

La Crosse Engineering & Surveying Co., Inc.

SEWERS
WATER
STREETS
SURVEYS
PLATTING

1206 South 3rd Street
LA CROSSE, WISCONSIN 54601
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Licensed in Wisconsin & Minnesota

March 9, 2023

Hoffer LLC

2813 South Avenue, La Crosse, WI

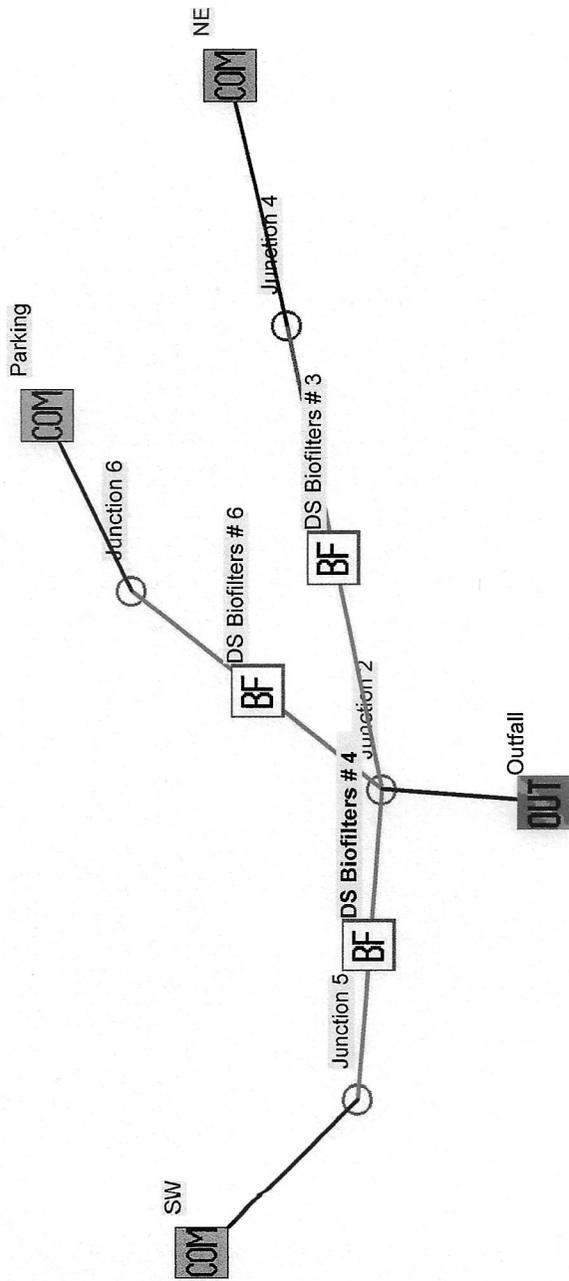
Storm water Management

Hofer LLC is a proposing a building at the above location in La Crosse. A 3,850 sq. ft. building with driveway off of Chase Street. The existing buildings were razed years ago to make way for the proposed complex. The drainage for the proposed building will be collected in the green areas, or rain gardens. These areas will be built to infiltrate. During larger storms (100 year), the discharge will be minimal and will discharge into the City system. The main discharge will be from the parking stalls, with a row of paver block being utilized for discharge control. The detail and layout is included on the grading/erosion plan. The computations are attached.

Storm event (yr)	Existing discharge (1S) to alley catch basin (cfs)	Proposed discharge (3P) to catch basin (cfs)
1	0.28	0.00
2	0.38	0.00
5	0.62	0.15
10	0.76	0.30
25	0.93	0.49
100	1.28	1.07

TSS removal

I have attached the WinSlamm calculations for the proposed storm chamber. Since the site is a redevelopment site, the removal rate of 40% is accomplished by these infiltration areas. As the WinSlamm computations show, the removal rate is 100%



Data file name: \\Chaffer\projects\Hoffer_Chase\Hoffer.mdb
WinSLAMM Version 10.4.1
Rain file name: C:\WinSLAMM Files\Rain Files\WisReg - Madison WI 1981.RAN
Particulate Solids Concentration file name: C:\WinSLAMM Files\w10.1 WI_AVG01.pscx
Runoff Coefficient file name: C:\WinSLAMM Files\WI_SL06 Dec06.rsvx
Residential Street Delivery file name: C:\WinSLAMM Files\WI_Res and Other Urban Dec06.std
Institutional Street Delivery file name: C:\WinSLAMM Files\WI_Com Inst Indust Dec06.std
Commercial Street Delivery file name: C:\WinSLAMM Files\WI_Com Inst Indust Dec06.std
Industrial Street Delivery file name: C:\WinSLAMM Files\WI_Com Inst Indust Dec06.std
Other Urban Street Delivery file name: C:\WinSLAMM Files\WI_Res and Other Urban Dec06.std
Freeway Street Delivery file name: C:\WinSLAMM Files\Freeway Dec06.std
Apply Street Delivery Files to Adjust the After Event Load Street Dirt Mass Balance: False
Pollutant Relative Concentration file name: C:\WinSLAMM Files\WI_GEO03.ppd
Source Area PSD and Peak to Average Flow Ratio File: C:\WinSLAMM Files\NURP Source Area PSD Files.csv
Cost Data file name:
Seed for random number generator: -42
Study period starting date: 03/12/81 Study period ending date: 12/02/81
Start of Winter Season: 12/02 End of Winter Season: 03/12
Date: 03-10-2023 Time: 10:44:24
Site information: South Avenue & Chase

LU# 1 - Commercial: Parking Total area (ac): 0.028

13 - Paved Parking 1: 0.025 ac. Connected PSD File: C:\WinSLAMM Files\NURP.cpz
51 - Small Landscaped Areas 1: 0.003 ac. Normal Sandy PSD File: C:\WinSLAMM Files\NURP.cpz

LU# 2 - Commercial: NE Total area (ac): 0.089

1 - Roofs 1: 0.051 ac. Pitched Disconnected Normal Sandy PSD File: C:\WinSLAMM Files\NURP.cpz
25 - Driveways 1: 0.004 ac. Disconnected Normal Sandy PSD File: C:\WinSLAMM Files\NURP.cpz
45 - Large Landscaped Areas 1: 0.026 ac. Normal Sandy PSD File: C:\WinSLAMM Files\NURP.cpz
70 - Water Body Areas: 0.008 ac. PSD File:

LU# 3 - Commercial: SW Total area (ac): 0.097

1 - Roofs 1: 0.037 ac. Pitched Disconnected Normal Sandy PSD File: C:\WinSLAMM Files\NURP.cpz
45 - Large Landscaped Areas 1: 0.046 ac. Normal Sandy PSD File: C:\WinSLAMM Files\NURP.cpz
70 - Water Body Areas: 0.014 ac. PSD File:

Control Practice 1: Biofilter CP# 1 (DS) - DS Biofilters # 3

1. Top area (square feet) = 510
2. Bottom area (square feet) = 104
3. Depth (ft): 1.5
4. Biofilter width (ft) - for Cost Purposes Only: 10
5. Infiltration rate (in/hr) = 3.63
6. Random infiltration rate generation? No
7. Infiltration rate fraction (side): 1
8. Infiltration rate fraction (bottom): 1
9. Depth of biofilter that is rock filled (ft) 0
10. Porosity of rock filled volume = 0
11. Engineered soil infiltration rate: 0
12. Engineered soil depth (ft) = 0
13. Engineered soil porosity = 0
14. Percent solids reduction due to flow through engineered soil = 0
15. Biofilter peak to average flow ratio = 3.8
16. Number of biofiltration control devices = 1
17. Particle size distribution file: Not needed - calculated by program
18. Initial water surface elevation (ft): 0

Soil Data Soil Type Fraction in Eng. Soil

Biofilter Outlet/Discharge Characteristics:

Outlet type: Broad Crested Weir

1. Weir crest length (ft): 4
2. Weir crest width (ft): 5
3. Height of datum to bottom of weir opening: 1.1

Control Practice 2: Biofilter CP# 2 (DS) - DS Biofilters # 4

1. Top area (square feet) = 675
2. Bottom area (square feet) = 150
3. Depth (ft): 1.5
4. Biofilter width (ft) - for Cost Purposes Only: 10
5. Infiltration rate (in/hr) = 3.63
6. Random infiltration rate generation? No
7. Infiltration rate fraction (side): 1
8. Infiltration rate fraction (bottom): 1
9. Depth of biofilter that is rock filled (ft) 0
10. Porosity of rock filled volume = 0
11. Engineered soil infiltration rate: 0
12. Engineered soil depth (ft) = 0
13. Engineered soil porosity = 0
14. Percent solids reduction due to flow through engineered soil = 0
15. Biofilter peak to average flow ratio = 3.8
16. Number of biofiltration control devices = 1
17. Particle size distribution file: Not needed - calculated by program
18. Initial water surface elevation (ft): 0

Soil Data Soil Type Fraction in Eng. Soil

Biofilter Outlet/Discharge Characteristics:

Outlet type: Broad Crested Weir

1. Weir crest length (ft): 4
2. Weir crest width (ft): 5
3. Height of datum to bottom of weir opening: 1

Control Practice 3: Biofilter CP# 3 (DS) - DS Biofilters # 6

1. Top area (square feet) = 175
2. Bottom area (square feet) = 175
3. Depth (ft): 1.1
4. Biofilter width (ft) - for Cost Purposes Only: 10
5. Infiltration rate (in/hr) = 3.63
6. Random infiltration rate generation? No
7. Infiltration rate fraction (side): 1
8. Infiltration rate fraction (bottom): 1
9. Depth of biofilter that is rock filled (ft) 0
10. Porosity of rock filled volume = 0
11. Engineered soil infiltration rate: 0
12. Engineered soil depth (ft) = 0
13. Engineered soil porosity = 0
14. Percent solids reduction due to flow through engineered soil = 0
15. Biofilter peak to average flow ratio = 3.8
16. Number of biofiltration control devices = 1
17. Particle size distribution file: Not needed - calculated by program
18. Initial water surface elevation (ft): 0

Soil Data Soil Type Fraction in Eng. Soil

Biofilter Outlet/Discharge Characteristics:

Outlet type: Broad Crested Weir

1. Weir crest length (ft): 5
2. Weir crest width (ft): 5
3. Height of datum to bottom of weir opening: 1

Data file name: \\Chafar\projects\Hoffer_Chase\Hoffer.mdb
WinSLAMM Version 10.4.1
Rain file name: C:\WinSLAMM Files\Rain Files\WisReg - Madison WI 1981.RAN
Particulate Solids Concentration file name: C:\WinSLAMM Files\10.1 WI_AVG01.pscx
Runoff Coefficient file name: C:\WinSLAMM Files\WI_SL06 Dec06.rsvx
Pollutant Relative Concentration file name: C:\WinSLAMM Files\WI_GEO03.ppd
Residential Street Delivery file name: C:\WinSLAMM Files\WI_Res and Other Urban Dec06.std
Institutional Street Delivery file name: C:\WinSLAMM Files\WI_Com Inst Indust Dec06.std
Commercial Street Delivery file name: C:\WinSLAMM Files\WI_Com Inst Indust Dec06.std
Industrial Street Delivery file name: C:\WinSLAMM Files\WI_Com Inst Indust Dec06.std
Other Urban Street Delivery file name: C:\WinSLAMM Files\WI_Res and Other Urban Dec06.std
Freeway Street Delivery file name: C:\WinSLAMM Files\Freeway Dec06.std
Apply Street Delivery Files to Adjust the After Event Load Street Dirt Mass Balance: False
Source Area PSD and Peak to Average Flow Ratio File: C:\WinSLAMM Files\NURP Source Area PSD Files.csv
Cost Data file name:
Seed for random number generator: -42
Study period starting date: 03/12/81 Study period ending date: 12/02/81
Start of Winter Season: 12/02 End of Winter Season: 03/12
Model Run Start Date: 03/12/81 Model Run End Date: 12/02/81
Date of run: 03-10-2023 Time of run: 10:43:57
Total Area Modeled (acres): 0.214
Years in Model Run: 0.68

	Runoff Volume (cu ft)	Percent Runoff Volume Reduction	Particulate Solids Conc. (mg/L)	Particulate Solids Yield (lbs)	Percent Particulate Solids Reduction
Total of all Land Uses without Controls:	4374	-	61.34	16.75	-
Outfall Total with Controls:	0	100.00%	0	0	100.00%
Annualized Total After Outfall Controls:	0			0	



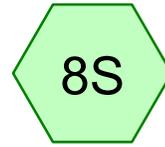
Exist



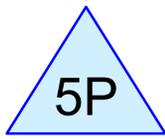
Parking



Northeast



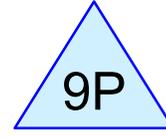
Southwest



South



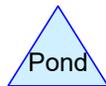
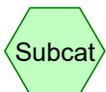
NW



SW



Total Discharge



Routing Diagram for Hoffer_Chase

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Hoffer_Chase

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Page 2

Project Notes

Rainfall events imported from "Sawyer_res.hcp"

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Page 3

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
0.226	79	<50% Grass cover, Poor, HSG B (1S)
0.072	61	>75% Grass cover, Good, HSG B (3S, 8S)
0.025	98	Paved parking, HSG B (2S)
0.004	98	Unconnected pavement, HSG B (3S)
0.088	98	Unconnected roofs, HSG B (3S, 8S)
0.023	98	Water Surface, HSG B (3S, 8S)
0.437	82	TOTAL AREA

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Page 4

Soil Listing (all nodes)

Area (acres)	Soil Group	Subcatchment Numbers
0.000	HSG A	
0.437	HSG B	1S, 2S, 3S, 8S
0.000	HSG C	
0.000	HSG D	
0.000	Other	
0.437		TOTAL AREA

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Page 5

Ground Covers (all nodes)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
0.000	0.226	0.000	0.000	0.000	0.226	<50% Grass cover, Poor	1S
0.000	0.072	0.000	0.000	0.000	0.072	>75% Grass cover, Good	3S, 8S
0.000	0.025	0.000	0.000	0.000	0.025	Paved parking	2S
0.000	0.004	0.000	0.000	0.000	0.004	Unconnected pavement	3S
0.000	0.088	0.000	0.000	0.000	0.088	Unconnected roofs	3S, 8S
0.000	0.023	0.000	0.000	0.000	0.023	Water Surface	3S, 8S
0.000	0.437	0.000	0.000	0.000	0.437	TOTAL AREA	

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Type II 24-hr 100 yr Rainfall=6.10"

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Page 6

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 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 1S: Exist	Runoff Area=9,842 sf 0.00% Impervious Runoff Depth>3.50" Tc=10.0 min CN=79 Runoff=1.28 cfs 0.066 af
Subcatchment 2S: Parking	Runoff Area=1,080 sf 100.00% Impervious Runoff Depth>5.36" Tc=3.0 min CN=98 Runoff=0.23 cfs 0.011 af
Subcatchment 3S: Northeast	Runoff Area=3,906 sf 70.92% Impervious Runoff Depth>4.32" Tc=10.0 min CN=87 Runoff=0.60 cfs 0.032 af
Subcatchment 8S: Southwest	Runoff Area=4,220 sf 52.61% Impervious Runoff Depth>3.60" Tc=10.0 min CN=80 Runoff=0.56 cfs 0.029 af
Pond 5P: South	Peak Elev=671.99' Storage=116 cf Inflow=0.23 cfs 0.011 af Discarded=0.02 cfs 0.009 af Primary=0.23 cfs 0.002 af Outflow=0.25 cfs 0.011 af
Pond 7P: NW	Peak Elev=672.22' Storage=306 cf Inflow=0.60 cfs 0.032 af Discarded=0.04 cfs 0.020 af Primary=0.60 cfs 0.011 af Outflow=0.63 cfs 0.032 af
Pond 9P: SW	Peak Elev=672.11' Storage=365 cf Inflow=0.56 cfs 0.029 af Discarded=0.04 cfs 0.022 af Primary=0.50 cfs 0.007 af Outflow=0.55 cfs 0.029 af
Link 10L: Total Discharge	Inflow=1.07 cfs 0.020 af Primary=1.07 cfs 0.020 af
Total Runoff Area = 0.437 ac Runoff Volume = 0.138 af Average Runoff Depth = 3.79"	
68.13% Pervious = 0.298 ac 31.87% Impervious = 0.139 ac	

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Type II 24-hr 100 yr Rainfall=6.10"

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Page 7

Summary for Subcatchment 1S: Exist

Runoff = 1.28 cfs @ 12.01 hrs, Volume= 0.066 af, Depth> 3.50"

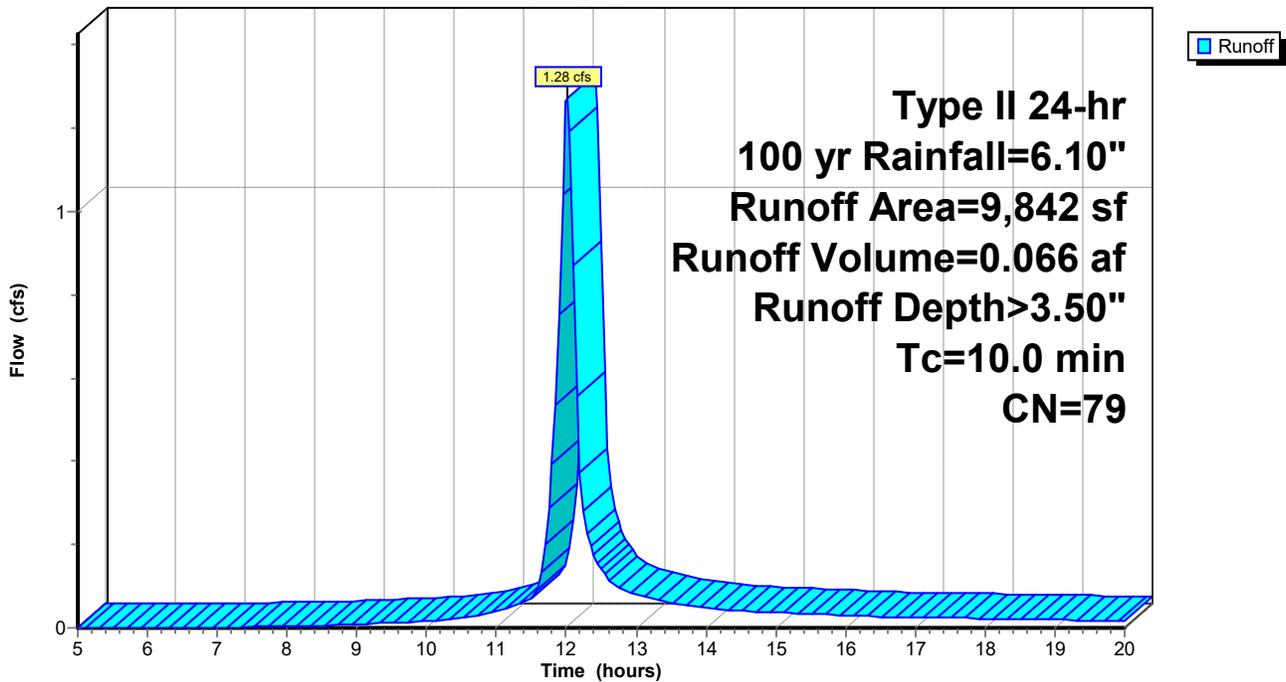
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 100 yr Rainfall=6.10"

Area (sf)	CN	Description
9,842	79	<50% Grass cover, Poor, HSG B
9,842		100.00% Pervious Area

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

Subcatchment 1S: Exist

Hydrograph



Summary for Subcatchment 2S: Parking

[49] Hint: $T_c < 2dt$ may require smaller dt

Runoff = 0.23 cfs @ 11.93 hrs, Volume= 0.011 af, Depth> 5.36"
 Routed to Pond 5P : South

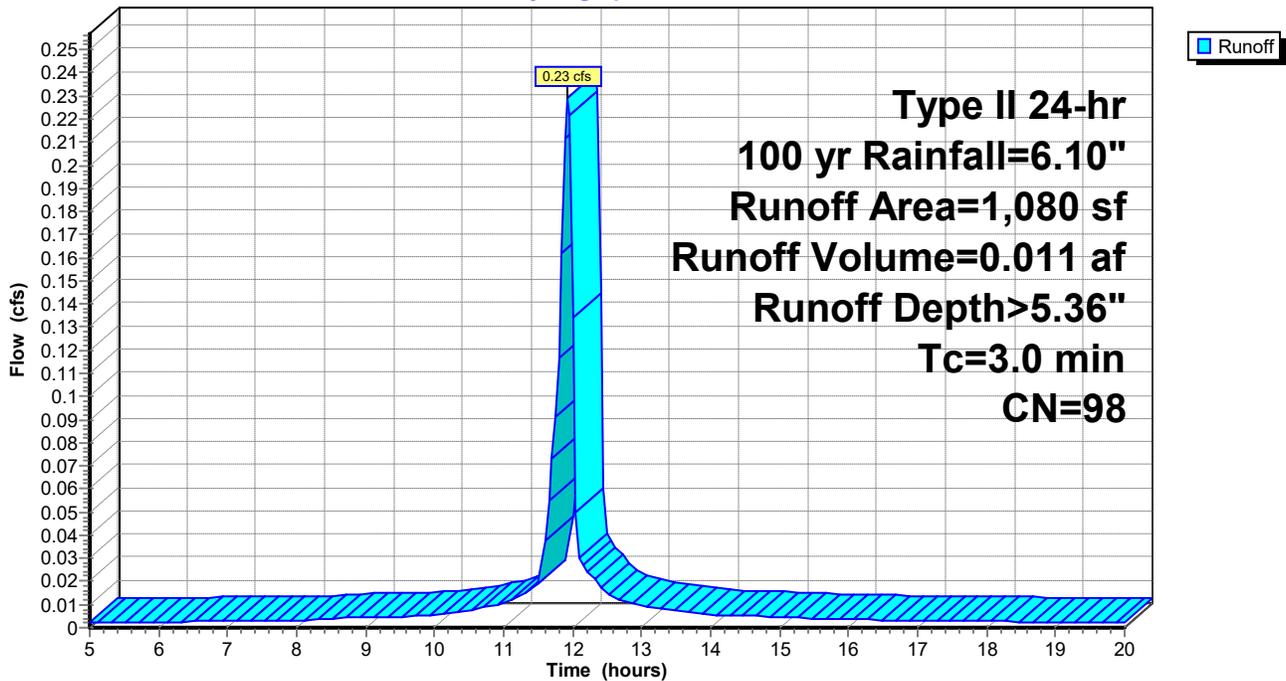
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 100 yr Rainfall=6.10"

Area (sf)	CN	Description
1,080	98	Paved parking, HSG B
1,080		100.00% Impervious Area

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

Subcatchment 2S: Parking

Hydrograph



Summary for Subcatchment 3S: Northeast

Runoff = 0.60 cfs @ 12.01 hrs, Volume= 0.032 af, Depth> 4.32"
 Routed to Pond 7P : NW

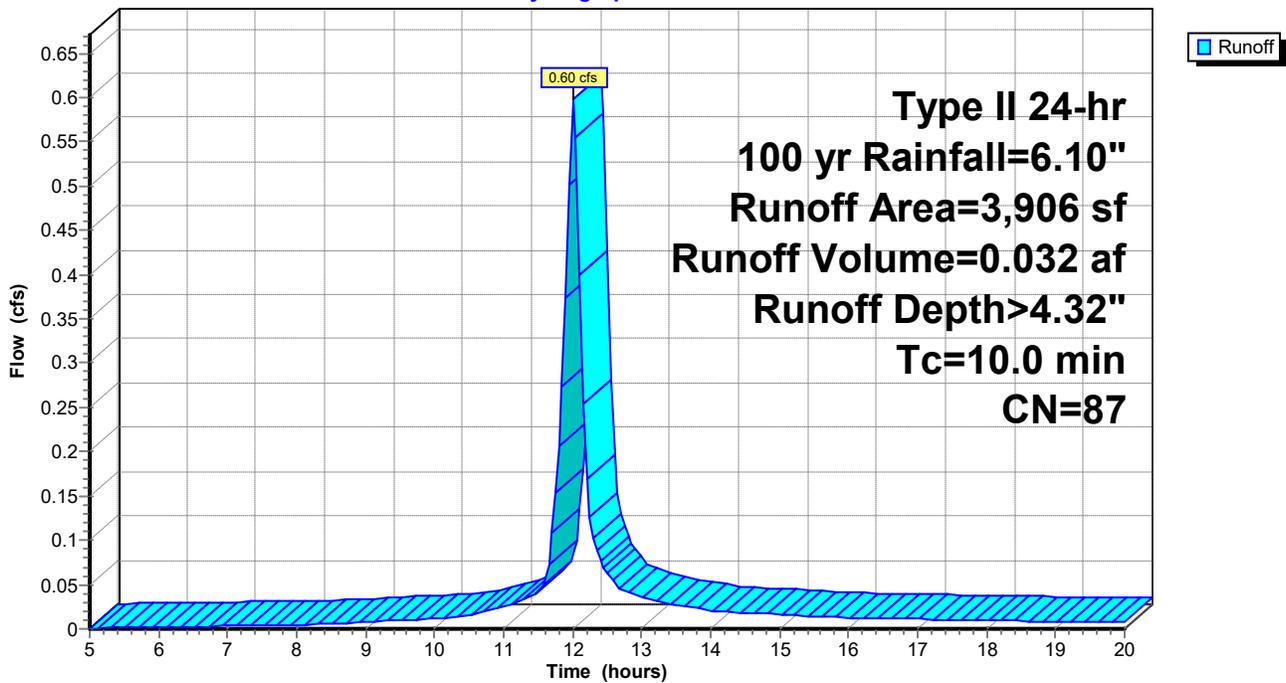
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 100 yr Rainfall=6.10"

Area (sf)	CN	Description
2,240	98	Unconnected roofs, HSG B
166	98	Unconnected pavement, HSG B
1,136	61	>75% Grass cover, Good, HSG B
364	98	Water Surface, HSG B
3,906	87	Weighted Average
1,136		29.08% Pervious Area
2,770		70.92% Impervious Area
2,406		86.86% Unconnected

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

Subcatchment 3S: Northeast

Hydrograph



Summary for Subcatchment 8S: Southwest

Runoff = 0.56 cfs @ 12.01 hrs, Volume= 0.029 af, Depth> 3.60"
 Routed to Pond 9P : SW

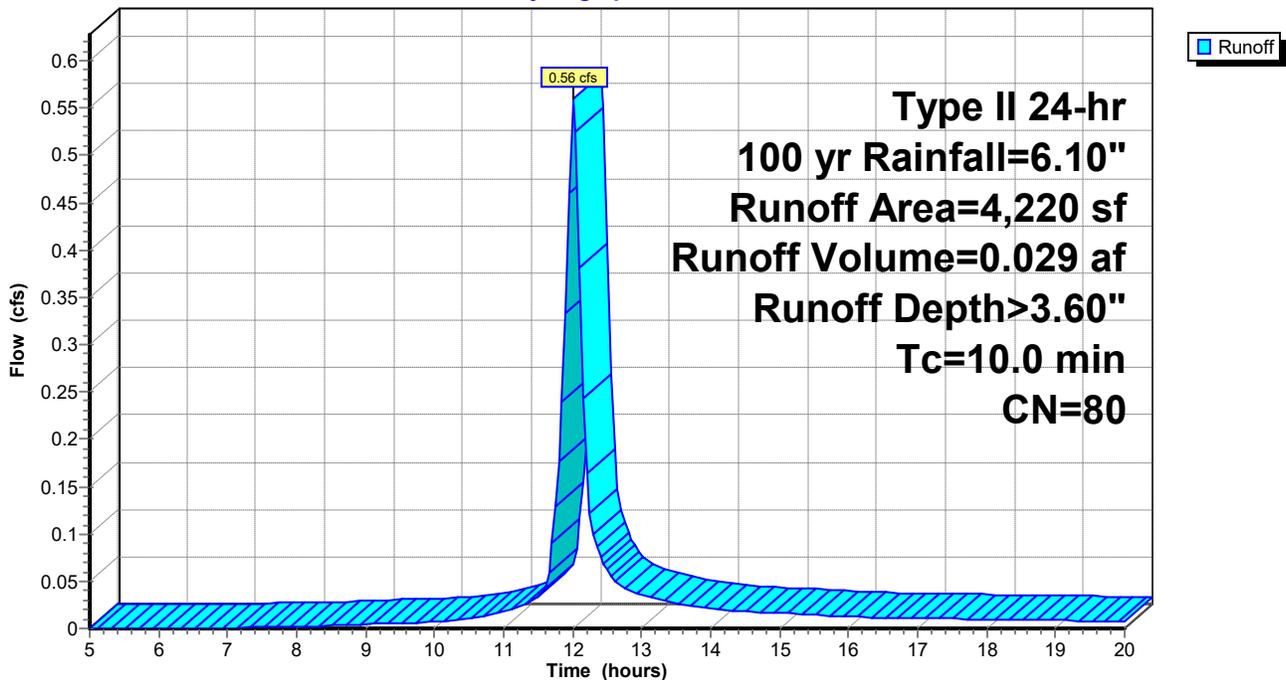
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 100 yr Rainfall=6.10"

Area (sf)	CN	Description
1,600	98	Unconnected roofs, HSG B
2,000	61	>75% Grass cover, Good, HSG B
620	98	Water Surface, HSG B
4,220	80	Weighted Average
2,000		47.39% Pervious Area
2,220		52.61% Impervious Area
1,600		72.07% Unconnected

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

Subcatchment 8S: Southwest

Hydrograph



Summary for Pond 5P: South

[82] Warning: Early inflow requires earlier time span
 [88] Warning: Qout>Qin may require smaller dt or Finer Routing

Inflow Area = 0.025 ac, 100.00% Impervious, Inflow Depth > 5.36" for 100 yr event
 Inflow = 0.23 cfs @ 11.93 hrs, Volume= 0.011 af
 Outflow = 0.25 cfs @ 11.96 hrs, Volume= 0.011 af, Atten= 0%, Lag= 1.9 min
 Discarded = 0.02 cfs @ 11.96 hrs, Volume= 0.009 af
 Primary = 0.23 cfs @ 11.96 hrs, Volume= 0.002 af
 Routed to Link 10L : Total Discharge

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 671.99' @ 11.96 hrs Surf.Area= 212 sf Storage= 116 cf

Plug-Flow detention time= 33.0 min calculated for 0.011 af (100% of inflow)
 Center-of-Mass det. time= 32.8 min (759.8 - 727.0)

Volume	Invert	Avail.Storage	Storage Description	
#1	671.30'	261 cf	Custom Stage Data (Prismatic) Listed below (Recalc)	
Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
671.30	175	0.0	0	0
671.35	175	30.0	3	3
671.85	175	100.0	88	90
672.50	350	100.0	171	261

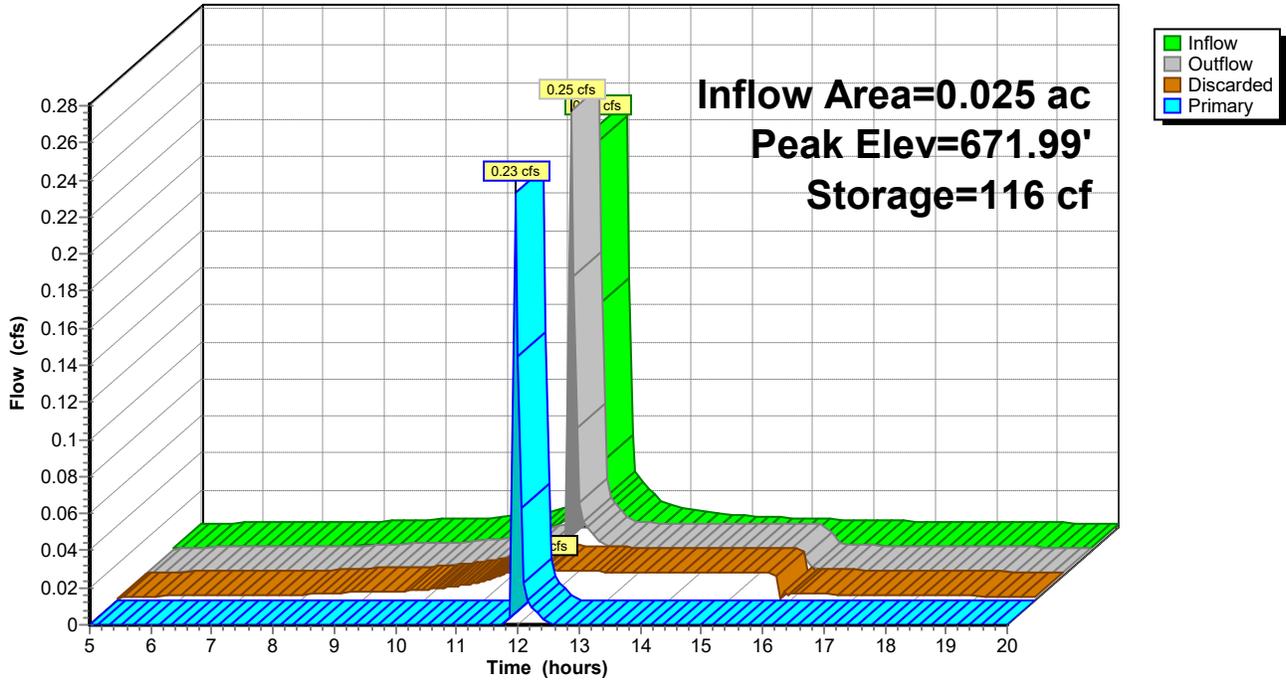
Device	Routing	Invert	Outlet Devices
#1	Discarded	671.30'	3.600 in/hr Exfiltration over Surface area Conductivity to Groundwater Elevation = 650.00'
#2	Primary	671.90'	4.0' long x 4.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.38 2.54 2.69 2.68 2.67 2.67 2.65 2.66 2.66 2.68 2.72 2.73 2.76 2.79 2.88 3.07 3.32

Discarded OutFlow Max=0.02 cfs @ 11.96 hrs HW=671.98' (Free Discharge)
 ↑1=Exfiltration (Controls 0.02 cfs)

Primary OutFlow Max=0.21 cfs @ 11.96 hrs HW=671.98' (Free Discharge)
 ↑2=Broad-Crested Rectangular Weir (Weir Controls 0.21 cfs @ 0.66 fps)

Pond 5P: South

Hydrograph



Summary for Pond 7P: NW

[82] Warning: Early inflow requires earlier time span

[88] Warning: Qout>Qin may require smaller dt or Finer Routing

Inflow Area = 0.090 ac, 70.92% Impervious, Inflow Depth > 4.32" for 100 yr event
 Inflow = 0.60 cfs @ 12.01 hrs, Volume= 0.032 af
 Outflow = 0.63 cfs @ 12.02 hrs, Volume= 0.032 af, Atten= 0%, Lag= 0.7 min
 Discarded = 0.04 cfs @ 12.02 hrs, Volume= 0.020 af
 Primary = 0.60 cfs @ 12.02 hrs, Volume= 0.011 af
 Routed to Link 10L : Total Discharge

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 672.22' @ 12.02 hrs Surf.Area= 416 sf Storage= 306 cf

Plug-Flow detention time= 58.8 min calculated for 0.032 af (98% of inflow)
 Center-of-Mass det. time= 50.9 min (810.5 - 759.6)

Volume	Invert	Avail.Storage	Storage Description
#1	671.00'	435 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
671.00	104	0	0
672.00	340	222	222
672.50	510	213	435

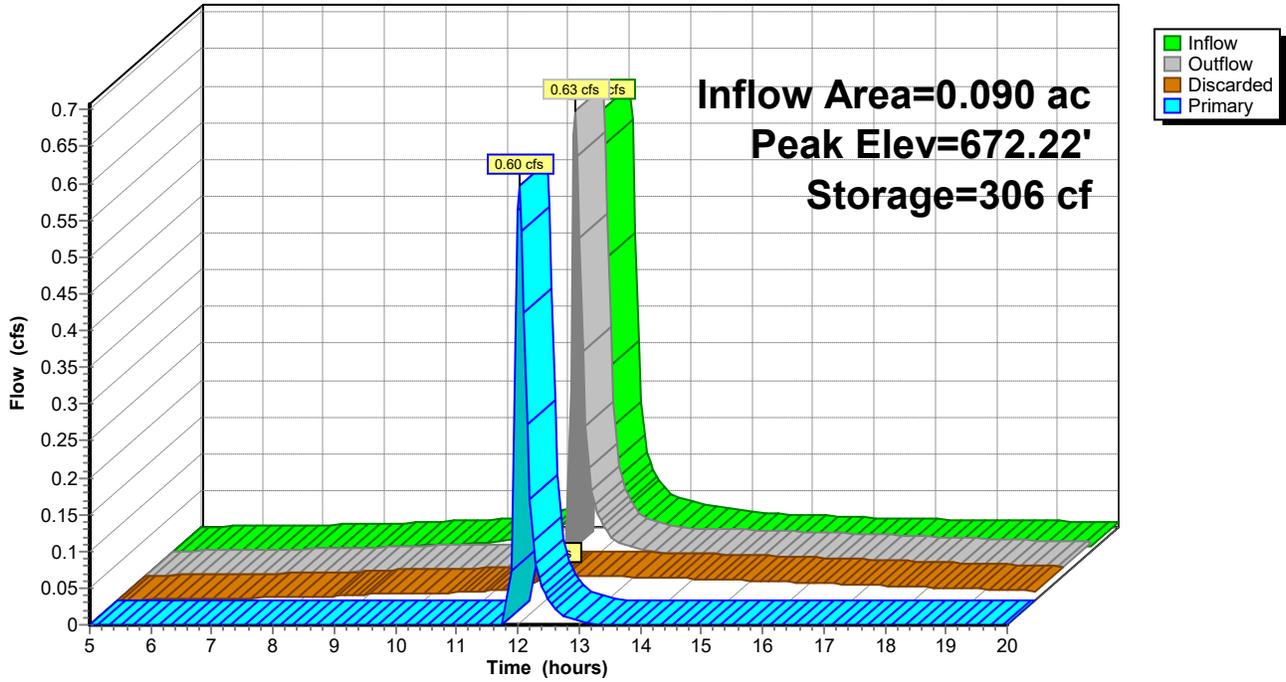
Device	Routing	Invert	Outlet Devices
#1	Discarded	671.00'	3.600 in/hr Exfiltration over Surface area Conductivity to Groundwater Elevation = 648.00'
#2	Primary	672.10'	6.0' long x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 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

Discarded OutFlow Max=0.04 cfs @ 12.02 hrs HW=672.22' (Free Discharge)
 ↑1=Exfiltration (Controls 0.04 cfs)

Primary OutFlow Max=0.55 cfs @ 12.02 hrs HW=672.22' (Free Discharge)
 ↑2=Broad-Crested Rectangular Weir (Weir Controls 0.55 cfs @ 0.80 fps)

Pond 7P: NW

Hydrograph



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Type II 24-hr 100 yr Rainfall=6.10"

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Page 15

Summary for Pond 9P: SW

Inflow Area = 0.097 ac, 52.61% Impervious, Inflow Depth > 3.60" for 100 yr event
Inflow = 0.56 cfs @ 12.01 hrs, Volume= 0.029 af
Outflow = 0.55 cfs @ 12.07 hrs, Volume= 0.029 af, Atten= 3%, Lag= 3.4 min
Discarded = 0.04 cfs @ 12.07 hrs, Volume= 0.022 af
Primary = 0.50 cfs @ 12.07 hrs, Volume= 0.007 af
Routed to Link 10L : Total Discharge

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 672.11' @ 12.07 hrs Surf.Area= 516 sf Storage= 365 cf

Plug-Flow detention time= 62.2 min calculated for 0.029 af (100% of inflow)
Center-of-Mass det. time= 61.6 min (837.1 - 775.5)

Volume	Invert	Avail.Storage	Storage Description
#1	671.00'	596 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
671.00	150	0	0
672.00	470	310	310
672.50	675	286	596

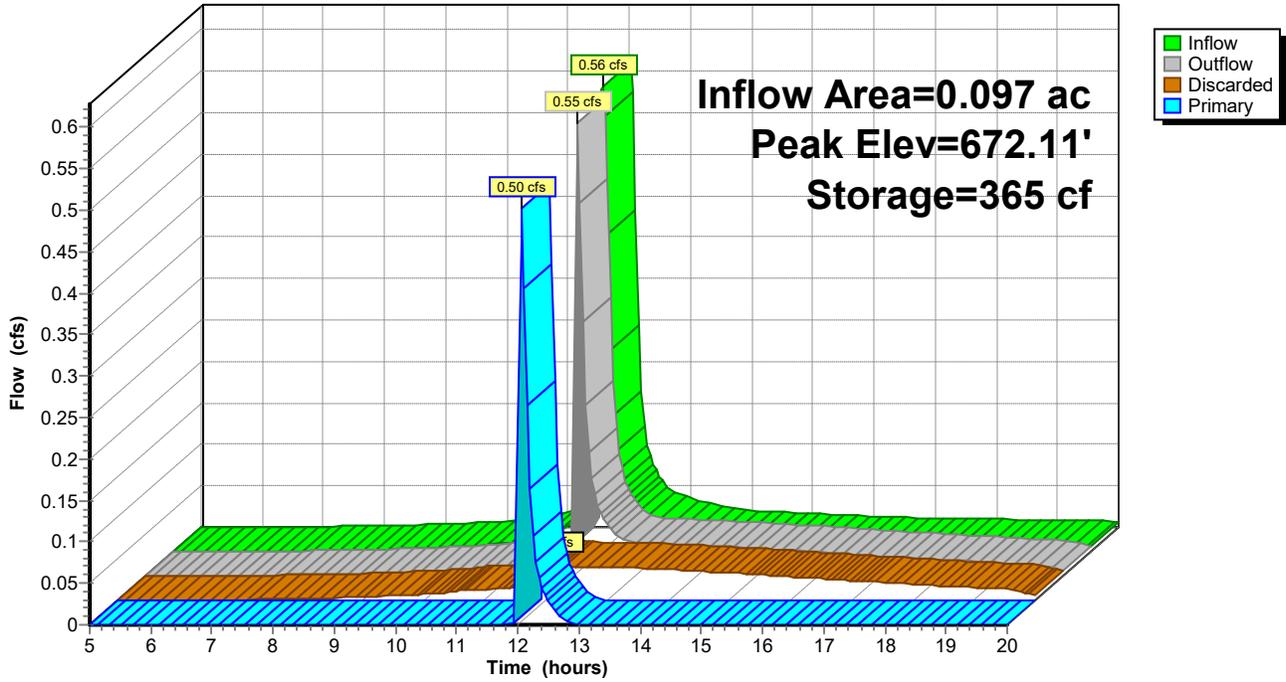
Device	Routing	Invert	Outlet Devices
#1	Discarded	671.00'	3.600 in/hr Exfiltration over Surface area Conductivity to Groundwater Elevation = 648.00'
#2	Primary	672.00'	6.0' long x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 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

Discarded OutFlow Max=0.04 cfs @ 12.07 hrs HW=672.10' (Free Discharge)
↑1=Exfiltration (Controls 0.04 cfs)

Primary OutFlow Max=0.44 cfs @ 12.07 hrs HW=672.10' (Free Discharge)
↑2=Broad-Crested Rectangular Weir (Weir Controls 0.44 cfs @ 0.74 fps)

Pond 9P: SW

Hydrograph



Summary for Link 10L: Total Discharge

Inflow Area = 0.211 ac, 65.94% Impervious, Inflow Depth = 1.16" for 100 yr event
Inflow = 1.07 cfs @ 12.06 hrs, Volume= 0.020 af
Primary = 1.07 cfs @ 12.06 hrs, Volume= 0.020 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Link 10L: Total Discharge

Hydrograph

