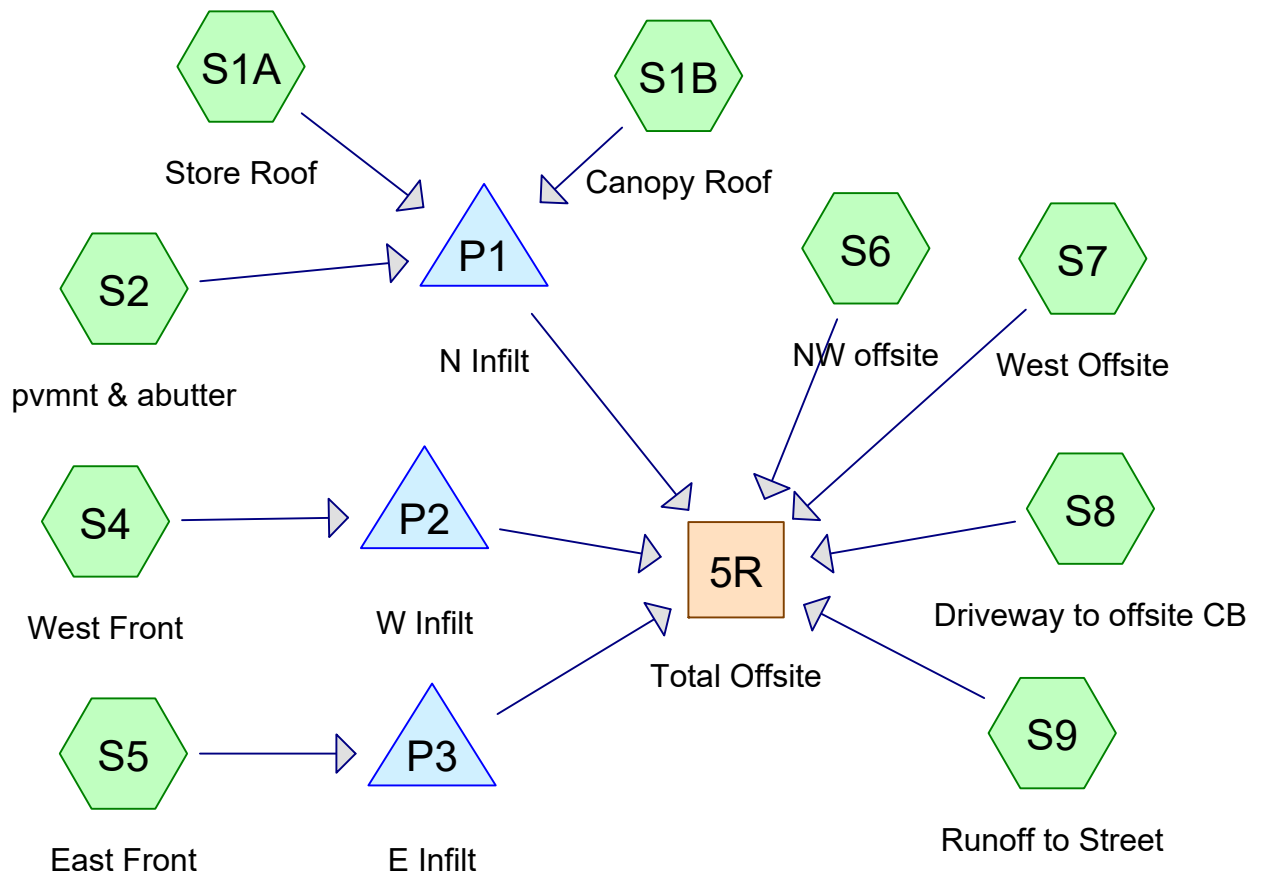


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Rainfall Events Listing

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	2 Yr	Type II 24-hr		Default	24.00	1	3.18	2
2	10 Yr	Type II 24-hr		Default	24.00	1	4.90	2
3	100 Yr	Type II 24-hr		Default	24.00	1	9.10	2

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Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
0.439	39	>75% Grass cover, Good, HSG A (S2, S5, S6)
0.169	61	>75% Grass cover, Good, HSG B (S2, S4, S5, S6, S7, S9)
0.692	98	Paved parking, HSG B (S2, S4, S5, S8, S9)
0.193	98	Roofs, HSG B (S1A, S1B)
0.009	98	Unconnected roofs, HSG A (S2)
0.024	98	Unconnected roofs, HSG B (S5)
1.526	77	TOTAL AREA

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Soil Listing (all nodes)

Area (acres)	Soil Group	Subcatchment Numbers
0.448	HSG A	S2, S5, S6
1.079	HSG B	S1A, S1B, S2, S4, S5, S6, S7, S8, S9
0.000	HSG C	
0.000	HSG D	
0.000	Other	
1.526		TOTAL AREA

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Ground Covers (all nodes)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
0.439	0.169	0.000	0.000	0.000	0.608	>75% Grass cover, Good	S2, S4, S5, S6, S7, S9
0.000	0.692	0.000	0.000	0.000	0.692	Paved parking	S2, S4, S5, S8, S9
0.000	0.193	0.000	0.000	0.000	0.193	Roofs	S1A, S1B
0.009	0.024	0.000	0.000	0.000	0.033	Unconnected roofs	S2, S5
0.448	1.079	0.000	0.000	0.000	1.526	TOTAL AREA	

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Type II 24-hr 2 Yr Rainfall=3.18"

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Time span=0.00-28.00 hrs, dt=0.02 hrs, 1401 points
 Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
 Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment S1A: Store Roof	Runoff Area=4,845 sf 100.00% Impervious Runoff Depth=2.95" Tc=6.0 min CN=98 Runoff=0.50 cfs 0.027 af
Subcatchment S1B: Canopy Roof	Runoff Area=3,568 sf 100.00% Impervious Runoff Depth=2.95" Tc=6.0 min CN=98 Runoff=0.37 cfs 0.020 af
Subcatchment S2: pvmnt & abutter	Runoff Area=28,226 sf 71.12% Impervious Runoff Depth=1.52" Tc=6.0 min CN=82 Runoff=1.76 cfs 0.082 af
Subcatchment S4: West Front	Runoff Area=5,424 sf 77.86% Impervious Runoff Depth=2.15" Tc=6.0 min CN=90 Runoff=0.46 cfs 0.022 af
Subcatchment S5: East Front	Runoff Area=14,990 sf 32.28% Impervious Runoff Depth=0.37" Tc=6.0 min CN=59 Runoff=0.16 cfs 0.011 af
Subcatchment S6: NW offsite	Runoff Area=5,241 sf 0.00% Impervious Runoff Depth=0.17" Tc=6.0 min CN=52 Runoff=0.01 cfs 0.002 af
Subcatchment S7: West Offsite	Runoff Area=931 sf 0.00% Impervious Runoff Depth=0.44" Tc=6.0 min CN=61 Runoff=0.01 cfs 0.001 af
Subcatchment S8: Driveway to offsite CB	Runoff Area=1,074 sf 100.00% Impervious Runoff Depth=2.95" Tc=6.0 min CN=98 Runoff=0.11 cfs 0.006 af
Subcatchment S9: Runoff to Street	Runoff Area=2,188 sf 63.12% Impervious Runoff Depth=1.67" Tc=6.0 min CN=84 Runoff=0.15 cfs 0.007 af
Reach 5R: Total Offsite	Inflow=0.27 cfs 0.015 af Outflow=0.27 cfs 0.015 af
Pond P1: N Infiltration	Peak Elev=58.05' Storage=2,843 cf Inflow=2.62 cfs 0.130 af Discarded=0.11 cfs 0.129 af Primary=0.00 cfs 0.000 af Outflow=0.11 cfs 0.129 af
Pond P2: W Infiltration	Peak Elev=56.87' Storage=450 cf Inflow=0.46 cfs 0.022 af Discarded=0.02 cfs 0.022 af Primary=0.00 cfs 0.000 af Outflow=0.02 cfs 0.022 af
Pond P3: E Infiltration	Peak Elev=56.98' Storage=80 cf Inflow=0.16 cfs 0.011 af Discarded=0.03 cfs 0.011 af Primary=0.00 cfs 0.000 af Outflow=0.03 cfs 0.011 af

Total Runoff Area = 1.526 ac Runoff Volume = 0.178 af Average Runoff Depth = 1.40"
39.83% Pervious = 0.608 ac 60.17% Impervious = 0.918 ac

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Type II 24-hr 2 Yr Rainfall=3.18"

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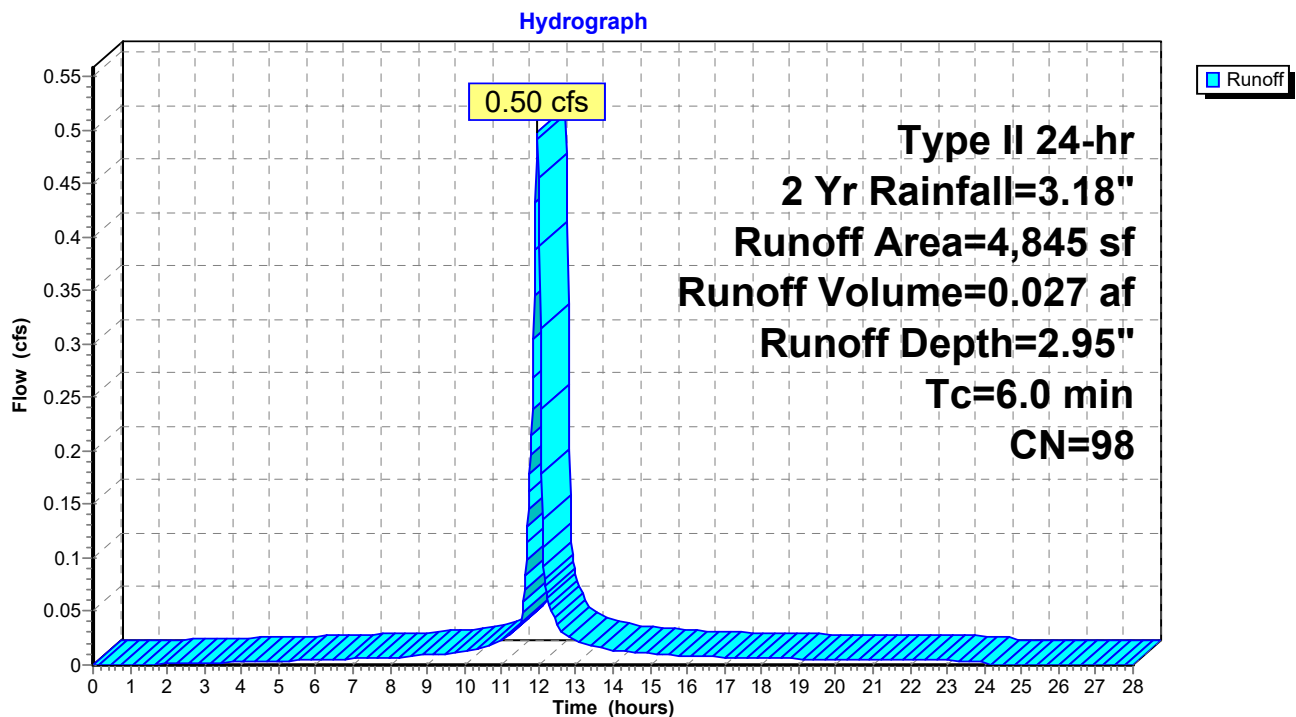
Summary for Subcatchment S1A: Store Roof

Runoff = 0.50 cfs @ 11.97 hrs, Volume= 0.027 af, Depth= 2.95"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-28.00 hrs, dt= 0.02 hrs
Type II 24-hr 2 Yr Rainfall=3.18"

Area (sf)	CN	Description
4,845	98	Roofs, HSG B
4,845		100.00% Impervious Area

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

Subcatchment S1A: Store Roof

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Type II 24-hr 2 Yr Rainfall=3.18"

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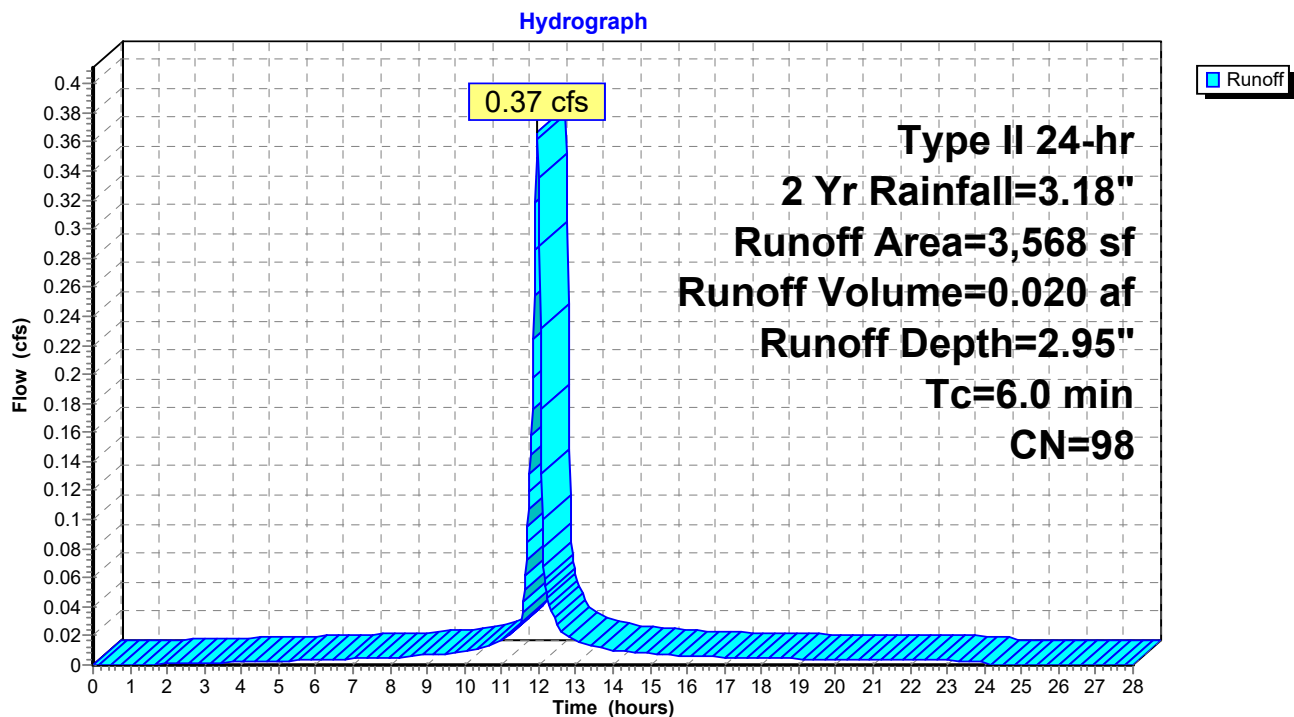
Summary for Subcatchment S1B: Canopy Roof

Runoff = 0.37 cfs @ 11.97 hrs, Volume= 0.020 af, Depth= 2.95"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-28.00 hrs, dt= 0.02 hrs
Type II 24-hr 2 Yr Rainfall=3.18"

Area (sf)	CN	Description
3,568	98	Roofs, HSG B
3,568		100.00% Impervious Area

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

Subcatchment S1B: Canopy Roof

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Type II 24-hr 2 Yr Rainfall=3.18"

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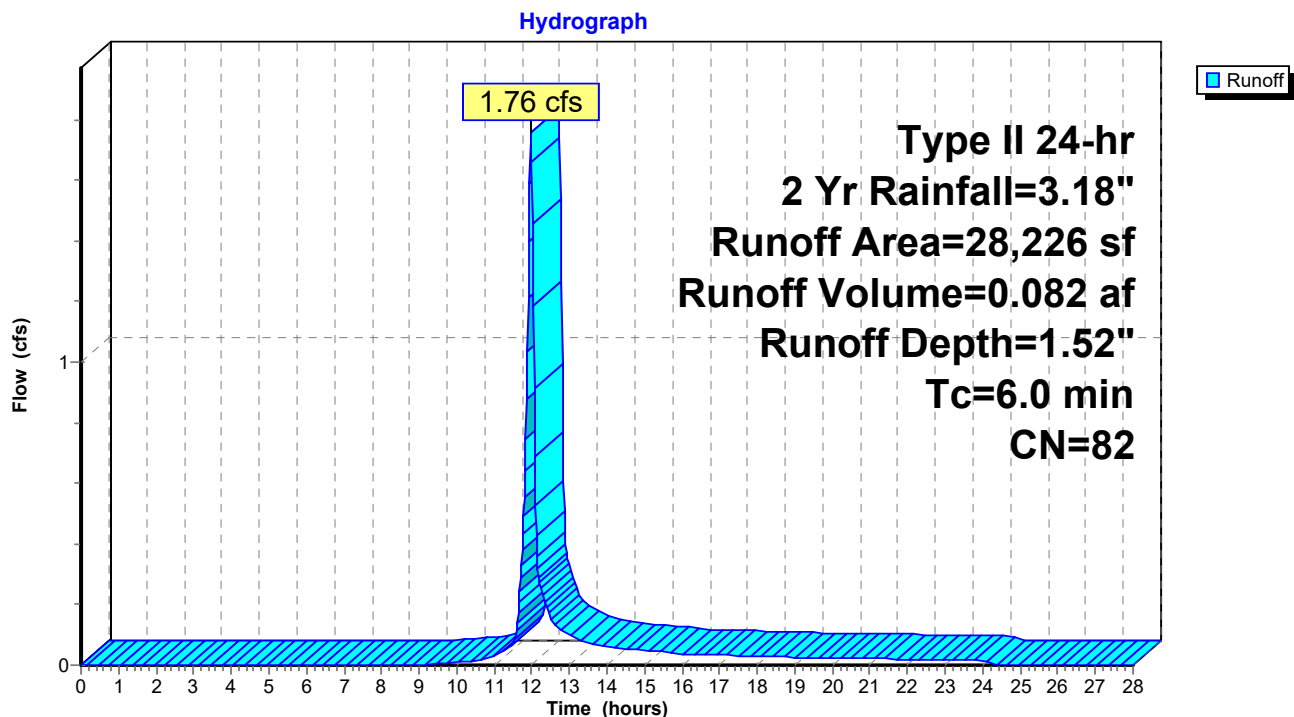
Summary for Subcatchment S2: pvmnt & abutter

Runoff = 1.76 cfs @ 11.97 hrs, Volume= 0.082 af, Depth= 1.52"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-28.00 hrs, dt= 0.02 hrs
Type II 24-hr 2 Yr Rainfall=3.18"

Area (sf)	CN	Description
11,454	98	Paved parking, HSG B
8,231	98	Paved parking, HSG B
246	61	>75% Grass cover, Good, HSG B
630	61	>75% Grass cover, Good, HSG B
7,275	39	>75% Grass cover, Good, HSG A
390	98	Unconnected roofs, HSG A
28,226	82	Weighted Average
8,151		28.88% Pervious Area
20,075		71.12% Impervious Area
390		1.94% Unconnected

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

Subcatchment S2: pvmnt & abutter

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Type II 24-hr 2 Yr Rainfall=3.18"

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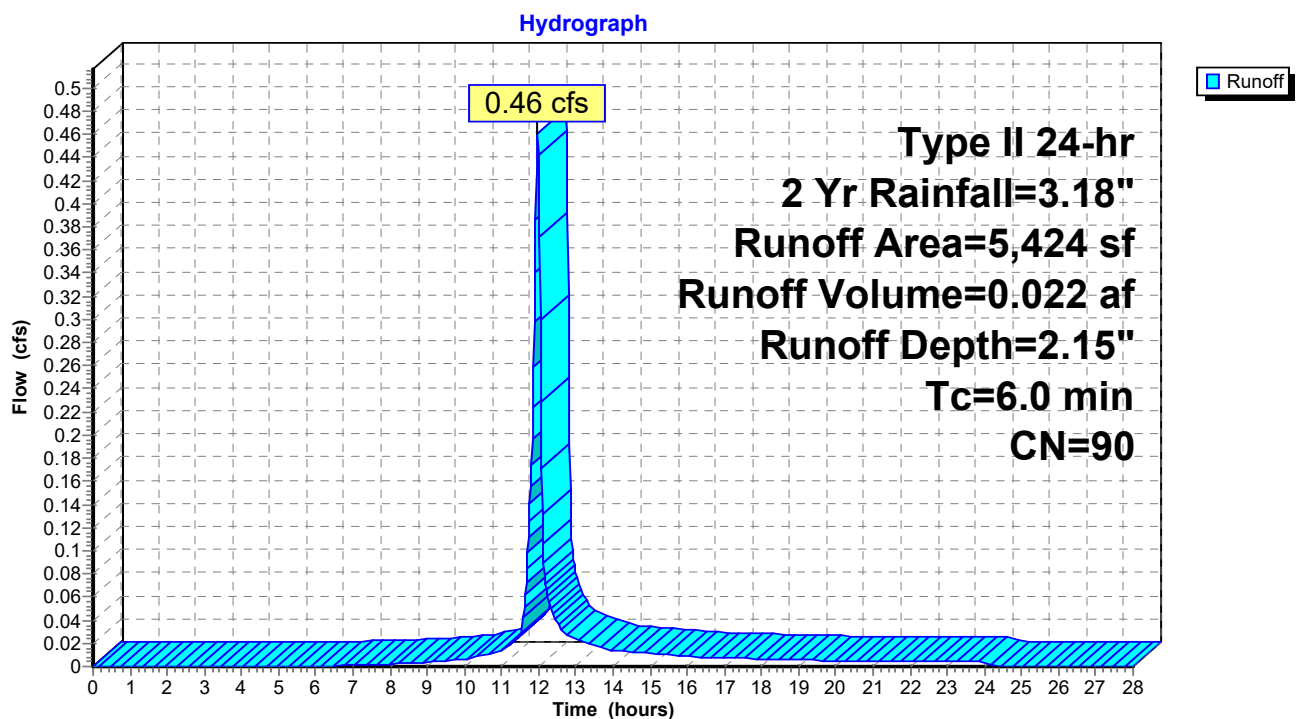
Summary for Subcatchment S4: West Front

Runoff = 0.46 cfs @ 11.97 hrs, Volume= 0.022 af, Depth= 2.15"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-28.00 hrs, dt= 0.02 hrs
Type II 24-hr 2 Yr Rainfall=3.18"

Area (sf)	CN	Description
4,223	98	Paved parking, HSG B
1,201	61	>75% Grass cover, Good, HSG B
5,424	90	Weighted Average
1,201		22.14% Pervious Area
4,223		77.86% Impervious Area

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

Subcatchment S4: West Front

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Type II 24-hr 2 Yr Rainfall=3.18"

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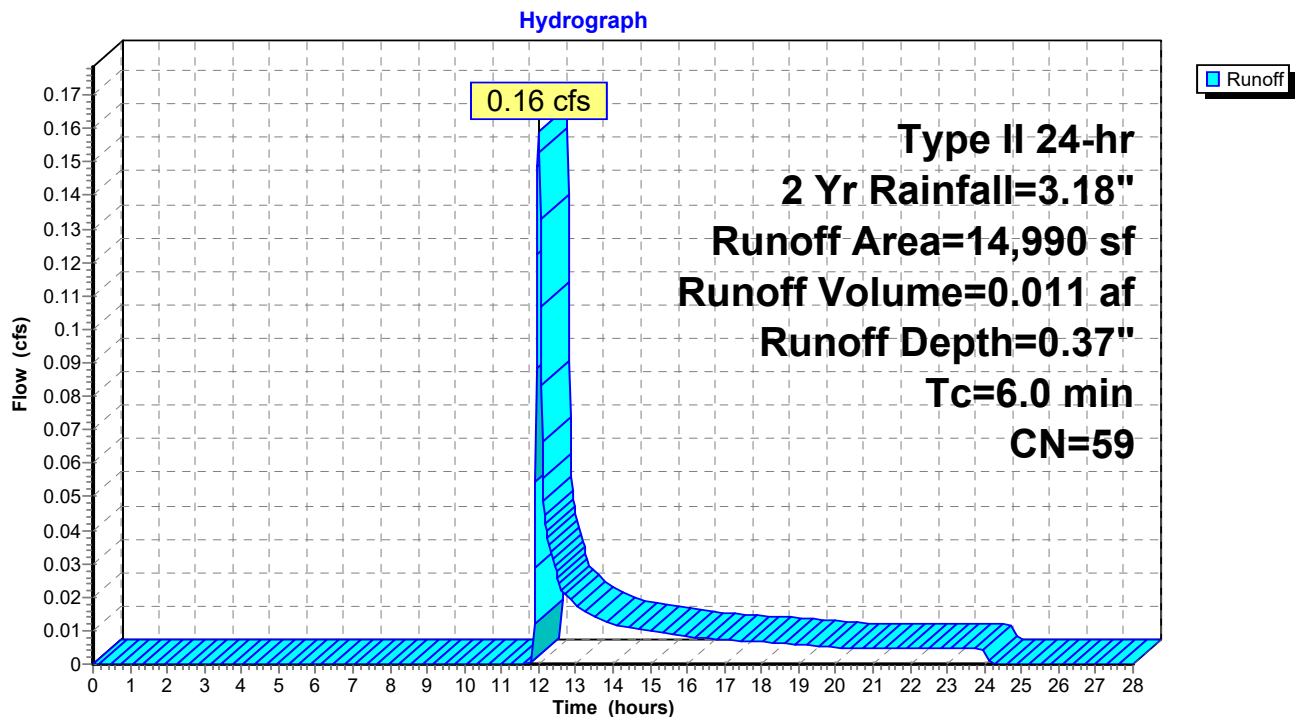
Summary for Subcatchment S5: East Front

Runoff = 0.16 cfs @ 12.00 hrs, Volume= 0.011 af, Depth= 0.37"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-28.00 hrs, dt= 0.02 hrs
Type II 24-hr 2 Yr Rainfall=3.18"

Area (sf)	CN	Description
3,798	98	Paved parking, HSG B
498	61	>75% Grass cover, Good, HSG B
1,041	98	Unconnected roofs, HSG B
9,653	39	>75% Grass cover, Good, HSG A
14,990	59	Weighted Average
10,151		67.72% Pervious Area
4,839		32.28% Impervious Area
1,041		21.51% Unconnected

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

Subcatchment S5: East Front

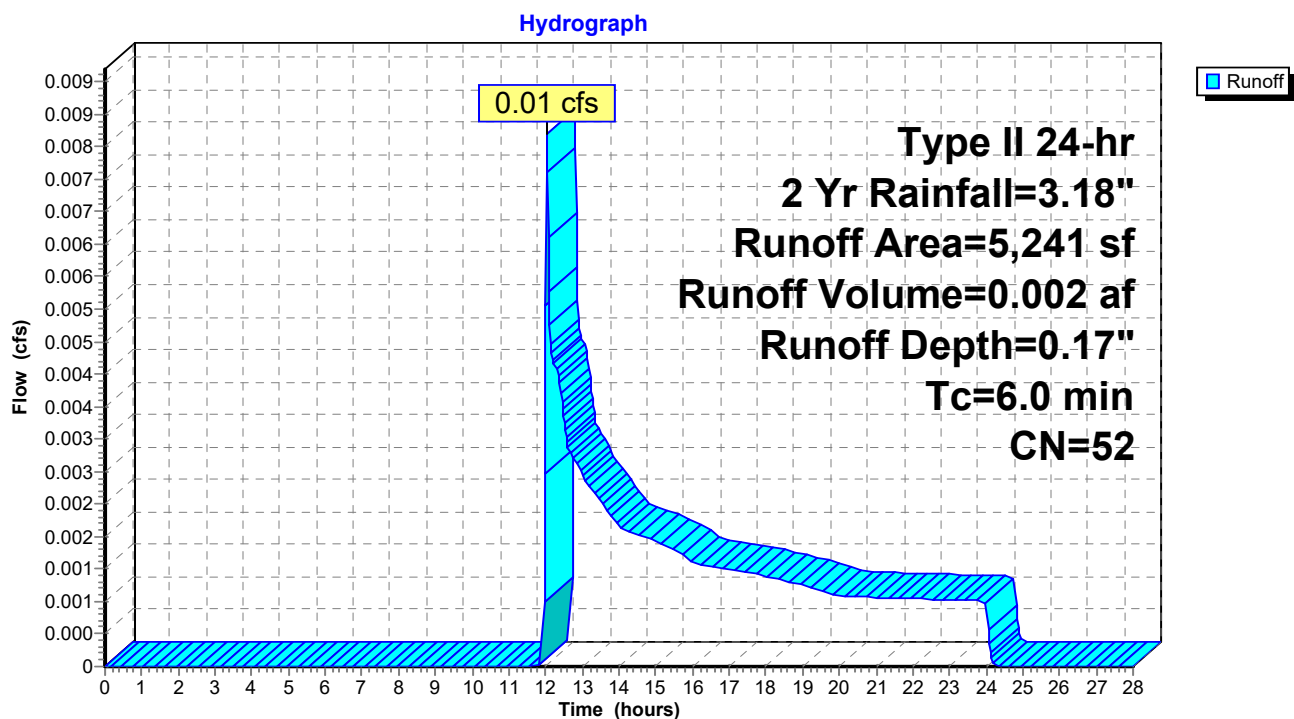
Summary for Subcatchment S6: NW offsite

Runoff = 0.01 cfs @ 12.04 hrs, Volume= 0.002 af, Depth= 0.17"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-28.00 hrs, dt= 0.02 hrs
Type II 24-hr 2 Yr Rainfall=3.18"

Area (sf)	CN	Description
949	61	>75% Grass cover, Good, HSG B
2,109	61	>75% Grass cover, Good, HSG B
2,183	39	>75% Grass cover, Good, HSG A
5,241	52	Weighted Average
5,241		100.00% Pervious Area

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

Subcatchment S6: NW offsite

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Type II 24-hr 2 Yr Rainfall=3.18"

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Summary for Subcatchment S7: West Offsite

Runoff = 0.01 cfs @ 12.00 hrs, Volume= 0.001 af, Depth= 0.44"

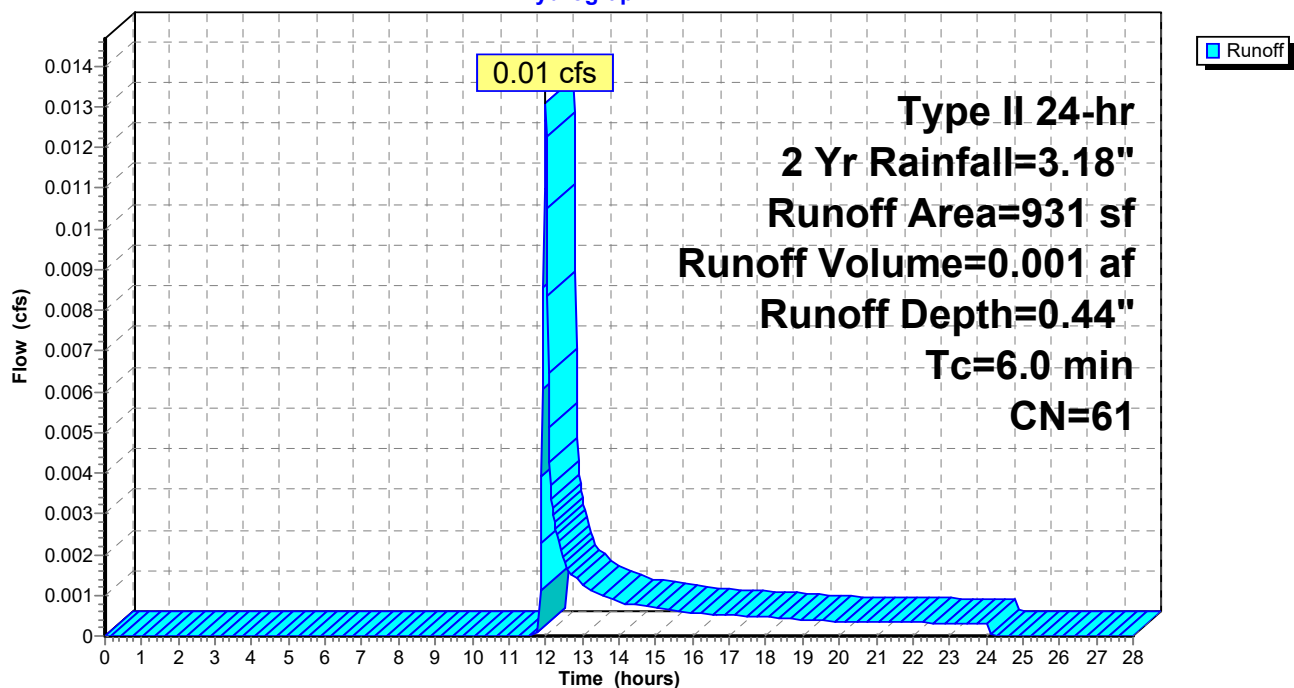
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-28.00 hrs, dt= 0.02 hrs
Type II 24-hr 2 Yr Rainfall=3.18"

Area (sf)	CN	Description
931	61	>75% Grass cover, Good, HSG B
931		100.00% Pervious Area

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

Subcatchment S7: West Offsite

Hydrograph



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Type II 24-hr 2 Yr Rainfall=3.18"

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Summary for Subcatchment S8: Driveway to offsite CB

Runoff = 0.11 cfs @ 11.97 hrs, Volume= 0.006 af, Depth= 2.95"

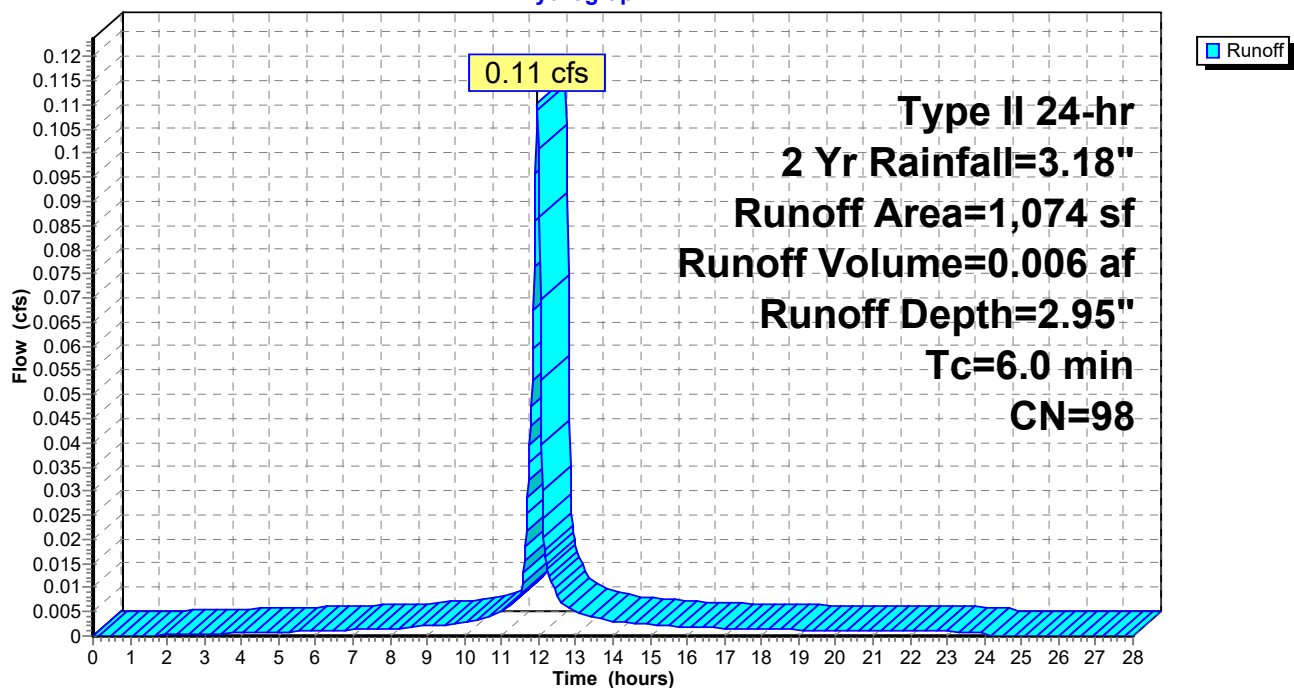
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-28.00 hrs, dt= 0.02 hrs
Type II 24-hr 2 Yr Rainfall=3.18"

Area (sf)	CN	Description
1,074	98	Paved parking, HSG B
1,074		100.00% Impervious Area

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

Subcatchment S8: Driveway to offsite CB

Hydrograph



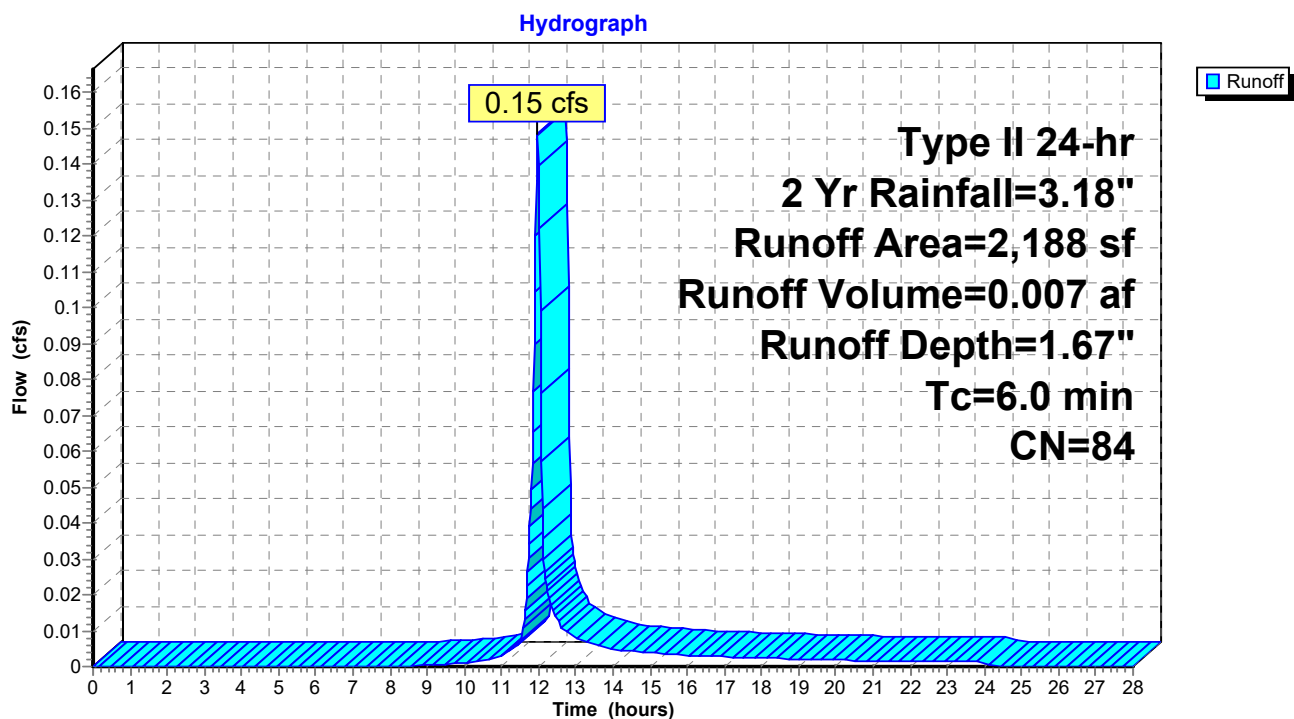
Summary for Subcatchment S9: Runoff to Street

Runoff = 0.15 cfs @ 11.97 hrs, Volume= 0.007 af, Depth= 1.67"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-28.00 hrs, dt= 0.02 hrs
Type II 24-hr 2 Yr Rainfall=3.18"

Area (sf)	CN	Description
1,381	98	Paved parking, HSG B
807	61	>75% Grass cover, Good, HSG B
2,188	84	Weighted Average
807		36.88% Pervious Area
1,381		63.12% Impervious Area

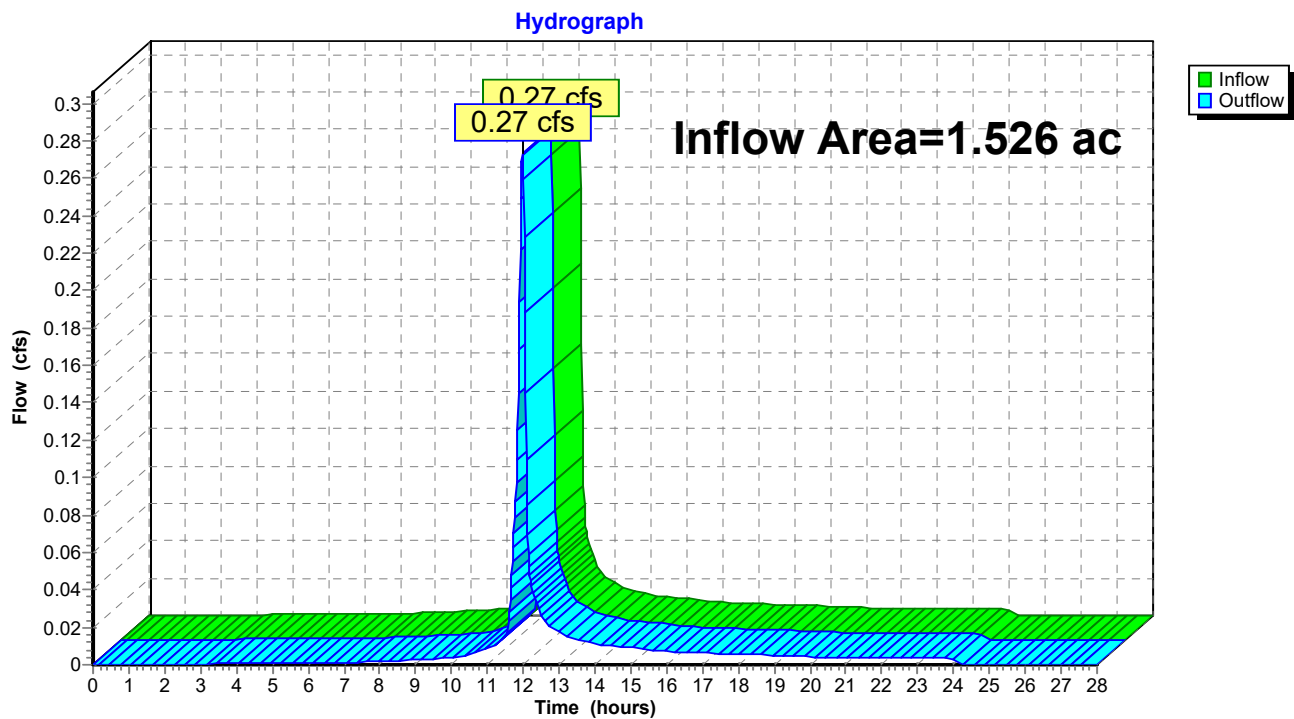
Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry, minimum

Subcatchment S9: Runoff to Street

Summary for Reach 5R: Total Offsite

Inflow Area = 1.526 ac, 60.17% Impervious, Inflow Depth = 0.12" for 2 Yr event
Inflow = 0.27 cfs @ 11.97 hrs, Volume= 0.015 af
Outflow = 0.27 cfs @ 11.97 hrs, Volume= 0.015 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-28.00 hrs, dt= 0.02 hrs

Reach 5R: Total Offsite

Summary for Pond P1: N Infil

Inflow Area = 0.841 ac, 77.75% Impervious, Inflow Depth = 1.85" for 2 Yr event
 Inflow = 2.62 cfs @ 11.97 hrs, Volume= 0.130 af
 Outflow = 0.11 cfs @ 12.04 hrs, Volume= 0.129 af, Atten= 96%, Lag= 4.1 min
 Discarded = 0.11 cfs @ 12.04 hrs, Volume= 0.129 af
 Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-28.00 hrs, dt= 0.02 hrs
 Peak Elev= 58.05' @ 13.52 hrs Surf.Area= 4,466 sf Storage= 2,843 cf
 Flood Elev= 60.70' Surf.Area= 4,466 sf Storage= 11,245 cf

Plug-Flow detention time= 281.3 min calculated for 0.129 af (100% of inflow)
 Center-of-Mass det. time= 280.5 min (1,084.3 - 803.8)

Volume	Invert	Avail.Storage	Storage Description
#1	56.50'	3,032 cf	Custom Stage Data (Prismatic) Listed below (Recalc) 16,874 cf Overall - 9,295 cf Embedded = 7,580 cf x 40.0% Voids
#2	57.50'	7,164 cf	ISI Rainstore3 8 x 287 Inside #1 Inside= 39.4"W x 31.5"H => 8.09 sf x 3.28'L = 26.6 cf Outside= 39.4"W x 31.5"H => 8.61 sf x 3.28'L = 28.3 cf 8,108 cf Overall x 94.0% Voids
#3	58.30'	1,048 cf	ISI Rainstore3 6 x 56 Inside #1 Inside= 39.4"W x 23.6"H => 6.07 sf x 3.28'L = 19.9 cf Outside= 39.4"W x 23.6"H => 6.46 sf x 3.28'L = 21.2 cf 1,187 cf Overall x 94.0% Voids
		11,245 cf	Total Available Storage

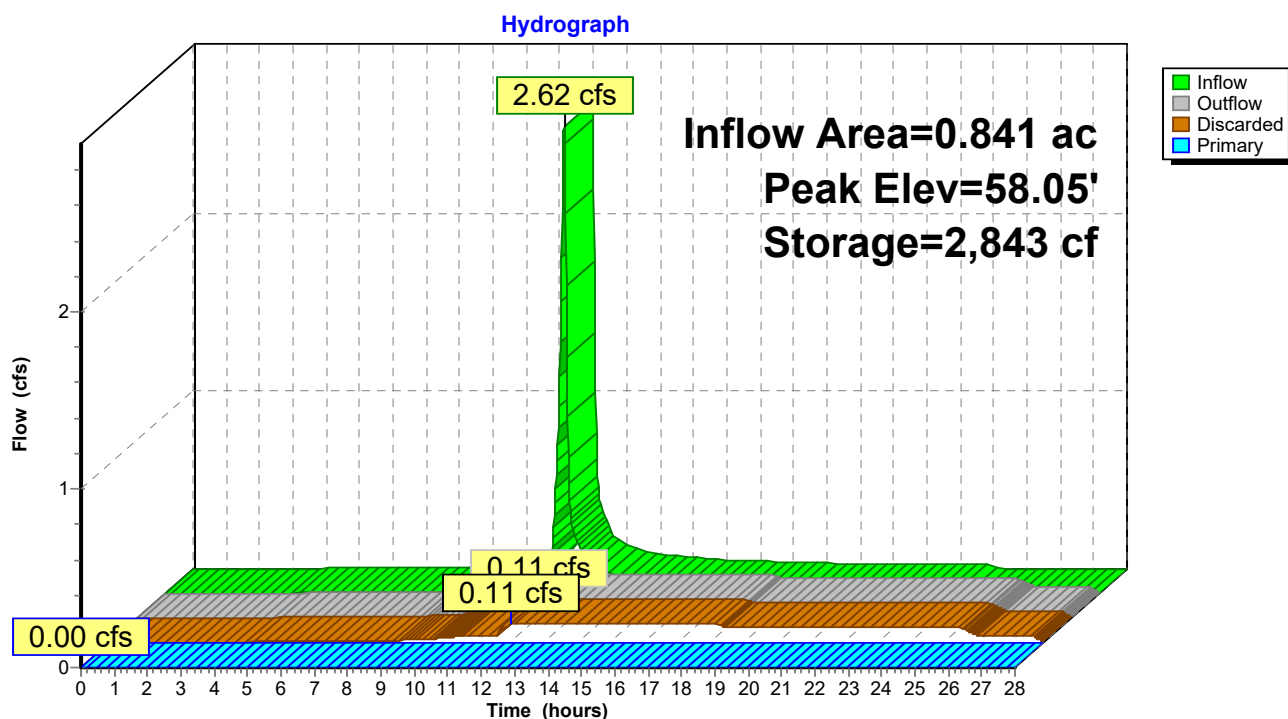
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
56.50	1,802	0	0
56.90	1,802	721	721
57.00	3,666	273	994
57.80	3,666	2,933	3,927
57.81	4,466	41	3,968
60.70	4,466	12,907	16,874

Device	Routing	Invert	Outlet Devices
#1	Discarded	56.50'	1.020 in/hr Exfiltration over Surface area
#2	Primary	59.30'	8.0" Round Culvert L= 120.0' CMP, mitered to conform to fill, Ke= 0.700 Inlet / Outlet Invert= 59.30' / 53.00' S= 0.0525 '/' Cc= 0.900 n= 0.010 PVC, smooth interior, Flow Area= 0.35 sf

Discarded OutFlow Max=0.11 cfs @ 12.04 hrs HW=57.83' (Free Discharge)
 ↑**1=Exfiltration** (Exfiltration Controls 0.11 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=56.50' (Free Discharge)
 ↑**2=Culvert** (Controls 0.00 cfs)

Pond P1: N Infil



Summary for Pond P2: W Infil

Inflow Area = 0.125 ac, 77.86% Impervious, Inflow Depth = 2.15" for 2 Yr event
 Inflow = 0.46 cfs @ 11.97 hrs, Volume= 0.022 af
 Outflow = 0.02 cfs @ 11.50 hrs, Volume= 0.022 af, Atten= 95%, Lag= 0.0 min
 Discarded = 0.02 cfs @ 11.50 hrs, Volume= 0.022 af
 Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-28.00 hrs, dt= 0.02 hrs
 Peak Elev= 56.87' @ 13.06 hrs Surf.Area= 947 sf Storage= 450 cf

Plug-Flow detention time= 174.8 min calculated for 0.022 af (100% of inflow)
 Center-of-Mass det. time= 174.7 min (978.8 - 804.1)

Volume	Invert	Avail.Storage	Storage Description
#1	56.00'	619 cf	Custom Stage Data (Prismatic) Listed below (Recalc) 2,841 cf Overall - 1,293 cf Embedded = 1,548 cf x 40.0% Voids
#2	56.50'	1,142 cf	ISI Rainstore3 6 x 61 Inside #1 Inside= 39.4"W x 23.6"H => 6.07 sf x 3.28'L = 19.9 cf Outside= 39.4"W x 23.6"H => 6.46 sf x 3.28'L = 21.2 cf 1,293 cf Overall x 94.0% Voids
1,761 cf			Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
56.00	947	0	0
59.00	947	2,841	2,841

Device	Routing	Invert	Outlet Devices
#1	Discarded	56.00'	1.020 in/hr Exfiltration over Horizontal area
#2	Primary	58.10'	8.0" Round Culvert L= 30.0' CMP, mitered to conform to fill, Ke= 0.700 Inlet / Outlet Invert= 58.10' / 53.00' S= 0.1700 '/' Cc= 0.900 n= 0.010 PVC, smooth interior, Flow Area= 0.35 sf

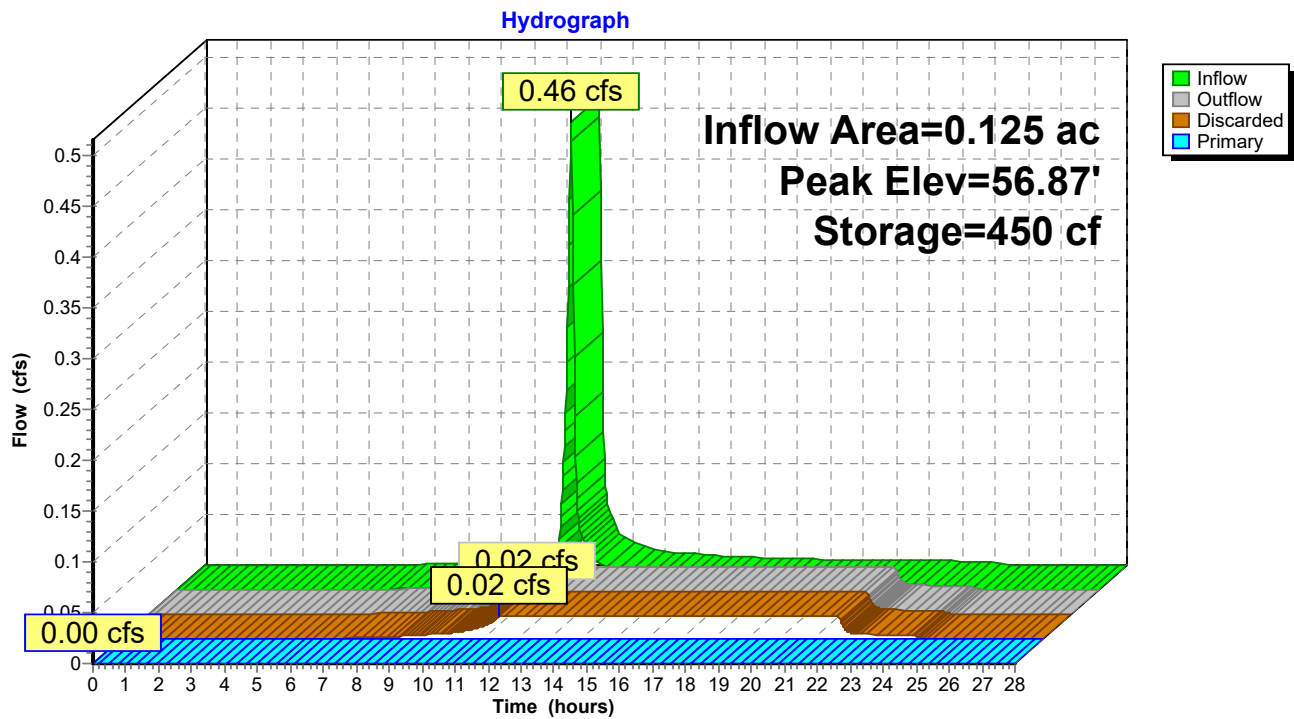
Discarded OutFlow Max=0.02 cfs @ 11.50 hrs HW=56.03' (Free Discharge)

↑**1=Exfiltration** (Exfiltration Controls 0.02 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=56.00' (Free Discharge)

↑**2=Culvert** (Controls 0.00 cfs)

Pond P2: W Infil



Summary for Pond P3: E Infil

Inflow Area = 0.344 ac, 32.28% Impervious, Inflow Depth = 0.37" for 2 Yr event
 Inflow = 0.16 cfs @ 12.00 hrs, Volume= 0.011 af
 Outflow = 0.03 cfs @ 11.96 hrs, Volume= 0.011 af, Atten= 84%, Lag= 0.0 min
 Discarded = 0.03 cfs @ 11.96 hrs, Volume= 0.011 af
 Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-28.00 hrs, dt= 0.02 hrs
 Peak Elev= 56.98' @ 12.50 hrs Surf.Area= 1,103 sf Storage= 80 cf

Plug-Flow detention time= 21.6 min calculated for 0.011 af (100% of inflow)
 Center-of-Mass det. time= 21.6 min (948.2 - 926.6)

Volume	Invert	Avail.Storage	Storage Description
#1	56.80'	691 cf	Custom Stage Data (Prismatic) Listed below (Recalc) 3,254 cf Overall - 1,526 cf Embedded = 1,728 cf x 40.0% Voids
#2	57.05'	1,348 cf	ISI Rainstore3 6 x 72 Inside #1 Inside= 39.4"W x 23.6"H => 6.07 sf x 3.28'L = 19.9 cf Outside= 39.4"W x 23.6"H => 6.46 sf x 3.28'L = 21.2 cf 1,526 cf Overall x 94.0% Voids
		2,039 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
56.80	1,103	0	0
59.75	1,103	3,254	3,254

Device	Routing	Invert	Outlet Devices
#1	Discarded	56.80'	1.020 in/hr Exfiltration over Horizontal area
#2	Primary	58.25'	8.0" Round Culvert L= 90.0' CMP, mitered to conform to fill, Ke= 0.700 Inlet / Outlet Invert= 58.25' / 53.00' S= 0.0583 ' /' Cc= 0.900 n= 0.010 PVC, smooth interior, Flow Area= 0.35 sf

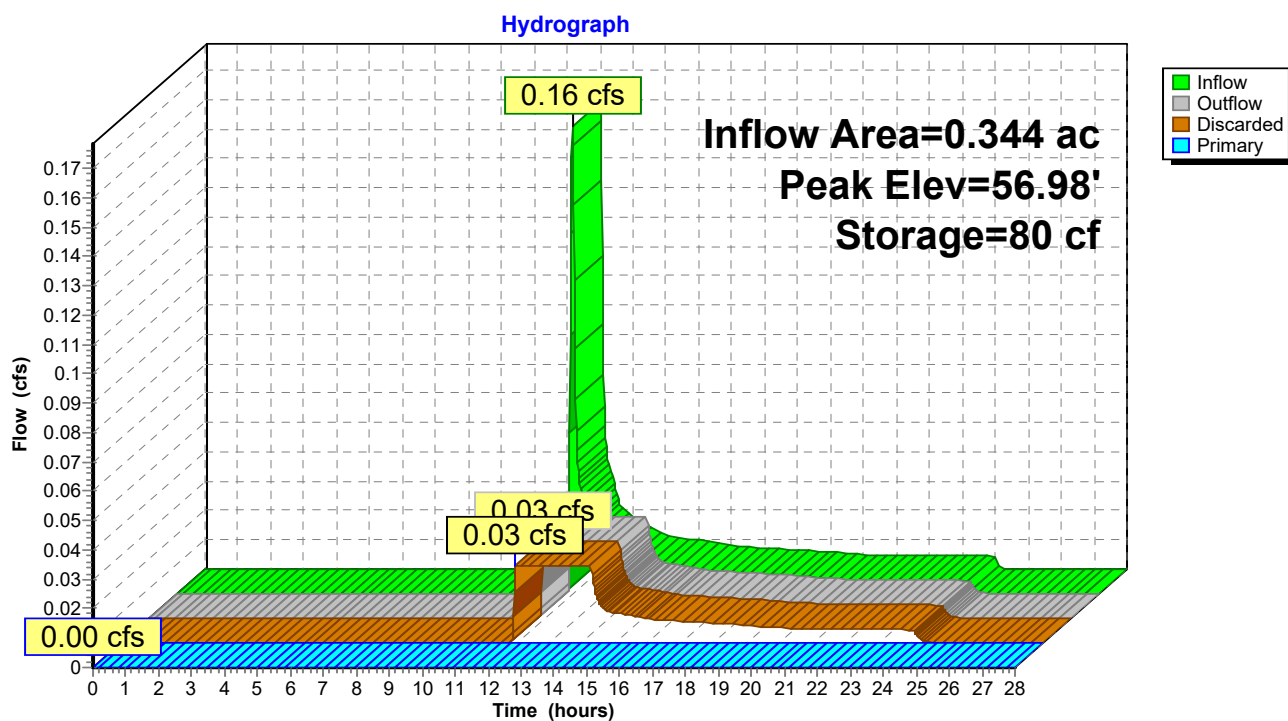
Discarded OutFlow Max=0.03 cfs @ 11.96 hrs HW=56.83' (Free Discharge)

↑**1=Exfiltration** (Exfiltration Controls 0.03 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=56.80' (Free Discharge)

↑**2=Culvert** (Controls 0.00 cfs)

Pond P3: E Infil



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Type II 24-hr 10 Yr Rainfall=4.90"

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Time span=0.00-28.00 hrs, dt=0.02 hrs, 1401 points
 Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
 Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment S1A: Store Roof	Runoff Area=4,845 sf 100.00% Impervious Runoff Depth=4.66" Tc=6.0 min CN=98 Runoff=0.77 cfs 0.043 af
Subcatchment S1B: Canopy Roof	Runoff Area=3,568 sf 100.00% Impervious Runoff Depth=4.66" Tc=6.0 min CN=98 Runoff=0.57 cfs 0.032 af
Subcatchment S2: pvmnt & abutter	Runoff Area=28,226 sf 71.12% Impervious Runoff Depth=2.99" Tc=6.0 min CN=82 Runoff=3.39 cfs 0.161 af
Subcatchment S4: West Front	Runoff Area=5,424 sf 77.86% Impervious Runoff Depth=3.78" Tc=6.0 min CN=90 Runoff=0.78 cfs 0.039 af
Subcatchment S5: East Front	Runoff Area=14,990 sf 32.28% Impervious Runoff Depth=1.18" Tc=6.0 min CN=59 Runoff=0.69 cfs 0.034 af
Subcatchment S6: NW offsite	Runoff Area=5,241 sf 0.00% Impervious Runoff Depth=0.76" Tc=6.0 min CN=52 Runoff=0.14 cfs 0.008 af
Subcatchment S7: West Offsite	Runoff Area=931 sf 0.00% Impervious Runoff Depth=1.31" Tc=6.0 min CN=61 Runoff=0.05 cfs 0.002 af
Subcatchment S8: Driveway to offsite CB	Runoff Area=1,074 sf 100.00% Impervious Runoff Depth=4.66" Tc=6.0 min CN=98 Runoff=0.17 cfs 0.010 af
Subcatchment S9: Runoff to Street	Runoff Area=2,188 sf 63.12% Impervious Runoff Depth=3.18" Tc=6.0 min CN=84 Runoff=0.28 cfs 0.013 af
Reach 5R: Total Offsite	Inflow=0.63 cfs 0.033 af Outflow=0.63 cfs 0.033 af
Pond P1: N Infil	Peak Elev=58.99' Storage=6,137 cf Inflow=4.73 cfs 0.236 af Discarded=0.11 cfs 0.163 af Primary=0.00 cfs 0.000 af Outflow=0.11 cfs 0.163 af
Pond P2: W Infil	Peak Elev=57.54' Storage=912 cf Inflow=0.78 cfs 0.039 af Discarded=0.02 cfs 0.035 af Primary=0.00 cfs 0.000 af Outflow=0.02 cfs 0.035 af
Pond P3: E Infil	Peak Elev=57.75' Storage=684 cf Inflow=0.69 cfs 0.034 af Discarded=0.03 cfs 0.034 af Primary=0.00 cfs 0.000 af Outflow=0.03 cfs 0.034 af

Total Runoff Area = 1.526 ac Runoff Volume = 0.342 af Average Runoff Depth = 2.69"
39.83% Pervious = 0.608 ac 60.17% Impervious = 0.918 ac

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Type II 24-hr 10 Yr Rainfall=4.90"

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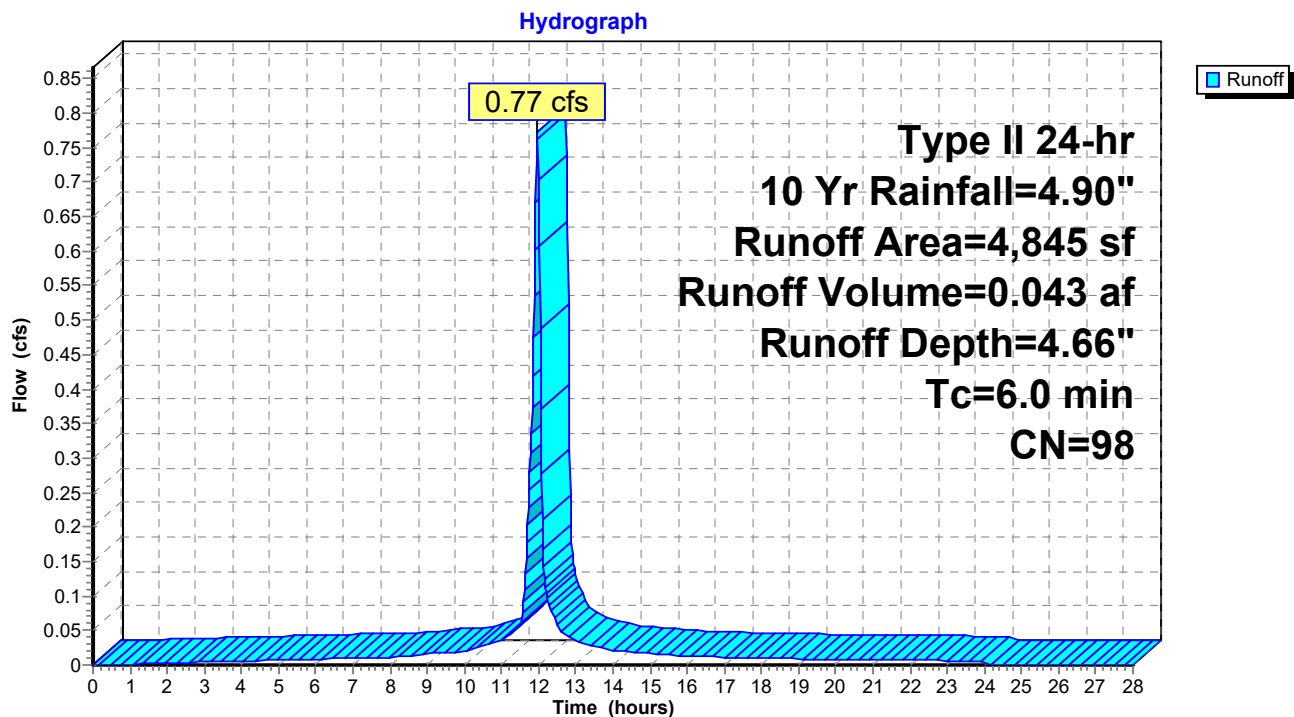
Summary for Subcatchment S1A: Store Roof

Runoff = 0.77 cfs @ 11.97 hrs, Volume= 0.043 af, Depth= 4.66"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-28.00 hrs, dt= 0.02 hrs
Type II 24-hr 10 Yr Rainfall=4.90"

Area (sf)	CN	Description
4,845	98	Roofs, HSG B
4,845		100.00% Impervious Area

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

Subcatchment S1A: Store Roof

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Type II 24-hr 10 Yr Rainfall=4.90"

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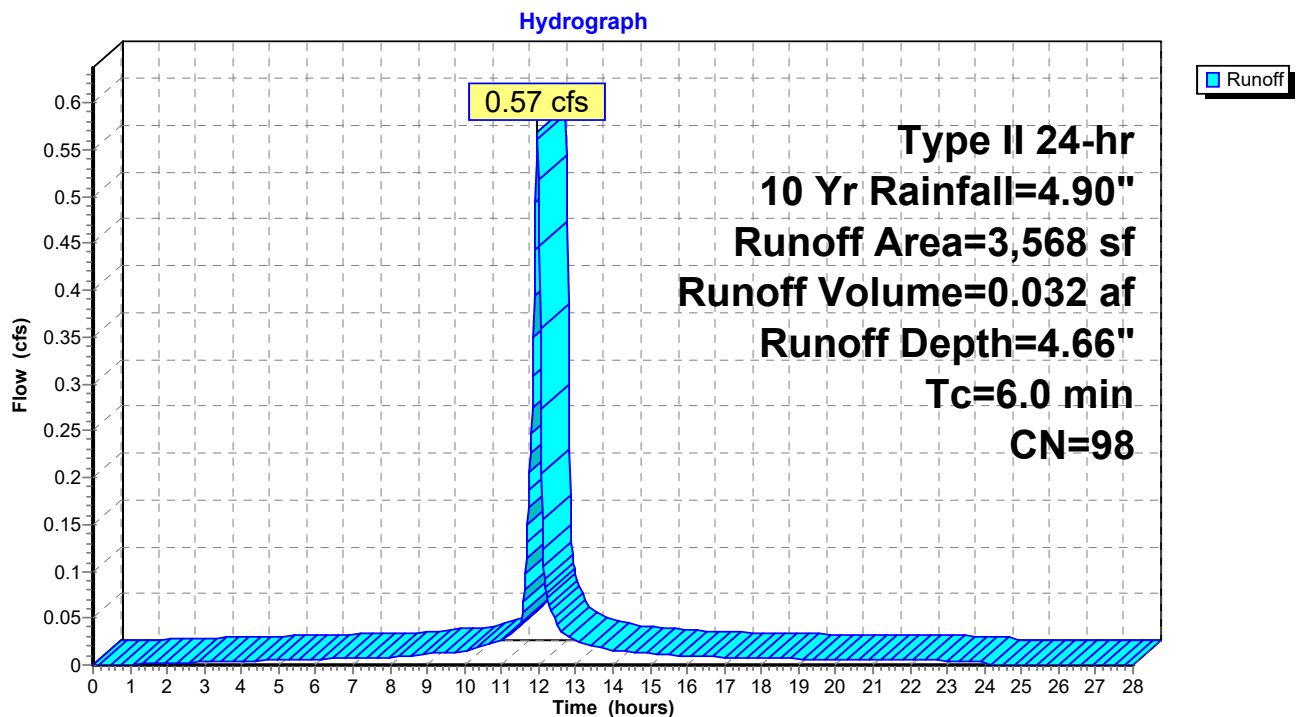
Summary for Subcatchment S1B: Canopy Roof

Runoff = 0.57 cfs @ 11.97 hrs, Volume= 0.032 af, Depth= 4.66"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-28.00 hrs, dt= 0.02 hrs
Type II 24-hr 10 Yr Rainfall=4.90"

Area (sf)	CN	Description
3,568	98	Roofs, HSG B
3,568		100.00% Impervious Area

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

Subcatchment S1B: Canopy Roof

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Type II 24-hr 10 Yr Rainfall=4.90"

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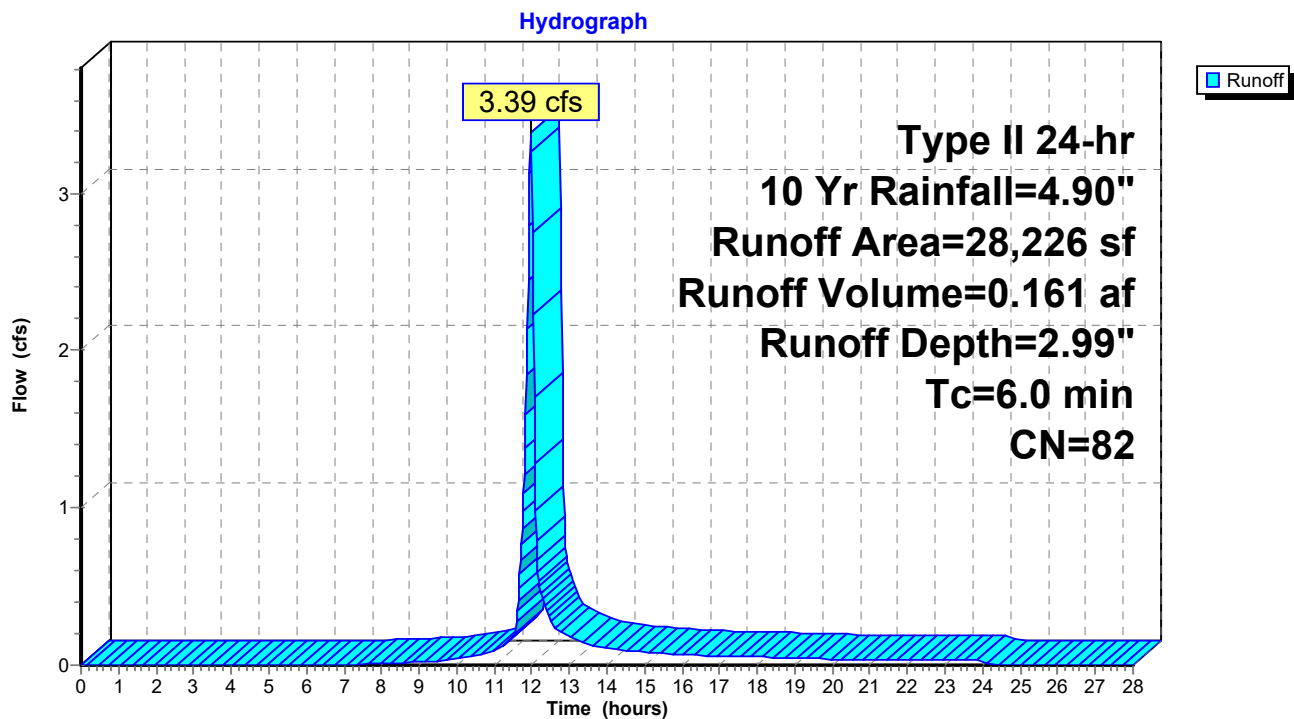
Summary for Subcatchment S2: pvmnt & abutter

Runoff = 3.39 cfs @ 11.97 hrs, Volume= 0.161 af, Depth= 2.99"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-28.00 hrs, dt= 0.02 hrs
Type II 24-hr 10 Yr Rainfall=4.90"

Area (sf)	CN	Description
11,454	98	Paved parking, HSG B
8,231	98	Paved parking, HSG B
246	61	>75% Grass cover, Good, HSG B
630	61	>75% Grass cover, Good, HSG B
7,275	39	>75% Grass cover, Good, HSG A
390	98	Unconnected roofs, HSG A
28,226	82	Weighted Average
8,151		28.88% Pervious Area
20,075		71.12% Impervious Area
390		1.94% Unconnected

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

Subcatchment S2: pvmnt & abutter

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Type II 24-hr 10 Yr Rainfall=4.90"

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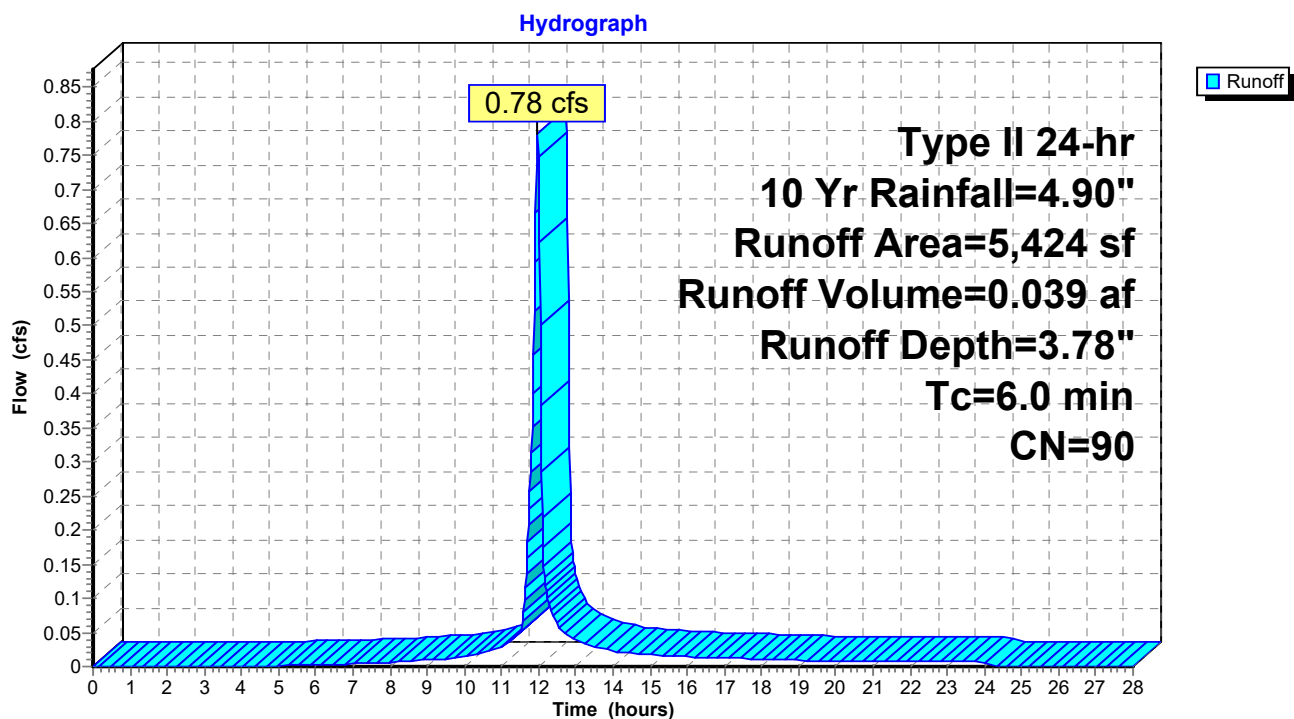
Summary for Subcatchment S4: West Front

Runoff = 0.78 cfs @ 11.97 hrs, Volume= 0.039 af, Depth= 3.78"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-28.00 hrs, dt= 0.02 hrs
Type II 24-hr 10 Yr Rainfall=4.90"

Area (sf)	CN	Description
4,223	98	Paved parking, HSG B
1,201	61	>75% Grass cover, Good, HSG B
5,424	90	Weighted Average
1,201		22.14% Pervious Area
4,223		77.86% Impervious Area

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

Subcatchment S4: West Front

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Type II 24-hr 10 Yr Rainfall=4.90"

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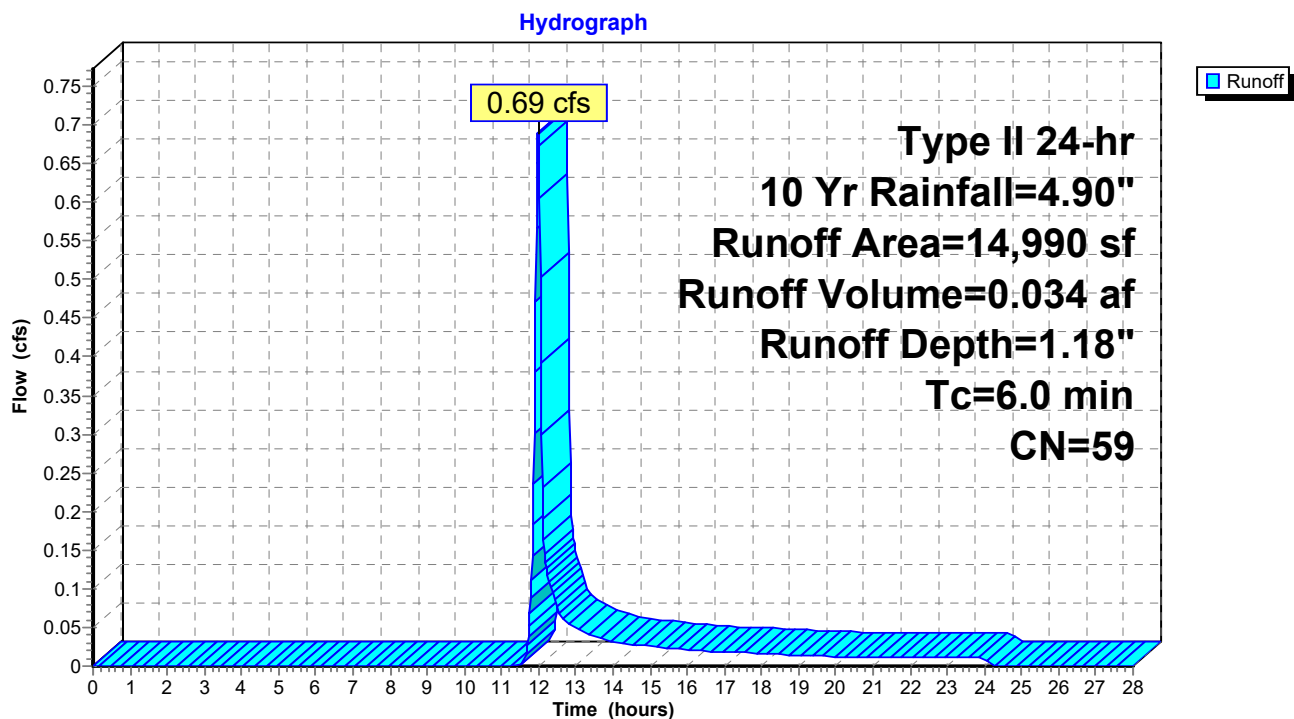
Summary for Subcatchment S5: East Front

Runoff = 0.69 cfs @ 11.98 hrs, Volume= 0.034 af, Depth= 1.18"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-28.00 hrs, dt= 0.02 hrs
Type II 24-hr 10 Yr Rainfall=4.90"

Area (sf)	CN	Description
3,798	98	Paved parking, HSG B
498	61	>75% Grass cover, Good, HSG B
1,041	98	Unconnected roofs, HSG B
9,653	39	>75% Grass cover, Good, HSG A
14,990	59	Weighted Average
10,151		67.72% Pervious Area
4,839		32.28% Impervious Area
1,041		21.51% Unconnected

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

Subcatchment S5: East Front

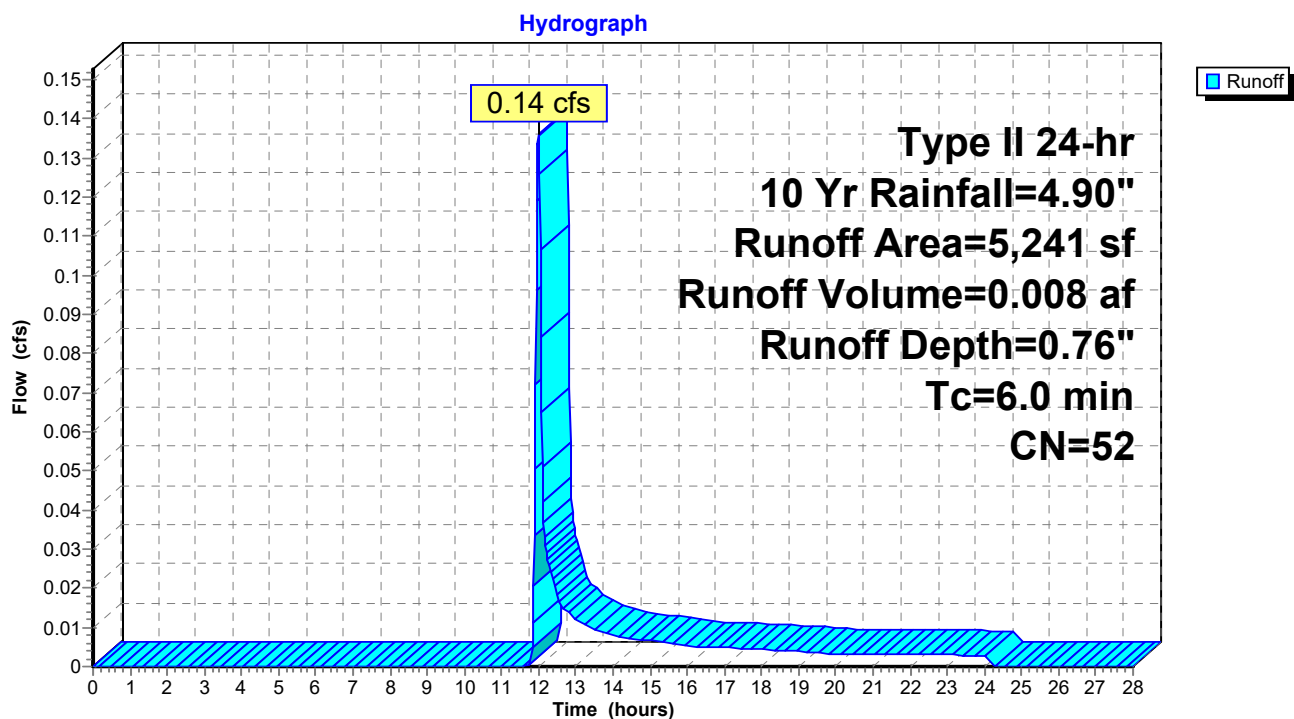
Summary for Subcatchment S6: NW offsite

Runoff = 0.14 cfs @ 11.99 hrs, Volume= 0.008 af, Depth= 0.76"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-28.00 hrs, dt= 0.02 hrs
Type II 24-hr 10 Yr Rainfall=4.90"

Area (sf)	CN	Description
949	61	>75% Grass cover, Good, HSG B
2,109	61	>75% Grass cover, Good, HSG B
2,183	39	>75% Grass cover, Good, HSG A
5,241	52	Weighted Average
5,241		100.00% Pervious Area

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

Subcatchment S6: NW offsite

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Type II 24-hr 10 Yr Rainfall=4.90"

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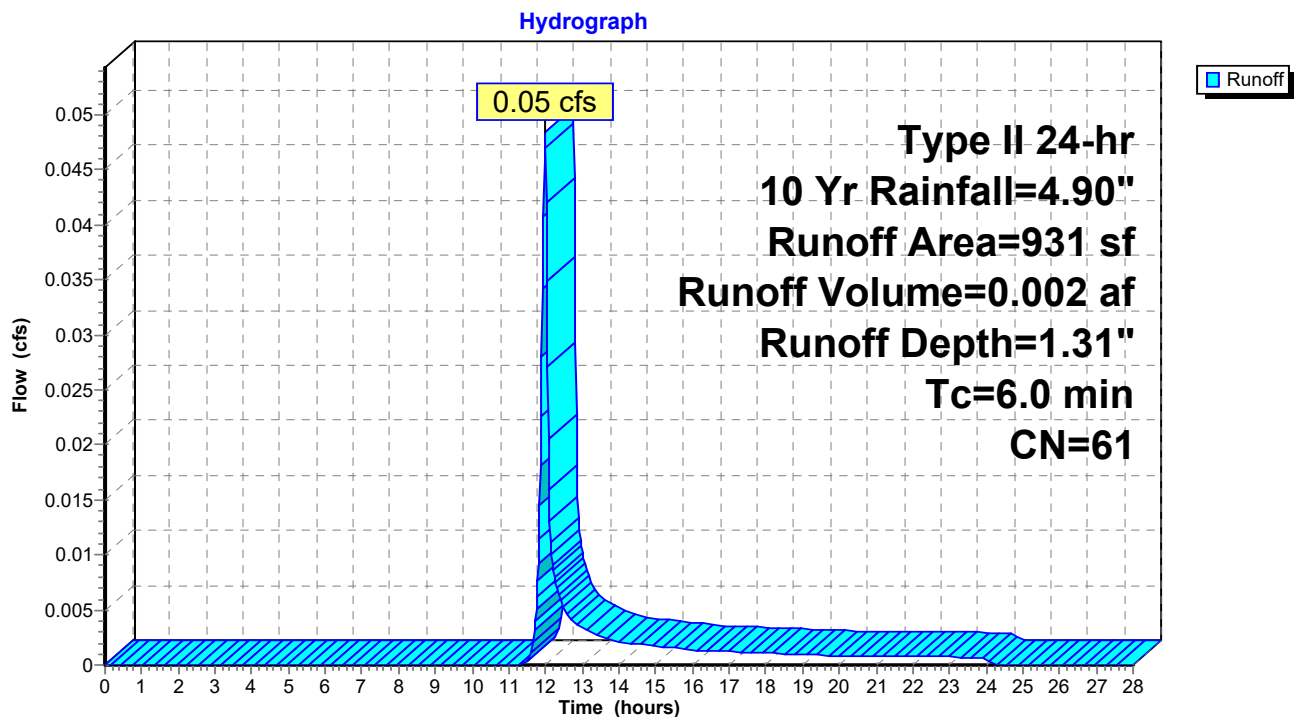
Summary for Subcatchment S7: West Offsite

Runoff = 0.05 cfs @ 11.98 hrs, Volume= 0.002 af, Depth= 1.31"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-28.00 hrs, dt= 0.02 hrs
Type II 24-hr 10 Yr Rainfall=4.90"

Area (sf)	CN	Description
931	61	>75% Grass cover, Good, HSG B
931		100.00% Pervious Area

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

Subcatchment S7: West Offsite

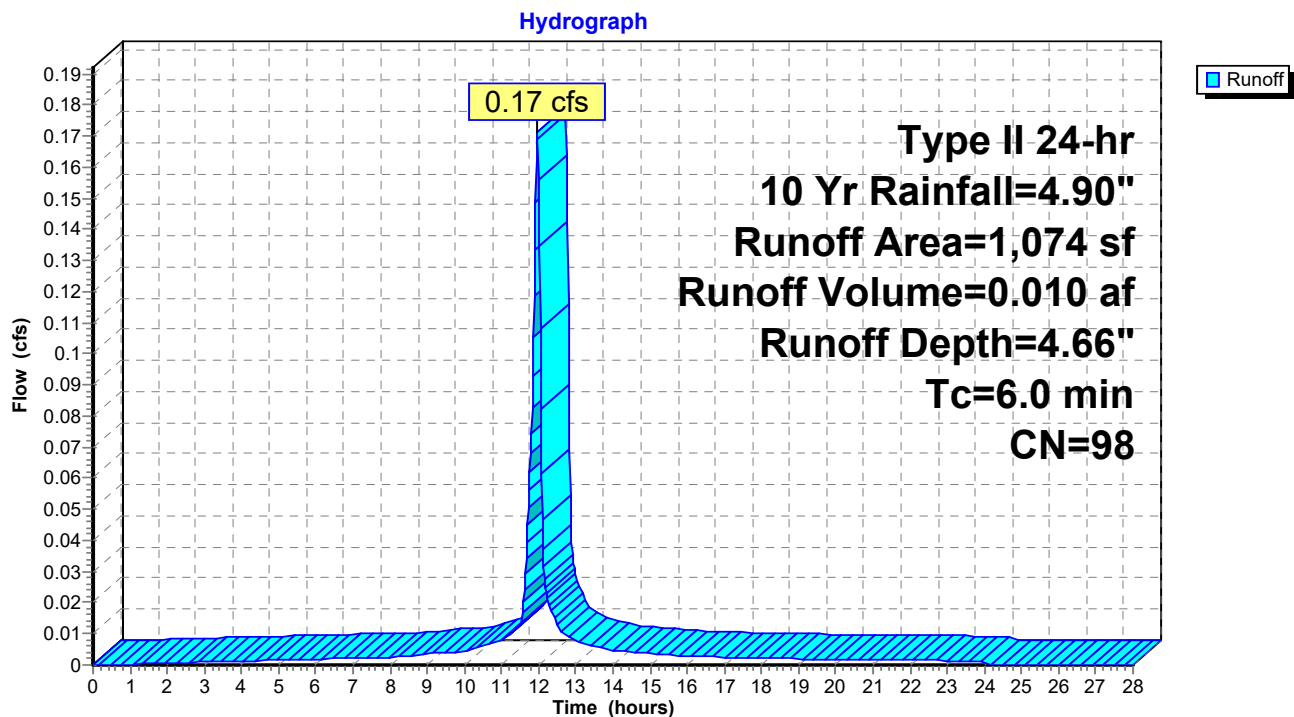
Summary for Subcatchment S8: Driveway to offsite CB

Runoff = 0.17 cfs @ 11.97 hrs, Volume= 0.010 af, Depth= 4.66"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-28.00 hrs, dt= 0.02 hrs
Type II 24-hr 10 Yr Rainfall=4.90"

Area (sf)	CN	Description
1,074	98	Paved parking, HSG B
1,074		100.00% Impervious Area

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

Subcatchment S8: Driveway to offsite CB

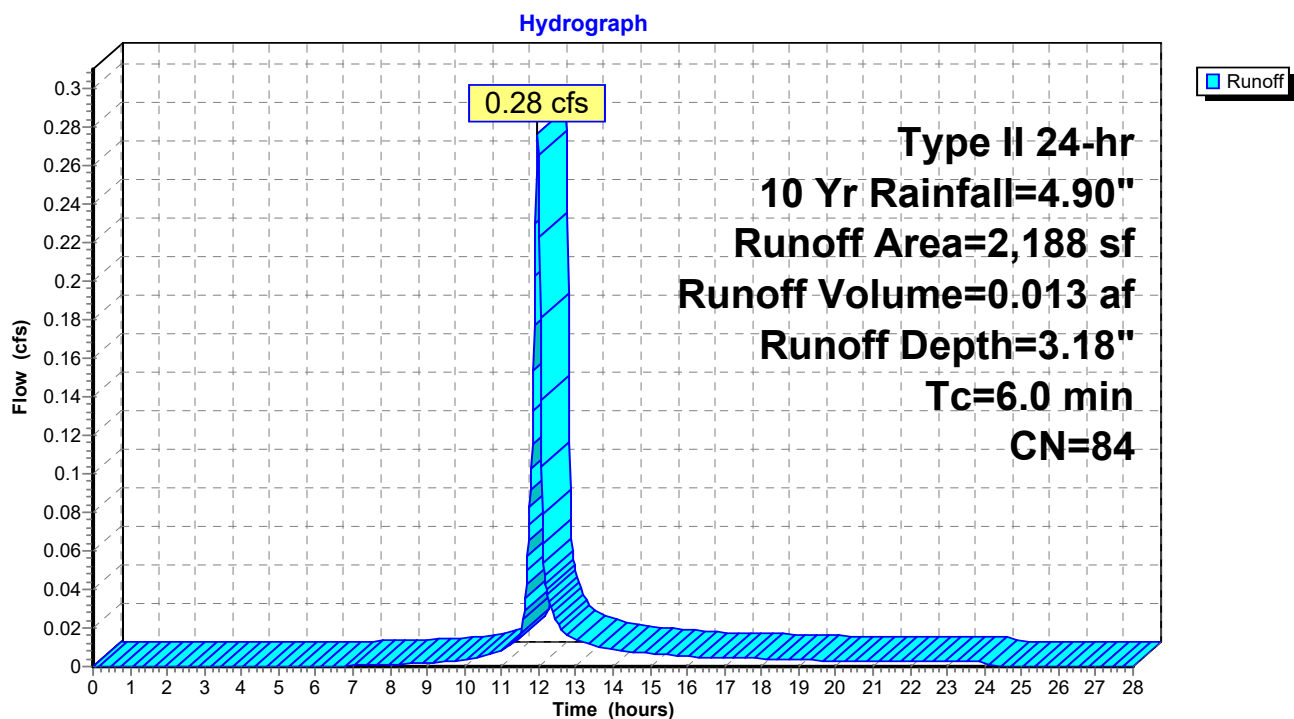
Summary for Subcatchment S9: Runoff to Street

Runoff = 0.28 cfs @ 11.97 hrs, Volume= 0.013 af, Depth= 3.18"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-28.00 hrs, dt= 0.02 hrs
Type II 24-hr 10 Yr Rainfall=4.90"

Area (sf)	CN	Description
1,381	98	Paved parking, HSG B
807	61	>75% Grass cover, Good, HSG B
2,188	84	Weighted Average
807		36.88% Pervious Area
1,381		63.12% Impervious Area

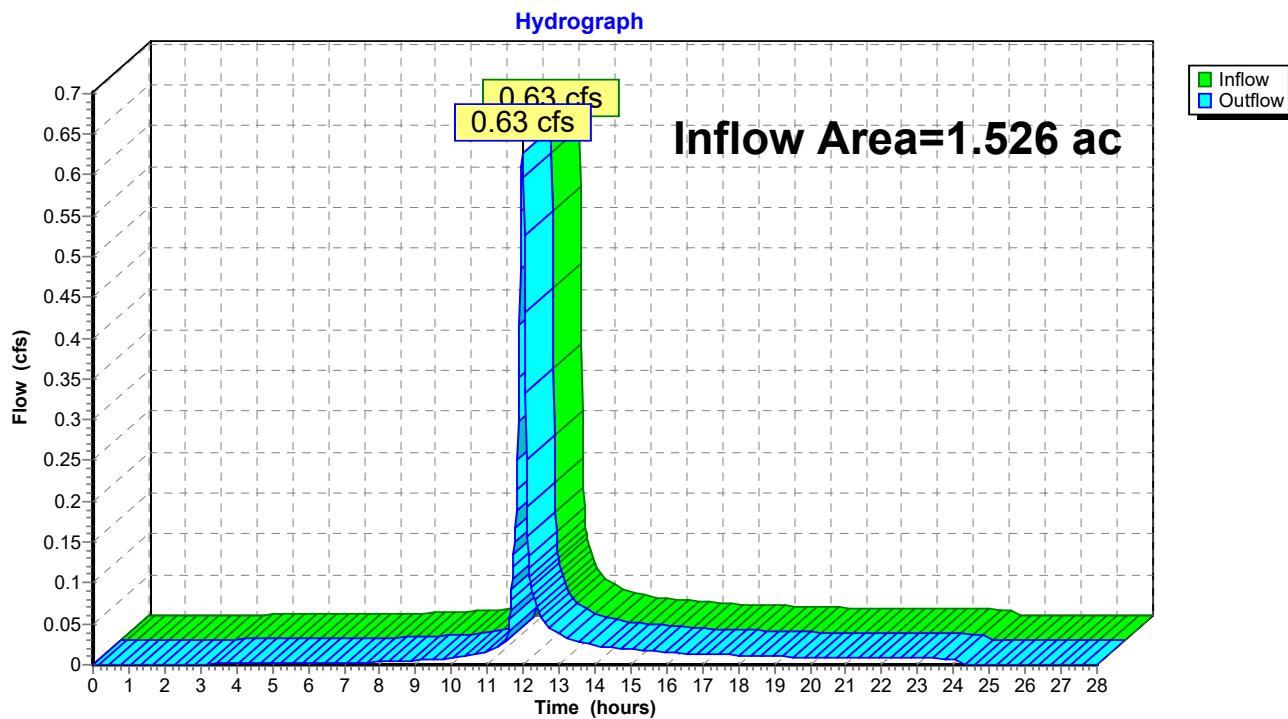
Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry, minimum

Subcatchment S9: Runoff to Street

Summary for Reach 5R: Total Offsite

Inflow Area = 1.526 ac, 60.17% Impervious, Inflow Depth = 0.26" for 10 Yr event
Inflow = 0.63 cfs @ 11.98 hrs, Volume= 0.033 af
Outflow = 0.63 cfs @ 11.98 hrs, Volume= 0.033 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-28.00 hrs, dt= 0.02 hrs

Reach 5R: Total Offsite

Summary for Pond P1: N Infil

Inflow Area = 0.841 ac, 77.75% Impervious, Inflow Depth = 3.37" for 10 Yr event
 Inflow = 4.73 cfs @ 11.97 hrs, Volume= 0.236 af
 Outflow = 0.11 cfs @ 11.90 hrs, Volume= 0.163 af, Atten= 98%, Lag= 0.0 min
 Discarded = 0.11 cfs @ 11.90 hrs, Volume= 0.163 af
 Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-28.00 hrs, dt= 0.02 hrs
 Peak Elev= 58.99' @ 15.33 hrs Surf.Area= 4,466 sf Storage= 6,137 cf
 Flood Elev= 60.70' Surf.Area= 4,466 sf Storage= 11,245 cf

Plug-Flow detention time= 417.2 min calculated for 0.163 af (69% of inflow)
 Center-of-Mass det. time= 315.3 min (1,107.2 - 791.9)

Volume	Invert	Avail.Storage	Storage Description
#1	56.50'	3,032 cf	Custom Stage Data (Prismatic) Listed below (Recalc) 16,874 cf Overall - 9,295 cf Embedded = 7,580 cf x 40.0% Voids
#2	57.50'	7,164 cf	ISI Rainstore3 8 x 287 Inside #1 Inside= 39.4"W x 31.5"H => 8.09 sf x 3.28'L = 26.6 cf Outside= 39.4"W x 31.5"H => 8.61 sf x 3.28'L = 28.3 cf 8,108 cf Overall x 94.0% Voids
#3	58.30'	1,048 cf	ISI Rainstore3 6 x 56 Inside #1 Inside= 39.4"W x 23.6"H => 6.07 sf x 3.28'L = 19.9 cf Outside= 39.4"W x 23.6"H => 6.46 sf x 3.28'L = 21.2 cf 1,187 cf Overall x 94.0% Voids
		11,245 cf	Total Available Storage

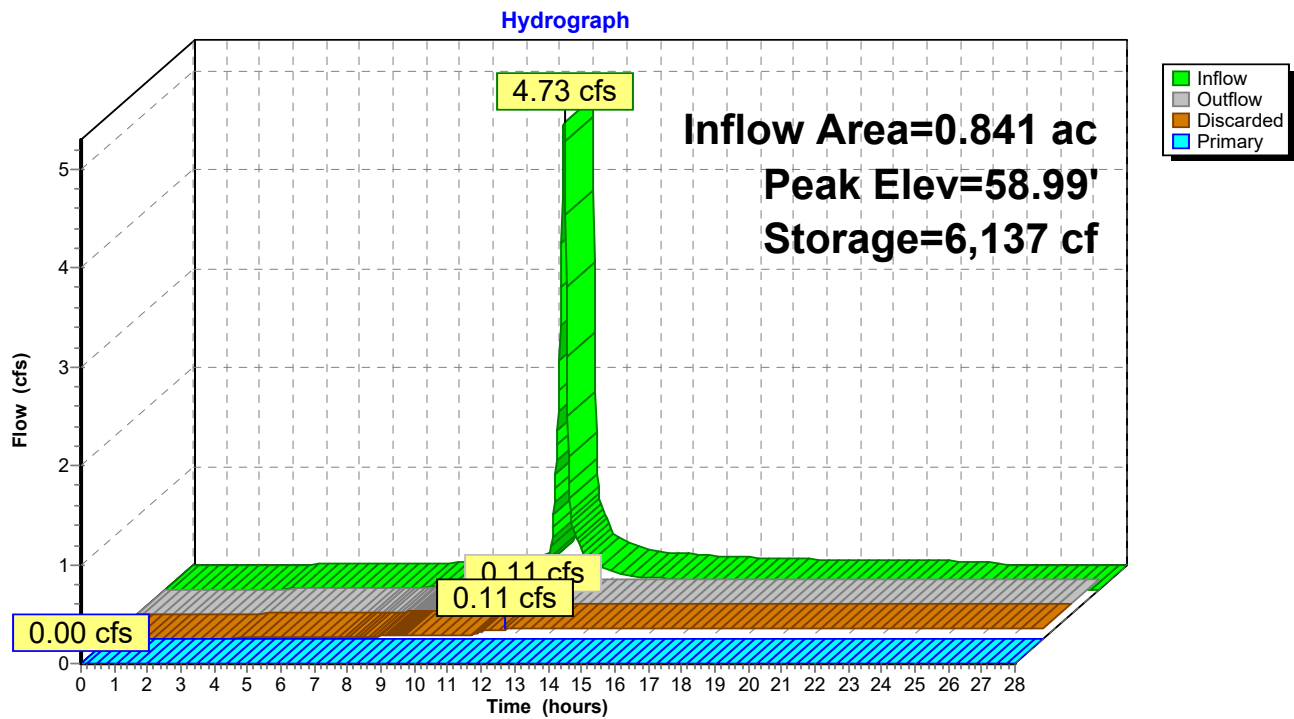
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
56.50	1,802	0	0
56.90	1,802	721	721
57.00	3,666	273	994
57.80	3,666	2,933	3,927
57.81	4,466	41	3,968
60.70	4,466	12,907	16,874

Device	Routing	Invert	Outlet Devices
#1	Discarded	56.50'	1.020 in/hr Exfiltration over Surface area
#2	Primary	59.30'	8.0" Round Culvert L= 120.0' CMP, mitered to conform to fill, Ke= 0.700 Inlet / Outlet Invert= 59.30' / 53.00' S= 0.0525 '/' Cc= 0.900 n= 0.010 PVC, smooth interior, Flow Area= 0.35 sf

Discarded OutFlow Max=0.11 cfs @ 11.90 hrs HW=57.86' (Free Discharge)
 ↑**1=Exfiltration** (Exfiltration Controls 0.11 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=56.50' (Free Discharge)
 ↑**2=Culvert** (Controls 0.00 cfs)

Pond P1: N Infil



Summary for Pond P2: W Infil

Inflow Area = 0.125 ac, 77.86% Impervious, Inflow Depth = 3.78" for 10 Yr event
 Inflow = 0.78 cfs @ 11.97 hrs, Volume= 0.039 af
 Outflow = 0.02 cfs @ 10.80 hrs, Volume= 0.035 af, Atten= 97%, Lag= 0.0 min
 Discarded = 0.02 cfs @ 10.80 hrs, Volume= 0.035 af
 Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-28.00 hrs, dt= 0.02 hrs
 Peak Elev= 57.54' @ 14.03 hrs Surf.Area= 947 sf Storage= 912 cf

Plug-Flow detention time= 366.5 min calculated for 0.035 af (90% of inflow)
 Center-of-Mass det. time= 314.9 min (1,103.1 - 788.2)

Volume	Invert	Avail.Storage	Storage Description
#1	56.00'	619 cf	Custom Stage Data (Prismatic) Listed below (Recalc) 2,841 cf Overall - 1,293 cf Embedded = 1,548 cf x 40.0% Voids
#2	56.50'	1,142 cf	ISI Rainstore3 6 x 61 Inside #1 Inside= 39.4"W x 23.6"H => 6.07 sf x 3.28'L = 19.9 cf Outside= 39.4"W x 23.6"H => 6.46 sf x 3.28'L = 21.2 cf 1,293 cf Overall x 94.0% Voids
		1,761 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
56.00	947	0	0
59.00	947	2,841	2,841

Device	Routing	Invert	Outlet Devices
#1	Discarded	56.00'	1.020 in/hr Exfiltration over Horizontal area
#2	Primary	58.10'	8.0" Round Culvert L= 30.0' CMP, mitered to conform to fill, Ke= 0.700 Inlet / Outlet Invert= 58.10' / 53.00' S= 0.1700 '/' Cc= 0.900 n= 0.010 PVC, smooth interior, Flow Area= 0.35 sf

Discarded OutFlow Max=0.02 cfs @ 10.80 hrs HW=56.03' (Free Discharge)

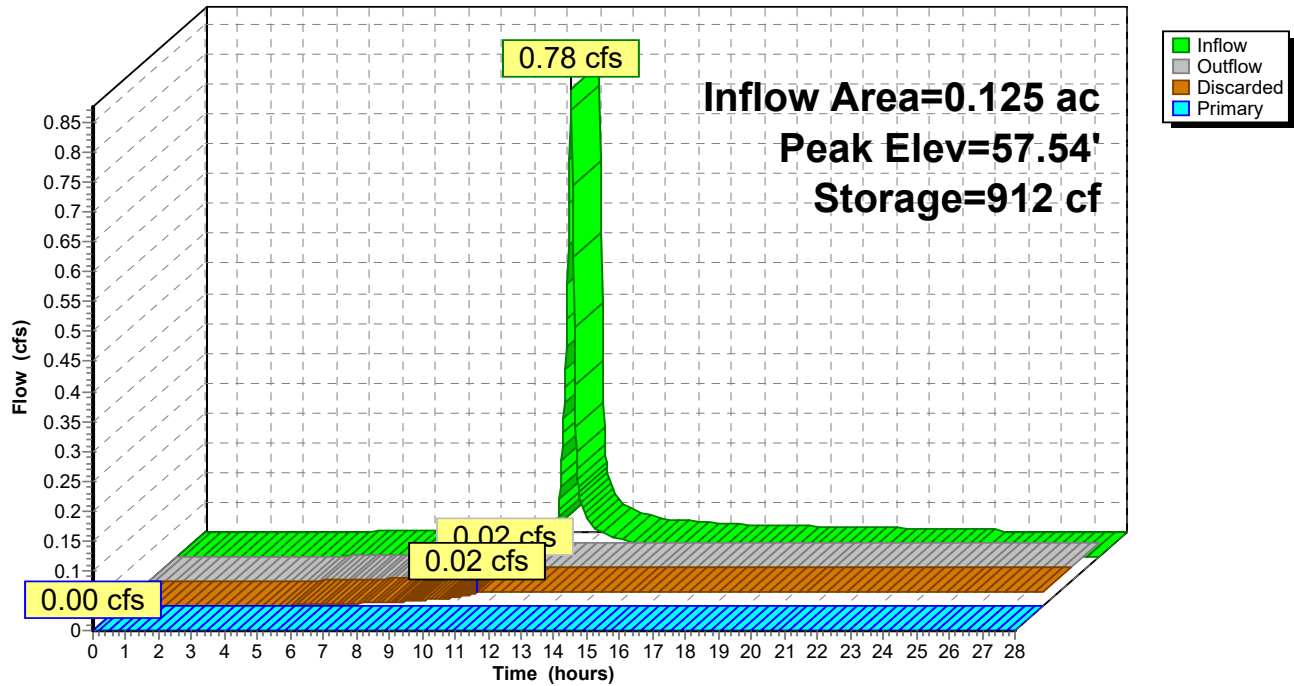
↑**1=Exfiltration** (Exfiltration Controls 0.02 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=56.00' (Free Discharge)

↑**2=Culvert** (Controls 0.00 cfs)

Pond P2: W Infil

Hydrograph



Summary for Pond P3: E Infil

Inflow Area = 0.344 ac, 32.28% Impervious, Inflow Depth = 1.18" for 10 Yr event
 Inflow = 0.69 cfs @ 11.98 hrs, Volume= 0.034 af
 Outflow = 0.03 cfs @ 11.78 hrs, Volume= 0.034 af, Atten= 96%, Lag= 0.0 min
 Discarded = 0.03 cfs @ 11.78 hrs, Volume= 0.034 af
 Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-28.00 hrs, dt= 0.02 hrs
 Peak Elev= 57.75' @ 14.89 hrs Surf.Area= 1,103 sf Storage= 684 cf

Plug-Flow detention time= 297.1 min calculated for 0.034 af (100% of inflow)
 Center-of-Mass det. time= 297.0 min (1,174.2 - 877.2)

Volume	Invert	Avail.Storage	Storage Description
#1	56.80'	691 cf	Custom Stage Data (Prismatic) Listed below (Recalc) 3,254 cf Overall - 1,526 cf Embedded = 1,728 cf x 40.0% Voids
#2	57.05'	1,348 cf	ISI Rainstore3 6 x 72 Inside #1 Inside= 39.4"W x 23.6"H => 6.07 sf x 3.28'L = 19.9 cf Outside= 39.4"W x 23.6"H => 6.46 sf x 3.28'L = 21.2 cf 1,526 cf Overall x 94.0% Voids
		2,039 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
56.80	1,103	0	0
59.75	1,103	3,254	3,254

Device	Routing	Invert	Outlet Devices
#1	Discarded	56.80'	1.020 in/hr Exfiltration over Horizontal area
#2	Primary	58.25'	8.0" Round Culvert L= 90.0' CMP, mitered to conform to fill, Ke= 0.700 Inlet / Outlet Invert= 58.25' / 53.00' S= 0.0583 '/' Cc= 0.900 n= 0.010 PVC, smooth interior, Flow Area= 0.35 sf

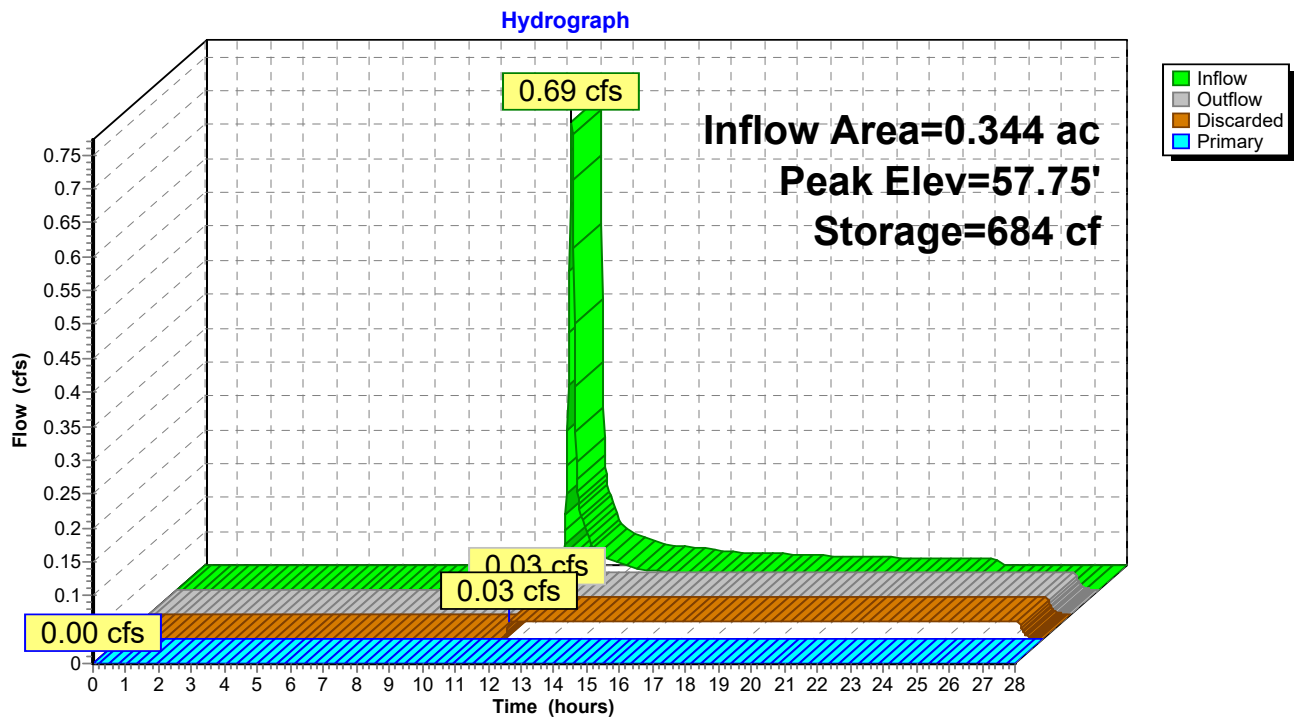
Discarded OutFlow Max=0.03 cfs @ 11.78 hrs HW=56.83' (Free Discharge)

↑**1=Exfiltration** (Exfiltration Controls 0.03 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=56.80' (Free Discharge)

↑**2=Culvert** (Controls 0.00 cfs)

Pond P3: E Infil



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Time span=0.00-28.00 hrs, dt=0.02 hrs, 1401 points
 Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
 Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment S1A: Store Roof	Runoff Area=4,845 sf 100.00% Impervious Runoff Depth=8.86" Tc=6.0 min CN=98 Runoff=1.44 cfs 0.082 af
Subcatchment S1B: Canopy Roof	Runoff Area=3,568 sf 100.00% Impervious Runoff Depth=8.86" Tc=6.0 min CN=98 Runoff=1.06 cfs 0.060 af
Subcatchment S2: pvmnt & abutter	Runoff Area=28,226 sf 71.12% Impervious Runoff Depth=6.91" Tc=6.0 min CN=82 Runoff=7.48 cfs 0.373 af
Subcatchment S4: West Front	Runoff Area=5,424 sf 77.86% Impervious Runoff Depth=7.89" Tc=6.0 min CN=90 Runoff=1.56 cfs 0.082 af
Subcatchment S5: East Front	Runoff Area=14,990 sf 32.28% Impervious Runoff Depth=4.06" Tc=6.0 min CN=59 Runoff=2.50 cfs 0.116 af
Subcatchment S6: NW offsite	Runoff Area=5,241 sf 0.00% Impervious Runoff Depth=3.19" Tc=6.0 min CN=52 Runoff=0.68 cfs 0.032 af
Subcatchment S7: West Offsite	Runoff Area=931 sf 0.00% Impervious Runoff Depth=4.30" Tc=6.0 min CN=61 Runoff=0.16 cfs 0.008 af
Subcatchment S8: Driveway to offsite CB	Runoff Area=1,074 sf 100.00% Impervious Runoff Depth=8.86" Tc=6.0 min CN=98 Runoff=0.32 cfs 0.018 af
Subcatchment S9: Runoff to Street	Runoff Area=2,188 sf 63.12% Impervious Runoff Depth=7.16" Tc=6.0 min CN=84 Runoff=0.59 cfs 0.030 af
Reach 5R: Total Offsite	Inflow=3.56 cfs 0.373 af Outflow=3.56 cfs 0.373 af
Pond P1: N Infiltration	Peak Elev=60.60' Storage=11,058 cf Inflow=9.98 cfs 0.516 af Discarded=0.11 cfs 0.183 af Primary=1.45 cfs 0.202 af Outflow=1.56 cfs 0.385 af
Pond P2: W Infiltration	Peak Elev=58.53' Storage=1,585 cf Inflow=1.56 cfs 0.082 af Discarded=0.02 cfs 0.040 af Primary=0.47 cfs 0.022 af Outflow=0.50 cfs 0.063 af
Pond P3: E Infiltration	Peak Elev=59.07' Storage=1,738 cf Inflow=2.50 cfs 0.116 af Discarded=0.03 cfs 0.038 af Primary=1.03 cfs 0.061 af Outflow=1.06 cfs 0.099 af

Total Runoff Area = 1.526 ac Runoff Volume = 0.802 af Average Runoff Depth = 6.30"
39.83% Pervious = 0.608 ac 60.17% Impervious = 0.918 ac

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Type II 24-hr 100 Yr Rainfall=9.10"

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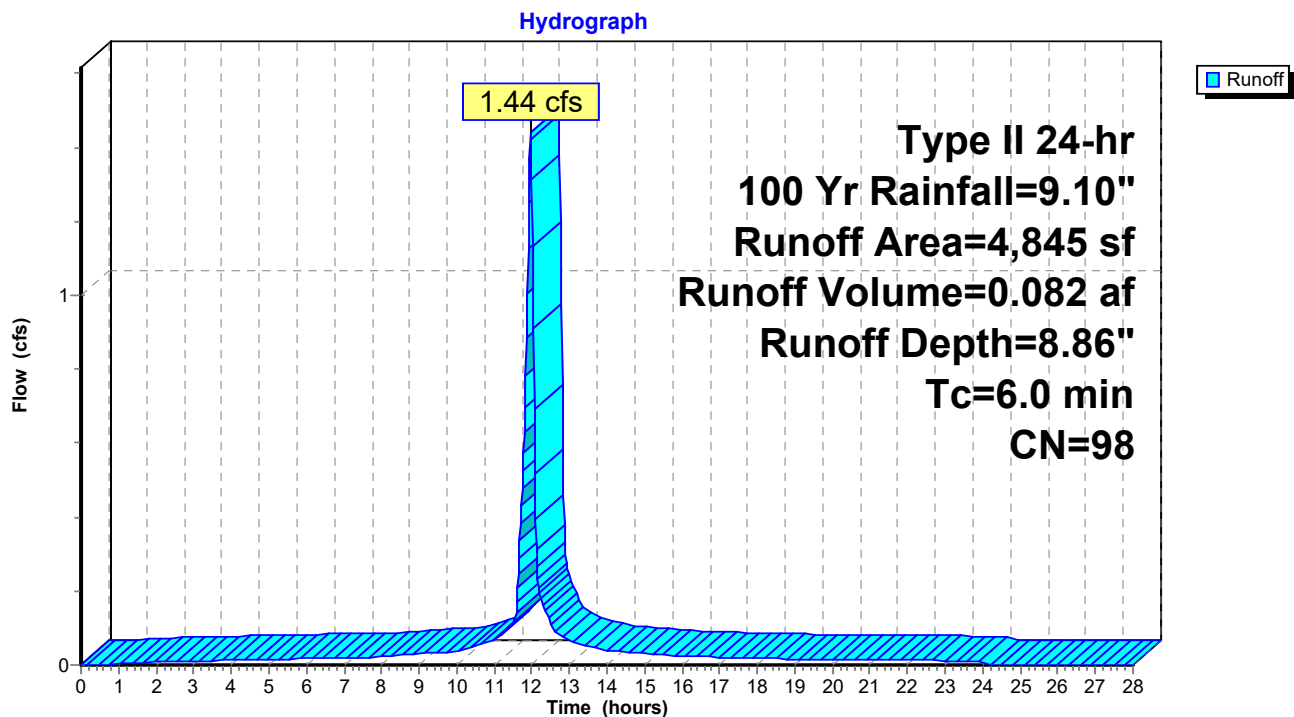
Summary for Subcatchment S1A: Store Roof

Runoff = 1.44 cfs @ 11.97 hrs, Volume= 0.082 af, Depth= 8.86"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-28.00 hrs, dt= 0.02 hrs
Type II 24-hr 100 Yr Rainfall=9.10"

Area (sf)	CN	Description
4,845	98	Roofs, HSG B
4,845		100.00% Impervious Area

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

Subcatchment S1A: Store Roof

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Type II 24-hr 100 Yr Rainfall=9.10"

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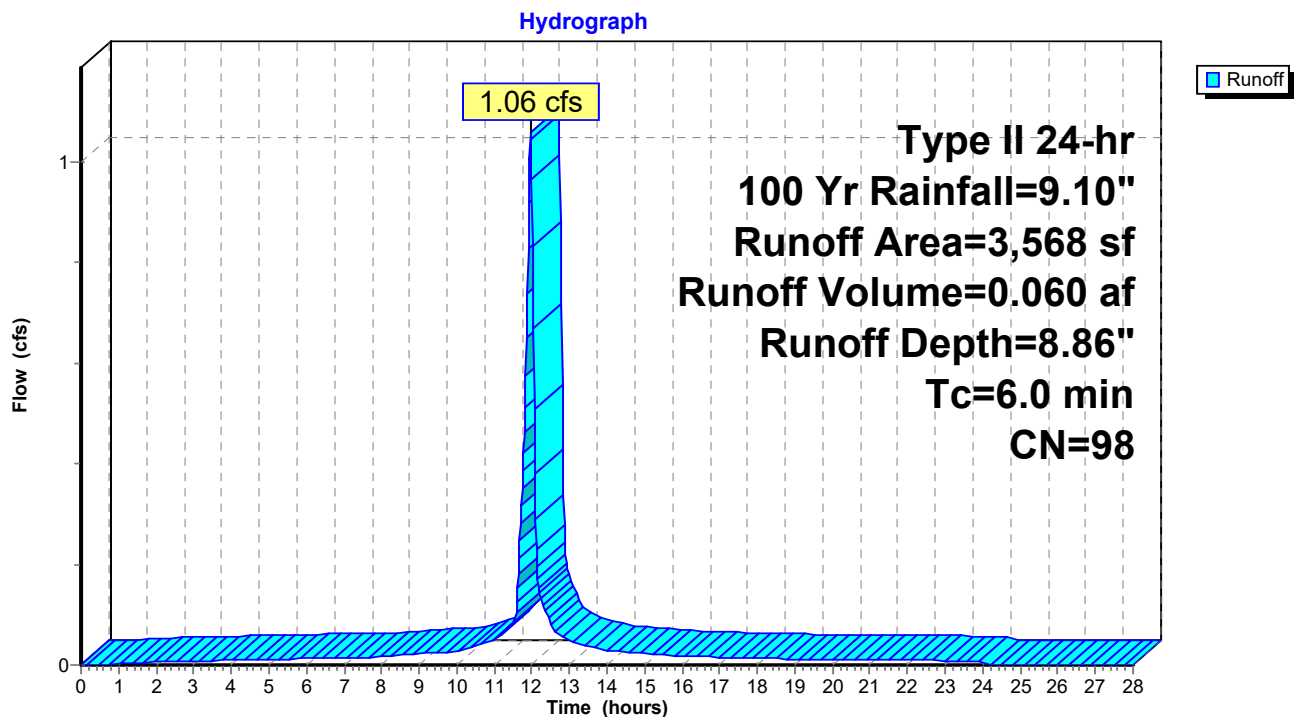
Summary for Subcatchment S1B: Canopy Roof

Runoff = 1.06 cfs @ 11.97 hrs, Volume= 0.060 af, Depth= 8.86"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-28.00 hrs, dt= 0.02 hrs
Type II 24-hr 100 Yr Rainfall=9.10"

Area (sf)	CN	Description
3,568	98	Roofs, HSG B
3,568		100.00% Impervious Area

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

Subcatchment S1B: Canopy Roof

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Type II 24-hr 100 Yr Rainfall=9.10"

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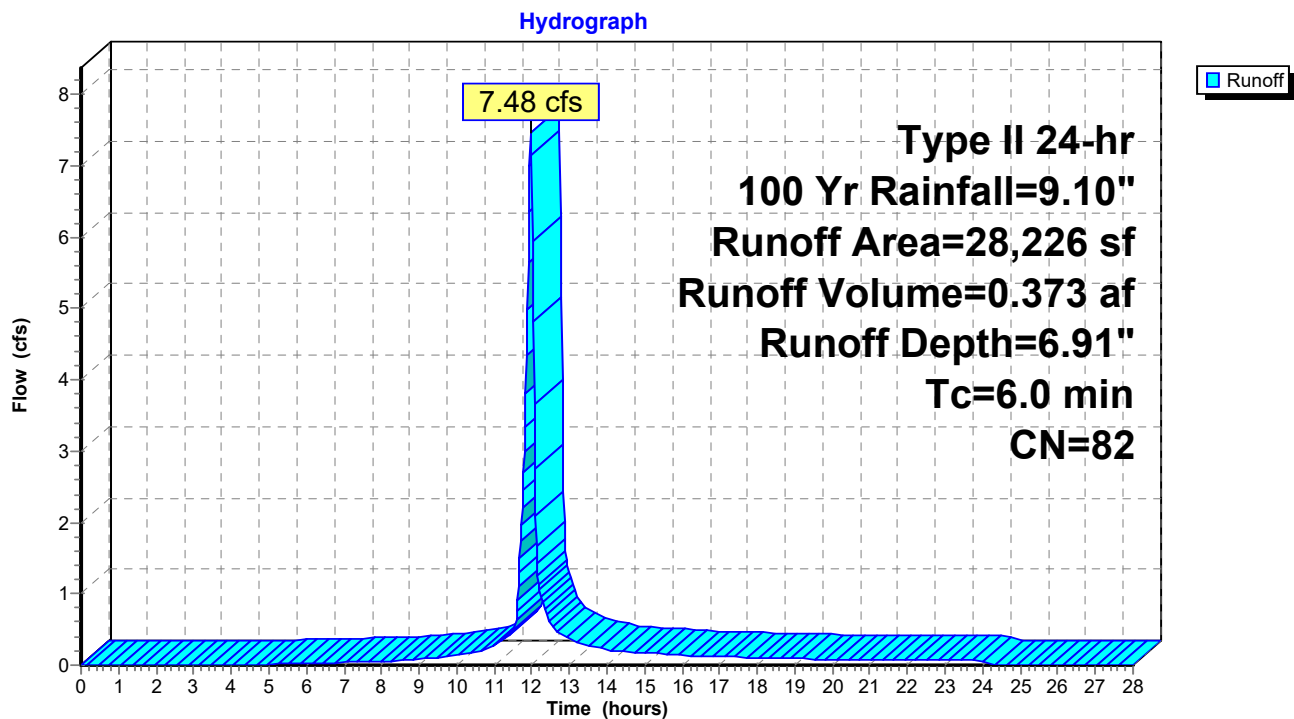
Summary for Subcatchment S2: pvmnt & abutter

Runoff = 7.48 cfs @ 11.97 hrs, Volume= 0.373 af, Depth= 6.91"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-28.00 hrs, dt= 0.02 hrs
Type II 24-hr 100 Yr Rainfall=9.10"

Area (sf)	CN	Description
11,454	98	Paved parking, HSG B
8,231	98	Paved parking, HSG B
246	61	>75% Grass cover, Good, HSG B
630	61	>75% Grass cover, Good, HSG B
7,275	39	>75% Grass cover, Good, HSG A
390	98	Unconnected roofs, HSG A
28,226	82	Weighted Average
8,151		28.88% Pervious Area
20,075		71.12% Impervious Area
390		1.94% Unconnected

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

Subcatchment S2: pvmnt & abutter

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Type II 24-hr 100 Yr Rainfall=9.10"

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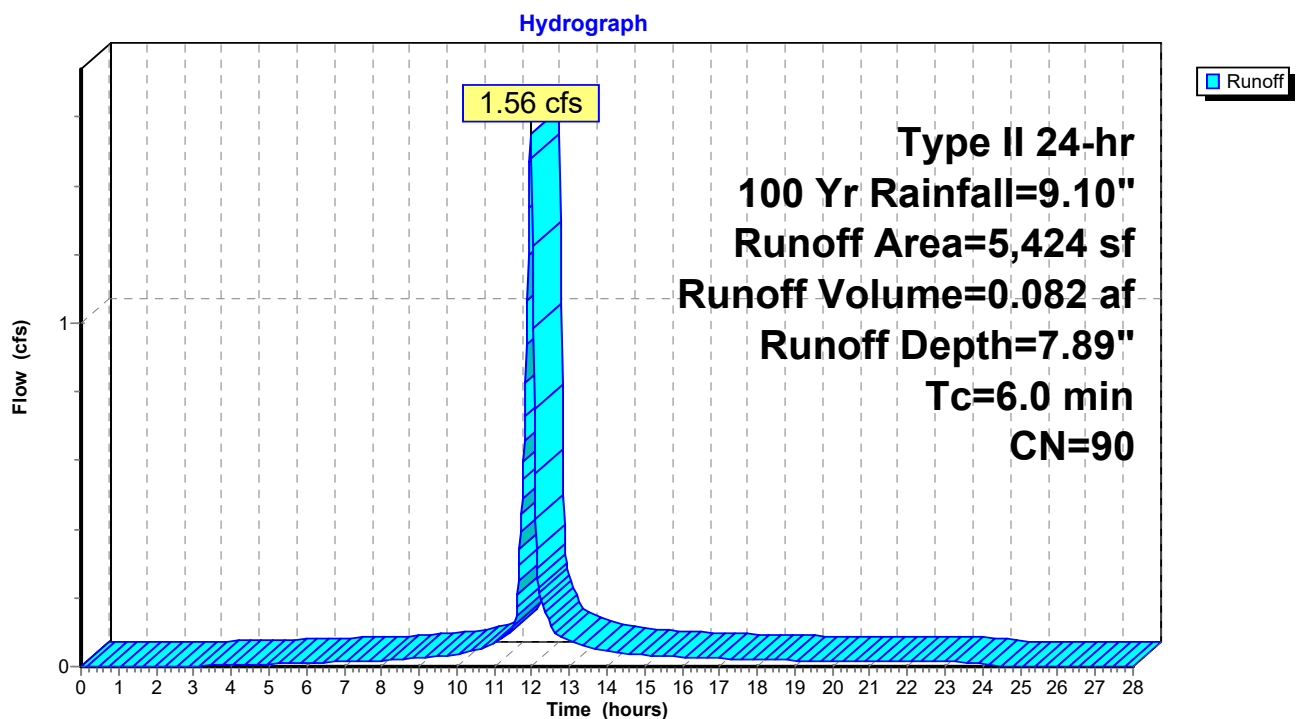
Summary for Subcatchment S4: West Front

Runoff = 1.56 cfs @ 11.97 hrs, Volume= 0.082 af, Depth= 7.89"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-28.00 hrs, dt= 0.02 hrs
Type II 24-hr 100 Yr Rainfall=9.10"

Area (sf)	CN	Description
4,223	98	Paved parking, HSG B
1,201	61	>75% Grass cover, Good, HSG B
5,424	90	Weighted Average
1,201		22.14% Pervious Area
4,223		77.86% Impervious Area

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

Subcatchment S4: West Front

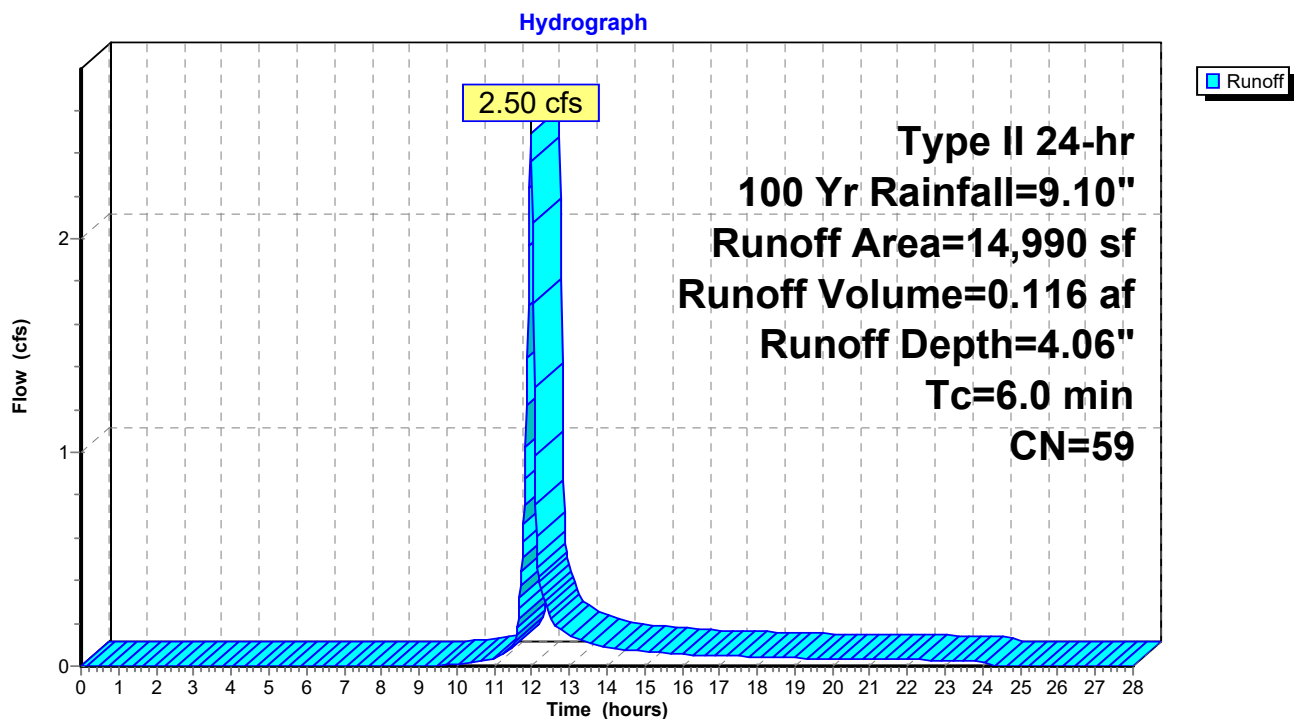
Summary for Subcatchment S5: East Front

Runoff = 2.50 cfs @ 11.98 hrs, Volume= 0.116 af, Depth= 4.06"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-28.00 hrs, dt= 0.02 hrs
Type II 24-hr 100 Yr Rainfall=9.10"

Area (sf)	CN	Description
3,798	98	Paved parking, HSG B
498	61	>75% Grass cover, Good, HSG B
1,041	98	Unconnected roofs, HSG B
9,653	39	>75% Grass cover, Good, HSG A
14,990	59	Weighted Average
10,151		67.72% Pervious Area
4,839		32.28% Impervious Area
1,041		21.51% Unconnected

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

Subcatchment S5: East Front

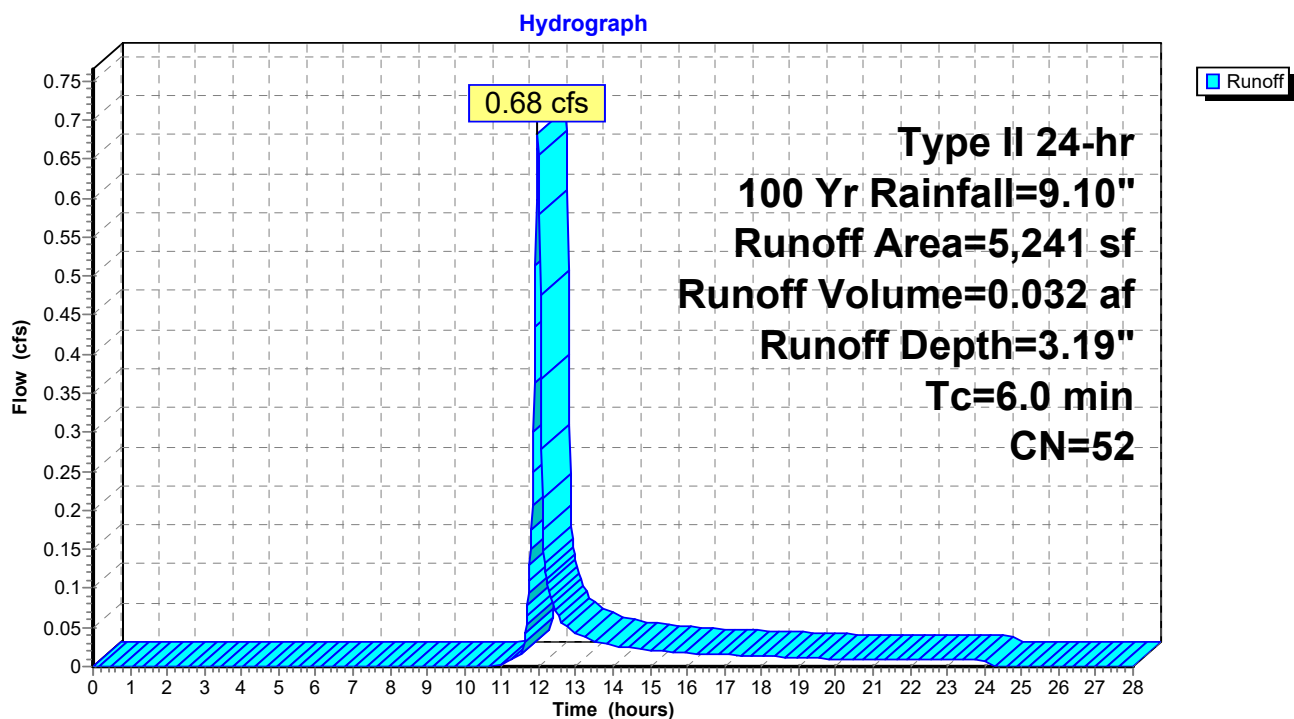
Summary for Subcatchment S6: NW offsite

Runoff = 0.68 cfs @ 11.98 hrs, Volume= 0.032 af, Depth= 3.19"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-28.00 hrs, dt= 0.02 hrs
Type II 24-hr 100 Yr Rainfall=9.10"

Area (sf)	CN	Description
949	61	>75% Grass cover, Good, HSG B
2,109	61	>75% Grass cover, Good, HSG B
2,183	39	>75% Grass cover, Good, HSG A
5,241	52	Weighted Average
5,241		100.00% Pervious Area

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

Subcatchment S6: NW offsite

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Type II 24-hr 100 Yr Rainfall=9.10"

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Summary for Subcatchment S7: West Offsite

Runoff = 0.16 cfs @ 11.97 hrs, Volume= 0.008 af, Depth= 4.30"

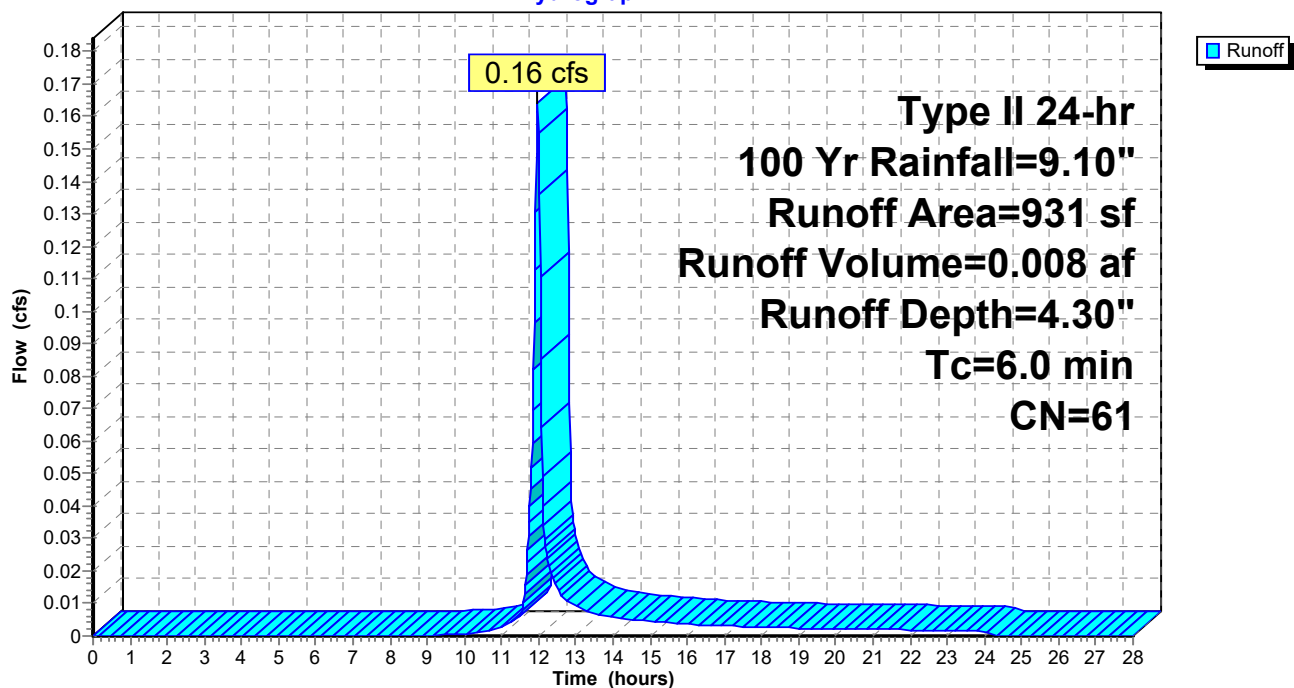
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-28.00 hrs, dt= 0.02 hrs
Type II 24-hr 100 Yr Rainfall=9.10"

Area (sf)	CN	Description
931	61	>75% Grass cover, Good, HSG B
931		100.00% Pervious Area

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

Subcatchment S7: West Offsite

Hydrograph



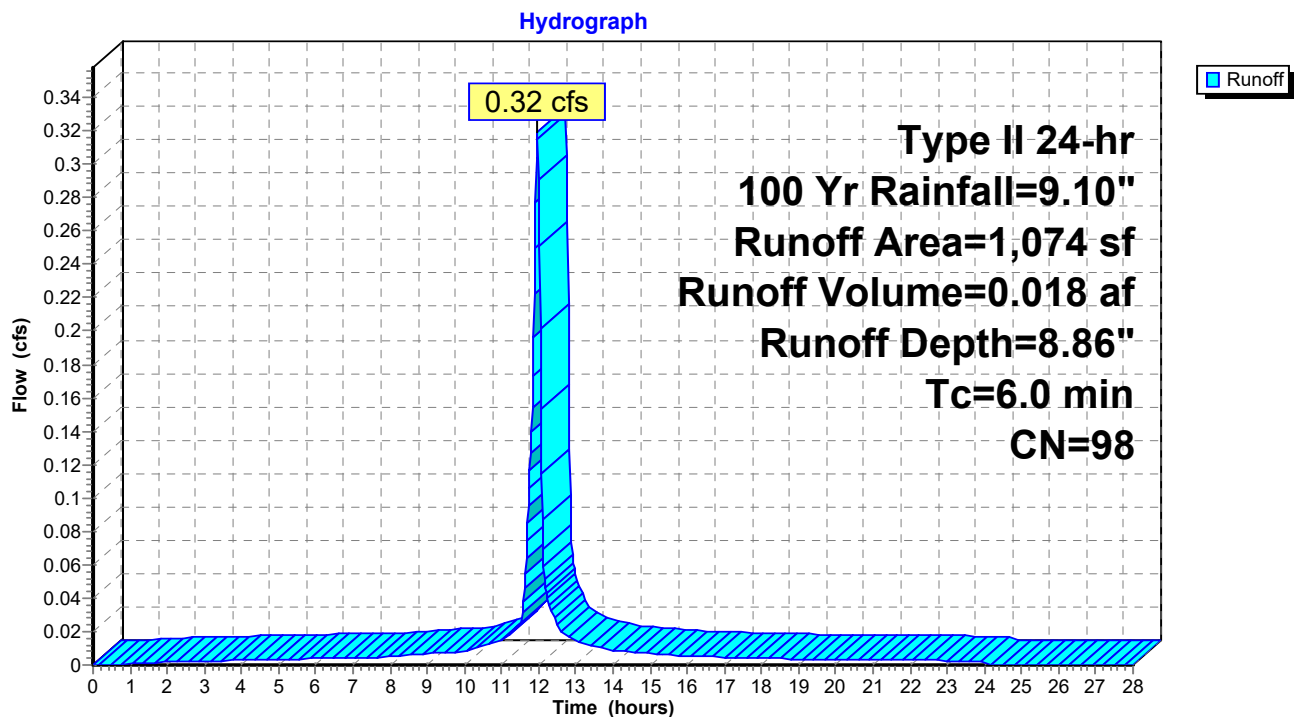
Summary for Subcatchment S8: Driveway to offsite CB

Runoff = 0.32 cfs @ 11.97 hrs, Volume= 0.018 af, Depth= 8.86"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-28.00 hrs, dt= 0.02 hrs
Type II 24-hr 100 Yr Rainfall=9.10"

Area (sf)	CN	Description
1,074	98	Paved parking, HSG B
1,074		100.00% Impervious Area

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

Subcatchment S8: Driveway to offsite CB

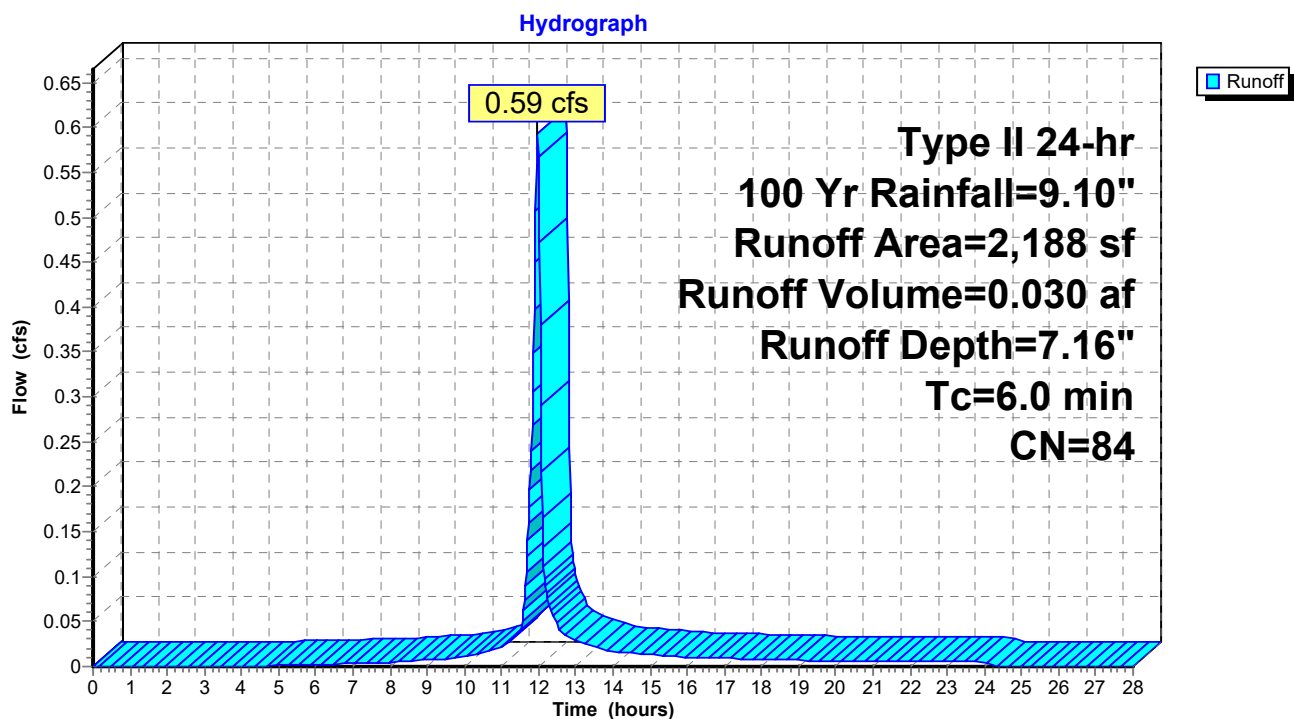
Summary for Subcatchment S9: Runoff to Street

Runoff = 0.59 cfs @ 11.97 hrs, Volume= 0.030 af, Depth= 7.16"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-28.00 hrs, dt= 0.02 hrs
Type II 24-hr 100 Yr Rainfall=9.10"

Area (sf)	CN	Description
1,381	98	Paved parking, HSG B
807	61	>75% Grass cover, Good, HSG B
2,188	84	Weighted Average
807		36.88% Pervious Area
1,381		63.12% Impervious Area

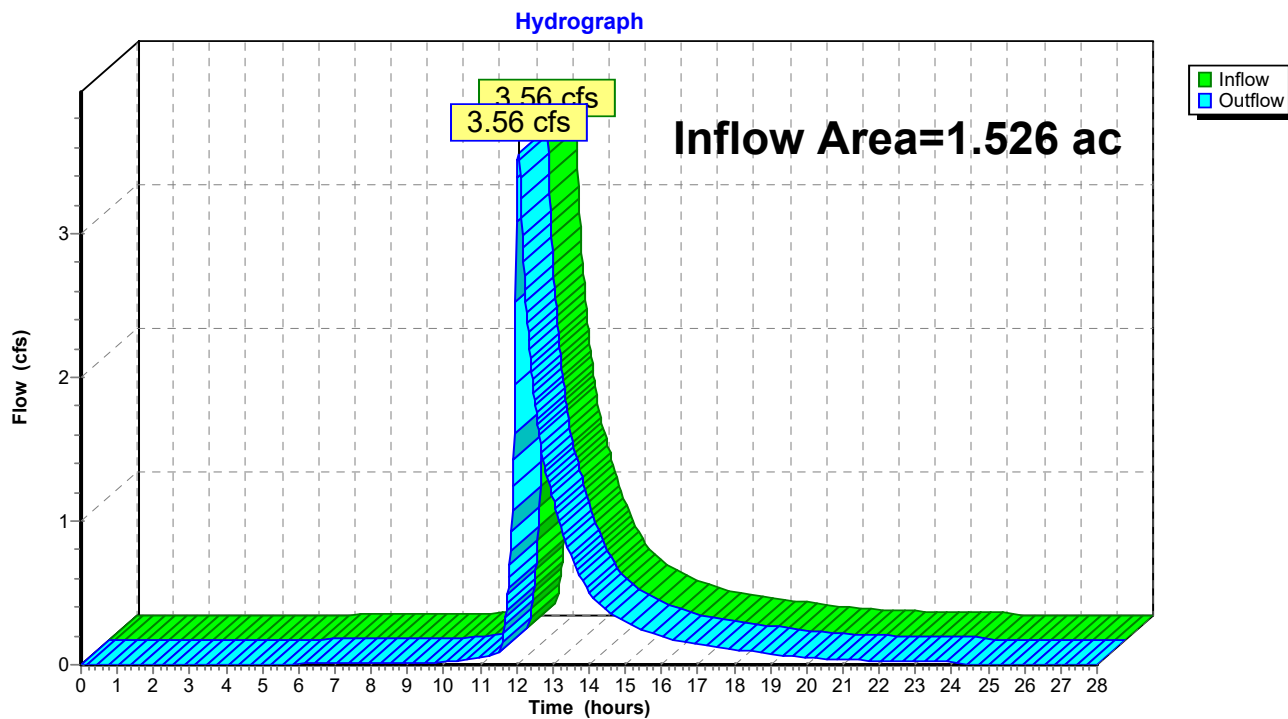
Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry, minimum

Subcatchment S9: Runoff to Street

Summary for Reach 5R: Total Offsite

Inflow Area = 1.526 ac, 60.17% Impervious, Inflow Depth = 2.93" for 100 Yr event
Inflow = 3.56 cfs @ 12.06 hrs, Volume= 0.373 af
Outflow = 3.56 cfs @ 12.06 hrs, Volume= 0.373 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-28.00 hrs, dt= 0.02 hrs

Reach 5R: Total Offsite

Summary for Pond P1: N Infil

Inflow Area = 0.841 ac, 77.75% Impervious, Inflow Depth = 7.36" for 100 Yr event
 Inflow = 9.98 cfs @ 11.97 hrs, Volume= 0.516 af
 Outflow = 1.56 cfs @ 12.17 hrs, Volume= 0.385 af, Atten= 84%, Lag= 12.2 min
 Discarded = 0.11 cfs @ 11.44 hrs, Volume= 0.183 af
 Primary = 1.45 cfs @ 12.17 hrs, Volume= 0.202 af

Routing by Stor-Ind method, Time Span= 0.00-28.00 hrs, dt= 0.02 hrs
 Peak Elev= 60.60' @ 12.17 hrs Surf.Area= 4,466 sf Storage= 11,058 cf
 Flood Elev= 60.70' Surf.Area= 4,466 sf Storage= 11,245 cf

Plug-Flow detention time= 237.8 min calculated for 0.385 af (75% of inflow)
 Center-of-Mass det. time= 146.8 min (921.9 - 775.2)

Volume	Invert	Avail.Storage	Storage Description
#1	56.50'	3,032 cf	Custom Stage Data (Prismatic) Listed below (Recalc) 16,874 cf Overall - 9,295 cf Embedded = 7,580 cf x 40.0% Voids
#2	57.50'	7,164 cf	ISI Rainstore3 8 x 287 Inside #1 Inside= 39.4"W x 31.5"H => 8.09 sf x 3.28'L = 26.6 cf Outside= 39.4"W x 31.5"H => 8.61 sf x 3.28'L = 28.3 cf 8,108 cf Overall x 94.0% Voids
#3	58.30'	1,048 cf	ISI Rainstore3 6 x 56 Inside #1 Inside= 39.4"W x 23.6"H => 6.07 sf x 3.28'L = 19.9 cf Outside= 39.4"W x 23.6"H => 6.46 sf x 3.28'L = 21.2 cf 1,187 cf Overall x 94.0% Voids
		11,245 cf	Total Available Storage

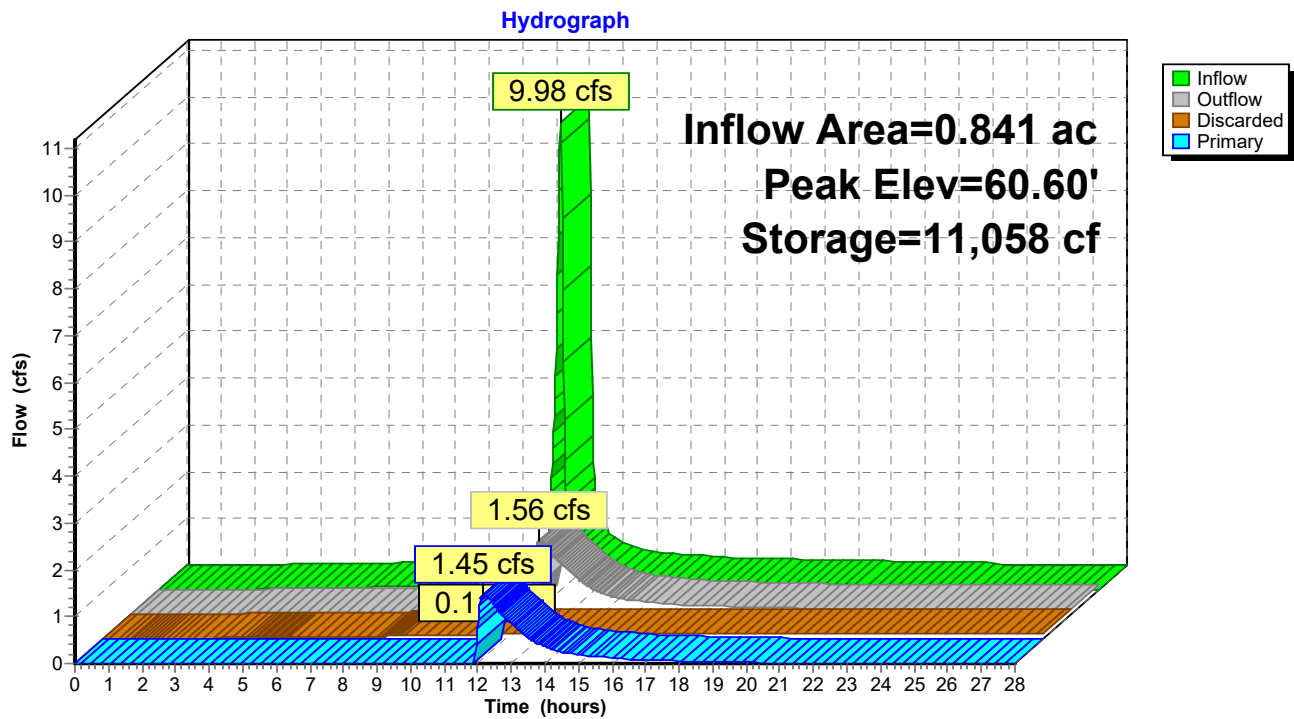
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
56.50	1,802	0	0
56.90	1,802	721	721
57.00	3,666	273	994
57.80	3,666	2,933	3,927
57.81	4,466	41	3,968
60.70	4,466	12,907	16,874

Device	Routing	Invert	Outlet Devices
#1	Discarded	56.50'	1.020 in/hr Exfiltration over Surface area
#2	Primary	59.30'	8.0" Round Culvert L= 120.0' CMP, mitered to conform to fill, Ke= 0.700 Inlet / Outlet Invert= 59.30' / 53.00' S= 0.0525 ' /' Cc= 0.900 n= 0.010 PVC, smooth interior, Flow Area= 0.35 sf

Discarded OutFlow Max=0.11 cfs @ 11.44 hrs HW=57.81' (Free Discharge)
 ↑ **1=Exfiltration** (Exfiltration Controls 0.11 cfs)

Primary OutFlow Max=1.45 cfs @ 12.17 hrs HW=60.59' (Free Discharge)
 ↑ **2=Culvert** (Inlet Controls 1.45 cfs @ 4.17 fps)

Pond P1: N Infil



Summary for Pond P2: W Infil

Inflow Area = 0.125 ac, 77.86% Impervious, Inflow Depth = 7.89" for 100 Yr event
 Inflow = 1.56 cfs @ 11.97 hrs, Volume= 0.082 af
 Outflow = 0.50 cfs @ 12.09 hrs, Volume= 0.063 af, Atten= 68%, Lag= 7.4 min
 Discarded = 0.02 cfs @ 8.76 hrs, Volume= 0.040 af
 Primary = 0.47 cfs @ 12.09 hrs, Volume= 0.022 af

Routing by Stor-Ind method, Time Span= 0.00-28.00 hrs, dt= 0.02 hrs
 Peak Elev= 58.53' @ 12.09 hrs Surf.Area= 947 sf Storage= 1,585 cf

Plug-Flow detention time= 251.3 min calculated for 0.063 af (77% of inflow)
 Center-of-Mass det. time= 165.1 min (933.8 - 768.7)

Volume	Invert	Avail.Storage	Storage Description
#1	56.00'	619 cf	Custom Stage Data (Prismatic) Listed below (Recalc) 2,841 cf Overall - 1,293 cf Embedded = 1,548 cf x 40.0% Voids
#2	56.50'	1,142 cf	ISI Rainstore3 6 x 61 Inside #1 Inside= 39.4"W x 23.6"H => 6.07 sf x 3.28'L = 19.9 cf Outside= 39.4"W x 23.6"H => 6.46 sf x 3.28'L = 21.2 cf 1,293 cf Overall x 94.0% Voids
1,761 cf			Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
56.00	947	0	0
59.00	947	2,841	2,841

Device	Routing	Invert	Outlet Devices
#1	Discarded	56.00'	1.020 in/hr Exfiltration over Horizontal area
#2	Primary	58.10'	8.0" Round Culvert L= 30.0' CMP, mitered to conform to fill, Ke= 0.700 Inlet / Outlet Invert= 58.10' / 53.00' S= 0.1700 '/' Cc= 0.900 n= 0.010 PVC, smooth interior, Flow Area= 0.35 sf

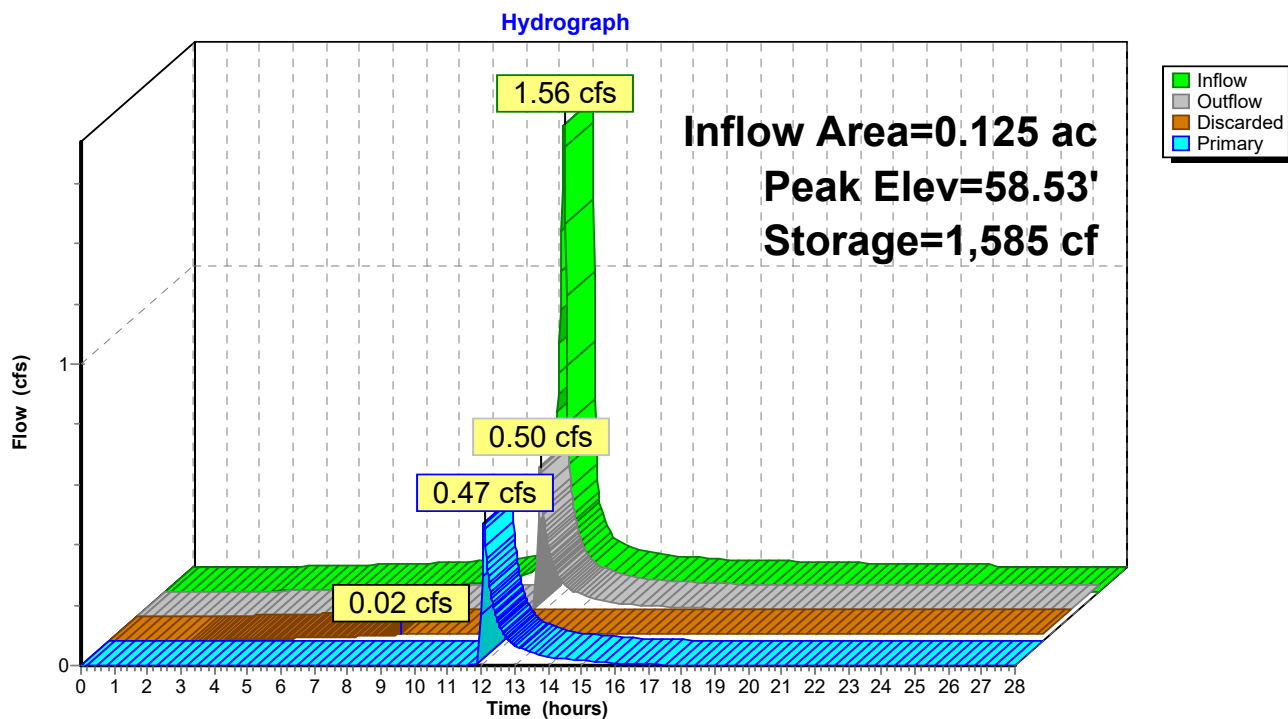
Discarded OutFlow Max=0.02 cfs @ 8.76 hrs HW=56.03' (Free Discharge)

↑**1=Exfiltration** (Exfiltration Controls 0.02 cfs)

Primary OutFlow Max=0.47 cfs @ 12.09 hrs HW=58.53' (Free Discharge)

↑**2=Culvert** (Inlet Controls 0.47 cfs @ 1.97 fps)

Pond P2: W Infil



Summary for Pond P3: E Infil

Inflow Area = 0.344 ac, 32.28% Impervious, Inflow Depth = 4.06" for 100 Yr event
 Inflow = 2.50 cfs @ 11.98 hrs, Volume= 0.116 af
 Outflow = 1.06 cfs @ 12.08 hrs, Volume= 0.099 af, Atten= 58%, Lag= 6.1 min
 Discarded = 0.03 cfs @ 10.90 hrs, Volume= 0.038 af
 Primary = 1.03 cfs @ 12.08 hrs, Volume= 0.061 af

Routing by Stor-Ind method, Time Span= 0.00-28.00 hrs, dt= 0.02 hrs
 Peak Elev= 59.07' @ 12.08 hrs Surf.Area= 1,103 sf Storage= 1,738 cf

Plug-Flow detention time= 175.5 min calculated for 0.099 af (85% of inflow)
 Center-of-Mass det. time= 106.8 min (945.1 - 838.3)

Volume	Invert	Avail.Storage	Storage Description
#1	56.80'	691 cf	Custom Stage Data (Prismatic) Listed below (Recalc) 3,254 cf Overall - 1,526 cf Embedded = 1,728 cf x 40.0% Voids
#2	57.05'	1,348 cf	ISI Rainstore3 6 x 72 Inside #1 Inside= 39.4"W x 23.6"H => 6.07 sf x 3.28'L = 19.9 cf Outside= 39.4"W x 23.6"H => 6.46 sf x 3.28'L = 21.2 cf 1,526 cf Overall x 94.0% Voids
		2,039 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
56.80	1,103	0	0
59.75	1,103	3,254	3,254

Device	Routing	Invert	Outlet Devices
#1	Discarded	56.80'	1.020 in/hr Exfiltration over Horizontal area
#2	Primary	58.25'	8.0" Round Culvert L= 90.0' CMP, mitered to conform to fill, Ke= 0.700 Inlet / Outlet Invert= 58.25' / 53.00' S= 0.0583 '/' Cc= 0.900 n= 0.010 PVC, smooth interior, Flow Area= 0.35 sf

Discarded OutFlow Max=0.03 cfs @ 10.90 hrs HW=56.83' (Free Discharge)

↑**1=Exfiltration** (Exfiltration Controls 0.03 cfs)

Primary OutFlow Max=1.03 cfs @ 12.08 hrs HW=59.06' (Free Discharge)

↑**2=Culvert** (Inlet Controls 1.03 cfs @ 2.95 fps)

Pond P3: E Infil

