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DRAINAGE REPORT & STORMWATER POLLUTION PREVENTION PLAN

FOR

SPLASH CAR WASH – 129 W GENESEE STREET

VILLAGE OF FAYETTEVILLE, NY
OCTOBER 2022
(Revised October 2023)

PROJECT: Splash Car Wash

129 W Genesee Street Fayetteville, New York

DEVELOPER: Splash Car Wash, Inc.

472 Wheeler's Farm Road Suite 304

Milford, CT 06461

PREPARED BY: The DDS Companies

45 Hendrix Road

West Henrietta, NY 14586



CONTENTS

SECTION I - PROJECT SUMMARY

SECTION II - STORMWATER MANAGEMENT PLAN

- 2.1 Pre-Development Conditions
- 2.2 Post-Development Conditions
- 2.3 Stormwater Management Planning & Facility Design
 - 2.3.1 Step 1: Site Planning
 - 2.3.2 Step 2: Determine Water Quality Volume
 - 2.3.3 Step 3: Runoff Reduction
 - 2.3.4 Step 4: Apply Standard Stormwater Management Practices to Address Remaining Water Quality Volume:
 - 2.3.5 Step 5: Apply Volume and Peak Control Practices to Meet Requirements:
- 2.4 Unified Stormwater Treatment Sizing Criteria Calculations Summary:

SECTION III - RUN-OFF SUMMARY AND CONCLUSIONS

SECTION IV - EROSION AND SEDIMENT CONTROLS

- 4.1 Planned Erosion & Sediment Control Practices Implementation
- **4.2 Sequence of Construction Activities**
- 4.3 Planned Erosion & Sediment Control Practices Maintenance

SECTION V - ADDITIONAL POLLUTION PREVENTION CONTROLS

- **5.1 Other Pollution Prevention Controls:**
- **5.2 Potential Pollution Sources**
- 5.3 Spill Prevention
- **5.4 Housekeeping Practices**
- **5.5 Hazardous Products**
- **5.6 Spill Control Practices**
- 5.7 Local Requirements

SECTION VI - SITE ASSESSMENT AND INSPECTIONS

- **6.1 Site Assessment and Inspections**
- 6.2 Stabilization
- 6.3 Maintenance
- **6.4 Contractors**
- 6.5 Monitoring, Reporting and Retention of Records

SECTION VII - CERTIFICATIONS

- 7.1 Operator's Certification
- 7.2 Contractor's Certification



APPENDICES

Appendix A - Report Figures

- 1. NYSDEC Wetland Location Map
- 2. Federal Wetland Location Map
- 3. Floodplain Location Map

Appendix B - Pre-Development Conditions - Drainage Area Map, Soils Report, & HydroCAD™ Model

Appendix C - Post-Development Conditions - Drainage Area Map & HydroCAD™ Model

Appendix D - GI Worksheets

Appendix E - NYSDEC SPDES - General Permit for Stormwater Discharge (GP-0-20-001)

Appendix F - N.O.I./N.O.T.

Appendix G - Maintenance and Inspection Forms

Appendix H - Erosion & Sediment Control Plan (See Grading Plan)

Appendix I - MS4 Acceptance Form



SECTION I - PROJECT SUMMARY

Splash Carwash Inc. is proposing to construct a new automatic carwash facility at the corner of Genesee Street and Highbridge Street on what is currently a vacant lot on four contiguous parcels. The development will include reconnection to existing utility services, new concrete pavement access drives and parking areas, landscaping, lighting, and a new +/- 4,800 sf building.

As part of the proposed project, the developer is proposing to purchase +/-0.24 acres from the Village of Fayetteville that is currently the Fitch Street right of way, making a total of 1.14 acres.

Stormwater treatment for this development will meet the requirements of the Municipality and the NYSDEC SPDES General Permit for stormwater discharges, GP-0-20-001.

The proposed project is a redevelopment of an existing site that will result in a <u>decrease in impervious surface</u>. Chapter 9 of the NYSDEC Stormwater Design Manual for redevelopment will be used to size SMPs to treat the required water quality volumes and control peak flow discharge rates from the site per the NYSDEC Stormwater Design Manual (herein referred to as "the manual").

With this report, we intend to provide information, calculations, and figures supporting the stormwater management design for the proposed development.

SECTION II - STORMWATER MANAGEMENT PLAN

The stormwater management plan for this development was designed with the intention of meeting the NYSDEC Stormwater Design Manual, latest edition.

The NYSDEC Phase II regulations, as described in the New York State DEC Stormwater Management Design Manual, provide the approach for designing stormwater management plans that meet pollutant removal goals, reduce channel erosion, prevent overbank flooding, and help control extreme floods through on-site stormwater management practices.

As this site represents a redevelopment project that is reducing existing impervious surface by at least 25% (32% reduction in this case), green infrastructure to treat water quality volumes is not required per Chapter 9 of the NYSDEC Technical Standard for Stormwater Design.

This report will analyze and present the 1, 10, and 100-year storm event runoff values using HydroCAD™ software. (See the appendices of this report for complete HydroCAD model results.).



2.1 Pre-Development Conditions

Existing Topography and Drainage:

The existing drainage patterns on the site generally flow from the center of the site to the west, south, and northeast where runoff makes its way into on-site stormwater structures that connect to the municipal storm sewers or discharge directly to Limestone Creek.

The site is currently vacant and made up of a mixture of impervious pavement cover and grassed areas. Soils on the site are primarily B/D silt loams per the USDA web soil survey. There are currently no stormwater detention or green infrastructure facilities on the site.

Three (3) points of analysis (POA) have been identified where stormwater runoff currently converges from the vacant site. The POA's have been designated Point of Analysis 1-3 on the enclosed drainage area map.

<u>POA-1</u> analyses a point within Limestone creek where all drainage from drainage area EX-1 eventually converges.

<u>POA-2</u> analyses a point at the southwest corner of the site where runoff converges to an existing stormwater drainage inlet along Highbridge Street.

<u>POA-3</u> analyses a point at the northwest corner of the site where runoff converges to an existing stormwater drainage inlet along Highbridge Street.

(See the Pre-Development Drainage Area Map, located in Appendix B of this report.)

<u>Wetlands:</u> Based on our review of available online resources, there are no federal, state, or locally regulated wetlands located on the property.

<u>Floodplain:</u> Based on our review of available online resources, the property is located in special flood hazard area AE Floodway – areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights. Per FEMA flood insurance rate map 36067C0244F, dated November 4, 2016. The proposed development will result in a net decrease of fill within the floodway and therefore not create a substantial increase in flood heights for the 1% annual chance flood.

<u>Archaeological Sensitivity:</u> Based on our review of available online resources the project site is not within an archaeological sensitive area.

2.2 Post-Development Conditions

The development as proposed will result in approximately 1.28 acres of earth disturbance and will require a NYSDEC Stormwater Discharge permit and Stormwater Pollution Prevention Plan (SWPPP) as part of the development.

As mentioned previously, the proposed redevelopment project will reduce existing impervious surface by at least 25% and green infrastructure is not required to treat water quality volumes per Chapter 9 of the NYSDEC Stormwater Manual.



Proposed Topography and Drainage:

The proposed drainage patterns on the site will utilize existing stormwater infrastructure on the south side of the site and propose a new closed stormwater system north of the proposed building to collect and convey drainage from the new parking area. Areas of existing impervious undergo soil restoration per the NYSDEC Stormwater manual table 5.3

Two (2) points of analysis (POA) have been identified for post-construction drainage where stormwater runoff from the site converges. The POA's have been designated POA-1 and 2 on the enclosed drainage area map.

<u>POA-1</u> analyses a point within Limestone creek where all drainage from drainage area EX-1 eventually converges.

<u>POA-2</u> analyses a point at the northwest corner of the site where runoff converges to an existing stormwater drainage inlet along Highbridge Street.

(See the Pre-Development Drainage Area Map, located in Appendix B of this report.)

2.3 Stormwater Management Planning & Facility Design

The proposed development is designed to meet the current NYSDEC Stormwater Manual regulations.

Overall Project Information Summary:

Proposed Disturbance Area: ± 1.28 acres

Current land use: Vacant Previously Developed

Drainage Area: ± 1.45 acres Total Impervious: ± 0.83 acres

Main Soils: "B/D" – Site land cover is made up of impervious pavement and compacted earth/gravel with rubble and some vegetated growth.

Hb Hamlim silt loam - B
Te Teel silt loam – B/D

Wayland soils complex, 0 to 3% slopes, frequently flooded – B/D

(See the Appendix B of this report for the Pre-Development Conditions, Drainage Area, Soils Report, and Existing Conditions HydroCAD model.)

2.3.1 - Step 1: Site Planning

The first step in stormwater management design is to identify and protect natural resources and environmentally sensitive areas, minimize grading and soil disturbance, and to reduce the amount of impervious cover related to the site design. Below is *Table 3.1* from the *New York State Stormwater Management Design Manual* which indicates what measures were applied during this process and which were not applicable.



Green Infrastructure Practices/Reduction of Impervious Cover Practices

Group	Practice	Description	Applicatio n	Area (ac)				
	Preservation of Undisturbed areas	Delineate and place into permanent conservation easement undisturbed forests, native vegetated areas, riparian corridors, wetlands, and natural terrain.	N/A	0				
	Explanation: There are no existing undisturbed areas on this site.							
	Preservation of Buffers	Define, delineate, and place in permanent conservation easement naturally vegetated buffers along perennial streams, rivers, shorelines and wetlands.	N/A	0				
	Explanation: The site i	s adjacent to but does not contain any buffer areas a	long Limestone	Creek. To				
	the greatest extent pos	ssible, preservation of open areas on the east site of the Limit clearing and grading to the minimum	ne site will be ma	aintained				
sources	Reduction of Clearing and Grading	N/A	0					
<u>~</u>	Explanation: The site	has been previously cleared to facilitate developmen	t.					
Preservation of Natural Resources	Locating Development in Less Sensitive Areas	Avoid sensitive resource areas such as floodplains, steep slopes, erodible soils, wetlands, mature forests, and critical habitats by locating development to fit the terrain in areas that will create the least impact.		1.28				
serva	Explanation: The site is located within a floodplain and floodway but was previously developed. The site is being developed with a use and intensity that creates very minimal impact to the floodway.							
Pre	Open Space Design	Use clustering, conservation design or open space design to reduce impervious cover, preserve more open space and protect water resources.	Considered & Applied	1.28				
	Explanation: The project is reducing impervious cover by over 32%.							
	Soil Restoration	Restore the original properties and porosity of the soil by deep till and amendment with compost to reduce the generation of runoff and enhance the runoff reduction performance of practices such as downspout disconnections, grass channels, filter strips, and tree clusters. Soil Restoration shall conform to the latest NYSDEC standards according to table 5.3 of the Stormwater Management Design Manual.	Considered & Applied	1.28				
		site will be tilled and cultivated as the site is graded material on site, will be placed in lawn and tree						
Reductio n of	Roadway Reduction	Minimize roadway widths and lengths to reduce site impervious area.	Considered & Applied	1.28				
Redu	Explanation: The site i	nternal drive aisles conform to Municipal design requingineering design practices.	uirements for e	mergenc				



	Minimize sidewalk lengths and widths to reduce	Considered			
Sidewalk Reduction	site impervious area.	& Applied	1.28		
Explanation: The side	walks associated with the new development have I		much as		
	s as proposed are necessary to allow for safe and conv				
•	and emergency service personnel from the parking ar		o sanam _b		
	Minimize driveway lengths and widths to reduce	Considered			
Driveway Reduction	site impervious area.	& Applied	1.28		
Explanation: Drivewa	y lengths and widths conform to Municipality of	lesign requirer	nents for		
•	d standard engineering design practices, while me	•			
developer.		J			
<u> </u>	Minimize the number of cul-de-sacs and				
Cul-de-sac Reduction	incorporate landscaped areas to reduce their	N/A	0		
	impervious cover.				
Explanation: The use	of a cul-de-sac would not be a typical consider	eration for this	s type of		
development.					
	Reduce the impervious footprint of residences and				
Building Footprint	commercial buildings by using alternate or taller	Considered	1 20		
Reduction	buildings while maintaining the same floor to area	& Applied	1.28		
	ratio.				
Explanation: The build	ing footprint associated with the development has be	en proposed to	meet the		
requirements of the M	unicipality as well as to meet the client's specific nee	ds.			
	Reduce imperviousness on parking lots by				
eliminating unneeded spaces, providing compact					
	car spaces and efficient parking lanes, minimizing	Considered	1 20		
Parking Reduction	stall dimensions, using porous pavement surfaces		1.28		
	in overflow parking areas, and using multi-storied	& Applied			
	parking decks where appropriate.				
Explanation: The parking areas associated with this development have been proposed to meet					
minimum Municipality requirements for parking and the meet client's overall parking needs.					



New York State Stormwater Management Design Manual

Chapter 5: Green Infrastructure Practices

Section 5.1 Planning for Green Infrastructure: Preservation of Natural Features and Conservation Design

Table 5.3 Soil Restoration Requirements					
Type of Soil Disturbance	Soil Restoration Requirement		Comments/Examples		
No soil disturbance	Restoration not permitted		Preservation of Natural Features		
Minimal soil disturbance	Restoration not required		Clearing and grubbing		
Areas where topsoil is	HSG A &B	HSG C&D	Protect area from any ongoing		
stripped only - no change in grade	apply 6 inches of topsoil	Aerate* and apply 6 inches of topsoil	construction activities.		
	HSG A &B	HSG C & D			
Areas of cut or fill	Aerate and apply 6 inches of topsoil	Apply full Soil Restoration **			
Heavy traffic areas on site (especially in a zone 5-25 feet around buildings but not within a 5 foot perimeter around foundation walls) Apply full Soil Restoration (decompaction and compost enhancement)					
Areas where Runoff Reduction and/or Infiltration practices are applied	Restoration not required, but may be applied to enhance the reduction specified for appropriate practices.		Keep construction equipment from crossing these areas. To protect newly installed practice from any ongoing construction activities construct a single phase operation fence area		
Redevelopment projects	Soil Restoration is required on redevelopment projects in areas where existing impervious area will be converted to pervious area.				

^{*}Aeration includes the use of machines such as tractor-drawn implements with coulters making a narrow slit in the soil, a roller with many spikes making indentations in the soil, or prongs which function like a mini-subsoiler.



^{**} Per "Deep Ripping and De-compaction, DEC 2008".

2.3.2- Step 2: Water Quality Volume

Per Chapter 9 of the Design Manual, section 9.2.1.B.1, since the development as proposed will reduce existing impervious by over 25% the water quality treatment objective is achieved.

2.3.3 - Step 3: Runoff Reduction

The minimum required Runoff Reduction will be achieved via area reduction credit via tree planting.

The GI worksheet is used to determine the required minimum RRv for the site. The site was analyzed, and appropriate practices were selected. (See Appendix D for Runoff Reduction Calcs in GI Worksheets)

Minimum RRv:

Given the hydrologic soil group of the site (average of "B & D" soils) and the specific reduction factor (S=0.28), the calculated minimum RRv is: **0.02 ac-ft, 704 sf.**

2.3.4 - Step 4: Apply Standard Stormwater Management Practices to Address Remaining Water Quality Volume

This step does not apply to this site due to redevelopment credit for WQv by reducing impervious surfaces by over 25%.

2.3.5 Step 5: Apply Volume and Peak Control Practices to Meet Requirements:

Per Chapter 9 of the Design Manual, section 9.2.1.A.I-II, since redevelopment activities result in no change to hydrology that increases the discharge rate from the project site, the 10 and 100-yr criteria do not apply. In addition, channel protection volume (CPv) calculations are not required.

The existing conditions analysis establishes hydrological boundaries at the point of analysis (POA) located downstream of the project site.

Base Stormwater Runoff at POA-1					
Storm Frequency	1-yr	10-yr	100-yr		
Existing (cfs)	2.42	4.67	8.46		
Post Development	2.33	4.41	7.90		
Base Stormwater Runoff at POA-2					
Existing (cfs)	0.44	0.77	1.31		
Post Development	0.29	0.58	1.06		
Base Stormwater Runoff at POA-3					
Existing (cfs) 0.97 1.65 2.80					
Post Development	0.10	0.29	0.64		

Stream Channel Protection (Cpv):

CPv requirements are designed to protect stream channels from erosion. In New York State this goal is accomplished by providing 24-hour extended detention of the one-year, 24-hour storm event, remaining after runoff reduction. CPv is not require for this project since there is no change in hydrology that causes an increase in runoff from the site.



Overbank Flood Control (Qp):

Qp requirements are designed to prevent an increase in the frequency and magnitude of out-of-bank flooding generated by development. Overbank control requires storage to attenuate the post development 10-year, 24-hour peak discharge rate to predevelopment rates. The Qpv requirement is waived for this project since there is no change in hydrology that causes an increase in runoff from the site.

Extreme Flood Control (Qf):

The intent of the extreme flood criteria is to (a) prevent the increased risk of flood damage from large storm events, (b) maintain the boundaries of the predevelopment 100-year floodplain, and (c) protect the physical integrity of stormwater management practices The Qf requirement is waived for this project since there is no change in hydrology that causes an increase in runoff from the site.

See appendix D for HydroCAD modeling.

2.4 - Unified Storm Sewer Sizing Calculations:

All culverts have been sized based on the 10-year storm event. The pipe sizing was an integral part of HydroCAD modeling.

SECTION III - RUN-OFF SUMMARY AND CONCLUSIONS

Below is a summary table indicating the pre-development run-off rates as compared to the total post-development runoff rates.

Peak Flow Rate Summary						
Design Storm	1-Yr	10-Yr	100-Yr			
Pre-Development	Pre-Development					
POA 1	2.42	4.67	8.46			
POA 2	0.44	0.77	1.31			
POA 3	0.97	1.65	2.80			
TOTAL RUNOFF	3.83	7.09	12.57			
Post-Development (No Controls)					
POA 1	2.33	4.41	7.90			
POA 2	0.29	0.58	1.06			
POA 3	0.10	0.29	0.64			
TOTAL RUNOFF	2.72	5.28	9.60			
Reduction Rate %						
	29%	26%	24%			

Flows can be found on the HydroCAD summary sheets of Appendix C and D.



SECTION IV - EROSION AND SEDIMENT CONTROLS

4.1 Planned Erosion & Sediment Control Practices - Implementation

The disturbance is required to achieve the developer's needs as well as parking requirements and stormwater management facilities. This will require the contractor to have a qualified inspector perform bi-weekly inspections until 5 acres or less of the site has been stabilized (also see section VIII of this report).

All erosion and sediment control practices shall meet the requirements of the latest version of the NYS Standards and Specifications for Erosion and Sediment Control.

Silt Fence

Perimeter controls are to be installed at locations shown on the attached plan. See below for maintenance of this sediment control measure.

Temporary Surface Stabilization

Vegetative measures such as seeding and mulching will be utilized to help prevent erosion of the soil. Bare soil will be seeded within 7 days of exposure. If construction is suspended, or sections completed, areas will be seeded down or mulched immediately.

Dust Control

Should excessive dust become a nuisance as a result of construction and earth moving activities, is should be controlled by periodic sprinkling to reduce the potential for dust to become airborne.

Stabilized Construction Entrance

A stabilized construction entrance will be installed at the driveway entrances for Lot 2. As driveway entrances are added or installed, stabilized construction entrances will be installed.

Implementation Notes

- 1. Procedures outlined in the New York State standards and specifications for erosion and sediment control must be followed throughout the duration of construction of this project. Throughout construction, emphasis will be placed on preventing erosion of the disturbed and exposed soil within the site.
- Vegetative measures such as jute mesh, seeding and mulching shall be utilized to help prevent eroding of the soil.
- 3. Temporary seeding will consist of ryegrass placed at a rate of 30 lbs. Per acre or 0.7 lbs. Per 1,000sf. The area is to then be mulched with hay or straw at a rate of 2 tons per acre or 90 lbs. Per 1,000sf.
- 4. Permanent seeding shall follow the schedules listed on the landscaping plan. Mulch shall be small grain straw applied at a rate of 2 tons per acre or 90 lbs. Per 1,000sf.
- 5. Sediment control concerns are addressed by use of perimeter controls such as silt fence, mulching.



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- 6. If necessary, the paved streets adjacent to the site entrance will be swept to remove any excess mud, dirt or rock tracked from the site. Dump trucks hauling material from the construction site which is prone to blowing from the wind, will be covered with a tarpaulin.
- 7. Inspections by a qualified professional are to occur at least twice every 7 calendar days regardless of whether or not the project is above 5 acres of active disturbance. Where soil disturbance activities have temporarily or permanently ceased, soil stabilization measures must be initiated by the end of the next business day and completed within 7 calendar days.
- 8. Construction may not begin until receipt of the notice of intent letter of acknowledgement from the NYSDEC.
- 9. During construction, the contractor will be responsible for replacing any erosion control devices which become inoperable or damaged. The contractor shall inspect all erosion control devices after each rain event to ensure they are working properly. Repairs to all erosion control devices shall be made in accordance with NYSDEC regulations and design criteria. Any silt accumulation on roadways, in ditches or swales, in existing stormwater management areas, in existing sewers shall be removed. No offsite tracking of silt, mud or other debris will be permitted.
- 10. Immediately after grading, all swales shall be seeded with grass seed and stabilized. Silt fence, silt sock, and similar practices shall not be placed within the swales.
- 11. Native and existing vegetation should be retained and protected to the greatest extent possible and incorporated into the landscape plan.
- 12. Jute mesh or erosion control fabric shall be used on steep slopes of 1v:3h or greater and wherever necessary to control erosion and siltation of existing drainage systems as ordered by the engineer.
- 13. Concrete washout facilities are to be located a minimum of 100 feet from all drainage swales, storm drain inlets, wetlands, streams, and other surface waters per NYSDEC standards.
- 14. For land disturbance activities between November 15 and April 1 where soil disturbance activities have temporarily or permanently ceased, soil stabilization measures must be initiated by the end of the next business day and completed within 3 calendar days.

4.2 Sequence of Construction Activities

Exposure of disturbed earth during the mass earthwork phase will be greater than 5 acres. Therefore, a waiver from the Municipality will be required. It is recommended that the contractor shall follow the following sequence of construction operations.

Sequence of Construction

- The proposed erosion and sediment plan will be discussed with contractors before beginning any earth
 disturbing activities to ensure that all contractors are aware of the proper implementation of the E&SC
 measures and maintenance requirements, which may be needed as the project progresses. This will be
 important in protecting the adjacent properties during the construction period.
- 2. Contractor to install stabilized construction entrance at location shown on plan, per detail.



- 3. Construct staging area(s) as required.
- 4. The operator and owner/developer shall have a Qualified Professional conduct an assessment of the site prior to the commencement of construction activities.
- 5. Perform site clearing and grubbing activities.
- 6. Install perimeter controls (silt fencing) at locations shown on plan. Immediately stabilize any areas disturbed by this activity. Use care to avoid damaging trees which are to remain.
- 7. Strip and stockpile topsoil at locations shown on plan or as directed by developer, using appropriate silt fencing and/or seeding to stabilize stockpiles upon completion of this activity.
- 8. Construct the perimeter swales and stormwater management facilities as shown on plan. Use care to avoid damaging trees which are to remain. Once completed these areas are to receive topsoil and shall be stabilized with a permanent seed mixture and mulched within 7 days.
- 9. Perform construction activities in accordance with Property Development Plans.
- 10. In areas where soil disturbance activity has been temporarily or permanently ceased, temporary and/or permanent soil stabilization measures shall be installed in accordance with the most current version of the NYSDEC Standards and Specifications for Erosion and Sediment Control. These measures shall be installed and/or implemented with seven (7) days from the date the soil disturbance activity ceased.
- 11. Upon permanent stabilization of individual portions of the site, remove individual temporary sedimentation control measures as appropriate.

4.3 Planned Erosion & Sediment Control Practices - Maintenance

Temporary Surface Stabilization

Vegetative measures should be inspected to ensure that they are taking root in the soil and that they are growing. Vegetative measures, which are found to be unsatisfactory, should be fertilized and watered if necessary and replanted as a last resort.

Silt Fence

Perimeter controls should be checked for integrity and to ensure that an erosion channel does not pass it. The area around the perimeter measure should be checked for excessive scour around the base and/or excessive sediment at its top. Repairs should be made immediately to any failing perimeter sediment control measures.

Stabilized Construction Entrance

The entrance and stone shall be maintained in a manner that will prevent tracking of sediment into the public right-of-way. This may require top dressing with additional aggregate. All silt or sediment that is tracked into the public right of way shall be swept up daily to prevent its entrance into storm sewers or other water courses.



SECTION V - ADDITIONAL POLLUTION PREVENTION CONTROLS

5.1 Other Pollution Prevention Controls:

Other potential sources of pollution exist that are unrelated to erosion and sediment, particularly those related to construction activities. This section identifies those potential sources and provides methods that reduce the risks of spills or other accidental exposure of materials/substances to stormwater run-off. All applicable state and local standards shall be followed at all times. Manufacturer's recommendations shall be followed with regard to the handling of particular products.

Off-site Vehicle Tracking

The road adjacent to the project site shall be kept clean and free of debris.

Waste Materials

All construction waste material shall be deposited into metal dumpsters that will be emptied on a regular basis by a licensed waste management company. Any spillage of chemicals such as petroleum products or related construction chemicals shall be cleaned up immediately using absorbent material and deposited into a separate metal dumpster and emptied by a properly licensed waste management company on a regular basis. Arrangements shall be made with the waste management company for disposal of various construction materials.

Only trees, brush, and stumps removed from site may be allowed for on-site burial. Prior to burial they must be chipped. Burial of such material is only allowable in lawn/berm areas and shall have a minimum of 2' of cover.

Sanitary Waste

All temporary sanitary waste, during construction, will be collected in on-site portable johns and shall be emptied on a regular basis by a licensed waste management company.

5.2 Potential Pollution Sources

The following materials are expected to be present during construction:

Hazardous Materials

- Paints
- Acids for cleaning masonry
- Cleaning solvents
- o Concrete curing compounds
- Construction chemicals

Other Products

- Petroleum based products
- o Concrete
- Detergents
- Masonry
- Asphalt
- o Tar
- Fertilizer
- Wood



5.3 Spill Prevention

A separate staging area shall be provided for the purpose of refueling and vehicle maintenance. Absorbent materials shall be available at this staging area to clean up spills and to prevent chemicals from entering stormwater. Material Safety Data Sheets (MSDS) should be consulted for proper procedures regarding the handling of hazardous products.

5.4 Housekeeping Practices

The following practices shall be followed on-site during the construction of this project:

- An effort should be made to store on-site only enough products necessary to complete the job.
- All materials stored on-site shall be in a neat, orderly manner and in their original containers, with the
 original manufacturer's label. Whenever possible, stored materials shall be covered or under a roof or
 other enclosure.
- Substances shall not be mixed with one another unless recommended by the manufacturer.
- Whenever possible, all of a product will be used before disposing of the container.
- Manufacturer's recommendations shall be followed for use and disposal of products.
- The site superintendent will inspect daily to ensure proper use and disposal of materials on-site.
- Detergents will be discharged only into the sanitary sewer system.

5.5 Hazardous Products

The following procedures shall be followed to reduce the risks associated with hazardous products:

- Products shall be stored in their original containers with original labels attached and in a readable fashion.
- Products shall be used only for their intended purpose, handled, and disposed of as per the manufacturer's recommendations, local, state, or federal agencies.

Petroleum Products:

- All on-site vehicles shall be monitored for leaks and receive regular maintenance to reduce the chance of leaks.
- All on-site construction vehicles will be parked or staged at least 200 ft. from any waterway, pond, or creek.
- Construction vehicles found with leaks shall be taken out of service until leak is repaired. Collection pans shall be placed under leaks until repaired.
- Petroleum products shall be stored in clearly labelled, sealed containers in an enclosed area whenever possible.
- A licensed waste management company will dispose of lubricant material containers in a proper manner.
- All spills shall be contained and cleaned up immediately.
- Equipment and materials necessary to contain and clean up spills shall be stored on-site in or near petroleum storage areas.
- Fuel storage tanks kept on-site shall be placed on concrete pads and in accordance with all state, local, and federal agencies.
- Petroleum and asphaltic products shall be used in conformance with manufacturer's recommendations.

Fertilizers:

- Fertilizers will only be applied in the minimum amounts as recommended by the manufacturer.
- Storage of fertilizers shall be in an enclosed or covered area.



Paints:

All containers will be tightly sealed and stored when not in use. Excess paint shall not be disposed of into the storm sewer system. Disposal shall be as recommended by the manufacturer and in accordance with all local, state and federal regulations.

Concrete Trucks:

 Concrete trucks may wash out or discharge surplus concrete or drum wash water on-site, only in the designated area.

5.6 Spill Control Practices

In addition to housekeeping and materials management, the following practices shall be followed for spill prevention and cleanup:

- Manufacturer's recommendations for cleanup shall be clearly posted and all site personnel will be made aware of these procedures as well as the location of the information and clean-up supplies.
- Materials and equipment necessary for spill cleanup shall be kept on-site. Equipment and materials shall include, but not be limited to brooms, mops, dustpans, gloves, goggles, and absorbent materials such as cat litter, sand, and sawdust, plastic and metal containers.
- All spills shall be contained and cleaned up immediately upon discovery.
- The spill area shall be kept well ventilated and all personnel in the area shall wear appropriate clothing necessary to prevent contact with hazardous materials.
- Toxic or hazardous spills will be reported to the appropriate state, local, or federal agency regardless of size. The National Response Center (1-800-424-8802) shall be notified immediately in the event of a spill of "reportable quantity". A written description of the release will be submitted to the EPA Regional Office and NYSDEC within 14 days of the event. The report shall include the date and circumstances, as well as the steps taken to prevent a similar release. The SWPPP and spill prevention plan shall be modified to include this information. The "reportable quantity" for oil is that which produces sheen on any waters of the United States.
- The site superintendent in charge of day-to-day site operations will be the spill prevention and clean-up coordinator. He will designate at least two other on-site personnel who will receive spill prevention and spill clean-up training. These individuals will become responsible for a particular phase of prevention and clean up. The names of responsible personnel shall be clearly posted within clean-up material storage area as well as in the on-site construction office.

5.7 Local Requirements

All local requirements have been incorporated into the stormwater management plan and pollution prevention controls.

SECTION VI - SITE ASSESSMENT AND INSPECTIONS

6.1 Site Assessment and Inspections

The operator and/or owner/developer shall have a qualified professional assess the site prior to the commencement of construction and certify in an inspection report that the appropriate erosion and sediment controls described in this SWPPP have been adequately installed or implemented to ensure overall preparedness of the site for the commencement of construction. Following the commencement of construction, site inspections shall be conducted by the qualified professional at least once every 7 calendar days and within 24 hours of the end of a storm event of 0.5 inches or greater. During each inspection, the qualified professional shall record the following information:



- (A) On a site map, indicate the extent of all disturbed site areas and drainage pathways. Indicate site areas that are expected to undergo initial disturbance or significant site work within the next 7-day period;
- (B) Indicate on a site map all areas of the site that have undergone temporary or permanent stabilization;
- (C) Indicate all disturbed site areas that have not undergone active site work during the previous 7-day period;
- **(D)** Inspect all sediment control practices and record the approximate degree of sediment accumulation as a percentage of the sediment storage volume (for example, 10 percent, 20 percent, and 50 percent);
- **(E)** Inspect all erosion and sediment control practices and record all maintenance requirements such as verifying the integrity of barrier or diversion systems (earthen berm or silt fencing) and containment systems (sediment basins and sediment traps. Identify any evidence of rill or gully erosion occurring on slopes and any loss of stabilizing vegetation or seeding/mulching. Document any excessive deposition of sediment or ponding water along barrier or diversion systems. Record the depth of sediment within containment structures, any erosion near outlet and overflow structures, and verify the ability of rock filters around perforated riser pipes to pass water.
- (F.) All deficiencies that are identified with the implementation of this SWPPP.

The operator shall maintain a record of all inspection reports in a site logbook. The site logbook shall be maintained on site and be made available to the permitting authority upon request. Prior to the commencement of construction, the operator shall certify in the site logbook that the SWPPP meets all Federal, State, and local erosion and sediment control requirements. The operator shall post at the site, in a publicly accessible location, a summary of the site inspection activities monthly.

Prior to filing of the Notice of Termination or the end of permit term, the operator shall have the qualified professional perform a final site inspection. The qualified professional shall certify that the site has undergone final stabilization using either vegetative or structural stabilization methods and that all temporary erosion and sediment controls (such as silt fencing) not needed for long-term erosion control have been removed.

The operator shall certify that the requirements of the "SITE ASSESSMENT AND INSPECTIONS", "STABILIZATION" AND "MAINTENANCE" portions of the permit have been satisfied within 48 hours of actually meeting such requirements.

6.2 Stabilization

The following requirements shall be met for site stabilization:

- (A) Inspections by a qualified professional are to occur at least once every 7 calendar days. Where soil disturbance activities have temporarily or permanently ceased, soil stabilization measures must be initiated by the end of the next business day and completed within 7 calendar days.
- (B) For land disturbance activities between November 15 and April 1 where soil disturbance activities have temporarily or permanently ceased, soil stabilization measures must be initiated by the end of the next business day and completed within 3 calendar days.



6.3 Maintenance

Sediment shall be removed from swales and ponds whenever their capacity has been reduced by fifty (50) percent from the design capacity.

6.4 Contractors

The SWPPP must clearly identify 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 of this permit (see section 7.1). All certifications must be included in the SWPPP. Additionally, new contractors and subcontractors need to similarly certify.

Certification Statement - All contractors and subcontractors identified in a SWPPP of this permit shall sign a copy of the operator's certification form before undertaking any construction activity at the site identified in the SWPPP's. The wording of the certification is as follows:

"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."

The certification must include the name and title of the person providing the signature in accordance with this permit; the name, address, and telephone number of the contracting firm; the address (or other identifying description) of the site; and the date the certification is made.

6.5 Monitoring, Reporting and Retention of Records

The Department may, at its sole discretion, require monitoring of discharge(s) from the permitted construction activity after notifying the permittee in writing of the basis for such monitoring, the parameters and frequency at which monitoring shall occur and the associated reporting requirements, if any.

The operator shall retain copies of SWPPP's, and any reports submitted in conjunction with this permit, and records of all data used to complete the NOI to be covered by this permit, for a period of at least three years from the date that the site is finally stabilized. The Department, in its sole discretion, may extend this period, at any time upon written notification.

The operator shall retain a copy of the SWPPP required by this permit at the construction site from the date of initiation of construction activities to the date of final stabilization.

The operator shall also prepare a written summary of its status with respect to compliance with this general permit at a minimum frequency of every three months during which coverage under this permit exists. The summary should address the status of achieving each component of the SWPPP. This summary shall be handled in the same manner as prescribed for SWPPP's previously.

Addresses - Except for the submittal of NOI's and NOT's, all written correspondence under this permit directed to the Department, including the submittal of individual permit applications, shall be sent to the address of the appropriate Department Office.



SECTION VII – CERTIFICATIONS

7.1 Operator's Certification

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that false statements made herein are punishable as a Class A misdemeanor pursuant to Section 210.45 of the Penal Law."

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Splash Car Wash, Inc.

DATE

7.2 Contractor's Certification

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 daily 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 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 (Part III.A.6) *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.



Signature, Title and Date	Company, address & Telephone Number	Responsibility – work to be performed

Appendix A

Report Figures

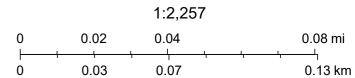
NYSDEC Wetland Location Map Federal Wetland Location Map Floodplain Location Map



NYS Wetland Map



September 28, 2022

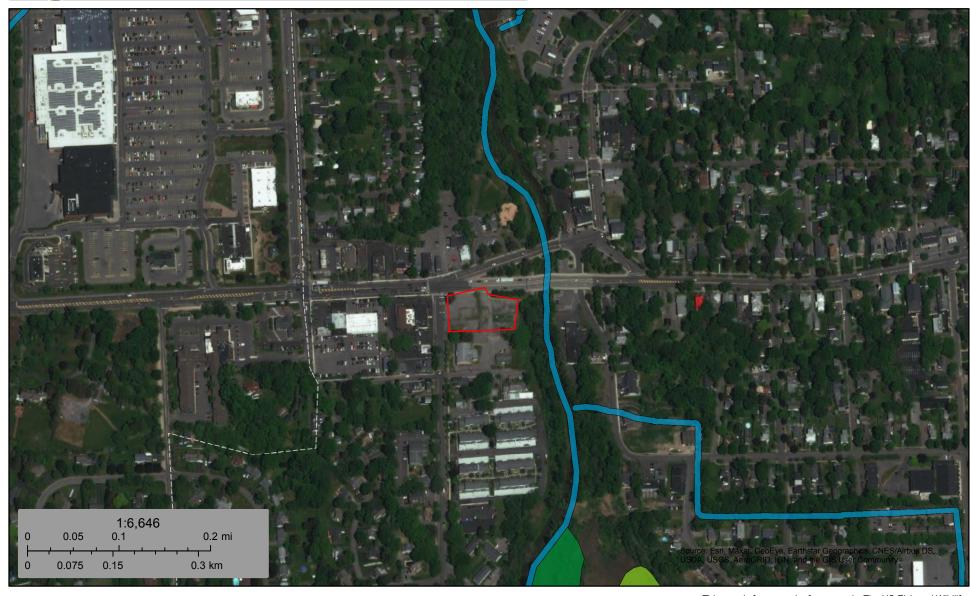


Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community, Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

U.S. Fish and Wildlife Service

National Wetlands Inventory

Wetlands



April 19, 2022

Wetlands

Estuarine and Marine Deepwater

Estuarine and Marine Wetland

Freshwater Emergent Wetland

Freshwater Forested/Shrub Wetland

Freshwater Pond

Lake

Riverine

Other

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

sources of small size. The **community map repository** should be consulted for possible updated or additional flood hazard information.

To obtain more detailed information in areas where **Base Flood Elevations** (BFEs) and/or **floodways** have been determined, users are encouraged to consult the Flood Profiles and Floodway Data and/or Summary of Stillwater Elevations tables contained within the Flood Insurance Study (FIS) Report that accompanies this FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole-foot elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS Report should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.

Coastal Base Flood Elevations shown on this map apply only landward of 0.0' North American Vertical Datum of 1988 (NAVD 88). Users of this FIRM should be aware that coastal flood elevations are also provided in the Summary of Stillwater Elevations table in the Flood Insurance Study Report for this jurisdiction. Elevations shown in the Summary of Stillwater Elevations table should be used for construction and/or floodplain management purposes when they are higher than the elevations shown on this FIRM.

Boundaries of the **floodways** were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the Flood Insurance Study Report for this jurisdiction.

Certain areas not in Special Flood Hazard Areas may be protected by **flood control structures**. Refer to Section 2.4 "Flood Protection Measures" of the Flood Insurance Study Report for information on flood control structures for this jurisdiction.

The **projection** used in the preparation of this map was New York State Plane Central Zone (FIPS zone 3102). The **horizontal datum** was NAD 83, GRS 1980 spheroid. Differences in datum, spheroid, projection or UTM zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of this FIRM.

Flood elevations on this map are referenced to the North American Vertical Datum of 1988. These flood elevations must be compared to structure and ground elevations referenced to the same **vertical datum**. For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at http://www.ngs.noaa.gov or contact the National Geodetic Survey at the following address:

NGS Information Services NOAA, N/NGS12 National Geodetic Survey SSMC-3, #9202 1315 East-West Highway Silver Spring, Maryland 20910-3282 (301) 713-3242

To obtain current elevation, description, and/or location information for **bench marks** shown on this map, please contact the Information Services Branch of the National Geodetic Survey at **(301)** 713- 3242, or visit its website at http://www.ngs.noaa.gov.

Base map information shown on the Flood Insurance Rate Map (FIRM) was derived from digital orthophotography provided by the New York Office of Cyber Security and Critical Infrastructure Coordination from photography dated April 2006.

The **profile baselines** depicted on this map represent the hydraulic modeling baselines that match the flood profiles in the FIS report. As a result of improved topographic data, the **profile baseline**, in some cases, may deviate significantly from the channel centerline or appear outside the SFHA.

Based on updated topographic information, this map reflects more detailed and up-to-date **stream channel configurations and floodplain delineations** than those shown on the previous FIRM for this jurisdiction. As a result, the Flood Profiles and Floodway Data tables for multiple streams in the Flood Insurance Study Report (which contains authoritative hydraulic data) may reflect stream channel distances that differ from what is shown on the map. Also, the road to floodplain relationships for unrevised streams may differ from what is shown on previous maps.

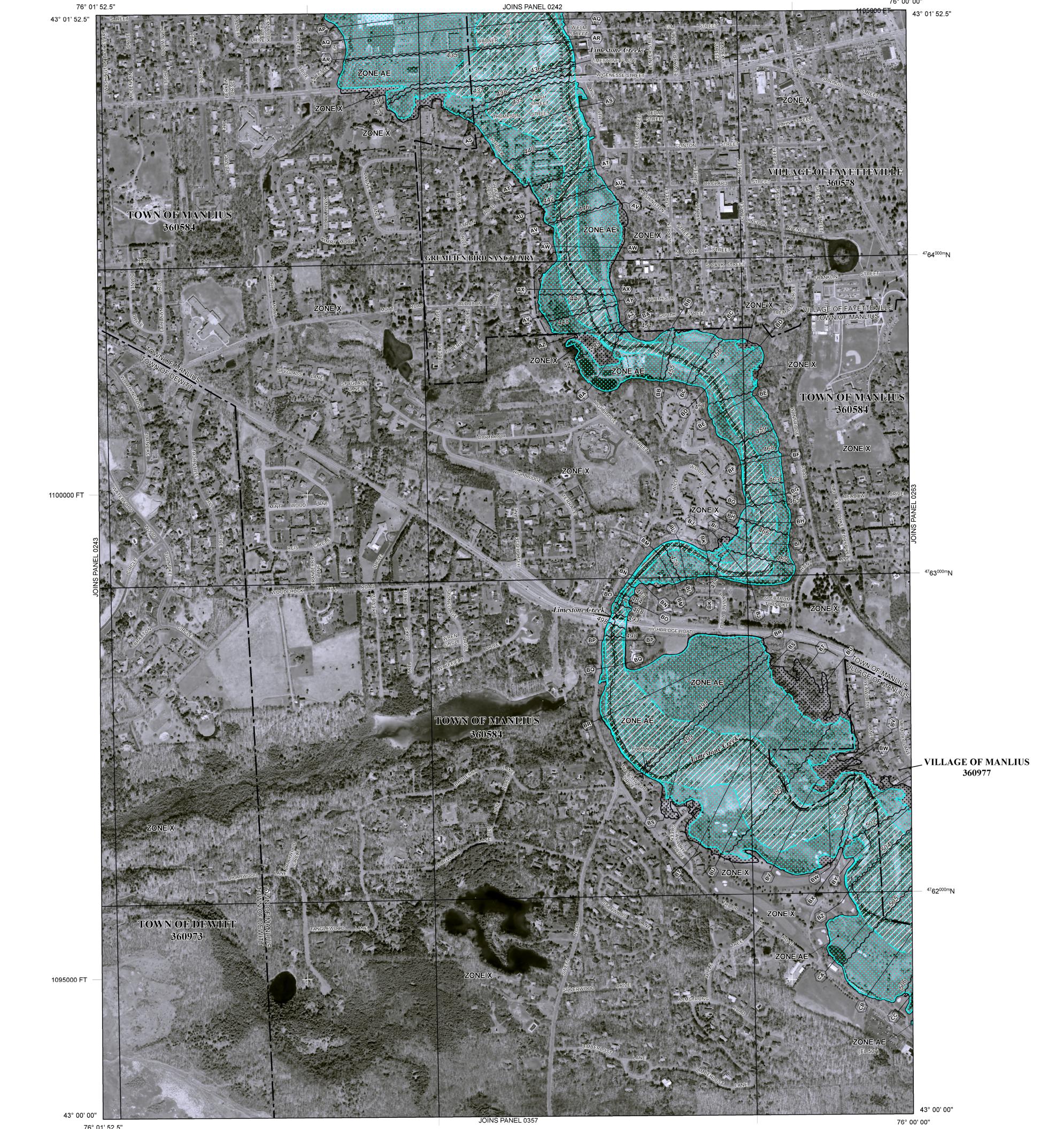
Corporate limits shown on this map are based on the best data available at the time of publication. Because changes due to annexations or de-annexations may have occurred after this map was published, map users should contact appropriate community officials to verify current corporate limit locations.

Please refer to the separately printed **Map Index** for an overview map of the county showing the layout of map panels; community map repository addresses; and a Listing of Communities table containing National Flood Insurance Program dates for each community as well as a listing of the panels on which each community is located.

For information on available products associated with this FIRM visit the Map Service Center (MSC) website at http://msc.fema.gov. Available products may include previously issued Letters of Map Change, a Flood Insurance Study Report, and/or digital versions of this map. Many of these products can be ordered or obtained directly from the MSC website.

If you have **questions about this map,** how to order products, or the National Flood Insurance Program in general, please call the **FEMA Map Information eXchange (FMIX)** at **1-877-FEMA-MAP** (1-877-336-2627) or visit the FEMA website at http://www.fema.gov/business/nfip.

This digital FIRM was produced through a unique cooperative partnership between the New York State Department of Environmental Conservation (NYSDEC) and FEMA. As part of the effort, NYSDEC has joined in a Cooperative Technical Partnership agreement to produce and maintain FEMA's digital FIRMS.



The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V, and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood. No Base Flood Elevations determined. Base Flood Elevations determined. Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined. Special Flood Hazard Areas formerly protected from the 1% annual chance flood by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood. Area to be protected from 1% annual chance flood by a Federal flood protection system under construction; no Base Flood Elevations determined. Coastal flood zone with velocity hazard (wave action); no Base Flood Elevations Coastal flood zone with velocity hazard (wave action); Base Flood Elevations FLOODWAY AREAS IN ZONE AE The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in OTHER FLOOD AREAS Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood. OTHER AREAS Areas determined to be outside the 0.2% annual chance floodplain. Areas in which flood hazards are undetermined, but possible. COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS OTHERWISE PROTECTED AREAS (OPAs) CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas. 1% Annual Chance Floodplain Boundary 0.2% Annual Chance Floodplain Boundary Floodway boundary Zone D boundary ••••• CBRS and OPA boundary Boundary dividing Special Flood Hazard Area Zones and boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths, or flood velocities. ~~~ 513~~~ Base Flood Elevation line and value; elevation in feet* Base Flood Elevation value where uniform within zone; elevation in (EL 987) *Referenced to the North American Vertical Datum of 1988 Geographic coordinates referenced to the North American Datum of 45° 02' 08", 93° 02' 12" 1983 (NAD 83) Western Hemisphere 5000-foot ticks: New York State Plane Central Zone 3100000 FT (FIPS Zone 3102), Transverse Mercator projection 1000-meter Universal Transverse Mercator grid values, zone 18 Bench mark (see explanation in Notes to Users section of this FIRM DX5510 X River Mile MAP REPOSITORIES Refer to Map Repositories list on Map Index EFFECTIVE DATE OF COUNTYWIDE FLOOD INSURANCE RATE MAP November 4, 2016 EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL For community map revision history prior to countywide mapping, refer to the Community Map History table located in the Flood Insurance Study report for this jurisdiction. To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

> PANEL 0244F **FIRM** FLOOD INSURANCE RATE MAP ONONDAGA COUNTY, **NEW YORK** (ALL JURISDICTIONS) **PANEL 244 OF 520** (SEE MAP INDEX FOR FIRM PANEL LAYOUT) CONTAINS: COMMUNITY FAYETTEVILLE. MANLIUS, TOWN OF 360584 MANLIUS, VILLAGE OF 360977 Notice to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject MAP NUMBER

METERS

Appendix B

Pre-Development Conditions
Drainage Area Map, Soils Report &
HydroCad Model Summary





Natural Resources Conservation Service A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Onondaga County, New York

129 West Genesee Street



Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2 053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require

alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

Contents

Preface	2
Soil Map	5
Soil Map	6
Legend	7
Map Unit Legend	
Map Unit Descriptions	8
Onondaga County, New York	10
Hb—Hamlin silt loam	10
Te—Teel silt loam	11
Wn—Wayland soils complex, 0 to 3 percent slopes, frequently flooded	12
Soil Information for All Uses	15
Soil Properties and Qualities	15
Soil Qualities and Features	15
Hydrologic Soil Group	. 15

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.



MAP LEGEND

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Map Unit Polygons

Soil Map Unit Lines



Soil Map Unit Points

Special Point Features

ဖ

Blowout

Borrow Pit

Clay Spot

Closed Depression

Gravelly Spot

Landfill Lava Flow

Gravel Pit

Marsh or swamp

Mine or Quarry

Miscellaneous Water

Perennial Water

Rock Outcrop

Saline Spot Sandy Spot

Severely Eroded Spot

Sinkhole

Sodic Spot

Slide or Slip

Spoil Area



Stony Spot Very Stony Spot



Wet Spot



Other

Special Line Features

Water Features

Streams and Canals

Transportation

Rails

Interstate Highways

US Routes



Major Roads

00

Local Roads

Background

Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20.000.

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

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

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

Source of Map: Natural Resources Conservation Service Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

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

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

Soil Survey Area: Onondaga County, New York Survey Area Data: Version 16, Sep 1, 2021

Soil map units are labeled (as space allows) for map scales 1:50.000 or larger.

Date(s) aerial images were photographed: Aug 3, 2021—Nov 7, 2021

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

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
Hb	Hamlin silt loam	0.3	22.0%
Те	Teel silt loam	1.0	76.1%
Wn	Wayland soils complex, 0 to 3 percent slopes, frequently flooded	0.0	1.9%
Totals for Area of Interest		1.3	100.0%

Map Unit Descriptions

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

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

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

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The

Custom Soil Resource Report

delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An association is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Onondaga County, New York

Hb—Hamlin silt loam

Map Unit Setting

National map unit symbol: 9vgz Elevation: 360 to 1,260 feet

Mean annual precipitation: 38 to 42 inches
Mean annual air temperature: 45 to 48 degrees F

Frost-free period: 110 to 190 days

Farmland classification: All areas are prime farmland

Map Unit Composition

Hamlin and similar soils: 85 percent Minor components: 15 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Hamlin

Setting

Landform: Flood plains

Landform position (two-dimensional): Summit Landform position (three-dimensional): Rise

Down-slope shape: Convex Across-slope shape: Convex

Parent material: Silty alluvium mainly from areas of siltstone, shale, and limestone

Typical profile

H1 - 0 to 9 inches: silt loam H2 - 9 to 16 inches: silt loam H3 - 16 to 41 inches: silt loam H4 - 41 to 60 inches: silt loam

Properties and qualities

Slope: 0 to 3 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high

(0.57 to 1.98 in/hr)

Depth to water table: About 36 to 72 inches Frequency of flooding: OccasionalNone

Frequency of ponding: None

Calcium carbonate, maximum content: 1 percent

Available water supply, 0 to 60 inches: High (about 11.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 1

Hydrologic Soil Group: B Hydric soil rating: No

Minor Components

Herkimer

Percent of map unit: 5 percent

Hydric soil rating: No

Teel

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

Howard

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

Te—Teel silt loam

Map Unit Setting

National map unit symbol: 9vkv Elevation: 600 to 1,800 feet

Mean annual precipitation: 38 to 42 inches Mean annual air temperature: 45 to 48 degrees F

Frost-free period: 110 to 190 days

Farmland classification: All areas are prime farmland

Map Unit Composition

Teel and similar soils: 80 percent Minor components: 20 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Teel

Setting

Landform: Flood plains

Landform position (two-dimensional): Summit Landform position (three-dimensional): Talf

Down-slope shape: Concave Across-slope shape: Convex Parent material: Silty alluvium

Typical profile

H1 - 0 to 10 inches: silt loam H2 - 10 to 28 inches: silt loam H3 - 28 to 60 inches: silt loam

Properties and qualities

Slope: 0 to 3 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Moderately well drained

Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high

(0.57 to 1.98 in/hr)

Depth to water table: About 18 to 24 inches Frequency of flooding: OccasionalNone

Frequency of ponding: None

Calcium carbonate, maximum content: 1 percent

Available water supply, 0 to 60 inches: High (about 9.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 2w

Hydrologic Soil Group: B/D Hydric soil rating: No

Minor Components

Hamlin

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

Herkimer

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

Howard

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

Wayland

Percent of map unit: 5 percent Landform: Flood plains Hydric soil rating: Yes

Wn—Wayland soils complex, 0 to 3 percent slopes, frequently flooded

Map Unit Setting

National map unit symbol: 2srgv Elevation: 160 to 1,970 feet

Mean annual precipitation: 31 to 68 inches
Mean annual air temperature: 43 to 52 degrees F

Frost-free period: 105 to 180 days

Farmland classification: Not prime farmland

Map Unit Composition

Wayland and similar soils: 60 percent

Wayland, very poorly drained, and similar soils: 30 percent

Minor components: 10 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Wayland

Setting

Landform: Flood plains

Landform position (three-dimensional): Tread

Down-slope shape: Linear Across-slope shape: Linear

Parent material: Silty and clayey alluvium derived from interbedded sedimentary

rock

Typical profile

A - 0 to 6 inches: silt loam

Bg1 - 6 to 12 inches: silt loam

Bg2 - 12 to 18 inches: silt loam

C1 - 18 to 46 inches: silt loam

C2 - 46 to 72 inches: silty clay loam

Properties and qualities

Slope: 0 to 3 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Poorly drained

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high

(0.14 to 14.17 in/hr)

Depth to water table: About 0 to 6 inches Frequency of flooding: FrequentNone

Frequency of ponding: None

Calcium carbonate, maximum content: 15 percent Maximum salinity: Nonsaline (0.0 to 1.9 mmhos/cm)

Available water supply, 0 to 60 inches: Very high (about 12.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 5w

Hydrologic Soil Group: B/D

Ecological site: F139XY009OH - Wet Floodplain

Hydric soil rating: Yes

Description of Wayland, Very Poorly Drained

Setting

Landform: Flood plains

Landform position (three-dimensional): Tread

Down-slope shape: Concave Across-slope shape: Concave

Parent material: Silty and clayey alluvium derived from interbedded sedimentary

rock

Typical profile

A - 0 to 6 inches: mucky silt loam

Bg1 - 6 to 12 inches: silt loam

Bg2 - 12 to 18 inches: silt loam

C1 - 18 to 46 inches: silt loam

C2 - 46 to 72 inches: silty clay loam

Properties and qualities

Slope: 0 to 3 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Very poorly drained

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high

(0.14 to 14.17 in/hr)

Depth to water table: About 0 inches Frequency of flooding: NoneFrequent Frequency of ponding: Frequent

Calcium carbonate, maximum content: 15 percent Maximum salinity: Nonsaline (0.0 to 1.9 mmhos/cm)

Available water supply, 0 to 60 inches: Very high (about 12.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 5w

Hydrologic Soil Group: B/D

Ecological site: F139XY009OH - Wet Floodplain

Hydric soil rating: Yes

Minor Components

Wakeville

Percent of map unit: 10 percent

Landform: Flood plains

Landform position (two-dimensional): Footslope Landform position (three-dimensional): Talf

Down-slope shape: Concave Across-slope shape: Linear Hydric soil rating: No

Soil Information for All Uses

Soil Properties and Qualities

The Soil Properties and Qualities section includes various soil properties and qualities displayed as thematic maps with a summary table for the soil map units in the selected area of interest. A single value or rating for each map unit is generated by aggregating the interpretive ratings of individual map unit components. This aggregation process is defined for each property or quality.

Soil Qualities and Features

Soil qualities are behavior and performance attributes that are not directly measured, but are inferred from observations of dynamic conditions and from soil properties. Example soil qualities include natural drainage, and frost action. Soil features are attributes that are not directly part of the soil. Example soil features include slope and depth to restrictive layer. These features can greatly impact the use and management of the soil.

Hydrologic Soil Group

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

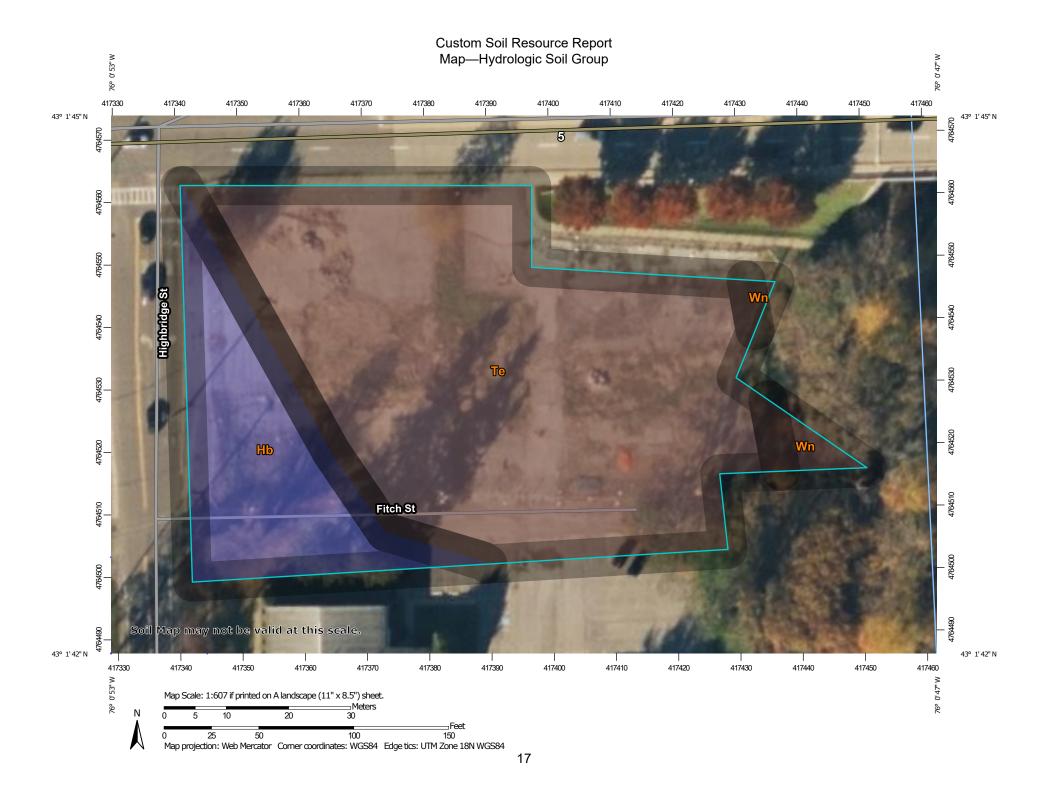
Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.



MAP LEGEND MAP INFORMATION Area of Interest (AOI) The soil surveys that comprise your AOI were mapped at С 1:20.000. Area of Interest (AOI) C/D Soils D Warning: Soil Map may not be valid at this scale. Soil Rating Polygons Not rated or not available Α Enlargement of maps beyond the scale of mapping can cause **Water Features** A/D misunderstanding of the detail of mapping and accuracy of soil Streams and Canals line placement. The maps do not show the small areas of В contrasting soils that could have been shown at a more detailed Transportation scale. B/D Rails ---Interstate Highways Please rely on the bar scale on each map sheet for map C/D **US Routes** measurements. Major Roads Source of Map: Natural Resources Conservation Service Not rated or not available Local Roads Web Soil Survey URL: -Coordinate System: Web Mercator (EPSG:3857) Soil Rating Lines Background Aerial Photography Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required. This product is generated from the USDA-NRCS certified data as of the version date(s) listed below. Soil Survey Area: Onondaga County, New York Not rated or not available Survey Area Data: Version 16, Sep 1, 2021 **Soil Rating Points** Soil map units are labeled (as space allows) for map scales Α 1:50.000 or larger. A/D Date(s) aerial images were photographed: Aug 3, 2021—Nov 7, 2021 B/D The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

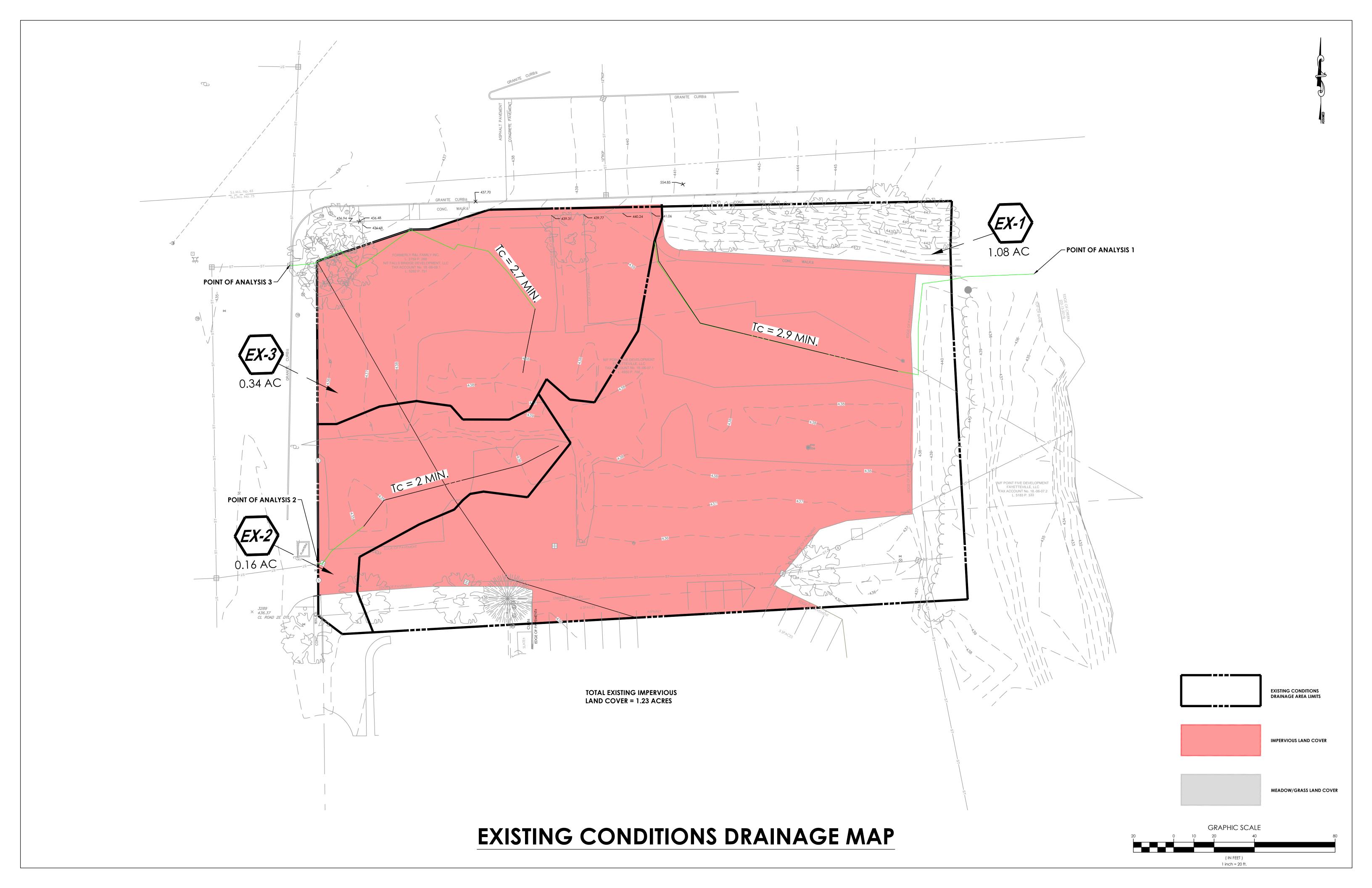
Table—Hydrologic Soil Group

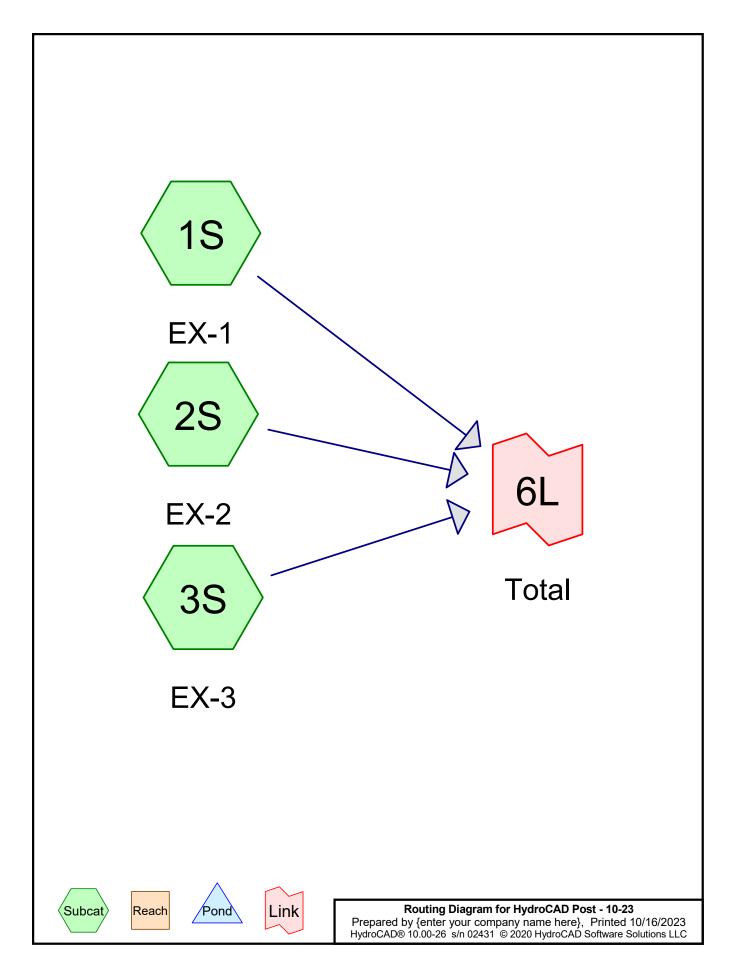
Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
Hb	Hamlin silt loam	В	0.3	22.0%
Те	Teel silt loam	B/D	1.0	76.1%
Wn	Wayland soils complex, 0 to 3 percent slopes, frequently flooded	B/D	0.0	1.9%
Totals for Area of Intere	st	1.3	100.0%	

Rating Options—Hydrologic Soil Group

Aggregation Method: Dominant Condition
Component Percent Cutoff: None Specified

Tie-break Rule: Higher





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Project Notes

Defined 7 rainfall events from Fayetteville IDF

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Area Listing (selected nodes)

Area	CN	Description
(acres)		(subcatchment-numbers)
0.280	79	<50% Grass cover, Poor, HSG B (1S, 2S)
0.120	89	<50% Grass cover, Poor, HSG D (1S)
0.340	98	Paved parking, HSG C (3S)
0.840	98	Paved parking, HSG D (1S, 2S)
1.580	94	TOTAL AREA

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Soil Listing (selected nodes)

Area (acres)	Soil Group	Subcatchment Numbers
0.000	HSG A	
0.280	HSG B	1S, 2S
0.340	HSG C	3S
0.960	HSG D	1S, 2S
0.000	Other	
1.580		TOTAL AREA

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Ground Covers (selected nodes)

	HSG-A	HSG-B	HSG-C	HSG-D	Other	Total	Ground	Subcatchment
_	(acres)	(acres)	(acres)	(acres)	(acres)	(acres)	Cover	Numbers
	0.000	0.280	0.000	0.120	0.000	0.400	<50% Grass cover, Poor	1S, 2S
	0.000	0.000	0.340	0.840	0.000	1.180	Paved parking	1S, 2S,
								3S
	0.000	0.280	0.340	0.960	0.000	1.580	TOTAL AREA	

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Pre Conditions HydroCAD Type II 24-hr 1-yr Rainfall=2.05" Printed 10/16/2023

Page 6

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Time span=0.00-100.00 hrs, dt=0.01 hrs, 10001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: EX-1 Runoff Area=1.080 ac 63.89% Impervious Runoff Depth=1.28"

Flow Length=213' Tc=6.0 min CN=92 Runoff=2.42 cfs 0.115 af

Subcatchment 2S: EX-2 Runoff Area=0.160 ac 93.75% Impervious Runoff Depth=1.72"

Flow Length=135' Tc=6.0 min CN=97 Runoff=0.44 cfs 0.023 af

Subcatchment 3S: EX-3 Runoff Area=0.340 ac 100.00% Impervious Runoff Depth=1.82"

Flow Length=178' Tc=6.0 min CN=98 Runoff=0.97 cfs 0.052 af

Link 6L: Total Inflow=3.84 cfs 0.190 af

Primary=3.84 cfs 0.190 af

Total Runoff Area = 1.580 ac Runoff Volume = 0.190 af Average Runoff Depth = 1.44" 25.32% Pervious = 0.400 ac 74.68% Impervious = 1.180 ac

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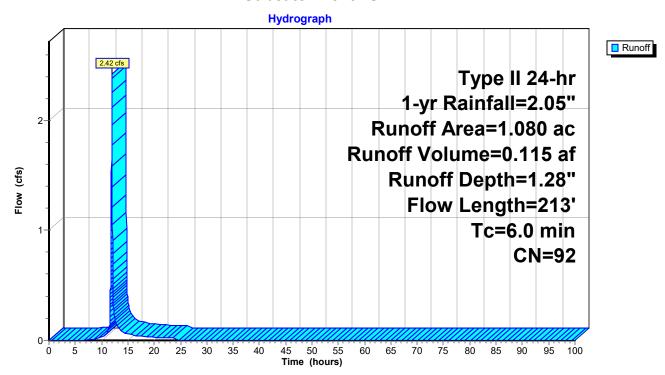
Summary for Subcatchment 1S: EX-1

Runoff 2.42 cfs @ 11.97 hrs, Volume= 0.115 af, Depth= 1.28"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs Type II 24-hr 1-yr Rainfall=2.05"

Area	(ac) C	N Desc	cription				
0.690 98 Paved parking, HSG D							
0.	.270 7	79 <509	% Grass co	over, Poor,	HSG B		
0.	.120 8	39 <509	% Grass co	over, Poor,	HSG D		
1.	.080	92 Weig	hted Aver	age			
0.	.390	36.1	1% Pervio	us Area			
0.	.690	63.8	9% Imperv	ious Area			
Tc	Length	Slope	Velocity	Capacity	Description		
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)			
2.4	100	0.0040	0.70		Sheet Flow, Sheet		
					Smooth surfaces n= 0.011 P2= 3.03"		
0.1	10	0.0040	1.28		Shallow Concentrated Flow, Shallow Concentrated		
					Paved Kv= 20.3 fps		
0.4	103	0.0600	3.94		Shallow Concentrated Flow, Shallow 2		
					Unpaved Kv= 16.1 fps		
2.9	213	Total, I	ncreased t	o minimum	Tc = 6.0 min		

Subcatchment 1S: EX-1



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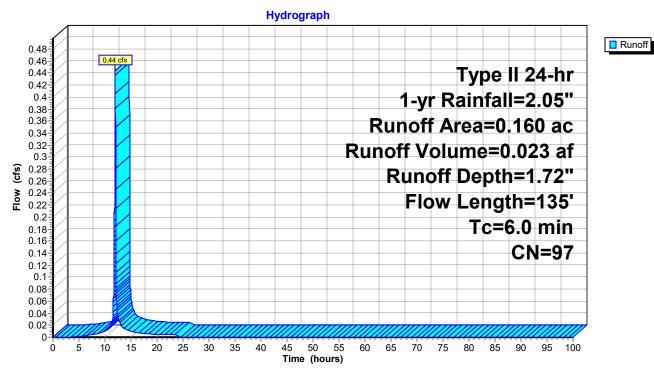
Summary for Subcatchment 2S: EX-2

Runoff = 0.44 cfs @ 11.97 hrs, Volume= 0.023 af, Depth= 1.72"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs Type II 24-hr 1-yr Rainfall=2.05"

Area (ac) C	N Desc	cription				
0.1	150 9	8 Pave	Paved parking, HSG D				
0.0	010 7	'9 <50°	% Grass co	over, Poor,	HSG B		
0.1	160 9	7 Weig	ghted Aver	age			
0.0	010	6.25	% Perviou	s Area			
0.1	150	93.7	5% Imperv	ious Area			
Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description		
1.4	100	0.0150	1.19		Sheet Flow, Sheet		
0.6	35	0.0040	1.02		Smooth surfaces n= 0.011 P2= 3.03" Shallow Concentrated Flow, Shallow Concentrated Unpaved Kv= 16.1 fps		
2.0	135	Total, I	ncreased t	o minimum	Tc = 6.0 min		

Subcatchment 2S: EX-2



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Summary for Subcatchment 3S: EX-3

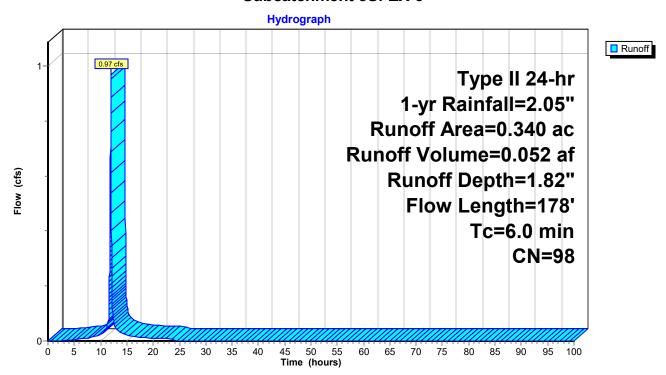
Runoff = 0.97 cfs @ 11.97 hrs, Volume= 0.052 af, Depth= 1.82"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs Type II 24-hr 1-yr Rainfall=2.05"

_	Area ((ac) C	N Desc	cription		
	0.3	340 9	8 Pave	ed parking,	HSG C	
	0.0	000	39 <50%	√ Grass co	over, Poor,	HSG D
	0.3	340 9	8 Weig	ghted Aver	age	
	0.3	340	100.0	00% Impe	rvious Area	1
	Tc	Length	Slope	Velocity	Capacity	Description
_	(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	
	1.8	100	0.0080	0.93		Sheet Flow, Sheet
						Smooth surfaces n= 0.011 P2= 3.03"
	0.5	58	0.0100	2.03		Shallow Concentrated Flow, Shallow
						Paved Kv= 20.3 fps
	0.4	20	0.0020	0.91		Shallow Concentrated Flow, Ch flow
_						Paved Kv= 20.3 fps
	~ -	4-0				T 00 :

2.7 178 Total, Increased to minimum Tc = 6.0 min

Subcatchment 3S: EX-3



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Summary for Link 6L: Total

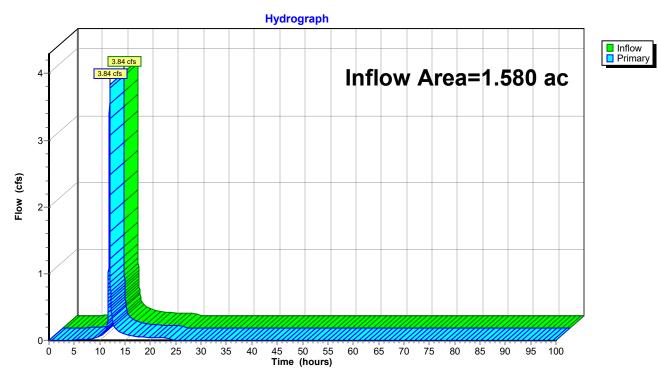
Inflow Area = 1.580 ac, 74.68% Impervious, Inflow Depth = 1.44" for 1-yr event

Inflow = 3.84 cfs @ 11.97 hrs, Volume= 0.190 af

Primary = 3.84 cfs @ 11.97 hrs, Volume= 0.190 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs

Link 6L: Total



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Pre Conditions HydroCAD Type II 24-hr 10-yr Rainfall=3.43" Printed 10/16/2023

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Page 11

Time span=0.00-100.00 hrs, dt=0.01 hrs, 10001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: EX-1 Runoff Area=1.080 ac 63.89% Impervious Runoff Depth=2.57"

Flow Length=213' Tc=6.0 min CN=92 Runoff=4.67 cfs 0.231 af

Subcatchment 2S: EX-2 Runoff Area=0.160 ac 93.75% Impervious Runoff Depth=3.08"

Flow Length=135' Tc=6.0 min CN=97 Runoff=0.77 cfs 0.041 af

Subcatchment 3S: EX-3 Runoff Area=0.340 ac 100.00% Impervious Runoff Depth=3.20"

Flow Length=178' Tc=6.0 min CN=98 Runoff=1.65 cfs 0.091 af

Link 6L: Total Inflow=7.09 cfs 0.363 af

Primary=7.09 cfs 0.363 af

Total Runoff Area = 1.580 ac Runoff Volume = 0.363 af Average Runoff Depth = 2.76" 25.32% Pervious = 0.400 ac 74.68% Impervious = 1.180 ac

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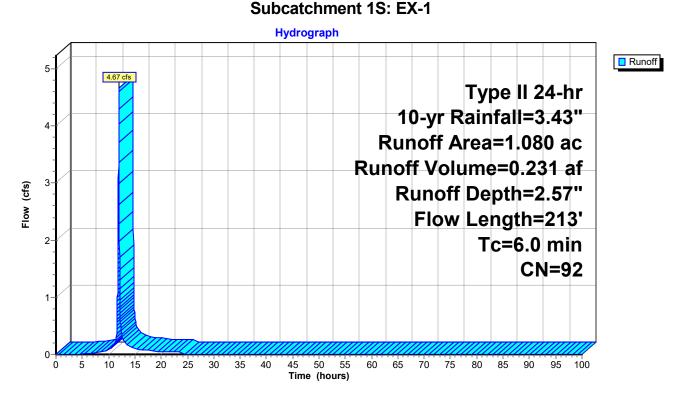
Summary for Subcatchment 1S: EX-1

Runoff = 4.67 cfs @ 11.97 hrs, Volume= 0.231 af, Depth= 2.57"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs Type II 24-hr 10-yr Rainfall=3.43"

Area (ac) CN Des	cription							
0.690 98 Paved parking, HSG D								
0.270 79 <50	% Grass cover, Poor	, HSG B						
	, ,							
1.080 92 Wei	ghted Average	,						
	11% Pervious Area							
	39% Impervious Area							
0.000								
Tc Length Slope	Velocity Capacity	Description						
(min) (feet) (ft/ft)	(ft/sec) (cfs)	•						
2.4 100 0.0040	0.70	Sheet Flow, Sheet						
2.1 100 0.0010	0.7 0	Smooth surfaces n= 0.011 P2= 3.03"						
0.1 10 0.0040	1.28	Shallow Concentrated Flow, Shallow Concentrated						
0.1 10 0.0010	1.20	Paved Kv= 20.3 fps						
0.4 103 0.0600	3.94	Shallow Concentrated Flow, Shallow 2						
0.1 100 0.0000	0.01	Unpaved Kv= 16.1 fps						
2.9 213 Total, I	Increased to minimur	<u> </u>						

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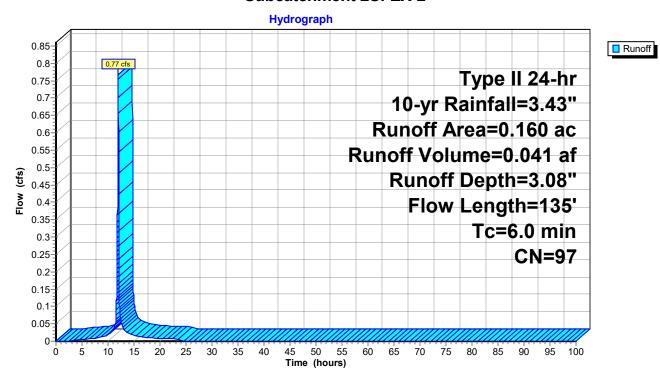
Summary for Subcatchment 2S: EX-2

0.77 cfs @ 11.97 hrs, Volume= 0.041 af, Depth= 3.08" Runoff

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs Type II 24-hr 10-yr Rainfall=3.43"

 Area	(ac) C	N De	scription		
0.	150	98 Pav	ed parking	, HSG D	
0.	010	79 <50)% Grass c	over, Poor,	HSG B
0.	160	97 We	ighted Ave	rage	
0.	010	6.2	5% Perviou	s Area	
0.	150	93.	75% Imper	∕ious Area	
 Tc (min)	Length (feet)	Slope (ft/ft)	,	Capacity (cfs)	Description
1.4	100	0.0150	1.19		Sheet Flow, Sheet
0.6	35	0.0040	1.02		Smooth surfaces n= 0.011 P2= 3.03" Shallow Concentrated Flow, Shallow Concentrated Unpaved Kv= 16.1 fps
2.0	135	Total,	Increased t	o minimum	n Tc = 6.0 min

Subcatchment 2S: EX-2



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Summary for Subcatchment 3S: EX-3

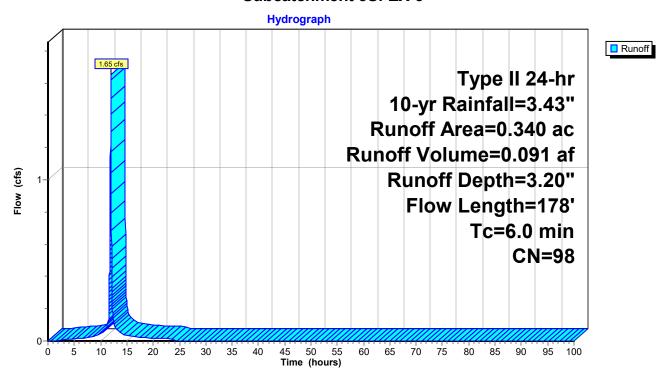
1.65 cfs @ 11.97 hrs, Volume= 0.091 af, Depth= 3.20" Runoff

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs Type II 24-hr 10-yr Rainfall=3.43"

_	Area	(ac) C	N Desc	cription		
0.340 98 Paved parking, HSG C						
_	0.	8 000	9 <509	% Grass co	over, Poor,	HSG D
	0.	340 9	8 Weig	ghted Aver	age	
	0.	340	100.	00% Impe	rvious Area	
				-		
	Tc	Length	Slope	Velocity	Capacity	Description
	(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	
	1.8	100	0.0080	0.93		Sheet Flow, Sheet
						Smooth surfaces n= 0.011 P2= 3.03"
	0.5	58	0.0100	2.03		Shallow Concentrated Flow, Shallow
						Paved Kv= 20.3 fps
	0.4	20	0.0020	0.91		Shallow Concentrated Flow, Ch flow
_						Paved Kv= 20.3 fps
	0.7	470	T . 4 . 1 . 1.	4		The Constitution of the Co

2.7 178 Total, Increased to minimum Tc = 6.0 min

Subcatchment 3S: EX-3



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Summary for Link 6L: Total

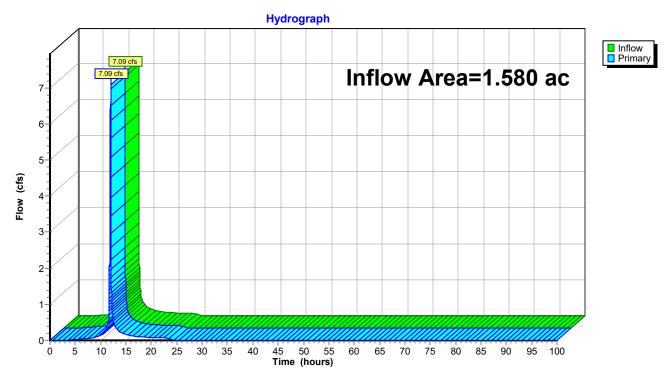
Inflow Area = 1.580 ac, 74.68% Impervious, Inflow Depth = 2.76" for 10-yr event

Inflow = 7.09 cfs @ 11.97 hrs, Volume= 0.363 af

Primary = 7.09 cfs @ 11.97 hrs, Volume= 0.363 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs

Link 6L: Total



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Pre Conditions HydroCAD Type II 24-hr 100-yr Rainfall=5.78" Printed 10/16/2023

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Time span=0.00-100.00 hrs, dt=0.01 hrs, 10001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: EX-1 Runoff Area=1.080 ac 63.89% Impervious Runoff Depth=4.85"

Flow Length=213' Tc=6.0 min CN=92 Runoff=8.46 cfs 0.437 af

Subcatchment 2S: EX-2 Runoff Area=0.160 ac 93.75% Impervious Runoff Depth=5.42"

Flow Length=135' Tc=6.0 min CN=97 Runoff=1.31 cfs 0.072 af

Subcatchment 3S: EX-3 Runoff Area=0.340 ac 100.00% Impervious Runoff Depth=5.54"

Flow Length=178' Tc=6.0 min CN=98 Runoff=2.80 cfs 0.157 af

Link 6L: Total Inflow=12.57 cfs 0.666 af

Primary=12.57 cfs 0.666 af

Total Runoff Area = 1.580 ac Runoff Volume = 0.666 af Average Runoff Depth = 5.06" 25.32% Pervious = 0.400 ac 74.68% Impervious = 1.180 ac HydroCAD® 10.00-26 s/n 02431 © 2020 HydroCAD Software Solutions LLC Page 17

Summary for Subcatchment 1S: EX-1

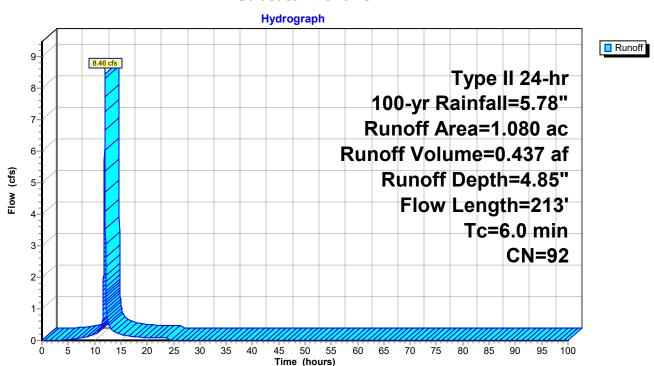
Runoff = 8.46 cfs @ 11.97 hrs, Volume= 0.437 af, Depth= 4.85"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs Type II 24-hr 100-yr Rainfall=5.78"

_	Area	(ac) C	N Des	cription				
	0.690 98 Paved parking, HSG D							
	0.	270 7	'9 <50°	% Grass c	over, Poor,	HSG B		
	0.	120 8	39 <50°	% Grass c	over, Poor,	HSG D		
_	1.	080 9	2 Weig	ghted Aver	age			
	0.	390	36.1	1% Pervio	us Area			
	0.	690	63.8	9% Imperv	ious Area			
	Tc	Length	Slope	Velocity	Capacity	Description		
_	(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)			
	2.4	100	0.0040	0.70		Sheet Flow, Sheet		
						Smooth surfaces n= 0.011 P2= 3.03"		
	0.1	10	0.0040	1.28		Shallow Concentrated Flow, Shallow Concentrated		
						Paved Kv= 20.3 fps		
	0.4	103	0.0600	3.94		Shallow Concentrated Flow, Shallow 2		
_						Unpaved Kv= 16.1 fps		
		040	T () (T 00 :		

2.9 213 Total, Increased to minimum Tc = 6.0 min

Subcatchment 1S: EX-1



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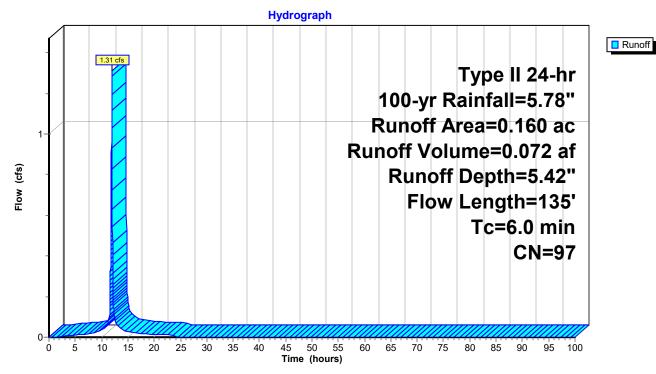
Summary for Subcatchment 2S: EX-2

Runoff = 1.31 cfs @ 11.97 hrs, Volume= 0.072 af, Depth= 5.42"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs Type II 24-hr 100-yr Rainfall=5.78"

Area	(ac)	CN D	escription			
0.	0.150 98 Paved parking, HSG D					
0.	.010	79 <5	0% Grass c	over, Poor,	HSG B	
0.	160	97 W	eighted Ave	rage		
0.	010	6.	25% Perviou	ıs Area		
0.	150	93	3.75% Imper	vious Area		
Tc (min)	Length (feet	•	,	Capacity (cfs)	Description	
1.4	100	0.015	0 1.19		Sheet Flow, Sheet	
0.6	35	0.004	0 1.02		Smooth surfaces n= 0.011 P2= 3.03" Shallow Concentrated Flow, Shallow Concentrated Unpaved Kv= 16.1 fps	
2.0	135	Total	Increased	to minimum	Tc = 6.0 min	

Subcatchment 2S: EX-2



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Summary for Subcatchment 3S: EX-3

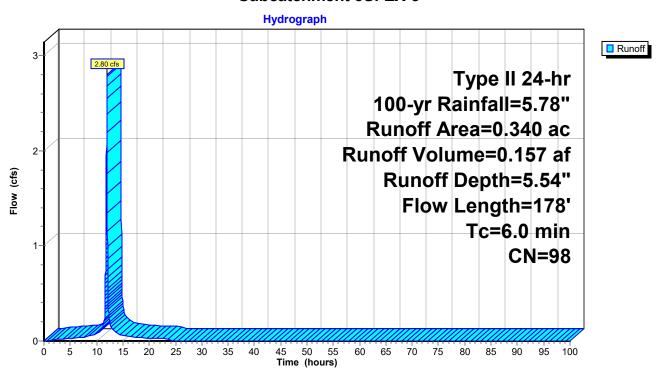
Runoff = 2.80 cfs @ 11.97 hrs, Volume= 0.157 af, Depth= 5.54"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs Type II 24-hr 100-yr Rainfall=5.78"

_	Area	(ac) C	N Desc	cription			
	0.340 98 Paved parking, HSG C						
_	0.000 89 <50% Grass cover, Poor, H					HSG D	
	0.340 98 Weighted Average						
	0.340 100.00% Impervious Area					1	
	Тс	Length	Slope	Velocity	Capacity	Description	
_	(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)		
	1.8	100	0.0080	0.93		Sheet Flow, Sheet	
						Smooth surfaces n= 0.011 P2= 3.03"	
	0.5	58	0.0100	2.03		Shallow Concentrated Flow, Shallow	
						Paved Kv= 20.3 fps	
	0.4	20	0.0020	0.91		Shallow Concentrated Flow, Ch flow	
_						Paved Kv= 20.3 fps	
	~ -	4-0				T 00 :	

2.7 178 Total, Increased to minimum Tc = 6.0 min

Subcatchment 3S: EX-3



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Summary for Link 6L: Total

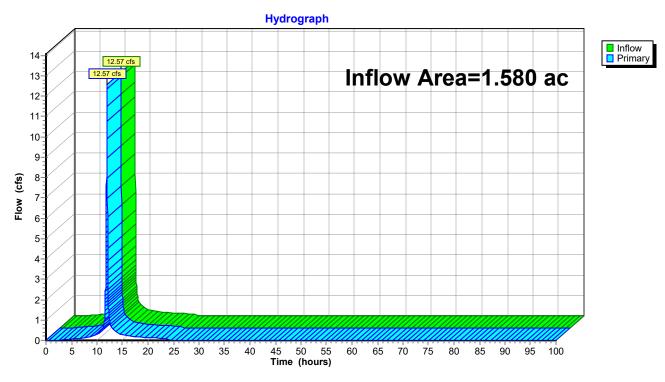
Inflow Area = 1.580 ac, 74.68% Impervious, Inflow Depth = 5.06" for 100-yr event

0.666 af Inflow =

12.57 cfs @ 11.97 hrs, Volume= 12.57 cfs @ 11.97 hrs, Volume= 0.666 af, Atten= 0%, Lag= 0.0 min Primary

Primary outflow = Inflow, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs

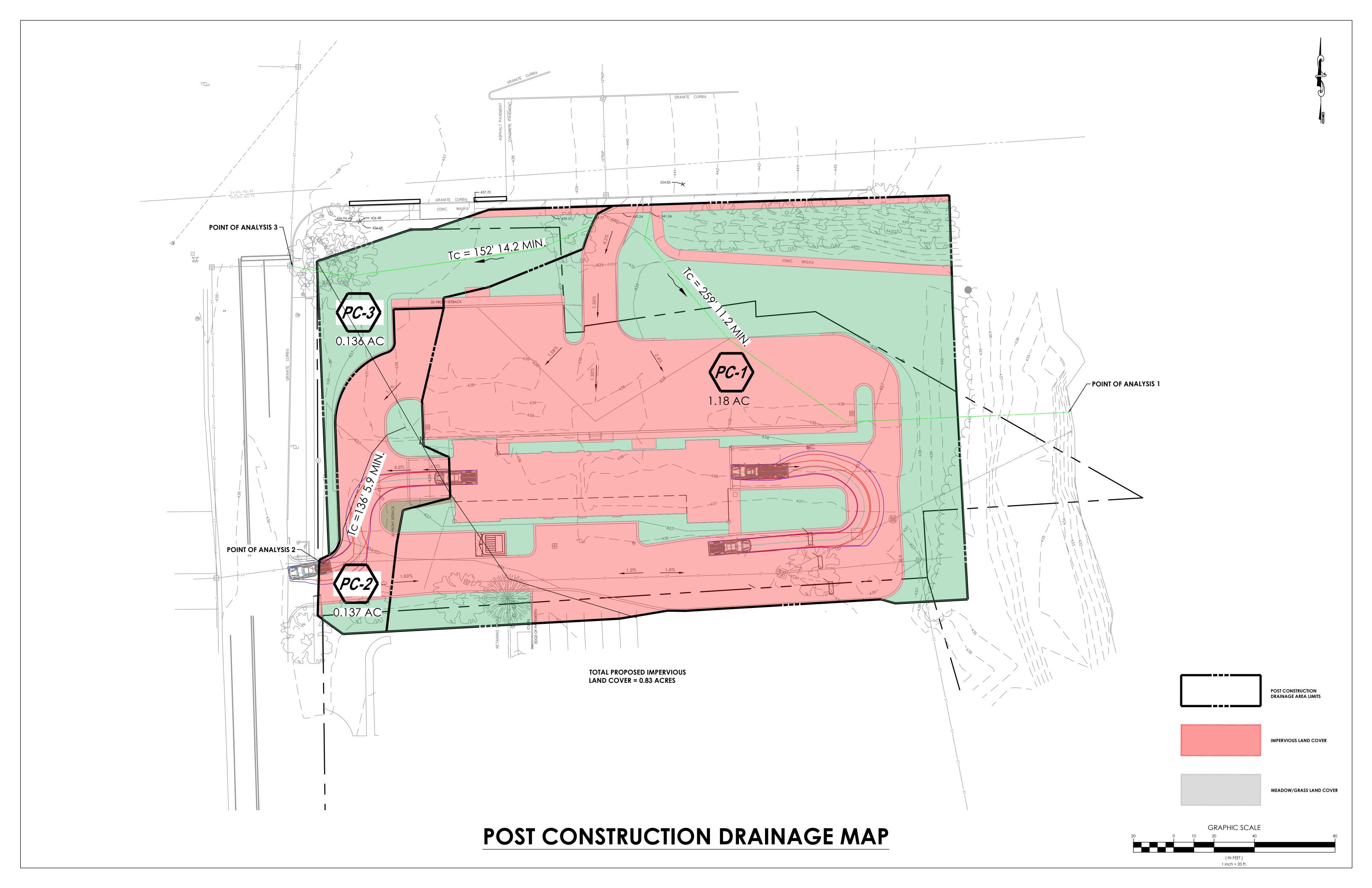
Link 6L: Total

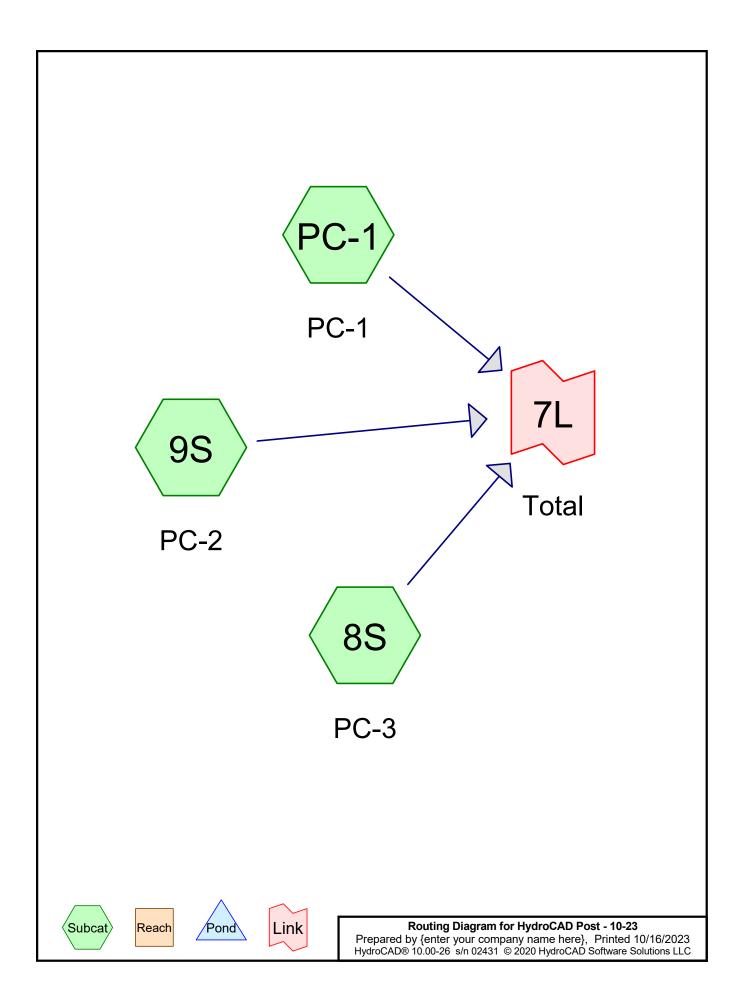


Appendix C

Post-Development Conditions Drainage Area Map & HydroCad Model Summary







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Project Notes

Defined 7 rainfall events from Fayetteville IDF

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Area Listing (selected nodes)

Area	CN	Description
(acres)		(subcatchment-numbers)
0.319	79	<50% Grass cover, Poor, HSG B (8S, PC-1)
0.203	89	<50% Grass cover, Poor, HSG D (PC-1)
0.025	61	>75% Grass cover, Good, HSG B (9S)
0.051	80	>75% Grass cover, Good, HSG D (8S, 9S)
0.855	98	Paved parking, HSG D (8S, 9S, PC-1)
1.453	91	TOTAL AREA

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Soil Listing (selected nodes)

Area (acres)	Soil Group	Subcatchment Numbers
0.000	HSG A	
0.344	HSG B	8S, 9S, PC-1
0.000	HSG C	
1.109	HSG D	8S, 9S, PC-1
0.000	Other	
1.453		TOTAL AREA

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Ground Covers (selected nodes)

	HSG-A	HSG-B	HSG-C	HSG-D	Other	Total	Ground	Subcatchment
	(acres)	(acres)	(acres)	(acres)	(acres)	(acres)	Cover	Numbers
,	0.000	0.319	0.000	0.203	0.000	0.522	<50% Grass cover, Poor	8S, PC-1
	0.000	0.025	0.000	0.051	0.000	0.076	>75% Grass cover, Good	8S, 9S
	0.000	0.000	0.000	0.855	0.000	0.855	Paved parking	8S, 9S,
								PC-1
	0.000	0.344	0.000	1.109	0.000	1.453	TOTAL AREA	

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Pipe Listing (selected nodes)

Line#	Node	In-Invert	Out-Invert	Length	Slope	n	Diam/Width	Height	Inside-Fill
	Number	(feet)	(feet)	(feet)	(ft/ft)		(inches)	(inches)	(inches)
1	PC-1	0.00	0.00	110.0	0.0070	0.013	12.0	0.0	0.0

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HydroCAD Post Type II 24-hr 1-yr Rainfall=2.05" Printed 10/16/2023

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Time span=0.00-100.00 hrs, dt=0.01 hrs, 10001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 8S: PC-3 Runoff Area=0.136 ac 5.88% Impervious Runoff Depth=0.59"

Flow Length=149' Tc=14.2 min CN=80 Runoff=0.10 cfs 0.007 af

Subcatchment 9S: PC-2 Runoff Area=0.137 ac 80.29% Impervious Runoff Depth=1.21"

Flow Length=240' Tc=6.0 min CN=91 Runoff=0.29 cfs 0.014 af

Subcatchment PC-1: PC-1 Runoff Area=1.180 ac 62.46% Impervious Runoff Depth=1.36"

Flow Length=259' Tc=11.2 min CN=93 Runoff=2.33 cfs 0.134 af

Link 7L: Total Inflow=2.64 cfs 0.154 af Primary=2.64 cfs 0.154 af

Total Runoff Area = 1.453 ac Runoff Volume = 0.154 af Average Runoff Depth = 1.27" 41.16% Pervious = 0.598 ac 58.84% Impervious = 0.855 ac

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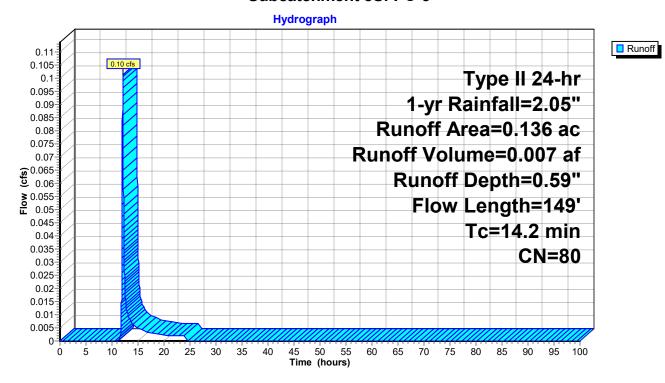
Summary for Subcatchment 8S: PC-3

Runoff = 0.10 cfs @ 12.07 hrs, Volume= 0.007 af, Depth= 0.59"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs Type II 24-hr 1-yr Rainfall=2.05"

_	Area	(ac)	CN	Desc	ription					
	0.	049	80	>75%	√ Grass co	over, Good	, HSG D			
0.008 98 Paved parking, HSG D										
0.079 79 <50% Grass cover, Poor, HSG B										
	0.	136	80	Weig	hted Aver	age				
0.128 94.12% Pervious Area										
	0.	800		5.889	% Impervi	ous Area				
					·					
	Tc	Length	n S	Slope	Velocity	Capacity	Description			
	(min)	(feet))	(ft/ft)	(ft/sec)	(cfs)				
	13.9	100	0.0	0230	0.12		Sheet Flow, Gradd			
							Grass: Dense n= 0.240 P2= 3.03"			
	0.3	49	0.0	0240	2.49		Shallow Concentrated Flow, Grass-2			
							Unpaved Kv= 16.1 fps			
	14.2	149) To	tal			<u> </u>			

Subcatchment 8S: PC-3



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Summary for Subcatchment 9S: PC-2

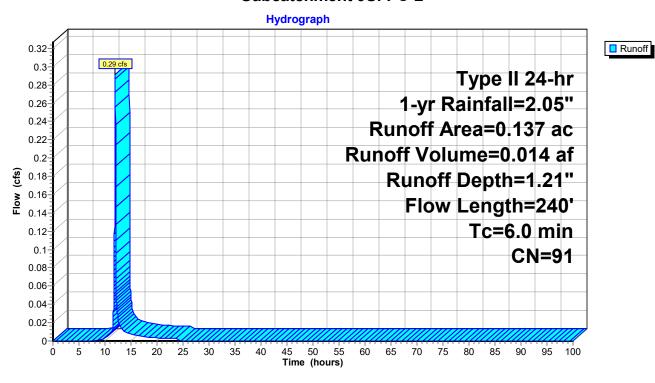
Runoff = 0.29 cfs @ 11.97 hrs, Volume= 0.014 af, Depth= 1.21"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs Type II 24-hr 1-yr Rainfall=2.05"

_	Area	(ac)	CN D	escription							
	0.	025	61 >	75% Grass	s cover, Goo	d, HSG B					
	0.	002	80 >	75% Gras	s cover, Goo	d, HSG D					
0.110 98 Paved parking, HSG D											
	0.	137	91 W	/eighted A	verage						
0.027 19.71% Pervious Area											
0.110 80.29% Impervious Area											
	Tc (min)	Length (feet)			, ,	·					
	4.0	10	0.005	50 0.0	04	Sheet Flow, Gradd					
_	1.9	230	0.010	00 2.0	03	Grass: Dense n= 0.240 P2= 3.03" Shallow Concentrated Flow, SCF 1 Paved Kv= 20.3 fps					
	5 0	240	Total	Ingraga	d to minimur	m To = 6.0 min					

5.9 240 Total, Increased to minimum Tc = 6.0 min

Subcatchment 9S: PC-2



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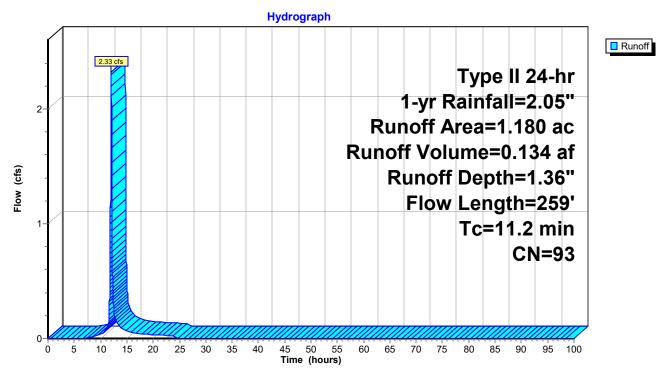
Summary for Subcatchment PC-1: PC-1

Runoff = 2.33 cfs @ 12.03 hrs, Volume= 0.134 af, Depth= 1.36"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs Type II 24-hr 1-yr Rainfall=2.05"

Ar	ea ((ac) C	N Desc	cription		
	0.	240 7	'9 <50°	% Grass co	over, Poor,	HSG B
	0.	203 8	89 < 50%	% Grass co	over, Poor,	HSG D
	0.	737 9	8 Pave	ed parking,	, HSG D	
	1.	180 9	3 Weig	ghted Aver	age	
	0.	443	37.5	4% Pervio	us Area	
	0.	737	62.4	6% Imperv	ious Area	
	Тс	Length	Slope	Velocity	Capacity	Description
(mi	in)	(feet)	(ft/ft)	(ft/sec)	(cfs)	
S	8.6	76	0.0320	0.13		Sheet Flow, Sheet
						Grass: Dense n= 0.240 P2= 3.03"
C).5	24	0.0100	0.76		Sheet Flow, Sheet 2 (Pave)
						Smooth surfaces n= 0.011 P2= 3.03"
C).4	49	0.0100	2.03		Shallow Concentrated Flow, Shallow Concentrated
						Paved Kv= 20.3 fps
C).5	110	0.0070	3.80	2.98	Pipe Channel, 12" SICPP
						12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25'
						n= 0.013 Corrugated PE, smooth interior
11	.2	259	Total			

Subcatchment PC-1: PC-1



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Summary for Link 7L: Total

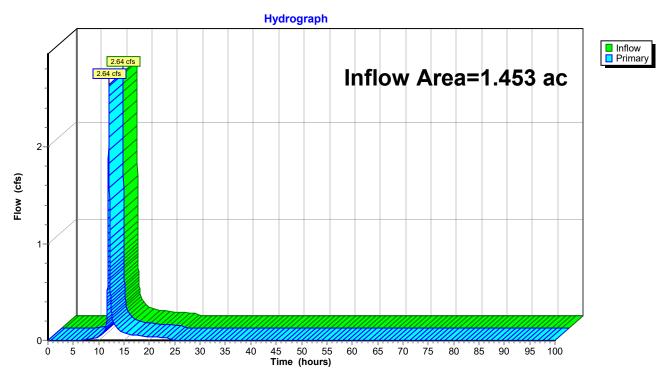
Inflow Area = 1.453 ac, 58.84% Impervious, Inflow Depth = 1.27" for 1-yr event

Inflow = 2.64 cfs @ 12.02 hrs, Volume= 0.154 af

Primary = 2.64 cfs @ 12.02 hrs, Volume= 0.154 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs

Link 7L: Total



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HydroCAD Post Type II 24-hr 10-yr Rainfall=3.43" Printed 10/16/2023

Page 13

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Time span=0.00-100.00 hrs, dt=0.01 hrs, 10001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 8S: PC-3 Runoff Area=0.136 ac 5.88% Impervious Runoff Depth=1.58"

Flow Length=149' Tc=14.2 min CN=80 Runoff=0.29 cfs 0.018 af

Subcatchment 9S: PC-2 Runoff Area=0.137 ac 80.29% Impervious Runoff Depth=2.47"

Flow Length=240' Tc=6.0 min CN=91 Runoff=0.58 cfs 0.028 af

Subcatchment PC-1: PC-1 Runoff Area=1.180 ac 62.46% Impervious Runoff Depth=2.67"

Flow Length=259' Tc=11.2 min CN=93 Runoff=4.41 cfs 0.262 af

Link 7L: Total Inflow=5.13 cfs 0.308 af Primary=5.13 cfs 0.308 af

Total Runoff Area = 1.453 ac Runoff Volume = 0.308 af Average Runoff Depth = 2.55" 41.16% Pervious = 0.598 ac 58.84% Impervious = 0.855 ac

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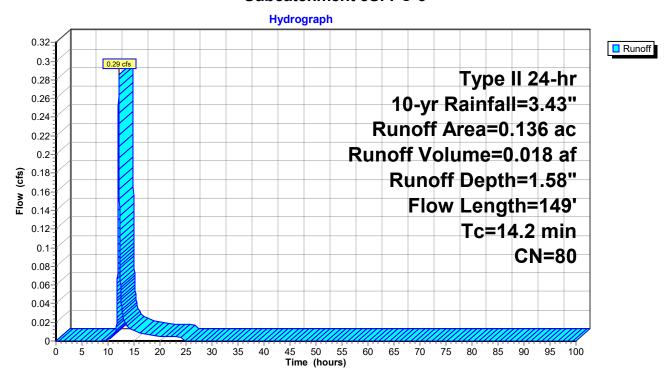
Summary for Subcatchment 8S: PC-3

Runoff = 0.29 cfs @ 12.07 hrs, Volume= 0.018 af, Depth= 1.58"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs Type II 24-hr 10-yr Rainfall=3.43"

	Area ((ac)	CN	l Desc	cription						
0.049 80 >75% Grass cover, Good, HSG D											
0.008 98 Paved parking, HSG D											
0.079 79 <50% Grass cover, Poor, HSG B											
	0.136 80 Weighted Average										
0.128 94.12% Pervious Area											
0.008 5.88% Impervious Area											
	Tc	Lengt	:h	Slope	Velocity	Capacity	Description				
(r	nin)	(fee	t)	(ft/ft)	(ft/sec)	(cfs)					
1	13.9	10	0	0.0230	0.12		Sheet Flow, Gradd				
							Grass: Dense n= 0.240 P2= 3.03"				
	0.3	4	9	0.0240	2.49		Shallow Concentrated Flow, Grass-2				
							Unpaved Kv= 16.1 fps				
1	14.2	14	9	Total							

Subcatchment 8S: PC-3



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Summary for Subcatchment 9S: PC-2

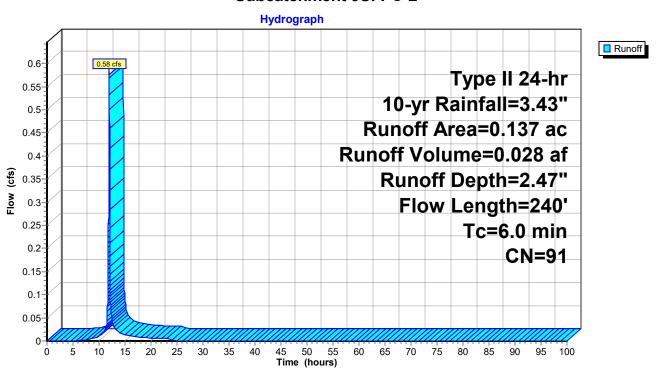
Runoff 0.58 cfs @ 11.97 hrs, Volume= 0.028 af, Depth= 2.47"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs Type II 24-hr 10-yr Rainfall=3.43"

	Area	(ac) (CN	Desc	ription						
	0.	025	61	>75%	√ Grass co	over, Good	, HSG B				
	0.	002	80	>75%	% Grass co	over, Good	, HSG D				
0.110 98 Paved parking, HSG D											
	0.	137	91	Weig	hted Aver	age					
0.027 19.71% Pervious Area											
	0.	110									
	Tc	Length	ı SI	lope	Velocity	Capacity	Description				
	(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	·				
	4.0	10	0.0	050	0.04		Sheet Flow, Gradd				
							Grass: Dense n= 0.240 P2= 3.03"				
	1.9	230	0.0	100	2.03		Shallow Concentrated Flow, SCF 1				
							Paved Kv= 20.3 fps				
	F 0	0.40	T-4	4 - 1 - 1	4		T C 0				

Total, Increased to minimum Tc = 6.0 min 5.9 240

Subcatchment 9S: PC-2



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Page 16

Summary for Subcatchment PC-1: PC-1

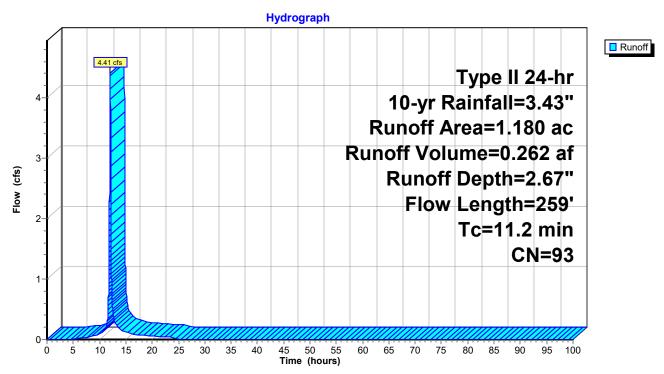
Runoff = 4.41 cfs @ 12.03 hrs, Volume= 0.262 af, Depth= 2.67"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs Type II 24-hr 10-yr Rainfall=3.43"

Area	(ac) C	N Desc	cription		
0.	240 7	79 <509	% Grass co	over, Poor,	HSG B
0.	203 8	39 < 509	% Grass co	over, Poor,	HSG D
0.	737	8 Pave	ed parking,	, HSG D	
1.	180 9	3 Weig	ghted Aver	age	
0.	443	37.5	4% Pervio	us Area	
0.	737	62.4	6% Imperv	∕ious Area	
Tc	Length	Slope	Velocity	Capacity	Description
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	
9.8	76	0.0320	0.13		Sheet Flow, Sheet
					Grass: Dense n= 0.240 P2= 3.03"
0.5	24	0.0100	0.76		Sheet Flow, Sheet 2 (Pave)
					Smooth surfaces n= 0.011 P2= 3.03"
0.4	49	0.0100	2.03		Shallow Concentrated Flow, Shallow Concentrated
					Paved Kv= 20.3 fps
0.5	110	0.0070	3.80	2.98	Pipe Channel, 12" SICPP
					12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25'
					n= 0.013 Corrugated PE, smooth interior
11.2	259	Total			

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Subcatchment PC-1: PC-1



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Summary for Link 7L: Total

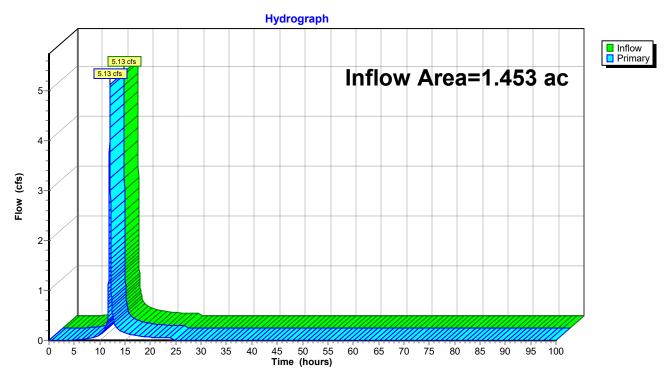
Inflow Area = 1.453 ac, 58.84% Impervious, Inflow Depth = 2.55" for 10-yr event

Inflow = 5.13 cfs @ 12.02 hrs, Volume= 0.308 af

Primary = 5.13 cfs @ 12.02 hrs, Volume= 0.308 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs

Link 7L: Total



HydroCAD Post - 10-23

HydroCAD Post Type II 24-hr 100-yr Rainfall=5.78" Printed 10/16/2023

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Page 19

Time span=0.00-100.00 hrs, dt=0.01 hrs, 10001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 8S: PC-3 Runoff Area=0.136 ac 5.88% Impervious Runoff Depth=3.58"

Flow Length=149' Tc=14.2 min CN=80 Runoff=0.64 cfs 0.041 af

Subcatchment 9S: PC-2 Runoff Area=0.137 ac 80.29% Impervious Runoff Depth=4.74"

Flow Length=240' Tc=6.0 min CN=91 Runoff=1.06 cfs 0.054 af

Subcatchment PC-1: PC-1 Runoff Area=1.180 ac 62.46% Impervious Runoff Depth=4.97"

Flow Length=259' Tc=11.2 min CN=93 Runoff=7.90 cfs 0.488 af

Link 7L: Total Inflow=9.35 cfs 0.583 af Primary=9.35 cfs 0.583 af

Total Runoff Area = 1.453 ac Runoff Volume = 0.583 af Average Runoff Depth = 4.82" 41.16% Pervious = 0.598 ac 58.84% Impervious = 0.855 ac

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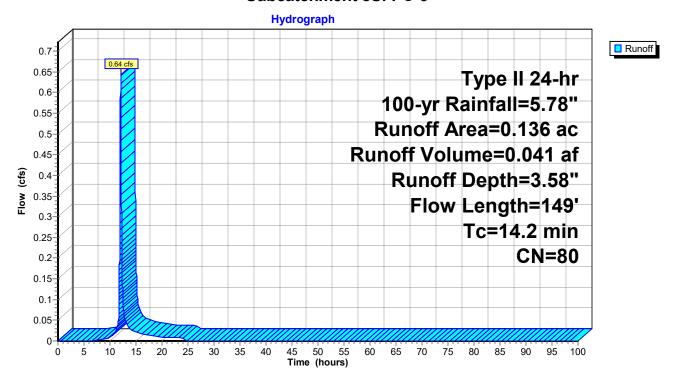
Summary for Subcatchment 8S: PC-3

Runoff = 0.64 cfs @ 12.06 hrs, Volume= 0.041 af, Depth= 3.58"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs Type II 24-hr 100-yr Rainfall=5.78"

	Area	(ac)	CI	N Desc	cription						
	0.049 80 >75% Grass cover, Good, HSG D										
	0.	0.008 98 Paved parking, HSG D									
0.079 79 <50% Grass cover, Poor, HSG B											
	0.136 80 Weighted Average										
0.128 94.12% Pervious Area											
0.008 5.88% Impervious Area											
	Tc	Leng	th	Slope	Velocity	Capacity	Description				
	(min)	(fee	et)	(ft/ft)	(ft/sec)	(cfs)					
	13.9	10	00	0.0230	0.12		Sheet Flow, Gradd				
							Grass: Dense n= 0.240 P2= 3.03"				
	0.3	4	19	0.0240	2.49		Shallow Concentrated Flow, Grass-2				
							Unpaved Kv= 16.1 fps				
	14.2	14	19	Total							

Subcatchment 8S: PC-3



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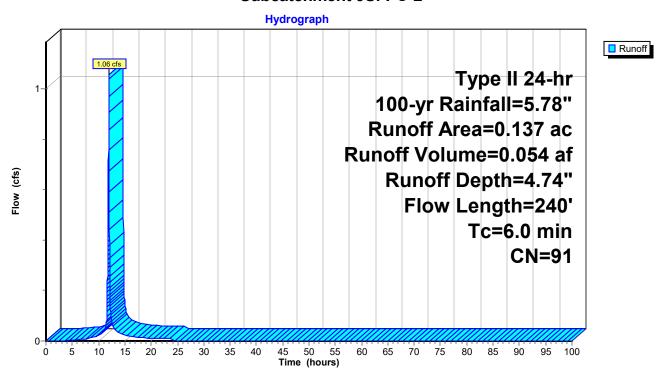
Summary for Subcatchment 9S: PC-2

Runoff = 1.06 cfs @ 11.97 hrs, Volume= 0.054 af, Depth= 4.74"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs Type II 24-hr 100-yr Rainfall=5.78"

	Area	(ac)	CN	Desc	cription					
	0.	025	61	>75%	√ Grass co	over, Good	, HSG B			
	0.	002	80	>75%	% Grass co	over, Good	, HSG D			
0.110 98 Paved parking, HSG D										
	0.	137	91	Weig	ghted Aver	age				
0.027 19.71% Pervious Area										
0.110 80.29% Impervious Area										
	Tc	Lengt	h	Slope	Velocity	Capacity	Description			
	(min)	(feet	t)	(ft/ft)	(ft/sec)	(cfs)				
	4.0	1	0 (0.0050	0.04		Sheet Flow, Gradd			
							Grass: Dense n= 0.240 P2= 3.03"			
	1.9	23	0 (0.0100	2.03		Shallow Concentrated Flow, SCF 1			
							Paved Kv= 20.3 fps			
	5.9	24	0 7	Γotal, Ir	ncreased t	o minimum	Tc = 6.0 min	_		

Subcatchment 9S: PC-2



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Summary for Subcatchment PC-1: PC-1

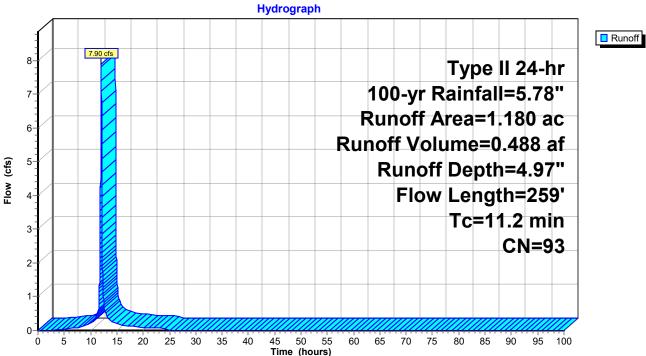
Runoff = 7.90 cfs @ 12.02 hrs, Volume= 0.488 af, Depth= 4.97"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs Type II 24-hr 100-yr Rainfall=5.78"

Area	(ac) C	N Desc	cription		
0.	240	79 <509	% Grass co	over, Poor,	HSG B
0.	203 8	39 < 509	% Grass co	over, Poor,	HSG D
0.	737	98 Pave	ed parking,	HSG D	
1.	180 9	93 Weid	hted Aver	age	
0.	443	•	, 4% Pervio	•	
0.	737	62.4	6% Imperv	ious Area	
			•		
Tc	Length	Slope	Velocity	Capacity	Description
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	
9.8	76	0.0320	0.13		Sheet Flow, Sheet
					Grass: Dense n= 0.240 P2= 3.03"
0.5	24	0.0100	0.76		Sheet Flow, Sheet 2 (Pave)
					Smooth surfaces n= 0.011 P2= 3.03"
0.4	49	0.0100	2.03		Shallow Concentrated Flow, Shallow Concentrated
					Paved Kv= 20.3 fps
0.5	110	0.0070	3.80	2.98	Pipe Channel, 12" SICPP
					12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25'
					n= 0.013 Corrugated PE, smooth interior
11.2	259	Total			

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Subcatchment PC-1: PC-1





Page 23

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Summary for Link 7L: Total

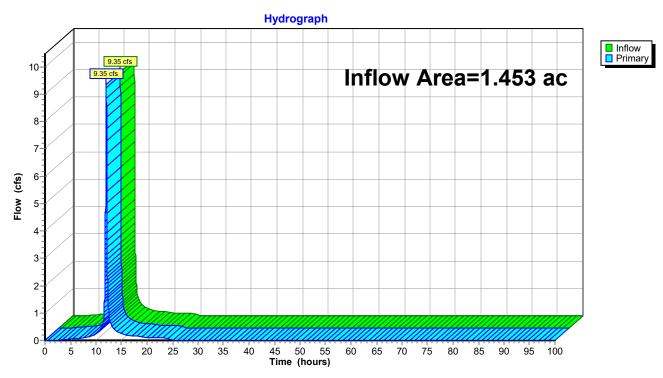
Inflow Area = 1.453 ac, 58.84% Impervious, Inflow Depth = 4.82" for 100-yr event

Inflow = 9.35 cfs @ 12.02 hrs, Volume= 0.583 af

Primary = 9.35 cfs @ 12.02 hrs, Volume= 0.583 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs

Link 7L: Total



Appendix D

GI Worksheets



Version 1.8 Last Updated: 11/09/2015

Total Water Quality Volume Calculation WQv(acre-feet) = [(P)(Rv)(A)] /12

Is this project subject to Chapter 10 of the NYS Design Manual (i.e. WQv is equal to post-	
development 1 year runoff volume)?	

Design Point: P= 1.00 inch

Breakdown of Subcatchments								
Catchment Number			Percent Pervious Area Impervious Rv (Acres) %		WQv (ft³)	Description		
1	1.45	0.83	57%	0.57	2,975			
2								
3								
4								
5								
6								
7								
8								
9								
10								
Subtotal (1-30)	1.45	0.83	57%	0.57	2,975	Subtotal 1		
Total	1.45	0.83	57%	0.57	2,975	Initial WQv		

Identify Runoff Reduction Techniques By Area						
Technique	Total Contributing Area	Contributing Impervious Area	Notes			
	(Acre)	(Acre)				
Conservation of Natural Areas	0.00	0.00	minimum 10,000 sf			
Riparian Buffers	0.00	0.00	maximum contributing length 75 feet to 150 feet			
Filter Strips	0.00	0.00				
Tree Planting	1.45	0.83	Up to 100 sf directly connected impervious area may be subtracted per tree			
Total	1.45	0.83				

Recalculate WQv after application of Area Reduction Techniques							
	Total Area (Acres)	Impervious Area (Acres)	Percent Impervious %	Runoff Coefficient Rv	WQv (ft³)		
"< <initial td="" wqv"<=""><td>1.45</td><td>0.83</td><td>57%</td><td>0.57</td><td>2,975</td></initial>	1.45	0.83	57%	0.57	2,975		
Subtract Area	-1.45	-0.83					
WQv adjusted after Area Reductions	0.00	0.00	0%	0.05	0		
Disconnection of Rooftops		0.00					
Adjusted WQv after Area Reduction and Rooftop Disconnect	0.00	0.00	0%	0.05	0		
WQv reduced by Area Reduction techniques					2,975		

Minimum RRv

Enter the Soils Da	ta for the site	
Soil Group	Acres	S
Α		55%
В	0.85	40%
С		30%
D	0.61	20%
Total Area	1.46	
Calculate the Min	imum RRv	
S =	0.32	
Impervious =	0.83	acre
Precipitation	1	in
Rv	0.95	
Minimum RRv	906	ft3
	0.02	af

Tree Planting/Tree Pits

Design Point:								
Enter Site Data For Drainage Area to be Treated by Practice								
Catchment Number	Total Area (Acres)	Impervious Area (Acres)	Percent Impervious %	Rv	WQv (ft ³)	Precipitation (in)	Description	
1	1.45	0.83	0.57	0.57	2974.79	1.00		
Do you intend reduction	Area	Design p	oractice using criteria below					
			Design Ele	ments				
Is another area based practice applied to this area?			No					
Diameter of Mature Canopy			30	ft				
Area Reduced per Tree			100	sf	mature ti	ree, the area co	eter canopy of a nsidered for area of the tree	
Number of Trees			11					
Total Area Reduced		1100	sf					
		0.03	af	Practice too small. Plant more trees.				
Area Ratio: Total to Impervious area			1.7		Minimum	n loading ratio 3	3:1	
Are All Criteria in Section 5.3.4 met?			Yes					
Area Reduction Adjustments								
		Subtract	1.45	Acres fro	m total A	rea		
	0.83	Acres fro	m total In	npervious Area				

Appendix E

NYSDEC SPDES General Permit (GP-0-20-001)





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

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

Table of Contents

Part 1.	PERMIT COVERAGE AND LIMITATIONS	1
A.	Permit Application	1
B.	Effluent Limitations Applicable to Discharges from Construction Activities	1
C.	Post-construction Stormwater Management Practice Requirements	4
D.	Maintaining Water Quality	8
E.	Eligibility Under This General Permit	9
F.	Activities Which Are Ineligible for Coverage Under This General Permit	9
Part II.	PERMIT COVERAGE	12
A.	How to Obtain Coverage	12
B.	Notice of Intent (NOI) Submittal	13
C.	Permit Authorization	
D.	General Requirements For Owners or Operators With Permit Coverage	15
E.	Permit Coverage for Discharges Authorized Under GP-0-15-002	17
F.	Change of Owner or Operator	17
Part III.	STORMWATER POLLUTION PREVENTION PLAN (SWPPP)	18
A.	General SWPPP Requirements	18
B.	Required SWPPP Contents	20
C.	Required SWPPP Components by Project Type	24
Part IV.	INSPECTION AND MAINTENANCE REQUIREMENTS	24
A.	General Construction Site Inspection and Maintenance Requirements	24
B.	Contractor Maintenance Inspection Requirements	24
C.	Qualified Inspector Inspection Requirements	25
Part V.	TERMINATION OF PERMIT COVERAGE	29
A.	Termination of Permit Coverage	29
Part VI.	REPORTING AND RETENTION RECORDS	31
A.	Record Retention	31
B.	Addresses	
Part VII	. STANDARD PERMIT CONDITIONS	31
A.	Duty to Comply	31
B.	Continuation of the Expired General Permit	32
C.	Enforcement	
D.	Need to Halt or Reduce Activity Not a Defense	32
E.	Duty to Mitigate	
F.	Duty to Provide Information	33
G.	Other Information	33
H.	Signatory Requirements	33
l.	Property Rights	35
J.	Severability	35

K.	Requirement to Obtain Coverage Under an Alternative Permit	35
L.	Proper Operation and Maintenance	
M.	Inspection and Entry	
N.	Permit Actions	
Ο.	Definitions	37
P.	Re-Opener Clause	
Q.	Penalties for Falsification of Forms and Reports	
R.	Other Permits	
APPE	NDIX A – Acronyms and Definitions	39
Acro	nyms	39
Defir	nitions	40
APPE	NDIX B – Required SWPPP Components by Project Type	48
	e 1	
Tabl	e 2	50
APPE	NDIX C – Watersheds Requiring Enhanced Phosphorus Removal	52
	NDIX D – Watersheds with Lower Disturbance Threshold	
APPE	NDIX E - 303(d) Segments Impaired by Construction Related Pollutant(s)	59
	NDIX F – List of NYS DEC Regional Offices	
	-	

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:

- 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;
- 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 *discharge*s 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 *discharge*s 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. *Discharge*s 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 *discharge*s 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. *Discharge*s 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

- 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

 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, 4th 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 <u>not</u> 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 <u>not</u> 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

- 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

 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 SWPPs 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
- I. 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;

- 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:
 - 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, <u>with the exception of</u>:
 - 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 <u>not</u> directly discharging to one of the 303(d) segments listed in Appendix E;
- 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 <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;
- 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;
- 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;
- 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 postconstruction stormwater management practice(s);
- 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

- 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; <u>and</u> all areas of disturbance have achieved *final* stabilization; <u>and</u> all temporary, structural erosion and sediment control measures have been removed; <u>and</u> 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; <u>and</u> all areas disturbed as of the project shutdown date have achieved *final stabilization*; <u>and</u> all temporary, structural erosion and sediment control measures have been removed; <u>and</u> 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-ofway(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:

- 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:

- 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

- 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.
- 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

The following construction activities that involve soil disturbances of one (1) or more acres of land, but less than five (5) acres:

- Single family home <u>not</u> located in one of the watersheds listed in Appendix C or <u>not</u> directly discharging to one of the 303(d) segments listed in Appendix E
- Single family residential subdivisions with 25% or less impervious cover at total site build-out and <u>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</u>
- Construction of a barn or other agricultural building, silo, stock yard or pen.

The following construction activities that involve soil disturbances between five thousand (5000) square feet and one (1) acre of land:

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.

- Installation of underground, linear utilities; such as gas lines, fiber-optic cable, cable TV, electric, telephone, sewer mains, and water mains
- Environmental enhancement projects, such as wetland mitigation projects, stormwater retrofits and stream restoration projects
- · Pond construction
- Linear bike paths running through areas with vegetative cover, including bike paths surfaced with an impervious cover
- · Cross-country ski trails and walking/hiking trails
- Sidewalk, bike path or walking path projects, surfaced with an impervious cover, that are not part of residential, commercial or institutional development;
- 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.
- · Slope stabilization projects
- Slope flattening that changes the grade of the site, but does not significantly change the runoff characteristics

Table 1 (Continued) Construction Activities that Require the Preparation of a SWPPP

THAT ONLY INCLUDES EROSION AND SEDIMENT CONTROLS

- · 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

- 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

- 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

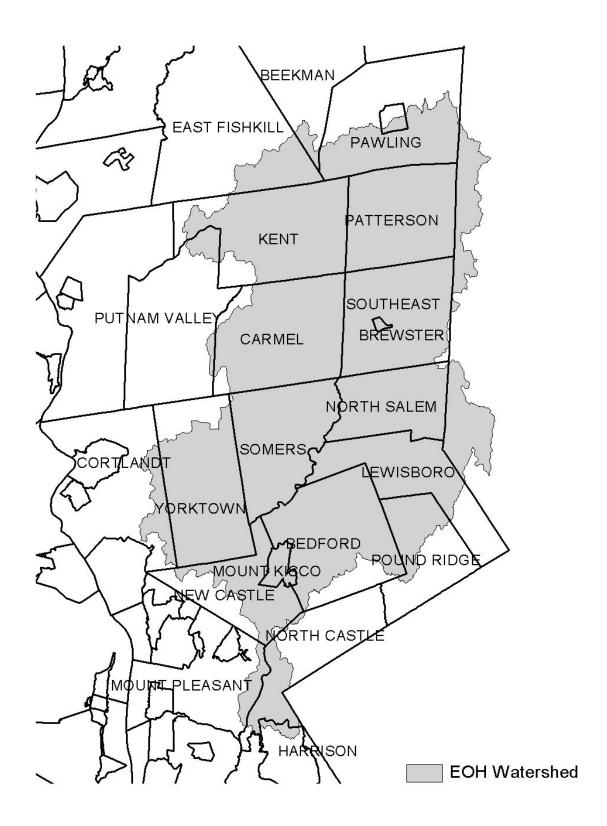


Figure 2 - Onondaga Lake Watershed



Figure 3 - Greenwood Lake Watershed

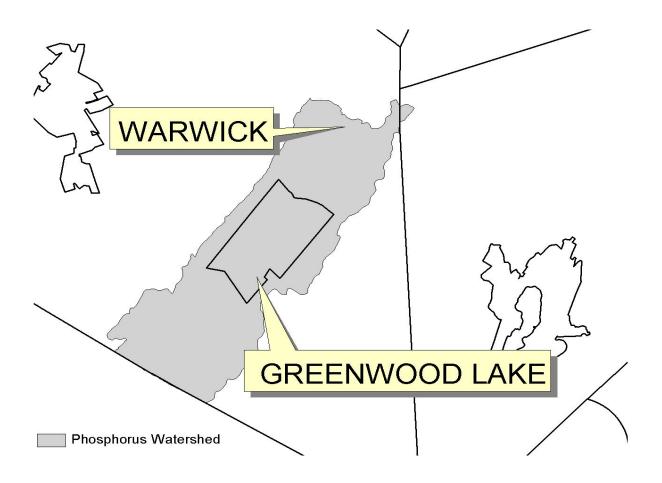


Figure 4 - Oscawana Lake Watershed

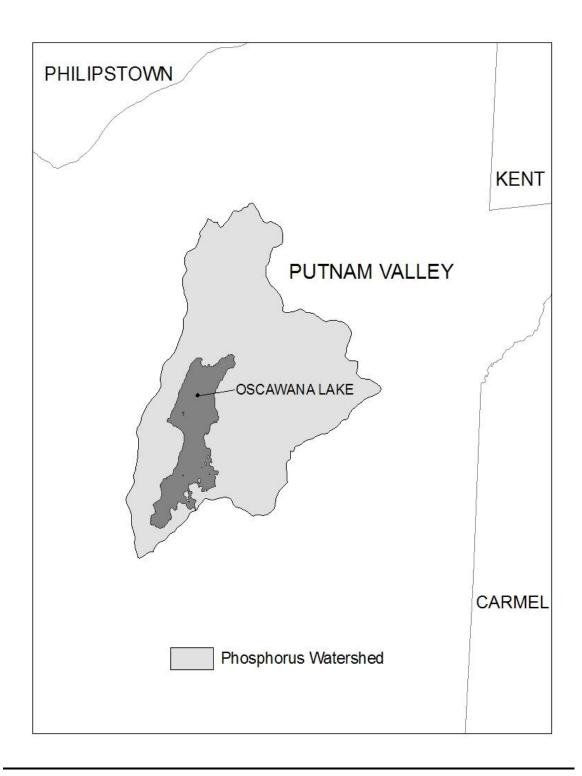
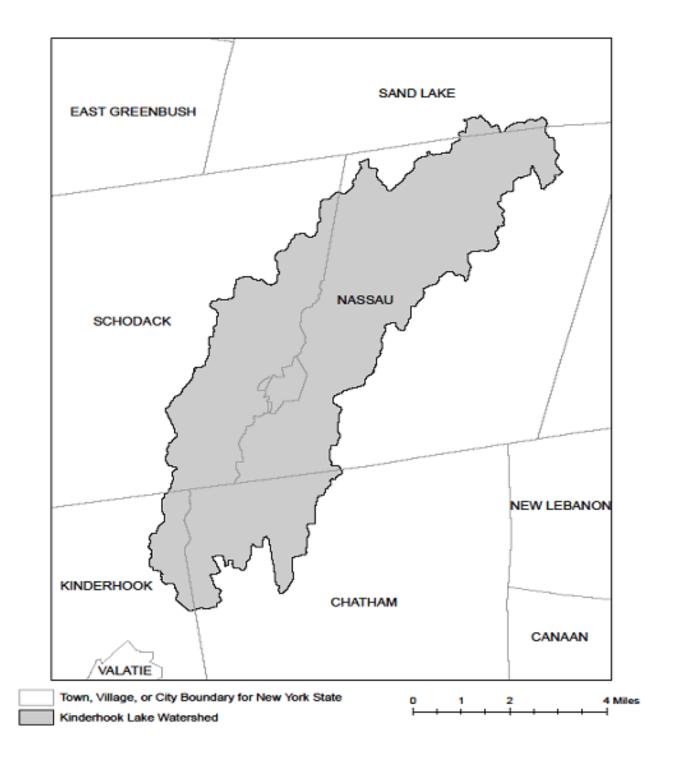


Figure 5 - Kinderhook Lake Watershed



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

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	

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	

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

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	

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	

Warren Warren	Indian Brook and tribs Lake George Tribs to L.George, Village of L George Cossayuna Lake	Silt/Sediment Silt/Sediment
	Tribs to L.George, Village of L George	
Warren	1	Cil+/Codimon+
	Cossayuna Lake	Silt/Sediment
Washington		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>	COVERING THE FOLLOWING COUNTIES:	DIVISION OF ENVIRONMENTAL PERMITS (DEP) PERMIT ADMINISTRATORS	DIVISION OF WATER (DOW) WATER (SPDES) PROGRAM
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

Appendix F

N.O.I/N.O.T.



NOI for coverage under Stormwater General Permit for Construction Activity

version 1.37

(Submission #: HPY-EDNS-26F42, version 1)

Details

Originally Started By SEAN CONDON

Alternate Identifier 129 Genesee Street - Splash Car Wash

Submission ID HPY-EDNS-26F42

Submission Reason New

Status Draft

Form Input

Owner/Operator Information

Owner/Operator Name (Company/Private Owner/Municipality/Agency/Institution, etc.)

Splash Car Wash

Owner/Operator Contact Person Last Name (NOT CONSULTANT)

Arnold

Owner/Operator Contact Person First Name

Jef

Owner/Operator Mailing Address

472 Wheelers Road

City

Milford

State

CT

Zip 06461

Phone

585-303-9448

Email

jeffarnold@gmail.com

Federal Tax ID

NONE PROVIDED

If the owner/operator is an organization, provide the Federal Tax ID number, or Employer Identification Number (EIN), in the format xx-xxxxxxx. If the owner/operator is an individual and not an organization, enter "Not Applicable" or "N/A" and do not provide the individual's social security number.

Project Location

Project/Site Name

129 Genesee Street - Splash Car Wash

Street Address (Not P.O. Box)

129 Genesee Street

Side of Street

South

City/Town/Village (THAT ISSUES BUILDING PERMIT)

Falyetteville

State

NY

Zip

13066

DEC Region

7

The DEC Region must be provided. Please use the NYSDEC Stormwater Interactive Map (https://gisservices.dec.ny.gov/gis/stormwater/) to confirm which DEC Region this site is located in. To view the DEC Regions, click on "Other Useful Reference Layers" on the left side of the map, then click on "DEC Administrative Boundary." Zoom out as needed to see the Region boundaries.

For projects that span multiple Regions, please select a primary Region and then provide the additional Regions as a note in Question 39.

County ONONDAGA

Name of Nearest Cross Street

Highbridge Street

Distance to Nearest Cross Street (Feet)

25

Project In Relation to Cross Street

West

Tax Map Numbers Section-Block-Parcel

018-06-09.1

Tax Map Numbers

NONE PROVIDED

If the project does not have tax map numbers (e.g. linear projects), enter "Not Applicable" or "N/A".

1. Coordinates

Provide the Geographic Coordinates for the project site. The two methods are:

- Navigate to the project location on the map (below) and click to place a marker and obtain the XY coordinates.
- The "Find Me" button will provide the lat/long for the person filling out this form. Then pan the map to the correct location and click the map to place a marker and obtain the XY coordinates.

Navigate to your location and click on the map to get the X,Y coordinates 43.0290282,-76.0142345

Project Details

2. What is the nature of this project?

Redevelopment with no increase in impervious area

For the purposes of this eNOI, "New Construction" refers to any project that does not involve the disturbance of existing impervious area (i.e. 0 acres). If existing impervious area will be disturbed on the project site, it is considered redevelopment with either increase in impervious area or no increase in impervious area.

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

Pre-Development Existing Landuse

Commercial

Post-Development Future Land Use

Commercial

3a. If Single Family Subdivision was selected in question 3, enter the number of subdivision lots.

NONE PROVIDED

4. In accordance with the larger common plan of development or sale, enter the total project site acreage, the acreage to be disturbed and the future impervious area (acreage)within the disturbed area.

*** ROUND TO THE NEAREST TENTH OF AN ACRE. ***

Total Site Area (acres)

1.4

Total Area to be Disturbed (acres)

1.3

Existing Impervious Area to be Disturbed (acres)

1.3

Future Impervious Area Within Disturbed Area (acres)

0.8

5. Do you plan to disturb more than 5 acres of soil at any one time?

No

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

A (%)

0

B (%)

58

C (%)

0

D (%)

42

7. Is this a phased project?

No

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

Start Date

04/08/2024

End Date

10/25/2024

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

Limestone Creek

Drainage ditches and storm sewer systems are not considered surface waterbodies. Please identify the surface waterbody that they discharge to. If the nearest surface waterbody is unnamed, provide a description of the waterbody, such as, "Unnamed tributary to Niagara River."

9a. Type of waterbody identified in question 9?

Stream/Creek Off Site

Other Waterbody Type Off Site Description

NONE PROVIDED

9b. If "wetland" was selected in 9A, how was the wetland identified?

NONE PROVIDED

10. Has the surface waterbody(ies) in question 9 been identified as a 303(d) segment in Appendix E of GP-0-20-001?

No

11. Is this project located in one of the Watersheds identified in Appendix C of GP-0-20-001?

No

12. Is the project located in one of the watershed areas associated with AA and AA-S classified waters?

Nο

Please use the DEC Stormwater Interactive Map

(https://gisservices.dec.ny.gov/gis/stormwater/) to confirm if this site is located in one of the watersheds of an AA or AA-S classified water. To view the watershed areas, click on "Permit Related Layers" on the left side of the map, then click on "Class AA AAS Watersheds"

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 D (provided the map unit name is inclusive of slopes greater than 25%), E or F on the USDA Soil Survey?

If Yes, what is the acreage to be disturbed? NONE PROVIDED

14. Will the project disturb soils within a State regulated wetland or the protected 100 foot adjacent area?

No

15. Does the site runoff enter a separate storm sewer system (including roadside drains, swales, ditches, culverts, etc)?

Yes

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

Village of Fayettville

- 17. Does any runoff from the site enter a sewer classified as a Combined Sewer?
- 18. Will future use of this site be an agricultural property as defined by the NYS Agriculture and Markets Law?
- 19. Is this property owned by a state authority, state agency, federal government or local government?
 No
- 20. Is this a remediation project being done under a Department approved work plan? (i.e. CERCLA, RCRA, Voluntary Cleanup Agreement, etc.)
 No

Required SWPPP Components

- 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
- 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)?

If you answered No in question 22, skip question 23 and the Post-construction Criteria and Post-construction SMP Identification sections.

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

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

Professional Engineer (P.E.)

SWPPP Preparer

DDS Engineering

Contact Name (Last, First)

Martin, Edmund

Mailing Address

45 Hendrix Road

City

West Henrietta

State

New York

Zip

14586

Phone

5853400582

Email

edmartin@ddscompanies.com

Download SWPPP Preparer Certification Form

Please take the following steps to prepare and upload your preparer certification form:

- 1) Click on the link below to download a blank certification form
- 2) The certified SWPPP preparer should sign this form
- 3) Scan the signed form
- 4) Upload the scanned document

Download SWPPP Preparer Certification Form

Please upload the SWPPP Preparer Certification

NONE PROVIDED

Comment

NONE PROVIDED

Erosion & Sediment Control Criteria

25. Has a construction sequence schedule for the planned management practices been prepared?

Yes

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

Temporary Structural

Silt Fence Storm Drain Inlet Protection Stabilized Construction Entrance

Biotechnical

None

Vegetative Measures

Seeding Topsoiling

Permanent Structural

None

Other

NONE PROVIDED

Post-Construction Criteria

* 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.

Parking Reduction
Building Footprint Reduction
Driveway Reduction
Sidewalk Reduction
Roadway 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).

28. Provide the total Water Quality Volume (WQv) required for this project (based on final site plan/layout). (Acre-feet) 0.07

29. Post-construction SMP Identification

Use the Post-construction SMP Identification section to identify the RR techniques (Area Reduction), RR techniques(Volume Reduction) and Standard SMPs with RRv Capacity that were used to reduce the Total WQv Required (#28).

Identify the SMPs to be used by providing 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 the Post-Construction SMP Identification section 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.

- 30. Indicate the Total RRv provided by the RR techniques (Area/Volume Reduction) and Standard SMPs with RRv capacity identified in question 29. (acre-feet) 0.09
- 31. Is the Total RRv provided (#30) greater than or equal to the total WQv required (#28)?

Yes

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)] (acre-feet) 0.02

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

Yes

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; therefore, NOI can not be processed. SWPPP preparer must modify design to meet sizing criteria.

33. SMPs

Use the Post-construction SMP Identification section to identify the Standard SMPs and, if applicable, the Alternative SMPs to be used to treat the remaining total WQv (=Total WQv Required in #28 - Total RRv Provided in #30).

Also, provide the total impervious area that contributes runoff to each practice selected.

NOTE: Use the Post-construction SMP Identification section 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. (acre-feet)

r

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 - provided by the

practice. (See Table 3.5 in Design Manual)

34. Provide the sum of the Total RRv provided (#30) and the WQv provided (#33a). 0.09

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

If Yes, go to question 36.

If No, sizing criteria has not been met; therefore, 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)

C

CPv Provided (acre-feet)

0

36a. The need to provide channel protection has been waived because: NONE PROVIDED

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

Overbank Flood Control Criteria (Qp)

Pre-Development (CFS)

7.09

Post-Development (CFS)

5.28

Total Extreme Flood Control Criteria (Qf)

Pre-Development (CFS)

12.57

Post-Development (CFS)

9.60

37a. The need to meet the Qp and Qf criteria has been waived because: NONE PROVIDED

38. Has a long term Operation and Maintenance Plan for the post-construction stormwater management practice(s) been developed?
Yes

If Yes, Identify the entity responsible for the long term Operation and Maintenance Owner (Splash Car Wash)

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.

NONE PROVIDED

Post-Construction SMP Identification

Runoff Reduction (RR) Techniques, Standard Stormwater Management Practices (SMPs) and Alternative SMPs

Identify the Post-construction SMPs to be used by providing 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.

RR Techniques (Area Reduction)

Round to the nearest tenth

Total Contributing Acres for Conservation of Natural Area (RR-1)

Total Contributing Impervious Acres for Conservation of Natural Area (RR-1)

Total Contributing Acres for Sheetflow to Riparian Buffers/Filter Strips (RR-2)

Total Contributing Impervious Acres for Sheetflow to Riparian Buffers/Filter Strips (RR-2)

Total Contributing Acres for Tree Planting/Tree Pit (RR-3)

Total Contributing Impervious Acres for Tree Planting/Tree Pit (RR-3)

Total Contributing Acres for Disconnection of Rooftop Runoff (RR-4)

RR Techniques (Volume Reduction)

Total Contributing Impervious Acres for Disconnection of Rooftop Runoff (RR-4)

```
Total Contributing Impervious Acres for Vegetated Swale (RR-5)
Total Contributing Impervious Acres for Rain Garden (RR-6)
Total Contributing Impervious Acres for Stormwater Planter (RR-7)
Total Contributing Impervious Acres for Rain Barrel/Cistern (RR-8)
Total Contributing Impervious Acres for Porous Pavement (RR-9)
Total Contributing Impervious Acres for Green Roof (RR-10)
Standard SMPs with RRv Capacity
Total Contributing Impervious Acres for Infiltration Trench (I-1)
Total Contributing Impervious Acres for Infiltration Basin (I-2)
Total Contributing Impervious Acres for Dry Well (I-3)
Total Contributing Impervious Acres for Underground Infiltration System (I-4)
Total Contributing Impervious Acres for Bioretention (F-5)
Total Contributing Impervious Acres for Dry Swale (O-1)
Standard SMPs
Total Contributing Impervious Acres for Micropool Extended Detention (P-1)
Total Contributing Impervious Acres for Wet Pond (P-2)
Total Contributing Impervious Acres for Wet Extended Detention (P-3)
```

```
Total Contributing Impervious Acres for Multiple Pond System (P-4)
Total Contributing Impervious Acres for Pocket Pond (P-5)
Total Contributing Impervious Acres for Surface Sand Filter (F-1)
Total Contributing Impervious Acres for Underground Sand Filter (F-2)
Total Contributing Impervious Acres for Perimeter Sand Filter (F-3)
Total Contributing Impervious Acres for Organic Filter (F-4)
Total Contributing Impervious Acres for Shallow Wetland (W-1)
Total Contributing Impervious Acres for Extended Detention Wetland (W-2)
Total Contributing Impervious Acres for Pond/Wetland System (W-3)
Total Contributing Impervious Acres for Pocket Wetland (W-4)
Total Contributing Impervious Acres for Wet Swale (O-2)
Alternative SMPs (DO NOT INCLUDE PRACTICES BEING USED FOR
PRETREATMENT ONLY)
Total Contributing Impervious Area for Hydrodynamic
Total Contributing Impervious Area for Wet Vault
Total Contributing Impervious Area for Media Filter
"Other" Alternative SMP?
```

Total Contributing Impervious Area for "Other"

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

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.

Manufacturer of Alternative SMP NONE PROVIDED

Name of Alternative SMP NONE PROVIDED

Other Permits

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

None

If SPDES Multi-Sector GP, then give permit ID NONE PROVIDED

If Other, then identify NONE PROVIDED

41. Does this project require a US Army Corps of Engineers Wetland Permit? No

If "Yes," then indicate Size of Impact, in acres, to the nearest tenth NONE PROVIDED

42. If this NOI is being submitted for the purpose of continuing or transferring coverage under a general permit for stormwater runoff from construction activities, please indicate the former SPDES number assigned. NONE PROVIDED

MS4 SWPPP Acceptance

43. Is this project subject to the requirements of a regulated, traditional land use control MS4?

Yes - Please attach the MS4 Acceptance form below

If No, skip question 44

44. Has the "MS4 SWPPP Acceptance" form been signed by the principal executive officer or ranking elected official and submitted along with this NOI? Yes

MS4 SWPPP Acceptance Form Download

Download form from the link below. Complete, sign, and upload. MS4 SWPPP Acceptance Form

MS4 Acceptance Form Upload

NONE PROVIDED

Comment

NONE PROVIDED

Owner/Operator Certification

Owner/Operator Certification Form Download

Download the certification form by clicking the link below. Complete, sign, scan, and upload the form.

Owner/Operator Certification Form (PDF, 45KB)

Upload Owner/Operator Certification Form

NONE PROVIDED
Comment
NONE PROVIDED

Appendix G

Maintenance and Inspection Forms



I. PRE-CONSTRUCTION MEETING DOCUMENTS Project Name _________ Date of Authorization ________ Name of Operator _________ Prime Contractor

a. Preamble to Site Assessment and Inspections

The Following Information To Be Read By All Person's Involved in The Construction of Stormwater Related Activities:

The Operator agrees to have a qualified inspector¹ conduct an assessment of the site prior to the commencement of construction² and certify in this inspection report that the appropriate erosion and sediment controls described in the SWPPP have been adequately installed or implemented to ensure overall preparedness of the site for the commencement of construction.

Prior to the commencement of construction, the Operator shall certify in this site logbook that the SWPPP has been prepared in accordance with the State's standards and meets all Federal, State and local erosion and sediment control requirements. A preconstruction meeting should be held to review all of the SWPPP requirements with construction personnel.

When construction starts, site inspections shall be conducted by the qualified inspector at least every 7 calendar days. The Operator shall maintain a record of all inspection reports in this site logbook. The site logbook shall be maintained on site and be made available to the permitting authorities upon request.

Prior to filing the Notice of Termination or the end of permit term, the Operator shall have a qualified inspector perform a final site inspection. The qualified inspector shall certify that the site has undergone final stabilization³ using either vegetative or structural stabilization methods and that all temporary erosion and sediment controls (such as silt fencing) not needed for long-term erosion control have been removed. In addition, the Operator must identify and certify that all permanent structures described in the SWPPP have been constructed and provide the owner(s) with an operation and maintenance plan that ensures the structure(s) continuously functions as designed.

¹ Refer to "Qualified Inspector" inspection requirements in the current SPDES General Permit for Stormwater Discharges from Construction Activity for complete list of inspection requirements.

^{2 &}quot;Commencement of construction" means the initial removal of vegetation and disturbance of soils associated with clearing, grading or excavating activities or other construction activities.

^{3 &}quot;Final stabilization" means that all soil-disturbing activities at the site have been completed and a uniform, perennial vegetative cover with a density of eighty (80) percent has been established or equivalent stabilization measures (such as the use of mulches or geotextiles) have been employed on all unpaved areas and areas not covered by permanent structures.

b. Pre-construction Site Assessment Checklist (NOTE: Provide comments below as necessary) 1. Notice of Intent, SWPPP, and Contractors Certification: Yes No NA [] [] Has a Notice of Intent been filed with the NYS Department of Conservation? [] [] Is the SWPPP on-site? Where?_ [] [] Is the Plan current? What is the latest revision date?_ [] [] Is a copy of the NOI (with brief description) onsite? Where? [] [] Have all contractors involved with stormwater related activities signed a contractor's certification? 2. Resource Protection Yes No NA [] [] Are construction limits clearly flagged or fenced? [] [] Important trees and associated rooting zones, on-site septic system absorption fields, existing vegetated areas suitable for filter strips, especially in perimeter areas, have been flagged for protection. [] [] Creek crossings installed prior to land-disturbing activity, including clearing and blasting. 3. Surface Water Protection Yes No NA [] [] Clean stormwater runoff has been diverted from areas to be disturbed. [] [] Bodies of water located either on site or in the vicinity of the site have been identified and protected. [] [] Appropriate practices to protect on-site or downstream surface water are installed. [] [] Are clearing and grading operations divided into areas <5 acres? 4. Stabilized Construction Access Yes No NA [] [] A temporary construction entrance to capture mud and debris from construction vehicles before they enter the public highway has been installed. [] [] Other access areas (entrances, construction routes, equipment parking areas) are stabilized immediately as work takes place with gravel or other cover. [] [] Sediment tracked onto public streets is removed or cleaned on a regular basis. 5. Sediment Controls Yes No NA

[] [] Silt fence material and installation comply with the standard drawing and specifications. [] [] Silt fences are installed at appropriate spacing intervals

[] [] Sediment/detention basin was installed as first land disturbing activity.

[] [] Sediment traps and barriers are installed.

6. Pollution Prevention for Waste and Hazardous Materials

Yes No NA

[] [] The Operator or designated representative has been assigned to implement the spill prevention avoidance and response plan.

[] [] The plan is contained in the SWPPP on page _

[] [] Appropriate materials to control spills are onsite. Where?

II. CONSTRUCTION DURATION INSPECTIONS

a. Directions:

Inspection Forms will be filled out during the entire construction phase of the project.

Required Elements:

- 1) On a site map, indicate the extent of all disturbed site areas and drainage pathways. Indicate site areas that are expected to undergo initial disturbance or significant site work within the next 14-day period;
- 2) Indicate on a site map all areas of the site that have undergone temporary or permanent stabilization;
- 3) Indicate all disturbed site areas that have not undergone active site work during the previous 14-day period;
- 4) Inspect all sediment control practices and record the approximate degree of sediment accumulation as a percentage of sediment storage volume (for example, 10 percent, 20 percent, 50 percent);
- 5) Inspect all erosion and sediment control practices and record all maintenance requirements such as verifying the integrity of barrier or diversion systems (earthen berms or silt fencing) and containment systems (sediment basins and sediment traps). Identify any evidence of rill or gully erosion occurring on slopes and any loss of stabilizing vegetation or seeding/mulching. Document any excessive deposition of sediment or ponding water along barrier or diversion systems. Record the depth of sediment within containment structures, any erosion near outlet and overflow structures, and verify the ability of rock filters around perforated riser pipes to pass water; and
- 6) Immediately report to the Operator any deficiencies that are identified with the implementation of the SWPPP.

CONSTRUCTION DURATION INSPECTIONS Page 1 of _____ SITE PLAN/SKETCH **Inspector (print name) Date of Inspection Qualified Inspector (print name) Qualified Inspector Signature**

Maintaining Water Quality

Ye	s No	NA							
[]	[]	[] Is there an increase in turbidity causing a substantial visible contrast to natural conditions at the outfalls?							
[]	[]	[] Is there residue from oil and floating substances, visible oil film, or globules or grease at the outfalls?							
٢1	٢٦	[] All disturbance is within the limits of the approved plans.							
		[] Have receiving lake/bay, stream, and/or wetland been impacted by silt from project?							
Ho	Housekeeping								
		neral Site Conditions							
		NA							
[]	[]	[] Is construction site litter, debris and spoils appropriately managed?[] Are facilities and equipment necessary for implementation of erosion and sediment control in working order and/or properly maintained?							
		[] Is construction impacting the adjacent property? [] Is dust adequately controlled?							
2.	Ten	nporary Stream Crossing							
Ye	s No	NA .							
[]	[]	 [] Maximum diameter pipes necessary to span creek without dredging are installed. [] Installed non-woven geotextile fabric beneath approaches. [] Is fill composed of aggregate (no earth or soil)? [] Rock on approaches is clean enough to remove mud from vehicles & prevent sediment from entering stream during high flow. 							
		bilized Construction Access NA							
		[] Stone is clean enough to effectively remove mud from vehicles.							
		[] Installed per standards and specifications?							
		Does all traffic use the stabilized entrance to enter and leave site?							
		[] Is adequate drainage provided to prevent ponding at entrance?							
Ru	noff	Control Practices							
		cavation Dewatering NA							
1 e:		[] Upstream and downstream berms (sandbags, inflatable dams, etc.) are installed per plan.							
[]	[]	[] Clean water from upstream pool is being pumped to the downstream pool.							
[]	[]	[] Sediment laden water from work area is being discharged to a silt-trapping device.							
[]	[]	[] Constructed upstream berm with one-foot minimum freeboard.							

Runoff Control Practices (continued)

2. Flow Spreader	
Yes No NA	
 [] [] Installed per plan. [] [] Constructed on undisturbed soil, not on fill, receiving only clear, non-sediment laden flow. [] [] Flow sheets out of level spreader without erosion on downstream edge. 	•
3. Interceptor Dikes and Swales	
Yes No NA	
[] [] Installed per plan with minimum side slopes 2H:1V or flatter. [] [] Stabilized by geotextile fabric, seed, or mulch with no erosion occurring. [] [] Sediment-laden runoff directed to sediment trapping structure	
4. Stone Check Dam	
Yes No NA	
[] [] Is channel stable? (flow is not eroding soil underneath or around the structure). [] [] Check is in good condition (rocks in place and no permanent pools behind the structure). [] [] Has accumulated sediment been removed?.	
5. Rock Outlet Protection	
Yes No NA	
[] [] [] Installed per plan. [] [] [] Installed concurrently with pipe installation.	
Soil Stabilization	
1. Topsoil and Spoil Stockpiles	
Yes No NA	
[] [] Stockpiles are stabilized with vegetation and/or mulch. [] [] Sediment control is installed at the toe of the slope.	
2. Revegetation	
Yes No NA	
[] [] Temporary seedings and mulch have been applied to idle areas. [] [] 4 inches minimum of topsoil has been applied under permanent seedings	
Sediment Control Practices	
Silt Fence and Linear Barriers	
Yes No NA	
 [] [] Installed on Contour, 10 feet from toe of slope (not across conveyance channels). [] [] Joints constructed by wrapping the two ends together for continuous support. [] [] Fabric buried 6 inches minimum. [] [] Posts are stable, fabric is tight and without rips or frayed areas. 	
Sediment accumulation is% of design capacity.	

CONSTRUCTION DURATION INSPECTIONS

Page 4 of _____

Sediment Control Practices (continued)

2.	Sto	rm Drain Inlet Protection (Use for Stone & Block; Filter Fabric; Curb; or, Excavated; Filter Sock of
	Mai	nufactured practices)
Ye	s No	NA
[]	[]	[] Installed concrete blocks lengthwise so open ends face outward, not upward.
		[] Placed wire screen between No. 3 crushed stone and concrete blocks.
[]	[]	[] Drainage area is 1 acre or less.
		[] Excavated area is 900 cubic feet.
		[] Excavated side slopes should be 2:1.
Ϊĺ	Ϊĺ	[] 2" x 4" frame is constructed and structurally sound.
		[] Posts 3-foot maximum spacing between posts.
[]	[]	[] Fabric is embedded 1 to 1.5 feet below ground and secured to frame/posts with staples at max 8 inch spacing.
۲1	[]	[] Posts are stable, fabric is tight and without rips or frayed areas.
		[] Manufactured insert fabric is free of tears and punctures.
		[] Filter Sock is not torn or flattened and fill material is contained within the mesh sock.
		nt accumulation% of design capacity.
3.	Ten	nporary Sediment Trap
Ye	s No	NA
[]	[]	[] Outlet structure is constructed per the approved plan or drawing.
[]	[]	[] Geotextile fabric has been placed beneath rock fill.
		[] Sediment trap slopes and disturbed areas are stabilized.
		nt accumulation is% of design capacity.
		nporary Sediment Basin
	s No	
		[] Basin and outlet structure constructed per the approved plan.
		[] Basin side slopes are stabilized with seed/mulch.
[]	[]	[] Drainage structure flushed and basin surface restored upon removal of sediment basin facility.
[]	[]	[] Sediment basin dewatering pool is dewatering at appropriate rate.
Sec	dime	nt accumulation is% of design capacity.
N T		
<u>No</u>	<u>ite</u> :	Not all erosion and sediment control practices are included in this listing. Add additional pages to this list as required by site specific design. All practices shall be maintained in accordance with their respective standards.
		Construction inspection checklists for post-development stormwater management practices can be found in Appendix F of the New York Stormwater Management Design Manual.

CONSTRUCTION DURATION INSPECTIONS

b. Modifications to the SWPPP (To be completed as described below)

The Operator shall amend the SWPPP whenever:

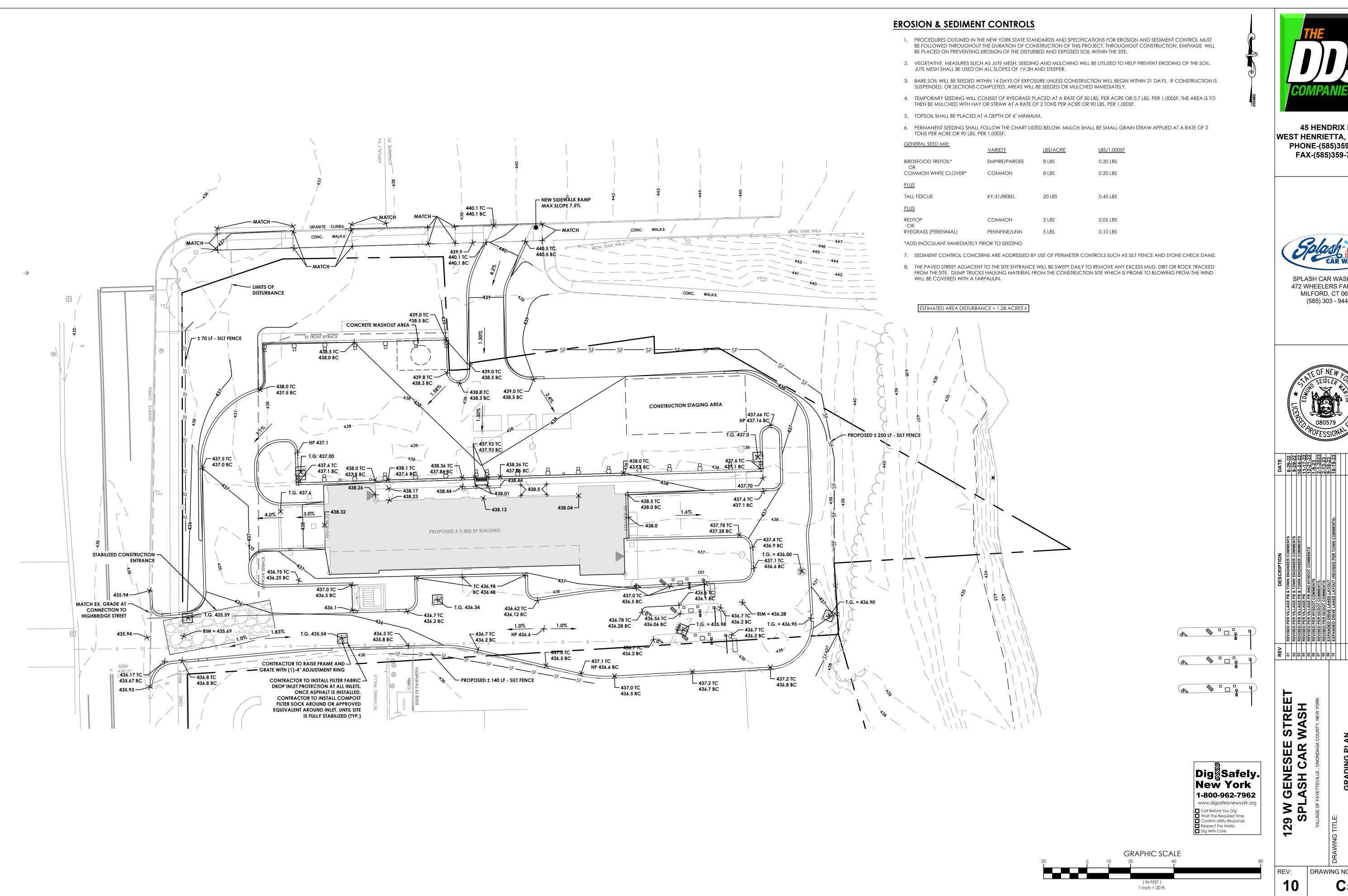
- 1. There is a significant change in design, construction, operation, or maintenance which may have a significant effect on the potential for the discharge of pollutants to the waters of the United States and which has not otherwise been addressed in the SWPPP; or
- 2. The SWPPP proves to be ineffective in:
 - a. Eliminating or significantly minimizing pollutants from sources identified in the SWPPP and as required by this permit; or
 - b. Achieving the general objectives of controlling pollutants in stormwater discharges from permitted construction activity; and
- 3. Additionally, the SWPPP shall be amended to identify any new contractor or subcontractor that will implement any measure of the SWPPP. **Modification & Reason:**

Appendix H

Erosion and Sediment Control Plan

(See Grading Plan)







45 HENDRIX RD WEST HENRIETTA, NY 14586 PHONE-(585)359-7540 FAX-(585)359-7541

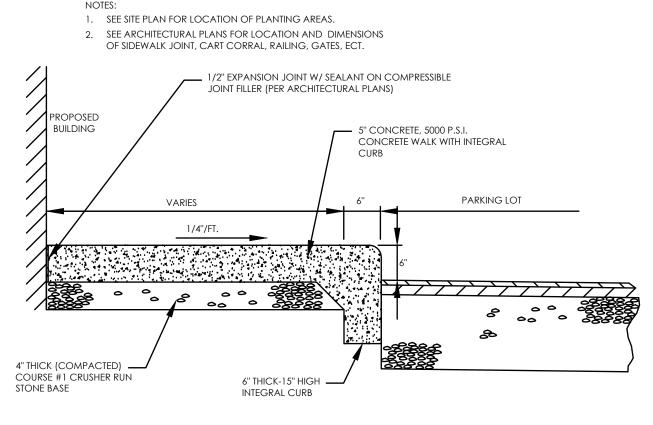


SPLASH CAR WASH, INC 472 WHEELERS FARM RD MILFORD, CT 06461 (585) 303 - 9448



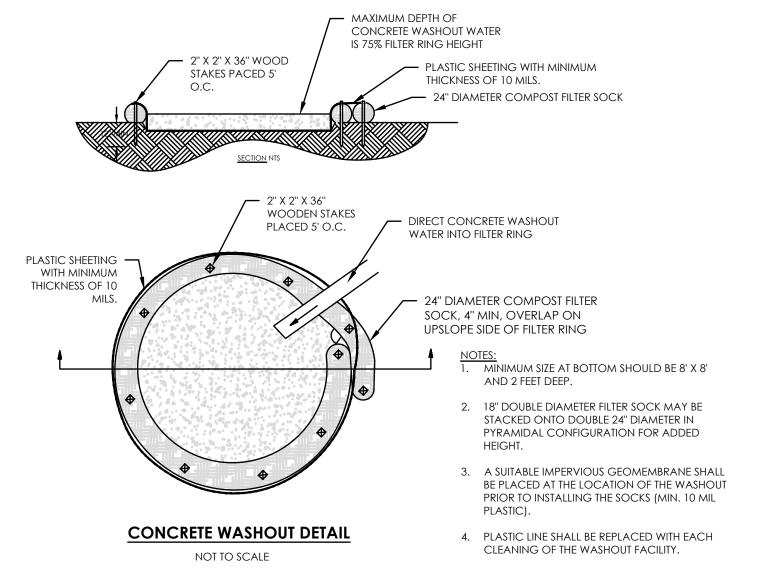
EVISED PER VILLAGE PB & TOWN ENGINEER COMMENTS	8 - 78
EVISED PER VILLAGE PB & TOWN ENGINEER COMMENTS	9-26
EVISED PER VILLAGE PB & TOWN ENGINEER COMMENTS	10-2
EVISED PER VILLAGE PB	11-1
EVISED PER VILLAGE PB AND NYSDOT COMMENTS	12-2
EVISED PER NYSDOT COMMENTS	1-9-2
EVISED PER OCDOT COMMENTS	2-1-2
EVISED PER OCDOT COMMENTS	2-13
(PANDED DRIVE LANES LAYOUT	9-18
(PANDED DRIVE LANES LAYOUT (REVISED PER TOWN COMMENTS)	10-1
DOCUMENTS INCLUDING ALL IDEAS, ARRANGEMENTS, DESIGNS AND PLA	PLA
ED THEREON OR PRESENTED THEREBY ARE OWNED BY AND REMAIN T	L N
TY OF DDS COMPANIES AND NO PART THEREOF SHALL BE UTILIZED BY A	ВҮА
FIRM OR CORPORATION FOR ANY PIRPOSE WHATSOEVER EXCEPT W	>

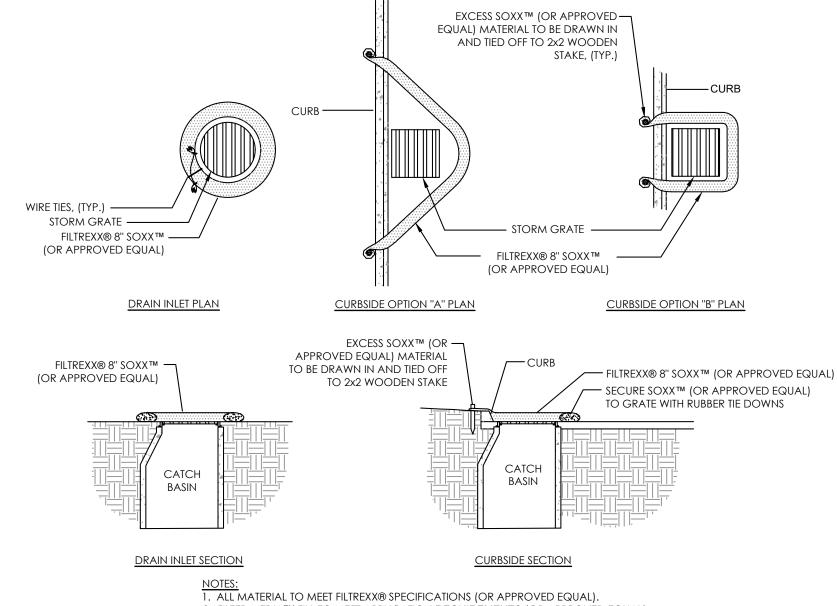
DRAWING NO:



SIDEWALK INTEGRAL CURB WITH DETAIL

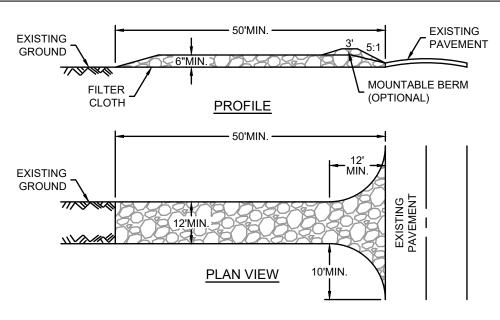
NOT TO SCALE





2. FILTER MEDIA™ FILL TO MEET APPLICATION REQUIREMENTS (OR APPROVED EQUAL). 3. DETAIL OBTAINED FROM FILTREXX®

> **INLET PROTECTION** NOT TO SCALE

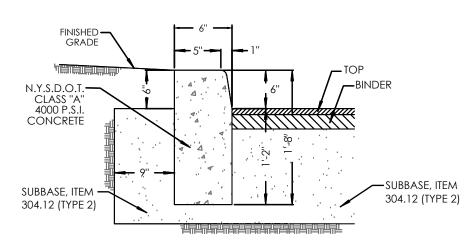


CONSTRUCTION SPECIFICATIONS

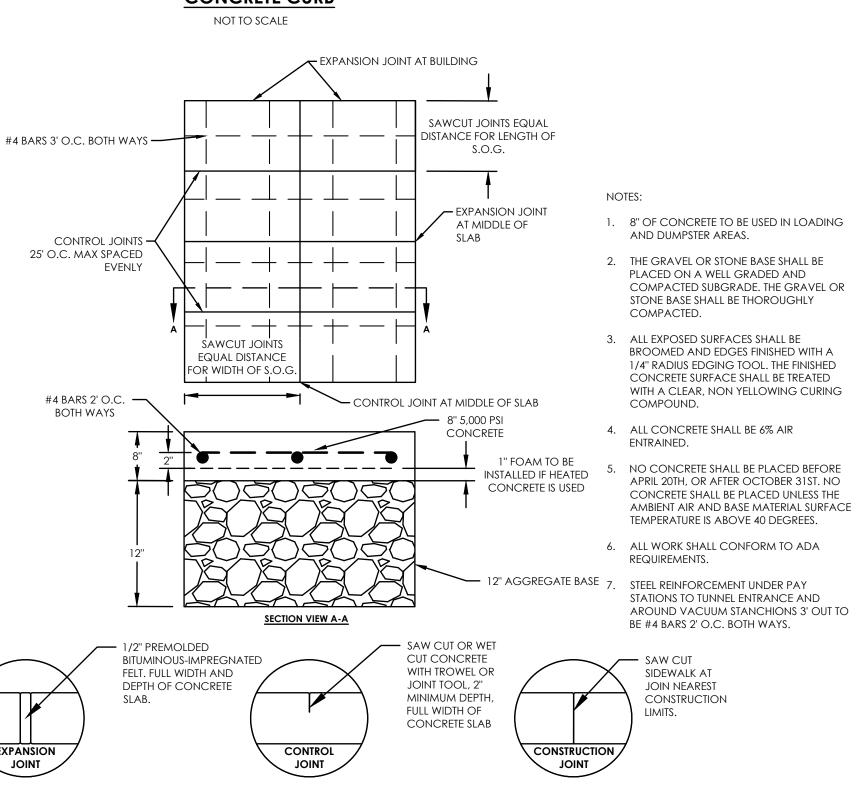
. STONE SIZE - USE 2" STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.

- 2. LENGTH NOT LESS THAN 50 FEET (EXCEPT ON A SINGLE RESIDENCE LOT WHERE A 30 FOOT MINIMUM LENGTH WOULD APPLY).
- 3. THICKNESS NOT LESS THAN SIX (6) INCHES.
- 4. WIDTH TWELVE (12) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS. TWENTY-FOUR (24) FOOT IF SINGLE ENTRANCE
- 5. FILTER CLOTH WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
- 6. SURFACE WATER ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
- 7. MAINTENANCE THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY, ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACTED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
- 8. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON A AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
- 9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH

STABILIZED CONSTRUCTION ENTRANCE NOT TO SCALE



CONCRETE CURB



SHALL BE CUT TO CONFORM TO THE CROSS SECTION OF THE CURB.

WITH CONCRETE FINISHING TOOLS.

5. CURB SHALL BE N.Y.S.D.O.T. TYPE BB OR EQUIVALENT.

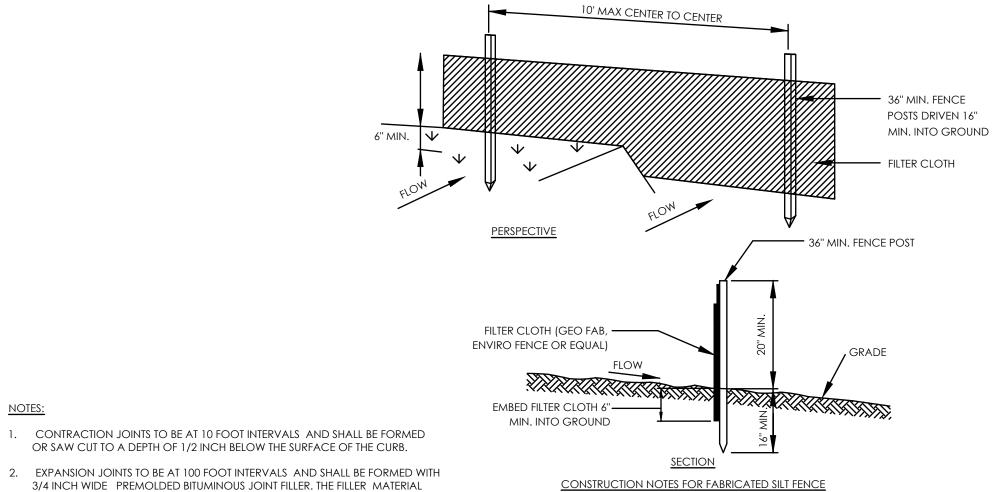
CONSTRUCTED.

3. EXPANSION JOINTS AND FORMED CONTRACTION JOINTS ARE TO BE EDGED

4. CONCRETE SEALING AGENT SHALL BE APPLIED THE SAME DAY THAT CURBS ARE

PROFILE VIEW TYPICAL HEAVY DUTY CONCRETE SLAB ON GRADE DETAIL

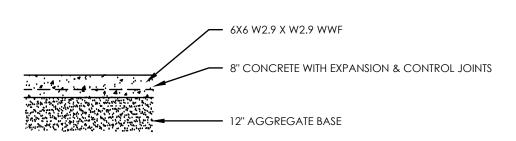
VARIES WIRE MESH REINFORCEMENT NO. 10 WIRE MESH 6" ON STROKE FINISH FULL LENGTH OF WALK I. CONTROL JOINTS TO BE EVERY 5'. 2. EXPANSION JOINTS TO BE EVERY 20'. SIDEWALK CROSS SECTION NOT TO SCALE



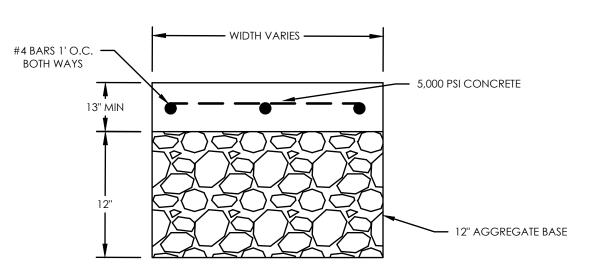
CONSTRUCTION NOTES FOR FABRICATED SILT FENCE 1. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER, THEY SHALL BE OVERLAPPED BY SIX INCHES AND FOLDED.

- 2. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN 'BULGES' DEVELOP IN THE SILT FENCE.
- 3. POSTS SHALL BE STEEL, EITHER T OR U TYPE OR 2" HARDWOOD
- 4. FILTER CLOTH SHALL BE EITHER FILTER X, MIRAFI 100X, STABILINKA T140N OR PREFABRICATED GEOFAB, ENVIROFENCE OR APPROVED EQUAL

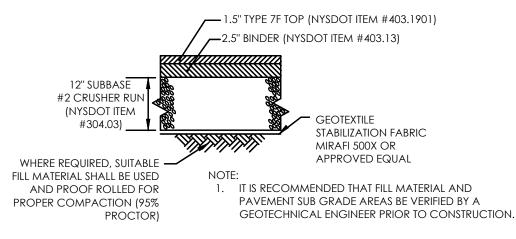
SILT FENCE



8" LOADING AND DUMPSTER CONCRETE DETAIL



SECTION VIEW PAY ISLAND CONCRETE DETAIL NOT TO SCALE



ASPHALT PAVEMENT SECTION

NOT TO SCALE



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SPLASH CAR WASH, INC 472 WHEELERS FARM RD MILFORD, CT 06461 (585) 303 - 9448



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DRAWING NO:

C8

Appendix I

MS4 Acceptance Form





NYS Department of Environmental Conservation Division of Water 625 Broadway, 4th Floor Albany, New York 12233-3505

MS4 Stormwater Pollution Prevention Plan (SWPPP) Acceptance Form

for

Construction Activities Seeking Authorization Under SPDES General Permit *(NOTE: Attach Completed Form to Notice Of Intent and Submit to Address Above)

I.	Project Owner/Operator Information
1.	Owner/Operator Name:
2.	Contact Person:
3.	Street Address:
4.	City/State/Zip:
II.	Project Site Information
5.	Project/Site Name:
6.	Street Address:
7.	City/State/Zip:
III.	Stormwater Pollution Prevention Plan (SWPPP) Review and Acceptance Information
8.	SWPPP Reviewed by:
9.	Title/Position:
10	. Date Final SWPPP Reviewed and Accepted:
IV.	. Regulated MS4 Information
11	. Name of MS4:
12	. MS4 SPDES Permit Identification Number: NYR20A
13	. Contact Person:
14	. Street Address:
15	. City/State/Zip:
16	. Telephone Number:

MS4 SWPPP Acceptance Form - continued			
V. Certification Statement - MS4 Official (principal executive officer or ranking elected official) or Duly Authorized Representative			
I hereby certify that the final Stormwater Pollution Prevention Plan (SWPPP) for the construction project identified in question 5 has been reviewed and meets the substantive requirements in the SPDES General Permit For Stormwater Discharges from Municipal Separate Storm Sewer Systems (MS4s). Note: The MS4, through the acceptance of the SWPPP, assumes no responsibility for the accuracy and adequacy of the design included in the SWPPP. In addition, review and acceptance of the SWPPP by the MS4 does not relieve the owner/operator or their SWPPP preparer of responsibility or liability for errors or omissions in the plan.			
Printed Name:			
Title/Position:			
Signature:			
Date:			
VI. Additional Information			

(NYS DEC - MS4 SWPPP Acceptance Form - January 2015)