NOTE:

This SWPPP/SWMR was prepared in accordance with the *City of Albany Unified Sustainable Development Ordinance* and with the New York State Stormwater Management Design Manual. This SWPPP/SWMR must be kept on the job site and available for use of contractors & sub-contractors. A Pre-Construction meeting must be held prior to commencing any excavation with the Albany Department of Water. Maintenance Plan is attached and includes both temporary and permanent facilities maintenance. A qualified professional must provide a site assessment that certifies erosion and sediment controls as described in the SWPPP are in place and will submit to the MS4 Coordinator at Department of Water prior to commencing construction. This SWPPP/SWMR, together with all required plans, completed inspection forms and a log of activities including any mitigation of items noted on inspection forms must be kept on the job site and available for inspection by regulatory authorities. SWPPP inspections must be completed by a qualified professional and forwarded electronically to the MS4 Coordinator at the City of Albany Department of Water & Water Supply within 24 hours after inspection is completed.

STORM WATER POLLUTION PREVENTION PLAN (SWPPP)
& STORM WATER MANAGEMENT REPORT (SWMR)

185 HENRY JOHNSON BOULEVARD

City of Albany
County of Albany
State of New York

Applicant:
ROY E. VINCENT

Prepared by:
HERSHBERG & HERSHBERG
CONSULTING ENGINEERS
18 Locust Street
Albany, New York 12203
Phone: (518) 459-3096
Fax: (518) 459-5683
Web Site: Hhershberg.com

April 2, 2021
REV July 26, 2021

Table of Contents

Appendices

Appendix #1 – Site Location Map
Appendix #2 – Tributary Area Maps
Appendix #3 –WQV and RRV Worksheet
Appendix #4 – HydroCAD10.0® Calculations
Appendix #5 – Maintenance Plan
Appendix #6 – Maintenance Agreement
Appendix #7 – Spill Response Plan

Attachments

Attachment #1 – Excerpt from USDO on Drainage
Attachment #2 – MS4 Acceptance Form
Attachment #3 – Completed Notice of Intent
Attachment #4 – Notice of Termination
Attachment #5 – Certification of Contractor
Attachment #6 – Certification of Owner/Developer

Map Pockets

Map Pocket #1 – C4 Utility Plan
Map Pocket #2 – C5 Utility Details
Map Pocket #3 – C6 Erosion and Sediment Control Plan and Details
Map Pocket #4 – Empty Map Pocket for Addendums

INTRODUCTION

Hershberg & Hershberg, Consulting Engineers and Land Surveyors, were retained by Roy E. Vincent (hereinafter the "Applicant") as site engineer in conjunction with a proposal to design the site plan, utilities, drainage system and to prepare a Stormwater Pollution Prevention Plan/Stormwater management report (hereinafter SWPPP/SWMR). This was prepared in accordance with the ***City of Albany Unified Sustainable Development Ordinance.***

DESCRIPTION OF EXISTING SITE

PARCEL AREA

The Site is know as 185 Henry Johnson Blvd. but will be consildated with 217 and 219 Third Street, along with 187 Henry Johnson Boulevard and a portion of 221 Third Street. (tid# 65.65-1-12, 65.65-1-14, 65.65-1-15, 65.65-1-11, and 65.65-1-12). The combined 0.21 acres, which constitute the lot on which this project will be located, is currently occupied by existing building and pavement. There are no wetlands on the site. The existing site statistics for project area are shown in Fig. No. 1 below. An aerial picture of site is shown in Fig. No. 2.

EXISTING COVERAGE STATISTICS			
Description	**Area (SF)**	**Area (acres)**	**%**
Green Area	1,968	0.04	21.1%
Building Area	1,279	0.03	13.7%
Paved Area	6,059	0.14	65.1%
Total Area	9,306	0.21	100.0%

Fig. No. 1 –Existing Coverage Statistics

Fig. No. 2 –Aerial Photo of Site

WATERCOURSES

There are a no watercourses which cross the project area.

FLOOD PLAIN

The entire project area lies within Zone X (Area of Minimal Flooding). See Mapping below.

Fig. No. 3 – FEMA Firmette

EXISTING WETLANDS

There are no Federal Wetlands (Waters of the United States). There are no New York State Freshwater Wetlands mapped within the site. A copy of the National Wetland Inventory site data is reproduced below.

Fig. No. 4 – National Wetlands Inventory

LISTED ENDANGERED OR THREATENED SPECIES

There are no listed endangered or threatened species in the area.

EXISTING SOILS

The Albany County Soil Survey indicates the existing soils within the project area consist of Urban Land which has no Hydrologic Class. The soil will be modeled as Hydrologic Soil Class D in the HydroCAD (appendix 5). A soil map is reproduced below.

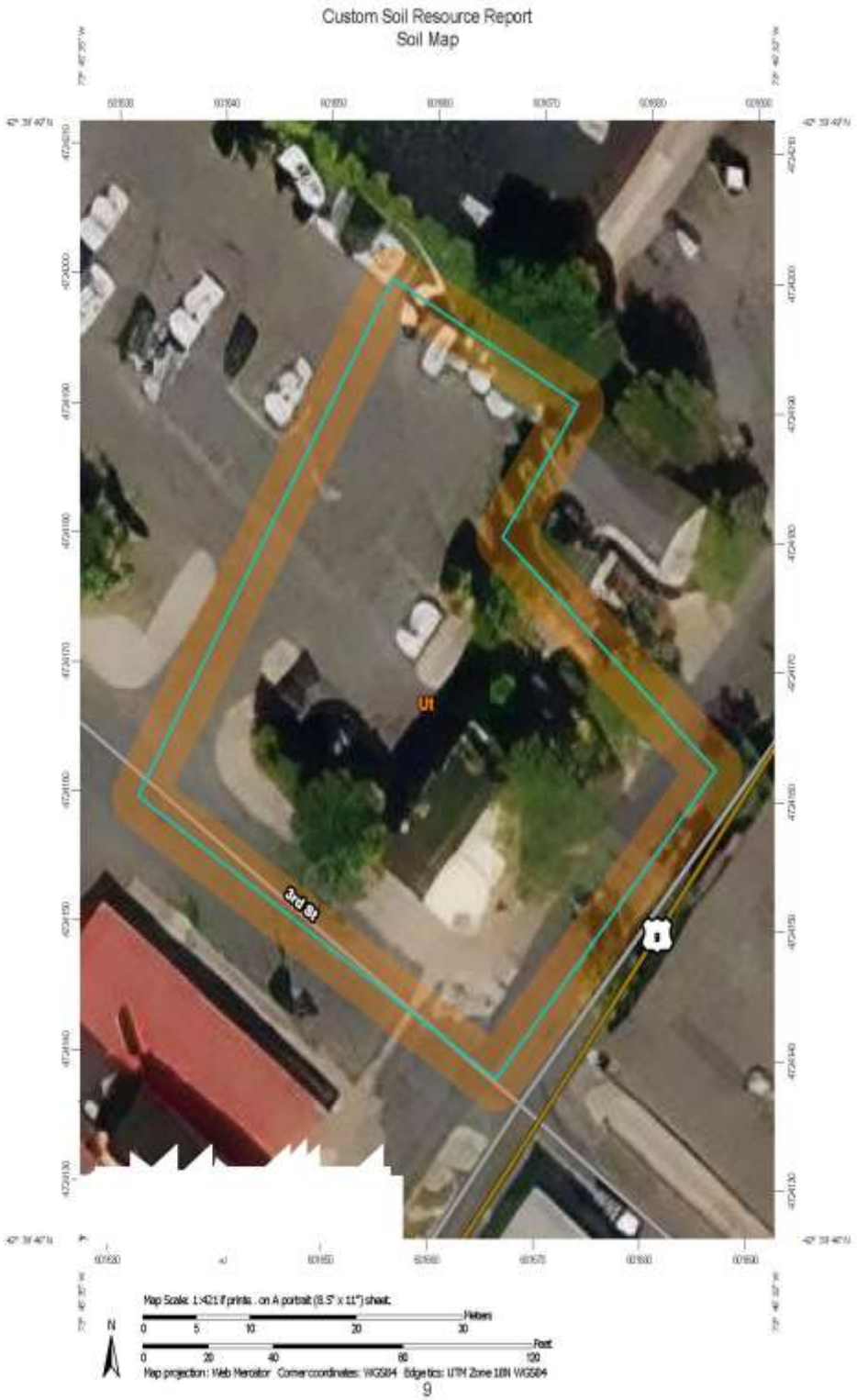


Fig. No. 5 – Soil Map from Web Soil Survey

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Albany County, New York
Survey Area Data: Version 18, Jun 11, 2020

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jul 1, 2014—Sep 22, 2017

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Fig. No. 6 – Map Legend and Map Information from Web Soil Survey

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
UI	Urban land-Udorthents complex, 0 to 8 percent slopes	0.4	100.0%
Totals for Area of Interest		0.4	100.0%

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however,

Fig. No. 7 – Map Unit Legend from Web Soil Survey

EXISTING DRAINAGE:

The Pre-Development Tributary Map (See Appendix #2) establishes 4 existing tributary areas.

Tributary Area A – This area represents the northern section of the existing pavement. This is all tributary to the catch basin in the existing pavement which goes to the storm water sewer system out on Third Street. This area contains 0.07 acres of impervious area which will be modeled as all pervious area. The CN is 80 and a time of concentration of 5.8 minutes.

Tributary Area B – This area includes existing pavement, sidewalk, building, and a portion of gras area. Due to the proposed building being placed here, this area will be modeled as grass since it is tributary to a combined sewer system. This area contains 0.12 acres of pervious area with a CN value of 80 and a Tc of 9.0 minutes.

Tributary Area C – This area is a portion of grass on the northern section of the site. This area will sheet flow towards our Reach A, which is modeled as Third Street. The area is 0.01 acres of impervious area with a CN value of 80 and a Tc of 0.4 minutes.

Tributary Area D – This area includes a portion of the existing pavement with a strip of grass area. This is modeled to be tributary to Third Street. The area contains 0.005 acres of total area with a CN value of 80 and a Tc of 2.3 minutes.

PROPOSED COVERAGE STATISTICS:

The proposed coverage statistics for the Project Site are shown below.

Description	Area (SF)	Area (acres)	%
Building Area	5,338	0.12	57.4%
Paved/Sidewalk Area	3,323	0.08	35.7%
Green Area	645	0.01	6.93%
Total Area	9,306	0.21	100.0%

Fig. No. 8 –Proposed Coverage Statistics

DESIGN CONSIDERATIONS

The design of the storm water quantity system for the subject site considered the following critical factors:

1. Compliance with Section 375-4(G)(11) of the Unified Sustainable Development Ordinance entitled STORMWATER MANAGEMENT

   (a) All development and redevelopment in the City shall comply with the requirements of Article 14 of Chapter 133 (Stormwater Management and Erosion Control) of the City Code, and with Chapter 299 (Sewers) of the City Code.

   (b) Each application for development or redevelopment shall be referred to the Department of Water and Water Supply for a determination of whether the existing sanitary and storm sewer infrastructure is adequate in size, location, connectivity, and construction quality to accommodate expected flows of both sanitary sewer and stormwater from the proposed facility. If the Albany Department of Water and Water Supply determines that the existing sanitary and/or storm sewer infrastructure is not adequate to

accommodate expected sanitary and stormwater flows from the proposed development, the City may require that the applicant modify the proposed development and/or install or contribute a proportional share of the overall cost to the installation of required storm and sanitary sewer infrastructure before the proposed development is approved, and the applicant may be required to pay its proportionate share of those costs.

(c) All development and redevelopment within the City with a proposed area of disturbance greater than or equal to one-quarter (1/4) of an acre in size shall comply with the latest version of the New York State Department of Environmental Conservation Stormwater Management Design Manual that are written as applicable to properties with areas of disturbance of one (1) acre in size or larger.

(d) The maximum allowable design peak-flow stormwater discharge into the combined sewer system shall be limited to the calculated peak-flow discharge of the **10-year storm for un-development site conditions**, as determined by a Professional Engineer, and to be reviewed and accepted by the Department of Water and Water Supply. (emphasis added)

2. During construction comply with the *New York State Standards and Specifications for Erosion and Sediment Control* dated July, 2016.

   The Post-Development Tributary Map (See Appendix #2) establishes four existing tributary areas.

3. The permanent system complies with the New York State Stormwater Management Design Manual (hereinafter NYSSWDM), last revised January, 2015, Chapter 9.

4. The HydroCAD models were developed for an 0.11-acre area where construction activities will take place.

DESCRIPTION OF INTENDED SITE DEVELOPMENT AND USE

A blue roof was selected for the site due to the amount of storm water generated from the new proposed building and the amount of space provided on site. The proposed building will be tributary to the blue roof storage area, and the mitigation of the storm water will be controlled using a 2" orifice tributary to a hydrodynamic separator which leads to existing storm water structures on site. This area will allow for sufficient storage so that the 1, 10, and 100-year storm outflow is less than the pre-tributary area outflows calculated. The developed site is modeled with 5 tributary areas totaling 0.21 acres.

CALCULATED FLOWS FROM THE SITE

The following table is prepared from the comparisons between the pre-developed (entire construction area modeled as grass) and the proposed conditions as required under USDO. This result exceeds the requirement in that it also controls the 100-year storm to discharge less (0.92 CFS) than the discharge from the 10-year storm in the undeveloped condition (1.02 CFS). These results are detailed in the HydroCAD®10.00 results contained in Appendix #4

Frequency	1 Year	1 Year	10 Year	10 Year	100 Year	100 Year
Pre	0.37		1.02		1.90	
Post		0.31		0.59		0.92

Fig. No. 9 – Undeveloped and Post Runoff Calculations

CAPACITY OF COMBINED SEWER SYSTEM TO ACCEPT FLOWS

This site is served by a combined 18" VP sewer system in Third Street. See portion of Sheet 018 in Fig. No. 10 below.

By instituting the storm water management system, the flow to this system will be reduced at the 100-year storm from 1.90 CFS to 0.92 CFS a reduction of

0.98 CFS. The flow to 18" VP Combined Sewer at the 10-year storm by instituting the storm water management the flow to this system will be reduced from 1.02 CFS to 0.59 CFS a reduction of 0.43 CFS.

Fig. No. 10 – Portion of Sewer Atlas Sheet 018

WATER QUALITY VOLUME

Water Quality Volume (WQ_v) is computed based upon the following formula:[1]

$$WQ_v = \frac{(P)\,(R_v)\,(A)}{12}$$

Where WQ_v = water quality volume (acre-feet)

P = 90% rainfall event[2] (1.20 inches)

R_v = 0.05 + 0.009 I, where I is percent impervious cover

A = site area in acres

[1] **Ibid.** Table 4-1, Page 4-3
[2] **Ibid.**, Page 4-2, Figure 4.1

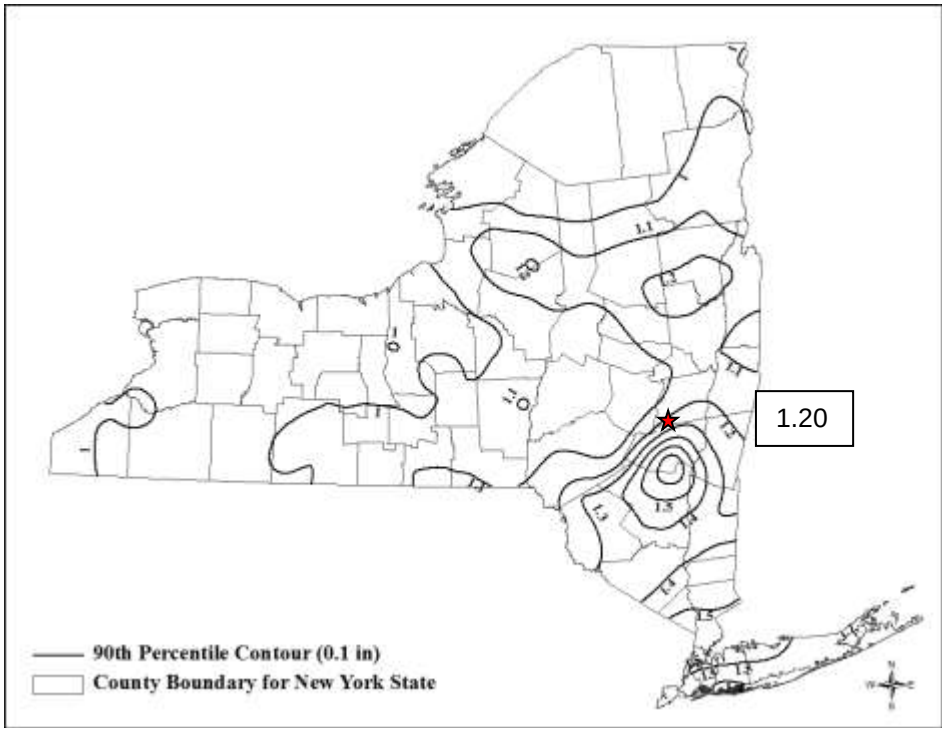


Fig. No. 10 – NYSDEC 90th Percentile Contour

The Water Quality Volume (WQ_v) is computed on the GI Worksheet in Appendix #3 for the tributary area as a whole as 0.019 acre-feet (812 cubic feet). The WQv is being treated with a blue roof.

RUNOFF REDUCTION VOLUME

Minimum Runoff Reduction Volume (RR_v) is computed based upon the following formula:[3]

$$RR_v = \frac{(P)\ (R_v)\ (Ai)}{12}$$

Where RR_v = runoff reduction volume (acre-feet)

P = 90% rainfall event[4]

[3] **Ibid.**, Page 4-6
[4] **Ibid.**, Page 4-6

R_v = 0.05 + 0.009 I, where I is percent impervious cover

AiC = site impervious area in acres

S = Hydrologic Soil Group Specific Reduction Factor (0.40 for Class C Hydrologic Soils)[5]

Ai = (AiC) (S)

The Minimum Runoff Reduction Volume (RR_v) is computed on the GI Worksheet in Appendix #3 is computed as 0.004 acre-feet (157 cubic feet) for subject site.

DESIGN IMPACTS

The design of a storm drainage system for the subject site includes the following impacts:

l. The outflow from the proposed system to the drainage system is decreased so that the post development outflow at 100-year storm (0.92 CFS) is less than the pre-existing conditions of an entirely pervious site for the 10-year storm (1.02 CFS)

2. The storm system can accommodate the storm water for a 1, 10 & 100-year storm.

3. The storm drainage system should accommodate the drainage from the site during a 100-year storm without any damage to personal property.

4. This system is entirely compliant with the Green Techniques as defined in the New York State Stormwater Management Design Manual.

[5] **Ibid,** Page 4-5

CONSTRUCTION SEQUENCING & SEDIMENTATION AND EROSION CONTROL DURING CONSTRUCTION

The construction sequence for this project is shown below. Approximate timing is indicated where applicable in red following steps.

Prior to commencement of any work this SWPPP

- ✓ Assure that copy of SWMR & SWPPP is on the site. ON COMMENCEMENT
- ✓ Establish Qualified Individual who will be performing site inspection. ON COMMENCEMENT
- ✓ Inspections must be performed by the qualified professional must be submitted to the MS4 Coordinator. FROM COMMENCEMENT UNTIL PROJECT COMPLETE
- ✓ Establish Trained Contractor who will be on site. At least one Trained Contractor must be on site whenever ground disturbing activities are being undertaken. ON COMMENCEMENT
- ✓ Establish contact person for Contractor/Subcontractor. ON COMMENCEMENT
- ✓ **IN CASE OF ANY SPILLS OF MATERIALS ON SITE, EXECUTE SPILL RESPONSE PLAN CONTAINED IN APPENDIX #7**

Construction Sequence

- ✓ Install traffic controls as required. PRIOR TO THE START OF ANY CONSTRUCTION
- ✓ Install construction fencing as required. PRIOR TO THE START OF ANY CONSTRUCTION
- ✓ Install silt fence or other controls as indicated on the plan. PRIOR TO COMMENCEMENT OF ANY GRADING – FENCE TO REMAIN IN PLACE UNTIL ALL AREAS ARE STABILIZED.
- ✓ Commence work on site.
- ✓ Grade and prepare stabilized construction access. PRIOR TO COMMENCEMENT OF ANY GRADING – STABILIZED CONSTRUCTION ACCESS TO REMAIN IN PLACE UNTIL ALL AREAS ARE STABILIZED.
- ✓ Establish fueling area. Relocate when required. MAINTAIN A FUELING AREA FOR EQUIPMENT UNTIL NO LONGER REQUIRED.

- ✓ The existing pavement must be kept swept clean to avoid tracking materials onto any streets. CONTINUOUSLY FROM INCEPTION TO COMPLETION OF STABILIZATION OR UNTIL PROJECT IS COMPLETE.
- ✓ Maintain this area clean of debris and verify condition and safety of storage of materials listed below. Requires daily inspection. CONTINUOUSLY FROM INCEPTION UNTIL PROJECT IS COMPLETE.
- ✓ Any construction materials, chemicals or construction debris must be stored in sealed receptacles, trailers or buildings. Any storage piles of materials meant for installation (i.e., sand, etc.) must be surrounded by sedimentation fence. The list of anticipated materials stored on site during construction is provided below and must be updated if any additional materials are utilized: CONTINUOUSLY FROM INCEPTION UNTIL PROJECT IS COMPLETE.
    - ❑ Select Fill
    - ❑ Fencing Materials
    - ❑ Pipes
    - ❑ Pipe Solvents
    - ❑ Concrete Structures
    - ❑ Reinforcing Steel
    - ❑ Brick
    - ❑ Concrete Additives
    - ❑ Concrete Sealers
- ✓ MSDS sheets must be available on site for all materials used or imported to the site. CONTINUOUSLY FROM INCEPTION UNTIL PROJECT IS COMPLETE.
- ✓ Any chemical spills must be contained immediately on site and reported to NYSDEC. CONTINUOUSLY FROM INCEPTION TO FILING OF NOTICE UNTIL PROJECT IS COMPLETE.
- ✓ Oil and grease spills from equipment shall be treated immediately. CONTINUOUSLY FROM INCEPTION UNTIL PROJECT IS COMPLETE.
- ✓ Direct drainage to storage system. PRIOR TO REMOVAL OF TEMPORARY PERIMETER SWALE AND CHECK DAMS.
- ✓ Complete construction of Project.
- ✓ Obtain approval of Project completion from the Department of Water & Water Supply,

HOUSEKEEPING SECTION

During construction any construction materials, chemicals or construction debris must be stored in sealed receptacles, trailers or buildings. Any storage piles of materials meant for installation (i.e., sand, etc.) must be surrounded by sedimentation fence. The list of anticipated materials stored on site during construction is provided below and must be updated if any additional materials are utilized:

- Select Fill
- Fencing Materials
- Pipes
- Pipe Solvents
- Concrete Structures
- Reinforcing Steel
- Brick
- Concrete Additives
- Concrete Sealers

MSDS sheets must be available on site for all materials used or imported to the site.

Any chemical spills must be contained immediately on site and reported to NYSDEC.

IN CASE OF ANY SPILLS OF MATERIALS ON SITE, EXECUTE SPILL RESPONSE PLAN CONTAINED IN APPENDIX #7

Oil and grease spills from equipment shall be treated immediately. Vehicle fueling must take place in designated area. Relocate designated fueling area when required.

DESCRIPTION OF NEED FOR WINTER CONDITION

The construction sequence for this project may require work between November 15th and April 1st of any year when construction is ongoing. Some un-stabilized soil areas may exist on November 15th. This Section is issued for use in the event that such conditions exist. The **STANDARD AND SPECIFICATIONS FOR WINTER STABILIZATION** (reproduced below) will apply to this project area. Accommodations for wintertime conditions are addressed below.

STANDARD AND SPECIFICATIONS FOR WINTER STABILIZATION

Definition & Scope

A temporary site specific, enhanced erosion and sediment control plan to manage runoff and sediment at the site during construction activities in the winter months to protect off-site water resources.

Conditions Where Practice Applies

This standard applies to all construction activities involved with ongoing land disturbance and exposure between November 15th to the following April 1st.

Design Criteria

1. Prepare a snow management plan with adequate storage for snow and control of melt water, requiring cleared snow to be stored in a manner not affecting ongoing construction activities.

2. Enlarge and stabilize access points to provide for snow management and stockpiling. Snow management activities must not destroy or degrade installed erosion and sediment control practices.

3. A minimum 25 foot buffer shall be maintained from all perimeter controls such as silt fence. Mark silt fence with tall stakes that are visible above the snow pack.

4. Edges of disturbed areas that drain to a waterbody within 100 feet will have 2 rows of silt fence, 5 feet apart, installed on the contour.

5. Drainage structures must be kept open and free of snow and ice dams. All debris, ice dams, or debris from plowing operations, that restrict the flow of runoff and meltwater, shall be removed.

6. Sediment barriers must be installed at all appropriate perimeter and sensitive locations. Silt fence and other practices requiring earth disturbance must be installed before the ground freezes.

7. Soil stockpiles must be protected by the use of established vegetation, anchored straw mulch, rolled stabilization matting, or other durable covering. A barrier must be installed at least 15 feet from the toe of the stockpile to prevent soil migration and to capture loose soil.

8. In areas where soil disturbance activity has temporarily or permanently ceased, the application of soil stabilization measures should be initiated by the end of the next business day and completed within three (3) days. Rolled erosion control blankets must be used on all slopes 3 horizontal to 1 vertical or steeper.

9. If straw mulch alone is used for temporary stabilization, it shall be applied at double the standard rate of 2 tons per acre, making the application rate 4 tons per acre. Other manufactured mulches should be applied at double the manufacturer's recommended rate.

10. To ensure adequate stabilization of disturbed soil in advance of a melt event, areas of disturbed soil should be stabilized at the end of each work day unless:

    a. work will resume within 24 hours in the same area and no precipitation is forecast or;

    b. the work is in disturbed areas that collect and retain runoff, such as open utility trenches, foundation excavations, or water management areas.

11. Use stone paths to stabilize access perimeters of buildings under construction and areas where construction vehicle traffic is anticipated. Stone paths should be a minimum 10 feet in width but wider as necessary to accommodate equipment.

Maintenance

The site shall be inspected frequently to ensure that the erosion and sediment control plan is performing its winter stabilization function. If the site will not have earth disturbing activities ongoing during the "winter season", **all** bare exposed soil must be stabilized by established vegetation, straw or other acceptable mulch, matting, rock, or other approved material such as rolled erosion control products. Seeding of areas with mulch cover is preferred but seeding alone is not acceptable for proper stabilization.

Compliance inspections must be performed and reports filed properly in accordance with the SWPPP for all sites under a winter shutdown.

WINTER CONDITIONS ITEMS TO BE ADDRESSED

1. Identify areas within the site to store snow which is tributary to the temporary perimeter swale. As work progresses this area may move but positive drainage tributary to the temporary perimeter swale must be maintained.

2. Widen stabilized construction access points to a minimum of 28 feet. Where pavement forms a portion of that route, maintain 50 feet of stone pavement meeting the detail as shown on the SWPPP plan. Stockpile a minimum of 25 cubic yard of stone for the purposes of establishing stone access point after snow storms.

3, Where any areas at the street grade or within two feet of the street grade remain disturbed overnight, stabilize those areas using 6” of broken stone.

4. Where equipment or vehicles are traversing the bottom of the excavation, establish paths using 6” of broken stone.

5. At any point on the perimeter where drainage from accumulated snow or ice will drain away from the site protect these areas with fiber rolls or polyethylene coated check dam materials (Filtrexx, Erosion eel or equal).

6. If work is to cease for more than 3 days, stabilize all disturbed soils.

WINTER CONDITIONS SUMMARY:

The following is a summary of the required work if wintertime as presented by the preparer of this report:

1. The temporary system and control measures proposed herein and, on the plans, comply with the *New York State Standards and Specifications for Erosion and Sediment Control* dated July, 2016.

2. The winter stabilization complies with Standard and Specifications for Winter Stabilization as described *New York State Standards and Specifications for Erosion and Sediment Control* dated July, 2016.

IMPACT OF SANITARY SEWAGE ON THE COMBINED SEWER

SEWAGE GENERATION

The existing site is currently developed. To establish the increased sewage generation, the New *York State Design Standards for Intermediate Sized Wastewater Treatment Systems (March 5, 2014)*[1] is used to compute the Average Daily Flow. Based upon 110 GPD per bed and other uses utilizing Method 1 Typical Per Unit Hydraulic Loading Rates the computation below has been developed.

Sewage Generation Calculations
185 Henry Johnson Boulevard

Use	Unit	Value	Sewage Generation Per Unit per day(GPD) - See Note 1	Daily Sewage Generation (GPD)
Apartments	Beds	11	110	1210
Ordinary Restaurant	Seats	60	35	2100
Bar	Seats	10	20	200
Banquet Hall	Seats	126	10	1260
TOTAL NEW ESTIMATED WATER USE				**4770**
Average New Water Use in GPD		**4770**		
Peak New Water Use in GPD		**19080**		
Average New Water Use in CFS		**0.007**		
Peak New Water Use in CFS		**0.029**		

Note 1: Flow based on Method 1 - Typical Per Unit Hydraulic Loading Rates - New York State Design Standards for Intermediate Sized Wastewater Treatment Systems (March 5, 2014)- Page B-20

Fig. No. 11 – Sewage Generation

COMBINED SEWER OVERFLOW BEST MANAGEMENT PRACTICES

NYSDEC issued a City of Albany Combined Sewer Overflow SPDES Permit, DEC ID#s 4-0101-00012/00001 SPDES #s NY0025747 on November 30, 2018. It included fifteen Best Management Practices which are reviewed below:

1. CSO Operation/Maintenance/Inspection – Not Applicable to this project although maintenance and inspection of Storm Water Management System is covered by maintenance agreement.

2. Maximum Use of Collection System for Storage – Not Applicable

3. Industrial Pretreatment — There are industrial discharges and no toxic substances which will be discharged to the combined sewer.

4. Maximize Flow to POTW_-Not applicable.

5. Wet Weather Operating Plan -Not applicable

6. Prohibition of Dry Weather Overflow – Dry weather overflows from the combined sewer system (CSS) are prohibited. Sewer outfalls from the site are separated into storm and sanitary sewer laterals. Dry weather flow can be accommodated from the site as shown by observation of the Livingston Avenue CSO SmartCover readings below.

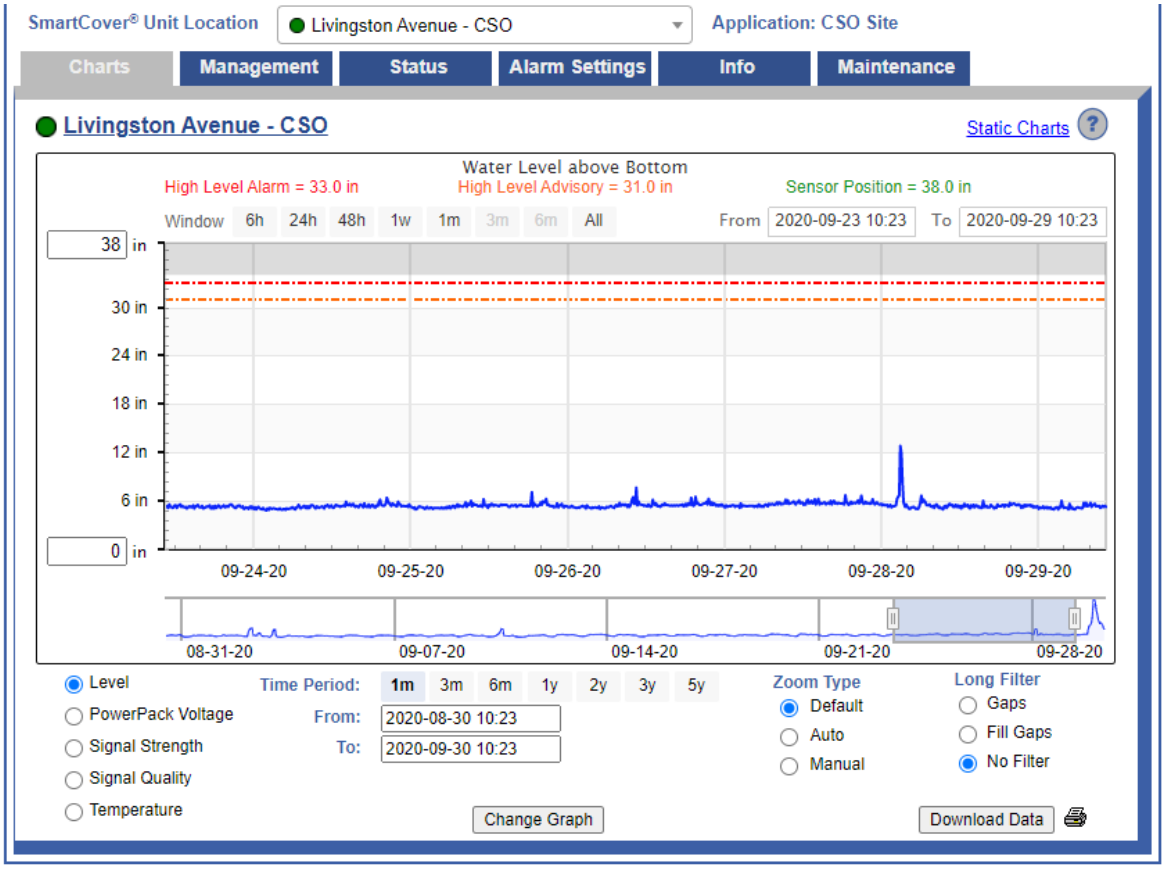


Fig. No. 6- SmartCover readings from Livingston Avenue CSO

7. Control of Floatable and Settleable Solids - The Applicant will provide a notice with leases that deposition of oil/grease or toilet litter is not allowed.

8. Combined Sewer System Replacement – Not applicable.

9. Sewer/Extension – Sewer/extension, when approved by the Department, should be accomplished using separate sewers. Sewer outfalls from the site are separated into storm and sanitary sewer laterals without interconnections. No new source of storm water shall be connected to any separate sanitary sewer in the collection system. The project reduces discharge at the 1-year storm from 0.37 CFS to 0.31 CFS, a reduction of 0.06 CFS which is 8.57 times the average sanitary flow.

10. Sewage Backups - There have been no documented, recurrent instances of sewage backing up into house(s) or discharges of raw sewage onto the ground surface from surcharging manholes in this

area. Since the combined flow to the combined sewer on Third Street is reduced for all storms from the 1 year to the 100-year storm frequencies this project will not make any potential surcharging/back-up problems worse.

11. Septage and Hauled Waste - Not Applicable.

12. Control of Run-off - The impacts of run-off from development and re-development in areas served by combined sewers shall be reduced by requiring compliance with the New York Standards for Erosion and Sediment Control and the quantity control requirements included in the New York State Stormwater Management Design Manual. The combined flow to the combined sewer on Third Street is reduced for all storms from the 1 year to the 100-year storm frequencies for this project through the use of a blue roof.

13. Public Notification - Not Applicable.

14. Characterization and Monitoring -Not Applicable

15. Annual report - Not Applicable.

This project conforms to the requirements of the CSO Best Management Practices.

MAINTENANCE PLAN

The Applicant will own and maintain the blue roof on site. A maintenance plan has been developed and is contained in Appendix #6.

SUMMARY:

The following is a summary of the findings of this study as presented by the preparer of this report:

1. The 100-year design storm will not exceed the runoff from the 10-year storm.

2. The storm drainage system will accommodate the drainage from the site for the 1, 10 & 100-year design storm.

3. Damage to personal property or adjacent will not occur when subjected by the 100-year storm as a result of this storm water management system.
4. The maintenance plan if followed will result in a storm water management system that can be readily maintained.

CONCLUSION:

It is the conclusion of the Engineer that the drainage system, as designed, will function adequately and will not adversely affect adjacent or downstream properties.

Prepared by: _____
Daniel R. Hershberg, P.E. & L.S.
Lic. No. 44226

File:DOCS/SWPPP/SWPPPSWMR20200140.DOC

APPENDIX #1

SITE LOCATION MAP

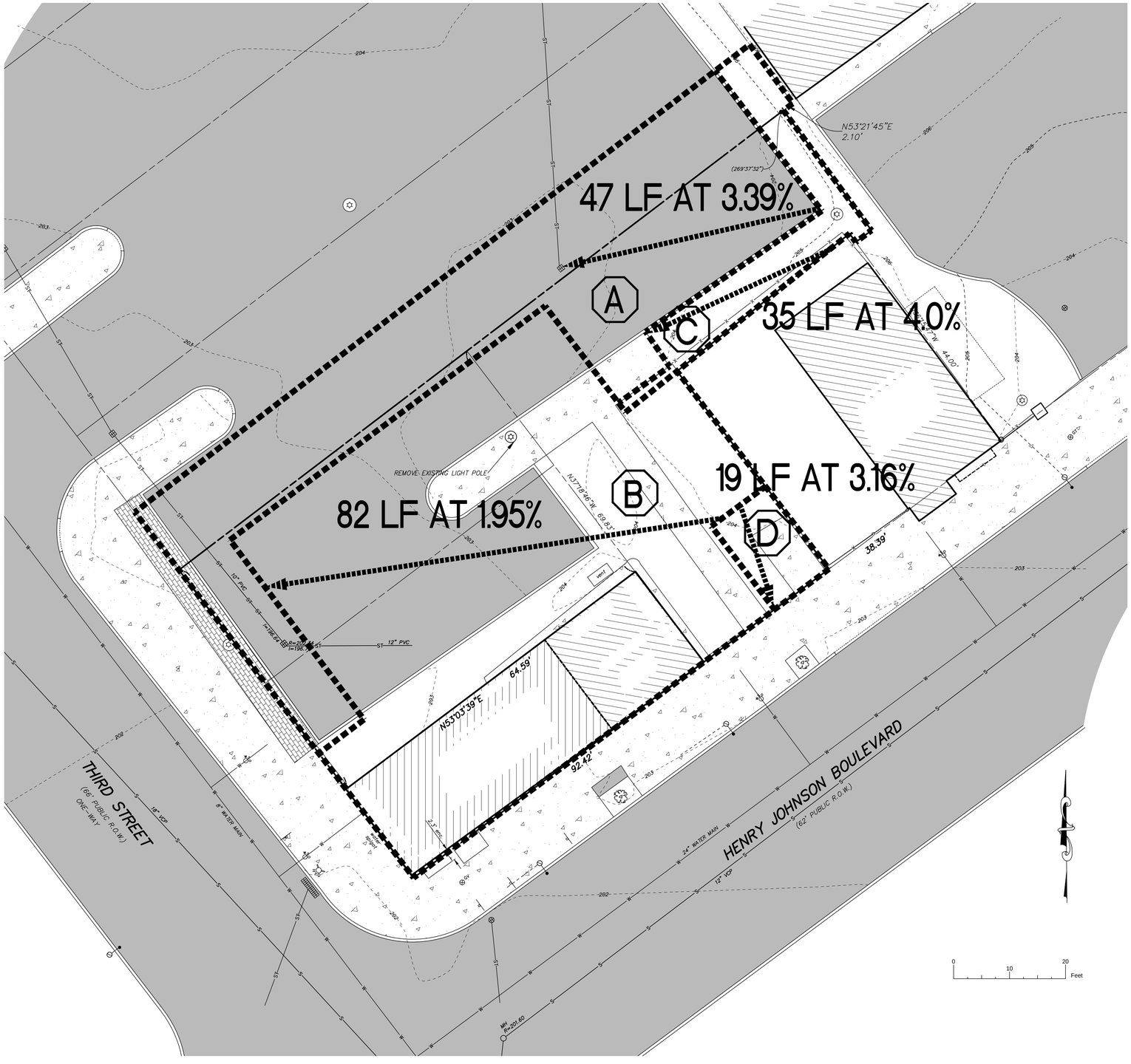
VICINITY MAP

MAP NOT TO SCALE

APPENDIX #2

TRIBUTARY AREA MAPS

PRE TRIB 185 HENRY JOHN. BLVD.



IB — DENOTES STORAGE NODE

A — DENOTES TRIBUTARY AREA NODE

RA — DENOTES REACH NODE

DENOTES LIMITS OF TRIBUTARY AREA

DENOTES Tc / Tt

POST TRIB 185 HENRY JOHN. BLVD.

1 DENOTES TRIBUTARY AREA NODE

R1 DENOTES REACH NODE

SB1 DENOTES STORAGE NODE

DENOTES LIMITS OF TRIBUTARY AREA

DENOTES Tc / Tt

47 LF AT 3.39%

20 LF AT 4.59%

51 LF AT 3.39%

22 LF AT 3.54%

ROOF

LANDS N/F OF CARTER, MARK A. L.2427 P.221

LANDS N/F OF VINCENT, ROY E. VINCENT, JOSSETTE L.2411 P.279

THIRD STREET (66' PUBLIC R.O.W.) ONE-WAY

HENRY JOHNSON BOULEVARD (62' PUBLIC R.O.W.)

0 10 20 Feet

APPENDIX #3

WQV AND RRV WORKSHEET

COMPUTATION OF WATER QUALITY VOLUME (WQ_v) OF DEVELOPED SITE

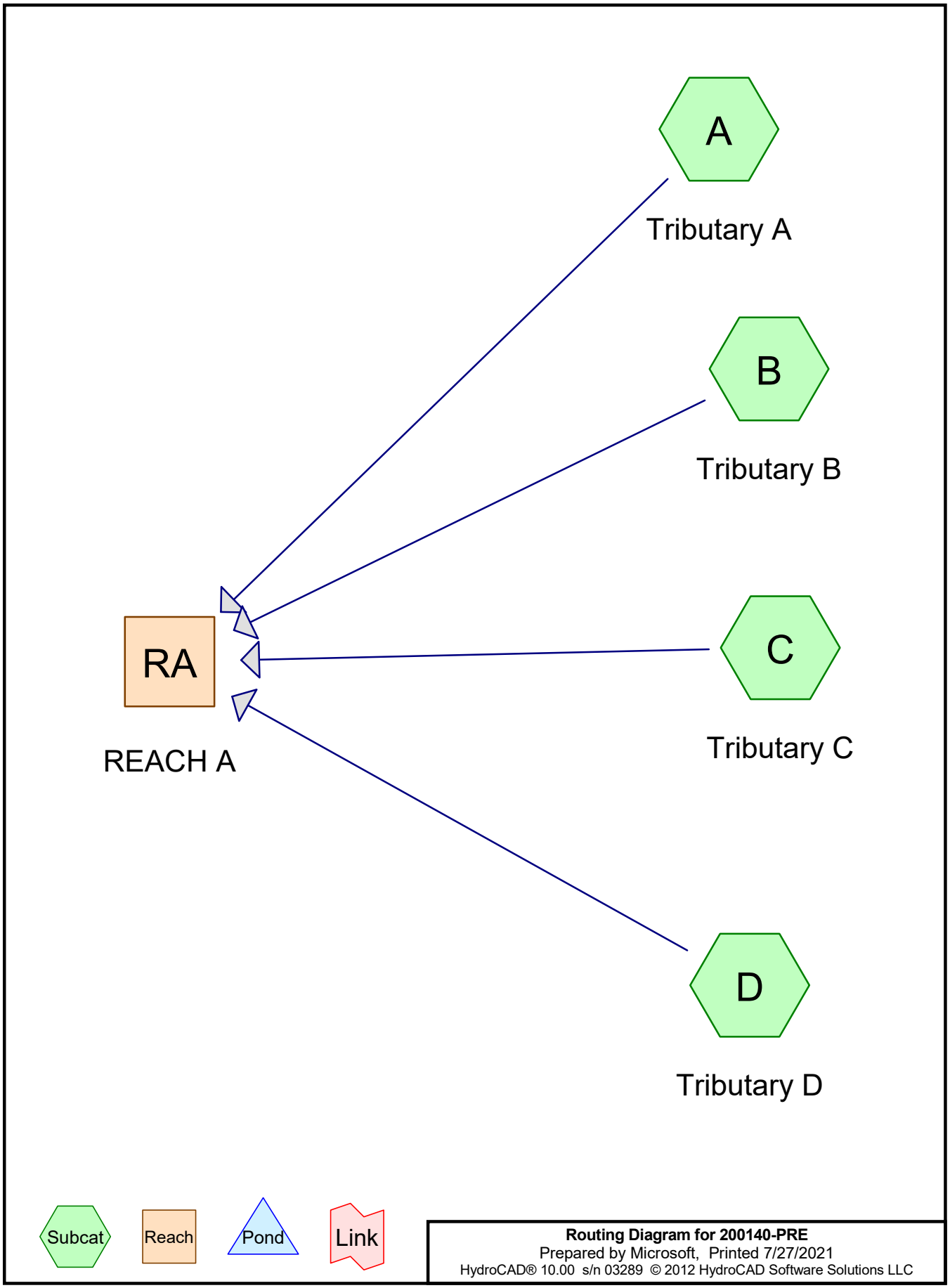
Impervious Area (Acres)	0.190	
I (Impervious Cover)	93.10%	
Rv = 0.05+0.009I	0.89	Minimum Rv = 0.20
P	1.2	
A (site area in acres)	0.210	
WQ_v TOTAL= [(P)(R_v)(A)]/12 (in acre-feet)	**0.019**	
WQv TOTAL= in CF	**812**	

COMPUTATION OF BASIC RUNOFF REDUCTION VOLUME (RRv)

Aic - Total Impervious Area -(Acres)	0.190	
I (Impervious Cover)	93.10%	
Rv = 0.05+0.009I	0.950	Rv = 0.95
P (Table 4.1)	1.2	
A (site area in acres)	0.210	
S (Hydrologic Group Specific Reduction Factor)	0.20	Hydrologic Class D Soil
Ai (Impervious cover targeted for runoff reduction)	0.04	Aic * S
RRv = [(P)(Rv)(Ai)]/12 (in acre-feet)	0.004	
RRv (in cubic-feet)	**157**	

APPENDIX #4

HydroCAD10.0® CALCULATIONS



Routing Diagram for 200140-PRE
Prepared by Microsoft, Printed 7/27/2021

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
0.275	80	>75% Grass cover, Good, HSG D (A, B, C, D)
0.275	**80**	**TOTAL AREA**

Soil Listing (all nodes)

Area (acres)	Soil Group	Subcatchment Numbers
0.000	HSG A	
0.000	HSG B	
0.000	HSG C	
0.275	HSG D	A, B, C, D
0.000	Other	
0.275		**TOTAL AREA**

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	0.000	0.000	0.275	0.000	0.275	>75% Grass cover, Good	A, B, C, D
0.000	**0.000**	**0.000**	**0.275**	**0.000**	**0.275**	**TOTAL AREA**	

Time span=0.00-30.00 hrs, dt=0.10 hrs, 301 points
Runoff by SCS TR-20 method, UH=SCS
Reach routing by Stor-Ind method - Pond routing by Stor-Ind method

Subcatchment A: Tributary A Runoff Area=5,849 sf 0.00% Impervious Runoff Depth=0.89"
Flow Length=127' Tc=5.8 min CN=80 Runoff=0.19 cfs 0.010 af

Subcatchment B: Tributary B Runoff Area=5,360 sf 0.00% Impervious Runoff Depth=0.89"
Flow Length=82' Slope=0.0195 '/' Tc=9.0 min CN=80 Runoff=0.16 cfs 0.009 af

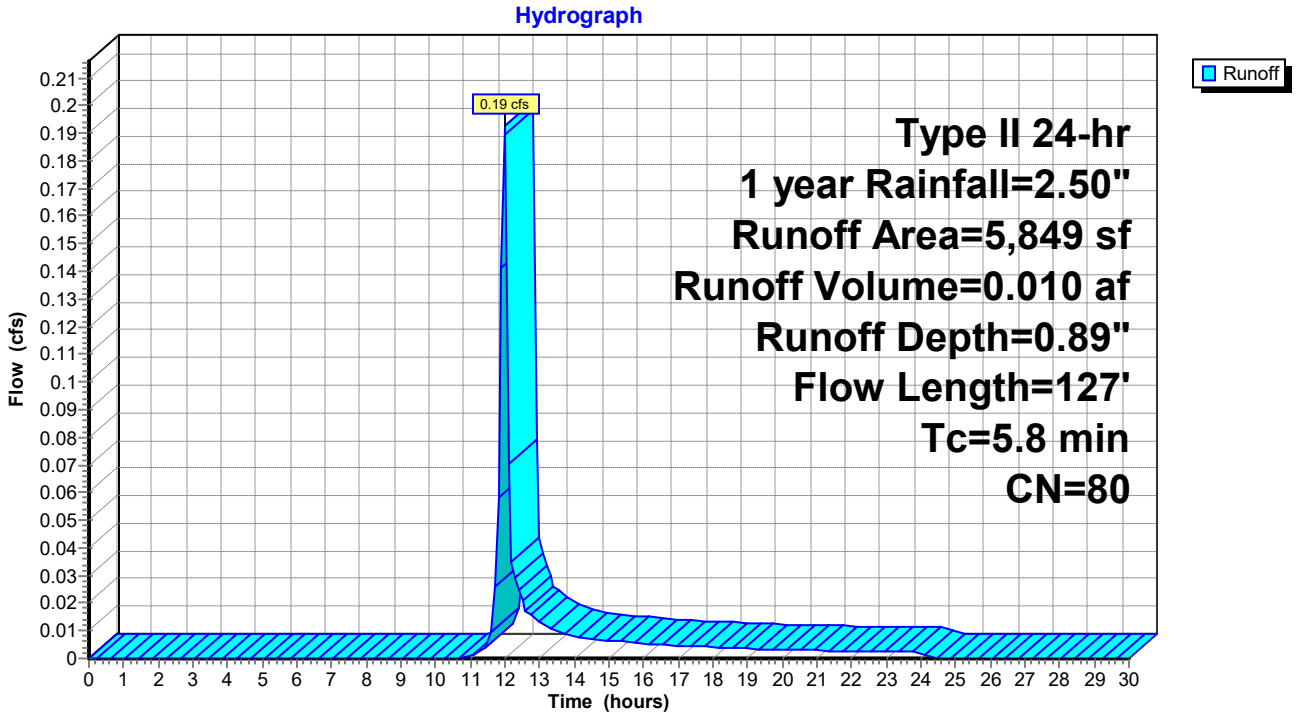
Subcatchment C: Tributary C Runoff Area=547 sf 0.00% Impervious Runoff Depth=0.89"
Flow Length=35' Slope=0.0400 '/' Tc=0.4 min CN=80 Runoff=0.02 cfs 0.001 af

Subcatchment D: Tributary D Runoff Area=224 sf 0.00% Impervious Runoff Depth=0.89"
Flow Length=19' Slope=0.0316 '/' Tc=2.3 min CN=80 Runoff=0.01 cfs 0.000 af

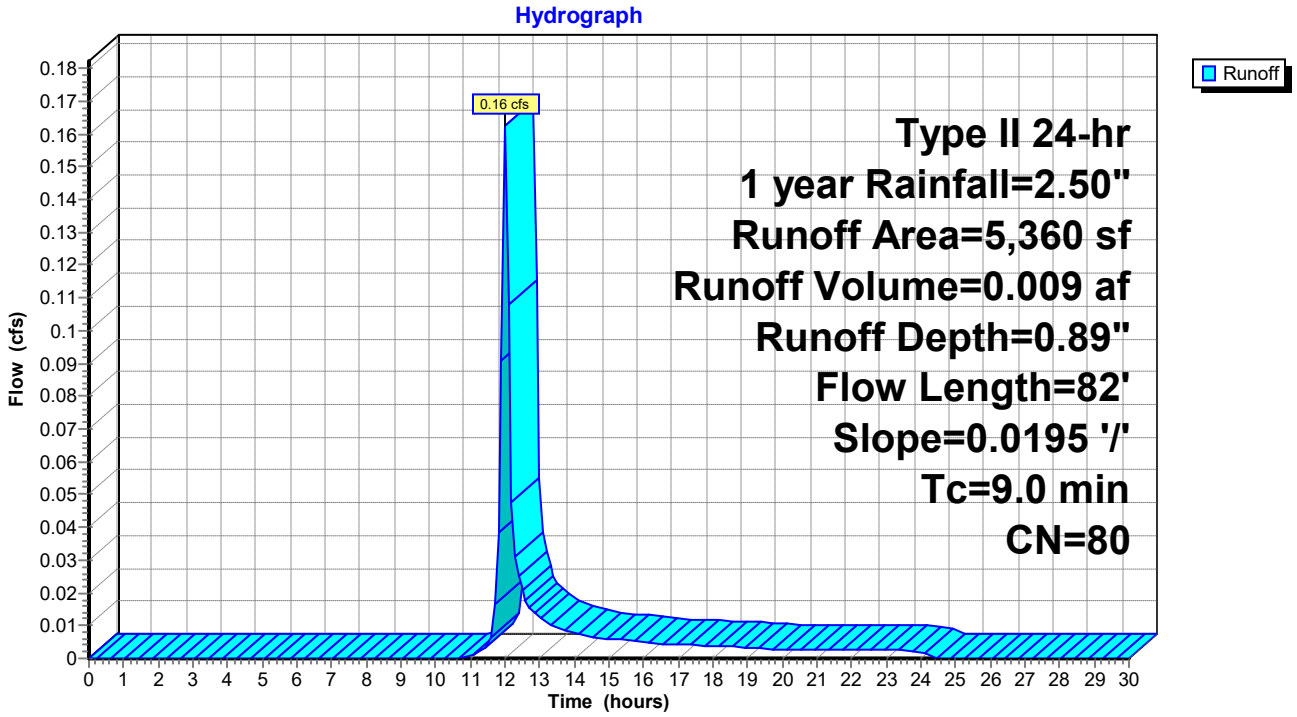
Reach RA: REACH A Inflow=0.37 cfs 0.020 af
Outflow=0.37 cfs 0.020 af

Total Runoff Area = 0.275 ac Runoff Volume = 0.020 af Average Runoff Depth = 0.89"
100.00% Pervious = 0.275 ac 0.00% Impervious = 0.000 ac

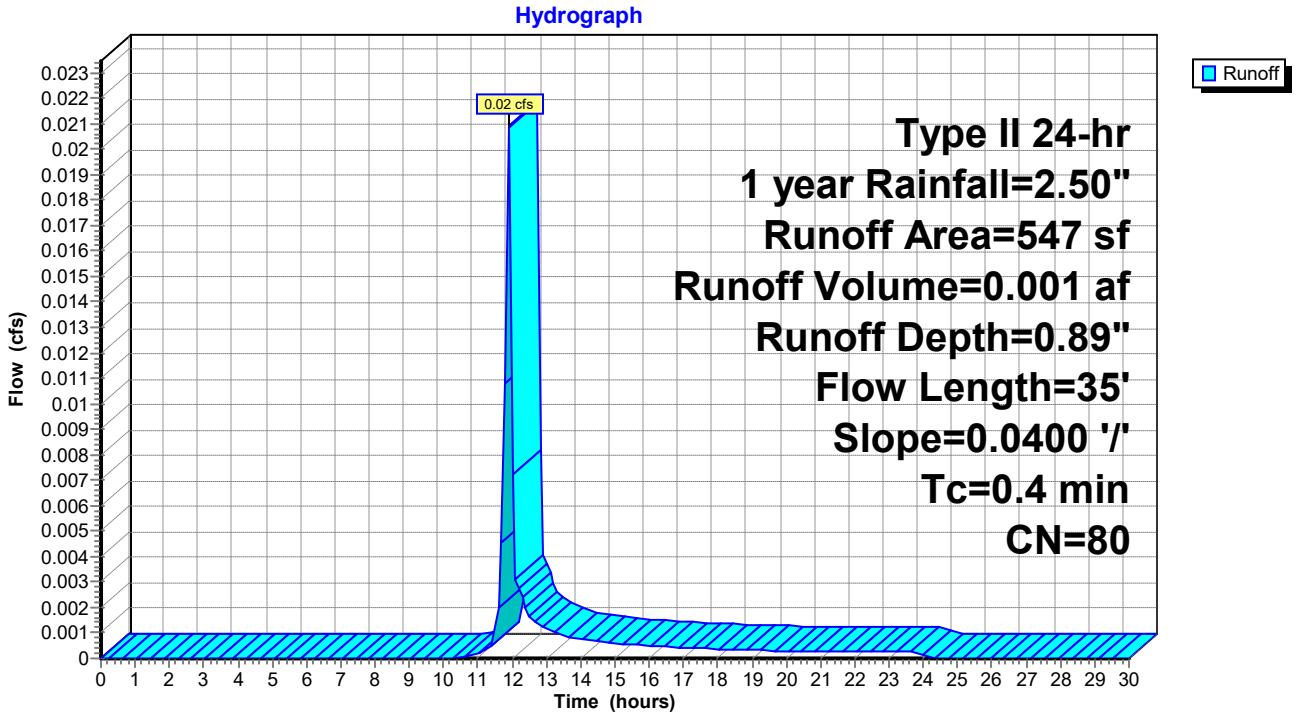
Subcatchment A: Tributary A



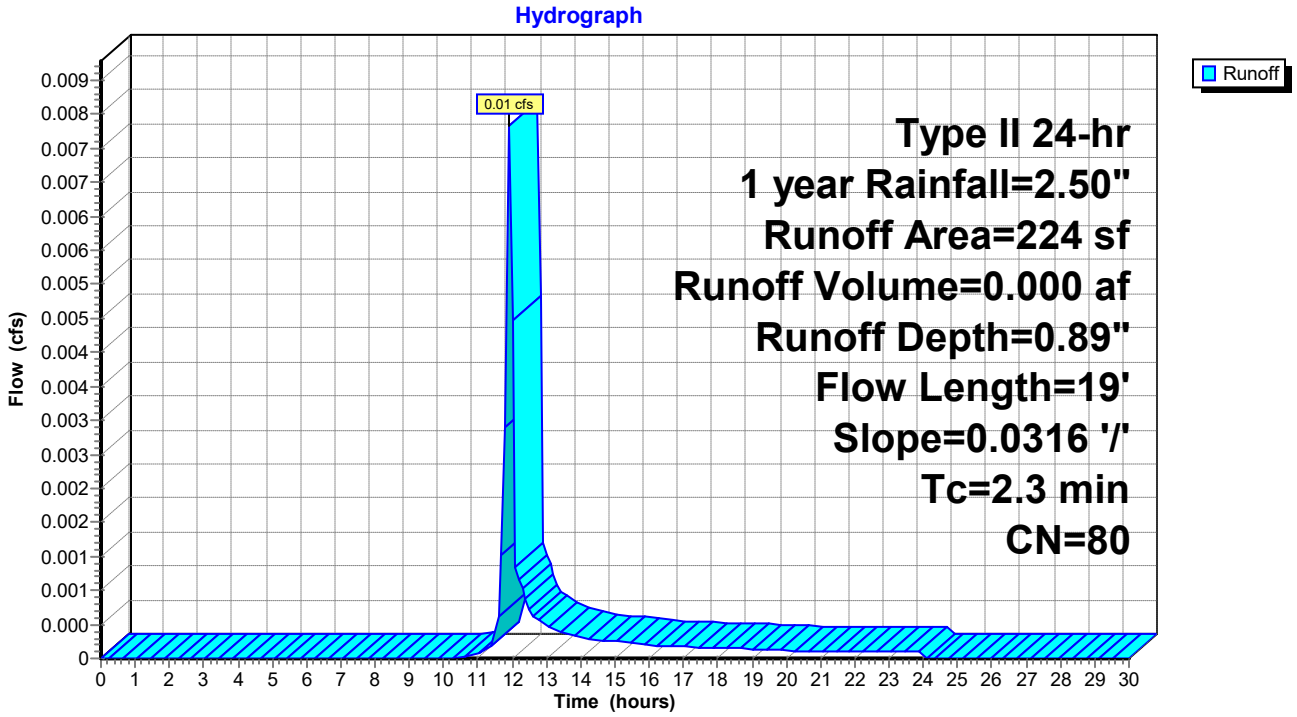
Subcatchment B: Tributary B



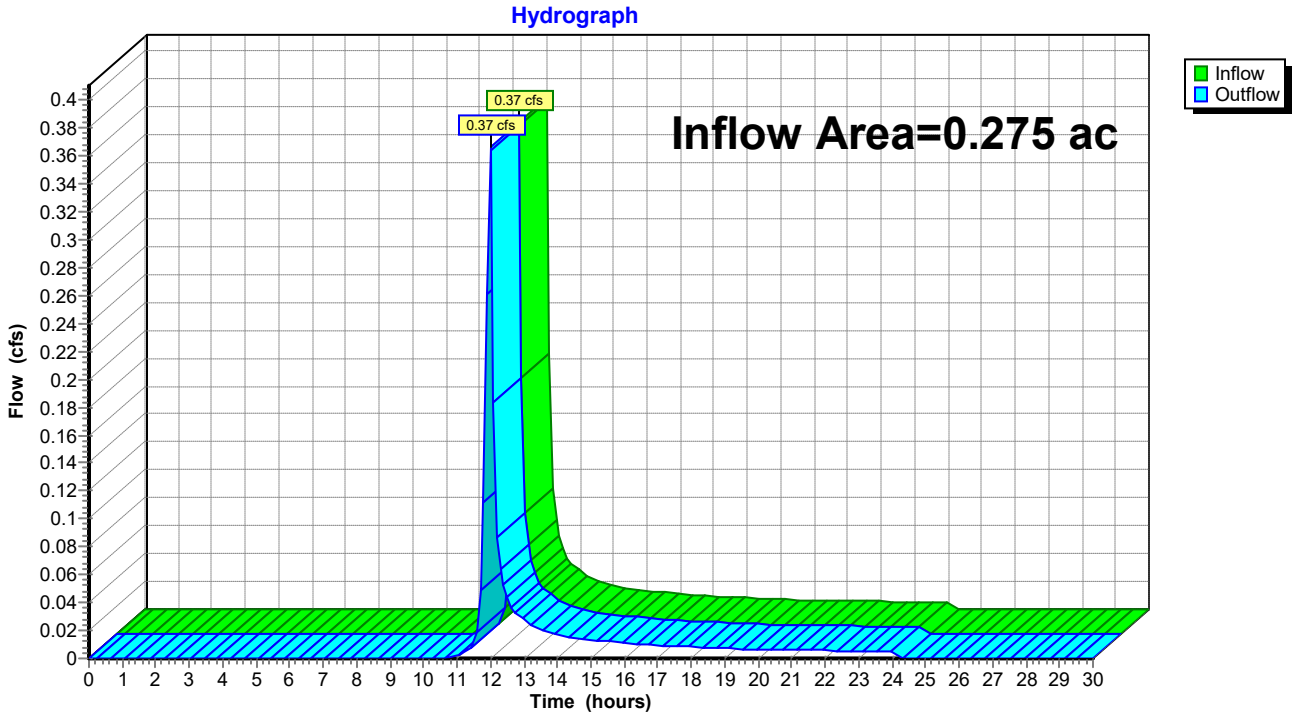
Subcatchment C: Tributary C



Subcatchment D: Tributary D



Reach RA: REACH A



Time span=0.00-30.00 hrs, dt=0.10 hrs, 301 points
Runoff by SCS TR-20 method, UH=SCS
Reach routing by Stor-Ind method - Pond routing by Stor-Ind method

Subcatchment A: Tributary A Runoff Area=5,849 sf 0.00% Impervious Runoff Depth=2.46"
Flow Length=127' Tc=5.8 min CN=80 Runoff=0.53 cfs 0.028 af

Subcatchment B: Tributary B Runoff Area=5,360 sf 0.00% Impervious Runoff Depth=2.46"
Flow Length=82' Slope=0.0195 '/' Tc=9.0 min CN=80 Runoff=0.46 cfs 0.025 af

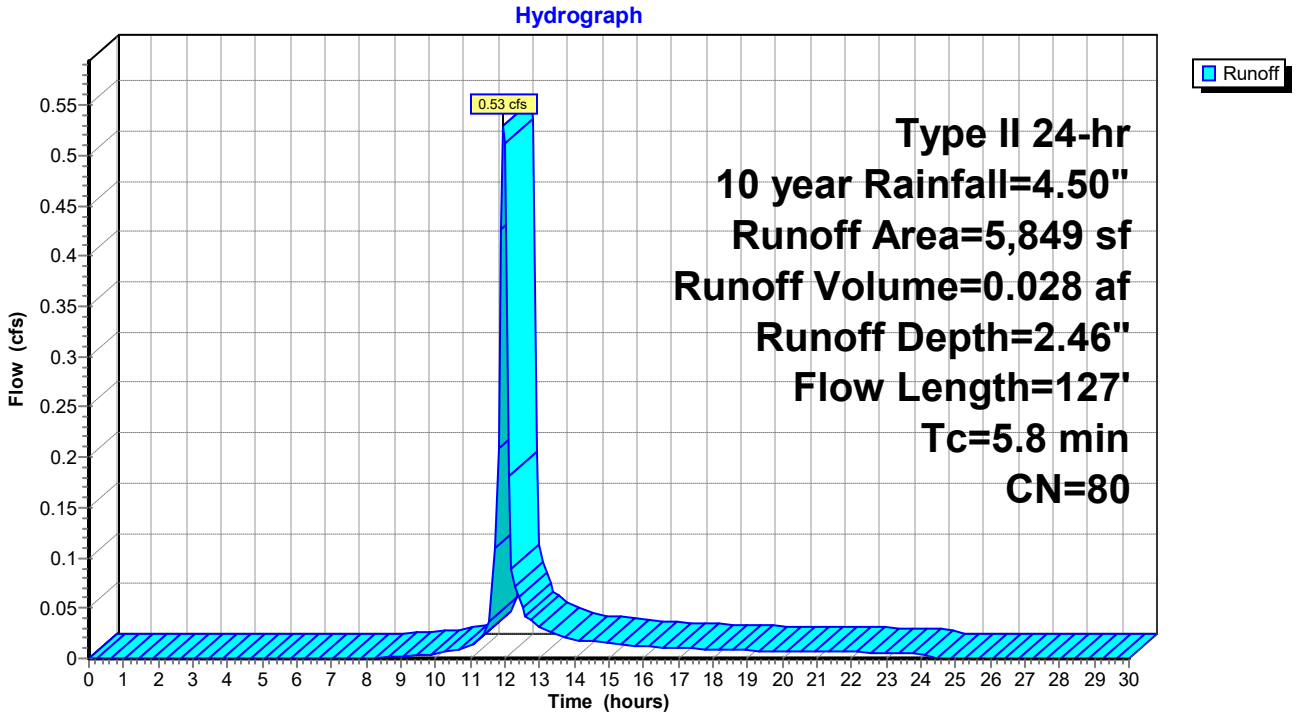
Subcatchment C: Tributary C Runoff Area=547 sf 0.00% Impervious Runoff Depth=2.46"
Flow Length=35' Slope=0.0400 '/' Tc=0.4 min CN=80 Runoff=0.06 cfs 0.003 af

Subcatchment D: Tributary D Runoff Area=224 sf 0.00% Impervious Runoff Depth=2.46"
Flow Length=19' Slope=0.0316 '/' Tc=2.3 min CN=80 Runoff=0.02 cfs 0.001 af

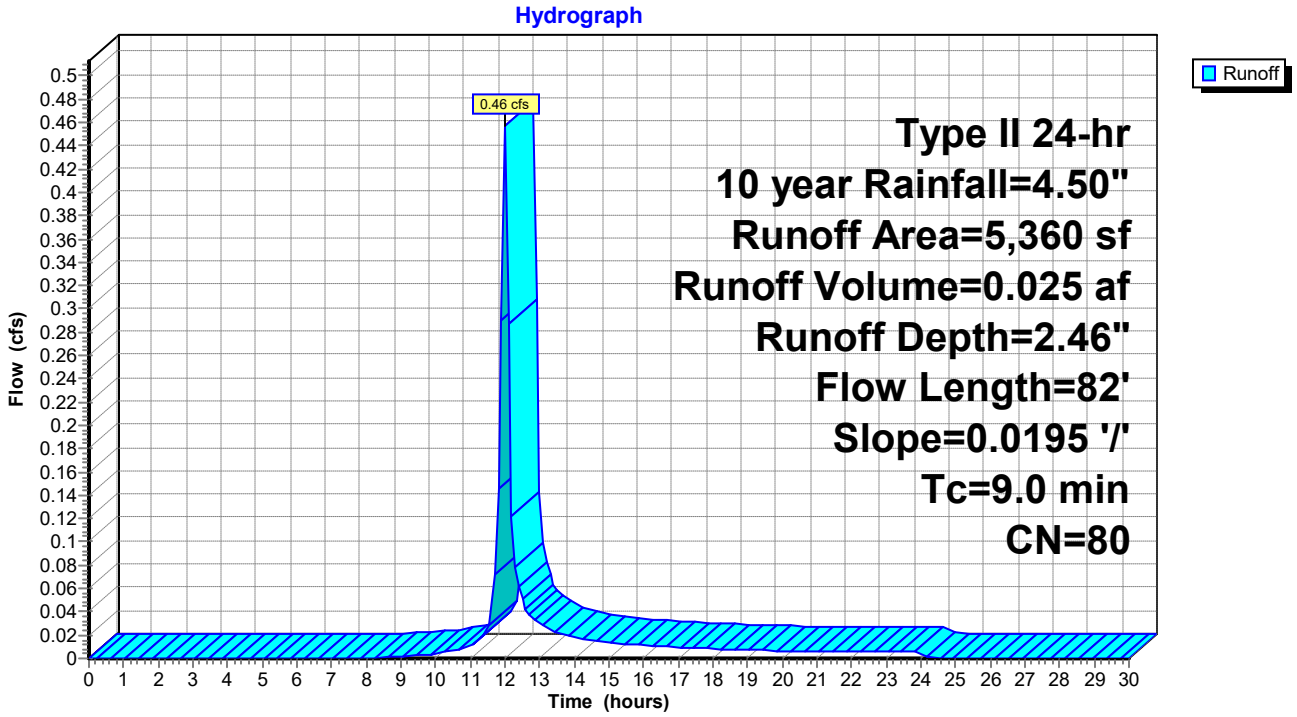
Reach RA: REACH A Inflow=1.02 cfs 0.056 af
Outflow=1.02 cfs 0.056 af

Total Runoff Area = 0.275 ac Runoff Volume = 0.056 af Average Runoff Depth = 2.46"
100.00% Pervious = 0.275 ac 0.00% Impervious = 0.000 ac

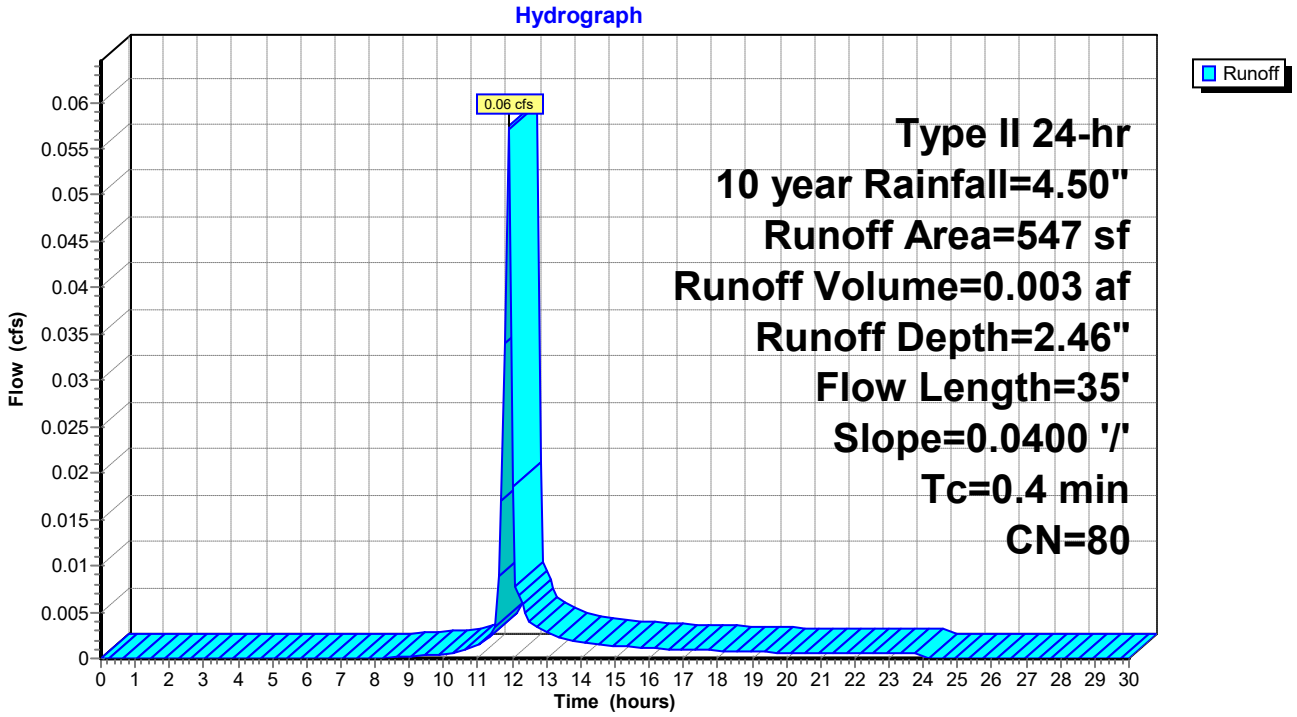
Subcatchment A: Tributary A



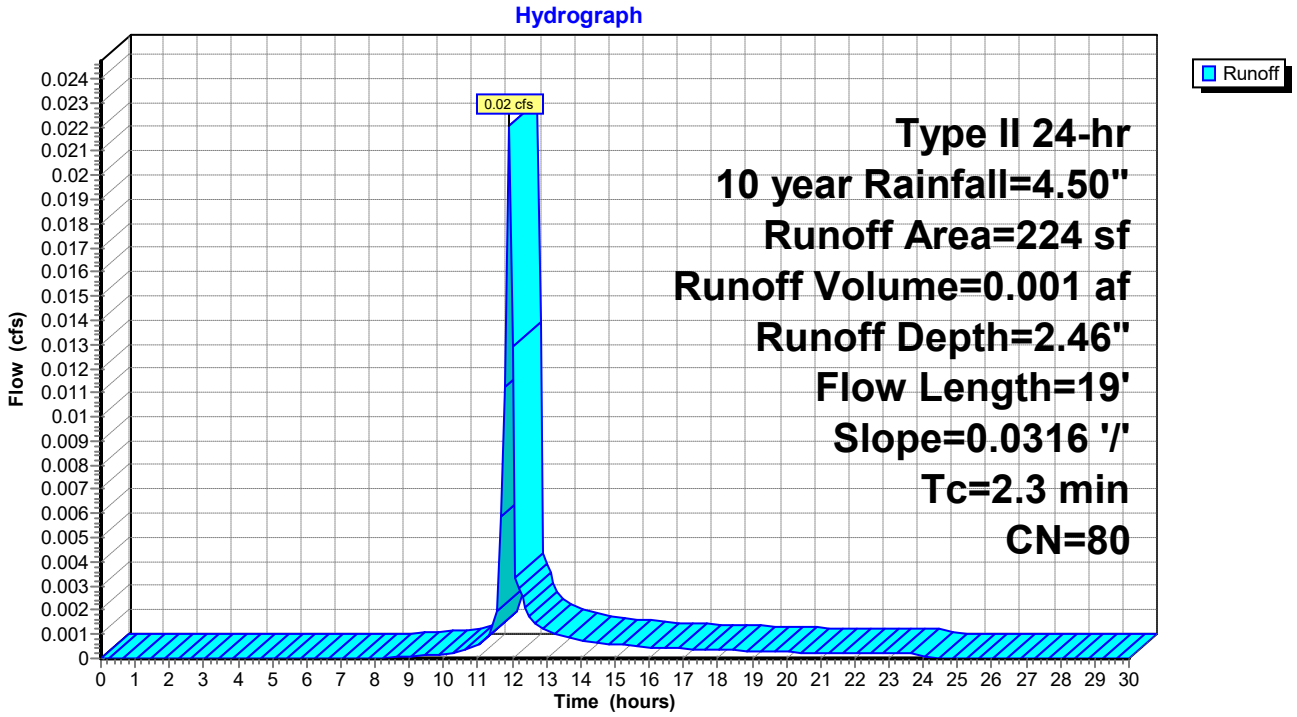
Subcatchment B: Tributary B



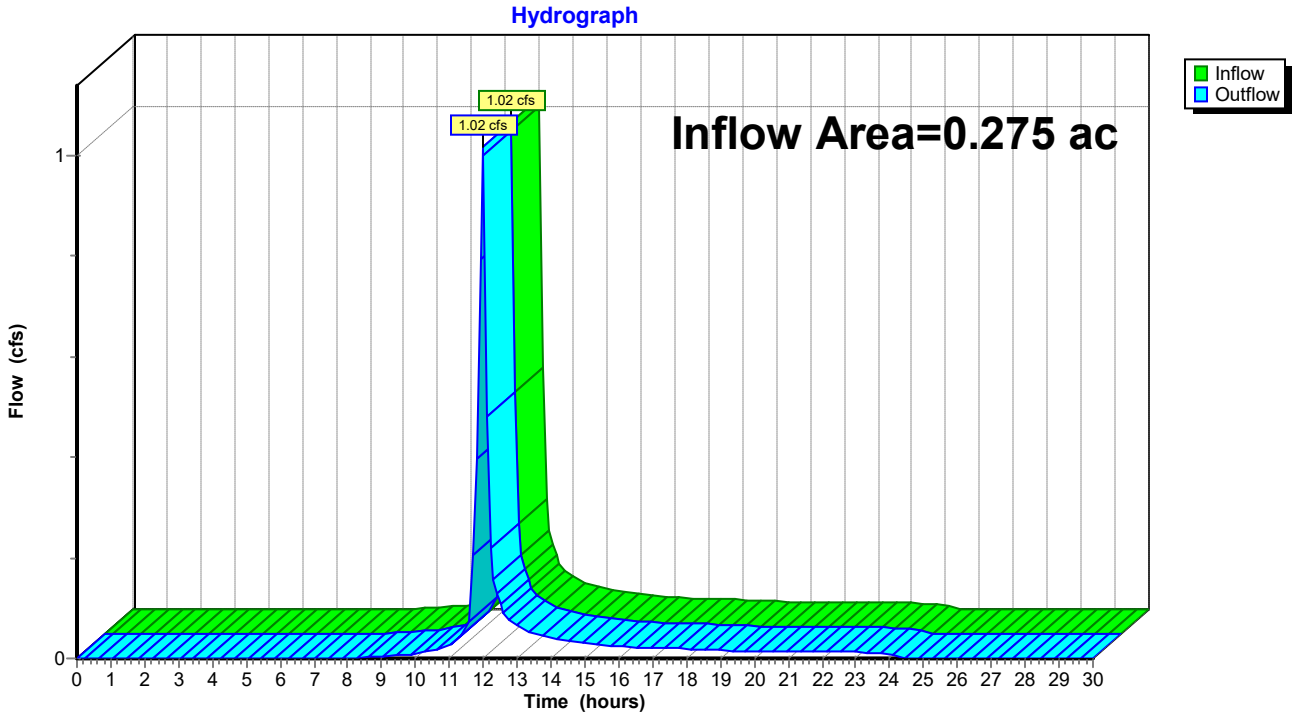
Subcatchment C: Tributary C



Subcatchment D: Tributary D



Reach RA: REACH A



Time span=0.00-30.00 hrs, dt=0.10 hrs, 301 points
Runoff by SCS TR-20 method, UH=SCS
Reach routing by Stor-Ind method - Pond routing by Stor-Ind method

Subcatchment A: Tributary A Runoff Area=5,849 sf 0.00% Impervious Runoff Depth=4.69"
Flow Length=127' Tc=5.8 min CN=80 Runoff=0.98 cfs 0.053 af

Subcatchment B: Tributary B Runoff Area=5,360 sf 0.00% Impervious Runoff Depth=4.69"
Flow Length=82' Slope=0.0195 '/' Tc=9.0 min CN=80 Runoff=0.86 cfs 0.048 af

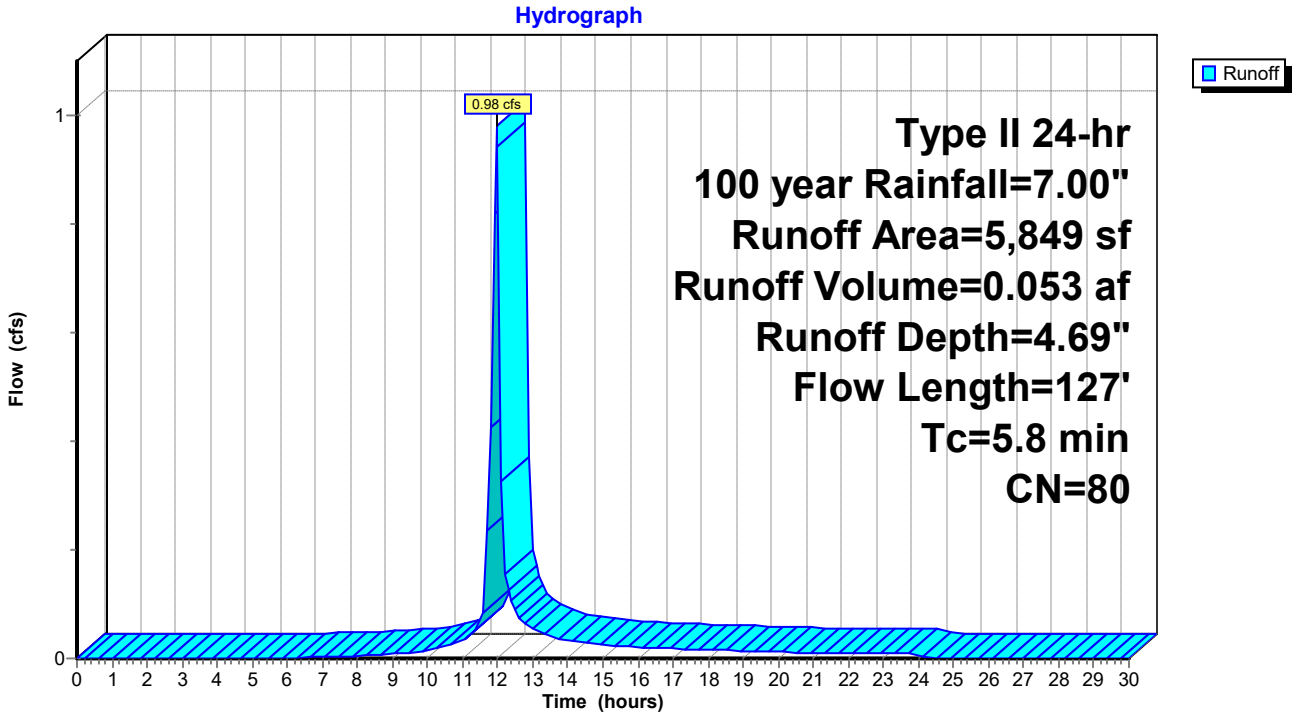
Subcatchment C: Tributary C Runoff Area=547 sf 0.00% Impervious Runoff Depth=4.69"
Flow Length=35' Slope=0.0400 '/' Tc=0.4 min CN=80 Runoff=0.11 cfs 0.005 af

Subcatchment D: Tributary D Runoff Area=224 sf 0.00% Impervious Runoff Depth=4.69"
Flow Length=19' Slope=0.0316 '/' Tc=2.3 min CN=80 Runoff=0.04 cfs 0.002 af

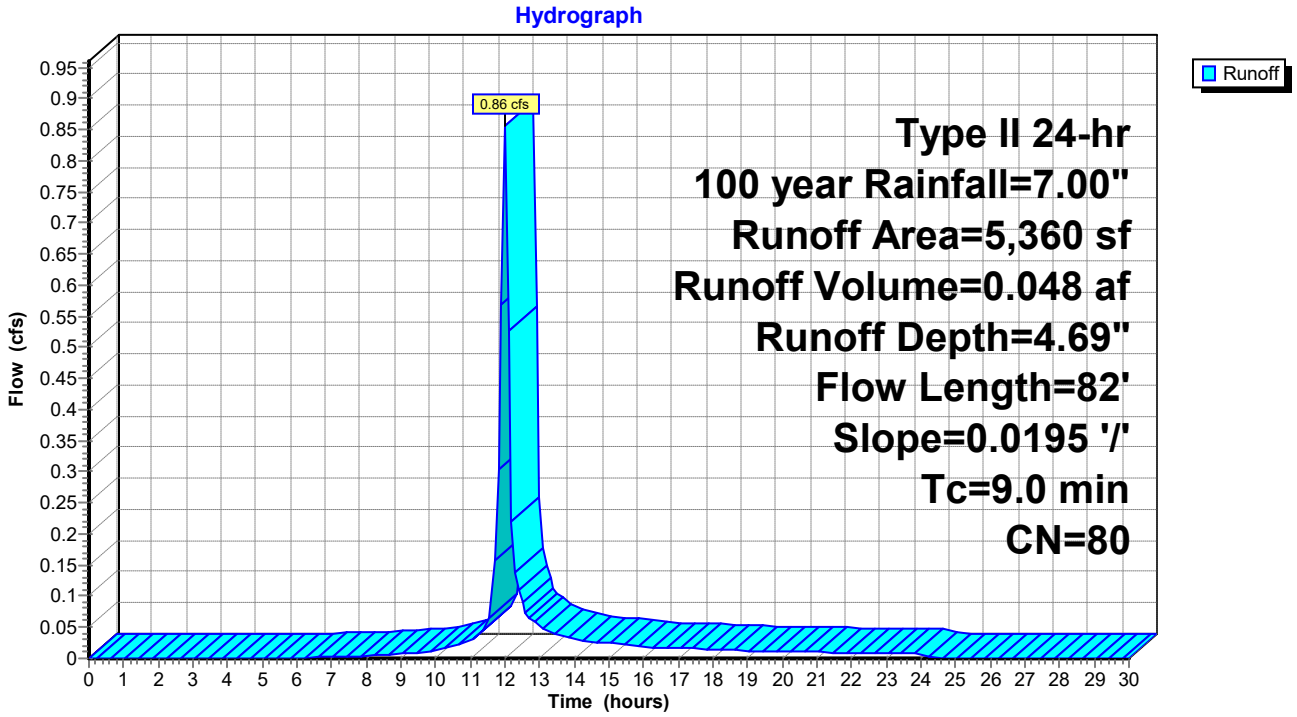
Reach RA: REACH A Inflow=1.90 cfs 0.108 af
Outflow=1.90 cfs 0.108 af

Total Runoff Area = 0.275 ac Runoff Volume = 0.108 af Average Runoff Depth = 4.69"
100.00% Pervious = 0.275 ac 0.00% Impervious = 0.000 ac

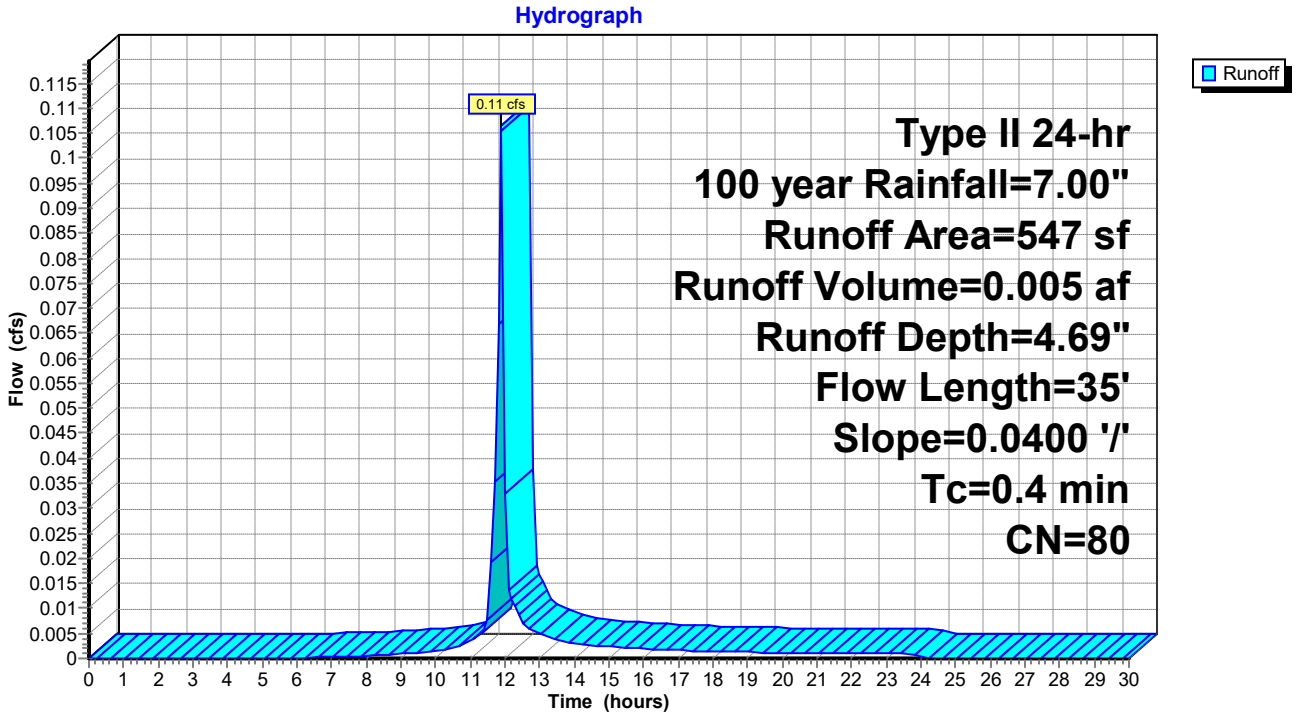
Subcatchment A: Tributary A



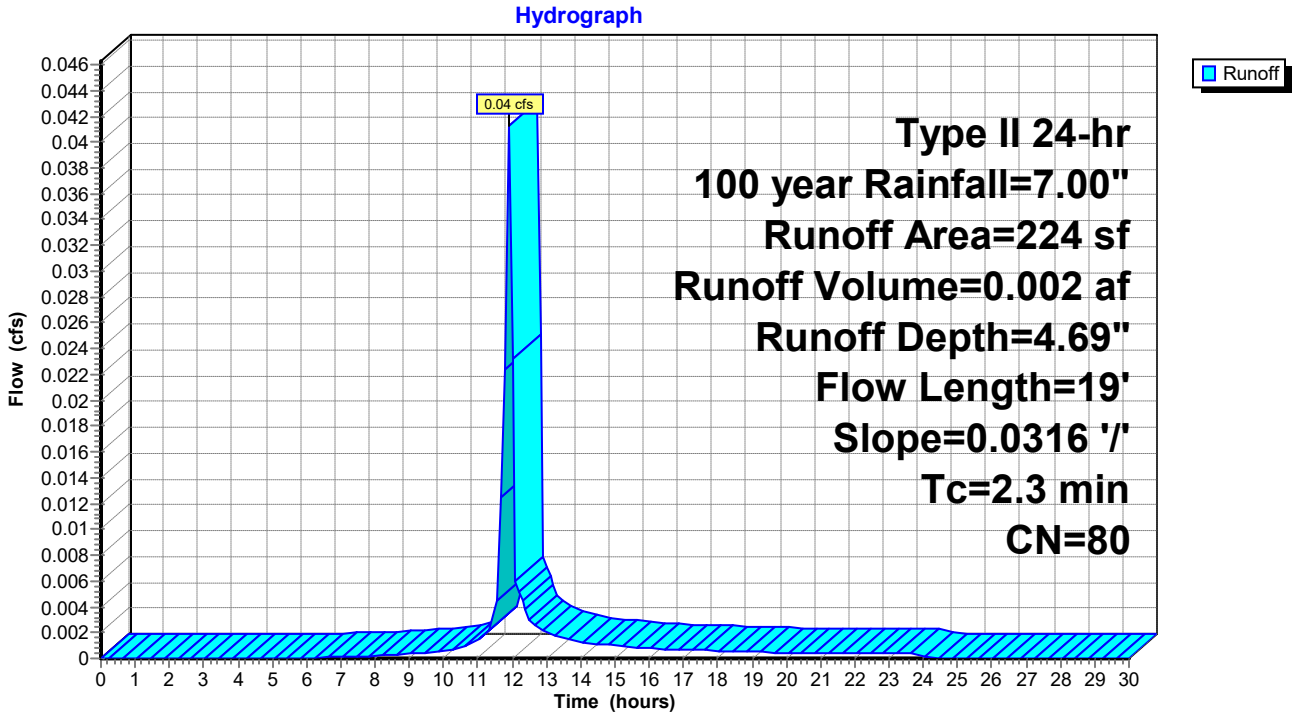
Subcatchment B: Tributary B



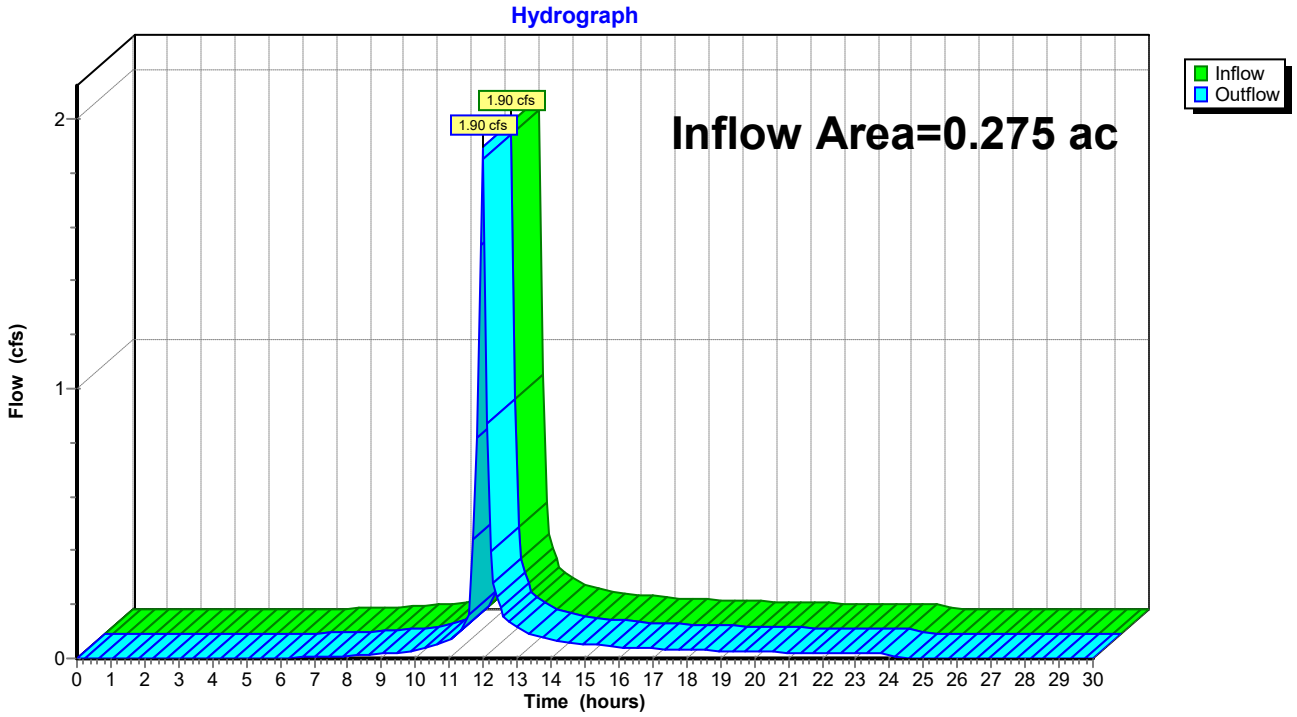
Subcatchment C: Tributary C

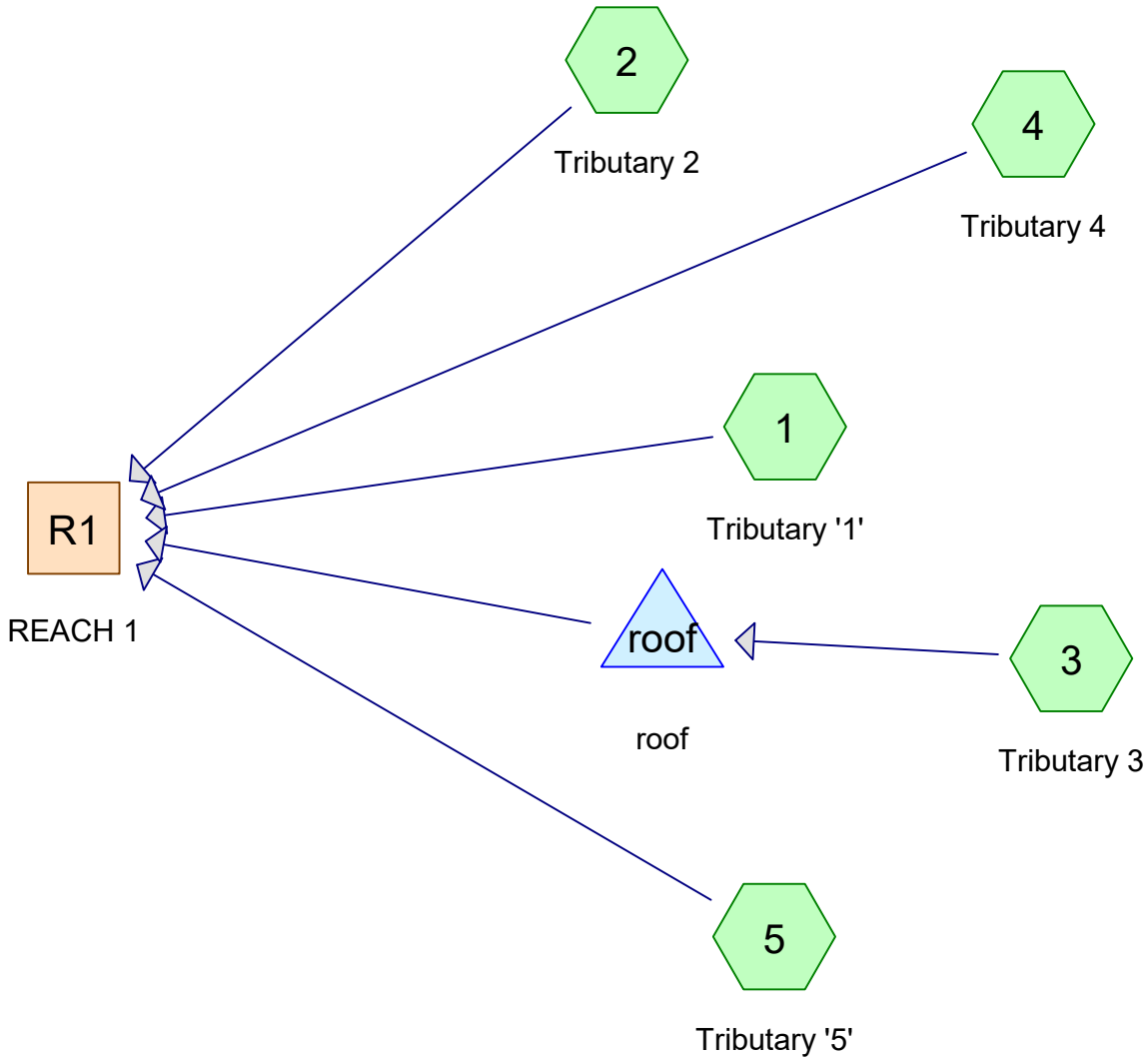


Subcatchment D: Tributary D



Reach RA: REACH A





Subcat Reach Pond Link

Routing Diagram for 200140-POST
Prepared by Microsoft, Printed 7/26/2021

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
0.008	80	>75% Grass cover, Good, HSG D (1, 2, 5)
0.004	98	CONC (5)
0.187	98	Paved parking, HSG A (1, 2, 3)
0.015	98	Unconnected roofs, HSG A (4)
0.213	**97**	**TOTAL AREA**

Soil Listing (all nodes)

Area (acres)	Soil Group	Subcatchment Numbers
0.201	HSG A	1, 2, 3, 4
0.000	HSG B	
0.000	HSG C	
0.008	HSG D	1, 2, 5
0.004	Other	5
0.213		**TOTAL AREA**

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	0.000	0.000	0.008	0.000	0.008	>75% Grass cover, Good	1, 2, 5
0.000	0.000	0.000	0.000	0.004	0.004	CONC	5
0.187	0.000	0.000	0.000	0.000	0.187	Paved parking	1, 2, 3
0.015	0.000	0.000	0.000	0.000	0.015	Unconnected roofs	4
0.201	**0.000**	**0.000**	**0.008**	**0.004**	**0.213**	**TOTAL AREA**	

Time span=0.00-30.00 hrs, dt=0.10 hrs, 301 points
Runoff by SCS TR-20 method, UH=SCS
Reach routing by Stor-Ind method - Pond routing by Stor-Ind method

Subcatchment 1: Tributary '1' Runoff Area=1,204 sf 78.41% Impervious Runoff Depth=1.87"
Flow Length=78' Tc=1.3 min CN=94 Runoff=0.09 cfs 0.004 af

Subcatchment 2: Tributary 2 Runoff Area=1,877 sf 97.55% Impervious Runoff Depth=2.27"
Flow Length=127' Tc=1.5 min CN=98 Runoff=0.16 cfs 0.008 af

Subcatchment 3: Tributary 3 Runoff Area=5,356 sf 100.00% Impervious Runoff Depth=2.27"
Flow Length=1' Slope=0.0500 '/' Tc=0.0 min CN=98 Runoff=0.45 cfs 0.023 af

Subcatchment 4: Tributary 4 Runoff Area=634 sf 100.00% Impervious Runoff Depth=2.27"
Flow Length=20' Slope=0.0459 '/' Tc=2.1 min CN=98 Runoff=0.05 cfs 0.003 af

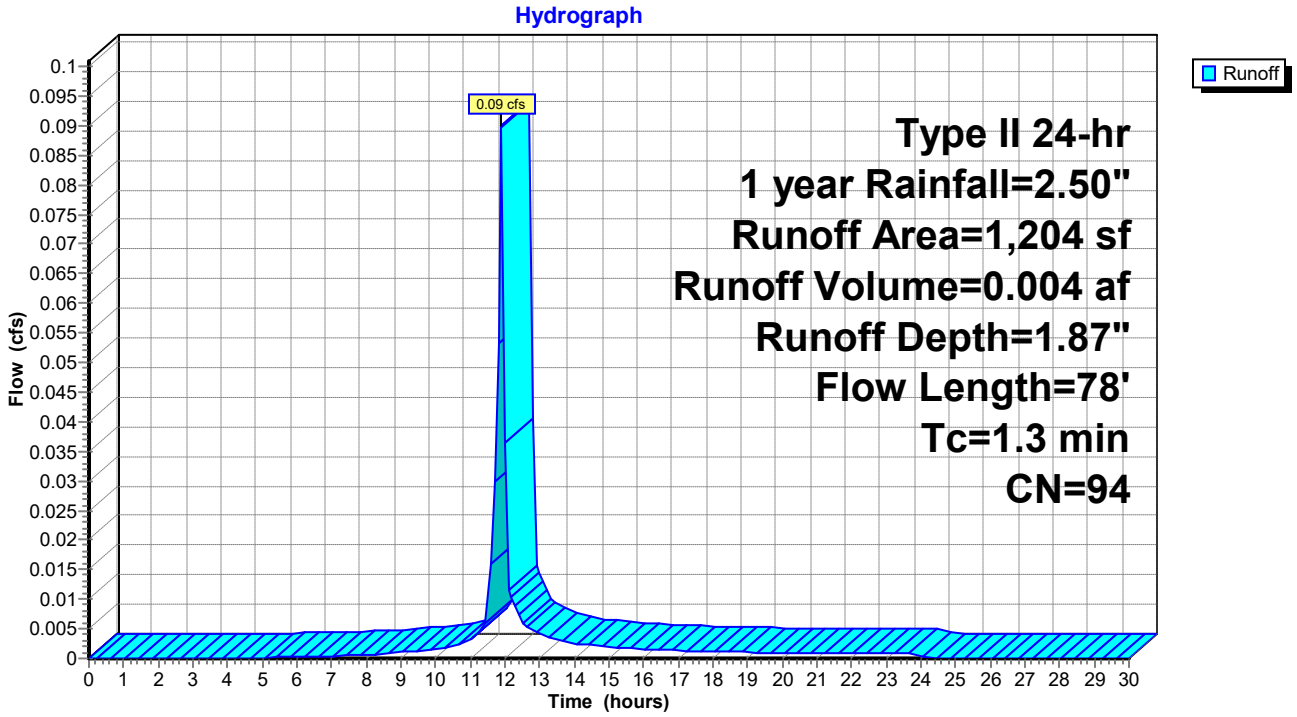
Subcatchment 5: Tributary '5' Runoff Area=227 sf 74.01% Impervious Runoff Depth=1.78"
Flow Length=22' Slope=0.0354 '/' Tc=0.3 min CN=93 Runoff=0.02 cfs 0.001 af

Reach R1: REACH 1 Inflow=0.31 cfs 0.016 af
Outflow=0.31 cfs 0.016 af

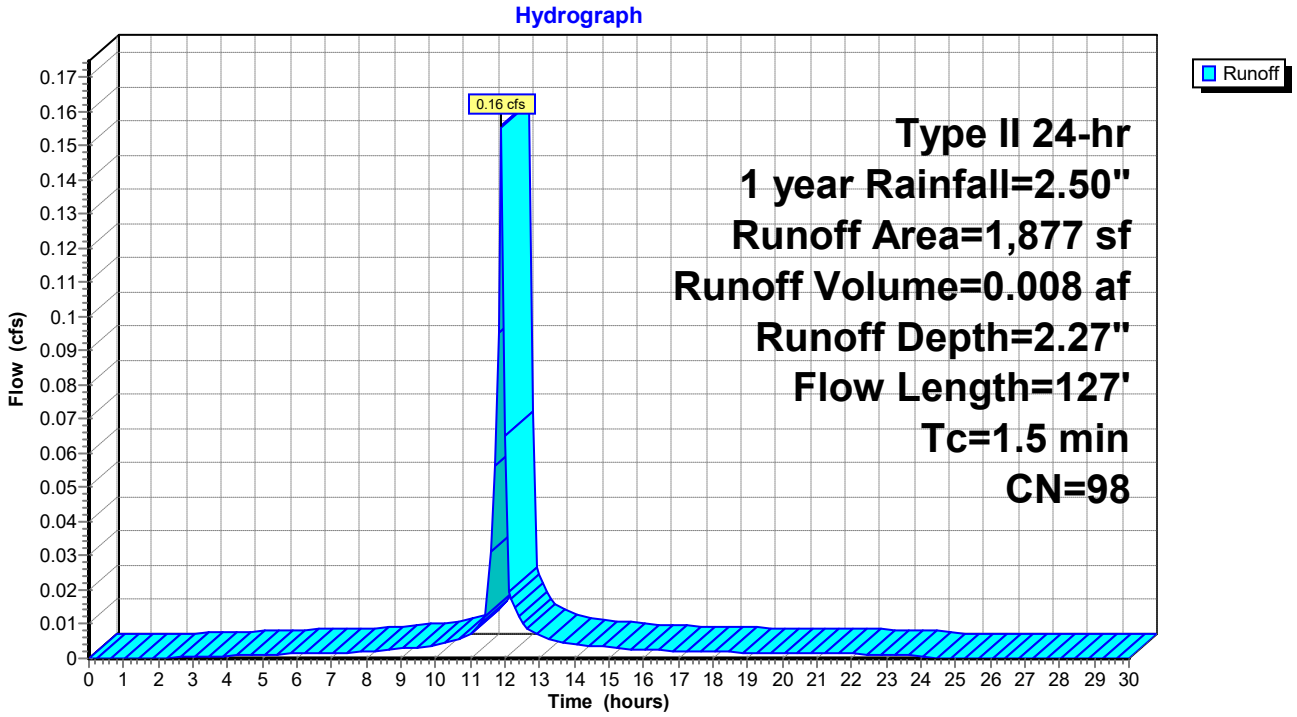
Pond roof: roof Peak Elev=0.18' Storage=1,014 cf Inflow=0.45 cfs 0.023 af
Outflow=0.00 cfs 0.000 af

Total Runoff Area = 0.213 ac Runoff Volume = 0.039 af Average Runoff Depth = 2.21"
3.93% Pervious = 0.008 ac 96.07% Impervious = 0.205 ac

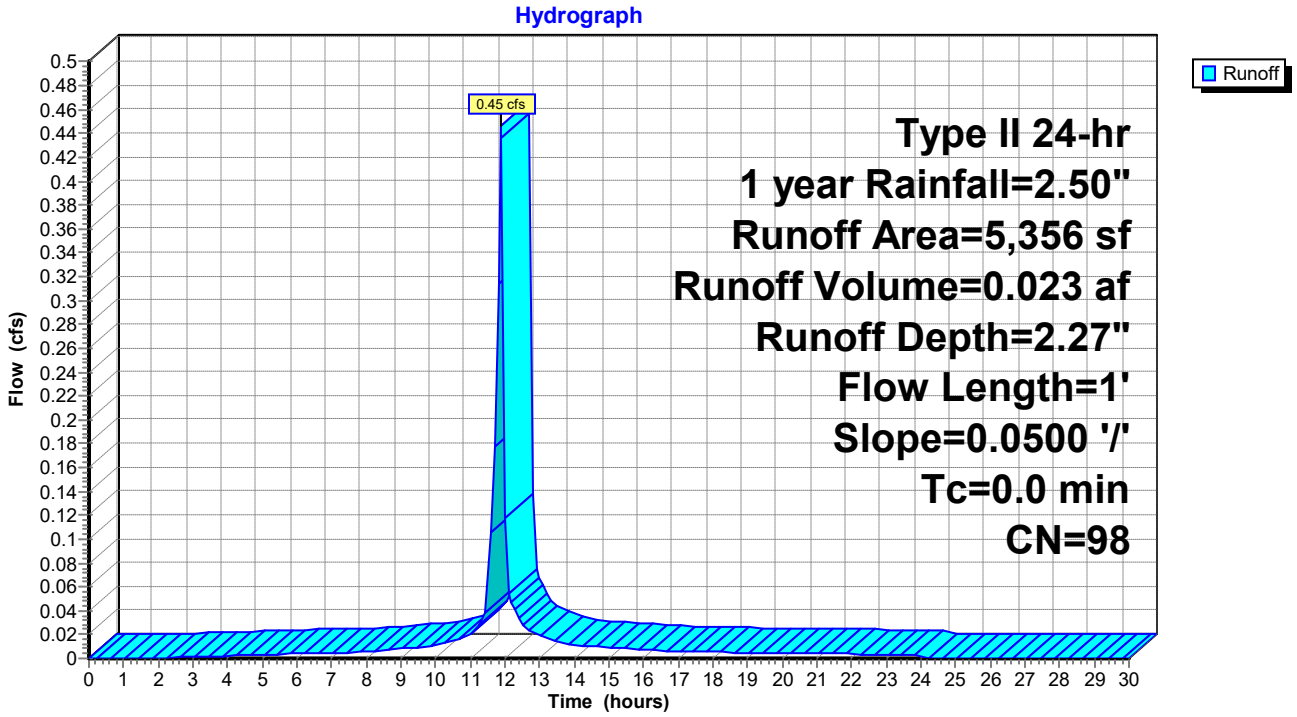
Subcatchment 1: Tributary '1'



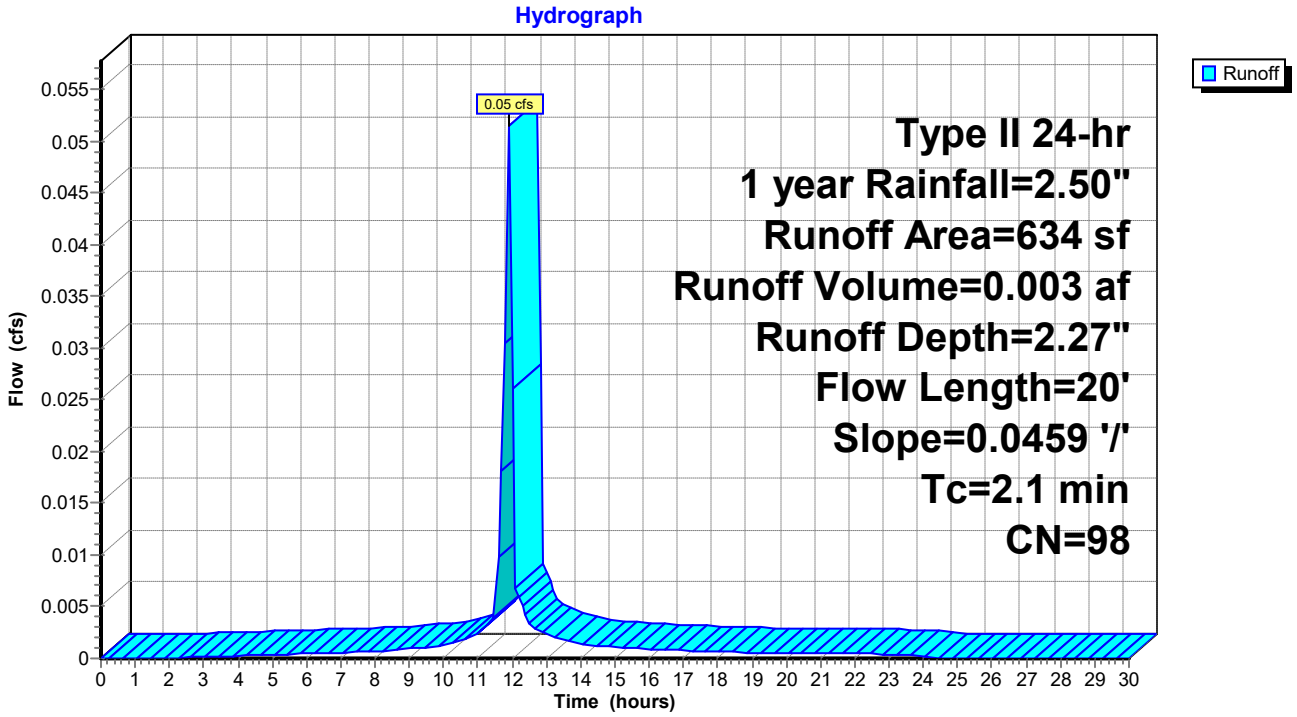
Subcatchment 2: Tributary 2



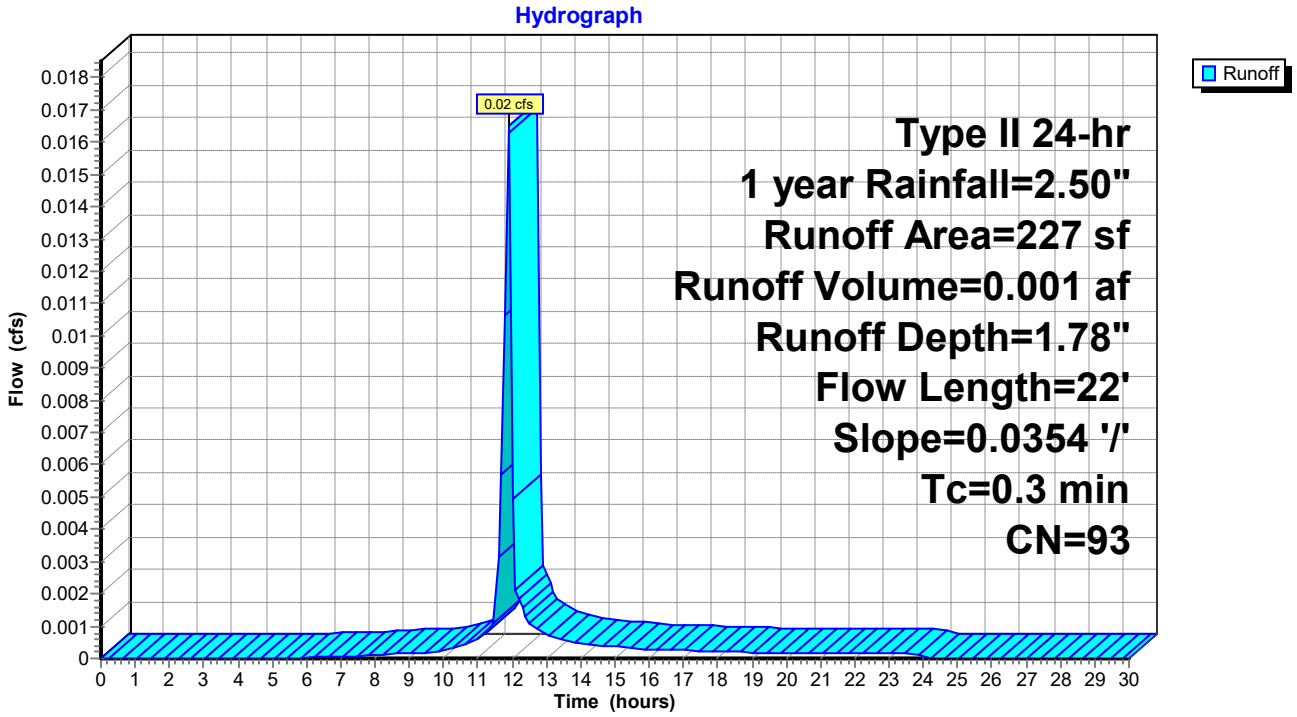
Subcatchment 3: Tributary 3



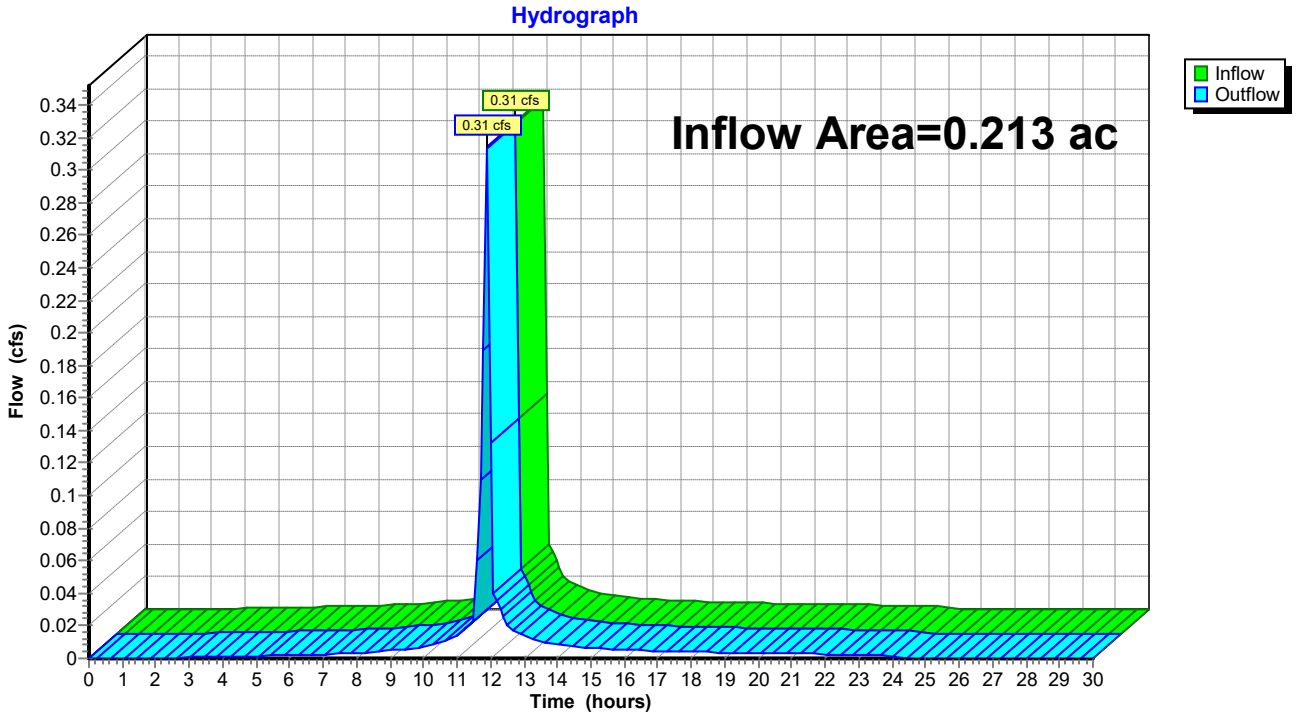
Subcatchment 4: Tributary 4



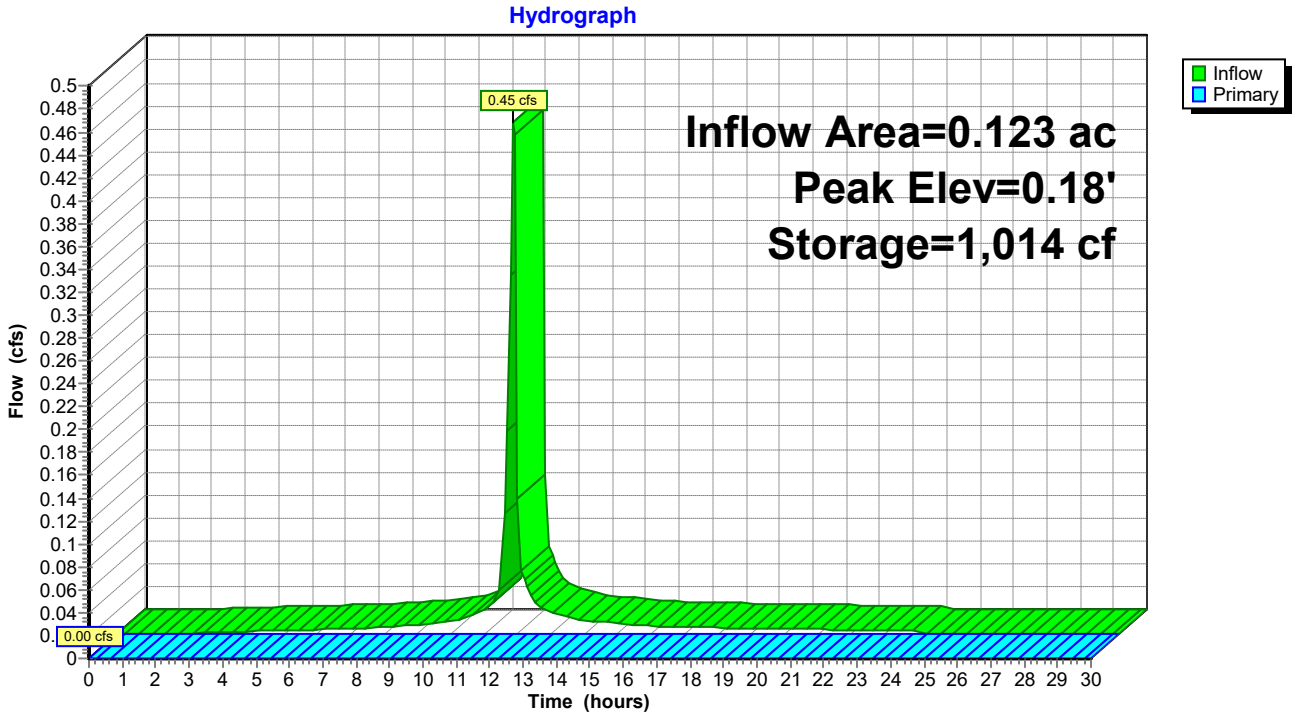
Subcatchment 5: Tributary '5'



Reach R1: REACH 1



Pond roof: roof



Time span=0.00-30.00 hrs, dt=0.10 hrs, 301 points
Runoff by SCS TR-20 method, UH=SCS
Reach routing by Stor-Ind method - Pond routing by Stor-Ind method

Subcatchment 1: Tributary '1' Runoff Area=1,204 sf 78.41% Impervious Runoff Depth=3.82"
Flow Length=78' Tc=1.3 min CN=94 Runoff=0.18 cfs 0.009 af

Subcatchment 2: Tributary 2 Runoff Area=1,877 sf 97.55% Impervious Runoff Depth=4.26"
Flow Length=127' Tc=1.5 min CN=98 Runoff=0.28 cfs 0.015 af

Subcatchment 3: Tributary 3 Runoff Area=5,356 sf 100.00% Impervious Runoff Depth=4.26"
Flow Length=1' Slope=0.0500 '/' Tc=0.0 min CN=98 Runoff=0.81 cfs 0.044 af

Subcatchment 4: Tributary 4 Runoff Area=634 sf 100.00% Impervious Runoff Depth=4.26"
Flow Length=20' Slope=0.0459 '/' Tc=2.1 min CN=98 Runoff=0.09 cfs 0.005 af

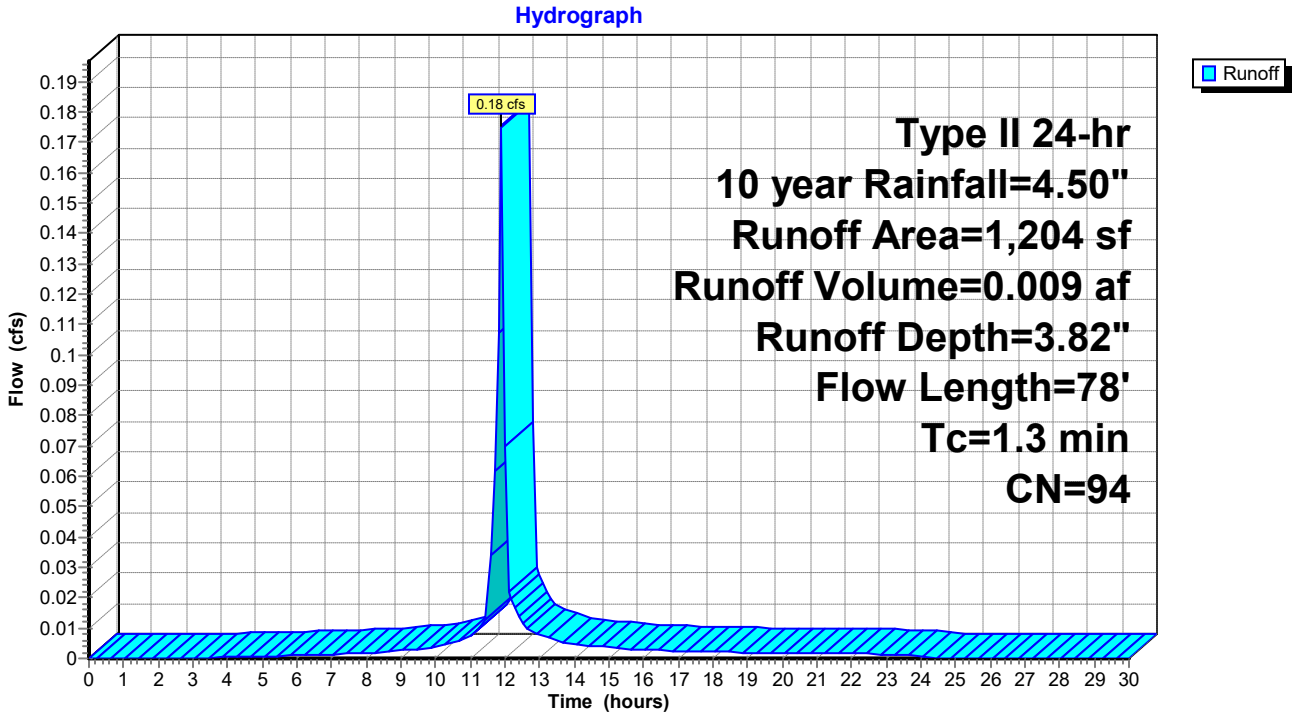
Subcatchment 5: Tributary '5' Runoff Area=227 sf 74.01% Impervious Runoff Depth=3.71"
Flow Length=22' Slope=0.0354 '/' Tc=0.3 min CN=93 Runoff=0.03 cfs 0.002 af

Reach R1: REACH 1 Inflow=0.59 cfs 0.033 af
Outflow=0.59 cfs 0.033 af

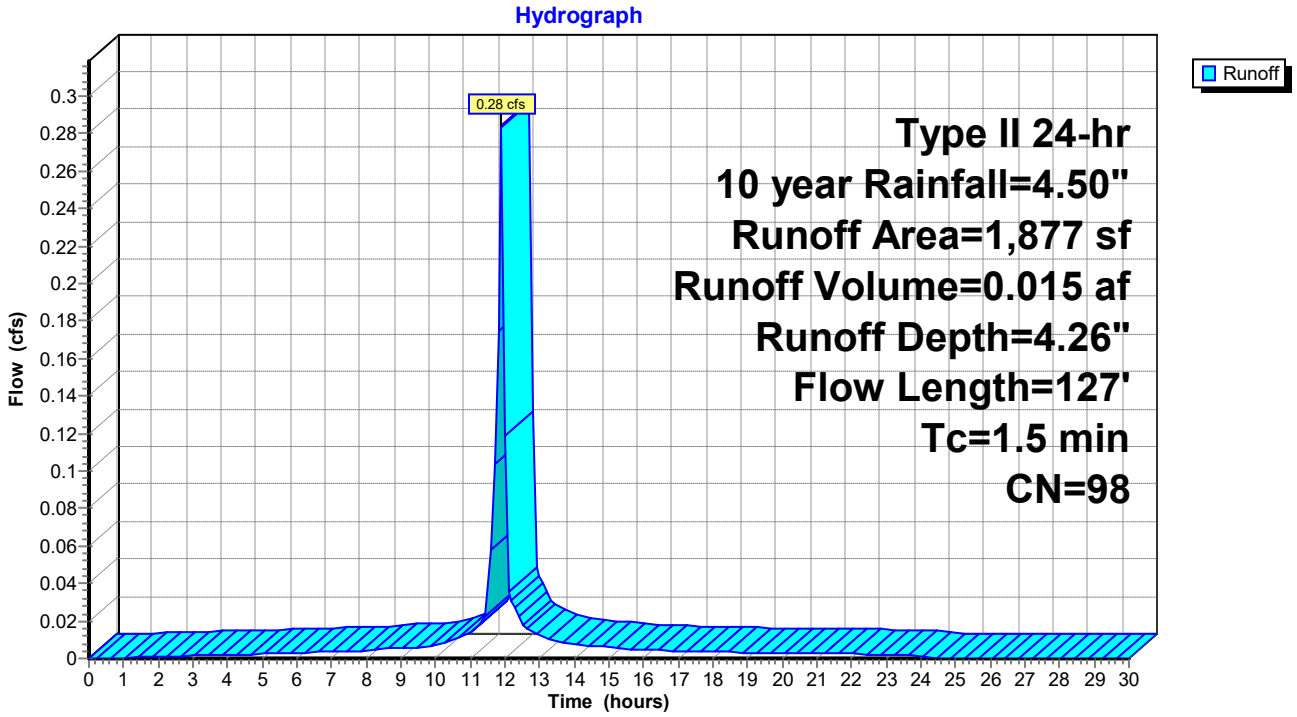
Pond roof: roof Peak Elev=0.33' Storage=1,863 cf Inflow=0.81 cfs 0.044 af
Outflow=0.00 cfs 0.002 af

Total Runoff Area = 0.213 ac Runoff Volume = 0.075 af Average Runoff Depth = 4.19"
3.93% Pervious = 0.008 ac 96.07% Impervious = 0.205 ac

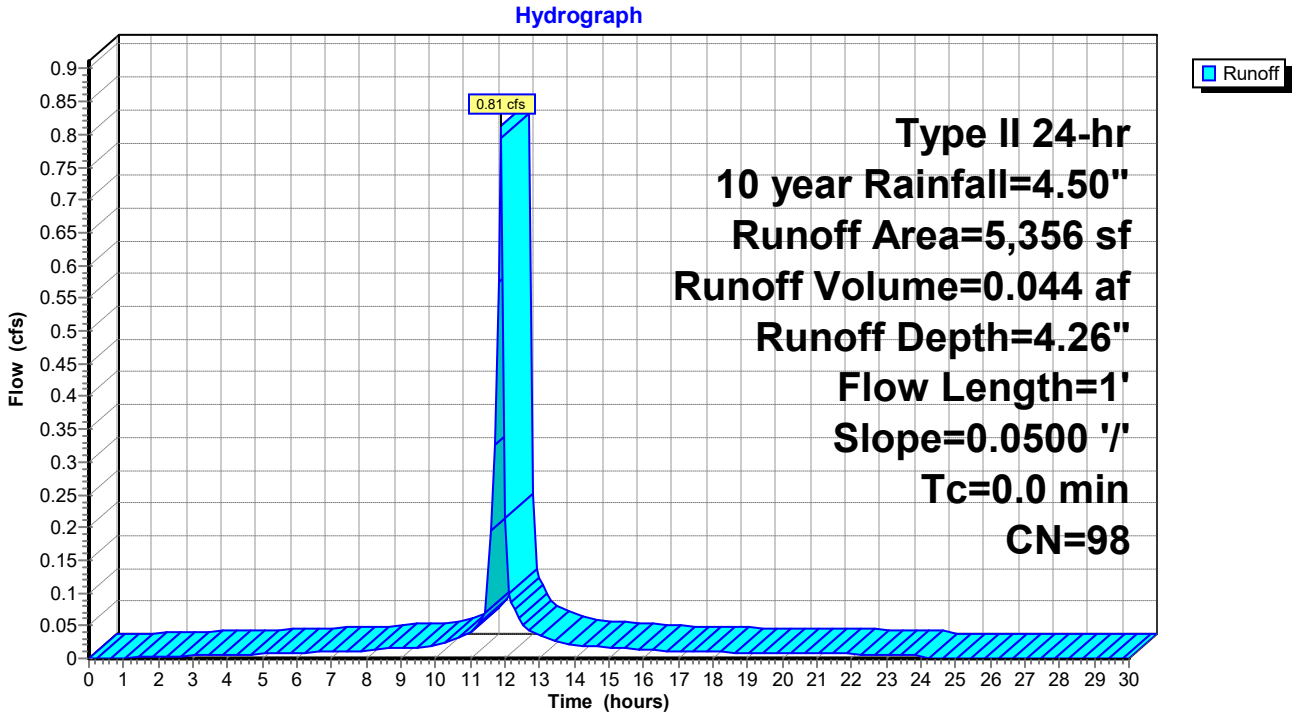
Subcatchment 1: Tributary '1'



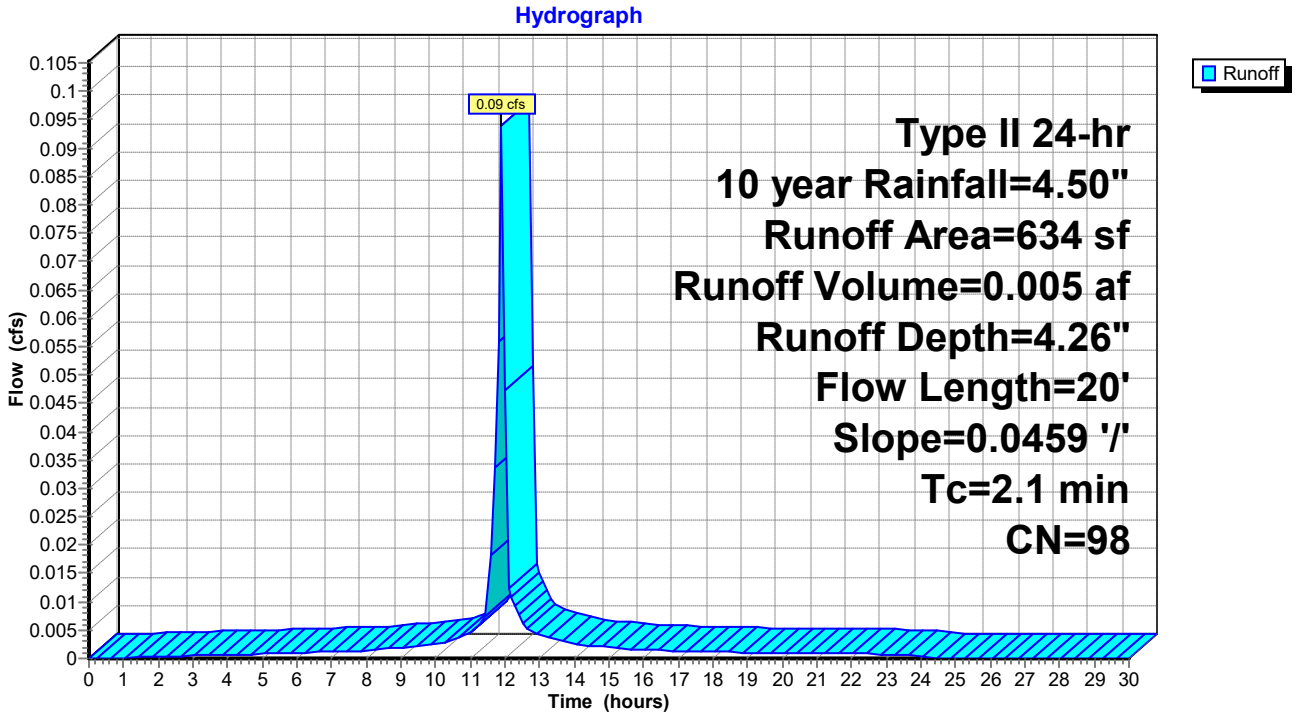
Subcatchment 2: Tributary 2



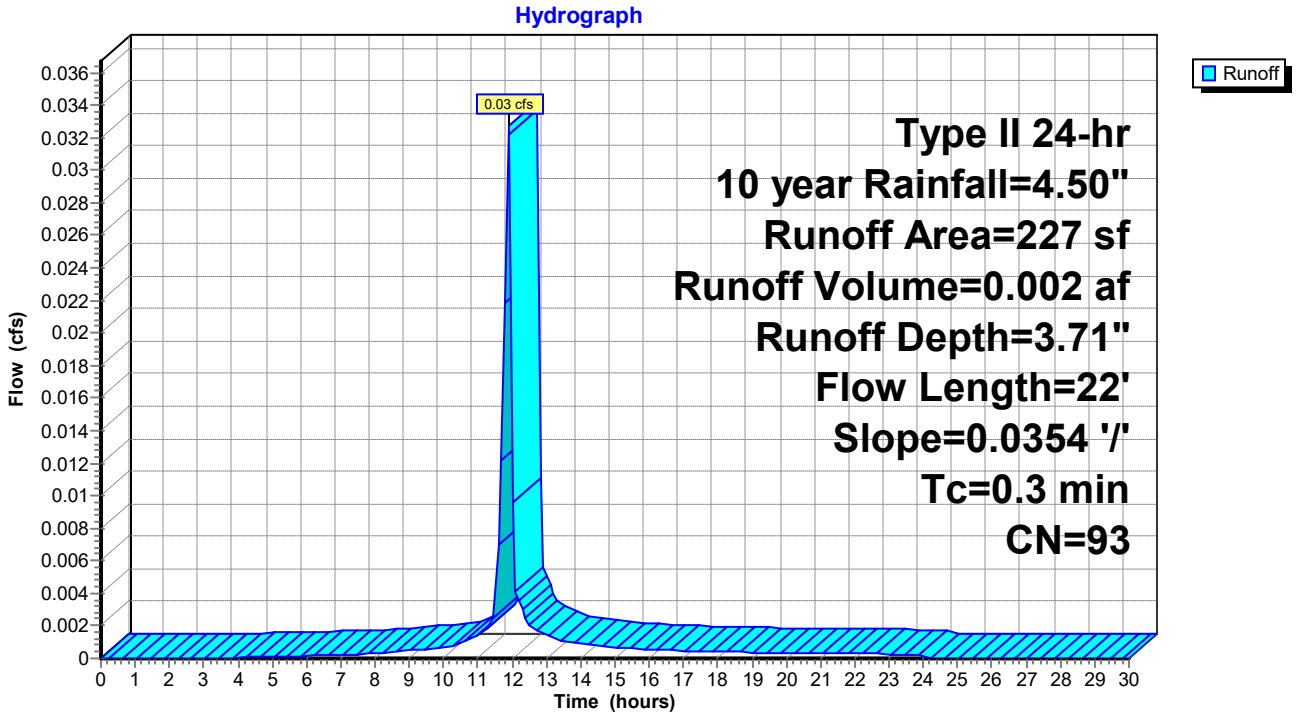
Subcatchment 3: Tributary 3



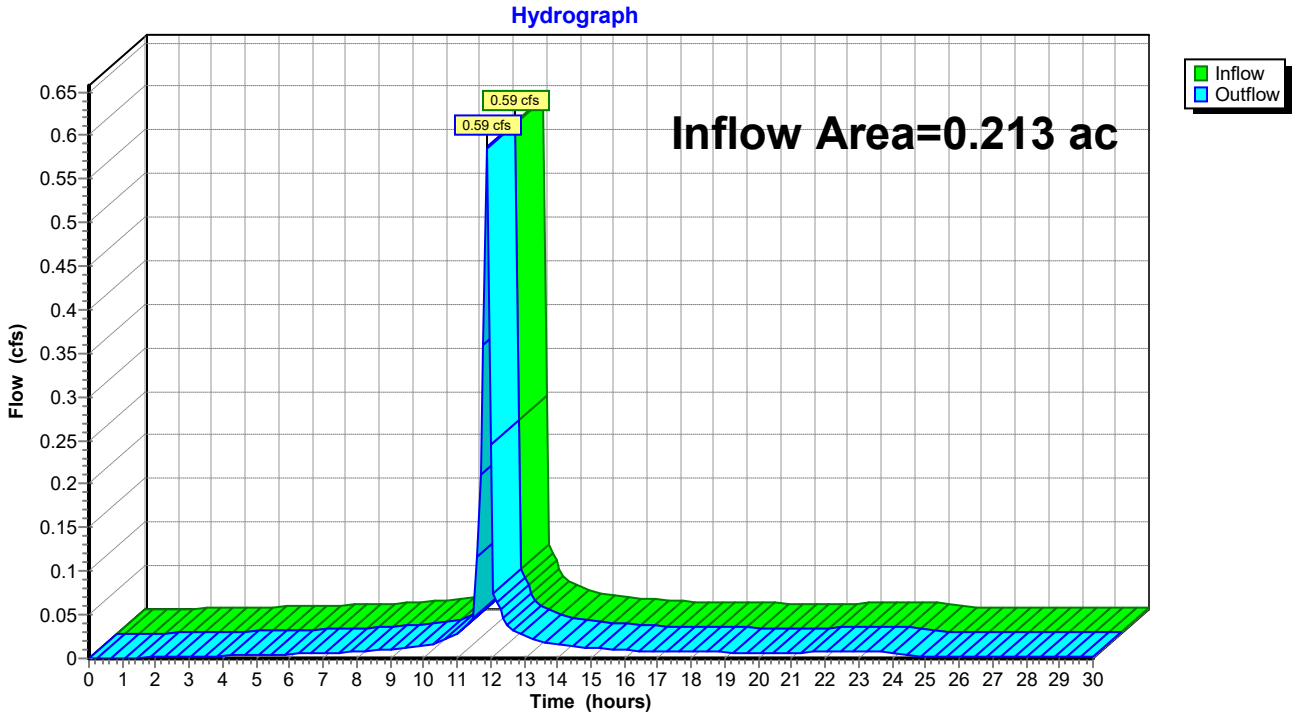
Subcatchment 4: Tributary 4



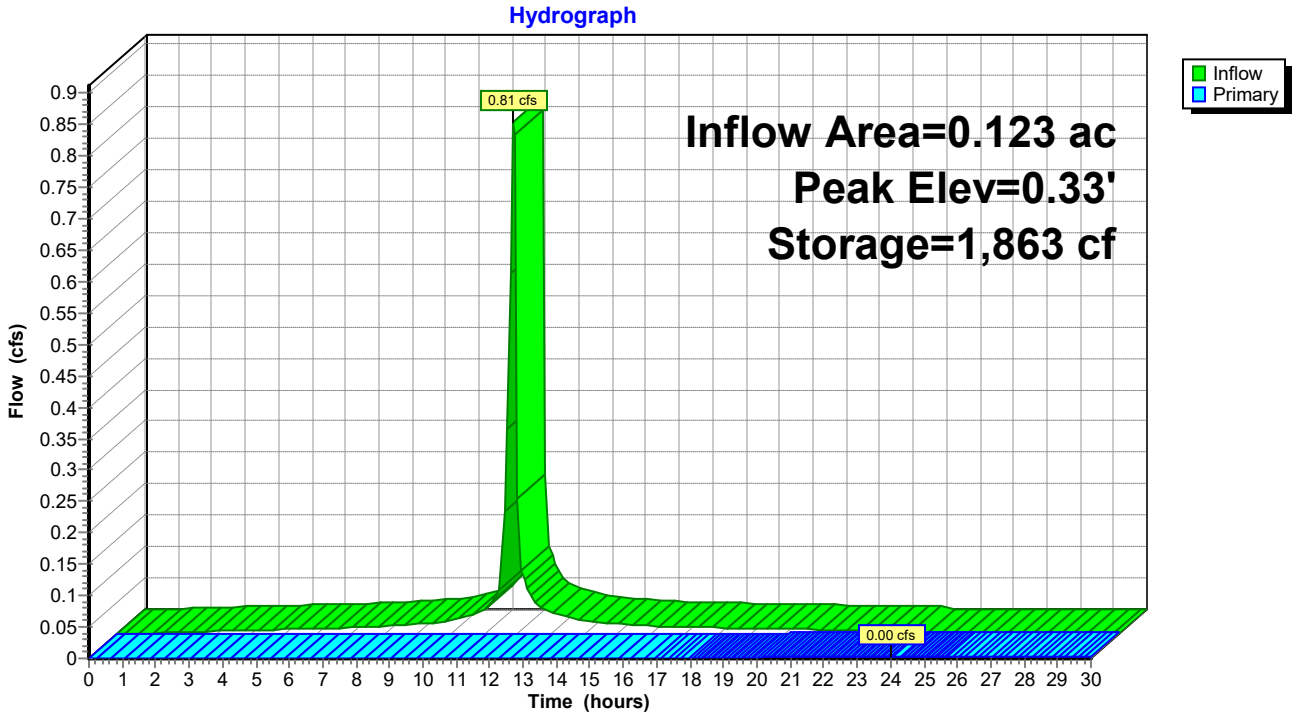
Subcatchment 5: Tributary '5'



Reach R1: REACH 1



Pond roof: roof



Time span=0.00-30.00 hrs, dt=0.10 hrs, 301 points
Runoff by SCS TR-20 method, UH=SCS
Reach routing by Stor-Ind method - Pond routing by Stor-Ind method

Subcatchment 1: Tributary '1' Runoff Area=1,204 sf 78.41% Impervious Runoff Depth=6.29"
Flow Length=78' Tc=1.3 min CN=94 Runoff=0.28 cfs 0.014 af

Subcatchment 2: Tributary 2 Runoff Area=1,877 sf 97.55% Impervious Runoff Depth=6.76"
Flow Length=127' Tc=1.5 min CN=98 Runoff=0.44 cfs 0.024 af

Subcatchment 3: Tributary 3 Runoff Area=5,356 sf 100.00% Impervious Runoff Depth=6.76"
Flow Length=1' Slope=0.0500 '/' Tc=0.0 min CN=98 Runoff=1.27 cfs 0.069 af

Subcatchment 4: Tributary 4 Runoff Area=634 sf 100.00% Impervious Runoff Depth=6.76"
Flow Length=20' Slope=0.0459 '/' Tc=2.1 min CN=98 Runoff=0.15 cfs 0.008 af

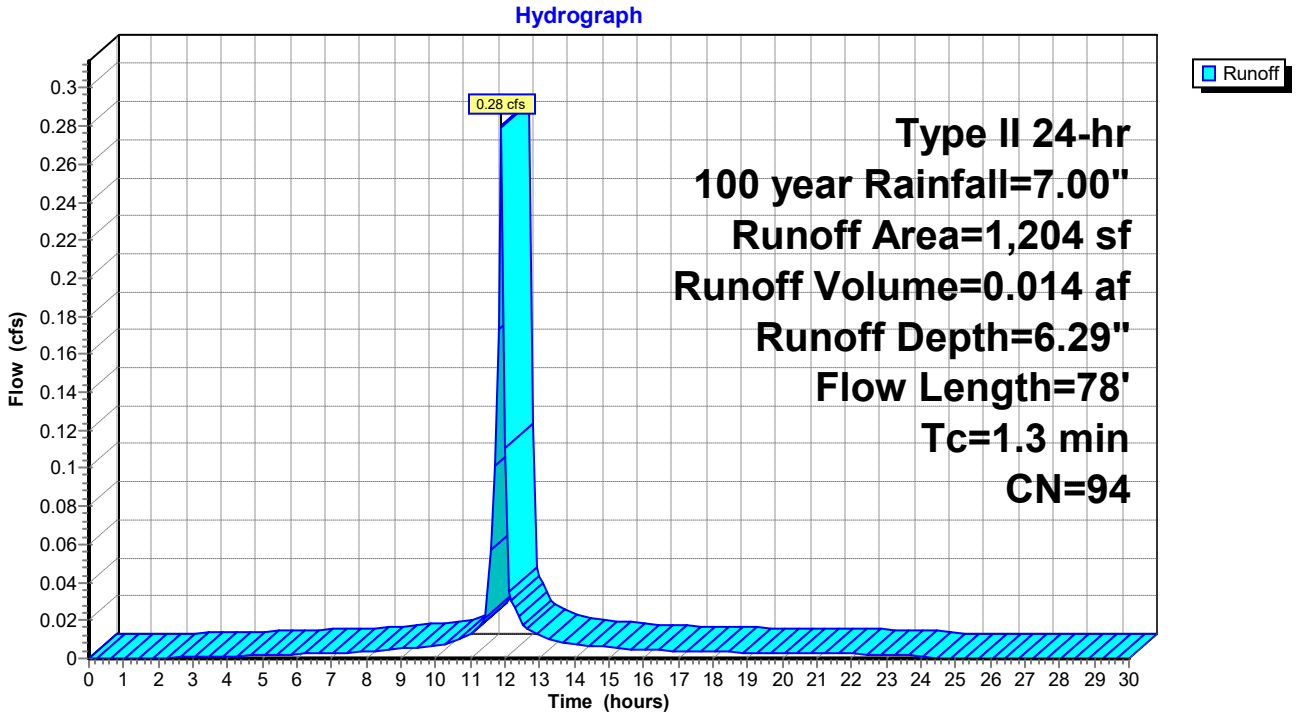
Subcatchment 5: Tributary '5' Runoff Area=227 sf 74.01% Impervious Runoff Depth=6.17"
Flow Length=22' Slope=0.0354 '/' Tc=0.3 min CN=93 Runoff=0.05 cfs 0.003 af

Reach R1: REACH 1 Inflow=0.92 cfs 0.076 af
Outflow=0.92 cfs 0.076 af

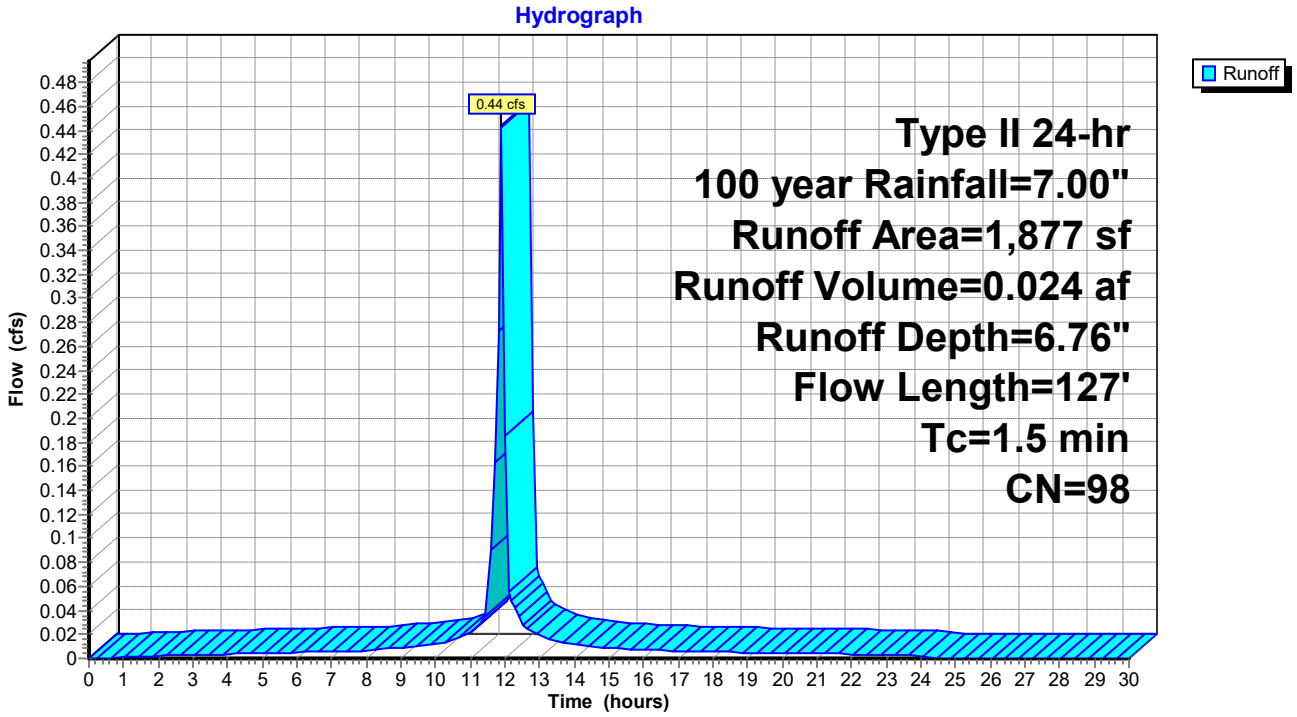
Pond roof: roof Peak Elev=0.40' Storage=2,257 cf Inflow=1.27 cfs 0.069 af
Outflow=0.03 cfs 0.026 af

Total Runoff Area = 0.213 ac Runoff Volume = 0.119 af Average Runoff Depth = 6.69"
3.93% Pervious = 0.008 ac 96.07% Impervious = 0.205 ac

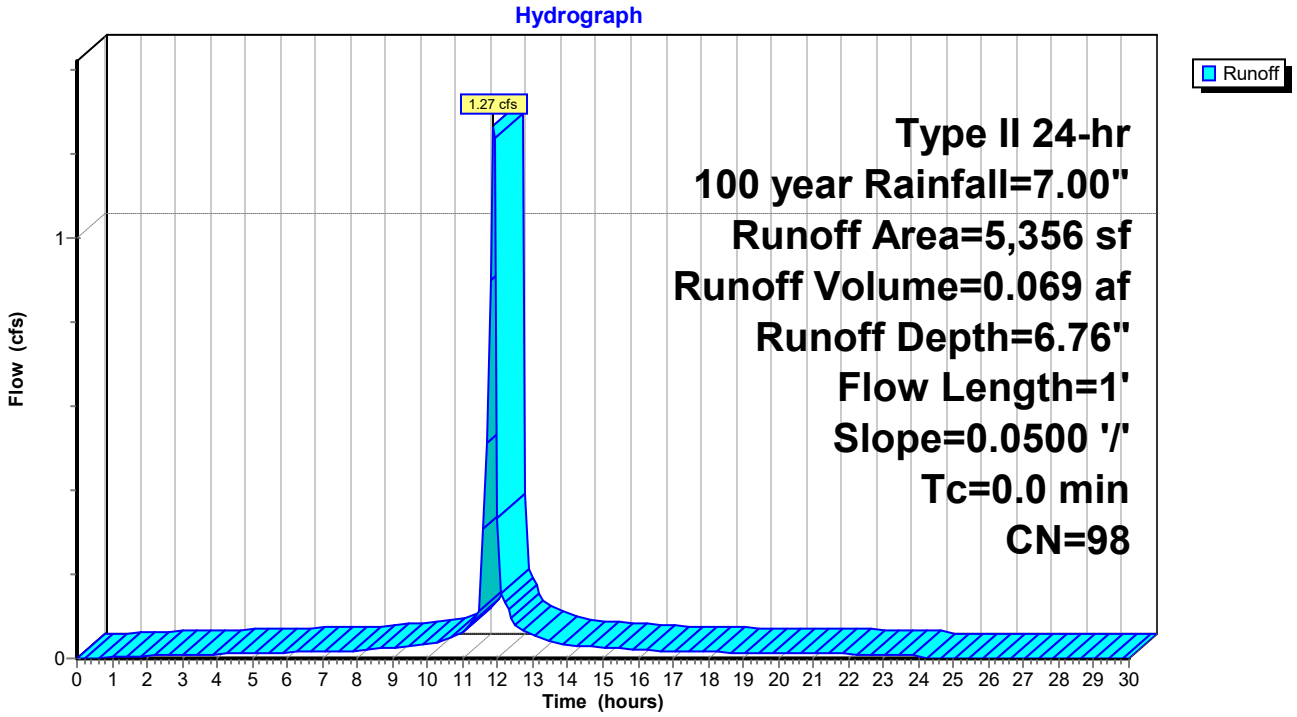
Subcatchment 1: Tributary '1'



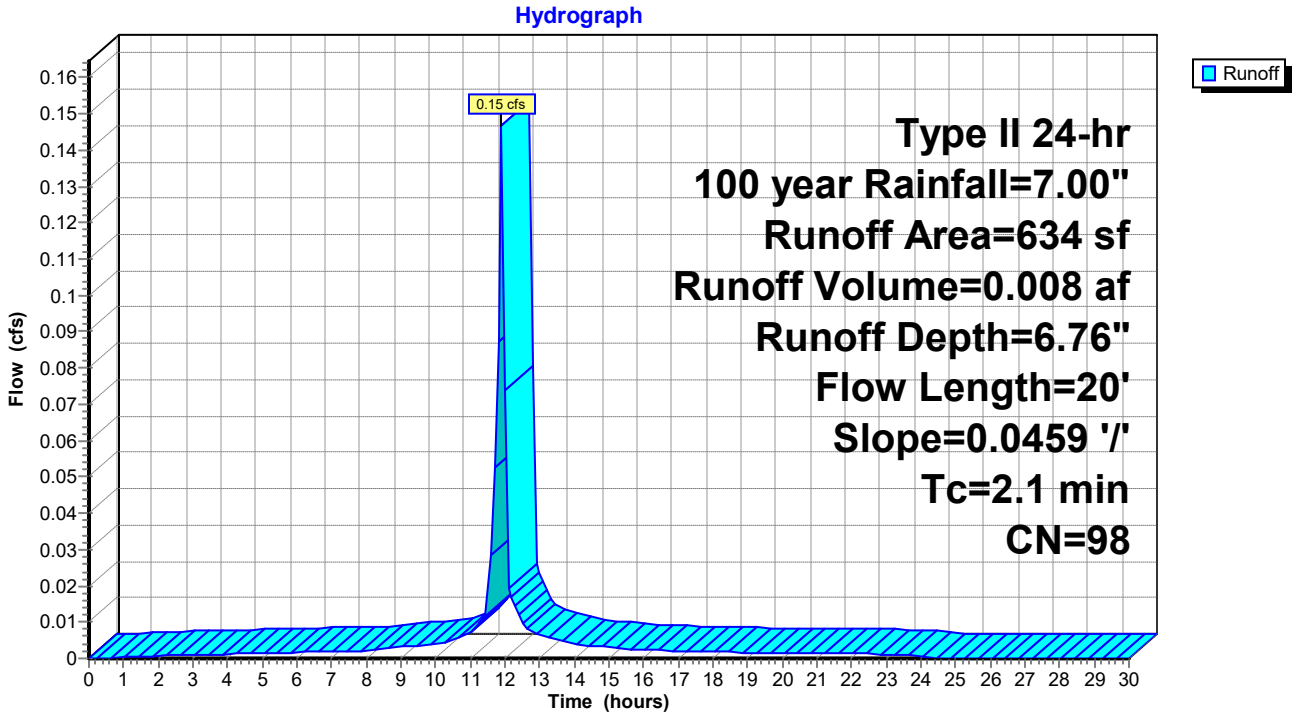
Subcatchment 2: Tributary 2



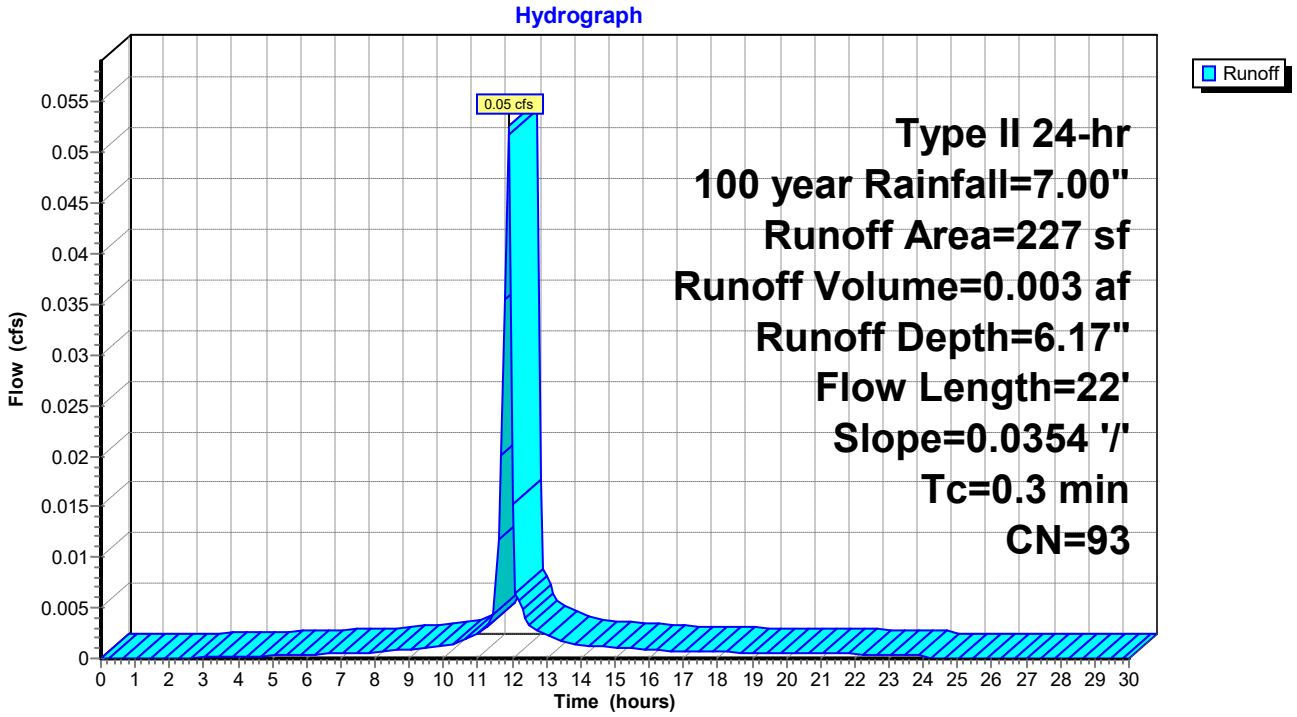
Subcatchment 3: Tributary 3



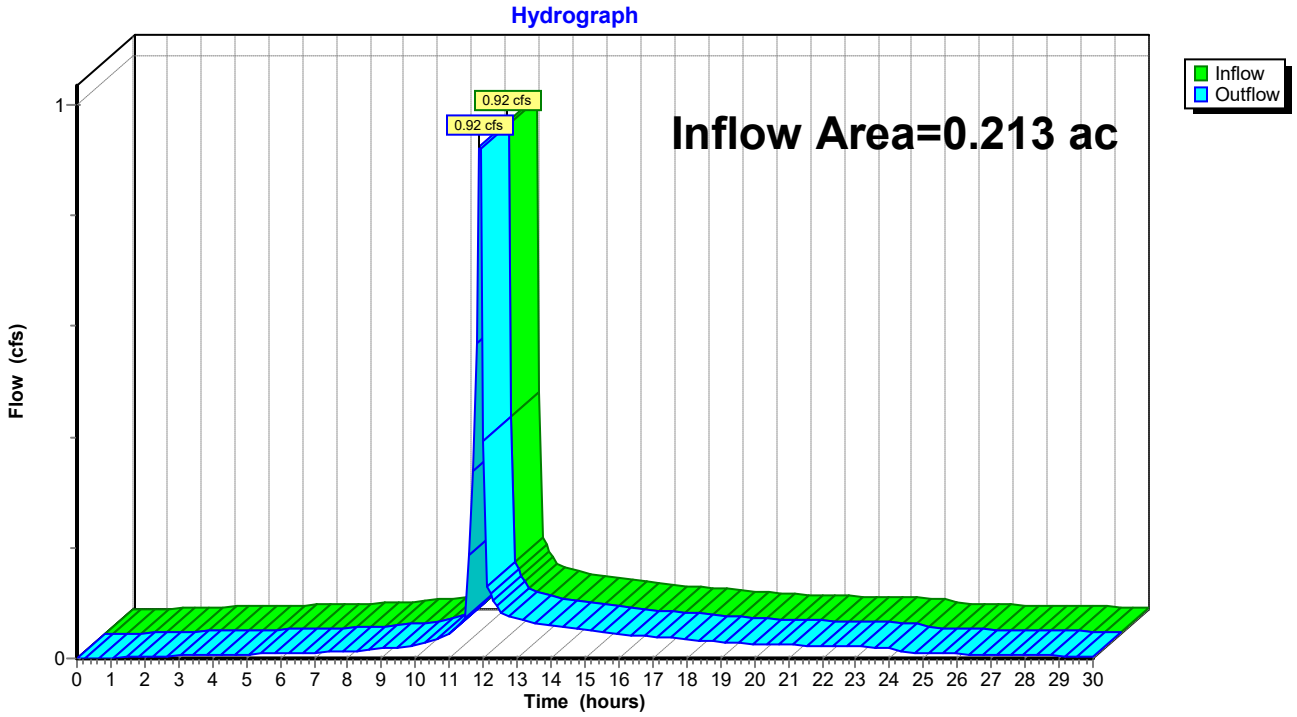
Subcatchment 4: Tributary 4



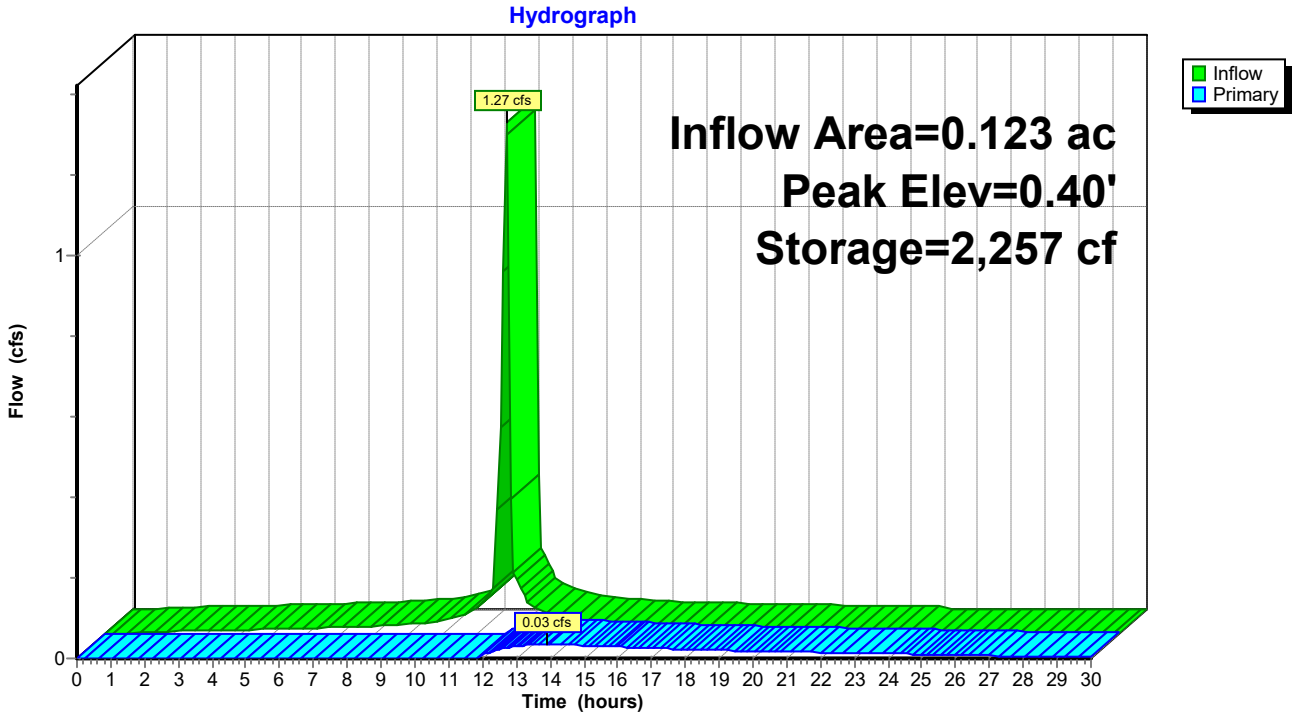
Subcatchment 5: Tributary '5'



Reach R1: REACH 1



Pond roof: roof



APPENDIX #5

MAINTENANCE PLAN

Facility Owner (Responsible Party)
Roy E. Vincent and Jossete Vincent
185 Henry Johnson Boulevard
Albany, NY 12210

The facility owner will be responsible to provide capital funding for this facility. The source will be from infrastructure funds set aside for construction. On an annual basis the responsible party will budget funds to fund the annual operating and maintenance costs. The facility owner must maintain all drainage facilities, stormwater quantity control facilities and all stormwater quality control facilities in accordance with approved plans and with this maintenance manual. Complete inspection form and retain with SWPPP. Inspection may be performed by a Qualified Inspector or a Qualified Professional. The Qualified Inspector is defined in GP #0-20-001 as follows:

Qualified Inspector - means a person that is knowledgeable in the principles and practices of erosion and sediment control, such as a licensed Professional Engineer, Certified Professional in Erosion and Sediment Control (CPESC), Registered Landscape Architect, or other Department endorsed individual(s). It can also mean someone working under the direct supervision of, and at the same company as, the licensed Professional Engineer or Registered Landscape Architect, provided that person has training in the principles and practices of erosion and sediment control. Training in the principles and practices of erosion and sediment control means that the individual working under the direct supervision of the licensed Professional Engineer or Registered Landscape Architect has received four (4) hours of Department endorsed training in proper erosion and sediment control principles from a Soil and Water Conservation District, or other Department endorsed entity. After receiving the initial training, the individual working under the direct supervision of the licensed Professional Engineer or Registered Landscape Architect shall receive four (4) hours of training every three (3) years. It can also mean a person that meets the *Qualified Professional qualifications in addition to the Qualified Inspector qualifications.*

The Qualified Professional is defined in GP #0-20-001 as follows:

Qualified Professional - means a person that is knowledgeable in the principles and practices of stormwater management and treatment, such

as a licensed Professional Engineer, Registered Landscape Architect or other Department endorsed individual(s). Individuals preparing SWPPPs that require the post-construction stormwater management practice component must have an understanding of the principles of hydrology, water quality management practice design, water quantity control design, and, in many cases, the principles of hydraulics in order to prepare a SWPPP that conforms to the Department's technical standard. All components of the SWPPP that involve the practice of engineering, as defined by the NYS Education Law (see Article 145), shall be prepared by, or under the direct supervision of, a professional engineer licensed to practice in the State of New York.

The elements of this SWPPP which require inspection include:

Overall Function of Collection System– This inspection includes pipes between concrete basins to the manhole and the pipe connection to the sewer in Walter Street. Fix any faults discovered, determine schedule for repair and make an inspection upon repair.

Pipes– Conduct an annual inspection for accumulated sediment. If sediment builds up in the catch basins or pipe gallery to 6" use vacuum methods to clear these structures of sediment.

Concrete Structures– Inspection shall verify that structures and their metal frames and grates are in good condition. Structures shall be opened to verify that orifices are in place and that structures are clean.

Vegetation cover within the tributary area. The inspection shall verify that on lawns or other seeded areas that vegetation covers a minimum of 90% of the exposed ground. Other areas such as mulch beds or landscaped areas shall be inspected to verify that proper mulching is in place.

Housekeeping Section – This section describes items requiring regular checking and should be conducted on a daily basis.

Daily Inspection During Construction

Debris cleanup – Remove and dispose of all debris encountered on parking area, on lawn areas or in area adjacent to public right-of-way.

Materials storage – Verify that all materials identified in the Housekeeping Section have been properly stored.

Winter Conditions and Transition Periods - Follow winter conditions for construction between November 15th and April 1st.. After April 1st during spring thaw, if ground remains unstabilized extend winter conditions. Prior to November 15th, if freezing occurs and ground remains unstabilized extend winter conditions.

Oil & Grease – Any visible oil and grease shall be treated with proper materials to capture residue. Remove any materials from the site. If possible, determine cause of accumulation of oil & grease and address these.

Monthly inspection or inspection after every significant rainfall (0.5 inches in 24 hours) shall determine whether the following benchmarks are reached in which case appropriate action shall be taken.

Debris cleanup – Remove and dispose of all debris encountered on parking area, on lawn areas or in area adjacent to public right-of-way.

Materials storage – Verify that all materials identified in the Housekeeping Section have been properly stored.

Condition of vegetation –Areas with seeded lawns should be maintained in accordance with good cultural practices. Mow and remove clippings if required. Dead or diseased plant material shall be replaced.

Annual inspection shall determine whether the benchmarks listed in the checklist are met.

Structures and Pipes –Inspect condition of all concrete structures for spalling or cracking. Repair or replace as required. Examine metal grates. Repair or replace as required. Examine exposed pipes by viewing from end to be certain that the pipe is clean and maintains its round shape. Small deformations should be noted and monitored. Pipes with larger deformations (exceeding 25% of pipe diameter) should be replaced. If debris is noted, flush pipes.).

Operation, Maintenance and Management Inspection Checklist
Blue Roof
(Complete in 1 Page)

Project: **Roy's Carribbean Restaurant**
Location: 185 Henry Johnson Boulevard .Albany, NY 12210
Date: _____
Time: _____
Inspector: _____

MAINTENANCE ITEM	SATISFACTORY(S)/ UNSATISFACTORY(U)	COMMENTS
BLUE ROOF		
MONTHLY OR AFTER ANY STORM OF MORE THAN 1" OF RAIN		
1. Cleanup		
Remove any debris blocking drains	□ **(S)** □ **(U)**	
ANNUALLY		
2. Roof Drains		
Verify roof drains retaining collars Are properly set	□ **(S)** □ **(U)**	
3. Overall Function of Facility (Annual)		
No replacement required	□ **(S)** □ **(U)**	
4. Hydrodynamic Separator		
Verify that it is clean (call for Professional Cleaner at least once per year	□ **(S)** □ **(U)**	
5. Oil and Grease (Monthly)		
Inspect water for evidence of oil & grease	□ **(S)** □ **(U)**	
Activities in drainage area minimize oil and grease entry	□ **(S)** □ **(U)**	

Comments:

_____
_____
_____
_____
_____

Actions to be Taken:

_____
_____
_____
_____

Date of Inspection _____ Sheet 1 of 1

APPENDIX #6

MAINTENANCE AGREEMENT

STORMWATER MANAGEMENT SYSTEM MAINTENANCE AGREEMENT
Roy's Caribbean Restaurant

THIS AGREEMENT ("Agreement") is made and entered into on the _____ day of _____, 2021, by and between Roy-E. & Jossete Vincent with an address of 185 Henry Johnson Boulevard Albany, NY 12210, (hereinafter referred to as the "Facility Owner"), and

CITY OF ALBANY, a municipal corporation with an address at 24 Eagle Street, Albany, New York 12207 (hereinafter referred to as the "City").

WITNESSETH:

WHEREAS, the Facility Owner is the owner of the subject parcel of land in the City of Albany, County of Albany and State of New York as more particularly located at 299 South Allen Street, Albany New York.

WHEREAS, the City and the Facility Owner desire that the stormwater management system be built in accordance with the approved project documents and thereafter be maintained, cleaned, repaired, replaced and continued in perpetuity in order to ensure optimum performance of the components; and

WHEREAS, the City has requested this legally binding and enforceable maintenance agreement from the Facility Owner; and

WHEREAS, the Facility Owner is representing the following design documents, with their City approved revisions, as containing all necessary information to construct, operate and maintain the stormwater management system for the lifetime of the facility:

a. Plan set submitted to the City representing a stormwater management system including stormwater collection, conveyance and storage using structures designed and specified by Hershberg & Hershberg, Consulting Engineers, sealed by Daniel R. Hershberg, P.E., as the Engineer of Record. The plan sheets showing features associated with the stormwater management system are listed below.

Sheet No.	Date	Drawing Title
C3	7/22/21	Site Plan 185 Henry Johnson Boulevard
C-	7/22/2021	Utility Plan & Details for 185 Henry Johnson Boulevard
C6	7/22/21	Erosion & Sediment Control Plan for 185 Henry Johnson Boulevard

b. STORM WATER POLLUTION PREVENTION PLAN (SWPPP) &*STORM WATER MANAGEMENT REPORT (SWMR), 299 South Allen Street Commercial to Mixed Use, 299 South Allen Street* prepared by Hershberg & Hershberg, Consulting Engineers and Land Surveyors, dated April 2, 2021 Revised July 26, 2021.

IN CONSIDERATION THEREOF, the parties agree as follow:

1. The Facility Owner shall be responsible for maintaining the storm water facility in a manner to prevent silt from becoming tributary to the City's storm water drainage system.

2. Operation and maintenance, including inspection and cleaning of the full storm water drainage system, shall be the responsibility of the Facility Owner.

3. In the event the Facility Owner fails to maintain the system in a manner to control storm water the City may order the system cleaned and bill the Facility Owner the full cost of this work at labor cost (direct labor plus 50% salary burden) and materials (at cost) if work is performed by the Department of Water & Water Supply; or the cost of a subcontractor plus 10% of the subcontractor's bill if the Department of Water & Water Supply obtains a subcontractor to perform the work. Invoices are payable to the Department of Water & Water Supply within ten (10) business days from the date of invoice. In the event payment for costs is not received within said ten (10) day period, the Department of Water & Water Supply shall have the right to file a lien in the amount of the invoice, together with reasonable costs of collection incurred in connection therewith, against the property of the Facility Owner.

4. The City has the right to access the premises for periodic inspections and to perform any maintenance of the stormwater system.

5. The Facility Owner shall disclose this Agreement to any successor or assignees in interest.

6. This Agreement is binding on the Facility Owner and any successor or assignees in interest hereof.

7. Facility Owner agrees to defend, indemnify, and save harmless the CITY and its officers, employees and agents, from and against all claims, actions, causes of action, injuries, damages, losses, liabilities, and expenses (including, without limitation, reasonable attorney's fees and court costs) arising out of, or in consequence of, any negligent or intentional act or omission of Facility Owner to the extent of its or their responsibility for such claims, actions, causes of action, injuries, damages, losses, liabilities, and expenses. The provisions of this Article shall survive any termination or expiration of this Agreement.

[Signatures on next page]

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be signed by their duly authorized officers as of the day and year first above written.

CITY OF ALBANY, NEW YORK

BY:_____
KATHY M. SHEEHAN
MAYOR, CITY OF ALBANY

BY_____
ROY E. VINCENT

BY_____
JOSSETTE. VINCENT

STATE OF NEW YORK)
) ss.:
COUNTY OF ALBANY)

On the _ day of_____ , 202___, before me the undersigned, a Notary Public in and for said State, personally appeared _____ , personally known to me or proved to me on the basis of satisfactory evidence to be the individual whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his capacity, and that by his signature on the instrument, the individual, or person upon behalf of which the individual acted, executed the instrument.

_____
Notary Public

STATE OF NEW YORK)
) ss.:
COUNTY OF ALBANY)
On the _ day of_____ , 202___, before me the undersigned, a Notary Public in and for said State, personally appeared _____ , personally known to me or proved to me on the basis of satisfactory evidence to be the individual whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his capacity, and that by his signature on the instrument, the individual, or person upon behalf of which the individual acted, executed the instrument.

_____
Notary Public
STATE OF NEW YORK)
) ss.:
COUNTY OF ALBANY)
On the _ day of_____ , 202___, before me the undersigned, a Notary Public in and for said State, personally appeared _____ , personally known to me or proved to me on the basis of satisfactory evidence to be the individual whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his capacity, and that by his signature on the instrument, the individual, or person upon behalf of which the individual acted, executed the instrument.

_____
Notary Public

APPENDIX #7

SPILL RESPONSE PLAN

SPILL RESPONSE PLAN

185 Henry Johnson Boulevard

In addition to the good housekeeping and material management practices discussed in relevant sections of this plan, the following practices will be implemented for spill prevention and cleanup:

Manufacturer's recommended methods for spill cleanup will be clearly posted and site personnel will be made aware of the procedures and the location of the information and cleanup supplies. Any spill in excess or suspected to be in excess of two gallons will be reported to the

NYSDEC Spill Response Unit. Notification to NYSDEC (1-800-457- 7362) must be completed within two hours of the discovery of the spill.

Materials and equipment necessary for spill cleanup will be kept in the material storage area onsite. Equipment and materials will include but not be limited to: absorbent pads, brooms, dust pans, mops, rags, gloves, goggles, kitty litter, sand, sawdust, and plastic and metal trash containers specifically for this purpose.

All spills will be cleaned up immediately after discovery.

The spill area will be kept well ventilated and personnel will wear appropriate protective clothing to prevent injury from contact with spilled substance.

Spills of toxic or hazardous material will be reported to the appropriate State or local government agency, regardless of the size.

The spill prevention plan will be adjusted to include measures to prevent this type of spill from reoccurring, and how to clean up the spill if there is another one. A description of the spill, what caused it, and the cleanup measures will also be included.

The contractor/trained individual will be the spill prevention and cleanup coordinator. He will designate at least three other site personnel who will receive spill prevention and cleanup training. These individuals will each become responsible for a particular phase of prevention and cleanup. The names of responsible spill personnel will be posted in the material storage area on the onsite construction office or trailer.

A Spill Response Report notifications are provided below.

SPILL RESPONSE REPORT
185 Henry Johnson Boulevard

Within 1 hour of a spill discovery less than 2 gallons in volume the following must be notified:

Roy E. Vincent
City of Albany, Randy Milano, P.E., City Engineer, 518-427-7481
City of Albany, Neil O'Connor, P.E., 518-434-5300

Within 1 hour of a spill discovery greater than 2 gallons in volume the following must be notified:

NYSDEC Spill Response Hotline 800-457-7362
Roy E. Vincent
City of Albany, Randy Milano, P.E., City Engineer, 518-427-7481
City of Albany, Neil O'Connor, P.E., 518-434-5300
Spill Response Contractor, *To Be Designated*

ATTACHMENT NO. 1

EXCERPTS FROM USDO

(8) STORM SEWERS AND DRAINAGE

The developer shall install, at the developer's expense, all site features and infrastructure necessary to retain, detain, and/or infiltrate stormwater to ensure that the new subdivision does not create additional burdens on the City's storm sewer system and does not create additional surface flooding. Developer's expense shall include the design and inspection of site features. All stormwater site features and infrastructure shall comply with:

(a) The City's adopted design, engineering, and construction standards; and

(b) The requirements of the FP-O and CS-O districts, if applicable.

(4) CS-O COMBINED SEWER OVERLAY

(a) PURPOSE

The purpose of the CS-O overlay district is:

To mitigate impacts of new development and redevelopment on the City's combined (i)sanitary/storm sewer system and to ensure that the City remains in compliance with applicable consent orders regarding management of stormwater flows.

To abate combined sanitary/storm sewer overflow discharges and stormwater (ii)surcharges during wet weather events through the use of practices that reuse, infiltrate, and delay the release of stormwater into the combined sanitary/storm sewer system.

(b) BOUNDARIES

The boundaries of the Combined Sewer Overlay district are shown on the map to the right.

(c) COMPLIANCE WITH CONSENT ORDER

All deposit of waste or sewage, all construction of public or private sewers, all connections to public sewer systems, and all other matters related to the disposal of stormwater or sanitary sewer effluent within the Beaver Creek Sewer District, the Karlsfeld Sanitary Sewer District, and the Krumkill Sanitary Sewer Districts, shall comply with the terms of The Albany Pool Communities Combined Sewer Overflow Long Term Control Plan Order on Consent (DEC Case #CO 4-20120911-01), entered into by the Albany Pool Communities, Albany County Sewer District, the Rensselaer County Sewer District, and The New York State Department of Conservation on January 15, 2014, and actions inconsistent with the terms of that Order are violations of this USDO, as amended, until such time as the terms of that Order are no longer binding on the City.

(d) ADDITIONAL REQUIREMENTS FOR SMALL LOTS

Properties one-quarter (1/4) acre in size or smaller located within the CS-O district (i)boundaries shall be required to install at least one of the following site design features to reduce stormwater flows into the combined sewer system.

Install one of the following, designed to detain the first one (1) inch of rainfall, as A.shown in this drawing, and design the site to direct all rooftop stormwater and at least 75% of surface stormwater flows into that site feature.

1. A tree in a tree well, designed to meet applicable standards in the Administrative Manual and the City's applicable technical construction standards.

2. A drainage swale or rain garden, designed to meet applicable standards in the Administrative Manual and the City's applicable technical construction standards.

3. An underground cistern.

Install a green roof or blue roof as described in Section 375-4(A)(4)(b). B.

The City may approve alternatives to the features listed in subsection (i) above if it (ii)determines that the alternative features would achieve the same or greater detention of stormwater or mitigation of impacts to the City's combined sewer system.

(e) ADDITIONAL REFERRALS REQUIRED

Each application for development or redevelopment that is anticipated to generate over 2,500 gallons of sanitary sewer flow per day will require review by the Albany Department of Water and Water Supply and the New York State Department of Environmental Conservation to ensure compliance with the State Pollution Discharge Elimination System Section 375-2 Zoning Districts Section 375-2(F): Overlay Districts Section 375-2(F)(5): PB-O P

permit. The City may require the use of water recycling technology as a condition for high water uses.

ATTACHMENT NO. 3

COMPLETED NOTICE OF INTENT

CITY OF ALBANY
DEPARTMENT OF WATER & WATER SUPPLY
10 NORTH ENTERPRISE DRIVE
ALBANY, NEW YORK 12204
TELEPHONE (518) 434-5300
FAX (518) 434-5332

KATHY M. SHEEHAN
MAYOR

JOSEPH E. COFFEY, JR
COMMISSIONER

AWD

(for Department of Water use only)

NOTICE OF INTENT

Stormwater Discharges Associated With Construction Activities Under Rezone Albany

All sections must be completed unless otherwise noted. Failer to complete all items may result in this form being returned to you, thereby delaying your coverage under this Permit. Applicants must read and understand the conditions of the permit and prepare a Stormwater Pollution Prevention Plan prior to submitting this NOI. Applicants are responsible for identifing and obtaining other DEC permits that may be required.

-IMPORTANT-

RETURN THIS FORM TO THE ADDRESS ABOVE

OWNER/OPERATOR MUST SIGN FORM

Owner/Operator Information

Owner/Operator (Company Name/Private Owner Name/Municipality Name)

Roy E Vincent

Owner/Operator Contact Person Last Name (NOT CONSULTANT)

Vincent

Owner/Operator Contact Person First Name

Roy

Owner/Operator Mailing Address

6 Fiore Circle

City

Latham

State

NY

Zip

12110 -

Phone (Owner/Operator)

- -

Fax (Owner/Operator)

- -

Email (Owner/Operator)

vincentroy869@gmail.com

FED TAX ID

- (not required for individuals)

Project Site Information

Project/Site Name

Roy's Carribean

Street Address (NOT P.O. BOX)

185 Henry Johnson Boulevard

Side of Street

○ **North** ○ **South** ○ **East** ◉ **West**

City/Town/Village (THAT ISSUES BUILDING PERMIT)

Albany

State: NY

Zip: 12210 -

County: Albany

Name of Nearest Cross Street

Third Street

Distance to Nearest Cross Street (Feet)

17

Project In Relation to Cross Street

○ **North** ◉ **South** ○ **East** ○ **West**

Tax Map Numbers
Section-Block-Parcel

65.65-1-12;13; 11; 14

Tax Map Numbers

1. Provide the Geographic Coordinates for the project site in NYTM Units. To do this you must go to the NYSDEC Stormwater Interactive Map on the DEC website at:

www.dec.ny.gov/imsmaps/stormwater/viewer.htm

Zoom into your Project Location such that you can accurately click on the centroid of your site. Once you have located your project site, go to the tool boxes on the top and choose "i" (identify). Then click on the center of your site and a new window containing the X, Y coordinates in UTM will pop up. Transcribe these coordinates into the boxes below. For problems with the interactive map use the help function.

X Coordinates (Easting)

42.6631431579589

Y Coordinates (Northing)

-73.7592544555664

2. What is the nature of this construction project?

○ **New Construction**

◉ **Redevelopment with increase in impervious area**

○ **Redevelopment with no increase in impervious area**

3. Select the predominant land use for both pre and post development conditions.

SELECT ONLY ONE CHOICE FOR EACH

Pre-Development
Existing Land Use

- ○ FOREST
- ○ PASTURE/OPEN LAND
- ○ CULTIVATED LAND
- ○ SINGLE FAMILY HOME
- ○ SINGLE FAMILY SUBDIVISION
- ○ TOWN HOME RESIDENTIAL
- ● MULTIFAMILY RESIDENTIAL
- ○ INSTITUTIONAL/SCHOOL
- ○ INDUSTRIAL
- ● COMMERCIAL
- ○ ROAD/HIGHWAY
- ○ RECREATIONAL/SPORTS FIELD
- ○ BIKE PATH/TRAIL
- ○ LINEAR UTILITY
- ○ PARKING LOT
- ○ OTHER

Post-Development
Future Land Use

- ○ SINGLE FAMILY HOME
- ○ SINGLE FAMILY SUBDIVISION
- ○ TOWN HOME RESIDENTIAL
- ● MULTIFAMILY RESIDENTIAL
- ○ INSTITUTIONAL/SCHOOL
- ○ INDUSTRIAL
- ● COMMERCIAL
- ○ MUNICIPAL
- ○ ROAD/HIGHWAY
- ○ RECREATIONAL/SPORTS FIELD
- ○ BIKE PATH/TRAIL
- ○ LINEAR UTILITY (water, sewer, gas, etc.)
- ○ PARKING LOT
- ○ CLEARING/GRADING ONLY
- ○ DEMOLITION, NO REDEVELOPMENT
- ○ WELL DRILLING ACTIVITY *(Oil, Gas, etc.)
- ○ OTHER

Number of Lots

*** Note** : for gas well drilling, non-high volume hydraulic fractured wells only

4. In accordance with the larger common plan of development or sale, enter the total project site area; the total area to be disturbed; existing impervious area to be disturbed (for redevelopment activities); and the future impervious area constructed within the existing impervious area to be disturbed (for redevelopment disturbed area). (Round to the nearest tenth of an acre).

Total Site Area	**Total Area To Be Disturbed**	**Existing Impervious Area To Be Disturbed**	**Future Impervious Area Within Disturbed Area**
0.21	0.18	0.18	0.18

5. Do you plan to disturb more than 5 acres of soil at any one time? ○ **Yes** ● **No**

6. Indicate the percentage of each Hydrologic Soil Group (HSG) at the site.

A	**B**	**C**	**D**
0 %	0 %	0 %	100 %

7. Is this a phased project? ○ **Yes** ○ **No**

8. Enter the planned start and end dates of the disturbance activities.

Start Date	**End Date**
8 / 01 / 2021	8 / 01 / 2022

9. Identify the nearest surface waterbody(ies) to which construction site runoff will discharge.

Name

Hudson River

9a. Type of waterbody identified in Question 9?

- ○ Wetland / State Jurisdiction On Site (Answer 9b)
- ○ Wetland / State Jurisdiction Off Site
- ○ Wetland / Federal Jurisdiction On Site (Answer 9b)
- ○ Wetland / Federal Jurisdiction Off Site
- ○ Stream / Creek On Site
- ○ Stream / Creek Off Site
- ○ River On Site
- ✔ River Off Site
- ○ Lake On Site
- ○ Lake Off Site
- ○ Other Type On Site
- ○ Other Type Off Site

9b. How was the wetland identified?

- ○ Regulatory Map
- ○ Delineated by Consultant
- ○ Delineated by Army Corps of Engineers
- ○ Other (identify)

10. Has the surface waterbody(ies) in question 9 been identified as a 303(d) segment in Appendix E of GP-0-15-002? ○ Yes ● No

11. Is this project located in one of the Watersheds identified in Appendix C of GP-0-15-002? ○ Yes ● No

12. Is the project located in one of the watershed areas associated with AA and AA-S classified waters? ○ Yes ● No
If no, skip question 13.

13. Does this construction activity disturb land with no existing impervious cover and where the Soil Slope Phase is identified as an E or F on the USDA Soil Survey? ○ Yes ● No
If Yes, what is the acreage to be disturbed?

.

14. Will the project disturb soils within a State regulated wetland or the protected 100 foot adjacent area? ○ Yes ● No

15. Does the site runoff enter a separate storm sewer system (including roadside drains, swales, ditches, culverts, etc)? ○ Yes ● No ○ Unknown

16. What is the name of the municipality/entity that owns the separate storm sewer system?

Albany Water Board

17. Does any runoff from the site enter a sewer classified as a Combined Sewer? ● Yes ○ No ○ Unknown

18. Will future use of this site be an agricultural property as defined by the NYS Agriculture and Markets Law? ○ Yes ○ ● No

19. Is this property owned by a state authority, state agency, federal government or local government? ○ Yes ● No

20. Is this a remediation project being done under a Department approved work plan? (i.e. CERCLA, RCRA, Voluntary Cleanup Agreement, etc.) ○ Yes ● No

21. Has the required Erosion and Sediment Control component of the SWPPP been developed in conformance with the current NYS Standards and Specifications for Erosion and Sediment Control (aka Blue Book)? ● Yes ○ No

22. Does this construction activity require the development of a SWPPP that includes the post-construction stormwater management practice component (i.e. Runoff Reduction, Water Quality and Quantity Control practices/techniques)? ● Yes No
If No, skip questions 23 and 27-39. ○ ○

23. Has the post-construction stormwater management practice component of the SWPPP been developed in conformance with the current NYS Stormwater Management Design Manual? ● Yes ○ No

24. The Stormwater Pollution Prevention Plan (SWPPP) was prepared by:

- ✔ **Professional Engineer (P.E.)**
- ○ **Soil and Water Conservation District (SWCD)**
- ○ **Registered Landscape Architect (R.L.A)**
- ○ **Certified Professional in Erosion and Sediment Control (CPESC)**
- ○ **Owner/Operator**
- ○ **Other**
- ○

SWPPP Preparer

Hershberg & Hershberg

Contact Name (Last, Space, First)

Hershberg Daniel

Mailing Address

18 Locust Street

City

Albany

State

NY 12203 -

Phone

518 459 - 3096

Fax

518 - 459 - 5683

Email

dan@hhershberg.com

SWPPP Preparer Certification

I hereby certify that the Stormwater Pollution Prevention Plan (SWPPP) for this project has been prepared in accordance with the terms and conditions of Rezone Albany. Furthermore, I understand that certifying false, incorrect or inaccurate information is a violation of this permit and the laws of the Stae of New York and could subject me to criminal, civil and/or administrative proceedings.

First Name

Daniel

MI

R

Last Name

Hershberg

Signature

Date

07 / 6 / 2021

25. Has a construction sequence schedule for the planned management practices been prepared? ◉ Yes ○ No

26. Select all of the erosion and sediment control practices that will be employed on this project site.

Temporary Structural

- ○ Check Dams
- ○ Construction Road Stabilization
- ○ Dust Control
- ○ Earth Dike
- ○ Level Spreader
- ○ Perimeter Dike/Swale
- ○ Pipe Slope Drain
- ○ Portable Sediment Tank
- ○ Rock Dam
- ○ Sediment Basin
- ○ Sediment Traps
- ☑ Silt Fence
- ☑ Stabilized Construction Entrance
- ☑ Storm Drain Inlet Protection
- ○ Straw/Hay Bale Dike
- ○ Temporary Access Waterway Crossing
- ○ Temporary Stormdrain Diversion
- ○ Temporary Swale
- ○ Turbidity Curtain
- ○ Water Bars

Biotechnical

- ○ Brush Matting
- ○ Wattling

Vegetative Measures

- ○ Brush Matting
- ○ Dune Stabilization
- ○ Grassed Waterway
- ○ Mulching
- ○ Protecting Vegetation
- ○ Recreation Area Improvement
- ○ Seeding
- ○ Sodding
- ○ Straw/Hay Bale Dike
- ○ Streambank Protection
- ○ Temporary Swale
- ○ Topsoiling
- ○ Vegetating Waterways

Permanent Structural

- ○ Debris Basin
- ○ Diversion
- ○ Grade Stabilization Structure
- ○ Land Grading
- ○ Lined Waterway (Rock)
- ○ Paved Channel (Concrete)
- ○ Paved Flume
- ○ Retaining Wall
- ○ Riprap Slope Protection
- ○ Rock Outlet Protection
- ○ Streambank Protection

Other

Post Construction Stormwater Management Practice (SMP) Requirments

Important: Completetion of Questions 27-39 is not required if response to Question 22 is No.

27. Identify all site planning practices that were used to prepare the final site plan/layout for the project.

- ◯ Preservation of Undisturbed Areas
- ◯ Preservations of Buffers
- ◯ Reduction of Clearing & Grading
- ◯ Locating Development in Less Sensitive Areas
- ◯ Roadway Reduction
- ◯ Sidewalk Reduction
- ◯ Driveway Reduction
- ◯ Cul-de-sac Reduction
- ◯ Building Footprint Reduction
- ◯ Parking Reduction

27a. Indicate which of the following soil restoration criteria was used to address the requirements in Section 5.1.6 ("Soil Restoration") of the Design Manual (2010 version).

- ✔ All disturbed areas will be restored in accordance with the Soil Restoration requirments in Table 5.3 of the Design Manual (see page 5-22).
- ◯ Compacted areas were considered as impervious cover when calculating the WQv Required, and the compacted areas were assigned a post construction Hydrologic Soil Group (HSG) designation that is one level less permeable than existing conditions for the hydrology analysis.

28. Provide the total Water Quality Volume (WQv) required for this project (based on final site plan/layout).

Total WQv Required

0 . 018 **acre-feet**

29. Identify the RR techniques (Area Reduction), RR techniques(Volume Reduction) and Standard SMPs with RRv Capacity in Table 1 (See Page 9) that were used to reduce the Total WQv Required (#28).

Also, provide in Table 1 the total impervious area that contributes runoff to each technique/practice selected. For the Area Reduction Techniques, provide the total contributing area (includes pervious area) and, if applicable, the total impervious area that contributes runoff to the technique/practice.

Note: Redevelopment projects shall use Table 1 and 2 to identify the SMPs used to treat and/or reduce the WQv required. If runoff reduction techniques will not be used to reduce the required WQv, skip to question 33a after identifying the SMPs

Table 1 - Runoff Reduction (RR) Techniques and Standard Stormwater Management Practices (SMPs)

RR Techniques (Area Reduction)	Total Contributing Area (acres)		Total Contributing Impervious Area (acres)
◯ Conservation of Natural Areas (RR-1)	.	and/or	.
◯ Sheetflow to Riparian Buffers/Filters Strips (RR-2)	.	and/or	.
◯ Tree Planting/Tree Pit (RR-3)	.	and/or	.
◯ Disconnection of Rooftop Runoff (RR-4)	.	and/or	.

RR Techniques (Area Reduction)	
◯ Vegetated Swale (RR-5)	.
◯ Rain Garden (RR-6)	.
◯ Stormwater Planter (RR-7)	.
◯ Rain Barrel/Cistern (RR-8)	.
◯ Porous Pavement (RR-9)	.
◯ Green Roof (RR-10)	.

Standard SMPs with RRv Capacity	
◯ Infiltration Trench (I-1)	.
◯ Infiltration Basin (I-2)	.
◯ Dry Well (I-3)	.
◯ Underground Infiltration System (I-4)	.
◯ Bioretention (F-5)	.
◯ Dry Swale (O-1)	.

Standard SMPs	
◯ Micropool Extended Detention (P-1)	.
◯ Wet Pond (P-2)	.
◯ Wet Extended Detention (P-3)	.
◯ Multiple Pond System (P-4)	.
◯ Pocket Pond (P-5)	.
◯ Surface Sand Filter (F-1)	.
◯ Underground Sand Filter (F-2)	.
◯ Perimeter Sand Filter (F-3)	.
◯ Organic Filter (F-4)	.
◯ Shallow Wetland (W-1)	.
◯ Extended Detention Wetland (W-2)	.
◯ Pond/Wetland System (W-3)	.
◯ Pocket Wetland (W-4)	.
◯ Wet Swale (O-2)	.

Table 2 - Alternative SMPs (Do Not Include Practices Being Used For Pretreatment Only)

Alternative SMP	Total Contributing Impervious Area (acres)
○ Hydrodynamic	.
○ Wet Vault	.
○ Media Filter	.
○ Other Blue Roof	0 . 13

Provide the name and manufacturer of the Alternative SMPs (i.e. proprietary practice (s)) being used for WQv treatment.

Name

Manufacturer

Note: Redevelopment projects which do not use RR techniques, shall use questions 28, 29, 33 and 33a to provide SMPs, used, total WQv required and total WQv provided for the project.

30. Indicate the Total RRv provided by the RR techniques (Area/Volume Reduction) and Standard SMPs with RRv capacity identified in question 29.

Total RRv provided

. 007 **acre-feet**

31. Is the Total RRv provided (#30) greater than or equal to the total WQv required (#28).

○ **Yes** ● **No**

If Yes, go to question 36.
If No, go to question 32.

32. Provide the Minimum RRv required based on HSG.
[Minimum RRv Required = (P)(0.95)(Ai)/12, Ai=(S)(Aic)]

Minimum RRv Required

0 . 004 **acre-feet**

32a. Is the Total RRv provided (#30) greater than or equal to the Minimum RRv Required (#32)?

● **Yes** ○ **No**

If Yes, go to question 33.

Note : Use the space provided in question #39 to summarize the specific site limitations and justification for not reducing 100% of WQv required (#28). A detailed evaluation of the specific site limitations and justification for not reducing 100% of the WQv required (#28) must also be included in the SWPPP.

If No, sizing criteria has not been met, so NOI can not be processed. SWPPP preparer must modify design to meet sizing **criteria.**

33. Identify the Standard SMP's in Table 1 and, if applicable, the Alternative SMPs in Table 2 that were used to treat the remaining total WQv (=Total WQv Required in 28 - Total RRv Provided in 30).

Also, provide in Table 1 and Table 2 the total impervious area that contributes runoff to each practice selected.

Note: Use Table 1 and Table 2 to identify the SMPs used on Redevelopment projects.

33a Indicate the Total WQv provided (i.e. WQv treated) by the SMPs identified in question #33 and Standard SMPs with RRv Capacity identified in Question #29.

WQv Provided

0 . 011 **acre-feet**

Note: For the Standard SMPs with RRv capacity, the WQv provided by each practice = the WQv calculated using the contributing drainage area to the practice - RRv provided by the practice. (See Table 3.5 in Design Manual)

34. Provide the sum of the Total RRv provided (#30) and the WQv provided (#33a). 0 . 0 1 **acre-feet**

35. Is the sum of the RRv provided (#30) and the WQv provided (#33a) greater than or equal to the total WQv required (#28)? ● **Yes** ○ **No**

If Yes, go to question 36.
If No, sizing criteria has not been met, so NOI can not be processed. SWPPP preparer must modify design to meet sizing criteria.

36. Provide the total Channel Protection Storage Volume (CPv) required and provided or select waiver (36a), if applicable.

CPv Required . **acre-feet**

CPv Provided . **acre-feet**

36a. The need to provide channel protection has been waived because:

○ Site discharges directly to tidal waters or a fifth order or larger stream.

○ Reduction of the total CPv is achieved on site through runoff reduction techniques or infiltration systems.

37. Provide the Overbank Flood (Qp) and Extreme Flood (Qf) control criteria or select waiver (37a), if applicable.

Total Overbank Flood Control Criteria (Qp)

Pre-Development 0 . 85 **CFS**

Post-Development 0 . 59 **CFS**

Total Extreme Flood Control Criteria (Qf)

Pre-Development 1 . 60 **CFS**

Post-Development 0 . 92 **CFS**

37a. The need to meet the Qp and Qf criteria has been waived because:

◯ Site discharges directly to tidal waters or a fifth order or larger stream.

◯ Downstream analysis reveals that the Qp and Qf controls are not required.

38. Has a long term Operation & Maintenance Plan for the post construction stormwater management practice (s) been developed? ☑ Yes ◯ No

If yes, identify the entity resonsible for the long term Operation & Maintenance.

OWNER

39. Use this space to summarize the specific site limitations and justification for not reducing 100% of WQv required (#28). (See Question #32a). This space can also be used for other pertinent project information.

40. Identify other DEC permits, existing and new, that are required for this project/facility.

- ○ Air Pollution Control
- ○ Coastal Erosion
- ○ Hazardous Waste
- ○ Long Island Wells
- ○ Mined Land Reclamation
- ○ Solid Waste
- ○ Navigable Waters Protection/Article 15
- ○ Water Quality Certificate
- ○ Dam Safety
- ○ Water Supply
- ○ Freshwater Wetlands/Article 24
- ○ Tidal Wetlands
- ○ Wild, Scenic and Recreational Rivers
- ○ Stream Bed or Bank Protection / Article 15
- ○ Endangered or Threatened Species(Incidental Take Permit)
- ○ Individual SPDES
- ○ SPDES Multi-Sector GP
- ○ Other
- ■ None

41. Does this project require a US Army Corps of Engineers Wetland Permit? ○ Yes ● No
If Yes, Indicate Size of Impact. .

42. Is this project subject to the requirements of a regulated, traditional land use control MS4? ○ Yes ● No
(If No, skip question 43)

43. Has the "MS4 SWPPP Acceptance" form been signed by the principal executive officer or ranking elected official and submitted along with this NOI? ○ Yes ● No

44. If this NOI is being submitted for the purpose of continuing or transferring coverage under a permit for stormwater runoff from construction activities, please indicate the former SPDES number assigned.

AWD

Owner/Operator Certification

I have read or been advised of the permit conditions and believe that I understand them. I also understand that, under the terms of this permit, there may be reporting requirements. I hereby certify that this document and the corresponding documents were prepared under my direction or supervision. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. I further understand that coverage under the permit will be identified in the acknowledgment that I will receive as a result of submitting this NOI and can be as long as sixty (60) business days as provided for in the permit. I also understand that, by submitting this NOI, I am acknowledging that the SWPPP has been developed and will be implemented as the first element of construction, and agreeing to comply with all the terms and conditions of the permit for which this NOI is being submitted.

Print First Name MI

Print Last Name

Owner/Operator Signature

Date

/ /

ATTACHMENT NO. 4

NOTICE OF TERMINATION
(BLANK FOR FUTURE USE)

New York State Department of Environmental Conservation
Division of Water
625 Broadway, 4th Floor
Albany, New York 12233-3505
(NOTE: Submit completed form to address above)

NOTICE OF TERMINATION for Storm Water Discharges Authorized under the SPDES General Permit for Construction Activity

Please indicate your permit identification number: NYR ___ ___ ___ ___ ___ ___

I. Owner or Operator Information

1. Owner/Operator Name:

2. Street Address:

3. City/State/Zip:

4. Contact Person: | 4a.Telephone:

5. Contact Person E-Mail:

II. Project Site Information

5. Project/Site Name:

6. Street Address:

7. City/Zip:

8. County:

III. Reason for Termination

9a. ☐ All disturbed areas have achieved final stabilization in accordance with the general permit and SWPPP.
***Date final stabilization completed** (month/year): _____

9b. ☐ Permit coverage has been transferred to new owner/operator. Indicate new owner/operator's permit identification number: NYR ___ ___ ___ ___ ___ ___
(Note: Permit coverage can not be terminated by owner identified in I.1. above until new owner/operator obtains coverage under the general permit)

9c. ☐ Other (Explain on Page 2)

IV. Final Site Information:

10a. Did this construction activity require the development of a SWPPP that includes post-construction stormwater management practices? ☐ yes ☐ no (If no, go to question 10f.)

10b. Have all post-construction stormwater management practices included in the final SWPPP been constructed? ☐ yes ☐ no (If no, explain on Page 2)

10c. Identify the entity responsible for long-term operation and maintenance of practice(s)?

_____

NOTICE OF TERMINATION for Storm Water Discharges Authorized under the SPDES General Permit for Construction Activity - continued

10d. Has the entity responsible for long-term operation and maintenance been given a copy of the operation and maintenance plan required by the general permit? ☐ yes ☐ no

10e. Indicate the method used to ensure long-term operation and maintenance of the post-construction stormwater management practice(s):

☐ Post-construction stormwater management practice(s) and any right-of-way(s) needed to maintain practice(s) have been deeded to the municipality.

☐ Executed maintenance agreement is in place with the municipality that will maintain the post-construction stormwater management practice(s).

☐ For post-construction stormwater management practices that are privately owned, the deed of record has been modified to include a deed covenant that requires operation and maintenance of the practice(s) in accordance with the operation and maintenance plan.

☐ For post-construction stormwater management practices that are owned by a public or private institution (e.g. school, college, university), or government agency or authority, policy and procedures are in place that ensures operation and maintenance of the practice(s) in accordance with the operation and maintenance plan.

10f. Provide the total area of impervious surface (i.e. roof, pavement, concrete, gravel, etc.) constructed within the disturbance area? _____ (acres)

11. Is this project subject to the requirements of a regulated, traditional land use control MS4? ☐ yes ☐ no
(If Yes, complete section VI - "MS4 Acceptance" statement

V. Additional Information/Explanation:
(Use this section to answer questions 9c. and 10b., if applicable)

VI. MS4 Acceptance - MS4 Official (principal executive officer or ranking elected official) or Duly Authorized Representative (Note: Not required when 9b. is checked -transfer of coverage)

I have determined that it is acceptable for the owner or operator of the construction project identified in question 5 to submit the Notice of Termination at this time.

Printed Name:

Title/Position:

Signature:	Date:

NOTICE OF TERMINATION for Storm Water Discharges Authorized under the SPDES General Permit for Construction Activity - continued

VII. Qualified Inspector Certification - Final Stabilization:

I hereby certify that all disturbed areas have achieved final stabilization as defined in the current version of the general permit, and that all temporary, structural erosion and sediment control measures have been removed. Furthermore, I understand that certifying false, incorrect or inaccurate information is a violation of the referenced permit and the laws of the State of New York and could subject me to criminal, civil and/or administrative proceedings.

Printed Name:	
Title/Position:	
Signature:	Date:

VIII. Qualified Inspector Certification - Post-construction Stormwater Management Practice(s):

I hereby certify that all post-construction stormwater management practices have been constructed in conformance with the SWPPP. Furthermore, I understand that certifying false, incorrect or inaccurate information is a violation of the referenced permit and the laws of the State of New York and could subject me to criminal, civil and/or administrative proceedings.

Printed Name:	
Title/Position:	
Signature:	Date:

IX. Owner or Operator Certification

I hereby certify that this document was prepared by me or under my direction or supervision. My determination, based upon my inquiry of the person(s) who managed the construction activity, or those persons directly responsible for gathering the information, is that the information provided in this document is true, accurate and complete. Furthermore, I understand that certifying false, incorrect or inaccurate information is a violation of the referenced permit and the laws of the State of New York and could subject me to criminal, civil and/or administrative proceedings.

Printed Name:	
Title/Position:	
Signature:	Date:

(NYS DEC Notice of Termination - January 2010)

ATTACHMENT NO. 5

CERTIFICATION OF CONTRACTOR

Contractor/Subcontractor SWPPP Certification

NOTE: This SWPPP identifies for each measure identified in the SWPPP, the contractor(s) and subcontractor(s) that will implement the measure. All contractors and subcontractors identified in the SWPPP must sign a copy of the certification statement. All certifications must be included in the SWPPP. Additionally, new contractors and subcontractors need to similarly certify. All contractors and subcontractors identified in a SWPPP shall sign a copy of this certification statement before undertaking any construction activity at the site identified in the SWPPP:

I hereby certify that I understand and agree to comply with the terms and conditions of the SWPPP and agree to implement any corrective actions identified by the qualified inspector during a site inspection. I also understand that the owner or operator must comply with the terms and conditions of the New York State Pollutant Discharge Elimination System ("SPDES") general permit for stormwater discharges from construction activities and that it is unlawful for any person to cause or contribute to a violation of water quality standards. Furthermore, I understand that certifying false, incorrect or inaccurate information is a violation of the referenced permit and the laws of the State of New York and could subject me to criminal, civil and/or administrative proceedings.

SERVICES PROVIDED BY THIS CONTRACTOR/SUBCONTRACTOR:
(Contractor/Subcontractor must complete)
List all trades covered:

_____

_____

_____

_____
Signature

_____
Name & Title (Print or Type)

_____
Name of Entity Constituting Contractor/Subcontractor (Print or Type)

_____
Address of Entity Constituting Contractor/Subcontractor (Print or Type)

_____
Phone Number/Fax Number of Entity Constituting Contractor/Subcontractor (Print or Type)

Signatory Requirements – This SWPPP certification shall be signed as follows:

a. For a corporation: by (1) a president, secretary, treasurer, or vice- president of the corporation in charge of a principal business function, or any other person authorized to and who performs similar policy or decision making functions for the corporation; or (2) the manager of one or more manufacturing, production or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding $25,000,000 (in second-quarter 1980 dollars) if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;

b. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively.

ATTACHMENT NO. 6

CERTIFICATION OF OWNER/DEVELOPER

Owner/Developer SWPPP Certification

I hereby certify that I understand and agree to comply with the terms and conditions of the SWPPP and agree to implement any corrective actions identified by the qualified inspector during a site inspection. I also understand that the owner or operator must comply with the terms and conditions of the New York State Pollutant Discharge Elimination System ("SPDES") general permit for stormwater discharges from construction activities and that it is unlawful for any person to cause or contribute to a violation of water quality standards. Furthermore, I understand that certifying false, incorrect or inaccurate information is a violation of the referenced permit and the laws of the State of New York and could subject me to criminal, civil and/or administrative proceedings.

Signature

Name (Print or Type)

Title (Print or Type)

Name of Entity Constituting Owner/Developer (Print or Type)

Address of Entity Constituting Owner/Developer (Print or Type)

Phone Number/Fax Number of Entity Constituting Owner/Developer (Print or Type)

Signatory Requirements – This SWPPP certification shall be signed as follows:

a. For a corporation: by (1) a president, secretary, treasurer, or vice- president of the corporation in charge of a principal business function, or any other person authorized to and who performs similar policy or decision making functions for the corporation; or (2) the manager of one or more manufacturing, production or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding $25,000,000 (in second-quarter 1980 dollars) if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;

b. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively.

Owner/Developer SWPPP Certification

I hereby certify that I understand and agree to comply with the terms and conditions of the SWPPP and agree to implement any corrective actions identified by the qualified inspector during a site inspection. I also understand that the owner or operator must comply with the terms and conditions of the New York State Pollutant Discharge Elimination System ("SPDES") general permit for stormwater discharges from construction activities and that it is unlawful for any person to cause or contribute to a violation of water quality standards. Furthermore, I understand that certifying false, incorrect or inaccurate information is a violation of the referenced permit and the laws of the State of New York and could subject me to criminal, civil and/or administrative proceedings.

_____

Signature

_____

Name (Print or Type)

_____

Title (Print or Type)

_____

Name of Entity Constituting Owner/Developer (Print or Type)

_____

Address of Entity Constituting Owner/Developer (Print or Type)

_____

Phone Number/Fax Number of Entity Constituting Owner/Developer (Print or Type)

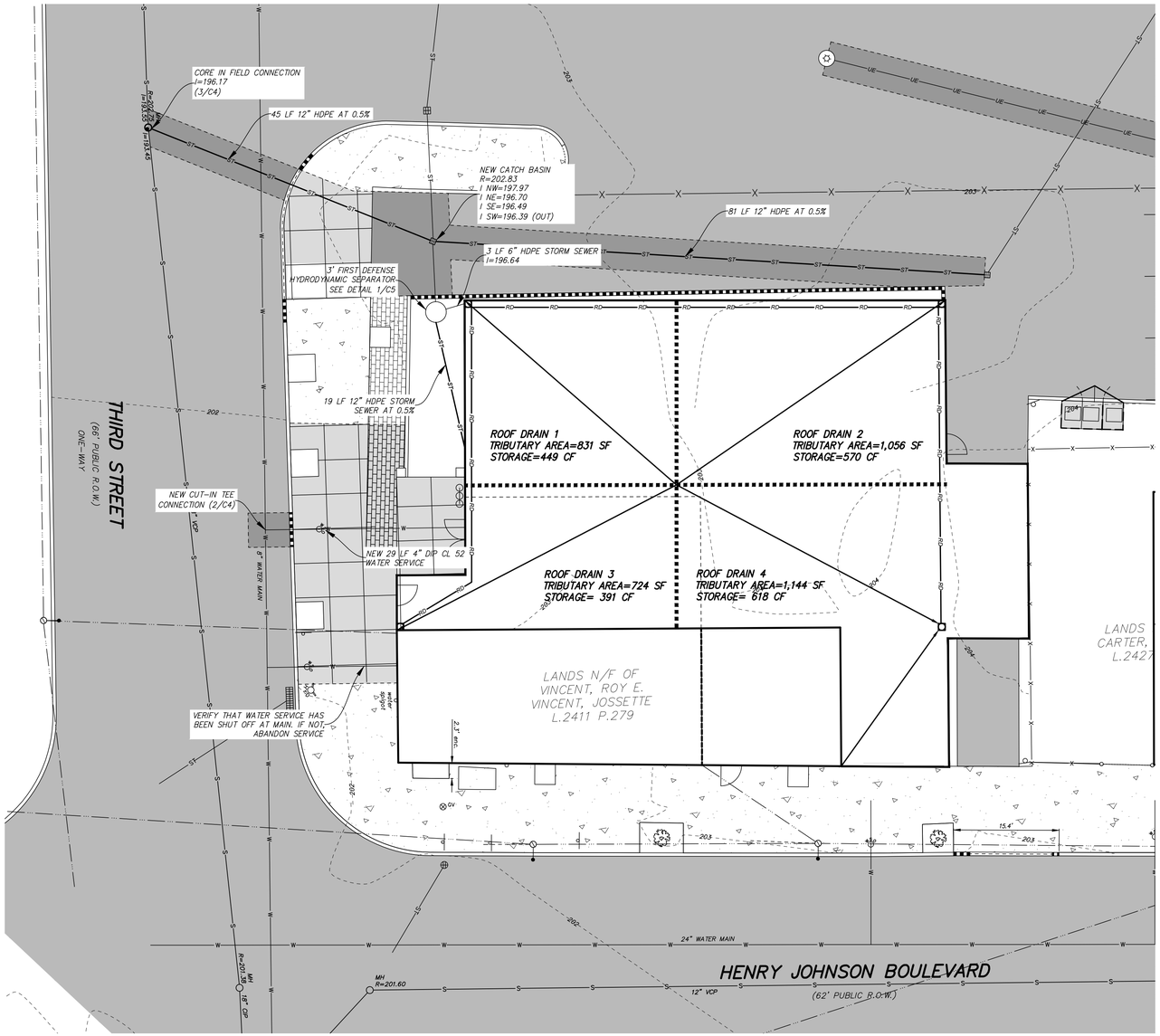
Signatory Requirements – This SWPPP certification shall be signed as follows:

a. For a corporation: by (1) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person authorized to and who performs similar policy or decision making functions for the corporation; or (2) the manager of one or more manufacturing, production or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding $25,000,000 (in second-quarter 1980 dollars) if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;

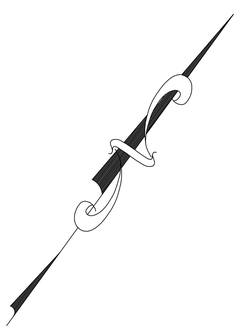
b. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively.

MAP POCKET #1
MAP C-4

UTILITY PLAN



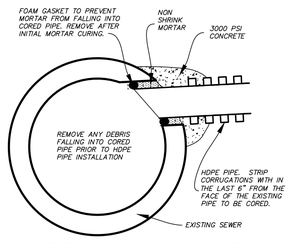
0 10 20 Feet



ROOF DRAIN TRIBUTARY AREA STORAGE		
ROOF DRAIN	AREA (SF)	STORAGE VOLUME (CF)
ROOF DRAIN 1	831	449
ROOF DRAIN 2	1,056	570
ROOF DRAIN 3	724	391
ROOF DRAIN 4	1,144	618
TOTAL	3,755	2028

NOTES

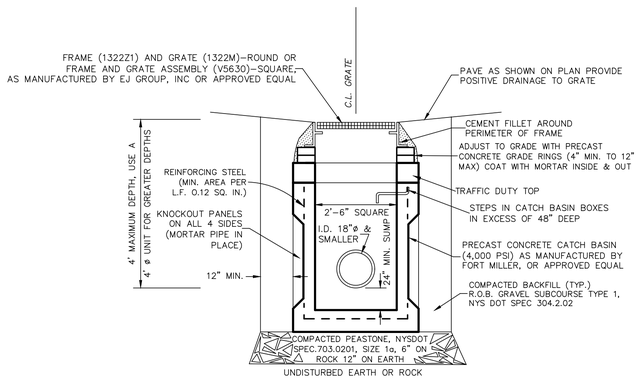
1. EXISTING WATER AND SEWER LATERALS TO BE USED. THERE ARE NO NEW PROPOSED WATER OR SEWER SERVICES.



CORED IN FIELD HDPE PIPE CONNECTION (3/C4)
NOT TO SCALE

LEGEND

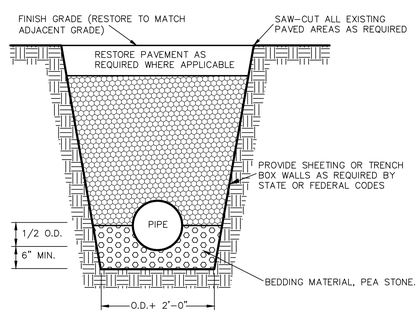
R.O.W.	RIGHT OF WAY		IRON ROD
No.	NUMBER	MH	MANHOLE
enc.	ENCROACHMENT		CATCHBASIN
P.O.B.	POINT OF BEGINNING		SIGN
S.F.	SQUARE FEET		FENCE LINE
N/F	NOW OR FORMERLY		OVERHEAD WIRE, UTILITY POLE & GUY WIRE
N	NORTH		TRAFFIC FLOW ACCESS AREA
S	SOUTH	WV	WATER SHUT OFF
E	EAST	WV	WATER VALVE
W	WEST		HYDRANT
elec.	ELECTRIC	GV	GAS VALVE
L.	LIBER	GT	GAS TEST
P.	PAGE		STREET LIGHT
ST	STORM LINE		LIGHT POLE
S	SEWER LINE		CONCRETE
W	WATER LINE		PAVEMENT
G	GAS LINE		BRICK
UE	UNDERGROUND ELECTRIC		
W	PROPOSED WATER MAIN		
S	PROPOSED SANITARY SEWER		
G	PROPOSED GAS LINE		
ST	PROPOSED STORM SEWER		



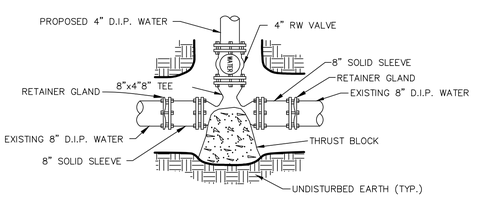
NOTES:
1. THE UPPERMOST STEP SHALL BE 4" TO 10" BELOW THE LOWERMOST GRADE RING AND NO DEEPER THAN 24" BELOW THE RIM OF THE STRUCTURE.

2. THIS STRUCTURE IS TO BE USED ONLY IF IT CAN ACCOMMODATE PIPE AND FRAME AND GRATE SIZE

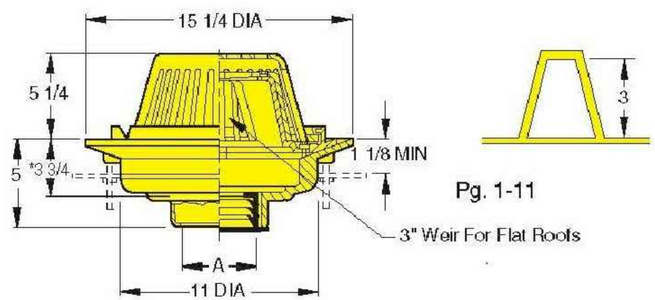
CATCH BASIN DETAIL (4/C4)
NOT TO SCALE



TYPICAL STORM SEWER TRENCH DETAIL (1/C4)
NOT TO SCALE



CUT IN TEE DETAIL (2/C4)
NOT TO SCALE



Pg. 1-11

FLAT ROOF TYPE
ROOF DRAIN DETAIL (5/C4)
NOT TO SCALE

FOR MUNICIPAL APPROVAL ONLY-NOT INTENDED FOR CONSTRUCTION

HERSHBERG & HERSHBERG
Consulting Engineers and Land Surveyors
18 Locust Street
Albany, New York 12203

STATE OF NEW YORK
DANIEL R. HERSHBERG
044226
LICENSED PROFESSIONAL ENGINEER & LAND SURVEYOR

REVISIONS		
REMARKS	DATE	
GENERAL REVISIONS	7/27/2020	

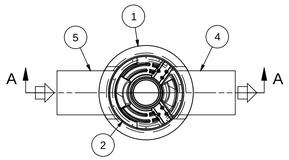
UTILITY PLAN AND DETAILS FOR
185 HENRY JOHNSON BOULEVARD
CITY OF ALBANY
STATE OF NEW YORK

FILE: 200140 | SCALE: AS NOTED | BY: MJB | CHK: DRH | DATE: 7/22/20 | 200140.DWG

MAP POCKET #2

MAP C-5

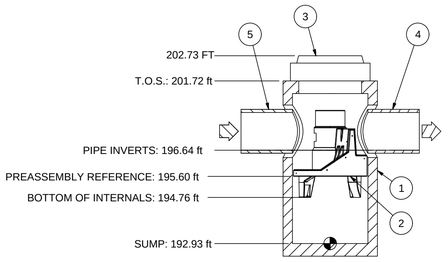
UTILITY DETAILS



PLAN VIEW

HYDRO FRAME AND COVER (INCLUDED)

GRADE RINGS BY OTHERS AS REQUIRED



SECTION A-A

PROJECTION

IF IN DOUBT ASK

COMMENTS:

1. MANHOLE WALL AND SLAB THICKNESSES ARE NOT TO SCALE.

2. CONTACT HYDRO INTERNATIONAL FOR A BOTTOM OF STRUCTURE ELEVATION PRIOR TO SETTING FIRST DEFENSE MANHOLE.

3. CONTRACTOR TO CONFIRM RIM, PIPE INVERTS, PIPE DIA. AND PIPE ORIENTATION PRIOR TO RELEASE OF UNIT TO FABRICATION.

DATE:	SCALE:
11/8/2019	NTS
DRAWN BY: JLL3	CHECKED BY: -	APPROVED BY

Title:
3-ft DIAMETER

FIRST DEFENSE HIGH CAPACITY

GENERAL ARRANGEMENT

Hydro International
hydro-int.com

HYDRO INTERNATIONAL

PRODUCT SPECIFICATION:

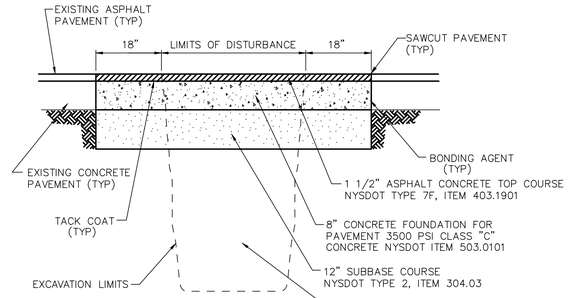
1. PEAK HYDRAULIC FLOW: 15.0 cfs (424 l/s)
2. MIN SEDIMENT STORAGE CAPACITY: 0.4 cu. yd. (0.3 cu. m.)
3. OIL STORAGE CAPACITY: 125 gal. (473 liters)
4. MAXIMUM INLET/OUTLET PIPE DIAMETERS: 18 in. (450 mm)
5. THE TREATMENT SYSTEM SHALL USE AN INDUCED VORTEX TO SEPARATE POLLUTANTS FROM STORMWATER RUNOFF.
6. FOR MORE PRODUCT INFORMATION INCLUDING REGULATORY ACCEPTANCES, PLEASE VISIT https://hydro-int.com/en/products/first-defense

GENERAL NOTES:
1. General Arrangement drawings only. Contact Hydro International for site specific drawings.
2. The diameter of the inlet and outlet pipes may be no more than 18".
3. Multiple inlet pipes possible (refer to project plan).
4. Inlet/outlet pipe angle can vary to align with drainage network (refer to project plan.s)
5. Peak flow rate and minimum height limited by available cover and pipe diameter.
6. Larger sediment storage capacity may be provided with a deeper sump depth.

PARTS LIST				
ITEM	QTY	SIZE (in)	SIZE (mm)	DESCRIPTION
1	1	36	900	I.D. PRECAST MANHOLE
2	1			INTERNAL COMPONENTS (PRE-INSTALLED)
3	1	30	750	FRAME AND COVER (ROUND)
4	1	18 (MAX)	450 (MAX)	OUTLET PIPE (BY OTHERS)
5	1	18 (MAX)	450 (MAX)	INLET PIPE (BY OTHERS)

FIRST DEFENSE HYDRODYNAMIC SEPARATOR DETAIL (1/C5)

NOT TO SCALE



NOTE:

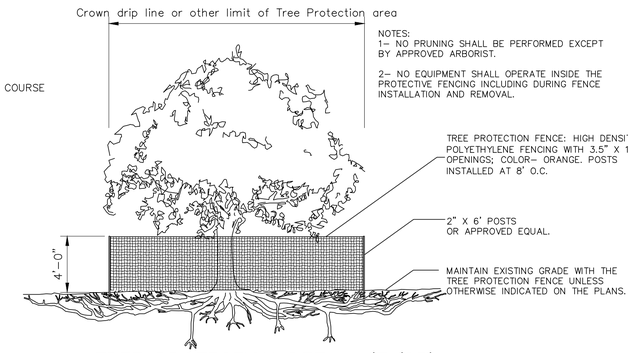
1. IF LIMITS OF TRENCHING EXCEEDS 50 FEET, CONTRACTOR SHALL COMPLETE CURB TO CURB MILLING PER CITY DETAILS

2. ALL PAVEMENT MARKINGS DISTURBED SHALL BE RESTORED TO THE SATISFACTION OF THE CITY

3. ALL JOINTS TO BE SEALED WITH ASPHALT EMULSION (AC-20) NYSDOT ITEM 702-0500

STREET RESTORATION CONCRETE PAVEMENT DETAIL (CITY R.O.W.) (2/C5)

NOT TO SCALE

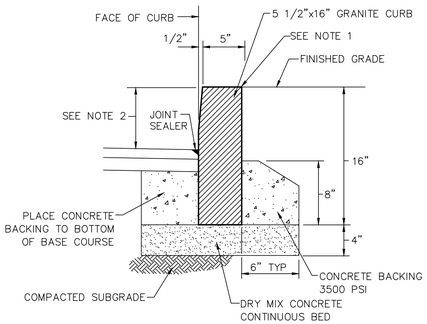


NOTES:
1- NO PRUNING SHALL BE PERFORMED EXCEPT BY APPROVED ARBORIST.

2- NO EQUIPMENT SHALL OPERATE INSIDE THE PROTECTIVE FENCING INCLUDING DURING FENCE INSTALLATION AND REMOVAL.

TREE PROTECTION DETAIL (7/C5)

NOT TO SCALE



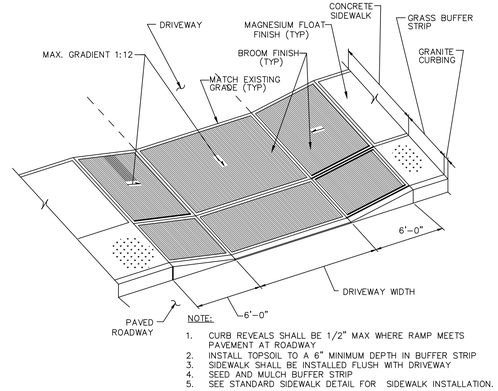
NOTE:

1. EXPANSION JOINT MATERIAL SHALL INSTALLED WHEN CURB IS SET AGAINST NEW OR EXISTING SIDEWALK AS ORDERED BY THE ENGINEER.

2. FOR NEW CONSTRUCTION, A 6" CURB REVEAL SHALL BE MAINTAINED, FOR CURB REPLACEMENT OR RESETTING, MATCH EXISTING REVEAL

GRANITE CURB INSTALLATION DETAIL (8/C5)

NOT TO SCALE



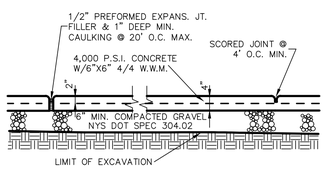
NOTE:

1. CURB REVEALS SHALL BE 1/2" MAX WHERE RAMP MEETS PAVEMENT AT ROADWAY
2. INSTALL TOPSOIL TO A 6" MINIMUM DEPTH IN BUFFER STRIP
3. SIDEWALK SHALL BE INSTALLED FLUSH WITH DRIVEWAY
4. SEED AND MULCH BUFFER STRIP
5. SEE STANDARD SIDEWALK DETAIL FOR SIDEWALK INSTALLATION.

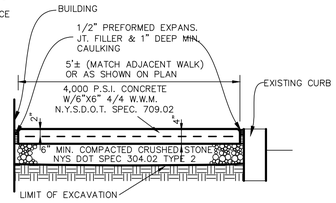
DRIVEWAY/SIDEWALK DROP CURB WITH BUFFER STRIP DETAIL (9/C4)

NOT TO SCALE

NOTES:
1. SIDEWALK SLOPE FROM BUILDING WALL TO CURB TO BE 1/8" PER FOOT
2. SIDEWALK FINISH TO BE MAGNESIUM FLOAT FINISH
3. CONCRETE WALK TO CONFORM TO CITY OF ALBANY ENGINEERING SPECIFICATIONS
4. CONCRETE USED SHALL HAVE AN AIR CONTENT OF 5% MIN. TO 7% MAX., AND A SLUMP OF THREE INCHES MIN. TO FIVE INCHES MAX.
5. ALL CONCRETE SIDEWALK REPLACEMENT SHALL BE TO FULL PANEL LIMITS. PARTIAL REPLACEMENTS WILL NOT BE ALLOWED.
6. EXPANSION JOINTS TO BE PLACED BETWEEN ADJACENT SLABS, AT BUILDING LINE OR PENETRATING STRUCTURES.
7. ALL CURBING SHALL BE RESET OR REPLACED AS REQUIRED IN ACCORDANCE WITH CITY DETAILS.



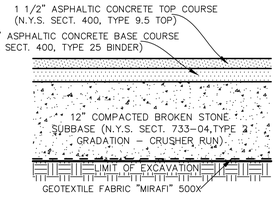
LONGITUDINAL SECTION



CROSS SECTION

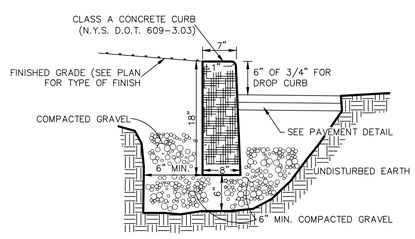
CONCRETE WALK REPAIR DETAIL IN CITY R.O.W. (3/C5)

NOT TO SCALE



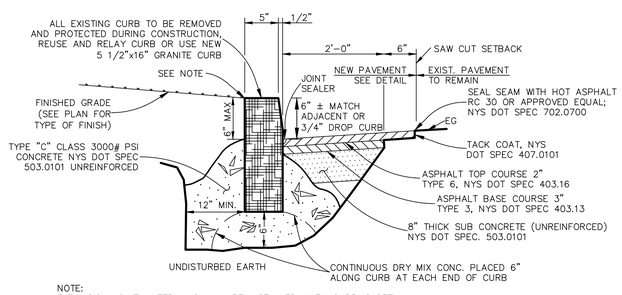
PAVEMENT DETAIL (4/C5)

NOT TO SCALE



CONCRETE CURB (CAST IN PLACE) DETAIL (6/C5)

NOT TO SCALE



NOTE:
EXPANSION JOINT MATERIAL SHALL BE INSTALLED WHEN CURB IS SET AGAINST NEW OR EXISTING SIDEWALK AS ORDERED BY THE ENGINEER

NEW OR RELAY CURB DETAIL (CITY R.O.W.) (5/C5)

NOT TO SCALE

FOR MUNICIPAL APPROVAL ONLY-NOT INTENDED FOR CONSTRUCTION

HERSHBERG & HERSHBERG
Consulting Engineers and Land Surveyors
18 Locust Street
Albany, New York 12203

STATE OF NEW YORK
DANIEL R. HERSHBERG
LICENSED PROFESSIONAL ENGINEER & LAND SURVEYOR
044226

REVISIONS								
REMARKS	GENERAL REVISIONS							
DATE	7/27/2020							

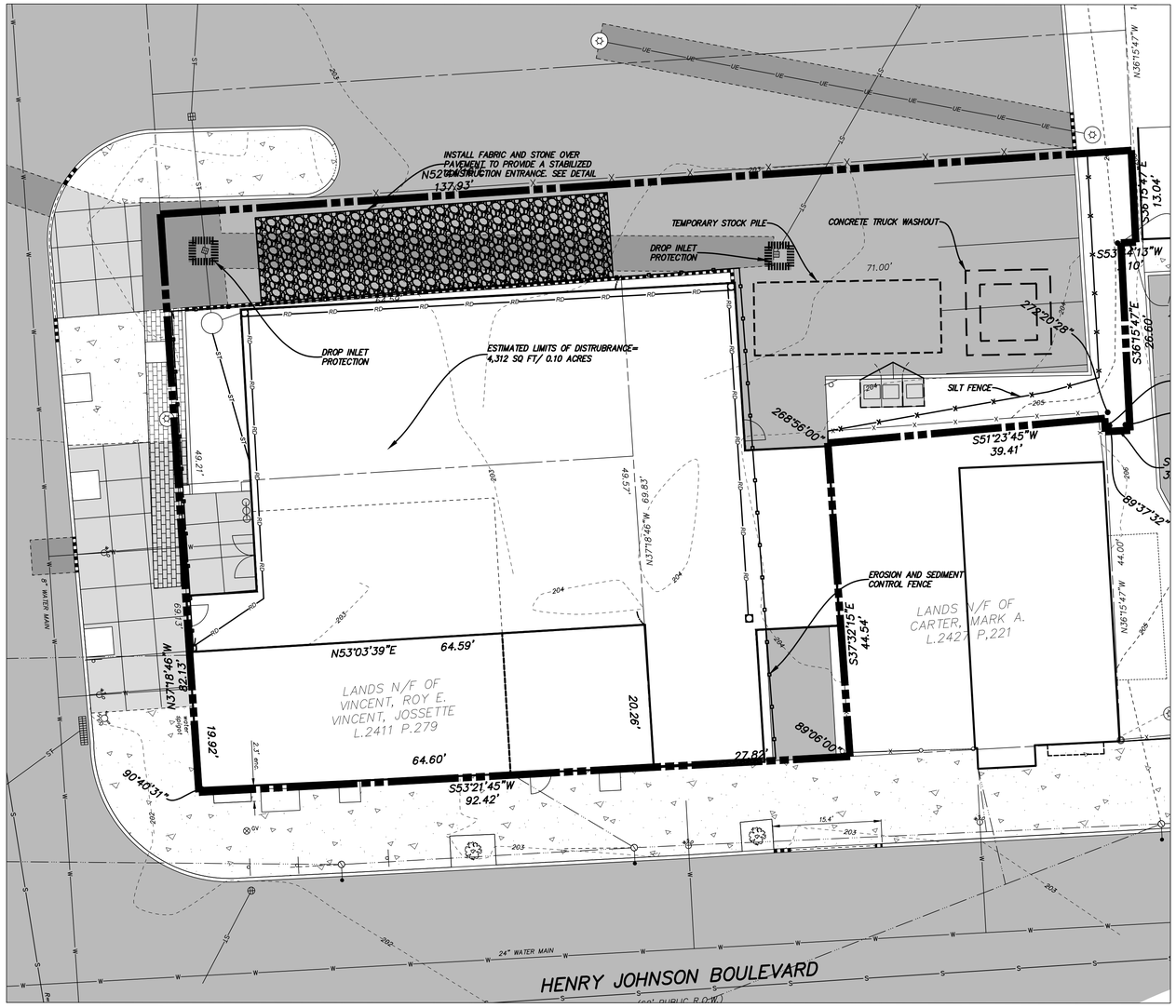
DETAILS FOR
185 HENRY JOHNSON BOULEVARD
CITY OF ALBANY
STATE OF NEW YORK

FILE: 200140 | SCALE: AS NOTED | BY: MJB | CHK: DRH | DATE: 7/22/20 | 200140.DWG

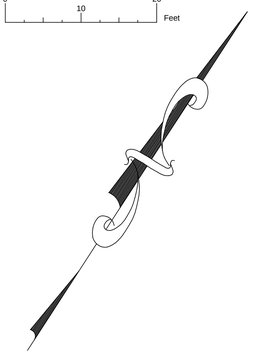
MAP POCKET #3

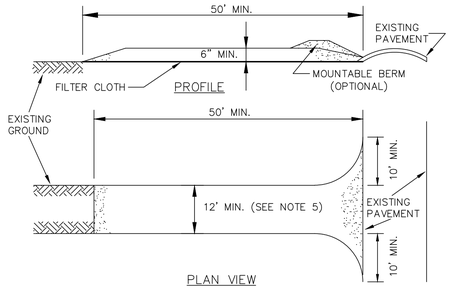
MAP C-6

EROSION AND SEDIMENT CONTROL PLAN AND DETAILS



0 10 20 Feet





PLAN VIEW

CONSTRUCTION SPECIFICATIONS:

1. INSTALL CONSTRUCTION ACCESS IN ACCORDANCE WITH "NEW YORK STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL", SECTION 7A.

2. STONE SIZE –USE 2" STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.

3. LENGTH – NOT LESS THAN 50 FEET (EXCEPT ON A SINGLE RESIDENCE LOT WHERE A 30 FOOT MINIMUM LENGTH WOULD APPLY).

4. THICKNESS– NOT LESS THAN (6) INCHES.

5. WIDTH – TWELVE (12) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS. IF CONSTRUCTED AS THE ONLY ENTRANCE TO THE SITE, WIDTH SHALL BE TWENTY–FOUR (24) FEET.

5. STABILIZATION FABRIC – WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.

6. SURFACE WATER – ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.

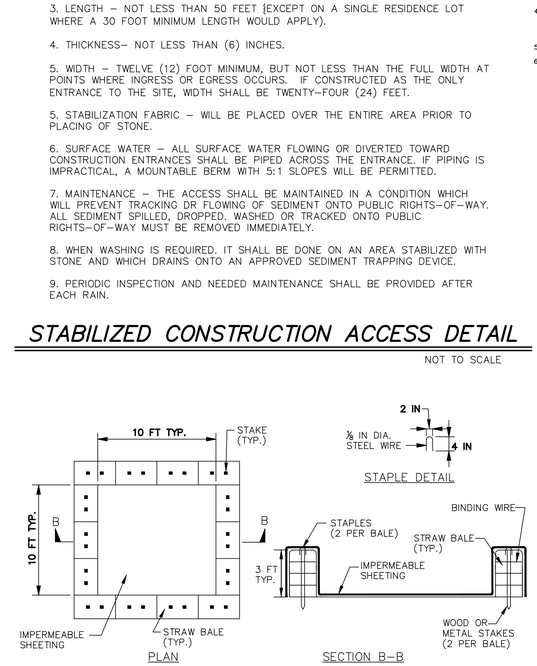
7. MAINTENANCE – THE ACCESS SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS–OF–WAY. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS–OF–WAY MUST BE REMOVED IMMEDIATELY.

8. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS ONTO AN APPROVED SEDIMENT TRAPPING DEVICE.

9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

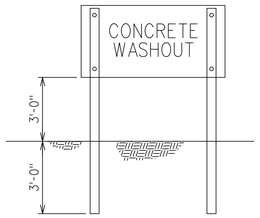
STABILIZED CONSTRUCTION ACCESS DETAIL

NOT TO SCALE



NOTE: CAN BE TWO STACKED BALES OR PARTIALLY EXCAVATED TO REACH 3 FT DEPTH

WASHOUT STRUCTURE WITH STRAW BALES



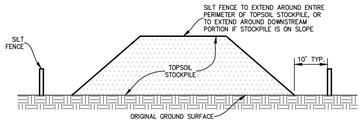
CONCRETE WASHOUT SIGN DETAIL
(OR EQUIVALENT)

CONSTRUCTION SPECIFICATIONS:

1. LOCATE WASHOUT STRUCTURE A MINIMUM OF 50 FEET AWAY FROM OPEN CHANNELS, STORM DRAIN INLETS, SENSITIVE AREAS, WETLANDS, BUFFERS AND WATER COURSES AND AWAY FROM CONSTRUCTION TRAFFIC.
2. SIZE WASHOUT STRUCTURE FOR VOLUME NECESSARY TO CONTAIN WASH WATER AND SOLIDS AND MAINTAIN AT LEAST 4 INCHES OF FREEBOARD. TYPICAL DIMENSIONS ARE 10 FEET X 10 FEET X 3 FEET DEEP.
3. PREPARE SOIL BASE FREE OF ROCKS OR OTHER DEBRIS THAT MAY CAUSE TEARS OR HOLES IN THE LINER. FOR LINER, USE 10 MIL OR THICKER UV RESISTANT, IMPERMEABLE SHEETING, FREE OF HOLES AND TEARS OR OTHER DEFECTS THAT COMPROMISE IMPERMEABILITY OF THE MATERIAL.
4. PROVIDE A SIGN FOR THE WASHOUT IN CLOSE PROXIMITY TO THE FACILITY.
5. KEEP CONCRETE WASHOUT STRUCTURE WATER TIGHT. REPLACE IMPERMEABLE LINER IF DAMAGED (E.G., RIPPED OR PUNCTURED). EMPTY OR REPLACE WASHOUT STRUCTURE THAT IS 75 PERCENT FULL, AND DISPOSE OF ACCUMULATED MATERIAL PROPERLY. DO NOT REUSE PLASTIC LINER. WET–VACUUM STORED LIQUIDS THAT HAVE NOT EVAPORATED AND DISPOSE OF IN AN APPROVED MANNER. PRIOR TO FORECASTED RAINSTORMS, REMOVE LIQUIDS OR COVER STRUCTURE TO PREVENT OVERFLOWS. REMOVE HARDENED SOLIDS, WHOLE OR BROKEN UP, FOR DISPOSAL OR RECYCLING. MAINTAIN RUNOFF DIVERSION AROUND EXCAVATED WASHOUT STRUCTURE UNTIL STRUCTURE IS REMOVED.

ONSITE CONCRETE TRUCK WASHOUT STRUCTURE DETAIL

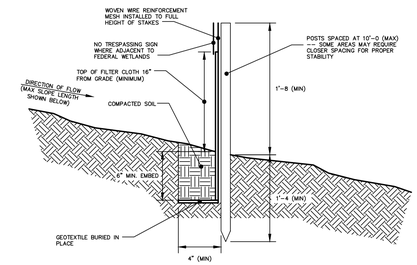
NOT TO SCALE



NOTES:
1. AN ON–SITE DRAINAGE SWALE SHALL BE LOCATED BETWEEN THE TOPSOIL STOCKPILE AND OFF–SITE PROPERTY.
2. REFERENCE IS MADE TO THE SILT FENCE DETAIL FOR MATERIALS AND INSTALLATION METHODS.
3. IF THE STOCKPILE IS TO REMAIN FOR MORE THAN 14 DAYS, IT SHALL BE STABILIZED WITH BURLAP MATTING OR SEEDED WITHIN 7 DAYS OF COMPLETION TO MINIMIZE EROSION.
4. INSPECTION OF SILT FENCES SHALL BE AT LEAST ONCE PER WEEK AND AFTER RAIN EVENTS IN EXCESS OF 1/2". REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
5. SEDIMENT TRAPPED BY THE FENCES SHALL BE REMOVED AND PROPERLY DISPOSED OF WHENEVER SIGNIFICANT ACCUMULATION OCCURS.
6. SILT FENCES SHALL BE MAINTAINED IN PLACE UNTIL TOPSOIL STOCKPILE HAS BEEN ELIMINATED AND SHALL BE REMOVED ONLY WHEN DIRECTED BY THE CITY.

TEMPORARY TOPSOIL STOCKPILE DETAIL

NOT TO SCALE



CONSTRUCTION SPECIFICATIONS FOR FABRICATED SILT FENCE

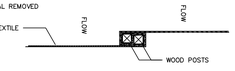
1. INSTALL SILT FENCE IN ACCORDANCE WITH THE JULY 2016 "THE NEW YORK STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL".
2. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES. POSTS SHALL BE STEEL EITHER "T" OF "U" TYPE OR HARDWOOD.
3. FILTER CLOTH TO BE TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION. FENCE SHALL BE WOVEN WIRE, 6" MAX. MESH OPENING.
4. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY SIX INCHES AND FOLDED. FILTER CLOTH SHALL BE EITHER FILTER X. MIRAFI 100X, STABILINKA T140N, OR APPROVED EQUIVALENT.
5. PREFABRICATED UNITS SHALL MEET THE MINIMUM REQUIREMENTS SHOWN.
6. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

POSTS: STEEL EITHER "T" OR "U" TYPE OR 2" HARDWOOD

FENCE: WOVEN WIRE, 12 1/2 GA. 6" MAX. MESH OPENING

FILTER CLOTH: FILTER X, STABILINKA T140N OR APPROVED EQUAL

PREFABRICATED UNIT: GEOFAB, ENVIROFENCE, OR APPROVED EQUAL



WRAP ENDS OF SILT FENCE SECTIONS TOGETHER TO PREVENT FLOW OF SEDIMENT BETWEEN SECTIONS

DESIGN CRITERIA:

SILT FENCE JOINT DETAIL

1. DESIGN COMPUTATIONS ARE NOT REQUIRED FOR INSTALLATIONS OF 1 MONTH OR LESS. LONGER INSTALLATION PERIODS SHOULD BE DESIGNED FOR EXPECTED RUNOFF.
2. ALL SILT FENCES SHALL BE PLACED AS CLOSE TO THE AREA AS POSSIBLE, BUT AT LEAST 10 FEET FROM THE TOE OF A SLOPE STEEPER THAN 3H:1V, TO ALLOW FOR MAINTENANCE AND ROLL DOWN. THE AREA BEYOND THE FENCE MUST BE UNDISTURBED OR STABILIZED.
3. THE TYPE OF SILT FENCE SPECIFIED FOR EACH LOCATION ON THE PLAN SHALL NOT EXCEED THE MAXIMUM SLOPE LENGTH AND MAXIMUM FENCE LENGTH REQUIREMENTS SHOWN IN THE FOLLOWING TABLE:

		Slope Length/Fence Length (ft.)		
Slope	Steepness	Standard (SF)	Reinforced (RSF)	Super (SSF)
<2%	<50:1	300/1500	N/A	N/A
2–10%	50:1 to 10:1	125/1000	250/2000	300/2500
10–20%	10:0 to 5:1	100/750	150/1000	200/1000
20–33%	5:1 to 3:1	60/500	80/750	100/1000
33–50%	3:1 to 2:1	40/250	70/350	100/500
>50%	>2:1	20/125	30/175	50/250

STANDARD SILT FENCE (SF) IS FABRIC ROLLS STAPLED TO WOODEN STAKES DRIVEN 16 INCHES IN THE GROUND.

REINFORCED SILT FENCE (RSF) IS FABRIC PLACED AGAINST WELDED WIRE FABRIC WITH ANCHORED STEEL POSTS DRIVEN 16 INCHES IN THE GROUND.

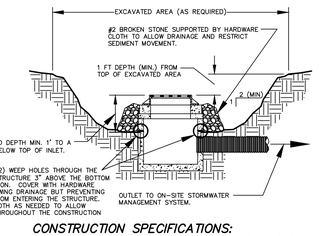
SUPER SILT FENCE (SSF) IS FABRIC PLACED AGAINST CHAIN LINK FENCE AS SUPPORT BACKING WITH POSTS DRIVEN 3 FEET IN THE GROUND.

4. SILT FENCE SHALL BE REMOVED AS SOON AS THE DISTURBED AREA HAS ACHIEVED FINAL STABILIZATION.

THE SILT FENCE SHALL BE INSTALLED IN ACCORDANCE WITH THE APPROPRIATE DETAILS. WHERE ENDS OF FILTER CLOTH COME TOGETHER, THEY SHALL BE OVERLAPPED, FOLDED AND STAPLED TO PREVENT SEDIMENT BYPASS. BUTT JOINTS ARE NOT ACCEPTABLE.

SEDIMENT CONTROL FENCE INSTALLATION DETAIL

NOT TO SCALE



CONSTRUCTION SPECIFICATIONS:

1. INSTALL INLET PROTECTION IN ACCORDANCE WITH THE JULY 2016 "NEW YORK STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL".
2. CLEAR THE AREA OF ALL DEBRIS THAT WILL HINDER EXCAVATION.
3. GRADE APPROACH TO THE INLET UNIFORMLY AROUND THE BASIN.
4. WEEP HOLES SHALL BE PROTECTED BY 2"ø STONE OR GRAVEL.
5. UPON STABILIZATION OF CONTRIBUTING DRAINAGE AREA, SEAL WEEP HOLES, FILL EXCAVATION WITH STABLE SOIL TO FINAL GRADE, COMPACT IT PROPERLY AND STABILIZE WITH PERMANENT SEEDING.
6. THE MAXIMUM DRAINAGE AREA SHALL BE 1 ACRE.

DESIGN CRITERIA:

LIMIT THE DRAINAGE AREA TO THE INLET DEVICE TO ONE (1) ACRE. EXCAVATED SIDE SLOPES SHALL BE NO STEEPER THEN 2:1. THE MINIMUM DEPTH SHALL BE 1 FOOT AND THE MAXIMUM DEPTH 2 FEET AS MEASURED FROM THE CREST OF THE INLET STRUCTURE. SHAPE THE EXCAVATED BASIN TO FIT CONDITIONS WITH THE LONGEST DIMENSION ORIENTATED TOWARD THE LONGEST INFLOW AREA TO PROVIDE MAXIMUM TRAP EFFICIENCY. THE CAPACITY OF THE EXCAVATED BASIN SHOULD BE ESTABLISHED TO CONTAIN 900 CUBIC FEET PER ACRE OF DISTURBED AREA. WEEP HOLES, PROTECTED BY FABRIC AND STONE, SHOULD BE PROVIDED FOR DRAINING THE TEMPORARY POOL.

INSPECT AND CLEAN THE EXCAVATED BASIN AFTER EVERY STORM. SEDIMENT SHOULD BE REMOVED WHEN 50 PERCENT OF THE STORAGE VOLUME IS ACHIEVED. THIS MATERIAL SHOULD BE INCORPORATED INTO THE SITE IN A STABILIZED MANNER.

EXCAVATED DROP INLET PROTECTION

NOT TO SCALE

FOR MUNICIPAL APPROVAL ONLY-NOT INTENDED FOR CONSTRUCTION

HERSHBERG & HERSHBERG
Consulting Engineers and Land Surveyors
18 Locust Street
Albany, New York 12203

STATE OF NEW YORK · DANIEL R. HERSHBERG · LICENSED PROFESSIONAL ENGINEER & LAND SURVEYOR · 044226

REVISIONS	DATE
REMARKS: GENERAL REVISIONS	7/27/2020

EROSION AND SEDIMENT CONTROL PLAN FOR
185 HENRY JOHNSON BOULEVARD
CITY OF ALBANY
STATE OF NEW YORK

FILE: 200140 | SCALE: AS NOTED | BY: MJB | CHK: DRH | DATE: 7/22/20 | 200140.DWG

MAP POCKET #4

EMPTY MAP POCKET

FOR ADDENDUMS