

**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)**

**HOSPITALITY HOUSE  
271 CENTRAL AVENUE**

City of Albany  
County of Albany  
State of New York

Applicant:  
Brian L. Barker



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## **INTRODUCTION**

Hershberg & Hershberg, Consulting Engineers and Land Surveyors, were retained by Brian L. Barker (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 271 Central Avenue but will be consildated with 269 and 271 Central Avenue, along with 98 North Lake Avenue and 260 Sherman Street. (tid# 65.63-2-68, 65.63-2-69, 65.63-2-70, and 65.63-2-33). The combined 0.29 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.

<b>EXISTING COVERAGE STATISTICS</b>			
<b>Description</b>	<b>Area (SF)</b>	<b>Area (acres)</b>	<b>%</b>
Green Area	1,949	0.04	15.6%
Building Area	4,670	0.11	37.4%
Paved Area	5,861	0.13	47.0%
Total Area	12,480	0.29	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.

## National Flood Hazard Layer FIRMette

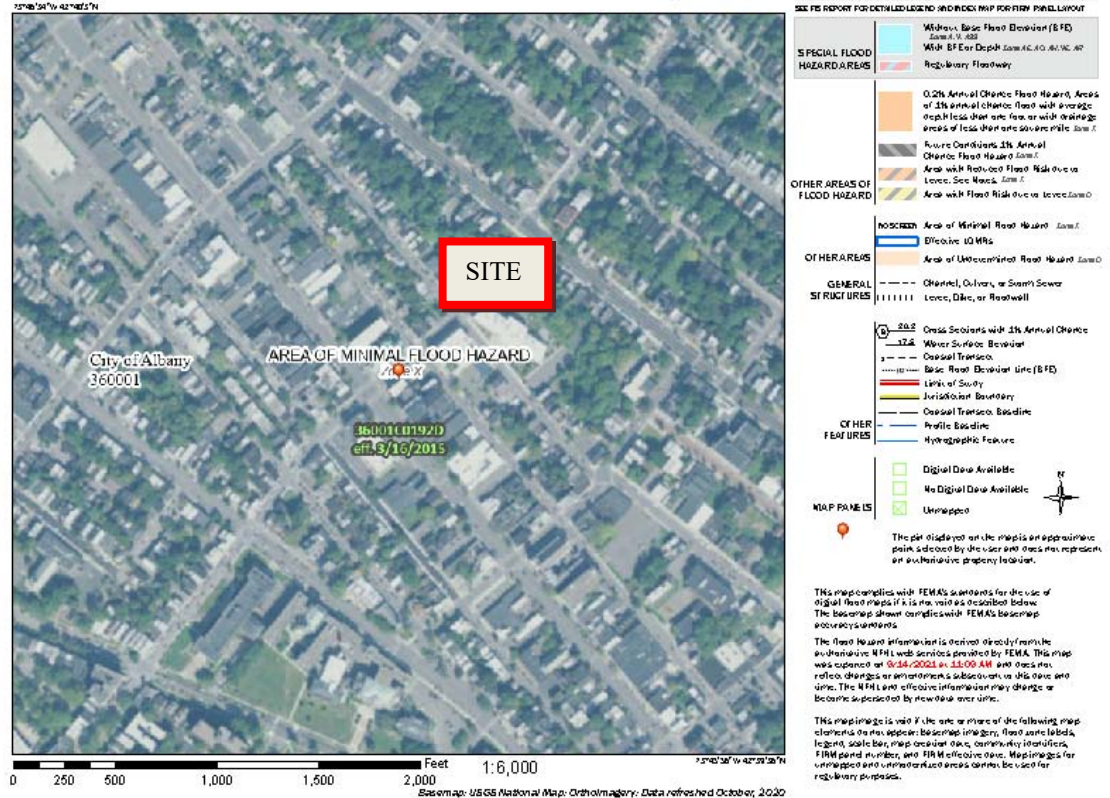
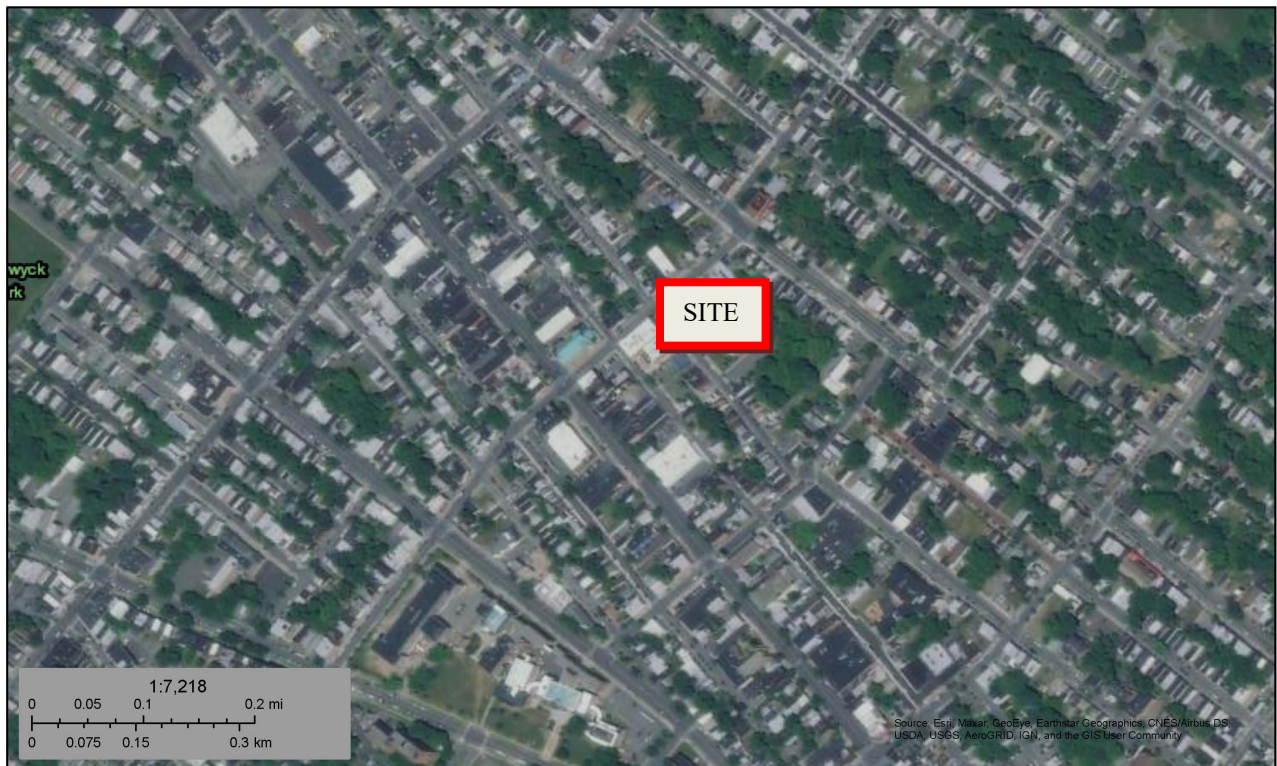


Fig. No. 3 – FEMA Firmette

## 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**

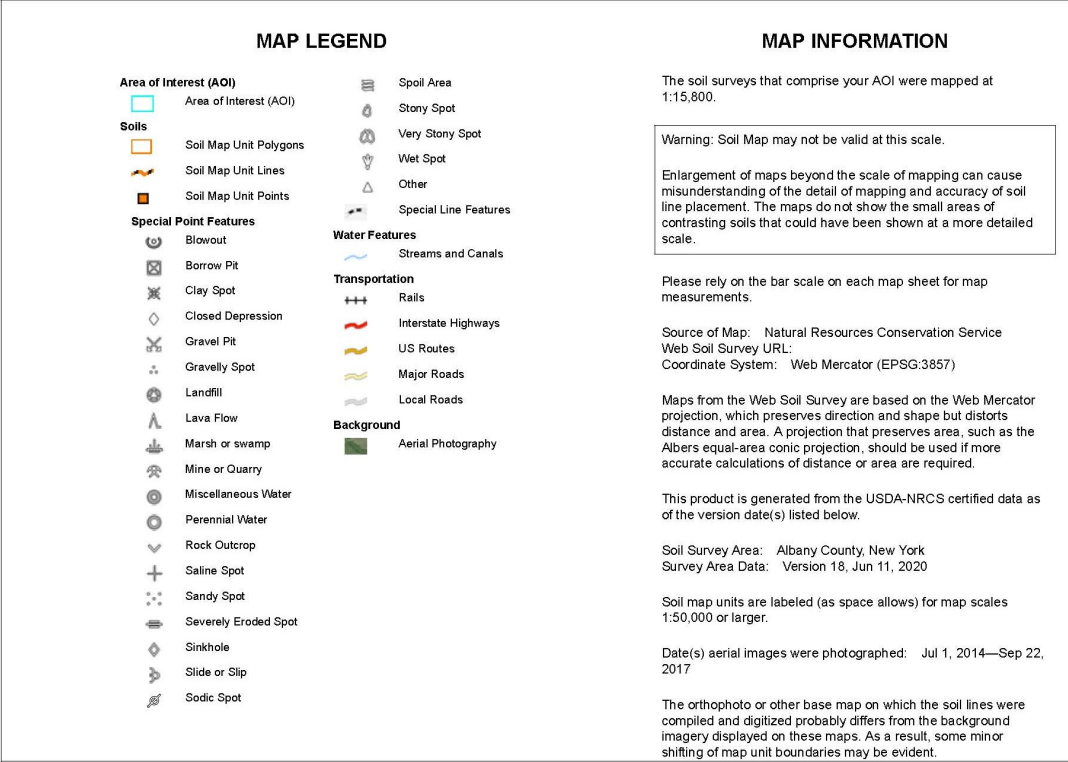
There are no listed endangered or threatened species in the area.

### **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**



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

**Albany County, New York**

**Ur—Urban land**

**Map Unit Setting**

National map unit symbol: 9pj8  
Mean annual precipitation: 36 to 41 inches  
Mean annual air temperature: 45 to 48 degrees F  
Frost-free period: 100 to 170 days  
Farmland classification: Not prime farmland

**Map Unit Composition**

Urban land: 85 percent  
Minor components: 15 percent  
Estimates are based on observations, descriptions, and transects of the mapunit.

**Description of Urban Land**

**Typical profile**

H1 - 0 to 6 inches: variable

**Minor Components**

**Unnamed soils**

Percent of map unit: 10 percent

**Udorthents**

Percent of map unit: 5 percent  
Hydric soil rating: No

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

### **EXISTING DRAINAGE:**

The Pre-Development Tributary Map (See Appendix #2) establishes 3 existing tributary areas.

Tributary Area A – This area represents the northern section of the existing pavement. This is all tributary to North Lake Avenue through sheet flow off of the asphalt. 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 0.13 acres of impervious area which will be modeled as all pervious area. The CN is 80 and a time of concentration of 10.4 minutes.

Tributary Area B – This area represents the northern section of the existing pavement. This is all tributary to Sherman Street through sheet flow off of the asphalt. 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 0.02 acres with a CN value of 80 and a Tc of 2.4 minutes.

Tributary Area C – This area represents the existing building which will remain on site and the surrounding grass and sidewalk areas. The area is 0.13 acres and will be modeled as pervious area with a CN value of 80 and a Tc of 13.8 minutes.

### **PROPOSED COVERAGE STATISTICS:**

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

<b>Description</b>	<b>Area (SF)</b>	<b>Area (acres)</b>	<b>%</b>
Building Area	9,167	0.21	73.5%
Paved/Sidewalk Area	1,764	0.04	14.1%
Green Area	1,549	0.04	12.4
Total Area	12,480	0.29	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 a 12.4-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 combined sewer structure on Sherman Street. 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 12.4 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 (0.83 CFS) than the discharge from the 10-year storm in the undeveloped condition (0.93 CFS). These results are detailed in the HydroCAD®10.00 results contained in Appendix

Frequency	1 Year	1 Year	10 Year	10 Year	100 Year	100 Year
Pre	0.33		0.93		1.75	
Post		0.31		0.53		0.83

Fig. No. 9 – Undeveloped and Post Runoff Calculations

## **CAPACITY OF COMBINED SEWER SYSTEM TO ACCEPT FLOWS**

This site is served by a combined 18" brick and stone sewer main on Sherman Street. See portion of Sheet 222 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 1.75 CFS to 0.83 CFS a reduction of 0.92 CFS. The flow to 18" brick and stone sewer combined sewer at the 10-year storm by instituting the storm water management the flow to this system will be reduced from 0.93 CFS to 0.53 CFS a reduction of 0.40 CFS.

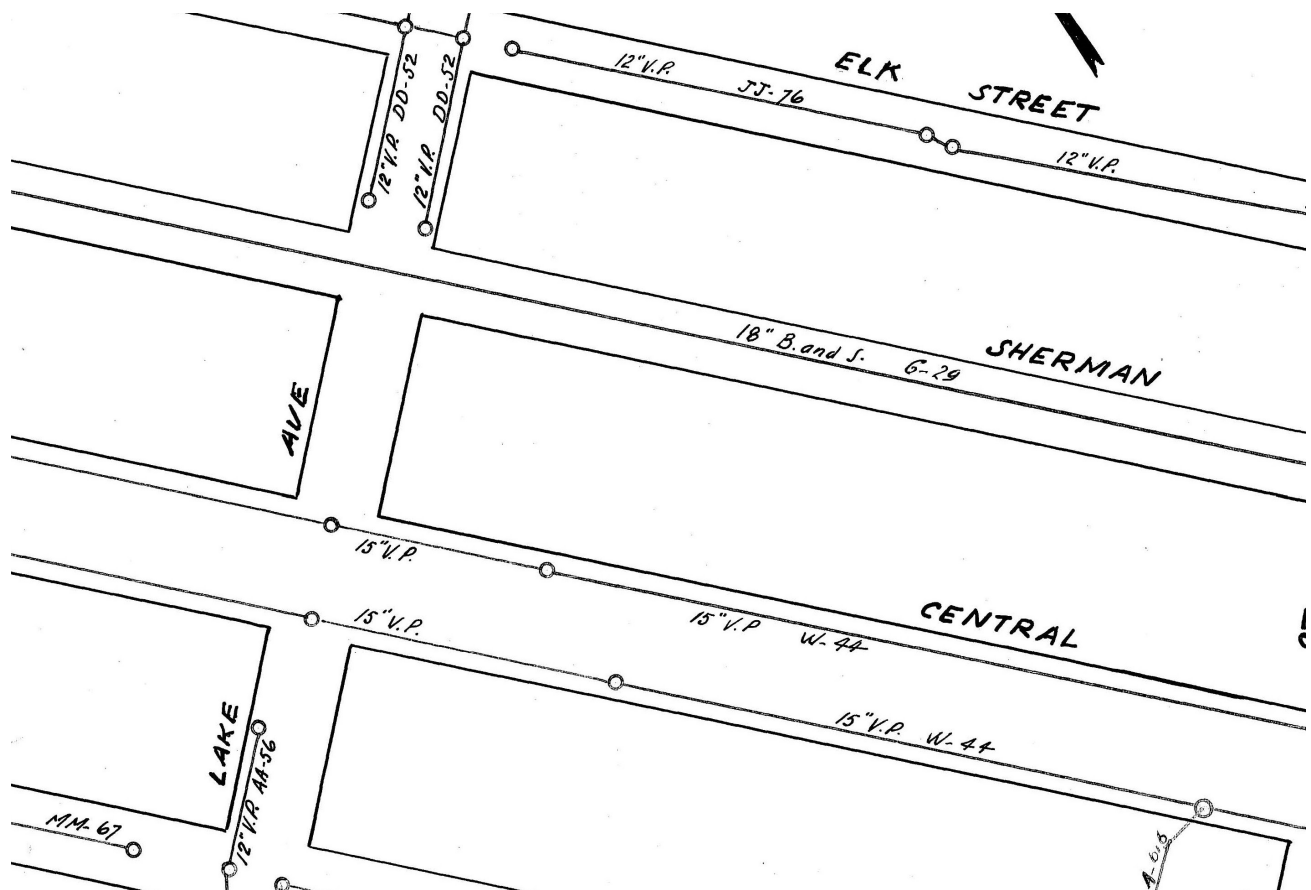


Fig. No. 10 – Portion of Sewer Atlas Sheet 018

## **WATER QUALITY VOLUME**

Water Quality Volume ( $WQ_v$ ) is computed based upon the following formula:<sup>1</sup>

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

Where  $WQ_v$  = water quality volume (acre-feet)

$P$  = 90% rainfall event<sup>2</sup> (1.20 inches)

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

$A$  = site area in acres

<sup>1</sup> Ibid. Table 4-1, Page 4-3

<sup>2</sup> Ibid., Page 4-2, Figure 4.1

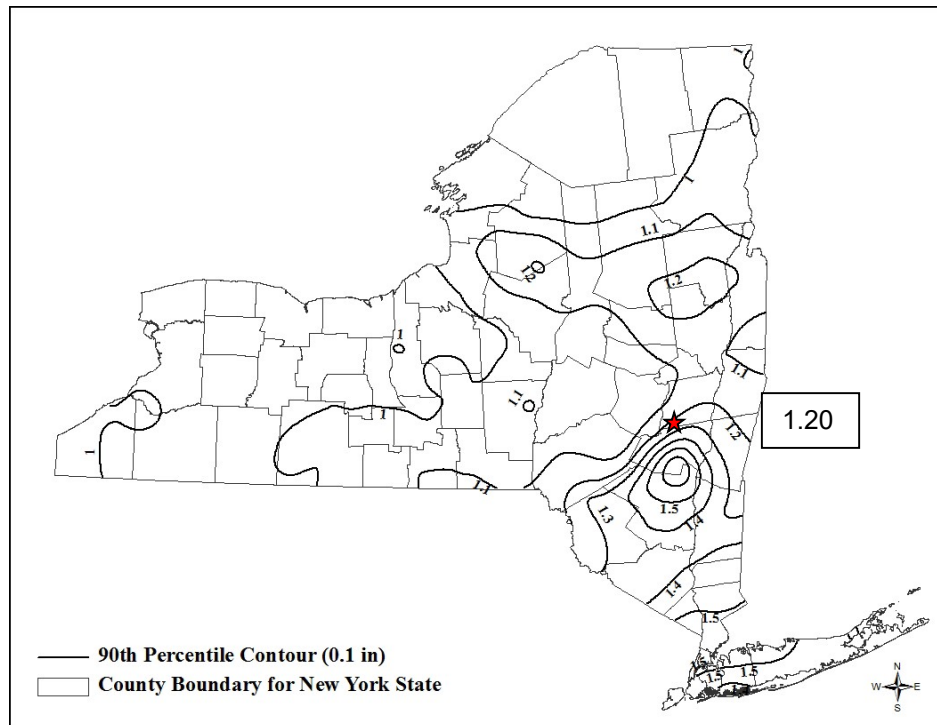


Fig. No. 11 – NYSDEC 90<sup>th</sup> Percentile Contour

The Water Quality Volume ( $WQ_v$ ) is computed on the WQV and RRV Worksheet in Appendix #3 for the tributary area as a whole as 0.024 acre-feet (1,043 cubic feet). The  $WQ_v$  is being treated with a blue roof and a Hydrodynamic Separator.

## **RUNOFF REDUCTION VOLUME**

Minimum Runoff Reduction Volume ( $RR_v$ ) is computed based upon the following formula:<sup>3</sup>

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

Where  $RR_v$  = runoff reduction volume (acre-feet)

P = 90% rainfall event<sup>4</sup>

<sup>3</sup> Ibid., Page 4-6

<sup>4</sup> Ibid., Page 4-6

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

$A_iC$  = site impervious area in acres

$S$  = Hydrologic Soil Group Specific Reduction Factor (0.40 for Class C Hydrologic Soils)<sup>5</sup>

$A_i = (A_iC) (S)$

The Minimum Runoff Reduction Volume ( $RR_v$ ) is computed on the WQV and RRV Worksheet in Appendix #3 is computed as 0.005 acre-feet (206 cubic feet) for subject site.

### **DESIGN CONSIDERATIONS:**

The design of a storm drainage system for the subject site considered the following critical factors:

1. The outflow from the proposed system to the drainage system is decreased so that the post development outflow at 100-year storm (0.83 CFS) is less than the pre-existing conditions of an entirely pervious site for the 10-year storm (0.93 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.

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<sup>5</sup> 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 #9**

### **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 #9**

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 15<sup>th</sup> and April 1<sup>st</sup> of any year when construction is ongoing. Some un-stabilized soil areas may exist on November 15<sup>th</sup>. 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 15<sup>th</sup> to the following April 1<sup>st</sup>.

## **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)*<sup>1</sup> 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

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

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. 12 – 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. 13- 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** .
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 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.

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.



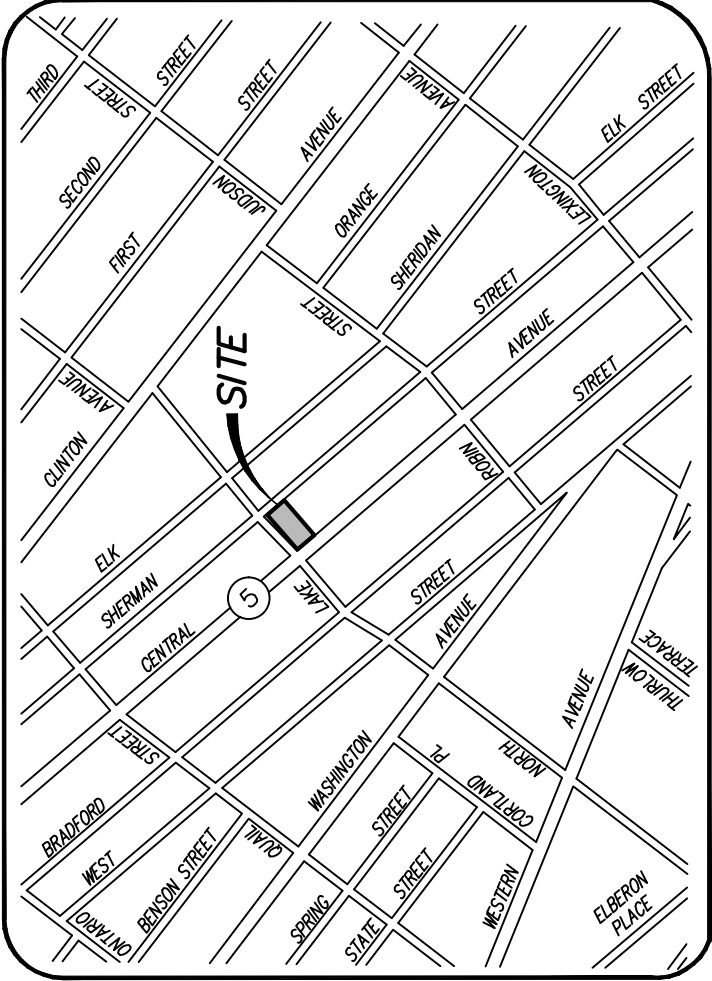
Prepared by: \_\_\_\_\_  
Daniel R. Hershberg, P.E. & L.S.  
Lic. No. 44226

File:DOCS/SWPPP/SWPPPSWMR20210144.doc

## **APPENDIX #1**

### **SITE LOCATION MAP**





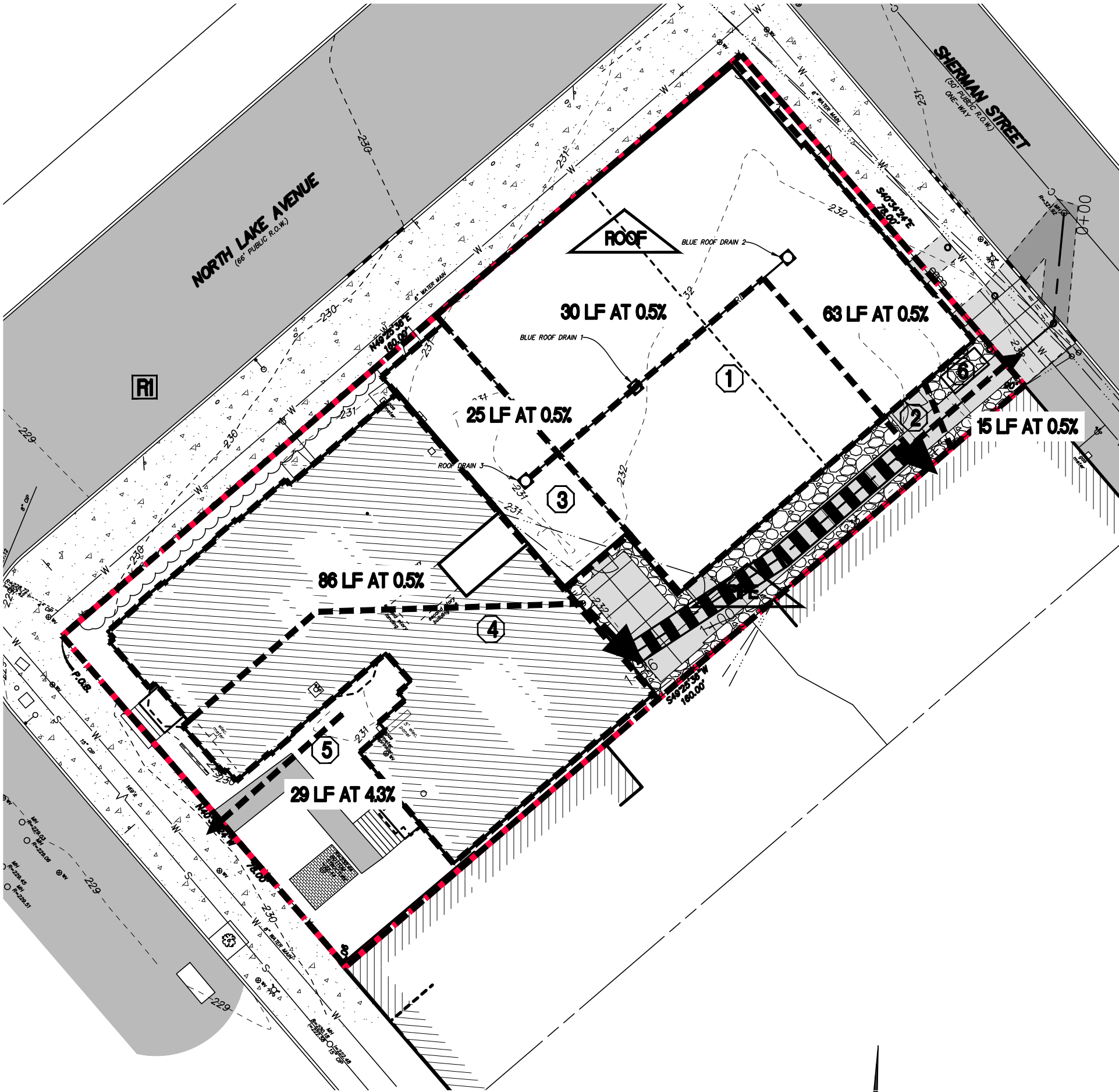
**VICINITY MAP**

MAP NOT TO SCALE

## **APPENDIX #2**

### **TRIBUTARY AREA MAPS**





DENOTES TRIBUTARY AREA



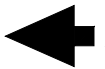
DENOTES REACH



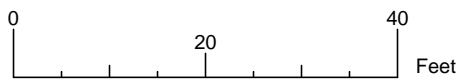
DENOTES DETENTION AREA



DENOTES LIMITS OF TRIBUTARY AREA



DENOTES T<sub>c</sub> / T<sub>t</sub>



POST DEVELOPMENT TRIBUTARY AREA  
271 CENTRAL AVE  
ALBANY, NY

## **APPENDIX #3**

### **WQV AND RRV WORKSHEET**

**COMPUTATION OF WATER QUALITY VOLUME (WQ<sub>v</sub>) OF DEVELOPED SITE**

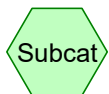
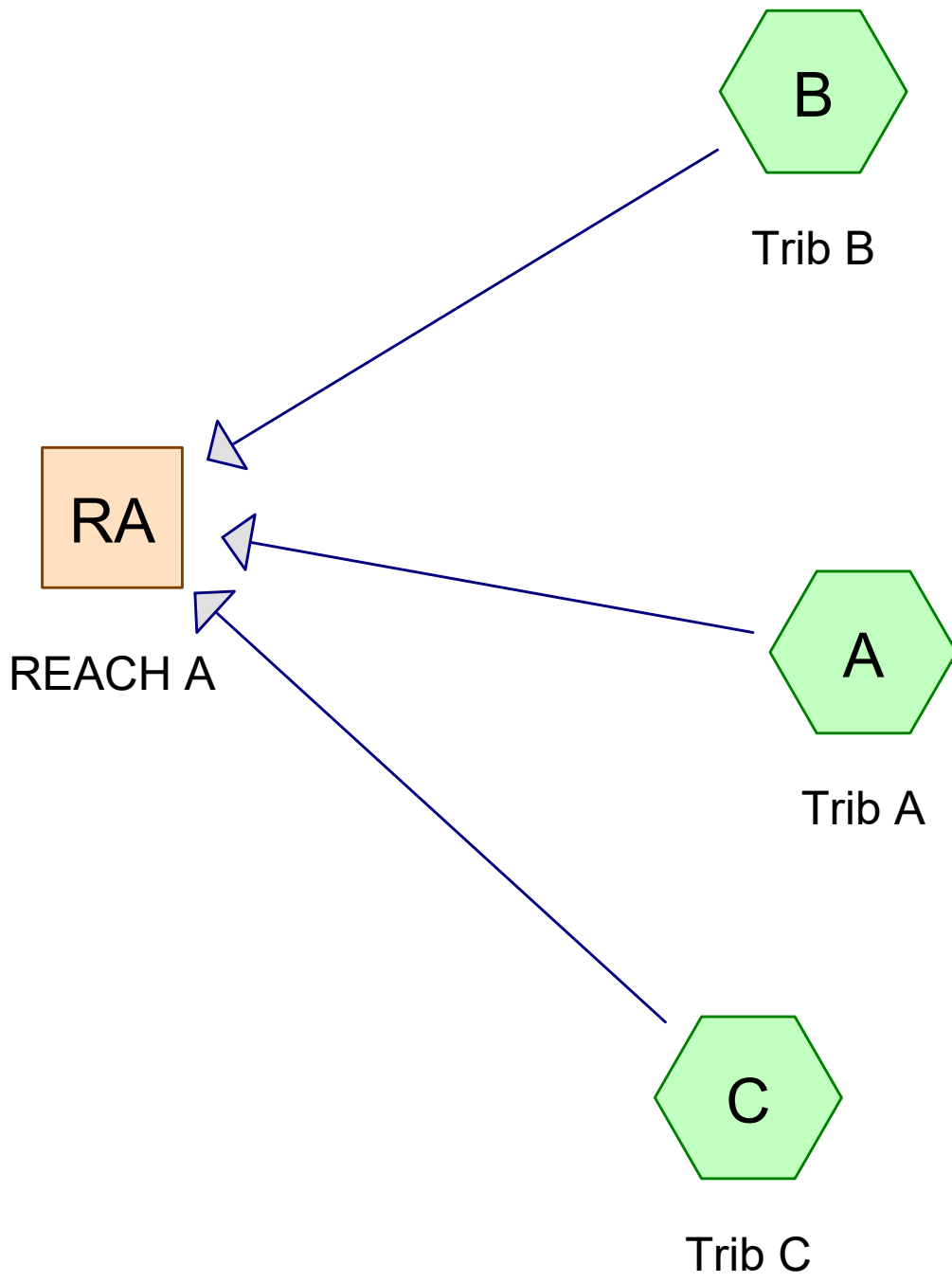
Impervious Area (Acres)	0.250	
I (Impervious Cover)	86.21%	
$R_v = 0.05 + 0.009I$	0.83	Minimum $R_v = 0.20$
P	1.2	
A (site area in acres)	0.290	
$WQ_v \text{ TOTAL} = [(P)(R_v)(A)]/12$ (in acre-feet)	<b>0.024</b>	
$WQ_v \text{ TOTAL} =$ in CF	<b>1043</b>	

**COMPUTATION OF BASIC RUNOFF REDUCTION VOLUME (RR<sub>v</sub>)**

Aic - Total Impervious Area -(Acres)	0.250	
I (Impervious Cover)	86.21%	
$R_v = 0.05 + 0.009I$	0.950	$R_v = 0.95$
P (Table 4.1)	1.2	
A (site area in acres)	0.290	
S (Hydrologic Group Specific Reduction Factor)	0.20	Hydrologic Class D Soil
Ai (Impervious cover targeted for runoff reduction)	0.05	Aic * S
$RR_v = [(P)(R_v)(Ai)]/12$ (in acre-feet)	0.005	
$RR_v$ (in cubic-feet)	<b>206</b>	

## **APPENDIX #4**

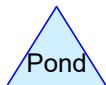
### **HydroCAD10.0® CALCULATIONS**



Subcat



Reach



Pond



Link



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Page 2

**Area Listing (all nodes)**

Area (acres)	CN	Description (subcatchment-numbers)
0.285	80	>75% Grass cover, Good, HSG D (A, B, C)
<b>0.285</b>	<b>80</b>	<b>TOTAL AREA</b>

**210144-existing**

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**Soil Listing (all nodes)**

Area (acres)	Soil Group	Subcatchment Numbers
0.000	HSG A	
0.000	HSG B	
0.000	HSG C	
0.285	HSG D	A, B, C
0.000	Other	
<b>0.285</b>		<b>TOTAL AREA</b>

**210144-existing**

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**Ground Covers (all nodes)**

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
0.000	0.000	0.000	0.285	0.000	0.285	>75% Grass cover, Good	A, B, C
<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.285</b>	<b>0.000</b>	<b>0.285</b>	<b>TOTAL AREA</b>	

**210144-existing***Type II 24-hr 1 Year Rainfall=2.50"*

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Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points

Runoff by SCS TR-20 method, UH=SCS

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

**Subcatchment A: Trib A**

Runoff Area=5,788 sf 0.00% Impervious Runoff Depth&gt;0.80"

Flow Length=100' Slope=0.0225 '/' Tc=10.4 min CN=80 Runoff=0.17 cfs 0.009 af

**Subcatchment B: Trib B**

Runoff Area=914 sf 0.00% Impervious Runoff Depth&gt;0.81"

Flow Length=26' Slope=0.0561 '/' Tc=2.4 min CN=80 Runoff=0.04 cfs 0.001 af

**Subcatchment C: Trib C**

Runoff Area=5,724 sf 0.00% Impervious Runoff Depth&gt;0.80"

Flow Length=74' Slope=0.0050 '/' Tc=13.8 min CN=80 Runoff=0.15 cfs 0.009 af

**Reach RA: REACH A**

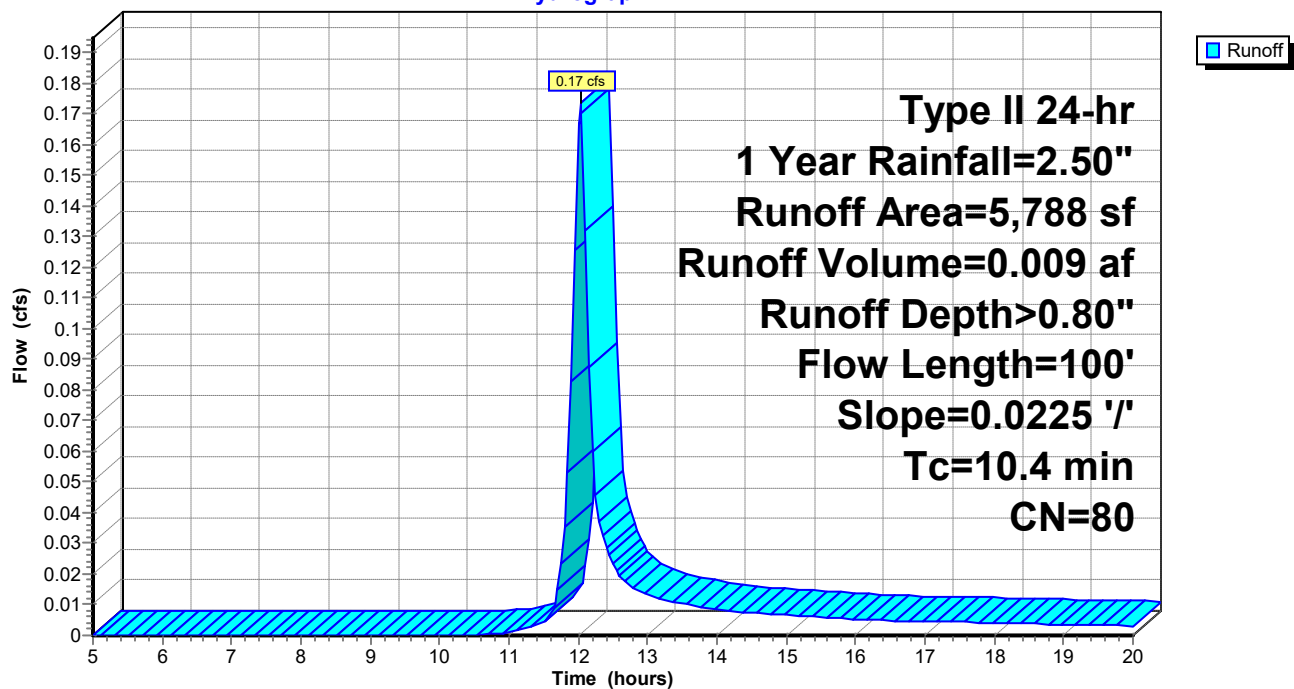
Inflow=0.33 cfs 0.019 af

Outflow=0.33 cfs 0.019 af

**Total Runoff Area = 0.285 ac Runoff Volume = 0.019 af Average Runoff Depth = 0.80"****100.00% Pervious = 0.285 ac 0.00% Impervious = 0.000 ac**

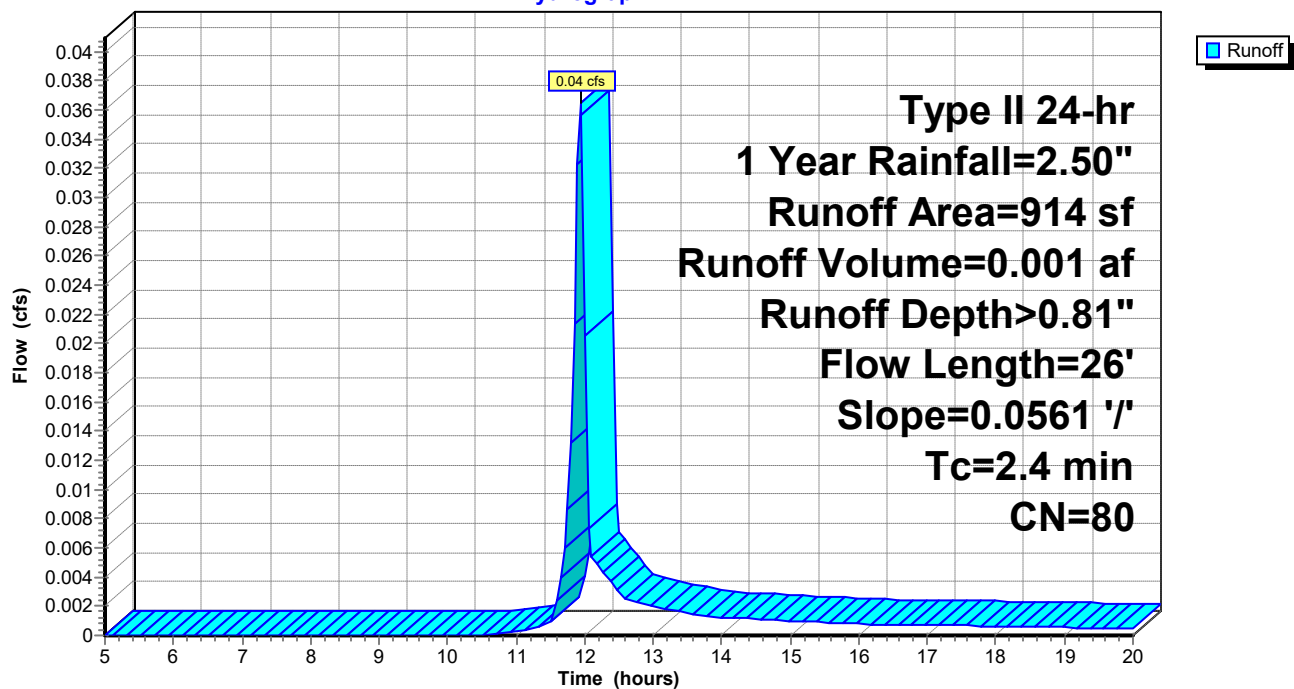
## Subcatchment A: Trib A

Hydrograph



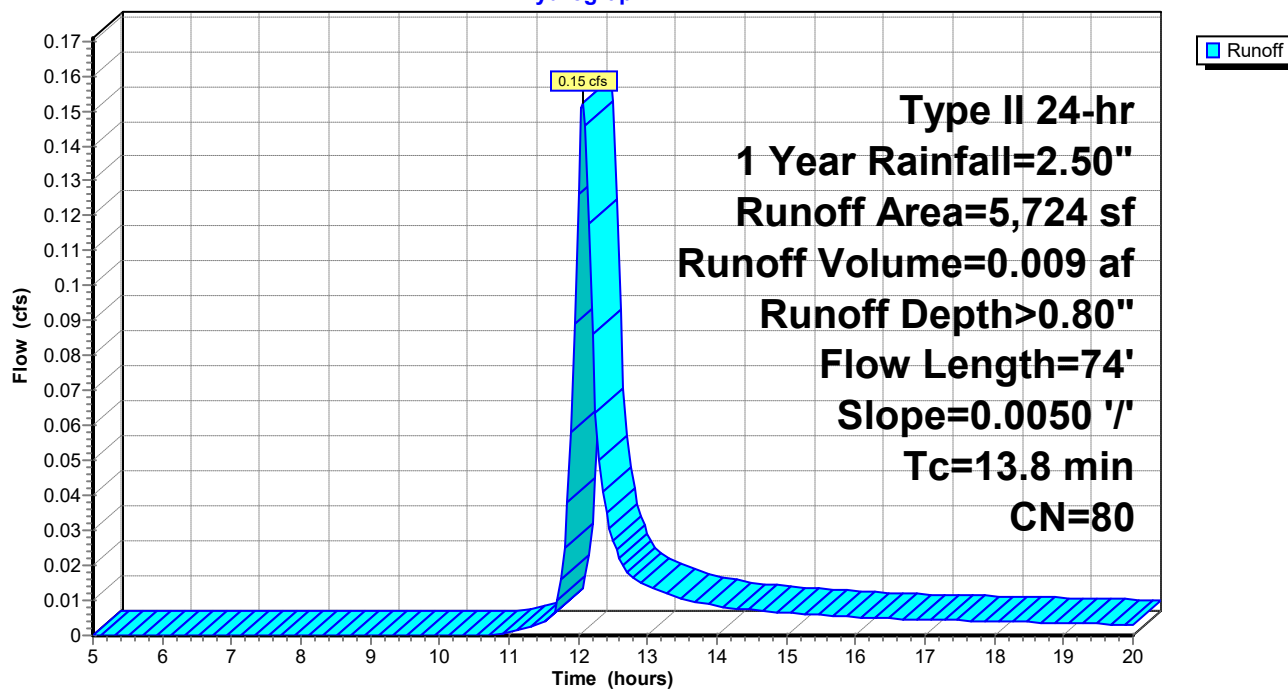
## Subcatchment B: Trib B

Hydrograph



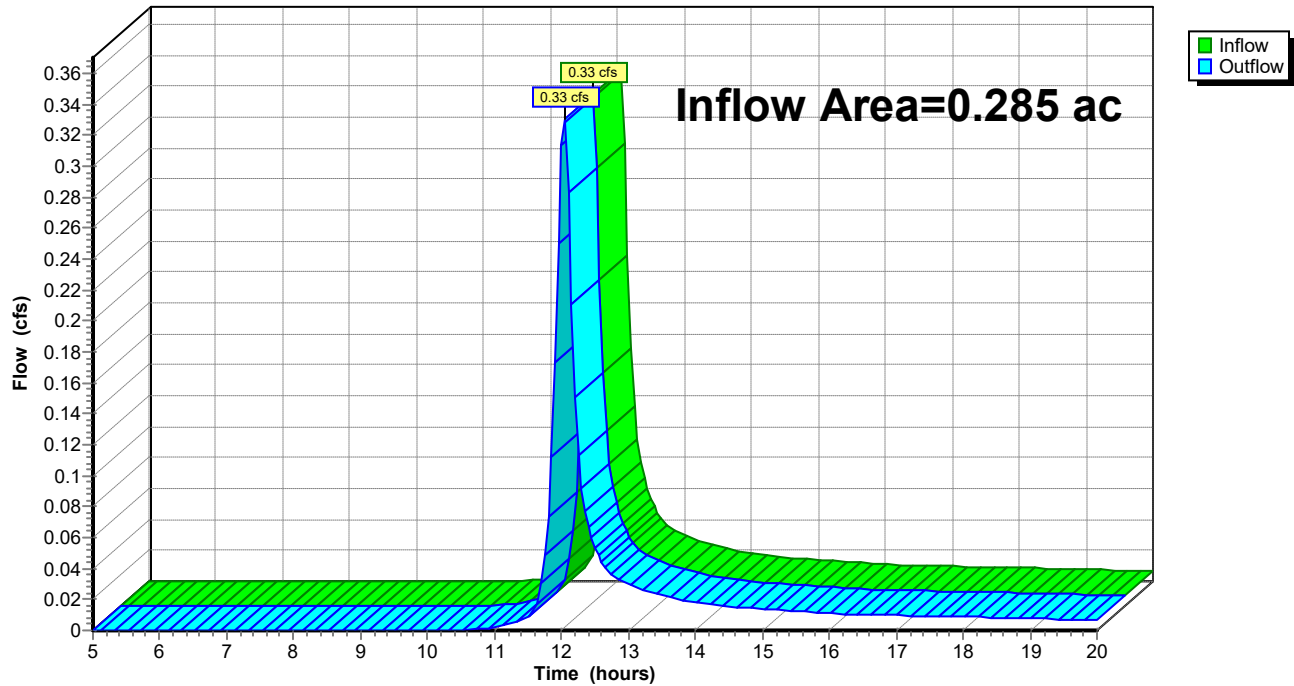
## Subcatchment C: Trib C

Hydrograph



## Reach RA: REACH A

Hydrograph





**210144-existing***Type II 24-hr 10 Year Rainfall=4.50"*

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Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points

Runoff by SCS TR-20 method, UH=SCS

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

**Subcatchment A: Trib A**

Runoff Area=5,788 sf 0.00% Impervious Runoff Depth&gt;2.27"

Flow Length=100' Slope=0.0225 '/' Tc=10.4 min CN=80 Runoff=0.49 cfs 0.025 af

**Subcatchment B: Trib B**

Runoff Area=914 sf 0.00% Impervious Runoff Depth&gt;2.28"

Flow Length=26' Slope=0.0561 '/' Tc=2.4 min CN=80 Runoff=0.10 cfs 0.004 af

**Subcatchment C: Trib C**

Runoff Area=5,724 sf 0.00% Impervious Runoff Depth&gt;2.27"

Flow Length=74' Slope=0.0050 '/' Tc=13.8 min CN=80 Runoff=0.43 cfs 0.025 af

**Reach RA: REACH A**

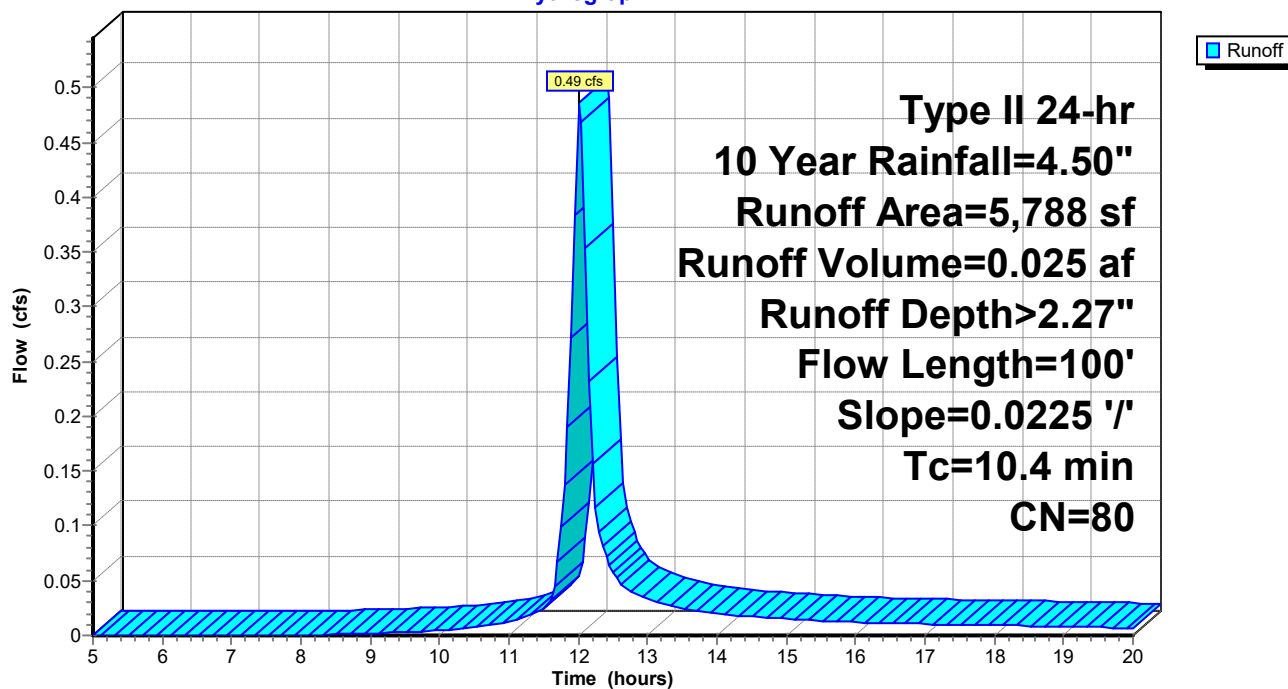
Inflow=0.93 cfs 0.054 af

Outflow=0.93 cfs 0.054 af

**Total Runoff Area = 0.285 ac Runoff Volume = 0.054 af Average Runoff Depth = 2.27"****100.00% Pervious = 0.285 ac 0.00% Impervious = 0.000 ac**

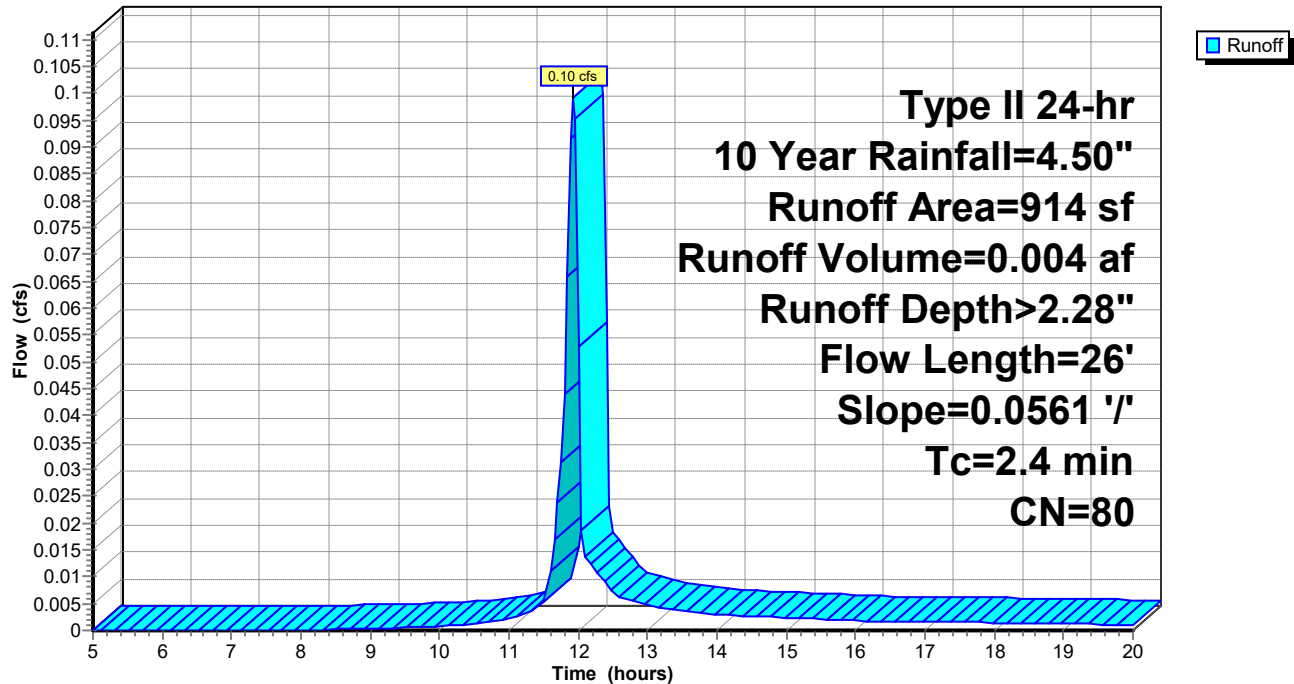
## Subcatchment A: Trib A

Hydrograph



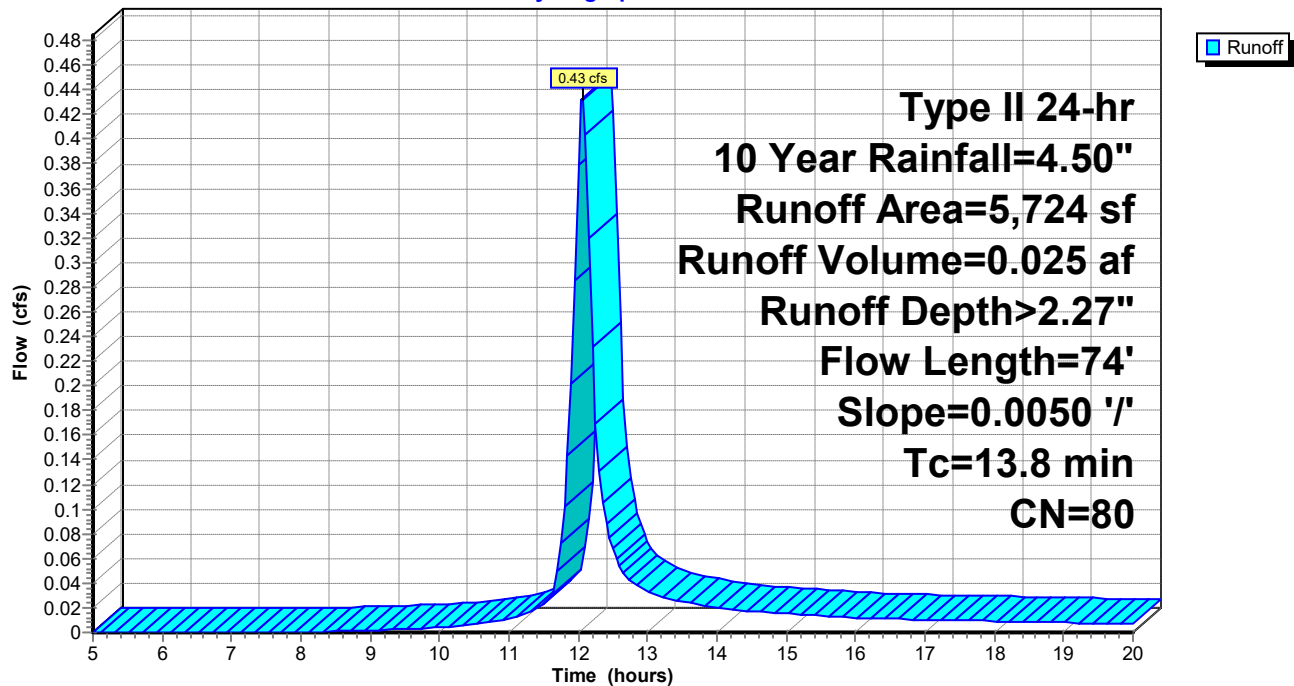
## Subcatchment B: Trib B

Hydrograph



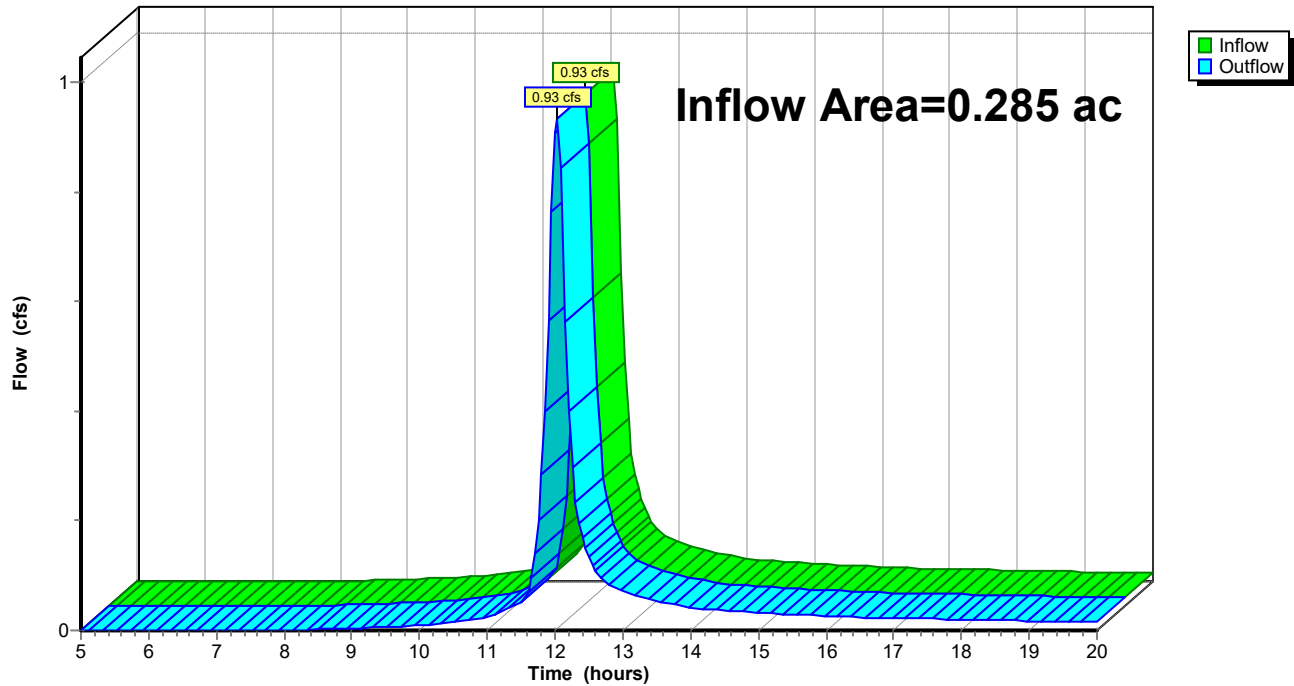
## Subcatchment C: Trib C

Hydrograph



## Reach RA: REACH A

Hydrograph



**210144-existing***Type II 24-hr 100 Year Rainfall=7.00"*

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Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points

Runoff by SCS TR-20 method, UH=SCS

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

**Subcatchment A: Trib A**

Runoff Area=5,788 sf 0.00% Impervious Runoff Depth&gt;4.37"

Flow Length=100' Slope=0.0225 '/' Tc=10.4 min CN=80 Runoff=0.91 cfs 0.048 af

**Subcatchment B: Trib B**

Runoff Area=914 sf 0.00% Impervious Runoff Depth&gt;4.38"

Flow Length=26' Slope=0.0561 '/' Tc=2.4 min CN=80 Runoff=0.18 cfs 0.008 af

**Subcatchment C: Trib C**

Runoff Area=5,724 sf 0.00% Impervious Runoff Depth&gt;4.37"

Flow Length=74' Slope=0.0050 '/' Tc=13.8 min CN=80 Runoff=0.81 cfs 0.048 af

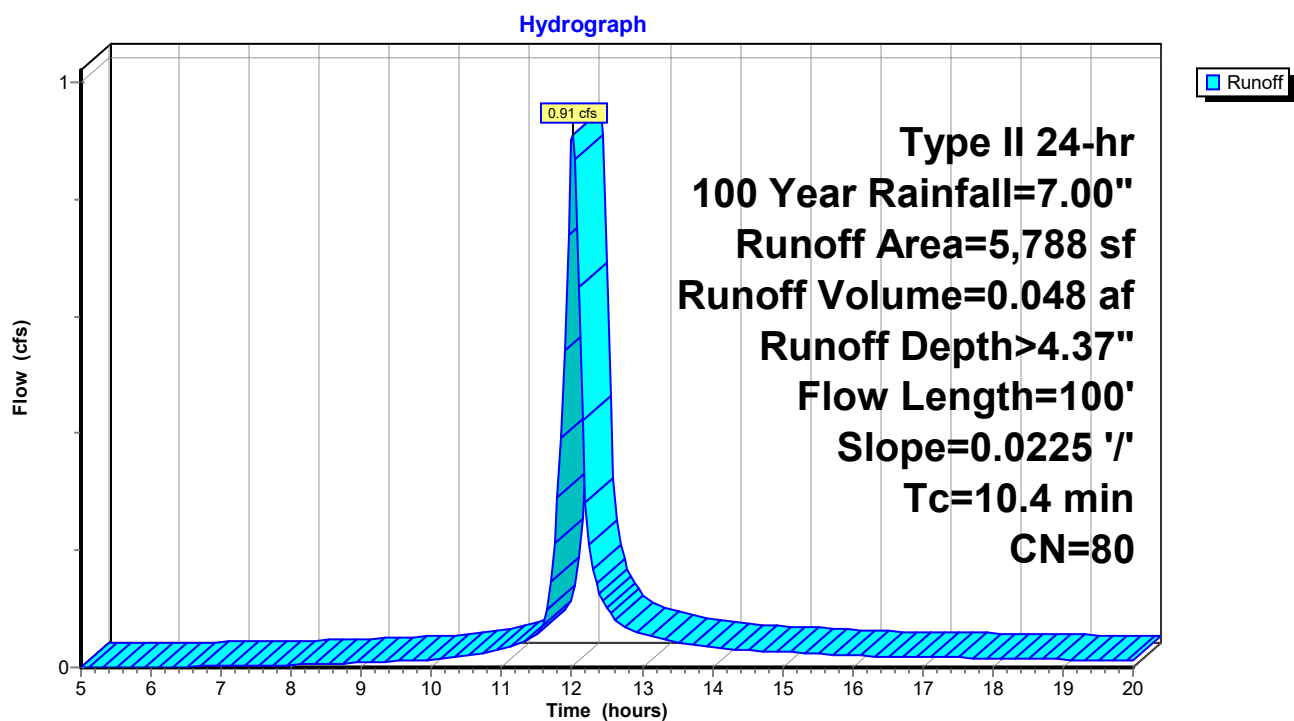
**Reach RA: REACH A**

Inflow=1.75 cfs 0.104 af

Outflow=1.75 cfs 0.104 af

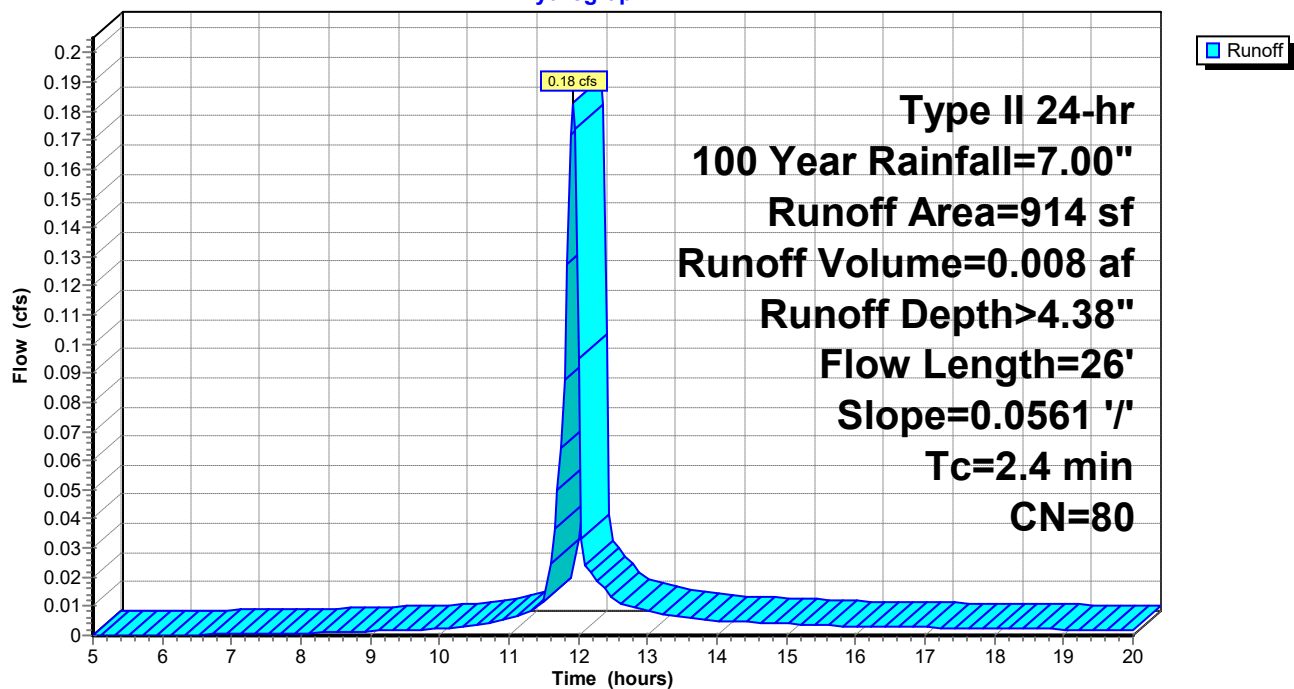
**Total Runoff Area = 0.285 ac Runoff Volume = 0.104 af Average Runoff Depth = 4.37"****100.00% Pervious = 0.285 ac 0.00% Impervious = 0.000 ac**

## Subcatchment A: Trib A



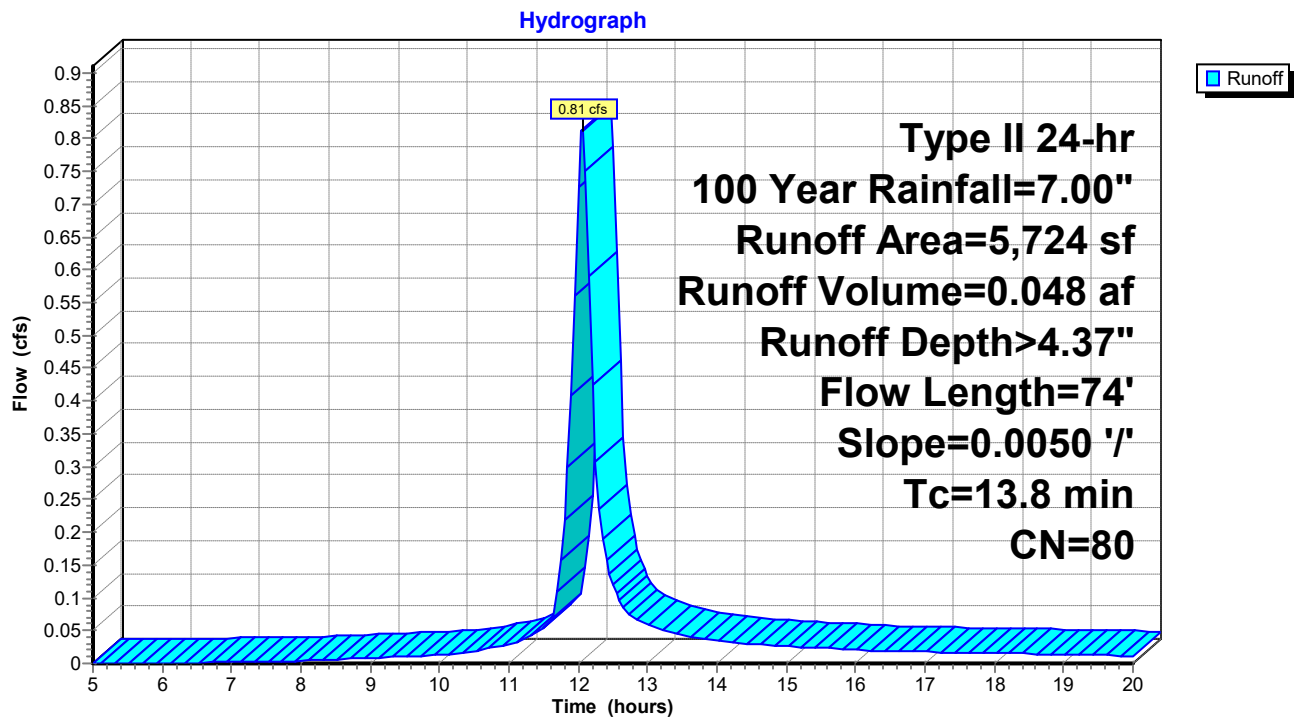
## Subcatchment B: Trib B

Hydrograph

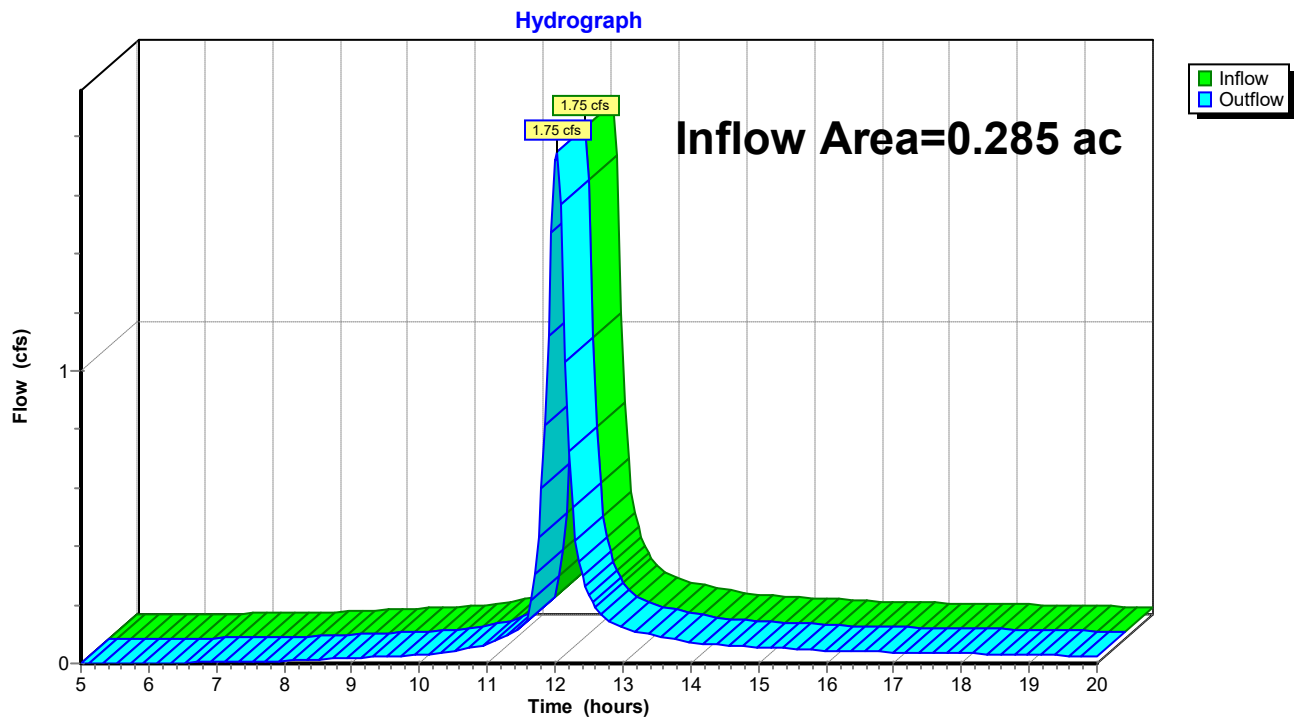


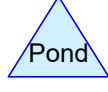
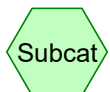
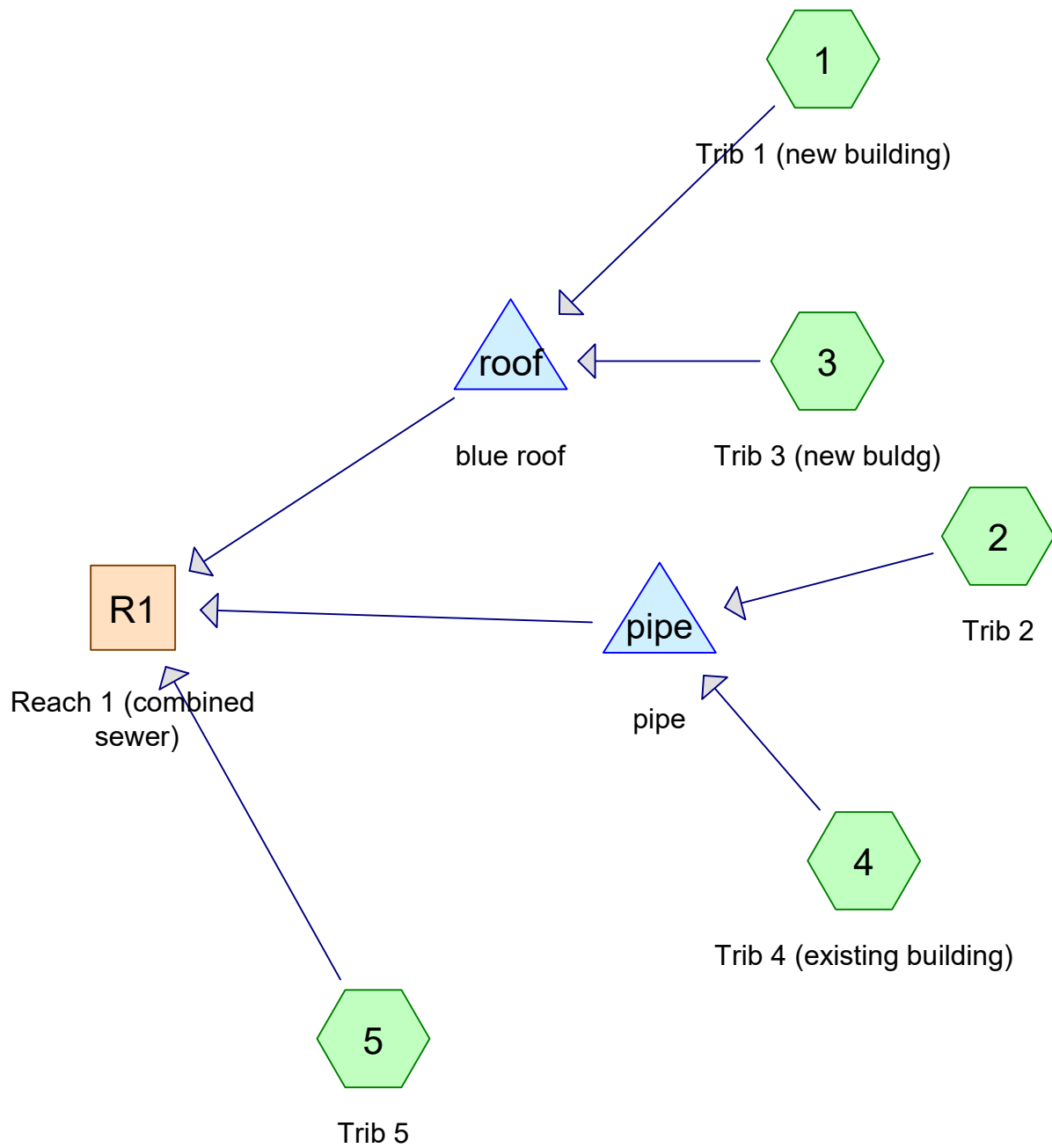


## Subcatchment C: Trib C



## Reach RA: REACH A





**Area Listing (all nodes)**

Area (acres)	CN	Description (subcatchment-numbers)
0.036	80	>75% Grass cover, Good, HSG D (2, 5)
0.142	98	Paved parking, HSG D (1, 2, 5)
0.107	98	Unconnected roofs, HSG D (3, 4)
<b>0.286</b>	<b>96</b>	<b>TOTAL AREA</b>

**Soil Listing (all nodes)**

Area (acres)	Soil Group	Subcatchment Numbers
0.000	HSG A	
0.000	HSG B	
0.000	HSG C	
0.286	HSG D	1, 2, 3, 4, 5
0.000	Other	
<b>0.286</b>		<b>TOTAL AREA</b>

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**Ground Covers (all nodes)**

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
0.000	0.000	0.000	0.036	0.000	0.036	>75% Grass cover, Good	2, 5
0.000	0.000	0.000	0.142	0.000	0.142	Paved parking	1, 2, 5
0.000	0.000	0.000	0.107	0.000	0.107	Unconnected roofs	3, 4
<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.286</b>	<b>0.000</b>	<b>0.286</b>	<b>TOTAL AREA</b>	

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**Pipe Listing (all nodes)**

Line#	Node Number	In-Invert (feet)	Out-Invert (feet)	Length (feet)	Slope (ft/ft)	n	Diam/Width (inches)	Height (inches)	Inside-Fill (inches)
1	4	0.00	0.00	61.0	0.0050	0.018	48.0	0.0	0.0

Time span=5.00-30.00 hrs, dt=0.05 hrs, 501 points

Runoff by SCS TR-20 method, UH=SCS

Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

**Subcatchment 1: Trib 1 (new building)** Runoff Area=4,559 sf 100.00% Impervious Runoff Depth>2.23"  
Flow Length=93' Tc=2.9 min CN=98 Runoff=0.39 cfs 0.019 af

**Subcatchment 2: Trib 2** Runoff Area=1,357 sf 92.11% Impervious Runoff Depth>2.14"  
Flow Length=91' Slope=0.0050 '/' Tc=2.2 min CN=97 Runoff=0.11 cfs 0.006 af

**Subcatchment 3: Trib 3 (new buldg)** Runoff Area=752 sf 100.00% Impervious Runoff Depth>2.23"  
Flow Length=118' Slope=0.0050 '/' Tc=2.2 min CN=98 Runoff=0.06 cfs 0.003 af

**Subcatchment 4: Trib 4 (existing building)** Runoff Area=3,927 sf 100.00% Impervious Runoff Depth>2.23"  
Flow Length=201' Tc=2.5 min CN=98 Runoff=0.33 cfs 0.017 af

**Subcatchment 5: Trib 5** Runoff Area=1,845 sf 21.08% Impervious Runoff Depth=1.12"  
Flow Length=29' Slope=0.0430 '/' Tc=3.0 min CN=84 Runoff=0.09 cfs 0.004 af

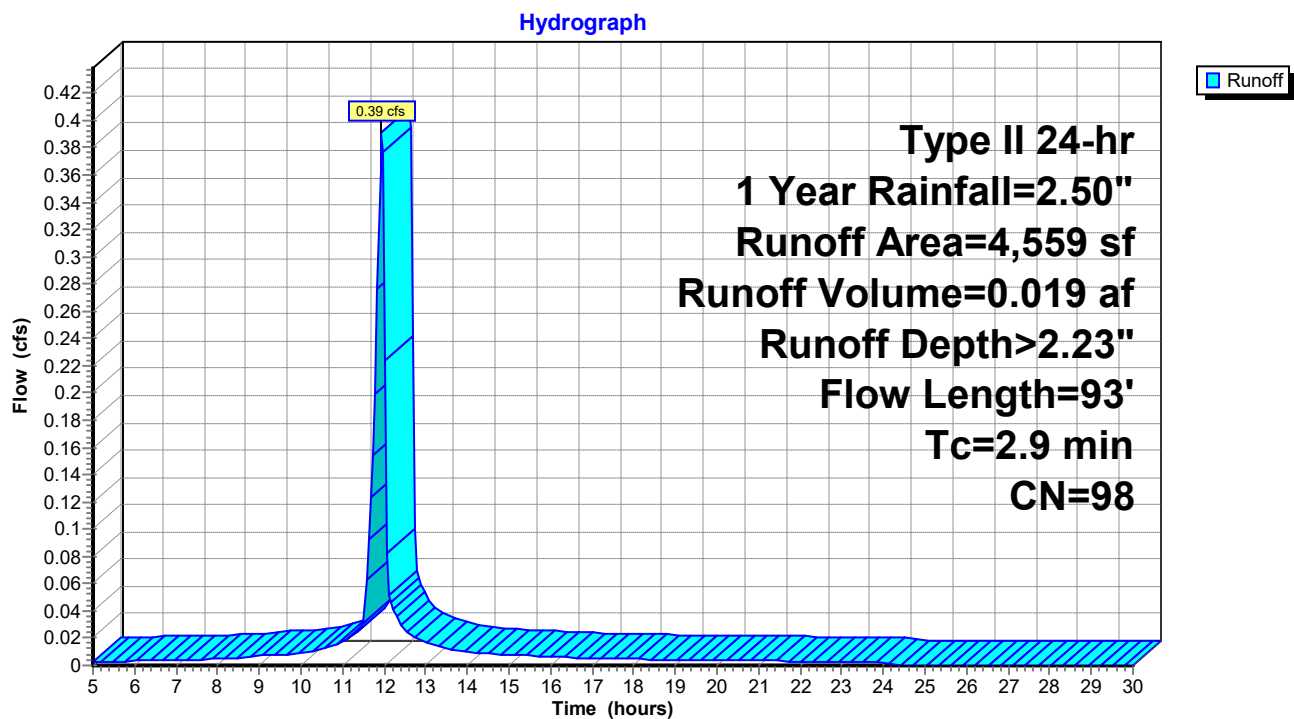
**Reach R1: Reach 1 (combined sewer)** Inflow=0.30 cfs 0.026 af  
Outflow=0.30 cfs 0.026 af

**Pond pipe: pipe** Peak Elev=228.57' Storage=166 cf Inflow=0.44 cfs 0.022 af  
Outflow=0.22 cfs 0.022 af

**Pond roof: blue roof** Peak Elev=293.21' Storage=987 cf Inflow=0.46 cfs 0.023 af  
Outflow=0.00 cfs 0.000 af

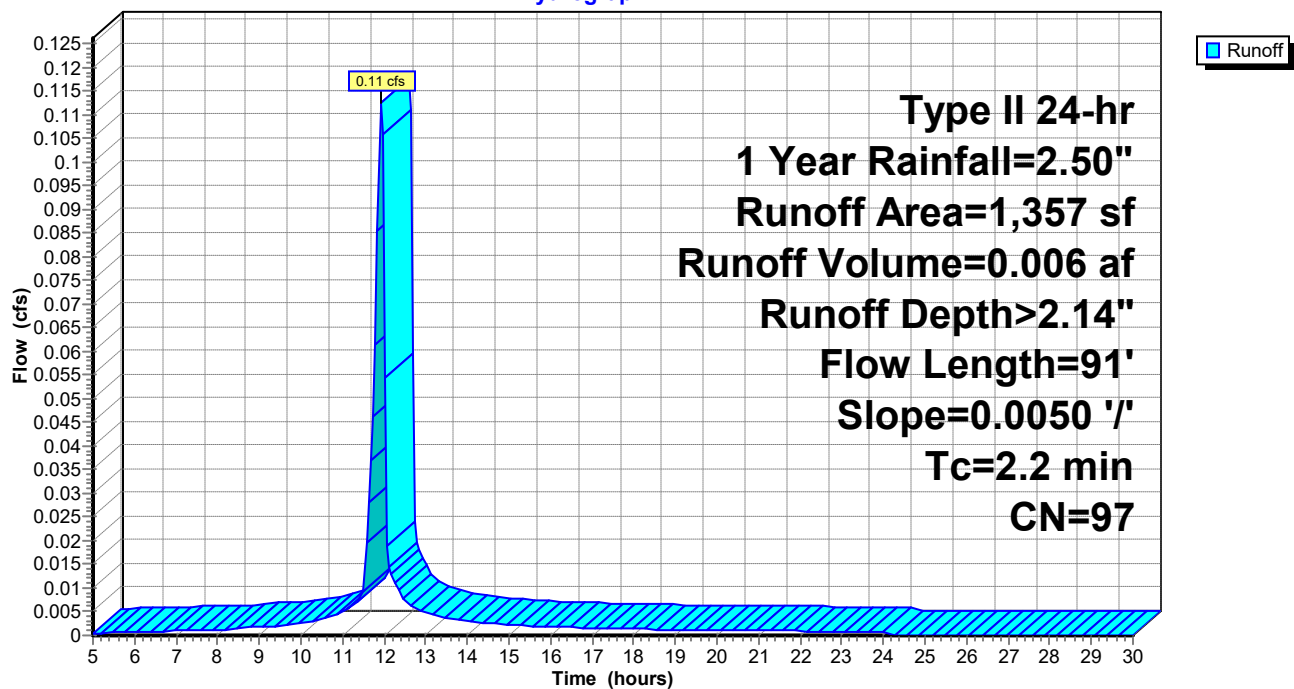
**Total Runoff Area = 0.286 ac Runoff Volume = 0.049 af Average Runoff Depth = 2.06"**  
**12.56% Pervious = 0.036 ac 87.44% Impervious = 0.250 ac**



**Subcatchment 1: Trib 1 (new building)**

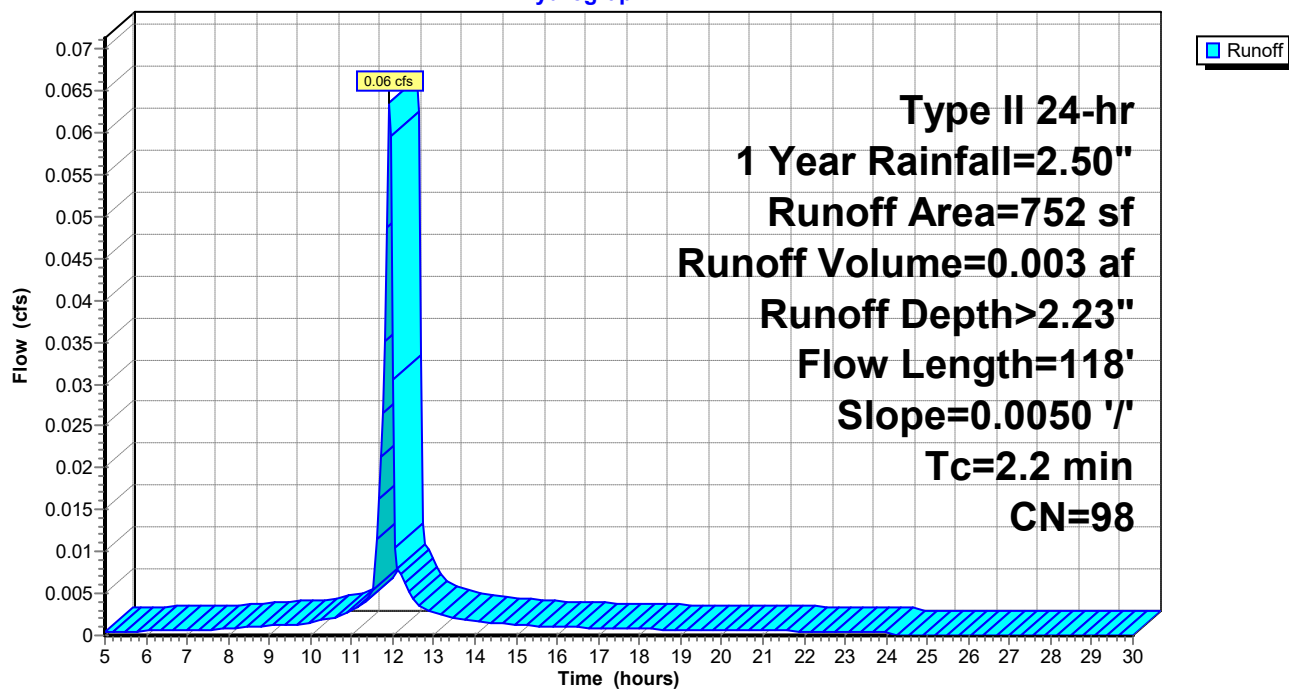
## Subcatchment 2: Trib 2

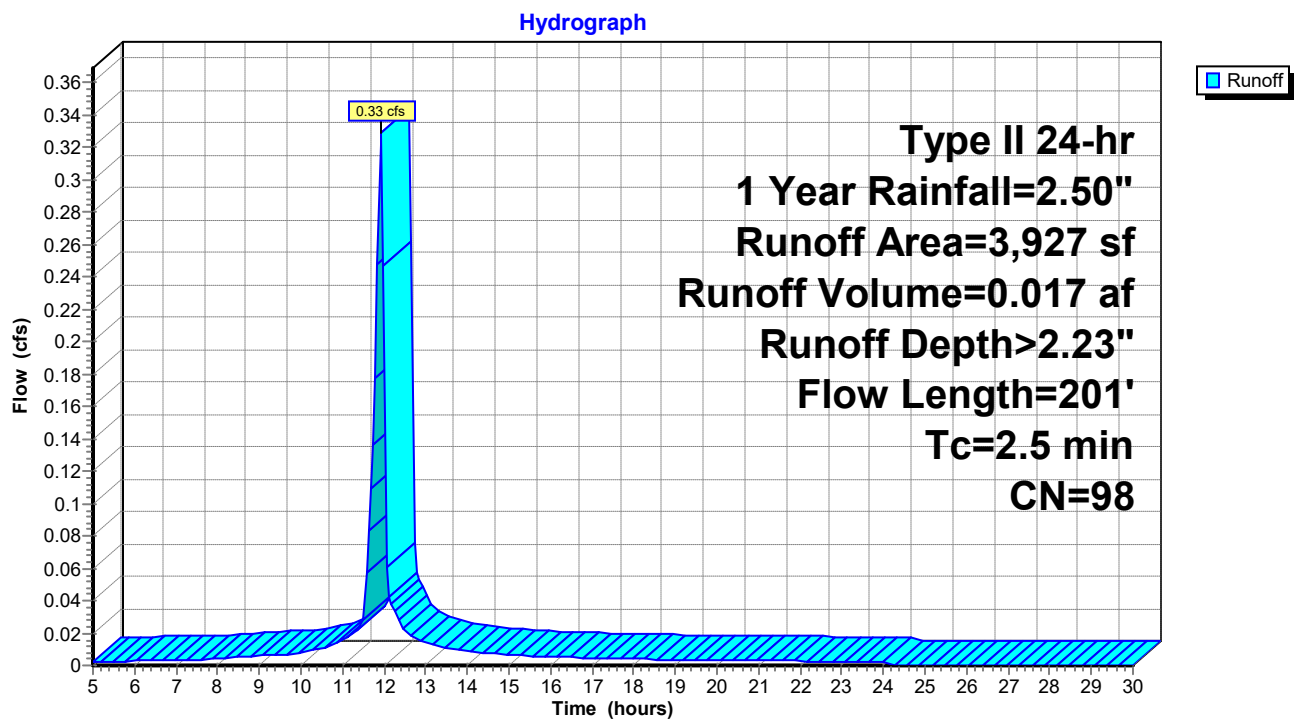
Hydrograph



## Subcatchment 3: Trib 3 (new buldg)

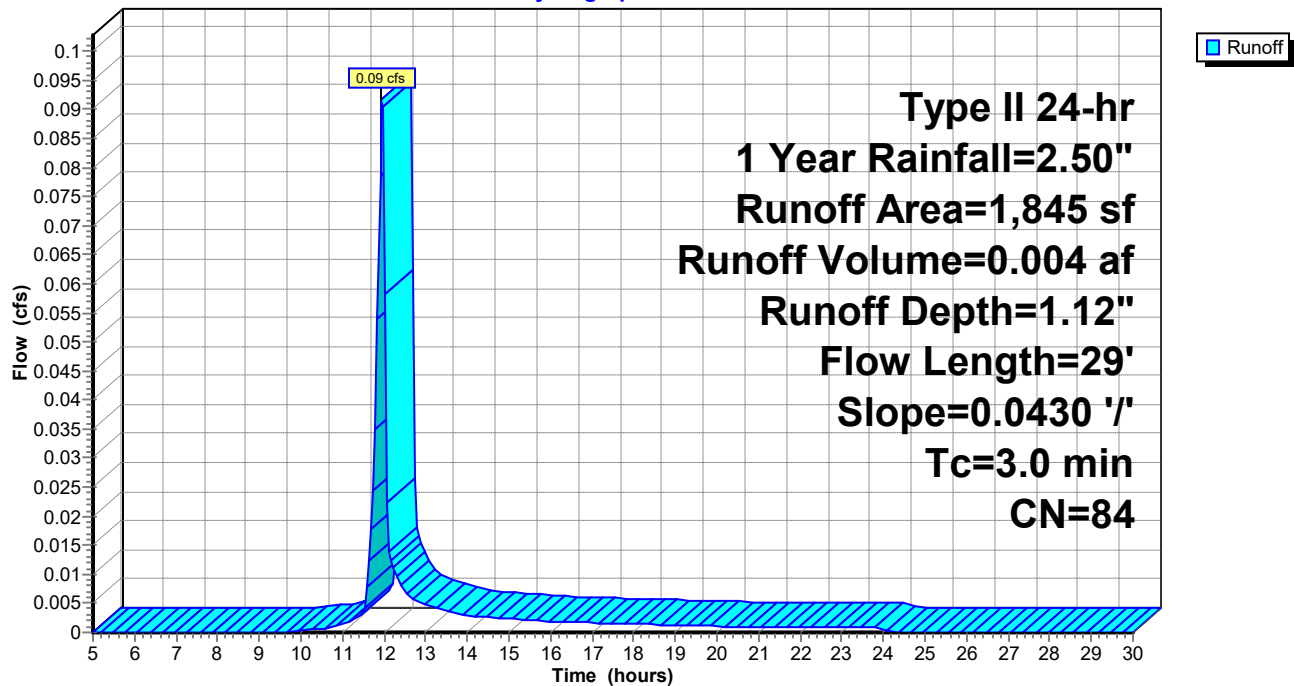
Hydrograph



**Subcatchment 4: Trib 4 (existing building)**

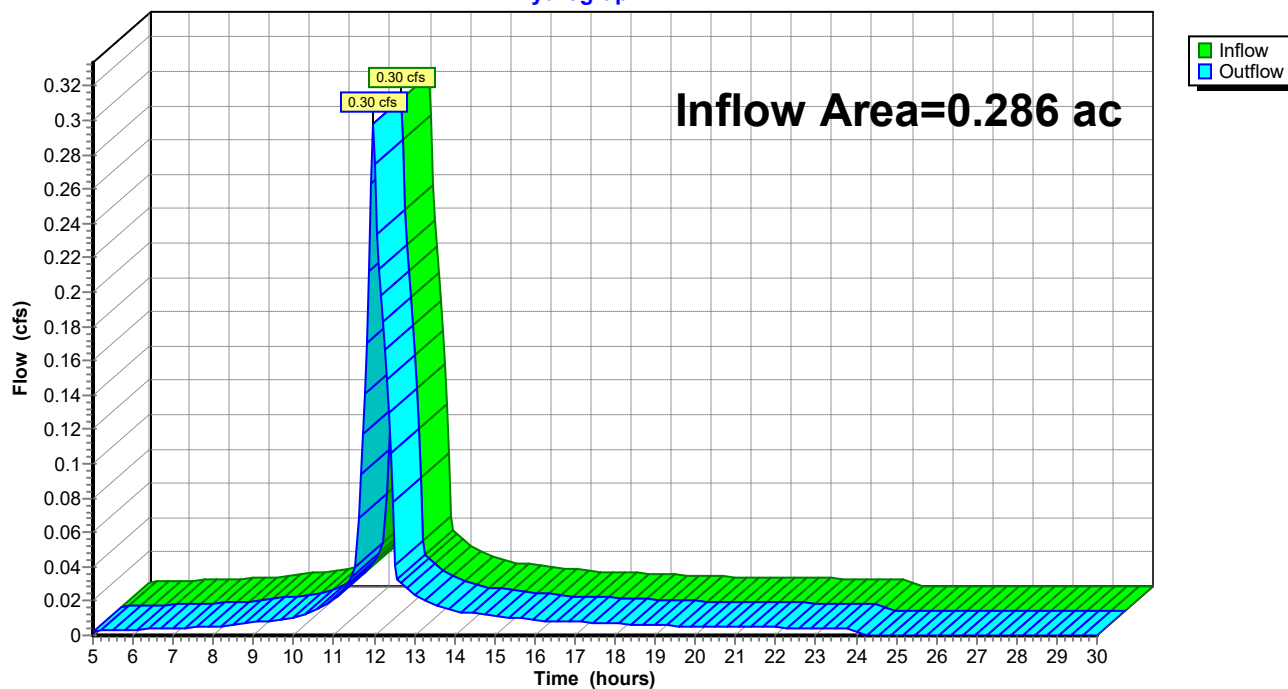
## Subcatchment 5: Trib 5

Hydrograph



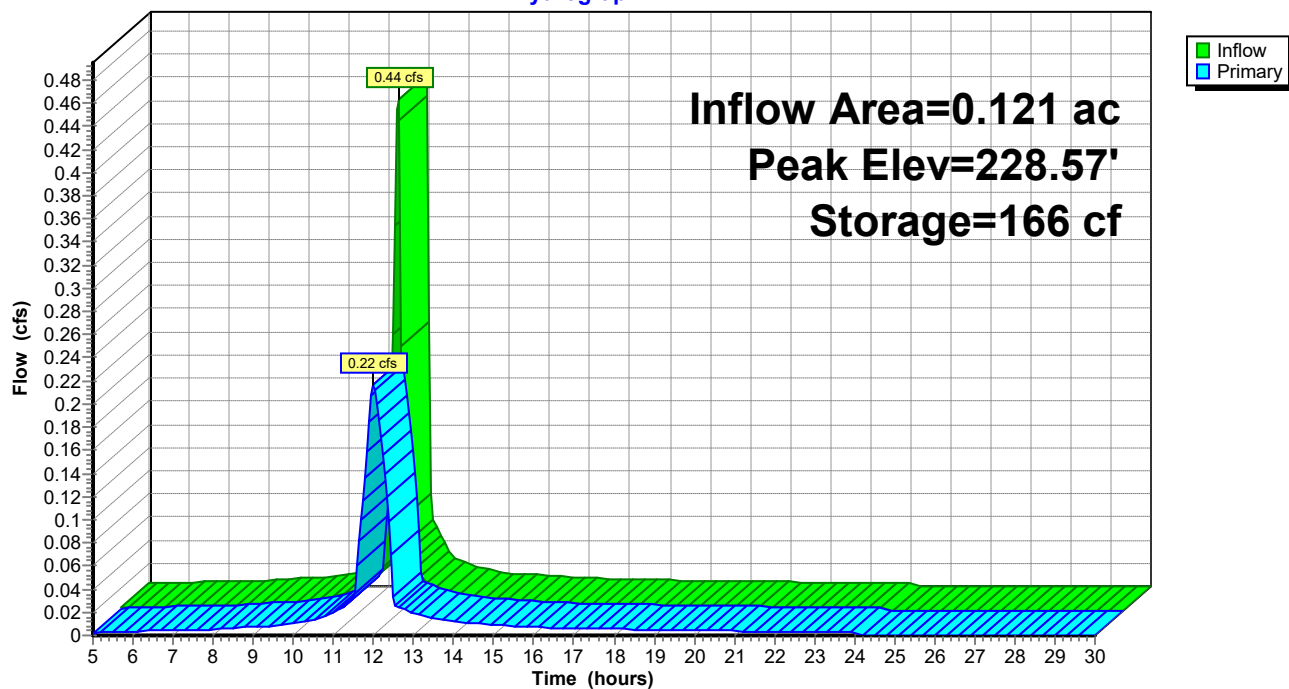
**Reach R1: Reach 1 (combined sewer)**

Hydrograph



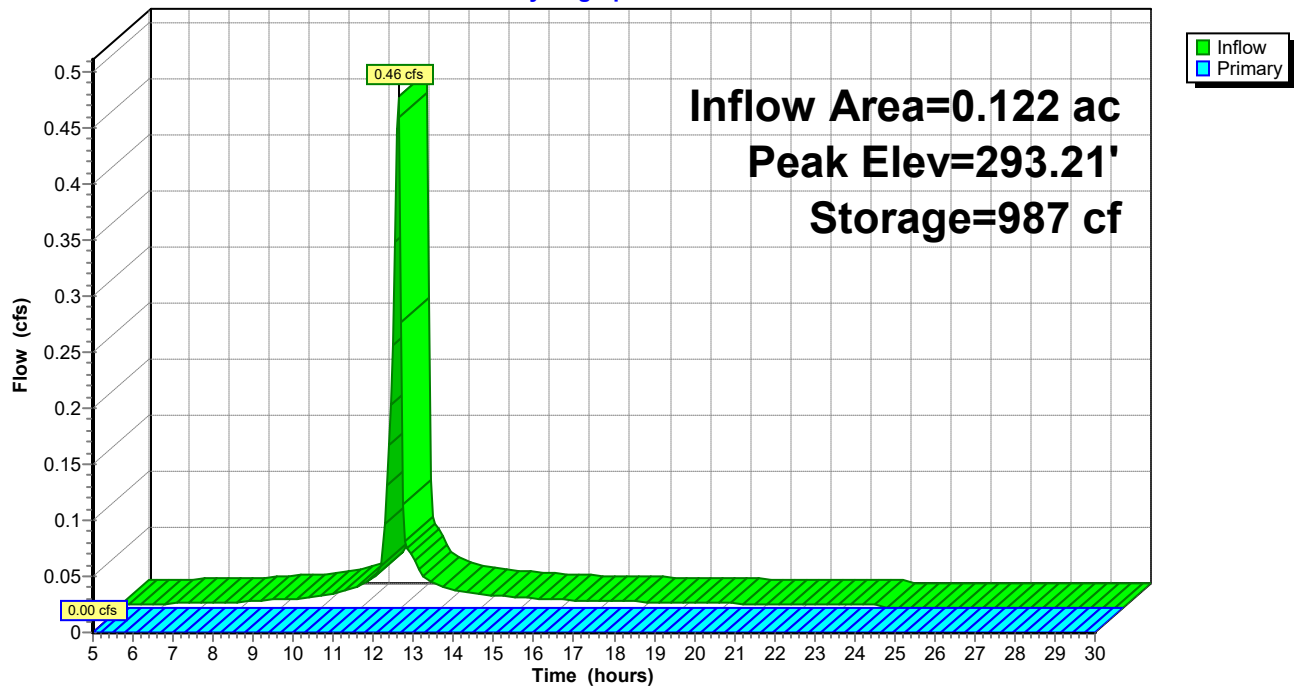
## Pond pipe: pipe

## Hydrograph



## Pond roof: blue roof

Hydrograph





Time span=5.00-30.00 hrs, dt=0.05 hrs, 501 points  
Runoff by SCS TR-20 method, UH=SCS  
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

**Subcatchment 1: Trib 1 (new building)** Runoff Area=4,559 sf 100.00% Impervious Runoff Depth>4.14"  
Flow Length=93' Tc=2.9 min CN=98 Runoff=0.71 cfs 0.036 af

**Subcatchment 2: Trib 2** Runoff Area=1,357 sf 92.11% Impervious Runoff Depth>4.06"  
Flow Length=91' Slope=0.0050 '/' Tc=2.2 min CN=97 Runoff=0.21 cfs 0.011 af

**Subcatchment 3: Trib 3 (new buldg)** Runoff Area=752 sf 100.00% Impervious Runoff Depth>4.14"  
Flow Length=118' Slope=0.0050 '/' Tc=2.2 min CN=98 Runoff=0.12 cfs 0.006 af

**Subcatchment 4: Trib 4 (existing building)** Runoff Area=3,927 sf 100.00% Impervious Runoff Depth>4.14"  
Flow Length=201' Tc=2.5 min CN=98 Runoff=0.60 cfs 0.031 af

**Subcatchment 5: Trib 5** Runoff Area=1,845 sf 21.08% Impervious Runoff Depth=2.82"  
Flow Length=29' Slope=0.0430 '/' Tc=3.0 min CN=84 Runoff=0.22 cfs 0.010 af

**Reach R1: Reach 1 (combined sewer)** Inflow=0.50 cfs 0.061 af  
Outflow=0.50 cfs 0.061 af

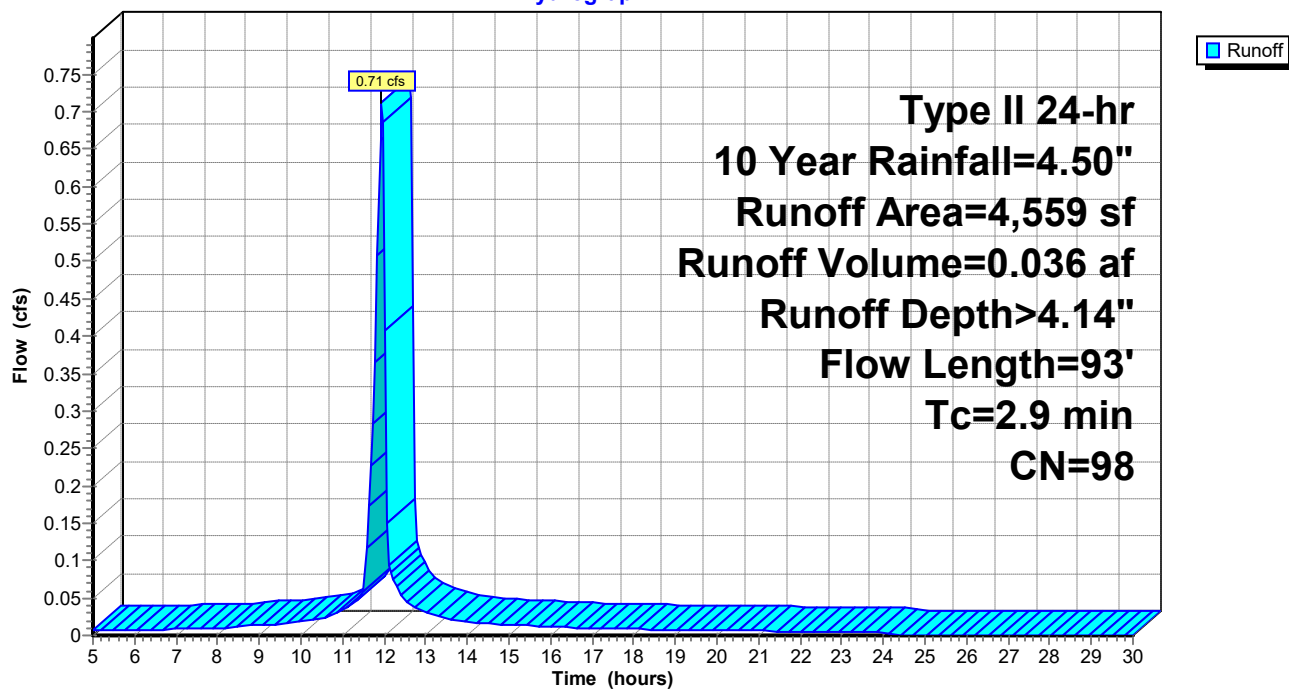
**Pond pipe: pipe** Peak Elev=229.59' Storage=406 cf Inflow=0.81 cfs 0.042 af  
Outflow=0.30 cfs 0.042 af

**Pond roof: blue roof** Peak Elev=293.32' Storage=1,474 cf Inflow=0.83 cfs 0.042 af  
Outflow=0.02 cfs 0.010 af

**Total Runoff Area = 0.286 ac Runoff Volume = 0.094 af Average Runoff Depth = 3.93"**  
**12.56% Pervious = 0.036 ac 87.44% Impervious = 0.250 ac**

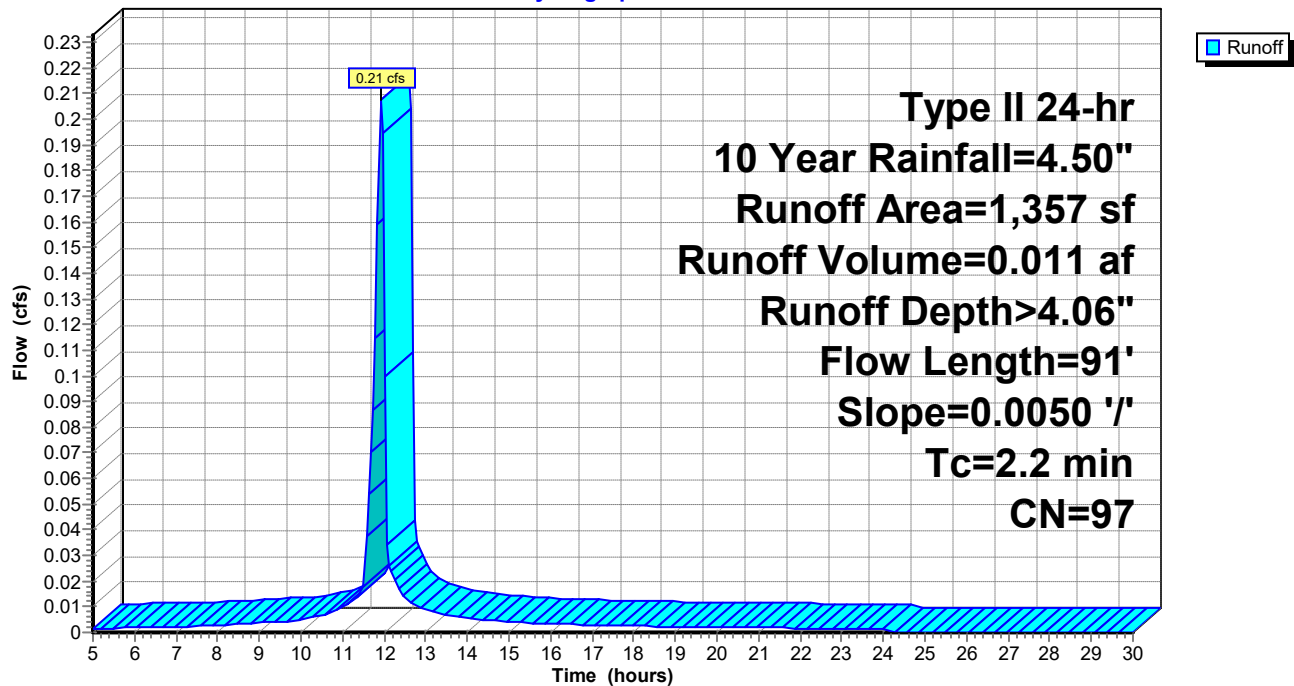
**Subcatchment 1: Trib 1 (new building)**

Hydrograph



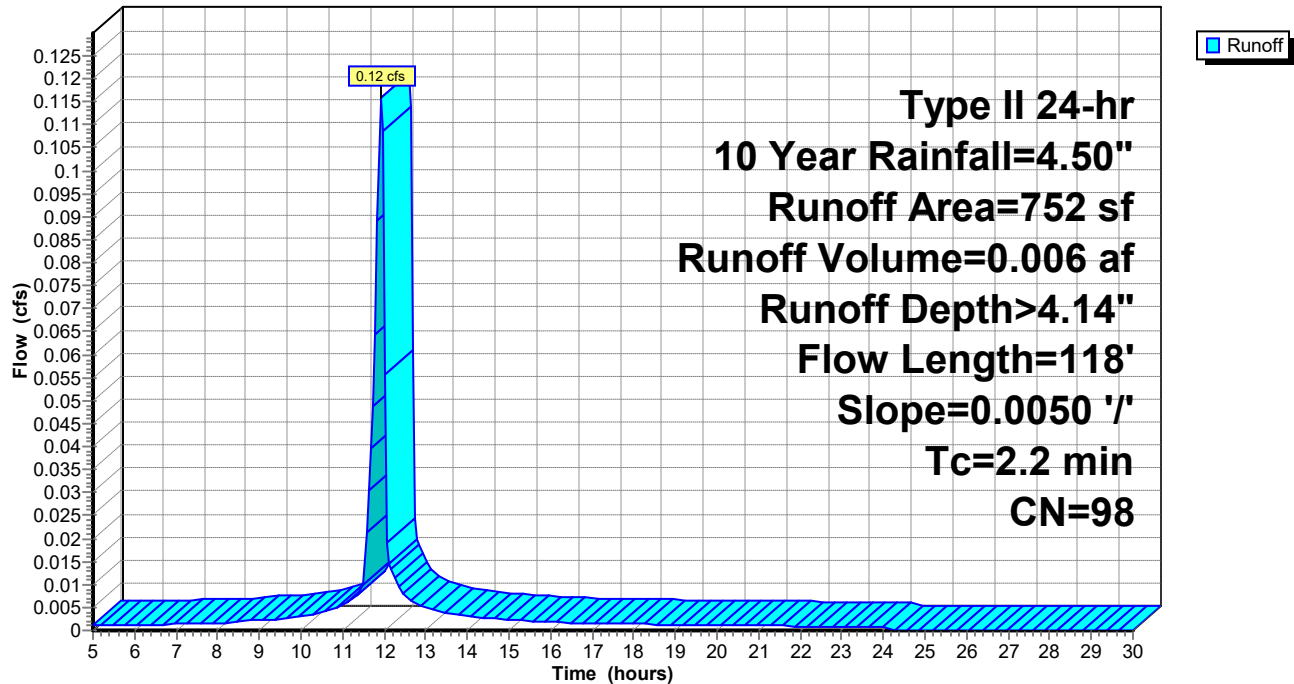
## Subcatchment 2: Trib 2

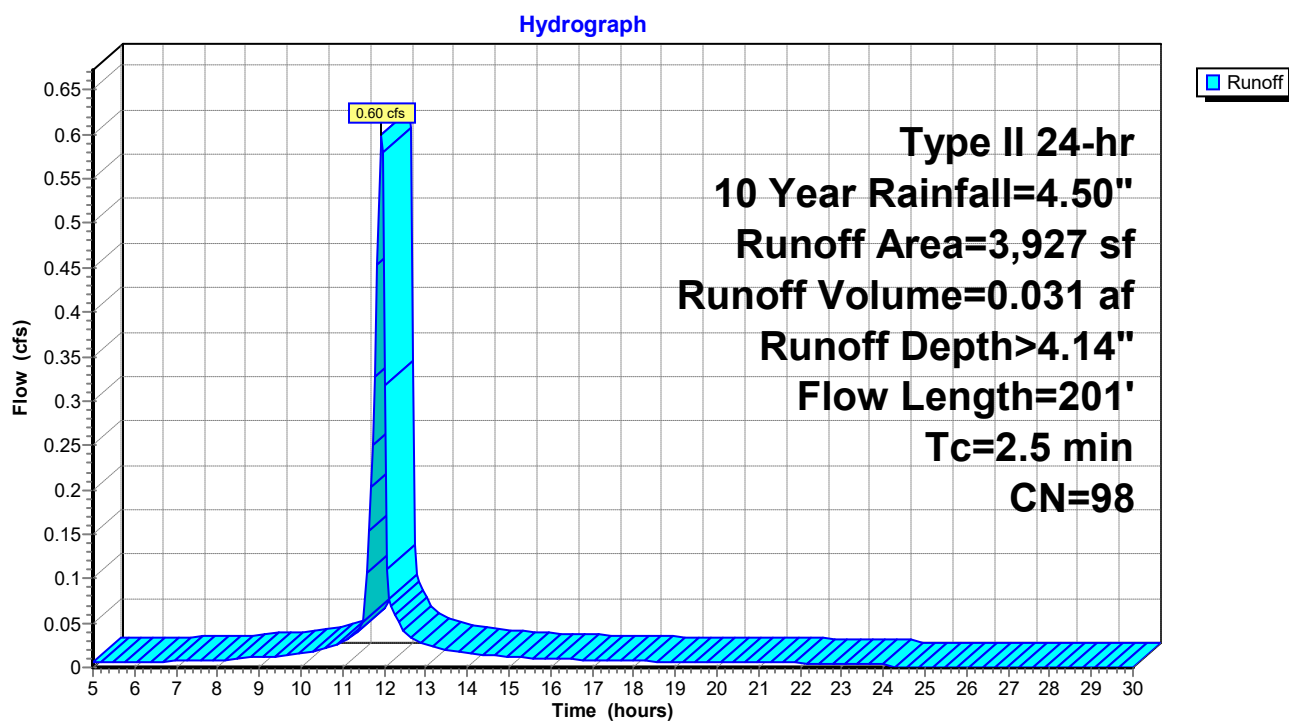
Hydrograph



**Subcatchment 3: Trib 3 (new buldg)**

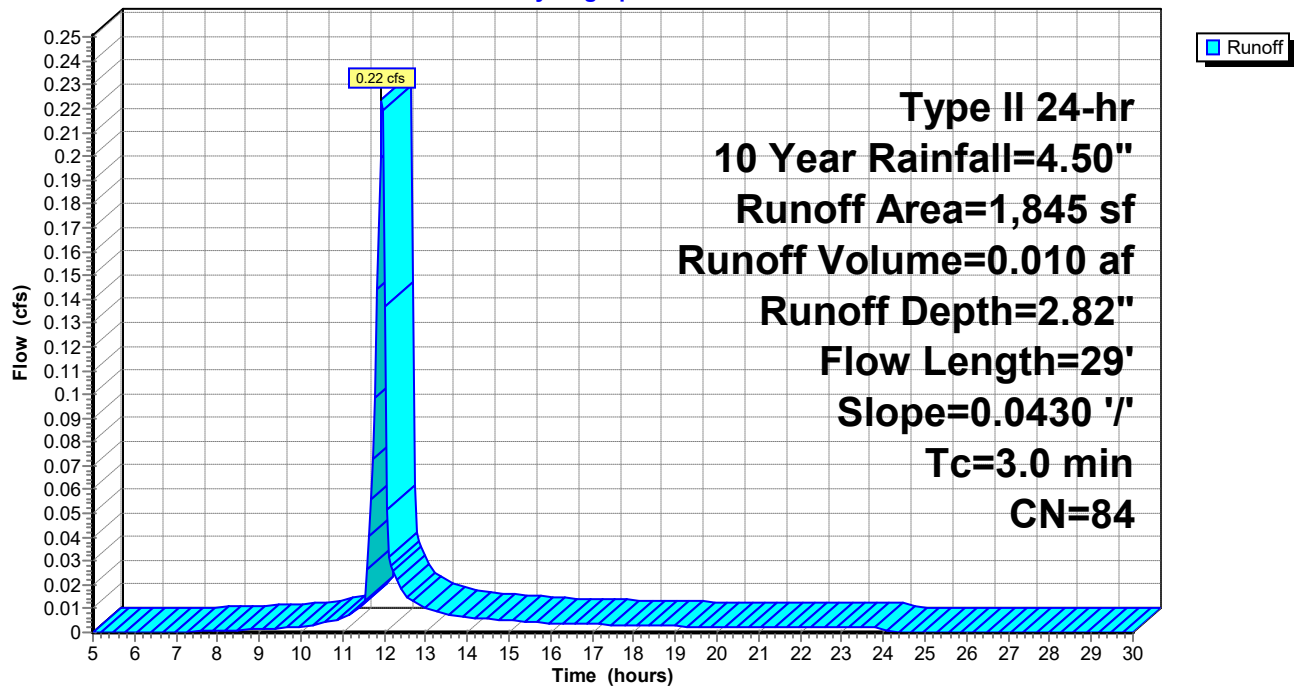
Hydrograph



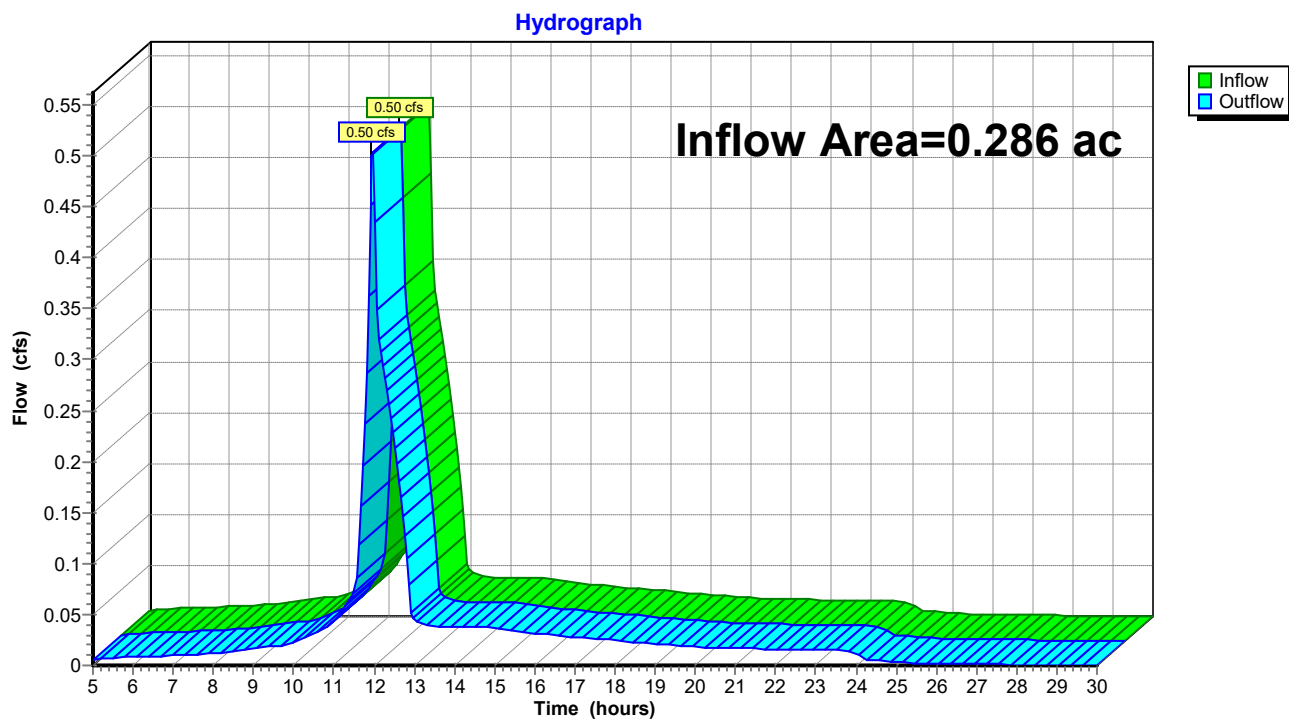
**Subcatchment 4: Trib 4 (existing building)**

## Subcatchment 5: Trib 5

Hydrograph

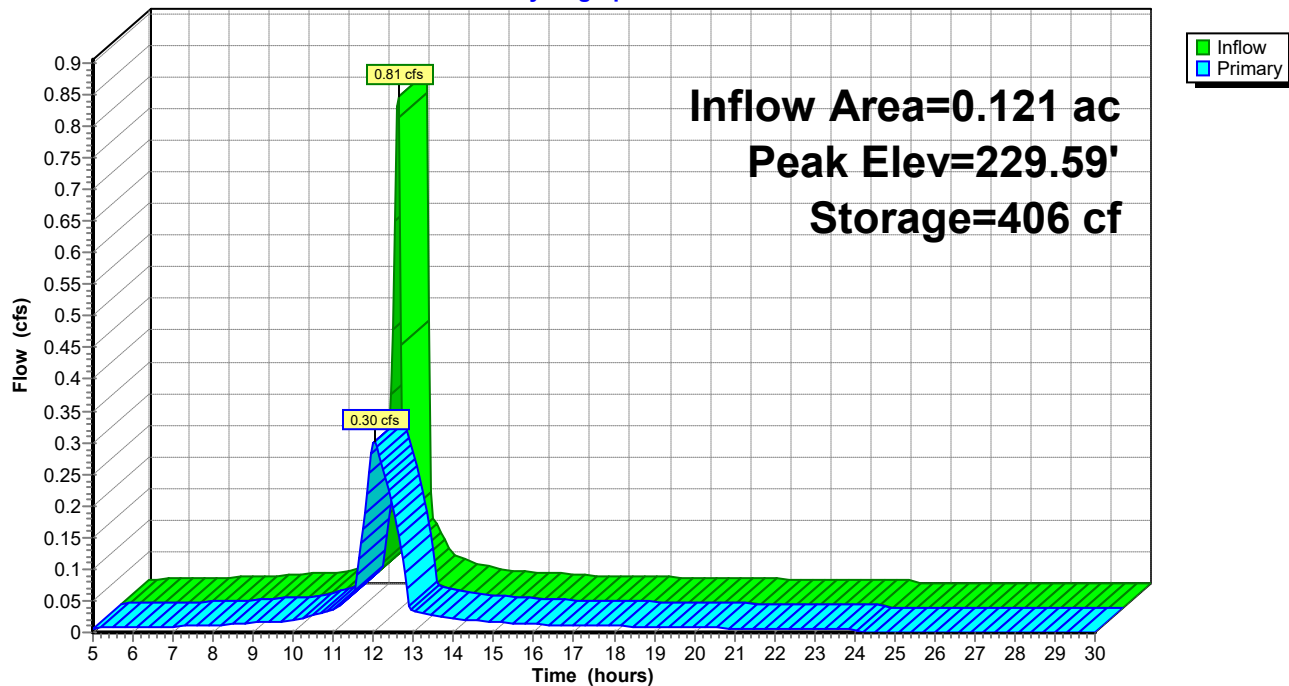


## Reach R1: Reach 1 (combined sewer)



## Pond pipe: pipe

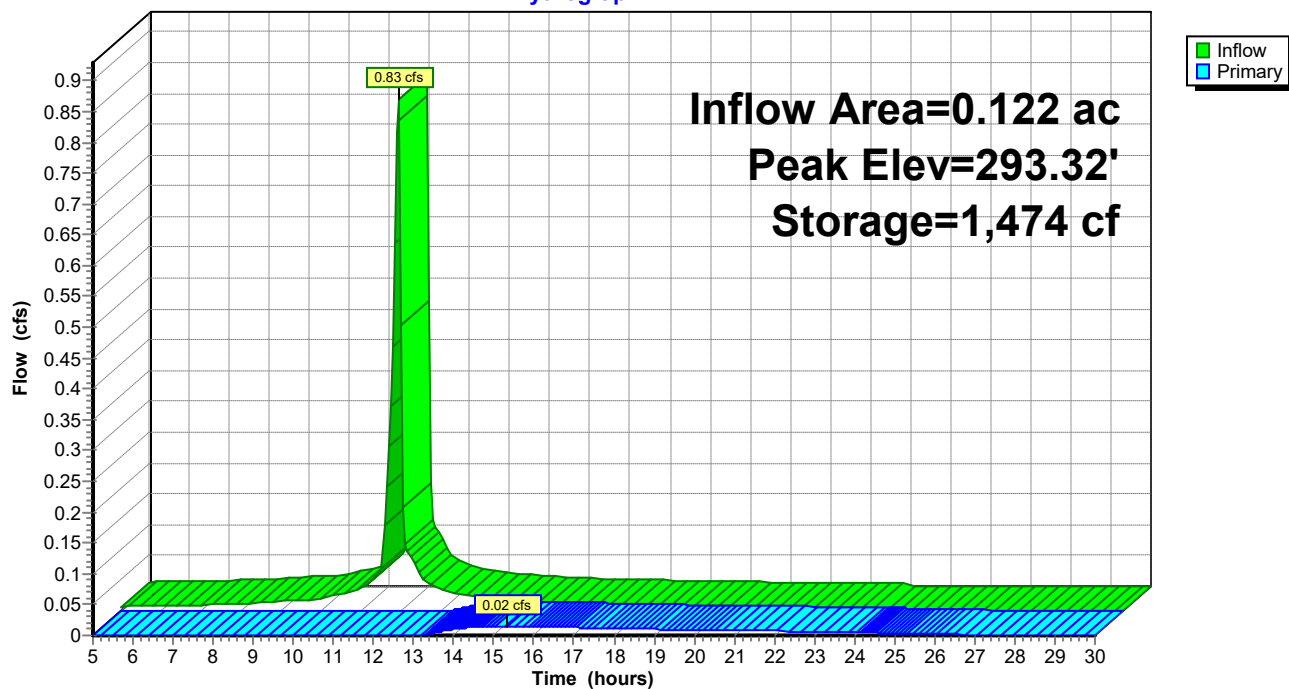
Hydrograph





## Pond roof: blue roof

## Hydrograph



**210144-post**

Prepared by Microsoft

HydroCAD® 10.00 s/n 03289 © 2012 HydroCAD Software Solutions LLC

*Type II 24-hr 100 Year Rainfall=7.00"*

Printed 8/9/2021

Page 24

Time span=5.00-30.00 hrs, dt=0.05 hrs, 501 points

Runoff by SCS TR-20 method, UH=SCS

Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

**Subcatchment 1: Trib 1 (new building)**      Runoff Area=4,559 sf   100.00% Impervious   Runoff Depth>6.50"  
Flow Length=93'   Tc=2.9 min   CN=98   Runoff=1.11 cfs   0.057 af

**Subcatchment 2: Trib 2**      Runoff Area=1,357 sf   92.11% Impervious   Runoff Depth>6.44"  
Flow Length=91'   Slope=0.0050 '/'   Tc=2.2 min   CN=97   Runoff=0.33 cfs   0.017 af

**Subcatchment 3: Trib 3 (new buldg)**      Runoff Area=752 sf   100.00% Impervious   Runoff Depth>6.50"  
Flow Length=118'   Slope=0.0050 '/'   Tc=2.2 min   CN=98   Runoff=0.18 cfs   0.009 af

**Subcatchment 4: Trib 4 (existing building)**      Runoff Area=3,927 sf   100.00% Impervious   Runoff Depth>6.50"  
Flow Length=201'   Tc=2.5 min   CN=98   Runoff=0.94 cfs   0.049 af

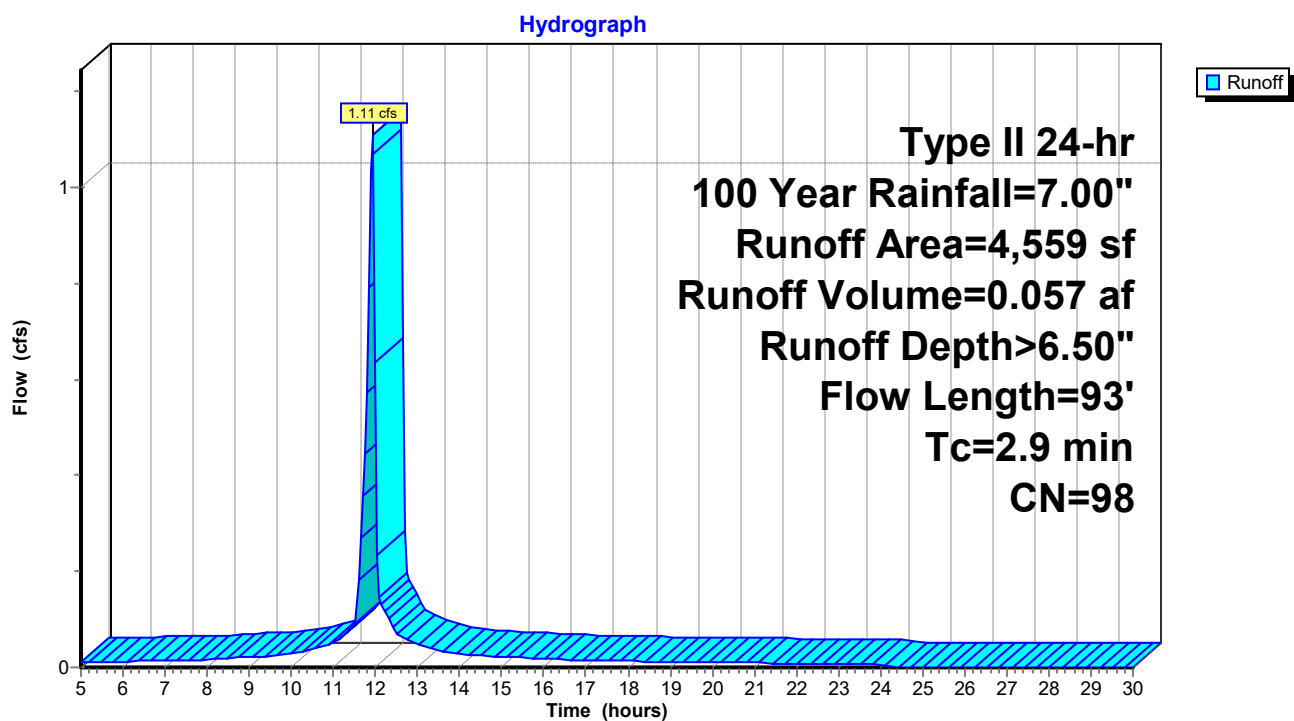
**Subcatchment 5: Trib 5**      Runoff Area=1,845 sf   21.08% Impervious   Runoff Depth>5.14"  
Flow Length=29'   Slope=0.0430 '/'   Tc=3.0 min   CN=84   Runoff=0.39 cfs   0.018 af

**Reach R1: Reach 1 (combined sewer)**      Inflow=0.79 cfs   0.118 af  
Outflow=0.79 cfs   0.118 af

**Pond pipe: pipe**      Peak Elev=231.12'   Storage=730 cf   Inflow=1.26 cfs   0.066 af  
Outflow=0.39 cfs   0.066 af

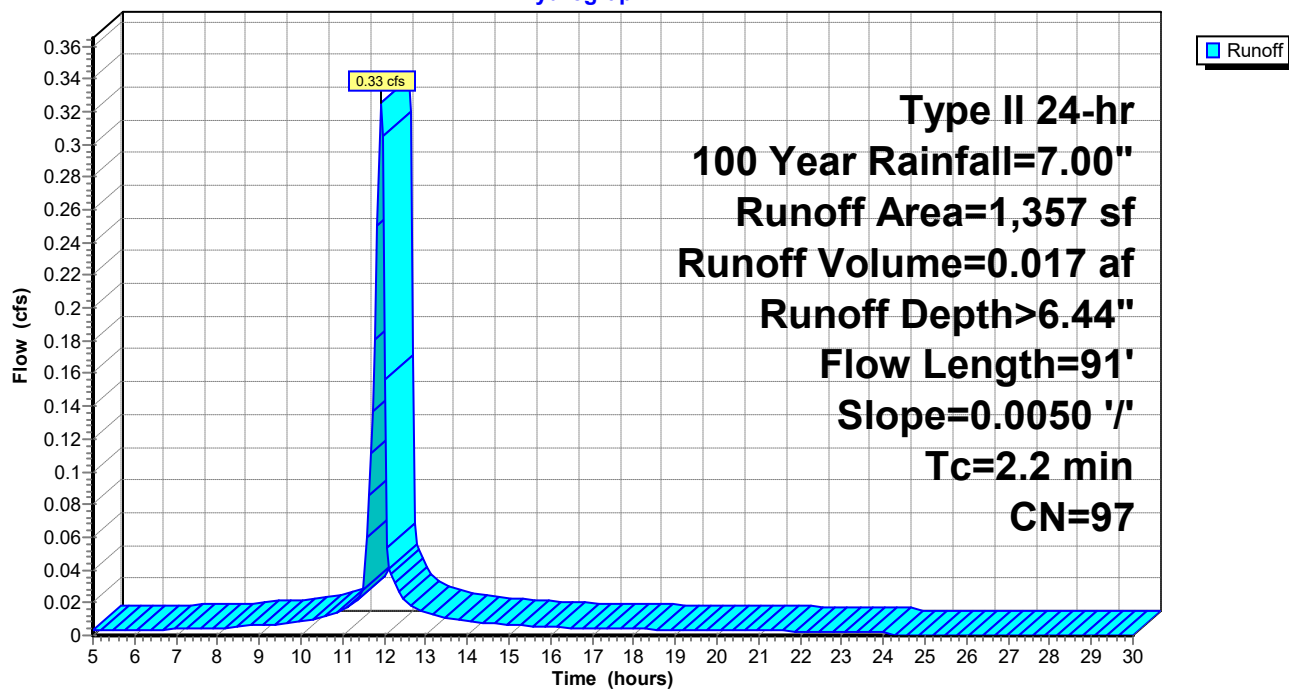
**Pond roof: blue roof**      Peak Elev=293.39'   Storage=1,819 cf   Inflow=1.30 cfs   0.066 af  
Outflow=0.13 cfs   0.034 af

**Total Runoff Area = 0.286 ac   Runoff Volume = 0.150 af   Average Runoff Depth = 6.29"**  
**12.56% Pervious = 0.036 ac   87.44% Impervious = 0.250 ac**

**Subcatchment 1: Trib 1 (new building)**

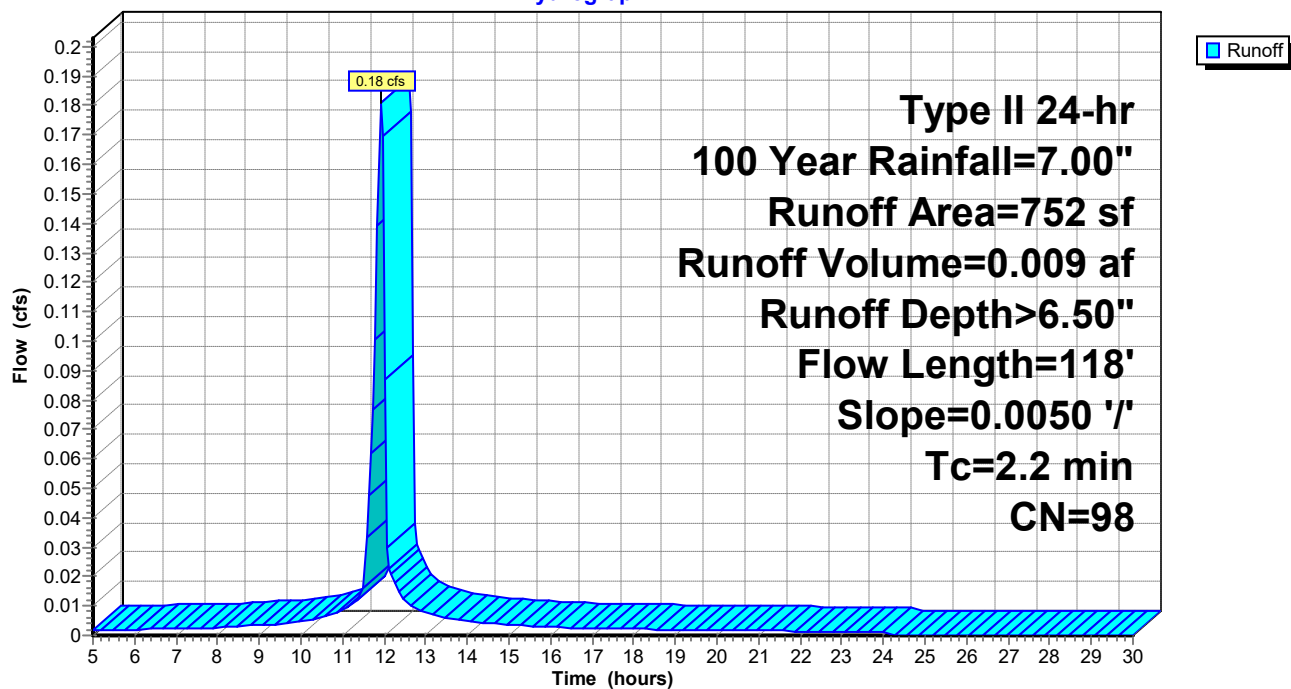
## Subcatchment 2: Trib 2

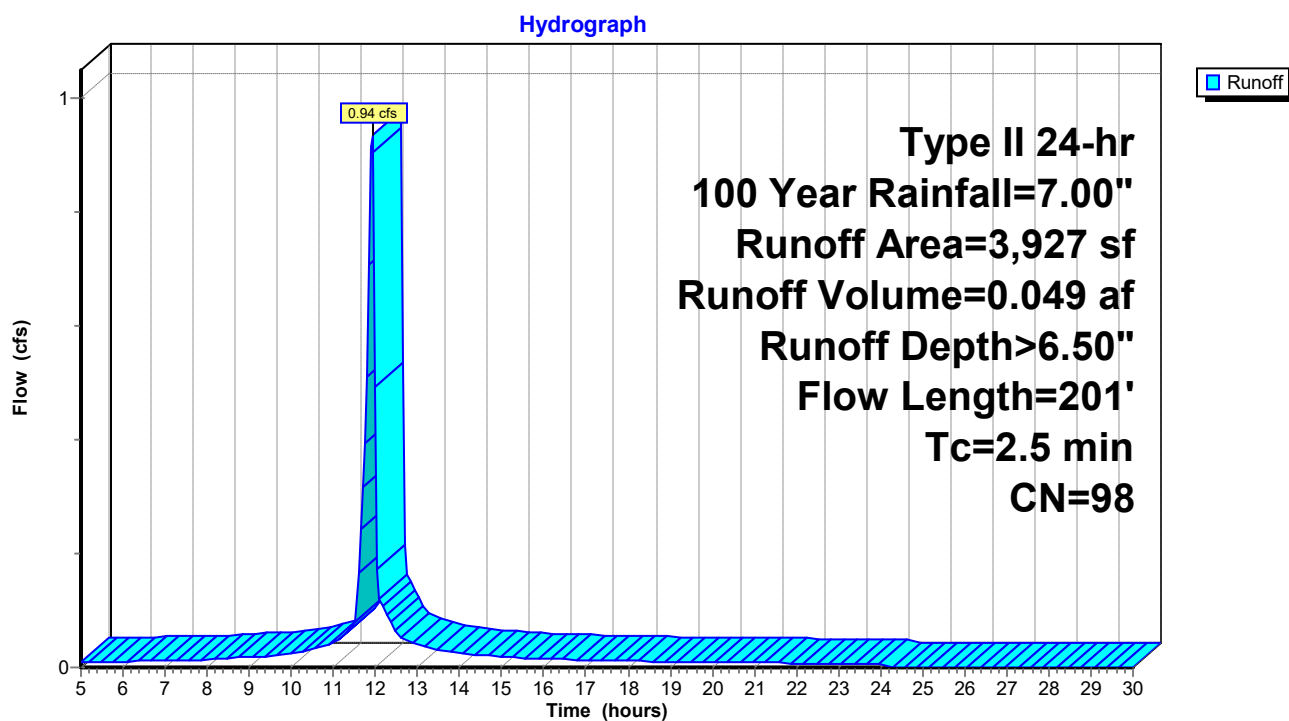
Hydrograph



## Subcatchment 3: Trib 3 (new buldg)

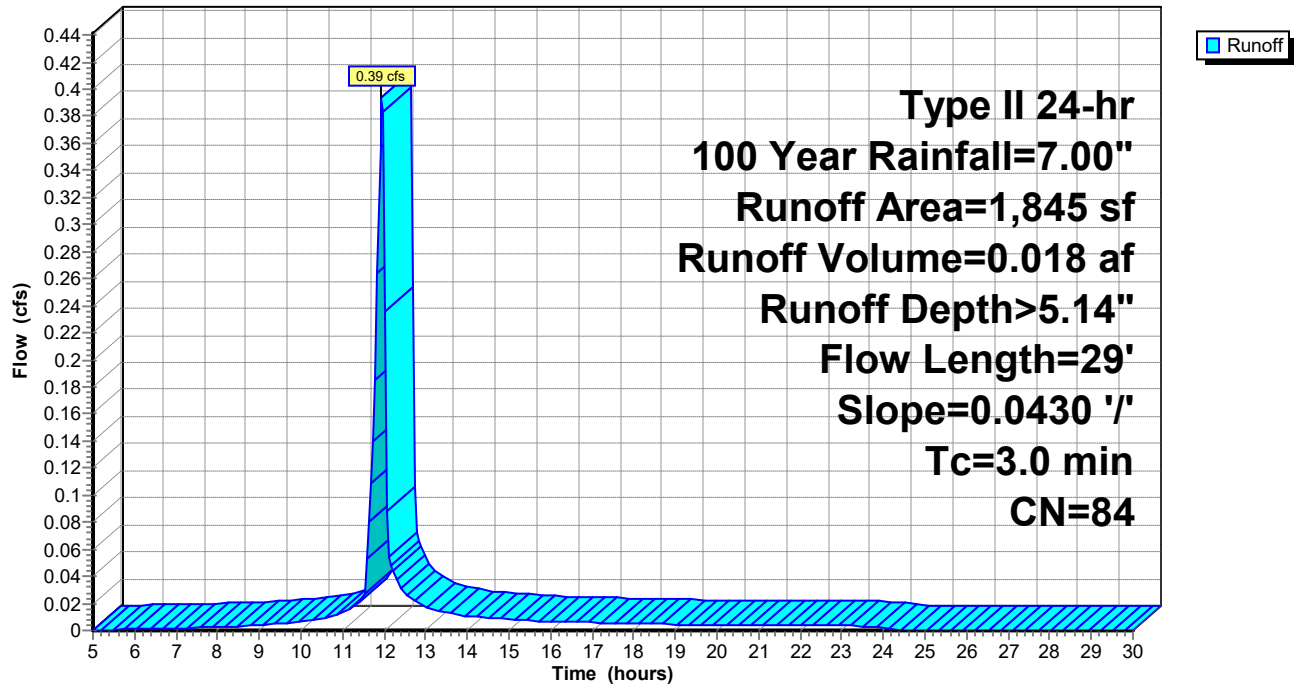
Hydrograph



**Subcatchment 4: Trib 4 (existing building)**

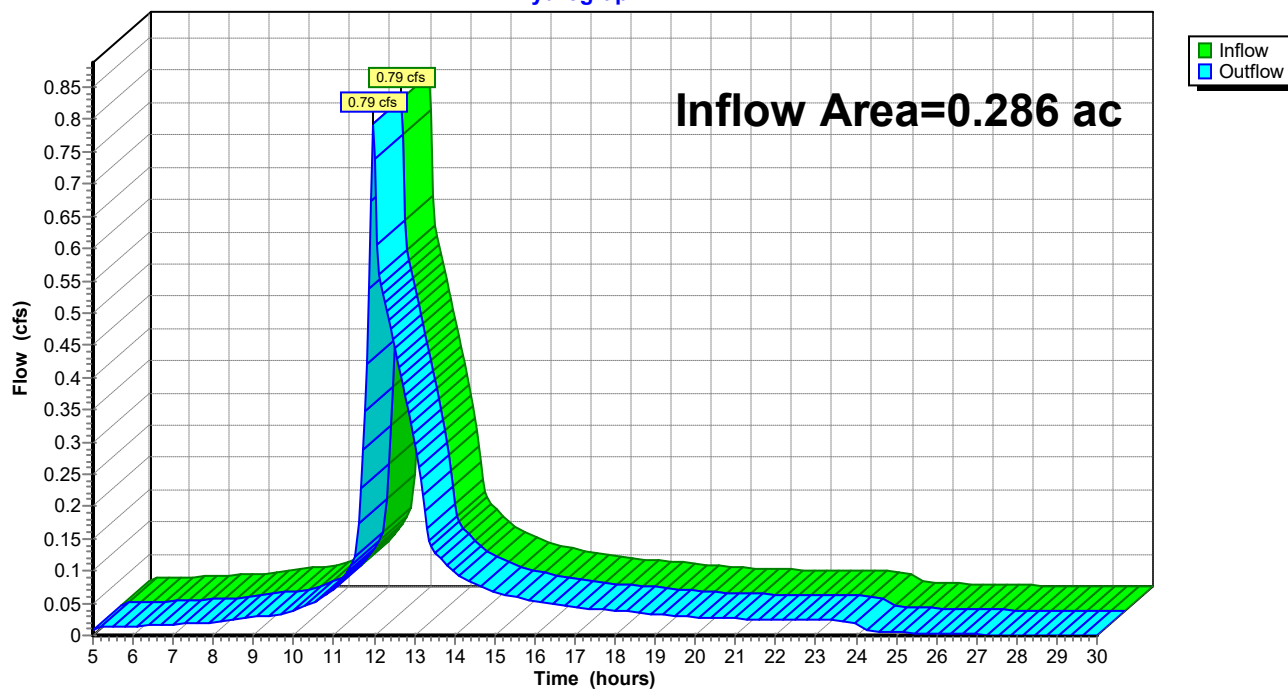
## Subcatchment 5: Trib 5

Hydrograph



## Reach R1: Reach 1 (combined sewer)

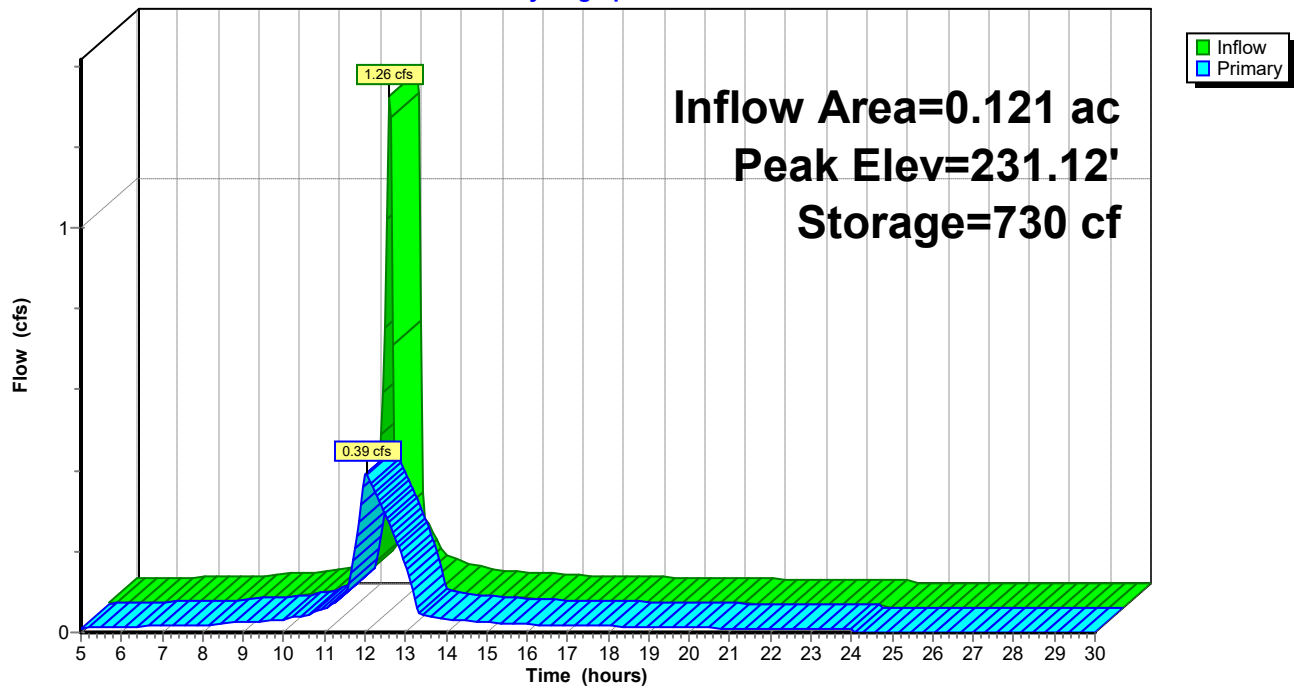
Hydrograph





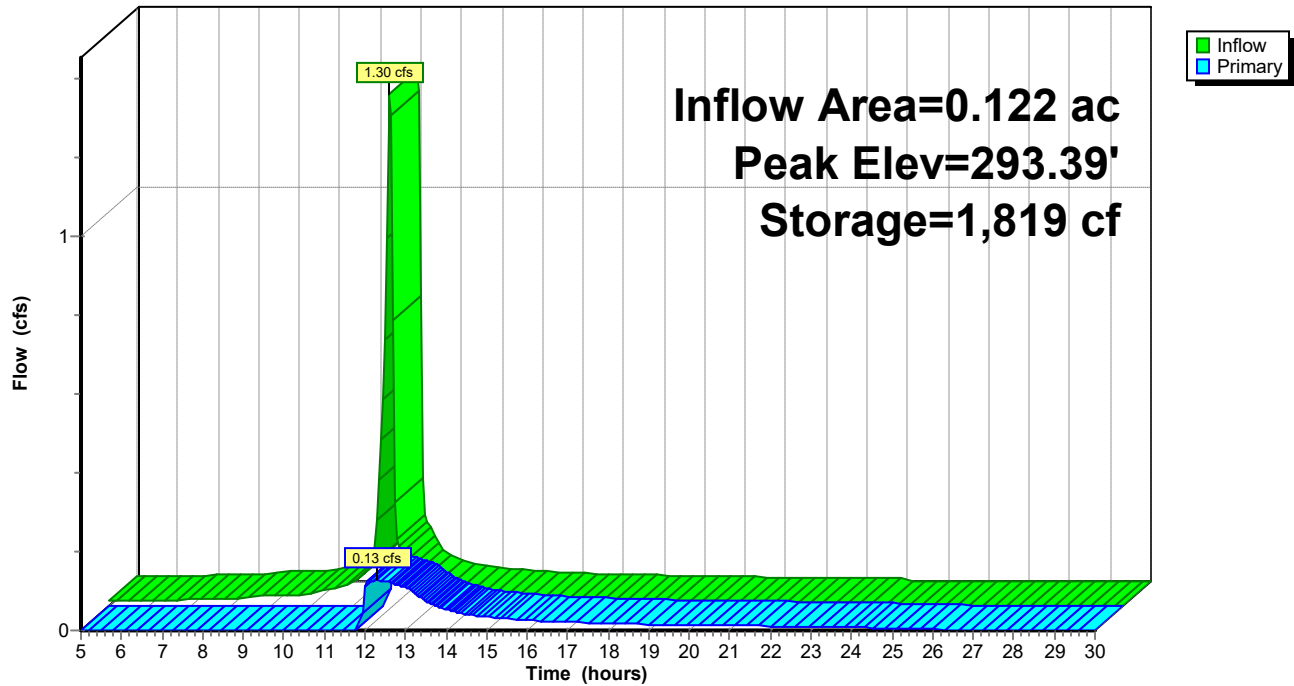
## Pond pipe: pipe

Hydrograph



## Pond roof: blue roof

Hydrograph



## Facility Owner (Responsible Party):

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 discharge structure and porous pavement**

This inspection includes pipe from roof drains to the drywell sections and underdrain pipes from the dry well. Also examine the quality of vegetation cover. If vegetation is not in healthy condition report to owner and schedule another site visit after vegetation is restored to required levels.

**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.**

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 15<sup>th</sup> and April 1<sup>st</sup>. After April 1<sup>st</sup> during spring thaw, if ground remains unstabilized extend winter conditions. Prior to November 15<sup>th</sup>, 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.

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.

## Operation, Maintenance and Management Inspection Checklist (Complete in 2 Pages)

**Project:** Hospitality House  
**Location:** 271 Central Avenue  
City of Albany, Albany County, NY  
**Date:** \_\_\_\_\_  
**Time:** \_\_\_\_\_  
**Inspector:** \_\_\_\_\_

MAINTENANCE ITEM	SATISFACTORY(S)/ UNSATISFACTORY(U)	COMMENTS
<b><u>DAILY</u></b> <b><u>1. Cleanup</u></b> Contributing areas clean of debris <input type="checkbox"/> (S) <input type="checkbox"/> (U)		
<b><u>2. Oil and Grease (Monthly)</u></b> Keep Pavement area free of of oil & grease <input type="checkbox"/> (S) <input type="checkbox"/> (U)		
<b><u>3. Vegetation Control (Monthly)</u></b> Keep drainage area stabilized <input type="checkbox"/> (S) <input type="checkbox"/> (U) No evidence of erosion <input type="checkbox"/> (S) <input type="checkbox"/> (U) Area mowed and clipping removed <input type="checkbox"/> (S) <input type="checkbox"/> (U)		
<b><u>4. Dry Wells and Pipes (Annual)</u></b> Structure, Top & Frame in Good Cond. <input type="checkbox"/> (S) <input type="checkbox"/> (U) Silt build up less than 6 inches <input type="checkbox"/> (S) <input type="checkbox"/> (U) Vacuum clean if silt build up greater than 6 inches <input type="checkbox"/> (S) <input type="checkbox"/> (U)		
<b><u>5. Winter Conditions and Transition Periods (Daily)</u></b> Follow winter conditions for construction between November 15 <sup>th</sup> and April 1 <sup>st</sup> <input type="checkbox"/> (S) <input type="checkbox"/> (U) After April 1 <sup>st</sup> during spring thaw, if ground remains unstabilized		

extend winter conditions ☐ (S) ☐ (U)

Prior to November 15<sup>th</sup>, if freezing occurs  
and ground remains unstabilized

extend winter conditions ☐ (S) ☐ (U)

Date of Inspection \_\_\_\_\_ Sheet 1 of 2

## **6. Porous Pavement (Spring, Summer & Fall)**

\_\_\_\_\_

Vacuum sweep porous pavement to remove salt deposits  
and any fines deposited during winter

(Minimum is once a year) ☐ (S) ☐ (U)

\_\_\_\_\_

High-pressure hosing to free pores **only if required** evidenced by deposits  
are still visible after vacuum cleaning ☐ (S) ☐ (U)

\_\_\_\_\_

Inspect Porous Pavement for any  
evidence of failure ☐ (S) ☐ (U)

\_\_\_\_\_

## **Comments:**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

### **Actions to be Taken:**

Date of Inspection \_\_\_\_\_ Sheet 2 of 2



## **APPENDIX #6**

### **MAINTENANCE AGREEMENT**

STORMWATER MANAGEMENT SYSTEM MAINTENANCE AGREEMENT  
271 Central Avenue

THIS AGREEMENT ("Agreement") is made and entered into on the \_\_\_\_ day of \_\_\_\_, 2020, by and between Hospitality House TC INC with an address at 271 Central Avenue Albany, NY 12206 (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 271 Central Avenue, 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.

<u>Sheet#</u>	<u>Date</u>	<u>Drawing Title</u>
C-1	7/20/21 Rev: 1/31/22	Existing Conditions and Demolition Plan
C-2	7/20/21 Rev: 1/31/22	Site Plan
C-4	7/20/21 Rev: 1/31/22	Sewer Plan/Profile and Details
C-5	7/20/21 Rev: 1/31/22	Water Plan/Profile and Details
C-6	7/20/21 Rev: 1/31/22	SWPPP Plan
C-7	7/20/21 Rev: 1/31/22	Erosion and Sediment Control Plan
C-8	7/20/21 Rev: 1/31/22	Truck Routing Plan
C-9	7/20/21 Rev: 1/31/22	Maintenance and Protection of Traffic Plan

b. *STORM WATER POLLUTION PREVENTION PLAN (SWPPP) & STORM WATER MANAGEMENT REPORT (SWMR)*, 271 Central Avenue Hospitality House prepared by Hershberg & Hershberg, Consulting Engineers and Land Surveyors, dated July 20, 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

REHABILITATION SUPPORT SERVICES, INC.

BY \_\_\_\_\_ -

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 -)

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**

### **271 Central Avenue**

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 notification are provided below.



**SPILL RESPONSE REPORT**

**271 Central Avenue**

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

Hospitality House TC INC, 518-542-9838

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

Hospitality House TC INC, 518-542-9838

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**

**SPDES PERMIT #GP-0-20-001**



Department of  
Environmental  
Conservation

NEW YORK STATE  
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SPDES GENERAL PERMIT  
FOR STORMWATER DISCHARGES

From

**CONSTRUCTION ACTIVITY**

Permit No. GP- 0-20-001

Issued Pursuant to Article 17, Titles 7, 8 and Article 70  
of the Environmental Conservation Law

Effective Date: January 29, 2020

Expiration Date: January 28, 2025

John J. Ferguson

Chief Permit Administrator



Authorized Signature

1-23-20  
Date

Address: NYS DEC  
Division of Environmental Permits  
625 Broadway, 4th Floor  
Albany, N.Y. 12233-1750

## PREFACE

Pursuant to Section 402 of the Clean Water Act (“CWA”), stormwater *discharges* from certain *construction activities* are unlawful unless they are authorized by a *National Pollutant Discharge Elimination System (“NPDES”)* permit or by a state permit program. New York administers the approved State Pollutant Discharge Elimination System (SPDES) program with permits issued in accordance with the New York State Environmental Conservation Law (ECL) Article 17, Titles 7, 8 and Article 70.

An *owner or operator* of a *construction activity* that is eligible for coverage under this permit must obtain coverage prior to the *commencement of construction activity*. Activities that fit the definition of “*construction activity*”, as defined under 40 CFR 122.26(b)(14)(x), (15)(i), and (15)(ii), constitute construction of a *point source* and therefore, pursuant to ECL section 17-0505 and 17-0701, the *owner or operator* must have coverage under a SPDES permit prior to *commencing construction activity*. The *owner or operator* cannot wait until there is an actual *discharge* from the *construction site* to obtain permit coverage.

**\*Note: The italicized words/phrases within this permit are defined in Appendix A.**

**NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
SPDES GENERAL PERMIT FOR STORMWATER DISCHARGES FROM  
CONSTRUCTION ACTIVITIES**

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## Part 1. PERMIT COVERAGE AND LIMITATIONS

### A. Permit Application

This permit authorizes stormwater *discharges to surface waters of the State* from the following *construction activities* identified within 40 CFR Parts 122.26(b)(14)(x), 122.26(b)(15)(i) and 122.26(b)(15)(ii), provided all of the eligibility provisions of this permit are met:

1. *Construction activities* involving soil disturbances of one (1) or more acres; including disturbances of less than one acre that are part of a *larger common plan of development or sale* that will ultimately disturb one or more acres of land; excluding *routine maintenance activity* that is performed to maintain the original line and grade, hydraulic capacity or original purpose of a facility;
2. *Construction activities* involving soil disturbances of less than one (1) acre where the Department has determined that a *SPDES* permit is required for stormwater *discharges* based on the potential for contribution to a violation of a *water quality standard* or for significant contribution of *pollutants to surface waters of the State*.
3. *Construction activities* located in the watershed(s) identified in Appendix D that involve soil disturbances between five thousand (5,000) square feet and one (1) acre of land.

### B. Effluent Limitations Applicable to Discharges from Construction Activities

*Discharges* authorized by this permit must achieve, at a minimum, the effluent limitations in Part I.B.1. (a) – (f) of this permit. These limitations represent the degree of effluent reduction attainable by the application of best practicable technology currently available.

1. Erosion and Sediment Control Requirements - The *owner or operator* must select, design, install, implement and maintain control measures to *minimize the discharge of pollutants* and prevent a violation of the *water quality standards*. The selection, design, installation, implementation, and maintenance of these control measures must meet the non-numeric effluent limitations in Part I.B.1.(a) – (f) of this permit and be in accordance with the New York State Standards and Specifications for Erosion and Sediment Control, dated November 2016, using sound engineering judgment. Where control measures are not designed in conformance with the design criteria included in the technical standard, the *owner or operator* must include in the *Stormwater Pollution Prevention Plan* (“SWPPP”) the reason(s) for the

deviation or alternative design and provide information which demonstrates that the deviation or alternative design is *equivalent* to the technical standard.

- a. **Erosion and Sediment Controls.** Design, install and maintain effective erosion and sediment controls to *minimize* the *discharge of pollutants* and prevent a violation of the *water quality standards*. At a minimum, such controls must be designed, installed and maintained to:
- (i) *Minimize* soil erosion through application of runoff control and soil stabilization control measure to *minimize pollutant discharges*;
  - (ii) Control stormwater *discharges*, including both peak flowrates and total stormwater volume, to *minimize* channel and *streambank* erosion and scour in the immediate vicinity of the *discharge* points;
  - (iii) *Minimize* the amount of soil exposed during *construction activity*;
  - (iv) *Minimize* the disturbance of *steep slopes*;
  - (v) *Minimize* sediment *discharges* from the site;
  - (vi) Provide and maintain *natural buffers* around surface waters, direct stormwater to vegetated areas and maximize stormwater infiltration to reduce *pollutant discharges*, unless *infeasible*;
  - (vii) *Minimize* soil compaction. Minimizing soil compaction is not required where the intended function of a specific area of the site dictates that it be compacted;
  - (viii) Unless *infeasible*, preserve a sufficient amount of topsoil to complete soil restoration and establish a uniform, dense vegetative cover; and
  - (ix) *Minimize* dust. On areas of exposed soil, *minimize* dust through the appropriate application of water or other dust suppression techniques to control the generation of pollutants that could be discharged from the site.
- b. **Soil Stabilization.** In areas where soil disturbance activity has temporarily or permanently ceased, the application of soil stabilization measures must be initiated by the end of the next business day and completed within fourteen (14) days from the date the current soil disturbance activity ceased. For construction sites that *directly discharge* to one of the 303(d) segments



listed in Appendix E or is located in one of the watersheds listed in Appendix C, the application of soil stabilization measures must be initiated by the end of the next business day and completed within seven (7) days from the date the current soil disturbance activity ceased. See Appendix A for definition of *Temporarily Ceased*.

- c. **Dewatering.** *Discharges from dewatering activities, including discharges from dewatering of trenches and excavations, must be managed by appropriate control measures.*
- d. **Pollution Prevention Measures.** Design, install, implement, and maintain effective pollution prevention measures to *minimize the discharge of pollutants* and prevent a violation of the *water quality standards*. At a minimum, such measures must be designed, installed, implemented and maintained to:
  - (i) *Minimize the discharge of pollutants from equipment and vehicle washing, wheel wash water, and other wash waters. This applies to washing operations that use clean water only. Soaps, detergents and solvents cannot be used;*
  - (ii) *Minimize the exposure of building materials, building products, construction wastes, trash, landscape materials, fertilizers, pesticides, herbicides, detergents, sanitary waste, hazardous and toxic waste, and other materials present on the site to precipitation and to stormwater. Minimization of exposure is not required in cases where the exposure to precipitation and to stormwater will not result in a discharge of pollutants, or where exposure of a specific material or product poses little risk of stormwater contamination (such as final products and materials intended for outdoor use) ; and*
  - (iii) *Prevent the discharge of pollutants from spills and leaks and implement chemical spill and leak prevention and response procedures.*
- e. **Prohibited Discharges.** The following *discharges* are prohibited:
  - (i) *Wastewater from washout of concrete;*
  - (ii) *Wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds and other construction materials;*

- (iii) Fuels, oils, or other *pollutants* used in vehicle and equipment operation and maintenance;
  - (iv) Soaps or solvents used in vehicle and equipment washing; and
  - (v) Toxic or hazardous substances from a spill or other release.
- f. Surface Outlets. When discharging from basins and impoundments, the outlets shall be designed, constructed and maintained in such a manner that sediment does not leave the basin or impoundment and that erosion at or below the outlet does not occur.

### **C. Post-construction Stormwater Management Practice Requirements**

1. The *owner or operator* of a *construction activity* that requires post-construction stormwater management practices pursuant to Part III.C. of this permit must select, design, install, and maintain the practices to meet the *performance criteria* in the New York State Stormwater Management Design Manual (“Design Manual”), dated January 2015, using sound engineering judgment. Where post-construction stormwater management practices (“SMPs”) are not designed in conformance with the *performance criteria* in the Design Manual, the *owner or operator* must include in the SWPPP the reason(s) for the deviation or alternative design and provide information which demonstrates that the deviation or alternative design is *equivalent* to the technical standard.
2. The *owner or operator* of a *construction activity* that requires post-construction stormwater management practices pursuant to Part III.C. of this permit must design the practices to meet the applicable *sizing criteria* in Part I.C.2.a., b., c. or d. of this permit.

#### **a. Sizing Criteria for New Development**

- (i) Runoff Reduction Volume (“RRv”): Reduce the total Water Quality Volume (“WQv”) by application of RR techniques and standard SMPs with RRv capacity. The total WQv shall be calculated in accordance with the criteria in Section 4.2 of the Design Manual.
- (ii) Minimum RRv and Treatment of Remaining Total WQv: Construction activities that cannot meet the criteria in Part I.C.2.a.(i) of this permit due to site limitations shall direct runoff from all newly constructed impervious areas to a RR technique or standard SMP with RRv capacity unless infeasible. The specific site limitations that prevent the reduction of 100% of the WQv shall be documented in the SWPPP.

For each impervious area that is not directed to a RR technique or standard SMP with RRv capacity, the SWPPP must include documentation which demonstrates that all options were considered and for each option explains why it is considered infeasible.

**In no case shall the runoff reduction achieved from the newly constructed impervious areas be less than the Minimum RRv as calculated using the criteria in Section 4.3 of the Design Manual.** The remaining portion of the total WQv that cannot be reduced shall be treated by application of standard SMPs.

- (iii) Channel Protection Volume (“Cpv”): Provide 24 hour extended detention of the post-developed 1-year, 24-hour storm event; remaining after runoff reduction. The Cpv requirement does not apply when:
  - (1) Reduction of the entire Cpv is achieved by application of runoff reduction techniques or infiltration systems, or
  - (2) The site discharges directly to tidal waters, or fifth order or larger streams.
- (iv) *Overbank* Flood Control Criteria (“Qp”): Requires storage to attenuate the post-development 10-year, 24-hour peak discharge rate (Qp) to predevelopment rates. The Qp requirement does not apply when:
  - (1) the site discharges directly to tidal waters or fifth order or larger streams, or
  - (2) A downstream analysis reveals that *overbank* control is not required.
- (v) Extreme Flood Control Criteria (“Qf”): Requires storage to attenuate the post-development 100-year, 24-hour peak discharge rate (Qf) to predevelopment rates. The Qf requirement does not apply when:
  - (1) the site discharges directly to tidal waters or fifth order or larger streams, or
  - (2) A downstream analysis reveals that *overbank* control is not required.

**b. Sizing Criteria for New Development in Enhanced Phosphorus Removal Watershed**

- (i) Runoff Reduction Volume (RRv): Reduce the total Water Quality Volume (WQv) by application of RR techniques and standard SMPs with RRv capacity. The total WQv is the runoff volume from the 1-year, 24 hour design storm over the post-developed watershed and shall be

calculated in accordance with the criteria in Section 10.3 of the Design Manual.

- (ii) Minimum RRv and Treatment of Remaining Total WQv: *Construction activities* that cannot meet the criteria in Part I.C.2.b.(i) of this permit due to *site limitations* shall direct runoff from all newly constructed *impervious areas* to a RR technique or standard SMP with RRv capacity unless *infeasible*. The specific *site limitations* that prevent the reduction of 100% of the WQv shall be documented in the SWPPP. For each *impervious area* that is not directed to a RR technique or standard SMP with RRv capacity, the SWPPP must include documentation which demonstrates that all options were considered and for each option explains why it is considered *infeasible*.

**In no case shall the runoff reduction achieved from the newly constructed *impervious areas* be less than the Minimum RRv as calculated using the criteria in Section 10.3 of the Design Manual.** The remaining portion of the total WQv that cannot be reduced shall be treated by application of standard SMPs.

- (iii) Channel Protection Volume (Cpv): Provide 24 hour extended detention of the post-developed 1-year, 24-hour storm event; remaining after runoff reduction. The Cpv requirement does not apply when:
  - (1) Reduction of the entire Cpv is achieved by application of runoff reduction techniques or infiltration systems, or
  - (2) The site *discharges* directly to tidal waters, or fifth order or larger streams.
- (iv) Overbank Flood Control Criteria (Qp): Requires storage to attenuate the post-development 10-year, 24-hour peak *discharge* rate (Qp) to predevelopment rates. The Qp requirement does not apply when:
  - (1) the site *discharges* directly to tidal waters or fifth order or larger streams, or
  - (2) A downstream analysis reveals that *overbank* control is not required.
- (v) Extreme Flood Control Criteria (Qf): Requires storage to attenuate the post-development 100-year, 24-hour peak *discharge* rate (Qf) to predevelopment rates. The Qf requirement does not apply when:
  - (1) the site *discharges* directly to tidal waters or fifth order or larger streams, or
  - (2) A downstream analysis reveals that *overbank* control is not required.

### c. Sizing Criteria for Redevelopment Activity

- (i) Water Quality Volume (WQv): The WQv treatment objective for *redevelopment activity* shall be addressed by one of the following options. *Redevelopment activities* located in an Enhanced Phosphorus Removal Watershed (see Part III.B.3. and Appendix C of this permit) shall calculate the WQv in accordance with Section 10.3 of the Design Manual. All other *redevelopment activities* shall calculate the WQv in accordance with Section 4.2 of the Design Manual.
  - (1) Reduce the existing *impervious cover* by a minimum of 25% of the total disturbed, *impervious area*. The Soil Restoration criteria in Section 5.1.6 of the Design Manual must be applied to all newly created pervious areas, or
  - (2) Capture and treat a minimum of 25% of the WQv from the disturbed, *impervious area* by the application of standard SMPs; or reduce 25% of the WQv from the disturbed, *impervious area* by the application of RR techniques or standard SMPs with RRv capacity., or
  - (3) Capture and treat a minimum of 75% of the WQv from the disturbed, *impervious area* as well as any additional runoff from tributary areas by application of the alternative practices discussed in Sections 9.3 and 9.4 of the Design Manual., or
  - (4) Application of a combination of 1, 2 and 3 above that provide a weighted average of at least two of the above methods. Application of this method shall be in accordance with the criteria in Section 9.2.1(B) (IV) of the Design Manual.

If there is an existing post-construction stormwater management practice located on the site that captures and treats runoff from the *impervious area* that is being disturbed, the WQv treatment option selected must, at a minimum, provide treatment equal to the treatment that was being provided by the existing practice(s) if that treatment is greater than the treatment required by options 1 – 4 above.

- (ii) Channel Protection Volume (Cpv): Not required if there are no changes to hydrology that increase the *discharge* rate from the project site.
- (iii) Overbank Flood Control Criteria (Qp): Not required if there are no changes to hydrology that increase the *discharge* rate from the project site.
- (iv) Extreme Flood Control Criteria (Qf): Not required if there are no changes to hydrology that increase the *discharge* rate from the project site

**d. Sizing Criteria for Combination of Redevelopment Activity and New Development**

Construction projects that include both New Development and Redevelopment Activity shall provide post-construction stormwater management controls that meet the sizing criteria calculated as an aggregate of the Sizing Criteria in Part I.C.2.a. or b. of this permit for the New Development portion of the project and Part I.C.2.c of this permit for Redevelopment Activity portion of the project.

**D. Maintaining Water Quality**

The Department expects that compliance with the conditions of this permit will control *discharges* necessary to meet applicable *water quality standards*. It shall be a violation of the *ECL* for any discharge to either cause or contribute to a violation of *water quality standards* as contained in Parts 700 through 705 of Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York, such as:

1. There shall be no increase in turbidity that will cause a substantial visible contrast to natural conditions;
2. There shall be no increase in suspended, colloidal or settleable solids that will cause deposition or impair the waters for their best usages; and
3. There shall be no residue from oil and floating substances, nor visible oil film, nor globules of grease.

If there is evidence indicating that the stormwater *discharges* authorized by this permit are causing, have the reasonable potential to cause, or are contributing to a violation of the *water quality standards*; the *owner or operator* must take appropriate corrective action in accordance with Part IV.C.5. of this general permit and document in accordance with Part IV.C.4. of this general permit. To address the *water quality standard* violation the *owner or operator* may need to provide additional information, include and implement appropriate controls in the SWPPP to correct the problem, or obtain an individual SPDES permit.

If there is evidence indicating that despite compliance with the terms and conditions of this general permit it is demonstrated that the stormwater *discharges* authorized by this permit are causing or contributing to a violation of *water quality standards*, or if the Department determines that a modification of the permit is necessary to prevent a violation of *water quality standards*, the authorized *discharges* will no longer be eligible for coverage under this permit. The Department may require the *owner or operator* to obtain an individual SPDES permit to continue discharging.

## **E. Eligibility Under This General Permit**

1. This permit may authorize all *discharges* of stormwater from *construction activity* to *surface waters of the State* and *groundwaters* except for ineligible *discharges* identified under subparagraph F. of this Part.
2. Except for non-stormwater *discharges* explicitly listed in the next paragraph, this permit only authorizes stormwater *discharges*; including stormwater runoff, snowmelt runoff, and surface runoff and drainage, from *construction activities*.
3. Notwithstanding paragraphs E.1 and E.2 above, the following non-stormwater discharges are authorized by this permit: those listed in 6 NYCRR 750-1.2(a)(29)(vi), with the following exception: “Discharges from firefighting activities are authorized only when the firefighting activities are emergencies/unplanned”; waters to which other components have not been added that are used to control dust in accordance with the SWPPP; and uncontaminated *discharges* from *construction site* de-watering operations. All non-stormwater discharges must be identified in the SWPPP. Under all circumstances, the *owner or operator* must still comply with *water quality standards* in Part I.D of this permit.
4. The *owner or operator* must maintain permit eligibility to *discharge* under this permit. Any *discharges* that are not compliant with the eligibility conditions of this permit are not authorized by the permit and the *owner or operator* must either apply for a separate permit to cover those ineligible *discharges* or take steps necessary to make the *discharge* eligible for coverage.

## **F. Activities Which Are Ineligible for Coverage Under This General Permit**

All of the following are **not** authorized by this permit:

1. *Discharges* after *construction activities* have been completed and the site has undergone *final stabilization*;
2. *Discharges* that are mixed with sources of non-stormwater other than those expressly authorized under subsection E.3. of this Part and identified in the SWPPP required by this permit;
3. *Discharges* that are required to obtain an individual SPDES permit or another SPDES general permit pursuant to Part VII.K. of this permit;
4. *Construction activities* or *discharges* from *construction activities* that may adversely affect an *endangered or threatened species* unless the *owner or*

*operator* has obtained a permit issued pursuant to 6 NYCRR Part 182 for the project or the Department has issued a letter of non-jurisdiction for the project. All documentation necessary to demonstrate eligibility shall be maintained on site in accordance with Part II.D.2 of this permit;

5. *Discharges* which either cause or contribute to a violation of *water quality standards* adopted pursuant to the *ECL* and its accompanying regulations;
6. *Construction activities* for residential, commercial and institutional projects:
  - a. Where the *discharges* from the *construction activities* are tributary to waters of the state classified as AA or AA-s; and
  - b. Which are undertaken on land with no existing *impervious cover*; and
  - c. Which disturb one (1) or more acres of land designated on the current United States Department of Agriculture ("USDA") Soil Survey as Soil Slope Phase "D", (provided the map unit name is inclusive of slopes greater than 25%), or Soil Slope Phase "E" or "F" (regardless of the map unit name), or a combination of the three designations.
7. *Construction activities* for linear transportation projects and linear utility projects:
  - a. Where the *discharges* from the *construction activities* are tributary to waters of the state classified as AA or AA-s; and
  - b. Which are undertaken on land with no existing *impervious cover*; and
  - c. Which disturb two (2) or more acres of land designated on the current USDA Soil Survey as Soil Slope Phase "D" (provided the map unit name is inclusive of slopes greater than 25%), or Soil Slope Phase "E" or "F" (regardless of the map unit name), or a combination of the three designations.



8. *Construction activities* that have the potential to affect an *historic property*, unless there is documentation that such impacts have been resolved. The following documentation necessary to demonstrate eligibility with this requirement shall be maintained on site in accordance with Part II.D.2 of this permit and made available to the Department in accordance with Part VII.F of this permit:
- a. Documentation that the *construction activity* is not within an archeologically sensitive area indicated on the sensitivity map, and that the *construction activity* is not located on or immediately adjacent to a property listed or determined to be eligible for listing on the National or State Registers of Historic Places, and that there is no new permanent building on the *construction site* within the following distances from a building, structure, or object that is more than 50 years old, or if there is such a new permanent building on the *construction site* within those parameters that NYS Office of Parks, Recreation and Historic Preservation (OPRHP), a Historic Preservation Commission of a Certified Local Government, or a qualified preservation professional has determined that the building, structure, or object more than 50 years old is not historically/archeologically significant.
    - 1-5 acres of disturbance - 20 feet
    - 5-20 acres of disturbance - 50 feet
    - 20+ acres of disturbance - 100 feet, or
  - b. DEC consultation form sent to OPRHP, and copied to the NYS DEC Agency Historic Preservation Officer (APO), and
    - (i) the State Environmental Quality Review (SEQR) Environmental Assessment Form (EAF) with a negative declaration or the Findings Statement, with documentation of OPRHP's agreement with the resolution; or
    - (ii) documentation from OPRHP that the *construction activity* will result in No Impact; or
    - (iii) documentation from OPRHP providing a determination of No Adverse Impact; or
    - (iv) a Letter of Resolution signed by the owner/operator, OPRHP and the DEC APO which allows for this *construction activity* to be eligible for coverage under the general permit in terms of the State Historic Preservation Act (SHPA); or
  - c. Documentation of satisfactory compliance with Section 106 of the National Historic Preservation Act for a coterminous project area:

- (i) No Affect
- (ii) No Adverse Affect
- (iii) Executed Memorandum of Agreement, or

d. Documentation that:

- (i) SHPA Section 14.09 has been completed by NYS DEC or another state agency.

9. *Discharges from construction activities* that are subject to an existing SPDES individual or general permit where a SPDES permit for *construction activity* has been terminated or denied; or where the *owner or operator* has failed to renew an expired individual permit.

## Part II. PERMIT COVERAGE

### A. How to Obtain Coverage

1. An *owner or operator* of a *construction activity* that is not subject to the requirements of a regulated, traditional land use control MS4 must first prepare a SWPPP in accordance with all applicable requirements of this permit and then submit a completed Notice of Intent (NOI) to the Department to be authorized to discharge under this permit.
2. An *owner or operator* of a *construction activity* that is subject to the requirements of a *regulated, traditional land use control MS4* must first prepare a SWPPP in accordance with all applicable requirements of this permit and then have the SWPPP reviewed and accepted by the *regulated, traditional land use control MS4* prior to submitting the NOI to the Department. The *owner or operator* shall have the "MS4 SWPPP Acceptance" form signed in accordance with Part VII.H., and then submit that form along with a completed NOI to the Department.
3. The requirement for an *owner or operator* to have its SWPPP reviewed and accepted by the *regulated, traditional land use control MS4* prior to submitting the NOI to the Department does not apply to an *owner or operator* that is obtaining permit coverage in accordance with the requirements in Part II.F. (Change of Owner or Operator) or where the *owner or operator* of the *construction activity* is the *regulated, traditional land use control MS4*. This exemption does not apply to *construction activities* subject to the New York City Administrative Code.

## **B. Notice of Intent (NOI) Submittal**

1. Prior to December 21, 2020, an owner or operator shall use either the electronic (eNOI) or paper version of the NOI that the Department prepared. Both versions of the NOI are located on the Department's website (<http://www.dec.ny.gov/>). The paper version of the NOI shall be signed in accordance with Part VII.H. of this permit and submitted to the following address:

**NOTICE OF INTENT  
NYS DEC, Bureau of Water Permits  
625 Broadway, 4<sup>th</sup> Floor  
Albany, New York 12233-3505**

2. Beginning December 21, 2020 and in accordance with EPA's 2015 NPDES Electronic Reporting Rule (40 CFR Part 127), the *owner or operator* must submit the NOI electronically using the *Department's* online NOI.
3. The *owner or operator* shall have the SWPPP preparer sign the "SWPPP Preparer Certification" statement on the NOI prior to submitting the form to the Department.
4. As of the date the NOI is submitted to the Department, the *owner or operator* shall make the NOI and SWPPP available for review and copying in accordance with the requirements in Part VII.F. of this permit.

## **C. Permit Authorization**

1. An *owner or operator* shall not *commence construction activity* until their authorization to *discharge* under this permit goes into effect.
2. Authorization to *discharge* under this permit will be effective when the *owner or operator* has satisfied all of the following criteria:
  - a. project review pursuant to the State Environmental Quality Review Act ("SEQRA") have been satisfied, when SEQRA is applicable. See the Department's website (<http://www.dec.ny.gov/>) for more information,
  - b. where required, all necessary Department permits subject to the *Uniform Procedures Act* ("UPA") (see 6 NYCRR Part 621), or the equivalent from another New York State agency, have been obtained, unless otherwise notified by the Department pursuant to 6 NYCRR 621.3(a)(4). *Owners or operators of construction activities* that are required to obtain UPA permits

must submit a preliminary SWPPP to the appropriate DEC Permit Administrator at the Regional Office listed in Appendix F at the time all other necessary *UPA* permit applications are submitted. The preliminary SWPPP must include sufficient information to demonstrate that the *construction activity* qualifies for authorization under this permit,

- c. the final SWPPP has been prepared, and
  - d. a complete NOI has been submitted to the Department in accordance with the requirements of this permit.
3. An *owner or operator* that has satisfied the requirements of Part II.C.2 above will be authorized to *discharge* stormwater from their *construction activity* in accordance with the following schedule:
- a. For *construction activities* that are not subject to the requirements of a *regulated, traditional land use control MS4*:
    - (i) Five (5) business days from the date the Department receives a complete electronic version of the NOI (eNOI) for *construction activities* with a SWPPP that has been prepared in conformance with the design criteria in the technical standard referenced in Part III.B.1 and the *performance criteria* in the technical standard referenced in Parts III.B., 2 or 3, for *construction activities* that require post-construction stormwater management practices pursuant to Part III.C.; or
    - (ii) Sixty (60) business days from the date the Department receives a complete NOI (electronic or paper version) for *construction activities* with a SWPPP that has not been prepared in conformance with the design criteria in technical standard referenced in Part III.B.1. or, for *construction activities* that require post-construction stormwater management practices pursuant to Part III.C., the *performance criteria* in the technical standard referenced in Parts III.B., 2 or 3, or;
    - (iii) Ten (10) business days from the date the Department receives a complete paper version of the NOI for *construction activities* with a SWPPP that has been prepared in conformance with the design criteria in the technical standard referenced in Part III.B.1 and the *performance criteria* in the technical standard referenced in Parts III.B., 2 or 3, for *construction activities* that require post-construction stormwater management practices pursuant to Part III.C.

- b. For *construction activities* that are subject to the requirements of a *regulated, traditional land use control MS4*:
  - (i) Five (5) business days from the date the Department receives both a complete electronic version of the NOI (eNOI) and signed “MS4 SWPPP Acceptance” form, or
  - (ii) Ten (10) business days from the date the Department receives both a complete paper version of the NOI and signed “MS4 SWPPP Acceptance” form.
4. Coverage under this permit authorizes stormwater *discharges* from only those areas of disturbance that are identified in the NOI. If an *owner or operator* wishes to have stormwater *discharges* from future or additional areas of disturbance authorized, they must submit a new NOI that addresses that phase of the development, unless otherwise notified by the Department. The *owner or operator* shall not *commence construction activity* on the future or additional areas until their authorization to *discharge* under this permit goes into effect in accordance with Part II.C. of this permit.

#### **D. General Requirements For Owners or Operators With Permit Coverage**

1. The *owner or operator* shall ensure that the provisions of the SWPPP are implemented from the *commencement of construction activity* until all areas of disturbance have achieved *final stabilization* and the Notice of Termination (“NOT”) has been submitted to the Department in accordance with Part V. of this permit. This includes any changes made to the SWPPP pursuant to Part III.A.4. of this permit.
2. The *owner or operator* shall maintain a copy of the General Permit (GP-0-20-001), NOI, *NOI Acknowledgment Letter*, SWPPP, MS4 SWPPP Acceptance form, inspection reports, responsible contractor’s or subcontractor’s certification statement (see Part III.A.6.), and all documentation necessary to demonstrate eligibility with this permit at the *construction site* until all disturbed areas have achieved *final stabilization* and the NOT has been submitted to the Department. The documents must be maintained in a secure location, such as a job trailer, on-site construction office, or mailbox with lock. The secure location must be accessible during normal business hours to an individual performing a compliance inspection.
3. The *owner or operator* of a *construction activity* shall not disturb greater than five (5) acres of soil at any one time without prior written authorization from the Department or, in areas under the jurisdiction of a *regulated, traditional land*

*use control MS4, the regulated, traditional land use control MS4* (provided the *regulated, traditional land use control MS4* is not the *owner or operator* of the *construction activity*). At a minimum, the *owner or operator* must comply with the following requirements in order to be authorized to disturb greater than five (5) acres of soil at any one time:

- a. The *owner or operator* shall have a *qualified inspector* conduct **at least** two (2) site inspections in accordance with Part IV.C. of this permit every seven (7) calendar days, for as long as greater than five (5) acres of soil remain disturbed. The two (2) inspections shall be separated by a minimum of two (2) full calendar days.
  - b. In areas where soil disturbance activity has temporarily or permanently ceased, the application of soil stabilization measures must be initiated by the end of the next business day and completed within seven (7) days from the date the current soil disturbance activity ceased. The soil stabilization measures selected shall be in conformance with the technical standard, New York State Standards and Specifications for Erosion and Sediment Control, dated November 2016.
  - c. The *owner or operator* shall prepare a phasing plan that defines maximum disturbed area per phase and shows required cuts and fills.
  - d. The *owner or operator* shall install any additional site-specific practices needed to protect water quality.
  - e. The *owner or operator* shall include the requirements above in their SWPPP.
4. In accordance with statute, regulations, and the terms and conditions of this permit, the Department may suspend or revoke an *owner's or operator's* coverage under this permit at any time if the Department determines that the SWPPP does not meet the permit requirements or consistent with Part VII.K..
  5. Upon a finding of significant non-compliance with the practices described in the SWPPP or violation of this permit, the Department may order an immediate stop to all activity at the site until the non-compliance is remedied. The stop work order shall be in writing, describe the non-compliance in detail, and be sent to the *owner or operator*.
  6. For *construction activities* that are subject to the requirements of a *regulated, traditional land use control MS4*, the *owner or operator* shall notify the

*regulated, traditional land use control MS4* in writing of any planned amendments or modifications to the post-construction stormwater management practice component of the SWPPP required by Part III.A. 4. and 5. of this permit. Unless otherwise notified by the *regulated, traditional land use control MS4*, the *owner or operator* shall have the SWPPP amendments or modifications reviewed and accepted by the *regulated, traditional land use control MS4* prior to commencing construction of the post-construction stormwater management practice.

#### **E. Permit Coverage for Discharges Authorized Under GP-0-15-002**

1. Upon renewal of SPDES General Permit for Stormwater Discharges from *Construction Activity* (Permit No. GP-0-15-002), an *owner or operator* of a *construction activity* with coverage under GP-0-15-002, as of the effective date of GP- 0-20-001, shall be authorized to *discharge* in accordance with GP- 0-20-001, unless otherwise notified by the Department.

An *owner or operator* may continue to implement the technical/design components of the post-construction stormwater management controls provided that such design was done in conformance with the technical standards in place at the time of initial project authorization. However, they must comply with the other, non-design provisions of GP-0-20-001.

#### **F. Change of Owner or Operator**

1. When property ownership changes or when there is a change in operational control over the construction plans and specifications, the original *owner or operator* must notify the new *owner or operator*, in writing, of the requirement to obtain permit coverage by submitting a NOI with the Department. For *construction activities* subject to the requirements of a *regulated, traditional land use control MS4*, the original *owner or operator* must also notify the MS4, in writing, of the change in ownership at least 30 calendar days prior to the change in ownership.
2. Once the new *owner or operator* obtains permit coverage, the original *owner or operator* shall then submit a completed NOT with the name and permit identification number of the new *owner or operator* to the Department at the address in Part II.B.1. of this permit. If the original *owner or operator* maintains ownership of a portion of the *construction activity* and will disturb soil, they must maintain their coverage under the permit.
3. Permit coverage for the new *owner or operator* will be effective as of the date the Department receives a complete NOI, provided the original *owner or*

*operator* was not subject to a sixty (60) business day authorization period that has not expired as of the date the Department receives the NOI from the new *owner or operator*.

### Part III. STORMWATER POLLUTION PREVENTION PLAN (SWPPP)

#### A. General SWPPP Requirements

1. A SWPPP shall be prepared and implemented by the *owner or operator* of each *construction activity* covered by this permit. The SWPPP must document the selection, design, installation, implementation and maintenance of the control measures and practices that will be used to meet the effluent limitations in Part I.B. of this permit and where applicable, the post-construction stormwater management practice requirements in Part I.C. of this permit. The SWPPP shall be prepared prior to the submittal of the NOI. The NOI shall be submitted to the Department prior to the *commencement of construction activity*. A copy of the completed, final NOI shall be included in the SWPPP.
2. The SWPPP shall describe the erosion and sediment control practices and where required, post-construction stormwater management practices that will be used and/or constructed to reduce the *pollutants* in stormwater *discharges* and to assure compliance with the terms and conditions of this permit. In addition, the SWPPP shall identify potential sources of pollution which may reasonably be expected to affect the quality of stormwater *discharges*.
3. All SWPPPs that require the post-construction stormwater management practice component shall be prepared by a *qualified professional* that is knowledgeable in the principles and practices of stormwater management and treatment.
4. The *owner or operator* must keep the SWPPP current so that it at all times accurately documents the erosion and sediment controls practices that are being used or will be used during construction, and all post-construction stormwater management practices that will be constructed on the site. At a minimum, the *owner or operator* shall amend the SWPPP, including construction drawings:
  - a. whenever the current provisions prove to be ineffective in minimizing *pollutants* in stormwater *discharges* from the site;



- b. whenever there is a change in design, construction, or operation at the *construction site* that has or could have an effect on the *discharge* of *pollutants*;
  - c. to address issues or deficiencies identified during an inspection by the *qualified inspector*, the Department or other regulatory authority; and
  - d. to document the final construction conditions.
5. The Department may notify the *owner or operator* at any time that the SWPPP does not meet one or more of the minimum requirements of this permit. The notification shall be in writing and identify the provisions of the SWPPP that require modification. Within fourteen (14) calendar days of such notification, or as otherwise indicated by the Department, the *owner or operator* shall make the required changes to the SWPPP and submit written notification to the Department that the changes have been made. If the *owner or operator* does not respond to the Department's comments in the specified time frame, the Department may suspend the *owner's or operator's* coverage under this permit or require the *owner or operator* to obtain coverage under an individual SPDES permit in accordance with Part II.D.4. of this permit.
6. Prior to the *commencement of construction activity*, the *owner or operator* must identify the contractor(s) and subcontractor(s) that will be responsible for installing, constructing, repairing, replacing, inspecting and maintaining the erosion and sediment control practices included in the SWPPP; and the contractor(s) and subcontractor(s) that will be responsible for constructing the post-construction stormwater management practices included in the SWPPP. The *owner or operator* shall have each of the contractors and subcontractors identify at least one person from their company that will be responsible for implementation of the SWPPP. This person shall be known as the *trained contractor*. The *owner or operator* shall ensure that at least one *trained contractor* is on site on a daily basis when soil disturbance activities are being performed.

The *owner or operator* shall have each of the contractors and subcontractors identified above sign a copy of the following certification statement below before they commence any *construction activity*:

"I hereby certify under penalty of law 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 most current version 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 am aware that there are significant penalties for submitting false information, that I do not believe to be true, including the possibility of fine and imprisonment for knowing violations"

In addition to providing the certification statement above, the certification page must also identify the specific elements of the SWPPP that each contractor and subcontractor will be responsible for and include the name and title of the person providing the signature; the name and title of the *trained contractor* responsible for SWPPP implementation; the name, address and telephone number of the contracting firm; the address (or other identifying description) of the site; and the date the certification statement is signed. The *owner or operator* shall attach the certification statement(s) to the copy of the SWPPP that is maintained at the *construction site*. If new or additional contractors are hired to implement measures identified in the SWPPP after construction has commenced, they must also sign the certification statement and provide the information listed above.

7. For projects where the Department requests a copy of the SWPPP or inspection reports, the *owner or operator* shall submit the documents in both electronic (PDF only) and paper format within five (5) business days, unless otherwise notified by the Department.

## **B. Required SWPPP Contents**

1. Erosion and sediment control component - All SWPPPs prepared pursuant to this permit shall include erosion and sediment control practices designed in conformance with the technical standard, New York State Standards and Specifications for Erosion and Sediment Control, dated November 2016. Where erosion and sediment control practices are not designed in conformance with the design criteria included in the technical standard, the *owner or operator* must demonstrate *equivalence* to the technical standard. At a minimum, the erosion and sediment control component of the SWPPP shall include the following:
  - a. Background information about the scope of the project, including the location, type and size of project

- b. A site map/construction drawing(s) for the project, including a general location map. At a minimum, the site map shall show the total site area; all improvements; areas of disturbance; areas that will not be disturbed; existing vegetation; on-site and adjacent off-site surface water(s); floodplain/floodway boundaries; wetlands and drainage patterns that could be affected by the *construction activity*; existing and final contours ; locations of different soil types with boundaries; material, waste, borrow or equipment storage areas located on adjacent properties; and location(s) of the stormwater *discharge(s)*;
- c. A description of the soil(s) present at the site, including an identification of the Hydrologic Soil Group (HSG);
- d. A construction phasing plan and sequence of operations describing the intended order of *construction activities*, including clearing and grubbing, excavation and grading, utility and infrastructure installation and any other activity at the site that results in soil disturbance;
- e. A description of the minimum erosion and sediment control practices to be installed or implemented for each *construction activity* that will result in soil disturbance. Include a schedule that identifies the timing of initial placement or implementation of each erosion and sediment control practice and the minimum time frames that each practice should remain in place or be implemented;
- f. A temporary and permanent soil stabilization plan that meets the requirements of this general permit and the technical standard, New York State Standards and Specifications for Erosion and Sediment Control, dated November 2016, for each stage of the project, including initial land clearing and grubbing to project completion and achievement of *final stabilization*;
- g. A site map/construction drawing(s) showing the specific location(s), size(s), and length(s) of each erosion and sediment control practice;
- h. The dimensions, material specifications, installation details, and operation and maintenance requirements for all erosion and sediment control practices. Include the location and sizing of any temporary sediment basins and structural practices that will be used to divert flows from exposed soils;
- i. A maintenance inspection schedule for the contractor(s) identified in Part III.A.6. of this permit, to ensure continuous and effective operation of the erosion and sediment control practices. The maintenance inspection

schedule shall be in accordance with the requirements in the technical standard, New York State Standards and Specifications for Erosion and Sediment Control, dated November 2016;

- j. A description of the pollution prevention measures that will be used to control litter, construction chemicals and construction debris from becoming a *pollutant* source in the stormwater *discharges*;
  - k. A description and location of any stormwater *discharges* associated with industrial activity other than construction at the site, including, but not limited to, stormwater *discharges* from asphalt plants and concrete plants located on the *construction site*; and
  - l. Identification of any elements of the design that are not in conformance with the design criteria in the technical standard, New York State Standards and Specifications for Erosion and Sediment Control, dated November 2016. Include the reason for the deviation or alternative design and provide information which demonstrates that the deviation or alternative design is *equivalent* to the technical standard.
2. Post-construction stormwater management practice component – The *owner or operator* of any construction project identified in Table 2 of Appendix B as needing post-construction stormwater management practices shall prepare a SWPPP that includes practices designed in conformance with the applicable *sizing criteria* in Part I.C.2.a., c. or d. of this permit and the *performance criteria* in the technical standard, New York State Stormwater Management Design Manual dated January 2015

Where post-construction stormwater management practices are not designed in conformance with the *performance criteria* in the technical standard, the *owner or operator* must include in the SWPPP the reason(s) for the deviation or alternative design and provide information which demonstrates that the deviation or alternative design is *equivalent* to the technical standard.

The post-construction stormwater management practice component of the SWPPP shall include the following:

- a. Identification of all post-construction stormwater management practices to be constructed as part of the project. Include the dimensions, material specifications and installation details for each post-construction stormwater management practice;

- b. A site map/construction drawing(s) showing the specific location and size of each post-construction stormwater management practice;
- c. A Stormwater Modeling and Analysis Report that includes:
  - (i) Map(s) showing pre-development conditions, including watershed/subcatchments boundaries, flow paths/routing, and design points;
  - (ii) Map(s) showing post-development conditions, including watershed/subcatchments boundaries, flow paths/routing, design points and post-construction stormwater management practices;
  - (iii) Results of stormwater modeling (i.e. hydrology and hydraulic analysis) for the required storm events. Include supporting calculations (model runs), methodology, and a summary table that compares pre and post-development runoff rates and volumes for the different storm events;
  - (iv) Summary table, with supporting calculations, which demonstrates that each post-construction stormwater management practice has been designed in conformance with the *sizing criteria* included in the Design Manual;
  - (v) Identification of any *sizing criteria* that is not required based on the requirements included in Part I.C. of this permit; and
  - (vi) Identification of any elements of the design that are not in conformance with the *performance criteria* in the Design Manual. Include the reason(s) for the deviation or alternative design and provide information which demonstrates that the deviation or alternative design is *equivalent* to the Design Manual;
- d. Soil testing results and locations (test pits, borings);
- e. Infiltration test results, when required; and
- f. An operations and maintenance plan that includes inspection and maintenance schedules and actions to ensure continuous and effective operation of each post-construction stormwater management practice. The plan shall identify the entity that will be responsible for the long term operation and maintenance of each practice.

3. Enhanced Phosphorus Removal Standards - All construction projects identified in Table 2 of Appendix B that are located in the watersheds identified in Appendix C shall prepare a SWPPP that includes post-construction stormwater management practices designed in conformance with the applicable *sizing criteria* in Part I.C.2. b., c. or d. of this permit and the *performance criteria*, Enhanced Phosphorus Removal Standards included in the Design Manual. At a minimum, the post-construction stormwater management practice component of the SWPPP shall include items 2.a - 2.f. above.

### **C. Required SWPPP Components by Project Type**

Unless otherwise notified by the Department, *owners or operators of construction activities* identified in Table 1 of Appendix B are required to prepare a SWPPP that only includes erosion and sediment control practices designed in conformance with Part III.B.1 of this permit. *Owners or operators of the construction activities* identified in Table 2 of Appendix B shall prepare a SWPPP that also includes post-construction stormwater management practices designed in conformance with Part III.B.2 or 3 of this permit.

## **Part IV. INSPECTION AND MAINTENANCE REQUIREMENTS**

### **A. General Construction Site Inspection and Maintenance Requirements**

1. The *owner or operator* must ensure that all erosion and sediment control practices (including pollution prevention measures) and all post-construction stormwater management practices identified in the SWPPP are inspected and maintained in accordance with Part IV.B. and C. of this permit.
2. The terms of this permit shall not be construed to prohibit the State of New York from exercising any authority pursuant to the ECL, common law or federal law, or prohibit New York State from taking any measures, whether civil or criminal, to prevent violations of the laws of the State of New York or protect the public health and safety and/or the environment.

### **B. Contractor Maintenance Inspection Requirements**

1. The *owner or operator* of each *construction activity* identified in Tables 1 and 2 of Appendix B shall have a *trained contractor* inspect the erosion and sediment control practices and pollution prevention measures being implemented within the active work area daily to ensure that they are being maintained in effective operating condition at all times. If deficiencies are identified, the contractor shall

begin implementing corrective actions within one business day and shall complete the corrective actions in a reasonable time frame.

2. For construction sites where soil disturbance activities have been temporarily suspended (e.g. winter shutdown) and *temporary stabilization* measures have been applied to all disturbed areas, the *trained contractor* can stop conducting the maintenance inspections. The *trained contractor* shall begin conducting the maintenance inspections in accordance with Part IV.B.1. of this permit as soon as soil disturbance activities resume.
3. For construction sites where soil disturbance activities have been shut down with partial project completion, the *trained contractor* can stop conducting the maintenance inspections if all areas disturbed as of the project shutdown date have achieved *final stabilization* and all post-construction stormwater management practices required for the completed portion of the project have been constructed in conformance with the SWPPP and are operational.

### C. Qualified Inspector Inspection Requirements

The *owner or operator* shall have a *qualified inspector* conduct site inspections in conformance with the following requirements:

[Note: The *trained contractor* identified in Part III.A.6. and IV.B. of this permit **cannot** conduct the *qualified inspector* site inspections unless they meet the *qualified inspector* qualifications included in Appendix A. In order to perform these inspections, the *trained contractor* would have to be a:

- licensed Professional Engineer,
  - Certified Professional in Erosion and Sediment Control (CPESC),
  - New York State Erosion and Sediment Control Certificate Program holder
  - Registered Landscape Architect, or
  - someone working under the direct supervision of, and at the same company as, the licensed Professional Engineer or Registered Landscape Architect, provided they have 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].
1. A *qualified inspector* shall conduct site inspections for all *construction activities* identified in Tables 1 and 2 of Appendix B, with the exception of:
    - a. the construction of a single family residential subdivision with 25% or less *impervious cover* at total site build-out that involves a soil disturbance of one (1) or more acres of land but less than five (5) acres and is not located

in one of the watersheds listed in Appendix C and not directly discharging to one of the 303(d) segments listed in Appendix E;

- b. the construction of a single family home that involves a soil disturbance of one (1) or more acres of land but less than five (5) acres and is not located in one of the watersheds listed in Appendix C and not directly discharging to one of the 303(d) segments listed in Appendix E;
  - c. construction on agricultural property that involves a soil disturbance of one (1) or more acres of land but less than five (5) acres; and
  - d. *construction activities* located in the watersheds identified in Appendix D that involve soil disturbances between five thousand (5,000) square feet and one (1) acre of land.
2. Unless otherwise notified by the Department, the *qualified inspector* shall conduct site inspections in accordance with the following timetable:
- a. For construction sites where soil disturbance activities are on-going, the *qualified inspector* shall conduct a site inspection at least once every seven (7) calendar days.
  - b. For construction sites where soil disturbance activities are on-going and the *owner or operator* has received authorization in accordance with Part II.D.3 to disturb greater than five (5) acres of soil at any one time, the *qualified inspector* shall conduct at least two (2) site inspections every seven (7) calendar days. The two (2) inspections shall be separated by a minimum of two (2) full calendar days.
  - c. For construction sites where soil disturbance activities have been temporarily suspended (e.g. winter shutdown) and *temporary stabilization* measures have been applied to all disturbed areas, the *qualified inspector* shall conduct a site inspection at least once every thirty (30) calendar days. The *owner or operator* shall notify the DOW Water (SPDES) Program contact at the Regional Office (see contact information in Appendix F) or, in areas under the jurisdiction of a *regulated, traditional land use control MS4*, the *regulated, traditional land use control MS4* (provided the *regulated, traditional land use control MS4* is not the *owner or operator* of the *construction activity*) in writing prior to reducing the frequency of inspections.



- d. For construction sites where soil disturbance activities have been shut down with partial project completion, the *qualified inspector* can stop conducting inspections if all areas disturbed as of the project shutdown date have achieved *final stabilization* and all post-construction stormwater management practices required for the completed portion of the project have been constructed in conformance with the SWPPP and are operational. The *owner or operator* shall notify the DOW Water (SPDES) Program contact at the Regional Office (see contact information in Appendix F) or, in areas under the jurisdiction of a *regulated, traditional land use control MS4*, the *regulated, traditional land use control MS4* (provided the *regulated, traditional land use control MS4* is not the *owner or operator* of the *construction activity*) in writing prior to the shutdown. If soil disturbance activities are not resumed within 2 years from the date of shutdown, the *owner or operator* shall have the *qualified inspector* perform a final inspection and certify that all disturbed areas have achieved *final stabilization*, and all temporary, structural erosion and sediment control measures have been removed; and that all post-construction stormwater management practices have been constructed in conformance with the SWPPP by signing the “*Final Stabilization*” and “*Post-Construction Stormwater Management Practice*” certification statements on the NOT. The *owner or operator* shall then submit the completed NOT form to the address in Part II.B.1 of this permit.
  - e. For construction sites that directly *discharge* to one of the 303(d) segments listed in Appendix E or is located in one of the watersheds listed in Appendix C, the *qualified inspector* shall conduct at least two (2) site inspections every seven (7) calendar days. The two (2) inspections shall be separated by a minimum of two (2) full calendar days.
3. At a minimum, the *qualified inspector* shall inspect all erosion and sediment control practices and pollution prevention measures to ensure integrity and effectiveness, all post-construction stormwater management practices under construction to ensure that they are constructed in conformance with the SWPPP, all areas of disturbance that have not achieved *final stabilization*, all points of *discharge* to natural surface waterbodies located within, or immediately adjacent to, the property boundaries of the *construction site*, and all points of *discharge* from the *construction site*.
  4. The *qualified inspector* shall prepare an inspection report subsequent to each and every inspection. At a minimum, the inspection report shall include and/or address the following:

- a. Date and time of inspection;
- b. Name and title of person(s) performing inspection;
- c. A description of the weather and soil conditions (e.g. dry, wet, saturated) at the time of the inspection;
- d. A description of the condition of the runoff at all points of *discharge* from the *construction site*. This shall include identification of any *discharges* of sediment from the *construction site*. Include *discharges* from conveyance systems (i.e. pipes, culverts, ditches, etc.) and overland flow;
- e. A description of the condition of all natural surface waterbodies located within, or immediately adjacent to, the property boundaries of the *construction site* which receive runoff from disturbed areas. This shall include identification of any *discharges* of sediment to the surface waterbody;
- f. Identification of all erosion and sediment control practices and pollution prevention measures that need repair or maintenance;
- g. Identification of all erosion and sediment control practices and pollution prevention measures that were not installed properly or are not functioning as designed and need to be reinstalled or replaced;
- h. Description and sketch of areas with active soil disturbance activity, areas that have been disturbed but are inactive at the time of the inspection, and areas that have been stabilized (temporary and/or final) since the last inspection;
- i. Current phase of construction of all post-construction stormwater management practices and identification of all construction that is not in conformance with the SWPPP and technical standards;
- j. Corrective action(s) that must be taken to install, repair, replace or maintain erosion and sediment control practices and pollution prevention measures; and to correct deficiencies identified with the construction of the post-construction stormwater management practice(s);
- k. Identification and status of all corrective actions that were required by previous inspection; and

- I. Digital photographs, with date stamp, that clearly show the condition of all practices that have been identified as needing corrective actions. The *qualified inspector* shall attach paper color copies of the digital photographs to the inspection report being maintained onsite within seven (7) calendar days of the date of the inspection. The *qualified inspector* shall also take digital photographs, with date stamp, that clearly show the condition of the practice(s) after the corrective action has been completed. The *qualified inspector* shall attach paper color copies of the digital photographs to the inspection report that documents the completion of the corrective action work within seven (7) calendar days of that inspection.
5. Within one business day of the completion of an inspection, the *qualified inspector* shall notify the *owner or operator* and appropriate contractor or subcontractor identified in Part III.A.6. of this permit of any corrective actions that need to be taken. The contractor or subcontractor shall begin implementing the corrective actions within one business day of this notification and shall complete the corrective actions in a reasonable time frame.
6. All inspection reports shall be signed by the *qualified inspector*. Pursuant to Part II.D.2. of this permit, the inspection reports shall be maintained on site with the SWPPP.

## **Part V. TERMINATION OF PERMIT COVERAGE**

### **A. Termination of Permit Coverage**

1. An *owner or operator* that is eligible to terminate coverage under this permit must submit a completed NOT form to the address in Part II.B.1 of this permit. The NOT form shall be one which is associated with this permit, signed in accordance with Part VII.H of this permit.
2. An *owner or operator* may terminate coverage when one or more the following conditions have been met:
  - a. Total project completion - All *construction activity* identified in the SWPPP has been completed; and all areas of disturbance have achieved *final stabilization*; and all temporary, structural erosion and sediment control measures have been removed; and all post-construction stormwater management practices have been constructed in conformance with the SWPPP and are operational;

- b. Planned shutdown with partial project completion - All soil disturbance activities have ceased; and all areas disturbed as of the project shutdown date have achieved *final stabilization*; and all temporary, structural erosion and sediment control measures have been removed; and all post-construction stormwater management practices required for the completed portion of the project have been constructed in conformance with the SWPPP and are operational;
  - c. A new *owner or operator* has obtained coverage under this permit in accordance with Part II.F. of this permit.
  - d. The *owner or operator* obtains coverage under an alternative SPDES general permit or an individual SPDES permit.
3. For *construction activities* meeting subdivision 2a. or 2b. of this Part, the *owner or operator* shall have the *qualified inspector* perform a final site inspection prior to submitting the NOT. The *qualified inspector* shall, by signing the “*Final Stabilization*” and “Post-Construction Stormwater Management Practice certification statements on the NOT, certify that all the requirements in Part V.A.2.a. or b. of this permit have been achieved.
4. For *construction activities* that are subject to the requirements of a *regulated, traditional land use control MS4* and meet subdivision 2a. or 2b. of this Part, the *owner or operator* shall have the *regulated, traditional land use control MS4* sign the “MS4 Acceptance” statement on the NOT in accordance with the requirements in Part VII.H. of this permit. The *regulated, traditional land use control MS4* official, by signing this statement, has determined that it is acceptable for the *owner or operator* to submit the NOT in accordance with the requirements of this Part. The *regulated, traditional land use control MS4* can make this determination by performing a final site inspection themselves or by accepting the *qualified inspector’s* final site inspection certification(s) required in Part V.A.3. of this permit.
5. For *construction activities* that require post-construction stormwater management practices and meet subdivision 2a. of this Part, the *owner or operator* must, prior to submitting the NOT, ensure one of the following:
- a. the post-construction stormwater management practice(s) and any right-of-way(s) needed to maintain such practice(s) have been deeded to the municipality in which the practice(s) is located,

- b. an executed maintenance agreement is in place with the municipality that will maintain the post-construction stormwater management practice(s),
- c. for post-construction stormwater management practices that are privately owned, the *owner or operator* has a mechanism in place that requires operation and maintenance of the practice(s) in accordance with the operation and maintenance plan, such as a deed covenant in the *owner or operator's* deed of record,
- d. for post-construction stormwater management practices that are owned by a public or private institution (e.g. school, university, hospital), government agency or authority, or public utility; the *owner or operator* has policy and procedures in place that ensures operation and maintenance of the practices in accordance with the operation and maintenance plan.

## **Part VI. REPORTING AND RETENTION RECORDS**

### **A. Record Retention**

The *owner or operator* shall retain a copy of the NOI, NOI Acknowledgment Letter, SWPPP, MS4 SWPPP Acceptance form and any inspection reports that were prepared in conjunction with this permit for a period of at least five (5) years from the date that the Department receives a complete NOT submitted in accordance with Part V. of this general permit.

### **B. Addresses**

With the exception of the NOI, NOT, and MS4 SWPPP Acceptance form (which must be submitted to the address referenced in Part II.B.1 of this permit), all written correspondence requested by the Department, including individual permit applications, shall be sent to the address of the appropriate DOW Water (SPDES) Program contact at the Regional Office listed in Appendix F.

## **Part VII. STANDARD PERMIT CONDITIONS**

### **A. Duty to Comply**

The *owner or operator* must comply with all conditions of this permit. All contractors and subcontractors associated with the project must comply with the terms of the SWPPP. Any non-compliance with this permit constitutes a violation of the Clean Water

Act (CWA) and the ECL and is grounds for an enforcement action against the *owner or operator* and/or the contractor/subcontractor; permit revocation, suspension or modification; or denial of a permit renewal application. Upon a finding of significant non-compliance with this permit or the applicable SWPPP, the Department may order an immediate stop to all *construction activity* at the site until the non-compliance is remedied. The stop work order shall be in writing, shall describe the non-compliance in detail, and shall be sent to the *owner or operator*.

If any human remains or archaeological remains are encountered during excavation, the *owner or operator* must immediately cease, or cause to cease, all *construction activity* in the area of the remains and notify the appropriate Regional Water Engineer (RWE). *Construction activity* shall not resume until written permission to do so has been received from the RWE.

## **B. Continuation of the Expired General Permit**

This permit expires five (5) years from the effective date. If a new general permit is not issued prior to the expiration of this general permit, an *owner or operator* with coverage under this permit may continue to operate and *discharge* in accordance with the terms and conditions of this general permit, if it is extended pursuant to the State Administrative Procedure Act and 6 NYCRR Part 621, until a new general permit is issued.

## **C. Enforcement**

Failure of the *owner or operator*, its contractors, subcontractors, agents and/or assigns to strictly adhere to any of the permit requirements contained herein shall constitute a violation of this permit. There are substantial criminal, civil, and administrative penalties associated with violating the provisions of this permit. Fines of up to \$37,500 per day for each violation and imprisonment for up to fifteen (15) years may be assessed depending upon the nature and degree of the offense.

## **D. Need to Halt or Reduce Activity Not a Defense**

It shall not be a defense for an *owner or operator* in an enforcement action that it would have been necessary to halt or reduce the *construction activity* in order to maintain compliance with the conditions of this permit.

### **E. Duty to Mitigate**

The *owner or operator* and its contractors and subcontractors shall take all reasonable steps to *minimize* or prevent any *discharge* in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

### **F. Duty to Provide Information**

The *owner or operator* shall furnish to the Department, within a reasonable specified time period of a written request, all documentation necessary to demonstrate eligibility and any information to determine compliance with this permit or to determine whether cause exists for modifying or revoking this permit, or suspending or denying coverage under this permit, in accordance with the terms and conditions of this permit. The NOI, SWPPP and inspection reports required by this permit are public documents that the *owner or operator* must make available for review and copying by any person within five (5) business days of the *owner or operator* receiving a written request by any such person to review these documents. Copying of documents will be done at the requester's expense.

### **G. Other Information**

When the *owner or operator* becomes aware that they failed to submit any relevant facts, or submitted incorrect information in the NOI or in any of the documents required by this permit, or have made substantive revisions to the SWPPP (e.g. the scope of the project changes significantly, the type of post-construction stormwater management practice(s) changes, there is a reduction in the sizing of the post-construction stormwater management practice, or there is an increase in the disturbance area or *impervious area*), which were not reflected in the original NOI submitted to the Department, they shall promptly submit such facts or information to the Department using the contact information in Part II.A. of this permit. Failure of the *owner or operator* to correct or supplement any relevant facts within five (5) business days of becoming aware of the deficiency shall constitute a violation of this permit.

### **H. Signatory Requirements**

1. All NOIs and NOTs shall be signed as follows:
  - a. For a corporation these forms shall be signed by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means:

- (i) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation; or
    - (ii) the manager of one or more manufacturing, production or operating facilities, provided the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;
  - b. For a partnership or sole proprietorship these forms shall be signed by a general partner or the proprietor, respectively; or
  - c. For a municipality, State, Federal, or other public agency these forms shall be signed by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes:
    - (i) the chief executive officer of the agency, or
    - (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of EPA).
2. The SWPPP and other information requested by the Department shall be signed by a person described in Part VII.H.1. of this permit or by a duly authorized representative of that person. A person is a duly authorized representative only if:
- a. The authorization is made in writing by a person described in Part VII.H.1. of this permit;
  - b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or a well field,



superintendent, position of *equivalent* responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position) and,

- c. The written authorization shall include the name, title and signature of the authorized representative and be attached to the SWPPP.
3. All inspection reports shall be signed by the *qualified inspector* that performs the inspection.
4. The MS4 SWPPP Acceptance form shall be signed by the principal executive officer or ranking elected official from the *regulated, traditional land use control MS4*, or by a duly authorized representative of that person.

It shall constitute a permit violation if an incorrect and/or improper signatory authorizes any required forms, SWPPP and/or inspection reports.

## **I. Property Rights**

The issuance of this permit does not convey any property rights of any sort, nor any exclusive privileges, nor does it authorize any injury to private property nor any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations. *Owners or operators* must obtain any applicable conveyances, easements, licenses and/or access to real property prior to *commencing construction activity*.

## **J. Severability**

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit shall not be affected thereby.

## **K. Requirement to Obtain Coverage Under an Alternative Permit**

1. The Department may require any owner or operator authorized by this permit to apply for and/or obtain either an individual SPDES permit or another SPDES general permit. When the Department requires any discharger authorized by a general permit to apply for an individual SPDES permit, it shall notify the discharger in writing that a permit application is required. This notice shall

include a brief statement of the reasons for this decision, an application form, a statement setting a time frame for the owner or operator to file the application for an individual SPDES permit, and a deadline, not sooner than 180 days from owner or operator receipt of the notification letter, whereby the authorization to discharge under this general permit shall be terminated. Applications must be submitted to the appropriate Permit Administrator at the Regional Office. The Department may grant additional time upon demonstration, to the satisfaction of the Department, that additional time to apply for an alternative authorization is necessary or where the Department has not provided a permit determination in accordance with Part 621 of this Title.

2. When an individual SPDES permit is issued to a discharger authorized to *discharge* under a general SPDES permit for the same *discharge(s)*, the general permit authorization for outfalls authorized under the individual SPDES permit is automatically terminated on the effective date of the individual permit unless termination is earlier in accordance with 6 NYCRR Part 750.

#### **L. Proper Operation and Maintenance**

The *owner or operator* shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the *owner or operator* to achieve compliance with the conditions of this permit and with the requirements of the SWPPP.

#### **M. Inspection and Entry**

The *owner or operator* shall allow an authorized representative of the Department, EPA, applicable county health department, or, in the case of a *construction site* which *discharges* through an *MS4*, an authorized representative of the *MS4* receiving the discharge, upon the presentation of credentials and other documents as may be required by law, to:

1. Enter upon the owner's or operator's premises where a regulated facility or activity is located or conducted or where records must be kept under the conditions of this permit;
2. Have access to and copy at reasonable times, any records that must be kept under the conditions of this permit; and

3. Inspect at reasonable times any facilities or equipment (including monitoring and control equipment), practices or operations regulated or required by this permit.
4. Sample or monitor at reasonable times, for purposes of assuring permit compliance or as otherwise authorized by the Act or ECL, any substances or parameters at any location.

## **N. Permit Actions**

This permit may, at any time, be modified, suspended, revoked, or renewed by the Department in accordance with 6 NYCRR Part 621. The filing of a request by the *owner or operator* for a permit modification, revocation and reissuance, termination, a notification of planned changes or anticipated noncompliance does not limit, diminish and/or stay compliance with any terms of this permit.

## **O. Definitions**

Definitions of key terms are included in Appendix A of this permit.

## **P. Re-Opener Clause**

1. If there is evidence indicating potential or realized impacts on water quality due to any stormwater discharge associated with construction activity covered by this permit, the owner or operator of such discharge may be required to obtain an individual permit or alternative general permit in accordance with Part VII.K. of this permit or the permit may be modified to include different limitations and/or requirements.
2. Any Department initiated permit modification, suspension or revocation will be conducted in accordance with 6 NYCRR Part 621, 6 NYCRR 750-1.18, and 6 NYCRR 750-1.20.

## **Q. Penalties for Falsification of Forms and Reports**

In accordance with 6NYCRR Part 750-2.4 and 750-2.5, any person who knowingly makes any false material statement, representation, or certification in any application, record, report or other document filed or required to be maintained under this permit, including reports of compliance or noncompliance shall, upon conviction, be punished in accordance with ECL §71-1933 and or Articles 175 and 210 of the New York State Penal Law.

## **R. Other Permits**

Nothing in this permit relieves the *owner or operator* from a requirement to obtain any other permits required by law.

## **APPENDIX A – Acronyms and Definitions**

### **Acronyms**

APO – Agency Preservation Officer  
BMP – Best Management Practice  
CPESC – Certified Professional in Erosion and Sediment Control  
Cpv – Channel Protection Volume  
CWA – Clean Water Act (or the Federal Water Pollution Control Act, 33 U.S.C. §1251 et seq)  
DOW – Division of Water  
EAF – Environmental Assessment Form  
ECL - Environmental Conservation Law  
EPA – U. S. Environmental Protection Agency  
HSG – Hydrologic Soil Group  
MS4 – Municipal Separate Storm Sewer System  
NOI – Notice of Intent  
NOT – Notice of Termination  
NPDES – National Pollutant Discharge Elimination System  
OPRHP – Office of Parks, Recreation and Historic Places  
Qf – Extreme Flood  
Qp – Overbank Flood  
RRv – Runoff Reduction Volume  
RWE – Regional Water Engineer  
SEQR – State Environmental Quality Review  
SEQRA - State Environmental Quality Review Act  
SHPA – State Historic Preservation Act  
SPDES – State Pollutant Discharge Elimination System  
SWPPP – Stormwater Pollution Prevention Plan  
TMDL – Total Maximum Daily Load  
UPA – Uniform Procedures Act  
USDA – United States Department of Agriculture  
WQv – Water Quality Volume

## Definitions

All definitions in this section are solely for the purposes of this permit.

**Agricultural Building** – a structure designed and constructed to house farm implements, hay, grain, poultry, livestock or other horticultural products; excluding any structure designed, constructed or used, in whole or in part, for human habitation, as a place of employment where agricultural products are processed, treated or packaged, or as a place used by the public.

**Agricultural Property** – means the land for construction of a barn, *agricultural building*, silo, stockyard, pen or other structural practices identified in Table II in the “Agricultural Management Practices Catalog for Nonpoint Source Pollution in New York State” prepared by the Department in cooperation with agencies of New York Nonpoint Source Coordinating Committee (dated June 2007).

**Alter Hydrology from Pre to Post-Development Conditions** - means the post-development peak flow rate(s) has increased by more than 5% of the pre-developed condition for the design storm of interest (e.g. 10 yr and 100 yr).

**Combined Sewer** - means a sewer that is designed to collect and convey both “sewage” and “stormwater”.

**Commence (Commencement of) Construction Activities** - means the initial disturbance of soils associated with clearing, grading or excavation activities; or other construction related activities that disturb or expose soils such as demolition, stockpiling of fill material, and the initial installation of erosion and sediment control practices required in the SWPPP. See definition for “*Construction Activity(ies)*” also.

**Construction Activity(ies)** - means any clearing, grading, excavation, filling, demolition or stockpiling activities that result in soil disturbance. Clearing activities can include, but are not limited to, logging equipment operation, the cutting and skidding of trees, stump removal and/or brush root removal. Construction activity does not include routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, or original purpose of a facility.

**Construction Site** – means the land area where *construction activity(ies)* will occur. See definition for “*Commence (Commencement of) Construction Activities*” and “*Larger Common Plan of Development or Sale*” also.

**Dewatering** – means the act of draining rainwater and/or groundwater from building foundations, vaults or excavations/trenches.

**Direct Discharge (to a specific surface waterbody)** - means that runoff flows from a *construction site* by overland flow and the first point of discharge is the specific surface waterbody, or runoff flows from a *construction site* to a separate storm sewer system

and the first point of discharge from the separate storm sewer system is the specific surface waterbody.

**Discharge(s)** - means any addition of any pollutant to waters of the State through an outlet or *point source*.

**Embankment** – means an earthen or rock slope that supports a road/highway.

**Endangered or Threatened Species** – see 6 NYCRR Part 182 of the Department’s rules and regulations for definition of terms and requirements.

**Environmental Conservation Law (ECL)** - means chapter 43-B of the Consolidated Laws of the State of New York, entitled the Environmental Conservation Law.

**Equivalent (Equivalence)** – means that the practice or measure meets all the performance, longevity, maintenance, and safety objectives of the technical standard and will provide an equal or greater degree of water quality protection.

**Final Stabilization** - means that all soil disturbance activities have ceased and a uniform, perennial vegetative cover with a density of eighty (80) percent over the entire pervious surface has been established; or other equivalent stabilization measures, such as permanent landscape mulches, rock rip-rap or washed/crushed stone have been applied on all disturbed areas that are not covered by permanent structures, concrete or pavement.

**General SPDES permit** - means a SPDES permit issued pursuant to 6 NYCRR Part 750-1.21 and Section 70-0117 of the ECL authorizing a category of discharges.

**Groundwater(s)** - means waters in the saturated zone. The saturated zone is a subsurface zone in which all the interstices are filled with water under pressure greater than that of the atmosphere. Although the zone may contain gas-filled interstices or interstices filled with fluids other than water, it is still considered saturated.

**Historic Property** – means any building, structure, site, object or district that is listed on the State or National Registers of Historic Places or is determined to be eligible for listing on the State or National Registers of Historic Places.

**Impervious Area (Cover)** - means all impermeable surfaces that cannot effectively infiltrate rainfall. This includes paved, concrete and gravel surfaces (i.e. parking lots, driveways, roads, runways and sidewalks); building rooftops and miscellaneous impermeable structures such as patios, pools, and sheds.

**Infeasible** – means not technologically possible, or not economically practicable and achievable in light of best industry practices.

**Larger Common Plan of Development or Sale** - means a contiguous area where multiple separate and distinct *construction activities* are occurring, or will occur, under one plan. The term “plan” in “larger common plan of development or sale” is broadly defined as any announcement or piece of documentation (including a sign, public notice or hearing, marketing plan, advertisement, drawing, permit application, State Environmental Quality Review Act (SEQRA) environmental assessment form or other documents, zoning request, computer design, etc.) or physical demarcation (including boundary signs, lot stakes, surveyor markings, etc.) indicating that *construction activities* may occur on a specific plot.

For discrete construction projects that are located within a larger common plan of development or sale that are at least 1/4 mile apart, each project can be treated as a separate plan of development or sale provided any interconnecting road, pipeline or utility project that is part of the same “common plan” is not concurrently being disturbed.

**Minimize** – means reduce and/or eliminate to the extent achievable using control measures (including best management practices) that are technologically available and economically practicable and achievable in light of best industry practices.

**Municipal Separate Storm Sewer (MS4)** - a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains):

- (i) Owned or operated by a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, stormwater, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA that discharges to surface waters of the State;
- (ii) Designed or used for collecting or conveying stormwater;
- (iii) Which is not a *combined sewer*; and
- (iv) Which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.2.

**National Pollutant Discharge Elimination System (NPDES)** - means the national system for the issuance of wastewater and stormwater permits under the Federal Water Pollution Control Act (Clean Water Act).

**Natural Buffer** – means an undisturbed area with natural cover running along a surface water (e.g. wetland, stream, river, lake, etc.).

**New Development** – means any land disturbance that does not meet the definition of Redevelopment Activity included in this appendix.



**New York State Erosion and Sediment Control Certificate Program** – a certificate program that establishes and maintains a process to identify and recognize individuals who are capable of developing, designing, inspecting and maintaining erosion and sediment control plans on projects that disturb soils in New York State. The certificate program is administered by the New York State Conservation District Employees Association.

**NOI Acknowledgment Letter** - means the letter that the Department sends to an owner or operator to acknowledge the Department's receipt and acceptance of a complete Notice of Intent. This letter documents the owner's or operator's authorization to discharge in accordance with the general permit for stormwater discharges from *construction activity*.

**Nonpoint Source** - means any source of water pollution or pollutants which is not a discrete conveyance or *point source* permitted pursuant to Title 7 or 8 of Article 17 of the Environmental Conservation Law (see ECL Section 17-1403).

**Overbank** –means flow events that exceed the capacity of the stream channel and spill out into the adjacent floodplain.

**Owner or Operator** - means the person, persons or legal entity which owns or leases the property on which the *construction activity* is occurring; an entity that has operational control over the construction plans and specifications, including the ability to make modifications to the plans and specifications; and/or an entity that has day-to-day operational control of those activities at a project that are necessary to ensure compliance with the permit conditions.

**Performance Criteria** – means the design criteria listed under the “Required Elements” sections in Chapters 5, 6 and 10 of the technical standard, New York State Stormwater Management Design Manual, dated January 2015. It does not include the Sizing Criteria (i.e. WQv, RRv, Cpv, Qp and Qf ) in Part I.C.2. of the permit.

**Point Source** - means any discernible, confined and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, vessel or other floating craft, or landfill leachate collection system from which *pollutants* are or may be discharged.

**Pollutant** - means dredged spoil, filter backwash, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand and industrial, municipal, agricultural waste and ballast discharged into water; which may cause or might reasonably be expected to cause pollution of the waters of the state in contravention of the standards or guidance values adopted as provided in 6 NYCRR Parts 700 et seq .

**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, New York State Erosion and Sediment Control Certificate Program holder 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.

Note: Inspections of any post-construction stormwater management practices that include structural components, such as a dam for an impoundment, shall be performed by a licensed Professional Engineer.

**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. 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.

**Redevelopment Activity(ies)** – means the disturbance and reconstruction of existing impervious area, including impervious areas that were removed from a project site within five (5) years of preliminary project plan submission to the local government (i.e. site plan, subdivision, etc.).

**Regulated, Traditional Land Use Control MS4** - means a city, town or village with land use control authority that is authorized to discharge under New York State DEC's

SPDES General Permit For Stormwater Discharges from Municipal Separate Stormwater Sewer Systems (MS4s) or the City of New York's Individual SPDES Permit for their Municipal Separate Storm Sewer Systems (NY-0287890).

**Routine Maintenance Activity** - means *construction activity* that is performed to maintain the original line and grade, hydraulic capacity, or original purpose of a facility, including, but not limited to:

- Re-grading of gravel roads or parking lots,
- Cleaning and shaping of existing roadside ditches and culverts that maintains the approximate original line and grade, and hydraulic capacity of the ditch,
- Cleaning and shaping of existing roadside ditches that does not maintain the approximate original grade, hydraulic capacity and purpose of the ditch if the changes to the line and grade, hydraulic capacity or purpose of the ditch are installed to improve water quality and quantity controls (e.g. installing grass lined ditch),
- Placement of aggregate shoulder backing that stabilizes the transition between the road shoulder and the ditch or *embankment*,
- Full depth milling and filling of existing asphalt pavements, replacement of concrete pavement slabs, and similar work that does not expose soil or disturb the bottom six (6) inches of subbase material,
- Long-term use of equipment storage areas at or near highway maintenance facilities,
- Removal of sediment from the edge of the highway to restore a previously existing sheet-flow drainage connection from the highway surface to the highway ditch or *embankment*,
- Existing use of Canal Corp owned upland disposal sites for the canal, and
- Replacement of curbs, gutters, sidewalks and guide rail posts.

**Site limitations** – means site conditions that prevent the use of an infiltration technique and or infiltration of the total WQv. Typical site limitations include: seasonal high groundwater, shallow depth to bedrock, and soils with an infiltration rate less than 0.5 inches/hour. The existence of site limitations shall be confirmed and documented using actual field testing (i.e. test pits, soil borings, and infiltration test) or using information from the most current United States Department of Agriculture (USDA) Soil Survey for the County where the project is located.

**Sizing Criteria** – means the criteria included in Part I.C.2 of the permit that are used to size post-construction stormwater management control practices. The criteria include; Water Quality Volume (WQv), Runoff Reduction Volume (RRv), Channel Protection Volume (Cpv), *Overbank Flood* (Qp), and *Extreme Flood* (Qf).

**State Pollutant Discharge Elimination System (SPDES)** - means the system established pursuant to Article 17 of the ECL and 6 NYCRR Part 750 for issuance of permits authorizing discharges to the waters of the state.

**Steep Slope** – means land area designated on the current United States Department of Agriculture (“USDA”) Soil Survey as Soil Slope Phase “D”, (provided the map unit name is inclusive of slopes greater than 25%) , or Soil Slope Phase E or F, (regardless of the map unit name), or a combination of the three designations.

**Streambank** – as used in this permit, means the terrain alongside the bed of a creek or stream. The bank consists of the sides of the channel, between which the flow is confined.

**Stormwater Pollution Prevention Plan (SWPPP)** – means a project specific report, including construction drawings, that among other things: describes the construction activity(ies), identifies the potential sources of pollution at the *construction site*; describes and shows the stormwater controls that will be used to control the pollutants (i.e. erosion and sediment controls; for many projects, includes post-construction stormwater management controls); and identifies procedures the *owner or operator* will implement to comply with the terms and conditions of the permit. See Part III of the permit for a complete description of the information that must be included in the SWPPP.

**Surface Waters of the State** - shall be construed to include lakes, bays, sounds, ponds, impounding reservoirs, springs, rivers, streams, creeks, estuaries, marshes, inlets, canals, the Atlantic ocean within the territorial seas of the state of New York and all other bodies of surface water, natural or artificial, inland or coastal, fresh or salt, public or private (except those private waters that do not combine or effect a junction with natural surface waters), which are wholly or partially within or bordering the state or within its jurisdiction. Waters of the state are further defined in 6 NYCRR Parts 800 to 941.

**Temporarily Ceased** – means that an existing disturbed area will not be disturbed again within 14 calendar days of the previous soil disturbance.

**Temporary Stabilization** - means that exposed soil has been covered with material(s) as set forth in the technical standard, New York Standards and Specifications for Erosion and Sediment Control, to prevent the exposed soil from eroding. The materials can include, but are not limited to, mulch, seed and mulch, and erosion control mats (e.g. jute twisted yarn, excelsior wood fiber mats).

**Total Maximum Daily Loads (TMDLs)** - A TMDL is the sum of the allowable loads of a single pollutant from all contributing point and *nonpoint sources*. It is a calculation of the maximum amount of a pollutant that a waterbody can receive on a daily basis and still meet *water quality standards*, and an allocation of that amount to the pollutant's sources. A TMDL stipulates wasteload allocations (WLAs) for *point source* discharges, load allocations (LAs) for *nonpoint sources*, and a margin of safety (MOS).

**Trained Contractor** - means an employee from the contracting (construction) company, identified in Part III.A.6., that 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 *trained contractor* shall receive four (4) hours of training every three (3) years.

It can also mean an employee from the contracting (construction) company, identified in Part III.A.6., that meets the *qualified inspector* qualifications (e.g. licensed Professional Engineer, Certified Professional in Erosion and Sediment Control (CPESC), Registered Landscape Architect, New York State Erosion and Sediment Control Certificate Program holder, or someone working under the direct supervision of, and at the same company as, the licensed Professional Engineer or Registered Landscape Architect, provided they have 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).

The *trained contractor* is responsible for the day to day implementation of the SWPPP.

**Uniform Procedures Act (UPA) Permit** - means a permit required under 6 NYCRR Part 621 of the Environmental Conservation Law (ECL), Article 70.

**Water Quality Standard** - means such measures of purity or quality for any waters in relation to their reasonable and necessary use as promulgated in 6 NYCRR Part 700 et seq.

## APPENDIX B – Required SWPPP Components by Project Type

**Table 1**  
**Construction Activities that Require the Preparation of a SWPPP That Only Includes Erosion and Sediment Controls**

<p><b>The following construction activities that involve soil disturbances of one (1) or more acres of land, but less than five (5) acres:</b></p> <ul style="list-style-type: none"><li>• Single family home <u>not</u> located in one of the watersheds listed in Appendix C or <u>not directly discharging</u> to one of the 303(d) segments listed in Appendix E</li><li>• Single family residential subdivisions with 25% or less impervious cover at total site build-out and <u>not</u> located in one of the watersheds listed in Appendix C and <u>not</u> directly discharging to one of the 303(d) segments listed in Appendix E</li><li>• Construction of a barn or other <i>agricultural building</i>, silo, stock yard or pen.</li></ul>
<p><b>The following construction activities that involve soil disturbances between five thousand (5000) square feet and one (1) acre of land:</b></p> <p>All construction activities located in the watersheds identified in Appendix D that involve soil disturbances between five thousand (5,000) square feet and one (1) acre of land.</p>
<p><b>The following construction activities that involve soil disturbances of one (1) or more acres of land:</b></p> <ul style="list-style-type: none"><li>• Installation of underground, linear utilities; such as gas lines, fiber-optic cable, cable TV, electric, telephone, sewer mains, and water mains</li><li>• Environmental enhancement projects, such as wetland mitigation projects, stormwater retrofits and stream restoration projects</li><li>• Pond construction</li><li>• Linear bike paths running through areas with vegetative cover, including bike paths surfaced with an impervious cover</li><li>• Cross-country ski trails and walking/hiking trails</li><li>• Sidewalk, bike path or walking path projects, surfaced with an impervious cover, that are not part of residential, commercial or institutional development;</li><li>• Sidewalk, bike path or walking path projects, surfaced with an impervious cover, that include incidental shoulder or curb work along an existing highway to support construction of the sidewalk, bike path or walking path.</li><li>• Slope stabilization projects</li><li>• Slope flattening that changes the grade of the site, but does not significantly change the runoff characteristics</li></ul>

**Table 1 (Continued) CONSTRUCTION ACTIVITIES THAT REQUIRE THE PREPARATION OF A SWPPP  
THAT ONLY INCLUDES EROSION AND SEDIMENT CONTROLS**

**The following construction activities that involve soil disturbances of one (1) or more acres of land:**

- Spoil areas that will be covered with vegetation
- Vegetated open space projects (i.e. recreational parks, lawns, meadows, fields, downhill ski trails) excluding projects that *alter hydrology from pre to post development* conditions,
- Athletic fields (natural grass) that do not include the construction or reconstruction of *impervious area* and do not *alter hydrology from pre to post development* conditions
- Demolition project where vegetation will be established, and no redevelopment is planned
- Overhead electric transmission line project that does not include the construction of permanent access roads or parking areas surfaced with *impervious cover*
- Structural practices as identified in Table II in the "Agricultural Management Practices Catalog for Nonpoint Source Pollution in New York State", excluding projects that involve soil disturbances of greater than five acres and construction activities that include the construction or reconstruction of impervious area
- Temporary access roads, median crossovers, detour roads, lanes, or other temporary impervious areas that will be restored to pre-construction conditions once the construction activity is complete

**Table 2**  
**CONSTRUCTION ACTIVITIES THAT REQUIRE THE PREPARATION OF A SWPPP THAT INCLUDES**  
**POST-CONSTRUCTION STORMWATER MANAGEMENT PRACTICES**

**The following construction activities that involve soil disturbances of one (1) or more acres of land:**

- Single family home located in one of the watersheds listed in Appendix C or *directly discharging* to one of the 303(d) segments listed in Appendix E
- Single family home that disturbs five (5) or more acres of land
- Single family residential subdivisions located in one of the watersheds listed in Appendix C or *directly discharging* to one of the 303(d) segments listed in Appendix E
- Single family residential subdivisions that involve soil disturbances of between one (1) and five (5) acres of land with greater than 25% impervious cover at total site build-out
- Single family residential subdivisions that involve soil disturbances of five (5) or more acres of land, and single family residential subdivisions that involve soil disturbances of less than five (5) acres that are part of a larger common plan of development or sale that will ultimately disturb five or more acres of land
- Multi-family residential developments; includes duplexes, townhomes, condominiums, senior housing complexes, apartment complexes, and mobile home parks
- Airports
- Amusement parks
- Breweries, cideries, and wineries, including establishments constructed on agricultural land
- Campgrounds
- Cemeteries that include the construction or reconstruction of impervious area (>5% of disturbed area) or *alter the hydrology from pre to post development conditions*
- Commercial developments
- Churches and other places of worship
- Construction of a barn or other *agricultural building* (e.g. silo) and structural practices as identified in Table II in the "Agricultural Management Practices Catalog for Nonpoint Source Pollution in New York State" that include the construction or reconstruction of *impervious area*, excluding projects that involve soil disturbances of less than five acres.
- Golf courses
- Institutional development; includes hospitals, prisons, schools and colleges
- Industrial facilities; includes industrial parks
- Landfills
- Municipal facilities; includes highway garages, transfer stations, office buildings, POTW's, water treatment plants, and water storage tanks
- Office complexes
- Playgrounds that include the construction or reconstruction of impervious area
- Sports complexes
- Racetracks; includes racetracks with earthen (dirt) surface
- Road construction or reconstruction, including roads constructed as part of the construction activities listed in Table 1



Table 2 (Continued)

**CONSTRUCTION ACTIVITIES THAT REQUIRE THE PREPARATION OF A SWPPP THAT INCLUDES POST-CONSTRUCTION STORMWATER MANAGEMENT PRACTICES**

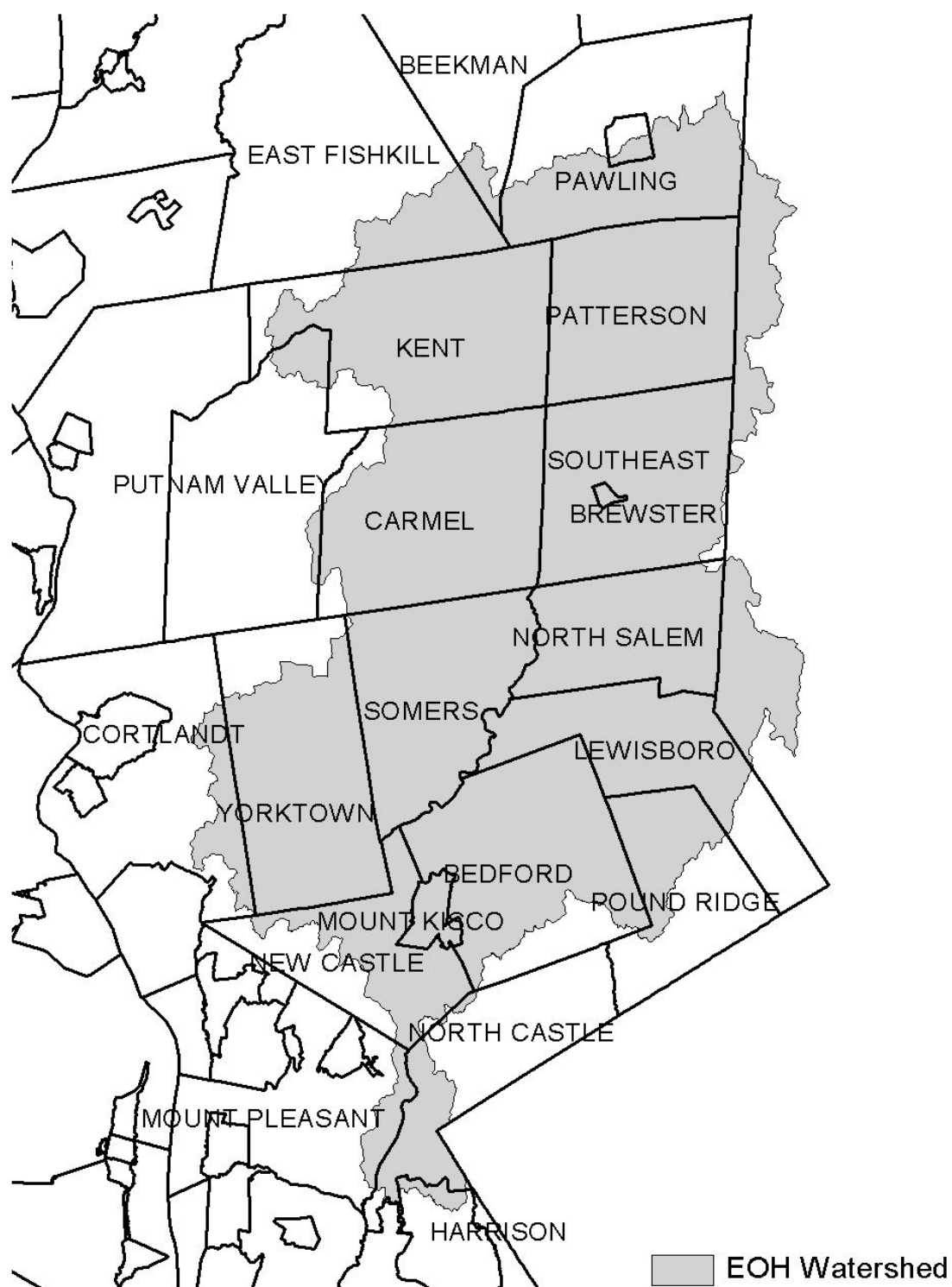
**The following construction activities that involve soil disturbances of one (1) or more acres of land:**

- Parking lot construction or reconstruction, including parking lots constructed as part of the construction activities listed in Table 1
- Athletic fields (natural grass) that include the construction or reconstruction of impervious area (>5% of disturbed area) or *alter the hydrology from pre to post development* conditions
- Athletic fields with artificial turf
- Permanent access roads, parking areas, substations, compressor stations and well drilling pads, surfaced with *impervious cover*, and constructed as part of an over-head electric transmission line project, wind-power project, cell tower project, oil or gas well drilling project, sewer or water main project or other linear utility project
- Sidewalk, bike path or walking path projects, surfaced with an impervious cover, that are part of a residential, commercial or institutional development
- Sidewalk, bike path or walking path projects, surfaced with an impervious cover, that are part of a highway construction or reconstruction project
- All other construction activities that include the construction or reconstruction of *impervious area* or *alter the hydrology from pre to post development* conditions, and are not listed in Table 1

## APPENDIX C – Watersheds Requiring Enhanced Phosphorus Removal

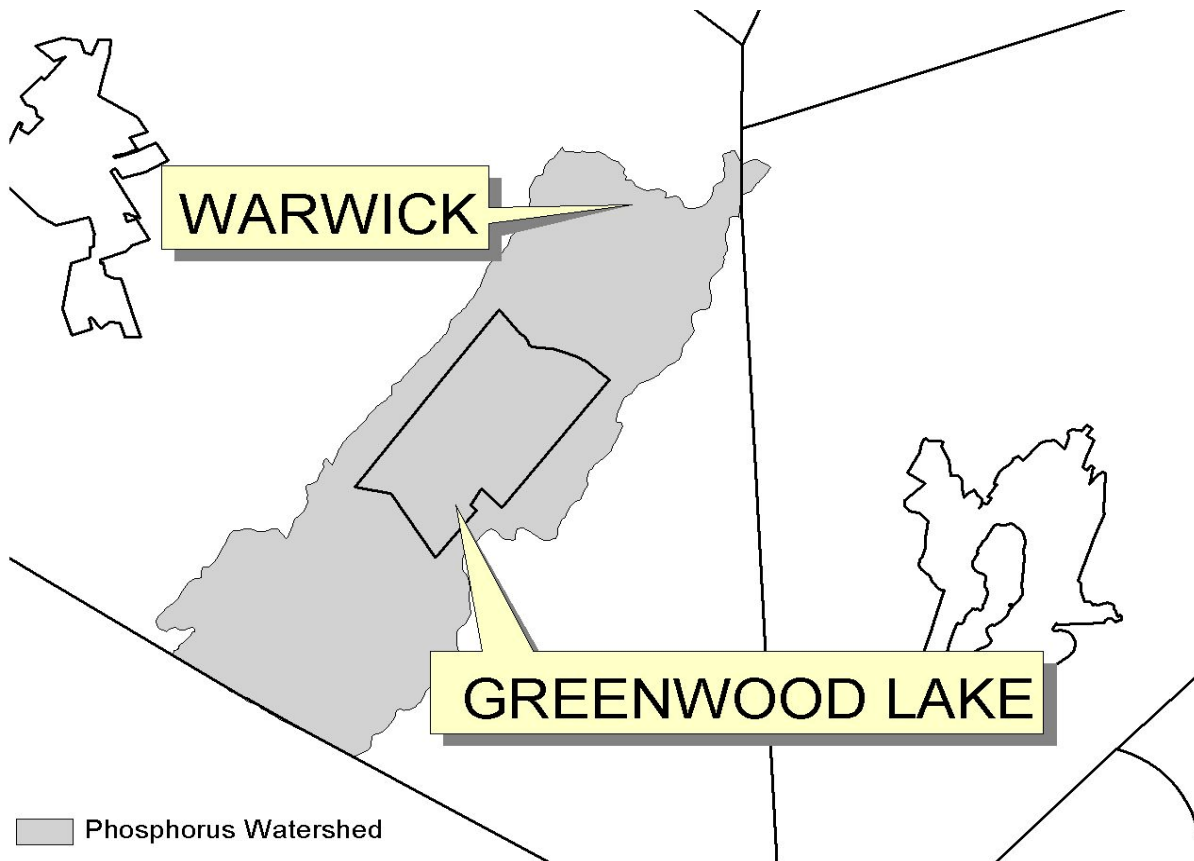
**Watersheds where *owners or operators* of construction activities identified in Table 2 of Appendix B must prepare a SWPPP that includes post-construction stormwater management practices designed in conformance with the Enhanced Phosphorus Removal Standards included in the technical standard, New York State Stormwater Management Design Manual (“Design Manual”).**

- Entire New York City Watershed located east of the Hudson River - Figure 1
- Onondaga Lake Watershed - Figure 2
- Greenwood Lake Watershed -Figure 3
- Oscawana Lake Watershed – Figure 4
- Kinderhook Lake Watershed – Figure 5

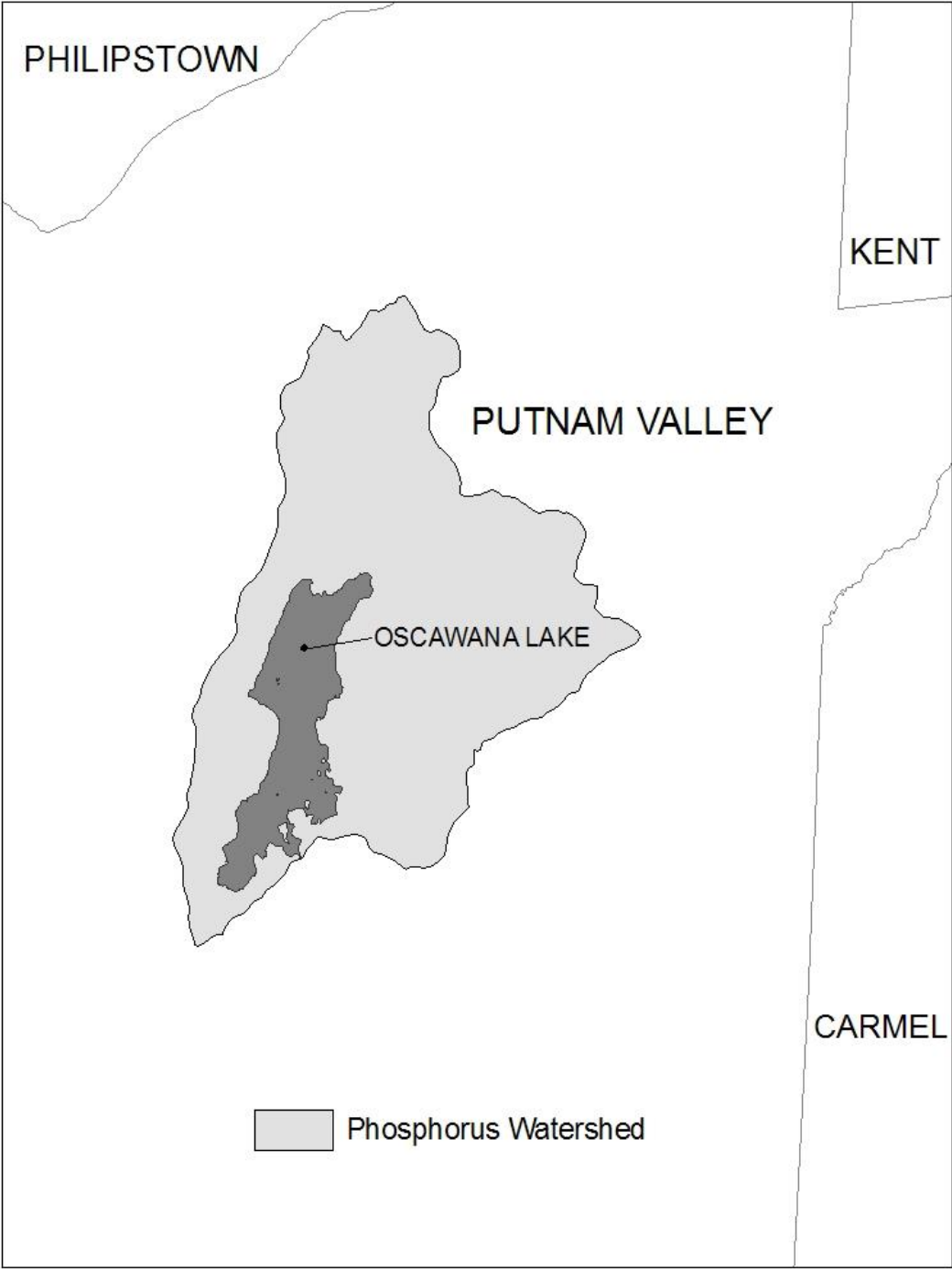
**Figure 1 - New York City Watershed East of the Hudson**

**Figure 2 - Onondaga Lake Watershed**

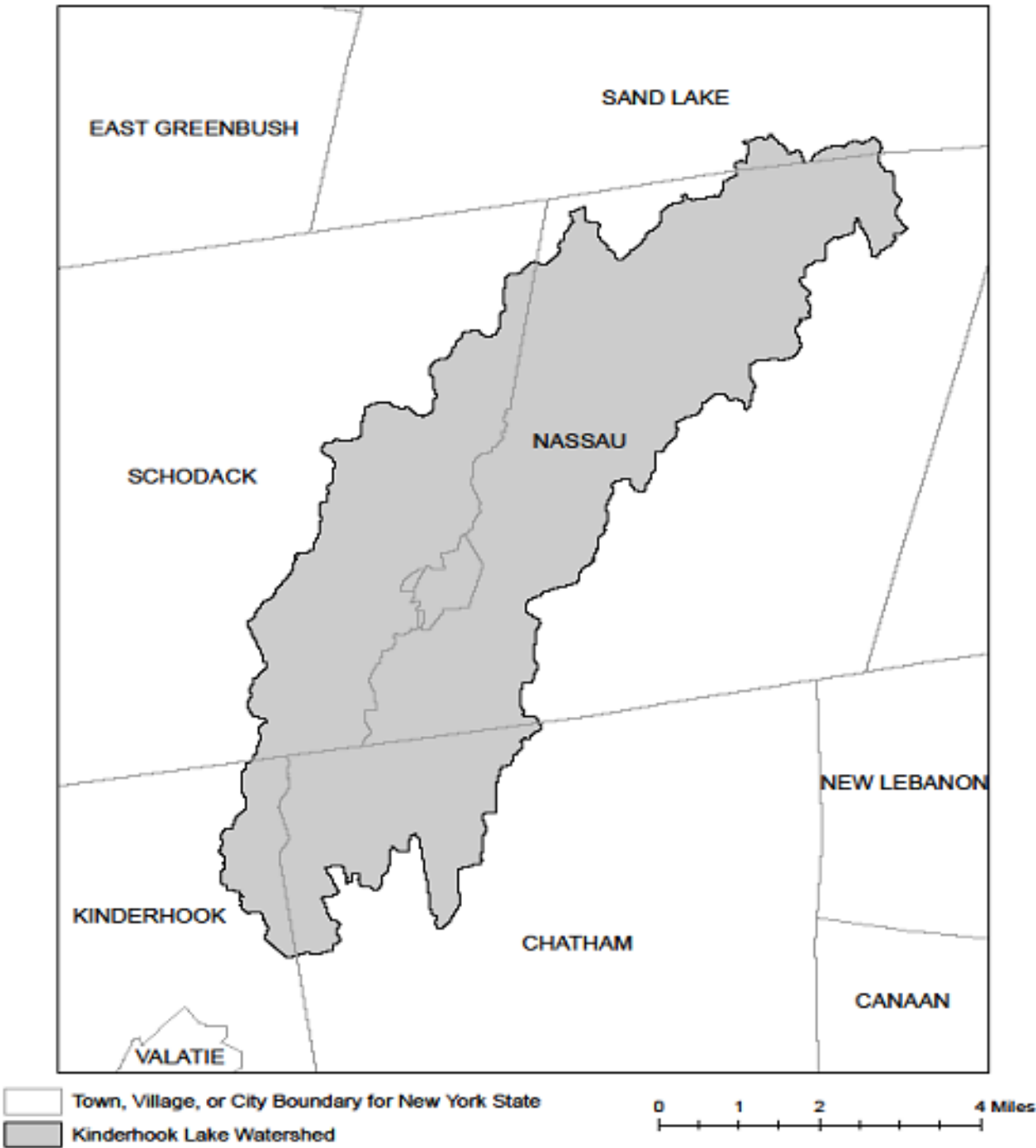
**Figure 3 - Greenwood Lake Watershed**



**Figure 4 - Oscawana Lake Watershed**



**Figure 5 - Kinderhook Lake Watershed**



## **APPENDIX D – Watersheds with Lower Disturbance Threshold**

**Watersheds where *owners or operators* of construction activities that involve soil disturbances between five thousand (5000) square feet and one (1) acre of land must obtain coverage under this permit.**

Entire New York City Watershed that is located east of the Hudson River - See Figure 1 in Appendix C
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## APPENDIX E – 303(d) Segments Impaired by Construction Related Pollutant(s)

List of 303(d) segments impaired by pollutants related to *construction activity* (e.g. silt, sediment or nutrients). The list was developed using "The Final New York State 2016 Section 303(d) List of Impaired Waters Requiring a TMDL/Other Strategy" dated November 2016. *Owners or operators* of single family home and single family residential subdivisions with 25% or less total impervious cover at total site build-out that involve soil disturbances of one or more acres of land, but less than 5 acres, and *directly discharge* to one of the listed segments below shall prepare a SWPPP that includes post-construction stormwater management practices designed in conformance with the New York State Stormwater Management Design Manual ("Design Manual"), dated January 2015.

COUNTY	WATERBODY	POLLUTANT
Albany	Ann Lee (Shakers) Pond, Stump Pond	Nutrients
Albany	Basic Creek Reservoir	Nutrients
Allegany	Amity Lake, Saunders Pond	Nutrients
Bronx	Long Island Sound, Bronx	Nutrients
Bronx	Van Cortlandt Lake	Nutrients
Broome	Fly Pond, Deer Lake, Sky Lake	Nutrients
Broome	Minor Tribs to Lower Susquehanna (north)	Nutrients
Broome	Whitney Point Lake/Reservoir	Nutrients
Cattaraugus	Allegheny River/Reservoir	Nutrients
Cattaraugus	Beaver (Alma) Lake	Nutrients
Cattaraugus	Case Lake	Nutrients
Cattaraugus	Linlyco/Club Pond	Nutrients
Cayuga	Duck Lake	Nutrients
Cayuga	Little Sodus Bay	Nutrients
Chautauqua	Bear Lake	Nutrients
Chautauqua	Chadakoin River and tribs	Nutrients
Chautauqua	Chautauqua Lake, North	Nutrients
Chautauqua	Chautauqua Lake, South	Nutrients
Chautauqua	Findley Lake	Nutrients
Chautauqua	Hulburt/Clymer Pond	Nutrients
Clinton	Great Chazy River, Lower, Main Stem	Silt/Sediment
Clinton	Lake Champlain, Main Lake, Middle	Nutrients
Clinton	Lake Champlain, Main Lake, North	Nutrients
Columbia	Kinderhook Lake	Nutrients
Columbia	Robinson Pond	Nutrients
Cortland	Dean Pond	Nutrients

### 303(d) Segments Impaired by Construction Related Pollutant(s)

Dutchess	Fall Kill and tribs	Nutrients
Dutchess	Hillside Lake	Nutrients
Dutchess	Wappingers Lake	Nutrients
Dutchess	Wappingers Lake	Silt/Sediment
Erie	Beeman Creek and tribs	Nutrients
Erie	Ellicott Creek, Lower, and tribs	Silt/Sediment
Erie	Ellicott Creek, Lower, and tribs	Nutrients
Erie	Green Lake	Nutrients
Erie	Little Sister Creek, Lower, and tribs	Nutrients
Erie	Murder Creek, Lower, and tribs	Nutrients
Erie	Rush Creek and tribs	Nutrients
Erie	Scajaquada Creek, Lower, and tribs	Nutrients
Erie	Scajaquada Creek, Middle, and tribs	Nutrients
Erie	Scajaquada Creek, Upper, and tribs	Nutrients
Erie	South Branch Smoke Cr, Lower, and tribs	Silt/Sediment
Erie	South Branch Smoke Cr, Lower, and tribs	Nutrients
Essex	Lake Champlain, Main Lake, South	Nutrients
Essex	Lake Champlain, South Lake	Nutrients
Essex	Willsboro Bay	Nutrients
Genesee	Bigelow Creek and tribs	Nutrients
Genesee	Black Creek, Middle, and minor tribs	Nutrients
Genesee	Black Creek, Upper, and minor tribs	Nutrients
Genesee	Bowen Brook and tribs	Nutrients
Genesee	LeRoy Reservoir	Nutrients
Genesee	Oak Orchard Cr, Upper, and tribs	Nutrients
Genesee	Tonawanda Creek, Middle, Main Stem	Nutrients
Greene	Schoharie Reservoir	Silt/Sediment
Greene	Sleepy Hollow Lake	Silt/Sediment
Herkimer	Steele Creek tribs	Silt/Sediment
Herkimer	Steele Creek tribs	Nutrients
Jefferson	Moon Lake	Nutrients
Kings	Hendrix Creek	Nutrients
Kings	Prospect Park Lake	Nutrients
Lewis	Mill Creek/South Branch, and tribs	Nutrients
Livingston	Christie Creek and tribs	Nutrients
Livingston	Conesus Lake	Nutrients
Livingston	Mill Creek and minor tribs	Silt/Sediment
Monroe	Black Creek, Lower, and minor tribs	Nutrients
Monroe	Buck Pond	Nutrients
Monroe	Cranberry Pond	Nutrients

### 303(d) Segments Impaired by Construction Related Pollutant(s)

Monroe	Lake Ontario Shoreline, Western	Nutrients
Monroe	Long Pond	Nutrients
Monroe	Mill Creek and tribs	Nutrients
Monroe	Mill Creek/Blue Pond Outlet and tribs	Nutrients
Monroe	Minor Tribs to Irondequoit Bay	Nutrients
Monroe	Rochester Embayment - East	Nutrients
Monroe	Rochester Embayment - West	Nutrients
Monroe	Shipbuilders Creek and tribs	Nutrients
Monroe	Thomas Creek/White Brook and tribs	Nutrients
Nassau	Beaver Lake	Nutrients
Nassau	Camaans Pond	Nutrients
Nassau	East Meadow Brook, Upper, and tribs	Silt/Sediment
Nassau	East Rockaway Channel	Nutrients
Nassau	Grant Park Pond	Nutrients
Nassau	Hempstead Bay	Nutrients
Nassau	Hempstead Lake	Nutrients
Nassau	Hewlett Bay	Nutrients
Nassau	Hog Island Channel	Nutrients
Nassau	Long Island Sound, Nassau County Waters	Nutrients
Nassau	Massapequa Creek and tribs	Nutrients
Nassau	Milburn/Parsonage Creeks, Upp, and tribs	Nutrients
Nassau	Reynolds Channel, west	Nutrients
Nassau	Tidal Tribs to Hempstead Bay	Nutrients
Nassau	Tribs (fresh) to East Bay	Nutrients
Nassau	Tribs (fresh) to East Bay	Silt/Sediment
Nassau	Tribs to Smith/Halls Ponds	Nutrients
Nassau	Woodmere Channel	Nutrients
New York	Harlem Meer	Nutrients
New York	The Lake in Central Park	Nutrients
Niagara	Bergholtz Creek and tribs	Nutrients
Niagara	Hyde Park Lake	Nutrients
Niagara	Lake Ontario Shoreline, Western	Nutrients
Niagara	Lake Ontario Shoreline, Western	Nutrients
Oneida	Ballou, Nail Creeks and tribs	Nutrients
Onondaga	Harbor Brook, Lower, and tribs	Nutrients
Onondaga	Ley Creek and tribs	Nutrients
Onondaga	Minor Tribs to Onondaga Lake	Nutrients
Onondaga	Ninemile Creek, Lower, and tribs	Nutrients
Onondaga	Onondaga Creek, Lower, and tribs	Nutrients
Onondaga	Onondaga Creek, Middle, and tribs	Nutrients

### 303(d) Segments Impaired by Construction Related Pollutant(s)

Onondaga	Onondaga Lake, northern end	Nutrients
Onondaga	Onondaga Lake, southern end	Nutrients
Ontario	Great Brook and minor tribs	Silt/Sediment
Ontario	Great Brook and minor tribs	Nutrients
Ontario	Hemlock Lake Outlet and minor tribs	Nutrients
Ontario	Honeoye Lake	Nutrients
Orange	Greenwood Lake	Nutrients
Orange	Monhagen Brook and tribs	Nutrients
Orange	Orange Lake	Nutrients
Orleans	Lake Ontario Shoreline, Western	Nutrients
Orleans	Lake Ontario Shoreline, Western	Nutrients
Oswego	Lake Neatahwanta	Nutrients
Oswego	Pleasant Lake	Nutrients
Putnam	Bog Brook Reservoir	Nutrients
Putnam	Boyd Corners Reservoir	Nutrients
Putnam	Croton Falls Reservoir	Nutrients
Putnam	Diverting Reservoir	Nutrients
Putnam	East Branch Reservoir	Nutrients
Putnam	Lake Carmel	Nutrients
Putnam	Middle Branch Reservoir	Nutrients
Putnam	Oscawana Lake	Nutrients
Putnam	Palmer Lake	Nutrients
Putnam	West Branch Reservoir	Nutrients
Queens	Bergen Basin	Nutrients
Queens	Flushing Creek/Bay	Nutrients
Queens	Jamaica Bay, Eastern, and tribs (Queens)	Nutrients
Queens	Kissena Lake	Nutrients
Queens	Meadow Lake	Nutrients
Queens	Willow Lake	Nutrients
Rensselaer	Nassau Lake	Nutrients
Rensselaer	Snyders Lake	Nutrients
Richmond	Grasmere Lake/Bradys Pond	Nutrients
Rockland	Congers Lake, Swartout Lake	Nutrients
Rockland	Rockland Lake	Nutrients
Saratoga	Ballston Lake	Nutrients
Saratoga	Dwaas Kill and tribs	Silt/Sediment
Saratoga	Dwaas Kill and tribs	Nutrients
Saratoga	Lake Lonely	Nutrients
Saratoga	Round Lake	Nutrients
Saratoga	Tribs to Lake Lonely	Nutrients

### 303(d) Segments Impaired by Construction Related Pollutant(s)

Schenectady	Collins Lake	Nutrients
Schenectady	Duane Lake	Nutrients
Schenectady	Mariaville Lake	Nutrients
Schoharie	Engleville Pond	Nutrients
Schoharie	Summit Lake	Nutrients
Seneca	Reeder Creek and tribs	Nutrients
St.Lawrence	Black Lake Outlet/Black Lake	Nutrients
St.Lawrence	Fish Creek and minor tribs	Nutrients
Steuben	Smith Pond	Nutrients
Suffolk	Agawam Lake	Nutrients
Suffolk	Big/Little Fresh Ponds	Nutrients
Suffolk	Canaan Lake	Silt/Sediment
Suffolk	Canaan Lake	Nutrients
Suffolk	Flanders Bay, West/Lower Sawmill Creek	Nutrients
Suffolk	Fresh Pond	Nutrients
Suffolk	Great South Bay, East	Nutrients
Suffolk	Great South Bay, Middle	Nutrients
Suffolk	Great South Bay, West	Nutrients
Suffolk	Lake Ronkonkoma	Nutrients
Suffolk	Long Island Sound, Suffolk County, West	Nutrients
Suffolk	Mattituck (Marratooka) Pond	Nutrients
Suffolk	Meetinghouse/Terrys Creeks and tribs	Nutrients
Suffolk	Mill and Seven Ponds	Nutrients
Suffolk	Millers Pond	Nutrients
Suffolk	Moriches Bay, East	Nutrients
Suffolk	Moriches Bay, West	Nutrients
Suffolk	Peconic River, Lower, and tidal tribs	Nutrients
Suffolk	Quantuck Bay	Nutrients
Suffolk	Shinnecock Bay and Inlet	Nutrients
Suffolk	Tidal tribs to West Moriches Bay	Nutrients
Sullivan	Bodine, Montgomery Lakes	Nutrients
Sullivan	Davies Lake	Nutrients
Sullivan	Evens Lake	Nutrients
Sullivan	Pleasure Lake	Nutrients
Tompkins	Cayuga Lake, Southern End	Nutrients
Tompkins	Cayuga Lake, Southern End	Silt/Sediment
Tompkins	Owasco Inlet, Upper, and tribs	Nutrients
Ulster	Ashokan Reservoir	Silt/Sediment
Ulster	Esopus Creek, Upper, and minor tribs	Silt/Sediment
Warren	Hague Brook and tribs	Silt/Sediment

### 303(d) Segments Impaired by Construction Related Pollutant(s)

Warren	Huddle/Finkle Brooks and tribs	Silt/Sediment
Warren	Indian Brook and tribs	Silt/Sediment
Warren	Lake George	Silt/Sediment
Warren	Tribs to L.George, Village of L George	Silt/Sediment
Washington	Cossayuna Lake	Nutrients
Washington	Lake Champlain, South Bay	Nutrients
Washington	Tribs to L.George, East Shore	Silt/Sediment
Washington	Wood Cr/Champlain Canal and minor tribs	Nutrients
Wayne	Port Bay	Nutrients
Westchester	Amawalk Reservoir	Nutrients
Westchester	Blind Brook, Upper, and tribs	Silt/Sediment
Westchester	Cross River Reservoir	Nutrients
Westchester	Lake Katonah	Nutrients
Westchester	Lake Lincolndale	Nutrients
Westchester	Lake Meahagh	Nutrients
Westchester	Lake Mohegan	Nutrients
Westchester	Lake Shenorock	Nutrients
Westchester	Long Island Sound, Westchester (East)	Nutrients
Westchester	Mamaroneck River, Lower	Silt/Sediment
Westchester	Mamaroneck River, Upper, and minor tribs	Silt/Sediment
Westchester	Muscoot/Upper New Croton Reservoir	Nutrients
Westchester	New Croton Reservoir	Nutrients
Westchester	Peach Lake	Nutrients
Westchester	Reservoir No.1 (Lake Isle)	Nutrients
Westchester	Saw Mill River, Lower, and tribs	Nutrients
Westchester	Saw Mill River, Middle, and tribs	Nutrients
Westchester	Sheldrake River and tribs	Silt/Sediment
Westchester	Sheldrake River and tribs	Nutrients
Westchester	Silver Lake	Nutrients
Westchester	Teatown Lake	Nutrients
Westchester	Titicus Reservoir	Nutrients
Westchester	Truesdale Lake	Nutrients
Westchester	Wallace Pond	Nutrients
Wyoming	Java Lake	Nutrients
Wyoming	Silver Lake	Nutrients

## APPENDIX F – List of NYS DEC Regional Offices

<u>Region</u>	<u>COVERING THE FOLLOWING COUNTIES:</u>	<u>DIVISION OF ENVIRONMENTAL PERMITS (DEP) PERMIT ADMINISTRATORS</u>	<u>DIVISION OF WATER (DOW) WATER (SPDES) PROGRAM</u>
1	NASSAU AND SUFFOLK	50 CIRCLE ROAD STONY BROOK, NY 11790 TEL. (631) 444-0365	50 CIRCLE ROAD STONY BROOK, NY 11790-3409 TEL. (631) 444-0405
2	BRONX, KINGS, NEW YORK, QUEENS AND RICHMOND	1 HUNTERS POINT PLAZA, 47-40 21ST ST. LONG ISLAND CITY, NY 11101-5407 TEL. (718) 482-4997	1 HUNTERS POINT PLAZA, 47-40 21ST ST. LONG ISLAND CITY, NY 11101-5407 TEL. (718) 482-4933
3	DUTCHESS, ORANGE, PUTNAM, ROCKLAND, SULLIVAN, ULSTER AND WESTCHESTER	21 SOUTH PUTT CORNERS ROAD NEW PALTZ, NY 12561-1696 TEL. (845) 256-3059	100 HILLSIDE AVENUE, SUITE 1W WHITE PLAINS, NY 10603 TEL. (914) 428 - 2505
4	ALBANY, COLUMBIA, DELAWARE, GREENE, MONTGOMERY, OTSEGO, RENSSELAER, SCHENECTADY AND SCHOHARIE	1150 NORTH WESTCOTT ROAD SCHENECTADY, NY 12306-2014 TEL. (518) 357-2069	1130 NORTH WESTCOTT ROAD SCHENECTADY, NY 12306-2014 TEL. (518) 357-2045
5	CLINTON, ESSEX, FRANKLIN, FULTON, HAMILTON, SARATOGA, WARREN AND WASHINGTON	1115 STATE ROUTE 86, Po Box 296 RAY BROOK, NY 12977-0296 TEL. (518) 897-1234	232 GOLF COURSE ROAD WARRENSBURG, NY 12885-1172 TEL. (518) 623-1200
6	HERKIMER, JEFFERSON, LEWIS, ONEIDA AND ST. LAWRENCE	STATE OFFICE BUILDING 317 WASHINGTON STREET WATERTOWN, NY 13601-3787 TEL. (315) 785-2245	STATE OFFICE BUILDING 207 GENESEE STREET UTICA, NY 13501-2885 TEL. (315) 793-2554
7	BROOME, CAYUGA, CHENANGO, CORTLAND, MADISON, ONONDAGA, OSWEGO, TIOGA AND TOMPKINS	615 ERIE BLVD. WEST SYRACUSE, NY 13204-2400 TEL. (315) 426-7438	615 ERIE BLVD. WEST SYRACUSE, NY 13204-2400 TEL. (315) 426-7500
8	CHEMUNG, GENESEE, LIVINGSTON, MONROE, ONTARIO, ORLEANS, SCHUYLER, SENECA, STEUBEN, WAYNE AND YATES	6274 EAST AVON-LIMA ROADAVON, NY 14414-9519 TEL. (585) 226-2466	6274 EAST AVON-LIMA RD. AVON, NY 14414-9519 TEL. (585) 226-2466
9	ALLEGANY, CATTARAUGUS, CHAUTAUQUA, ERIE, NIAGARA AND WYOMING	270 MICHIGAN AVENUE BUFFALO, NY 14203-2999 TEL. (716) 851-7165	270 MICHIGAN AVENUE BUFFALO, NY 14203-2999 TEL. (716) 851-7070

## **ATTACHMENT NO. 2**

### **DEEP RIPPING & DECOMPACTION (APRIL 2008)**





New York State  
**DEPARTMENT OF ENVIRONMENTAL CONSERVATION**

Division of Water

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# Deep-Ripping and Decompaction

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April 2008

New York State  
**Department of Environmental Conservation**

Document Prepared by:

John E. Lacey,  
Land Resource Consultant and Environmental Compliance Monitor  
(Formerly with the Division of Agricultural Protection and Development Services,  
NYS Dept. of Agriculture & Markets)

## Alternative Stormwater Management Deep-Ripping and Decompaction

### Description

The two-phase practice of 1) “Deep Ripping;” and 2) “Decompaction” (deep subsoiling), of the soil material as a step in the cleanup and restoration/landscaping of a construction site, helps mitigate the physically induced impacts of soil compression; i.e.: soil compaction or the substantial increase in the bulk density of the soil material.

Deep Ripping and Decompaction are key factors which help in restoring soil pore space and permeability for water infiltration. Conversely, the physical actions of cut-and-fill work, land grading, the ongoing movement of construction equipment and the transport of building materials throughout a site alter the architecture and structure of the soil, resulting in: the mixing of layers (horizons) of soil materials, compression of those materials and diminished soil porosity which, if left unchecked, severely impairs the soil’s water holding capacity and vertical drainage (rainfall infiltration), from the surface downward.

In a humid climate region, compaction damage on a site is virtually guaranteed over the duration of a project. Soil in very moist to wet condition when compacted, will have severely reduced permeability. Figure 1 displays the early stage of the deep-ripping phase (Note that all topsoil was stripped prior to construction access, and it remains stockpiled until the next phase – decompaction – is complete). A heavy-duty tractor is pulling a three-shank ripper on the first of several series of incrementally deepening passes through the construction access corridor's densely compressed subsoil material. Figure 2 illustrates the approximate volumetric composition of a loam surface soil when conditions are good for plant growth, with adequate natural pore space for fluctuating moisture conditions.

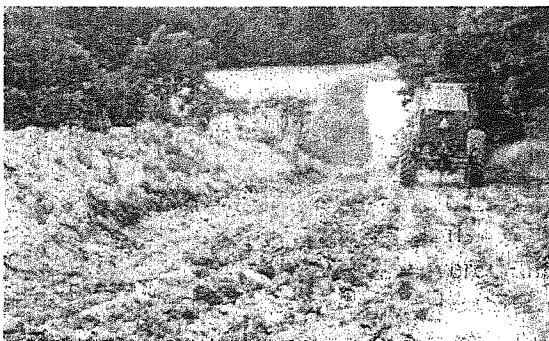


Fig. 1. A typical deep ripping phase of this practice, during the first in a series of progressively deeper “rips” through severely compressed subsoil.

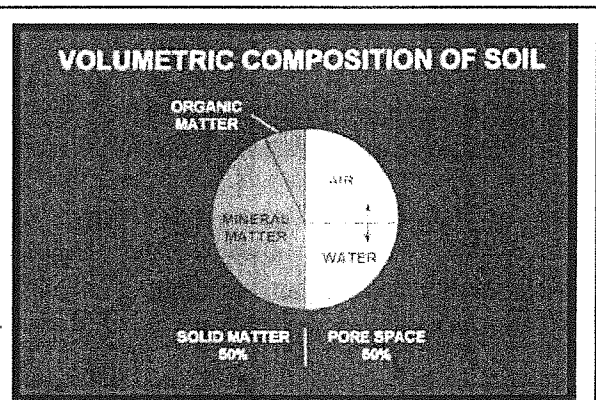


Fig. 2. About 50% of the volume of undisturbed loam surface soil is pore space, when soil is in good condition for plant growth. Brady, 2002.

## Recommended Application of Practice

The objective of Deep Ripping and Decompaction is to effectively fracture (vertically and laterally) through the thickness of the physically compressed subsoil material (see Figure 3), restoring soil porosity and permeability and aiding infiltration to help reduce runoff. Together with topsoil stripping, the “two-phase” practice of Deep Ripping and Decompaction first became established as a “best management practice” through ongoing success on commercial farmlands affected by heavy utility construction right-of-way projects (transmission pipelines and large power lines).

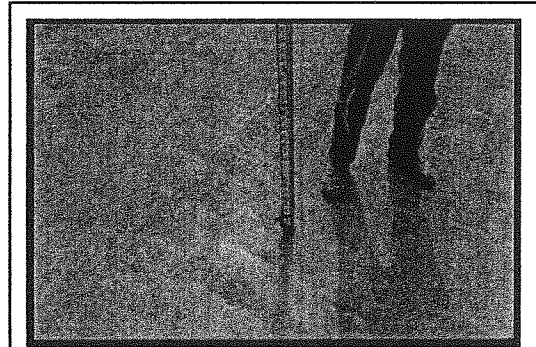


Fig. 3. Construction site with significant compaction of the deep basal till subsoil extends 24 inches below this exposed cut-and-fill work surface.

Soil permeability, soil drainage and cropland productivity were restored. For broader construction application, the two-phase practice of Deep Ripping and Decompaction is best adapted to areas impacted with significant soil compaction, on contiguous open portions of large construction sites and inside long, open construction corridors used as temporary access over the duration of construction. Each mitigation area should have minimal above-and-below-ground obstructions for the easy avoidance and maneuvering of a large tractor and ripping/decompacting implements. Conversely, the complete two-phase practice is not recommended in congested or obstructed areas due to the limitations on tractor and implement movement.

## Benefits

Aggressive “deep ripping” through the compressed thickness of exposed subsoil before the replacement/respreading of the topsoil layer, followed by “decompaction,” i.e.: “sub-soiling,” through the restored topsoil layer down into the subsoil, offers the following benefits:

- Increases the project (larger size) area’s direct surface infiltration of rainfall by providing the open site’s mitigated soil condition and lowers the demand on concentrated runoff control structures
- Enhances direct groundwater recharge through greater dispersion across and through a broader surface than afforded by some runoff-control structural measures
- Decreases runoff volume generated and provides hydrologic source control
- May be planned for application in feasible open locations either alone or in

conjunction with plans for structural practices (e.g., subsurface drain line or infiltration basin) serving the same or contiguous areas

- Promotes successful long-term revegetation by restoring soil permeability, drainage and water holding capacity for healthy (rather than restricted) root-system development of trees, shrubs and deep rooted ground cover, minimizing plant drowning during wet periods and burnout during dry periods.

## Feasibility/Limitations

The effectiveness of Deep Ripping and Decomaction is governed mostly by site factors such as: the original (undisturbed) soil's hydrologic characteristics; the general slope; local weather/timing (soil moisture) for implementation; the space-related freedom of equipment/implement maneuverability (noted above in **Recommended Application of Practice**), and by the proper selection and operation of tractor and implements (explained below in **Design Guidance**). The more notable site-related factors include:

### Soil

In the undisturbed condition, each identified soil type comprising a site is grouped into one of four categories of soil hydrology, Hydrologic Soil Group A, B, C or D, determined primarily by a range of characteristics including soil texture, drainage capability when thoroughly wet, and depth to water table. The natural rates of infiltration and transmission of soil-water through the undisturbed soil layers for Group A is "high" with a low runoff potential while soils in Group B are moderate in infiltration and the transmission of soil-water with a moderate runoff potential, depending somewhat on slope. Soils in Group C have slow rates of infiltration and transmission of soil-water and a moderately high runoff potential influenced by soil texture and slope; while soils in Group D have exceptionally slow rates of infiltration and transmission of soil-water, and high runoff potential.

In Figure 4, the profile displays the undisturbed horizons of a soil in Hydrologic Soil Group C and the naturally slow rate of infiltration through the subsoil. The slow rate of infiltration begins immediately below the topsoil horizon (30 cm), due to the limited amount of macro pores, e.g.: natural subsoil fractures, worm holes and root channels. Infiltration after the construction-induced mixing and compression of such subsoil material is virtually absent; but can be restored back to this natural level with the two-phase practice of deep ripping and decompaction, followed by the permanent establishment of an appropriate, deep taproot

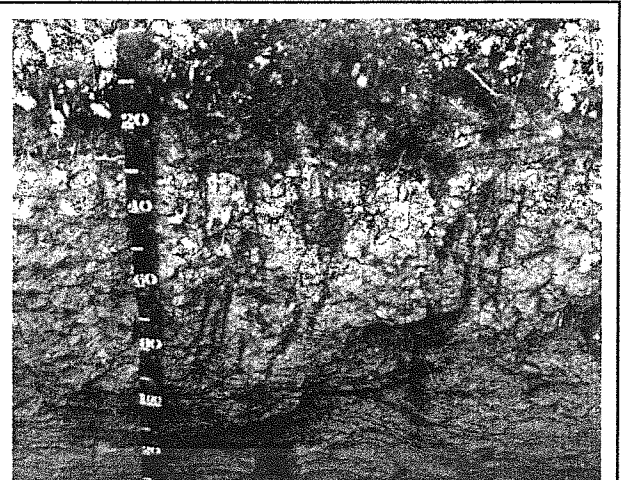


Fig. 4. Profile (in centimeters) displaying the infiltration test result of the natural undisturbed horizons of a soil in Hydrologic Soil Group C.

lawn/ground cover to help maintain the restored subsoil structure. Infiltration after construction-induced mixing and compression of such subsoil material can be notably rehabilitated with the Deep Ripping and Decompaction practice, which prepares the site for the appropriate long-term lawn/ground cover mix including deep taproot plants such as clover, fescue or trefoil, etc. needed for all rehabilitated soils.

Generally, soils in Hydrologic Soil Groups A and B, which respectively may include deep, well-drained, sandy-gravelly materials or deep, moderately well-drained basal till materials, are among the easier ones to restore permeability and infiltration, by deep ripping and decompaction. Among the many different soils in Hydrologic Soil Group C are those unique glacial tills having a natural fragipan zone, beginning about 12 to 18 inches (30 – 45cm), below surface. Although soils in Hydrologic Soil Group C do require a somewhat more carefully applied level of the Deep Ripping and Decompaction practice, it can greatly benefit such affected areas by reducing the runoff and fostering infiltration to a level equal to that of pre-disturbance.

Soils in Hydrologic Soil Group D typically have a permanent high water table close to the surface, influenced by a clay or other highly impervious layer of material. In many locations with clay subsoil material, the bulk density is so naturally high that heavy trafficking has little or no added impact on infiltration; and structural runoff control practices rather than Deep Ripping and Decompaction should be considered.

The information about Hydrologic Soil Groups is merely a general guideline. Site-specific data such as limited depths of cut-and-fill grading with minimal removal or translocation of the inherent subsoil materials (as analyzed in the county soil survey) or, conversely, the excavation and translocation of deeper, unconsolidated substratum or consolidated bedrock materials (unlike the analyzed subsoil horizons' materials referred to in the county soil survey) should always be taken into account.

Sites made up with significant quantities of large rocks, or having a very shallow depth to bedrock, are not conducive to deep ripping and decompaction (subsoiling); and other measures may be more practical.

### **Slope**

The two-phase application of 1) deep ripping and 2) decompaction (deep subsoiling), is most practical on flat, gentle and moderate slopes. In some situations, such as but not limited to temporary construction access corridors, inclusion areas that are moderately steep along a project's otherwise gentle or moderate slope may also be deep ripped and decompacted. For limited instances of moderate steepness on other projects, however, the post-construction land use and the relative alignment of the potential ripping and decompaction work in relation to the lay of the slope should be reviewed for safety and practicality. In broad construction areas predominated by moderately steep or steep slopes, the practice is generally not used.

### **Local Weather/Timing/Soil Moisture**

Effective fracturing of compressed subsoil material from the exposed work surface, laterally and vertically down through the affected zone is achieved only when the soil material is moderately dry to moderately moist. Neither one of the two-phases, deep ripping nor decompaction (deep

subsoiling), can be effectively conducted when the soil material (subsoil or replaced topsoil) is in either a “plastic” or “liquid” state of soil consistency. Pulling the respective implements legs through the soil when it is overly moist only results in the “slicing and smearing” of the material or added “squeezing and compression” instead of the necessary fracturing. Ample drying time is needed for a “rippable” soil condition not merely in the material close to the surface, but throughout the material located down to the bottom of the physically compressed zone of the subsoil.

The “poor man’s Atterberg field test” for soil plasticity is a simple “hand-roll” method used for quick, on-site determination of whether or not the moisture level of the affected soil material is low enough for: effective deep ripping of subsoil; respreading of topsoil in a friable state; and final decompaction (deep subsoiling). Using a sample of soil material obtained from the planned bottom depth of ripping, e.g.: 20 - 24 inches below exposed subsoil surface, the sample is hand rolled between the palms down to a 1/8-inch diameter thread. (Use the same test for stored topsoil material before respreading on the site.) If the respective soil sample crumbles apart in segments no greater than 3/8 of an inch long, by the time it is rolled down to 1/8 inch diameter, it is low enough in moisture for deep ripping (or topsoil replacement), and decompaction. Conversely, as shown in Figure 5, if the rolled sample stretches out in increments greater than 3/8 of an inch long before crumbling, it is in a “plastic” state of soil consistency and is too wet for subsoil ripping (as well as topsoil replacement) and final decompaction.

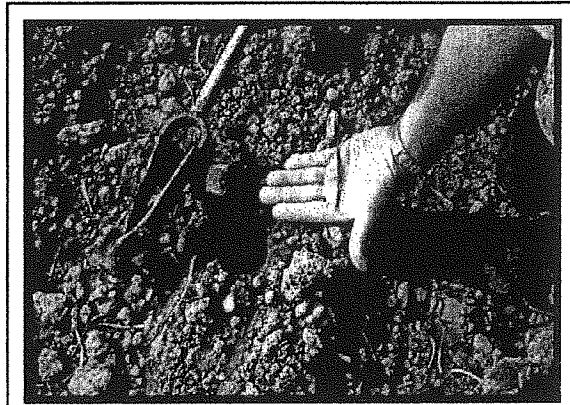


Fig. 5. Augered from a depth of 19 inches below the surface of the replaced topsoil, this subsoil sample was hand rolled to a 1/8-inch diameter. The test shows the soil at this site stretches out too far without crumbling; it indicates the material is in a plastic state of consistence, too wet for final decompaction (deep subsoiling) at this time.

## Design Guidance

Beyond the above-noted site factors, a vital requirement for the effective Deep Ripping and Decompaction (deep subsoiling), is implementing the practice in its distinct, two-phase process:

- 1) Deep rip the affected thickness of exposed subsoil material (see Figure 10 and 11), aggressively fracturing it before the protected topsoil is reapplied on the site (see Figure 12); and
- 2) Decompact (deep subsoil), simultaneously through the restored topsoil layer and the upper half of the affected subsoil (Figure 13). The second phase, “decompaction,” mitigates the partial recompaction which occurs during the heavy process of topsoil spreading/grading. Prior to deep ripping and decompacting the site, all construction activity, including construction equipment and material storage, site cleanup and trafficking (Figure 14), should be finished; and the site closed off to further disturbance. Likewise, once the practice is underway and the area’s soil permeability and

rainfall infiltration are being restored, a policy limiting all further traffic to permanent travel lanes is maintained.

The other critical elements, outlined below, are: using the proper implements (deep, heavy-duty rippers and subsoilers), and ample pulling-power equipment (tractors); and conducting the practice at the appropriate speed, depth and pattern(s) of movement.

Note that an appropriate plan for the separate practice of establishing a healthy perennial ground cover, with deep rooting to help maintain the restored soil structure, should be developed in advance. This may require the assistance of an agronomist or landscape horticulturist.

### Implements

Avoid the use of all undersize implements. The small-to-medium, light-duty tool will, at best, only “scarify” the uppermost surface portion of the mass of compacted subsoil material. The term “chisel plow” is commonly but incorrectly applied to a broad range of implements. While a few may be adapted for the moderate subsoiling of non-impacted soils, the majority are less durable and used for only lighter land-fitting (see Figure 6).

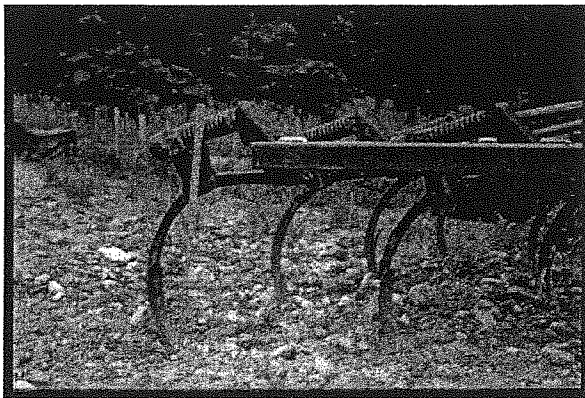


Fig. 6. A light duty chisel implement, not adequate for either the deep ripping or decompaction (deep subsoiling) phase.

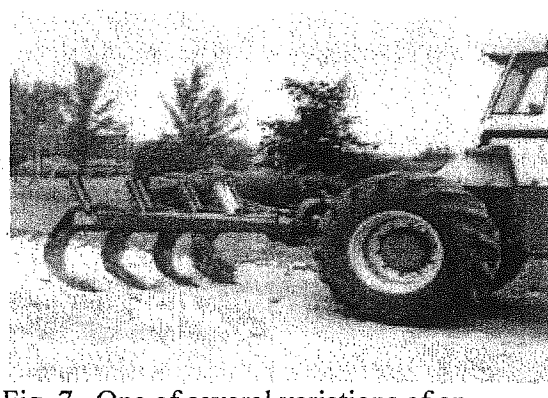


Fig. 7. One of several variations of an agricultural ripper. This unit has long, rugged shanks mounted on a steel V-frame for deep, aggressive fracturing through Phase 1.

Use a “heavy duty” agricultural-grade, deep ripper (see Figures 7,9,10 and 11) for the first phase: the lateral and vertical fracturing of the mass of exposed and compressed subsoil, down and through, to the bottom of impact, prior to the replacement of the topsoil layer. (Any oversize rocks which are uplifted to the subsoil surface during the deep ripping phase are picked and removed.) Like the heavy-duty class of implement for the first phase, the decompaction (deep subsoiling) of Phase 2 is conducted with the heavy-duty version of the deep subsoiler. More preferable is the angled-leg variety of deep subsoiler (shown in Figures 8 and 13). It minimizes the inversion of the subsoil and topsoil layers while laterally and vertically fracturing the upper half of the previously ripped subsoil layer and all of the topsoil layer by delivering a momentary, wave-like “lifting and shattering” action up through the soil layers as it is pulled.



### **Pulling-Power of Equipment**

Use the following rule of thumb for tractor horsepower (hp) whenever deep ripping and decompacting a significantly impacted site: For both types of implement, have at least 40 hp of tractor pull available for each mounted shank/ leg.

Using the examples of a 3-shank and a 5-shank implement, the respective tractors should have 120 and 200 hp available for fracturing down to the final depth of 20-to-24 inches per phase. Final depth for the deep ripping in Phase 1 is achieved incrementally by a progressive series of passes (see Depth and Patterns of Movement, below); while for Phase 2, the full operating depth of the deep subsoiler is applied from the beginning.

The operating speed for pulling both types of implement should not exceed 2 to 3 mph. At this slow and managed rate of operating speed, maximum functional performance is sustained by the tractor and the implement performing the soil fracturing. Referring to Figure 8, the implement is the 6-leg version of the deep angled-leg subsoiler. Its two outside legs are "chained up" so that only four legs will be engaged (at the maximum depth), requiring no less than 160 hp, (rather than 240 hp) of pull. The 4-wheel drive, articulated-frame tractor in Figure 8 is 174 hp. It will be decompacting this unobstructed, former construction access area simultaneously through 11 inches of replaced topsoil and the upper 12 inches of the previously deep-ripped subsoil. In constricted areas of Phase 1) Deep Ripping, a medium-size tractor with adequate hp, such as the one in Figure 9 pulling a 3-shank deep ripper, may be more maneuverable.

Some industrial-grade variations of ripping implements are attached to power graders and bulldozers. Although highly durable, they are generally not recommended. Typically, the shanks or "teeth" of these rippers are too short and stout; and they are mounted too far apart to achieve the well-distributed type of lateral and vertical fracturing of the soil materials necessary to restore soil permeability and infiltration. In addition, the power graders and bulldozers, as pullers, are far less maneuverable for turns and patterns than the tractor.



Fig. 8. A deep, angled-leg subsoiler, ideal for Phase 2 decompaction of after the topsoil layer is graded on top of the ripped subsoil.



Fig. 9. This medium tractor is pulling a 3-shank deep ripper. The severely compacted construction access corridor is narrow, and the 120 hp tractor is more maneuverable for Phase 1 deep ripping (subsoil fracturing), here.

### Depth and Patterns of Movement

As previously noted both Phase 1 Deep Ripping through significantly compressed, exposed subsoil and Phase 2 Decompaction (deep subsoiling) through the replaced topsoil and upper subsoil need to be performed at maximum capable depth of each implement. With an implement's guide wheels attached, some have a "normal" maximum operating depth of 18 inches, while others may go deeper. In many situations, however, the tractor/implement operator must first remove the guide wheels and other non essential elements from the implement. This adapts the ripper or the deep subsoiler for skillful pulling with its frame only a few inches above surface, while the shanks or legs, fracture the soil material 20-to-24 inches deep.

There may be construction sites where the depth of the exposed subsoil's compression is moderate, e.g.: 12 inches, rather than deep. This can be verified by using a  $\frac{3}{4}$  inch cone penetrometer and a shovel to test the subsoil for its level of compaction, incrementally, every three inches of increasing depth. Once the full thickness of the subsoil's compacted zone is finally "pieced" and there is a significant drop in the psi measurements of the soil penetrometer, the depth/thickness of compaction is determined. This is repeated at several representative locations of the construction site. If the thickness of the site's subsoil compaction is verified as, for example, ten inches, then the Phase 1 Deep Ripping can be correspondingly reduced to the implement's minimum operable depth of 12 inches. However, the Phase 2 simultaneous Decompaction (subsoiling) of an 11 inch thick layer of replaced topsoil and the upper subsoil should run at the subsoiling implements full operating depth.

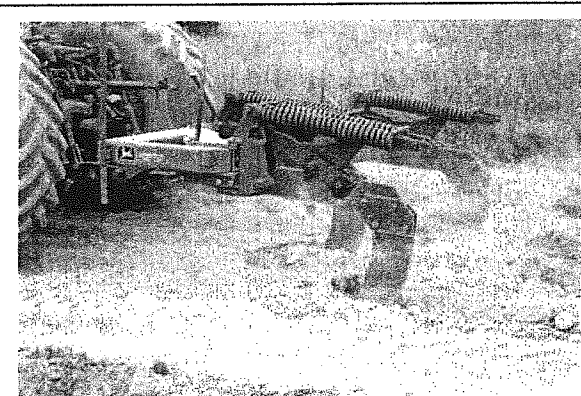


Fig. 10. An early pass with a 3-shank deep ripper penetrating only 8 inches into this worksite's severely compressed subsoil.

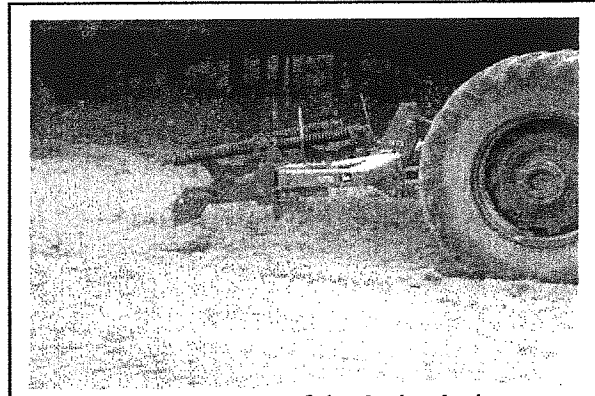


Fig. 11. A repeat run of the 3-shank ripper along the same patterned pass area as Fig. 9; here, incrementally reaching 18 of the needed 22 inches of subsoil fracture.

Typically, three separate series (patterns) are used for both the Phase 1 Deep Ripping and the Phase 2 Decompaction on significantly compacted sites. For Phase 1, each series begins with a moderate depth of rip and, by repeat-pass, continues until full depth is reached. Phase 2 applies the full depth of Decompaction (subsoiling), from the beginning.

Every separate series (pattern) consists of parallel, forward-and-return runs, with each progressive

pass of the implement's legs or shanks evenly staggered between those from the previous pass. This compensates for the shank or leg-spacing on the implement, e.g., with 24-to-30 inches between each shank or leg. The staggered return pass ensures lateral and vertical fracturing actuated every 12 to 15 inches across the densely compressed soil mass.

### **Large, Unobstructed Areas**

For larger easy areas, use the standard patterns of movement:

- The first series (pattern) of passes is applied lengthwise, parallel with the longest spread of the site; gradually progressing across the site's width, with each successive pass.
- The second series runs obliquely, crossing the first series at an angle of about 45 degrees.
- The third series runs at right angle (or 90 degrees), to the first series to complete the fracturing and shattering on severely compacted sites, and avoid leaving large unbroken blocks of compressed soil material. (In certain instances, the third series may be optional, depending on how thoroughly the first two series loosen the material and eliminate large chunks/blocks of material as verified by tests with a  $\frac{3}{4}$ -inch cone penetrometer.)



Fig. 12. Moderately dry topsoil is being replaced on the affected site now that Phase 1 deep ripping of the compressed subsoil is complete.

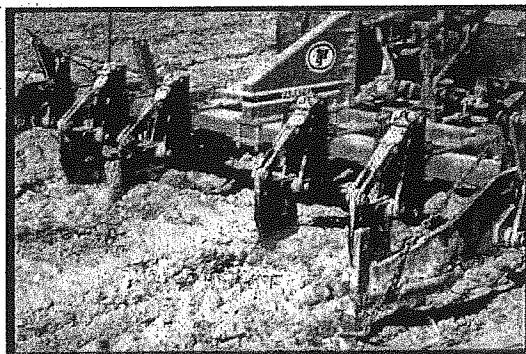


Fig. 13. The same deep, angled-leg subsoiler shown in Fig. 7 is engaged at maximum depth for Phase 2, decompaction (deep soiling), of the replaced topsoil and the upper subsoil materials.

### **Corridors**

In long corridors of limited width and less maneuverability than larger sites, e.g.: along compacted areas used as temporary construction access, a modified series of pattern passes are used.

- First, apply the same initial lengthwise, parallel series of passes described above.

- A second series of passes makes a broad “S” shaped pattern of rips, continually and gradually alternating the “S” curves between opposite edges inside the compacted corridor.
- The third and final series again uses the broad, alternating S pattern, but it is “flip-flopped” to continually cross the previous S pattern along the corridor’s centerline. This final series of the S pattern curves back along the edge areas skipped by the second series.

## Maintenance and Cost

Once the two-phase practice of Deep Ripping and Decompaction is completed, two items are essential for maintaining a site’s soil porosity and permeability for infiltration. They are: planting and maintaining the appropriate ground cover with deep roots to maintain the soil structure (see Figure 15); and keeping the site free of traffic or other weight loads.

Note that site-specific choice of an appropriate vegetative ground-cover seed mix, including the proper seeding ratio of one or more perennial species with a deep taproot system and the proper amount of lime and soil nutrients (fertilizer mix) adapted to the soil-needs, are basic to the final practice of landscaping, i.e: surface tillage, seeding/planting/fertilizing and culti-packing or mulching is applied. The "maintenance" of an effectively deep-ripped and decompacted area is generally limited to the successful perennial (long-term) landscape ground cover; as long as no weight-bearing force of soil compaction is applied.

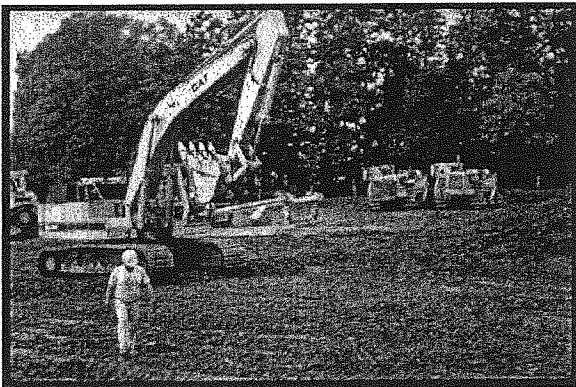


Fig. 14. The severely compacted soil of a temporary construction yard used daily by heavy equipment for four months; shown before deep ripping, topsoil replacement, and decompaction.



Fig. 15. The same site as Fig. 14 after deep ripping of the exposed subsoil, topsoil replacement, decompaction through the topsoil and upper subsoil and final surface tillage and revegetation to maintain soil permeability and infiltration.

The Deep Ripping and Decompaction practice is, by necessity, more extensive than periodic subsoiling of farmland. The cost of deep ripping and decompacting (deep subsoiling), will vary according to the depth and severity of soil-material compression and the relative amount of tractor and implement time that is required. In some instances, depending on open maneuverability, two-to-three acres of compacted project area may be deep-ripped in one day. In other situations of more severe compaction and - or less maneuverability, as little as one acre may be fully ripped in a day. Generally, if the Phase 1) Deep Ripping is fully effective, the Phase 2) Decompaction should be completed in  $\frac{2}{3}$  to  $\frac{3}{4}$  of the time required for Phase 1.

Using the example of two acres of Phase 1) Deep Ripping in one day, at \$1800 per day, the net cost is \$900 per acre. If the Phase 2) Decompacting or deep subsoiling takes  $\frac{3}{4}$  the time as Phase 1, it costs \$675 per acre for a combined total of \$1575 per acre to complete the practice (these figures do not include the cost of the separate practice of topsoil stripping and replacement). Due to the many variables, it must be recognized that cost will be determined by the specific conditions or constraints of the site and the availability of proper equipment.

## Resources

### Publications:

- American Society of Agricultural Engineers. 1971. *Compaction of Agricultural Soils*. ASAE.
- Brady, N.C., and R.R. Weil. 2002. *The Nature and Properties of Soils*. 13<sup>th</sup> ed. Pearson Education, Inc.
- Baver, L.D. 1948. *Soil Physics*. John Wiley & Sons.
- Carpachi, N. 1987 (1995 fifth printing). *Excavation and Grading Handbook, Revised*. 2<sup>nd</sup> ed. Craftsman Book Company
- Ellis, B. (Editor). 1997. *Safe & Easy Lawn Care: The Complete Guide to Organic Low Maintenance Lawn*. Houghton Mifflin.
- Harpstead, M.I., T.J. Sauer, and W.F. Bennett. 2001. *Soil Science Simplified*. 4<sup>th</sup> ed. Iowa State University Press.
- Magdoff, F., and H. van Es. 2000. *Building Soils for Better Crops*. 2<sup>nd</sup> ed. Sustainable Agricultural Networks
- McCarthy, D.F. 1993. *Essentials of Soil Mechanics and Foundations, Basic Geotechnics* 4<sup>th</sup> ed. Regents/Prentice Hall.
- Plaster, E.J. 1992. *Soil Science & Management*. 3<sup>rd</sup> ed. Delmar Publishers.
- Union Gas Limited, Ontario, Canada. 1984. *Rehabilitation of Agricultural Lands, Dawn-Kerwood Loop Pipeline; Technical Report*. Ecological Services for Planning, Ltd.; Robinson, Merritt & Devries, Ltd. and Smith, Hoffman Associates, Ltd.
- US Department of Agriculture in cooperation with Cornell University Agricultural Experiment Station. Various years. *Soil Survey of (various names) County, New York*. USDA.

### Internet Access:

- Examples of implements:  
V-Rippers. Access by internet search of *John Deere Ag -New Equipment for 915 (larger-frame model) V-Ripper*; and, *for 913 (smaller-frame model) V-Ripper*. Deep, angled-leg subsoiler. Access by internet search of: *Bigham Brothers Shear Bolt Paratill-Subsoiler*.  
[http://salesmanual.deere.com/sales/salesmanual/en\\_NA/primary\\_tillage/2008/feature/rippers/915v\\_pattern\\_frame.html?sbu=a&link=prodcat](http://salesmanual.deere.com/sales/salesmanual/en_NA/primary_tillage/2008/feature/rippers/915v_pattern_frame.html?sbu=a&link=prodcat) Last visited March 08.
- Soils data of USDA Natural Resources Conservation Service. NRCS Web Soil Survey. <http://websoilsurvey.nrcs.usda.gov/app/> and *USDA-NRCS Official Soil Series Descriptions; View by Name*. <http://ortho.ftw.nrcs.usda.gov/cgi-bin/osd/osdname.cgi> . Last visited Jan. 08.
- Soil penetrometer information. Access by internet searches of: *Diagnosing Soil Compaction using a Penetrometer (soil compaction tester)*, PSU Extension; as well as *Dickey-john Soil Compaction Tester*.  
<http://www.dickey-johnproducts.com/pdf/SoilCompactionTest.pdf> and <http://cropsoil.psu.edu/Extension/Facts/uc178pdf> Last visited Sept. 07

## **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 identifying 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)

HOSPITALITY HOUSE

Owner/Operator Contact Person Last Name (NOT CONSULTANT)

BARKER

Owner/Operator Contact Person First Name

BRIAN

Owner/Operator Mailing Address

297 RIVER STREET

City

TROY

State

NY

Zip

-

Phone (Owner/Operator)

-

-

Fax (Owner/Operator)

-

-

Email (Owner/Operator)

BARKERB@APLUSUSA.COM

FED TAX ID

-

(not required for individuals)



### Project Site Information

Project/Site Name

HOSPITALITY HOUSE

Street Address (NOT P.O. BOX)

271 CENTRAL AVENUE

Side of Street

☒ North ☐ South ☐ East ☐ West

City/Town/Village (THAT ISSUES BUILDING PERMIT)

Albany

State

N Y

Zip

-

County

Albany

Name of Nearest Cross Street

NORTH LAKE AVENUE

Distance to Nearest Cross Street (Feet)

20

Project In Relation to Cross Street

☐ North ☐ South ☐ East ☒ West

Tax Map Numbers  
Section-Block-Parcel

65 . 63 - 2 - 69

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](http://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 . 66375

**Y Coordinates (Northing)**

-73 . 77081

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

 . 

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**

 0 %

**B**

 0 %

**C**

 0 %

**D**

 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

 -  /  /

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?

City of Albany

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  -

Phone

-

Fax

-  -

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 State of New York and could subject me to criminal, civil and/or administrative proceedings.

**First Name**

Daniel

**MI**

R

**Last Name**

Hershberg

**Signature**

**Date**

/  /

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) Requirements

Important: Completion 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 requirements 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**

•  **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)

<u>RR Techniques (Area Reduction)</u>	Total Contributing Area (acres)		Total Contributing Impervious Area (acres)
<input type="radio"/> Conservation of Natural Areas (RR-1).....	<input type="text"/> . <input type="text"/>	and/or	<input type="text"/> . <input type="text"/>
<input type="radio"/> Sheetflow to Riparian Buffers/Filters Strips (RR-2).....	<input type="text"/> . <input type="text"/>	and/or	<input type="text"/> . <input type="text"/>
<input type="radio"/> Tree Planting/Tree Pit (RR-3).....	<input type="text"/> . <input type="text"/>	and/or	<input type="text"/> . <input type="text"/>
<input type="radio"/> Disconnection of Rooftop Runoff (RR-4).....	<input type="text"/> . <input type="text"/>	and/or	<input type="text"/> . <input type="text"/>
<u>RR Techniques (Area Reduction)</u>			
<input type="radio"/> Vegetated Swale (RR-5).....			<input type="text"/> . <input type="text"/>
<input type="radio"/> Rain Garden (RR-6).....			<input type="text"/> . <input type="text"/>
<input type="radio"/> Stormwater Planter (RR-7).....			<input type="text"/> . <input type="text"/>
<input type="radio"/> Rain Barrel/Cistern (RR-8).....			<input type="text"/> . <input type="text"/>
<input type="radio"/> Porous Pavement (RR-9).....			<input type="text"/> . <input type="text"/>
<input type="radio"/> Green Roof (RR-10).....			<input type="text"/> . <input type="text"/>
<u>Standard SMPs with RRv Capacity</u>			
<input type="radio"/> Infiltration Trench (I-1).....			<input type="text"/> . <input type="text"/>
<input type="radio"/> Infiltration Basin (I-2).....			<input type="text"/> . <input type="text"/>
<input type="radio"/> Dry Well (I-3).....			<input type="text"/> . <input type="text"/>
<input type="radio"/> Underground Infiltration System (I-4).....			<input type="text"/> . <input type="text"/>
<input type="radio"/> Bioretention (F-5).....			<input type="text"/> . <input type="text"/>
<input type="radio"/> Dry Swale (O-1).....			<input type="text"/> . <input type="text"/>
<u>Standard SMPs</u>			
<input type="radio"/> Micropool Extended Detention (P-1).....			<input type="text"/> . <input type="text"/>
<input type="radio"/> Wet Pond (P-2).....			<input type="text"/> . <input type="text"/>
<input type="radio"/> Wet Extended Detention (P-3).....			<input type="text"/> . <input type="text"/>
<input type="radio"/> Multiple Pond System (P-4).....			<input type="text"/> . <input type="text"/>
<input type="radio"/> Pocket Pond (P-5).....			<input type="text"/> . <input type="text"/>
<input type="radio"/> Surface Sand Filter (F-1).....			<input type="text"/> . <input type="text"/>
<input type="radio"/> Underground Sand Filter (F-2).....			<input type="text"/> . <input type="text"/>
<input type="radio"/> Perimeter Sand Filter (F-3).....			<input type="text"/> . <input type="text"/>
<input type="radio"/> Organic Filter (F-4).....			<input type="text"/> . <input type="text"/>
<input type="radio"/> Shallow Wetland (W-1).....			<input type="text"/> . <input type="text"/>
<input type="radio"/> Extended Detention Wetland (W-2).....			<input type="text"/> . <input type="text"/>
<input type="radio"/> Pond/Wetland System (W-3).....			<input type="text"/> . <input type="text"/>
<input type="radio"/> Pocket Wetland (W-4).....			<input type="text"/> . <input type="text"/>
<input type="radio"/> Wet Swale (O-2).....			<input type="text"/> . <input type="text"/>



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

Alternative SMP	Total Contributing Impervious Area (acres)	
<input type="radio"/> Hydrodynamic.....	<input type="text"/>	<input type="text"/>
<input type="radio"/> Wet Vault.....	<input type="text"/>	<input type="text"/>
<input type="radio"/> Media Filter.....	<input type="text"/>	<input type="text"/>
<input checked="" type="radio"/> Other BLUE ROOF .....	<input type="text"/>	<input type="text"/>

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**

.  **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**

.  **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

.  **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).  .  **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**

.  **CFS**

**Post-Development**

.  **CFS**

**Total Extreme Flood Control Criteria (Qf)**

**Pre-Development**

.  **CFS**

**Post-Development**

.  **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 responsible for the long term Operation & Maintenance.

APPLICANT

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

BRIAN

MI

L

Print Last Name

BARKER

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)

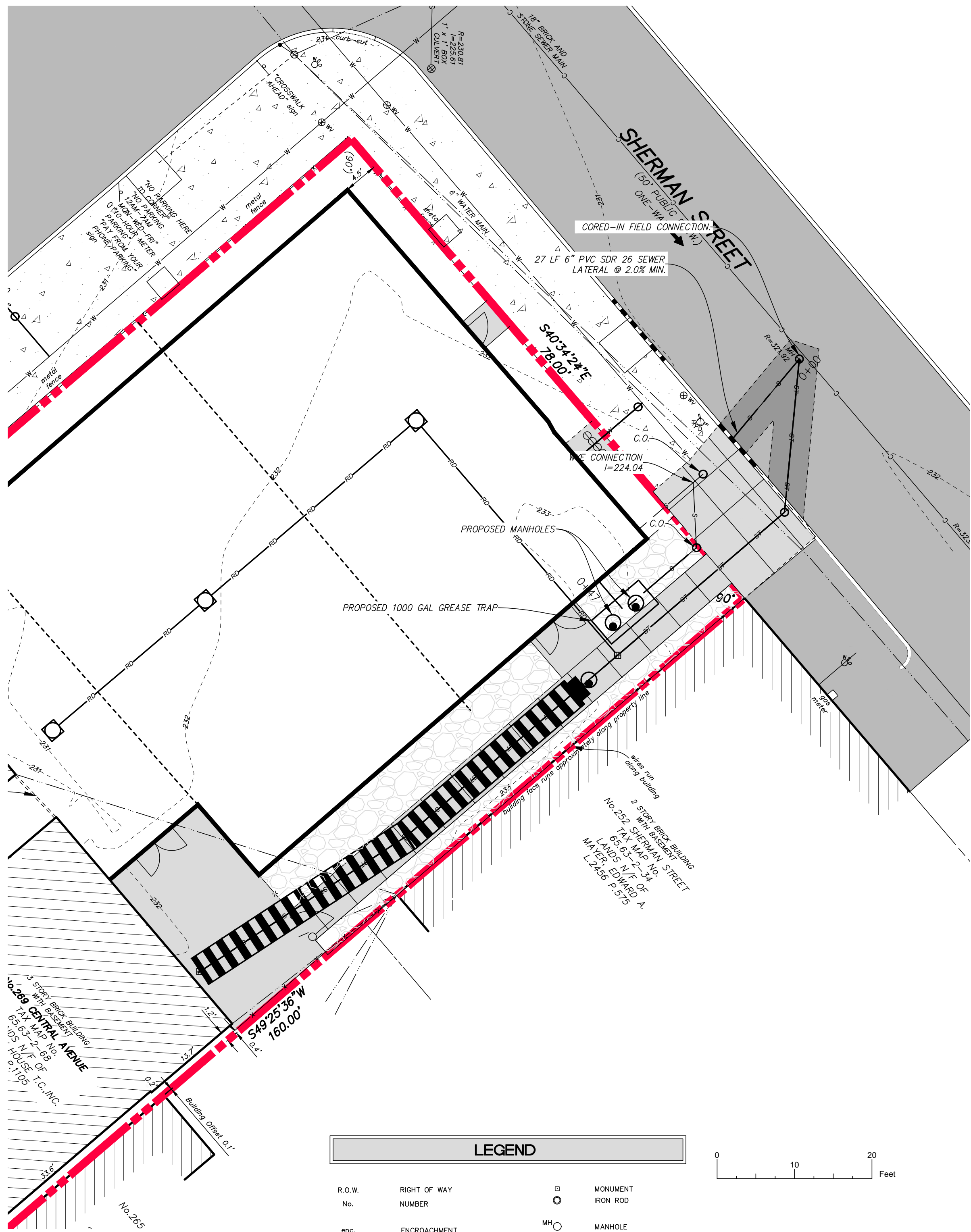
**Signatory Requirements** – This SWPPP certification shall be signed as follows:

- 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.

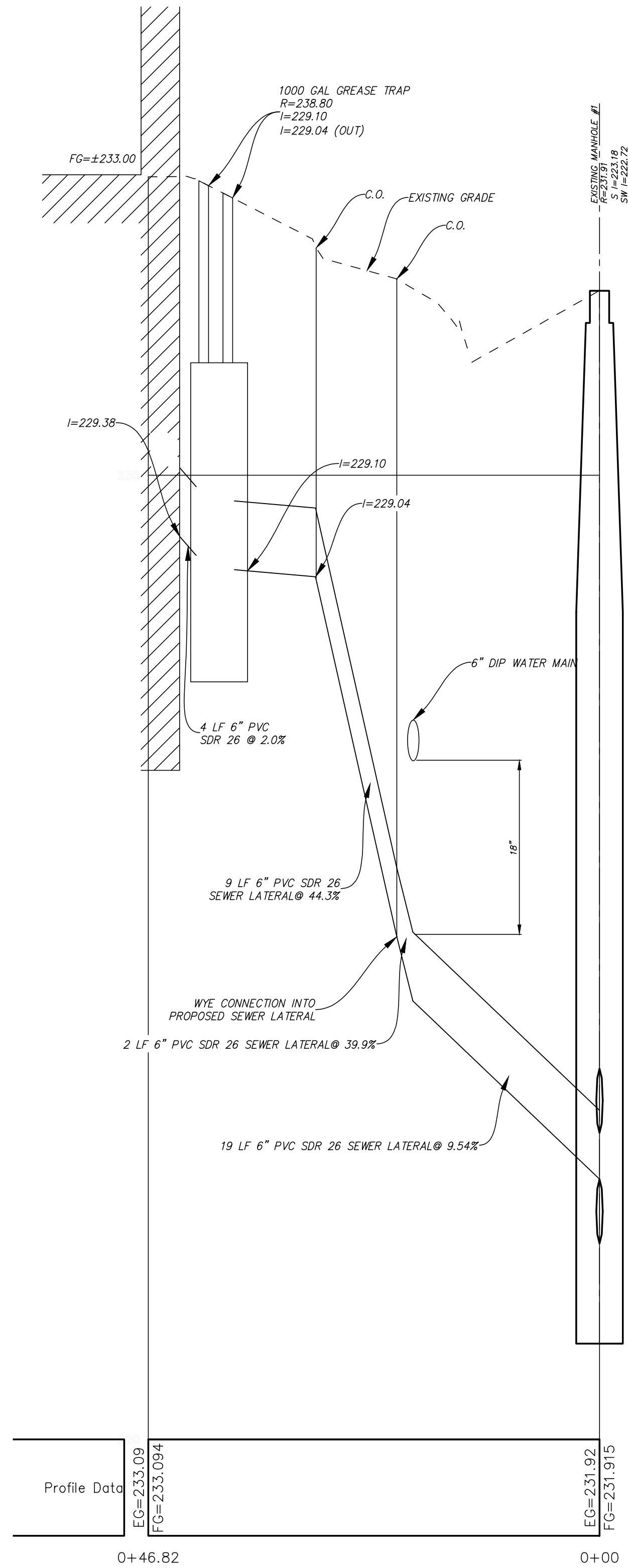
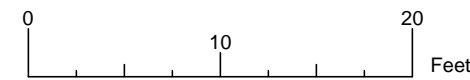
**MAP POCKET #1**  
**MAP C-4**  
**SEWER PLAN**





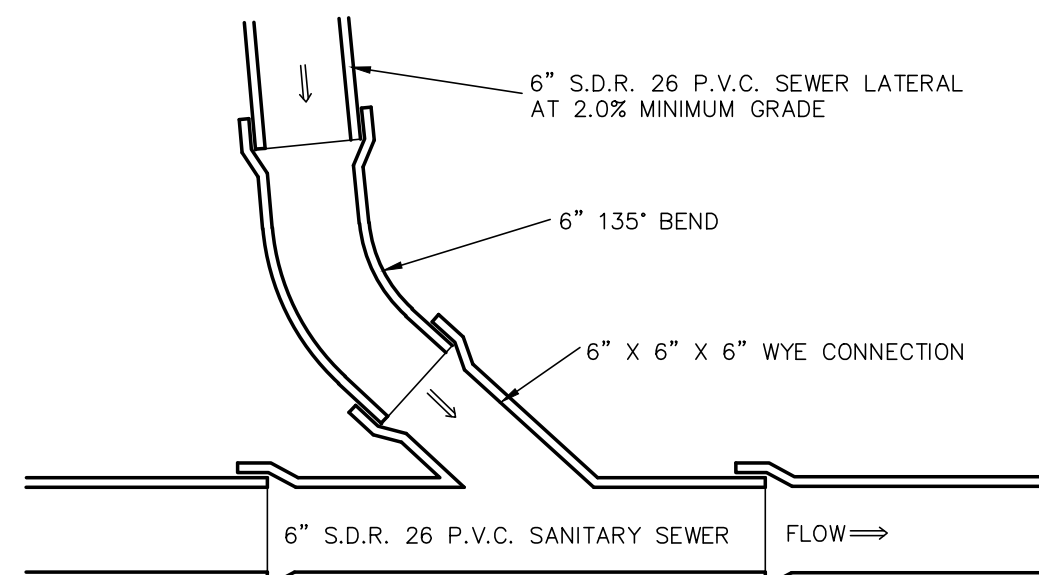
LEGEND

R.O.W.	RIGHT OF WAY	MONUMENT
No.	NUMBER	IRON ROD
enc.	ENCROACHMENT	MANHOLE
P.O.B.	POINT OF BEGINNING	CATCHBASIN
S.F.	SQUARE FEET	SIGN
N/F	NOW OR FORMERLY	BOLLARD
Fl.	FEET	FENCE LINE
Deg.	DEGREE	GUARD RAIL
R	RECORD	OVERHEAD WIRE, UTILITY POLE & GUY WIRE
M	MEASURED	TRAFFIC FLOW ACCESS AREA
N	NORTH	WATER SHUT OFF
S	SOUTH	WATER VALVE
E	EAST	HYDRANT
W	WEST	GAS VALVE
tel.	TELEPHONE	GAS TEST
elec.	ELECTRIC	GAS DRIP
L.	LIBER	STREET LIGHT
P.	PAGE	LIGHT POLE
W	WATER LINE	CONCRETE
ST	STORM LINE	ASPHALT
S	SEWER LINE	PROPOSED ASPHALT
G	GAS LINE	PROPOSED CONCRETE
UE	UNDERGROUND ELECTRIC	
ST	NEW STORM SEWER	
RD	NEW ROOF DRAIN	
SD	NEW SANITARY SEWER LATERAL	
W	NEW WATER SERVICE	



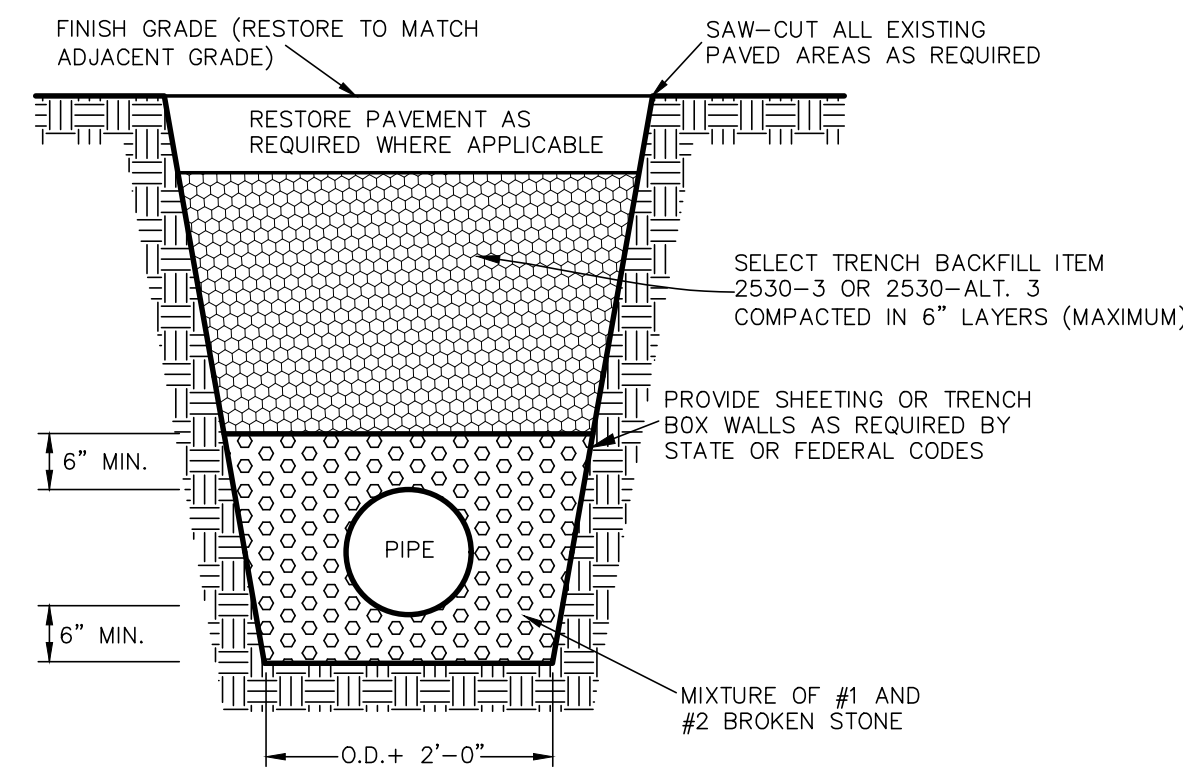
SEWER LINE FROM GREASE TRAP PROFILE

SCALE: (V) 1"=1' SCALE: (H) 1"=10'



PLAN SECTION WYE CONNECTION DETAIL

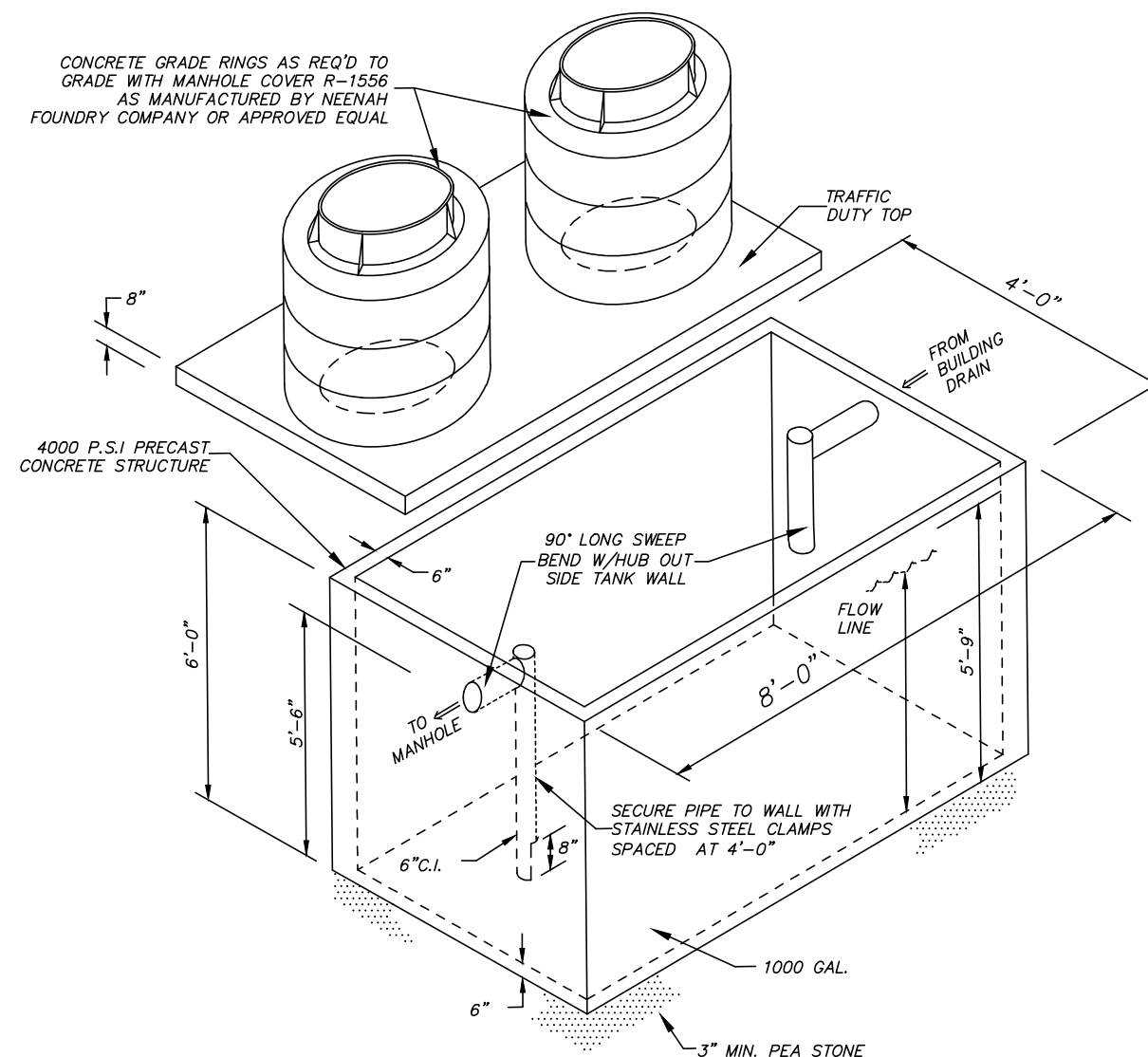
NOT TO SCALE



TYPICAL SANITARY SEWER

TRENCH DETAIL

NOT TO SCALE

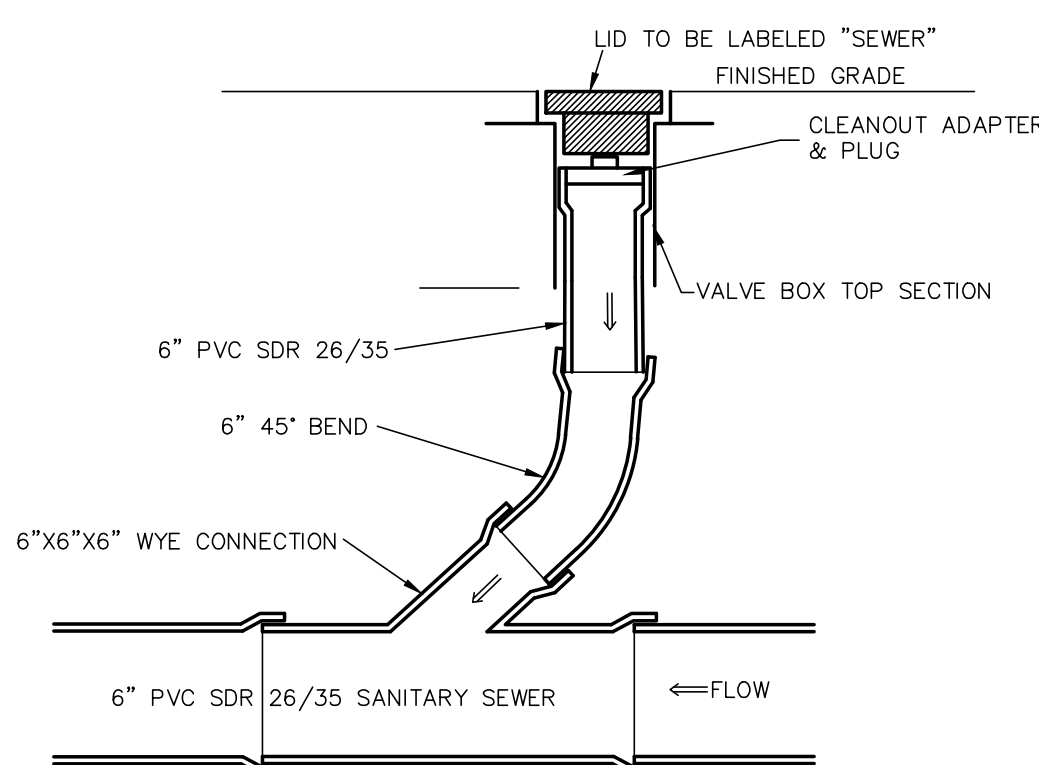


NOTES:

- GREASE & OIL INTERCEPTOR SHALL BE INSTALLED IN CONFORMANCE WITH THE CITY OF ALBANY DEPARTMENT OF GENERAL SERVICES.
- THE TANKS SHALL BE DESIGNED FOR H-20 LOADING. (TRAFFIC DUTY).
- SUBMIT SHOP DRAWINGS FOR APPROVAL PRIOR TO FABRICATION.
- EXTENSION OF TANK SHALL RECEIVE BITUMINOUS COATING TO ENSURE WATER TIGHTNESS & PREVENT DETRIORATION.
- THE TANKS SHALL BE MANUFACTURED BY THE FORT MILLER CO., INC. OR KISTNER CONCRETE PRODUCTS, INC.

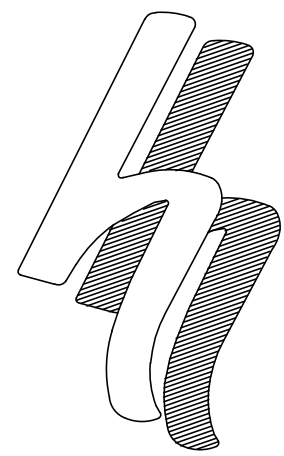
GREASE & OIL INTERCEPTOR DETAIL

NOT TO SCALE



IN LINE CLEANOUT DETAIL

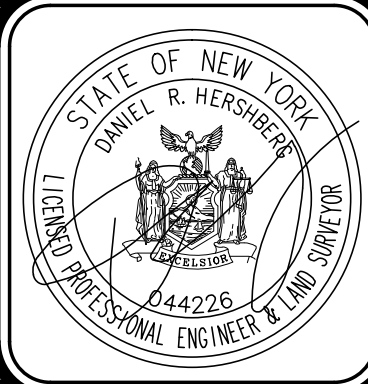
NOT TO SCALE



**HERSHBERG & HERSHBERG**  
Consulting Engineers  
and Land Surveyors

18 Locust Street  
Albany, New York 12203

ALTERATION OF THIS  
DOCUMENT EXCEPT BY A  
LICENSED PROFESSIONAL  
ENGINEER OR LAND  
SURVEYOR, IS ILLEGAL



DATE	REVISIONS
8-10-2021	GENERAL REVISIONS
11-23-2021	GENERAL REVISIONS
1-31-2022	GENERAL REVISIONS

SEWER PLAN, DETAILS, AND PROFILE FOR  
No. 269 & 271 CENTRAL AVENUE, No. 98 NORTH LAKE AVENUE  
& No. 260 SHERMAN STREET  
CITY OF ALBANY  
COUNTY OF ALBANY, STATE OF NEW YORK

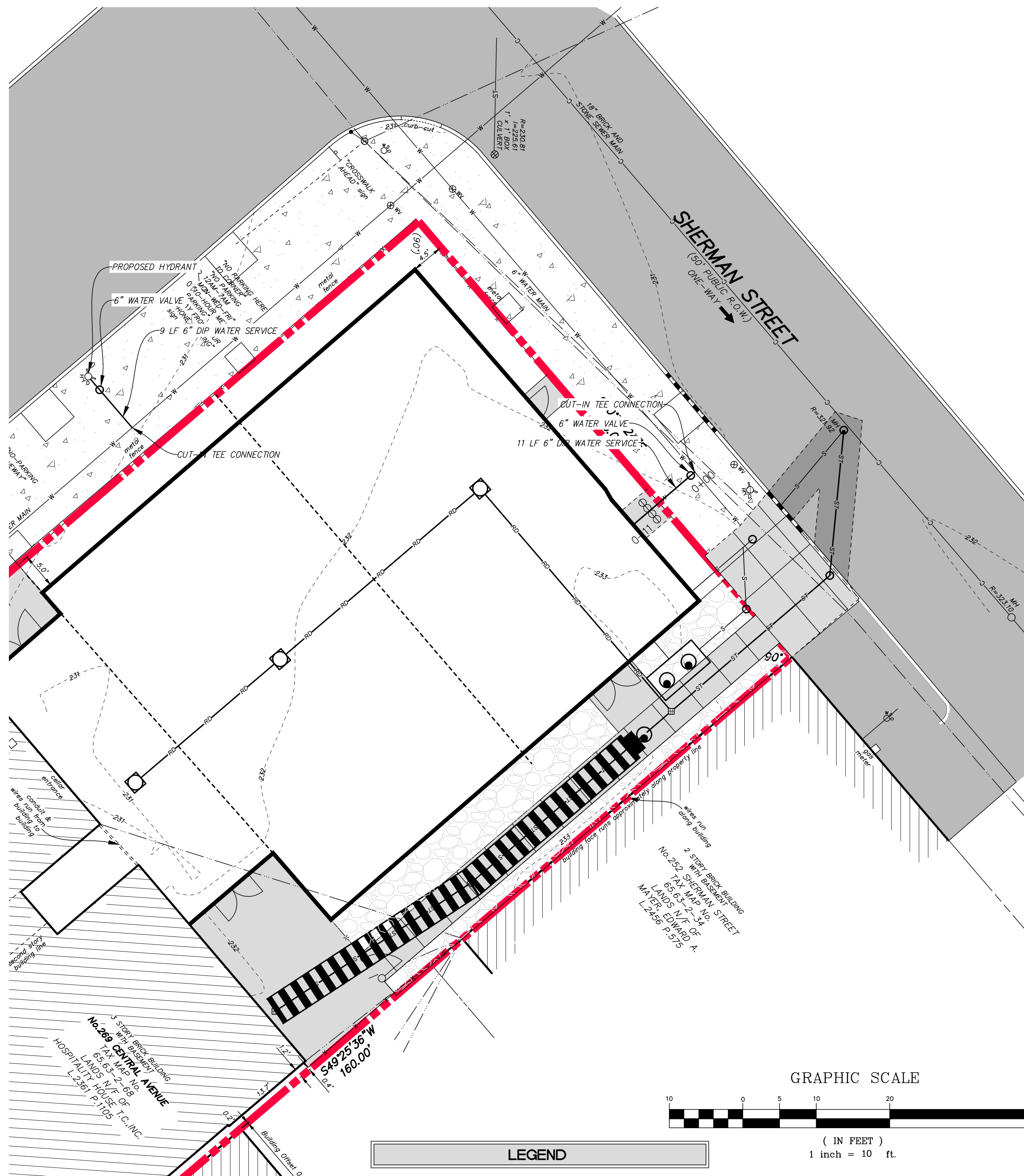
C4/9

**MAP POCKET #2**

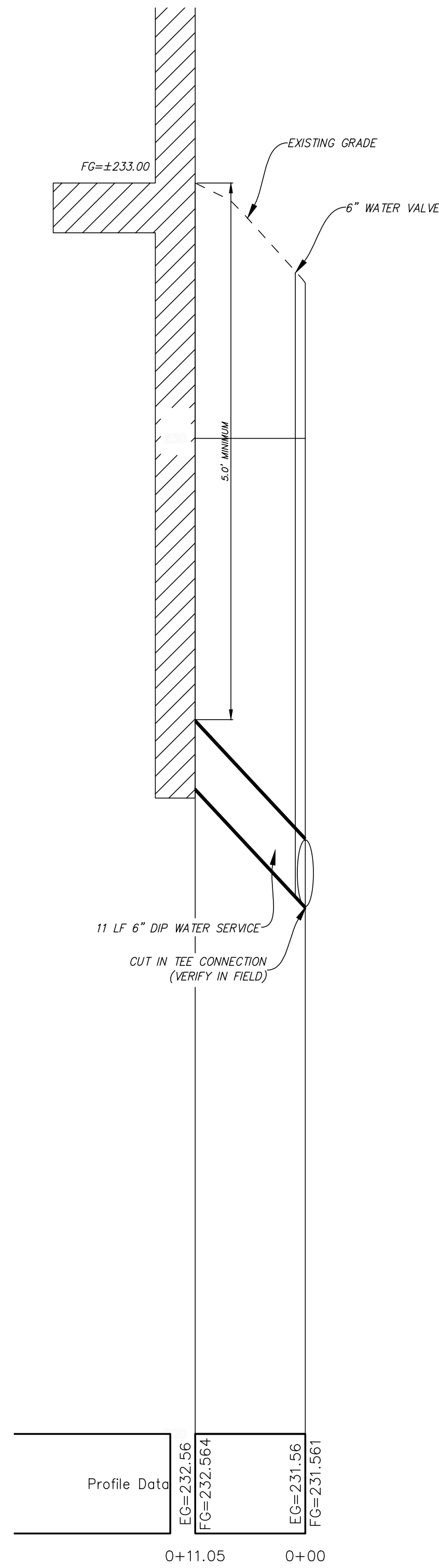
**MAP C-5**

**WATER PLAN**

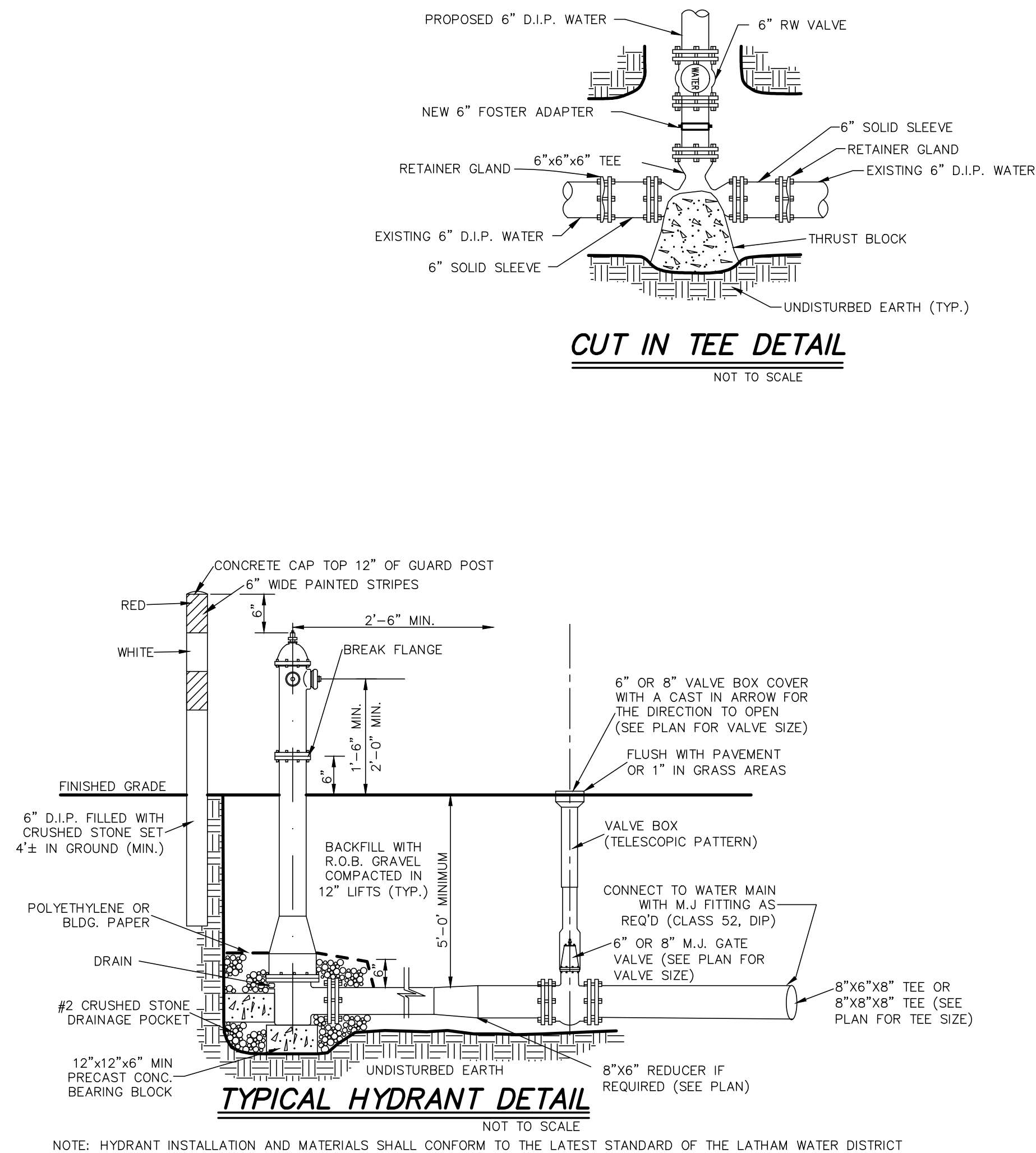




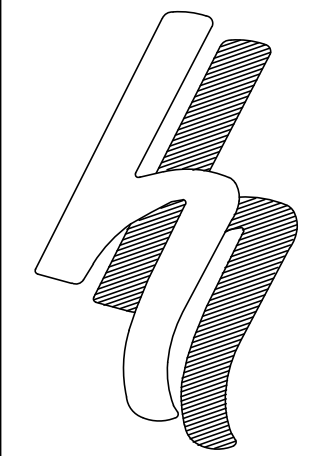
LEGEND			
R.O.W.	RIGHT OF WAY	IS	MONUMENT
No.	NUMBER	○	IRON ROD
enc.	ENCROACHMENT	MH	MANHOLE
P.O.B.	POINT OF BEGINNING	CB	CATCHBASIN
S.F.	SQUARE FEET	—	SIGN
N/F	NOW OR FORMERLY	•	BOLLARD
FL	FEET	—x—	FENCE LINE
Deg.	DEGREE	—+—	GUARD RAIL
R	RECORD	—○—	OVERHEAD WIRE, UTILITY POLE & GUY WIRE
M	MEASURED	↑↑	TRAFFIC FLOW ACCESS AREA
N	NORTH	⊙	WATER SHUT OFF
S	SOUTH	⊙W	WATER VALVE
E	EAST	⊙V	HYDRANT
W	WEST	⊙V	GAS VALVE
tel.	TELEPHONE	⊙T	GAS TEST
elec.	ELECTRIC	⊙D	GAS DRIP
L	LIBER	○	STREET LIGHT
P.	PAGE	☆	LIGHT POLE
—W—	WATER LINE	CONCRETE	CONCRETE
—ST—	STORM LINE	ASPHALT	ASPHALT
—S—	SEWER LINE	PROPOSED ASPHALT	PROPOSED ASPHALT
—G—	GAS LINE	PROPOSED CONCRETE	PROPOSED CONCRETE
—UE—	UNDERGROUND ELECTRIC		
—ST—	NEW STORM SEWER		
—RD—	NEW ROOF DRAIN		
—S—	NEW SANITARY SEWER LATERAL		
—W—	NEW WATER SERVICE		



WATER SERVICE PROFILE  
SCALE: (V) 1"=1' SCALE: (H) 1"=10'



NOTE: HYDRANT INSTALLATION AND MATERIALS SHALL CONFORM TO THE LATEST STANDARD OF THE LATHAM WATER DISTRICT



**HERSHBERG & HERSHBERG**  
Consulting Engineers and Land Surveyors

18 Locust Street  
Albany, New York 12203

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REVISIONS	DATE	REMARKS
GENERAL REVISIONS	8-30-2021	
GENERAL REVISIONS	11-23-2021	
GENERAL REVISIONS	1-31-2022	

**No. 269 & 271 CENTRAL AVENUE, No. 98 NORTH LAKE AVENUE & No. 260 SHERMAN STREET**  
**CITY OF ALBANY, STATE OF NEW YORK**

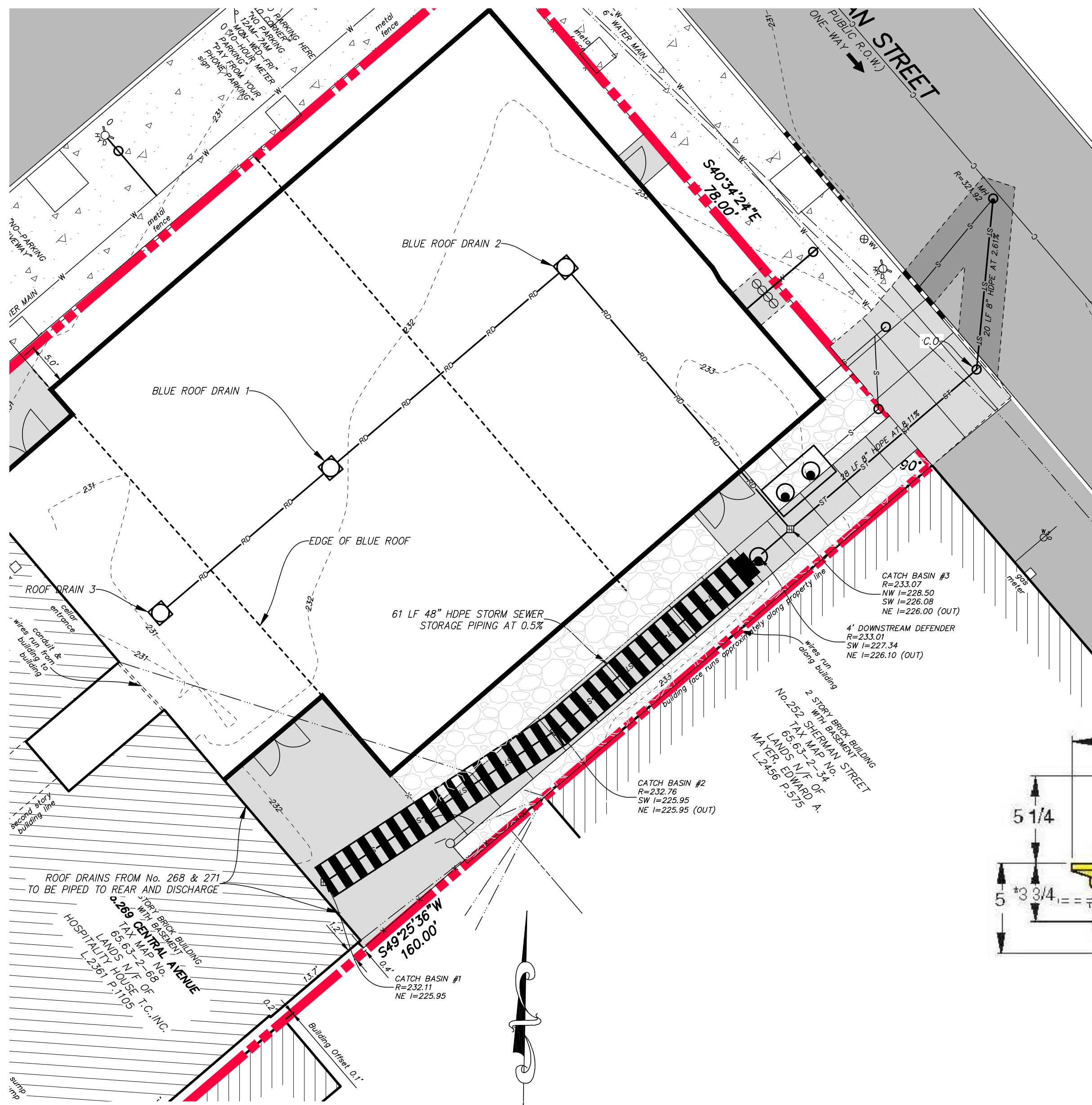
C519

**MAP POCKET #3**

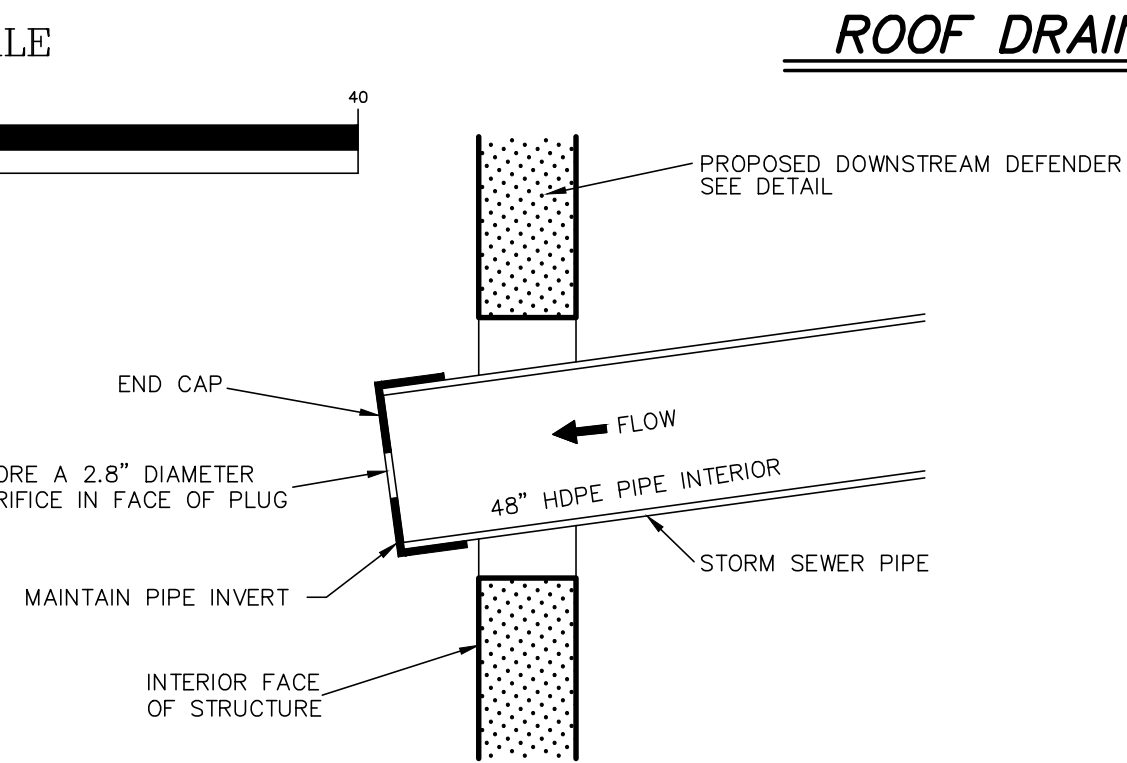
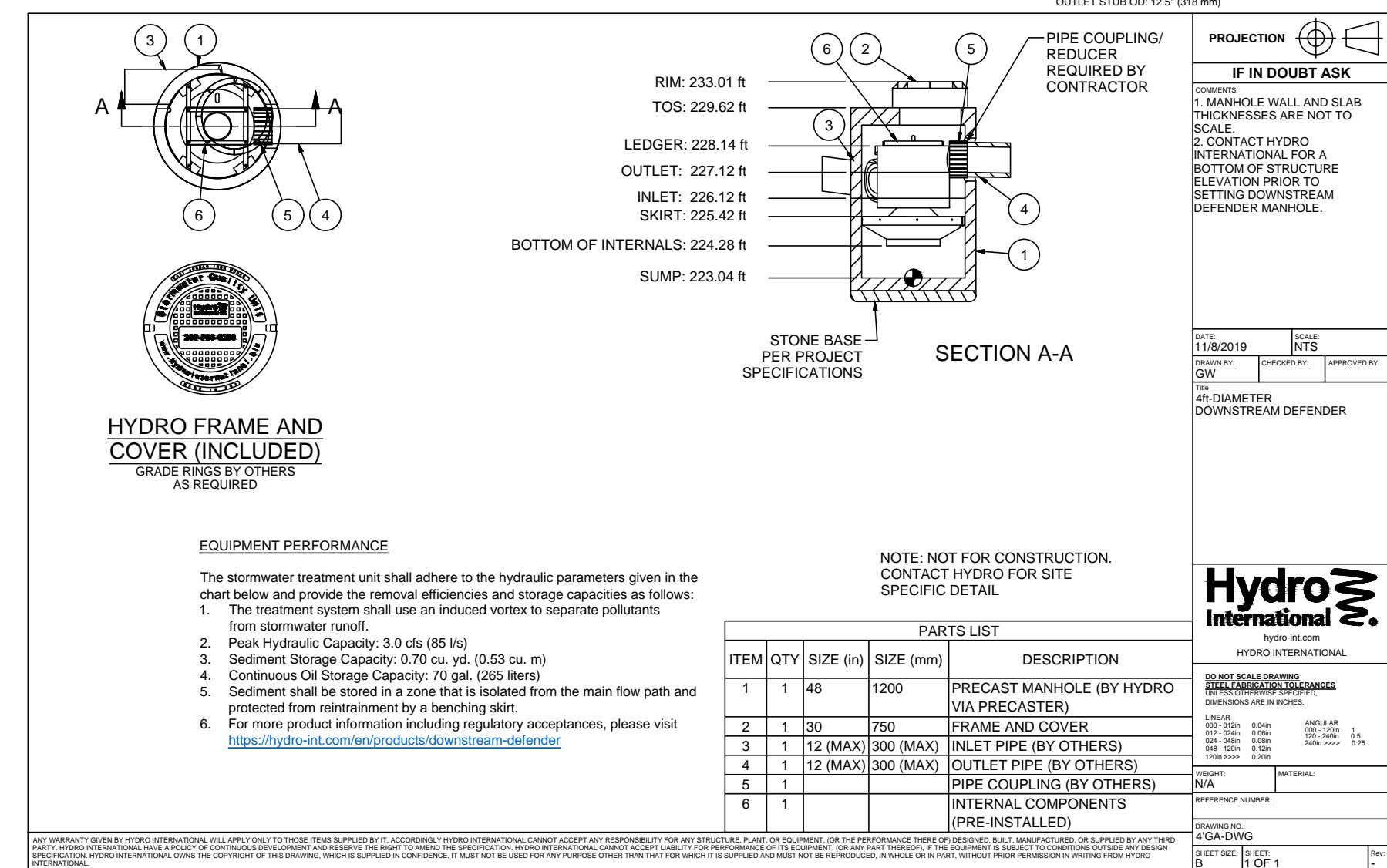
**MAP C-6**

**STORM WATER POLLUTION PREVENTION  
PLAN**

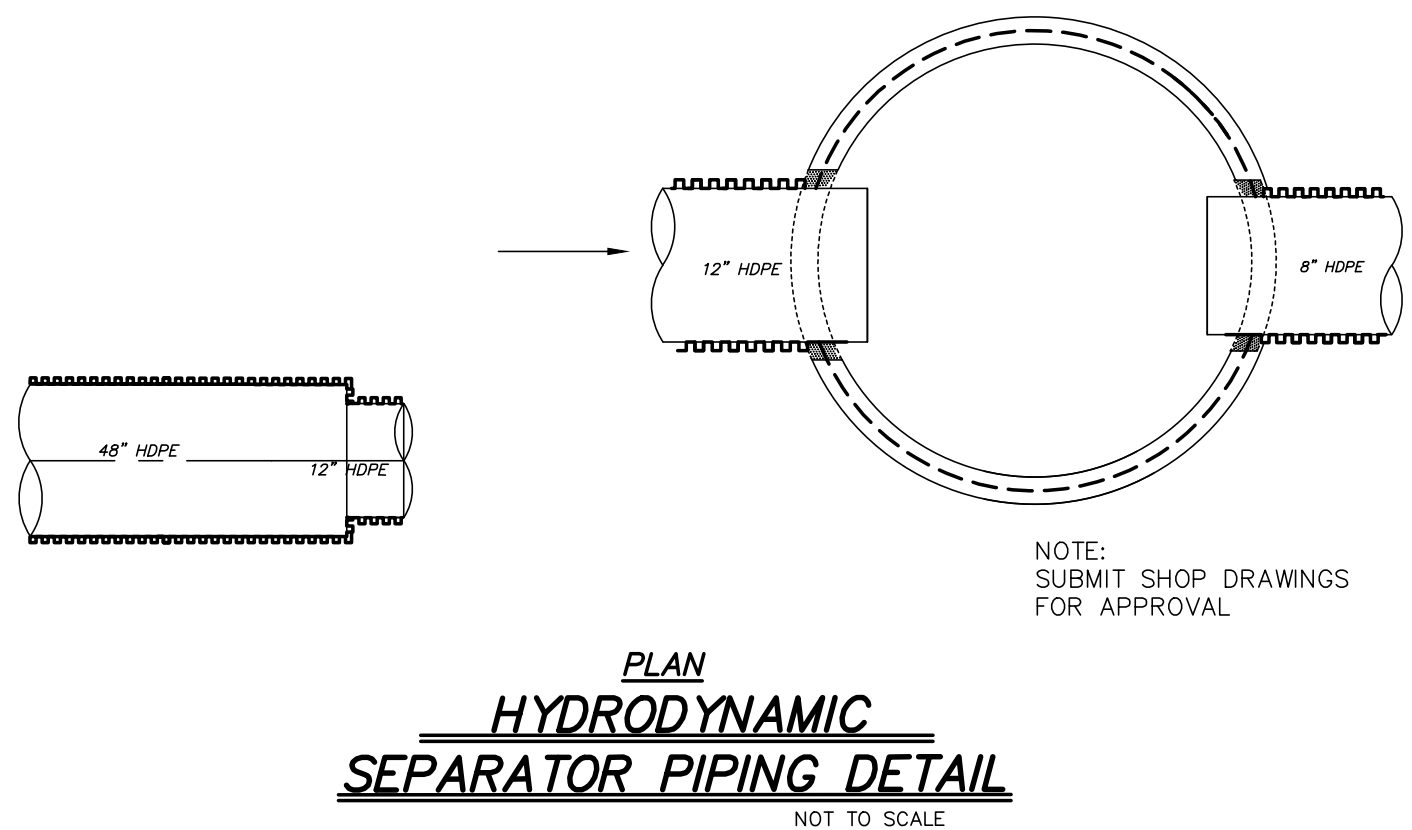




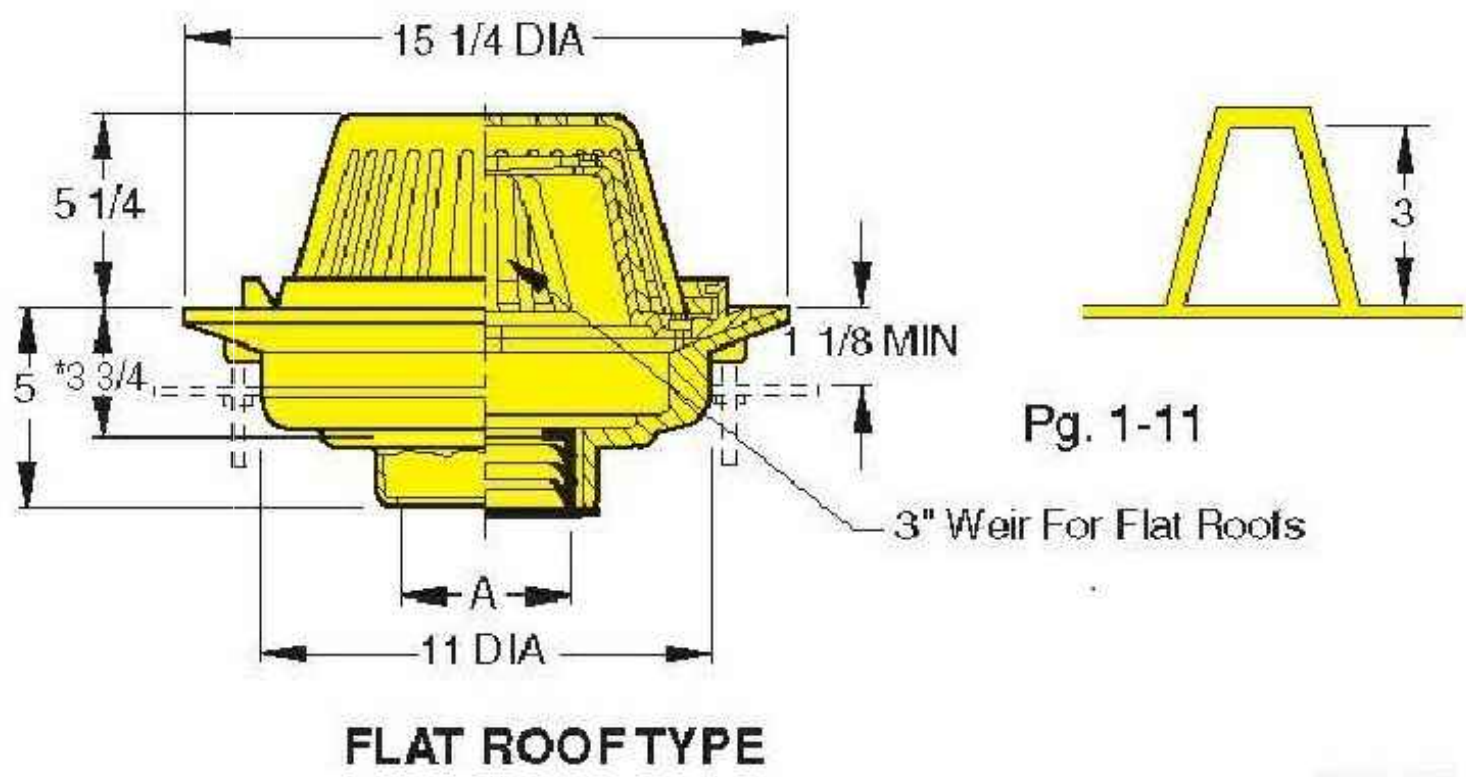
ROOF DRAIN TRIBUTARY AREA STORAGE		
ROOF DRAIN	AREA (SF)	STORAGE VOLUME (CF)
ROOF DRAIN 1	2,313	923
ROOF DRAIN 2	2,289	913
TOTAL	4,602	1,836



**RESTRICTOR PLATE DETAIL**  
NOT TO SCALE



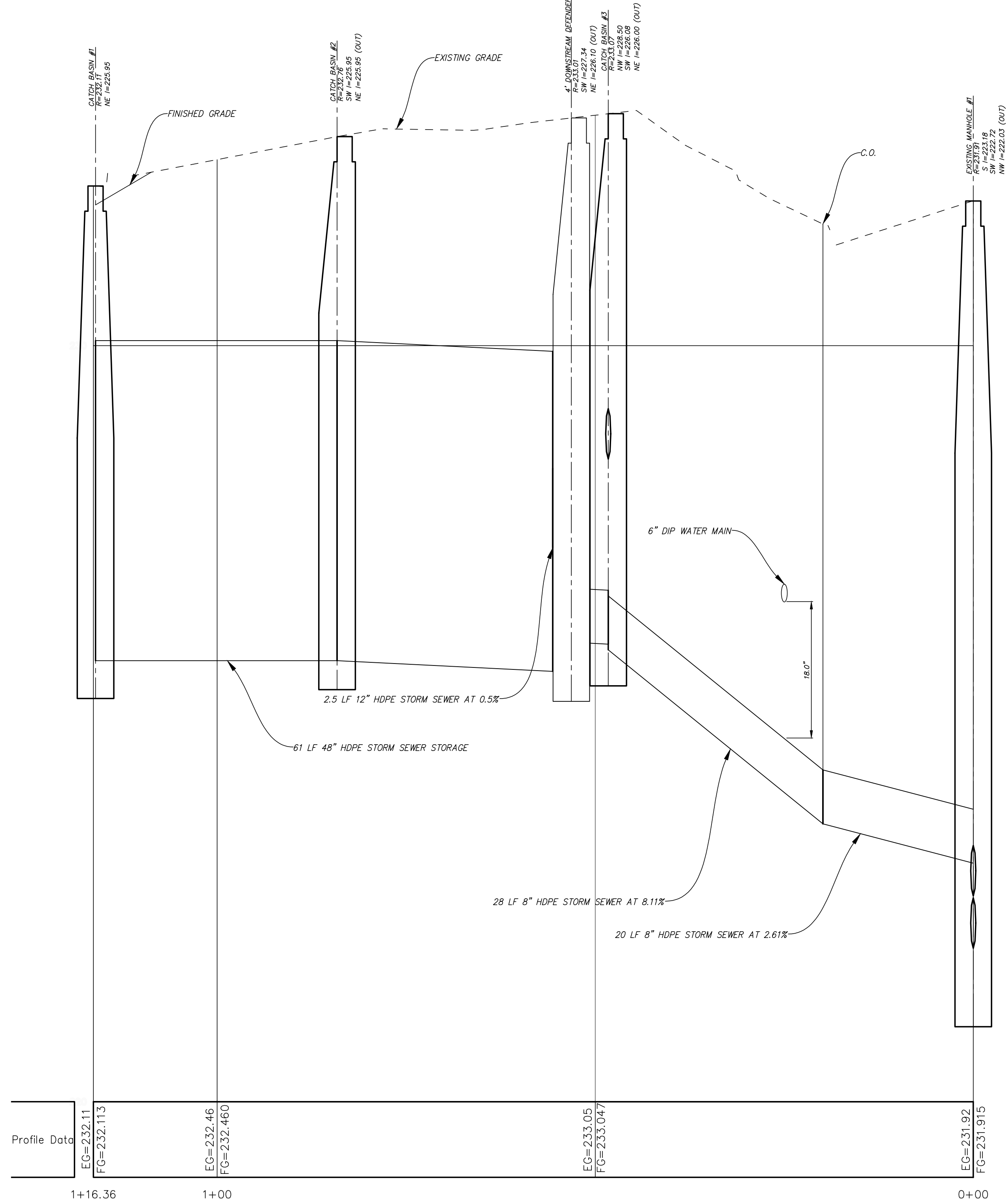
**PLAN HYDRODYNAMIC SEPARATOR PIPING DETAIL**  
NOT TO SCALE



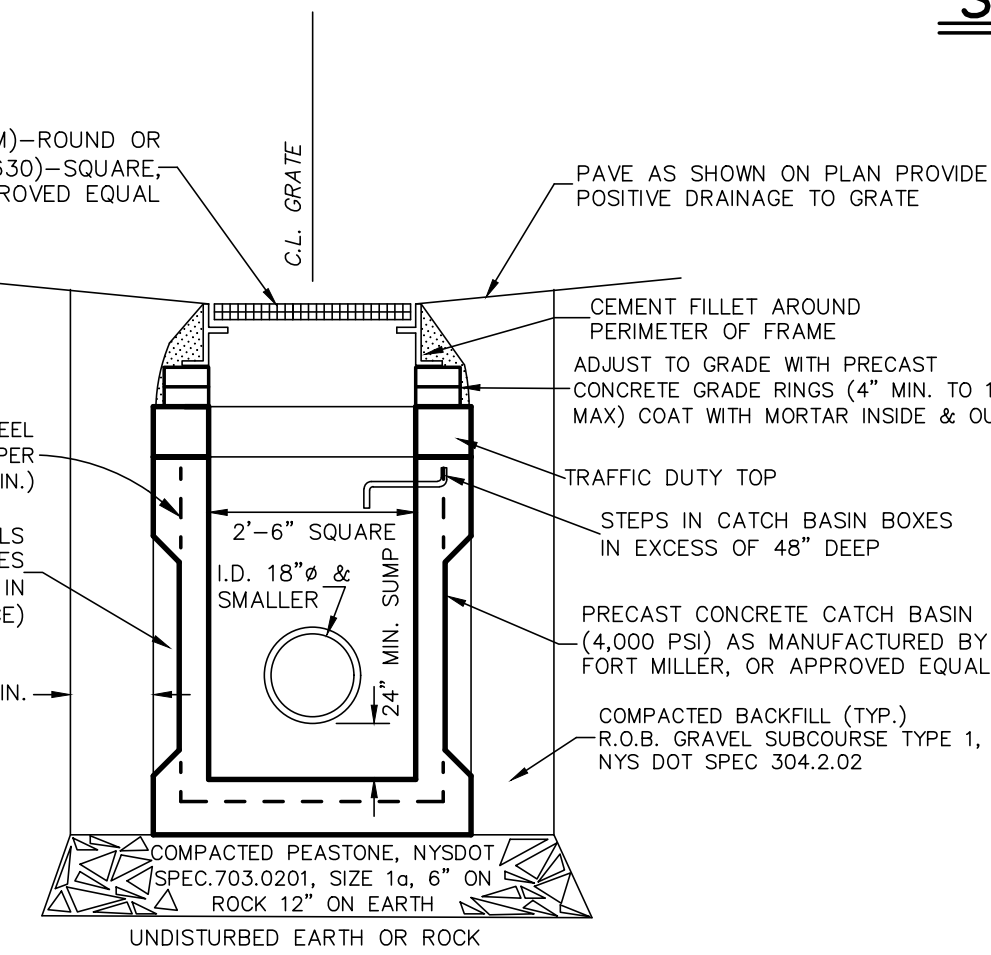
**FLAT ROOF TYPE**

**ROOF DRAIN DETAIL**  
NOT TO SCALE

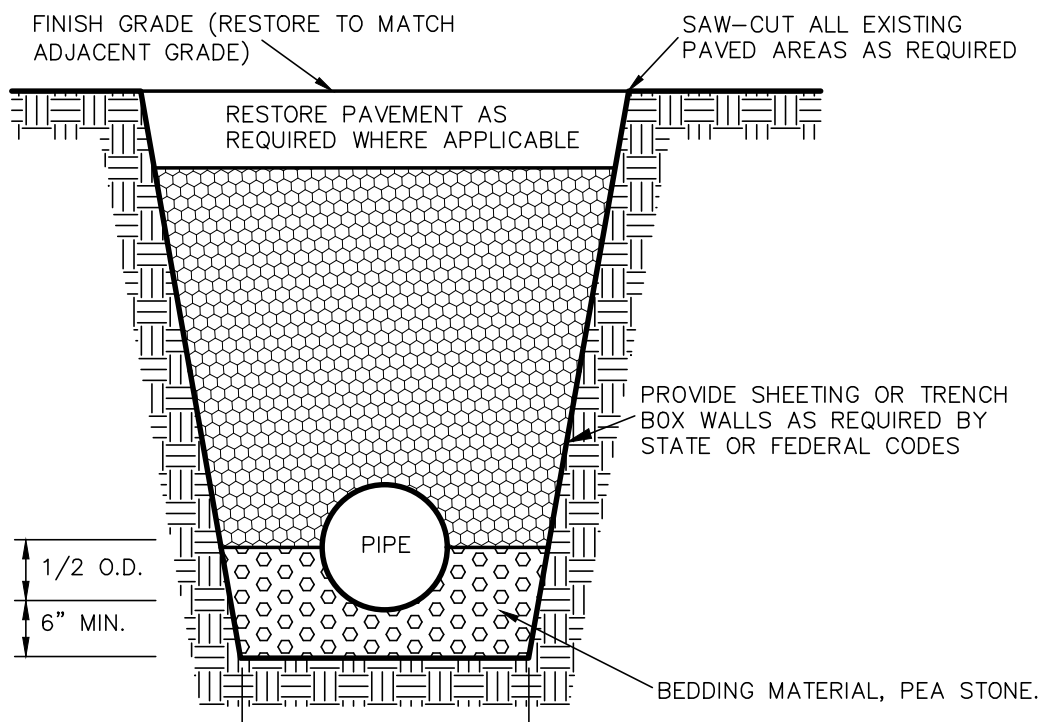
LEGEND		
R.O.W. No.	RIGHT OF WAY NUMBER	MONUMENT IRON ROD
enc.	ENCROACHMENT	MANHOLE
P.O.B.	POINT OF BEGINNING	CATCHBASIN
S.F.	SQUARE FEET	SIGN
N/F	NOW OR FORMERLY	BOLLARD
Ft.	FEET	FENCE LINE
Dep.	DEGREE	GUARD RAIL
R	RECORD	OVERHEAD WIRE, UTILITY POLE & GUY WIRE
M	MEASURED	TRAFFIC FLOW ACCESS AREA
N	NORTH	WATER SHUT OFF
S	SOUTH	WATER VALVE
E	EAST	HYDRANT
W	WEST	GAS VALVE
tel.	TELEPHONE	GAS TEST
elec.	ELECTRIC	GAS DRIP
L	LIBER	STREET LIGHT
P	PAGE	LIGHT POLE
W	WATER LINE	CONCRETE
ST	STORM LINE	ASPHALT
S	SEWER LINE	PROPOSED ASPHALT
G	GAS LINE	PROPOSED CONCRETE
UE	UNDERGROUND ELECTRIC	
ST	NEW STORM SEWER	
ST	NEW ROOF DRAIN	
S	NEW SANITARY SEWER LATERAL	
W	NEW WATER SERVICE	



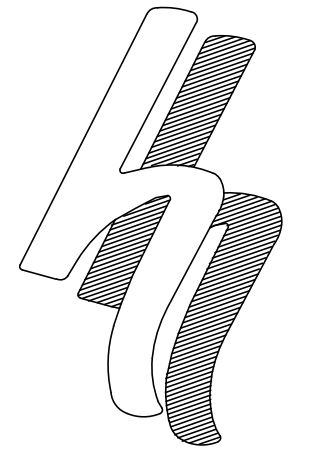
**STORM SEWER PROFILE**  
SCALE: (V) 1"=1' SCALE: (H) 1"=10'



**CATCH BASIN DETAIL**  
NOT TO SCALE

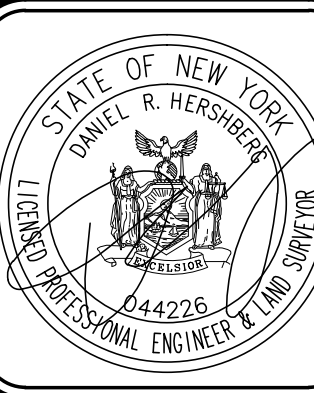


**TYPICAL STORM SEWER TRENCH DETAIL**  
NOT TO SCALE



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DATE	REVISIONS
8-30-2021	GENERAL REVISIONS
11-23-2021	GENERAL REVISIONS
1-31-2022	GENERAL REVISIONS

**STORM SEWER PLAN, DETAIL, AND PROFILE FOR**  
**No. 269 & 271 CENTRAL AVENUE, No. 98 NORTH LAKE AVENUE**  
**& No. 260 SHERMAN STREET**  
**CITY OF ALBANY, STATE OF NEW YORK**  
COUNTY OF ALBANY, STATE OF NEW YORK  
DATE: 7/20/2021  
SCALE: AS NOTED  
CHK: DRH  
GK: MAB  
FILE: 210144

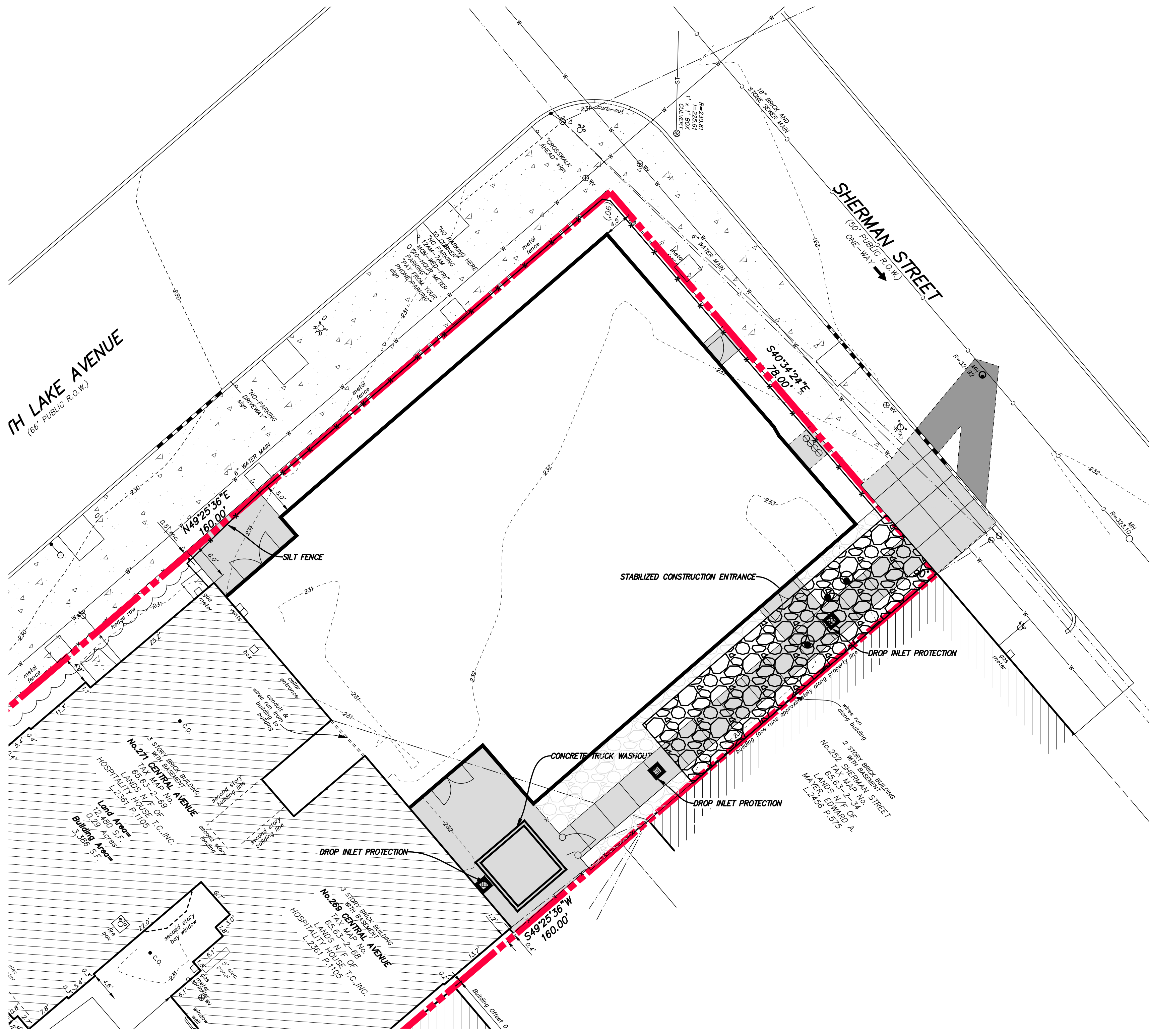


**MAP POCKET #4**

**MAP C-7**

**EROSION AND SEDIMENT CONTROL PLAN**





GRAPHIC SCALE

10 0 5 10 20 40

( IN FEET )

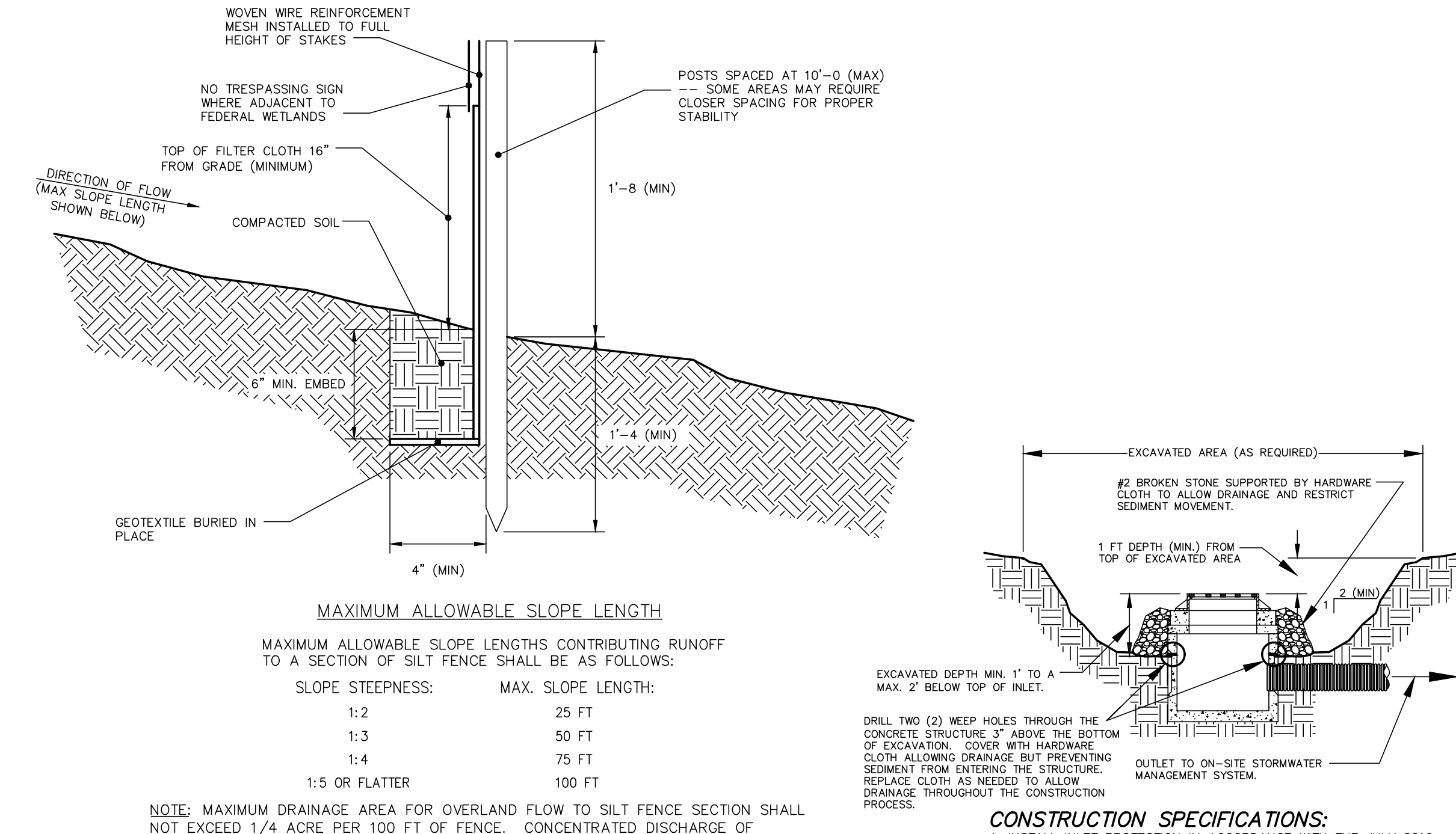
1 inch = 10 ft.

**EROSION AND SEDIMENT CONTROL NOTES**

- THIS PROJECT IS AUTHORIZED UNDER NYSDEC SPDES GENERAL PERMIT GP-0-20-001.
- ANY CONTRACTOR INVOLVED IN EARTHWORK ACTIVITIES, INCLUDING BUT NOT LIMITED TO: CLEARING, GRADING AND TRENCHING, SHALL REVIEW ALL PERMIT CONDITIONS AND CERTIFY UNDERSTANDING OF THESE CONDITIONS. IN WRITING, IT IS THE CONTRACTOR'S RESPONSIBILITY TO IMPLEMENT ALL EROSION CONTROLS DESCRIBED IN GP-0-15-002, AND IT IS NOT THE INTENT OF THESE DRAWINGS TO REPLACE OR DISSEMINATE THE PERMIT REQUIREMENTS. THE CONTRACTOR SHALL REMAIN IN COMPLIANCE WITH THE PERMIT AT ALL TIMES.
- AT NO TIME, SHALL MORE THAN FIVE (5) ACRES REMAIN UNSTABILIZED. THE CONTRACTOR SHALL COORDINATE EARTHWORK ACTIVITIES AND IMPLEMENTATION OF SOIL STABILIZATION MEASURES TO ENSURE COMPLIANCE TO THIS PERMIT REQUIREMENT.
- THE CONTRACTOR SHALL MAINTAIN A CLEAN CONSTRUCTION AND EQUIPMENT ENTRANCE WHENEVER PRACTICABLE.
- DISTURBED AREAS SHALL BE STABILIZED WITHIN 14 DAYS OF COMPLETION OR SUSPENSION OF GRADING OPERATIONS.
- INSTALL TEMPORARY & PERMANENT SEEDING IN ACCORDANCE WITH THE JULY 2016 NEW YORK GUIDELINES FOR URBAN EROSION AND SEDIMENT CONTROL STANDARD AND SPECIFICATION FOR TEMPORARY CONSTRUCTION AREA SEEDING PAGE 4.58 AND FOR MULCHING PAGE 4.39.
- SEE REMAINDER OF PLANS FOR PERMANENT IMPROVEMENTS. PERMANENT IMPROVEMENTS SHOWN ON THIS PLAN ARE FOR REFERENCE ONLY.
- PAVED AREAS ARE TO BE SWEEP DAILY TO REMOVE ANY SEDIMENT AND ALL NEWLY PAVED AREAS SHALL BE DIRECTED TO THE TEMPORARY OR FINAL SEDIMENT CONTROL BASINS.

**ESC LEGEND**

— SILT FENCE



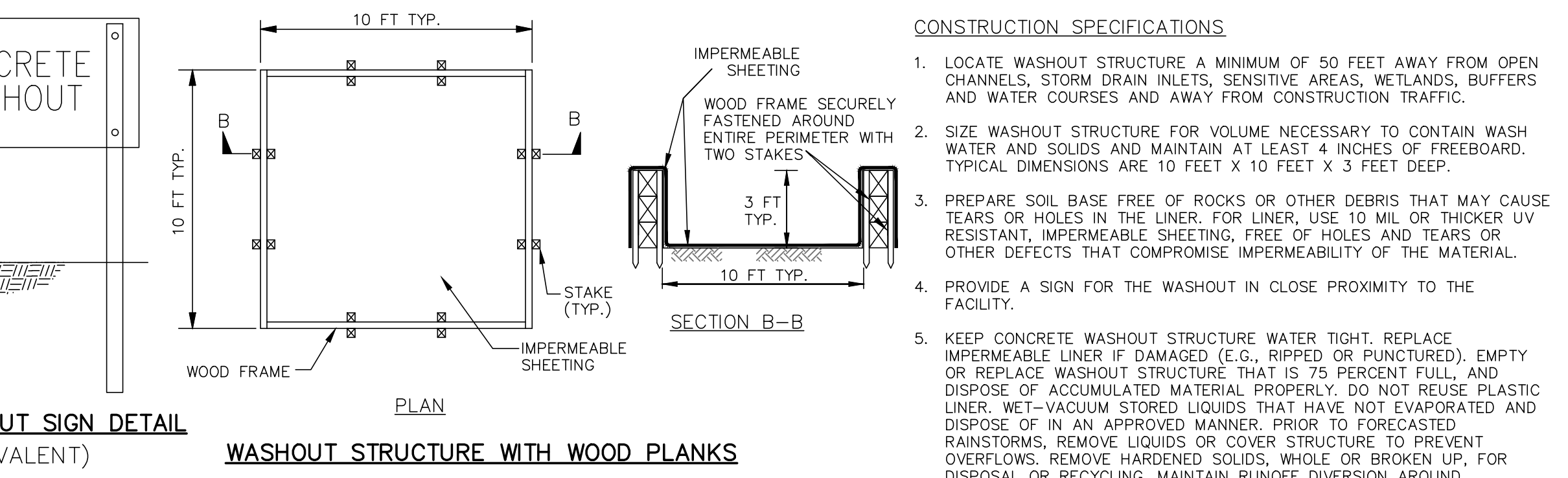
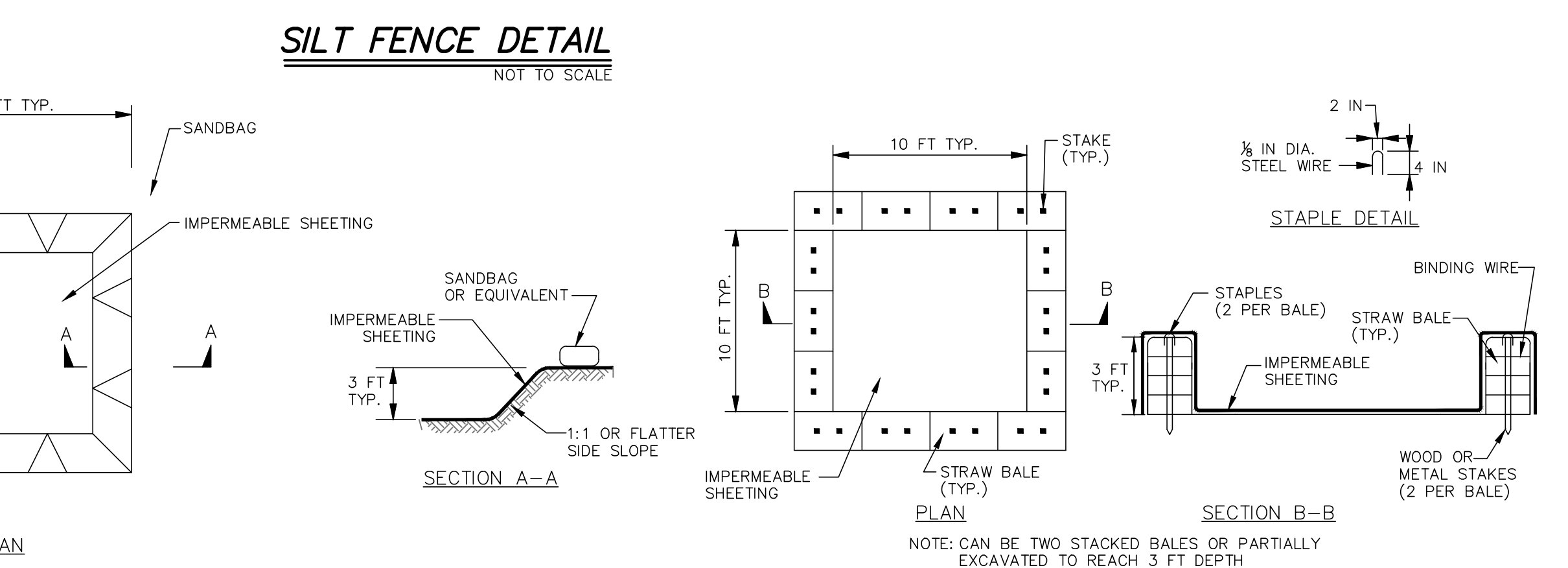
- CONSTRUCTION NOTES FOR FABRICATED SILT FENCE**
- INSTALL SILT FENCE IN ACCORDANCE WITH "THE NEW YORK STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL", SECTION 7A.
  - WOVEN WIRE FENCE SHALL BE 12 1/2 GA., 6" MAXIMUM MESH OPENING, FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES.
  - FILTER CLOTH TO BE TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION.
  - WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE WRAPPED TOGETHER PER SILT FENCE JOINT DETAIL ON THIS SHEET.
  - MAINTENANCE SHALL BE PERFORMED AS NEEDED AND SEDIMENT REMOVED WHEN ACCUMULATION REACHES 1/2 OF DESIGN CAPACITY OF FENCE (1/2 HEIGHT OF FILTER FABRIC) OR WHEN "BULGES" DEVELOP IN FENCING.

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, MIRAFI 100X, STABILINKA T140N OR APPROVED EQUAL.

PREFABRICATED UNIT: GEOFAB, ENVIROFENCE, OR APPROVED EQUAL.
- MAXIMUM ALLOWABLE SLOPE LENGTH**
- MAXIMUM ALLOWABLE SLOPE LENGTHS CONTRIBUTING RUNOFF TO A SECTION OF SILT FENCE SHALL BE AS FOLLOWS:
- | SLOPE STEEPNESS: | MAX. SLOPE LENGTH: |
|------------------|--------------------|
| 1:2              | 25 FT              |
| 1:3              | 50 FT              |
| 1:4              | 75 FT              |
| 1:5 OR FLATTER   | 100 FT             |
- NOTE: MAXIMUM DRAINAGE AREA FOR OVERLAND FLOW TO SILT FENCE SECTION SHALL NOT EXCEED 1/4 ACRE PER 100 FT OF FENCE. CONCENTRATED DISCHARGE OF SEDIMENT LADEN WATER SHALL NOT BE ALLOWED TO FLOW DIRECTLY TO THE FENCING.



**ONSITE CONCRETE TRUCK WASHOUT STRUCTURE DETAIL**

NOT TO SCALE

**HERSHBERG & HERSHBERG**

Consulting Engineers and Land Surveyors

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Albany, New York 12203

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6-30-2021	GENERAL REVISIONS
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1-31-2022	GENERAL REVISIONS

**EROSION AND SEDIMENT CONTROL PLAN FOR**

**No. 269 & 271 CENTRAL AVENUE, No. 98 NORTH LAKE AVENUE**

**& No. 260 SHERMAN STREET**

**CITY OF ALBANY**

**COUNTY OF ALBANY, STATE OF NEW YORK**

SCALE: AS NOTED

DATE: 7/20/2021

CHK: DRH

BY: MJB

FILE: 210144

**C719**



**MAP POCKET #5**  
**EMPTY MAP POCKET**  
**FOR ADDENDUMS**