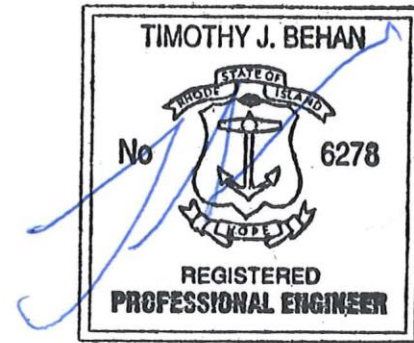


Report for:

**Stormwater BMP Narrative Report for  
AP 47-3 Lot 119-Proposed Sublot-A  
523 South Road  
South Kingstown, Rhode Island  
Pre-Application Submittal**

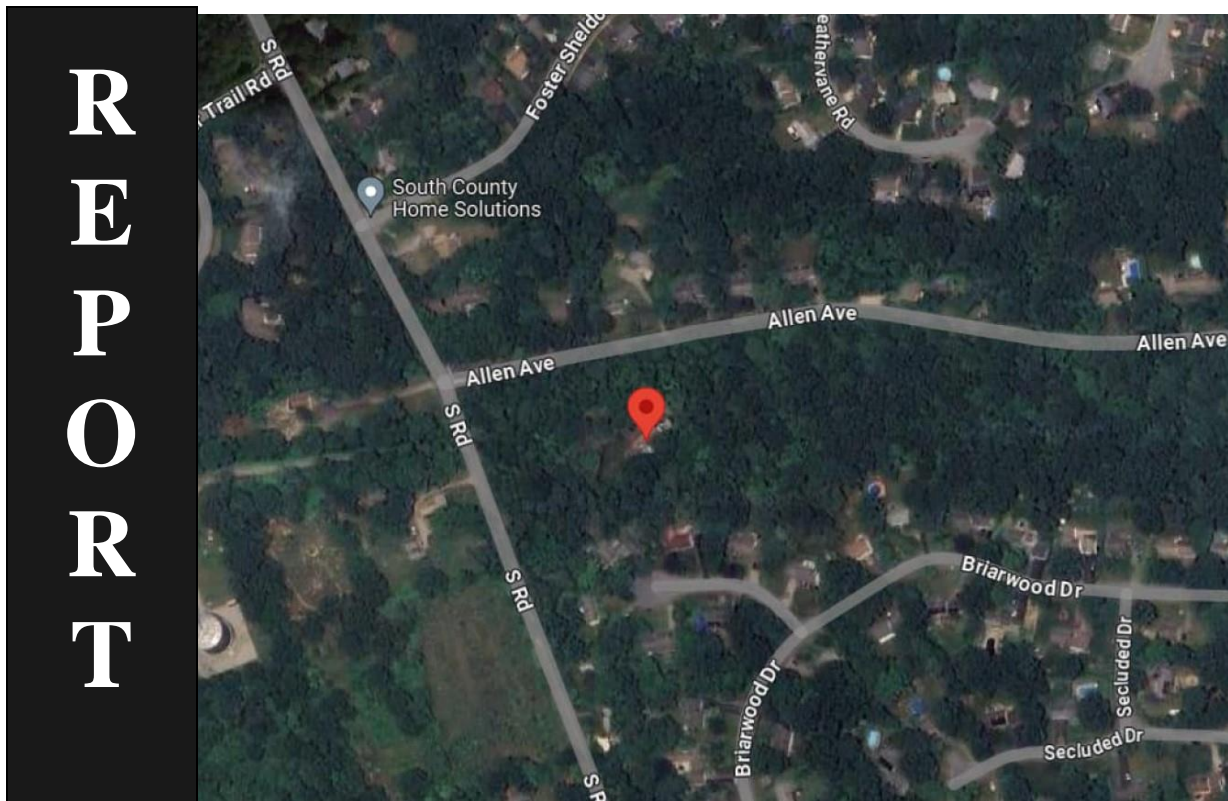


Prepared for:

**Atlas Land Surveying, LLC  
91 Parkway Drive  
Warwick, Rhode Island**

July 2024

CE&C #24052.00



**COMMONWEALTH ENGINEERS & CONSULTANTS, INC.**  
400 SMITH STREET  
RHODE ISLAND, 02908  
401-273-6600

# Stormwater Narrative:

## 1.0 Introduction:

This report was prepared to document the stormwater best management practices (BMPs) proposed for the subject property located at 523 South Road, South Kingstown, Rhode Island (A.P. 47-3, Lot 119) for the proposed Sublot-A.

## 2.0 General Description/Purpose:

The applicant is proposing to subdivide the existing 3.95 acre lot into four (4) lots and construct a new single-family dwelling and associated items as detailed below on each of the three (3) new lots.

The project consists of the following major components:

- Installing sediment and erosion control devices;
- Construct a new single-family dwelling, existing OWTS connection, water line and utilities (electric/communication/cable);
- Construct a new asphalt driveway; and
- Construct stormwater BMPs for treatment of runoff generated from the proposed impervious surfaces.

## 3.0 Basis of Stormwater BMP Design:

BMP sizing and design is based on the *'State of Rhode Island Stormwater Management Guidance for Individual Single-Family Residential Lot Development'* guidance document prepared by the RIDEM/CRMC and the *Town of South Kingstown Soil Erosion, Runoff and Sediment Control Ordinance*. Note: due to site constraints the systems have been designed to the 'maximum extent possible' in accordance with these documents.

## 4.0 Stormwater BMP Design:

The seven (7) design steps detailed in this section were taken from the *'State of Rhode Island Stormwater Management Guidance for Individual Single-Family Residential Lot Development'* guidance document:

Step 1: Identify major impervious surfaces and areas (ft<sup>2</sup>):

Proposed Dwelling Roof:  
Proposed new Driveway:

Impervious Area = 1,836 ft<sup>2</sup>  
Impervious Area = 1,089 ft<sup>2</sup>

Step 2: Choose potential storm water management practice locations based on required regulatory setbacks. The depth to SHGWT is not required when the selected practice is a Qualifying Pervious Area (QPA), vegetated swale, rain garden or permeable surface construction.

The stormwater management practices must meet the required minimum separation distances, or setbacks, listed in Table 1 below.

**Table 1.** Minimum Setback Distances for Rain Gardens, Infiltration Trenches, Dry Wells and Permeable Pavement Practices on Single-Family Residential Lots

Landscape Feature	Required Setback (ft) for Infiltration Trenches and Dry Wells	Required Setback (ft) for Rain Gardens and Permeable Paving Practices
Public Drinking Water Supply Well – Drilled (rock), Driven, or Dug	200	200
Public Drinking Water Supply Well – Gravel Packed, Gravel Developed	400	400
Private Drinking Water Wells	50	25
Surface Water Drinking Water Supply Impoundment with Supply Intake	100	100
Tributaries that Discharge to the Surface Drinking Water Supply Impoundment	50	50
All Other Surface Waters	50	50
Up-gradient from Natural slopes > %15	25	25
Down-gradient from Building Structures	10	10
Up-gradient from Building Structures	10	10
Onsite Wastewater Treatment Systems (OWTS)	15	15
Coastal features, coastal buffer zones, regulated freshwater wetlands	As applicable	As applicable

The site has the following constraints:

1. buildings
2. onsite wastewater treatment systems

It is a challenge to meet all the above setbacks due to site constraints. The proposed BMPs have been designed to the ‘maximum extent possible’ in accordance with the *‘State of Rhode Island Stormwater Management Guidance for Individual Single-Family Residential Lot Development’* using sound engineering judgement.

**Step 3:** Select appropriate storm water treatment practice(s) based on your site conditions and required elements for each practice. You may have to install more than one practice to meet your stormwater management requirements;

The checked box indicates which BMPs were selected:

<input type="checkbox"/>	<u>Type of BMP</u>	<u>Justification</u>
<input checked="" type="checkbox"/>	Infiltration trench	(Proposed for Driveway)
<input checked="" type="checkbox"/>	Drywell	(Proposed for Roof Runoff)
<input type="checkbox"/>	Qualified pervious area	(not used)
<input type="checkbox"/>	Vegetated swale	(not used)

- Rain garden (not used)
- Permeable surface (not used)

**Step 4:** Size the selected stormwater treatment practice(s) to meet the water quality volume (WQv) requirement using drainage area and soil texture information:

**BMP #1: (Infiltration Trench for New Asphalt Driveway Runoff)**

Selected BMP = Infiltration Trench for Proposed Driveway runoff.

Sizing table is taken from the *'State of Rhode Island Stormwater Management Guidance for Individual Single-Family Residential Lot Development'* guidance document:

**Tables 10. and 11.** Sizing Guidance for Infiltration Trenches and Dry Wells

**Infiltration Trench / Dry Well Surface Area (square feet)  
in Sandy Soils (Sands, Loamy Sands and Sandy Loams)**

Drainage Area (sq. ft.)	6 in. deep	12 in. deep	18 in. deep	24 in. deep	30 in. deep	36 in. deep	48 in. deep
100	24	16	12	10	8	7	5
200	48	32	24	19	16	14	11
300	72	48	36	29	24	21	16
400	96	64	48	39	32	28	21
500	119	80	60	48	40	34	27
600	143	96	72	58	48	41	32
700	167	112	84	67	56	48	38
800	191	128	96	77	64	55	43
900	215	144	108	87	72	62	48
1000	239	160	120	96	80	69	54

Infiltration Trench: 5' wide by 3' deep by 60' long

Total impervious surface area = 1,089 ft<sup>2</sup>

Width of infiltration Trench = 5.00 feet

Depth of infiltration trench = 3.00 feet

Length of infiltration trench = 70.00 feet

Total Area provided = 350 square-feet

Total storage required = ((1,089/1,000) X 69) square-feet=75.1 square-feet

The impervious areas and the proposed infiltration trench were modeled in HydroCAD for the water quality storm of 1.2-inches, 1-Year and the 10-Year storms. The modeling shows no increase discharge from the infiltration trench for the water quality storm, see attached HydroCAD report and table below.

**BMP #2: (Underground Chambers for Roof Runoff)**

Selected BMP = underground chambers for roof runoff.

Sizing table is taken from the 'State of Rhode Island Stormwater Management Guidance for Individual Single-Family Residential Lot Development' guidance document:

**Tables 10. and 11.** Sizing Guidance for Infiltration Trenches and Dry Wells

<b>Infiltration Trench / Dry Well Surface Area (square feet) in Sandy Soils (Sands, Loamy Sands and Sandy Loams)</b>							
<b>Drainage Area (sq. ft.)</b>	<b>6 in. deep</b>	<b>12 in. deep</b>	<b>18 in. deep</b>	<b>24 in. deep</b>	<b>30 in. deep</b>	<b>36 in. deep</b>	<b>48 in. deep</b>
100	24	16	12	10	8	7	5
200	48	32	24	19	16	14	11
300	72	48	36	29	24	21	16
400	96	64	48	39	32	28	21
500	119	80	60	48	40	34	27
600	143	96	72	58	48	41	32
700	167	112	84	67	56	48	38
800	191	128	96	77	64	55	43
900	215	144	108	87	72	62	48
1000	239	160	120	96	80	69	54

Infiltration Bed: Cultec chambers:

Total impervious surface area = 1,836ft<sup>2</sup>

Use 10-Cultec C-100HD units in a bed of stone

Width of infiltration bed = 18.33 feet  
 Length of infiltration bed = 17.50 feet

Total storage provided = 0.008 acre-feet  
 Total storage required = 0.003 acre-feet

The impervious roof areas and the proposed infiltration bed were modeled in HydroCAD for the water quality storm of 1.2-inches, 1-Year and the 10-Year storms. The modeling shows no discharge from the infiltration system for the water quality storm, 1-Year and the 10-Year storms, see attached HydroCAD report and table below.

**5.0 How potential wetland impacts have been avoided (pertaining to stormwater BMPs):**

Post project water quality impacts will be mitigated by constructing BMPs for the dwelling and driveway, all of which were designed and constructed in accordance with the 'State of Rhode Island Stormwater Management Guidance for Individual Single-Family Residential Lot Development' guidance document to the 'maximum extent possible'.

**6.0 Town of South Kingstown Soil Erosion, Runoff and Sediment Control Ordinance**

The Town of South Kingstown Soil Erosion, Runoff and Sediment Control Ordinance requires the post-development runoff rates do not exceed the pre-development rates for a 10-year storm. Additional storage for the 10-year storm has been added to the infiltration trench and the infiltration chambers. There is no increase in runoff rates for either the Water Quality Storm, 1-Year or the 10-Year Type III Storms, see attached HydroCAD Report.

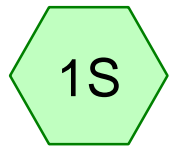
Table1: HydroCAD Modeling Summary

	PRE-DEVELOPMENT		POST-DEVELOPMENT		REDUCTION	
	(CFS)	(ACRE FEET)	(CFS)	(ACRE FEET)	(CFS)	(ACRE FEET)
WATER QUALITY	0.03	0.003	0.03	0.003	0	0
1-YEAR STORM	0.06	0.013	0.06	0.013	0	0
10-YEAR STORM	0.62	0.068	0.59	0.065	-0.03	-0.003

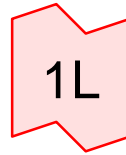
Appendix 1: HydroCAD Modeling Report for Water Quality, 1-Year and 10-year Storm Events

End of Report

HYDROCAD REPORTS



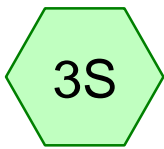
EXISTING



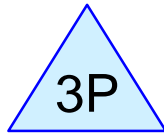
TOTAL EXISTING



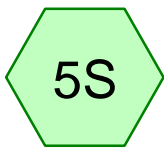
PR-SITE



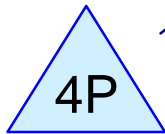
PR-HOUSE-GARAGE



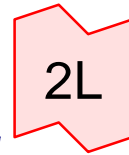
INFILTRATION  
CHAMBERS



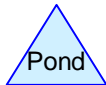
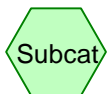
PR-DRIVEWAY



INFIL TRENCH



TOTAL PROPOSED



**Summary for Subcatchment 1S: EXISTING**

Runoff = 0.03 cfs @ 12.19 hrs, Volume= 0.003 af, Depth= 0.04"

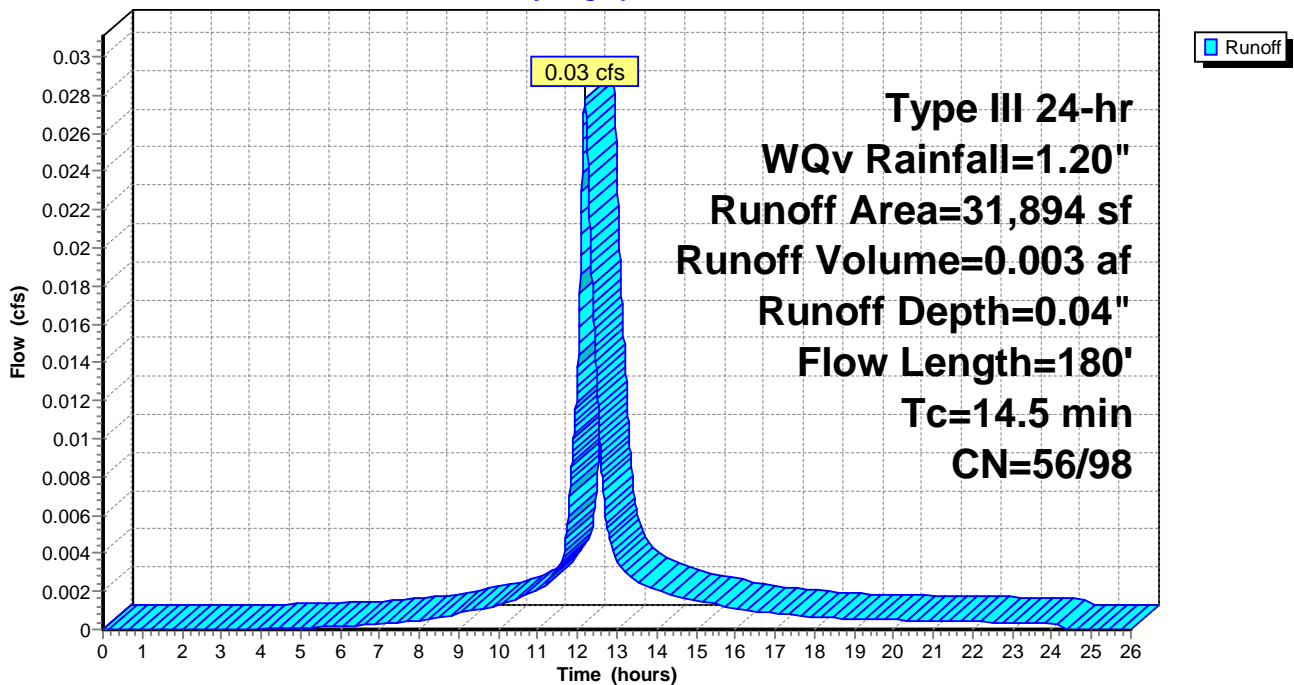
Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-26.00 hrs, dt= 0.01 hrs  
 Type III 24-hr WQv Rainfall=1.20"

Area (sf)	CN	Description
7,260	61	>75% Grass cover, Good, HSG B
1,431	98	Paved parking, HSG B
23,203	55	Woods, Good, HSG B
31,894	58	Weighted Average
30,463	56	95.51% Pervious Area
1,431	98	4.49% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.6	100	0.0600	0.12		<b>Sheet Flow,</b> Woods: Light underbrush n= 0.400 P2= 3.30"
0.6	50	0.0700	1.32		<b>Shallow Concentrated Flow,</b> Woodland Kv= 5.0 fps
0.3	30	0.0700	1.85		<b>Shallow Concentrated Flow,</b> Short Grass Pasture Kv= 7.0 fps
14.5	180	Total			

**Subcatchment 1S: EXISTING**

Hydrograph



**Summary for Subcatchment 2S: PR-SITE**

Runoff = 0.03 cfs @ 12.22 hrs, Volume= 0.003 af, Depth= 0.06"

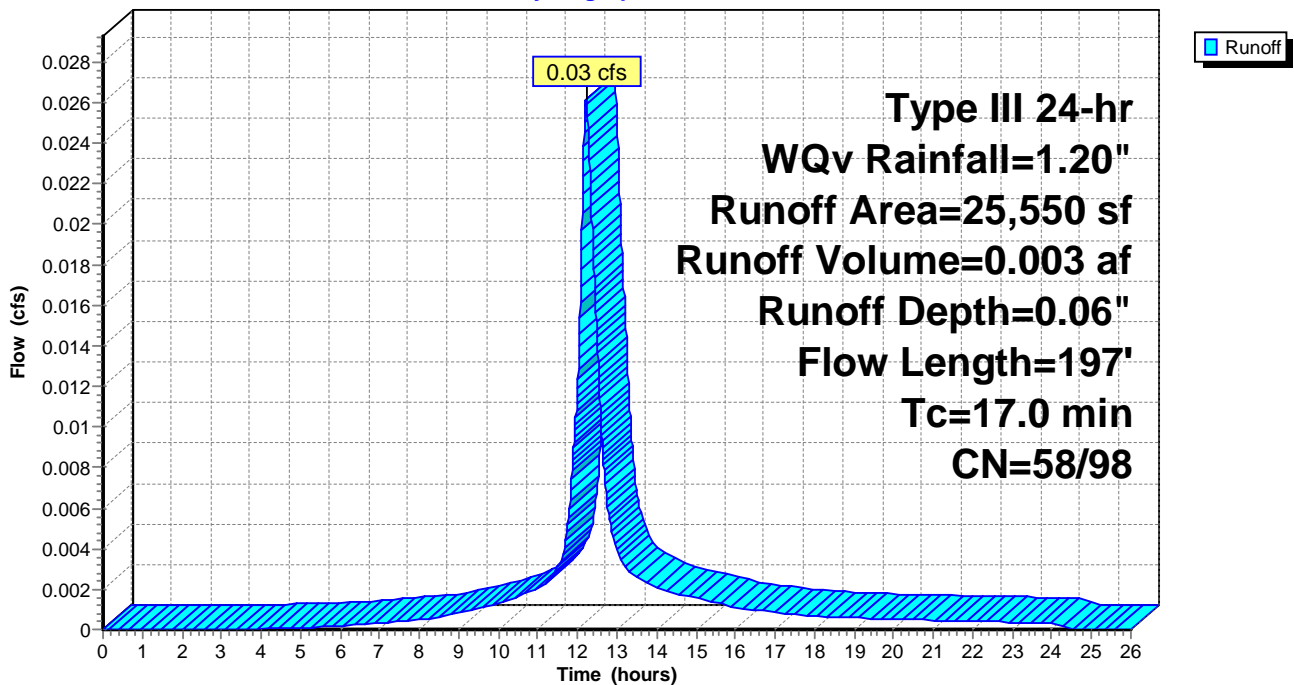
Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-26.00 hrs, dt= 0.01 hrs  
 Type III 24-hr WQv Rainfall=1.20"

Area (sf)	CN	Description
11,418	61	>75% Grass cover, Good, HSG B
12,702	55	Woods, Good, HSG B
1,430	98	Paved parking, HSG B
25,550	60	Weighted Average
24,120	58	94.40% Pervious Area
1,430	98	5.60% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
11.0	73	0.0540	0.11		<b>Sheet Flow,</b> Woods: Light underbrush n= 0.400 P2= 3.30"
4.9	27	0.0200	0.09		<b>Sheet Flow,</b> Grass: Dense n= 0.240 P2= 3.30"
1.1	97	0.0460	1.50		<b>Shallow Concentrated Flow,</b> Short Grass Pasture Kv= 7.0 fps
17.0	197	Total			

**Subcatchment 2S: PR-SITE**

Hydrograph



**Summary for Subcatchment 3S: PR-HOUSE-GARAGE**

Runoff = 0.05 cfs @ 12.07 hrs, Volume= 0.003 af, Depth= 0.99"

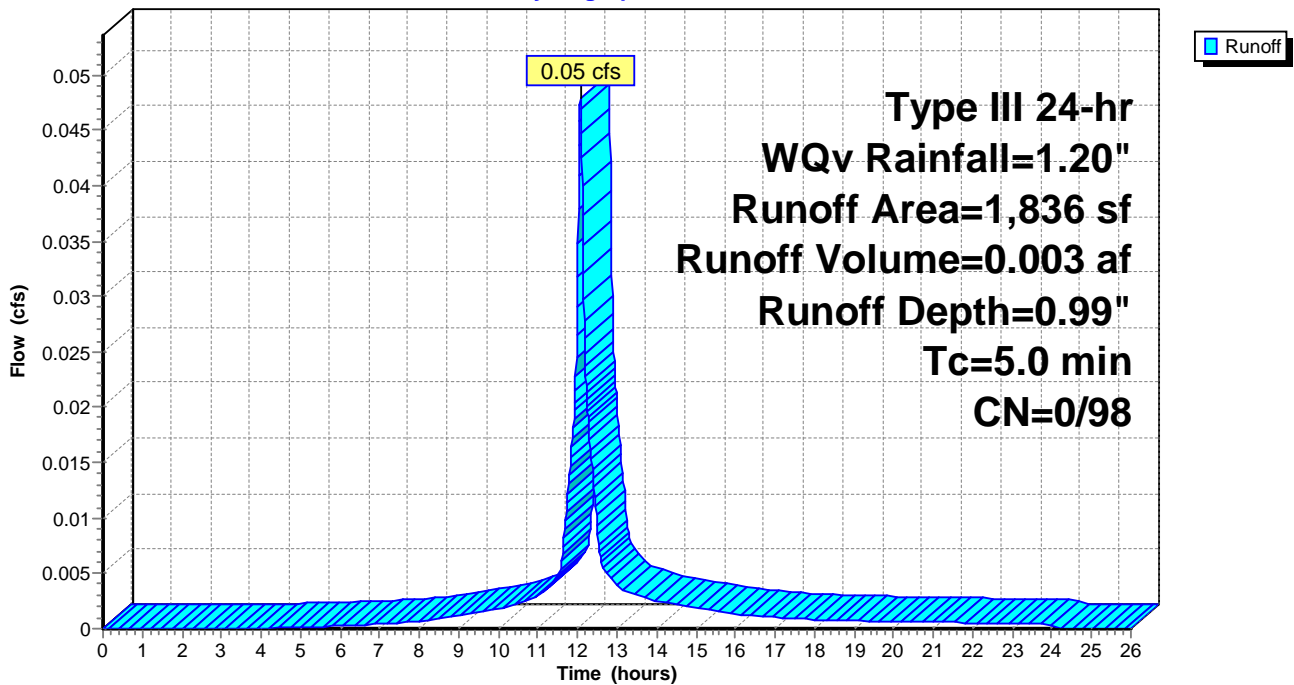
Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-26.00 hrs, dt= 0.01 hrs  
 Type III 24-hr WQv Rainfall=1.20"

Area (sf)	CN	Description
1,836	98	Roofs, HSG B
1,836	98	100.00% Impervious Area

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

**Subcatchment 3S: PR-HOUSE-GARAGE**

Hydrograph



**Summary for Subcatchment 5S: PR-DRIVEWAY**

Runoff = 0.03 cfs @ 12.07 hrs, Volume= 0.002 af, Depth= 0.24"

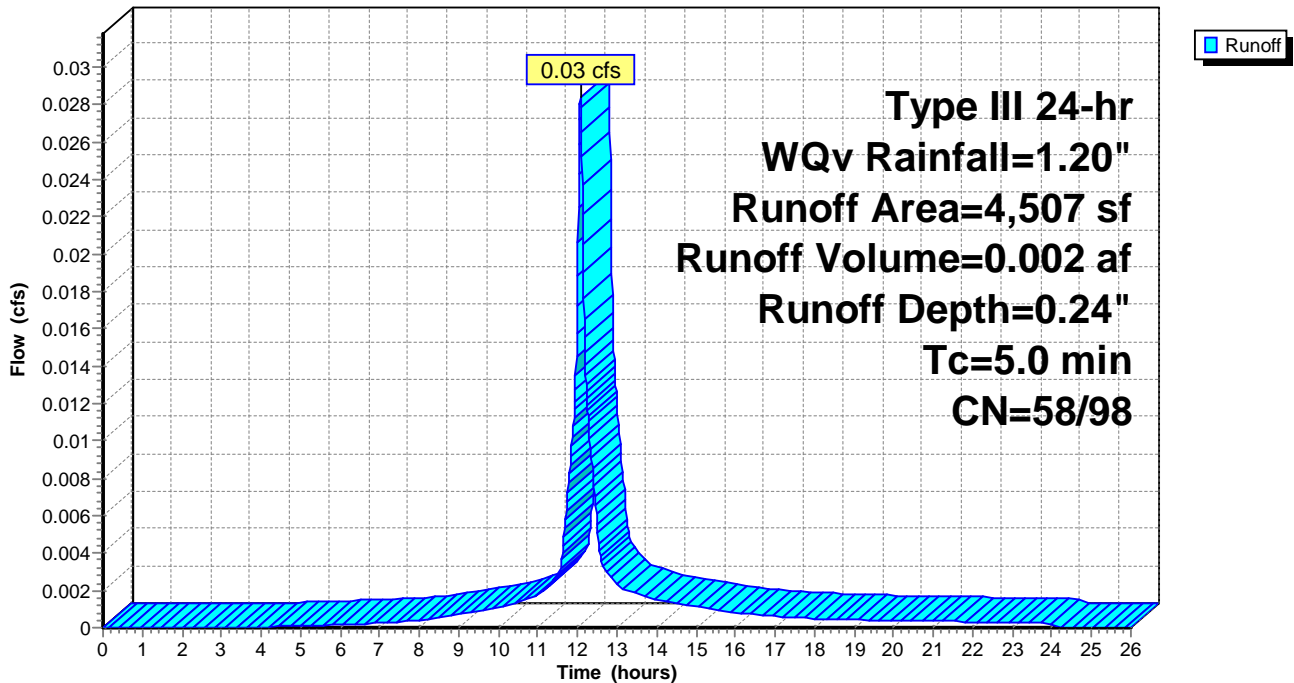
Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-26.00 hrs, dt= 0.01 hrs  
 Type III 24-hr WQv Rainfall=1.20"

Area (sf)	CN	Description
1,089	98	Paved parking, HSG B
1,924	61	>75% Grass cover, Good, HSG B
1,494	55	Woods, Good, HSG B
4,507	68	Weighted Average
3,418	58	75.84% Pervious Area
1,089	98	24.16% Impervious Area

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

**Subcatchment 5S: PR-DRIVEWAY**

Hydrograph



**Summary for Pond 3P: INFILTRATION CHAMBERS**

Inflow Area = 0.042 ac, 100.00% Impervious, Inflow Depth = 0.99" for WQv event  
 Inflow = 0.05 cfs @ 12.07 hrs, Volume= 0.003 af  
 Outflow = 0.01 cfs @ 11.84 hrs, Volume= 0.003 af, Atten= 84%, Lag= 0.0 min  
 Discarded = 0.01 cfs @ 11.84 hrs, Volume= 0.003 af  
 Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-26.00 hrs, dt= 0.01 hrs / 2  
 Peak Elev= 90.99' @ 12.54 hrs Surf.Area= 0.007 ac Storage= 0.001 af

Plug-Flow detention time= (not calculated: outflow precedes inflow)  
 Center-of-Mass det. time= 31.0 min ( 812.1 - 781.1 )

Volume	Invert	Avail.Storage	Storage Description
#1A	90.60'	0.005 af	<b>18.33'W x 17.50'L x 2.54'H Field A</b> 0.019 af Overall - 0.003 af Embedded = 0.015 af x 33.0% Voids
#2A	91.60'	0.003 af	<b>Cultec C-100HD x 10 Inside #1</b> Effective Size= 32.1"W x 12.0"H => 1.86 sf x 7.50'L = 14.0 cf Overall Size= 36.0"W x 12.5"H x 8.00'L with 0.50' Overlap Row Length Adjustment= +0.50' x 1.86 sf x 5 rows
		0.008 af	Total Available Storage

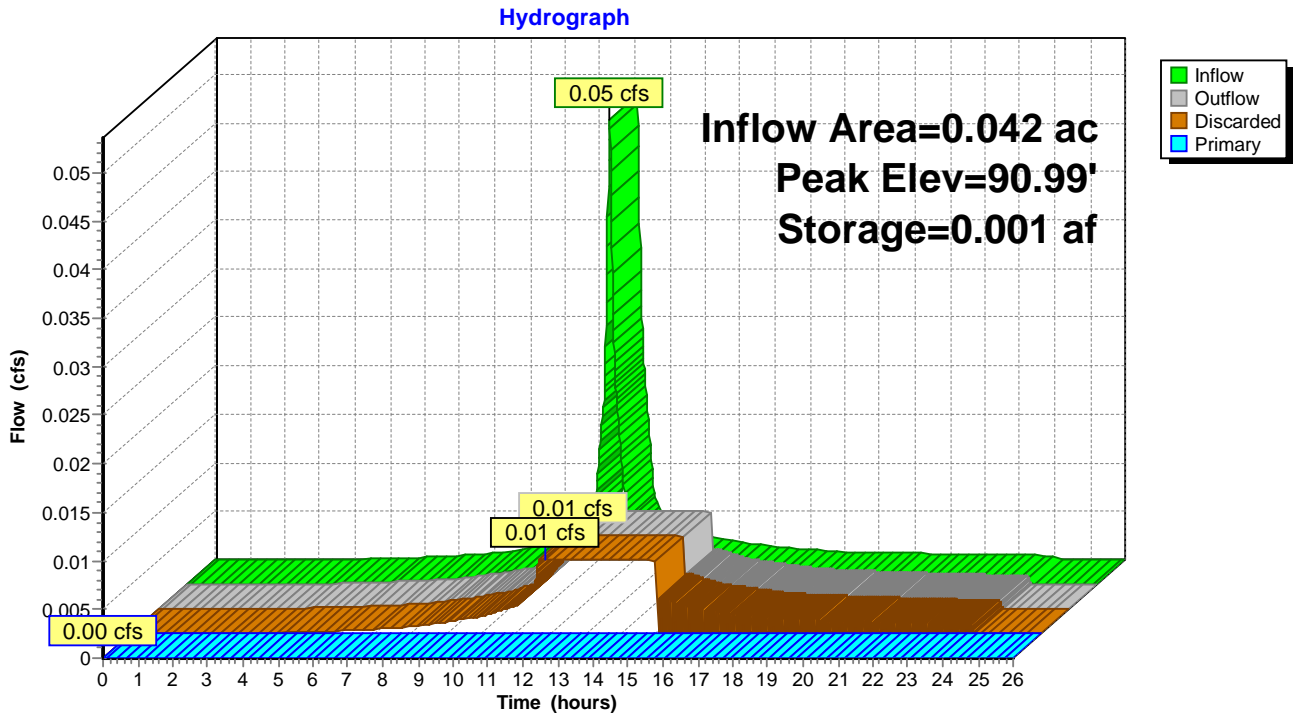
Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Discarded	90.60'	<b>1.020 in/hr Exfiltration over Surface area</b>
#2	Primary	93.10'	<b>8.0' long x 1.0' breadth Broad-Crested Rectangular Weir</b> 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 Coef. (English) 2.69 2.72 2.75 2.85 2.98 3.08 3.20 3.28 3.31 3.30 3.31 3.32

**Discarded OutFlow** Max=0.01 cfs @ 11.84 hrs HW=90.63' (Free Discharge)  
 ↑1=Exfiltration (Exfiltration Controls 0.01 cfs)

**Primary OutFlow** Max=0.00 cfs @ 0.00 hrs HW=90.60' TW=0.00' (Dynamic Tailwater)  
 ↑2=Broad-Crested Rectangular Weir ( Controls 0.00 cfs)

### Pond 3P: INFILTRATION CHAMBERS



**Summary for Pond 4P: INFIL TRENCH**

Inflow Area = 0.103 ac, 24.16% Impervious, Inflow Depth = 0.24" for WQv event  
 Inflow = 0.03 cfs @ 12.07 hrs, Volume= 0.002 af  
 Outflow = 0.01 cfs @ 12.01 hrs, Volume= 0.002 af, Atten= 71%, Lag= 0.0 min  
 Discarded = 0.01 cfs @ 12.01 hrs, Volume= 0.002 af  
 Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-26.00 hrs, dt= 0.01 hrs / 2  
 Peak Elev= 93.13' @ 12.39 hrs Surf.Area= 0.008 ac Storage= 0.000 af

Plug-Flow detention time= 9.8 min calculated for 0.002 af (100% of inflow)  
 Center-of-Mass det. time= 9.8 min ( 790.9 - 781.1 )

Volume	Invert	Avail.Storage	Storage Description
#1	93.00'	0.008 af	<b>5.00'W x 70.00'L x 3.00'H Prismatic</b> 0.024 af Overall x 33.0% Voids

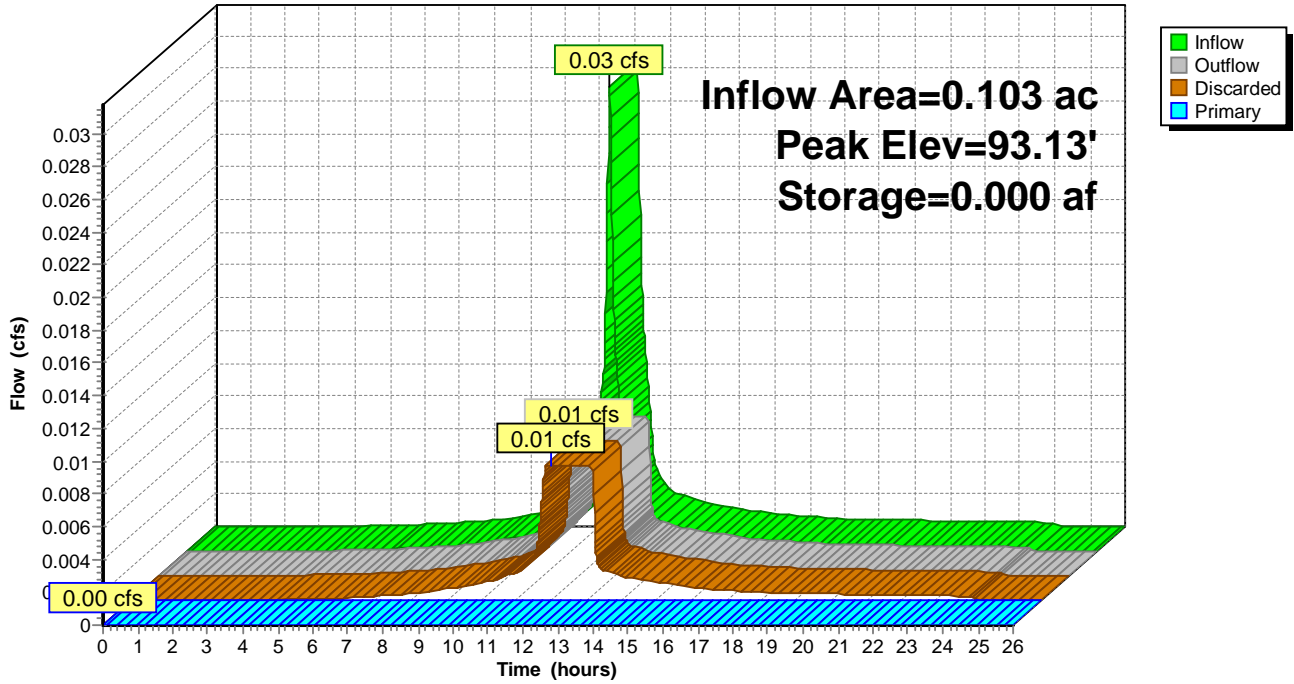
Device	Routing	Invert	Outlet Devices
#1	Discarded	93.00'	<b>1.020 in/hr Exfiltration over Surface area</b> Phase-In= 0.01'
#2	Primary	94.90'	<b>5.0' long x 0.5' breadth Broad-Crested Rectangular Weir</b> Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

**Discarded OutFlow** Max=0.01 cfs @ 12.01 hrs HW=93.03' (Free Discharge)  
 ↑1=Exfiltration (Exfiltration Controls 0.01 cfs)

**Primary OutFlow** Max=0.00 cfs @ 0.00 hrs HW=93.00' TW=0.00' (Dynamic Tailwater)  
 ↑2=Broad-Crested Rectangular Weir ( Controls 0.00 cfs)

### Pond 4P: INFIL TRENCH

Hydrograph

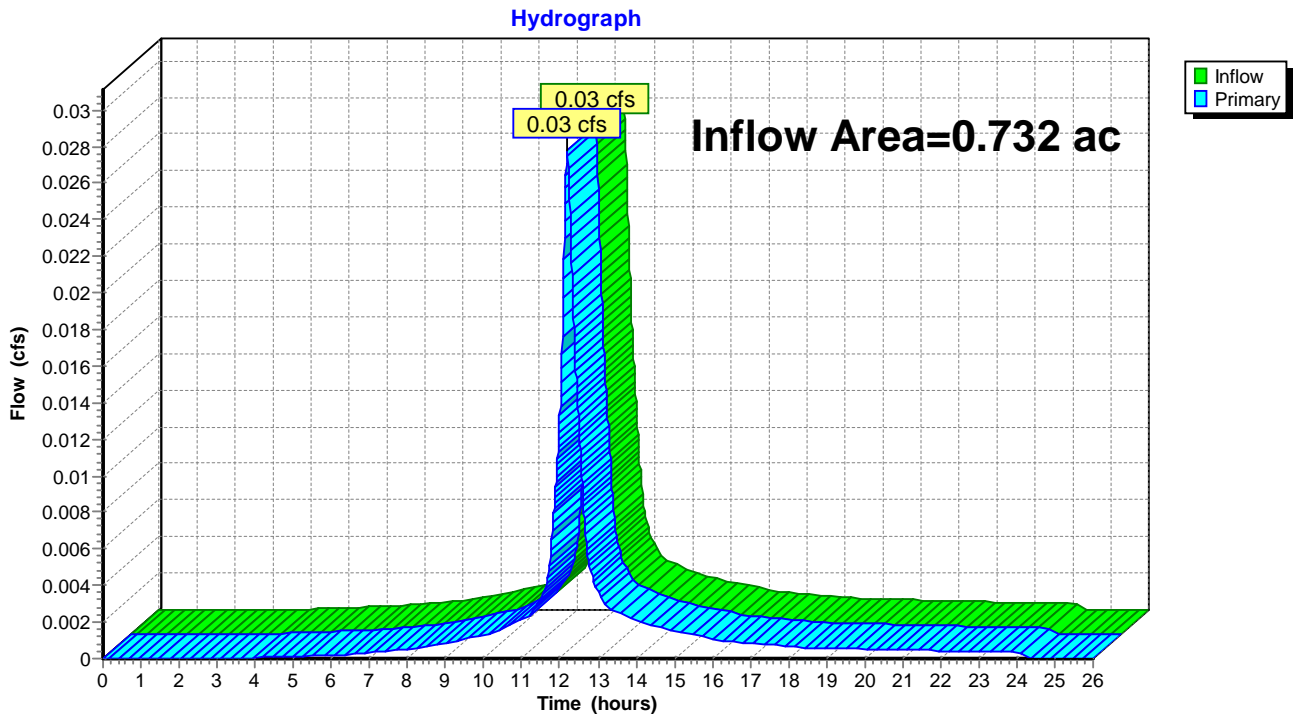


### Summary for Link 1L: TOTAL EXISTING

Inflow Area = 0.732 ac, 4.49% Impervious, Inflow Depth = 0.04" for WQv event  
Inflow = 0.03 cfs @ 12.19 hrs, Volume= 0.003 af  
Primary = 0.03 cfs @ 12.19 hrs, Volume= 0.003 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-26.00 hrs, dt= 0.01 hrs

### Link 1L: TOTAL EXISTING

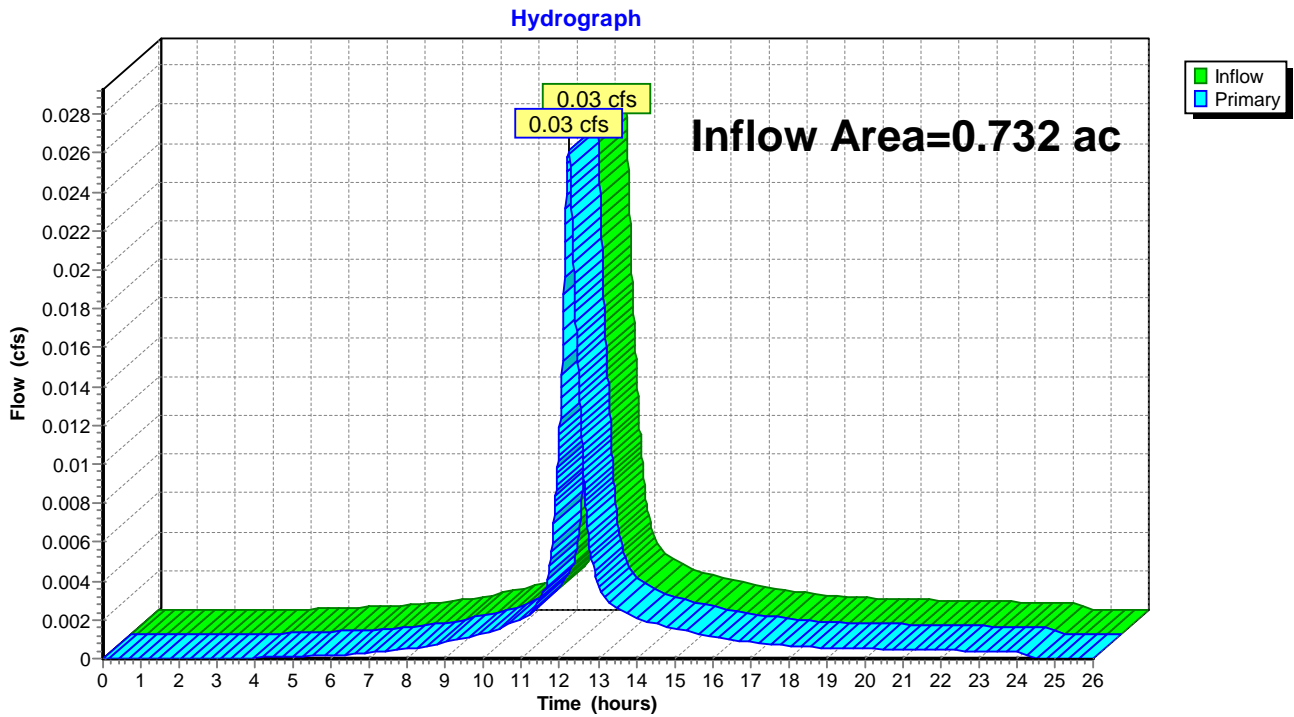


### Summary for Link 2L: TOTAL PROPOSED

Inflow Area = 0.732 ac, 13.66% Impervious, Inflow Depth = 0.04" for WQv event  
Inflow = 0.03 cfs @ 12.22 hrs, Volume= 0.003 af  
Primary = 0.03 cfs @ 12.22 hrs, Volume= 0.003 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-26.00 hrs, dt= 0.01 hrs

### Link 2L: TOTAL PROPOSED



**24052.00 SOUTH ROAD-SOUTH KINGSTOWN LOT-A**

Type III 24-hr 1 year Rainfall=2.80"

Prepared by Commonwealth Engineers and Consultants Inc.

Printed 7/16/2024

HydroCAD® 10.00-25 s/n 05727 © 2019 HydroCAD Software Solutions LLC

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Time span=0.00-26.00 hrs, dt=0.01 hrs, 2601 points x 2  
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN  
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

**Subcatchment 1S: EXISTING**

Runoff Area=31,894 sf 4.49% Impervious Runoff Depth=0.21"  
Flow Length=180' Tc=14.5 min CN=58 Runoff=0.06 cfs 0.013 af

**Subcatchment 2S: PR-SITE**

Runoff Area=25,550 sf 5.60% Impervious Runoff Depth=0.26"  
Flow Length=197' Tc=17.0 min CN=60 Runoff=0.06 cfs 0.013 af

**Subcatchment 3S: PR-HOUSE-GARAGE**

Runoff Area=1,836 sf 100.00% Impervious Runoff Depth=2.57"  
Tc=5.0 min CN=98 Runoff=0.12 cfs 0.009 af

**Subcatchment 5S: PR-DRIVEWAY**

Runoff Area=4,507 sf 24.16% Impervious Runoff Depth=0.53"  
Tc=5.0 min CN=68 Runoff=0.05 cfs 0.005 af

**Pond 3P: INFILTRATION CHAMBERS**

Peak Elev=91.81' Storage=0.004 af Inflow=0.12 cfs 0.009 af  
Discarded=0.01 cfs 0.009 af Primary=0.00 cfs 0.000 af Outflow=0.01 cfs 0.009 af

**Pond 4P: INFIL TRENCH**

Peak Elev=93.44' Storage=0.001 af Inflow=0.05 cfs 0.005 af  
Discarded=0.01 cfs 0.005 af Primary=0.00 cfs 0.000 af Outflow=0.01 cfs 0.005 af

**Link 1L: TOTAL EXISTING**

Inflow=0.06 cfs 0.013 af  
Primary=0.06 cfs 0.013 af

**Link 2L: TOTAL PROPOSED**

Inflow=0.06 cfs 0.013 af  
Primary=0.06 cfs 0.013 af

**Total Runoff Area = 1.464 ac Runoff Volume = 0.039 af Average Runoff Depth = 0.32"**  
**90.93% Pervious = 1.332 ac 9.07% Impervious = 0.133 ac**

Time span=0.00-26.00 hrs, dt=0.01 hrs, 2601 points x 2  
 Runoff by SCS TR-20 method, UH=SCS, Weighted-CN  
 Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

<b>Subcatchment 1S: EXISTING</b>	Runoff Area=31,894 sf    4.49% Impervious    Runoff Depth=1.11" Flow Length=180'    Tc=14.5 min    CN=58    Runoff=0.62 cfs    0.068 af
<b>Subcatchment 2S: PR-SITE</b>	Runoff Area=25,550 sf    5.60% Impervious    Runoff Depth=1.24" Flow Length=197'    Tc=17.0 min    CN=60    Runoff=0.54 cfs    0.061 af
<b>Subcatchment 3S: PR-HOUSE-GARAGE</b>	Runoff Area=1,836 sf    100.00% Impervious    Runoff Depth=4.66" Tc=5.0 min    CN=98    Runoff=0.21 cfs    0.016 af
<b>Subcatchment 5S: PR-DRIVEWAY</b>	Runoff Area=4,507 sf    24.16% Impervious    Runoff Depth=1.81" Tc=5.0 min    CN=68    Runoff=0.22 cfs    0.016 af
<b>Pond 3P: INFILTRATION CHAMBERS</b>	Peak Elev=93.10'    Storage=0.008 af    Inflow=0.21 cfs    0.016 af Discarded=0.01 cfs    0.012 af    Primary=0.00 cfs    0.000 af    Outflow=0.01 cfs    0.012 af
<b>Pond 4P: INFIL TRENCH</b>	Peak Elev=94.93'    Storage=0.005 af    Inflow=0.22 cfs    0.016 af Discarded=0.01 cfs    0.010 af    Primary=0.08 cfs    0.004 af    Outflow=0.09 cfs    0.014 af
<b>Link 1L: TOTAL EXISTING</b>	Inflow=0.62 cfs    0.068 af Primary=0.62 cfs    0.068 af
<b>Link 2L: TOTAL PROPOSED</b>	Inflow=0.59 cfs    0.065 af Primary=0.59 cfs    0.065 af
<b>Total Runoff Area = 1.464 ac    Runoff Volume = 0.161 af    Average Runoff Depth = 1.32"</b>	
<b>90.93% Pervious = 1.332 ac    9.07% Impervious = 0.133 ac</b>	