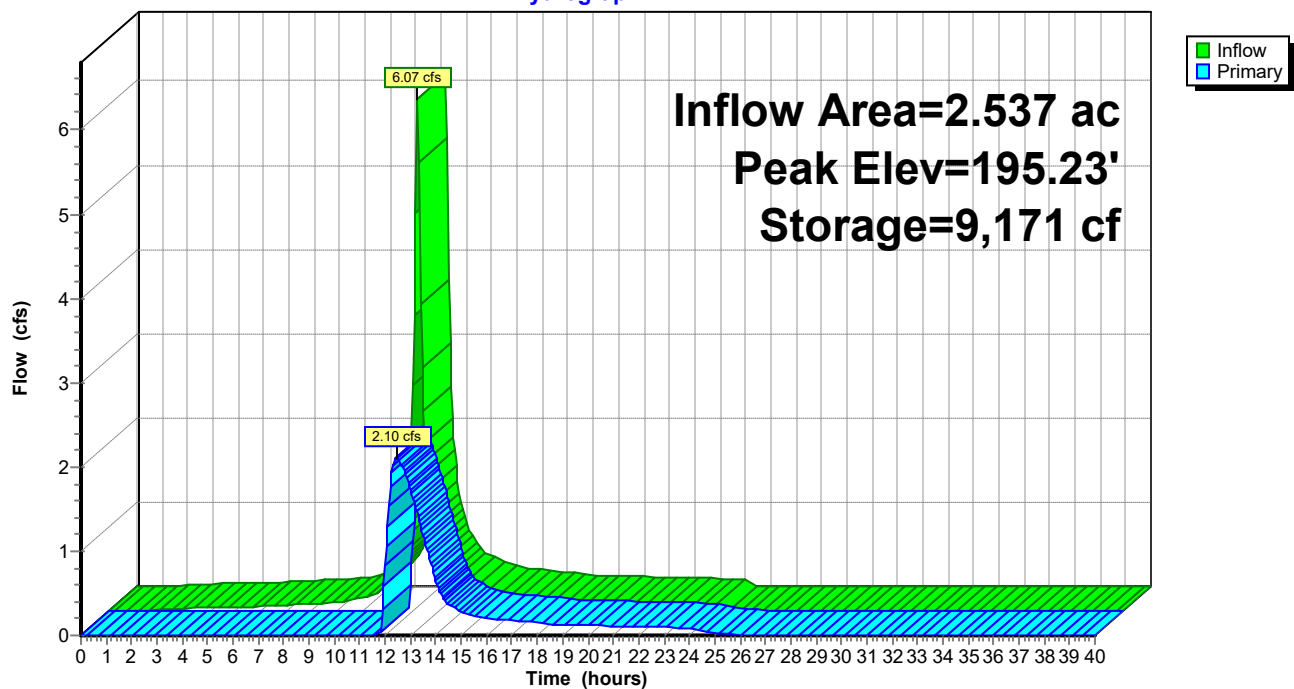
Device	Routing	Invert	Outlet Devices
#1	Primary	192.00'	18.0" Round Culvert L= 163.0' Ke= 0.500 Inlet / Outlet Invert= 192.00' / 191.00' S= 0.0061 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	194.03'	24.0" W x 2.5" H Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	195.24'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	196.99'	50.0' long + 3.0' /' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=2.10 cfs @ 12.44 hrs HW=195.23' (Free Discharge)

1=Culvert (Passes 2.10 cfs of 11.07 cfs potential flow)
 2=Orifice/Grate (Orifice Controls 2.10 cfs @ 5.04 fps)
 3=Sharp-Crested Rectangular Weir (Controls 0.00 cfs)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-52: Basin #52

Hydrograph



Summary for Pond B-53: Basin #53

Inflow Area = 2.540 ac, 47.79% Impervious, Inflow Depth = 2.50" for Future 2 yr event
 Inflow = 6.38 cfs @ 12.17 hrs, Volume= 0.530 af
 Outflow = 0.32 cfs @ 14.47 hrs, Volume= 0.409 af, Atten= 95%, Lag= 137.9 min
 Primary = 0.32 cfs @ 14.47 hrs, Volume= 0.409 af
 Routed to Link PDA-6 : Proposed Drainage Area #6

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 202.93' @ 14.47 hrs Surf.Area= 5,991 sf Storage= 15,469 cf

Plug-Flow detention time= 569.7 min calculated for 0.409 af (77% of inflow)
 Center-of-Mass det. time= 481.5 min (1,270.2 - 788.7)

Volume	Invert	Avail.Storage	Storage Description
#1	199.75'	33,011 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
199.75	0	0	0
200.00	4,035	504	504
201.00	4,695	4,365	4,869
202.00	5,685	5,190	10,059
203.00	6,015	5,850	15,909
204.00	6,676	6,346	22,255
205.00	7,336	7,006	29,261
205.50	7,666	3,751	33,011

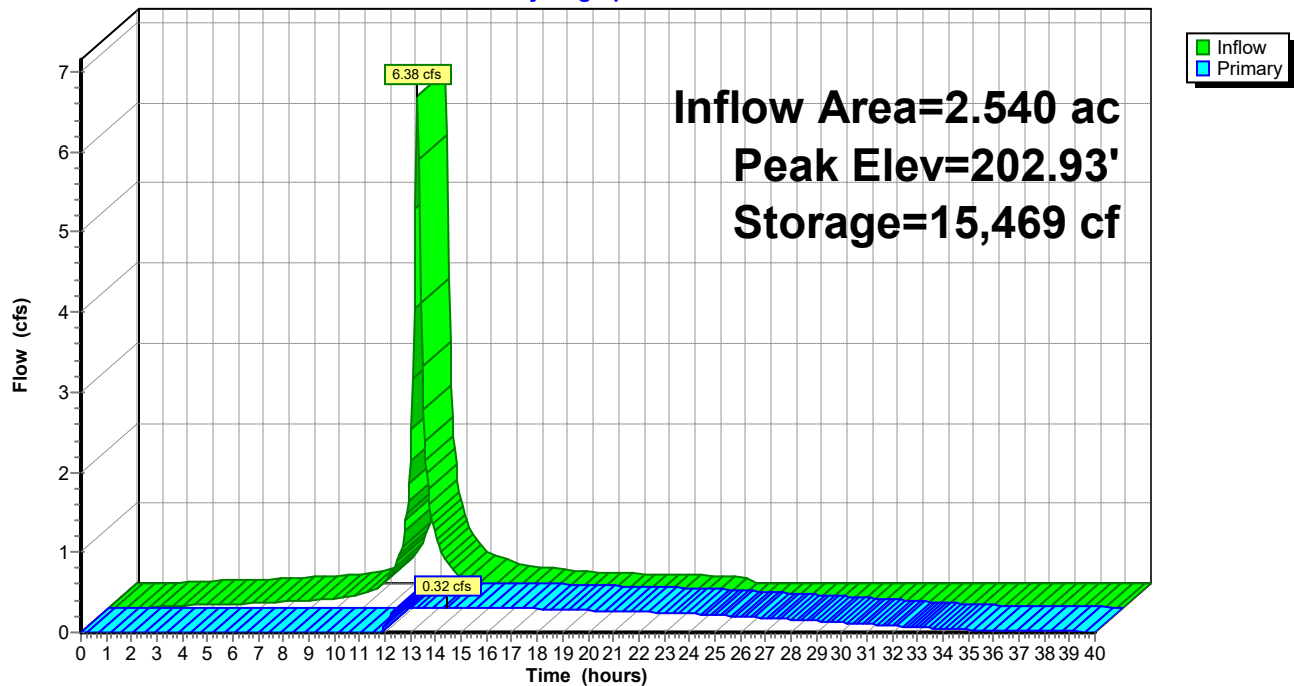
Device	Routing	Invert	Outlet Devices
#1	Primary	198.75'	18.0" Round Culvert L= 122.0' Ke= 0.500 Inlet / Outlet Invert= 198.75' / 198.00' S= 0.0061 ' / Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	201.02'	3.0" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	202.94'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	204.43'	50.0' long + 3.0 ' / SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.32 cfs @ 14.47 hrs HW=202.93' (Free Discharge)

- 1=Culvert (Passes 0.32 cfs of 13.59 cfs potential flow)
 2=Orifice/Grate (Orifice Controls 0.32 cfs @ 6.43 fps)
 3=Sharp-Crested Rectangular Weir (Controls 0.00 cfs)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-53: Basin #53

Hydrograph



Summary for Pond B-54: Basin #54

Inflow Area = 2.570 ac, 60.46% Impervious, Inflow Depth = 2.77" for Future 2 yr event
 Inflow = 7.07 cfs @ 12.17 hrs, Volume= 0.594 af
 Outflow = 0.24 cfs @ 15.24 hrs, Volume= 0.422 af, Atten= 97%, Lag= 184.0 min
 Primary = 0.24 cfs @ 15.24 hrs, Volume= 0.422 af
 Routed to Link PDA-6 : Proposed Drainage Area #6

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 203.70' @ 15.24 hrs Surf.Area= 6,222 sf Storage= 18,701 cf

Plug-Flow detention time= 745.6 min calculated for 0.421 af (71% of inflow)
 Center-of-Mass det. time= 647.7 min (1,426.5 - 778.8)

Volume	Invert	Avail.Storage	Storage Description
#1	199.89'	30,982 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
199.89	0	0	0
200.00	3,780	208	208
201.00	4,440	4,110	4,318
202.00	5,100	4,770	9,088
203.00	5,760	5,430	14,518
204.00	6,421	6,091	20,608
205.00	7,081	6,751	27,359
205.50	7,411	3,623	30,982

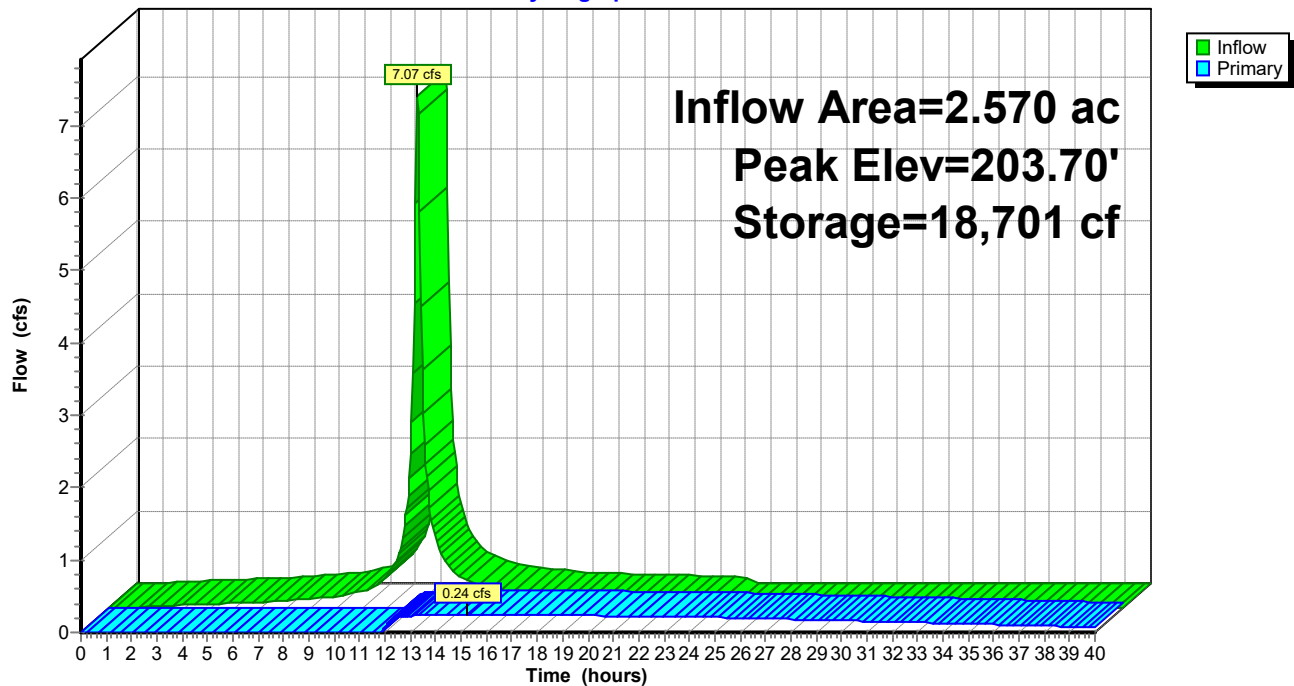
Device	Routing	Invert	Outlet Devices
#1	Primary	198.89'	18.0" Round Culvert L= 178.0' Ke= 0.500 Inlet / Outlet Invert= 198.89' / 198.00' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	201.40'	2.5" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	203.70'	4.0' long 1 2 End Contraction(s)
#4	Primary	204.47'	50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.24 cfs @ 15.24 hrs HW=203.70' (Free Discharge)

1=Culvert (Passes 0.24 cfs of 13.32 cfs potential flow)
 2=Orifice/Grate (Orifice Controls 0.24 cfs @ 7.13 fps)
 3=1 (Controls 0.00 cfs)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-54: Basin #54

Hydrograph



Summary for Pond B-55: Basin #55

Inflow Area = 2.024 ac, 49.74% Impervious, Inflow Depth = 2.55" for Future 2 yr event
 Inflow = 5.16 cfs @ 12.17 hrs, Volume= 0.429 af
 Outflow = 1.65 cfs @ 12.46 hrs, Volume= 0.336 af, Atten= 68%, Lag= 17.3 min
 Primary = 1.65 cfs @ 12.46 hrs, Volume= 0.336 af
 Routed to Link PDA-6 : Proposed Drainage Area #6

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 193.62' @ 12.46 hrs Surf.Area= 5,062 sf Storage= 8,469 cf

Plug-Flow detention time= 187.9 min calculated for 0.335 af (78% of inflow)
 Center-of-Mass det. time= 101.8 min (888.9 - 787.0)

Volume	Invert	Avail.Storage	Storage Description
#1	191.56'	22,010 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
191.56	0	0	0
192.00	4,250	935	935
193.00	4,746	4,498	5,433
194.00	5,257	5,002	10,434
195.00	5,784	5,521	15,955
196.00	6,327	6,056	22,010

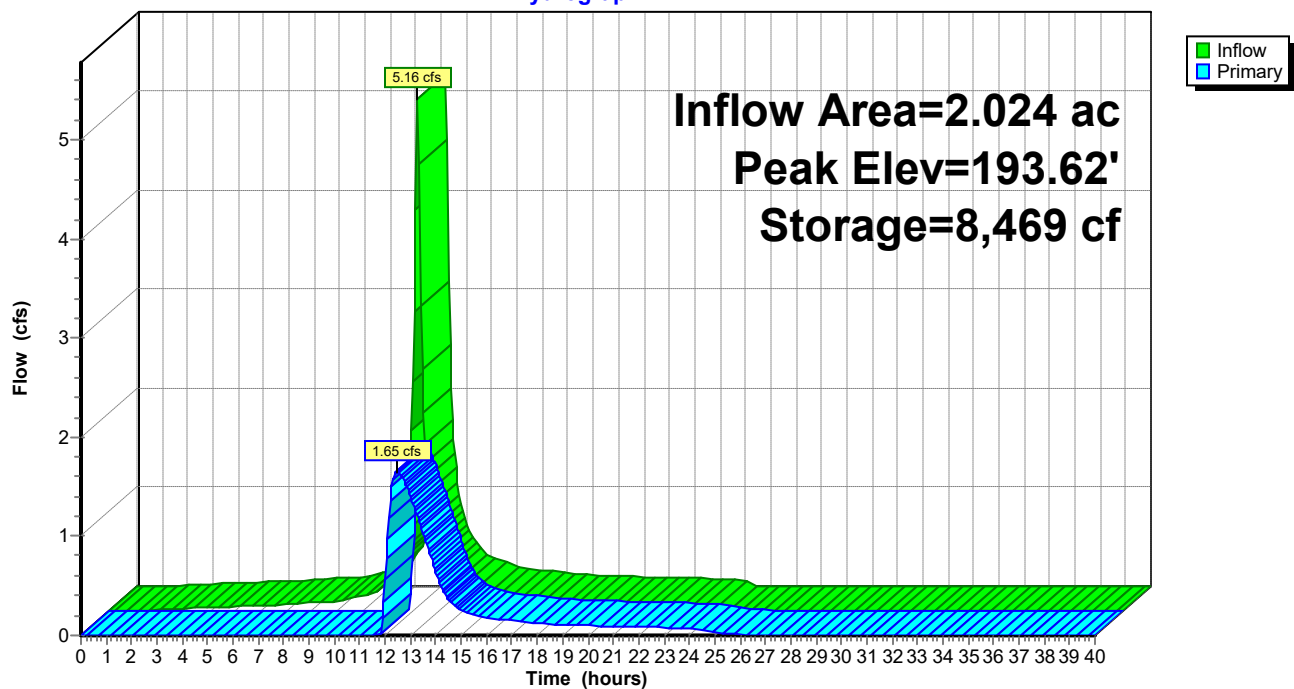
Device	Routing	Invert	Outlet Devices
#1	Primary	191.56'	18.0" Round Culvert L= 112.0' Ke= 0.500 Inlet / Outlet Invert= 191.56' / 191.00' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	192.71'	22.0" W x 2.5" H Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	193.63'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	194.99'	50.0' long + 3.0' /' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=1.65 cfs @ 12.46 hrs HW=193.62' (Free Discharge)

1=Culvert (Passes 1.65 cfs of 7.96 cfs potential flow)
 2=Orifice/Grate (Orifice Controls 1.65 cfs @ 4.31 fps)
 3=Sharp-Crested Rectangular Weir (Controls 0.00 cfs)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-55: Basin #55

Hydrograph



Summary for Pond B-56: Basin #56

Inflow Area = 2.308 ac, 44.92% Impervious, Inflow Depth = 2.44" for Future 2 yr event
 Inflow = 5.68 cfs @ 12.17 hrs, Volume= 0.470 af
 Outflow = 1.48 cfs @ 12.56 hrs, Volume= 0.372 af, Atten= 74%, Lag= 22.9 min
 Primary = 1.48 cfs @ 12.56 hrs, Volume= 0.372 af
 Routed to Link PDA-6 : Proposed Drainage Area #6

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 193.59' @ 12.56 hrs Surf.Area= 5,778 sf Storage= 9,671 cf

Plug-Flow detention time= 196.6 min calculated for 0.371 af (79% of inflow)
 Center-of-Mass det. time= 112.1 min (903.4 - 791.2)

Volume	Invert	Avail.Storage	Storage Description
#1	191.57'	25,032 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
191.57	0	0	0
192.00	5,021	1,080	1,080
193.00	5,490	5,256	6,335
194.00	5,976	5,733	12,068
195.00	6,478	6,227	18,295
196.00	6,995	6,737	25,032

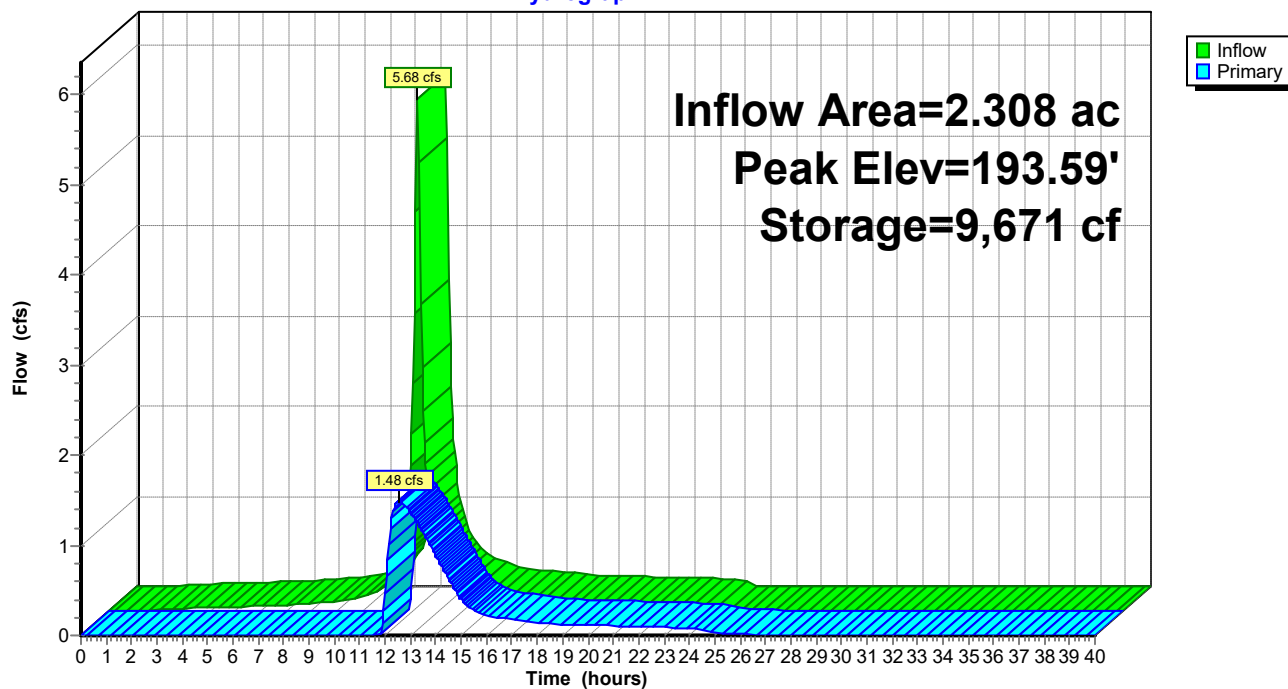
Device	Routing	Invert	Outlet Devices
#1	Primary	191.57'	18.0" Round Culvert L= 29.0' Ke= 0.500 Inlet / Outlet Invert= 191.57' / 191.42' S= 0.0052 ' / Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	192.62'	19.0" W x 2.5" H Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	193.60'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	194.99'	50.0' long + 3.0 ' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=1.48 cfs @ 12.56 hrs HW=193.59' (Free Discharge)

1=Culvert (Passes 1.48 cfs of 8.16 cfs potential flow)
 2=Orifice/Grate (Orifice Controls 1.48 cfs @ 4.48 fps)
 3=Sharp-Crested Rectangular Weir (Controls 0.00 cfs)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-56: Basin #56

Hydrograph



Summary for Pond B-57: Basin #57

Inflow Area = 1.297 ac, 51.37% Impervious, Inflow Depth = 2.58" for Future 2 yr event
 Inflow = 3.34 cfs @ 12.17 hrs, Volume= 0.279 af
 Outflow = 0.70 cfs @ 12.64 hrs, Volume= 0.216 af, Atten= 79%, Lag= 27.8 min
 Primary = 0.70 cfs @ 12.64 hrs, Volume= 0.216 af
 Routed to Link PDA-6 : Proposed Drainage Area #6

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 203.14' @ 12.64 hrs Surf.Area= 4,564 sf Storage= 6,250 cf

Plug-Flow detention time= 225.7 min calculated for 0.216 af (77% of inflow)
 Center-of-Mass det. time= 138.6 min (924.3 - 785.7)

Volume	Invert	Avail.Storage	Storage Description
#1	201.30'	15,700 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
201.30	0	0	0
202.00	3,969	1,389	1,389
203.00	4,488	4,229	5,618
204.00	5,034	4,761	10,379
205.00	5,608	5,321	15,700

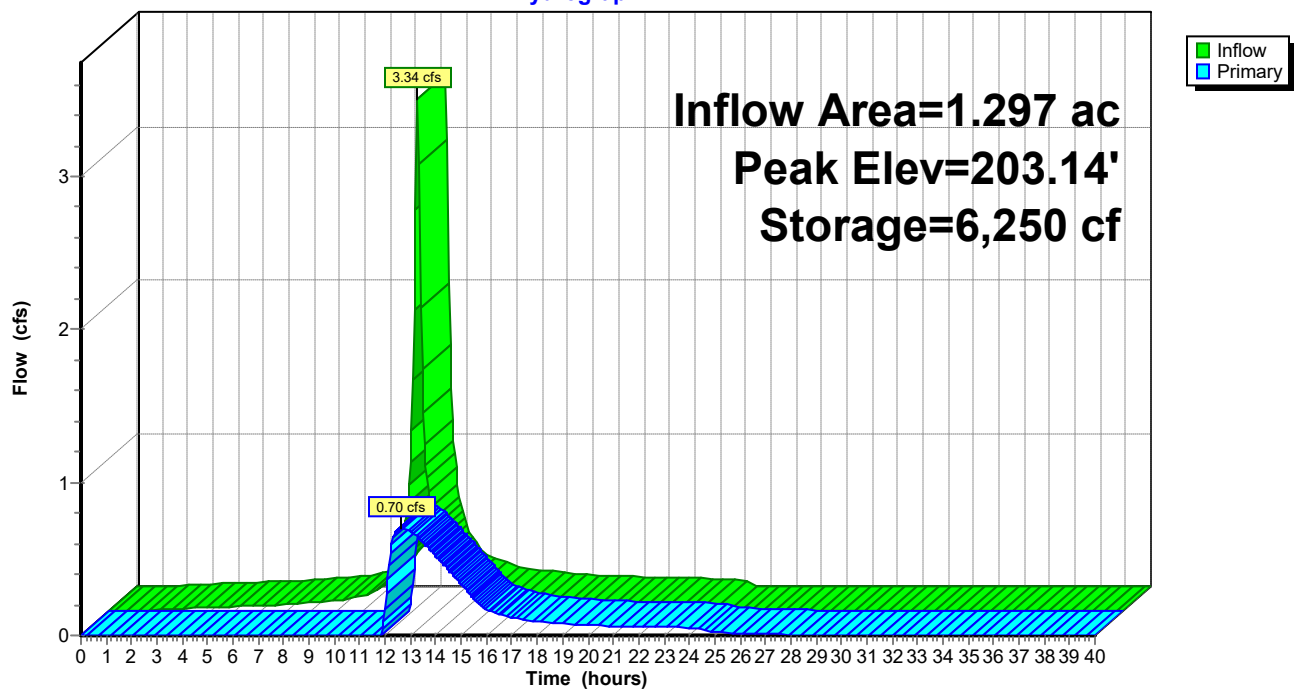
Device	Routing	Invert	Outlet Devices
#1	Primary	200.65'	18.0" Round Culvert L= 207.0' Ke= 0.500 Inlet / Outlet Invert= 200.65' / 198.00' S= 0.0128 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	202.33'	10.0" W x 2.5" H Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	203.15'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	203.98'	50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.70 cfs @ 12.64 hrs HW=203.14' (Free Discharge)

1=Culvert (Passes 0.70 cfs of 11.22 cfs potential flow)
 2=Orifice/Grate (Orifice Controls 0.70 cfs @ 4.04 fps)
 3=Sharp-Crested Rectangular Weir (Controls 0.00 cfs)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-57: Basin #57

Hydrograph



Summary for Pond B-58: Basin #58

Inflow Area = 2.371 ac, 32.26% Impervious, Inflow Depth = 2.17" for Future 2 yr event
 Inflow = 5.26 cfs @ 12.18 hrs, Volume= 0.430 af
 Outflow = 0.19 cfs @ 15.71 hrs, Volume= 0.322 af, Atten= 96%, Lag= 211.8 min
 Primary = 0.19 cfs @ 15.71 hrs, Volume= 0.322 af
 Routed to Link PDA-6 : Proposed Drainage Area #6

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 200.59' @ 15.71 hrs Surf.Area= 7,365 sf Storage= 12,956 cf

Plug-Flow detention time= 716.7 min calculated for 0.322 af (75% of inflow)
 Center-of-Mass det. time= 621.2 min (1,425.4 - 804.2)

Volume	Invert	Avail.Storage	Storage Description
#1	198.30'	32,924 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
198.30	0	0	0
199.00	6,230	2,180	2,180
200.00	6,932	6,581	8,761
201.00	7,670	7,301	16,062
202.00	8,426	8,048	24,110
203.00	9,201	8,814	32,924

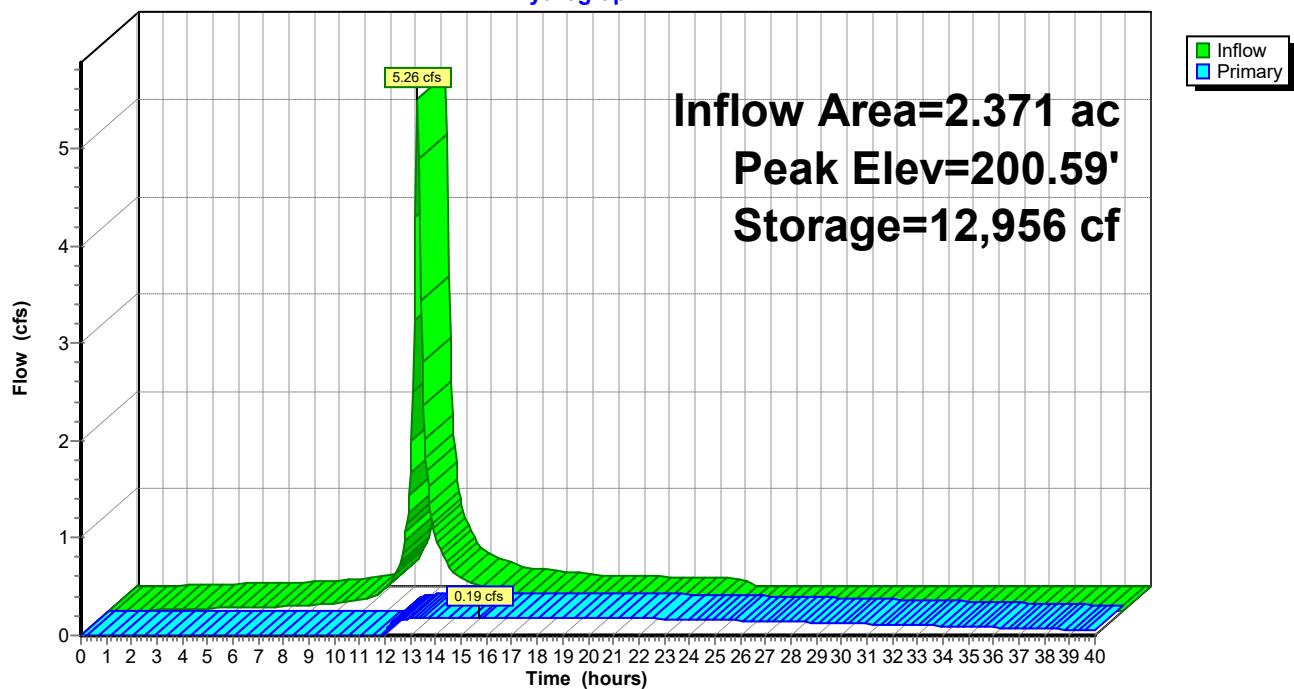
Device	Routing	Invert	Outlet Devices
#1	Primary	198.30'	18.0" Round Culvert L= 48.0' Ke= 0.500 Inlet / Outlet Invert= 198.30' / 198.00' S= 0.0063 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	199.19'	2.5" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	200.60'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	201.90'	50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.19 cfs @ 15.71 hrs HW=200.59' (Free Discharge)

1=Culvert (Passes 0.19 cfs of 9.59 cfs potential flow)
 2=Orifice/Grate (Orifice Controls 0.19 cfs @ 5.47 fps)
 3=Sharp-Crested Rectangular Weir (Controls 0.00 cfs)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-58: Basin #58

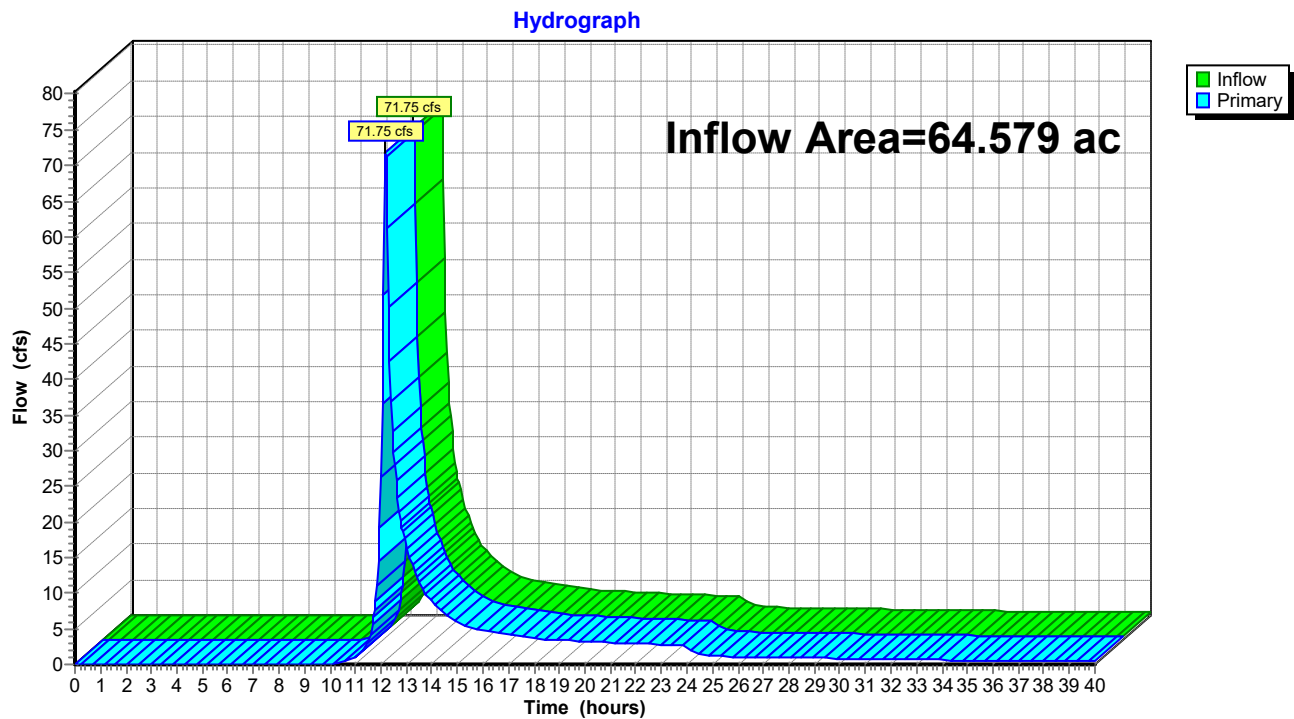
Hydrograph



Summary for Link DP-3: Design Pont #3 (Woolsey Creek)

Inflow Area = 64.579 ac, 17.83% Impervious, Inflow Depth > 1.60" for Future 2 yr event
Inflow = 71.75 cfs @ 12.19 hrs, Volume= 8.633 af
Primary = 71.75 cfs @ 12.19 hrs, Volume= 8.633 af, Atten= 0%, Lag= 0.0 min

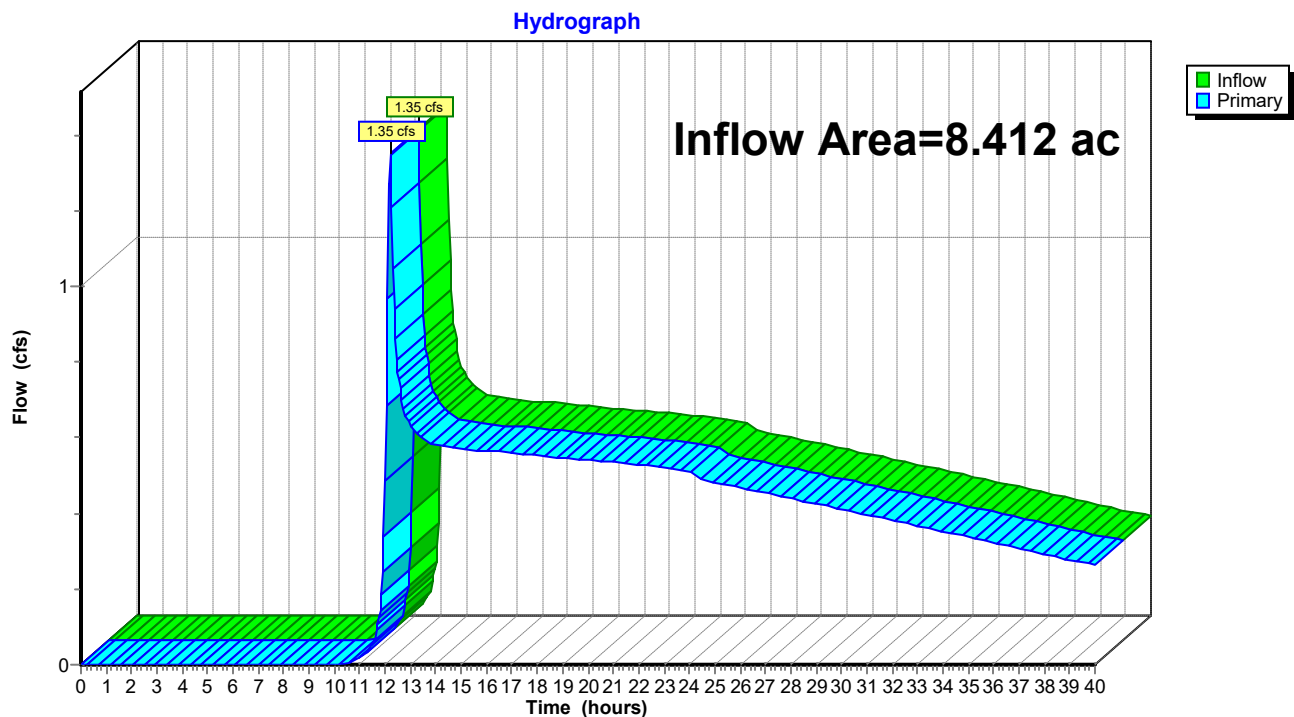
Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link DP-3: Design Pont #3 (Woolsey Creek)

Summary for Link PDA-5: Proposed Drainage Area #5

Inflow Area = 8.412 ac, 42.77% Impervious, Inflow Depth > 1.55" for Future 2 yr event
Inflow = 1.35 cfs @ 12.19 hrs, Volume= 1.085 af
Primary = 1.35 cfs @ 12.19 hrs, Volume= 1.085 af, Atten= 0%, Lag= 0.0 min
Routed to Link DP-3 : Design Pont #3 (Woolsey Creek)

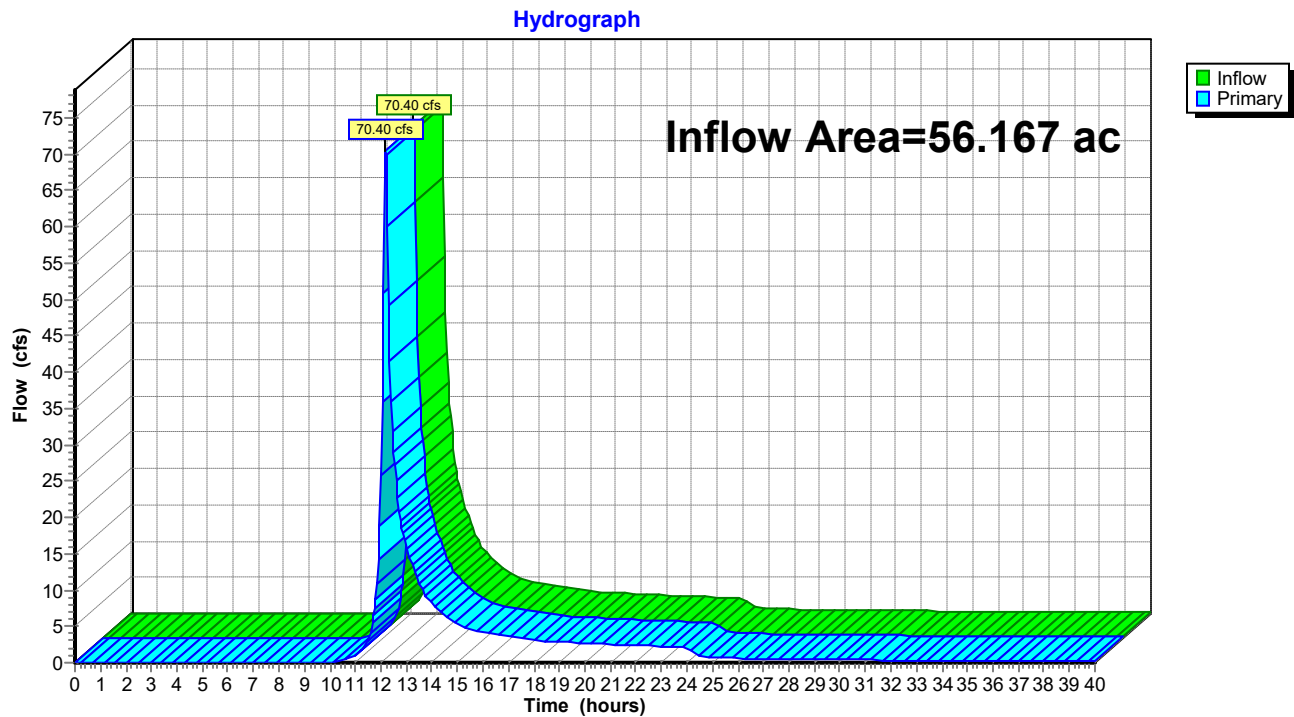
Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link PDA-5: Proposed Drainage Area #5

Summary for Link PDA-6: Proposed Drainage Area #6

Inflow Area = 56.167 ac, 14.10% Impervious, Inflow Depth > 1.61" for Future 2 yr event
Inflow = 70.40 cfs @ 12.19 hrs, Volume= 7.548 af
Primary = 70.40 cfs @ 12.19 hrs, Volume= 7.548 af, Atten= 0%, Lag= 0.0 min
Routed to Link DP-3 : Design Pont #3 (Woolsey Creek)

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link PDA-6: Proposed Drainage Area #6

Summary for Subcatchment 48I: PDA-48 (impervious)

Runoff = 4.76 cfs @ 12.17 hrs, Volume= 0.417 af, Depth= 5.61"
 Routed to Pond B-48 : Basin #48

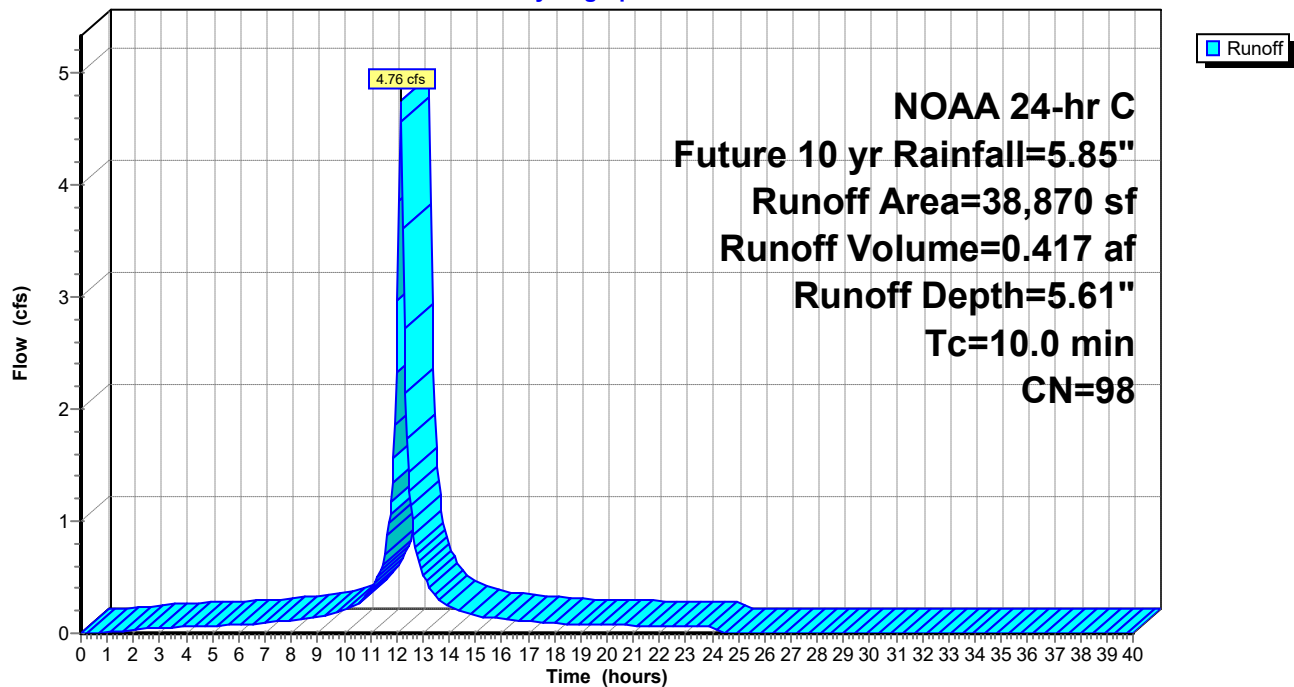
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 10 yr Rainfall=5.85"

	Area (sf)	CN	Description
*	16,283	98	Pavement, HSG C
*	21,350	98	Roof, HSG C
*	1,237	98	Concrete, HSG C
	38,870	98	Weighted Average
	38,870		100.00% Impervious Area

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

Subcatchment 48I: PDA-48 (impervious)

Hydrograph



Summary for Subcatchment 48P: PDA-48 (pervious)

Runoff = 5.15 cfs @ 12.18 hrs, Volume= 0.388 af, Depth= 3.06"
 Routed to Pond B-48 : Basin #48

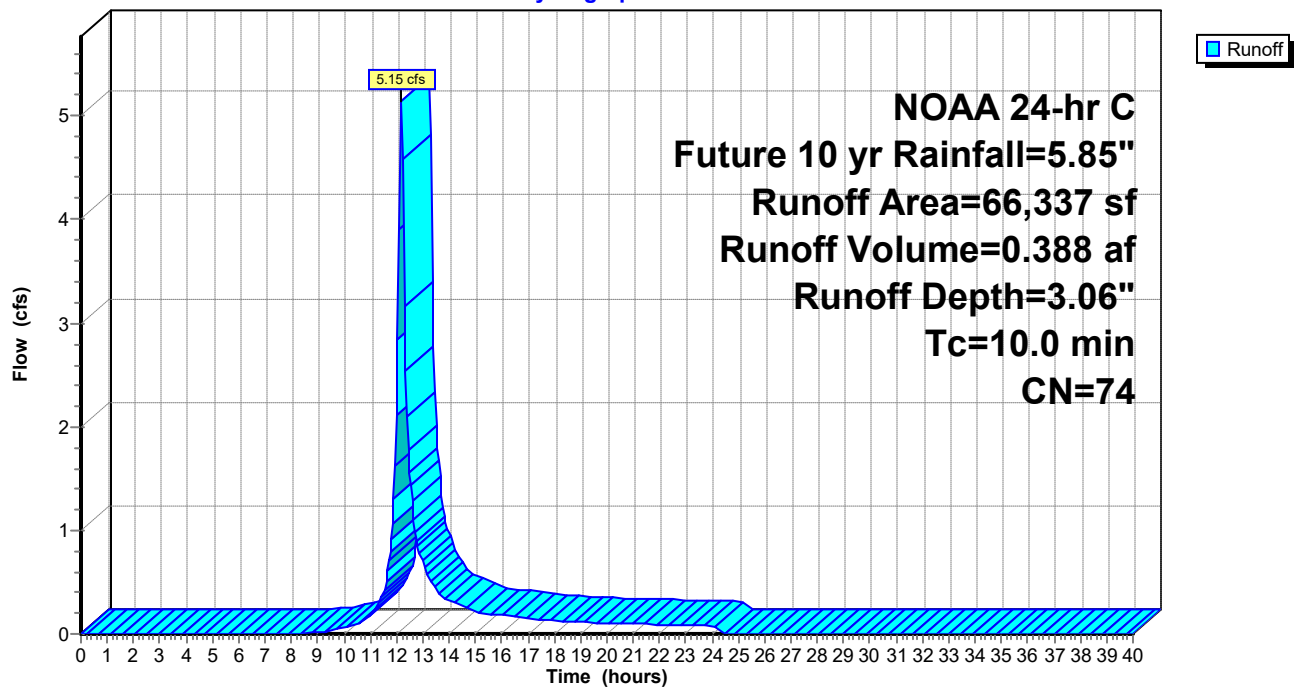
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (sf)	CN	Description
66,337	74	>75% Grass cover, Good, HSG C
66,337		100.00% Pervious Area

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

Subcatchment 48P: PDA-48 (pervious)

Hydrograph



Summary for Subcatchment 49I: PDA-49 (impervious)

Runoff = 7.75 cfs @ 12.17 hrs, Volume= 0.680 af, Depth= 5.61"
 Routed to Pond B-49 : Basin #49

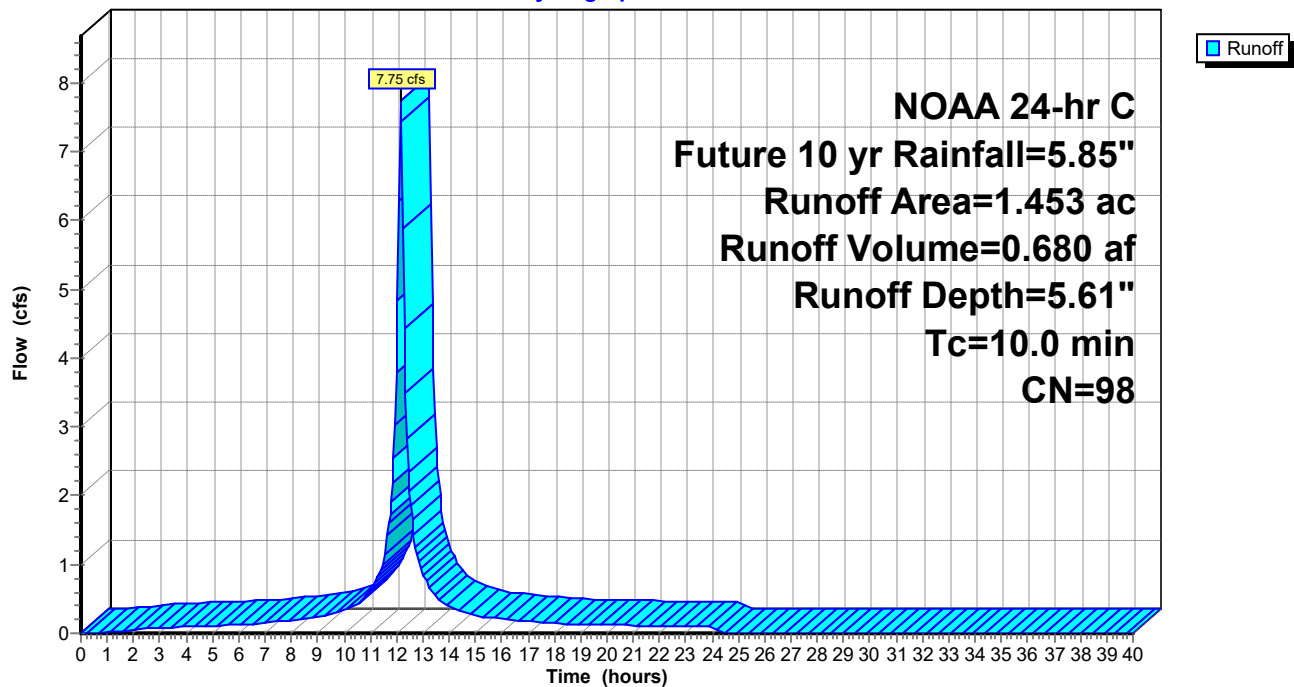
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (ac)	CN	Description
* 0.454	98	Pavement, HSG C
* 0.940	98	Roof, HSG C
* 0.059	98	Concrete, HSG C
1.453	98	Weighted Average
1.453		100.00% Impervious Area

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

Subcatchment 49I: PDA-49 (impervious)

Hydrograph



Summary for Subcatchment 49P: PDA-49 (pervious)

Runoff = 4.15 cfs @ 12.18 hrs, Volume= 0.313 af, Depth= 3.06"
 Routed to Pond B-49 : Basin #49

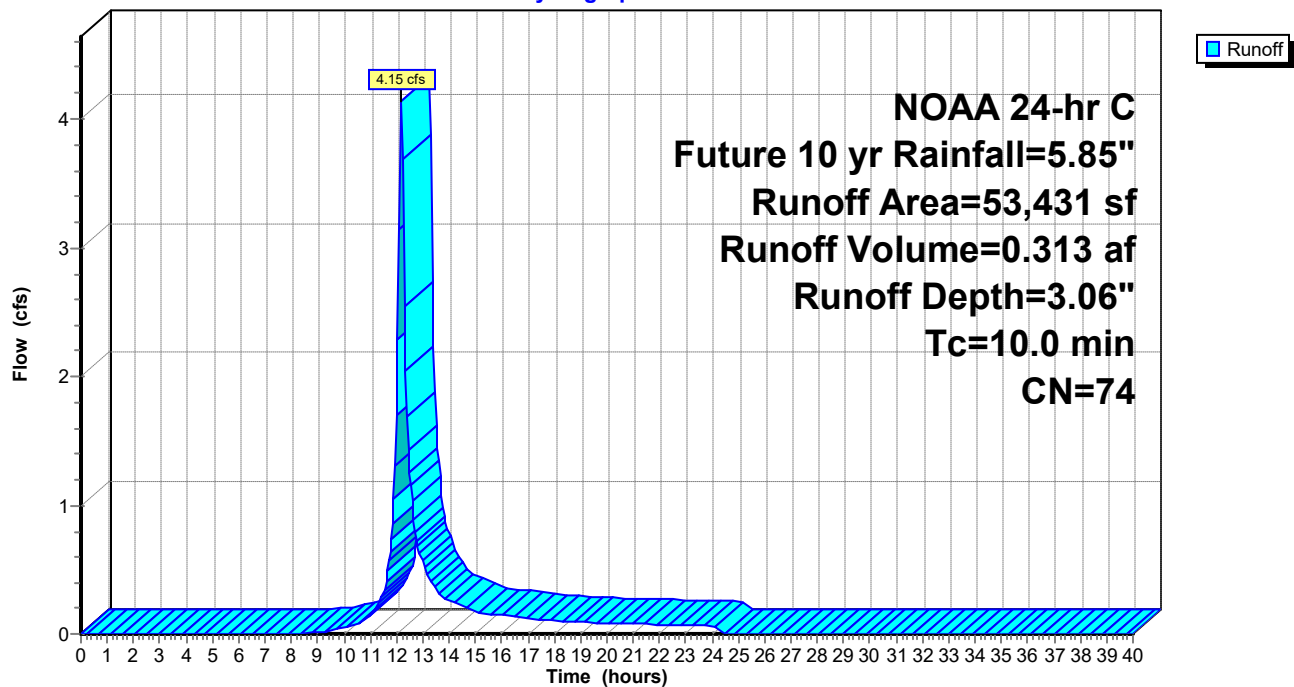
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (sf)	CN	Description
53,431	74	>75% Grass cover, Good, HSG C
53,431		100.00% Pervious Area

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

Subcatchment 49P: PDA-49 (pervious)

Hydrograph



Summary for Subcatchment 50I: PDA-50 (impervious)

Runoff = 6.68 cfs @ 12.17 hrs, Volume= 0.586 af, Depth= 5.61"
 Routed to Pond B-50 : Basin #50

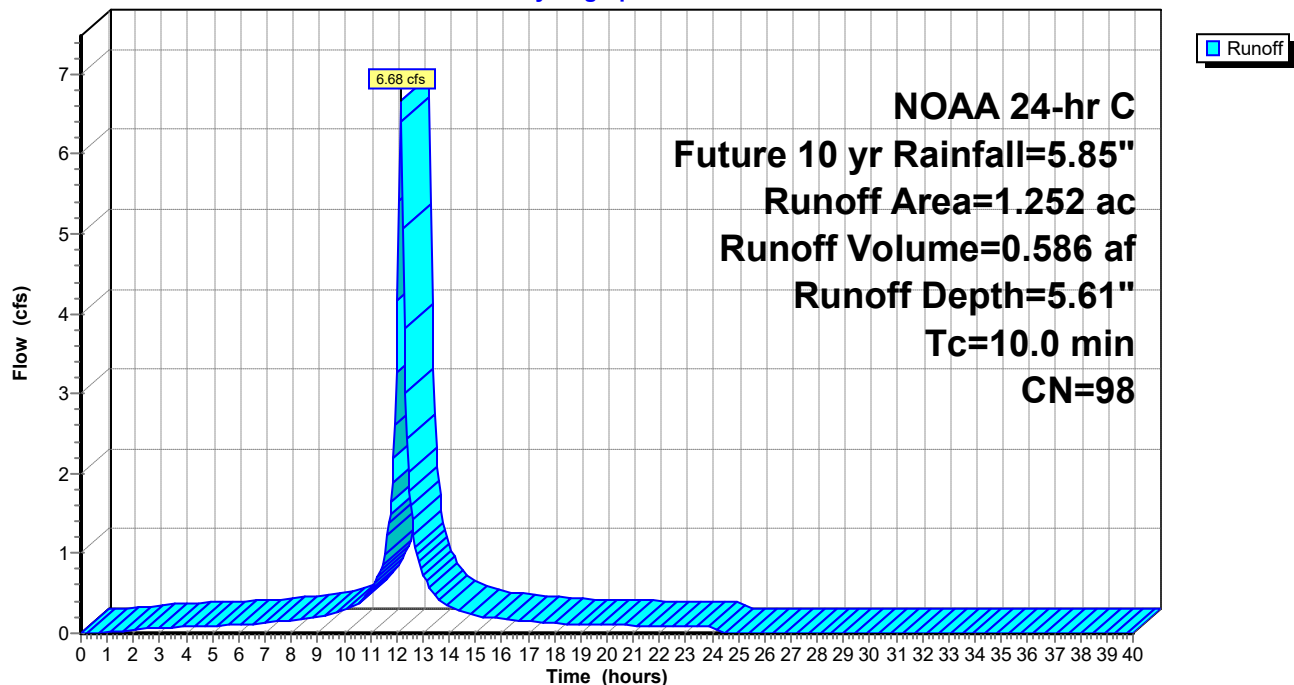
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (ac)	CN	Description
* 0.633	98	Pavement, HSG C
* 0.546	98	Roof, HSG C
* 0.073	98	Concrete, HSG C
1.252	98	Weighted Average
1.252		100.00% Impervious Area

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

Subcatchment 50I: PDA-50 (impervious)

Hydrograph



Summary for Subcatchment 50P: PDA-50 (pervious)

Runoff = 4.79 cfs @ 12.18 hrs, Volume= 0.361 af, Depth= 3.06"
 Routed to Pond B-50 : Basin #50

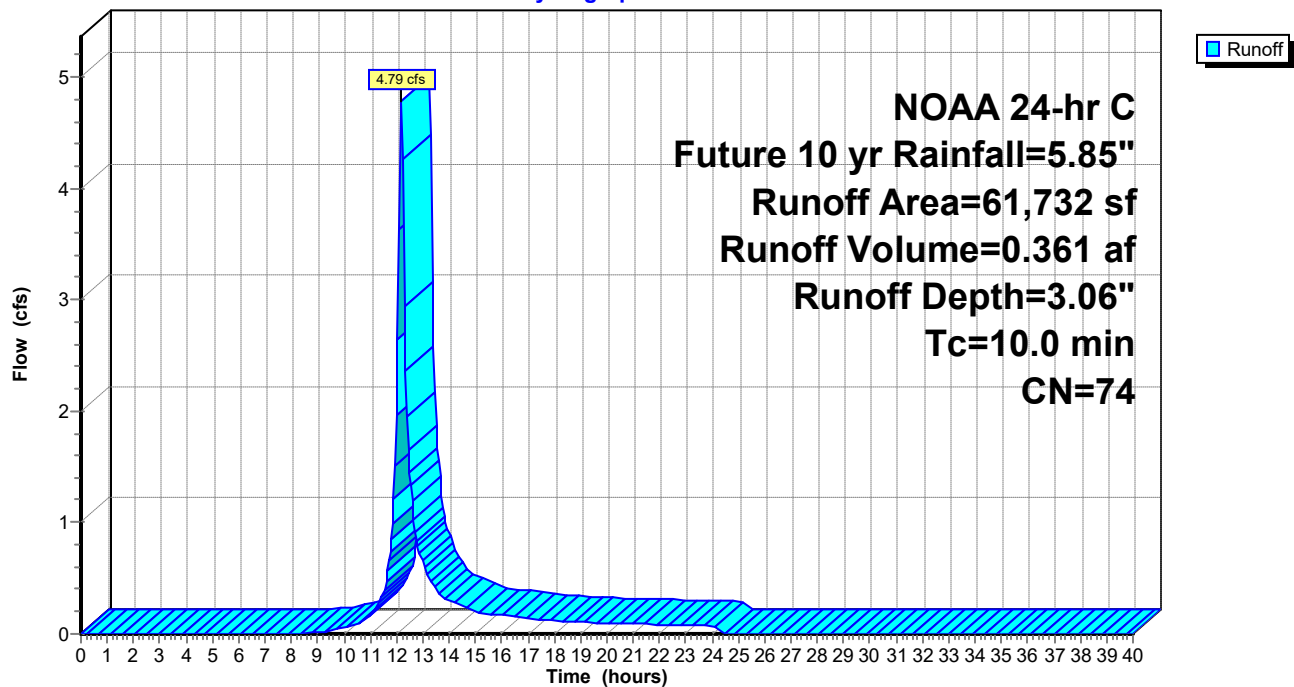
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (sf)	CN	Description
61,732	74	>75% Grass cover, Good, HSG C
61,732		100.00% Pervious Area

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

Subcatchment 50P: PDA-50 (pervious)

Hydrograph



Summary for Subcatchment 51I: PDA-51 (impervious)

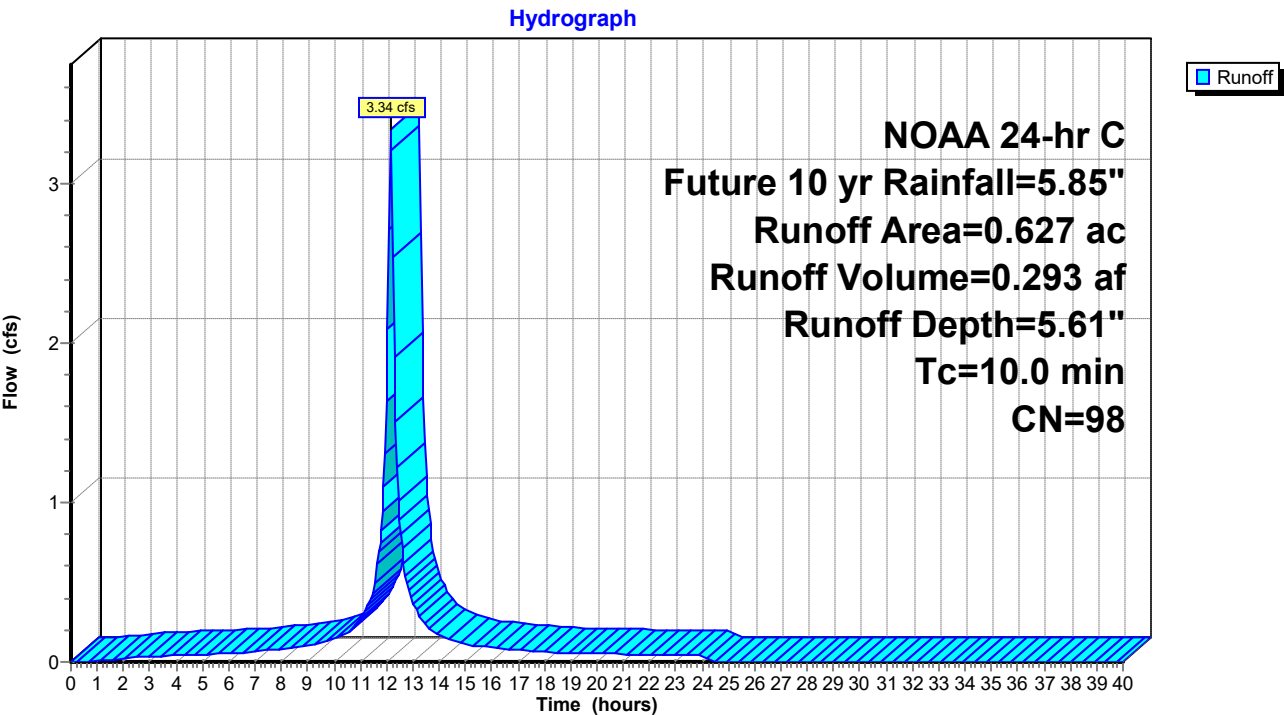
Runoff = 3.34 cfs @ 12.17 hrs, Volume= 0.293 af, Depth= 5.61"
Routed to Pond B-51 : Basin #51

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (ac)	CN	Description
* 0.627	98	Roof, HSG C
0.627		100.00% Impervious Area

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

Subcatchment 51I: PDA-51 (impervious)



Summary for Subcatchment 51P: PDA-51 (pervious)

Runoff = 3.35 cfs @ 12.18 hrs, Volume= 0.253 af, Depth= 3.06"
 Routed to Pond B-51 : Basin #51

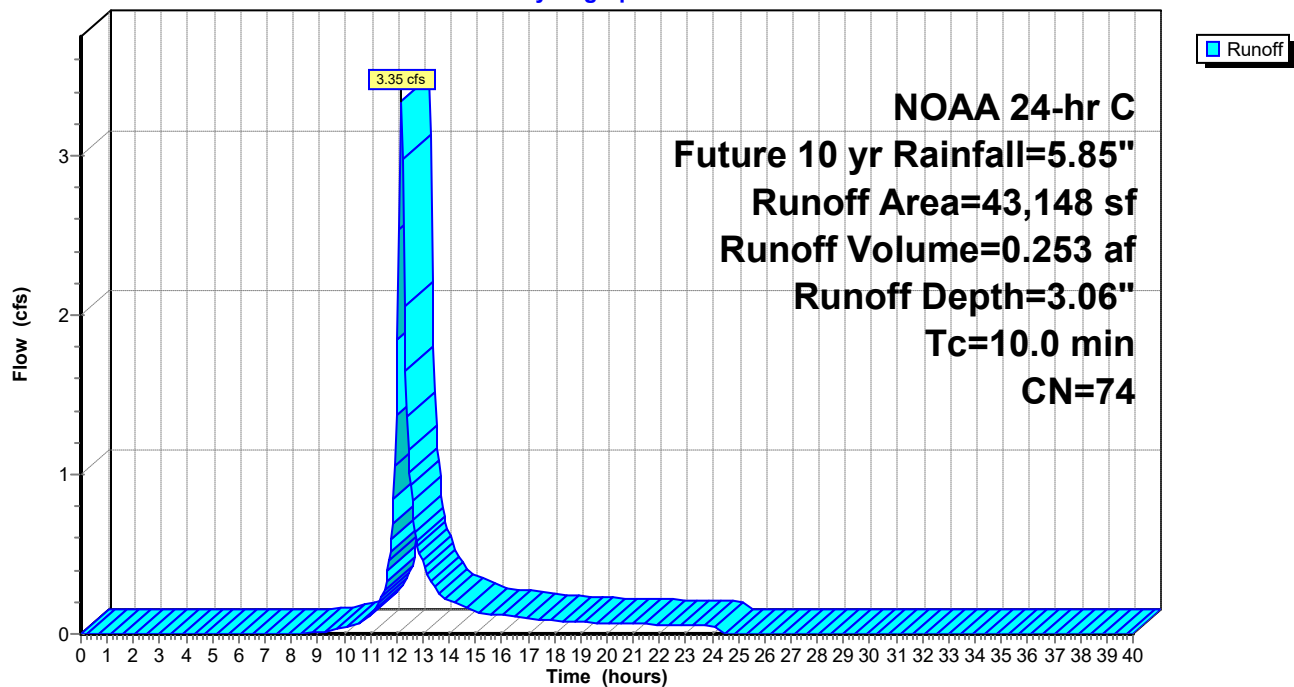
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (sf)	CN	Description
43,148	74	>75% Grass cover, Good, HSG C
43,148		100.00% Pervious Area

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

Subcatchment 51P: PDA-51 (pervious)

Hydrograph



Summary for Subcatchment 52I: PDA-52 (impervious)

Runoff = 5.60 cfs @ 12.17 hrs, Volume= 0.491 af, Depth= 5.61"
 Routed to Pond B-52 : Basin #52

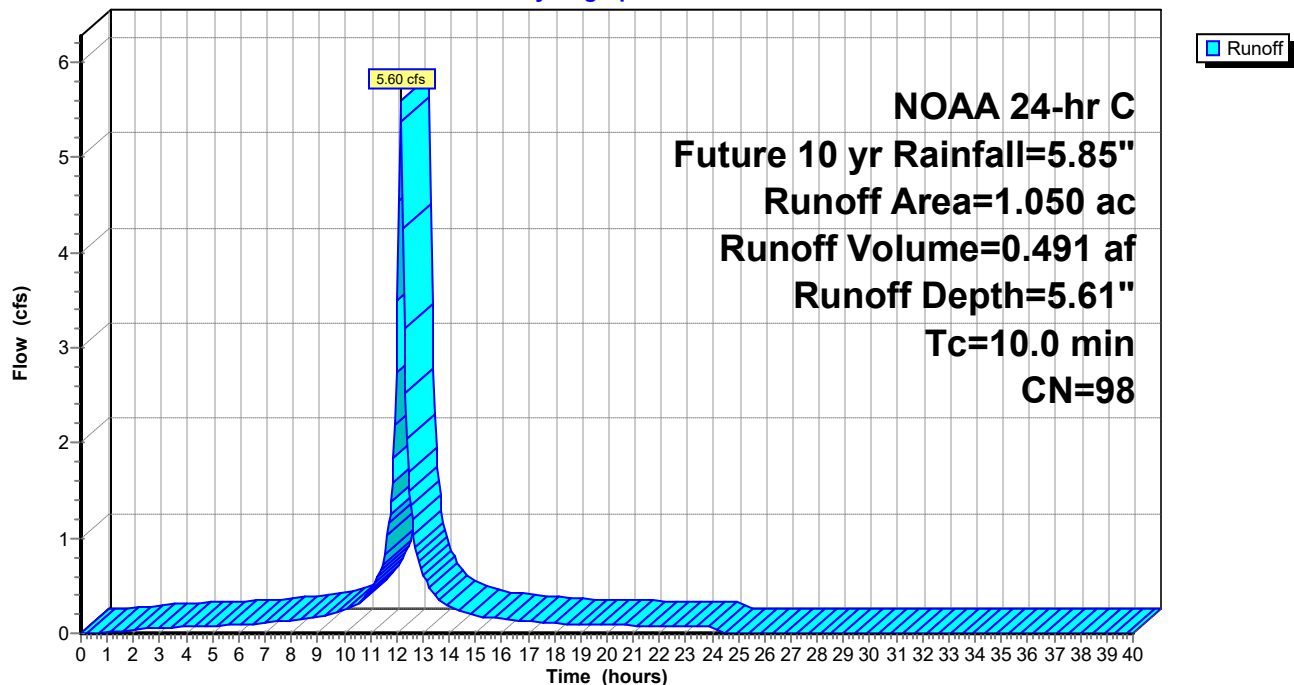
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (ac)	CN	Description
* 0.350	98	Pavement, HSG C
* 0.659	98	Roof, HSG C
* 0.041	98	Concrete, HSG C
1.050	98	Weighted Average
1.050		100.00% Impervious Area

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

Subcatchment 52I: PDA-52 (impervious)

Hydrograph



Summary for Subcatchment 52P: PDA-52 (pervious)

Runoff = 5.03 cfs @ 12.18 hrs, Volume= 0.379 af, Depth= 3.06"
 Routed to Pond B-52 : Basin #52

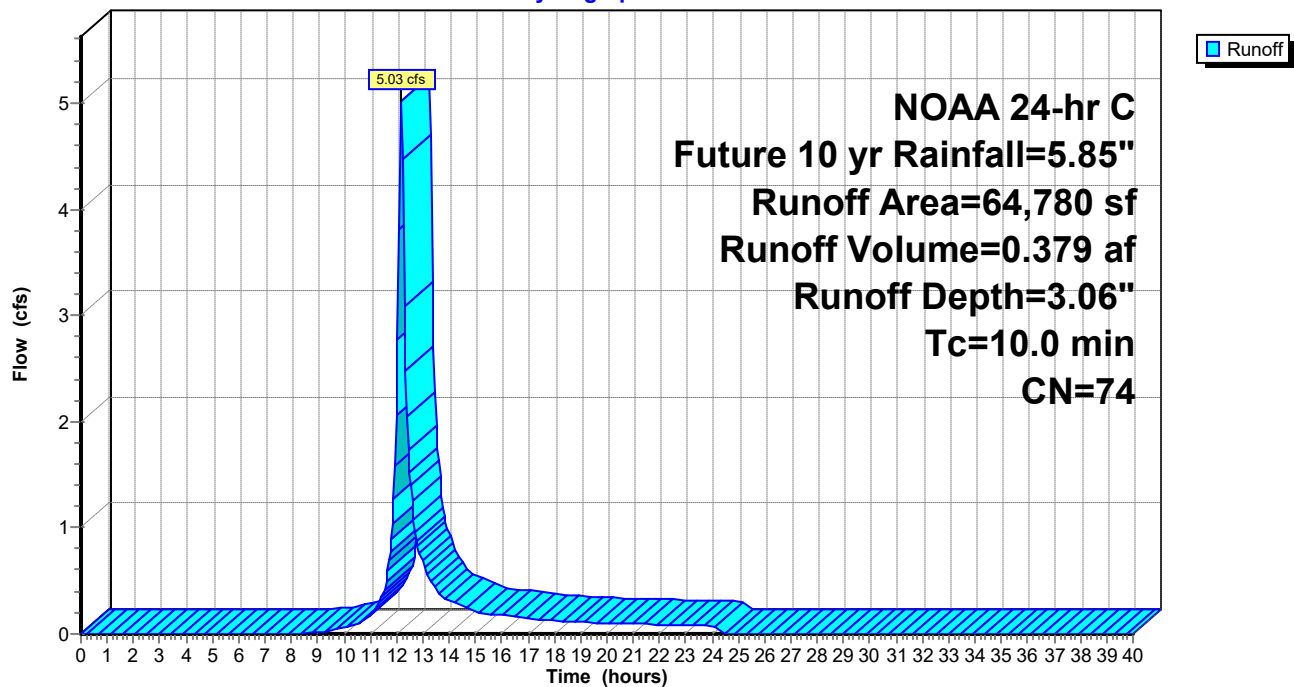
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (sf)	CN	Description
64,780	74	>75% Grass cover, Good, HSG C
64,780		100.00% Pervious Area

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

Subcatchment 52P: PDA-52 (pervious)

Hydrograph



Summary for Subcatchment 53I: PDA-53 (impervious)

Runoff = 6.48 cfs @ 12.17 hrs, Volume= 0.568 af, Depth= 5.61"
 Routed to Pond B-53 : Basin #53

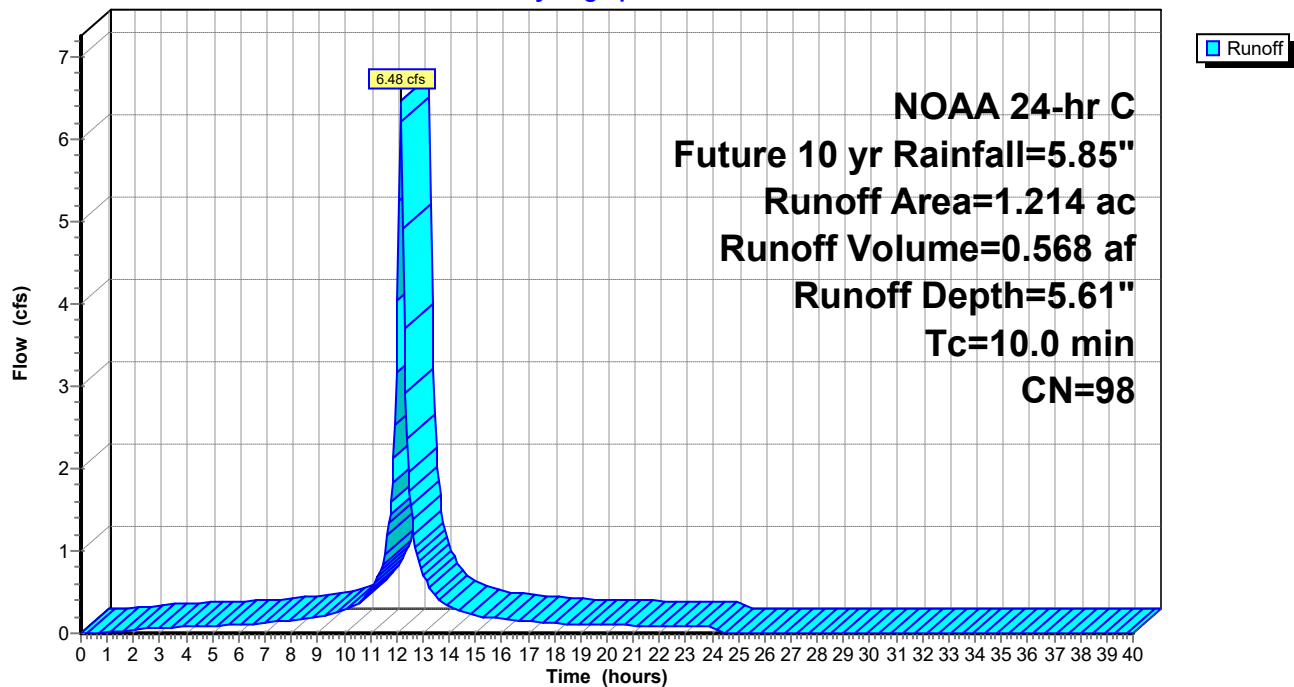
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (ac)	CN	Description
* 0.628	98	Pavement, HSG C
* 0.450	98	Roof, HSG C
* 0.136	98	Concrete, HSG C
1.214	98	Weighted Average
1.214		100.00% Impervious Area

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

Subcatchment 53I: PDA-53 (impervious)

Hydrograph



Summary for Subcatchment 53P: PDA-53 (pervious)

Runoff = 4.48 cfs @ 12.18 hrs, Volume= 0.338 af, Depth= 3.06"
 Routed to Pond B-53 : Basin #53

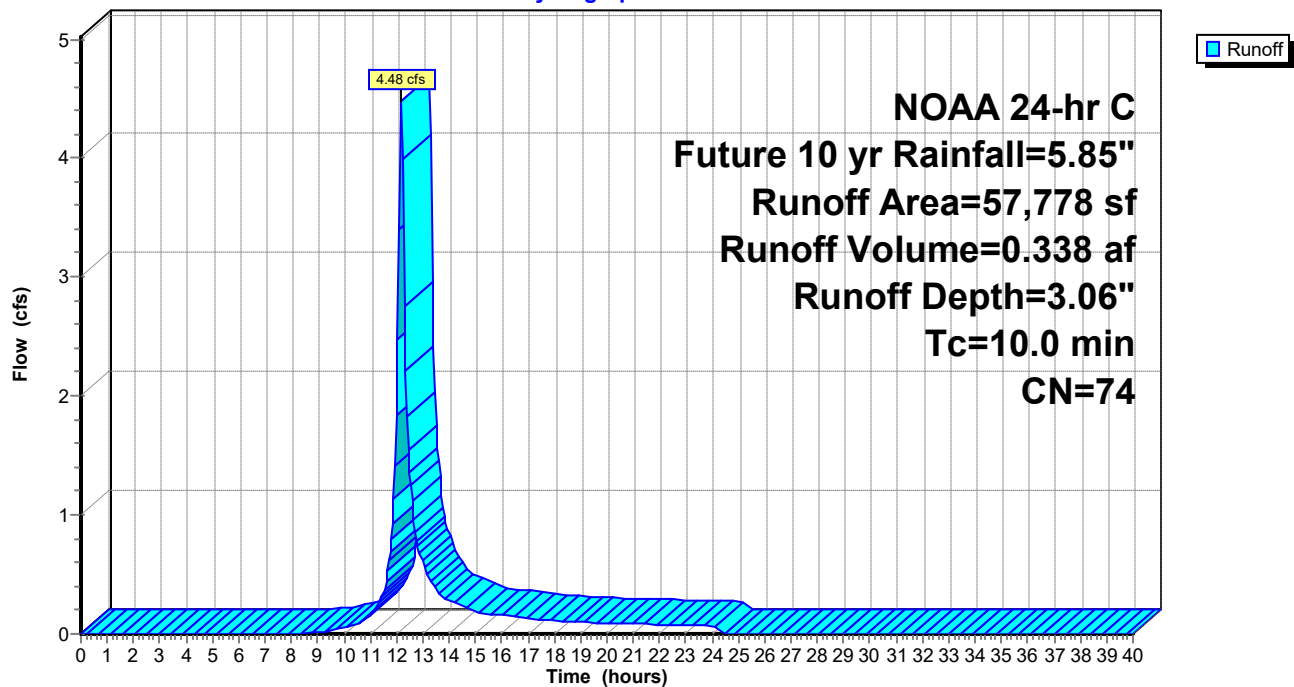
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (sf)	CN	Description
57,778	74	>75% Grass cover, Good, HSG C
57,778		100.00% Pervious Area

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

Subcatchment 53P: PDA-53 (pervious)

Hydrograph



Summary for Subcatchment 54I: PDA-54 (impervious)

Runoff = 8.29 cfs @ 12.17 hrs, Volume= 0.727 af, Depth= 5.61"
 Routed to Pond B-54 : Basin #54

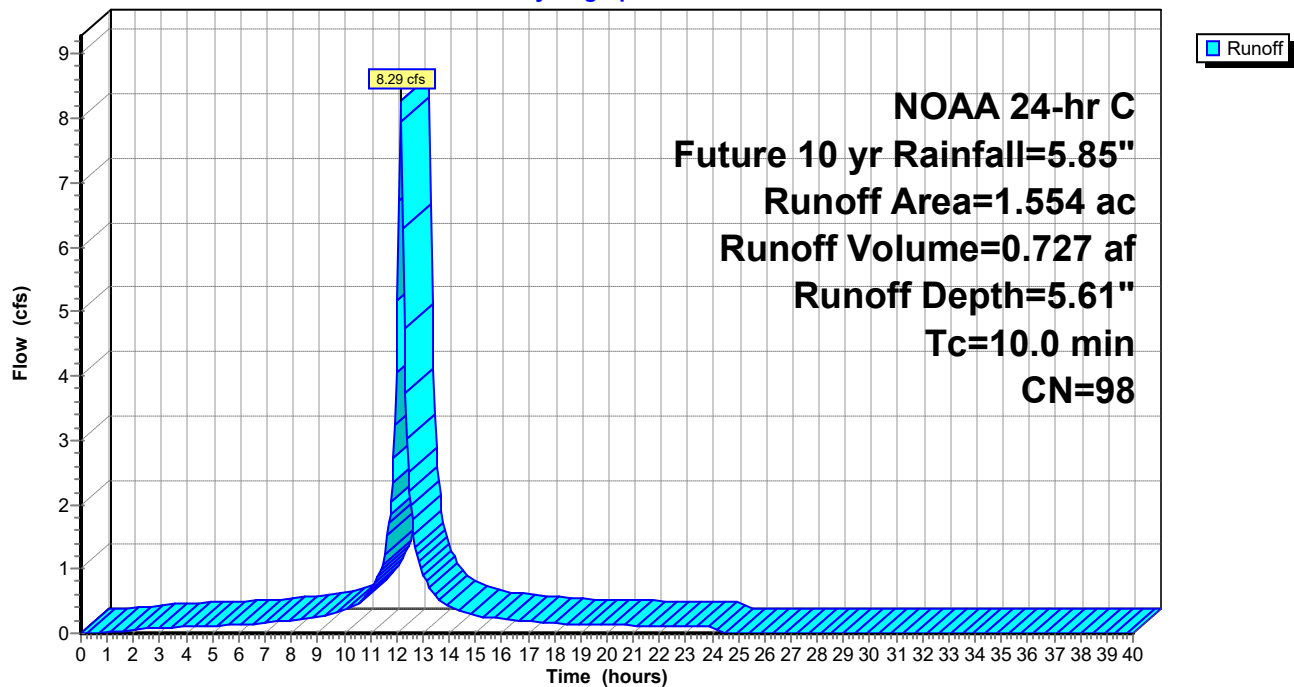
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (ac)	CN	Description
* 0.983	98	Pavement, HSG C
* 0.361	98	Roof, HSG C
* 0.210	98	Concrete, HSG C
1.554	98	Weighted Average
1.554		100.00% Impervious Area

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

Subcatchment 54I: PDA-54 (impervious)

Hydrograph



Summary for Subcatchment 54P: PDA-54 (pervious)

Runoff = 3.44 cfs @ 12.18 hrs, Volume= 0.259 af, Depth= 3.06"
 Routed to Pond B-54 : Basin #54

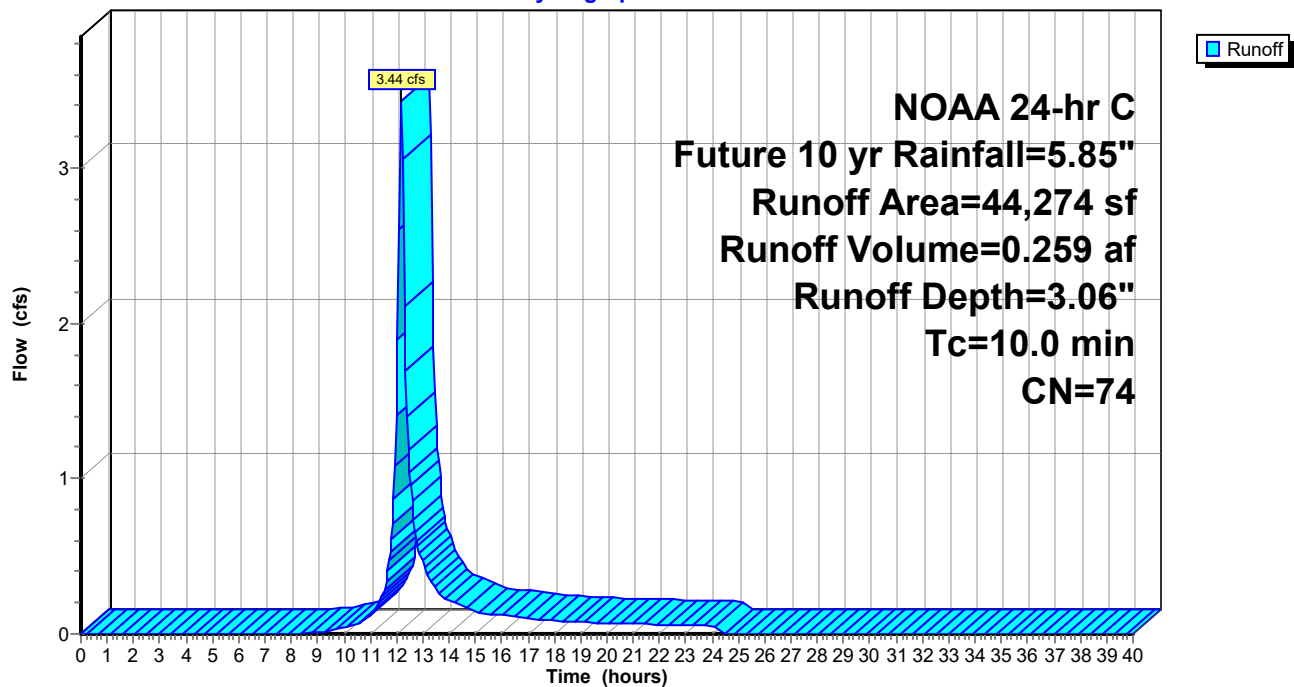
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (sf)	CN	Description
44,274	74	>75% Grass cover, Good, HSG C
44,274		100.00% Pervious Area

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

Subcatchment 54P: PDA-54 (pervious)

Hydrograph



Summary for Subcatchment 55I: PDA-55 (impervious)

Runoff = 5.37 cfs @ 12.17 hrs, Volume= 0.471 af, Depth= 5.61"
 Routed to Pond B-55 : Basin #55

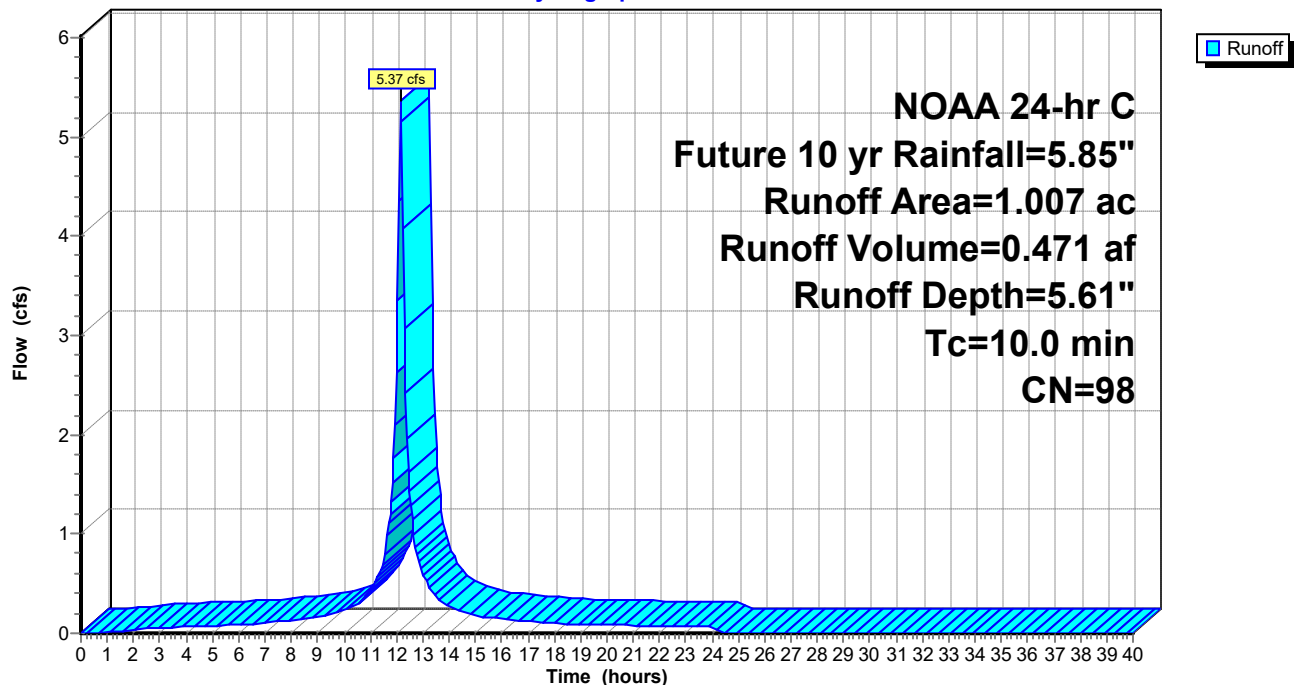
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (ac)	CN	Description
* 0.771	98	Pavement, HSG C
* 0.169	98	Roof, HSG C
* 0.067	98	Concrete, HSG C
1.007	98	Weighted Average
1.007		100.00% Impervious Area

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

Subcatchment 55I: PDA-55 (impervious)

Hydrograph



Summary for Subcatchment 55P: PDA-55 (pervious)

Runoff = 3.44 cfs @ 12.18 hrs, Volume= 0.259 af, Depth= 3.06"
 Routed to Pond B-55 : Basin #55

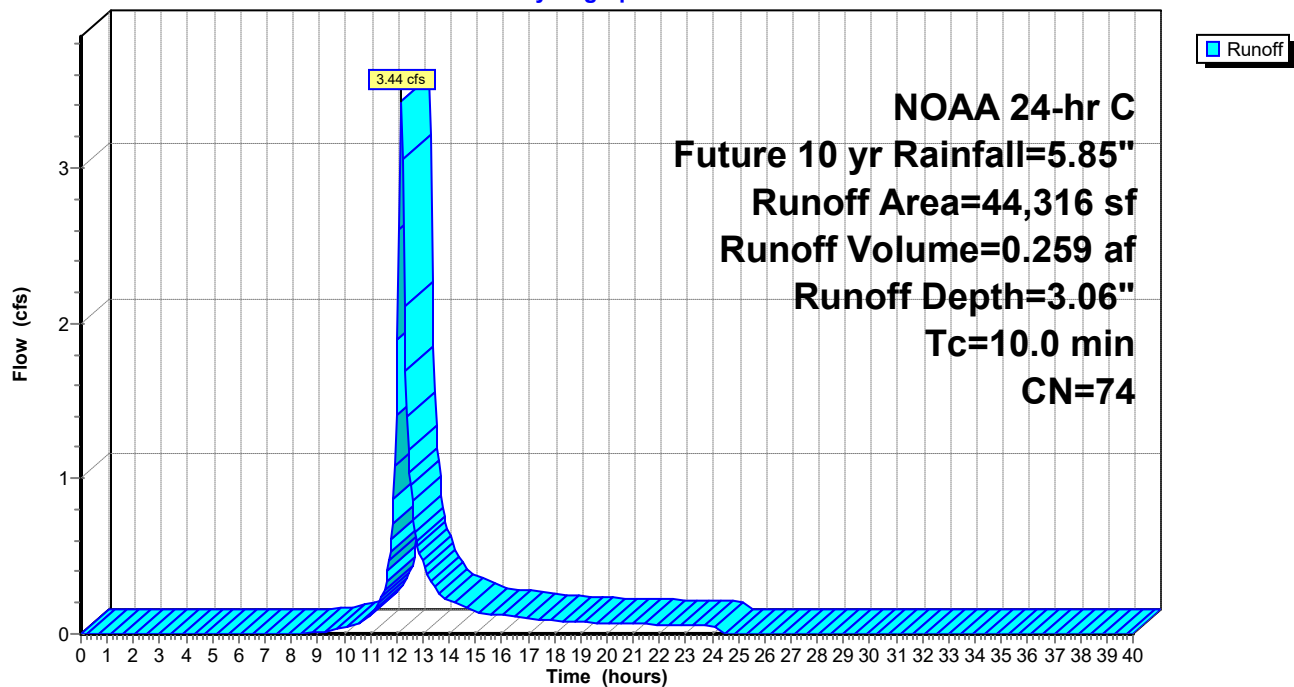
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (sf)	CN	Description
44,316	74	>75% Grass cover, Good, HSG C
44,316		100.00% Pervious Area

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

Subcatchment 55P: PDA-55 (pervious)

Hydrograph



Summary for Subcatchment 56I: PDA-56 (impervious)

Runoff = 5.53 cfs @ 12.17 hrs, Volume= 0.485 af, Depth= 5.61"
 Routed to Pond B-56 : Basin #56

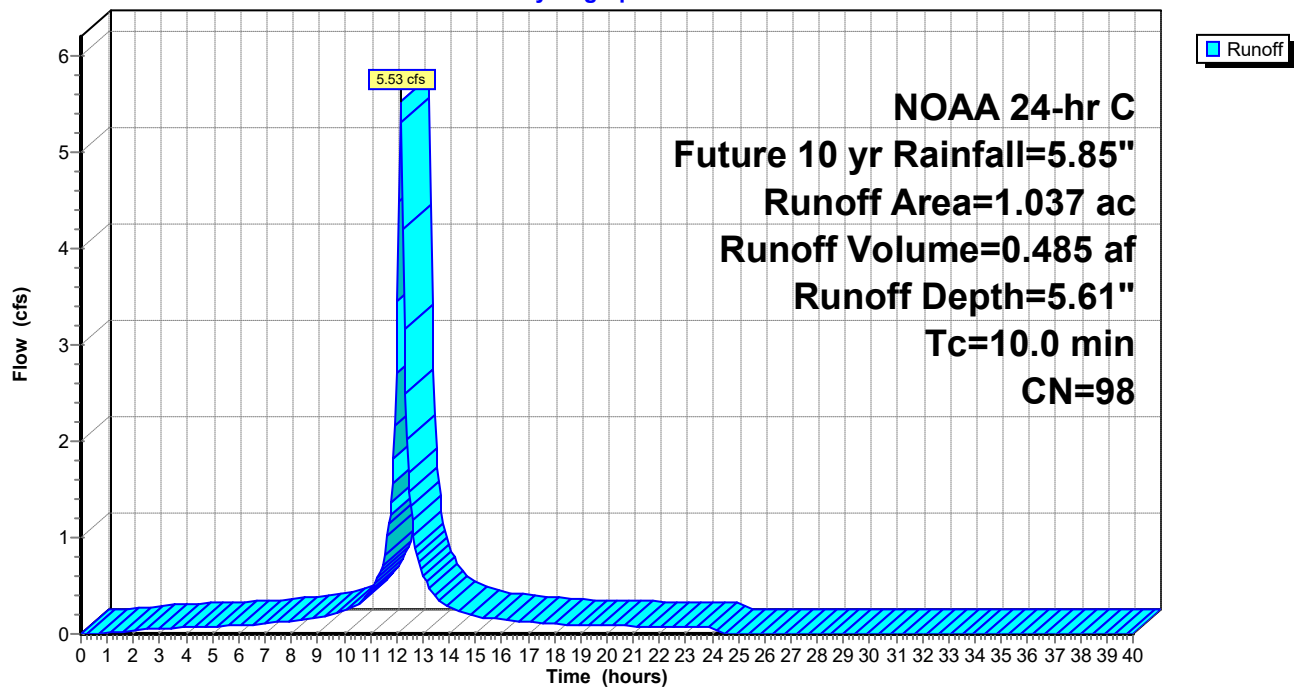
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (ac)	CN	Description
* 1.037	98	Roof, HSG C
1.037		100.00% Impervious Area

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

Subcatchment 56I: PDA-56 (impervious)

Hydrograph



Summary for Subcatchment 56P: PDA-56 (pervious)

Runoff = 4.30 cfs @ 12.18 hrs, Volume= 0.324 af, Depth= 3.06"
 Routed to Pond B-56 : Basin #56

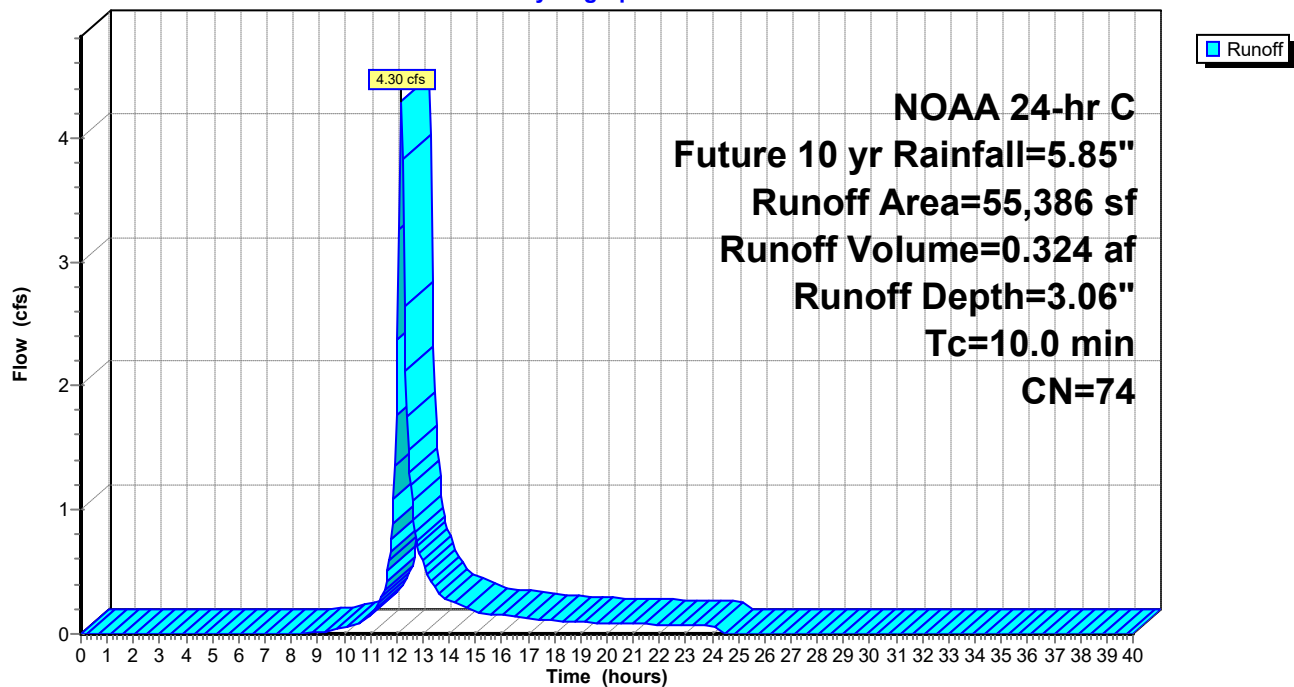
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (sf)	CN	Description
55,386	74	>75% Grass cover, Good, HSG C
55,386		100.00% Pervious Area

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

Subcatchment 56P: PDA-56 (pervious)

Hydrograph



Summary for Subcatchment 57I: PDA-57 (impervious)

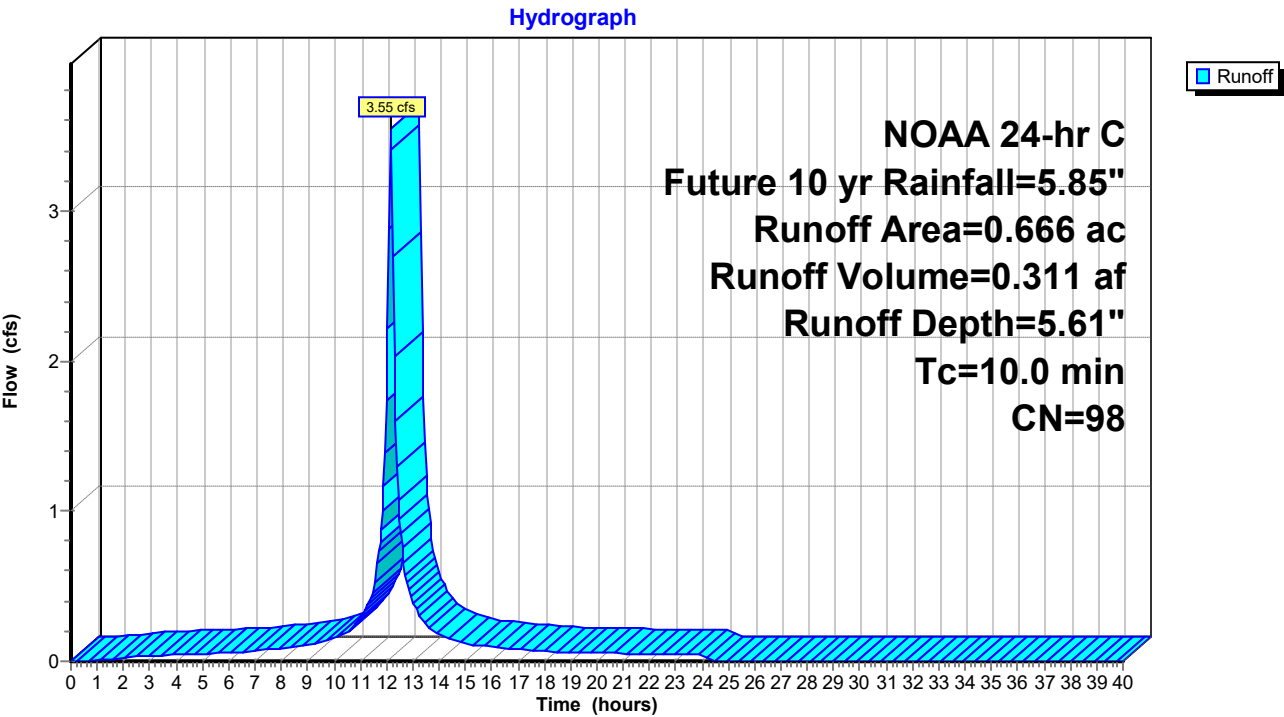
Runoff = 3.55 cfs @ 12.17 hrs, Volume= 0.311 af, Depth= 5.61"
Routed to Pond B-57 : Basin #57

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (ac)	CN	Description
* 0.311	98	Pavement, HSG C
* 0.313	98	Roof, HSG C
* 0.042	98	Concrete, HSG C
0.666	98	Weighted Average
0.666		100.00% Impervious Area

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

Subcatchment 57I: PDA-57 (impervious)



Summary for Subcatchment 57P: PDA-57 (pervious)

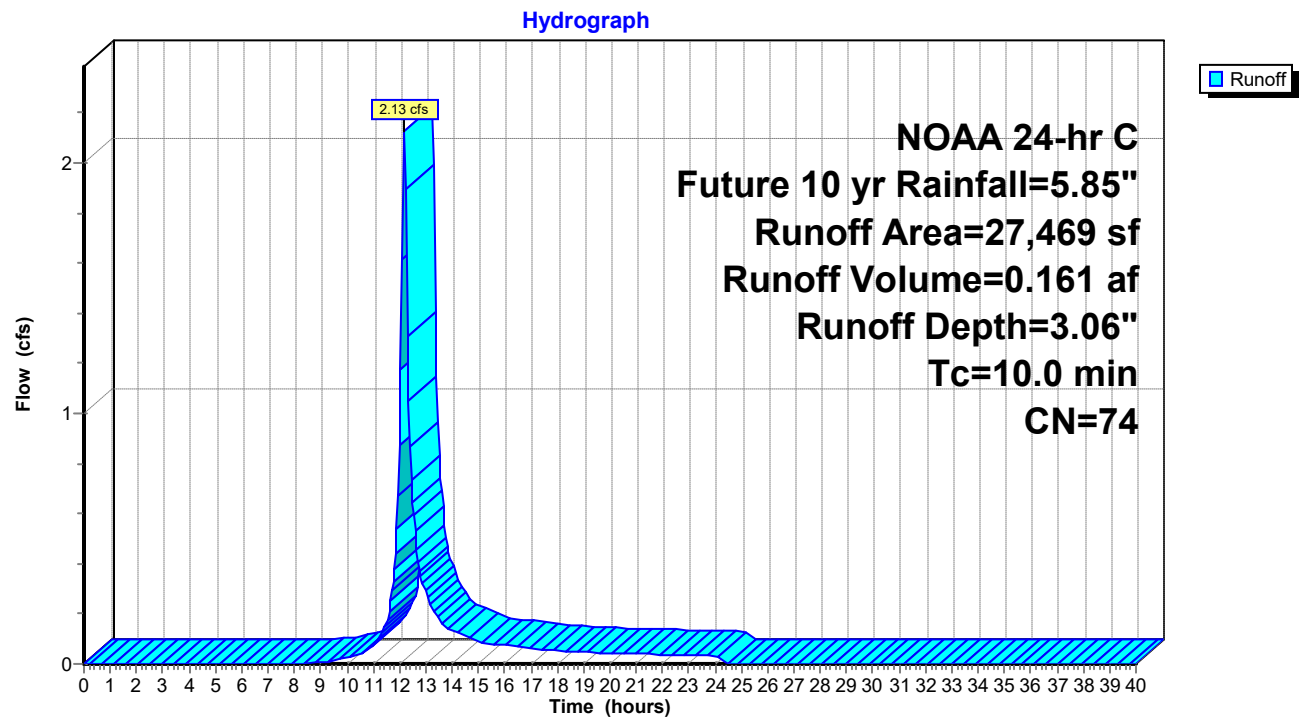
Runoff = 2.13 cfs @ 12.18 hrs, Volume= 0.161 af, Depth= 3.06"
Routed to Pond B-57 : Basin #57

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (sf)	CN	Description
27,469	74	>75% Grass cover, Good, HSG C
27,469		100.00% Pervious Area

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

Subcatchment 57P: PDA-57 (pervious)



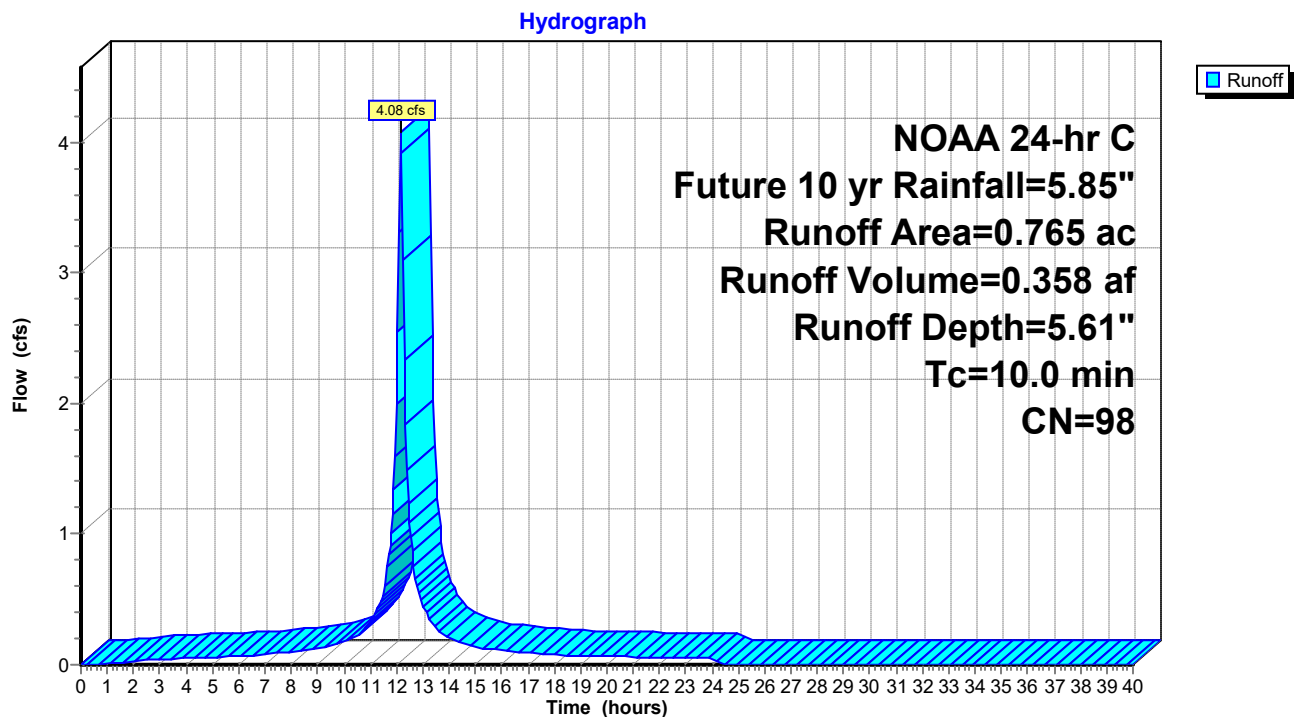
Summary for Subcatchment 58I: PDA-58 (impervious)

Runoff = 4.08 cfs @ 12.17 hrs, Volume= 0.358 af, Depth= 5.61"
 Routed to Pond B-58 : Basin #58

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (ac)	CN	Description
* 0.763	98	Roof, HSG C
* 0.002	98	Concrete, HSG C
0.765	98	Weighted Average
0.765		100.00% Impervious Area

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

Subcatchment 58I: PDA-58 (impervious)

Summary for Subcatchment 58P: PDA-58 (pervious)

Runoff = 5.43 cfs @ 12.18 hrs, Volume= 0.409 af, Depth= 3.06"
 Routed to Pond B-58 : Basin #58

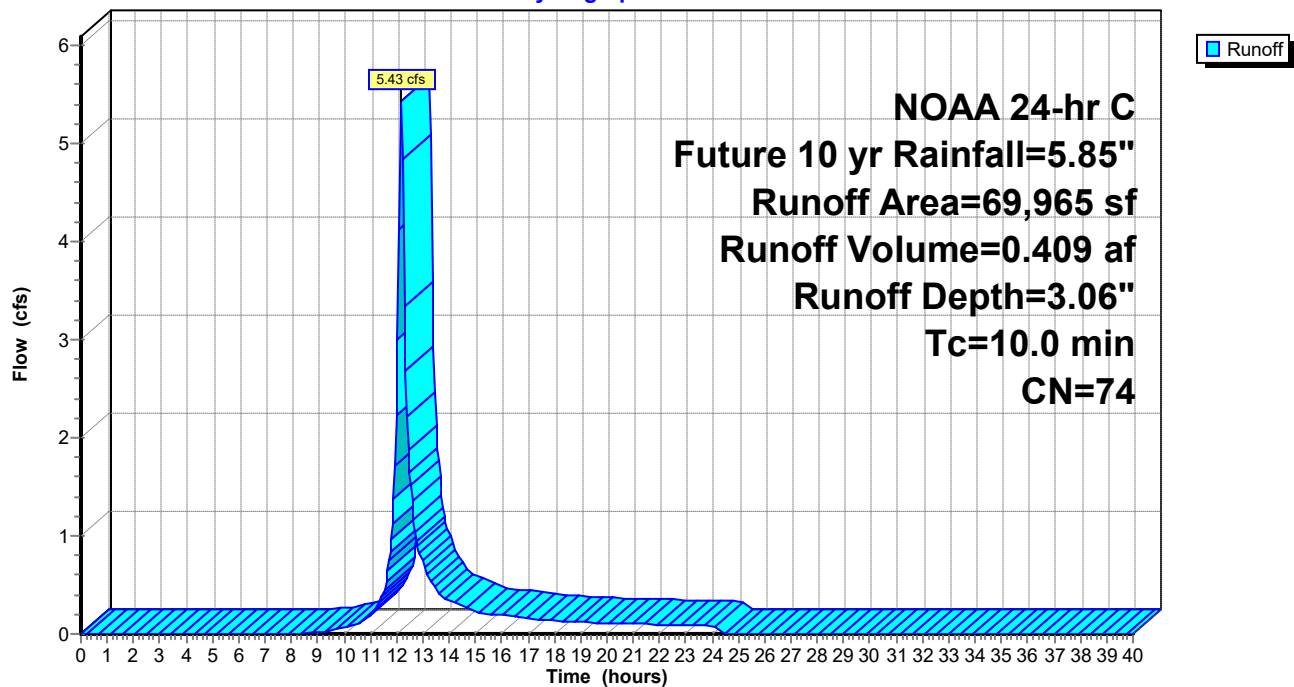
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (sf)	CN	Description
69,965	74	>75% Grass cover, Good, HSG C
69,965		100.00% Pervious Area

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

Subcatchment 58P: PDA-58 (pervious)

Hydrograph



Summary for Subcatchment UPDA-5: PDA-5 (undetained)

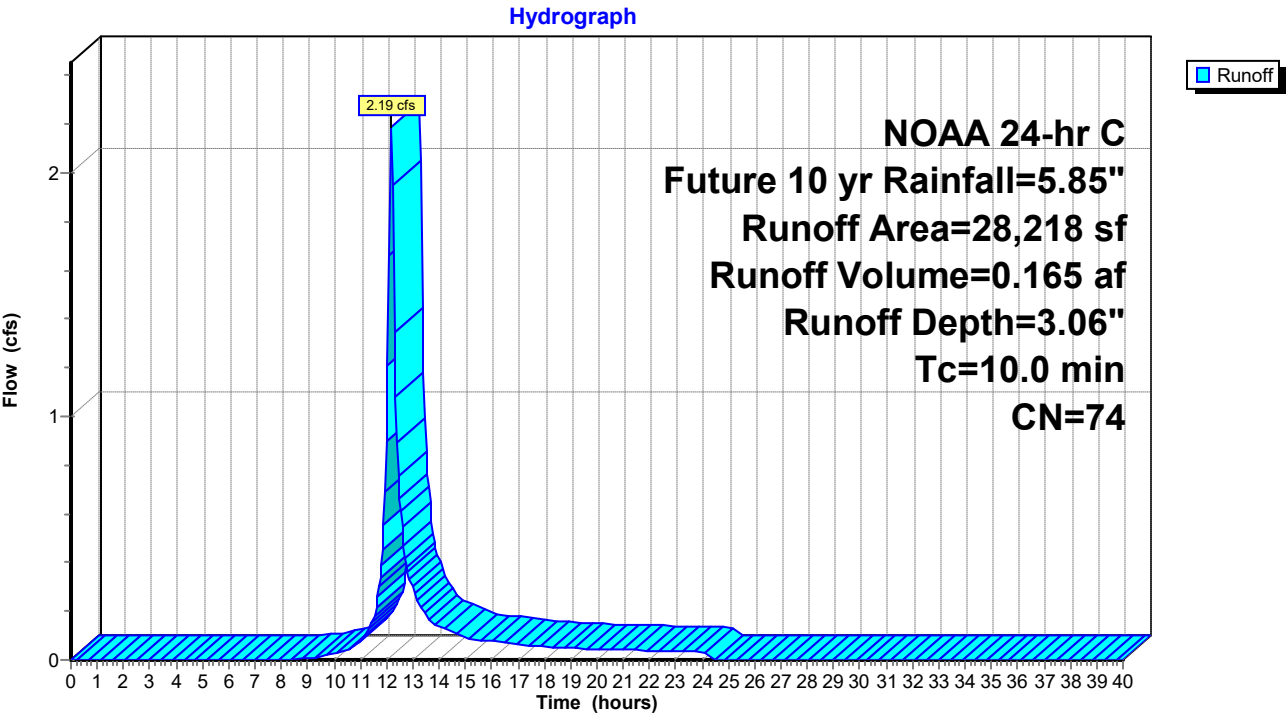
Runoff = 2.19 cfs @ 12.18 hrs, Volume= 0.165 af, Depth= 3.06"
Routed to Link PDA-5 : Proposed Drainage Area #5

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (sf)	CN	Description
28,218	74	>75% Grass cover, Good, HSG C
28,218		100.00% Pervious Area

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

Subcatchment UPDA-5: PDA-5 (undetained)



Summary for Subcatchment UPDA-6: PDA-6 (undetained)

Runoff = 131.53 cfs @ 12.18 hrs, Volume= 9.917 af, Depth= 3.06"

Routed to Link PDA-6 : Proposed Drainage Area #6

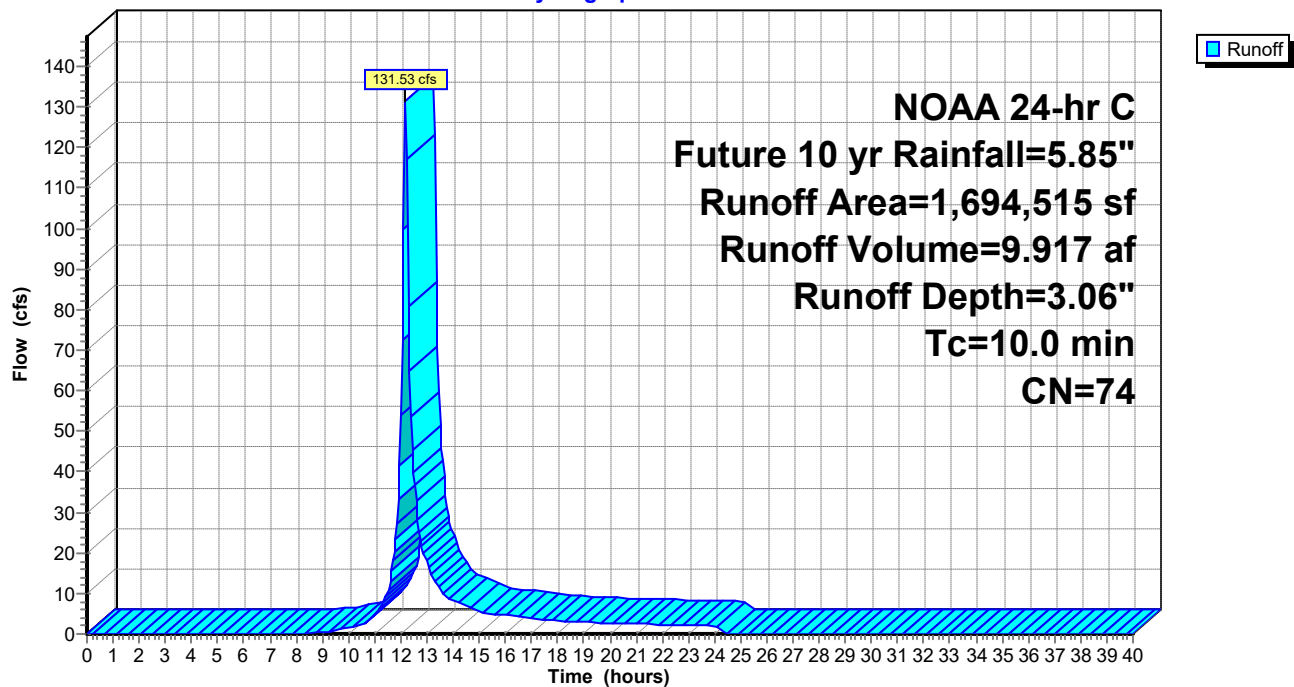
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (sf)	CN	Description
1,694,515	74	>75% Grass cover, Good, HSG C
1,694,515		100.00% Pervious Area

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

Subcatchment UPDA-6: PDA-6 (undetained)

Hydrograph



Summary for Pond B-48: Basin #48

Inflow Area = 2.415 ac, 36.95% Impervious, Inflow Depth = 4.00" for Future 10 yr event
 Inflow = 9.91 cfs @ 12.17 hrs, Volume= 0.806 af
 Outflow = 0.69 cfs @ 13.60 hrs, Volume= 0.517 af, Atten= 93%, Lag= 85.9 min
 Primary = 0.69 cfs @ 13.60 hrs, Volume= 0.517 af
 Routed to Link PDA-5 : Proposed Drainage Area #5

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 188.86' @ 13.60 hrs Surf.Area= 12,735 sf Storage= 23,584 cf

Plug-Flow detention time= 688.1 min calculated for 0.517 af (64% of inflow)
 Center-of-Mass det. time= 579.5 min (1,371.4 - 791.9)

Volume	Invert	Avail.Storage	Storage Description
#1	186.85'	81,173 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
186.85	0	0	0
187.00	11,678	876	876
188.00	12,246	11,962	12,838
189.00	12,814	12,530	25,368
190.00	13,382	13,098	38,466
191.00	13,951	13,667	52,132
192.00	14,520	14,236	66,368
193.00	15,090	14,805	81,173

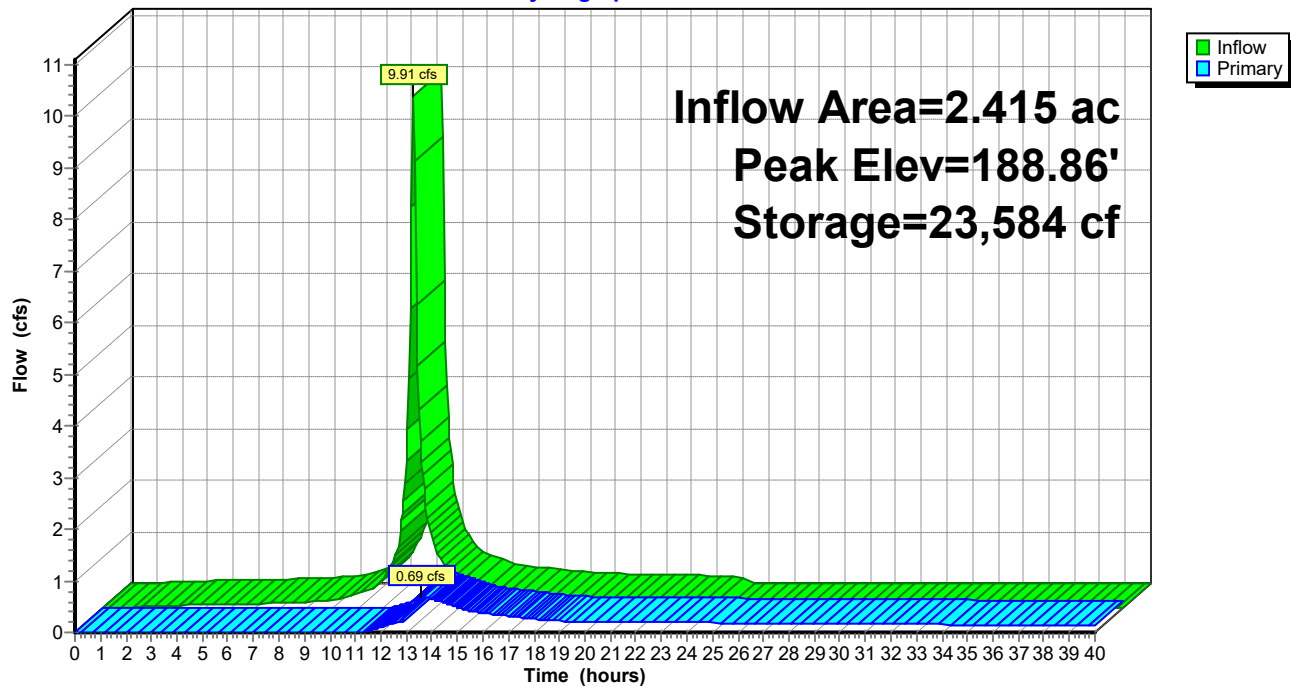
Device	Routing	Invert	Outlet Devices
#1	Primary	186.85'	18.0" Round Culvert L= 121.0' Ke= 0.500 Inlet / Outlet Invert= 186.85' / 186.25' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	187.26'	2.5" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	188.75'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	189.46'	50.0' long + 3.0 ' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.68 cfs @ 13.60 hrs HW=188.86' (Free Discharge)

- 1=Culvert (Passes 0.68 cfs of 7.76 cfs potential flow)
 2=Orifice/Grate (Orifice Controls 0.20 cfs @ 5.89 fps)
 3=Sharp-Crested Rectangular Weir (Weir Controls 0.48 cfs @ 1.09 fps)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-48: Basin #48

Hydrograph



Summary for Pond B-49: Basin #49

Inflow Area = 2.680 ac, 54.22% Impervious, Inflow Depth = 4.44" for Future 10 yr event
 Inflow = 11.90 cfs @ 12.17 hrs, Volume= 0.992 af
 Outflow = 3.68 cfs @ 12.47 hrs, Volume= 0.763 af, Atten= 69%, Lag= 17.7 min
 Primary = 3.68 cfs @ 12.47 hrs, Volume= 0.763 af
 Routed to Link PDA-5 : Proposed Drainage Area #5

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 185.67' @ 12.47 hrs Surf.Area= 9,624 sf Storage= 23,056 cf

Plug-Flow detention time= 479.6 min calculated for 0.762 af (77% of inflow)
 Center-of-Mass det. time= 392.5 min (1,169.9 - 777.4)

Volume	Invert	Avail.Storage	Storage Description
#1	182.60'	55,030 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
182.60	0	0	0
183.00	6,698	1,340	1,340
184.00	7,766	7,232	8,572
185.00	8,867	8,317	16,888
186.00	10,002	9,435	26,323
187.00	11,172	10,587	36,910
188.00	12,378	11,775	48,685
188.50	13,004	6,346	55,030

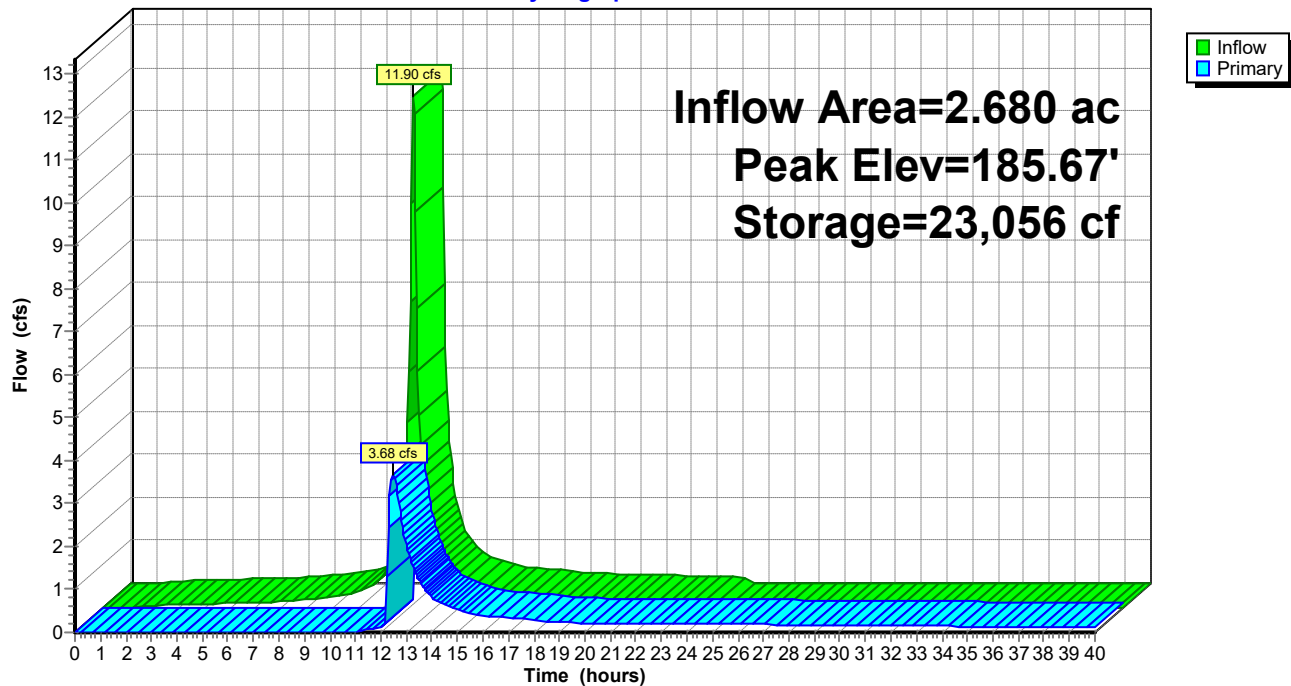
Device	Routing	Invert	Outlet Devices
#1	Primary	182.60'	18.0" Round Culvert L= 112.0' Ke= 0.500 Inlet / Outlet Invert= 182.60' / 182.00' S= 0.0054 '/ Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	183.64'	2.5" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	185.25'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	186.75'	50.0' long + 3.0 '/ SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=3.66 cfs @ 12.47 hrs HW=185.67' (Free Discharge)

- 1=Culvert (Passes 3.66 cfs of 11.08 cfs potential flow)
 2=Orifice/Grate (Orifice Controls 0.23 cfs @ 6.67 fps)
 3=Sharp-Crested Rectangular Weir (Weir Controls 3.43 cfs @ 2.11 fps)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-49: Basin #49

Hydrograph



Summary for Pond B-50: Basin #50

Inflow Area = 2.669 ac, 46.91% Impervious, Inflow Depth = 4.26" for Future 10 yr event
 Inflow = 11.47 cfs @ 12.17 hrs, Volume= 0.947 af
 Outflow = 3.07 cfs @ 12.53 hrs, Volume= 0.720 af, Atten= 73%, Lag= 21.4 min
 Primary = 3.07 cfs @ 12.53 hrs, Volume= 0.720 af
 Routed to Link PDA-5 : Proposed Drainage Area #5

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 185.90' @ 12.53 hrs Surf.Area= 11,311 sf Storage= 22,156 cf

Plug-Flow detention time= 472.7 min calculated for 0.719 af (76% of inflow)
 Center-of-Mass det. time= 383.7 min (1,166.9 - 783.2)

Volume	Invert	Avail.Storage	Storage Description
#1	183.30'	56,291 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
183.30	0	0	0
184.00	8,805	3,082	3,082
185.00	10,108	9,457	12,538
186.00	11,448	10,778	23,316
187.00	12,826	12,137	35,453
188.00	14,244	13,535	48,988
188.50	14,966	7,303	56,291

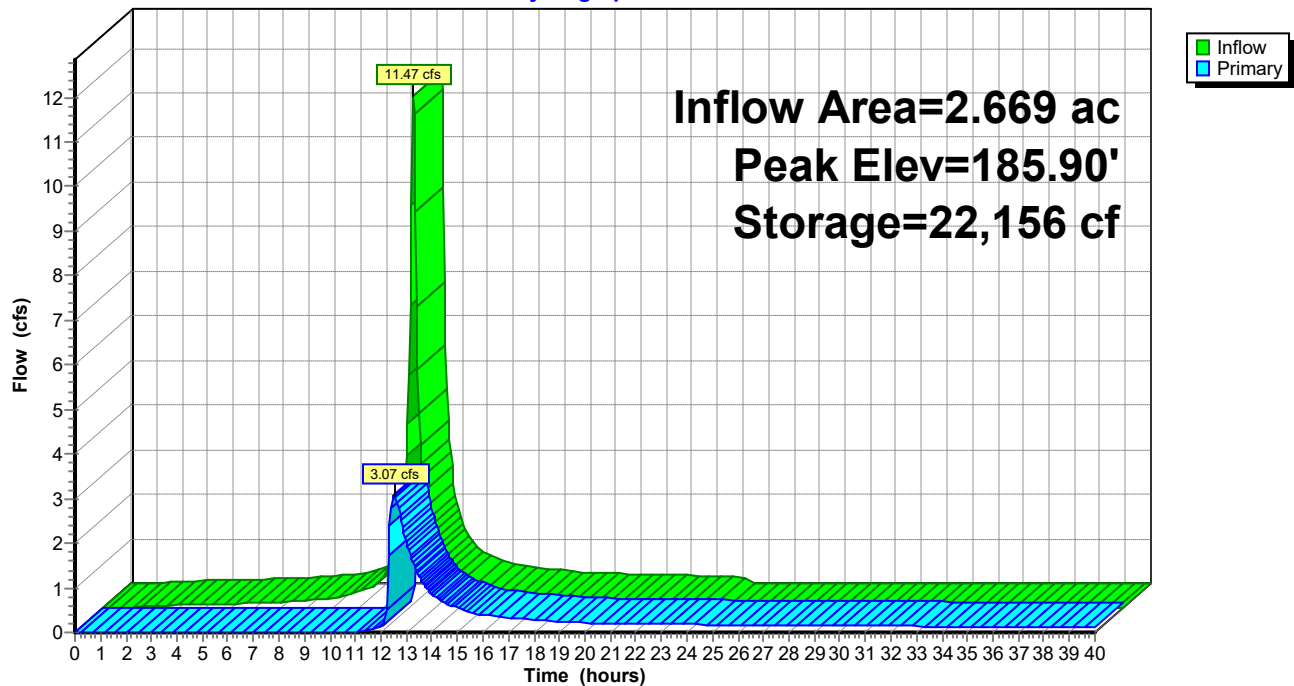
Device	Routing	Invert	Outlet Devices
#1	Primary	183.17'	18.0" Round Culvert L= 23.0' Ke= 0.500 Inlet / Outlet Invert= 183.17' / 183.05' S= 0.0052 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	184.23'	2.5" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	185.53'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	186.82'	50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=3.07 cfs @ 12.53 hrs HW=185.90' (Free Discharge)

1=Culvert (Passes 3.07 cfs of 11.88 cfs potential flow)
 2=Orifice/Grate (Orifice Controls 0.21 cfs @ 6.02 fps)
 3=Sharp-Crested Rectangular Weir (Weir Controls 2.86 cfs @ 1.98 fps)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-50: Basin #50

Hydrograph



Summary for Pond B-51: Basin #51

Inflow Area = 1.618 ac, 38.76% Impervious, Inflow Depth = 4.05" for Future 10 yr event
 Inflow = 6.70 cfs @ 12.17 hrs, Volume= 0.546 af
 Outflow = 5.58 cfs @ 12.24 hrs, Volume= 0.485 af, Atten= 17%, Lag= 4.2 min
 Primary = 5.58 cfs @ 12.24 hrs, Volume= 0.485 af
 Routed to Link PDA-6 : Proposed Drainage Area #6

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 188.94' @ 12.24 hrs Surf.Area= 3,788 sf Storage= 5,562 cf

Plug-Flow detention time= 113.3 min calculated for 0.484 af (89% of inflow)
 Center-of-Mass det. time= 57.6 min (847.9 - 790.2)

Volume	Invert	Avail.Storage	Storage Description
#1	186.86'	16,158 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
186.86	0	0	0
187.00	1,882	132	132
188.00	2,798	2,340	2,472
189.00	3,853	3,326	5,797
190.00	5,083	4,468	10,265
191.00	6,703	5,893	16,158

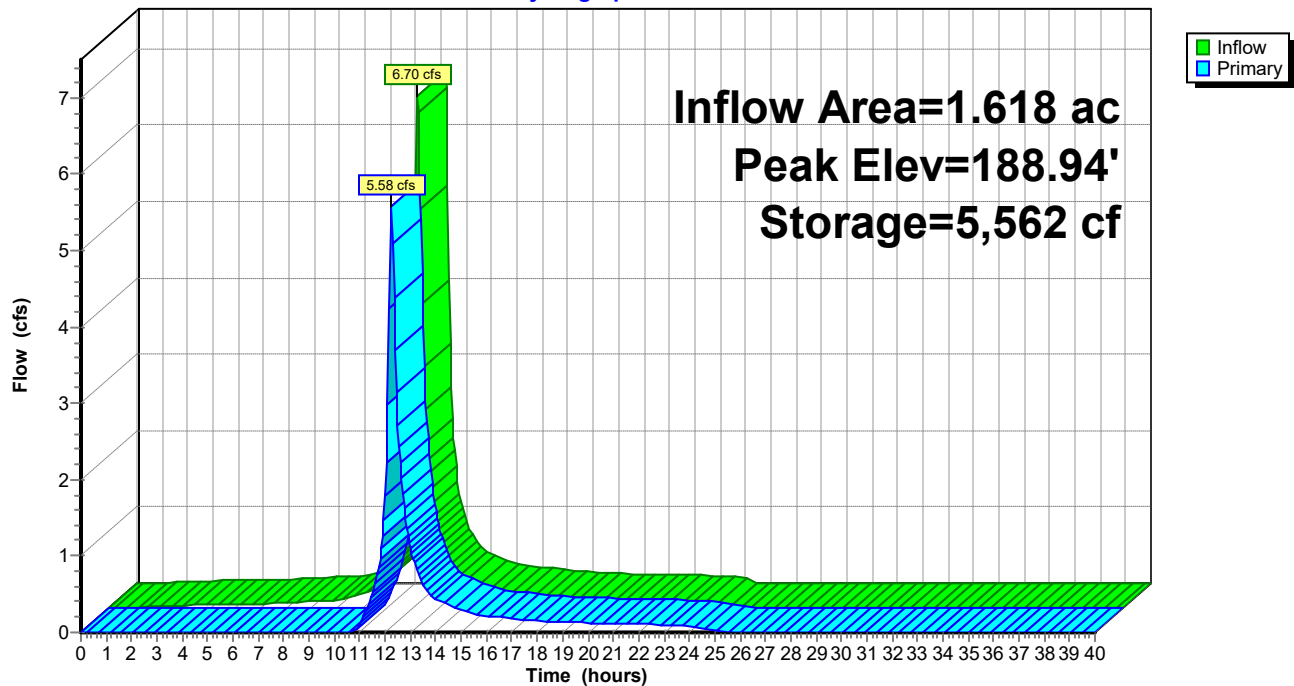
Device	Routing	Invert	Outlet Devices
#1	Primary	186.86'	18.0" Round Culvert L= 172.0' Ke= 0.500 Inlet / Outlet Invert= 186.86' / 186.00' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	188.06'	20.0" W x 8.0" H Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	188.68'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	189.71'	50.0' long + 3.0' /' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=5.53 cfs @ 12.24 hrs HW=188.94' (Free Discharge)

1=Culvert (Passes 5.53 cfs of 7.88 cfs potential flow)
 2=Orifice/Grate (Orifice Controls 3.87 cfs @ 3.48 fps)
 3=Sharp-Crested Rectangular Weir (Weir Controls 1.66 cfs @ 1.65 fps)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-51: Basin #51

Hydrograph



Summary for Pond B-52: Basin #52

Inflow Area = 2.537 ac, 41.39% Impervious, Inflow Depth = 4.12" for Future 10 yr event
 Inflow = 10.63 cfs @ 12.17 hrs, Volume= 0.870 af
 Outflow = 7.63 cfs @ 12.27 hrs, Volume= 0.770 af, Atten= 28%, Lag= 6.0 min
 Primary = 7.63 cfs @ 12.27 hrs, Volume= 0.770 af
 Routed to Link PDA-6 : Proposed Drainage Area #6

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 195.78' @ 12.27 hrs Surf.Area= 4,753 sf Storage= 11,690 cf

Plug-Flow detention time= 124.9 min calculated for 0.769 af (88% of inflow)
 Center-of-Mass det. time= 67.5 min (855.4 - 787.9)

Volume	Invert	Avail.Storage	Storage Description
#1	192.30'	23,897 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
192.30	0	0	0
193.00	2,920	1,022	1,022
194.00	3,579	3,250	4,271
195.00	4,239	3,909	8,180
196.00	4,898	4,569	12,749
197.00	5,558	5,228	17,977
198.00	6,282	5,920	23,897

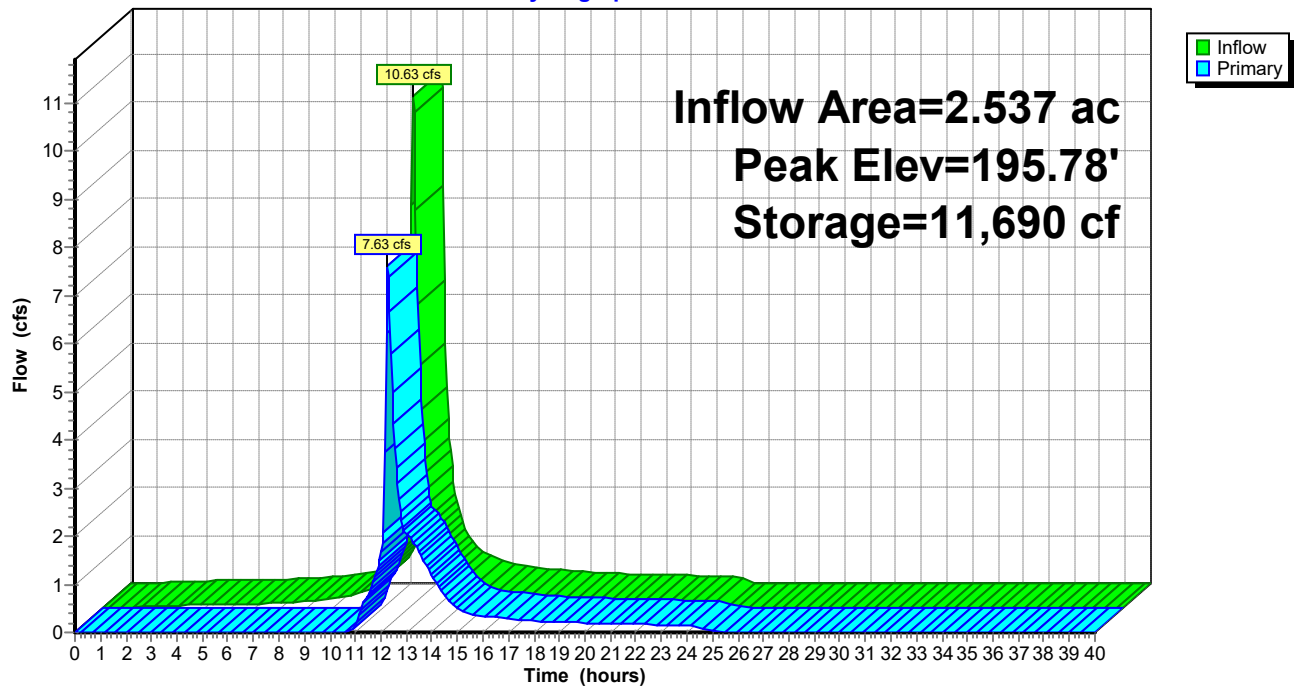
Device	Routing	Invert	Outlet Devices
#1	Primary	192.00'	18.0" Round Culvert L= 163.0' Ke= 0.500 Inlet / Outlet Invert= 192.00' / 191.00' S= 0.0061 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	194.03'	24.0" W x 2.5" H Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	195.24'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	196.99'	50.0' long + 3.0 ' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=7.45 cfs @ 12.27 hrs HW=195.77' (Free Discharge)

1=Culvert (Passes 7.45 cfs of 12.11 cfs potential flow)
 2=Orifice/Grate (Orifice Controls 2.56 cfs @ 6.15 fps)
 3=Sharp-Crested Rectangular Weir (Weir Controls 4.89 cfs @ 2.38 fps)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-52: Basin #52

Hydrograph



Summary for Pond B-53: Basin #53

Inflow Area = 2.540 ac, 47.79% Impervious, Inflow Depth = 4.28" for Future 10 yr event
 Inflow = 10.96 cfs @ 12.17 hrs, Volume= 0.906 af
 Outflow = 5.10 cfs @ 12.36 hrs, Volume= 0.783 af, Atten= 53%, Lag= 11.3 min
 Primary = 5.10 cfs @ 12.36 hrs, Volume= 0.783 af
 Routed to Link PDA-6 : Proposed Drainage Area #6

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 203.46' @ 12.36 hrs Surf.Area= 6,317 sf Storage= 18,728 cf

Plug-Flow detention time= 388.2 min calculated for 0.782 af (86% of inflow)
 Center-of-Mass det. time= 324.6 min (1,107.1 - 782.4)

Volume	Invert	Avail.Storage	Storage Description
#1	199.75'	33,011 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
199.75	0	0	0
200.00	4,035	504	504
201.00	4,695	4,365	4,869
202.00	5,685	5,190	10,059
203.00	6,015	5,850	15,909
204.00	6,676	6,346	22,255
205.00	7,336	7,006	29,261
205.50	7,666	3,751	33,011

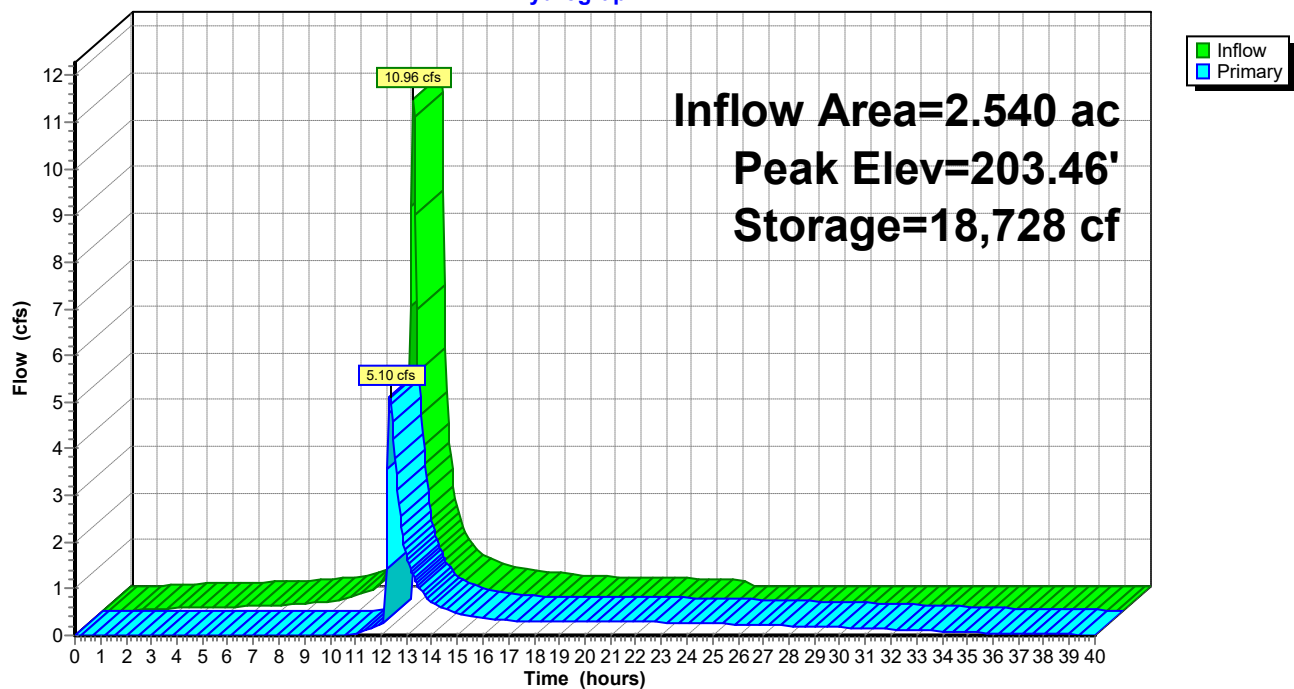
Device	Routing	Invert	Outlet Devices
#1	Primary	198.75'	18.0" Round Culvert L= 122.0' Ke= 0.500 Inlet / Outlet Invert= 198.75' / 198.00' S= 0.0061 ' / Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	201.02'	3.0" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	202.94'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	204.43'	50.0' long + 3.0 ' / SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=5.06 cfs @ 12.36 hrs HW=203.45' (Free Discharge)

- 1=Culvert (Passes 5.06 cfs of 14.60 cfs potential flow)
 2=Orifice/Grate (Orifice Controls 0.36 cfs @ 7.32 fps)
 3=Sharp-Crested Rectangular Weir (Weir Controls 4.70 cfs @ 2.35 fps)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-53: Basin #53

Hydrograph



Summary for Pond B-54: Basin #54

Inflow Area = 2.570 ac, 60.46% Impervious, Inflow Depth = 4.60" for Future 10 yr event
 Inflow = 11.73 cfs @ 12.17 hrs, Volume= 0.986 af
 Outflow = 4.88 cfs @ 12.38 hrs, Volume= 0.798 af, Atten= 58%, Lag= 12.5 min
 Primary = 4.88 cfs @ 12.38 hrs, Volume= 0.798 af
 Routed to Link PDA-6 : Proposed Drainage Area #6

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 204.21' @ 12.38 hrs Surf.Area= 6,558 sf Storage= 21,956 cf

Plug-Flow detention time= 475.3 min calculated for 0.798 af (81% of inflow)
 Center-of-Mass det. time= 395.7 min (1,168.6 - 772.8)

Volume	Invert	Avail.Storage	Storage Description
#1	199.89'	30,982 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
199.89	0	0	0
200.00	3,780	208	208
201.00	4,440	4,110	4,318
202.00	5,100	4,770	9,088
203.00	5,760	5,430	14,518
204.00	6,421	6,091	20,608
205.00	7,081	6,751	27,359
205.50	7,411	3,623	30,982

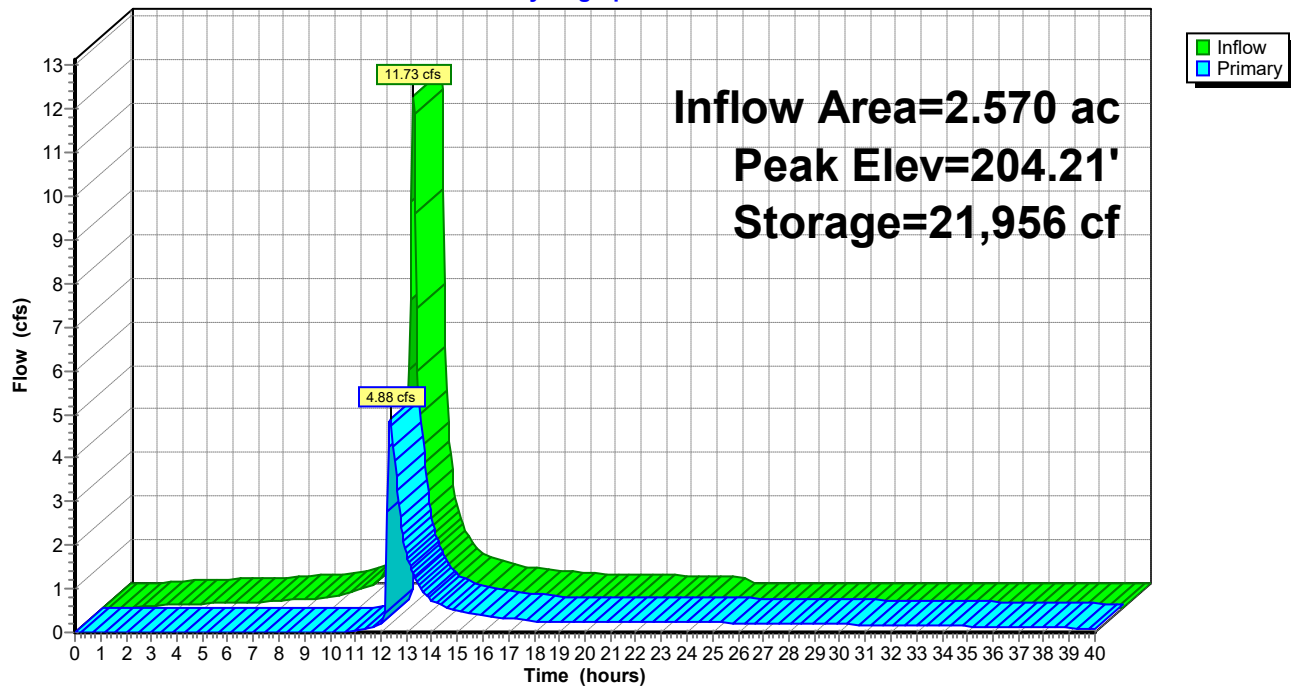
Device	Routing	Invert	Outlet Devices
#1	Primary	198.89'	18.0" Round Culvert L= 178.0' Ke= 0.500 Inlet / Outlet Invert= 198.89' / 198.00' S= 0.0050 ' /' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	201.40'	2.5" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	203.70'	4.0' long 1 2 End Contraction(s)
#4	Primary	204.47'	50.0' long + 3.0 ' /' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=4.85 cfs @ 12.38 hrs HW=204.21' (Free Discharge)

1=Culvert (Passes 4.85 cfs of 14.11 cfs potential flow)
 2=Orifice/Grate (Orifice Controls 0.27 cfs @ 7.91 fps)
 3=1 (Weir Controls 4.58 cfs @ 2.32 fps)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-54: Basin #54

Hydrograph



Summary for Pond B-55: Basin #55

Inflow Area = 2.024 ac, 49.74% Impervious, Inflow Depth = 4.33" for Future 10 yr event
 Inflow = 8.81 cfs @ 12.17 hrs, Volume= 0.730 af
 Outflow = 5.82 cfs @ 12.29 hrs, Volume= 0.637 af, Atten= 34%, Lag= 6.9 min
 Primary = 5.82 cfs @ 12.29 hrs, Volume= 0.637 af
 Routed to Link PDA-6 : Proposed Drainage Area #6

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 194.07' @ 12.29 hrs Surf.Area= 5,295 sf Storage= 10,814 cf

Plug-Flow detention time= 141.3 min calculated for 0.636 af (87% of inflow)
 Center-of-Mass det. time= 79.8 min (860.6 - 780.9)

Volume	Invert	Avail.Storage	Storage Description
#1	191.56'	22,010 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
191.56	0	0	0
192.00	4,250	935	935
193.00	4,746	4,498	5,433
194.00	5,257	5,002	10,434
195.00	5,784	5,521	15,955
196.00	6,327	6,056	22,010

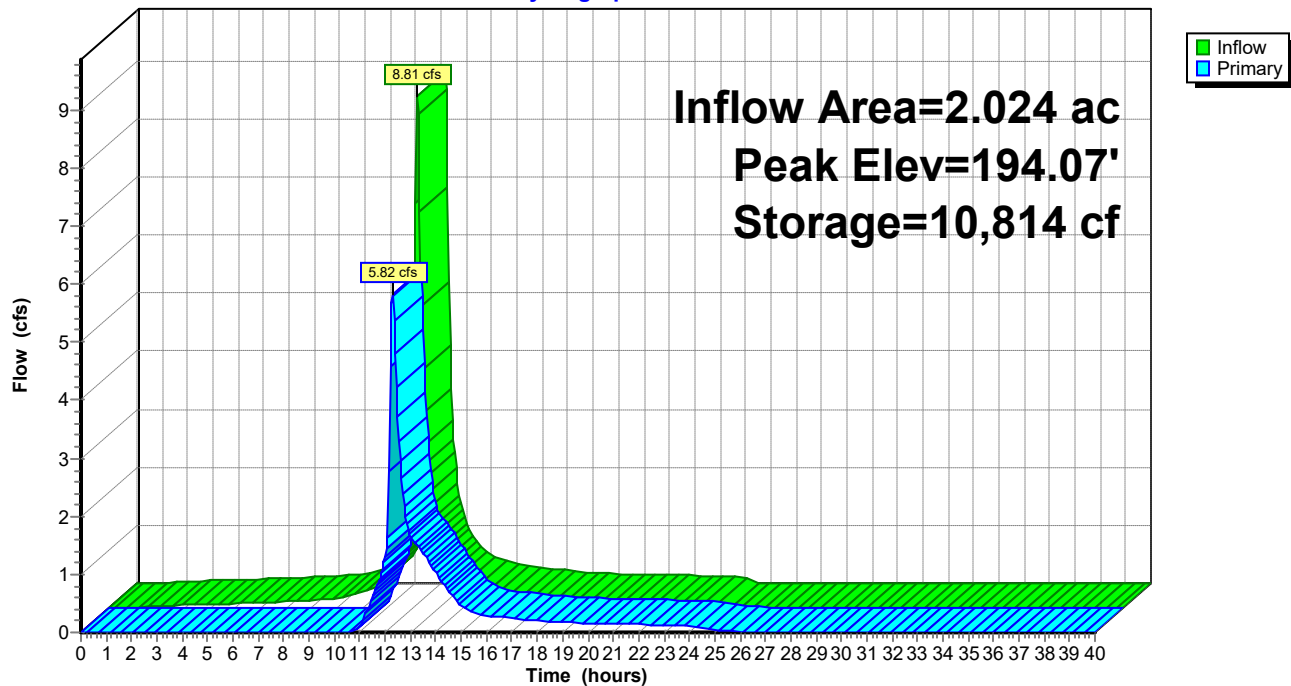
Device	Routing	Invert	Outlet Devices
#1	Primary	191.56'	18.0" Round Culvert L= 112.0' Ke= 0.500 Inlet / Outlet Invert= 191.56' / 191.00' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	192.71'	22.0" W x 2.5" H Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	193.63'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	194.99'	50.0' long + 3.0' /' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=5.76 cfs @ 12.29 hrs HW=194.07' (Free Discharge)

1=Culvert (Passes 5.76 cfs of 9.43 cfs potential flow)
 2=Orifice/Grate (Orifice Controls 2.06 cfs @ 5.39 fps)
 3=Sharp-Crested Rectangular Weir (Weir Controls 3.70 cfs @ 2.16 fps)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-55: Basin #55

Hydrograph



Summary for Pond B-56: Basin #56

Inflow Area = 2.308 ac, 44.92% Impervious, Inflow Depth = 4.21" for Future 10 yr event
 Inflow = 9.83 cfs @ 12.17 hrs, Volume= 0.809 af
 Outflow = 6.17 cfs @ 12.30 hrs, Volume= 0.711 af, Atten= 37%, Lag= 7.6 min
 Primary = 6.17 cfs @ 12.30 hrs, Volume= 0.711 af
 Routed to Link PDA-6 : Proposed Drainage Area #6

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 194.09' @ 12.30 hrs Surf.Area= 6,019 sf Storage= 12,579 cf

Plug-Flow detention time= 147.2 min calculated for 0.711 af (88% of inflow)
 Center-of-Mass det. time= 86.9 min (871.8 - 784.8)

Volume	Invert	Avail.Storage	Storage Description
#1	191.57'	25,032 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
191.57	0	0	0
192.00	5,021	1,080	1,080
193.00	5,490	5,256	6,335
194.00	5,976	5,733	12,068
195.00	6,478	6,227	18,295
196.00	6,995	6,737	25,032

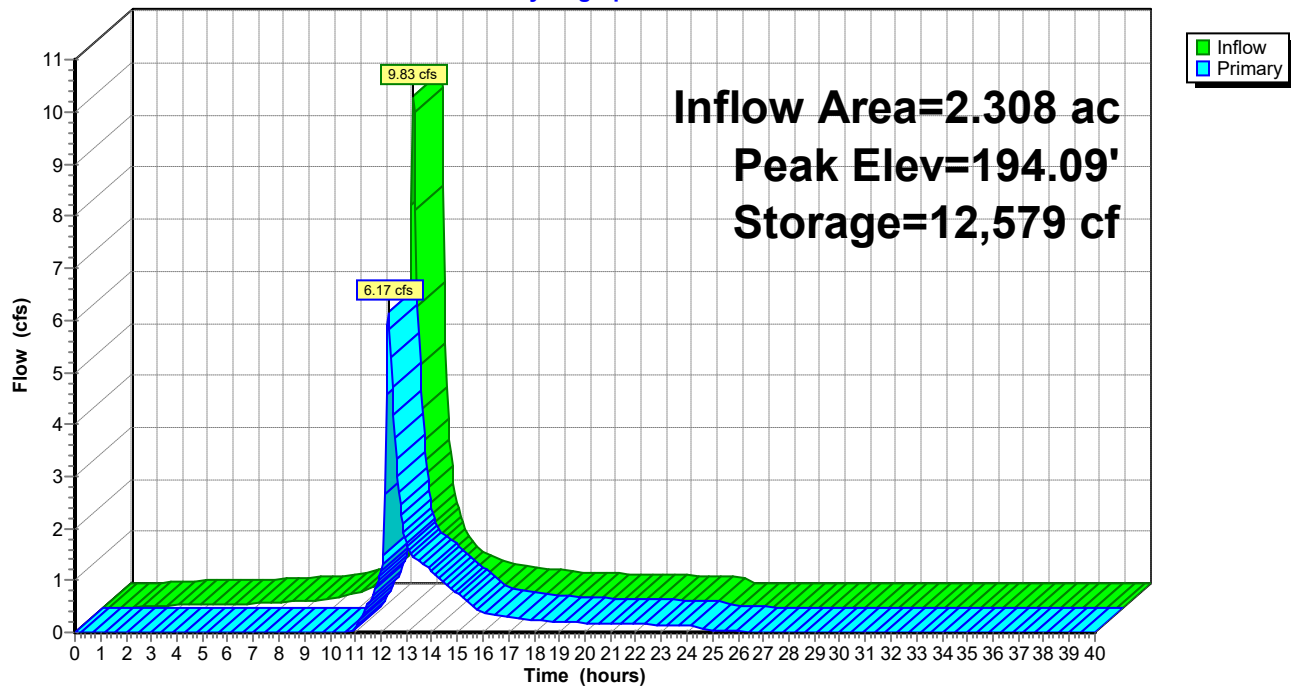
Device	Routing	Invert	Outlet Devices
#1	Primary	191.57'	18.0" Round Culvert L= 29.0' Ke= 0.500 Inlet / Outlet Invert= 191.57' / 191.42' S= 0.0052 ' / Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	192.62'	19.0" W x 2.5" H Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	193.60'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	194.99'	50.0' long + 3.0 ' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=6.16 cfs @ 12.30 hrs HW=194.08' (Free Discharge)

1=Culvert (Passes 6.16 cfs of 10.74 cfs potential flow)
 2=Orifice/Grate (Orifice Controls 1.85 cfs @ 5.61 fps)
 3=Sharp-Crested Rectangular Weir (Weir Controls 4.30 cfs @ 2.28 fps)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-56: Basin #56

Hydrograph



Summary for Pond B-57: Basin #57

Inflow Area = 1.297 ac, 51.37% Impervious, Inflow Depth = 4.37" for Future 10 yr event
 Inflow = 5.69 cfs @ 12.17 hrs, Volume= 0.472 af
 Outflow = 3.58 cfs @ 12.30 hrs, Volume= 0.410 af, Atten= 37%, Lag= 7.5 min
 Primary = 3.58 cfs @ 12.30 hrs, Volume= 0.410 af
 Routed to Link PDA-6 : Proposed Drainage Area #6

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 203.50' @ 12.30 hrs Surf.Area= 4,763 sf Storage= 7,950 cf

Plug-Flow detention time= 169.2 min calculated for 0.409 af (87% of inflow)
 Center-of-Mass det. time= 106.5 min (886.1 - 779.6)

Volume	Invert	Avail.Storage	Storage Description
#1	201.30'	15,700 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
201.30	0	0	0
202.00	3,969	1,389	1,389
203.00	4,488	4,229	5,618
204.00	5,034	4,761	10,379
205.00	5,608	5,321	15,700

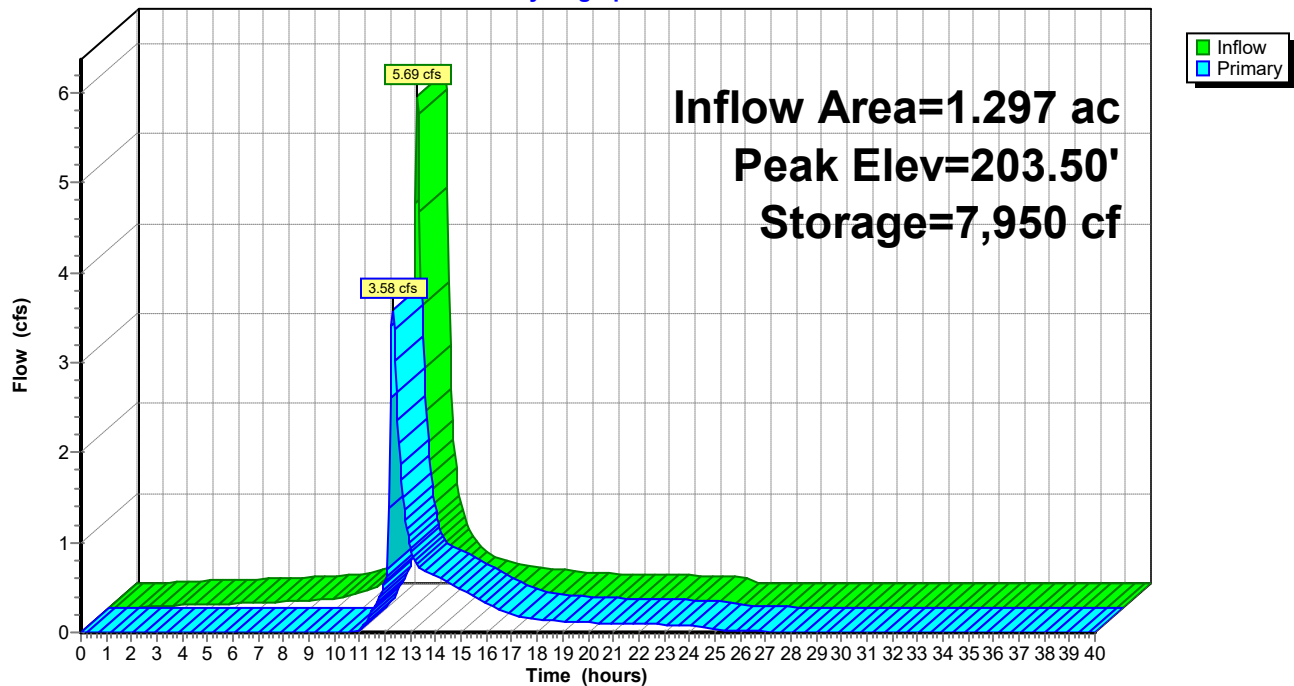
Device	Routing	Invert	Outlet Devices
#1	Primary	200.65'	18.0" Round Culvert L= 207.0' Ke= 0.500 Inlet / Outlet Invert= 200.65' / 198.00' S= 0.0128 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	202.33'	10.0" W x 2.5" H Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	203.15'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	203.98'	50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=3.56 cfs @ 12.30 hrs HW=203.50' (Free Discharge)

1=Culvert (Passes 3.56 cfs of 12.34 cfs potential flow)
 2=Orifice/Grate (Orifice Controls 0.86 cfs @ 4.98 fps)
 3=Sharp-Crested Rectangular Weir (Weir Controls 2.70 cfs @ 1.94 fps)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-57: Basin #57

Hydrograph



Summary for Pond B-58: Basin #58

Inflow Area = 2.371 ac, 32.26% Impervious, Inflow Depth = 3.88" for Future 10 yr event
 Inflow = 9.52 cfs @ 12.17 hrs, Volume= 0.767 af
 Outflow = 3.47 cfs @ 12.42 hrs, Volume= 0.646 af, Atten= 64%, Lag= 14.9 min
 Primary = 3.47 cfs @ 12.42 hrs, Volume= 0.646 af
 Routed to Link PDA-6 : Proposed Drainage Area #6

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 201.00' @ 12.42 hrs Surf.Area= 7,671 sf Storage= 16,070 cf

Plug-Flow detention time= 431.7 min calculated for 0.646 af (84% of inflow)
 Center-of-Mass det. time= 361.6 min (1,158.0 - 796.4)

Volume	Invert	Avail.Storage	Storage Description
#1	198.30'	32,924 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
198.30	0	0	0
199.00	6,230	2,180	2,180
200.00	6,932	6,581	8,761
201.00	7,670	7,301	16,062
202.00	8,426	8,048	24,110
203.00	9,201	8,814	32,924

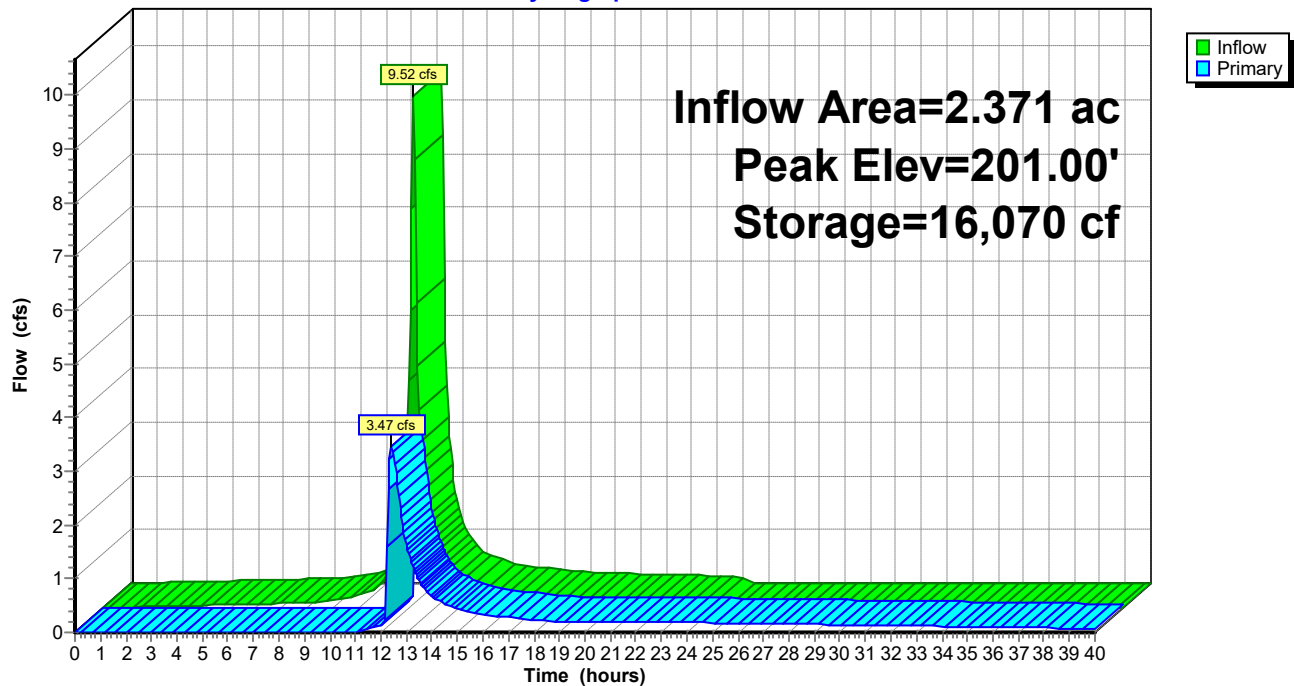
Device	Routing	Invert	Outlet Devices
#1	Primary	198.30'	18.0" Round Culvert L= 48.0' Ke= 0.500 Inlet / Outlet Invert= 198.30' / 198.00' S= 0.0063 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	199.19'	2.5" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	200.60'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	201.90'	50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=3.44 cfs @ 12.42 hrs HW=201.00' (Free Discharge)

1=Culvert (Passes 3.44 cfs of 11.26 cfs potential flow)
 2=Orifice/Grate (Orifice Controls 0.21 cfs @ 6.29 fps)
 3=Sharp-Crested Rectangular Weir (Weir Controls 3.23 cfs @ 2.06 fps)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-58: Basin #58

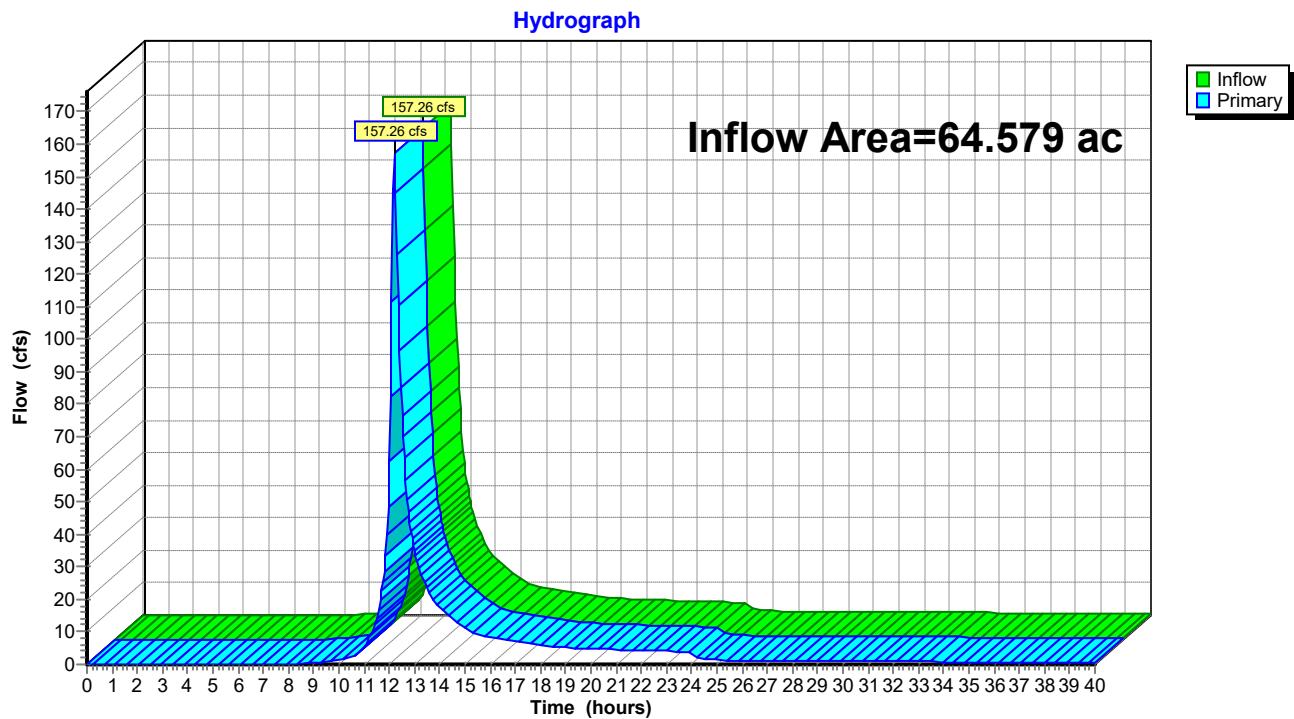
Hydrograph



Summary for Link DP-3: Design Pont #3 (Woolsey Creek)

Inflow Area = 64.579 ac, 17.83% Impervious, Inflow Depth > 3.22" for Future 10 yr event
Inflow = 157.26 cfs @ 12.20 hrs, Volume= 17.320 af
Primary = 157.26 cfs @ 12.20 hrs, Volume= 17.320 af, Atten= 0%, Lag= 0.0 min

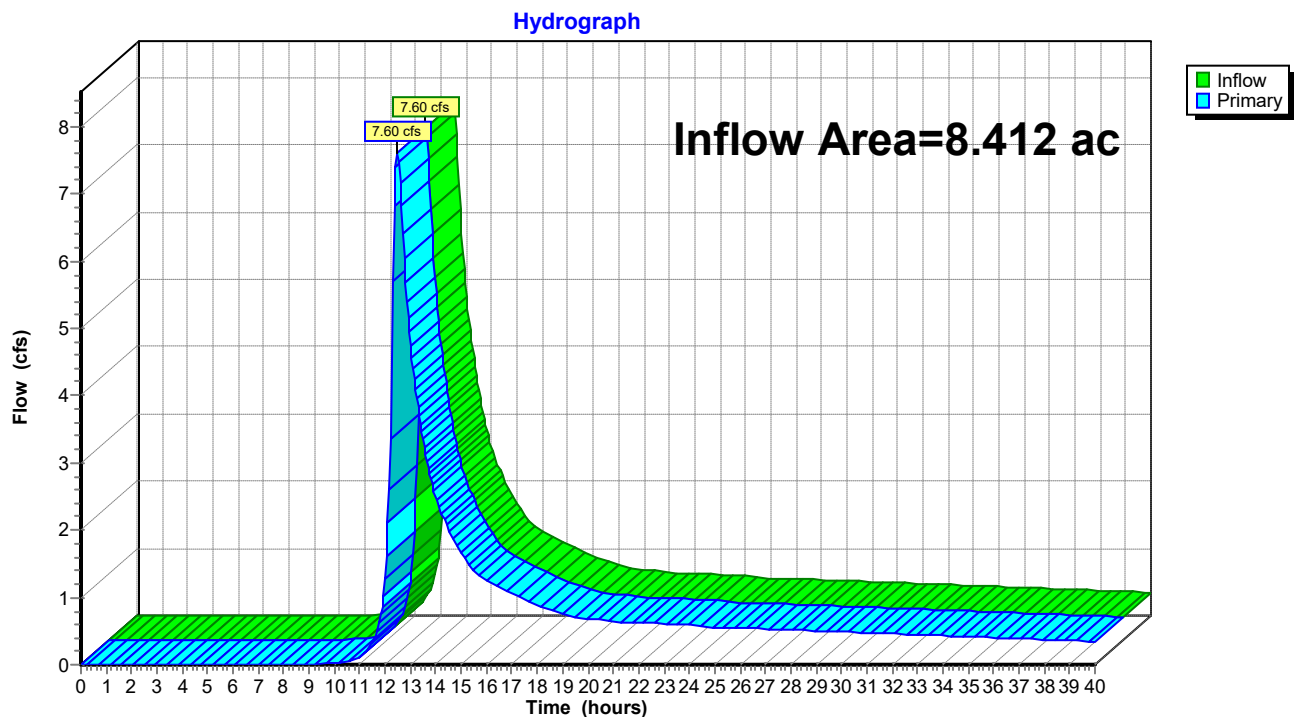
Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link DP-3: Design Pont #3 (Woolsey Creek)

Summary for Link PDA-5: Proposed Drainage Area #5

Inflow Area = 8.412 ac, 42.77% Impervious, Inflow Depth > 3.09" for Future 10 yr event
Inflow = 7.60 cfs @ 12.47 hrs, Volume= 2.164 af
Primary = 7.60 cfs @ 12.47 hrs, Volume= 2.164 af, Atten= 0%, Lag= 0.0 min
Routed to Link DP-3 : Design Pont #3 (Woolsey Creek)

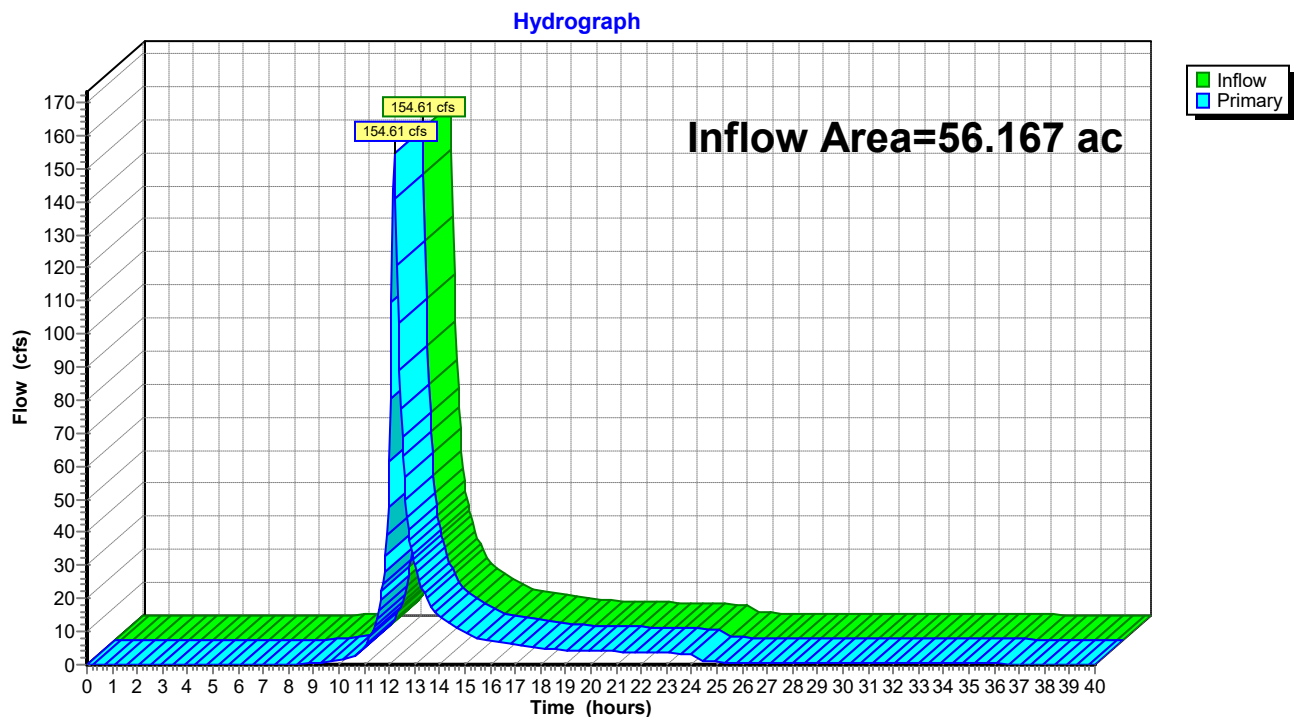
Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link PDA-5: Proposed Drainage Area #5

Summary for Link PDA-6: Proposed Drainage Area #6

Inflow Area = 56.167 ac, 14.10% Impervious, Inflow Depth > 3.24" for Future 10 yr event
Inflow = 154.61 cfs @ 12.20 hrs, Volume= 15.156 af
Primary = 154.61 cfs @ 12.20 hrs, Volume= 15.156 af, Atten= 0%, Lag= 0.0 min
Routed to Link DP-3 : Design Pont #3 (Woolsey Creek)

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link PDA-6: Proposed Drainage Area #6

Summary for Subcatchment 48I: PDA-48 (impervious)

Runoff = 9.17 cfs @ 12.17 hrs, Volume= 0.817 af, Depth=10.99"
 Routed to Pond B-48 : Basin #48

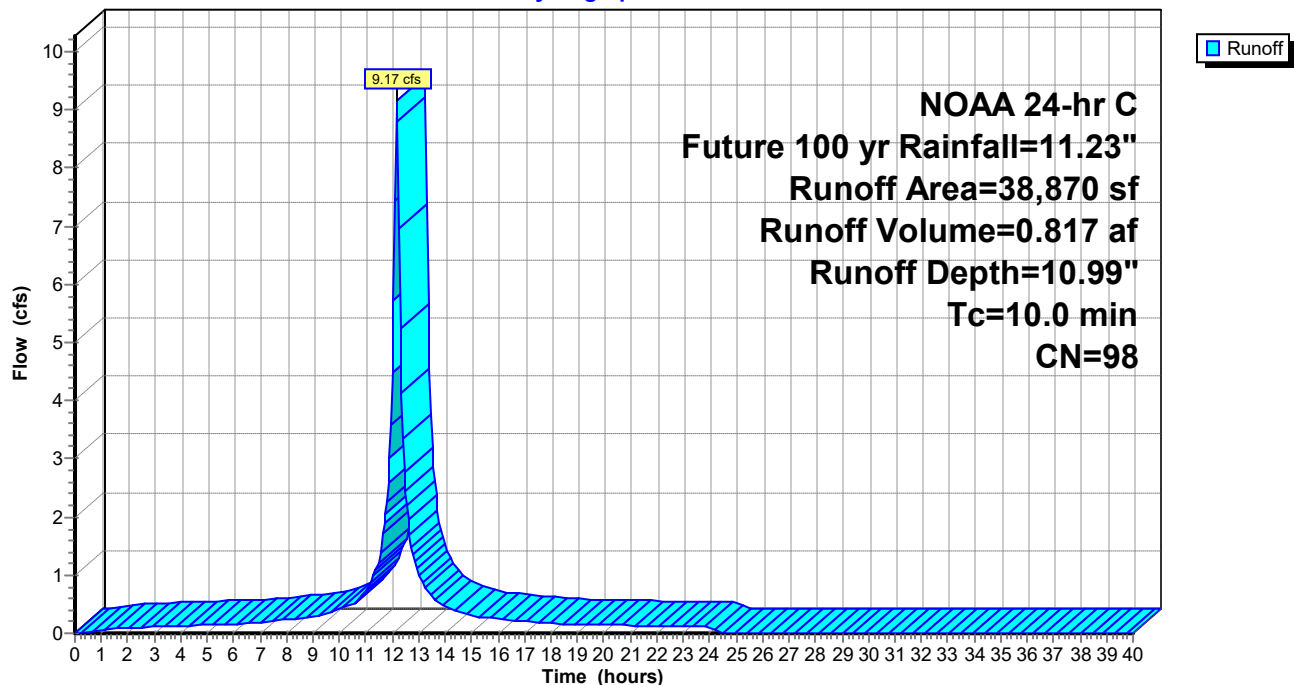
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 100 yr Rainfall=11.23"

	Area (sf)	CN	Description
*	16,283	98	Pavement, HSG C
*	21,350	98	Roof, HSG C
*	1,237	98	Concrete, HSG C
	38,870	98	Weighted Average
	38,870		100.00% Impervious Area

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

Subcatchment 48I: PDA-48 (impervious)

Hydrograph



Summary for Subcatchment 48P: PDA-48 (pervious)

Runoff = 12.99 cfs @ 12.17 hrs, Volume= 1.002 af, Depth= 7.89"
 Routed to Pond B-48 : Basin #48

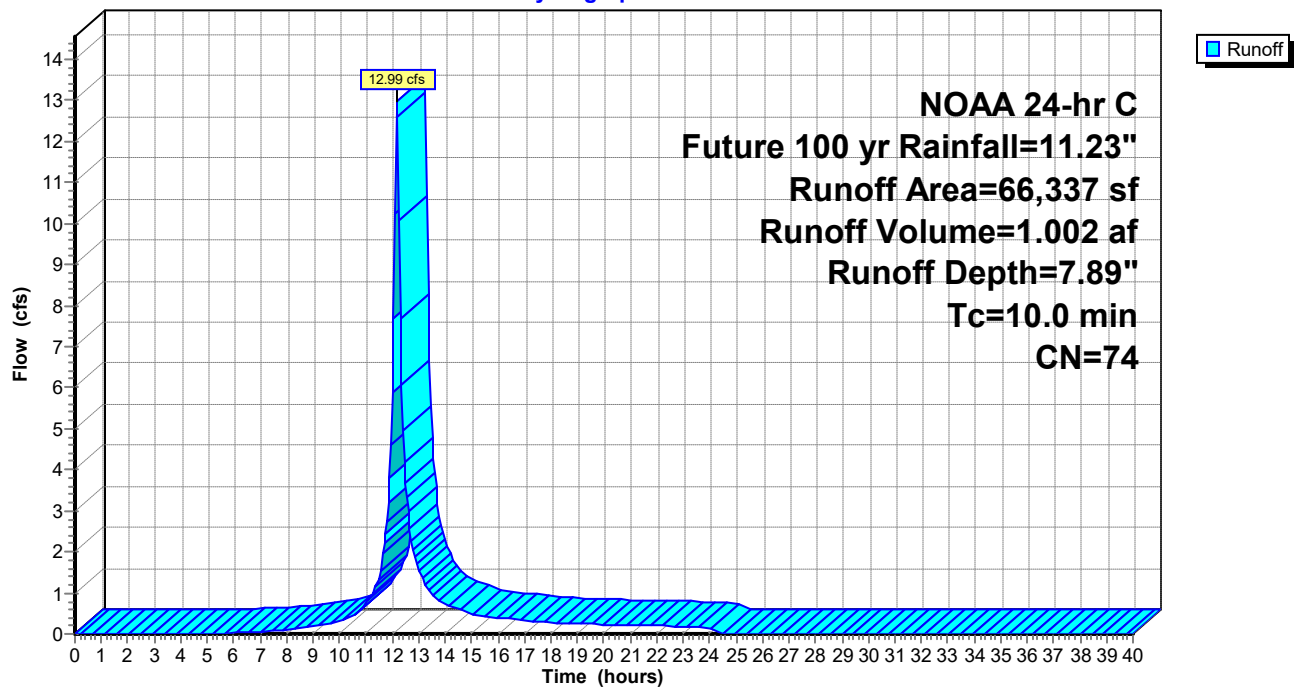
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (sf)	CN	Description
66,337	74	>75% Grass cover, Good, HSG C
66,337		100.00% Pervious Area

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

Subcatchment 48P: PDA-48 (pervious)

Hydrograph



Summary for Subcatchment 49I: PDA-49 (impervious)

Runoff = 14.93 cfs @ 12.17 hrs, Volume= 1.331 af, Depth=10.99"
 Routed to Pond B-49 : Basin #49

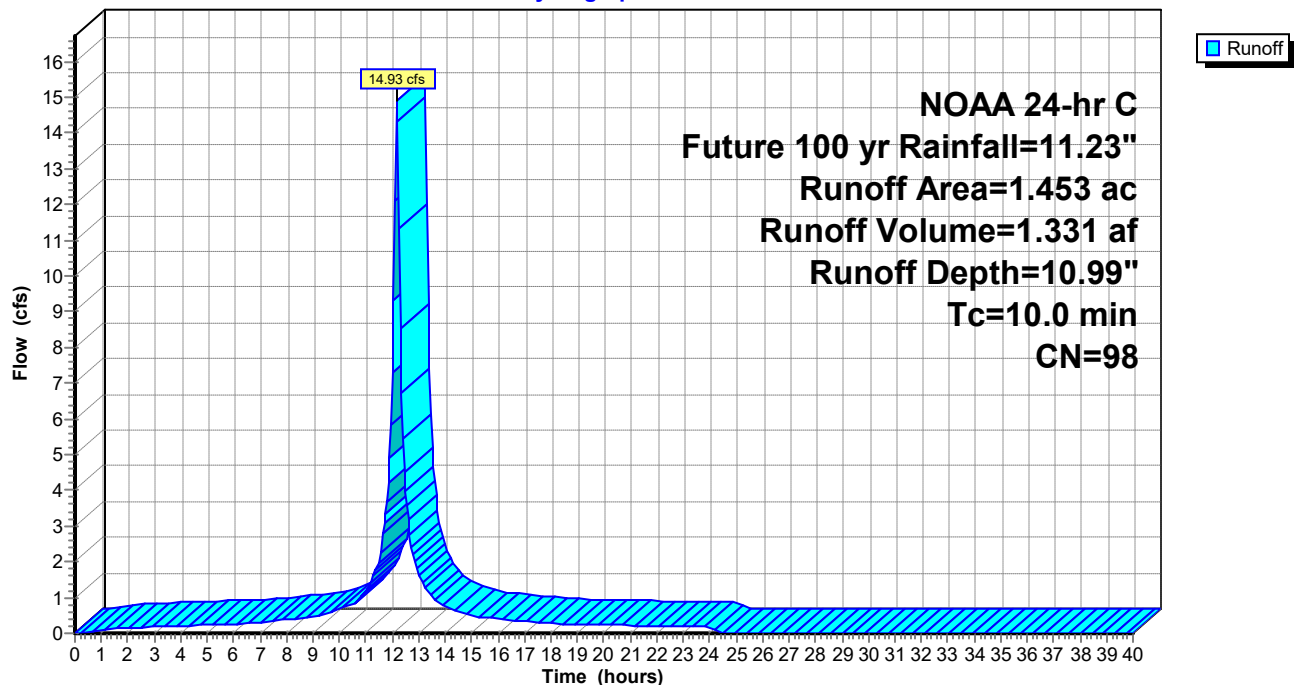
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (ac)	CN	Description
* 0.454	98	Pavement, HSG C
* 0.940	98	Roof, HSG C
* 0.059	98	Concrete, HSG C
1.453	98	Weighted Average
1.453		100.00% Impervious Area

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

Subcatchment 49I: PDA-49 (impervious)

Hydrograph



Summary for Subcatchment 49P: PDA-49 (pervious)

Runoff = 10.46 cfs @ 12.17 hrs, Volume= 0.807 af, Depth= 7.89"
 Routed to Pond B-49 : Basin #49

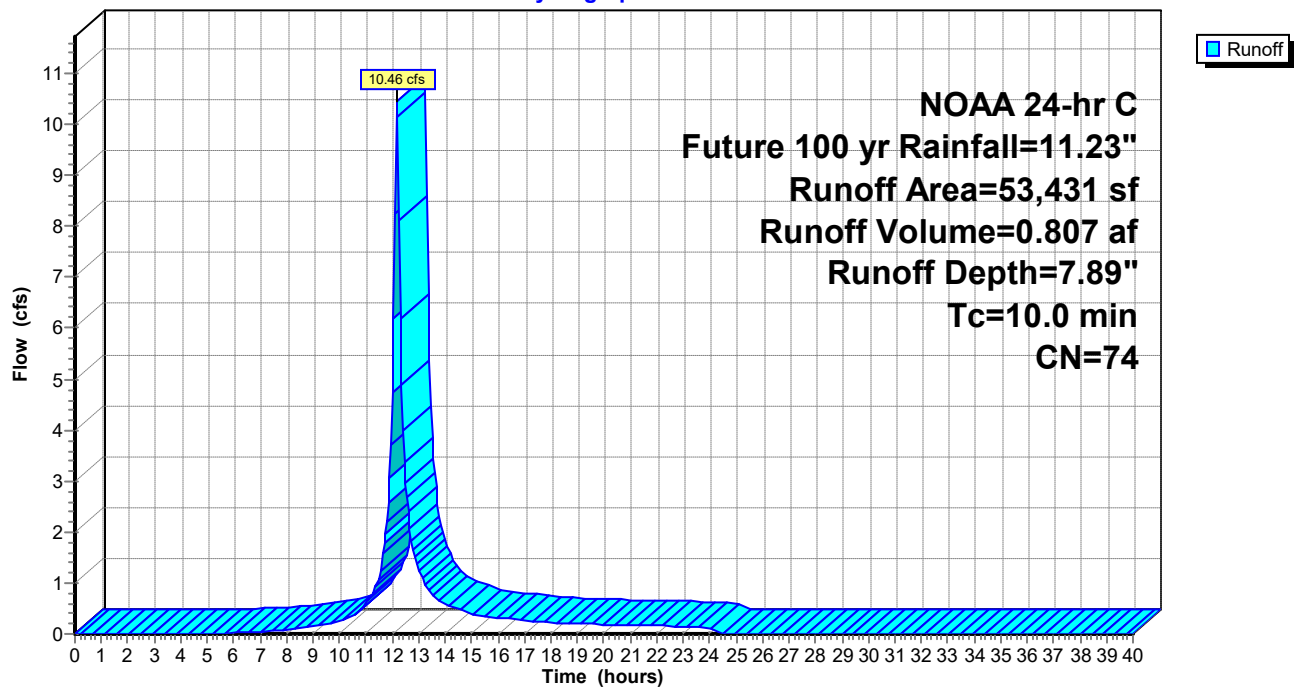
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (sf)	CN	Description
53,431	74	>75% Grass cover, Good, HSG C
53,431		100.00% Pervious Area

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

Subcatchment 49P: PDA-49 (pervious)

Hydrograph



Summary for Subcatchment 50I: PDA-50 (impervious)

Runoff = 12.86 cfs @ 12.17 hrs, Volume= 1.146 af, Depth=10.99"
 Routed to Pond B-50 : Basin #50

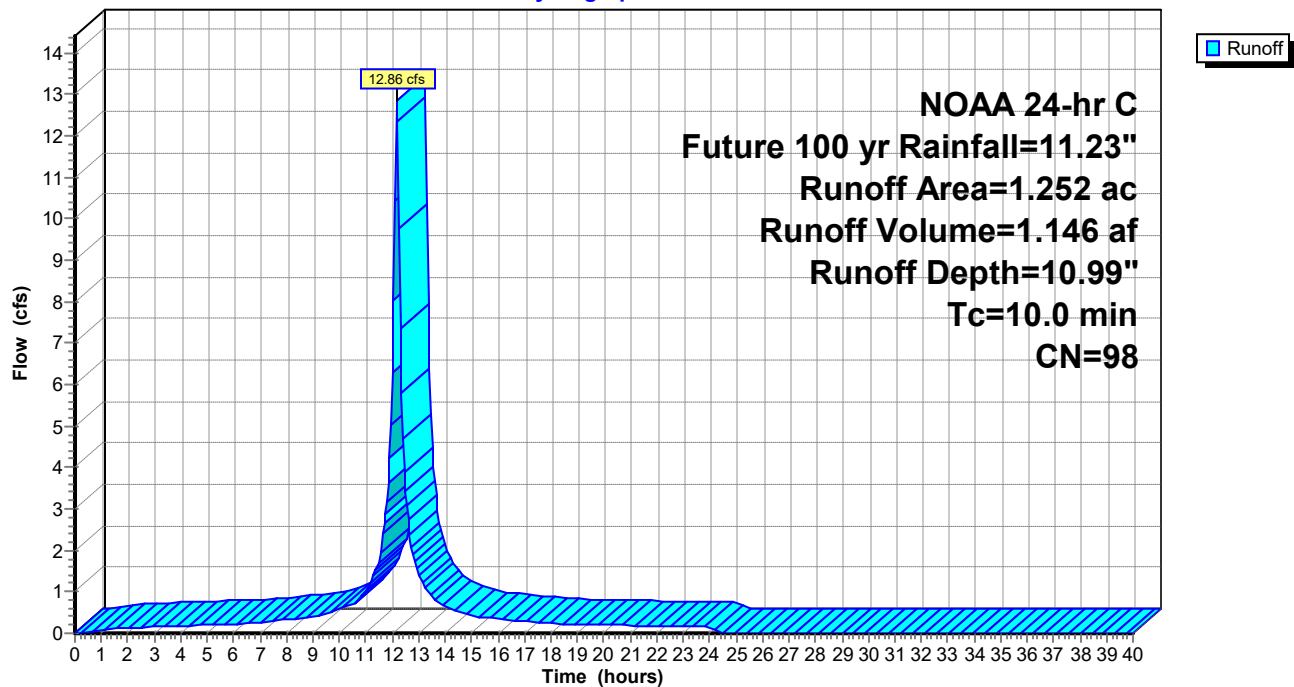
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (ac)	CN	Description
* 0.633	98	Pavement, HSG C
* 0.546	98	Roof, HSG C
* 0.073	98	Concrete, HSG C
1.252	98	Weighted Average
1.252		100.00% Impervious Area

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

Subcatchment 50I: PDA-50 (impervious)

Hydrograph



Summary for Subcatchment 50P: PDA-50 (pervious)

Runoff = 12.09 cfs @ 12.17 hrs, Volume= 0.932 af, Depth= 7.89"
Routed to Pond B-50 : Basin #50

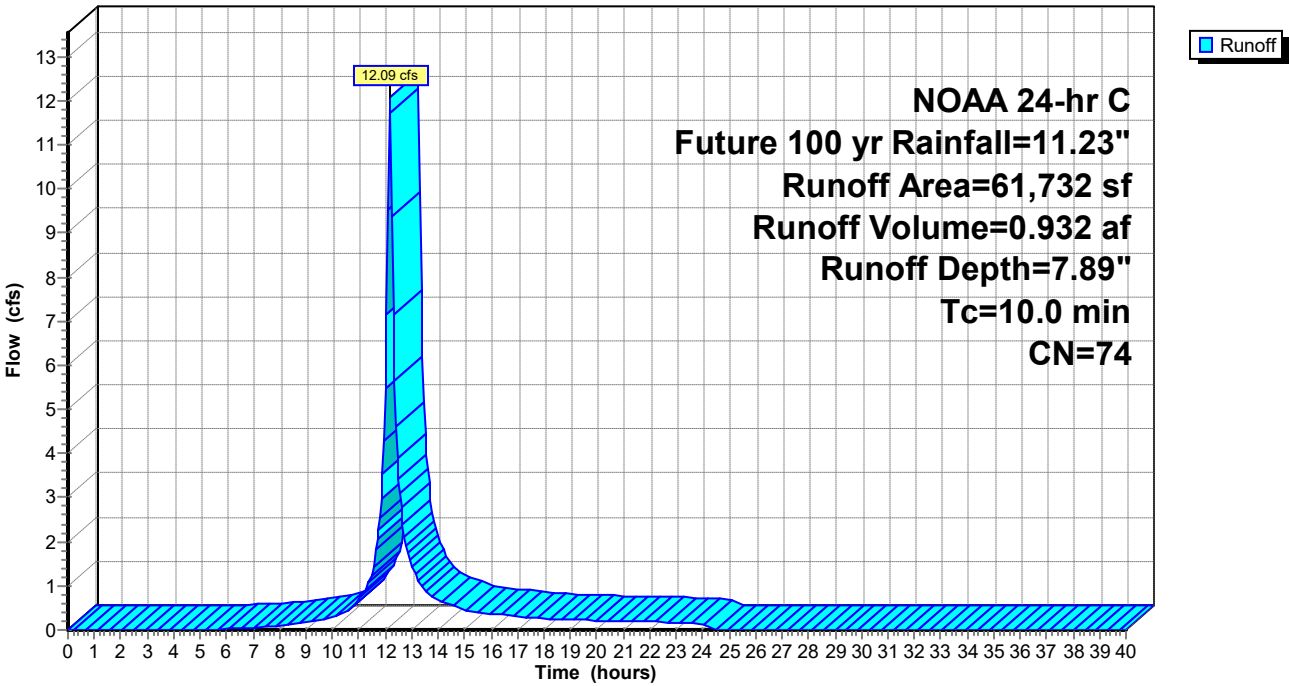
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (sf)	CN	Description
61,732	74	>75% Grass cover, Good, HSG C
61,732		100.00% Pervious Area

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

Subcatchment 50P: PDA-50 (pervious)

Hydrograph



Summary for Subcatchment 51I: PDA-51 (impervious)

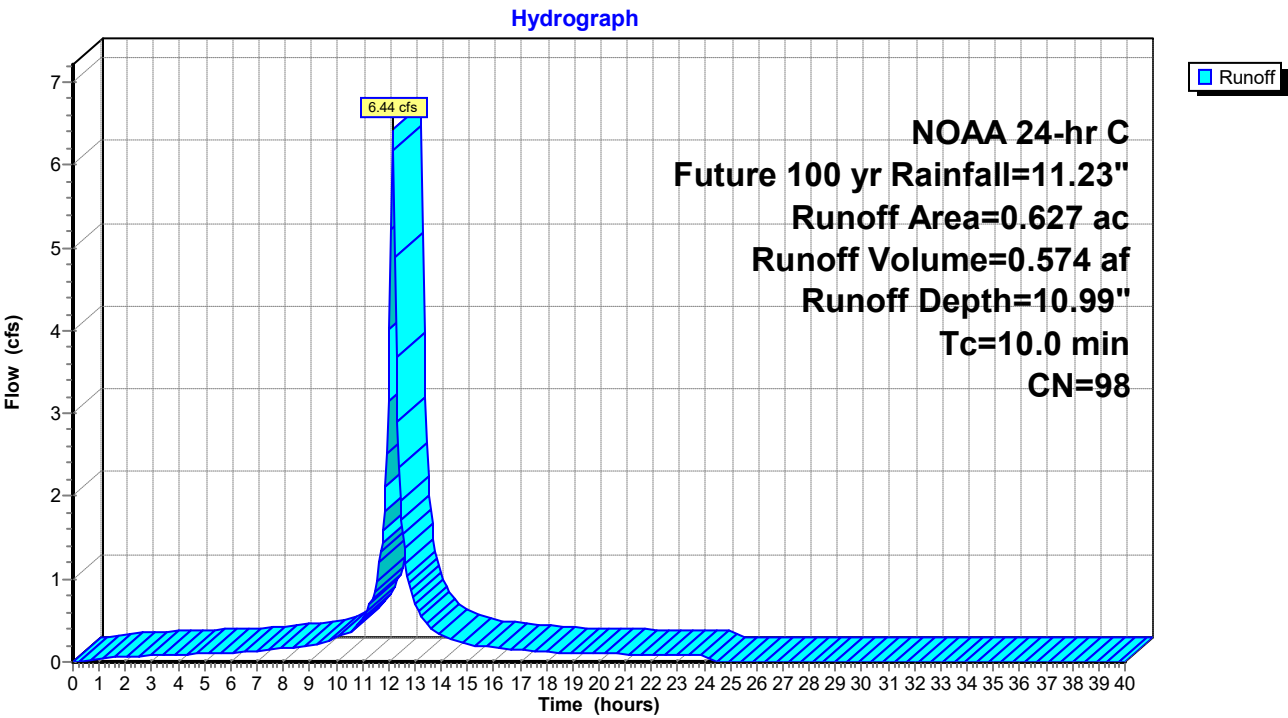
Runoff = 6.44 cfs @ 12.17 hrs, Volume= 0.574 af, Depth=10.99"
Routed to Pond B-51 : Basin #51

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (ac)	CN	Description
* 0.627	98	Roof, HSG C
0.627		100.00% Impervious Area

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

Subcatchment 51I: PDA-51 (impervious)



Summary for Subcatchment 51P: PDA-51 (pervious)

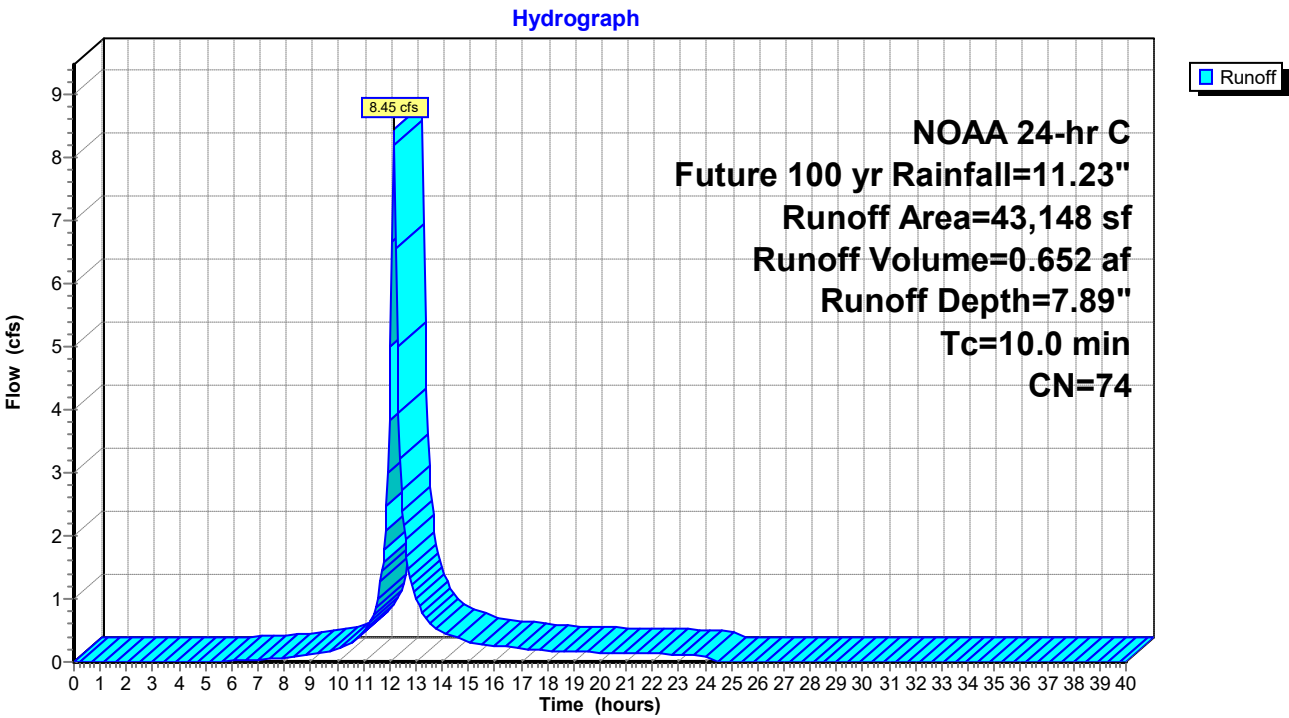
Runoff = 8.45 cfs @ 12.17 hrs, Volume= 0.652 af, Depth= 7.89"
Routed to Pond B-51 : Basin #51

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (sf)	CN	Description
43,148	74	>75% Grass cover, Good, HSG C
43,148		100.00% Pervious Area

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

Subcatchment 51P: PDA-51 (pervious)



Summary for Subcatchment 52I: PDA-52 (impervious)

Runoff = 10.79 cfs @ 12.17 hrs, Volume= 0.962 af, Depth=10.99"
 Routed to Pond B-52 : Basin #52

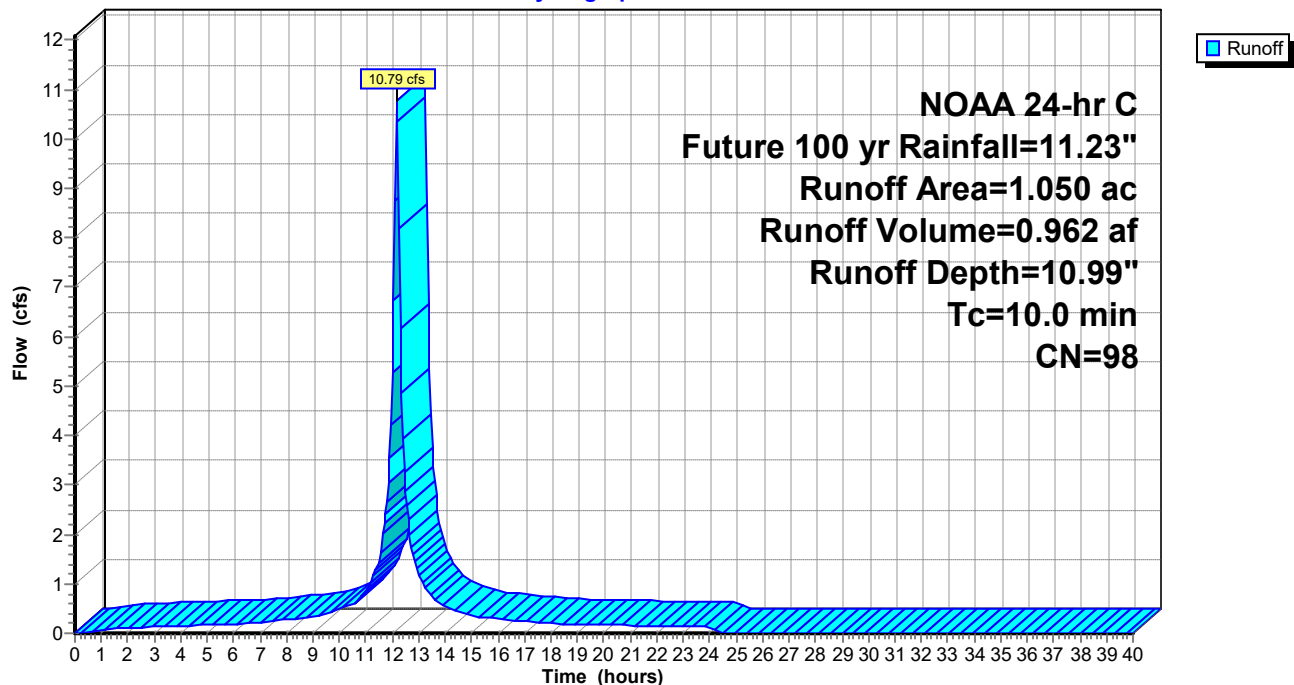
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (ac)	CN	Description
* 0.350	98	Pavement, HSG C
* 0.659	98	Roof, HSG C
* 0.041	98	Concrete, HSG C
1.050	98	Weighted Average
1.050		100.00% Impervious Area

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

Subcatchment 52I: PDA-52 (impervious)

Hydrograph



Summary for Subcatchment 52P: PDA-52 (pervious)

Runoff = 12.69 cfs @ 12.17 hrs, Volume= 0.978 af, Depth= 7.89"
 Routed to Pond B-52 : Basin #52

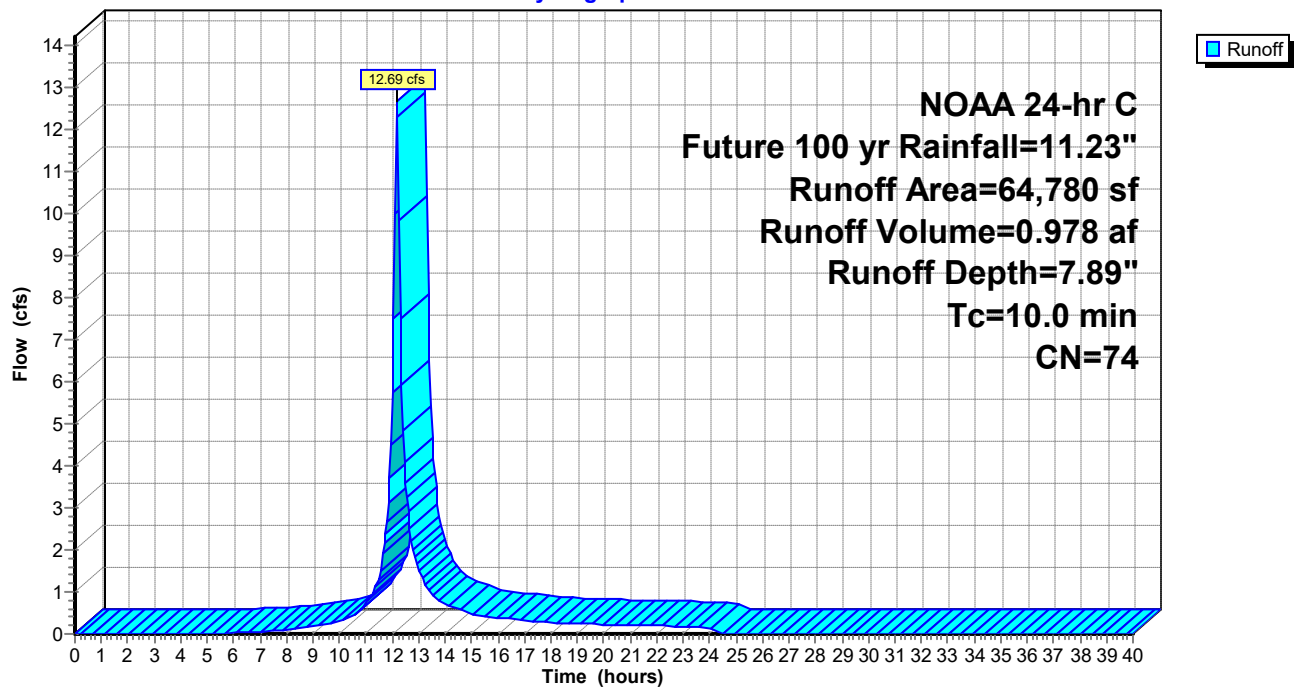
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (sf)	CN	Description
64,780	74	>75% Grass cover, Good, HSG C
64,780		100.00% Pervious Area

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

Subcatchment 52P: PDA-52 (pervious)

Hydrograph



Summary for Subcatchment 53I: PDA-53 (impervious)

Runoff = 12.47 cfs @ 12.17 hrs, Volume= 1.112 af, Depth=10.99"
 Routed to Pond B-53 : Basin #53

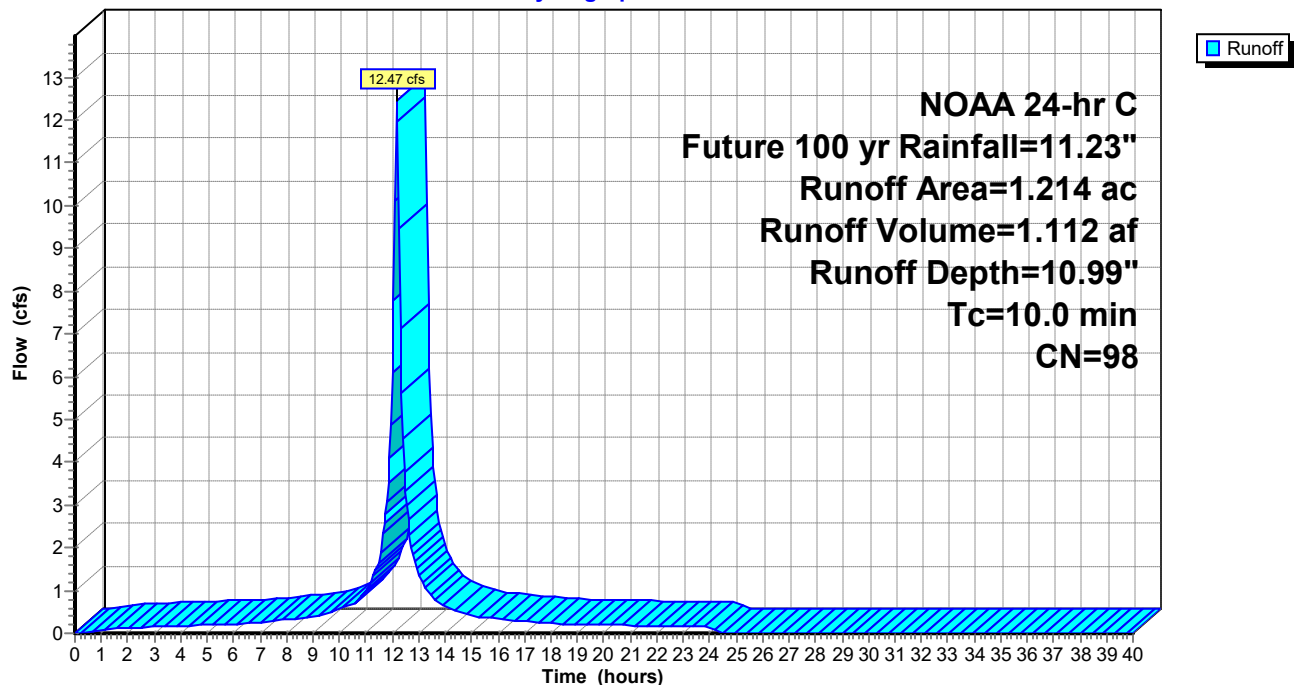
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (ac)	CN	Description
* 0.628	98	Pavement, HSG C
* 0.450	98	Roof, HSG C
* 0.136	98	Concrete, HSG C
1.214	98	Weighted Average
1.214		100.00% Impervious Area

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

Subcatchment 53I: PDA-53 (impervious)

Hydrograph



Summary for Subcatchment 53P: PDA-53 (pervious)

Runoff = 11.32 cfs @ 12.17 hrs, Volume= 0.872 af, Depth= 7.89"
 Routed to Pond B-53 : Basin #53

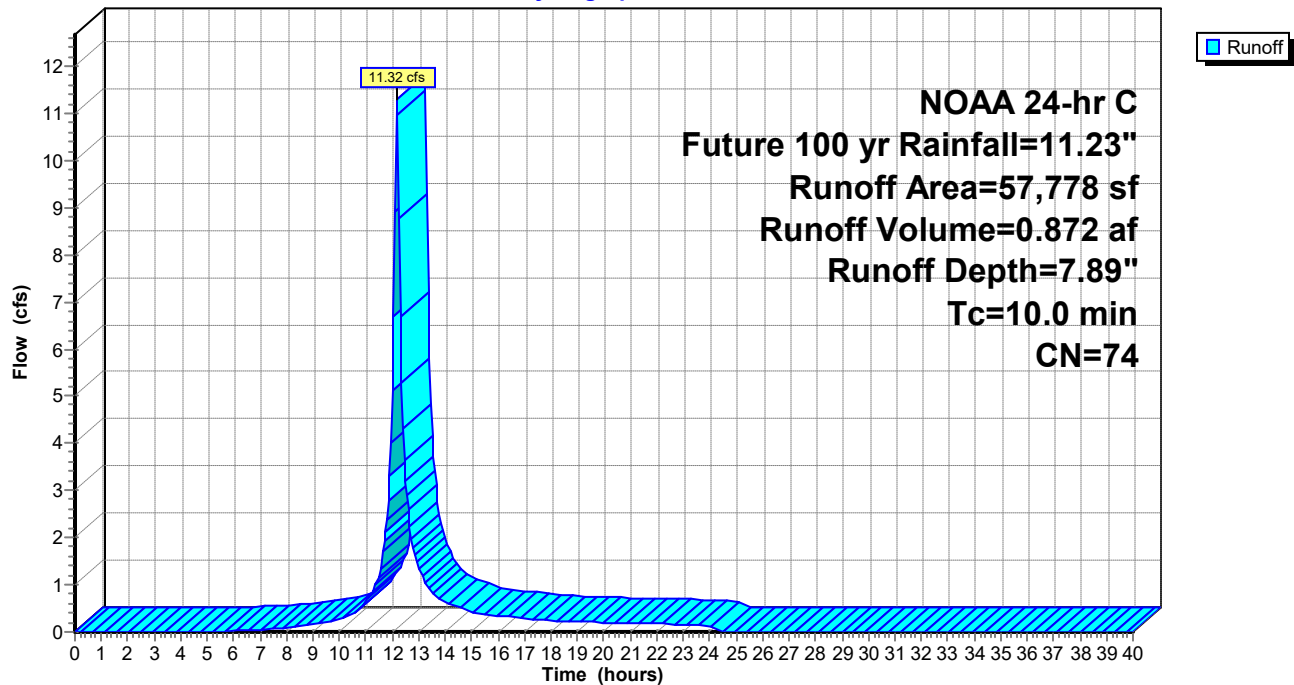
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (sf)	CN	Description
57,778	74	>75% Grass cover, Good, HSG C
57,778		100.00% Pervious Area

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

Subcatchment 53P: PDA-53 (pervious)

Hydrograph



Summary for Subcatchment 54I: PDA-54 (impervious)

Runoff = 15.96 cfs @ 12.17 hrs, Volume= 1.423 af, Depth=10.99"
 Routed to Pond B-54 : Basin #54

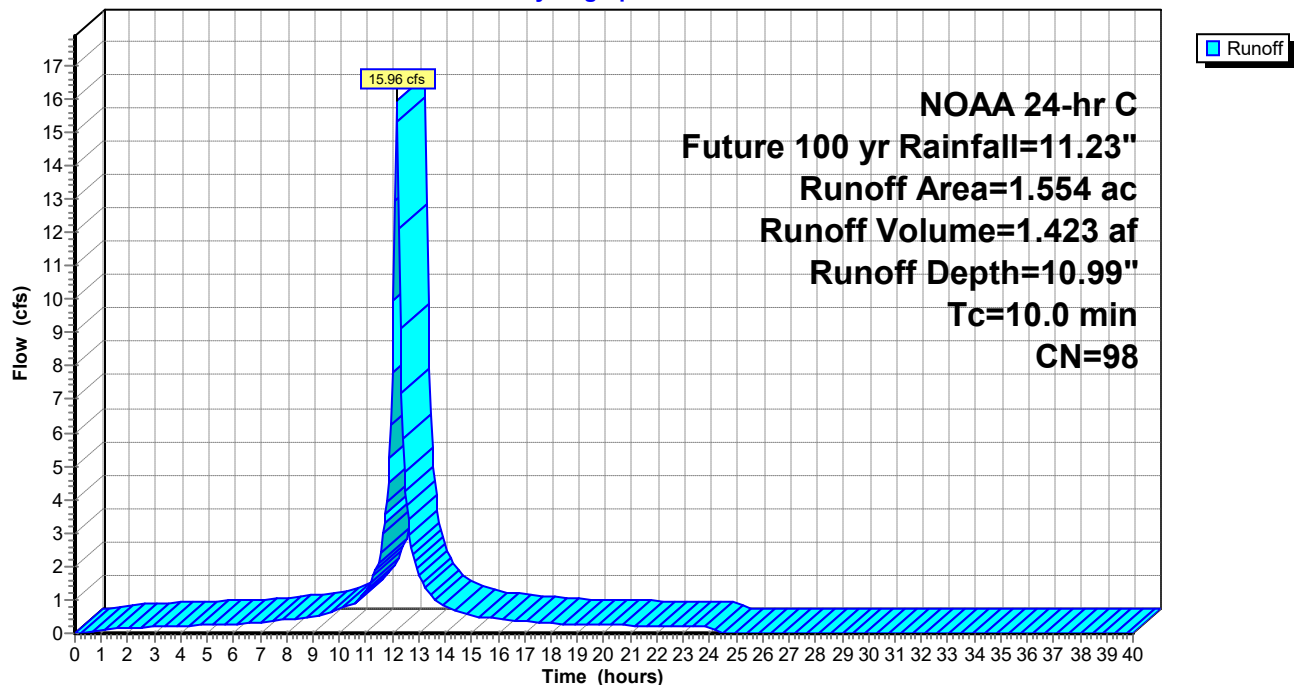
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (ac)	CN	Description
* 0.983	98	Pavement, HSG C
* 0.361	98	Roof, HSG C
* 0.210	98	Concrete, HSG C
1.554	98	Weighted Average
1.554		100.00% Impervious Area

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

Subcatchment 54I: PDA-54 (impervious)

Hydrograph



Summary for Subcatchment 54P: PDA-54 (pervious)

Runoff = 8.67 cfs @ 12.17 hrs, Volume= 0.669 af, Depth= 7.89"
 Routed to Pond B-54 : Basin #54

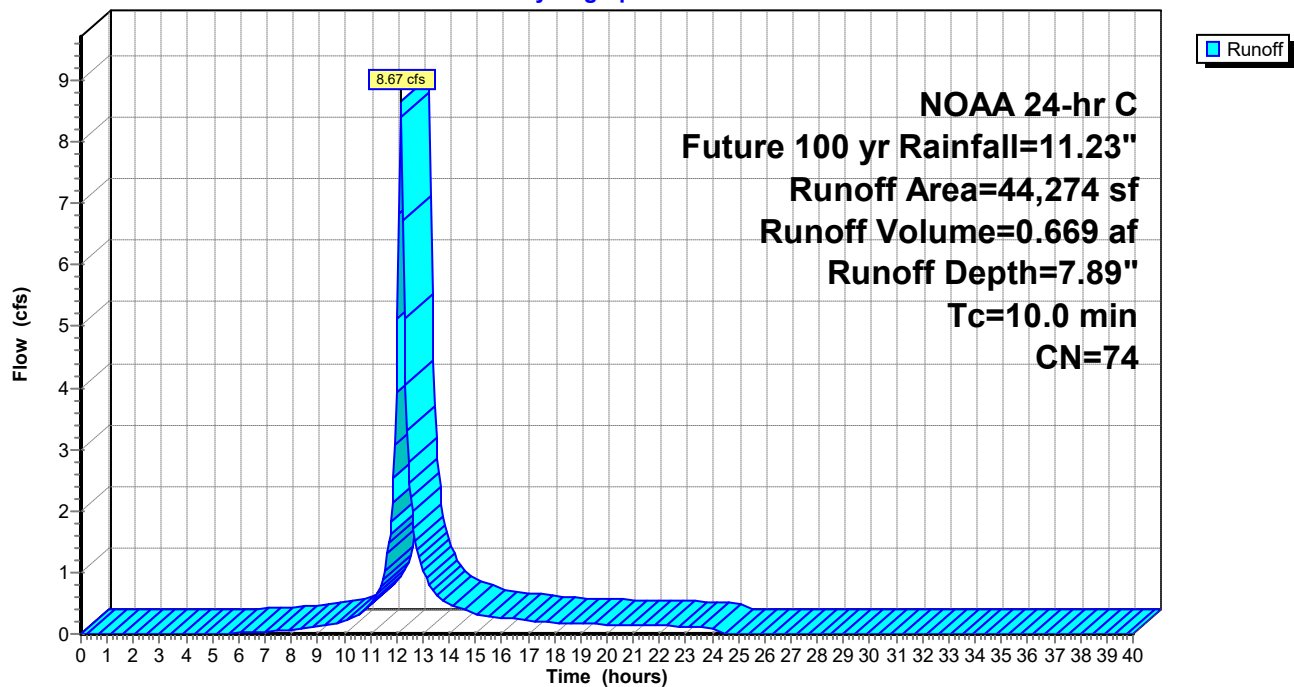
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (sf)	CN	Description
44,274	74	>75% Grass cover, Good, HSG C
44,274		100.00% Pervious Area

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

Subcatchment 54P: PDA-54 (pervious)

Hydrograph



Summary for Subcatchment 55I: PDA-55 (impervious)

Runoff = 10.34 cfs @ 12.17 hrs, Volume= 0.922 af, Depth=10.99"
 Routed to Pond B-55 : Basin #55

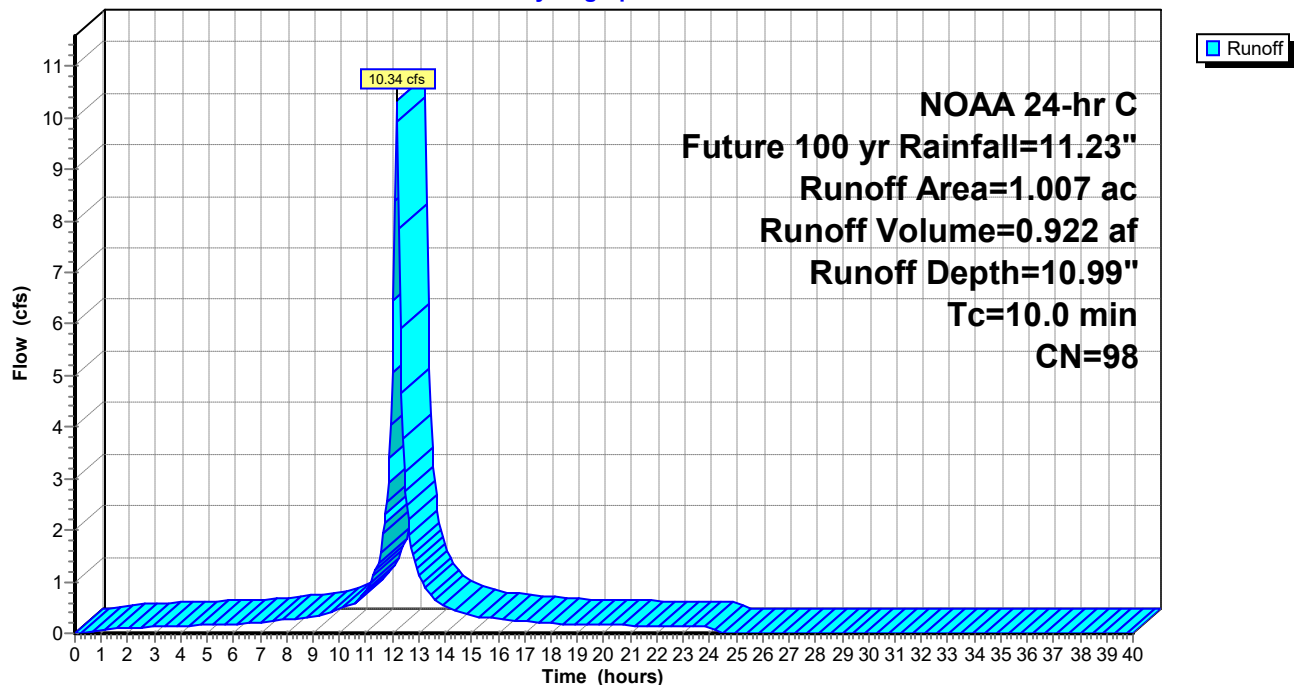
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (ac)	CN	Description
* 0.771	98	Pavement, HSG C
* 0.169	98	Roof, HSG C
* 0.067	98	Concrete, HSG C
1.007	98	Weighted Average
1.007		100.00% Impervious Area

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

Subcatchment 55I: PDA-55 (impervious)

Hydrograph



Summary for Subcatchment 55P: PDA-55 (pervious)

Runoff = 8.68 cfs @ 12.17 hrs, Volume= 0.669 af, Depth= 7.89"
 Routed to Pond B-55 : Basin #55

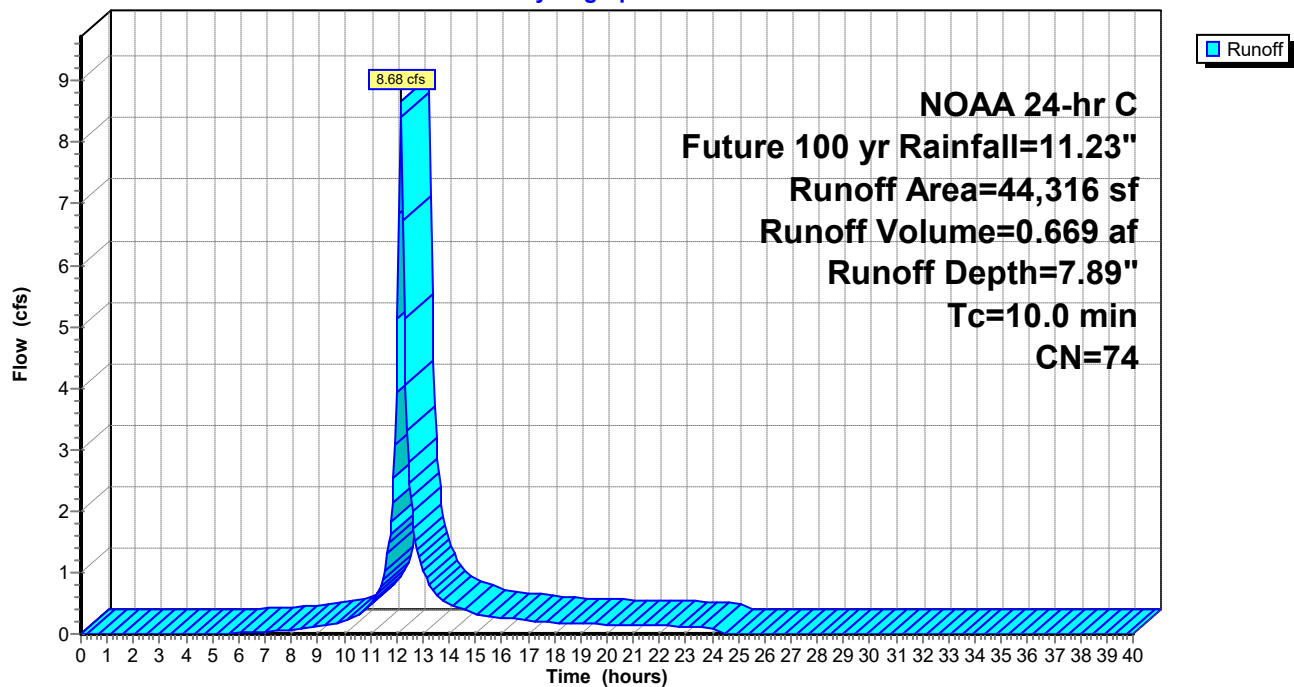
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (sf)	CN	Description
44,316	74	>75% Grass cover, Good, HSG C
44,316		100.00% Pervious Area

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

Subcatchment 55P: PDA-55 (pervious)

Hydrograph



Summary for Subcatchment 56I: PDA-56 (impervious)

Runoff = 10.65 cfs @ 12.17 hrs, Volume= 0.950 af, Depth=10.99"
 Routed to Pond B-56 : Basin #56

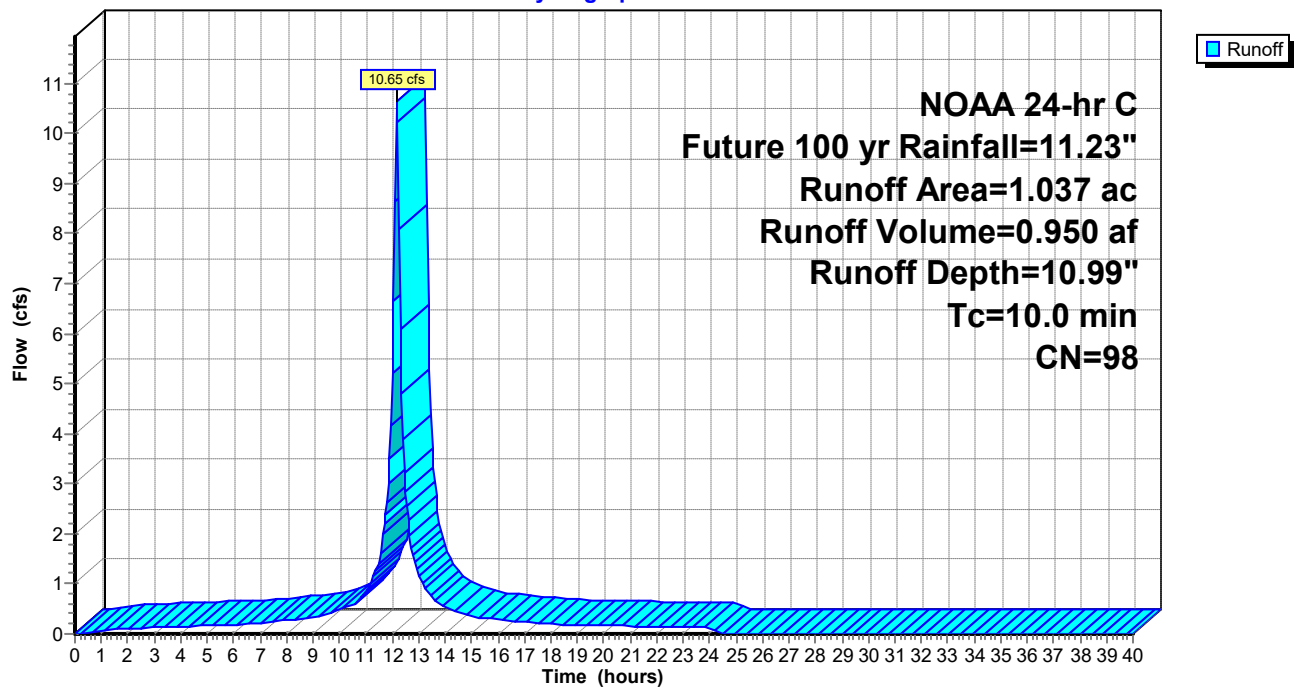
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (ac)	CN	Description
* 1.037	98	Roof, HSG C
1.037		100.00% Impervious Area

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

Subcatchment 56I: PDA-56 (impervious)

Hydrograph



Summary for Subcatchment 56P: PDA-56 (pervious)

Runoff = 10.85 cfs @ 12.17 hrs, Volume= 0.836 af, Depth= 7.89"
 Routed to Pond B-56 : Basin #56

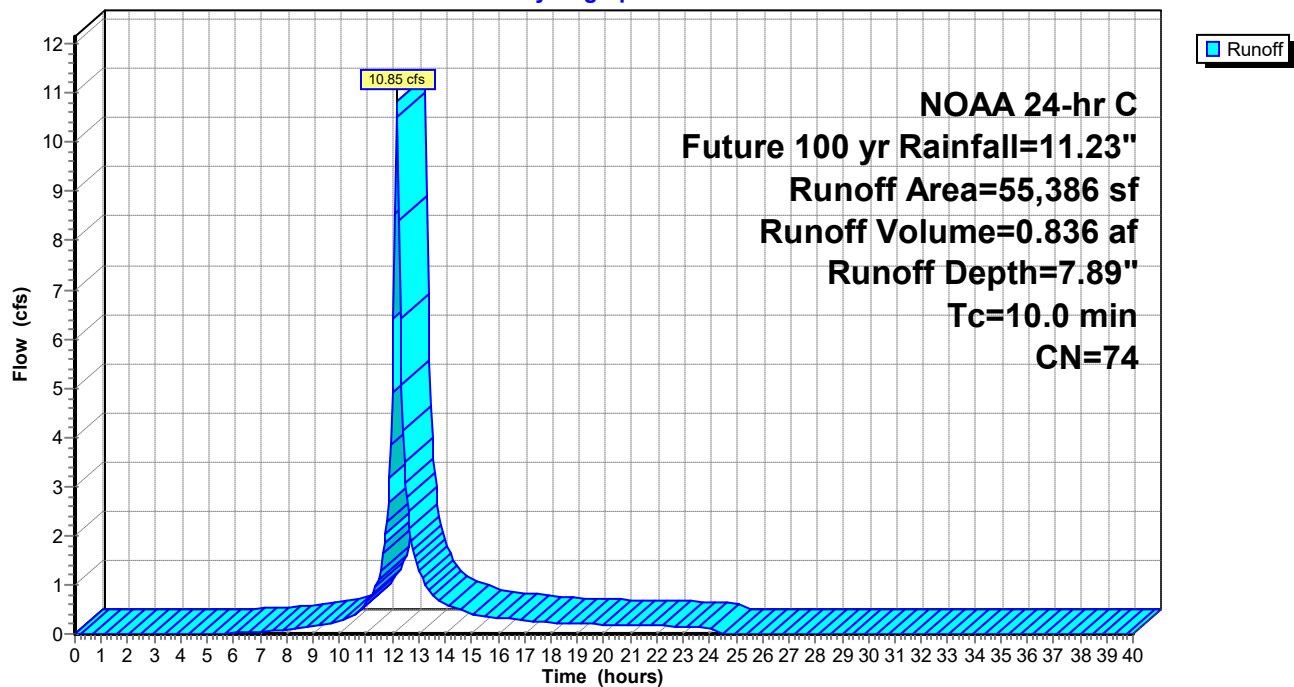
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (sf)	CN	Description
55,386	74	>75% Grass cover, Good, HSG C
55,386		100.00% Pervious Area

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

Subcatchment 56P: PDA-56 (pervious)

Hydrograph



Summary for Subcatchment 57I: PDA-57 (impervious)

Runoff = 6.84 cfs @ 12.17 hrs, Volume= 0.610 af, Depth=10.99"
 Routed to Pond B-57 : Basin #57

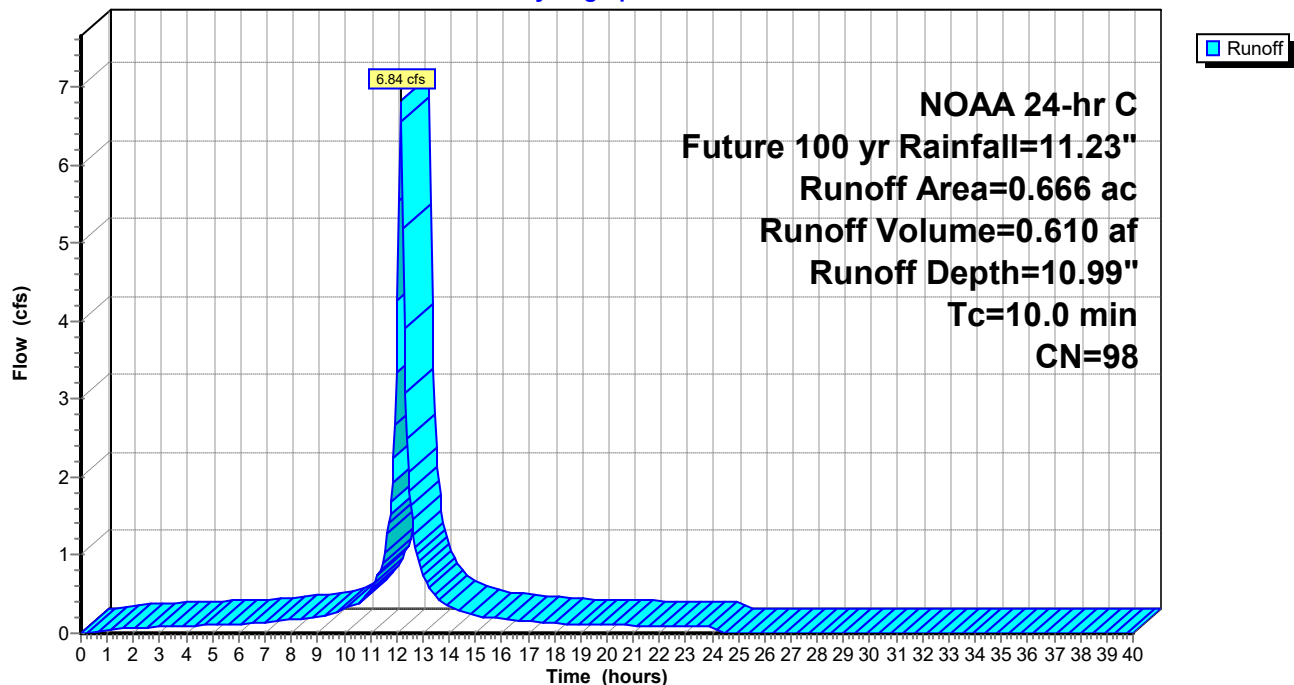
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (ac)	CN	Description
* 0.311	98	Pavement, HSG C
* 0.313	98	Roof, HSG C
* 0.042	98	Concrete, HSG C
0.666	98	Weighted Average
0.666		100.00% Impervious Area

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

Subcatchment 57I: PDA-57 (impervious)

Hydrograph



Summary for Subcatchment 57P: PDA-57 (pervious)

Runoff = 5.38 cfs @ 12.17 hrs, Volume= 0.415 af, Depth= 7.89"
 Routed to Pond B-57 : Basin #57

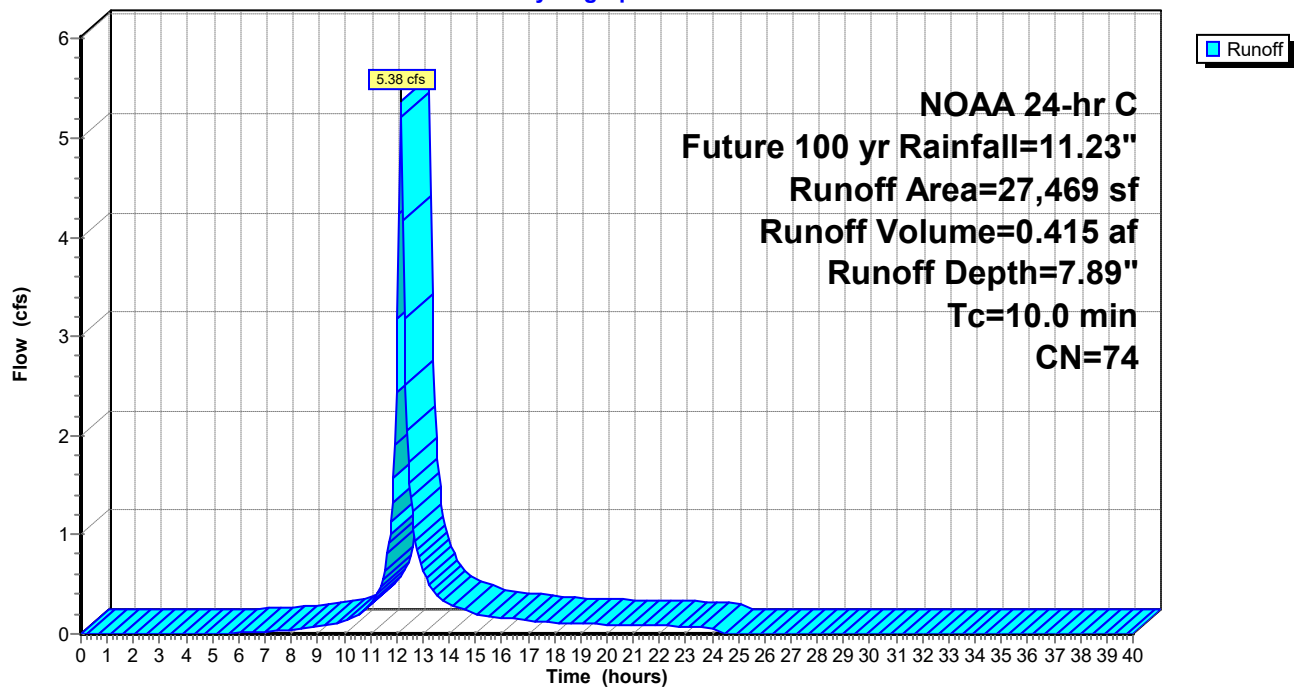
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (sf)	CN	Description
27,469	74	>75% Grass cover, Good, HSG C
27,469		100.00% Pervious Area

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

Subcatchment 57P: PDA-57 (pervious)

Hydrograph



Summary for Subcatchment 58I: PDA-58 (impervious)

Runoff = 7.86 cfs @ 12.17 hrs, Volume= 0.701 af, Depth=10.99"
 Routed to Pond B-58 : Basin #58

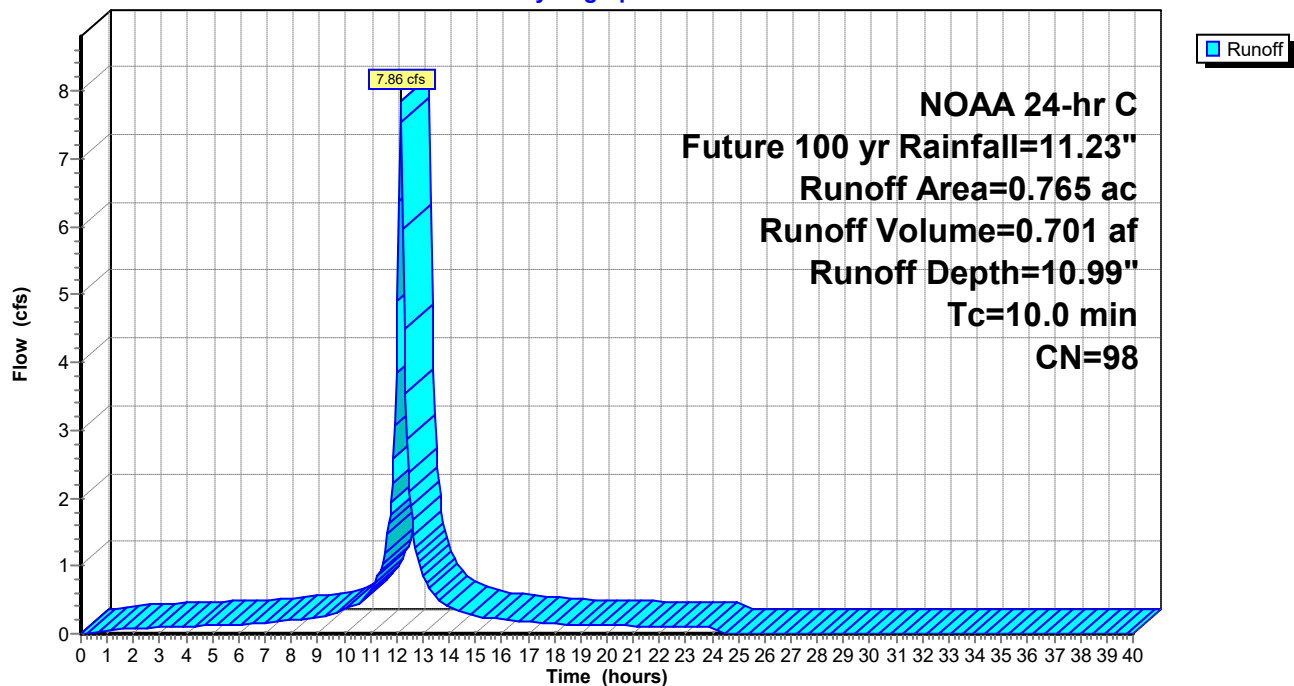
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (ac)	CN	Description
* 0.763	98	Roof, HSG C
* 0.002	98	Concrete, HSG C
0.765	98	Weighted Average
0.765		100.00% Impervious Area

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

Subcatchment 58I: PDA-58 (impervious)

Hydrograph



Summary for Subcatchment 58P: PDA-58 (pervious)

Runoff = 13.70 cfs @ 12.17 hrs, Volume= 1.056 af, Depth= 7.89"
 Routed to Pond B-58 : Basin #58

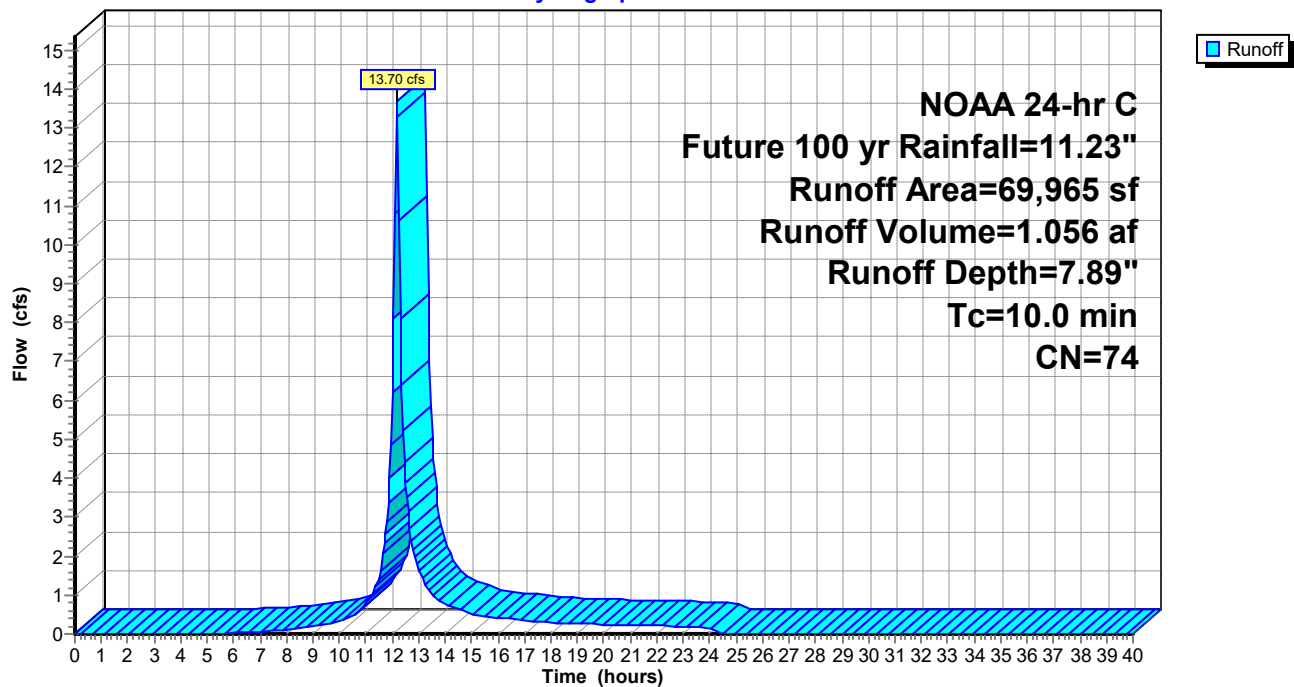
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (sf)	CN	Description
69,965	74	>75% Grass cover, Good, HSG C
69,965		100.00% Pervious Area

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

Subcatchment 58P: PDA-58 (pervious)

Hydrograph



Summary for Subcatchment UPDA-5: PDA-5 (undetained)

Runoff = 5.53 cfs @ 12.17 hrs, Volume= 0.426 af, Depth= 7.89"

Routed to Link PDA-5 : Proposed Drainage Area #5

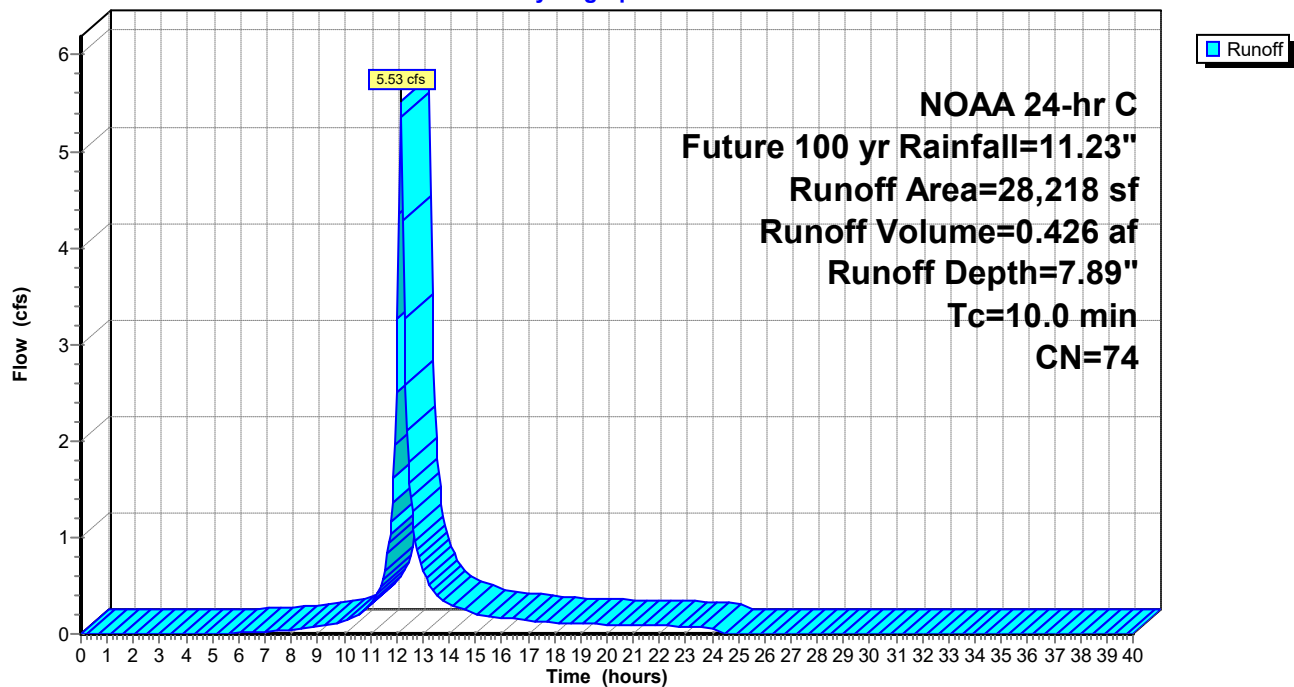
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (sf)	CN	Description
28,218	74	>75% Grass cover, Good, HSG C
28,218		100.00% Pervious Area

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

Subcatchment UPDA-5: PDA-5 (undetained)

Hydrograph



Summary for Subcatchment UPDA-6: PDA-6 (undetained)

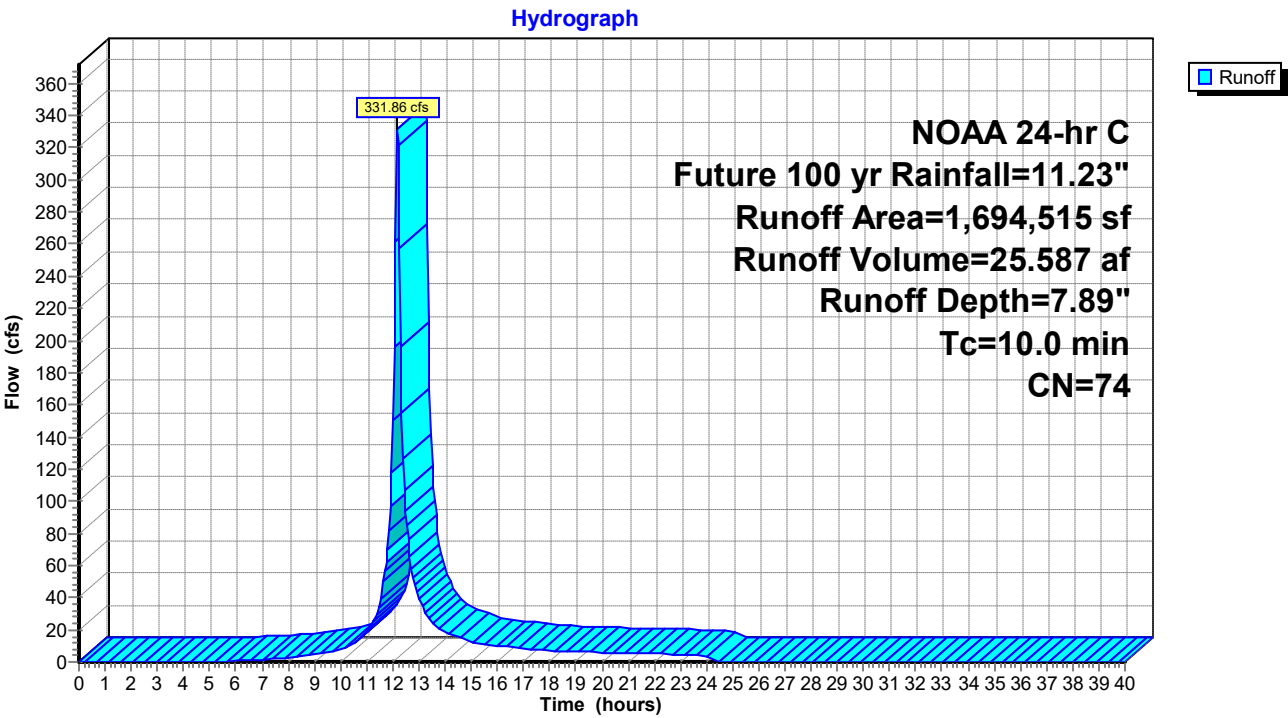
Runoff = 331.86 cfs @ 12.17 hrs, Volume= 25.587 af, Depth= 7.89"
Routed to Link PDA-6 : Proposed Drainage Area #6

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (sf)	CN	Description
1,694,515	74	>75% Grass cover, Good, HSG C
1,694,515		100.00% Pervious Area

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

Subcatchment UPDA-6: PDA-6 (undetained)



Summary for Pond B-48: Basin #48

Inflow Area = 2.415 ac, 36.95% Impervious, Inflow Depth = 9.04" for Future 100 yr event
 Inflow = 22.15 cfs @ 12.17 hrs, Volume= 1.819 af
 Outflow = 16.61 cfs @ 12.27 hrs, Volume= 1.517 af, Atten= 25%, Lag= 5.9 min
 Primary = 16.61 cfs @ 12.27 hrs, Volume= 1.517 af
 Routed to Link PDA-5 : Proposed Drainage Area #5

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 189.61' @ 12.27 hrs Surf.Area= 13,159 sf Storage= 33,255 cf

Plug-Flow detention time= 308.8 min calculated for 1.517 af (83% of inflow)
 Center-of-Mass det. time= 236.2 min (1,015.2 - 779.0)

Volume	Invert	Avail.Storage	Storage Description
#1	186.85'	81,173 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
186.85	0	0	0
187.00	11,678	876	876
188.00	12,246	11,962	12,838
189.00	12,814	12,530	25,368
190.00	13,382	13,098	38,466
191.00	13,951	13,667	52,132
192.00	14,520	14,236	66,368
193.00	15,090	14,805	81,173

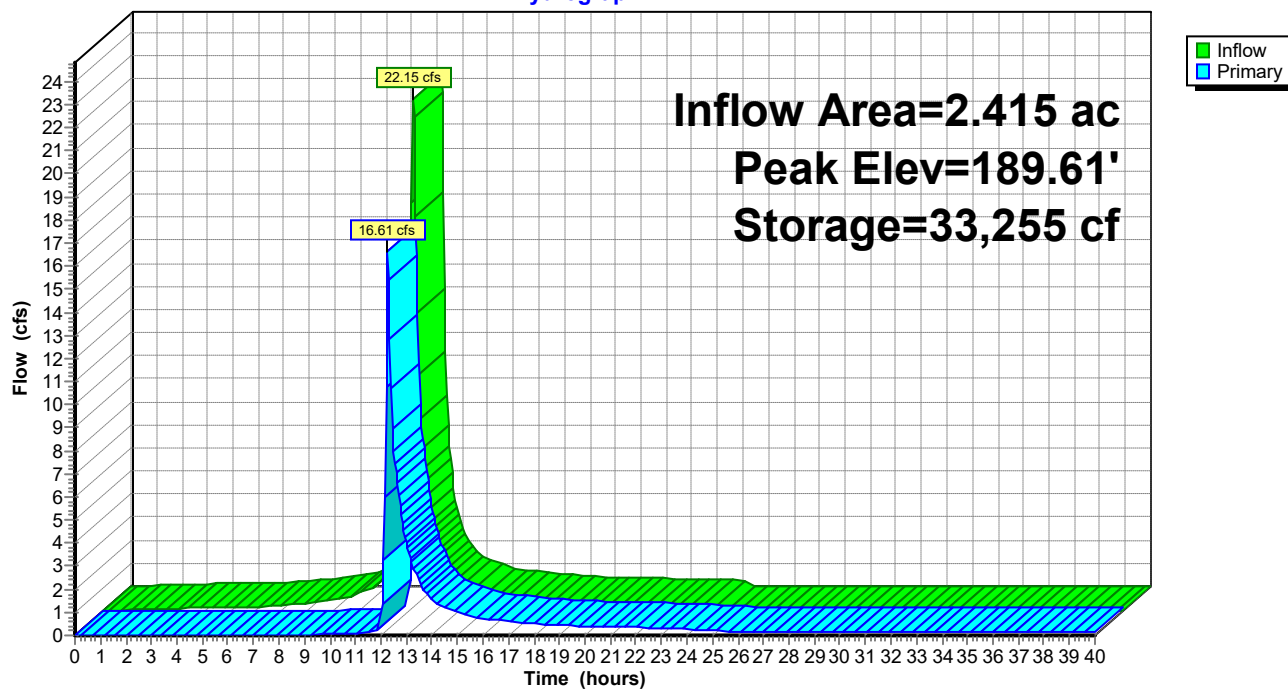
Device	Routing	Invert	Outlet Devices
#1	Primary	186.85'	18.0" Round Culvert L= 121.0' Ke= 0.500 Inlet / Outlet Invert= 186.85' / 186.25' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	187.26'	2.5" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	188.75'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	189.46'	50.0' long + 3.0 ' /' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=15.97 cfs @ 12.27 hrs HW=189.60' (Free Discharge)

- 1=Culvert (Barrel Controls 10.00 cfs @ 5.66 fps)
 2=Orifice/Grate (Passes < 0.25 cfs potential flow)
 3=Sharp-Crested Rectangular Weir (Passes < 9.76 cfs potential flow)
 4=Broad-Crested Rectangular Weir (Weir Controls 5.97 cfs @ 0.86 fps)

Pond B-48: Basin #48

Hydrograph



Summary for Pond B-49: Basin #49

Inflow Area = 2.680 ac, 54.22% Impervious, Inflow Depth = 9.57" for Future 100 yr event
 Inflow = 25.39 cfs @ 12.17 hrs, Volume= 2.137 af
 Outflow = 13.56 cfs @ 12.32 hrs, Volume= 1.900 af, Atten= 47%, Lag= 9.0 min
 Primary = 13.56 cfs @ 12.32 hrs, Volume= 1.900 af
 Routed to Link PDA-5 : Proposed Drainage Area #5

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 186.74' @ 12.32 hrs Surf.Area= 10,870 sf Storage= 34,067 cf

Plug-Flow detention time= 248.7 min calculated for 1.900 af (89% of inflow)
 Center-of-Mass det. time= 192.6 min (959.8 - 767.2)

Volume	Invert	Avail.Storage	Storage Description
#1	182.60'	55,030 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
182.60	0	0	0
183.00	6,698	1,340	1,340
184.00	7,766	7,232	8,572
185.00	8,867	8,317	16,888
186.00	10,002	9,435	26,323
187.00	11,172	10,587	36,910
188.00	12,378	11,775	48,685
188.50	13,004	6,346	55,030

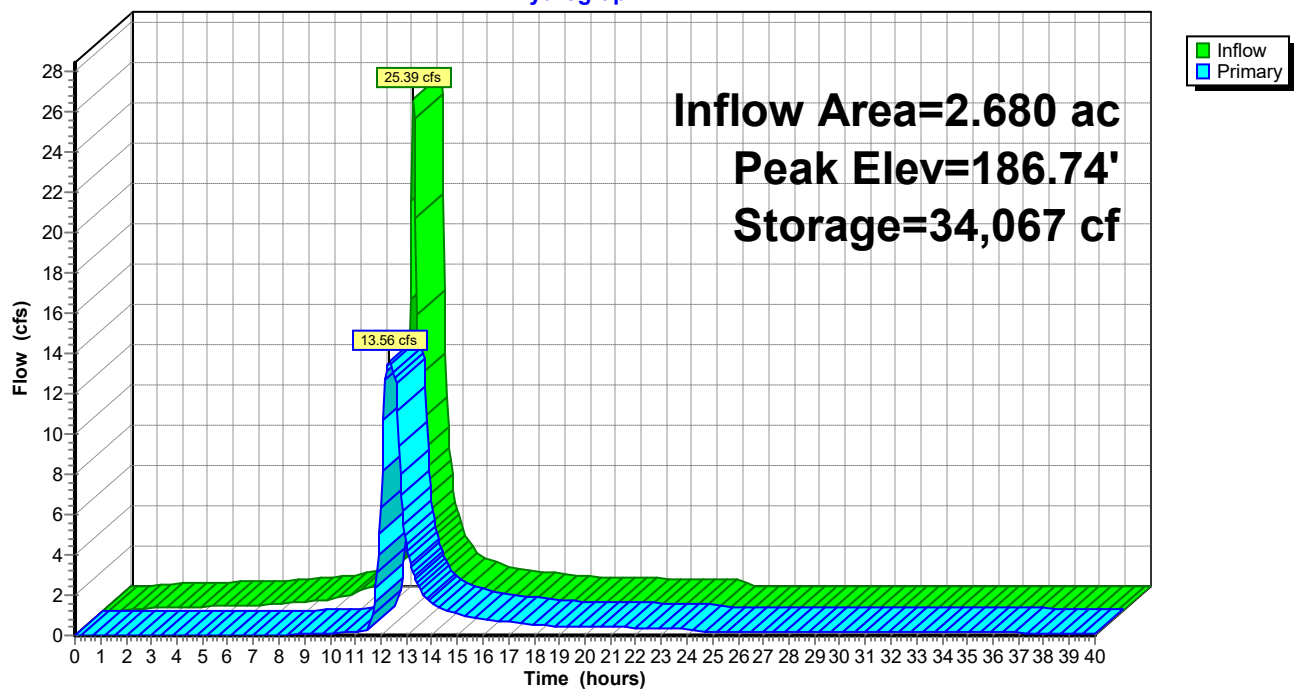
Device	Routing	Invert	Outlet Devices
#1	Primary	182.60'	18.0" Round Culvert L= 112.0' Ke= 0.500 Inlet / Outlet Invert= 182.60' / 182.00' S= 0.0054 '/ Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	183.64'	2.5" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	185.25'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	186.75'	50.0' long + 3.0 '/ SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=13.54 cfs @ 12.32 hrs HW=186.73' (Free Discharge)

- 1=Culvert (Barrel Controls 13.54 cfs @ 7.66 fps)
 2=Orifice/Grate (Passes < 0.28 cfs potential flow)
 3=Sharp-Crested Rectangular Weir (Passes < 21.89 cfs potential flow)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-49: Basin #49

Hydrograph



Summary for Pond B-50: Basin #50

Inflow Area = 2.669 ac, 46.91% Impervious, Inflow Depth = 9.35" for Future 100 yr event
 Inflow = 24.95 cfs @ 12.17 hrs, Volume= 2.079 af
 Outflow = 14.47 cfs @ 12.31 hrs, Volume= 1.845 af, Atten= 42%, Lag= 8.2 min
 Primary = 14.47 cfs @ 12.31 hrs, Volume= 1.845 af
 Routed to Link PDA-5 : Proposed Drainage Area #5

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 186.81' @ 12.31 hrs Surf.Area= 12,566 sf Storage= 33,053 cf

Plug-Flow detention time= 239.5 min calculated for 1.843 af (89% of inflow)
 Center-of-Mass det. time= 184.5 min (956.5 - 772.0)

Volume	Invert	Avail.Storage	Storage Description
#1	183.30'	56,291 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
183.30	0	0	0
184.00	8,805	3,082	3,082
185.00	10,108	9,457	12,538
186.00	11,448	10,778	23,316
187.00	12,826	12,137	35,453
188.00	14,244	13,535	48,988
188.50	14,966	7,303	56,291

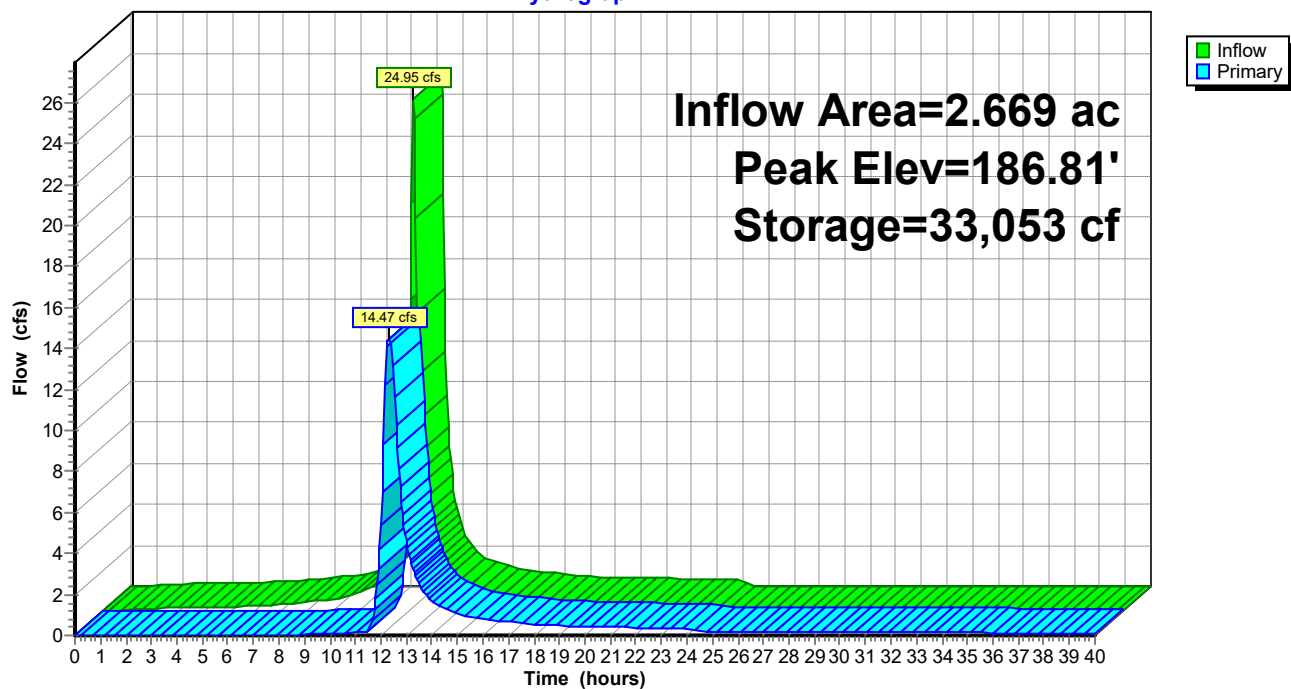
Device	Routing	Invert	Outlet Devices
#1	Primary	183.17'	18.0" Round Culvert L= 23.0' Ke= 0.500 Inlet / Outlet Invert= 183.17' / 183.05' S= 0.0052 ' / Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	184.23'	2.5" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	185.53'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	186.82'	50.0' long + 3.0 ' / SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=14.46 cfs @ 12.31 hrs HW=186.81' (Free Discharge)

1=Culvert (Inlet Controls 14.46 cfs @ 8.18 fps)
 2=Orifice/Grate (Passes < 0.26 cfs potential flow)
 3=Sharp-Crested Rectangular Weir (Passes < 17.69 cfs potential flow)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-50: Basin #50

Hydrograph



Summary for Pond B-51: Basin #51

Inflow Area = 1.618 ac, 38.76% Impervious, Inflow Depth = 9.09" for Future 100 yr event
 Inflow = 14.89 cfs @ 12.17 hrs, Volume= 1.226 af
 Outflow = 9.77 cfs @ 12.28 hrs, Volume= 1.165 af, Atten= 34%, Lag= 6.7 min
 Primary = 9.77 cfs @ 12.28 hrs, Volume= 1.165 af
 Routed to Link PDA-6 : Proposed Drainage Area #6

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 189.70' @ 12.28 hrs Surf.Area= 4,720 sf Storage= 8,817 cf

Plug-Flow detention time= 68.0 min calculated for 1.164 af (95% of inflow)
 Center-of-Mass det. time= 39.2 min (816.9 - 777.7)

Volume	Invert	Avail.Storage	Storage Description
#1	186.86'	16,158 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
186.86	0	0	0
187.00	1,882	132	132
188.00	2,798	2,340	2,472
189.00	3,853	3,326	5,797
190.00	5,083	4,468	10,265
191.00	6,703	5,893	16,158

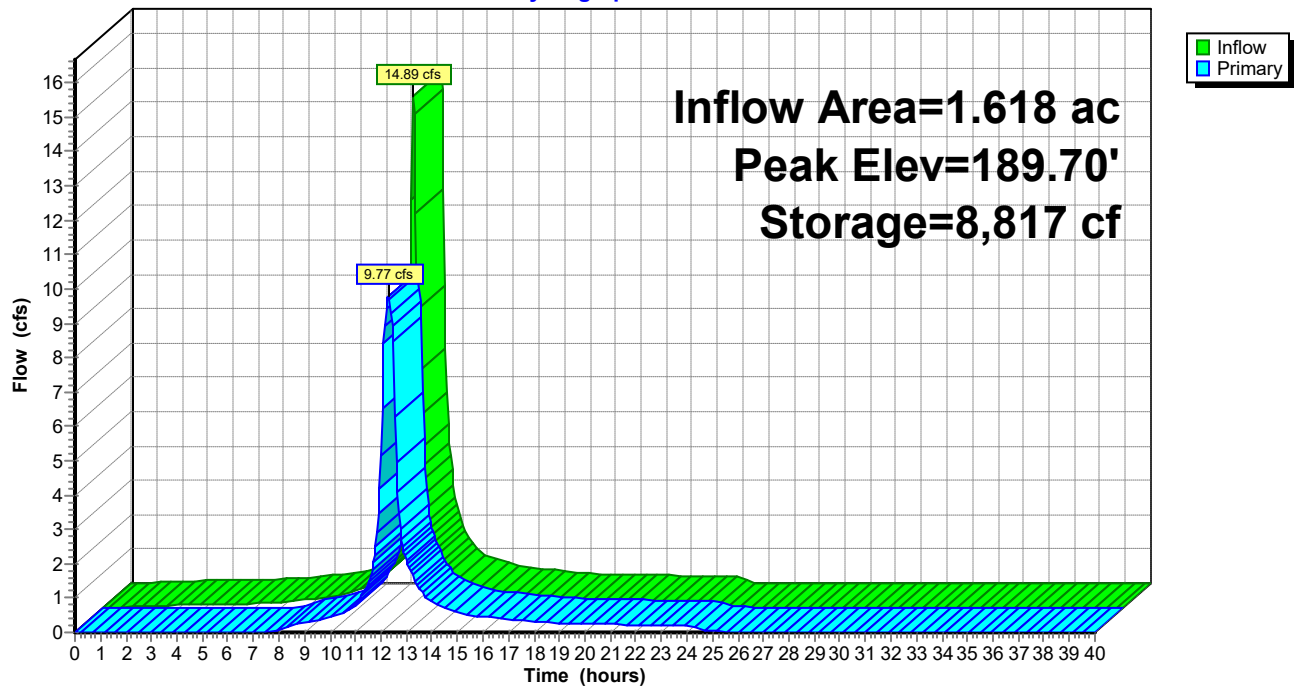
Device	Routing	Invert	Outlet Devices
#1	Primary	186.86'	18.0" Round Culvert L= 172.0' Ke= 0.500 Inlet / Outlet Invert= 186.86' / 186.00' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	188.06'	20.0" W x 8.0" H Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	188.68'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	189.71'	50.0' long + 3.0' /' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=9.75 cfs @ 12.28 hrs HW=189.69' (Free Discharge)

- 1=Culvert (Barrel Controls 9.75 cfs @ 5.52 fps)
 2=Orifice/Grate (Passes < 6.09 cfs potential flow)
 3=Sharp-Crested Rectangular Weir (Passes < 12.69 cfs potential flow)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-51: Basin #51

Hydrograph



Summary for Pond B-52: Basin #52

Inflow Area = 2.537 ac, 41.39% Impervious, Inflow Depth = 9.17" for Future 100 yr event
 Inflow = 23.47 cfs @ 12.17 hrs, Volume= 1.940 af
 Outflow = 14.18 cfs @ 12.30 hrs, Volume= 1.839 af, Atten= 40%, Lag= 7.7 min
 Primary = 14.18 cfs @ 12.30 hrs, Volume= 1.839 af
 Routed to Link PDA-6 : Proposed Drainage Area #6

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 196.98' @ 12.30 hrs Surf.Area= 5,547 sf Storage= 17,884 cf

Plug-Flow detention time= 78.1 min calculated for 1.839 af (95% of inflow)
 Center-of-Mass det. time= 47.3 min (823.1 - 775.8)

Volume	Invert	Avail.Storage	Storage Description
#1	192.30'	23,897 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
192.30	0	0	0
193.00	2,920	1,022	1,022
194.00	3,579	3,250	4,271
195.00	4,239	3,909	8,180
196.00	4,898	4,569	12,749
197.00	5,558	5,228	17,977
198.00	6,282	5,920	23,897

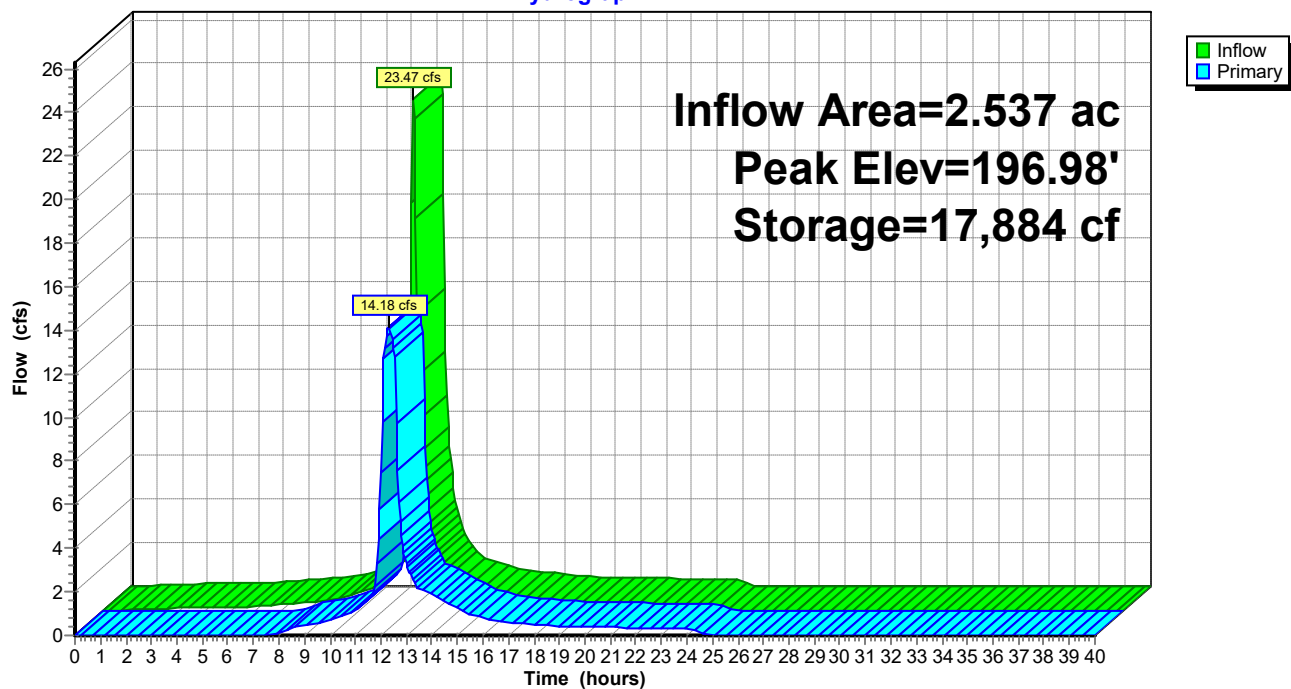
Device	Routing	Invert	Outlet Devices
#1	Primary	192.00'	18.0" Round Culvert L= 163.0' Ke= 0.500 Inlet / Outlet Invert= 192.00' / 191.00' S= 0.0061 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	194.03'	24.0" W x 2.5" H Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	195.24'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	196.99'	50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=14.18 cfs @ 12.30 hrs HW=196.98' (Free Discharge)

1=Culvert (Barrel Controls 14.18 cfs @ 8.03 fps)
 2=Orifice/Grate (Passes < 3.39 cfs potential flow)
 3=Sharp-Crested Rectangular Weir (Passes < 27.44 cfs potential flow)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-52: Basin #52

Hydrograph



Summary for Pond B-53: Basin #53

Inflow Area = 2.540 ac, 47.79% Impervious, Inflow Depth = 9.37" for Future 100 yr event
 Inflow = 23.78 cfs @ 12.17 hrs, Volume= 1.984 af
 Outflow = 16.29 cfs @ 12.27 hrs, Volume= 1.856 af, Atten= 32%, Lag= 6.1 min
 Primary = 16.29 cfs @ 12.27 hrs, Volume= 1.856 af
 Routed to Link PDA-6 : Proposed Drainage Area #6

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 204.42' @ 12.27 hrs Surf.Area= 6,955 sf Storage= 25,141 cf

Plug-Flow detention time= 218.5 min calculated for 1.854 af (93% of inflow)
 Center-of-Mass det. time= 183.1 min (954.5 - 771.5)

Volume	Invert	Avail.Storage	Storage Description
#1	199.75'	33,011 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
199.75	0	0	0
200.00	4,035	504	504
201.00	4,695	4,365	4,869
202.00	5,685	5,190	10,059
203.00	6,015	5,850	15,909
204.00	6,676	6,346	22,255
205.00	7,336	7,006	29,261
205.50	7,666	3,751	33,011

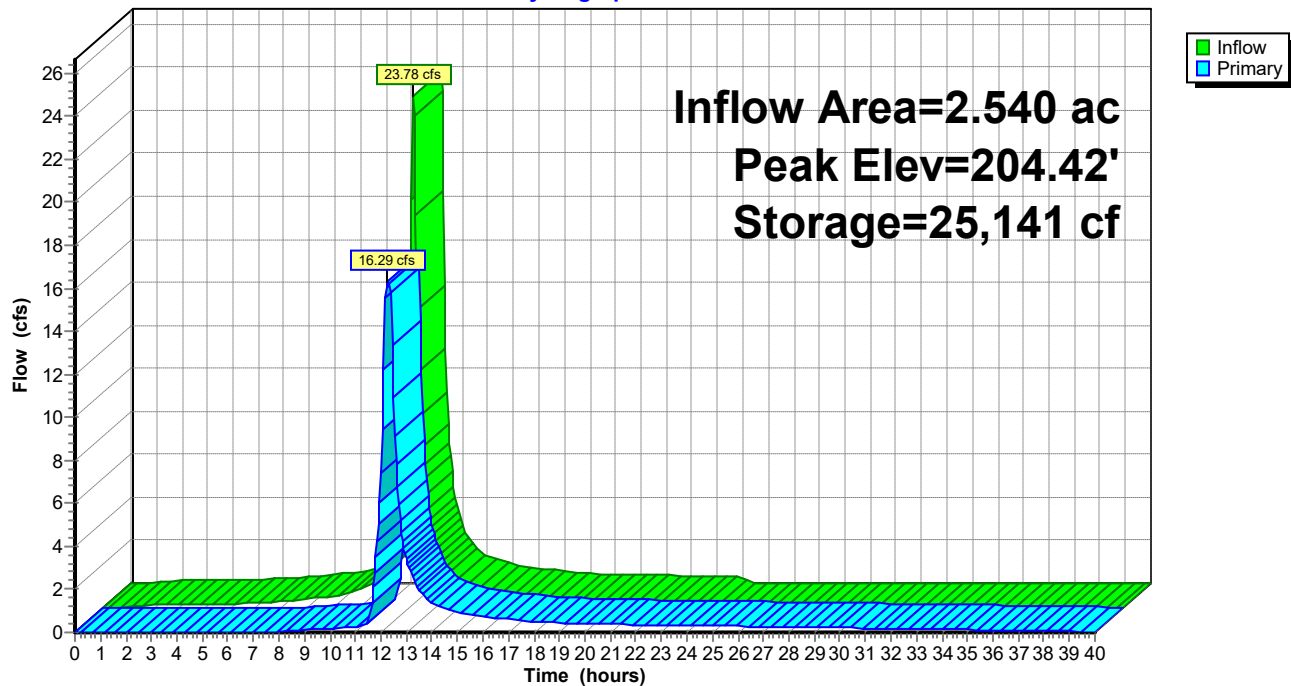
Device	Routing	Invert	Outlet Devices
#1	Primary	198.75'	18.0" Round Culvert L= 122.0' Ke= 0.500 Inlet / Outlet Invert= 198.75' / 198.00' S= 0.0061 ' / Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	201.02'	3.0" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	202.94'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	204.43'	50.0' long + 3.0 ' / SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=16.27 cfs @ 12.27 hrs HW=204.41' (Free Discharge)

- 1=Culvert (Barrel Controls 16.27 cfs @ 9.20 fps)
 2=Orifice/Grate (Passes < 0.43 cfs potential flow)
 3=Sharp-Crested Rectangular Weir (Passes < 21.57 cfs potential flow)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-53: Basin #53

Hydrograph



Summary for Pond B-54: Basin #54

Inflow Area = 2.570 ac, 60.46% Impervious, Inflow Depth = 9.76" for Future 100 yr event
 Inflow = 24.63 cfs @ 12.17 hrs, Volume= 2.092 af
 Outflow = 24.27 cfs @ 12.19 hrs, Volume= 1.892 af, Atten= 1%, Lag= 1.4 min
 Primary = 24.27 cfs @ 12.19 hrs, Volume= 1.892 af
 Routed to Link PDA-6 : Proposed Drainage Area #6

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 204.68' @ 12.19 hrs Surf.Area= 6,872 sf Storage= 25,153 cf

Plug-Flow detention time= 248.9 min calculated for 1.890 af (90% of inflow)
 Center-of-Mass det. time= 199.9 min (963.2 - 763.3)

Volume	Invert	Avail.Storage	Storage Description
#1	199.89'	30,982 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
199.89	0	0	0
200.00	3,780	208	208
201.00	4,440	4,110	4,318
202.00	5,100	4,770	9,088
203.00	5,760	5,430	14,518
204.00	6,421	6,091	20,608
205.00	7,081	6,751	27,359
205.50	7,411	3,623	30,982

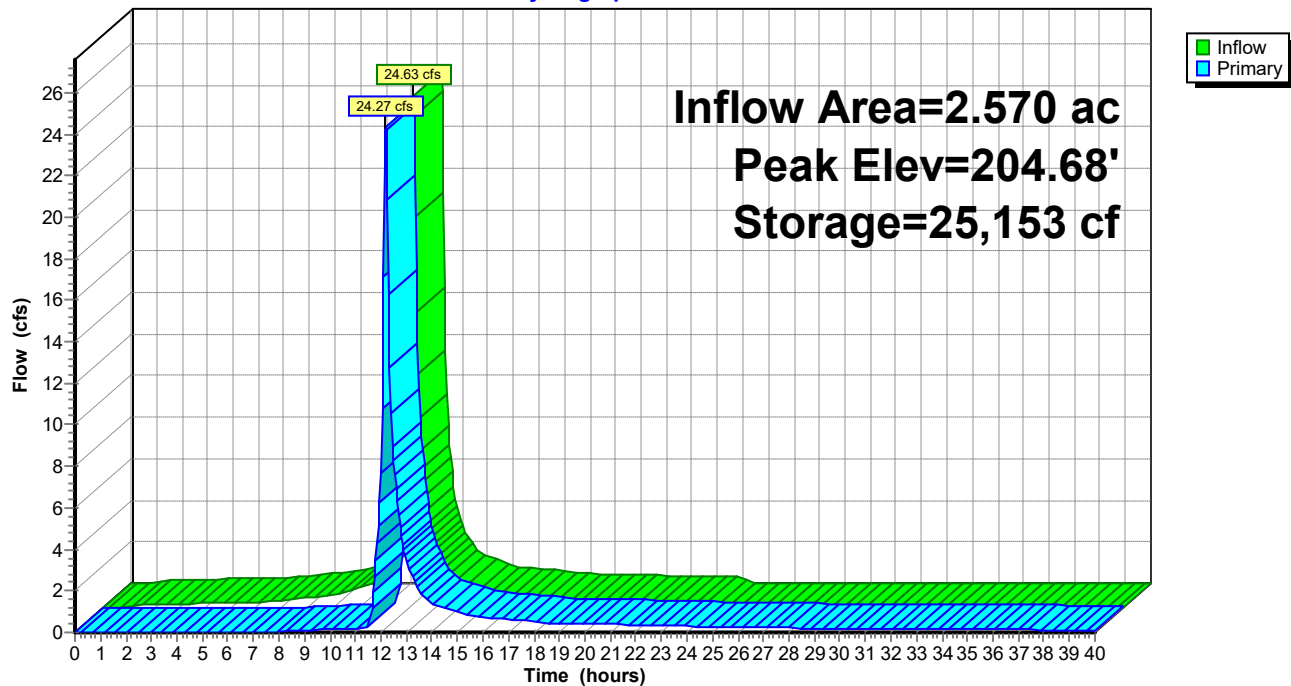
Device	Routing	Invert	Outlet Devices
#1	Primary	198.89'	18.0" Round Culvert L= 178.0' Ke= 0.500 Inlet / Outlet Invert= 198.89' / 198.00' S= 0.0050 ' / Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	201.40'	2.5" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	203.70'	4.0' long 1 2 End Contraction(s)
#4	Primary	204.47'	50.0' long + 3.0 ' / SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=23.82 cfs @ 12.19 hrs HW=204.68' (Free Discharge)

1=Culvert (Passes 12.37 cfs of 14.80 cfs potential flow)
 2=Orifice/Grate (Orifice Controls 0.29 cfs @ 8.58 fps)
 3=1 (Weir Controls 12.08 cfs @ 3.24 fps)
 4=Broad-Crested Rectangular Weir (Weir Controls 11.45 cfs @ 1.07 fps)

Pond B-54: Basin #54

Hydrograph



Summary for Pond B-55: Basin #55

Inflow Area = 2.024 ac, 49.74% Impervious, Inflow Depth = 9.43" for Future 100 yr event
 Inflow = 19.02 cfs @ 12.17 hrs, Volume= 1.591 af
 Outflow = 11.86 cfs @ 12.29 hrs, Volume= 1.498 af, Atten= 38%, Lag= 7.3 min
 Primary = 11.86 cfs @ 12.29 hrs, Volume= 1.498 af
 Routed to Link PDA-6 : Proposed Drainage Area #6

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 194.98' @ 12.29 hrs Surf.Area= 5,775 sf Storage= 15,861 cf

Plug-Flow detention time= 89.7 min calculated for 1.496 af (94% of inflow)
 Center-of-Mass det. time= 56.1 min (826.3 - 770.2)

Volume	Invert	Avail.Storage	Storage Description
#1	191.56'	22,010 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
191.56	0	0	0
192.00	4,250	935	935
193.00	4,746	4,498	5,433
194.00	5,257	5,002	10,434
195.00	5,784	5,521	15,955
196.00	6,327	6,056	22,010

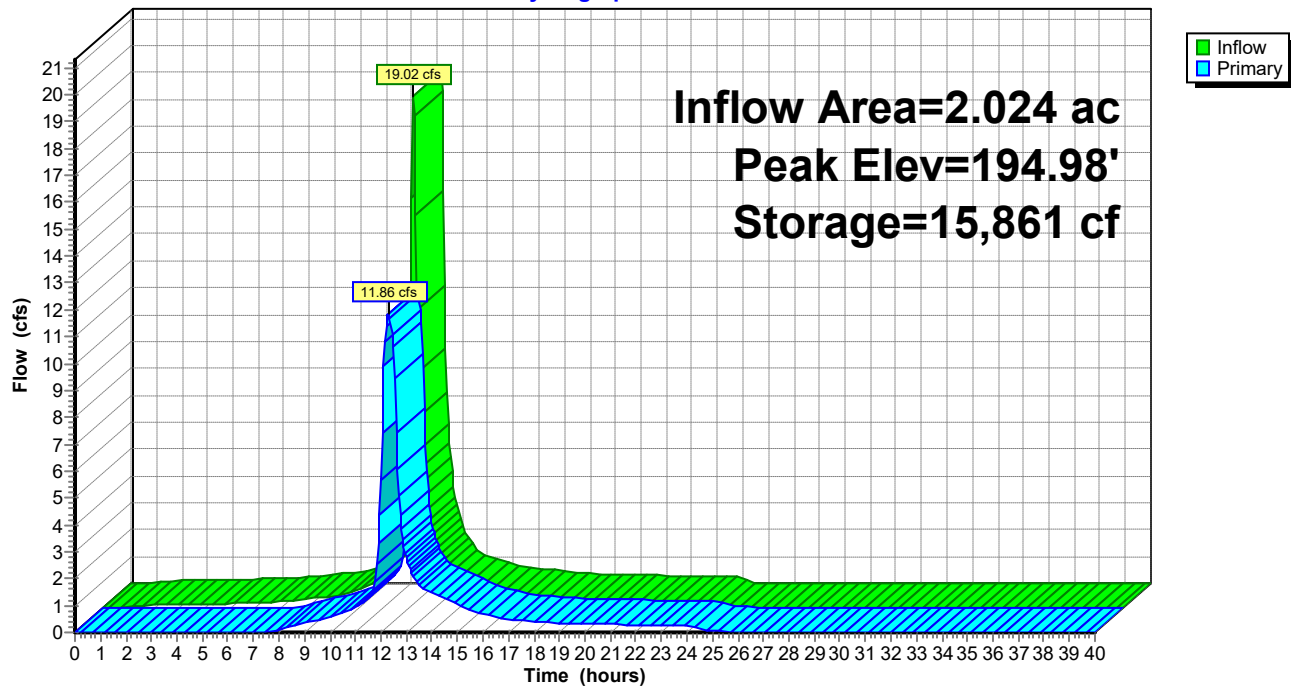
Device	Routing	Invert	Outlet Devices
#1	Primary	191.56'	18.0" Round Culvert L= 112.0' Ke= 0.500 Inlet / Outlet Invert= 191.56' / 191.00' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	192.71'	22.0" W x 2.5" H Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	193.63'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	194.99'	50.0' long + 3.0' /' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=11.85 cfs @ 12.29 hrs HW=194.98' (Free Discharge)

1=Culvert (Barrel Controls 11.85 cfs @ 6.71 fps)
 2=Orifice/Grate (Passes < 2.70 cfs potential flow)
 3=Sharp-Crested Rectangular Weir (Passes < 19.08 cfs potential flow)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-55: Basin #55

Hydrograph



Summary for Pond B-56: Basin #56

Inflow Area = 2.308 ac, 44.92% Impervious, Inflow Depth = 9.28" for Future 100 yr event
 Inflow = 21.50 cfs @ 12.17 hrs, Volume= 1.786 af
 Outflow = 13.88 cfs @ 12.29 hrs, Volume= 1.688 af, Atten= 35%, Lag= 6.9 min
 Primary = 13.88 cfs @ 12.29 hrs, Volume= 1.688 af
 Routed to Link PDA-6 : Proposed Drainage Area #6

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 194.98' @ 12.29 hrs Surf.Area= 6,469 sf Storage= 18,183 cf

Plug-Flow detention time= 93.3 min calculated for 1.688 af (94% of inflow)
 Center-of-Mass det. time= 61.0 min (834.4 - 773.4)

Volume	Invert	Avail.Storage	Storage Description
#1	191.57'	25,032 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
191.57	0	0	0
192.00	5,021	1,080	1,080
193.00	5,490	5,256	6,335
194.00	5,976	5,733	12,068
195.00	6,478	6,227	18,295
196.00	6,995	6,737	25,032

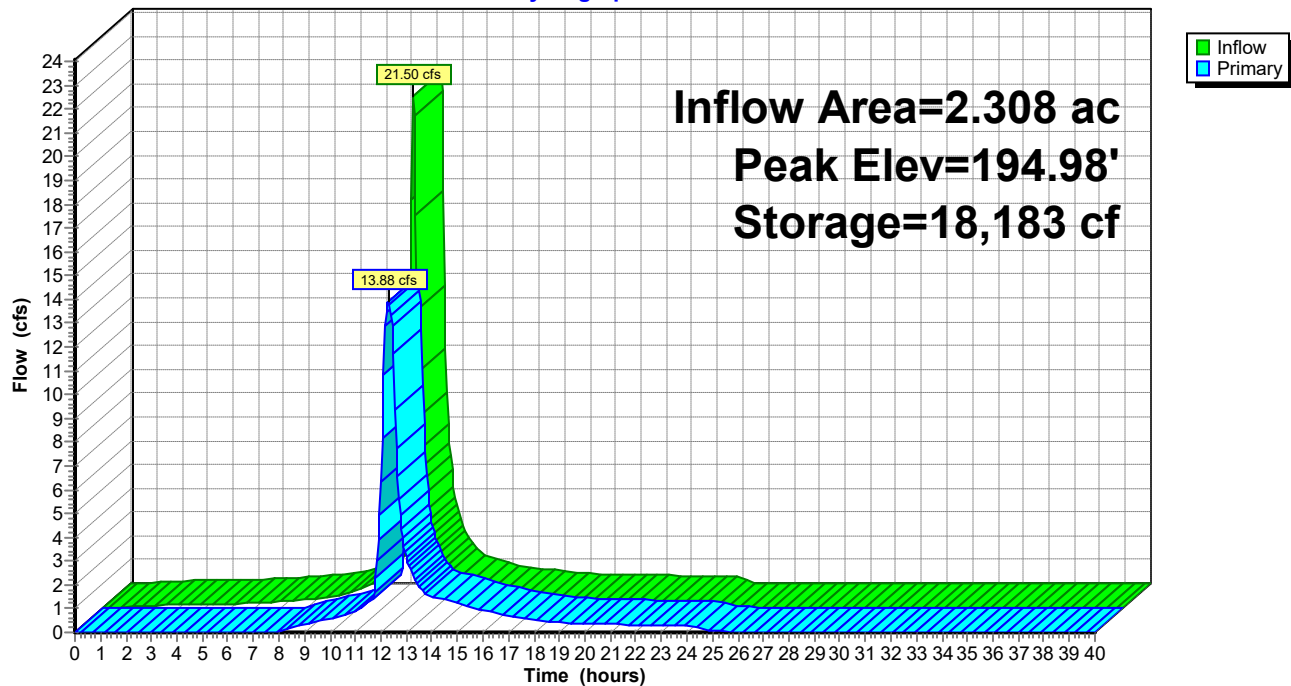
Device	Routing	Invert	Outlet Devices
#1	Primary	191.57'	18.0" Round Culvert L= 29.0' Ke= 0.500 Inlet / Outlet Invert= 191.57' / 191.42' S= 0.0052 ' / Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	192.62'	19.0" W x 2.5" H Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	193.60'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	194.99'	50.0' long + 3.0 ' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=13.86 cfs @ 12.29 hrs HW=194.97' (Free Discharge)

1=Culvert (Inlet Controls 13.86 cfs @ 7.84 fps)
 2=Orifice/Grate (Passes < 2.38 cfs potential flow)
 3=Sharp-Crested Rectangular Weir (Passes < 19.60 cfs potential flow)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-56: Basin #56

Hydrograph



Summary for Pond B-57: Basin #57

Inflow Area = 1.297 ac, 51.37% Impervious, Inflow Depth = 9.48" for Future 100 yr event
 Inflow = 12.22 cfs @ 12.17 hrs, Volume= 1.025 af
 Outflow = 10.28 cfs @ 12.24 hrs, Volume= 0.962 af, Atten= 16%, Lag= 4.0 min
 Primary = 10.28 cfs @ 12.24 hrs, Volume= 0.962 af
 Routed to Link PDA-6 : Proposed Drainage Area #6

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 203.97' @ 12.24 hrs Surf.Area= 5,016 sf Storage= 10,209 cf

Plug-Flow detention time= 109.6 min calculated for 0.962 af (94% of inflow)
 Center-of-Mass det. time= 74.2 min (843.3 - 769.1)

Volume	Invert	Avail.Storage	Storage Description
#1	201.30'	15,700 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
201.30	0	0	0
202.00	3,969	1,389	1,389
203.00	4,488	4,229	5,618
204.00	5,034	4,761	10,379
205.00	5,608	5,321	15,700

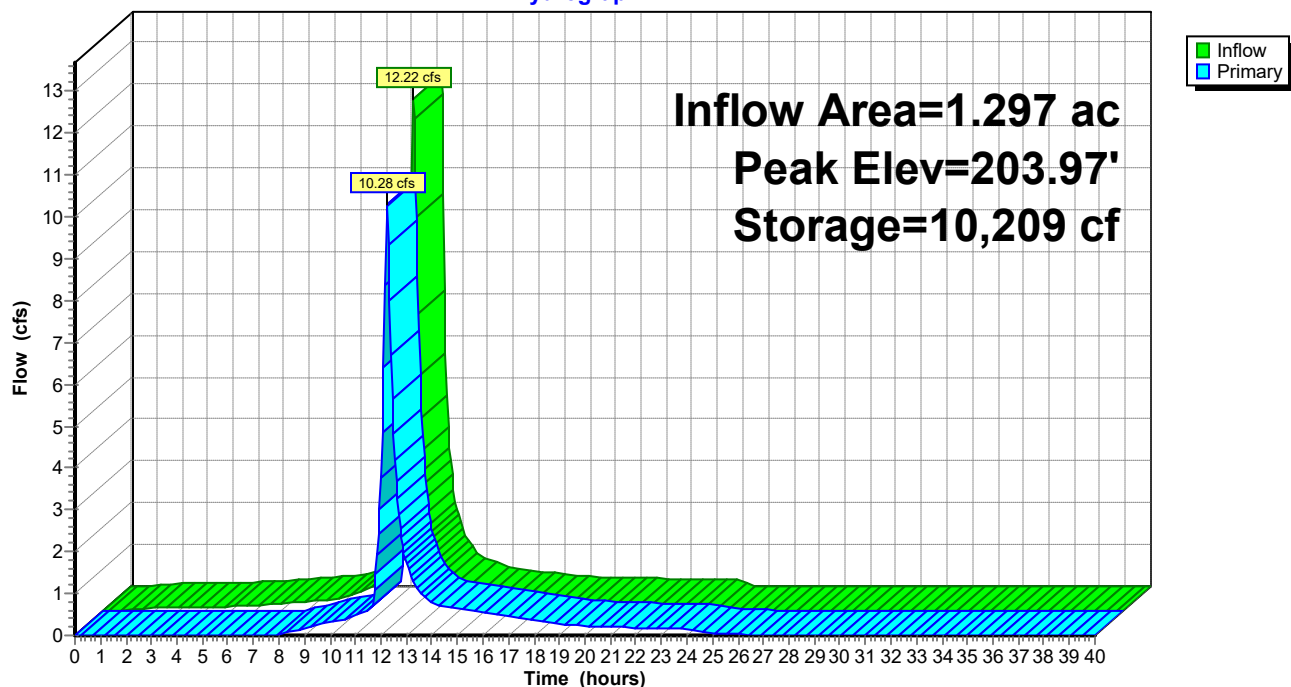
Device	Routing	Invert	Outlet Devices
#1	Primary	200.65'	18.0" Round Culvert L= 207.0' Ke= 0.500 Inlet / Outlet Invert= 200.65' / 198.00' S= 0.0128 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	202.33'	10.0" W x 2.5" H Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	203.15'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	203.98'	50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=10.17 cfs @ 12.24 hrs HW=203.96' (Free Discharge)

1=Culvert (Passes 10.17 cfs of 13.03 cfs potential flow)
 2=Orifice/Grate (Orifice Controls 1.03 cfs @ 5.94 fps)
 3=Sharp-Crested Rectangular Weir (Weir Controls 9.13 cfs @ 2.94 fps)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-57: Basin #57

Hydrograph



Summary for Pond B-58: Basin #58

Inflow Area = 2.371 ac, 32.26% Impervious, Inflow Depth = 8.89" for Future 100 yr event
 Inflow = 21.56 cfs @ 12.17 hrs, Volume= 1.757 af
 Outflow = 14.23 cfs @ 12.28 hrs, Volume= 1.630 af, Atten= 34%, Lag= 6.6 min
 Primary = 14.23 cfs @ 12.28 hrs, Volume= 1.630 af
 Routed to Link PDA-6 : Proposed Drainage Area #6

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 201.89' @ 12.28 hrs Surf.Area= 8,346 sf Storage= 23,220 cf

Plug-Flow detention time= 210.8 min calculated for 1.628 af (93% of inflow)
 Center-of-Mass det. time= 172.1 min (954.5 - 782.4)

Volume	Invert	Avail.Storage	Storage Description
#1	198.30'	32,924 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
198.30	0	0	0
199.00	6,230	2,180	2,180
200.00	6,932	6,581	8,761
201.00	7,670	7,301	16,062
202.00	8,426	8,048	24,110
203.00	9,201	8,814	32,924

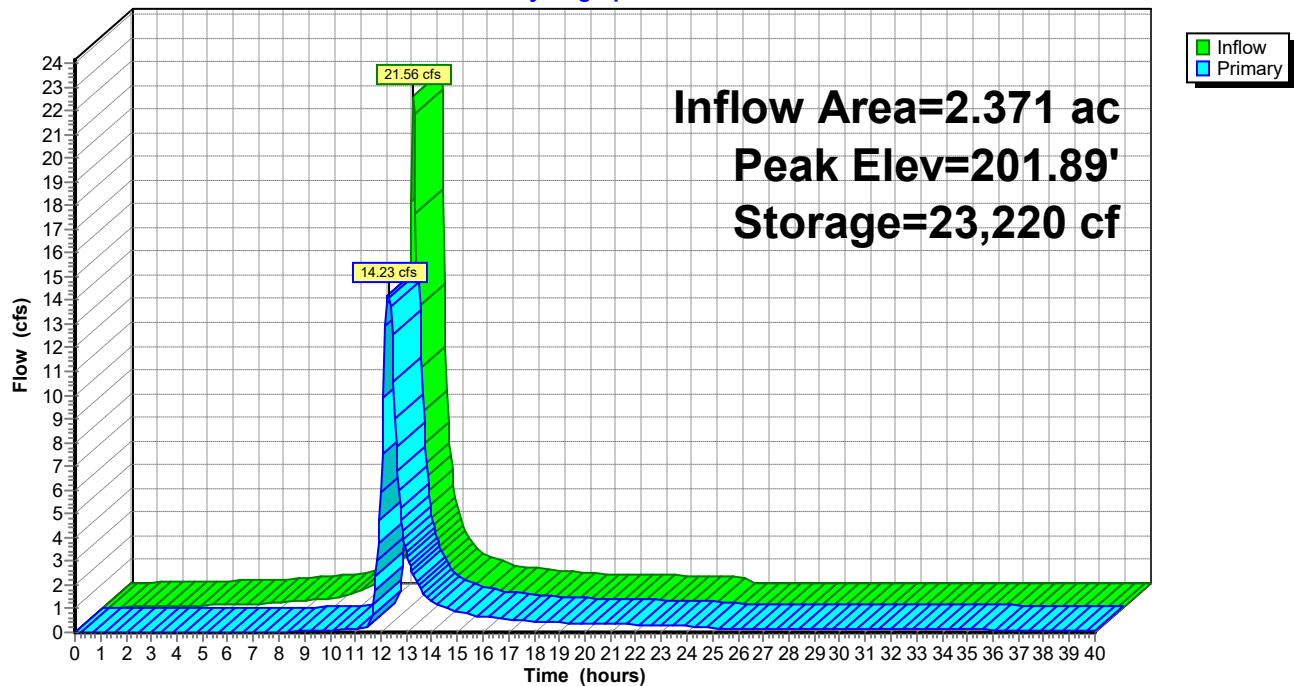
Device	Routing	Invert	Outlet Devices
#1	Primary	198.30'	18.0" Round Culvert L= 48.0' Ke= 0.500 Inlet / Outlet Invert= 198.30' / 198.00' S= 0.0063 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	199.19'	2.5" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	200.60'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	201.90'	50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=14.20 cfs @ 12.28 hrs HW=201.89' (Free Discharge)

1=Culvert (Barrel Controls 14.20 cfs @ 8.04 fps)
 2=Orifice/Grate (Passes < 0.26 cfs potential flow)
 3=Sharp-Crested Rectangular Weir (Passes < 17.84 cfs potential flow)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-58: Basin #58

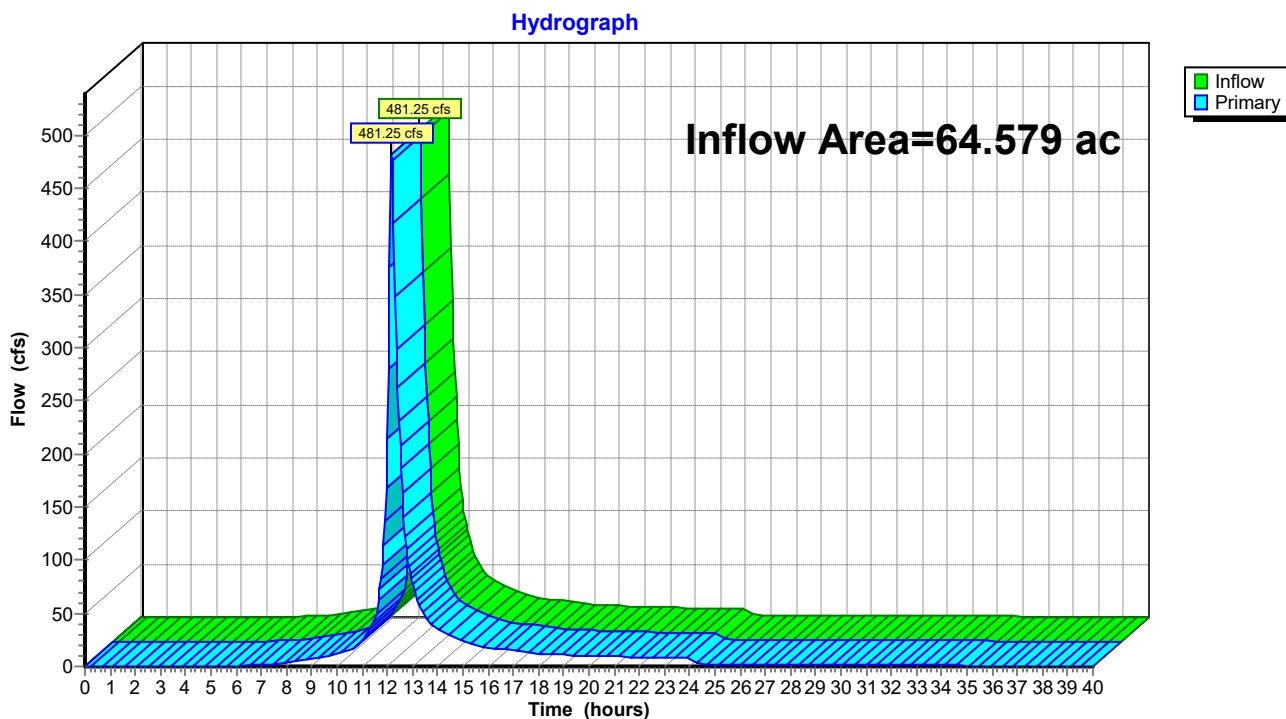
Hydrograph



Summary for Link DP-3: Design Pont #3 (Woolsey Creek)

Inflow Area = 64.579 ac, 17.83% Impervious, Inflow Depth > 8.14" for Future 100 yr event
Inflow = 481.25 cfs @ 12.18 hrs, Volume= 43.805 af
Primary = 481.25 cfs @ 12.18 hrs, Volume= 43.805 af, Atten= 0%, Lag= 0.0 min

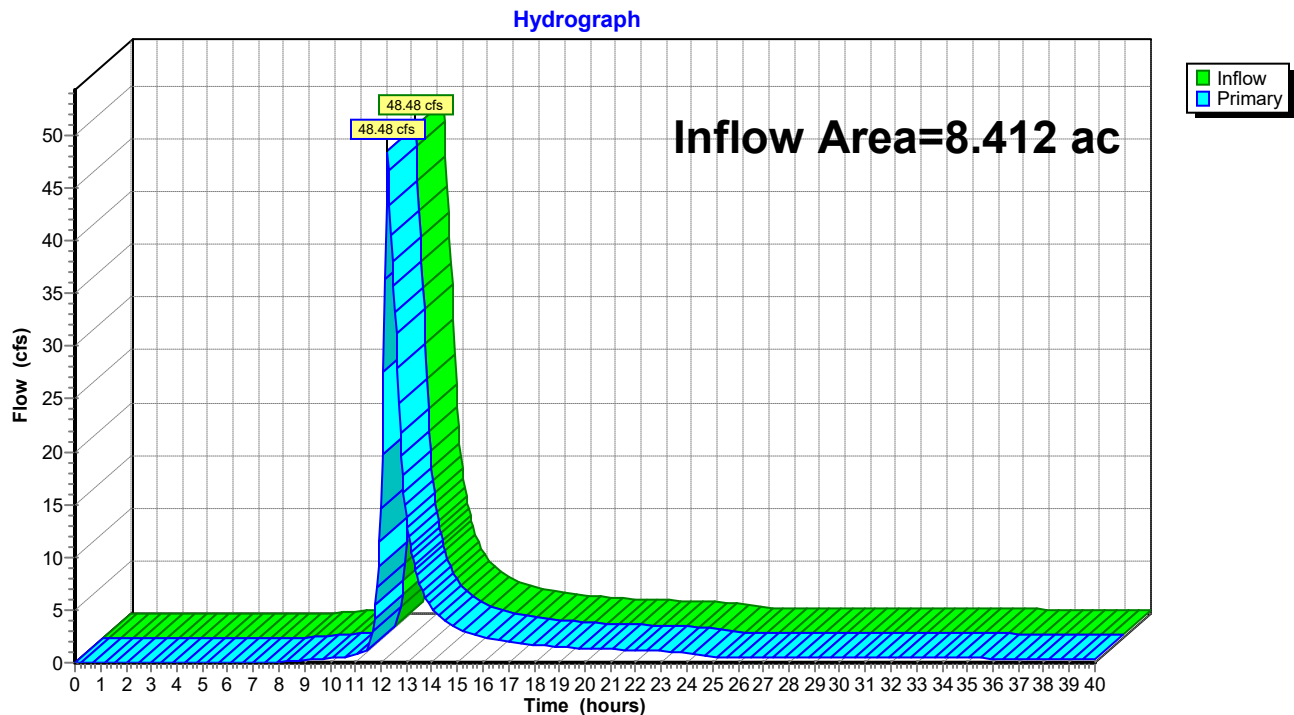
Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link DP-3: Design Pont #3 (Woolsey Creek)

Summary for Link PDA-5: Proposed Drainage Area #5

Inflow Area = 8.412 ac, 42.77% Impervious, Inflow Depth > 8.12" for Future 100 yr event
Inflow = 48.48 cfs @ 12.26 hrs, Volume= 5.689 af
Primary = 48.48 cfs @ 12.26 hrs, Volume= 5.689 af, Atten= 0%, Lag= 0.0 min
Routed to Link DP-3 : Design Pont #3 (Woolsey Creek)

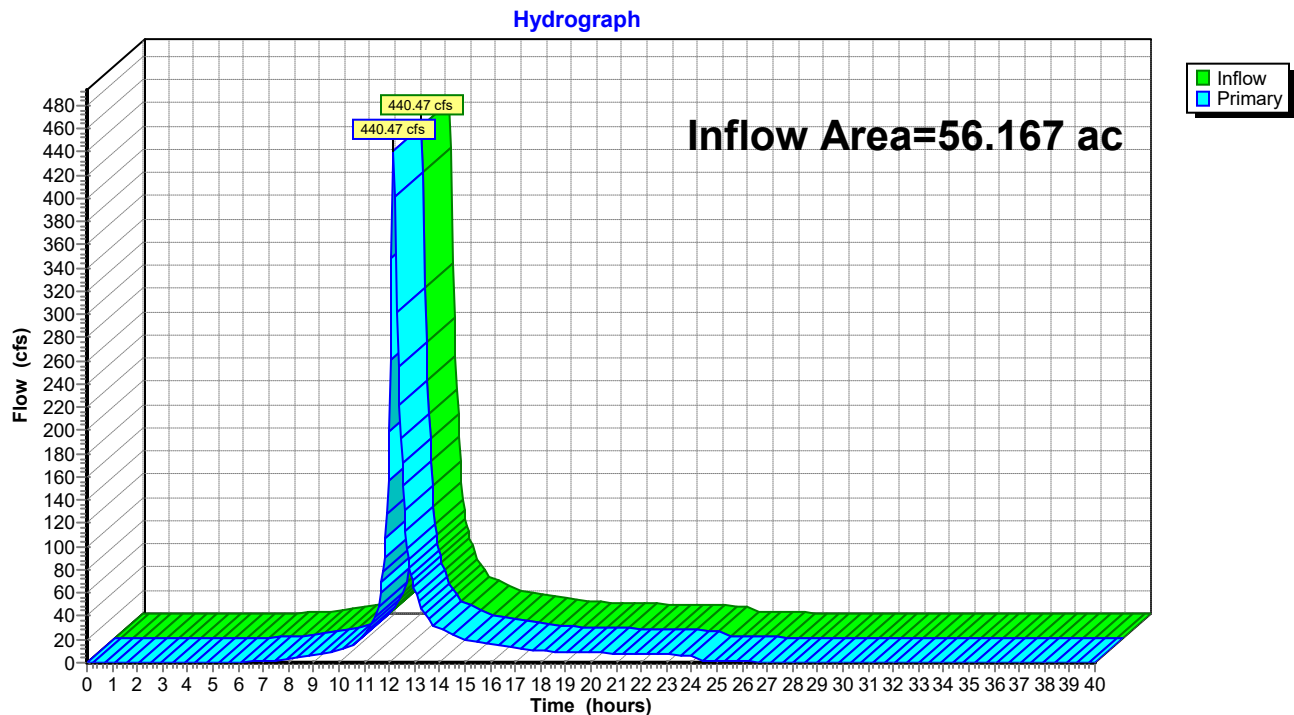
Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link PDA-5: Proposed Drainage Area #5

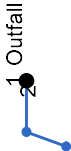
Summary for Link PDA-6: Proposed Drainage Area #6

Inflow Area = 56.167 ac, 14.10% Impervious, Inflow Depth > 8.14" for Future 100 yr event
Inflow = 440.47 cfs @ 12.18 hrs, Volume= 38.116 af
Primary = 440.47 cfs @ 12.18 hrs, Volume= 38.116 af, Atten= 0%, Lag= 0.0 min
Routed to Link DP-3 : Design Pont #3 (Woolsey Creek)

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

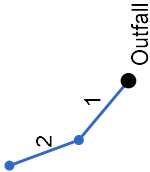
Link PDA-6: Proposed Drainage Area #6

Hydraflow Storm Sewers Extension for Autodesk® Civil 3D® Plan



Storm Sewer Tabulation

Station		Len (ft)	Dmg Area		Rnoff coeff (C)	Area x C		Tc		Rain (l) (in/hr)	Total flow (cfs)	Cap full (cfs)	Vel (ft/s)	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID
Line	To Line		Incr (ac)	Total (ac)		Incr Total	Inlet (min)	Syst (min)	Size (in)					Slope (%)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)		
1	End	29,000	0.73	1.64	0.65	0.47	1.07	10.0	10.1	6.9	7.38	7.46	6.04	15	1.14	209.00	209.33	210.25	210.55	211.44	212.70	HW1 - A118
2	1	24,000	0.91	0.91	0.65	0.59	0.59	10.0	10.0	6.9	4.11	4.95	3.35	15	0.50	209.33	209.45	211.36	211.44	212.70	212.70	A118 - A119
Project File: 1.stm														Number of lines: 2		Run Date: 6/25/2024						
NOTES:Intensity = 102.61 / (Inlet time + 16.50) ^ 0.82; Return period =Yrs. 25 ; c = cir e = ellip b = box																						



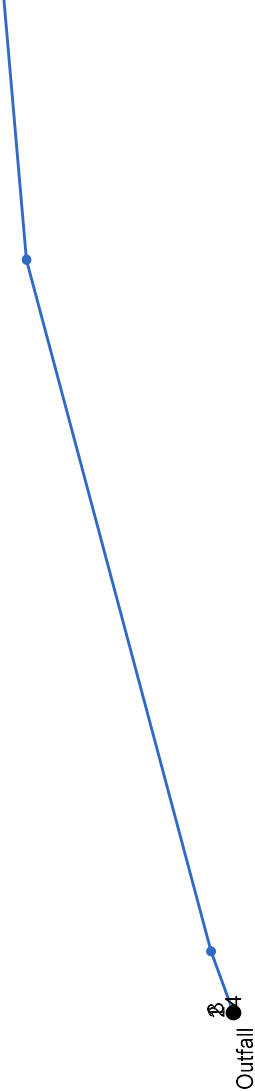
Storm Sewer Tabulation

Station		Len (ft)	Dmg Area		Rnoff coeff (C)	Area x C		Tc		Rain (l) (in/hr)	Total flow (cfs)	Cap full (cfs)	Vel (ft/s)	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID
Line	To Line		Incr (ac)	Total (ac)		Incr Total	Inlet (min)	Syst (min)	Size (in)					Slope (%)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)		
1	End	44.000	0.22	0.82	0.65	0.14	0.53	10.0	10.3	6.4	3.42	4.57	2.86	15	0.50	208.72	208.94	209.97	210.07	210.44	212.75	HW - A121
2	1	42.000	0.60	0.60	0.65	0.39	0.39	10.0	10.0	6.5	2.53	4.57	2.16	15	0.50	208.94	209.15	210.18	210.23	212.75	212.40	A121 - A120
2A												Number of lines: 2		Run Date: 6/25/2024								
NOTES: Intensity = 106.91 / (Inlet time + 13.90) ^ 0.88; Return period = Yrs. 25 ; c = cir e = ellip b = box																						



Page 1

Storm Sewers v2022.00



Storm Sewer Tabulation

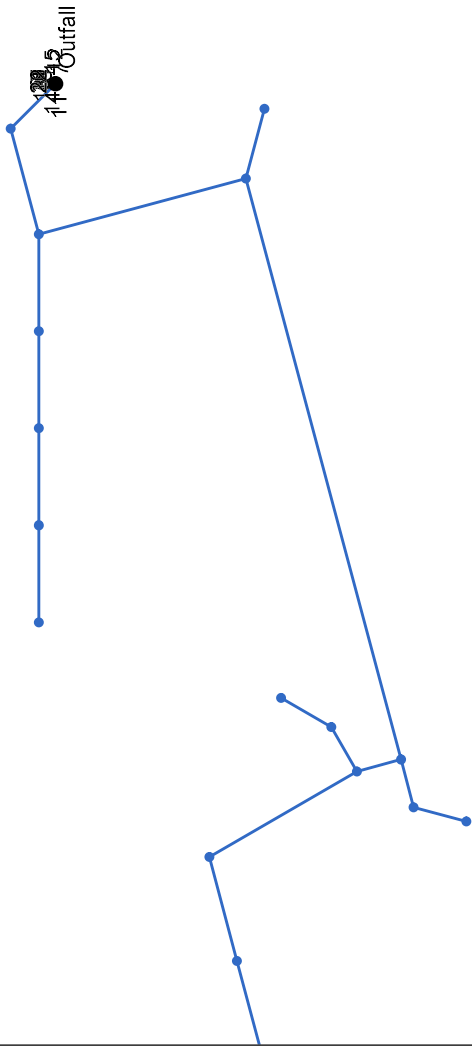
Station		Len (ft)	Drng Area		Rnoff coeff (C)	Area x C		Tc		Rain (l) (in/hr)	Total flow (cfs)	Cap full (cfs)	Vel (ft/s)	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID
Line	To Line		Incr (ac)	Total (ac)		Incr	Total	Inlet (min)	Syst (min)					Size (in)	Slope (%)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	
1	End	37.000	1.27	1.83	0.65	0.83	1.19	10.0	17.2	5.2	6.13	9.62	5.41	15	1.89	187.30	188.00	188.55	189.00	184.44	191.50	HW - A31
2	1	406.000	0.13	0.56	0.65	0.08	0.36	10.0	13.4	5.8	2.11	10.21	2.90	15	2.13	188.00	196.64	189.00	197.22	191.50	203.09	A31 - A100
3	2	240.000	0.22	0.43	0.65	0.14	0.28	10.0	10.6	6.3	1.77	4.95	3.39	15	0.50	196.64	197.84	197.22	198.37	203.09	201.09	A100 - A99
4	3	28.000	0.21	0.21	0.65	0.14	0.14	10.0	10.0	6.5	0.89	4.95	2.36	15	0.50	197.84	197.98	198.37	198.35	201.09	201.25	A99 - A98
3A												Number of lines: 4					Run Date: 6/25/2024					
NOTES: Intensity = 106.91 / (Inlet time + 13.90) ^ 0.88; Return period = Yrs. 25 ; c = cir e = ellip b = box																						

Outfall 



Storm Sewer Tabulation

Station		Len (ft)	Drng Area		Rnoff coeff (C)	Area x C		Tc		Rain (l) (in/hr)	Total flow (cfs)	Cap full (cfs)	Vel (ft/s)	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID		
Line	To Line		Incr (ac)	Total (ac)		Incr	Total	Inlet (min)	Syst (min)					Size (in)	Slope (%)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)			
1	End	16,000	0.08	1.14	0.65	0.05	0.74	10.0	19.2	4.9	3.61	7.22	3.09	15	1.25	187.30	187.50	188.55	188.57	184.44	191.16	HW - A367		
2	1	55,000	0.14	1.06	0.65	0.09	0.69	10.0	18.9	4.9	3.39	7.34	3.61	15	1.29	187.50	188.21	188.75	188.95	191.16	191.46	A367 - A366		
3	2	55,000	0.14	0.92	0.65	0.09	0.60	10.0	18.6	5.0	2.96	12.28	4.08	15	3.62	188.21	190.20	188.95	190.89	191.46	193.45	A366 - A365		
4	3	55,000	0.13	0.78	0.65	0.08	0.51	10.0	18.2	5.0	2.54	12.71	3.84	15	3.87	190.20	192.33	190.89	192.97	193.45	195.58	A365 - A364		
5	4	55,000	0.12	0.65	0.65	0.08	0.42	10.0	17.8	5.1	2.14	12.56	3.61	15	3.78	192.33	194.41	192.97	194.99	195.58	197.66	A364 - A363		
6	5	55,000	0.12	0.53	0.65	0.08	0.34	10.0	17.2	5.1	1.77	11.68	3.37	15	3.27	194.41	196.21	194.99	196.74	197.66	199.46	A363 - A362		
7	6	55,000	0.11	0.41	0.65	0.07	0.27	10.0	16.5	5.2	1.40	10.66	3.09	15	2.73	196.21	197.71	196.74	198.18	199.46	200.96	A362 - A361		
8	7	54,000	0.12	0.30	0.65	0.08	0.20	10.0	15.6	5.4	1.05	6.58	2.79	15	1.04	197.71	198.27	198.18	198.67	200.96	201.86	A361 - A360		
9	8	53,000	0.12	0.18	0.65	0.08	0.12	10.0	14.2	5.6	0.66	4.52	2.30	15	0.49	198.27	198.53	198.67	198.85	201.86	202.86	A360 - A359		
10	9	52,000	0.06	0.06	0.65	0.04	0.04	10.0	10.0	6.5	0.25	4.57	1.40	15	0.50	198.53	198.79	198.90	198.99	202.86	202.04	A359 - A358		
3B													Number of lines: 10										Run Date: 6/25/2024	
NOTES: Intensity = 106.91 / (Inlet time + 13.90) ^ 0.88; Return period = Yrs. 25 ; c = cir e = ellip b = box																								



Storm Sewer Tabulation

Station	Line	Len (ft)	Drng Area		Rnoff coeff	Area x C		Tc		Rain (l)	Total flow (cfs)	Cap full (cfs)	Vel (ft/s)	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID
			Incr (ac)	Total (ac)		Incr	Total	Inlet (min)	Syst (min)					Size (in)	Slope (%)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	
1	End	36,000	0.12	3.68	0.65	0.08	2.39	10.0	23.0	4.4	10.61	45.85	2.31	30	1.25	177.30	177.75	179.80	179.80	189.50	189.50	HW - A357
2	1	62,000	0.00	3.56	0.00	0.00	2.31	0.0	22.5	4.5	10.37	130.2	3.71	30	10.08	177.75	184.00	179.93	185.08	189.50	188.50	A357 - A617
3	2	55,000	0.11	0.43	0.65	0.07	0.28	10.0	14.8	5.5	1.54	14.09	2.41	15	4.76	184.00	186.62	185.08	187.11	188.50	189.87	A357 - A356
4	3	55,000	0.11	0.32	0.65	0.07	0.21	10.0	14.0	5.7	1.18	9.89	2.91	15	2.35	186.62	187.91	187.11	188.34	189.87	191.16	A356 - A355
5	4	55,000	0.11	0.21	0.65	0.07	0.14	10.0	12.7	5.9	0.81	9.89	2.51	15	2.35	187.91	189.20	188.34	189.55	191.16	192.45	A355 - A354
6	5	55,000	0.10	0.10	0.65	0.07	0.07	10.0	10.0	6.5	0.42	9.89	1.94	15	2.35	189.20	190.49	189.55	190.74	192.45	193.74	A354 - A353
7	2	122,000	0.54	3.13	0.65	0.35	2.03	10.0	21.6	4.6	9.33	40.67	4.79	30	0.98	184.00	185.20	185.08	186.22	188.50	189.70	A357 - A500
8	7	41,000	0.43	0.43	0.65	0.28	0.28	10.0	10.0	6.5	1.82	9.02	2.66	15	1.95	185.20	186.00	186.22	186.54	189.70	189.25	A500 - A501
9	7	341,000	0.00	2.16	0.65	0.00	1.40	10.0	19.3	4.9	6.82	32.27	4.52	24	2.04	185.20	192.14	186.22	193.07	189.70	196.96	A500 - A502
10	9	28,000	0.62	1.18	0.65	0.40	0.77	10.0	10.3	6.4	4.94	15.50	6.27	18	2.18	193.46	194.07	194.04	194.92	196.96	197.57	A502 - A503
11	10	31,000	0.56	0.56	0.65	0.36	0.36	10.0	10.0	6.5	2.37	8.12	3.29	15	1.58	194.07	194.56	194.92	195.17	197.57	197.80	A503 - A504
12	9	26,000	0.08	0.98	0.65	0.05	0.64	10.0	19.1	4.9	3.11	7.43	2.96	18	0.50	192.14	192.27	193.07	193.08	196.96	197.21	A502 - A505
13	12	29,000	0.06	0.13	0.65	0.04	0.08	10.0	12.3	6.0	0.51	4.64	2.02	15	0.52	192.94	193.09	193.33	193.37	197.21	197.45	A505 - A506
14	13	33,000	0.07	0.07	0.65	0.05	0.05	10.0	10.0	6.5	0.30	4.50	1.45	15	0.48	193.09	193.25	193.45	193.48	197.45	196.50	A506 - A507
15	12	97,000	0.10	0.77	0.65	0.07	0.50	10.0	18.4	5.0	2.49	4.54	2.81	15	0.49	192.27	192.75	193.33	193.48	197.21	196.00	A505 - A187
16	15	61,000	0.10	0.67	0.65	0.07	0.44	10.0	17.9	5.0	2.20	11.55	2.98	15	3.20	192.75	194.70	193.73	195.29	196.00	197.95	A187 - A186
17	16	55,000	0.10	0.57	0.65	0.07	0.37	10.0	17.4	5.1	1.90	7.93	3.49	15	1.51	194.70	195.53	195.29	196.08	197.95	198.78	A186 - A185
18	17	55,000	0.10	0.47	0.65	0.07	0.31	10.0	16.8	5.2	1.59	7.88	3.28	15	1.49	195.53	196.35	196.08	196.85	198.78	199.60	A185 - A184
19	18	55,000	0.10	0.37	0.65	0.07	0.24	10.0	16.1	5.3	1.28	7.88	3.03	15	1.49	196.35	197.17	196.85	197.62	199.60	200.42	A184 - A183
20	19	55,000	0.10	0.27	0.65	0.07	0.18	10.0	15.0	5.5	0.96	7.93	2.72	15	1.51	197.17	198.00	197.62	198.39	200.42	201.25	A183 - A182
21	20	55,000	0.10	0.17	0.65	0.07	0.11	10.0	13.5	5.8	0.64	7.93	2.33	15	1.51	198.00	198.83	198.39	199.14	201.25	202.08	A182 - A181
22	21	50,000	0.07	0.07	0.65	0.05	0.05	10.0	10.0	6.5	0.30	8.27	1.70	15	1.64	198.83	199.65	199.14	199.86	202.08	202.90	A181 - A180
4																						Run Date: 6/25/2024
Number of lines: 22																						
NOTES:Intensity = 106.91 / (Inlet time + 13.90) ^ 0.88; Return period =Yrs. 25 ; c = cir e = ellip b = box																						



Project File: 5.stm	Number of lines: 2	Date: 6/25/2024
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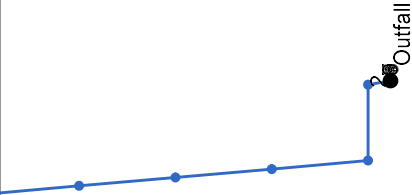
Storm Sewer Tabulation

Station		Len (ft)	Drng Area		Rnoff coeff (C)	Area x C		Tc		Rain (l) (in/hr)	Total flow (cfs)	Cap full (cfs)	Vel (ft/s)	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID
Line	To Line		Incr (ac)	Total (ac)		Inlet (min)	Syst (min)	Size (in)	Slope (%)					Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)			
1	End	20.000	0.25	0.86	0.65	0.16	0.56	10.0	10.2	6.4	3.60	7.42	2.06	18	0.50	200.40	200.50	201.90	201.92	204.44	204.00	HW - A103
2	1	28.000	0.61	0.61	0.65	0.40	0.40	10.0	10.0	6.5	2.58	6.10	2.10	15	0.89	200.50	200.75	202.00	202.05	204.00	204.00	A103 - A104
5														Number of lines: 2				Run Date: 6/25/2024				
NOTES: Intensity = 106.91 / (Inlet time + 13.90) ^ 0.88; Return period = Yrs. 25 ; c = cir e = ellip b = box																						



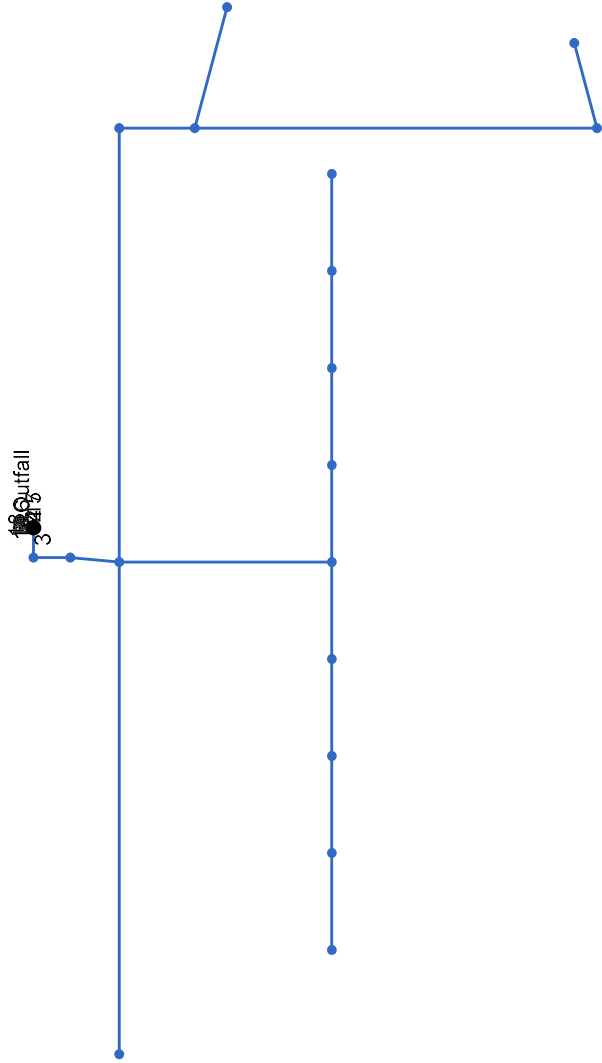
Storm Sewer Tabulation

Station		Len (ft)	Drng Area		Rnoff coeff (C)	Area x C		Tc		Rain (l) (in/hr)	Total flow (cfs)	Cap full (cfs)	Vel (ft/s)	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID
Line	To Line		Incr (ac)	Total (ac)		Incr Total	Inlet (min)	Syst (min)	Size (in)					Slope (%)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)		
1	End	21.000	1.78	1.78	0.65	1.16	1.16	10.0	10.0	6.5	7.52	20.94	2.44	24	0.86	191.30	191.48	193.30	193.32	192.94	195.48	HW - A29
6A														Number of lines: 1				Run Date: 6/25/2024				
NOTES: Intensity = 106.91 / (Inlet time + 13.90) ^ 0.88; Return period = Yrs. 25 ; c = cir e = ellip b = box																						



Storm Sewer Tabulation

Station		Len (ft)	Drng Area		Rnoff coeff (C)	Area x C		Tc		Rain (l) (in/hr)	Total flow (cfs)	Cap full (cfs)	Vel (ft/s)	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID
Line	To Line		Incr (ac)	Total (ac)		Inlet (min)	Syst (min)	Incr	Total					Size (in)	Slope (%)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	
1	End	13.000	0.00	1.17	0.65	0.00	0.76	10.0	26.8	4.1	3.09	7.71	1.76	18	0.54	191.30	191.37	192.80	192.81	194.44	196.25	HW - A500
2	1	43.000	0.13	1.17	0.65	0.08	0.76	10.0	26.6	4.1	3.10	8.12	3.03	15	1.58	191.37	192.05	192.86	192.89	196.25	195.30	A500 - A501
3	2	55.000	0.16	1.04	0.65	0.10	0.68	10.0	26.4	4.1	2.77	8.49	3.26	15	1.73	192.05	193.00	193.18	193.67	195.30	196.50	A501 - A502
4	3	55.000	0.16	0.88	0.65	0.10	0.57	10.0	26.0	4.1	2.36	10.27	3.74	15	2.53	193.00	194.39	193.67	195.00	196.50	197.64	A502 - A503
5	4	55.000	0.16	0.72	0.65	0.10	0.47	10.0	25.6	4.2	1.95	10.00	3.48	15	2.40	194.39	195.71	195.00	196.27	197.64	199.80	A503 - A504
6	5	55.000	0.16	0.56	0.65	0.10	0.36	10.0	25.1	4.2	1.53	4.52	3.16	15	0.49	195.71	195.98	196.27	196.47	199.80	200.00	A504 - A505
7	6	55.000	0.16	0.40	0.65	0.10	0.26	10.0	24.4	4.3	1.11	4.52	2.54	15	0.49	195.98	196.25	196.56	196.67	200.00	199.50	A505 - A506
8	7	55.000	0.22	0.24	0.65	0.14	0.16	10.0	23.3	4.4	0.69	13.77	2.13	15	4.55	196.25	198.75	196.74	199.07	199.50	202.00	A506 - A507
9	8	55.000	0.02	0.02	0.65	0.01	0.01	10.0	10.0	6.5	0.08	12.31	0.95	15	3.64	198.75	200.75	199.07	200.86	202.00	204.00	A507 - A508
6B														Number of lines: 9				Run Date: 6/25/2024				
NOTES: Intensity = 106.91 / (Inlet time + 13.90) ^ 0.88; Return period = Yrs. 25 ; c = cir e = ellip b = box																						



Storm Sewer Tabulation

Station	Line	Len (ft)	Drng Area		Rnoff coeff (C)	Area x C		Tc		Rain (l) (in/hr)	Total flow (cfs)	Cap full (cfs)	Vel (ft/s)	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID
			Incr (ac)	Total (ac)		Incr	Total	Inlet (min)	Syst (min)					Size (in)	Slope (%)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	
1	End	17,000	1.53	5.91	0.65	0.99	3.84	10.0	15.2	5.5	21.01	29.84	4.29	30	0.53	199.89	199.98	202.39	202.43	205.00	204.24	HW - A618
2	1	21,000	0.00	4.38	0.00	0.00	2.85	0.0	15.0	5.5	15.62	29.68	3.18	30	0.52	199.98	200.09	202.86	202.89	204.24	205.00	A618 - A1
3	2	28,000	0.83	4.38	0.65	0.54	2.85	10.0	14.9	5.5	15.69	29.00	3.20	30	0.50	200.09	200.23	202.92	202.96	205.00	204.23	A1 - A2
4	3	121,000	0.21	1.46	0.65	0.14	0.95	10.0	13.6	5.7	5.45	9.83	3.68	18	0.88	201.40	202.46	203.19	203.47	204.23	205.29	A2 - A96
5	4	55,000	0.15	0.61	0.65	0.10	0.40	10.0	13.1	5.8	2.31	4.52	1.90	15	0.49	202.71	202.98	204.12	204.18	205.29	205.56	A96 - A299
6	5	55,000	0.15	0.46	0.65	0.10	0.30	10.0	12.5	5.9	1.78	4.61	1.59	15	0.51	202.98	203.26	204.21	204.24	205.56	205.84	A299 - A300
7	6	55,000	0.15	0.31	0.65	0.10	0.20	10.0	11.7	6.1	1.23	4.52	1.40	15	0.49	203.26	203.53	204.26	204.27	205.84	206.11	A300 - A301
8	7	55,000	0.16	0.16	0.65	0.10	0.10	10.0	10.0	6.5	0.68	4.61	1.18	15	0.51	203.53	203.81	204.29	204.31	206.11	206.39	A301 - A302
9	4	55,000	0.16	0.64	0.65	0.10	0.42	10.0	13.1	5.8	2.43	5.71	2.10	15	0.78	202.71	203.14	204.12	204.18	205.29	205.72	A96 - A303
10	9	55,000	0.16	0.48	0.65	0.10	0.31	10.0	12.5	5.9	1.86	5.71	2.65	15	0.78	203.14	203.57	204.22	204.11	205.72	206.15	A303 - A304
11	10	55,000	0.16	0.32	0.65	0.10	0.21	10.0	11.7	6.1	1.27	5.78	2.88	15	0.80	203.57	204.01	204.11	204.46	206.15	206.59	A304 - A305
12	11	55,000	0.16	0.16	0.65	0.10	0.10	10.0	10.0	6.5	0.68	5.71	2.22	15	0.78	204.01	204.44	204.46	204.76	206.59	207.02	A305 - A306
13	3	279,000	0.76	0.76	0.65	0.49	0.49	10.0	10.0	6.5	3.21	5.80	3.50	15	0.81	201.65	203.90	203.19	204.62	204.23	206.48	A2 - A139
14	3	246,000	0.46	1.33	0.65	0.30	0.86	10.0	13.9	5.7	4.91	6.18	4.61	15	0.91	201.65	203.90	203.19	204.80	204.23	208.67	A2 - A515
15	14	43,000	0.19	0.87	0.65	0.12	0.57	10.0	13.7	5.7	3.24	4.62	3.69	15	0.51	203.90	204.12	204.80	204.91	208.67	208.80	A515 - A516
16	15	71,000	0.22	0.22	0.65	0.14	0.14	10.0	10.0	6.5	0.93	8.40	3.73	15	1.69	205.55	206.75	205.83	207.13	208.80	210.00	A516 - A517
17	15	229,000	0.26	0.46	0.65	0.17	0.30	10.0	11.2	6.2	1.86	4.54	2.60	15	0.49	204.12	205.25	205.27	205.80	208.80	208.50	A515 - A518
18	17	50,000	0.20	0.20	0.65	0.13	0.13	10.0	10.0	6.5	0.84	11.18	1.92	15	3.00	205.25	206.75	206.10	207.11	208.50	210.00	A518 - A519
7																						Run Date: 6/25/2024
NOTES:Intensity = 106.91 / (Inlet time + 13.90) ^ 0.88; Return period =Yrs. 25 ; c = cir e = ellip b = box																						



Storm Sewer Tabulation

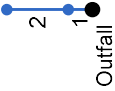
Station		Len (ft)	Drmg Area		Rnoff coeff (C)	Area x C		Tc		Rain (l) (in/hr)	Total flow (cfs)	Cap full (cfs)	Vel (ft/s)	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID	
Line	To Line		Incr (ac)	Total (ac)		Incr	Total	Inlet (min)	Syst (min)					Size (in)	Slope (%)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)		
1	End	52,000	0.05	0.55	0.65	0.03	0.36	10.0	34.1	3.5	1.26	6.20	1.29	15	0.92	197.50	197.98	198.75	198.76	197.94	202.90	HW - A368	
2	1	55,000	0.06	0.50	0.65	0.04	0.33	10.0	33.5	3.6	1.15	4.57	1.72	15	0.50	197.98	198.25	198.80	198.82	202.90	203.10	A368 - A369	
3	2	55,000	0.06	0.44	0.65	0.04	0.29	10.0	32.8	3.6	1.03	4.57	2.35	15	0.50	198.25	198.53	198.86	198.93	203.10	204.00	A369 - A370	
4	3	55,000	0.06	0.38	0.65	0.04	0.25	10.0	32.1	3.6	0.90	4.57	2.51	15	0.50	198.53	198.80	199.00	199.18	204.00	203.20	A370 - A371	
5	4	55,000	0.06	0.32	0.65	0.04	0.21	10.0	31.2	3.7	0.77	4.57	2.39	15	0.50	198.80	199.08	199.24	199.42	203.20	203.50	A371 - A372	
6	5	55,000	0.06	0.26	0.65	0.04	0.17	10.0	30.1	3.8	0.64	4.57	2.25	15	0.50	199.08	199.35	199.48	199.67	203.50	203.50	A372 - A373	
7	6	55,000	0.06	0.20	0.65	0.04	0.13	10.0	28.7	3.9	0.51	4.57	2.07	15	0.50	199.35	199.63	199.72	199.90	203.50	203.50	A373 - A374	
8	7	55,000	0.06	0.14	0.65	0.04	0.09	10.0	26.7	4.1	0.37	4.57	1.87	15	0.50	199.63	199.90	199.95	200.14	203.50	203.70	A374 - A375	
9	8	55,000	0.06	0.08	0.65	0.04	0.05	10.0	23.3	4.4	0.23	4.57	1.72	15	0.50	199.90	200.18	200.14	200.36	203.70	203.70	A375 - A376	
10	9	55,000	0.02	0.02	0.65	0.01	0.01	10.0	10.0	6.5	0.08	4.57	1.14	15	0.50	200.18	200.45	200.36	200.56	203.70	203.70	A376 - A377	
Number of lines: 10																						Run Date: 6/25/2024	
NOTES:Intensity = 106.91 / (Inlet time + 13.90) ^ 0.88; Return period =Yrs. 25 ; c = cir e = ellip b = box																							



Project File: 7C.stm	Number of lines: 10	Date: 6/25/2024
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Storm Sewer Tabulation

Station		Len (ft)	Drng Area		Rnoff coeff (C)	Area x C		Tc		Rain (l) (in/hr)	Total flow (cfs)	Cap full (cfs)	Vel (ft/s)	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID
Line	To Line		Incr	Total		Incr	Total	Inlet	Syst					Size (in)	Slope (%)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	
1	End	52,000	0.05	0.55	0.65	0.03	0.36	10.0	34.1	3.5	1.26	3.47	1.05	15	0.29	197.50	197.65	198.75	198.77	202.44	200.90	HW - A378
2	1	55,000	0.06	0.50	0.65	0.04	0.33	10.0	33.5	3.6	1.15	9.11	2.07	15	1.99	197.65	198.75	198.79	199.17	200.90	202.00	A378 - A379
3	2	55,000	0.06	0.44	0.65	0.04	0.29	10.0	32.8	3.6	1.03	9.11	2.96	15	1.99	198.75	199.85	199.17	200.24	202.00	203.10	A379 - A380
4	3	55,000	0.06	0.38	0.65	0.04	0.25	10.0	32.1	3.6	0.90	9.95	2.83	15	2.37	199.85	201.16	200.24	201.53	203.10	204.40	A380 - A381
5	4	55,000	0.06	0.32	0.65	0.04	0.21	10.0	31.2	3.7	0.77	9.91	2.69	15	2.35	201.16	202.46	201.53	202.80	204.40	205.70	A381 - A382
6	5	55,000	0.06	0.26	0.65	0.04	0.17	10.0	30.1	3.8	0.64	9.48	2.53	15	2.15	202.46	203.65	202.80	203.96	205.70	206.90	A382 - A383
7	6	55,000	0.06	0.20	0.65	0.04	0.13	10.0	28.7	3.9	0.51	7.81	2.34	15	1.46	203.65	204.45	203.96	204.73	206.90	207.70	A383 - A384
8	7	55,000	0.06	0.14	0.65	0.04	0.09	10.0	26.7	4.1	0.37	7.81	2.05	15	1.46	204.45	205.25	204.73	205.49	207.70	208.50	A384 - A385
9	8	55,000	0.06	0.08	0.65	0.04	0.05	10.0	23.3	4.4	0.23	6.19	1.70	15	0.92	205.25	205.75	205.49	205.94	208.50	209.00	A385 - A386
10	9	55,000	0.02	0.02	0.65	0.01	0.01	10.0	10.0	6.5	0.08	8.60	1.14	15	1.77	205.75	206.73	205.94	206.84	209.00	209.98	A386 - A387
7C		Number of lines: 10										Run Date: 6/25/2024										
NOTES:Intensity = 106.91 / (Inlet time + 13.90) ^ 0.88; Return period =Yrs. 25 ; c = cir e = ellip b = box																						



Storm Sewer Tabulation

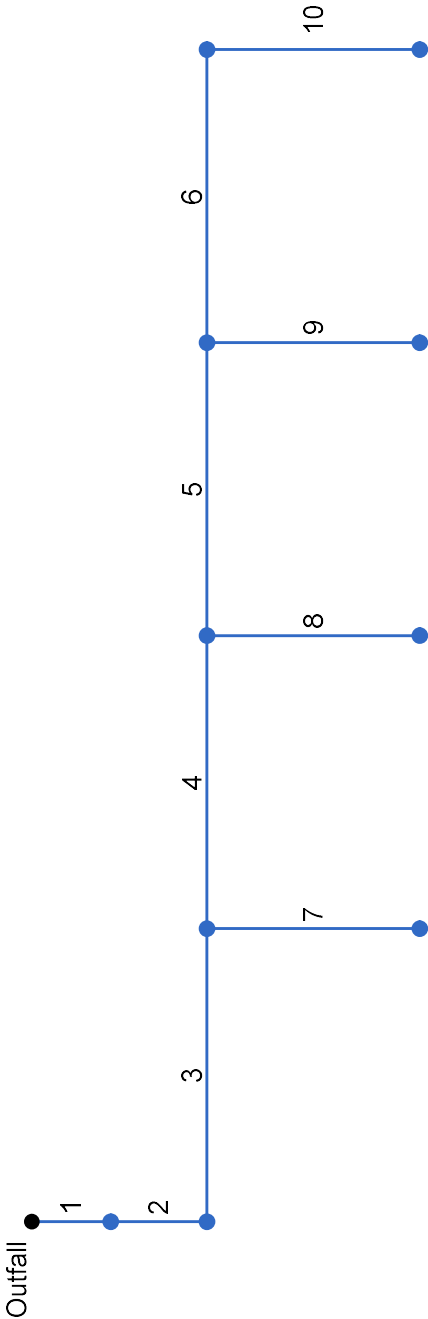
Station		Len (ft)	Drng Area		Rnoff coeff (C)	Area x C		Tc		Rain (l) (in/hr)	Total flow (cfs)	Cap full (cfs)	Vel (ft/s)	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID
Line	To Line		Incr (ac)	Total (ac)		Incr	Total	Inlet (min)	Syst (min)					Size (in)	Slope (%)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	
1	End	11.000	0.35	1.04	0.65	0.23	0.68	10.0	10.3	4.3	2.87	4.77	2.35	15	0.55	191.56	191.62	192.81	192.83	200.00	196.49	HW - A509
2	1	28.000	0.69	0.69	0.65	0.45	0.45	10.0	10.0	4.3	1.93	15.53	2.63	15	5.78	191.62	193.24	192.87	193.79	196.49	196.49	A509 - A508
8A														Number of lines: 2				Run Date: 6/25/2024				
NOTES: Intensity = 52.33 / (Inlet time + 9.80) ^ 0.84; Return period = Yrs. 2 ; c = cir e = ellip b = box																						



Project File: 8B.stm	Number of lines: 2	Date: 6/25/2024
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Storm Sewer Tabulation

Station		Len (ft)	Dmg Area		Rnoff coeff (C)	Area x C		Tc		Rain (l) (in/hr)	Total flow (cfs)	Cap full (cfs)	Vel (ft/s)	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID
Line	To Line		Incr (ac)	Total (ac)		Incr	Total	Inlet (min)	Syst (min)					Size (in)	Slope (%)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	
1	End	50.000	0.16	0.26	0.65	0.10	0.17	10.0	16.2	3.4	0.58	11.19	1.53	15	3.00	191.56	193.06	192.81	193.36	200.00	199.58	HW - A424
2	1	85.000	0.10	0.10	0.65	0.07	0.07	10.0	10.0	4.3	0.28	14.48	1.70	15	5.03	193.06	197.33	193.36	197.54	199.58	200.58	A424 - A423
8B													Number of lines: 2		Run Date: 6/25/2024							
NOTES: Intensity = 52.33 / (Inlet time + 9.80) ^ 0.84; Return period = Yrs. 2 ; c = cir e = ellip b = box																						



Project File: 9.stm	Number of lines: 10	Date: 6/25/2024
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Storm Sewer Tabulation

Station		Len (ft)	Drng Area		Rnoff coeff (C)	Area x C		Tc		Rain (l) (in/hr)	Total flow (cfs)	Cap full (cfs)	Vel (ft/s)	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID
Line	To Line		Incr	Total		Inlet	Syst	Total	Inlet					Syst	Size (in)	Slope (%)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	Dn (ft)	
1	End	23,000	0.54	2.75	0.65	0.35	1.79	10.0	14.8	5.5	9.89	29.62	2.03	30	0.52	191.56	191.68	194.06	194.07	200.00	195.30	HW - A5
2	1	28,000	1.11	2.21	0.65	0.72	1.44	10.0	14.6	5.6	7.99	15.99	2.54	24	0.50	191.68	191.82	194.10	194.14	195.30	195.30	A5 - A6
3	2	85,000	0.00	1.10	0.65	0.00	0.72	10.0	14.0	5.7	4.05	11.84	2.29	18	1.27	191.82	192.90	194.29	194.40	195.30	196.58	A6 - A511
4	3	85,000	0.00	0.80	0.65	0.00	0.52	10.0	13.4	5.8	3.00	4.59	3.99	15	0.51	194.00	194.43	194.74	195.17	196.58	198.47	A511 - A512
5	4	85,000	0.00	0.55	0.65	0.00	0.36	10.0	12.7	5.9	2.12	4.59	3.67	15	0.51	195.89	196.32	196.49	196.92	198.47	200.37	A512 - A513
6	5	85,000	0.00	0.27	0.65	0.00	0.18	10.0	11.1	6.2	1.10	4.59	3.07	15	0.51	197.79	198.22	198.21	198.63	200.37	202.24	A513 - A514
7	3	62,000	0.30	0.30	0.65	0.20	0.20	10.0	10.0	6.5	1.27	4.49	2.82	15	0.48	193.93	194.23	194.48	194.68	196.58	196.81	A511 - A437
8	4	62,000	0.25	0.25	0.65	0.16	0.16	10.0	10.0	6.5	1.06	4.49	2.99	15	0.48	195.83	196.13	196.24	196.54	198.47	198.71	A512 - A438
9	5	62,000	0.28	0.28	0.65	0.18	0.18	10.0	10.0	6.5	1.18	4.49	3.09	15	0.48	197.72	198.02	198.16	198.46	200.37	200.60	A513 - A439
10	6	62,000	0.27	0.27	0.65	0.18	0.18	10.0	10.0	6.5	1.14	4.49	3.06	15	0.48	199.62	199.92	200.05	200.35	202.24	202.50	A514 - A440
9		Number of lines: 10										Run Date: 6/25/2024										
NOTES: Intensity = 106.91 / (Inlet time + 13.90) ^ 0.88; Return period = Yrs. 25 ; c = cir e = ellip b = box																						

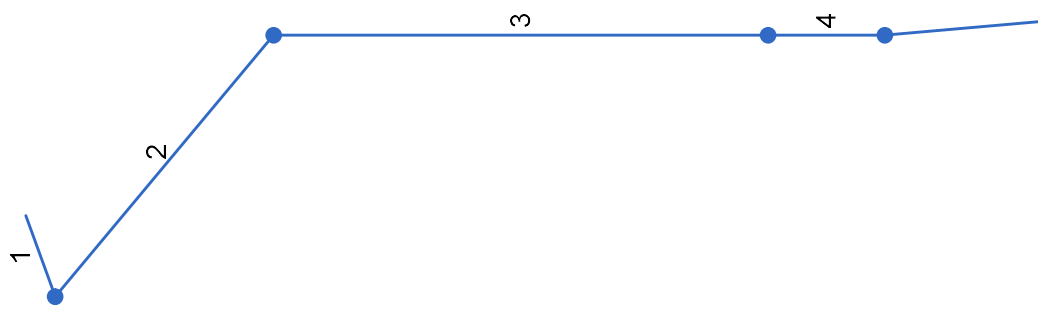
Hydraflow Storm Sewers Extension for Autodesk® Civil 3D® Plan



Project File: 10.stm	Number of lines: 4	Date: 6/25/2024
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Storm Sewer Tabulation

Station		Len (ft)	Drng Area		Rnoff coeff (C)	Area x C		Tc		Rain (l) (in/hr)	Total flow (cfs)	Cap full (cfs)	Vel (ft/s)	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID		
Line	To Line		Incr (ac)	Total (ac)		Incr	Total	Inlet (min)	Syst (min)					Size (in)	Slope (%)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)			
1	End	28.000	0.37	0.58	0.65	0.24	0.38	10.0	19.5	4.8	1.82	4.57	1.52	15	0.50	190.76	190.90	192.01	192.03	194.44	200.50	HW - A441		
2	1	170.000	0.00	0.21	0.00	0.00	0.14	0.0	15.4	5.4	0.74	4.57	1.25	15	0.50	190.90	191.75	192.08	192.20	200.50	195.00	Inserted Line		
3	2	85.000	0.14	0.21	0.65	0.09	0.14	10.0	13.5	5.8	0.79	4.57	2.37	15	0.50	191.75	192.18	192.21	192.52	195.00	195.95	A441 - A442		
4	3	50.000	0.07	0.07	0.65	0.05	0.05	10.0	10.0	6.5	0.30	4.57	2.10	15	0.50	192.70	192.95	192.92	193.17	195.95	197.45	A442 - A444		
Project File: 10.stm														Number of lines: 4				Run Date: 6/25/2024						
NOTES: Intensity = 106.91 / (Inlet time + 13.90) ^ 0.88; Return period = Yrs. 25 ; c = cir e = ellip b = box																								

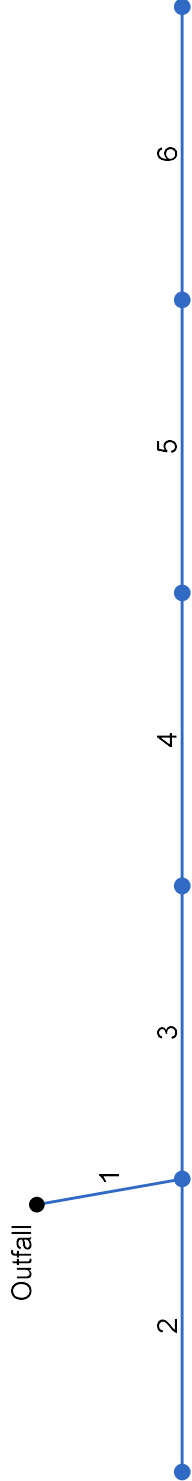


● Outfall

7

Storm Sewer Tabulation

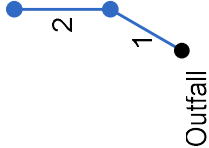
Station		Len (ft)	Drng Area		Rnoff coeff (C)	Area x C		Tc		Rain (l) (in/hr)	Total flow (cfs)	Cap full (cfs)	Vel (ft/s)	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID			
Line	To Line		Incr (ac)	Total (ac)		Incr	Total	Inlet (min)	Syst (min)					Size (in)	Slope (%)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)				
1	End	25,000	0.84	2.62	0.65	0.55	1.70	10.0	16.1	5.3	9.07	45.24	4.08	24	4.00	182.30	183.30	184.30	184.37	200.00	193.30	HW - A7			
2	1	99,000	0.00	1.78	0.65	0.00	1.16	10.0	15.2	5.5	6.31	57.95	4.18	24	6.57	183.30	189.80	184.37	190.69	193.30	195.33	A7 - A419			
3	2	144,000	0.18	1.78	0.65	0.12	1.16	10.0	14.1	5.6	6.53	15.99	4.78	24	0.50	191.33	192.05	192.22	192.95	195.33	198.84	A419 - A412			
4	3	34,000	0.83	1.60	0.65	0.54	1.04	10.0	14.0	5.7	5.90	7.43	4.67	18	0.50	195.12	195.29	196.13	196.30	198.84	199.00	A412 - A413			
5	4	108,000	0.18	0.77	0.65	0.12	0.50	10.0	13.2	5.8	2.91	4.57	3.54	15	0.50	195.54	196.08	196.47	196.78	199.00	200.85	A413 - A420			
6	5	85,000	0.26	0.59	0.65	0.17	0.38	10.0	12.5	6.0	2.28	4.54	2.45	15	0.49	196.08	196.50	197.17	197.26	200.85	201.35	A420 - A421			
7	6	170,000	0.33	0.33	0.65	0.21	0.21	10.0	10.0	6.5	1.39	4.57	2.48	15	0.50	196.50	197.35	197.33	197.82	201.35	200.60	A421 - A422			



Project File: 11B.stm	Number of lines: 6	Date: 6/25/2024
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Storm Sewer Tabulation

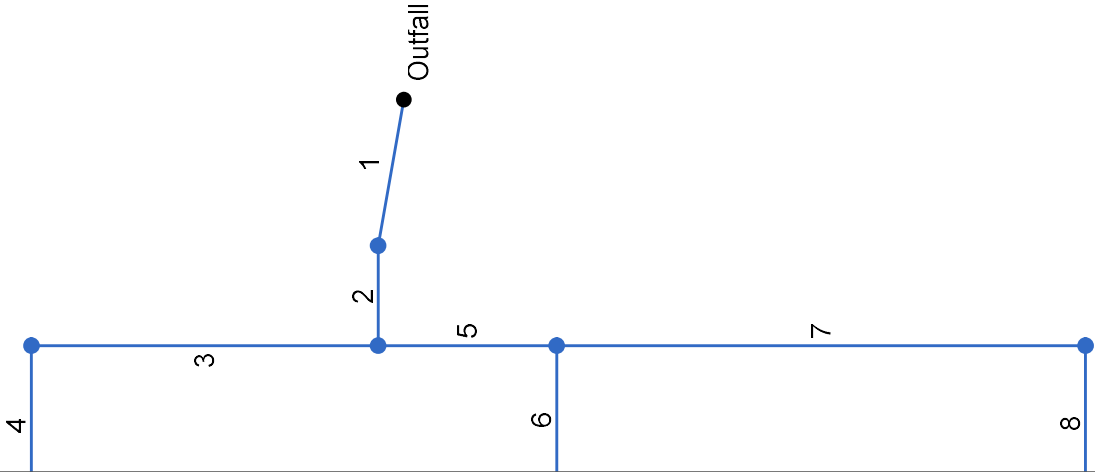
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Project File: 12A.stm	Number of lines: 2	Date: 6/25/2024
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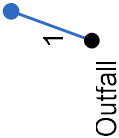
Storm Sewer Tabulation

Station		Len	Drng Area		Rnoff coeff	Area x C		Tc		Rain (l)	Total flow	Cap full	Vel	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID
Line	To Line		Incr	Total		Incr	Total	Inlet	Syst	(in/hr)	(cfs)	(cfs)	(ft/s)	Size	Slope	Dn	Up	Dn	Up	Dn	Up	
		(ft)	(ac)	(ac)	(C)			(min)	(min)					(in)	(%)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	
1	End	24.000	0.15	0.58	0.65	0.10	0.38	10.0	10.5	4.2	1.59	4.57	3.39	15	0.50	-1.25	-1.13	-0.75	-0.61	0.00	205.95	HW - A27
2	1	28.000	0.43	0.43	0.65	0.28	0.28	10.0	10.0	4.3	1.20	4.57	2.12	15	0.50	-1.13	-0.99	-0.47	-0.46	205.95	205.94	A27 - A28
12A		Number of lines: 2																			Run Date: 6/25/2024	
NOTES: Intensity = 52.33 / (Inlet time + 9.80) ^ 0.84; Return period = Yrs. 2 ; c = cir e = ellip b = box																						



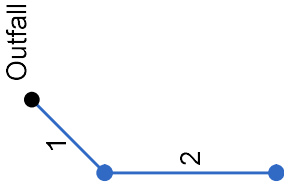
Storm Sewer Tabulation

Station		Len (ft)	Drng Area		Rnoff coeff (C)	Area x C		Tc		Rain (l) (in/hr)	Total flow (cfs)	Cap full (cfs)	Vel (ft/s)	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID
Line	To Line		Incr (ac)	Total (ac)		Incr	Total	Inlet (min)	Syst (min)					Size (in)	Slope (%)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	
1	End	43.000	0.28	0.57	0.65	0.18	0.37	10.0	47.4	2.8	1.05	4.57	3.03	15	0.50	-1.25	-1.04	-0.85	0.00	208.68	HW - A33	
2	1	29.000	0.20	0.29	0.65	0.13	0.19	10.0	46.9	2.9	0.54	4.57	1.58	15	0.50	-1.04	-0.89	-0.55	208.68	208.51	A33 - A32	
3	2	101.000	0.00	0.03	0.65	0.00	0.02	10.0	17.4	5.1	0.10	4.57	0.80	15	0.50	-0.89	-0.39	-0.41	208.51	207.74	A32 - A551	
4	3	46.000	0.03	0.03	0.65	0.02	0.02	10.0	10.0	6.5	0.13	4.57	1.51	15	0.50	-0.39	-0.16	-0.22	207.74	208.00	A551 - A552	
5	2	52.000	0.00	0.06	0.65	0.00	0.04	10.0	42.5	3.0	0.12	4.57	0.52	15	0.50	-0.89	-0.63	-0.41	208.51	208.91	A32 - A553	
6	5	43.000	0.03	0.03	0.65	0.02	0.02	10.0	10.0	6.5	0.13	4.57	1.24	15	0.50	-0.63	-0.42	-0.39	208.91	209.00	A553 - A554	
7	5	154.000	0.00	0.03	0.65	0.00	0.02	10.0	17.3	5.1	0.10	4.57	1.13	15	0.50	-0.63	0.14	-0.39	208.91	209.90	A553 - A555	
8	7	45.000	0.03	0.03	0.65	0.02	0.02	10.0	10.0	6.5	0.13	4.57	1.63	15	0.50	0.14	0.37	0.28	209.90	210.00	A555 - A556	
12B													Number of lines: 8				Run Date: 6/25/2024					
NOTES: Intensity = 106.91 / (Inlet time + 13.90) ^ 0.88; Return period = Yrs. 25 ; c = cir e = ellip b = box																						



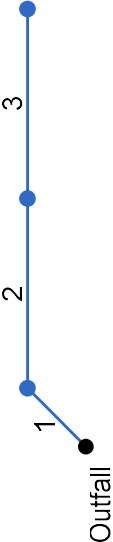
Storm Sewer Tabulation

Station		Len (ft)	Dmg Area		Rnoff coeff (C)	Area x C		Tc		Rain (l) (in/hr)	Total flow (cfs)	Cap full (cfs)	Vel (ft/s)	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID
Line	To Line		Incr (ac)	Total (ac)		Incr Total	Inlet (min)	Syst (min)	Size (in)					Slope (%)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)		
1	End	25,000	0.72	0.72	0.65	0.47	0.47	10.0	10.0	6.5	3.04	4.57	4.09	15	0.50	-1.25	-1.13	-0.55	-0.36	0.00	193.30	HW - A8
13		Number of lines: 1																			Run Date: 6/25/2024	
NOTES: Intensity = 106.91 / (Inlet time + 13.90) ^ 0.88; Return period = Yrs. 25 ; c = cir e = ellip b = box																						



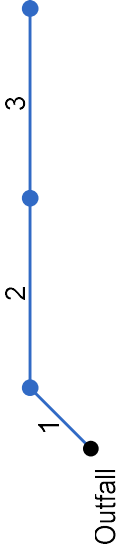
Page 1

Storm Sewers v2022.00



Storm Sewer Tabulation

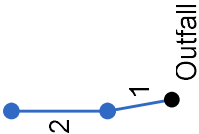
Station		Len (ft)	Drng Area		Rnoff coeff (C)	Area x C		Tc		Rain (l) (in/hr)	Total flow (cfs)	Cap full (cfs)	Vel (ft/s)	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID			
Line	To Line		Incr (ac)	Total (ac)		Incr	Total	Inlet (min)	Syst (min)					Size (in)	Slope (%)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)				
1	End	24.000	0.04	0.22	0.65	0.03	0.14	10.0	14.2	5.6	0.81	5.59	0.69	15	0.75	197.00	197.18	198.25	198.25	200.00	200.43	HW - A177			
2	1	55.000	0.08	0.18	0.65	0.05	0.12	10.0	12.7	5.9	0.69	7.91	1.67	15	1.50	197.18	198.01	198.33	198.33	200.43	201.25	A177 - A188			
3	2	55.000	0.10	0.10	0.65	0.07	0.07	10.0	10.0	6.5	0.42	7.91	2.04	15	1.50	198.01	198.84	199.09	198.33	201.25	202.08	A188 - A179			
14B														Number of lines: 3				Run Date: 6/25/2024							
NOTES: Intensity = 106.91 / (Inlet time + 13.90) ^ 0.88; Return period = Yrs. 25 ; c = cir e = ellip b = box																									



Project File: 15A.stm	Number of lines: 3	Date: 6/25/2024
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Page 1

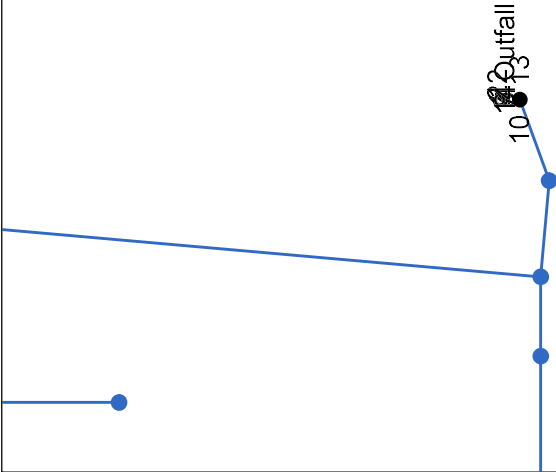
Storm Sewers v2022.00



Storm Sewer Tabulation

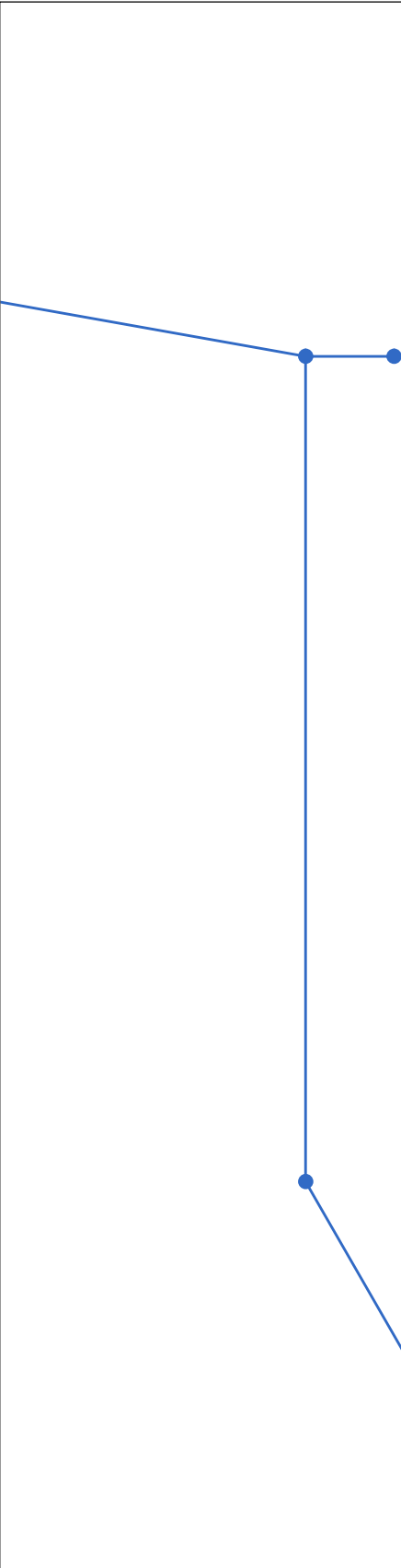
Station		Len (ft)	Drng Area		Rnoff coeff (C)	Area x C		Tc		Rain (l) (in/hr)	Total flow (cfs)	Cap full (cfs)	Vel (ft/s)	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID
Line	To Line		Incr (ac)	Total (ac)		Incr	Total	Inlet (min)	Syst (min)					Size (in)	Slope (%)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	
1	End	19.000	0.27	0.48	0.65	0.18	0.31	10.0	10.6	6.3	1.98	4.57	3.62	15	0.50	-1.25	-1.16	-0.69	-0.57	0.00	207.00	HW - A54
2	1	28.000	0.21	0.21	0.65	0.14	0.14	10.0	10.0	6.5	0.89	4.57	1.51	15	0.50	-1.16	-1.02	-0.47	-0.47	207.00	207.00	A54 - A55
15B		Number of lines: 2																			Run Date: 6/25/2024	
NOTES: Intensity = 106.91 / (Inlet time + 13.90) ^ 0.88; Return period = Yrs. 25 ; c = cir e = ellip b = box																						

14B



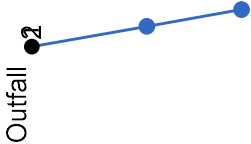
Storm Sewer Tabulation

Station		Len (ft)	Drng Area		Rnoff coeff (C)	Area x C		Tc		Rain (l) (in/hr)	Total flow (cfs)	Cap full (cfs)	Vel (ft/s)	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID	
Line	To Line		Incr (ac)	Total (ac)		Incr	Total	Inlet (min)	Syst (min)					Size (in)	Slope (%)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)		
1	End	25,000	0.25	3.10	0.65	0.16	2.02	10.0	14.1	5.7	11.40	29.00	5.29	30	0.50	-2.50	-2.38	-1.37	-1.24	0.00	199.80	HW - A25	
2	1	28,000	0.19	2.85	0.65	0.12	1.85	10.0	13.8	5.7	10.56	29.00	5.03	30	0.50	-2.38	-2.24	-1.24	-1.15	199.80	199.94	A25 - A26	
3	2	23,000	0.06	0.61	0.65	0.04	0.40	10.0	12.7	5.9	2.34	4.57	3.75	15	0.50	-0.98	-0.87	-0.35	-0.24	199.94	201.50	A26 - A254	
4	3	53,000	0.07	0.55	0.65	0.05	0.36	10.0	12.3	6.0	2.14	4.57	3.29	15	0.50	-0.87	-0.60	-0.13	-0.02	201.50	203.16	A254 - A253	
5	4	55,000	0.09	0.48	0.65	0.06	0.31	10.0	11.8	6.1	1.90	4.57	3.17	15	0.50	-0.60	-0.33	0.09	0.22	203.16	203.99	A253 - A252	
6	5	55,000	0.09	0.39	0.65	0.06	0.25	10.0	11.4	6.2	1.57	4.57	2.92	15	0.50	-0.33	-0.05	0.32	0.44	203.99	204.82	A252 - A251	
7	6	55,000	0.09	0.30	0.65	0.06	0.20	10.0	10.9	6.3	1.23	4.57	2.67	15	0.50	-0.05	0.22	0.54	0.66	204.82	205.64	A251 - A250	
8	7	55,000	0.09	0.21	0.65	0.06	0.14	10.0	10.5	6.4	0.87	4.57	2.35	15	0.50	0.22	0.50	0.74	0.86	205.64	206.48	A250 - A249	
9	8	55,000	0.12	0.12	0.65	0.08	0.08	10.0	10.0	6.5	0.51	4.57	1.91	15	0.50	0.50	0.77	0.93	1.05	206.48	207.31	A249 - A248	
10	2	165,000	0.26	2.05	0.65	0.17	1.33	10.0	12.5	6.0	7.94	15.99	5.06	24	0.50	-1.74	-0.91	-0.74	0.09	199.94	204.63	A26 - A348	
11	10	31,000	0.44	0.44	0.65	0.29	0.29	10.0	10.0	6.5	1.86	4.57	3.53	15	0.50	-0.16	0.00	0.40	0.55	204.63	204.41	A348 - A349	
12	10	51,000	0.64	1.35	0.65	0.42	0.88	10.0	12.0	6.0	5.31	7.43	4.56	18	0.50	-0.41	-0.15	0.53	0.78	204.63	205.12	A348 - A346	
13	12	46,000	0.59	0.59	0.65	0.38	0.38	10.0	10.0	6.5	2.49	4.57	2.24	15	0.50	0.10	0.33	1.27	1.31	205.12	204.24	A346 - A347	
14	12	244,000	0.12	0.12	0.65	0.08	0.08	10.0	10.0	6.5	0.51	4.57	1.29	15	0.50	0.10	1.32	1.27	1.62	205.12	208.77	A346 - A345	
14B														Number of lines: 14				Run Date: 6/25/2024					
NOTES:Intensity = 106.91 / (Inlet time + 13.90) ^ 0.88; Return period =Yrs. 25 ; c = cir e = ellip b = box																							



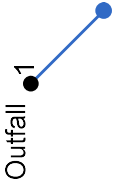
Storm Sewer Tabulation

Station		Len (ft)	Drng Area		Rnoff coeff (C)	Area x C		Tc		Rain (l) (in/hr)	Total flow (cfs)	Cap full (cfs)	Vel (ft/s)	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID			
Line	To Line		Incr	Total		Inlet	Syst	Total	Inlet					Syst	Size (in)	Slope (%)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	Dn (ft)		Up (ft)		
1	End	108.000	0.67	2.23	0.65	0.44	1.45	10.0	16.6	5.2	7.60	15.99	4.97	24	0.50	-2.00	-1.46	-1.02	-0.48	0.00	187.14	HW - A9			
2	1	260.000	0.36	1.56	0.65	0.23	1.01	10.0	15.2	5.5	5.54	7.43	4.61	18	0.50	-0.96	0.34	0.01	1.30	187.14	193.00	A9 - A101			
3	2	28.000	0.37	0.37	0.65	0.24	0.24	10.0	10.0	6.5	1.56	4.57	1.27	15	0.50	0.59	0.73	2.04	2.05	193.00	193.00	A101 - A102			
4	2	115.000	0.05	0.83	0.65	0.03	0.54	10.0	14.3	5.6	3.03	4.57	2.56	15	0.50	0.59	1.17	2.04	2.27	193.00	193.04	A101 - A403			
5	4	85.000	0.12	0.78	0.65	0.08	0.51	10.0	13.5	5.8	2.92	4.57	2.60	15	0.50	1.17	1.59	2.43	2.57	193.04	194.96	A403 - A405			
6	5	85.000	0.11	0.66	0.65	0.07	0.43	10.0	12.8	5.9	2.53	4.57	2.82	15	0.50	1.59	2.02	2.63	2.76	194.96	196.60	A405 - A406			
7	6	85.000	0.13	0.55	0.65	0.08	0.36	10.0	12.1	6.0	2.15	4.57	3.15	15	0.50	2.02	2.44	2.84	3.03	196.60	195.32	A406 - A407			
8	7	85.000	0.15	0.42	0.65	0.10	0.27	10.0	11.4	6.2	1.69	4.57	2.95	15	0.50	2.44	2.87	3.14	3.38	195.32	188.00	A407 - A408			
9	8	85.000	0.15	0.27	0.65	0.10	0.18	10.0	10.7	6.3	1.11	4.57	2.49	15	0.50	2.87	3.29	3.48	3.70	188.00	188.00	A408 - A409			
10	9	85.000	0.12	0.12	0.65	0.08	0.08	10.0	10.0	6.5	0.51	4.57	1.97	15	0.50	3.29	3.72	3.70	3.99	188.00	188.00	A409 - A410			
18														Number of lines: 10										Run Date: 6/25/2024	
NOTES:Intensity = 106.91 / (Inlet time + 13.90) ^ 0.88; Return period =Yrs. 25 ; c = cir e = ellip b = box																									



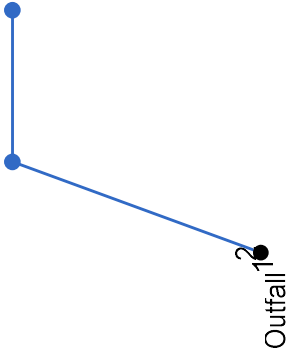
Page 1

Storm Sewers v2022.00



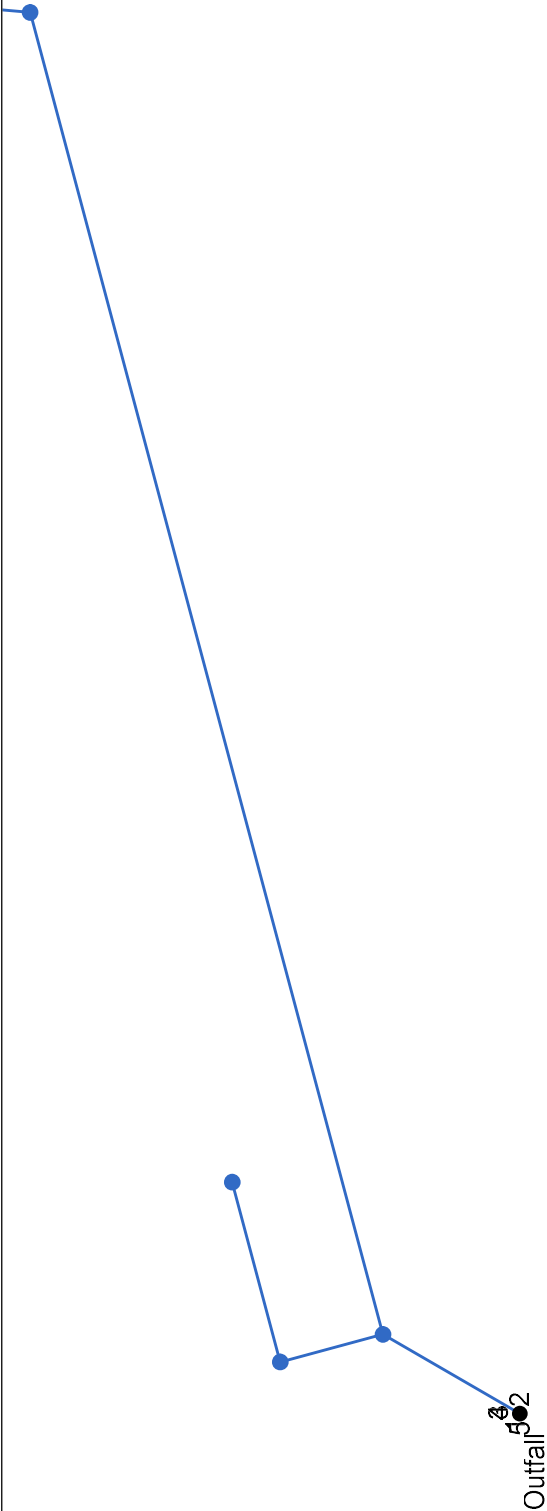
Page 1

Storm Sewers v2022.00



Storm Sewer Tabulation

Station		Len (ft)	Dmg Area		Rnoff coeff (C)	Area x C		Tc		Rain (l) (in/hr)	Total flow (cfs)	Cap full (cfs)	Vel (ft/s)	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID
Line	To Line		Incr (ac)	Total (ac)		Incr	Total	Inlet (min)	Syst (min)					Size (in)	Slope (%)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	
1	End	77.000	0.00	1.80	0.65	0.00	1.17	10.0	10.2	6.5	7.56	7.43	5.15	18	0.50	-1.50	-1.12	-0.44	0.18	0.00	192.50	HW - A399
2	1	44.000	1.80	1.80	0.65	1.17	1.17	10.0	10.0	6.5	7.60	7.43	4.30	18	0.50	-1.12	-0.90	0.50	0.73	192.50	191.79	A399 - A388
																					Run Date: 6/25/2024	
21		Number of lines: 2																				
NOTES: Intensity = 106.91 / (Inlet time + 13.90) ^ 0.88; Return period = Yrs. 25 ; c = cir e = ellip b = box																						



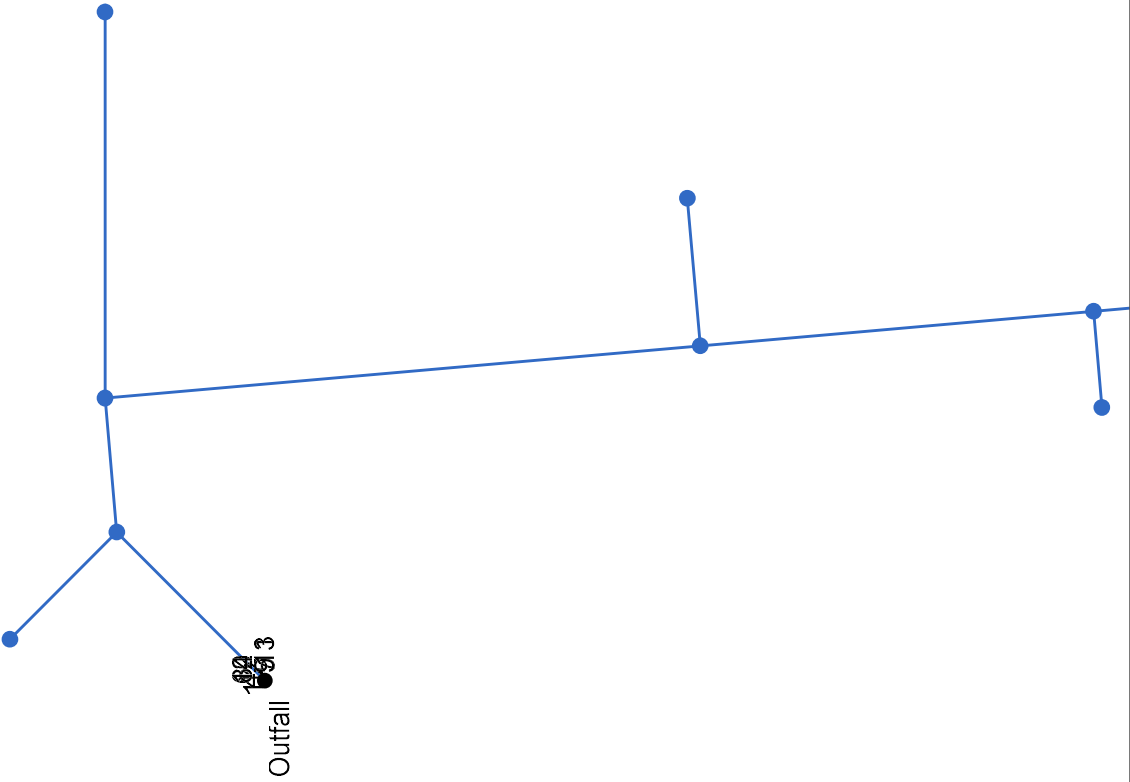
Storm Sewer Tabulation

Station		Len (ft)	Drmg Area		Rnoff coeff (C)	Area x C		Tc		Rain (l) (in/hr)	Total flow (cfs)	Cap full (cfs)	Vel (ft/s)	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID	
Line	To Line		Incr (ac)	Total (ac)		Incr	Total	Inlet (min)	Syst (min)					Size (in)	Slope (%)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)		
1	End	46.000	0.88	3.67	0.65	0.57	2.39	10.0	13.5	5.8	13.72	15.99	5.89	24	0.50	-2.00	-1.77	-0.67	-0.32	0.00	185.35	HW - A16	
2	1	31.000	0.33	0.67	0.65	0.21	0.44	10.0	10.5	6.4	2.78	4.57	2.27	15	0.50	-1.02	-0.87	0.51	0.57	185.35	185.25	A16 - A529	
3	2	54.000	0.34	0.34	0.65	0.22	0.22	10.0	10.0	6.5	1.44	4.57	1.17	15	0.50	-0.87	-0.60	0.69	0.72	185.25	185.60	A529 - A530	
4	1	397.000	1.70	2.12	0.65	1.11	1.38	10.0	10.2	6.4	8.88	15.99	3.78	24	0.50	-1.77	0.22	0.51	1.37	185.35	186.20	A16 - A58	
5	4	28.000	0.42	0.42	0.65	0.27	0.27	10.0	10.0	6.5	1.77	4.57	2.05	15	0.50	0.97	1.11	1.87	1.88	186.20	186.34	A58 - A57	
														Number of lines: 5									
														Run Date: 6/25/2024									
NOTES: Intensity = 106.91 / (Inlet time + 13.90) ^ 0.88; Return period = Yrs. 25 ; c = cir e = ellip b = box																							



Storm Sewer Tabulation

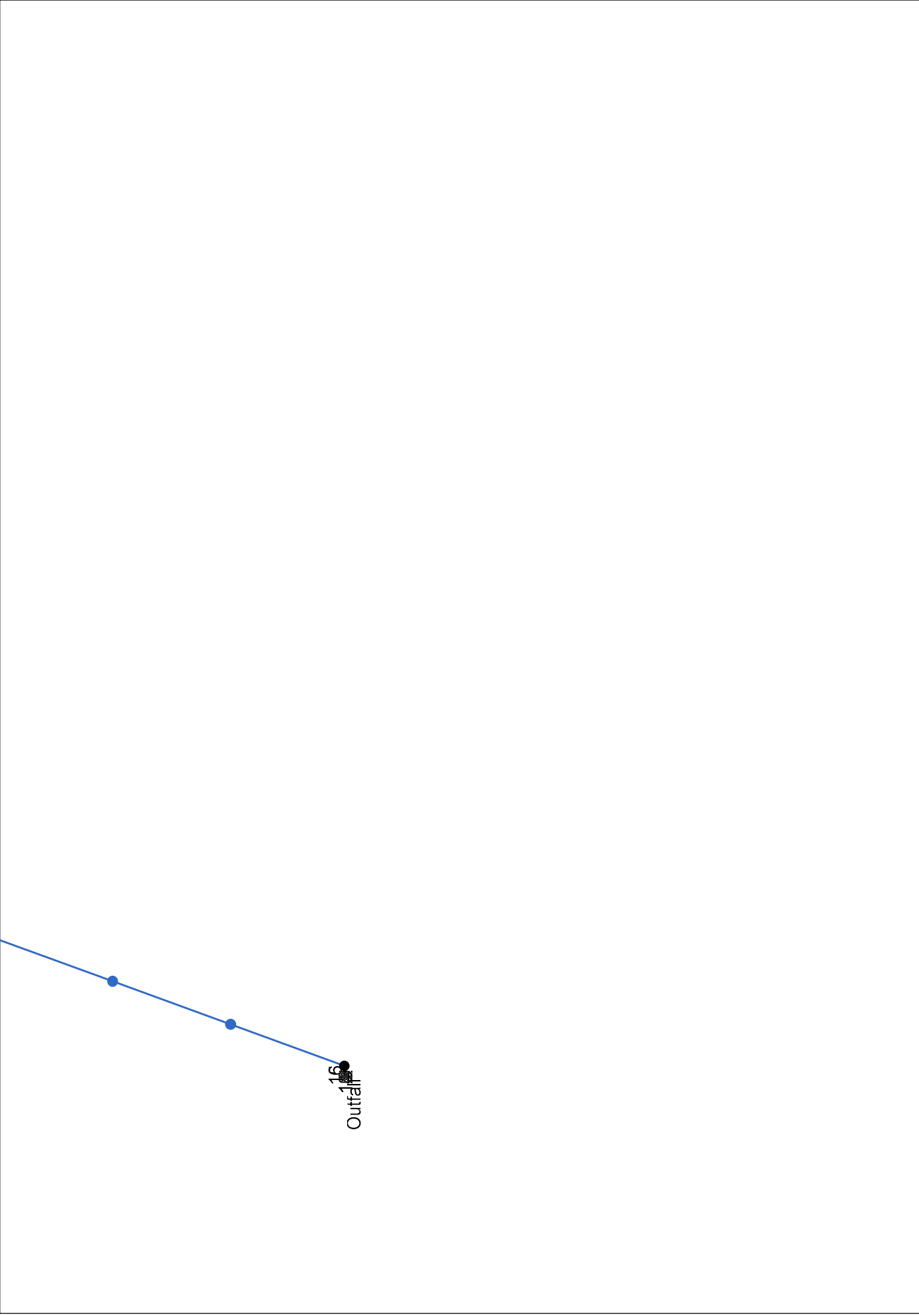
Station		Len (ft)	Drng Area		Rnoff coeff (C)	Area x C		Tc		Rain (l) (in/hr)	Total flow (cfs)	Cap full (cfs)	Vel (ft/s)	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID
Line	To Line		Incr (ac)	Total (ac)		Incr	Total	Inlet (min)	Syst (min)					Size (in)	Slope (%)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	
1	End	43.000	0.68	0.68	0.65	0.44	0.44	10.0	10.0	6.5	2.87	4.57	3.99	15	0.50	-1.25	-1.04	-0.57	-0.29	0.00	174.80	HW - A15
23																						
Run Date: 6/25/2024																						
Number of lines: 1																						
Run Date: 6/25/2024																						



Project File: 24.stm	Number of lines: 14	Date: 6/25/2024
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Storm Sewer Tabulation

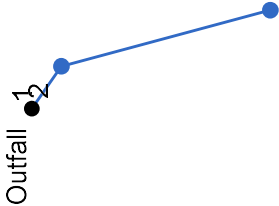
Station		Len (ft)	Drng Area		Rnoff coeff (C)	Area x C		Tc		Rain (l) (in/hr)	Total flow (cfs)	Cap full (cfs)	Vel (ft/s)	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID
Line	To Line		Incr (ac)	Total (ac)		Incr	Total	Inlet (min)	Syst (min)					Size (in)	Slope (%)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	
1	End	61,000	0.18	2.11	0.65	0.12	1.37	10.0	15.0	5.5	7.53	15.99	4.96	24	0.50	-2.00	-1.70	-1.03	-0.72	0.00	203.14	HW - A532
2	1	44,000	0.16	0.16	0.65	0.10	0.10	10.0	10.0	6.5	0.68	4.57	2.67	15	0.50	-0.94	-0.72	-0.62	-0.40	203.14	203.20	A532 - A531
3	1	39,000	0.62	1.77	0.65	0.40	1.15	10.0	14.7	5.5	6.38	15.99	4.45	24	0.50	-1.70	-1.50	-0.72	-0.61	203.14	204.00	A532 - A34
4	3	112,000	0.13	0.13	0.65	0.08	0.08	10.0	10.0	6.5	0.55	4.57	2.50	15	0.50	-0.75	-0.19	-0.46	0.10	204.00	207.00	A34 - A125
5	3	174,000	0.00	1.02	0.65	0.00	0.66	10.0	13.2	5.8	3.85	7.43	4.25	18	0.50	-1.00	-0.13	-0.23	0.63	204.00	205.05	A34 - A546
6	5	43,000	0.03	0.03	0.65	0.02	0.02	10.0	10.0	6.5	0.13	4.57	0.19	15	0.50	0.12	0.34	0.92	0.92	205.05	205.30	A546 - A545
7	5	115,000	0.38	0.99	0.65	0.25	0.64	10.0	12.3	6.0	3.86	7.43	3.63	18	0.50	-0.13	0.45	0.92	1.20	205.05	205.90	A546 - A344
8	7	28,000	0.14	0.14	0.65	0.09	0.09	10.0	10.0	6.5	0.59	4.57	0.65	15	0.50	0.69	0.83	1.64	1.64	205.90	205.90	A344 - A343
9	7	40,000	0.00	0.47	0.65	0.00	0.31	10.0	12.0	6.1	1.85	4.57	2.11	15	0.50	0.69	0.89	1.64	1.66	205.90	206.20	A344 - A547
10	9	44,000	0.03	0.03	0.65	0.02	0.02	10.0	10.0	6.5	0.13	4.57	0.17	15	0.50	0.90	1.12	1.75	1.75	206.20	206.50	A547 - A548
11	9	154,000	0.00	0.44	0.65	0.00	0.29	10.0	10.7	6.3	1.81	4.57	2.83	15	0.50	0.90	1.67	1.75	2.20	206.20	207.36	A547 - A549
12	11	44,000	0.03	0.03	0.65	0.02	0.02	10.0	10.0	6.5	0.13	4.57	0.39	15	0.50	1.67	1.89	2.20	2.20	207.36	208.00	A549 - A550
13	11	52,000	0.28	0.41	0.65	0.18	0.27	10.0	10.2	6.4	1.72	4.57	3.45	15	0.50	1.67	1.93	2.20	2.45	207.36	207.75	A549 - A340
14	13	28,000	0.13	0.13	0.65	0.08	0.08	10.0	10.0	6.5	0.55	4.57	0.73	15	0.50	1.93	2.07	2.74	2.74	207.75	207.75	A340 - A339
24		Number of lines: 14										Run Date: 6/25/2024										
NOTES: Intensity = 106.91 / (Inlet time + 13.90) ^ 0.88; Return period = Yrs. 25 ; c = cir e = ellip b = box																						



Project File: 25.stm	Number of lines: 16	Date: 6/25/2024
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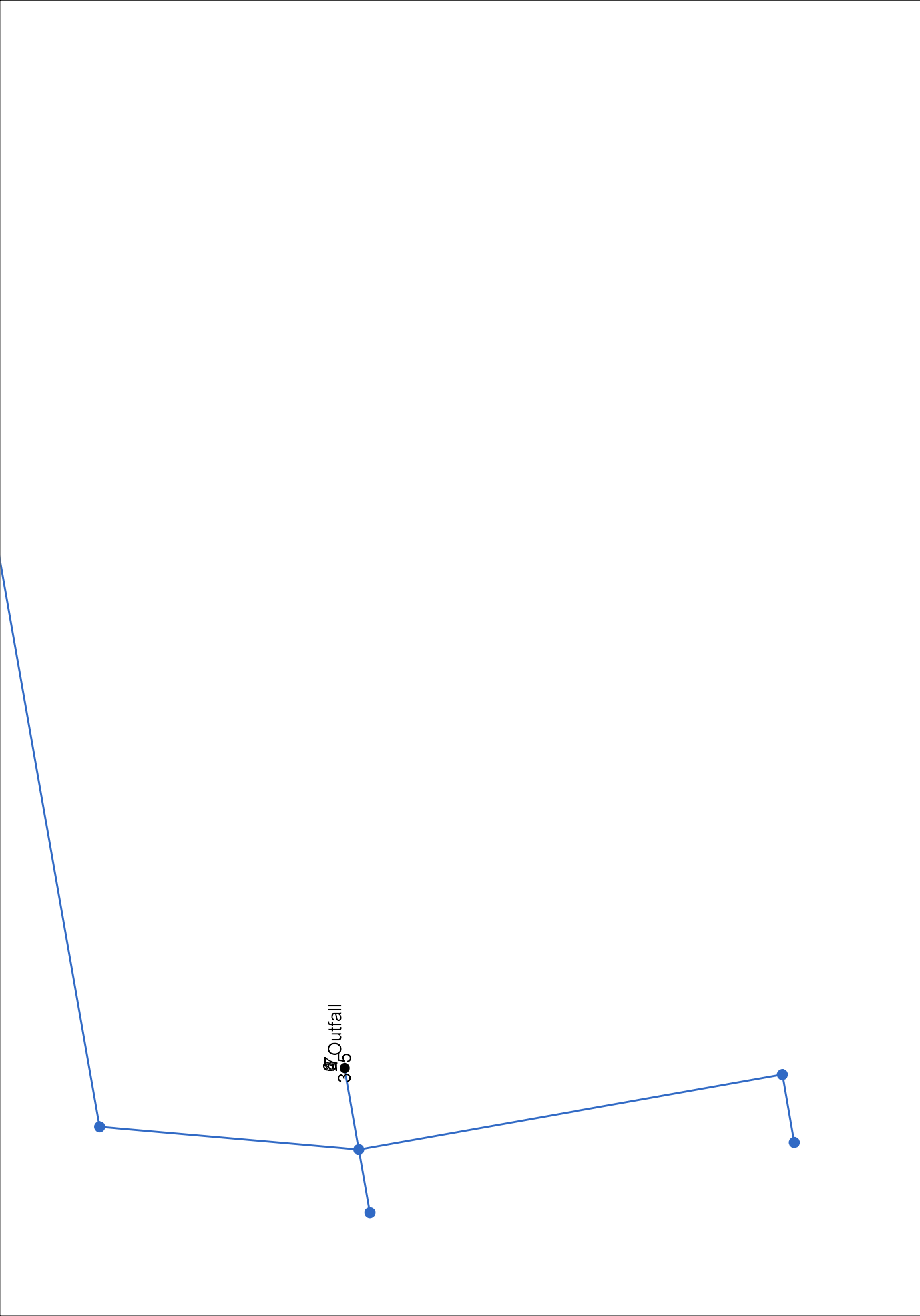
Storm Sewer Tabulation

Station	Line	Len (ft)	Drng Area		Rnoff coeff (C)	Area x C		Tc		Rain (l) (in/hr)	Total flow (cfs)	Cap full (cfs)	Vel (ft/s)	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID		
			Incr (ac)	Total (ac)		Incr	Total	Inlet (min)	Syst (min)					Size (in)	Slope (%)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)			
1	End	53,000	0.07	1.81	0.65	0.05	1.18	10.0	16.7	5.2	6.15	7.43	4.85	18	0.50	-1.50	-1.24	-0.54	-0.16	0.00	192.97	HW - A323		
2	1	55,000	0.12	1.74	0.65	0.08	1.13	10.0	16.4	5.3	5.96	7.43	4.05	18	0.50	-1.24	-0.96	0.00	0.14	192.97	193.13	A323 - A324		
3	2	55,000	0.12	1.62	0.65	0.08	1.05	10.0	16.0	5.3	5.62	7.43	3.84	18	0.50	-0.96	-0.69	0.28	0.40	193.13	193.29	A324 - A325		
4	3	55,000	0.12	1.50	0.65	0.08	0.98	10.0	15.5	5.4	5.28	7.43	3.71	18	0.50	-0.69	-0.41	0.53	0.64	193.29	193.72	A325 - A326		
5	4	55,000	0.12	1.38	0.65	0.08	0.90	10.0	15.0	5.5	4.92	7.43	3.65	18	0.50	-0.41	-0.14	0.76	0.86	193.72	194.17	A326 - A327		
6	5	55,000	0.12	1.26	0.65	0.08	0.82	10.0	14.6	5.6	4.56	7.43	3.62	18	0.50	-0.14	0.14	0.98	1.06	194.17	194.47	A327 - A328		
7	6	55,000	0.12	1.14	0.65	0.08	0.74	10.0	14.1	5.6	4.18	7.43	3.60	18	0.50	0.14	0.41	1.19	1.27	194.47	194.82	A328 - A329		
8	7	55,000	0.12	1.02	0.65	0.08	0.66	10.0	13.7	5.7	3.80	7.43	3.58	18	0.50	0.41	0.69	1.40	1.48	194.82	196.06	A329 - A330		
9	8	55,000	0.12	0.90	0.65	0.08	0.59	10.0	13.2	5.8	3.40	4.57	4.08	15	0.50	0.94	1.22	1.74	2.02	196.06	197.00	A330 - A331		
10	9	55,000	0.12	0.78	0.65	0.08	0.51	10.0	12.8	5.9	2.99	4.57	3.40	15	0.50	1.22	1.49	2.15	2.26	197.00	197.70	A331 - A332		
11	10	55,000	0.12	0.66	0.65	0.08	0.43	10.0	12.3	6.0	2.57	4.57	3.19	15	0.50	1.49	1.77	2.37	2.47	197.70	198.79	A332 - A333		
12	11	55,000	0.12	0.54	0.65	0.08	0.35	10.0	11.8	6.1	2.14	4.57	3.05	15	0.50	1.77	2.04	2.57	2.66	198.79	199.40	A333 - A334		
13	12	55,000	0.11	0.42	0.65	0.07	0.27	10.0	11.4	6.2	1.69	4.57	2.89	15	0.50	2.04	2.32	2.75	2.84	199.40	199.88	A334 - A335		
14	13	55,000	0.10	0.31	0.65	0.07	0.20	10.0	10.9	6.3	1.27	4.57	2.66	15	0.50	2.32	2.59	2.93	3.04	199.88	200.56	A335 - A336		
15	14	55,000	0.10	0.21	0.65	0.07	0.14	10.0	10.5	6.4	0.87	4.57	2.18	15	0.50	2.59	2.87	3.17	3.24	200.56	201.19	A336 - A337		
16	15	55,000	0.11	0.11	0.65	0.07	0.07	10.0	10.0	6.5	0.46	4.57	1.81	15	0.50	2.87	3.14	3.30	3.41	201.19	202.13	A337 - A338		
Number of lines: 16																							Run Date: 6/25/2024	
NOTES:Intensity = 106.91 / (Inlet time + 13.90) ^ 0.88; Return period =Yrs. 25 ; c = cir e = ellip b = box																								



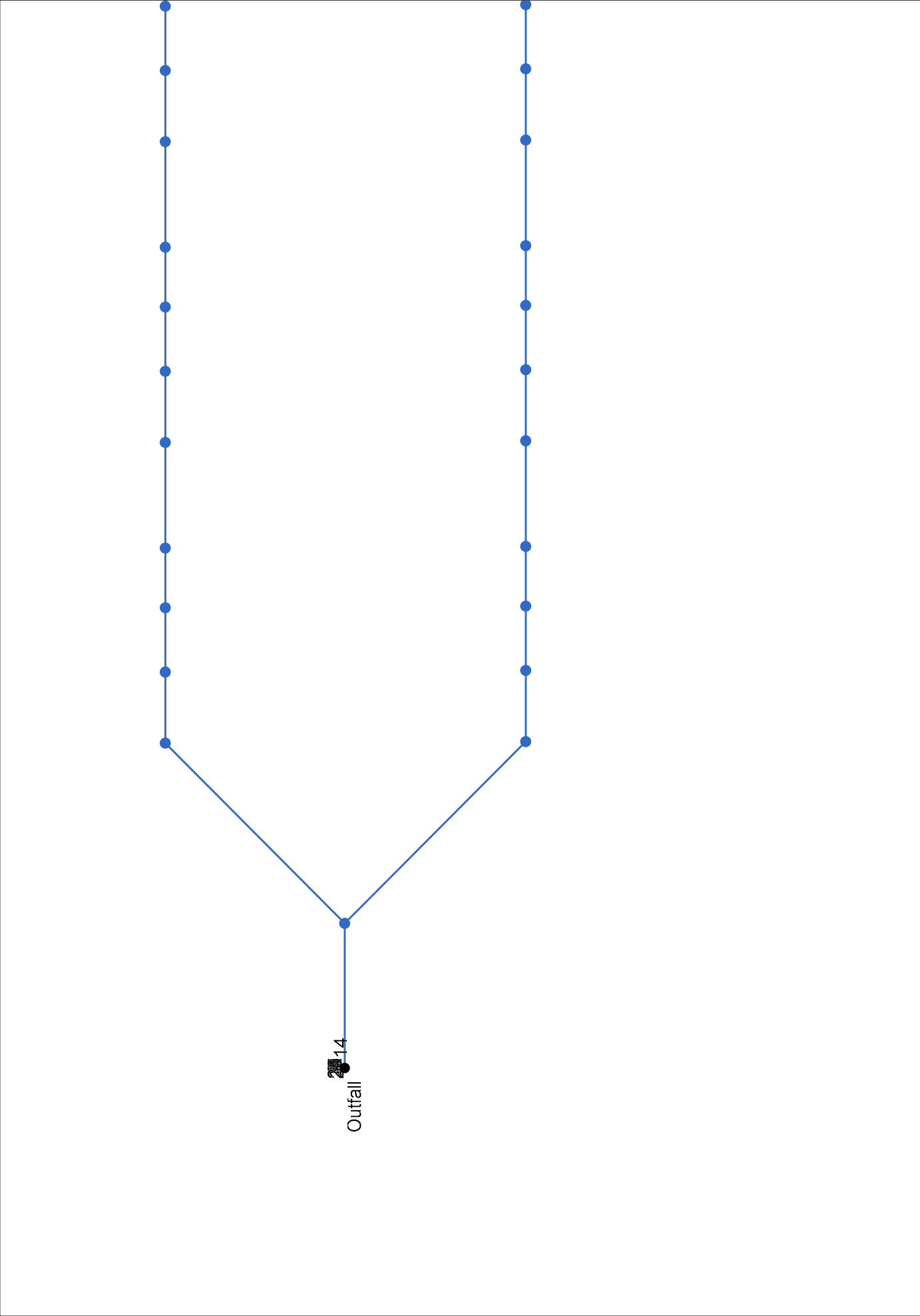
Storm Sewer Tabulation

Station		Len (ft)	Drmg Area		Rnoff coeff (C)	Area x C		Tc		Rain (l) (in/hr)	Total flow (cfs)	Cap full (cfs)	Vel (ft/s)	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID
Line	To Line		Incr (ac)	Total (ac)		Incr Total	Inlet (min)	Syst (min)	Size (in)					Slope (%)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)		
1	End	15.000	0.56	0.89	0.65	0.36	0.58	10.0	10.9	6.3	3.64	7.43	4.20	18	0.50	-1.50	-1.43	-0.77	-0.67	0.00	189.96	HW - A11
2	1	63.000	0.33	0.33	0.65	0.21	0.21	10.0	10.0	6.5	1.39	4.57	2.32	15	0.50	-1.18	-0.86	-0.40	-0.34	189.96	190.69	A11 - A12
														Number of lines: 2		Run Date: 6/25/2024						
26																						
NOTES: Intensity = 106.91 / (Inlet time + 13.90) ^ 0.88; Return period = Yrs. 25 ; c = cir e = ellip b = box																						



Storm Sewer Tabulation

Station		Len (ft)	Drng Area		Rnoff coeff (C)	Area x C		Tc		Rain (l) (in/hr)	Total flow (cfs)	Cap full (cfs)	Vel (ft/s)	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID	
Line	To Line		Incr (ac)	Total (ac)		Incr	Total	Inlet (min)	Syst (min)					Size (in)	Slope (%)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)		
1	End	36,000	0.28	1.54	0.65	0.18	1.00	10.0	14.3	5.6	5.62	7.43	4.74	18	0.50	-1.50	-1.32	-0.59	-0.32	0.00	192.37	HW - A18	
2	1	28,000	0.31	0.31	0.65	0.20	0.20	10.0	10.0	6.5	1.31	4.57	1.07	15	0.50	-1.07	-0.93	0.39	0.40	192.37	192.37	A18 - A17	
3	1	114,000	0.20	0.65	0.65	0.13	0.42	10.0	13.3	5.8	2.45	4.57	2.13	15	0.50	-1.07	-0.50	0.39	0.53	192.37	195.05	A18 - A105	
4	3	372,000	0.18	0.45	0.65	0.12	0.29	10.0	10.2	6.4	1.88	4.57	2.63	15	0.50	-0.50	1.36	0.65	1.91	195.05	198.87	A105 - A3	
5	1	188,000	0.16	0.30	0.65	0.10	0.20	10.0	10.3	6.4	1.26	4.57	1.51	15	0.50	-1.07	-0.13	0.39	0.51	192.37	198.86	A18 - A524	
6	5	30,000	0.14	0.14	0.65	0.09	0.09	10.0	10.0	6.5	0.59	4.57	0.92	15	0.50	-0.13	0.02	0.60	0.60	198.86	198.86	A524 - A533	
7	4	28,000	0.27	0.27	0.65	0.18	0.18	10.0	10.0	6.5	1.14	4.57	2.61	15	0.50	1.36	1.50	1.91	1.94	198.87	19887.00	A3 - A4	
27A												Number of lines: 7										Run Date: 6/25/2024	
NOTES: Intensity = 106.91 / (Inlet time + 13.90) ^ 0.88; Return period = Yrs. 25 ; c = cir e = ellip b = box																							



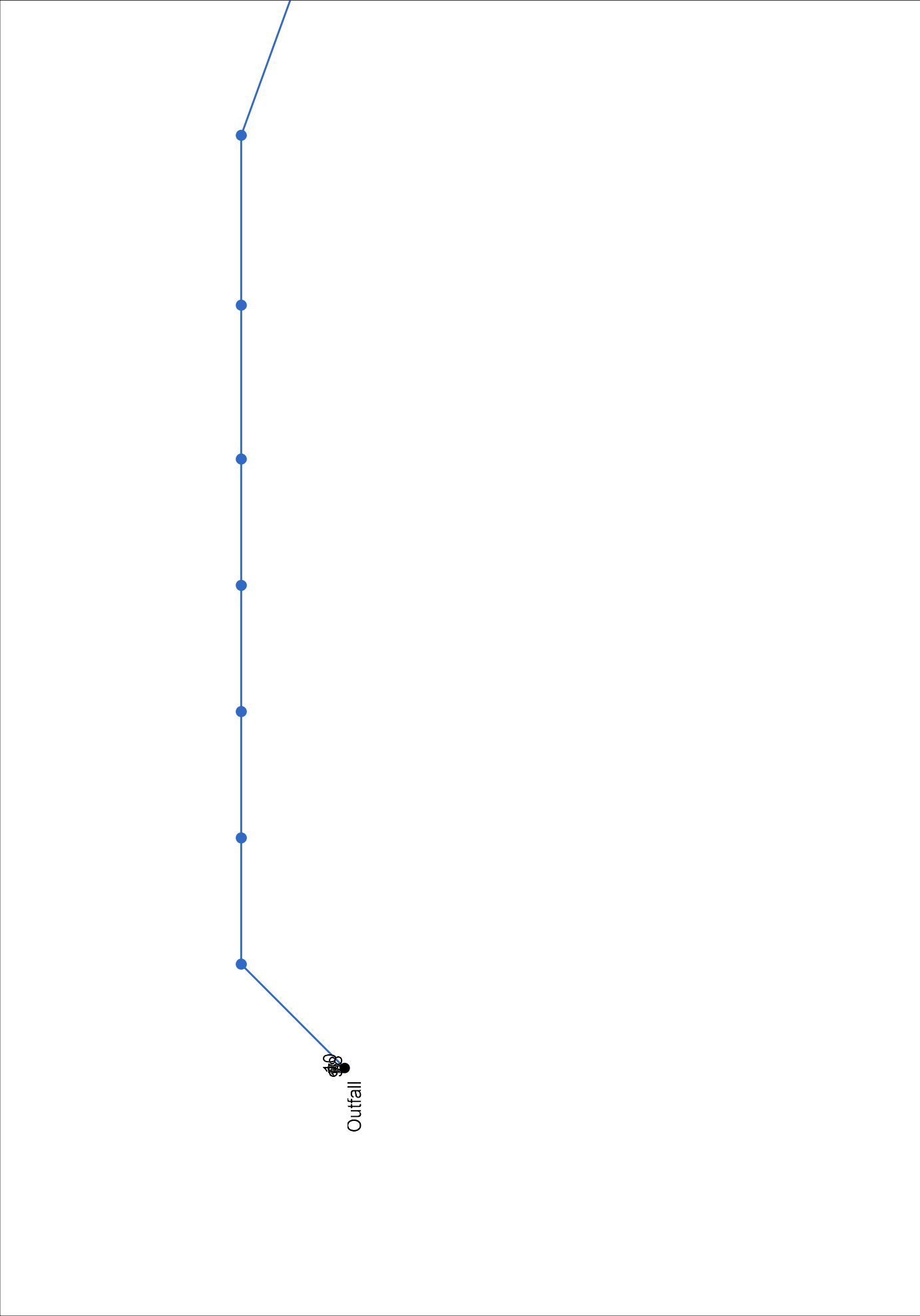
Project File: 27B.stm	Number of lines: 25	Date: 6/25/2024
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Storm Sewer Tabulation

Station		Len (ft)	Drng Area		Rnoff coeff (C)	Area x C		Tc		Rain (l) (in/hr)	Total flow (cfs)	Cap full (cfs)	Vel (ft/s)	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID
Line	To Line		Incr (ac)	Total (ac)		Incr	Total	Inlet (min)	Syst (min)					Size (in)	Slope (%)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	
1	End	63,000	0.81	2.08	0.65	0.53	1.35	10.0	14.5	5.6	7.53	15.99	4.96	24	0.50	-2.00	-1.69	-1.03	-0.71	0.00	203.72	HW - A447
2	1	111,000	0.03	0.36	0.65	0.02	0.23	10.0	12.9	5.9	1.37	4.57	3.26	15	0.50	-0.93	-0.38	-0.46	0.09	203.72	205.00	A447 - A557
3	2	31,000	0.04	0.33	0.65	0.03	0.21	10.0	12.6	5.9	1.27	4.57	2.30	15	0.50	-0.38	-0.22	0.28	0.29	205.00	205.00	A557 - A558
4	3	28,000	0.02	0.29	0.65	0.01	0.19	10.0	12.4	6.0	1.13	4.57	2.43	15	0.50	-0.22	-0.08	0.35	0.37	205.00	205.00	A558 - A559
5	4	26,000	0.03	0.27	0.65	0.02	0.18	10.0	12.2	6.0	1.06	4.57	2.60	15	0.50	-0.08	0.05	0.43	0.46	205.00	205.00	A559 - A560
6	5	46,000	0.03	0.24	0.65	0.02	0.16	10.0	11.8	6.1	0.95	4.57	2.57	15	0.50	0.05	0.28	0.53	0.66	205.00	205.50	A560 - A561
7	6	31,000	0.04	0.21	0.65	0.03	0.14	10.0	11.5	6.1	0.84	4.57	2.47	15	0.50	0.28	0.43	0.73	0.79	205.50	205.50	A561 - A562
8	7	28,000	0.02	0.17	0.65	0.01	0.11	10.0	11.3	6.2	0.69	4.57	2.28	15	0.50	0.43	0.57	0.85	0.90	205.50	205.50	A562 - A563
9	8	26,000	0.03	0.15	0.65	0.02	0.10	10.0	11.1	6.2	0.61	4.57	2.26	15	0.50	0.57	0.70	0.95	1.01	205.50	205.50	A563- A564
10	9	46,000	0.03	0.12	0.65	0.02	0.08	10.0	10.7	6.3	0.49	4.57	2.07	15	0.50	0.70	0.93	1.06	1.21	205.50	206.00	A564 - A565
11	10	31,000	0.04	0.09	0.65	0.03	0.06	10.0	10.5	6.4	0.37	4.57	1.88	15	0.50	0.93	1.09	1.25	1.32	206.00	206.00	A565 - A566
12	11	28,000	0.02	0.05	0.65	0.01	0.03	10.0	10.2	6.4	0.21	4.57	1.45	15	0.50	1.09	1.23	1.36	1.41	206.00	206.00	A566 - A567
13	12	26,000	0.03	0.03	0.65	0.02	0.02	10.0	10.0	6.5	0.13	4.57	1.31	15	0.50	1.23	1.36	1.44	1.49	206.00	206.00	A567 - A568
14	1	112,000	0.03	0.91	0.65	0.02	0.59	10.0	12.9	5.9	3.48	4.57	4.10	15	0.50	-0.93	-0.37	-0.12	0.44	203.72	205.00	A447 - A559
15	14	31,000	0.04	0.88	0.65	0.03	0.57	10.0	12.6	5.9	3.39	4.57	3.06	15	0.50	-0.37	-0.22	0.74	0.79	205.00	205.00	A569 - A570
16	15	28,000	0.02	0.84	0.65	0.01	0.55	10.0	12.4	6.0	3.26	4.57	2.98	15	0.50	-0.22	-0.08	0.87	0.92	205.00	205.00	A570 - A570B
17	16	26,000	0.30	0.82	0.65	0.20	0.53	10.0	12.2	6.0	3.21	4.57	2.96	15	0.50	-0.08	0.05	1.00	1.04	205.00	205.00	A570B - A571
18	17	46,000	0.03	0.52	0.65	0.02	0.34	10.0	11.8	6.1	2.06	4.57	2.07	15	0.50	0.05	0.28	1.11	1.14	205.00	205.50	A571 - A572
19	18	31,000	0.04	0.49	0.65	0.03	0.32	10.0	11.5	6.1	1.96	4.57	2.27	15	0.50	0.28	0.44	1.18	1.20	205.50	205.50	A572- A573
20	19	28,000	0.02	0.45	0.65	0.01	0.29	10.0	11.3	6.2	1.81	4.57	2.37	15	0.50	0.44	0.58	1.25	1.27	205.50	205.50	A573 - A574
21	20	26,000	0.31	0.43	0.65	0.20	0.28	10.0	11.1	6.2	1.75	4.57	2.56	15	0.50	0.58	0.71	1.32	1.34	205.50	205.50	A574- A575
22	21	46,000	0.03	0.12	0.65	0.02	0.08	10.0	10.7	6.3	0.49	4.57	0.95	15	0.50	0.71	0.94	1.40	1.40	205.50	206.00	A575 - A576
27B		Number of lines: 25										Run Date: 6/25/2024										
NOTES:Intensity = 106.91 / (Inlet time + 13.90) ^ 0.88; Return period =Yrs. 25 ; c = cir e = ellip b = box																						

Storm Sewer Tabulation

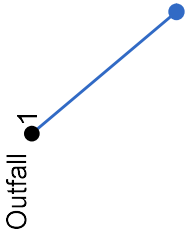
Station		Len (ft)	Drng Area		Rnoff coeff (C)	Area x C		Tc		Rain (l) (in/hr)	Total flow (cfs)	Cap full (cfs)	Vel (ft/s)	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID				
Line	To Line		Incr (ac)	Total (ac)		Incr	Total	Inlet (min)	Syst (min)					Size (in)	Slope (%)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)					
23	22	31.000	0.04	0.09	0.65	0.03	0.06	10.0	10.5	6.4	0.37	4.57	1.16	15	0.50	0.93	1.09	1.41	1.42	206.00	206.00	A576 - A577				
24	23	28.000	0.02	0.05	0.65	0.01	0.03	10.0	10.2	6.4	0.21	4.57	1.10	15	0.50	1.09	1.23	1.43	1.45	206.00	206.00	A577 - A578				
25	24	26.000	0.03	0.03	0.65	0.02	0.02	10.0	10.0	6.5	0.13	4.57	1.19	15	0.50	1.23	1.36	1.47	1.50	206.00	206.00	A578 - A579				
27B																							Number of lines: 25		Run Date: 6/25/2024	
NOTES: Intensity = 106.91 / (Inlet time + 13.90) ^ 0.88; Return period = Yrs. 25 ; c = cir e = ellip b = box																										



Project File: 28A.stm	Number of lines: 10	Date: 6/25/2024
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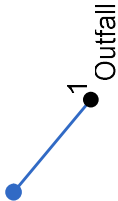
Storm Sewer Tabulation

Station		Len (ft)	Drng Area		Rnoff coeff (C)	Area x C		Tc		Rain (l) (in/hr)	Total flow (cfs)	Cap full (cfs)	Vel (ft/s)	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID	
Line	To Line		Incr	Total		Incr	Total	Inlet (min)	Syst (min)					Size (in)	Slope (%)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)		
1	End	64,000	0.38	2.20	0.65	0.25	1.43	10.0	15.1	5.5	7.83	15.99	5.02	24	0.50	-2.00	-1.68	-1.01	-0.69	0.00	181.00	HW - A534	
2	1	55,000	0.09	1.82	0.65	0.06	1.18	10.0	14.7	5.6	6.57	15.99	4.47	24	0.50	-1.68	-1.41	-0.69	-0.50	181.00	181.84	A534 - A535	
3	2	55,000	0.09	1.73	0.65	0.06	1.12	10.0	14.2	5.6	6.33	15.99	4.63	24	0.50	-1.41	-1.13	-0.50	-0.24	181.84	182.67	A535 - A536	
4	3	55,000	0.09	1.64	0.65	0.06	1.07	10.0	13.8	5.7	6.09	7.43	4.69	18	0.50	-0.63	-0.36	0.40	0.68	182.67	183.51	A536 - A537	
5	4	55,000	0.12	1.55	0.65	0.08	1.01	10.0	13.3	5.8	5.84	7.43	4.08	18	0.50	-0.36	-0.08	0.85	0.99	183.51	184.35	A537 - A538	
6	5	67,000	0.21	1.43	0.65	0.14	0.93	10.0	12.7	5.9	5.49	7.43	3.90	18	0.50	-0.08	0.25	1.14	1.29	184.35	185.15	A538 - A539	
7	6	74,000	0.35	1.22	0.65	0.23	0.79	10.0	12.1	6.0	4.78	7.43	3.68	18	0.50	0.25	0.62	1.43	1.56	185.15	187.00	A539 - A540	
8	7	110,000	0.27	0.87	0.65	0.18	0.57	10.0	11.2	6.2	3.52	4.57	4.08	15	0.50	0.88	1.43	1.72	2.24	187.00	188.00	A540 - A541	
9	8	77,000	0.32	0.60	0.65	0.21	0.39	10.0	10.6	6.4	2.48	4.57	2.40	15	0.50	1.43	1.81	2.60	2.68	188.00	189.67	A541 - A542	
10	9	68,000	0.28	0.28	0.65	0.18	0.18	10.0	10.0	6.5	1.18	4.57	1.50	15	0.50	1.81	2.15	2.78	2.80	189.67	189.97	A542 - A543	
Number of lines: 10																						Run Date: 6/25/2024	
NOTES: Intensity = 106.91 / (Inlet time + 13.90) ^ 0.88; Return period = Yrs. 25 ; c = cir e = ellip b = box																							



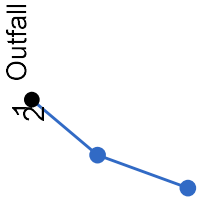
Page 1

Storm Sewers v2022.00



Page 1

Storm Sewers v2022.00



Storm Sewer Tabulation

Station		Len (ft)	Dmg Area		Rnoff coeff (C)	Area x C		Tc		Rain (l) (in/hr)	Total flow (cfs)	Cap full (cfs)	Vel (ft/s)	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID
Line	To Line		Incr (ac)	Total (ac)		Incr	Total	Inlet (min)	Syst (min)					Size (in)	Slope (%)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	
1	End	25,000	0.07	0.13	0.65	0.05	0.08	10.0	12.3	6.0	0.51	4.57	2.46	15	0.50	-1.25	-1.13	-0.97	-0.84	0.00	196.34	HW - A47
2	1	28,000	0.06	0.06	0.65	0.04	0.04	10.0	10.0	6.5	0.25	4.57	1.34	15	0.50	-1.13	-0.99	-0.79	-0.76	196.34	196.27	A47 - A48
30														Number of lines: 2				Run Date: 6/25/2024				
NOTES: Intensity = 106.91 / (Inlet time + 13.90) ^ 0.88; Return period = Yrs. 25 ; c = cir e = ellip b = box																						

Venue at Hopewell
Stormwater Management Report
June 25, 2024
BCG File: 081391-01-001

APPENDIX 4

DRAINAGE AREA MAPS

