



SOIL REMEDIAL ACTION WORKPLAN

**Harbor View Square
68 West First Street
OSWEGO, NEW YORK**

NYS BCP Site No. C738040

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TABLE OF CONTENTS

<u>Section</u>		<u>Page</u>
1.0	OVERVIEW AND OBJECTIVES	2
2.0	NATURE AND EXTENT OF IMPACTS	4
	2.1 Soil	4
	2.2 Groundwater	4
3.0	CONTEMPLATED FUTURE USE	6
4.0	PURPOSE AND DESCRIPTION OF SURFACE COVER SYSTEMS	7
	4.1 Purpose	7
	4.2 Future Surface Cover System	Error! Bookmark not defined.
5.0	MANAGEMENT OF EXCAVATED MATERIAL.....	8
	5.1 Management of the Excavated Soil/Fill for Off-site Disposal.	9
	5.2 Management of Subgrade Material	12
6.0	PROJECT MONITORING.....	14
7.0	HEALTH AND SAFETY REQUIREMENTS	20
8.0	REPORTING.....	21
9.0	SCHEDULE.....	21

LIST OF FIGURES

Figure F2 – Aerial Property Plan

Figure 3 – Previous Soil Sampling Locations and Analytical Exceedances

Figure 4 – Previous Groundwater Sampling Locations and Analytical Exceedances

Figure F3 – Final Cover Systems

Figure F4 – Miscellaneous Details

LIST OF EXHIBITS

Exhibit 1 – NYSDEC Approval Letter

Exhibit 2 – Allowable Constituent Levels for Imported Fill

Exhibit 3 – Community Air Monitoring Plan

Exhibit 4 – Stormwater Pollution Prevention Plan (Passero)

ENGINEERING CERTIFICATION

I, Jeffrey R. Holt, P.E., certify that I am currently a NYS registered professional engineer as defined in 6 NYCRR Part 375 and that this Soil Remedial Action Work Plan was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigations and Remediation (DER-10).

HOLT CONSULTING



JEFFREY R. HOLT, P.E.



1.0 OVERVIEW AND OBJECTIVES

Introduction

Synapse Risk Management, LLC and Holt Consulting (Synapse) developed this Soil Remedial Action Workplan on behalf of Harbor View Square (Site), Site ID C738040, under the Brownfield Cleanup Program (BCP), as well as to define soil management during site redevelopment. The remedy for the Site was selected by a Record of Decision (ROD), which was issued in November 2013 under the Environmental Restoration Program (ERP), Site ID E738040, Operable Unit 01.

The Volunteer entered into a Brownfield Cleanup Agreement (BCA) with the New York State Department of Environmental Conservation (NYSDEC) in January 2017 for the Site, which is an approximately a 2.4-acre area located at 68 West First Street in the City of Oswego, Oswego County, New York. The Site is bounded by Lake Street to the north, West Schuyler Street to the South, West First Street to the east, and West Second Street to the west (see Figure F2 – Aerial Property Plan).

Overview

Several investigations of the subsurface Site conditions have been performed and subsequent reports have been issued. A Remedial Investigation/Remedial Alternatives Report was issued by CHA in 2011, a Supplemental Subsurface Investigation/Alternatives Analysis Report was issued by OBG in 2013. Following these reports, the NYSDEC issued RODs in 2013: one ROD for Operable Unit (OU) Number 01: On-Site Area; and one for OU Number 02: Off-Site Area. The RODs present the remedy selected by NYSDEC to address documented contamination at each OU. This work was done under the NYSDEC Environmental Restoration Program as site number E738040.

The purpose of the investigations was to define the nature and extent of any contamination resulting from previous industrial activities at the Site. The primary contaminants of concern (COCs) for the site include several chlorinated volatile organic compounds (CVOCs); specifically, tetrachloroethene (PCE) and trichloroethene (TCE) and their degradation products, which include 1,1-dichloroethene (1,1-DCE), cis-1,2-dichloroethene (cis-1,2-DCE), trans-1,2-dichloroethene (trans-1,2-DCE), and vinyl chloride (VC). Other COCs of interest include; several metals, including lead, mercury and others, as well as polycyclic organic hydrocarbons (PAHs).

Remedial Design Management of Soil Objective

Excavation and off-site disposal of contaminant source areas, including the soil in and around the two sumps located within the on-site building, soil surrounding the former underground storage tank (UST) and the soil surrounding the underground utility or process lines connected to the former 15,000-gallon UST. Excavation in these areas will proceed to bedrock or until endpoint samples indicate there is no soil remaining which contains VOCs at concentrations exceeding their soil cleanup objective for the protection of groundwater, as defined by 6 NYCRR Part 375-6.8. In addition, the concrete slab below the former UST will be removed and further excavation conducted if necessary. Soil to the east of the process lines connecting the southern building sump and the former UST will also be excavated. The approximate excavation areas are shown on Figure F2.

**SOIL REMEDIAL ACTION WORKPLAN
HARBOR VIEW SQUARE
68 WEST FIRST STREET
OSWEGO, NEW YORK**

It is estimated approximately 1450 cubic yards of soil will be excavated from these areas. Clean fill meeting the requirements of 6 NYCRR Part 375-6.7(d) will be brought in to replace soil removed from the site and establish the designed grades at the site.

Construction and Redevelopment Management of Soil Objective

The objective of this Soil Remedial Action Workplan is to: (1) set forth guidance for excavation and off-site disposal of contaminant source areas, including soil around the former sumps and soils around the former UST; and (2) provide for establishing modified cover systems that are compatible with the redevelopment plans. This Soil Remedial Action Workplan has been prepared to address environmental concerns during the implementation of element 2 of the ROD and during any redevelopment activities or any soil disturbance activities, and has been reviewed and approved by NYSDEC, as provided in Exhibit 1.

2.0 NATURE AND EXTENT OF IMPACTS

The following provides an overview of the environmental conditions at the Site that are set forth in greater detail in the above reports.

2.1 Soil

Results of previous soil sampling are presented in the attached Figure 3. PAHs and metals are present in soil across the site at concentrations greater than Part 375 soil cleanup objectives (SCOs) for the protection of public health for restricted residential use. In general, the levels were only slightly greater than SCOs; however, a few isolated locations contained higher levels. Lead was detected in one location at 38,800 parts per million (ppm), compared to its restricted residential SCO for the protection of public health of 400 ppm; however, samples collected near this location had much lower levels of lead (maximum of 319 ppm), and the next highest lead concentration detected was 875 ppm. Mercury was detected at a maximum concentration of 52 ppm in one location, compared to its restricted residential SCO for the protection of public health of 0.81 ppm. Samples collected near this location had much lower levels of mercury, and the next highest level of mercury detected during the investigation was 4.5 ppm. Benzo(a)pyrene (a PAH) was detected at a maximum concentration of 4.9 ppm, compared to its restricted residential SCO of 1 ppm, and it exceeded 1 ppm in 7 out of 23 samples collected.

PCE, TCE and their degradation products in general were detected in soil at relatively low concentrations, but in some instances at concentrations which exceed the SCOs for the protection of groundwater. The highest concentrations of VOCs were detected in samples collected to the east of the southern half of the on-site building, which is also east of the utility lines connecting the former sump and the former 15,000-gallon underground storage tank. Of the VOCs, TCE was present at the most significant concentrations; up to 1 ppm, compared to its SCO for the protection of groundwater of 0.47 ppm. Cis-1,2-DCE was detected at concentrations up to 0.49 ppm, compared to its SCO for the protection of groundwater of 0.25 ppm. Other degradation products were detected at lower concentrations or not at all in soil. PCE was detected less frequently than TCE, at a maximum concentration of 0.022 ppm, compared to its SCO for the protection of groundwater of 1.3 ppm.

2.2 Groundwater

The groundwater results of previous investigations are shown in Figure 4. The results were compared to the Standard Criteria or Guidance (SCG) for groundwater – Ambient Water Quality Standards and Guidance Values (TOGs 1.1.1), 6 NYCRR Part 703, Surface and Groundwater Quality Standards. TCE was detected in groundwater at concentrations that ranged from 4.6 to 280 parts per billion (ppb). The detected TCE concentrations exceeded the SCG for groundwater of 5 ppb in 11 of 12 samples. Additionally, the degradation products also detected were: cis-1,2-DCE in nine of 12 samples at concentrations ranging from non-detect to 1,100 ppb (SCG = 5ppb); trans-1,2-DCE in three of 12 samples in concentrations ranging from non-detect to 26 ppb (SCG = 5 ppb); 1,1-DCE in one sample at a concentration of 8 ppb (SCG = 5 ppb) and vinyl chloride in 3 of 12 samples at concentrations ranging from non-detect to 67 ppb (SCG = 2 ppb).

The highest concentrations of TCE detected on-site were in samples collected from monitoring wells east of the southern sump. This suggests the primary source of groundwater contamination is

located in or near the southern portion of the building, most likely the southern sump, and the groundwater contamination extends east from that area.

TCE and cis-1,2-DCE were present the most often and at the highest concentrations (9.4 to 240 ug/L and 7.6 to 1,100 ug/L, respectively). When the other degradation products were detected, they were present at lower concentrations. Total VOC contamination was higher in the deep bedrock well, when compared to the adjacent shallow bedrock well.

3.0 CONTEMPLATED FUTURE USE

As part of the Harbor View Square \ redevelopment project, the Site has been identified as Brownfield Site that will be redeveloped for new residential and mixed-use construction.

The environmental easement for the Site shall prohibit the Site from being used for purposes other than restricted residential, commercial or industrial use, without the express written waiver of such prohibition by NYSDEC.

4.0 PURPOSE AND DESCRIPTION OF SURFACE COVER SYSTEMS

4.1 Purpose

The purpose of a surface cover system is to minimize the potential for human contact with impacted material and the potential for impacted runoff from the Site. The intent is to incorporate the necessary remedial excavations and construction of the site cover system into the redevelopment project for Harbor View Square. The surface cover systems that will be installed or which otherwise exist at the time of completion of remedial construction activities at the Site (See Figure F2) will consist of one of the following types of material:

- Soil: A minimum of two feet of clean soil or fill and vegetation cover in areas where asphalt or concrete are not present. The upper six inches of soil will be of sufficient quality to maintain a vegetation layer.
- Asphalt: a minimum of six inches of material (asphalt and subbase material) in areas that will become roadways, sidewalks, and parking lots. Actual cross sections will be determined based on the intended use of the area.
- Concrete: a minimum of six inches of material (concrete and subbase material) in areas that will become buildings or other slab-on-grade structures or for roadways, sidewalks, and parking lots in lieu of asphalt. Actual cross sections will be determined based on the intended use of the area.

Greater than approximately 80% of the Site will have a concrete or asphalt cover system. The locations and type of final cover systems are provided on Figure F3 – Final Cover Systems.

For all Site buildings which will be occupied by people, engineering controls will be placed beneath the concrete that will include vapor barriers and sub-slab depressurization systems (SSDS). All proposed buildings have been designed with active SSDS in accordance United States Environmental Protection Agency (USEPA) Techniques of Controlling Radon in New Residential Construction (March 1994). Details regarding the SSDS construction, commissioning, operation, maintenance and monitoring will be defined in a separate document or documents. The cover systems will be required to be maintained to satisfy the requirements of the ROD.

5.0 MANAGEMENT OF EXCAVATED MATERIAL

This section presents environmental guidelines for management of excavated material, including subsurface soils/fill generated during construction activities conducted at the Site from now until issuance of a Certificate of Completion for the Site. After issuance of the Certificate of Completion soil management will be defined in the Site Management Plan, which will be developed and finalized towards the end of the remedial action phase. This section pertains to all intrusive activities including, but not necessary limited to: remedial excavations, foundation construction, utility installation, repair, modification, installation of infrastructure for a SSDS, installation of any other infrastructure (e.g. light pole or utility pole bases, etc.) and other excavations. For all such constructions activities, the following conditions will be required:

- Any breach of the cover system, including for the purposes of construction or utilities work, must be replaced or repaired using an approved borrow source. Soil sources must meet the requirements of 6 NYCRR 375-6.7(d) and must be pre-approved prior to import to the Site. The repaired area must be covered with a minimum of 2-foot material from an approved borrow source and reseeded or covered with impervious product such as concrete or asphalt, as described in Section 4, to prevent erosion and limit exposure to contamination in the future.
- Concrete or asphalt removed from the vicinity of the building sumps shall be properly characterized and disposed of offsite. Other areas of concrete or asphalt removal that show staining or signs of contamination shall be characterized and disposed of offsite.
- Control of surface erosion and run-off of the Site always, including during construction activities. This includes proper maintenance of the vegetative cover established on the Site, as needed.
- Soil that is excavated and is intended to be removed from the Site must be managed, characterized, and properly disposed of in accordance with NYSDEC regulations and directives.
- Soil excavated at the Site may be reused as backfill material onsite provided it contains no visual or olfactory evidence of contamination, and it is placed beneath a cover system component as described in Section 4.
- Any off-site fill material brought to the Site for filling or grading purposes shall be from an approved borrow source. Off-site borrow sources shall be subject to collection of samples for each material type for each fill source. If two or more material types are being imported for the same source (e.g. topsoil and general fill) each material must be sampled. The number of samples per source and per material type will be as defined in Section 5.2. The sample should be analyzed for Target Compound List provided in Exhibit 2 – Allowable Constituent Levels for Imported Fill or Soil (DER-10).
- Prior to any construction activities, workers are to be notified of the site conditions with clear instructions regarding how the work is to proceed. Invasive work performed at the Site will be performed in accordance with all applicable local, state, and federal regulations to protect worker health and safety.

5.1 Management of the Excavated Soil/Fill for Off-site Disposal.

Some soil/fill that is excavated during redevelopment activities cannot be used as fill below the cover system because of unsuitable geotechnical conditions. This off-specification material will be further characterized prior to transportation off-site for disposal at a permitted facility.

Excavation and off-site disposal of contaminant source areas will be conducted, including the soil in and around the two sumps located within the onsite building, soil surrounding the former underground storage tank (UST) and the soil surrounding the underground utility or process lines connected to the former 15,000-gallon UST. Excavation in these areas will proceed to bedrock or until endpoint samples indicate there is no soil remaining which contains VOCs at concentrations exceeding their soil cleanup objective for the protection of groundwater, as defined by 6 NYCRR Part 375-6.8. In addition, the concrete slab below the former UST will be removed and further excavation conducted if necessary. Soil to the east of the process lines connecting the southern building sump and the former UST will also be excavated. The approximate excavation areas are shown on Figure F2.

Excavated soil/fill with visual evidence of contamination (e.g., staining or free product) or olfactory evidence of contamination or elevated PID measurements will be disposed of off-site. For these materials, at a minimum discrete samples will be collected for VOC analysis based on the estimated cubic yards of stockpiled soil/fill, at the frequency outlined in Table 5.4e 10 (See Section 5.2). Additional waste characterization will be conducted as required by the anticipated disposal facility. If the contamination is not consistent with previously identified contamination (i.e. if it appears to be something other than chlorinated solvents) additional characterization sampling will be necessary.

For excavated soil/fill that does not exhibit visual evidence of contamination but must be sent for off-site disposal, waste characterization will be conducted as required by the anticipated disposal facility. Typically, this includes toxicity leaching characteristic procedure (TCLP) for all contaminants listed in 6 NYCRR 371.3 (Leachability, Ph, ignitability, corrosivity, total PCBs (USEPA Method 8082); and often includes, moisture content and/or paint filter test.

Additional characterization for off-site disposal may be required by the selected disposal facility. To potentially reduce off-site disposal requirements/costs, the owner or site developer may also choose to characterize each stockpile individually. If the analytical results indicate that concentrations exceed the standards for RCRA characteristics or that the soil contains a listed hazardous waste, the material will be considered a hazardous waste and must be properly disposed off-site at a permitted disposal facility within 90 days of excavation. If TCE is present in soil at concentrations greater than 58 parts per million (ppm), or PCE at concentrations greater than 12 ppm, then the soil would need to be managed as a hazardous waste. If other contaminants are detected indicating a listed hazardous waste is present, the Volunteer would need to request a determination as to whether the soil would need to be managed as a hazardous waste. If analytical results indicate that the soil is not a hazardous waste, the material may be properly disposed off-site at a non-hazardous waste facility. Stockpiled soil cannot be transported off-site prior to receipt of analytical results.

Designated field personnel will be responsible for collecting all samples, under the direct supervision of a professional engineer (PE) or a qualified environmental professional (QEP) Soil samples will be composited by placing equal portions from each of the five discrete sample locations into a pre-

cleaned, stainless steel (or Pyrex glass) mixing bowl. The samples should be collected from at least six inches into the stockpile. The soil/fill will be thoroughly homogenized using a stainless-steel scoop or trowel and transferred to dedicated sample containers provided by the laboratory. Samples will then be transported to the laboratory utilizing standard chain-of-custody (COC) protocols. The field personnel should indicate on the COC NYSDEC Analytical Services Protocol (ASP) Category B deliverables.

Post-Excavation Soil Sampling

Post-excavation verification soil sampling will be conducted in the area of excavation required by the ROD (the ROD Area) and any other source areas identified during construction. To provide data to confirm that TCE, cis-1,2-DCE, trans-1,2-DCE, 1,1-DCE and vinyl chloride are not present in the remaining soils at concentrations greater than their protection to groundwater SCO's at the limits of the excavation and to document the level of other site contaminants (PAHs and metals). If source areas of other contaminants are identified, endpoint samples for the affected excavation area will also be collected for those additional contaminants. One post-excavation verification soil sample will be collected from each sidewall of the ROD Area excavation at a frequency of 1 sample per 30 linear feet of sidewall. Post-excavation verification soil samples will also be collected from the bottom of the ROD Area excavation at a frequency of 1 sample per 900 square feet.

Based on the estimated size of the excavation a total of 18 verification soil samples will be collected from the sidewalls. As the excavation will be advanced to the top of bedrock bottom samples are not anticipated. Verification soil samples from the sidewalls will be composite samples formed from four discrete samples collected within a two-foot radius except for VOCs, which will be grab samples. QA/QC samples, described below will also be collected for excavation endpoint samples.

Samples will be analyzed by an NYSDPH ELAP-certified laboratory for TCL VOCs by USEPA Method 8260; PAHs by USEPA Method 8270; and TAL metals by USEPA Methods 6010/7471. Laboratory deliverables for excavation endpoint samples will be NYSDEC Analytical Services Protocol (ASP) Category B Deliverables. Endpoint sample analytical data will be validated, and a data usability summary report prepared.

Quality Control Sampling Frequency

- Duplicate Samples – Samples will be sent for laboratory analysis to evaluate reproducibility of the sampling techniques. Five percent or one every 20 samples of each matrix.
- Rinse Blanks – Rinse blanks will be prepared by pouring analyte-free water over denominated sampling equipment to check decontamination procedures. One every 20 samples collected a minimum of once per week.
- Matrix Spike/Matrix Spike Duplicates – One every 20 samples collected.
- Trip Blanks – Every shipment or courier pickup (VOCs only).

Sample Designation System

The sample designation code and sample date will provide each sample with a unique name. The alphanumeric system will apply to all samples collected and submitted to the designated laboratory. The designated codes that will be used as part of the remedial action as presented below:

Sample Type	Sample Designation
Verification Soil Samples	<ul style="list-style-type: none"> • A prefix (VA) will indicate a verification sample; • A location following the prefix (Rod Soil) will indicate the area being sampled; • A dash and directional code (N, S, E, W or B) will follow the area. The directional code will reflect the north, south, east, west sidewall or bottom of the excavation; and • A number following the directional code will indicate the position along the excavation sidewall or bottom of the excavation (i.e. 2-4 representing the depth interval of 2-4 feet).
Confirmation Soil Samples	<ul style="list-style-type: none"> • A prefix (CA) will indicate a confirmation sample; • A location following the prefix (Rod Soil) will indicate the area the material being sampled was removed; and • A dash and a number will follow the excavation area. This additional number will be used to track multiple confirmation samples from an area (i.e. one confirmation sample will be collected per 2,000 CY of excavated soil from select areas).
Water Samples from the Temporary Water Treatment System	<ul style="list-style-type: none"> ▪ Samples of the effluent water from the treatment system will contain a prefix (EW) followed by the sample number.

Note: Duplicates must be submitted to the laboratory as blind duplicates. The inspector/sampler will record the time and location from which the duplicate is collected and maintain that in the project file for data validation and reporting, however the sample time and location information will not be included in the sample name or chain of custody. Typical duplicates are named DUP-##-YYYYMMDD or similar and rinse blanks will contain a "RB" designation followed by a number and date.

Sampling Equipment Decontamination Procedures

Removing or neutralizing contaminants from sampling equipment will minimize the likelihood of sample cross contamination, reduces or eliminates transfer of contaminants to clean areas, and prevents the mixing of incompatible substances. Gross contamination can be removed by physical decontamination procedures. These abrasive and non-abrasive methods include the use of brushes, air and wet blasting, and high and low-pressure water cleaning. The first step, a soap and water wash, removes all visible particulate matter and residual oils and grease. This may be preceded by a steam or high-pressure water wash to facilitate residuals removal.

The second step involves a tap water rinse and a distilled/deionized water rinse to remove the detergent. An acid rinse provides a low pH media for trace metals removal and is included in the decontamination process if metal samples are to be collected. It is followed by another distilled/deionized water rinse. Next, a high purity solvent rinse is performed for trace organics removal. Typical solvents used for removal of organic contaminants include acetone, hexane, or water. Acetone is typically chosen because it is an excellent solvent, miscible in water, and not a

target analyte on the Priority Pollutant List. If acetone is known to be a contaminant of concern at a given site or if Target Compound List analysis (which includes acetone) is to be performed, another solvent may be substituted. The solvent must be allowed to evaporate completely and then a final distilled/deionized water rinse is performed. This rinse removes any residual traces of the solvent.

The decontamination procedure described above and to be implemented during the Harbor View project can be summarized as follows:

1. Physical removal;
2. Non-phosphate detergent wash;
3. Tap water rinse;
4. Distilled/deionized water rinse;
5. 10% nitric acid rinse;
6. Distilled/deionized water rinse;
7. Solvent rinse (pesticide grade);
8. Air dry; and
9. Distilled/deionized water rinse.

5.2 Management of Subgrade Material

Subgrade material to be used as excavation backfill, or placed to increase site grades or elevation, shall meet the following criteria:

- Soil excavated at the Site may be reused as backfill material on-site provided it contains no visual or olfactory evidence of contamination and does not contain TCE, cis-1,2-DCE, trans-1,2-DCE, 1,1-DCE or vinyl chloride at concentrations greater than their SCOs for protection to groundwater, unless otherwise approved by the NYSDEC, and it is placed beneath a cover system component as described in Section 4.
- Off-site fill material brought to the Site for filling and grading purposes shall be comprised of soil or other unregulated material as set forth in 6 NYCRR Part 360 and shall be from an approved borrow source.
- Soil sources shall also be subject to the collection of a minimum of one representative sample per source. The sample should be analyzed for TCL VOCs, SVOCs, pesticides, 2,4,5-TP (Silvex), PCBs, arsenic, barium, beryllium, cadmium, chromium, copper, lead, manganese, mercury, nickel, selenium, silver, zinc, total cyanide, hexavalent chromium. The VOCs sample(s) will be grab samples while the sample(s) for the other parameters will be composite samples. The composite samples will be comprised of five discrete samples collected from across the area/stockpile which is being characterized. Soil source pre-approval samples will be collected by a PE or someone under supervision of a PE and will be analyzed by a NYSDOH ELAP-certified laboratory. QA/QC samples will be collected as described in Section 5.1 for excavation endpoint samples. Laboratory deliverables for pre-approval samples will be NYSDEC ASP Category B deliverables.

**SOIL REMEDIAL ACTION WORKPLAN
HARBOR VIEW SQUARE
68 WEST FIRST STREET
OSWEGO, NEW YORK**

- A demarcation layer must be installed at the base of all excavation areas that are backfilled with imported soil/fill. The demarcation layer will consist of an orange construction fence or equivalent material.
- All newly installed utilities and all other utility corridors which are excavated during remediation or redevelopment must be backfilled with clean fill and must be lined with a demarcation layer. A typical utility trench detail is provided on Figure F4 – Miscellaneous Details.
- The sampling frequency is specified in Table 5.4(e) 10, of DER -10, located below. The soil will be approved for use as backfill provided that no parameters exceed the levels listed in Exhibit 2, Allowable Constituent Levels for Imported Fill or Soil for Restricted Residential Use.

Table 5.4 e 10			
Recommended Number of Soil Samples of Soil Imported to or Exported from a Site			
Contaminant	VOCs	SVOCs, Inorganics & PCBs/Pesticides	
Soil Quantity (Cubic Yards)	Discrete Samples	Composite Samples	Discrete/Composite Samples
0-50	1	1	3-5 discrete samples from different locations in the fill being provided will comprise a composite sample for analysis.
50-100	2	1	
100-200	3	1	
200-300	4	1	
300-400	4	2	
400-500	5	2	
500-800	6	2	
800-1000	7	2	
➤ 1000	Add an additional 2 VOCs & 1 composite for each additional 1000 Cubic Yards or consult DER		

6.0 PROJECT MONITORING

The excavation activities during the development of the site will require the following:

- Community Air Monitoring Plan;
- Excavation / Remediation Work;
- Progress Meetings;
- Erosion, Sediment Control;
- Decontamination Pad;
- Site Security and Ingress/Egress;
- Monitoring Well Decommissioning;
- Analytical Quality Control;
- Excavation Dewatering;
- Disposal and Hauling Requirements;
- Survey Control; and
- Stormwater runoff and erosion control monitoring.

Community Air Monitoring Plan

The Community Air Monitoring Plan (CAMP) was prepared by Synapse for Housing Visions and is intended to be used during the implementation of all invasive and non-invasive activities associated with the redevelopment project at 68 West First Street in Oswego, New York. The CAMP is included as Exhibit 3 of this Workplan.

Excavation / Remedial Work

All excavation, remedial work and other subsurface work will be inspected by a PE or QEP or someone under the direct supervision of a QEP or PE. The inspector will screen the excavated material for visual or olfactory signs of contamination using a photoionization detector (PID) and determine if the material should be stockpiled for potential reuse or if it should be stockpiled for disposal or potential disposal.

Progress Meetings

Weekly progress meetings will be conducted either by phone or in person, the meeting will be attended by the contractor, the engineer, NYSDEC and the owner. The frequency may be reduced in the future if all participants agree.

Erosion Control and Sediment Control

A stormwater pollution prevention plan (SWPPP) has been prepared for the Site by Passero Associates and transmitted under separate cover to NYSDEC. The SWPPP must be adhered to during all work specified in this Workplan and is included as Exhibit 4 of this Workplan.

Stabilized Construction Entrance/Exit: A stabilized pad of aggregate underlain with filter fabric should be placed at the point where traffic will be entering and exiting the pavement. The stabilized construction exit is intended to reduce or eliminate the tracking of sediment onto the surrounding

streets. The streets will be monitored for soils tracked from the Site throughout construction. Any soil tracked onto the street will be removed immediately.

Silt Fence: A temporary barrier of geotextile fabric should be placed to intercept sediment runoff from disturbed soil. The silt fence will be constructed around the entire perimeter of the site to protect the surrounding areas from migration of sediment. The silt fence will be inspected at least weekly and following any rain events. It will be maintained until final site stabilization is complete.

Filter Fabric Inlet Protection: A temporary barrier of geotextile fabric should be framed around a drainage inlet designed to intercept and trap sediment runoff from entering a drainage structure. Inlet protection will be inspected at least weekly and following any rain events. It will be maintained until final site stabilization is complete. Sediment will be removed to maintain adequate drainage.

Decontamination Pad

Decontamination pads should be constructed for field cleaning of sampling and construction equipment and must meet the following minimum specifications:

- The pad should be constructed in an area known or believed to be free of surface contamination.
- The pad should not leak.

All equipment must be decontaminated prior to being demobilized from the site

If possible, the pad should be constructed on a level, paved surface and should facilitate the removal of wastewater. This may be accomplished by either constructing the pad with one corner lower than the rest, or by creating a sump or pit in one corner or along one side. Any sump or pit should also be lined.

Sawhorses or racks constructed to hold equipment while being cleaned should be high enough above ground to prevent equipment from being splashed. Water should be removed from the decontamination pad frequently and contained in a tank or 55-gallon drum.

Any temporary pads should be lined with a water impermeable material with no seams within the pad. This material should be either easily replaced (disposable) or repairable. At the completion of site activities, the decontamination pad should be decommissioned.

The pit or sump should be backfilled with the appropriate material designated by the site project manager, but only after all waste/rinse water has been pumped into containers for disposal.

Site Security and Ingress/Egress

To maintain site security a perimeter construction fence with a locking gate will be installed prior to any invasive activities. Additionally, all necessary controls will be in place prior to conducting any work at the Site.

Monitoring Well Decommissioning

Monitoring wells MW-1 through MW-8 will be decommissioned prior to excavation and offsite disposal of the soils specified in Element 2 of the ROD or other construction activities in accordance with NYSDEC guidance document CP-43 Monitoring Well Decommissioning Policy, presented in Appendix E of the Pre-Design Investigation Workplan. The monitoring wells will be decommissioned by over-drilling and grouting with a temporary casing. A decommissioning log will be prepared for each monitoring well. Monitoring well MW-9D will be protected by placing a construction cones over the top of the cover. Replacement monitoring wells will be installed as part of the groundwater remedial activities and will be defined in a separate Workplan or Plans.

Excavation Dewatering

If excavation dewatering is required, the dewatering system for excavation work will include the placement of submersible sumps at alternating edges of the excavation every 50 feet lineally. The sumps will be placed inside of slotted pipe that is encased in 1/4-inch gravel to protect the pumps and filter sediment. The slotted pipe sections will be attached to 4-inch- or 6-inch-diameter pipe casings. The casings will be constantly adjusted so that the sumps are lowered and maintained at an approximate depth of 2 feet below the bottom of the excavation always. The collected water is pumped to a header pipe and then to water tanks for settling/treatment prior to treatment and discharge to the sanitary sewer system following receipt of analytical analysis that confirms compliance with Oswego County Health Department Sanitary Permit parameters. Excavations shall be maintained free of water during excavation and during post-excavation sampling and inspections. Control measures shall be implemented to prevent surface water from entering excavations. A sanitary permit shall be obtained by the awarded contractor, below is the contact information.

Oswego County Health Department
Environmental Division 70 Bunner Street Oswego, NY 13126
(315) 349-3557

Transportation and Disposal Requirements

All soil, groundwater asphalt or concrete transported from the Site for offsite disposal must be transported by a company with a current Part 364 Permit. If any material required management because it has been identified as hazardous, the material must be properly manifested and transported to a permitted hazardous waste treatment and disposal facility. The preferred transportation route for all waste leaving the Site is south via West First Street and then east onto East Bridge Street, this route will avoid residential areas. All trucks hauling contaminated soil from the Site must have solid covers which must be closed prior to leaving the Site. All trucks must be decontaminated prior to leaving the Site

Survey Control

Horizontal and vertical project control shall be established using global positioning system (GPS) or total stations (TPS) techniques to establish survey baselines in support of surveying operations during all work on the Site.

Extracted Groundwater Treatment and Sampling Requirements

If treatment is required, aboveground treatment of the extracted groundwater, such as by gravity sedimentation, will be performed prior to discharge. Additional treatment of metals, petroleum hydrocarbons, and/or VOCs may be required based on permit conditions, dewatering rates, and concentrations of target analytes encountered during the dewatering. As it is anticipated that VOCs will be encountered, activated carbon adsorption using granular activated carbon (GAC) vessels will be performed prior to discharge, a process flow diagram of a typical treatment train is provided on Figure F4.

Representative grab samples of excavation water will be collected from the flow-through system at a rate of one sample per 20,000-gallon basis. The samples will be collected at the terminus end of the flow-through system in a poly container prior to the point of discharge. The excavation water will be transferred from the sampling container into the appropriate laboratory provided container as outlined below:

Parameter Reference List

Parameter	Reference	Sample Container	Sample Volume	Preservation	Holding Time
VOCs	USEPA 624	Two 40-ml glass vials with Teflon-lined septum cap	80 ml	No headspace; cool 4°C	7 Days
SVOCs	USEPA 625	1-Liter amber glass	1 Liter	No headspace; cool 4°C	7 Days
Selected Metals	USEPA 200.7	500-ml plastic	500 ml	HNO ₃ to pH <3	180 Days
PCBs/Pesticides	USEPA 608	1-Liter amber glass with Teflon cap	1 Liter	Cool 4°C	1 Day
Oil & Grease	USEPA 1664	1-Liter amber glass	1 Liter	H ₂ SO ₄ cool 4°C	26 Days
TSS	USEPA 160.2	Plastic	250 ml	None	None

Note: This Parameter list should be confirmed with the Oswego Wastewater Department.

All original data documented on sample bottle identification labels, Chain-of-Custody forms, Sampling Activity Logs, and Inspection Checklists will be recorded using waterproof ink. These will be considered accountable documents. If an error is made on an accountable document, the individual will make corrections by lining through the error and entering the correct information. The erroneous information will not be obliterated. Sampling and field analysis activities will be documented using the following:

- Sample Bottle Identification Labels: Sampling personnel will attach an identification label to each sample bottle.

At a minimum, the following information will be recorded on the label, as appropriate:

- Project name Project number unique sample identification number and location as outlined in Section 5.1 of this Workplan.

All samples to be analyzed by a laboratory will be accompanied by a COC form provided by the laboratory. Only the sample collectors will sign the COC form over to the lab.

Sanitary Sewer Compliance Levels

Analytical Requirements		Compliance Levels
TTO:	VOC - USEPA Method 624	*
	SVOC - USEPA Method 625	*
	Pesticides - USEPA Method 608	2.0 mg/L (ppm)
Metals:	Cadmium - USEPA Method 200.7	1.0 mg/L (ppm)
	Chromium - USEPA Method 200.7	5.0 mg/L (ppm)
	Copper - USEPA Method 200.7	3.0 mg/L (ppm)
	Lead - USEPA Method 200.7	5.0 mg/L (ppm)
	Nickel - USEPA Method 200.7	2.0 mg/L (ppm)
	Zinc - USEPA Method 200.7	4.0 mg/L (ppm)
PCBs:	Per Aroclor - USEPA Method 608	0.065 ug/L (ppb)
Oil and Grease:	USEPA Method 1664	100 mg/L (ppm)

Notes:

- * TTO = Total Toxic Organics; the sum of methods of 624, 625, and 608 (pesticides only).
- VOCs = Volatile Organic Compounds.
- SVOCs = Semivolatile Organic Compounds.
- PCBs = Polychlorinated Biphenyls.
- mg/L = Milligrams per liter (mg/L).
- ppm = Parts per million.
- ug/L = Micrograms per liter (ug/L).
- ppb = Parts per billion.

Quality Assurance/Quality Control

Quality assurance/quality control (QA/QC) will be performed for all sampling activities, lab reports, and COCs to ensure consistency between lab methods, sample identifications, dates, and times for both primary samples and QA/QC samples. For each sample shipment, trip blanks will be prepared to evaluate if the shipping and handling procedures are introducing contaminants into the samples, and if cross contamination has occurred between the collected samples. A minimum of one trip blank will be submitted to the laboratory for analysis with every shipment of samples. Trip blanks will consist of representative sample containers that have been filled High Performance Liquid

Chromatography (HPLC) organic-free (for organics) or de-ionized water (for inorganics) and shipped with the empty sampling containers to the site or sampling area prior to sampling.

The sealed trip blanks are not opened in the field and are shipped to the laboratory in the same cooler with the samples collected for analyses. The trip blanks will be preserved, packaged, and sealed in the manner described for the environmental samples. A separate sample number and station number will be assigned to each trip sample and it will be submitted blind to the laboratory. To maintain sample integrity and prevent cross-contamination, sampling collection

- Wear a clean pair of nitrile gloves prior to the collection and handling of each sample at each location.
- Not contaminate the inside of the sample bottle by allowing it to come into contact with any material other than the water sample.
- Discard sample bottles or sample lids that have been dropped onto the ground prior to sample collection.
- Not leave the cooler lid open for an extended period once samples are placed inside. v Not sample near a running vehicle where exhaust fumes may impact the sample. v
- Not touch the exposed end of a sampling tube, if applicable. v
- Avoid allowing rain water to drip from rain gear or other surfaces into sample bottles. v
- Not eat, smoke, or drink during sample collection. v
- Not sneeze or cough in the direction of an open sample bottle.
- Minimize the exposure of the samples to direct sunlight.
- Decontaminate sampling equipment prior to sample collection using a TSP-soapy water wash, distilled water rinse, and final rinse with distilled water.

7.0 HEALTH AND SAFETY REQUIREMENTS

The successful contractor shall have a written health and safety plan that will provide the framework for safe work practices and procedures to be followed by workers and subcontractors performing work activities associated with the Harbor View Square project. Synapse's Health and Safety Coordinator or representatives of Housing Visions may review the plan upon request. The contractor is solely responsible for insuring that all workers have received any required safety related training. The contractor must develop and comply with a Health and Safety Plan that complies with all applicable laws, regulations, etc., including but not limited to 29 CFR 1910.120. Training documentation shall be made available for review upon request to Synapse and Housing Visions.

8.0 REPORTING

A Construction Completion Report will be prepared following the completion work activities outlined in this Soil Remedial Action Workplan and in accordance with DER-10, section 1.5 and include but not limited to the following:

- Tables with analytical results;
- Category B laboratory reports and data validation reports/DUSRs;
- Figures that will document the areas of excavation, sample locations, limits of the cover systems and other pertinent information;
- Daily construction logs and CAMP monitoring data;
- Bills of lading for imported fill material;
- Manifests and disposal receipts; and
- Permits.

9.0 SCHEDULE

The schedule for beginning this work is dependent on receipt of bids for construction and relocation of utilities including National Grid electric service. A potential schedule is presented in table below:

Soil Construction Schedule

Activity	Dates
Receive Funding Award	4/15/18
Submit GW Workplan	9/24/18
Submit Soil Remedial Action WP	9/20/18
Baseline Groundwater (COC/PFOA)	9/15/18
Soil Remedial Action WP Approval by NYSDEC	10/19/18
Utility Relocation	10/31/18 – 12/30/18
Harbor View Construction	10/31/18 – 4/1/20
Soil Remediation	10/31/18 – 12/30/18
Bedrock Borings	11/5-11/8/2018
Summary Report Submittal	11/27/2019

FIGURES

Soil Remedial Action Workplan
Harbor View Square
68 West First Street
Oswego, New York

October 2018

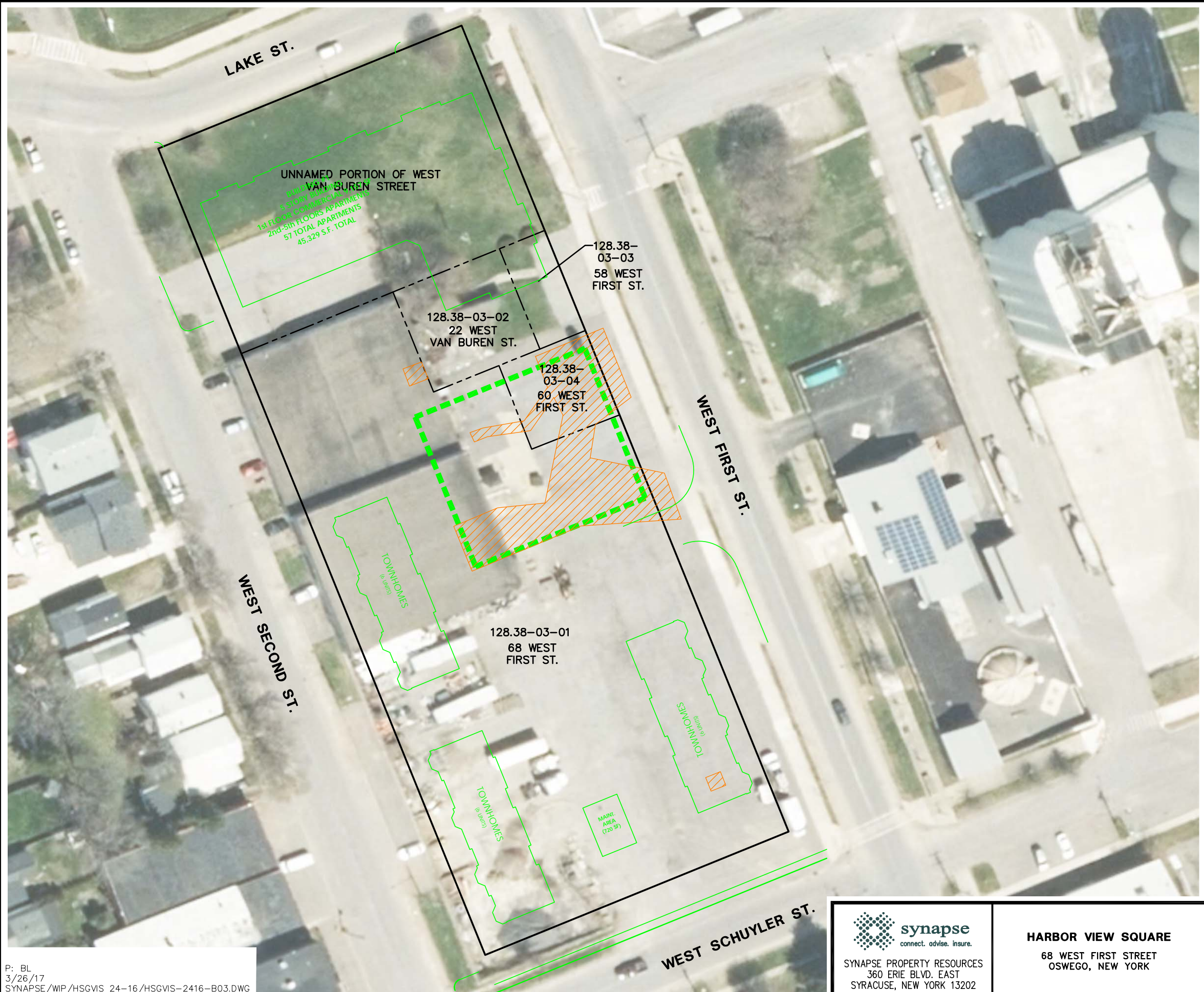
Figure F2 – Aerial Property Plan

Figure 3 – Previous Soil Sampling Locations and Analytical Exceedances

Figure 4 – Previous Groundwater Sampling Locations and Analytical Exceedances

Figure F3 – Final Cover Systems

Figure F4 – Miscellaneous Details

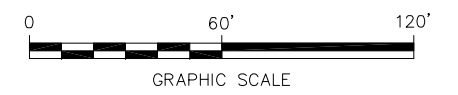


LEGEND

- APPROXIMATE BROWNFIELD CLEANUP PROGRAM SITE BOUNDARY
- - - APPROXIMATE TAX PARCEL LINE
- 128.38-03-01 TAX PARCEL ID
- [Green dashed line] PROPOSED INJECTION AREA (APPROXIMATE)
- [Orange hatched box] PROPOSED EXCAVATION AREA (APPROXIMATE)

NOTES:

1. 2015 AERIAL PHOTOGRAPH FROM NYSGIS CLEARINGHOUSE WEBSITE.
2. TAX PARCEL INFORMATION DIGITIZED FROM OSWEGO COUNTY, CITY OF OSWEGO TAX MAPS AND FROM TOPOGRAPHIC AND BOUNDARY SURVEY BY CREEKSIDE BOUNDARY, DATED 9/18/12.
3. ALL LOCATIONS ARE APPROXIMATE.



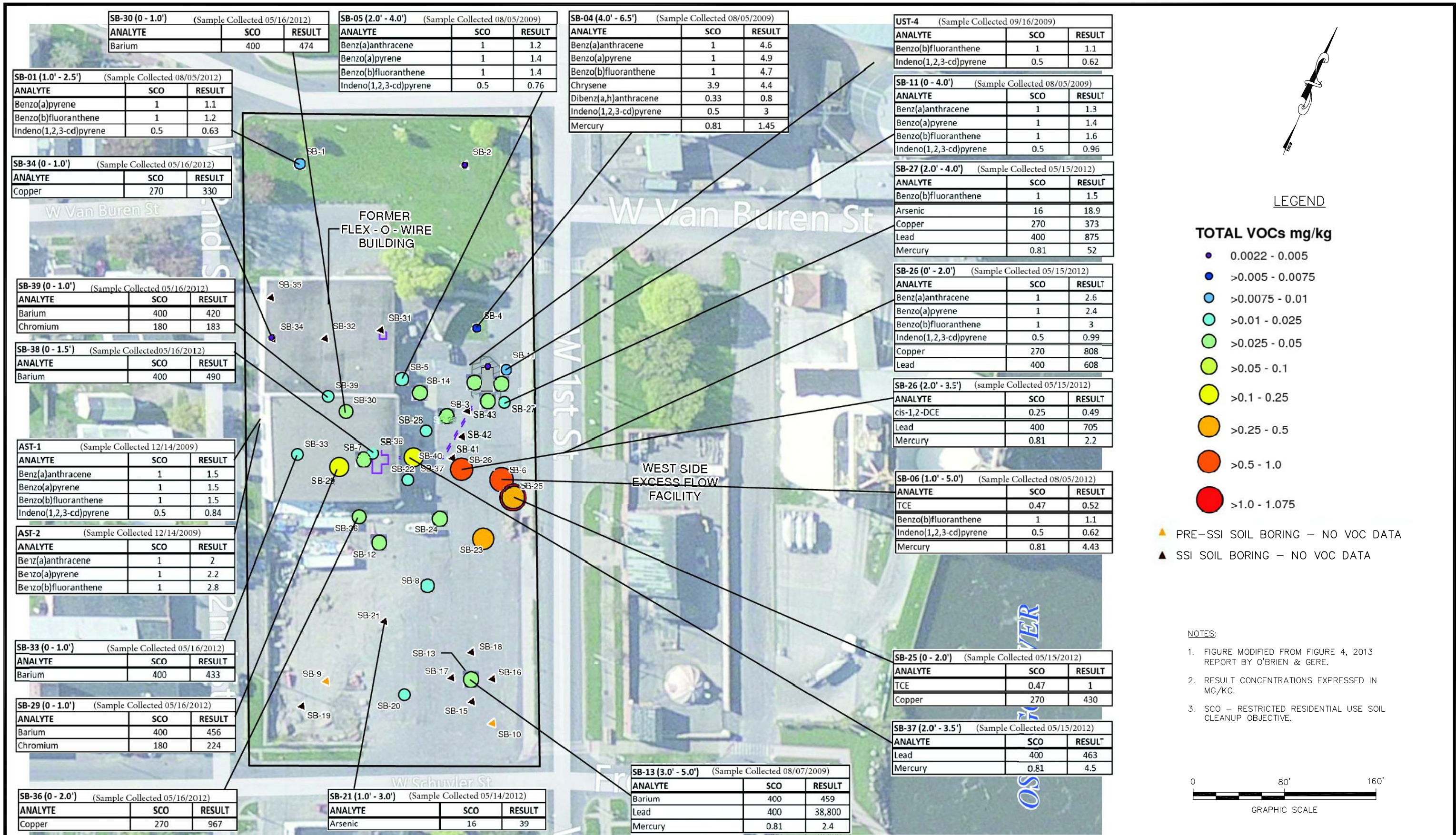
P: BL
3/26/17
SYNAPSE/WIP/HSGVIS 24-16/HSGVIS-2416-B03.DWG

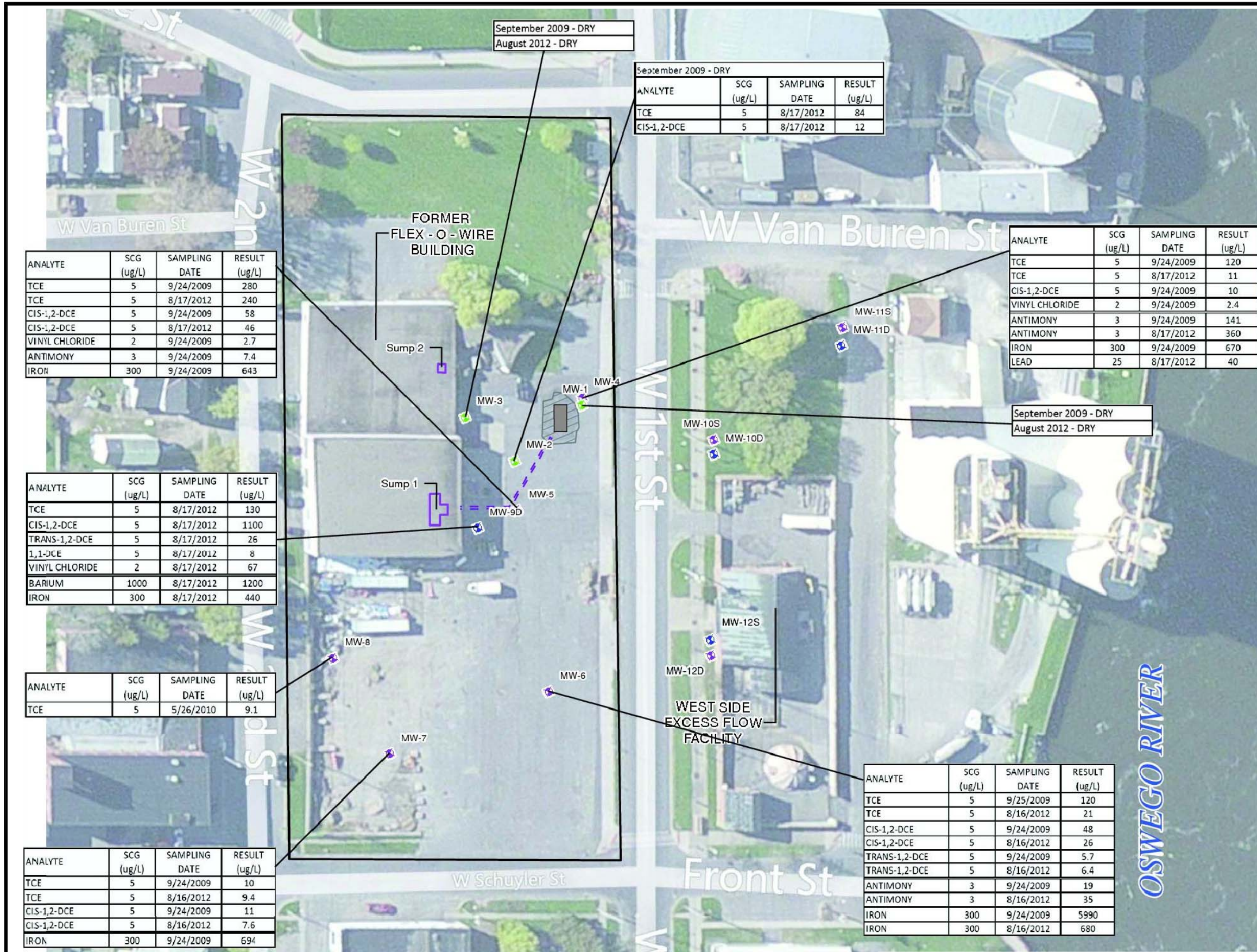
synapse
connect. advise. insure.
SYNAPSE PROPERTY RESOURCES
360 ERIE BLVD. EAST
SYRACUSE, NEW YORK 13202

HARBOR VIEW SQUARE
68 WEST FIRST STREET
OSWEGO, NEW YORK

**AERIAL
PROPERTY PLAN**

PROJECT NO.:
HSGVIS-24-16-05
DATE:
MARCH 2016
FIGURE NO.:
F2





ANALYTE	SCG (ug/L)	SAMPLING DATE	RESULT (ug/L)
TCE	5	9/24/2009	280
TCE	5	8/17/2012	240
CIS-1,2-DCE	5	9/24/2009	58
CIS-1,2-DCE	5	8/17/2012	46
VINYL CHLORIDE	2	9/24/2009	2.7
ANTIMONY	3	9/24/2009	7.4
IRON	300	9/24/2009	643

ANALYTE	SCG (ug/L)	SAMPLING DATE	RESULT (ug/L)
TCE	5	8/17/2012	130
CIS-1,2-DCE	5	8/17/2012	1100
TRANS-1,2-DCE	5	8/17/2012	26
1,1-DCE	5	8/17/2012	8
VINYL CHLORIDE	2	8/17/2012	67
BARIUM	1000	8/17/2012	1200
IRON	300	8/17/2012	440

ANALYTE	SCG (ug/L)	SAMPLING DATE	RESULT (ug/L)
TCE	5	5/26/2010	9.1

ANALYTE	SCG (ug/L)	SAMPLING DATE	RESULT (ug/L)
TCE	5	9/24/2009	10
TCE	5	8/16/2012	9.4
CIS-1,2-DCE	5	9/24/2009	11
CIS-1,2-DCE	5	8/16/2012	7.6
IRON	300	9/24/2009	694

September 2009 - DRY
August 2012 - DRY

ANALYTE	SCG (ug/L)	SAMPLING DATE	RESULT (ug/L)
TCE	5	8/17/2012	84
CIS-1,2-DCE	5	8/17/2012	12

ANALYTE	SCG (ug/L)	SAMPLING DATE	RESULT (ug/L)
TCE	5	9/24/2009	120
TCE	5	8/17/2012	11
CIS-1,2-DCE	5	9/24/2009	10
VINYL CHLORIDE	2	9/24/2009	2.4
ANTIMONY	3	9/24/2009	141
ANTIMONY	3	8/17/2012	360
IRON	300	9/24/2009	670
LEAD	25	8/17/2012	40

September 2009 - DRY
August 2012 - DRY

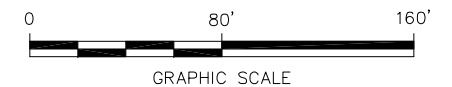
ANALYTE	SCG (ug/L)	SAMPLING DATE	RESULT (ug/L)
TCE	5	9/25/2009	120
TCE	5	8/16/2012	21
CIS-1,2-DCE	5	9/24/2009	48
CIS-1,2-DCE	5	8/16/2012	26
TRANS-1,2-DCE	5	9/24/2009	5.7
TRANS-1,2-DCE	5	8/16/2012	6.4
ANTIMONY	3	9/24/2009	19
ANTIMONY	3	8/16/2012	35
IRON	300	9/24/2009	5990
IRON	300	8/16/2012	680

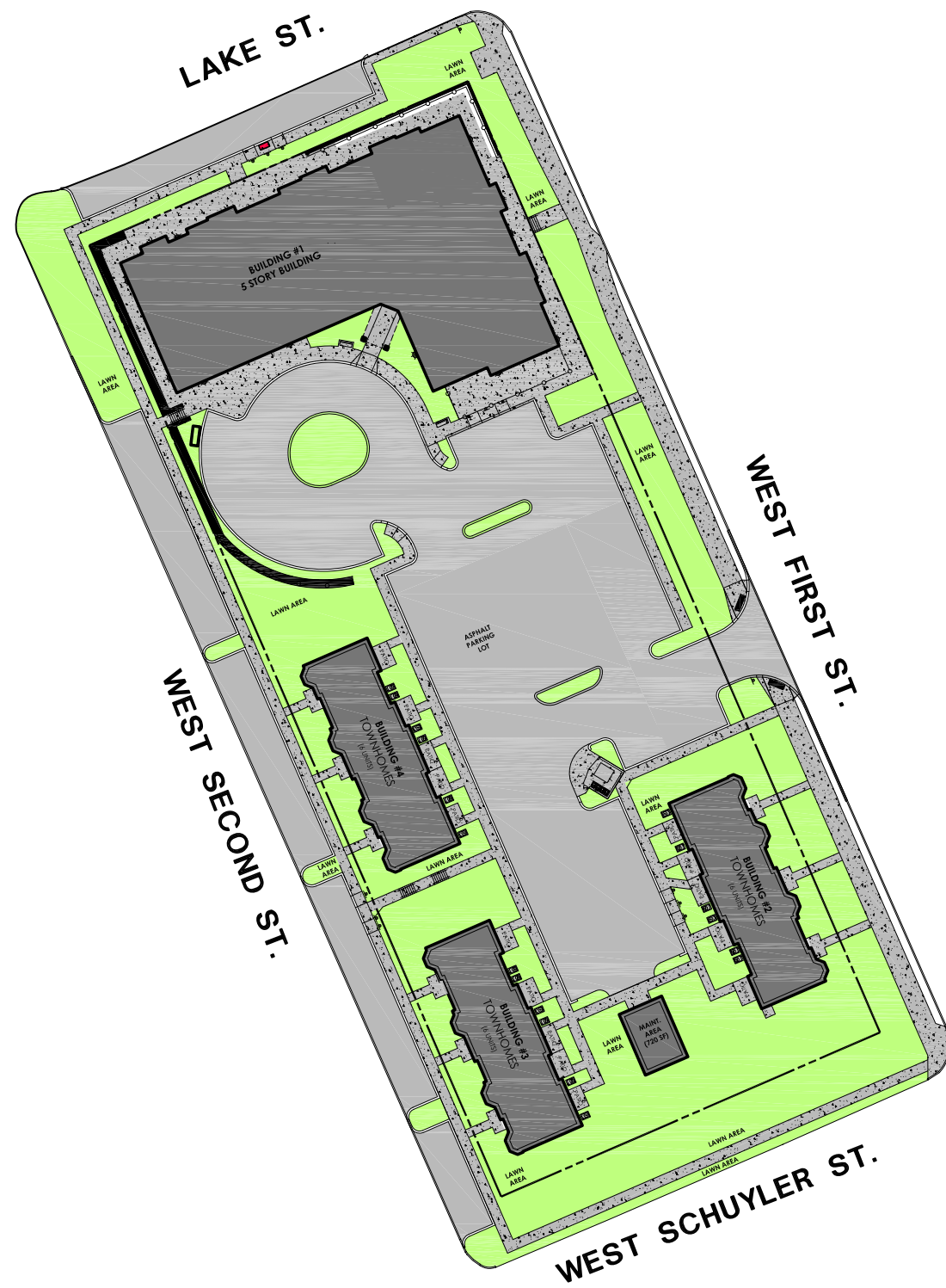
LEGEND

- PROCESS LINE
- EXISTING SUMP
- ▨ EXCAVATION AREA
- FORMER 15,000 GALLON UST



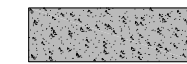

NOTES:

1. FIGURE MODIFIED FROM FIGURE 4, 2013 REPORT BY O'BRIEN & GERE.



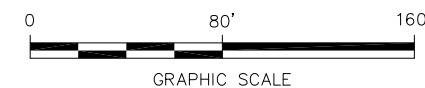


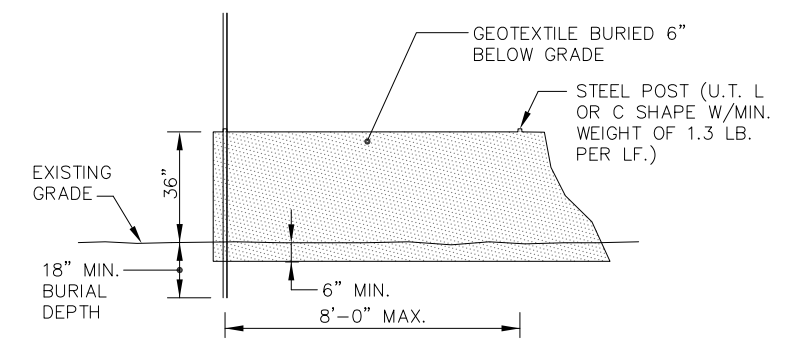
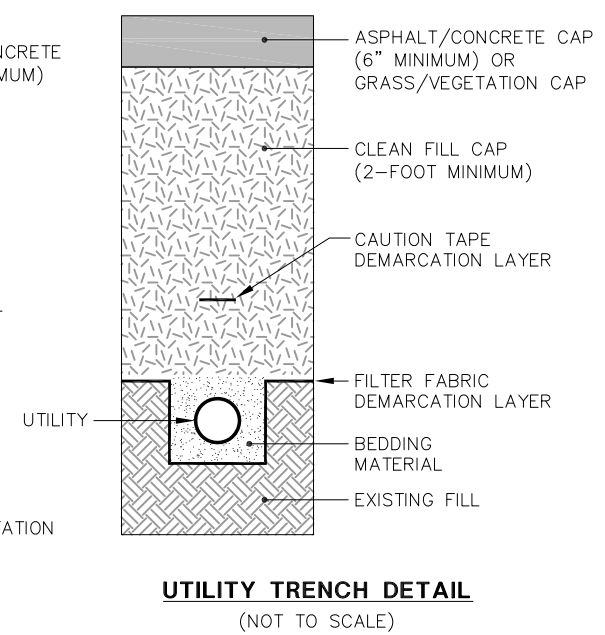
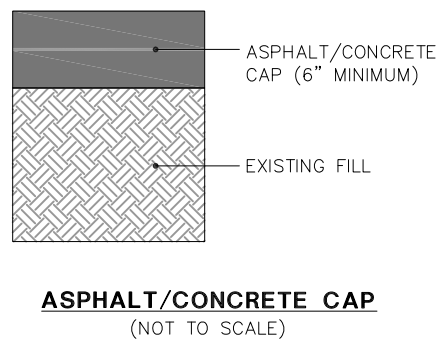
LEGEND

-  APPROXIMATE SITE BOUNDARY
-  ASPHALT CAP (6-INCH MINIMUM TYP.)
-  CONCRETE CAP (6-INCH MINIMUM TYP.)
-  LANDSCAPE CAP (2-FOOT CLEAN FILL MINIMUM WITH DEMARCATION LAYER TYP.)

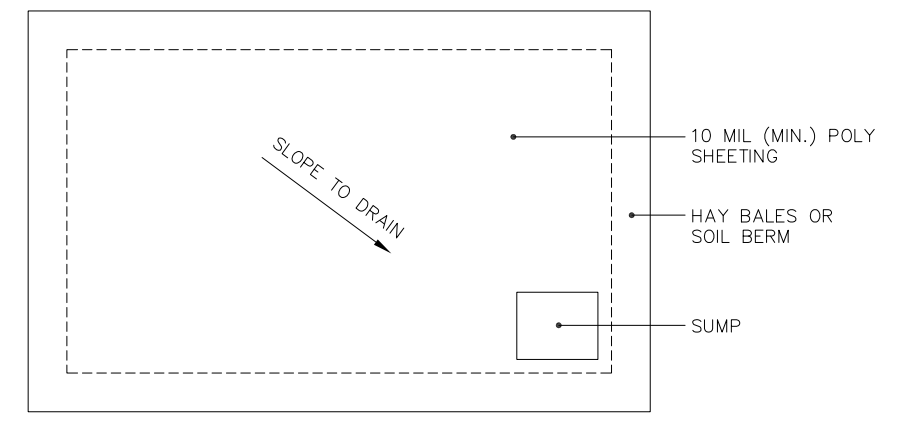
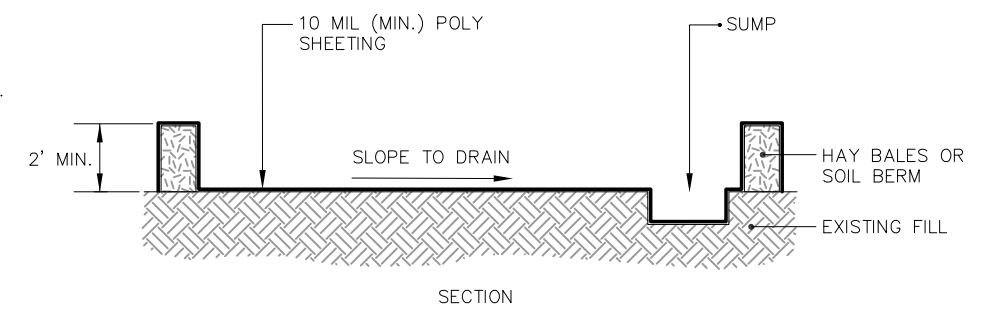
NOTES:

1. 2015 AERIAL PHOTOGRAPH FROM NYSGIS CLEARINGHOUSE WEBSITE.
2. BASE MAP FROM PASSERO ASSOCIATES DRAWING ENTITLED "SITE PLAN HARBOR VIEW SQUARE", DATED AUGUST 1, 2018.
3. ALL LOCATIONS ARE APPROXIMATE.





- NOTES:**
1. SEDIMENT DEPOSITS SHALL BE REMOVED WHEN DEPOSITS REACH APPROXIMATELY 0.5- FEET ALONG THE FACE OF THE SILT FENCE.
 2. THE SILT FENCE WILL REMAIN IN PLACE UNTIL CONSOLIDATION PHASE IS COMPLETE AND VEGETATION HAS BEEN ESTABLISHED.



STOCKPILE CONTAINMENT PAD
(NOT TO SCALE)

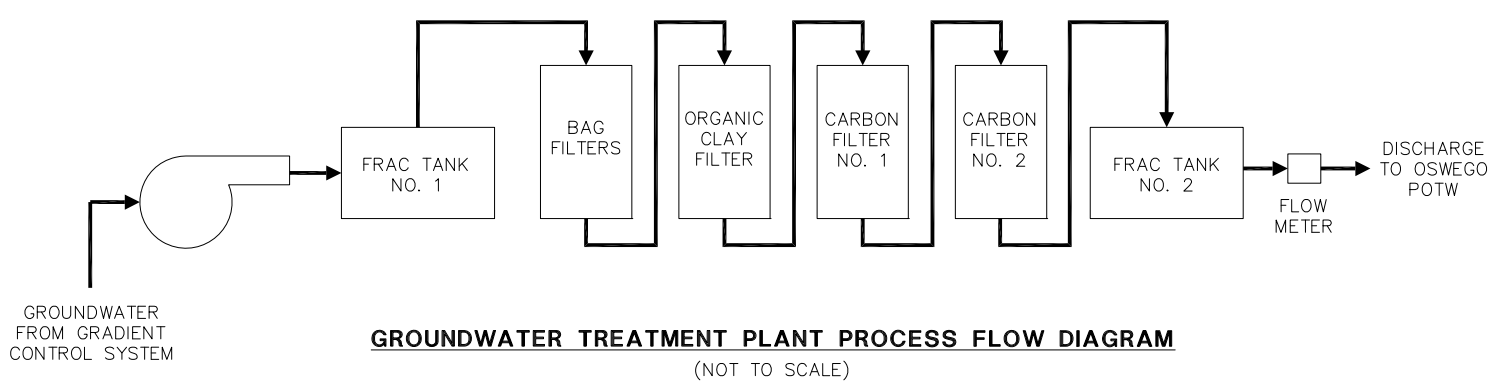
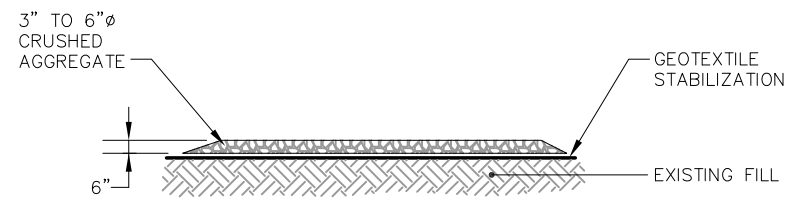
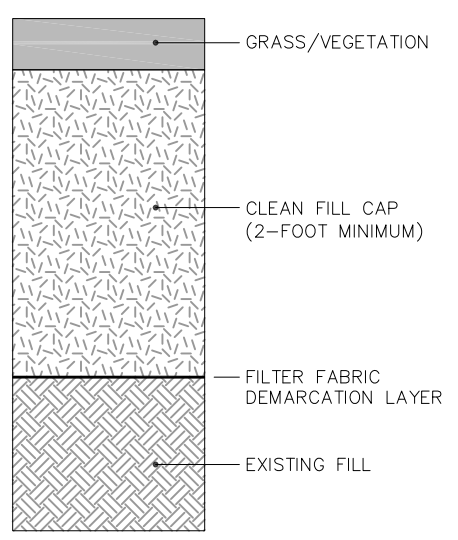


EXHIBIT 1
NYSDEC APPROVAL LETTER

Soil Remedial Action Workplan
Harbor View Square
68 West First Street
Oswego, New York

October 2018

EXHIBIT 2
ALLOWABLE CONSTITUENT LEVELS FOR IMPORTED FILL

Soil Remedial Action Workplan
Harbor View Square
68 West First Street
Oswego, New York

October 2018

Appendix 5
Allowable Constituent Levels for Imported Fill or Soil
Subdivision 5.4(e)

Source: This table is derived from soil cleanup objective (SCO) tables in 6 NYCRR 375. Table 375-6.8(a) is the source for unrestricted use and Table 375-6.8(b) is the source for restricted use.

Note: For constituents not included in this table, refer to the contaminant for supplemental soil cleanup objectives (SSCOs) in the Commissioner Policy on *Soil Cleanup Guidance*. If an SSCO is not provided for a constituent, contact the DER PM to determine a site-specific level.

Constituent	Unrestricted Use	Residential Use	Restricted Residential Use	Commercial or Industrial Use	If Ecological Resources are Present
Metals					
Arsenic	13	16	16	16	13
Barium	350	350	400	400	433
Beryllium	7.2	14	47	47	10
Cadmium	2.5	2.5	4.3	7.5	4
Chromium, Hexavalent ¹	1 ³	19	19	19	1 ³
Chromium, Trivalent ¹	30	36	180	1500	41
Copper	50	270	270	270	50
Cyanide	27	27	27	27	NS
Lead	63	400	400	450	63
Manganese	1600	2000	2000	2000	1600
Mercury (total)	0.18	0.73	0.73	0.73	0.18
Nickel	30	130	130	130	30
Selenium	3.9	4	4	4	3.9
Silver	2	8.3	8.3	8.3	2
Zinc	109	2200	2480	2480	109
PCBs/Pesticides					
2,4,5-TP Acid (Silvex)	3.8	3.8	3.8	3.8	NS
4,4'-DDE	0.0033 ³	1.8	8.9	17	0.0033 ³
4,4'-DDT	0.0033 ³	1.7	7.9	47	0.0033 ³
4,4'-DDD	0.0033 ³	2.6	13	14	0.0033 ³
Aldrin	0.005	0.019	0.097	0.19	0.14
Alpha-BHC	0.02	0.02	0.02	0.02	0.04 ⁴
Beta-BHC	0.036	0.072	0.09	0.09	0.6
Chlordane (alpha)	0.094	0.91	2.9	2.9	1.3
Delta-BHC	0.04	0.25	0.25	0.25	0.04 ⁴
Dibenzofuran	7	14	59	210	NS
Dieldrin	0.005	0.039	0.1	0.1	0.006
Endosulfan I	2.4 ²	4.8	24	102	NS
Endosulfan II	2.4 ²	4.8	24	102	NS
Endosulfan sulfate	2.4 ²	4.8	24	200	NS
Endrin	0.014	0.06	0.06	0.06	0.014
Heptachlor	0.042	0.38	0.38	0.38	0.14
Lindane	0.1	0.1	0.1	0.1	6
Polychlorinated biphenyls	0.1	1	1	1	1

Constituent	Unrestricted Use	Residential Use	Restricted Residential Use	Commercial or Industrial Use	If Ecological Resources are Present
Semi-volatile Organic Compounds					
Acenaphthene	20	98	98	98	20
Acenaphthylene	100	100	100	107	NS
Anthracene	100	100	100	500	NS
Benzo(a)anthracene	1	1	1	1	NS
Benzo(a)pyrene	1	1	1	1	2.6
Benzo(b)fluoranthene	1	1	1	1.7	NS
Benzo(g,h,i)perylene	100	100	100	500	NS
Benzo(k)fluoranthene	0.8	1	1.7	1.7	NS
Chrysene	1	1	1	1	NS
Dibenz(a,h)anthracene	0.33 ³	0.33 ³	0.33 ³	0.56	NS
Fluoranthene	100	100	100	500	NS
Fluorene	30	100	100	386	30
Indeno(1,2,3-cd)pyrene	0.5	0.5	0.5	5.6	NS
m-Cresol(s)	0.33 ³	0.33 ³	0.33 ³	0.33 ³	NS
Naphthalene	12	12	12	12	NS
o-Cresol(s)	0.33 ³	0.33 ³	0.33 ³	0.33 ³	NS
p-Cresol(s)	0.33	0.33	0.33	0.33	NS
Pentachlorophenol	0.8 ³	0.8 ³	0.8 ³	0.8 ³	0.8 ³
Phenanthrene	100	100	100	500	NS
Phenol	0.33 ³	0.33 ³	0.33 ³	0.33 ³	30
Pyrene	100	100	100	500	NS
Volatile Organic Compounds					
1,1,1-Trichloroethane	0.68	0.68	0.68	0.68	NS
1,1-Dichloroethane	0.27	0.27	0.27	0.27	NS
1,1-Dichloroethene	0.33	0.33	0.33	0.33	NS
1,2-Dichlorobenzene	1.1	1.1	1.1	1.1	NS
1,2-Dichloroethane	0.02	0.02	0.02	0.02	10
1,2-Dichloroethene(cis)	0.25	0.25	0.25	0.25	NS
1,2-Dichloroethene(trans)	0.19	0.19	0.19	0.19	NS
1,3-Dichlorobenzene	2.4	2.4	2.4	2.4	NS
1,4-Dichlorobenzene	1.8	1.8	1.8	1.8	20
1,4-Dioxane	0.1 ³	0.1 ³	0.1 ³	0.1 ³	0.1
Acetone	0.05	0.05	0.05	0.05	2.2
Benzene	0.06	0.06	0.06	0.06	70
Butylbenzene	12	12	12	12	NS
Carbon tetrachloride	0.76	0.76	0.76	0.76	NS
Chlorobenzene	1.1	1.1	1.1	1.1	40
Chloroform	0.37	0.37	0.37	0.37	12
Ethylbenzene	1	1	1	1	NS
Hexachlorobenzene	0.33 ³	0.33 ³	1.2	3.2	NS
Methyl ethyl ketone	0.12	0.12	0.12	0.12	100
Methyl tert-butyl ether	0.93	0.93	0.93	0.93	NS
Methylene chloride	0.05	0.05	0.05	0.05	12

Volatile Organic Compounds (continued)					
Propylbenzene-n	3.9	3.9	3.9	3.9	NS
Sec-Butylbenzene	11	11	11	11	NS
Tert-Butylbenzene	5.9	5.9	5.9	5.9	NS
Tetrachloroethene	1.3	1.3	1.3	1.3	2
Toluene	0.7	0.7	0.7	0.7	36
Trichloroethene	0.47	0.47	0.47	0.47	2
Trimethylbenzene-1,2,4	3.6	3.6	3.6	3.6	NS
Trimethylbenzene-1,3,5	8.4	8.4	8.4	8.4	NS
Vinyl chloride	0.02	0.02	0.02	0.02	NS
Xylene (mixed)	0.26	1.6	1.6	1.6	0.26

All concentrations are in parts per million (ppm)

NS = Not Specified

Footnotes:

¹ The SCO for Hexavalent or Trivalent Chromium is considered to be met if the analysis for the total species of this contaminant is below the specific SCO for Hexavalent Chromium.

² The SCO is the sum of endosulfan I, endosulfan II and endosulfan sulfate.

³ For constituents where the calculated SCO was lower than the contract required quantitation limit (CRQL), the CRQL is used as the Track 1 SCO value.

⁴ This SCO is derived from data on mixed isomers of BHC.

EXHIBIT 3
COMMUNITY AIR MONITORING PLAN

Soil Remedial Action Workplan
Harbor View Square
68 West First Street
Oswego, New York

October 2018

Community Air Monitoring Plan

HARBOR VIEW SQUARE
68 West First Street
OSWEGO, NEW YORK

NYS BCP Site No. C738040

Prepared by:



*Synapse Risk Management
360 Erie Boulevard East
Syracuse, New York 13202*

July 2018

Table of Contents

	<u>Page</u>
Disclaimer	2
1 Introduction	3
1.1 Objective	3
2 Air Monitoring	4
2.1 VOC Monitoring	4
2.2 Particulate Monitoring	5
2.3 Regional Meteorological Monitoring	5
3 Response and Action Levels	6
3.1 VOCs	6
3.2 Particulate Monitoring	7
4 Documentation	8
5 References	9

LIST OF FIGURES

Figure 1 – Property Location Plan

Figure 2 – Aerial Property Plan

Disclaimer

This Community Air Monitoring Plan (CAMP) was prepared by Synapse Risk Management (Synapse) for Housing Visions and is intended to be used during the implementation of the Pre-design Investigation at 68 West First Street in Oswego, New York. Any changes in project conditions and/or the scope of work will require a review and modification to this CAMP. Such changes will be completed in the form of an addendum to this plan or a revision of the plan.

The provisions of this plan are mandatory for all personnel assigned to the project. All visitors to the project site must also abide by the requirements of the plan. It should be acknowledged that the personnel of other consulting and/or contracted companies shall work in accordance with their own independent task-specific HASPs. The policies and procedures presented in this document shall not be construed to supercede any federal, state, or local regulations, and do not relieve any employer, agent, or invitee involved in the project from complying with applicable federal, state, and local regulations.

This CAMP is not intended or represented to be suitable for reuse by others on extensions of this or any other project. Any reuse without prior written approval or adaptation by Synapse will be at the user's sole risk and without liability and legal exposure to Synapse.

1 Introduction

This plan presents the Community Air Monitoring Plan (CAMP), which was prepared by Synapse Risk Management (Synapse) to protect the community from any potential airborne releases that could result during field work associated with the Harbor View Square Brownfield Cleanup Program (BCP).

This plan is consistent with requirements set forth in the New York State Department of Environmental Conservation (NYSDEC) Division of Environmental Remediation, *Technical Guidance for Site Investigation and Remediation*, May 2010 (DER-10).

1.1 Objective

This CAMP identifies the air monitoring activities to be performed at the site during implementation of both non-intrusive and intrusive activities. The overall objectives of this CAMP are as follows:

- Prevent exposures to the public during the implementation of work activities over the course of the Harbor View Square BCP;
- Set forth the monitoring requirement and associated documentation; and
- Set forth guidance for potential contingency situations that may arise.

2 Air Monitoring

Air monitoring during the implementation of various work activities will include volatile organic compounds (VOCs) and particulate monitoring utilizing specialized instruments, visual observations for fugitive dust and documenting meteorological conditions on a daily basis. The monitoring locations, frequency and methods for monitoring VOCs and particulate are discussed in the following sections of this CAMP.

2.1 VOC Monitoring

Real time VOC monitoring will be conducted during non-invasive and invasive work activities conducted during various aspects of the BCP. The locations will be based on wind direction and frequency of the monitoring will be based the type of work being conducted. Below is breakdown of work activities that require continuous versus. periodic VOC monitoring.

Monitoring Type	Work Activities
Continuous	<ul style="list-style-type: none"> ▪ Soil Borings or Monitoring Well Installation; ▪ Soil Excavation; ▪ Soil Loading ▪ Test pits; and ▪ Demolition of contaminated structures.
Periodic	<ul style="list-style-type: none"> ▪ Groundwater sampling

The upwind location will be determined at the beginning of each work day with an initial VOC recording. If the wind direction changes during the course of the work, another VOC reading will be recorded at the new upwind location to establish baseline conditions. The downwind measurements will be recorded at the downwind perimeter of the work area. If the work activities are determined ort considered invasive then continuous monitoring will be conducted. If the work activities are considered non-invasive, then periodic monitoring for VOC will be sufficient.

Locations	Frequency
Upwind perimeter	<ul style="list-style-type: none"> ▪ Start of work day; and ▪ New background measurements based on wind direction change.
Downwind perimeter	<ul style="list-style-type: none"> ▪ Continuous for invasive work; and ▪ Periodic for non-invasive work.

The VOC recording will be performed utilizing a photoionization detector (PID) that should be calibrated on a daily basis. The PID shall be adjusted to provide continuous

monitoring and integrating a 15-minute running average through the course of the work day.

2.2 Particulate Monitoring

The particulate monitoring will be conducted on a continuous basis and at varying locations based on wind direction. The upwind location will be determined at the beginning of each workday. If the wind direction changes through the course of the day a new upwind location will be established for baseline conditions.

Locations	Frequency
Upwind perimeter	Continuous
Downwind perimeter	Continuous

The particulate recordings will be conducted utilizing an instrument that can measure particles less than 10 micrometers (um) in size (PM-10). The particulate monitor should be programmed to record in real time and set to have an alarm notification if an action level for particulate is exceeded during work activities (0.150 mg/m³).

2.3 Regional Meteorological Monitoring

Meteorological monitoring should be documented daily through the course of the work activities. Daily temperature, wind direction and general atmospheric conditions, such as clear / cloudy and rain / snow should be recorded

3 Response and Action Levels

3.1 VOCs

The real-time monitoring data (15-minute averages) will dictate specific work procedures and locations. The air monitoring devices to be used include:

- Photoionization Detector (PID) with a 10.6 millivolt lamp;
- MIE DATARAM 4000 to monitor particulate levels.

Levels	Actions
Total VOCs at downwind perimeter exceed background by 5 parts per million (ppm) (15-Min Average)	<ul style="list-style-type: none"> ▪ Stop work activities & continue monitoring. ▪ Work activities can resume when levels reduce below 5 ppm.
Total VOCs at downwind perimeter exceed background levels between 5 ppm & 25 ppm (15-Min Average)	<ul style="list-style-type: none"> ▪ Stop work activities & identify the source of the VOC exceedance & correct, continue monitoring. ▪ Continue work activities if VOCs 200 feet downwind of the site perimeter or ½ distance to the nearest structure is below 5 ppm (15-Min Average). Should not be less than 20-feet.
Total VOCs at the perimeter work area exceed 25 ppm (15-Min Average)	<ul style="list-style-type: none"> ▪ Stop all work activities.

3.2 Particulate Monitoring

Real time particulate monitoring will be conducted by Synapse at the site perimeter. Particulate monitoring will be conducted utilizing a MIE DATARAM 4000 at a minimum frequency of once per hour consistent with TAGM 4031. The continuous particulate monitoring will be integrated over a 15-minute running average.

Levels	Actions
Particulate level at the downwind perimeter 0.1 milligrams per cubic meter (mg/m ³) greater than the up-wind location (15 min period).	<ul style="list-style-type: none"> ▪ Implement dust suppression measures.
Visible dust observed leaving the perimeter.	<ul style="list-style-type: none"> ▪ Implement dust suppression measures.
After implementation of dust suppression measures, particulate levels at downwind perimeter greater than 0.150 mg/m ³ action level.	<ul style="list-style-type: none"> ▪ Stop all work. ▪ Work activities can only resume if 0.150 mg/m³ action level are below at the downwind location and no visible dust.

4 Documentation

The following data will be recorded and documented daily when the CAMP is implemented:

- Daily calibration logs to document that instruments are working within the limits per the manufacturer;
- Weather conditions including temperature, wind direction, wind speed, other atmospheric condition, date and time;
- Logs of VOCs on a 15-minute average;
- Logs of continuous Particulate monitoring; and

5 References

This CAMP complies with applicable Occupational Safety and Health Administration (OSHA) regulations, United States Environmental Protection Agency (USEPA) regulations, and Synapse Health and Safety policies and procedures. This plan follows the guidelines established in the following:

- NYSDEC DER-10.
- NYSDEC Technical and Administrative Guidance Memorandum (TAGM) MWR-89-4031 entitled “Fugitive Dust Suppression and Particulate Monitoring Program and Inactive Hazardous Waste Site,” dated October 27, 1989 (TAGM 4031).
- Standard Operating Safety Guides, EPA (Publication 9285.1-03, June 1992).
- Occupational Safety and Health Guidance Manual for Hazardous Waste Site Activities, NIOSH, OSHA, USCG, EPA (86-116, October 1985).
- Title 29 of the Code of Federal Regulations (CFR), Part 1910.120.
- Title 29 of the Code of Federal Regulations (CFR), Part 1926.
- Pocket Guide to Chemical Hazards, DHHS, PHS, CDC, NIOSH, (2010).
- Threshold Limit Values and Biological Exposure Indices, ACGIH, (2013)
 - Documentation of any exceedance and corrective response.

FIGURES

Community Air Monitoring Plan
Harbor View Square
68 West First Street
Oswego, New York

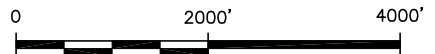
July 2018

Figure 1 – Property Location Plan
Figure 2 – Aerial Property Plan



SOURCE: USGS 7.5 MIN. TOPOGRAPHIC QUADRANGLES: OSWEGO WEST, N.Y., 1954, PHOTOREVISED 1978 AND OSWEGO EAST, N.Y., 1954, PHOTOREVISED 1978.

APPROXIMATE GRAPHIC SCALE:



P: EPA
5/16/17
SYNAPSE/WIP/HSGVIS 24-16/HSGVIS-2416-SL3.DWG



SYNAPSE PROPERTY RESOURCES
360 ERIE BLVD. EAST
SYRACUSE, NEW YORK 13202

HARBOR VIEW SQUARE
NYSBCP SITE NO. C738040
68 WEST FIRST STREET
OSWEGO, NEW YORK

PROPERTY LOCATION PLAN

PROJECT NO.:
HSGVIS-24-16-05

DATE:
MAY 2017

FIGURE NO.:

1

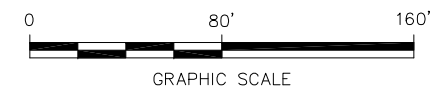


LEGEND


— APPROXIMATE SITE BOUNDARY

NOTES:

1. 2015 AERIAL PHOTOGRAPH FROM NYSGIS CLEARINGHOUSE WEBSITE.
2. ALL LOCATIONS ARE APPROXIMATE.



P: BL
5/18/17
SYNAPSE/WIP/HSGVIS 24-16/HSGVIS-2416-B01.DWG

 **synapse**
connect. advise. insure.
SYNAPSE PROPERTY RESOURCES
360 ERIE BLVD. EAST
SYRACUSE, NEW YORK 13202

HARBOR VIEW SQUARE
NYSBCP SITE NO. C738040
68 WEST FIRST STREET
OSWEGO, NEW YORK

**AERIAL
PROPERTY PLAN**

PROJECT NO.:
HSGVIS-24-16-05
DATE:
MAY 2017
FIGURE NO.:
2

EXHIBIT 4
STORMWATER POLLUTION PREVENTION PLAN (PREPARED BY PASSERO)

Soil Remedial Action Workplan
Harbor View Square
68 West First Street
Oswego, New York

October 2018

Stormwater Pollution Prevention Plan

Harbor View Square

City of Oswego, NY

August 2016

Prepared for:

Housing Visions Consultants, Inc.

1201 East Fayette Street

Syracuse, NY 13201

P.N. 20160101.0000



PASSERO ASSOCIATES
engineering architecture

Stormwater Pollution Prevention Plan

Harbor View Square – City of Oswego, NY

CONTENTS

1.0	INTRODUCTION.....	1
2.0	EXISTING CONDITIONS.....	2
3.0	DEVELOPED CONDITIONS	3
4.0	GREEN INFRASTRUCTURE.....	4
5.0	STANDARD STORMWATER MANAGEMENT PRACTICES (SMP'S).....	4
6.0	CONSTRUCTION EROSION CONTROL PRACTICES & INSPECTIONS	5
7.0	POST CONSTRUCTION	7

APPENDICES

APPENDIX A.	SWPPP Practices, Procedures and Certifications
APPENDIX B.	Aerial Photograph
APPENDIX C.	Site as Depicted by the USGS Quadrangle Map
APPENDIX D.	Environmental Resource Mapping
APPENDIX E.	Wetland Mapping
APPENDIX F.	Soils Map
APPENDIX G.	FEMA Mapping
APPENDIX H.	Archeological Sensitive Areas Map
APPENDIX I.	Drainage Area Maps
APPENDIX J.	Existing, Developed and Time of Concentration Hydrographs
APPENDIX K.	Water Quality Calculations
APPENDIX L.	NYSDEC SPDES General Permit for Storm Water Discharges from Construction Activity (Permit No. GP-0-15-002)
APPENDIX M.	Construction Site Inspection and Maintenance Log Sheets
APPENDIX N.	MS4 Acceptance Form
APPENDIX O.	Notice of Intent
APPENDIX P.	Notice of Termination (Blank)
APPENDIX Q.	Erosion Control Details
APPENDIX R.	Maintenance Inspection Reports

Stormwater Pollution Prevention Plan

Harbor View Square – City of Oswego, NY

1.0 INTRODUCTION

The parcel considered for redevelopment is located at 68 West 1st Street in the City of Oswego. The parcel is situated between West 2nd Street to the west, West 1st Street to the east, Schuyler Street and Lake Street to the south and north respectively. The parcel is approximately 3.33 acres in size and currently has a small portion of lawn area, large parking area and existing building on site. The proposed project includes removal of the existing building and replacement with three 6-unit townhome buildings, and a mixed use commercial building with commercial (storefront) space on the first floor with apartments on the remaining four floors above.

The provided Stormwater Pollution Prevention Plan (SWPPP) materials adhere to the State Pollutant Discharge Elimination System (SPDES) General Permit (GP-0-15-02) for Stormwater Discharges from Construction Activity. The guidelines specified by the *New York State Stormwater Management Design Manual, January 2015* (SWDM) were used to analyze the proposed stormwater management facilities for this project. Erosion and Sediment controls were designed in conformance with New York Standards and Specifications for Erosion and Sediment Controls.

A copy of this SWPPP and associated inspection logs will be kept on site in the proposed office space and job trailer/SWPPP mailbox.

Owner/Operator

Housing Visions Consultants, Inc.
1201 East Fayette Street
Syracuse, NY 13201
Contact: Diana Jakimoski

SWPPP Preparer

Passero Associates
242 West Main Street, Suite 100
Rochester, NY 14614
(585) 325-1000
Contact: Dave Cox, P.E.

Stormwater Pollution Prevention Plan

Harbor View Square – City of Oswego, NY

2.0 EXISTING CONDITIONS

A. Topography/ Drainage

Currently the existing site slopes from west to east. There is an existing retaining wall on the west side of the site that, in conjunction with the existing building, retains approximately 6-7 feet of earth. Elevation change from west to east overall is approximately 10-12 feet across the site, which is generally the direction of stormwater runoff flow. The site runoff is currently collected in the enclosed stormwater system of catch basins and storm pipe/combined sewer on West 1st Street. The proposed project will direct all storm sewer to the storm system at the corner of West 1st Street and Schuyler Streets.

B. Soils

Soils within the project boundary and within the offsite drainage area were reviewed for their hydrologic soil group in accordance with the USDA's NRCS Soil Survey. The soils are summarized below and the soils report can be found in Appendix B.

Group: Ub Urban	Hydraulic Soil Group: D
	Slopes: 0-2%

C. Wetlands

The site was reviewed for the existence of federal and state regulated wetlands within the property boundaries. Federal wetlands were researched using the National Wetlands Inventory (NWI) using an online U.S. Fish and Wildlife website search. State regulated wetlands were researched using the NYSDEC's online Environmental Resource Mapper website. Review of the mapping indicates there no federal and state wetlands on site.

Refer to Appendix D and E for the federal and state regulated wetlands mapping.

D. Floodplain

Floodplains were researched using the online Firmette tools found at FEMA Map Service Center.

Review of the floodplain mapping indicates there no floodplains located on the site according to FEMA map 36075C0259G, dated June 18, 2013. Refer to Appendix G for the FEMA Firmette map.

Stormwater Pollution Prevention Plan

Harbor View Square – City of Oswego, NY

E. NYSDEC Environmental Resources

The NYSDEC has an Environmental Resource Mapper on its website. The Environmental Resource Mapper is an interactive mapping application that can be used to identify some of New York State's natural resources and environmental features that are state protected, or of conservation concern. It displays the following:

- Animals and plants that are rare in New York, including those listed as Endangered or Threatened (generalized locations). [Updated May 2008]
- Significant natural communities, such as rare or high-quality forests, wetlands, and other habitat types.
- New York's streams, rivers, lakes, and ponds; water quality classifications are also displayed

According to this database, there are rare plants/animals in the vicinity of the project because of the project sites' proximity to Lake Ontario. As the site is fully developed there is not the required habitat to support any rare plants or animals. Refer to Appendix D for the NYSDEC's Environmental Resource Mapping.

F. State Historic Preservation Office Review

The site was reviewed for the presence of an archeological sensitive area within the property boundary. The archeo-sensitive areas were located using online GIS tools found at the NYS Historic Preservation Office (SHPO). The site is located within an archeological-sensitive area. A phase IA cultural resource study was previously performed.

G. Brownfield

The project site is located within a brownfield site. As part of this project, the contaminated area will be remediated in accordance with NYSDEC Regulations.

3.0 DEVELOPED CONDITIONS

The proposed development will consist of a five-floor mixed commercial use and residential apartment building, and three 6-unit townhome buildings. The project will also construct the parking lots and access roads as well as water and sanitary utilities. The storm sewers on site will collect runoff, pass it through a proprietary stormwater quality unit, where it will connect and discharge to the City owned storm system on West 1st Street. The site will be graded to maintain the existing west to east topography.

Stormwater Pollution Prevention Plan

Harbor View Square – City of Oswego, NY

4.0 GREEN INFRASTRUCTURE

Since the proposed project is a redevelopment project, green infrastructure and RR_v reductions are not required. The proposed project does however, increase the amount of lawn and greenspace from the existing amount by approximately 2,000 sf.

5.0 STANDARD STORMWATER MANAGEMENT PRACTICES (SMP'S)

The project is a redevelopment site, with a decrease in impervious area. As a result, this project will follow the criteria of chapter 9 of the *New York State Stormwater Management Design Manual, January 2015 (SWMD)* which provides C_p, Q_p and Q_f protection. The project will utilize a proprietary stormwater quality control device to treat 75% of the water quality volume, in accordance with Seciton 9.3 of the SWDM, and since it is a redevelopment project RR_v practices and requirements are not required. Since we are reducing the amount of impervious area and not changing the hydrology of the site, quantity and channel protection controls are not required as indicated in Section 9.2.1 A.II. And A.III. of the SWDM. Quantity controls can also be waived, since the site is located 340 feet immediately upstream from and will discharge almost immediately to the Oswego River/Lake Ontario. Refer to Appendix K for Runoff Reduction volume calculations. Refer to the table below for a summary of the runoff rates:

Description	Runoff (cfs)			
	1 Year	10 Year	25 Year	100 Year
Pre-Developed Condition	7.435	13.55	16.90	23.50
Post-Developed Condition	4.762	8.852	11.10	15.53
Reduction Provided	35%	35%	34%	34%

A summary of the water quantity and quality control targets is provided below:

Description	Required	Provided
WQ _v Total	0.21 ac-ft	0.16 ac-ft (75%)
Min RR _v Total	N/A ac-ft	N/A ac-ft
CP _v Total	N/A ac-ft	N/A ac-ft
Q _p Total	16.90 cfs	11.1 cfs
Q _f Total	23.50 cfs	15.53 cfs

Stormwater Pollution Prevention Plan

Harbor View Square – City of Oswego, NY

As shown above, the peak rate of discharge is less for all storm events. This meets the intent of stormwater management by releasing the water at a sustainable rate that does not lead to erosion or high levels of pollution entering the ground water. Refer to Appendix J for the Hydraflow analysis.

6.0 CONSTRUCTION EROSION CONTROL PRACTICES & INSPECTIONS

The Owner is responsible for having monthly inspections of the storm water management facility completed. The inspections shall review and document the following at a minimum: visual inspection of the outlet structure, check of the outlets for excessive sediment accumulation, visual inspection of the earthen berm for signs of erosion, burrowing, vegetation degradation, or any other issues of concern. A certified copy of the annual summary of inspections report will be provided to the City of Oswego by the first of December.

Several erosion control practices will be utilized during construction by the contractor under direct supervision by the owner and a qualified SWPPP inspector (S.W.T.). These practices are explained below and shown in detail in the Appendices of this report and the construction plans.

- Silt Fence → Silt fencing shall be installed at the toe of all slopes along the perimeter of the disturbed areas and at the toe of slope for any soil stock pile areas. Also, a row of silt fence will be installed around the perimeter of all wetlands in an effort to delineate its boundary. The fencing will be installed in accordance with the NYSDEC construction standards and at the instruction of this plan. The silt fencing shall be buried in the ground at least 6 inches. The contractor shall provide continued monitoring to ensure the silt fencing remains intact, and shall repair as needed. When the silt accumulates to greater than 1/3 the height of the fence the contractor shall remove and dispose of the silt.
- Stabilized Construction Entrance → The project entrance shall serve as the construction entrance to the project and shall be installed according to the details of this plan. The contractor shall ensure that mud is not tracked onto the adjacent roadways and that the stone entrance properly removes mud and debris from construction vehicles.
- Sediment Basin → the proposed infiltration basins shall serve as a temporary sediment basin during construction. A temporary outlet pipe will be installed to allow runoff to exit the basin. The SMA area shall be undercut a minimum of 3 ft. below the temporary pipe to provide a settling area for the runoff. Prior to final site stabilization, the sediment shall be removed from the facility.

Stormwater Pollution Prevention Plan

Harbor View Square – City of Oswego, NY

- Drop Inlet Protection → All field inlets and catch basins shall have inlet protection in accordance with the detail the Appendix. Drop Inlet protection can be removed from catch basins in the roadway when the sub base is installed, and from the field inlets when the adjacent area is brought to final grade and stabilized.
- Seeding and Stabilization → The contractor shall seed and stabilize all disturbed areas not to be worked for 7 days within 7 days of the last disturbance. Stabilization measures may include but are not limited to straw mulching, wood chip mulching, jute mesh and hydroseeding. The SMA and adjacent areas shall be stabilized immediately following their shaping and installation.

All embankments greater than 3:1 shall be stabilized with jute mesh.

- Truck Washdown area → a truck washdown area will be provided adjacent to the construction entrance. This area will be constructed such that it drains to a sediment basin immediately adjacent prior to discharging offsite.

Additional measures may be required during construction at the guidance of the owner or certified SWPPP Inspector. The contractor shall begin to make all adjustments to the erosion control within 24 hours of receipt of any deficiencies. The owner will be responsible for providing bi-weekly reports by a qualified inspector in accordance with the GP-0-15-002, during construction to the Village.

Any modifications to the SWPPP will be reported to the Village in writing prior to implementation. See Appendix A for additional SWPPP information.

The owner is responsible for having a qualified operator on site at all times who has at least 4 hours of erosion control training in accordance with the GP-0-15-002. Once the site has achieved 80% stabilization and ground cover, the Village shall be required to sign off on the Notice of Termination prior to submission to the NYSDEC. Removal of all temporary erosion and sediment control practices is required prior to demobilization.

Stormwater Pollution Prevention Plan

Harbor View Square – City of Oswego, NY

7.0 POST CONSTRUCTION

The owner of the subject project will be responsible for all post construction practices. The contact information for the owner is illustrated on the cover of this plan as well as the design plans for the project. The post construction practices include performing annual inspections of the SMAs to ensure proper working conditions and ensure continual stabilized cover of all project areas to 80% cover, minimum. All applicable inspection and maintenance activities shall continue until the 80% cover is met. Any silt removal will be disposed either off site or on site and immediately stabilized in accordance with the practices of this plan.

Additionally, annual monitoring of the storm sewer structures will be provided by the owner to ensure that they are functioning properly. These inspections will be certified by a Professional Engineer and a copy of the inspection report will be furnished to the City of Oswego.

**APPENDIX A. SWPPP PRACTICES, PROCEDURES AND
CERTIFICATIONS**

STORMWATER POLLUTION PREVENTION PLAN
Riverwood Student Housing – Henrietta, NY

SITE DESCRIPTION			
Project Name and Location: (Latitude, Longitude, or Address)	Harbor View Square 68 West 1 st Street Oswego, NY	Owner Name and Address:	Housing Visions Consultants, LLC 1201 East Fayette Street Syracuse NY
Description: (Purpose and Types of Soil Disturbing Activities)	The subject property is 3.33 acres containing an existing building and parking area (and former ROW), which will be developed into a multi-use property including a mixed use apartment/retail space building and three 6-unit townhome buildings. There will be a reduction in		
Runoff Coefficient/Soils Conditions:	The runoff coefficient impervious area is 0.9 and 0.2 for the grass areas. The soils on-site generally consist of loams with hydrologic soil classes of C and D or C/D.		
Site Area:	3.33 acres		
Sequence of Major Activities			
<p>The order of activities will be as follows:</p> <ol style="list-style-type: none"> 1. Install stabilized construction entrance. 2. Install perimeter silt fencing 3. Grade improvements areas within the project site. Areas where construction activity temporarily ceases for more than 7 days will be stabilized with a temporary seed and mulch within 7 days of the last disturbance. 4. Construct drop inlet protection devices after storm structure installation as shown on this plan. 5. Replace topsoil and fine grade. 6. Hydro-seed all disturbed areas within 7 days after final grading, contractor is responsible to reseed if grading is unsatisfactory. 7. Upon approval of the city, remove all temporary siltation controls. 8. Slopes shall not exceed 1' vertical to 3' horizontal max. Maintain 1:4 where possible. 9. Minimum of 6" of topsoil is to be placed on all grass areas. 10. Additional erosion control measures may be required based upon actual field conditions AOB. Contractor shall provide for this cost in his contract. 11. The contractor shall be responsible for all siltation and erosion control measures from installation through maintenance and removal after re-vegetation has been established. 12. All end sections will be provided with rip-rap aprons. 13. All erosion and sediment control methods will be designed and installed in accordance with the latest edition of the New York State Standards and Specifications for Erosion and Sediment Control. 14. All erosion control measures will be removed after approved by a qualified professional. 			
Name of Receiving Waters:	Tributary to Oswego River		

CONTROLS

Erosion and Sediment Controls

Stabilization Practices

Temporary Stabilization - Topsoil will be replaced onsite or removed from the site. Disturbed portions of the site where construction activity temporarily ceases for at least 7 days will be stabilized with temporary seed and mulch no later than 7 days from the last construction activity in that area. The temporary seed shall be Rye (grain) applied at the rate of 120 pounds per acre. Prior to seeding, 2,000 pounds per acre of ground agricultural limestone and 1,000 pounds per acre of 10-10-10 fertilizer shall be applied. If applicable, areas of the site which are to be paved will be temporarily stabilized by applying geotextile and stone sub-base until bituminous pavement can be applied.

Permanent Stabilization - Disturbed portions of the site where construction activities permanently cease shall be stabilized with permanent seed no later than 7 days after the last construction activity. The permanent seed mix shall be as indicated on the plans and specifications.

Structural Practices

Light stone fill (check dams) will be installed along flow lines and at the discharge side of the culvert excavations to act as a runoff "filter" as per the plans and specifications.

Stormwater Management

The proposed stormwater management pond will provide stormwater quality and siltation control during the construction process. The areas which are not graded as part of this project will remain untouched. When construction has been completed all surfaces will be restored and erosion control measures removed after all turf areas are established. After construction has been completed the siltation basins will be cleaned of all construction debris, then filled and stabilized.

Post Construction Stormwater Management/Maintenance Procedures

Once the stormwater management areas are permanently stabilized and operating properly, a monthly inspection is required. This shall consist of:

- A visual inspection of the outlet structure and removal of any debris that may affect its performance.
- Checking the facilities forebay for excess sediment accumulation, and removing the sediment if necessary.
- A visual inspection of the earthen berm. Signs of erosion or areas lacking vegetation should be identified and corrected.
- Provide a report summarizing the above to the Town of Lancaster in a format acceptable to their office.
- See attached GP-01-15-002 for additional inspection requirements
- Sediment removal from forebay every five to six years or when 50% full.

OTHER CONTROLS

Waste Disposal:

Waste Material - All waste material will be collected and stored in a metal dumpster rented from a NYSDEC approved hauler, which is a licensed solid waste management company. The dumpster will meet all local and state solid waste management regulations. All trash and construction debris from the site will be deposited in the dumpster. The dumpster will be emptied a minimum of once per week or more often if necessary, and the trash will be hauled to a NYSDEC approved dump. No construction waste material will be buried on site. All personnel will be instructed regarding the correct procedures for waste disposal. Notices stating these practices will be posted in the office trailer and the individual who manages the day-to-day operations will be responsible for seeing that these procedures are followed.

Hazardous Waste – All hazardous waste materials will be disposed of in a manner specified by local and state regulations or by the manufacturer. Site personnel will be instructed in these practices and the individual who manages the day-to-day operations will be responsible for seeing that these practices are followed.

Sanitary Waste – If portable units are used, all sanitary waste will be collected from the portable units a minimum of three times per week by a licensed sanitary waste management contractor, as required by local regulation.

Offsite Vehicle Tracking:

The paved streets adjacent to the site will be swept daily to remove any excess mud, dirt, or rock tracked from the site. Dump trucks hauling material from the construction site will be covered with a tarpaulin.

TIMING OF CONTROLS/MEASURES

As indicated in the Sequence of Major Activities, the erosion and sedimentation control measures, including silt fence, will be constructed prior to clearing or grading of any other portions of the site. Areas where construction activity temporarily ceases for more than 7 days will be stabilized with a temporary seed and mulch within 7 days of the last disturbance. Once construction activity ceases permanently in an area, that area will be stabilized with permanent seed and mulch.

CERTIFICATION OF COMPLIANCE WITH FEDERAL, STATE, AND LOCAL REGULATIONS

The stormwater collection and discharge complies with the NYSDEC requirements of the New York State Stormwater Management Design Manual.

MAINTENANCE/INSPECTION PROCEDURES

Erosion and Sediment Control Inspection and Maintenance Practices

These are the inspection and maintenance practices that will be used to maintain erosion and sediment controls:

- All control measures will be inspected at least once each week if there is 5 acres or less of disturbance. Twice a week if more than 5 acres is disturbed.
- All measures will be maintained in good working order; if a repair is necessary; it will be initiated within 24 hours of report.
- Built-up sediment will be removed from silt fence when it has reached one-third the height of the fence.
- Temporary and permanent seeding and planting will be inspected for bare spots, washouts, and health of growth.
- A maintenance inspection report will be made after each inspection. A copy of the report form to be completed by the inspector is attached.
- The site superintendent will select individuals who will be responsible for inspections, maintenance and repair activities, and filling out the inspection and maintenance report.
- Personnel selected for inspection and maintenance responsibilities will receive training from the site superintendent. They will be trained in all the inspection and maintenance practices necessary for keeping the erosion and sediment controls used on-site in good working order.

Non-Stormwater Discharges

No non-stormwater discharges will occur from the site during the period, except the following:

- Pavement wash waters (where no spills or leaks of toxic or hazardous materials have occurred).
- Uncontaminated groundwater (from dewatering excavation).

INVENTORY FOR POLLUTION PREVENTION PLAN

The materials or substances listed below are expected to be present on-site during construction:

Select Granular Fill	Topsoil	HDPE Pipe
Precast Concrete	Mulch	Construction Signs
Concrete	Joint Sealant	Sign Panels & Sign Supports
Seed	Electric Cable	Metal Frames & Grates
Steel Conduit	Asphalt Tack Coat	PVC Pipe
Subbase Course	Asphalt Concrete	

SPILL PREVENTION

Material Management Practices

The following are the material management practices that will be used to reduce the risk of spills or other accidental exposure of materials and substances to stormwater runoff.

Good Housekeeping:

The following good housekeeping practices will be followed on-site during the construction project:

- An effort will be made to store only enough product required to do the job.
- All materials stored on-site will be stored in a neat, orderly manner in their appropriate containers and, if possible, under a roof or other enclosure.
- Products will be kept in their original containers with the original manufacturer's label.
- Substances will not be mixed with one another unless recommended by the manufacturer.
- Whenever possible, all of a product will be used up before disposing of the container.
- Manufacturers' recommendations for proper use and disposal will be followed.
- The site superintendent will inspect daily to ensure proper use and disposal of materials on-site.

Hazardous Products:

These practices are used to reduce the risks associated with hazardous materials:

- Products will be kept in original containers unless they are not re-sealable.
- Original labels and material safety data will be retained; they contain important product information.
- If surplus product must be disposed of, manufacturers' or local and state recommended methods of proper disposal will be followed.

SPILL PREVENTION (Continued)

Product Specific Practices

The following product specific practices will be followed on-site:

Petroleum Products:

All on-site vehicles will be monitored for leaks and receive regular preventive maintenance to reduce the chance of leakage. Fuel oil for construction machinery will be stored in an above-ground tank with a suitable containment system. Material safety data sheets will be filed in the site superintendent's trailer. Any asphalt substances used on-site will be applied according to the manufacturer's recommendations.

Fertilizers:

Fertilizers used will be applied only in the minimum amounts recommended by the manufacturer. Once applied, fertilizer will be worked into the soil to limit exposure to stormwater. The contents of any partially used bags of fertilizer will be transferred to resealable plastic bags to avoid spills.

Paints:

All containers will be tightly sealed and stored when not required for use. Excess paint will not be discharged to the storm sewer system, but will be properly disposed of according to manufacturers' instructions or state and local regulations.

Concrete Trucks:

Concrete trucks will not be allowed to wash out or discharge surplus concrete or drum wash water on site.

Spill Control Practices

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

- Manufacturers' recommended methods for spill cleanup will be clearly posted and site personnel will be made aware of the procedures and the location of the information and cleanup supplies.
- Materials and equipment necessary for spill cleanup will be kept in the material storage area on-site. Equipment and materials will include but not be limited to brooms, dust pans, mops, rags, gloves, kitty litter, sand, sawdust, and plastic and metal trash containers specifically for this purpose.
- All spills will be cleaned up immediately after discovery.
- The spill area will be kept well ventilated and personnel will wear appropriate protective clothing to prevent injury from contact with hazardous substance.
- Reportable spills of any petroleum-based material will be reported to the appropriate state or local government agency.
- The spill prevention plan will be adjusted to include measures to prevent this type of spill from reoccurring and how to clean up the spill if there is another one. A description of the spill, what caused it, and the cleanup measures will also be included.
- The site superintendent responsible for the day-to-day operations will be the spill prevention and cleanup coordinator. He will designate at least three other site personnel who will receive spill prevention and cleanup training. These individuals will each become responsible for a particular phase of prevention and cleanup. The names of responsible spill personnel will be posted in the material storage area and in the office trailer on-site.

Signature	For	Responsible for
<hr/> Date: _____		
<hr/> Date: _____		
<hr/> Date: _____		
<hr/> Date: _____		
<hr/> Date: _____		
<hr/> Date: _____		
<hr/> Date: _____		
<hr/> Date: _____		

APPENDIX B. AERIAL PHOTOGRAPH



© 2011 Pictometry

PA

AERIAL PHOTOGRAPH

August 2016

**APPENDIX C. SITE AS DEPICTED BY THE USGS
QUADRANGLE MAP**

Stormwater Pollution Prevention Plan
Harbor View Square – City of Oswego, NY

APPENDIX D. ENVIRONMENTAL RESOURCE MAPPING

SITE	Layers & Legend	Tell Me More...
Need a Permit?	Contacts	Help



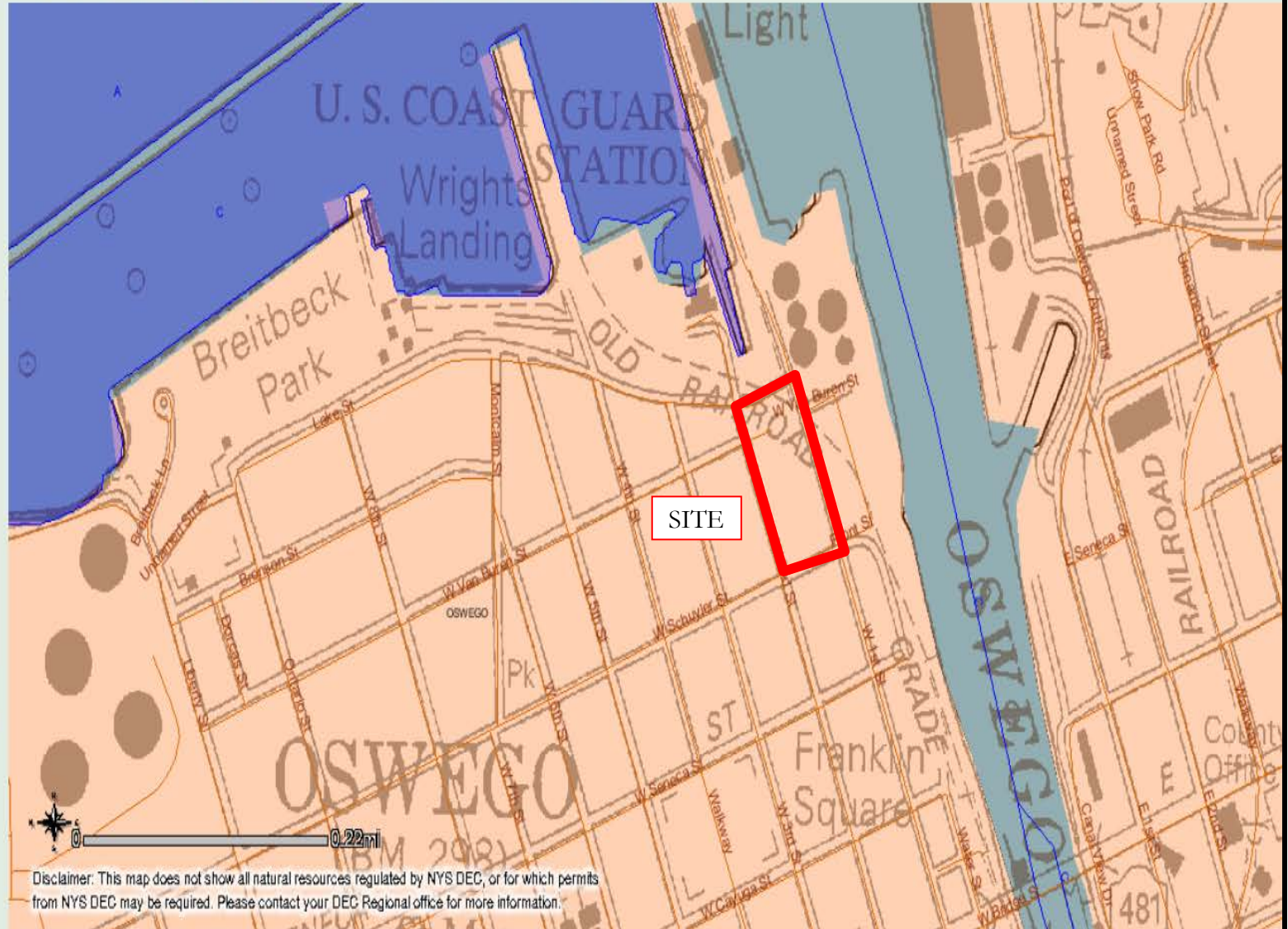
Map Layers & Legend

More layers appear as you zoom in.

- Classified Water Bodies
- Unique Geological Features
- Classified Water Bodies
- State-Regulated Freshwater Wetlands
- Wetland Checkzone ?
- Rare Plants and Rare Animals
- Significant Natural Communities
- Natural Communities Vicinity ?
- Background Map
- Adirondack Park Boundary
- Counties

Click "Refresh Layers" to activate and deactivate layers.

Refresh Layers



APPENDIX E. WETLAND MAPPING



U.S. Fish and Wildlife Service National Wetlands Inventory

Aug 16, 2016



Wetlands

- Freshwater Emergent
- Freshwater Forested/Shrub
- Estuarine and Marine Deepwater
- Estuarine and Marine
- 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.

User Remarks:

APPENDIX F. SOILS MAP



MAP LEGEND

Area of Interest (AOI)

- Area of Interest (AOI)

Soils

Soil Rating Polygons

- 0 - 25
- 25 - 50
- 50 - 100
- 100 - 150
- 150 - 200
- > 200
- Not rated or not available

Soil Rating Lines

- 0 - 25
- 25 - 50
- 50 - 100
- 100 - 150
- 150 - 200
- > 200
- Not rated or not available

Soil Rating Points

- 0 - 25
- 25 - 50
- 50 - 100
- 100 - 150
- 150 - 200
- > 200

Water Features

- Streams and Canals

Transportation

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

Background

- Aerial Photography

Not rated or not available

MAP INFORMATION

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

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

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

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

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>
 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: Oswego County, New York
 Survey Area Data: Version 14, Sep 24, 2015

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

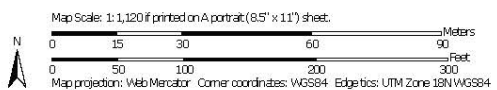
Date(s) aerial images were photographed: Jun 2, 2010—Jun 15, 2011

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.

LSDA Natural Resources Conservation Service

Web Soil Survey National Cooperative Soil Survey

8/1/2016 Page 2 of 3



LSDA Natural Resources Conservation Service

Web Soil Survey National Cooperative Soil Survey

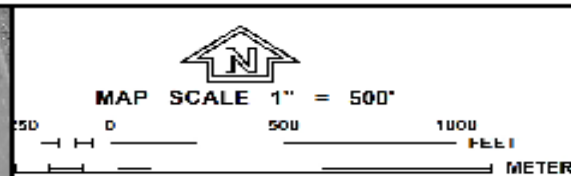
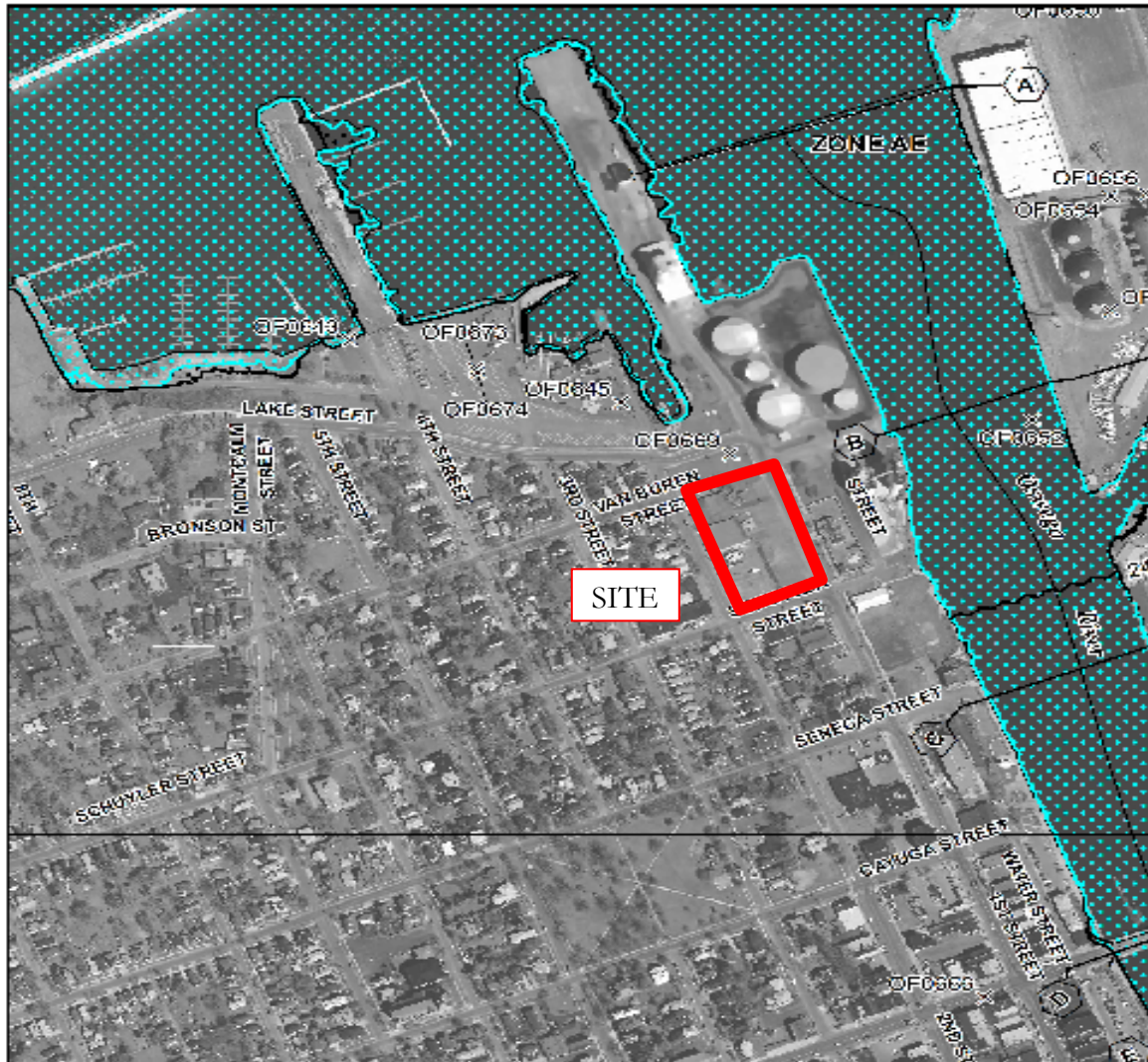
8/1/2016 Page 1 of 3



SOILS MAP

August 2016

APPENDIX G. FEMA MAPPING



PANEL 0259G

FIRM
FLOOD INSURANCE RATE MAP
OSWEGO COUNTY,
NEW YORK
 (ALL JURISDICTIONS)

PANEL 259 OF 726
 (SEE MAP NUMBER FOR PANEL LAYOUT)

DATE:
 10/18/11 BY: [unclear] [unclear] [unclear]
 000000 000000

Map Number: The Map Number above here should be used when making map orders. Community Number: Also shown above here should be used when making map orders. For more information, see the National Flood Insurance Program User Manual.

MAP NUMBER
 36075C0259G

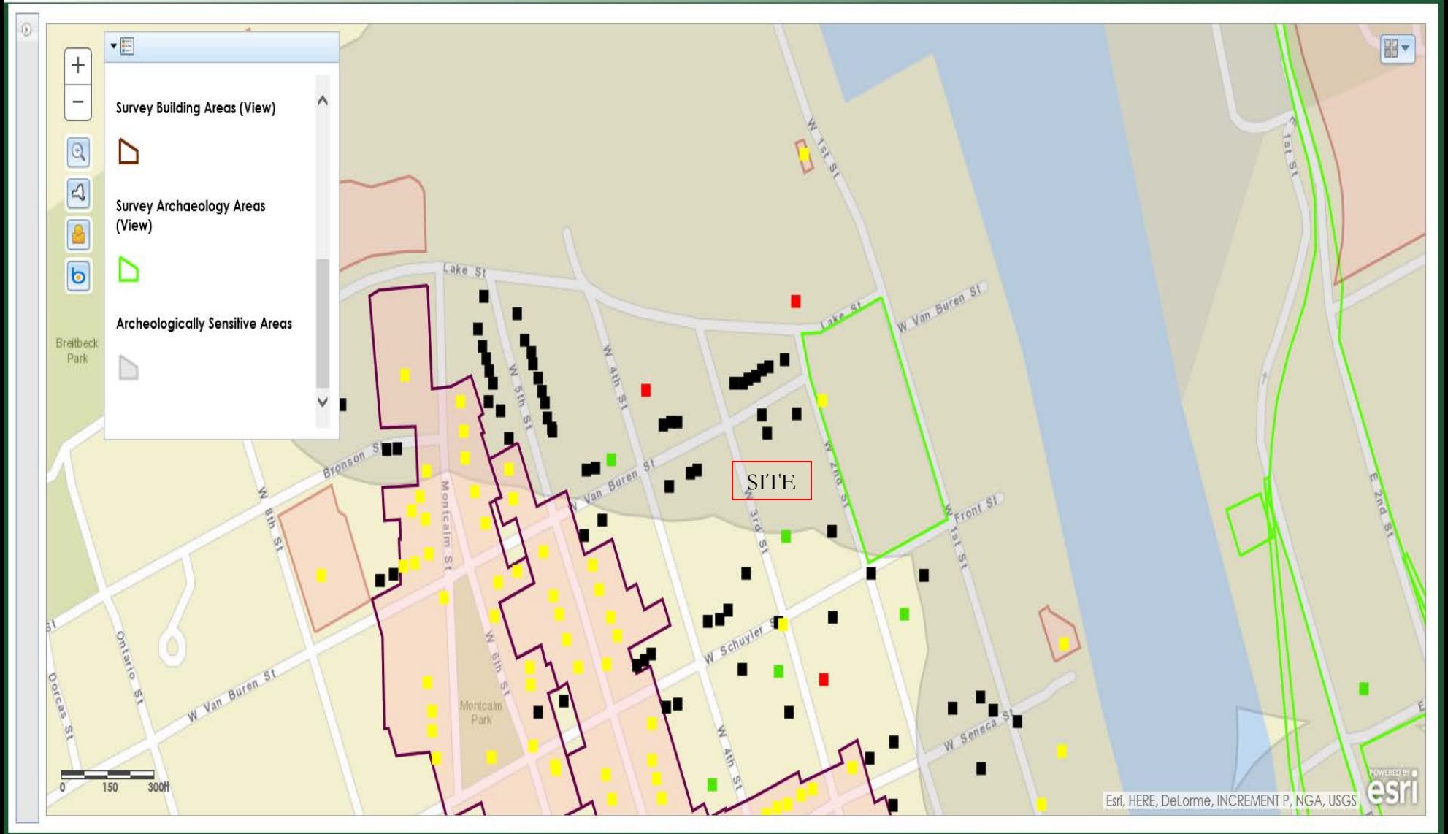
EFFECTIVE DATE
 JUNE 18, 2013

Federal Emergency Management Agency

This is an official map of a portion of the above referenced flood map. It was published on 06/18/13. The map does not include any information which may be used to determine the location of the flood zone. The flood zone is shown on the National Flood Insurance Program User Manual. For more information, see the National Flood Insurance Program User Manual. The FEMA Flood Map Service Center is located at www.fema.gov.

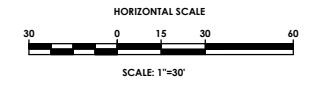
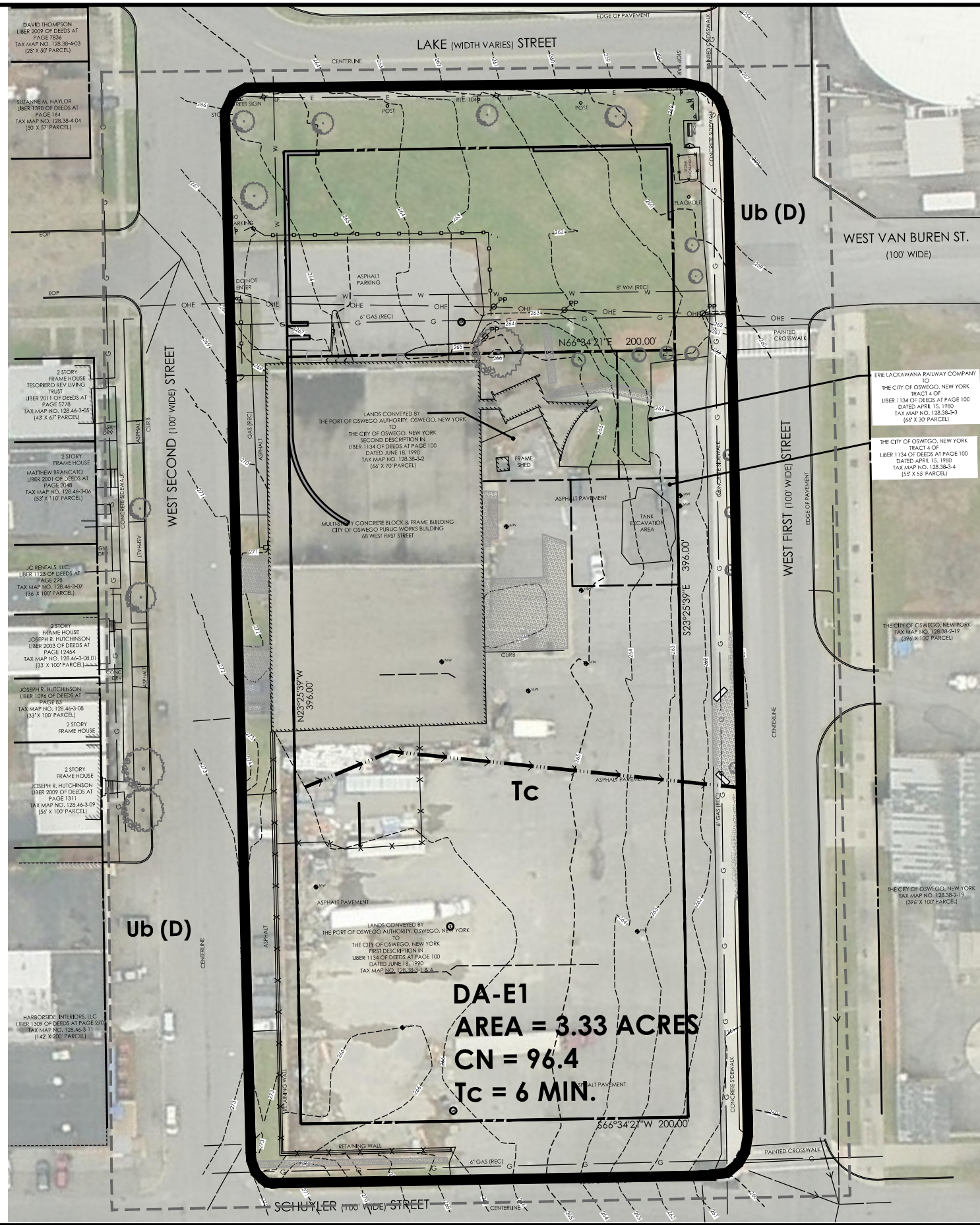


**APPENDIX H. ARCHEOLOGICAL SENSITIVE AREAS
MAP**

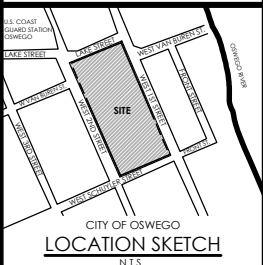


APPENDIX I. DRAINAGE AREA MAPS

Z:\2016\20160101- OSWEGO FLEDO WIRE\20160101.0000\DRAWINGS\ENGINEERING\20160101.0000_DRAINAGE.DWG 8/18/2016 1:09 PM Tm Harris



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 Designed by Carole G. Harvey



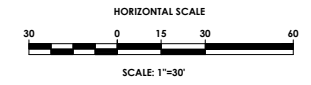
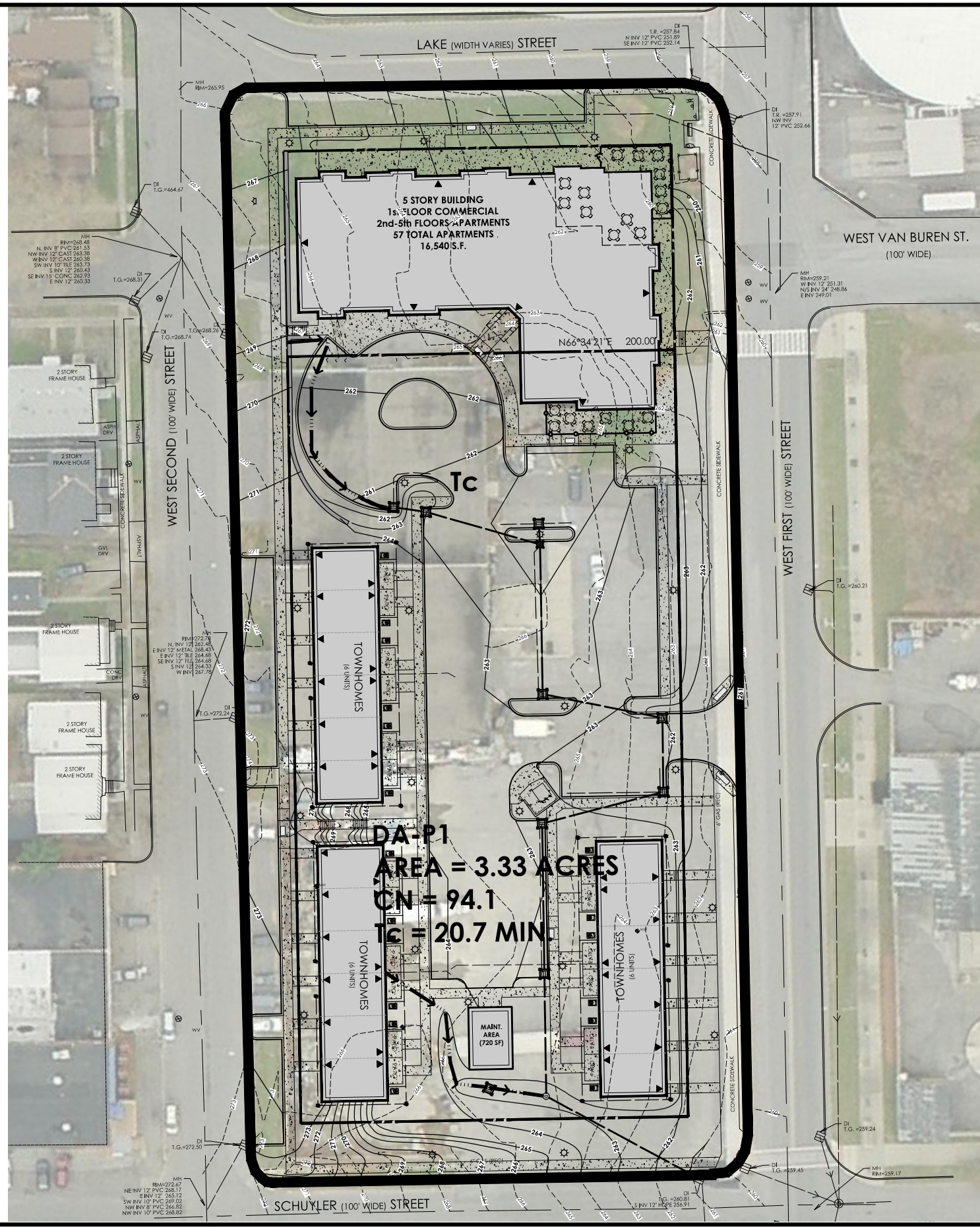
Revisions			
No.	Date	By	Description
1			
2			
3			
4			
5			
6			
7			
8			
9			

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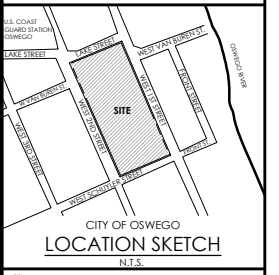
EXISTING DRAINAGE AREA MAP
HARBOR VIEW SQUARE

City of Oswego, Oswego County, New York
 Project No. 20160101.0000
 Drawing No. EDA-1 Sheet No. I-1
 Scale: 1" = 30'
 Date: AUGUST 2016

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 Project Manager David L. Cox, P.E.
 Designed by Carole G. Harvey



Revisions			
No.	Date	By	Description
1			
2			
3			
4			
5			
6			
7			
8			
9			

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PROPOSED DRAINAGE AREA MAP
HARBOR VIEW SQUARE

City of Oswego, Oswego County, New York
 Project No. 20160101.0000
 Drawing No. PDA-1 Sheet No. I-2
 Scale: 1" = 30'
 Date: AUGUST 2016

**APPENDIX J. EXISTING, DEVELOPED AND TIME OF
CONCENTRATION HYDROGRAPHS**

Project No: 20160101
 Location: Oswego, NY
 Date: 18/Aug/16
 By: TAH
 Sheet

Runoff curve number

Existing Drainage		DA-E1					
Runoff curve number							
Soil name and hydrologic group (appendix A)	Cover description (cover type & hydrologic condition)	CN			Area	Product of CN x Area	
		Table 2-2	Figure 2-3	Figure 2-4	<input checked="" type="checkbox"/> acre <input type="checkbox"/> mi2 <input type="checkbox"/> %		
Ub - Urban	D	Impervious	98			2.65	259.70
Ub - Urban	D	Lawn	80			0.68	54.40
							0.00
							0.00
							0.00
							0.00
							0.00
							0.00
							0.00
							0.00
							0.00
							0.00
Totals =						3.33	314.10

$$\text{CN (Weighted)} = \frac{\text{Total product}}{\text{Total area}} = \frac{314.1}{3.33} = 94.32 \quad \text{Use CN } \boxed{94.4}$$

Extreme Precipitation Tables

Northeast Regional Climate Center

Data represents point estimates calculated from partial duration series. All precipitation amounts are displayed in inches.

Smoothing	Yes
State	New York
Location	
Longitude	76.514 degrees West
Latitude	43.461 degrees North
Elevation	Unknown/Unavailable
Date/Time	Tue, 16 Aug 2016 11:18:24 -0400

Extreme Precipitation Estimates

	5min	10min	15min	30min	60min	120min		1hr	2hr	3hr	6hr	12hr	24hr	48hr		1day	2day	4day	7day	10day	
1yr	0.27	0.41	0.51	0.67	0.84	1.03	1yr	0.72	0.92	1.16	1.39	1.65	1.94	2.19	1yr	1.72	2.11	2.54	3.09	3.59	1yr
2yr	0.30	0.46	0.57	0.75	0.95	1.17	2yr	0.82	1.06	1.33	1.60	1.91	2.26	2.55	2yr	2.00	2.45	2.88	3.48	4.02	2yr
5yr	0.35	0.54	0.67	0.90	1.15	1.44	5yr	1.00	1.30	1.64	1.97	2.35	2.77	3.10	5yr	2.45	2.98	3.48	4.12	4.73	5yr
10yr	0.38	0.60	0.76	1.03	1.35	1.69	10yr	1.16	1.53	1.93	2.32	2.75	3.22	3.59	10yr	2.85	3.45	4.01	4.69	5.34	10yr
25yr	0.44	0.71	0.90	1.24	1.65	2.09	25yr	1.43	1.89	2.39	2.87	3.39	3.93	4.37	25yr	3.48	4.20	4.84	5.56	6.29	25yr
50yr	0.50	0.80	1.02	1.43	1.93	2.45	50yr	1.67	2.22	2.81	3.37	3.97	4.58	5.07	50yr	4.05	4.88	5.59	6.32	7.11	50yr
100yr	0.56	0.91	1.18	1.66	2.26	2.89	100yr	1.95	2.61	3.31	3.96	4.64	5.34	5.89	100yr	4.72	5.66	6.46	7.20	8.05	100yr
200yr	0.63	1.03	1.33	1.92	2.65	3.40	200yr	2.29	3.08	3.90	4.66	5.43	6.22	6.84	200yr	5.50	6.58	7.45	8.19	9.11	200yr
500yr	0.75	1.23	1.61	2.34	3.28	4.22	500yr	2.83	3.82	4.84	5.77	6.69	7.62	8.34	500yr	6.74	8.02	9.02	9.72	10.73	500yr

Lower Confidence Limits

	5min	10min	15min	30min	60min	120min		1hr	2hr	3hr	6hr	12hr	24hr	48hr		1day	2day	4day	7day	10day	
1yr	0.25	0.38	0.47	0.63	0.78	0.81	1yr	0.67	0.79	0.95	1.16	1.31	1.58	2.07	1yr	1.40	1.99	2.40	2.92	3.20	1yr
2yr	0.29	0.45	0.55	0.75	0.92	1.06	2yr	0.80	1.04	1.16	1.47	1.78	2.22	2.50	2yr	1.96	2.40	2.83	3.42	3.96	2yr
5yr	0.31	0.48	0.59	0.82	1.04	1.25	5yr	0.90	1.22	1.39	1.72	2.10	2.60	2.95	5yr	2.30	2.83	3.30	3.94	4.53	5yr
10yr	0.33	0.51	0.63	0.88	1.13	1.43	10yr	0.98	1.39	1.59	1.92	2.36	2.94	3.34	10yr	2.60	3.21	3.72	4.39	5.00	10yr
25yr	0.35	0.53	0.65	0.93	1.23	1.71	25yr	1.06	1.67	1.90	2.25	2.77	3.45	3.93	25yr	3.05	3.78	4.34	5.06	5.65	25yr
50yr	0.34	0.52	0.65	0.94	1.26	1.95	50yr	1.09	1.90	2.17	2.54	3.15	3.87	4.46	50yr	3.43	4.29	4.87	5.63	6.18	50yr
100yr	0.34	0.52	0.65	0.94	1.29	2.23	100yr	1.11	2.18	2.49	2.87	3.56	4.37	5.07	100yr	3.86	4.88	5.48	6.27	6.74	100yr
200yr	0.38	0.58	0.73	1.06	1.48	2.55	200yr	1.28	2.50	2.85	3.24	4.03	4.91	5.76	200yr	4.35	5.54	6.16	6.99	7.37	200yr
500yr	0.41	0.60	0.78	1.13	1.60	3.07	500yr	1.38	3.00	3.41	3.83	4.77	5.74	6.82	500yr	5.08	6.56	7.20	8.07	8.33	500yr

Upper Confidence Limits

	5min	10min	15min	30min	60min	120min		1hr	2hr	3hr	6hr	12hr	24hr	48hr		1day	2day	4day	7day	10day	
1yr	0.28	0.44	0.54	0.72	0.89	1.03	1yr	0.76	1.01	1.12	1.40	1.72	2.05	2.32	1yr	1.81	2.23	2.67	3.23	3.76	1yr
2yr	0.32	0.49	0.60	0.81	1.00	1.11	2yr	0.87	1.09	1.23	1.55	1.88	2.33	2.61	2yr	2.06	2.51	2.97	3.56	4.17	2yr
5yr	0.39	0.61	0.75	1.03	1.31	1.43	5yr	1.13	1.40	1.60	1.94	2.38	2.91	3.25	5yr	2.57	3.13	3.64	4.31	4.90	5yr
10yr	0.47	0.72	0.89	1.24	1.60	1.73	10yr	1.38	1.69	1.94	2.30	2.85	3.47	3.84	10yr	3.07	3.69	4.27	4.99	5.62	10yr
25yr	0.61	0.92	1.15	1.64	2.15	2.21	25yr	1.86	2.16	2.53	2.89	3.62	4.36	4.81	25yr	3.86	4.62	5.30	6.05	6.74	25yr
50yr	0.74	1.12	1.40	2.01	2.70	2.67	50yr	2.33	2.61	3.09	3.45	4.35	5.18	5.69	50yr	4.59	5.47	6.20	7.01	7.74	50yr
100yr	0.91	1.38	1.73	2.50	3.43	3.23	100yr	2.96	3.16	3.79	4.10	5.22	6.16	6.73	100yr	5.46	6.48	7.27	8.11	8.91	100yr
200yr	0.90	1.35	1.71	2.48	3.46	3.92	200yr	2.98	3.84	4.64	4.86	6.26	7.32	7.96	200yr	6.48	7.66	8.54	9.38	10.25	200yr
500yr	1.21	1.80	2.31	3.36	4.78	5.06	500yr	4.12	4.95	6.06	6.11	7.97	9.23	9.96	500yr	8.17	9.58	10.55	11.39	12.36	500yr



Watershed Model Schematic

Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2016 by Autodesk, Inc. v10.5



Hydrograph Return Period Recap

Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2016 by Autodesk, Inc. v10.5

Hyd. No.	Hydrograph type (origin)	Inflow hyd(s)	Peak Outflow (cfs)								Hydrograph Description
			1-yr	2-yr	3-yr	5-yr	10-yr	25-yr	50-yr	100-yr	
1	SCS Runoff	-----	7.435	8.972	-----	-----	13.55	16.90	-----	23.50	DA-E1
2	SCS Runoff	-----	4.762	5.787	-----	-----	8.852	11.10	-----	15.53	DA-P1

Hydrograph Report

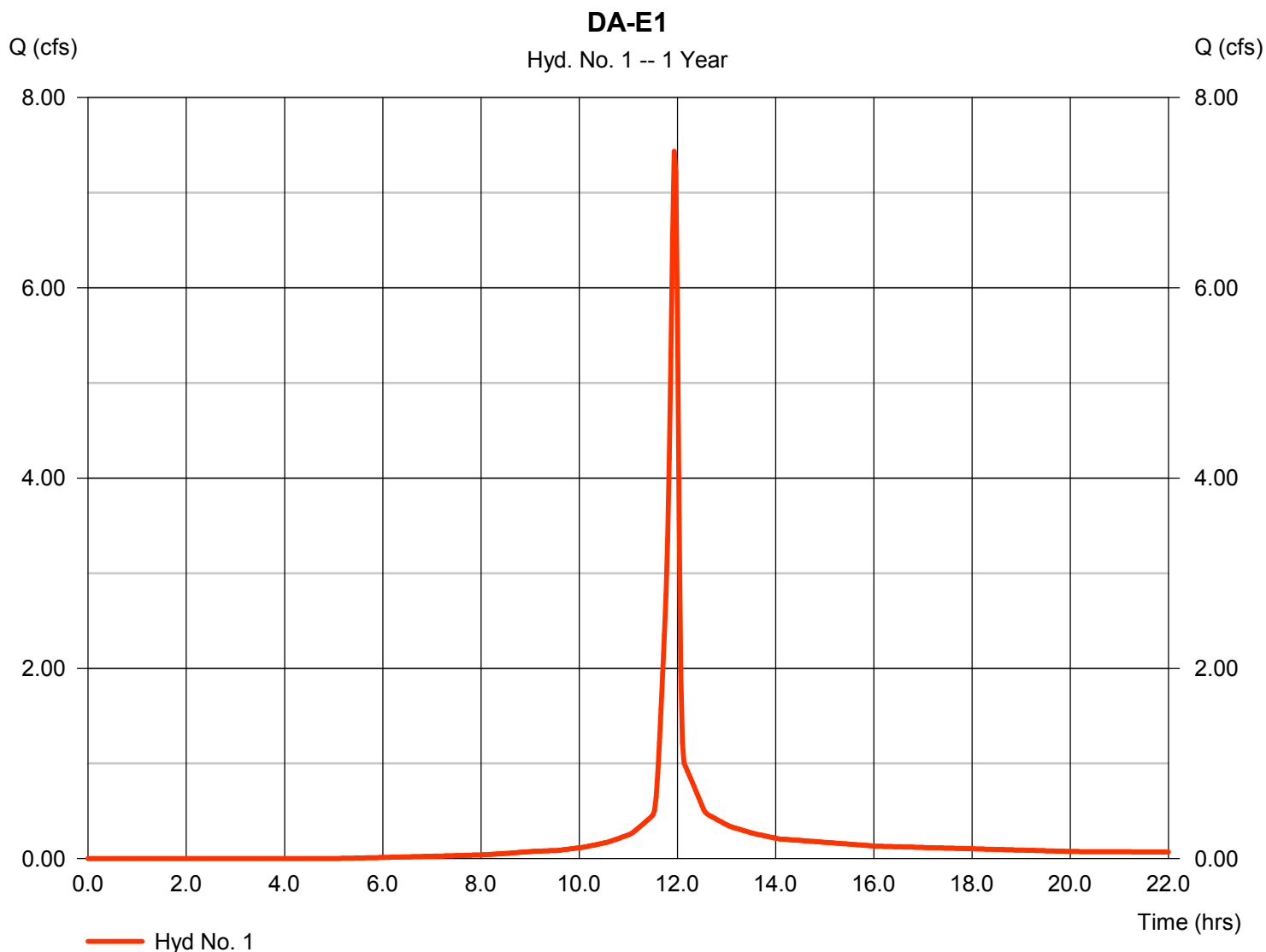
Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2016 by Autodesk, Inc. v10.5

Thursday, 08 / 18 / 2016

Hyd. No. 1

DA-E1

Hydrograph type	= SCS Runoff	Peak discharge	= 7.435 cfs
Storm frequency	= 1 yrs	Time to peak	= 11.93 hrs
Time interval	= 2 min	Hyd. volume	= 15,569 cuft
Drainage area	= 3.330 ac	Curve number	= 94.4
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 6.00 min
Total precip.	= 1.94 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

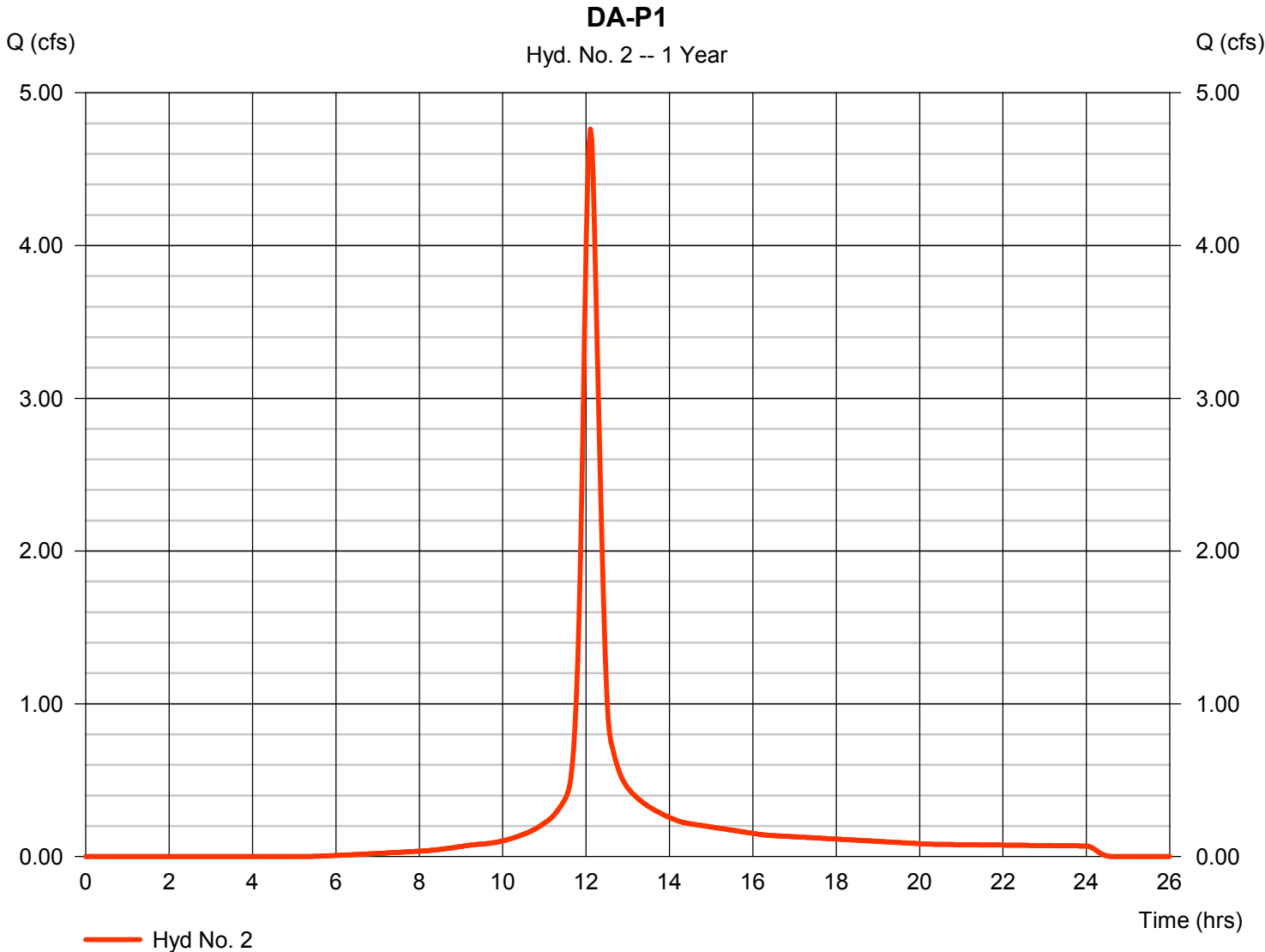


Hydrograph Report

Hyd. No. 2

DA-P1

Hydrograph type	= SCS Runoff	Peak discharge	= 4.762 cfs
Storm frequency	= 1 yrs	Time to peak	= 12.10 hrs
Time interval	= 2 min	Hyd. volume	= 16,593 cuft
Drainage area	= 3.330 ac	Curve number	= 94.1
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= TR55	Time of conc. (Tc)	= 20.70 min
Total precip.	= 1.94 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



TR55 Tc Worksheet

Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2016 by Autodesk, Inc. v10.5

Hyd. No. 2

DA-P1

<u>Description</u>	<u>A</u>	<u>B</u>	<u>C</u>	<u>Totals</u>
Sheet Flow				
Manning's n-value	= 0.240	0.011	0.011	
Flow length (ft)	= 90.0	0.0	0.0	
Two-year 24-hr precip. (in)	= 2.26	0.00	0.00	
Land slope (%)	= 1.00	0.00	0.00	
Travel Time (min)	= 20.59	+ 0.00	+ 0.00	= 20.59
Shallow Concentrated Flow				
Flow length (ft)	= 0.00	0.00	0.00	
Watercourse slope (%)	= 0.00	0.00	0.00	
Surface description	= Paved	Paved	Paved	
Average velocity (ft/s)	=0.00	0.00	0.00	
Travel Time (min)	= 0.00	+ 0.00	+ 0.00	= 0.00
Channel Flow				
X sectional flow area (sqft)	= 0.79	0.00	0.00	
Wetted perimeter (ft)	= 3.14	0.00	0.00	
Channel slope (%)	= 0.50	0.00	0.00	
Manning's n-value	= 0.011	0.015	0.015	
Velocity (ft/s)	=3.78	0.00	0.00	
Flow length (ft)	27.0	0.0	0.0	
Travel Time (min)	= 0.12	+ 0.00	+ 0.00	= 0.12
Total Travel Time, Tc				20.70 min

Hydrograph Report

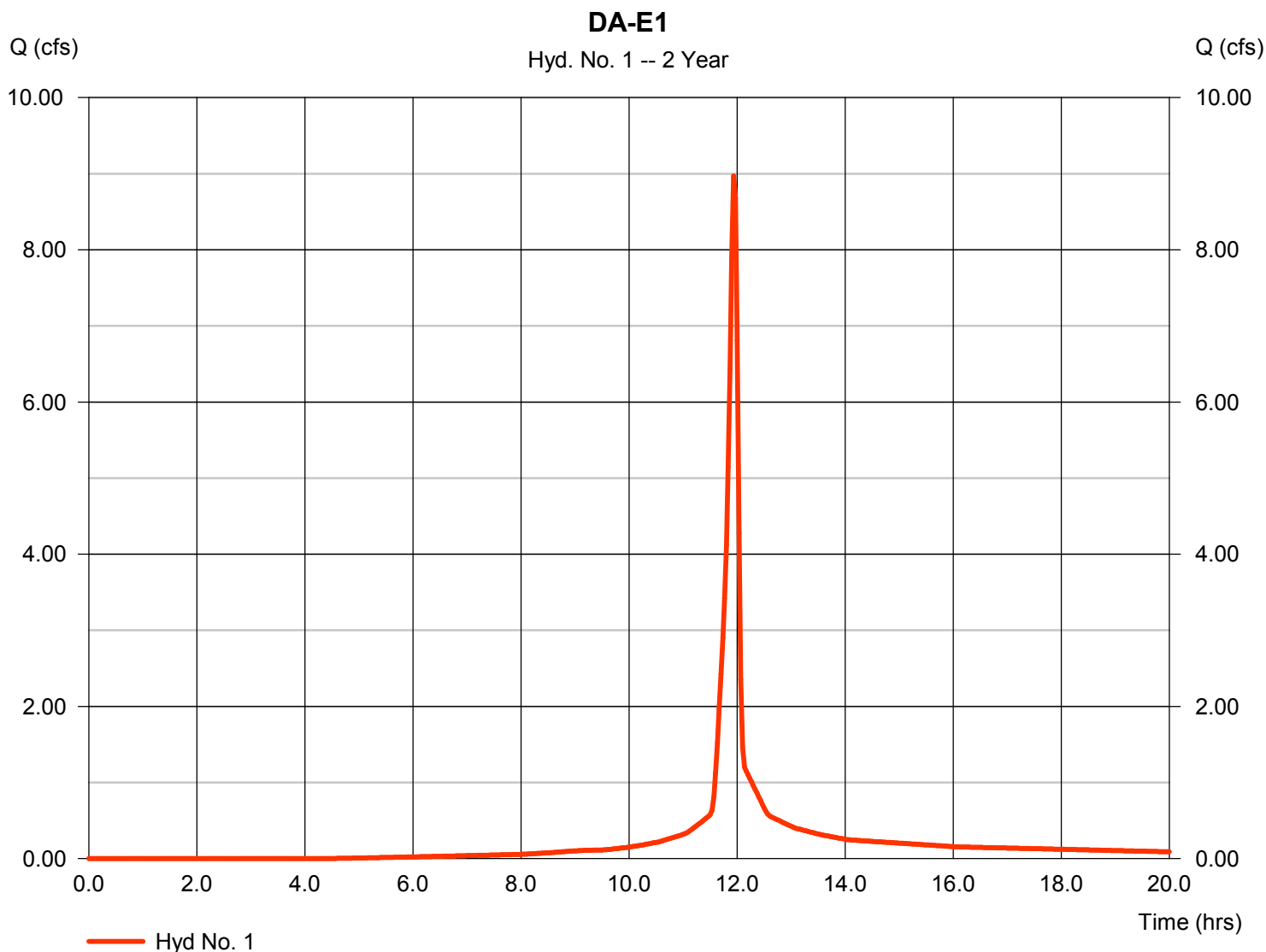
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Thursday, 08 / 18 / 2016

Hyd. No. 1

DA-E1

Hydrograph type	= SCS Runoff	Peak discharge	= 8.972 cfs
Storm frequency	= 2 yrs	Time to peak	= 11.93 hrs
Time interval	= 2 min	Hyd. volume	= 19,002 cuft
Drainage area	= 3.330 ac	Curve number	= 94.4
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 6.00 min
Total precip.	= 2.26 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



Hydrograph Report

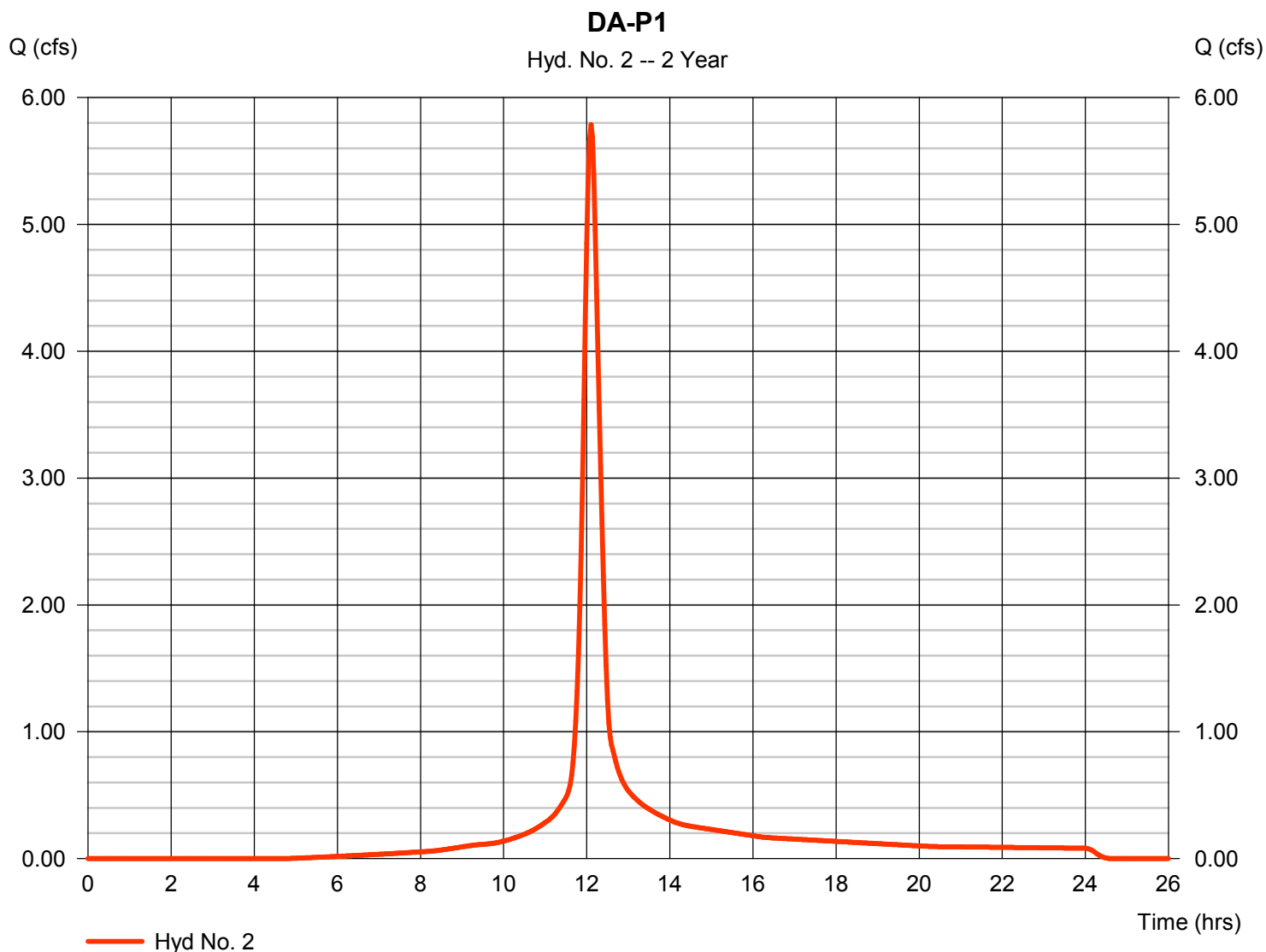
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Thursday, 08 / 18 / 2016

Hyd. No. 2

DA-P1

Hydrograph type	= SCS Runoff	Peak discharge	= 5.787 cfs
Storm frequency	= 2 yrs	Time to peak	= 12.10 hrs
Time interval	= 2 min	Hyd. volume	= 20,301 cuft
Drainage area	= 3.330 ac	Curve number	= 94.1
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= TR55	Time of conc. (Tc)	= 20.70 min
Total precip.	= 2.26 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

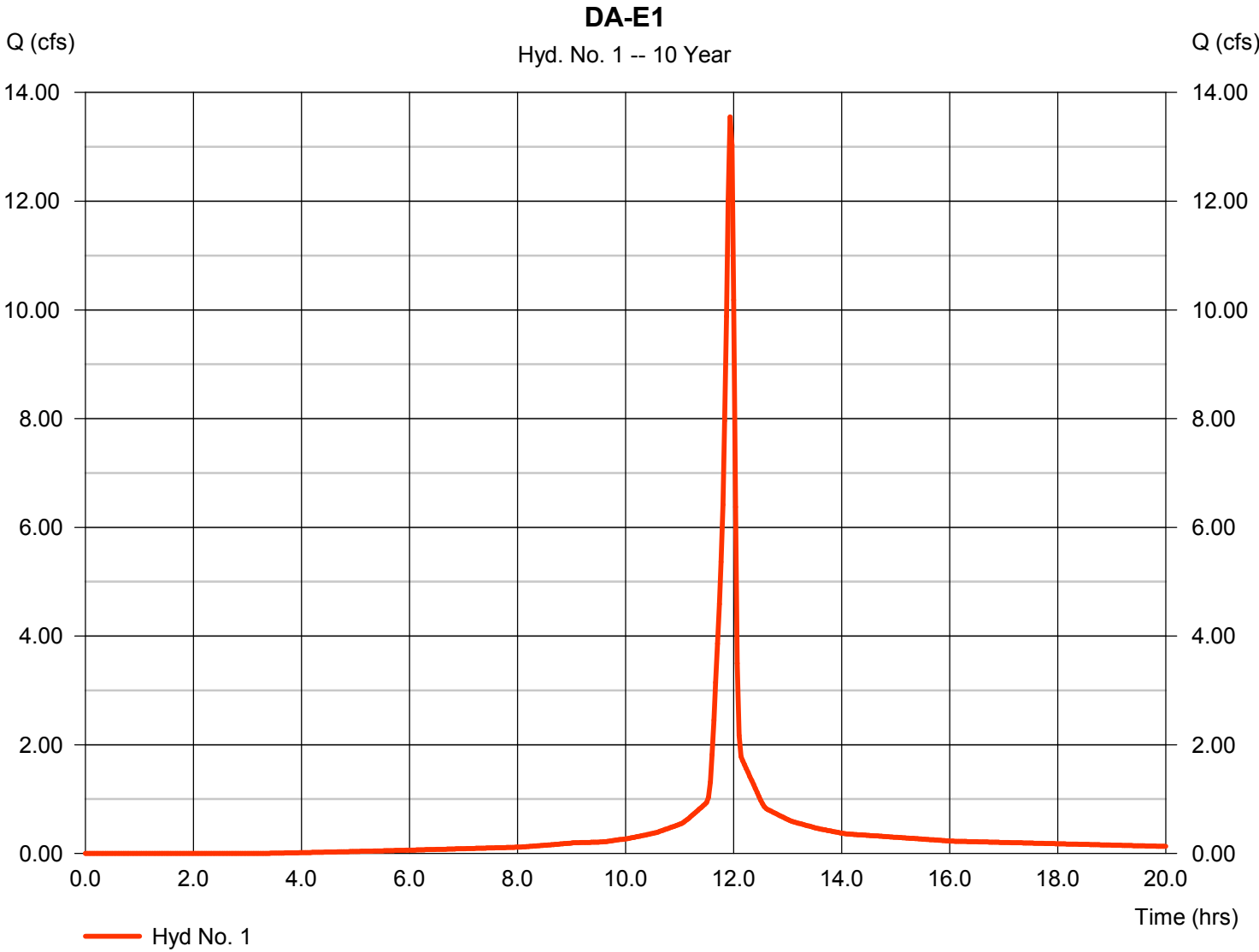


Hydrograph Report

Hyd. No. 1

DA-E1

Hydrograph type	= SCS Runoff	Peak discharge	= 13.55 cfs
Storm frequency	= 10 yrs	Time to peak	= 11.93 hrs
Time interval	= 2 min	Hyd. volume	= 29,503 cuft
Drainage area	= 3.330 ac	Curve number	= 94.4
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 6.00 min
Total precip.	= 3.22 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

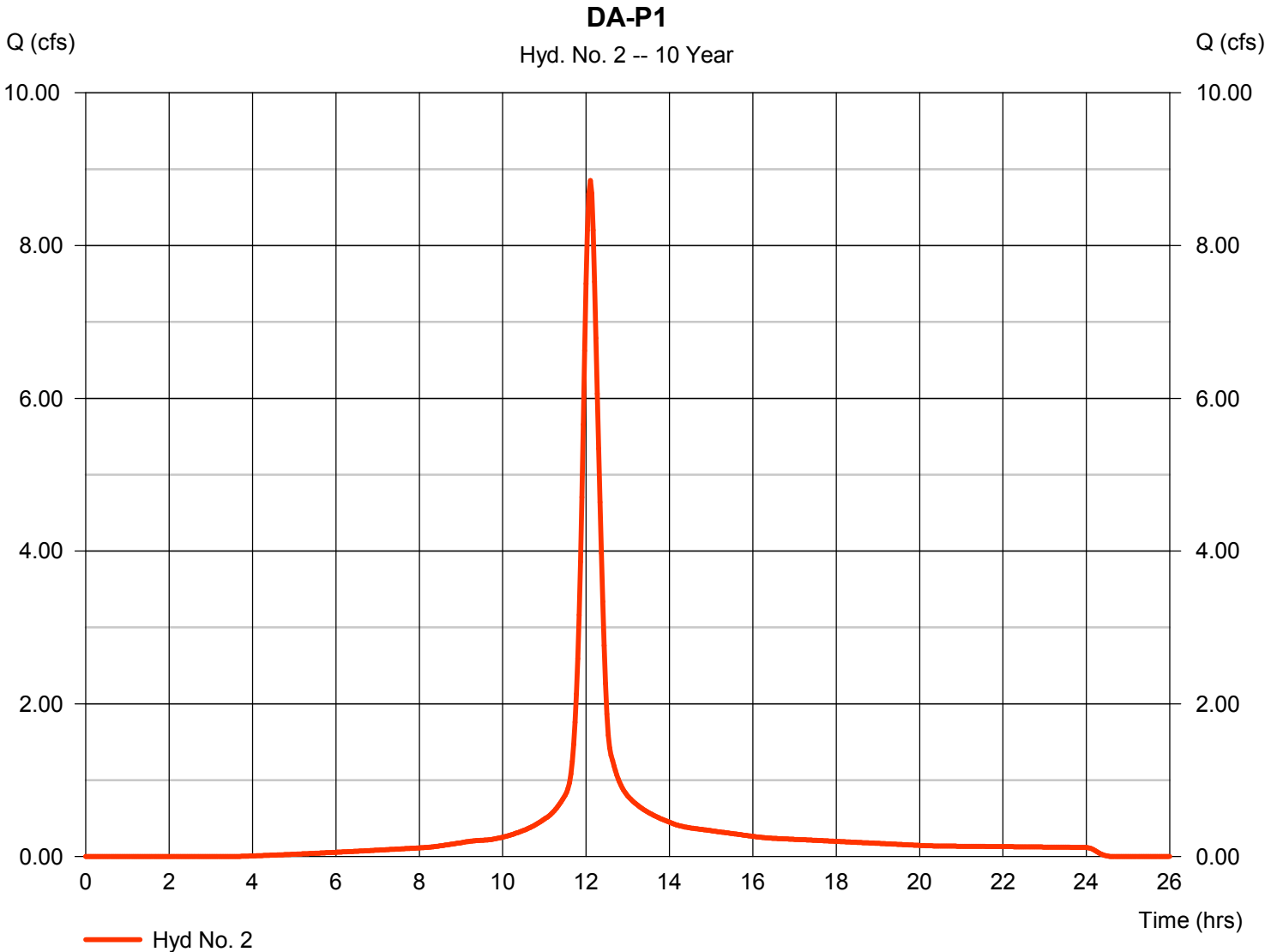


Hydrograph Report

Hyd. No. 2

DA-P1

Hydrograph type	= SCS Runoff	Peak discharge	= 8.852 cfs
Storm frequency	= 10 yrs	Time to peak	= 12.10 hrs
Time interval	= 2 min	Hyd. volume	= 31,661 cuft
Drainage area	= 3.330 ac	Curve number	= 94.1
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= TR55	Time of conc. (Tc)	= 20.70 min
Total precip.	= 3.22 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



Hydrograph Report

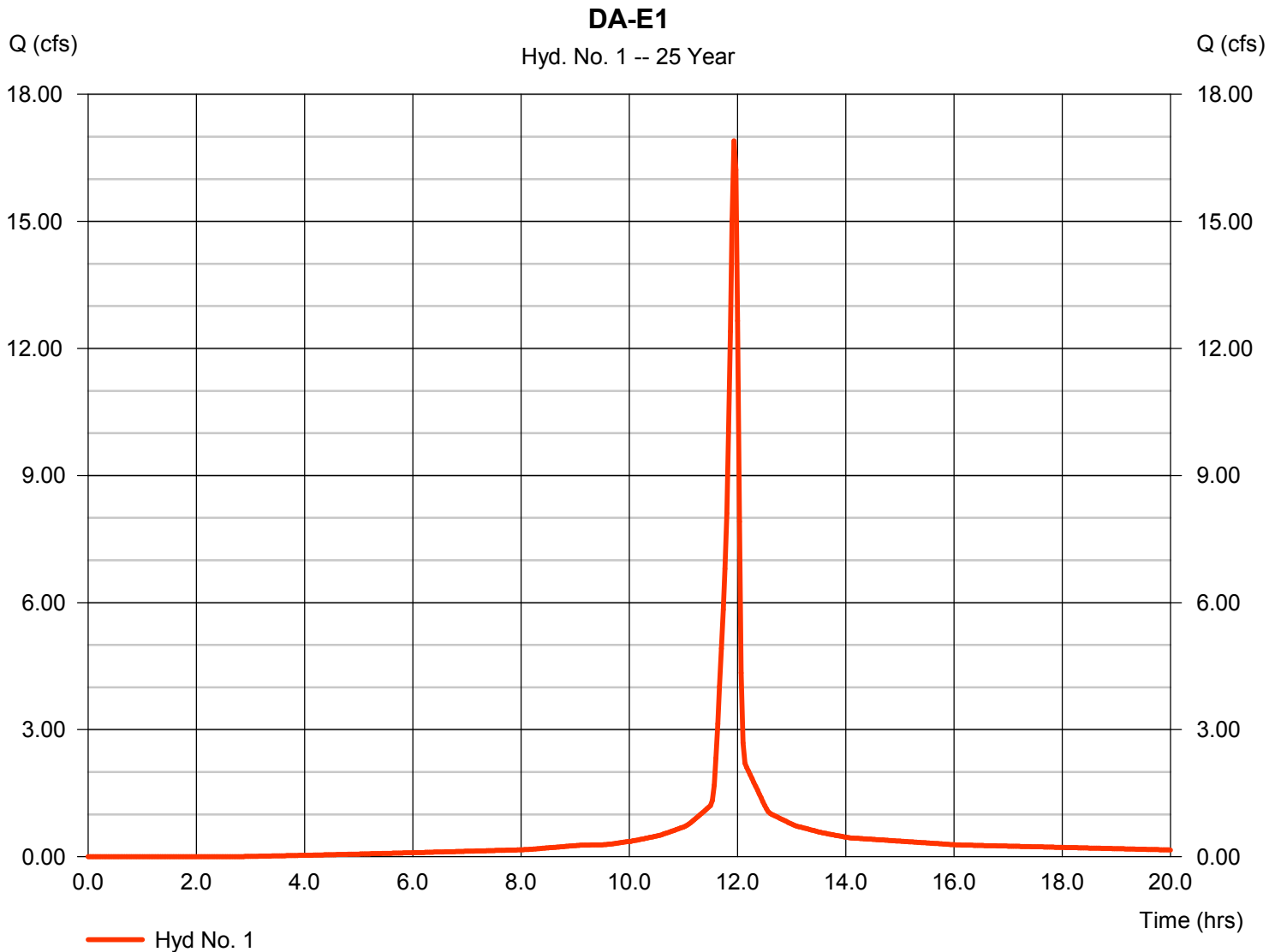
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Thursday, 08 / 18 / 2016

Hyd. No. 1

DA-E1

Hydrograph type	= SCS Runoff	Peak discharge	= 16.90 cfs
Storm frequency	= 25 yrs	Time to peak	= 11.93 hrs
Time interval	= 2 min	Hyd. volume	= 37,375 cuft
Drainage area	= 3.330 ac	Curve number	= 94.4
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 6.00 min
Total precip.	= 3.93 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

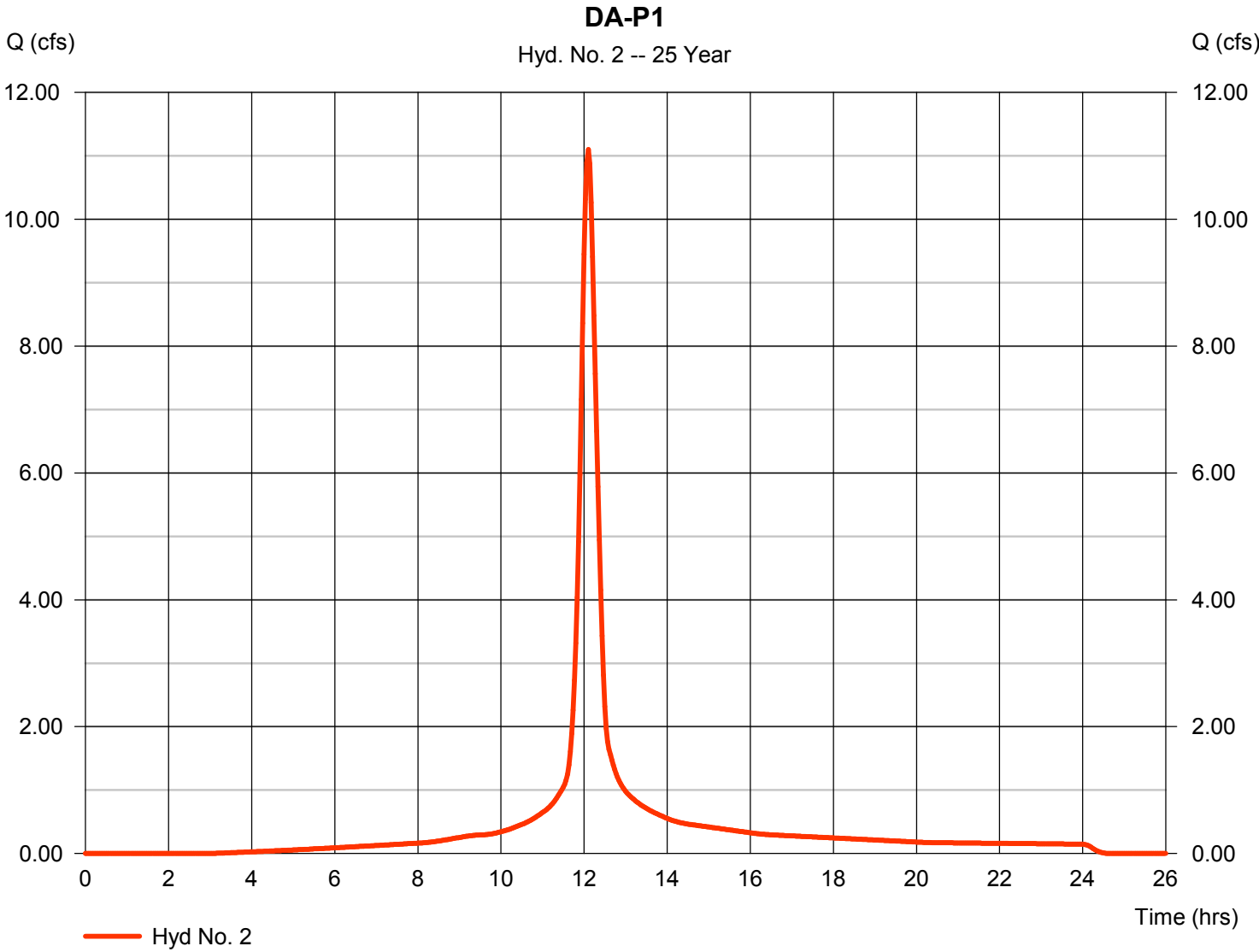


Hydrograph Report

Hyd. No. 2

DA-P1

Hydrograph type	= SCS Runoff	Peak discharge	= 11.10 cfs
Storm frequency	= 25 yrs	Time to peak	= 12.10 hrs
Time interval	= 2 min	Hyd. volume	= 40,188 cuft
Drainage area	= 3.330 ac	Curve number	= 94.1
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= TR55	Time of conc. (Tc)	= 20.70 min
Total precip.	= 3.93 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



Hydrograph Report

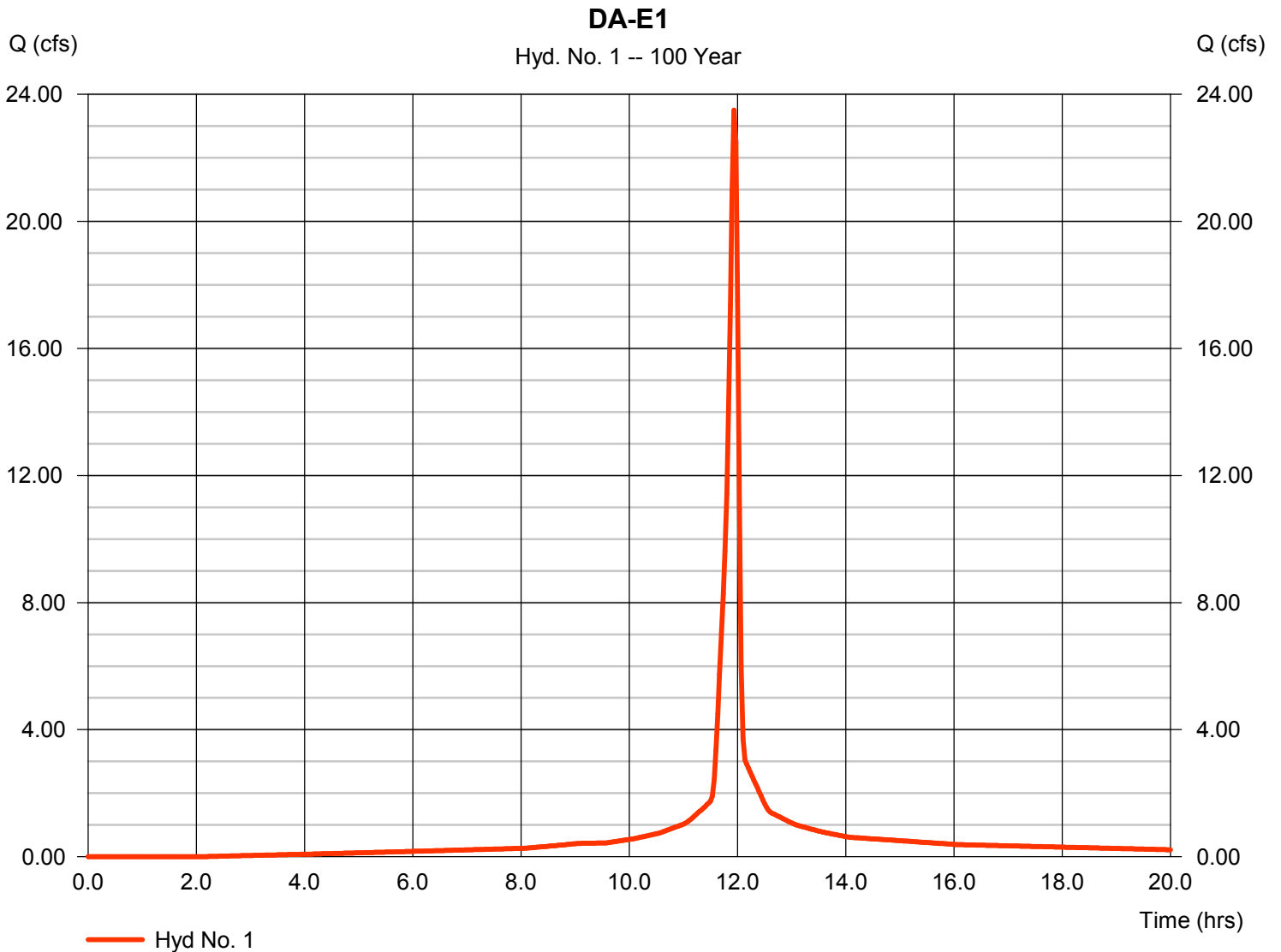
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Thursday, 08 / 18 / 2016

Hyd. No. 1

DA-E1

Hydrograph type	= SCS Runoff	Peak discharge	= 23.50 cfs
Storm frequency	= 100 yrs	Time to peak	= 11.93 hrs
Time interval	= 2 min	Hyd. volume	= 53,134 cuft
Drainage area	= 3.330 ac	Curve number	= 94.4
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 6.00 min
Total precip.	= 5.34 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



Hydrograph Report

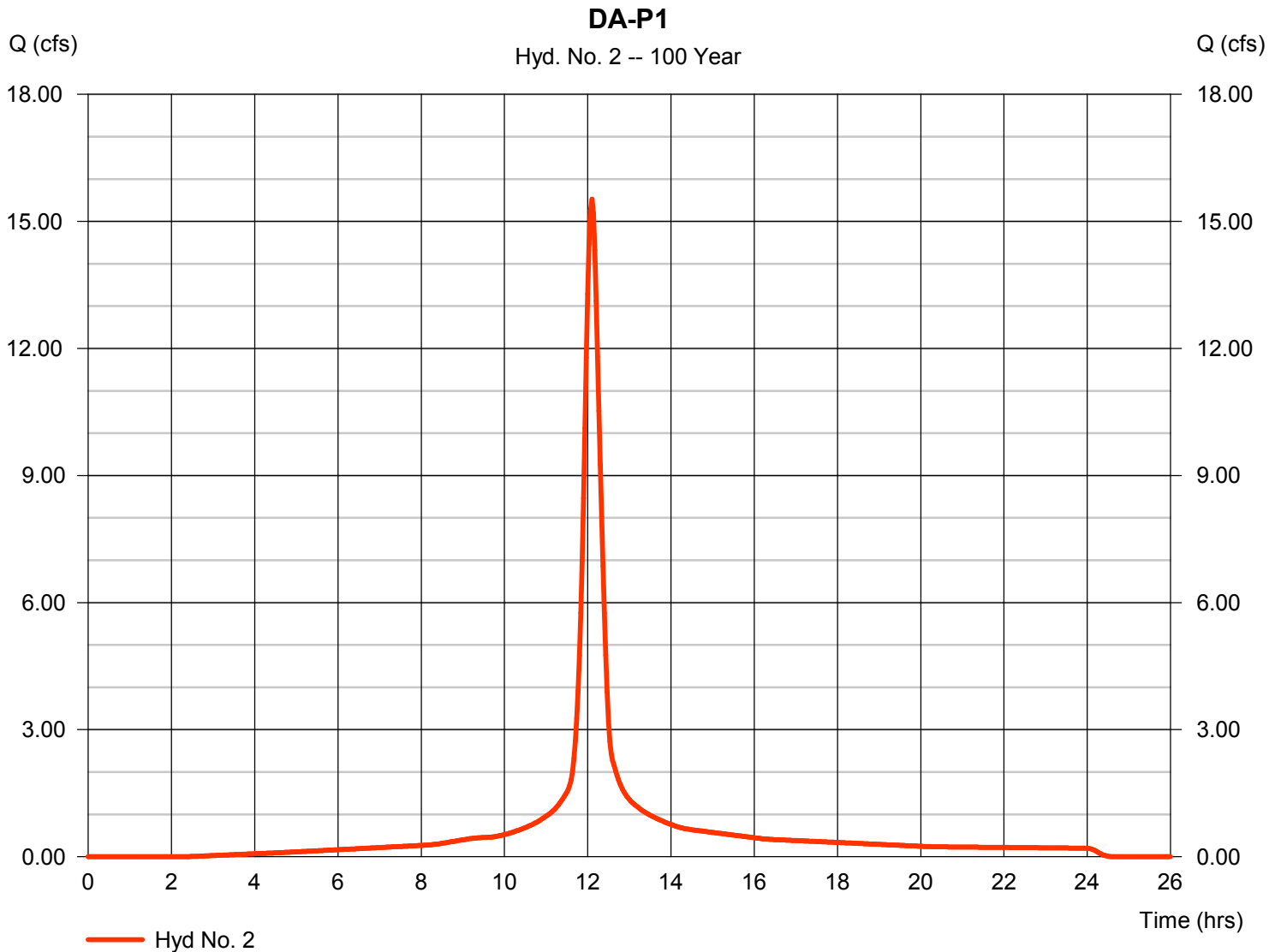
Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2016 by Autodesk, Inc. v10.5

Thursday, 08 / 18 / 2016

Hyd. No. 2

DA-P1

Hydrograph type	= SCS Runoff	Peak discharge	= 15.53 cfs
Storm frequency	= 100 yrs	Time to peak	= 12.10 hrs
Time interval	= 2 min	Hyd. volume	= 57,273 cuft
Drainage area	= 3.330 ac	Curve number	= 94.1
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= TR55	Time of conc. (Tc)	= 20.70 min
Total precip.	= 5.34 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



APPENDIX K. WATER QUALITY CALCULATIONS

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	Total Area (Acres)	Impervious Area (Acres)	Percent Impervious %	Rv	WQv (ft ³)	Description
1	3.33	2.60	78%	0.75	9,099	
2						
3						
4						
5						
6						
7						
8						
9						
10						
Subtotal (1-30)	3.33	2.60	78%	0.75	9,099	Subtotal 1
Total	3.33	2.60	78%	0.75	9,099	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	0.00	0.00	Up to 100 sf directly connected impervious area may be subtracted per tree
Total	0.00	0.00	

Recalculate WQv after application of Area Reduction Techniques					
	Total Area (Acres)	Impervious Area (Acres)	Percent Impervious %	Runoff Coefficient Rv	WQv (ft ³)
"<<Initial WQv"	3.33	2.60	78%	0.75	9,099
Subtract Area	0.00	0.00			
WQv adjusted after Area Reductions	3.33	2.60	78%	0.75	9,099
Disconnection of Rooftops		0.00			
Adjusted WQv after Area Reduction and Rooftop Disconnect	3.33	2.60	78%	0.75	9,099
WQv reduced by Area Reduction techniques					0

**APPENDIX L. NYSDEC SPDES GENERAL PERMIT FOR
STORM WATER DISCHARGES FROM CONSTRUCTION
ACTIVITY (PERMIT NO. GP-0-15-002)**



Department of
Environmental
Conservation

NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
SPDES GENERAL PERMIT
FOR STORMWATER DISCHARGES

From

CONSTRUCTION ACTIVITY

Permit No. GP-0-15-002

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

Effective Date: January 29, 2015

Expiration Date: January 28, 2020

Modification Date:

July 14, 2015 – Correction of typographical error in definition of “New Development”,
Appendix A

John J. Ferguson
Chief Permit Administrator


Authorized Signature

Date

7-15-15

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’s *State Pollutant Discharge Elimination System (“SPDES”)* is a NPDES-approved program with permits issued in accordance with the *Environmental Conservation Law (“ECL”)*.

This general permit (“permit”) is issued pursuant to Article 17, Titles 7, 8 and Article 70 of the ECL. An *owner or operator* may obtain coverage under this permit by submitting a Notice of Intent (“NOI”) to the Department. Copies of this permit and the NOI for New York are available by calling (518) 402-8109 or at any New York State Department of Environmental Conservation (“the Department”) regional office (see Appendix G). They are also available on the Department’s website at:

<http://www.dec.ny.gov/>

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 Article 17-0505 of the ECL, the *owner or operator* must have coverage under a SPDES permit prior to *commencing construction activity*. They 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**

Part I. 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. OBTAINING PERMIT COVERAGE	12
A. Notice of Intent (NOI) Submittal	12
B. Permit Authorization.....	13
C. General Requirements For Owners or Operators With Permit Coverage	15
D. Permit Coverage for Discharges Authorized Under GP-0-10-001.....	17
E. Change of <i>Owner or Operator</i>	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.....	23
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.....	24
Part V. TERMINATION OF PERMIT COVERAGE.....	28
A. Termination of Permit Coverage	28
Part VI. REPORTING AND RETENTION OF RECORDS.....	30
A. Record Retention	30
B. Addresses	30
Part VII. STANDARD PERMIT CONDITIONS.....	31
A. Duty to Comply.....	31
B. Continuation of the Expired General Permit.....	31
C. Enforcement.....	31
D. Need to Halt or Reduce Activity Not a Defense.....	31
E. Duty to Mitigate	32
F. Duty to Provide Information.....	32
G. Other Information	32
H. Signatory Requirements.....	32
I. Property Rights.....	34
J. Severability.....	34
K. Requirement to Obtain Coverage Under an Alternative Permit.....	34
L. Proper Operation and Maintenance	35
M. Inspection and Entry	35
N. Permit Actions.....	36
O. Definitions	36
P. Re-Opener Clause	36

Q. Penalties for Falsification of Forms and Reports.....	36
R. Other Permits.....	36
APPENDIX A.....	37
APPENDIX B.....	44
APPENDIX C.....	46
APPENDIX D.....	52
APPENDIX E.....	53
APPENDIX F.....	55

(Part I)

I. Part I. PERMIT COVERAGE AND LIMITATIONS

A. Permit Application

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

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

B. Effluent Limitations Applicable to Discharges from Construction Activities

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

1. Erosion and Sediment Control Requirements - The *owner or operator* must select, design, install, implement and maintain control measures to *minimize* the *discharge of pollutants* and prevent a violation of the *water quality standards*. The selection, design, installation, implementation, and maintenance of these control measures must meet the non-numeric effluent limitations in Part I.B.1.(a) – (f) of this permit and be in accordance with the New York State Standards and Specifications for Erosion and Sediment Control, dated August 2005, 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

(Part I.B.1)

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* 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; and
- (viii) Unless *infeasible*, preserve a sufficient amount of topsoil to complete soil restoration and establish a uniform, dense vegetative cover.

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*

(Part I.B.1.c)

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 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

(Part I.B.1.f)

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

(Part I.C.2.a.ii)

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

(Part I.C.2.b.ii)

standard SMP with RRv capacity unless *infeasible*. The specific *site limitations* that prevent the reduction of 100% of the WQv shall be documented in the SWPPP. For each *impervious area* that is not directed to a RR technique or standard SMP with RRv capacity, the SWPPP must include documentation which demonstrates that all options were considered and for each option explains why it is considered *infeasible*.

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

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

c. Sizing Criteria for Redevelopment Activity

(Part I.C.2.c.i)

- (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.

(Part I.C.2.c.iv)

- (iv) Extreme Flood Control Criteria (Qf): Not required if there are no changes to hydrology that increase the *discharge* rate from the project site.

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

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

D. Maintaining Water Quality

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

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

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

If there is evidence indicating that despite compliance with the terms and conditions of this general permit it is demonstrated that the stormwater *discharges* authorized by this permit are causing or contributing to a violation of *water quality standards*, or

(Part I.D)

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* from *construction activities*.
3. Notwithstanding paragraphs E.1 and E.2 above, the following non-stormwater *discharges* may be authorized by this permit: *discharges* from firefighting activities; fire hydrant flushings; waters to which cleansers or other components have not been added that are used to wash vehicles or control dust in accordance with the SWPPP, routine external building washdown which does not use detergents; pavement washwaters where spills or leaks of toxic or hazardous materials have not occurred (unless all spilled material has been removed) and where detergents are not used; air conditioning condensate; uncontaminated *groundwater* or spring water; uncontaminated *discharges* from construction site de-watering operations; and foundation or footing drains where flows are not contaminated with process materials such as solvents. For those entities required to obtain coverage under this permit, and who *discharge* as noted in this paragraph, and with the exception of flows from firefighting activities, these *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:

(Part I.F)

1. *Discharges after construction activities* have been completed and the site has undergone *final stabilization*;
2. *Discharges* that are mixed with sources of non-stormwater other than those expressly authorized under subsection E.3. of this Part and identified in the SWPPP required by this permit;
3. *Discharges* that are required to obtain an individual SPDES permit or another SPDES general permit pursuant to Part VII.K. of this permit;
4. *Construction activities or discharges from construction activities* that may adversely affect an endangered or threatened species unless the *owner or operator* has obtained a permit issued pursuant to 6 NYCRR Part 182 for the project or the Department has issued a letter of non-jurisdiction for the project. All documentation necessary to demonstrate eligibility shall be maintained on site in accordance with Part II.C.2 of this permit.
5. *Discharges* which either cause or contribute to a violation of *water quality standards* adopted pursuant to the *ECL* and its accompanying regulations;
6. *Construction activities* for residential, commercial and institutional projects:
 - a. Where the *discharges* from the *construction activities* are tributary to waters of the state classified as AA or AA-s; and
 - b. Which disturb one or more acres of land with no existing *impervious cover*; and
 - c. Which are undertaken on land with a Soil Slope Phase that is identified as an E or F, or the map unit name is inclusive of 25% or greater slope, on the United States Department of Agriculture (“USDA”) Soil Survey for the County where the disturbance will occur.
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 disturb two or more acres of land with no existing *impervious cover*; and
 - c. Which are undertaken on land with a Soil Slope Phase that is identified as an E or F, or the map unit name is inclusive of 25% or greater slope, on the USDA Soil Survey for the County where the disturbance will occur.

(Part I.F.8)

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.C.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

(Part I.F.8.c.iii)

(iii) Executed Memorandum of Agreement, or

d. Documentation that:

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

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

II. Part II. OBTAINING PERMIT COVERAGE

A. Notice of Intent (NOI) Submittal

1. An *owner or operator* of a *construction activity* that is not subject to the requirements of a *regulated, traditional land use control MS4* must first prepare a SWPPP in accordance with all applicable requirements of this permit and then submit a completed NOI form to the Department in order to be authorized to *discharge* under this permit. 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. 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 its 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. An *owner or operator* shall use either the electronic (eNOI) or paper version of the NOI.

The paper version of the NOI shall be signed in accordance with Part VII.H. of this permit and submitted to the address in Part II.A.1.

(Part II.A.2)

The requirement for an *owner or operator* to have its SWPPP reviewed and accepted by the *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.E. (Change of *Owner or Operator*) or where the *owner or operator* of the *construction activity* is the *regulated, traditional land use control MS4*.

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.

B. 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) 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.B.2 above

(Part II.B.3)

will be authorized to *discharge* stormwater from their *construction activity* in accordance with the following schedule:

a. For *construction activities* that are not subject to the requirements of a *regulated, traditional land use control MS4*:

(i) Five (5) business days from the date the Department receives a complete electronic version of the NOI (eNOI) for *construction activities* with a SWPPP that has been prepared in conformance with the design criteria in the technical standard referenced in Part III.B.1 and the *performance criteria* in the technical standard referenced in Parts III.B., 2 or 3, for *construction activities* that require post-construction stormwater management practices pursuant to Part III.C.; or

(ii) Sixty (60) business days from the date the Department receives a complete NOI (electronic or paper version) for *construction activities* with a SWPPP that has not been prepared in conformance with the design criteria in technical standard referenced in Part III.B.1. or, for *construction activities* that require post-construction stormwater management practices pursuant to Part III.C., the *performance criteria* in the technical standard referenced in Parts III.B., 2 or 3, or;

(iii) Ten (10) business days from the date the Department receives a complete paper version of the NOI for *construction activities* with a SWPPP that has been prepared in conformance with the design criteria in the technical standard referenced in Part III.B.1 and the *performance criteria* in the technical standard referenced in Parts III.B., 2 or 3, for *construction activities* that require post-construction stormwater management practices pursuant to Part III.C.

b. For *construction activities* that are subject to the requirements of a *regulated, traditional land use control MS4*:

(i) Five (5) business days from the date the Department receives both a complete electronic version of the NOI (eNOI) and signed “MS4 SWPPP Acceptance” form, or

(ii) Ten (10) business days from the date the Department receives both a complete paper version of the NOI and signed “MS4 SWPPP Acceptance” form.

4. The Department may suspend or deny an *owner’s or operator’s* coverage

(Part II.B.4)

under this permit if the Department determines that the SWPPP does not meet the permit requirements. In accordance with statute, regulation, and the terms and conditions of this permit, the Department may deny coverage under this permit and require submittal of an application for an individual SPDES permit based on a review of the NOI or other information pursuant to Part II.

5. 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.B. of this permit.

C. General Requirements For Owners or Operators With Permit Coverage

1. The *owner or operator* shall ensure that the provisions of the SWPPP are implemented from the *commencement of construction activity* until all areas of disturbance have achieved *final stabilization* and the Notice of Termination (“NOT”) has been submitted to the Department in accordance with Part V. of this permit. This includes any changes made to the SWPPP pursuant to Part III.A.4. of this permit.
2. The *owner or operator* shall maintain a copy of the General Permit (GP-0-15-002), NOI, *NOI Acknowledgment Letter*, SWPPP, MS4 SWPPP Acceptance form, inspection reports, 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

(Part II.C.3.a)

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 August 2005.
 - 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. 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*.
 5. 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

(Part II.D)

D. Permit Coverage for Discharges Authorized Under GP-0-10-001

1. Upon renewal of SPDES General Permit for Stormwater Discharges from *Construction Activity* (Permit No. GP-0-10-001), an *owner or operator* of a *construction activity* with coverage under GP-0-10-001, as of the effective date of GP-0-15-002, shall be authorized to *discharge* in accordance with GP-0-15-002, 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-0-15-002.

E. Change of *Owner or Operator*

2. 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. 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.A.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.

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)

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

A. General SWPPP Requirements

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

(Part III.A.5)

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.C.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

(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.

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 August 2005. 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

(Part III.B.1.d)

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 August 2005, 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 August 2005;
- j. A description of the pollution prevention measures that will be used to control litter, construction chemicals and construction debris from becoming a *pollutant* source in the stormwater *discharges*;
- k. A description and location of any stormwater *discharges* associated with industrial activity other than construction at the site, including, but not limited to, stormwater *discharges* from asphalt plants and concrete plants located on the construction site; and
- l. Identification of any elements of the design that are not in conformance with the design criteria in the technical standard, New York State Standards and Specifications for Erosion and Sediment Control, dated August 2005. Include the reason for the deviation or alternative design

(Part III.B.1.I)

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

2. Post-construction stormwater management practice component – The *owner or operator* of any construction project identified in Table 2 of Appendix B as needing post-construction stormwater management practices shall prepare a SWPPP that includes practices designed in conformance with the applicable *sizing criteria* in Part I.C.2.a., c. or d. of this permit and the *performance criteria* in the technical standard, New York State Stormwater Management Design Manual dated January 2015

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

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

- a. Identification of all post-construction stormwater management practices to be constructed as part of the project. Include the dimensions, material specifications and installation details for each post-construction stormwater management practice;
- b. A site map/construction drawing(s) showing the specific location and size of each post-construction stormwater management practice;
- c. A Stormwater Modeling and Analysis Report that includes:
 - (i) Map(s) showing pre-development conditions, including watershed/subcatchments boundaries, flow paths/routing, and design points;
 - (ii) Map(s) showing post-development conditions, including watershed/subcatchments boundaries, flow paths/routing, design points and post-construction stormwater management practices;
 - (iii) Results of stormwater modeling (i.e. hydrology and hydraulic analysis) for the required storm events. Include supporting calculations (model runs), methodology, and a summary table that compares pre and post-development runoff rates and volumes for the different storm events;
 - (iv) Summary table, with supporting calculations, which demonstrates

(Part III.B.2.c.iv)

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)

IV. 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

(Part IV.C)

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),
- Registered Landscape Architect, or
- someone working under the direct supervision of, and at the same company as, the licensed Professional Engineer or Registered Landscape Architect, provided they have received four (4) hours of Department endorsed training in proper erosion and sediment control principles from a Soil and Water Conservation District, or other Department endorsed entity].

1. A *qualified inspector* shall conduct site inspections for all *construction activities* identified in Tables 1 and 2 of Appendix B, with the exception of:
 - a. the construction of a single family residential subdivision with 25% or less *impervious cover* at total site build-out that involves a soil disturbance of one (1) or more acres of land but less than five (5) acres and is not located in one of the watersheds listed in Appendix C and not directly discharging to one of the 303(d) segments listed in Appendix E;
 - b. the construction of a single family home that involves a soil disturbance of one (1) or more acres of land but less than five (5) acres and is not located in one of the watersheds listed in Appendix C and not directly discharging to one of the 303(d) segments listed in Appendix E;
 - c. construction on agricultural property that involves a soil disturbance of one (1) or more acres of land but less than five (5) acres; and
 - d. *construction activities* located in the watersheds identified in Appendix D that involve soil disturbances between five thousand (5,000) square feet and one (1) acre of land.
2. Unless otherwise notified by the Department, the *qualified inspector* shall conduct site inspections in accordance with the following timetable:
 - a. For construction sites where soil disturbance activities are on-going, the *qualified inspector* shall conduct a site inspection at least once every seven (7) calendar days.
 - b. For construction sites where soil disturbance activities are on-going and

(Part IV.C.2.b)

the *owner or operator* has received authorization in accordance with Part II.C.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.A.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

(Part IV.C.2.e)

be separated by a minimum of two (2) full calendar days.

3. At a minimum, the *qualified inspector* shall inspect all erosion and sediment control practices and pollution prevention measures to ensure integrity and effectiveness, all post-construction stormwater management practices under construction to ensure that they are constructed in conformance with the SWPPP, all areas of disturbance that have not achieved *final stabilization*, all points of *discharge* to natural surface waterbodies located within, or immediately adjacent to, the property boundaries of the construction site, and all points of *discharge* from the construction site.
4. The *qualified inspector* shall prepare an inspection report subsequent to each and every inspection. At a minimum, the inspection report shall include and/or address the following:
 - a. Date and time of inspection;
 - b. Name and title of person(s) performing inspection;
 - c. A description of the weather and soil conditions (e.g. dry, wet, saturated) at the time of the inspection;
 - d. A description of the condition of the runoff at all points of *discharge* from the construction site. This shall include identification of any *discharges* of sediment from the construction site. Include *discharges* from conveyance systems (i.e. pipes, culverts, ditches, etc.) and overland flow;
 - e. A description of the condition of all natural surface waterbodies located within, or immediately adjacent to, the property boundaries of the construction site which receive runoff from disturbed areas. This shall include identification of any *discharges* of sediment to the surface waterbody;
 - f. Identification of all erosion and sediment control practices and pollution prevention measures that need repair or maintenance;
 - g. Identification of all erosion and sediment control practices and pollution prevention measures that were not installed properly or are not functioning as designed and need to be reinstalled or replaced;
 - h. Description and sketch of areas with active soil disturbance activity, areas that have been disturbed but are inactive at the time of the inspection, and areas that have been stabilized (temporary and/or final) since the last inspection;

(Part IV.C.4.i)

- i. Current phase of construction of all post-construction stormwater management practices and identification of all construction that is not in conformance with the SWPPP and technical standards;
 - j. Corrective action(s) that must be taken to install, repair, replace or maintain erosion and sediment control practices and pollution prevention measures; and to correct deficiencies identified with the construction of the post-construction stormwater management practice(s);
 - k. Identification and status of all corrective actions that were required by previous inspection; and
 - l. 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.C.2. of this permit, the inspection reports shall be maintained on site with the SWPPP.

V. Part V. TERMINATION OF PERMIT COVERAGE

A. Termination of Permit Coverage

1. An *owner or operator* that is eligible to terminate coverage under this permit must submit a completed NOT form to the address in Part II.A.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.

(Part V.A.2)

2. An *owner or operator* may terminate coverage when one or more the following conditions have been met:
 - a. Total project completion - All *construction activity* identified in the SWPPP has been completed; and all areas of disturbance have achieved *final stabilization*; and all temporary, structural erosion and sediment control measures have been removed; and all post-construction stormwater management practices have been constructed in conformance with the SWPPP and are operational;
 - b. Planned shutdown with partial project completion - All soil disturbance activities have ceased; and all areas disturbed as of the project shutdown date have achieved *final stabilization*; and all temporary, structural erosion and sediment control measures have been removed; and all post-construction stormwater management practices required for the completed portion of the project have been constructed in conformance with the SWPPP and are operational;
 - c. A new *owner or operator* has obtained coverage under this permit in accordance with Part II.E. 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.

(Part V.A.5)

5. For *construction activities* that require post-construction stormwater management practices and meet subdivision 2a. of this Part, the *owner or operator* must, prior to submitting the NOT, ensure one of the following:
 - a. the post-construction stormwater management practice(s) and any right-of-way(s) needed to maintain such practice(s) have been deeded to the municipality in which the practice(s) is located,
 - b. an executed maintenance agreement is in place with the municipality that will maintain the post-construction stormwater management practice(s),
 - c. for post-construction stormwater management practices that are privately owned, the *owner or operator* has a mechanism in place that requires operation and maintenance of the practice(s) in accordance with the operation and maintenance plan, such as a deed covenant in the *owner or operator's* deed of record,
 - d. for post-construction stormwater management practices that are owned by a public or private institution (e.g. school, university, hospital), government agency or authority, or public utility; the *owner or operator* has policy and procedures in place that ensures operation and maintenance of the practices in accordance with the operation and maintenance plan.

VI. Part VI. REPORTING AND RETENTION OF 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.A.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)

VII. 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.

(Part VII.E)

E. Duty to Mitigate

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

F. Duty to Provide Information

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

G. Other Information

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

H. Signatory Requirements

1. All NOIs and NOTs shall be signed as follows:
 - a. For a corporation these forms shall be signed by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means:
 - (i) a president, secretary, treasurer, or vice-president of the

(Part VII.H.1.a.i)

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

(Part VII.H.2.b)

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

(Part VII.K.1)

discharge under this general permit shall be terminated. Applications must be submitted to the appropriate Permit Administrator at the Regional Office. The Department may grant additional time upon demonstration, to the satisfaction of the Department, that additional time to apply for an alternative authorization is necessary or where the Department has not provided a permit determination in accordance with Part 621 of this Title.

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

L. Proper Operation and Maintenance

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

M. Inspection and Entry

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

1. Enter upon the *owner's or operator's* premises where a regulated facility or activity is located or conducted or where records must be kept under the conditions of this permit;
2. Have access to and copy at reasonable times, any records that must be kept under the conditions of this permit; and
3. Inspect at reasonable times any facilities or equipment (including monitoring and control equipment), practices or operations regulated or required by this permit.
4. Sample or monitor at reasonable times, for purposes of assuring permit compliance or as otherwise authorized by the Act or ECL, any substances or parameters at any location.

(Part VII.N)

N. Permit Actions

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

O. Definitions

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

P. Re-Opener Clause

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

Q. Penalties for Falsification of Forms and Reports

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

R. Other Permits

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

VIII. APPENDIX A

Definitions

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.

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.

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).

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

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*.

Owner or Operator - means the person, persons or legal entity which owns or leases the property on which the *construction activity* is occurring; and/or an entity that has operational control over the construction plans and specifications, including the ability to make modifications to the plans and specifications.

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.

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, 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 required to gain coverage under New York State DEC's SPDES General Permit For Stormwater Discharges from Municipal Separate Stormwater Sewer Systems (MS4s).

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,
- Stream bank restoration projects (does not include the placement of spoil material),
- 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 makes 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 with a Soil Slope Phase that is identified as an E or F, or

the map unit name is inclusive of 25% or greater slope, on the United States Department of Agriculture (“USDA”) Soil Survey for the County where the disturbance will occur.

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, 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.

IX. APPENDIX B

Required SWPPP Components by Project Type

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

<p>The following construction activities that involve soil disturbances of one (1) or more acres of land, but less than five (5) acres:</p> <ul style="list-style-type: none"> • Single family home <u>not</u> located in one of the watersheds listed in Appendix C or <u>not directly discharging</u> to one of the 303(d) segments listed in Appendix E • Single family residential subdivisions with 25% or less impervious cover at total site build-out and <u>not</u> located in one of the watersheds listed in Appendix C and <u>not</u> directly discharging to one of the 303(d) segments listed in Appendix E • Construction of a barn or other agricultural building, silo, stock yard or pen.
<p>The following construction activities that involve soil disturbances of one (1) or more acres of land:</p> <ul style="list-style-type: none"> • 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 • Bike paths and trails • Sidewalk construction projects that are not part of a road/ highway construction or reconstruction project • Slope stabilization projects • Slope flattening that changes the grade of the site, but does not significantly change the runoff characteristics • Spoil areas that will be covered with vegetation • Land clearing and grading for the purposes of creating vegetated open space (i.e. recreational parks, lawns, meadows, fields), excluding projects that <i>alter hydrology from pre to post development</i> conditions • Athletic fields (natural grass) that do not include the construction or reconstruction of <i>impervious area</i> <u>and</u> do not <i>alter hydrology from pre to post development</i> 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 <i>impervious cover</i> • 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 less than five acres and construction activities that include the construction or reconstruction of impervious area
<p>The following construction activities that involve soil disturbances between five thousand (5000) square feet and one (1) acre of land:</p> <ul style="list-style-type: none"> • 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.

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

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

- Single family home located in one of the watersheds listed in Appendix C or *directly discharging* to one of the 303(d) segments listed in Appendix E
- Single family 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 townhomes, condominiums, senior housing complexes, apartment complexes, and mobile home parks
- Airports
- Amusement parks
- 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, includes hospitals, prisons, schools and colleges
- Industrial facilities, includes industrial parks
- Landfills
- Municipal facilities; includes highway garages, transfer stations, office buildings, POTW’s and water treatment plants
- Office complexes
- Sports complexes
- Racetracks, includes racetracks with earthen (dirt) surface
- Road construction or reconstruction
- Parking lot construction or reconstruction
- 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
- 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 Where Enhanced Phosphorus Removal Standards Are Required**

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

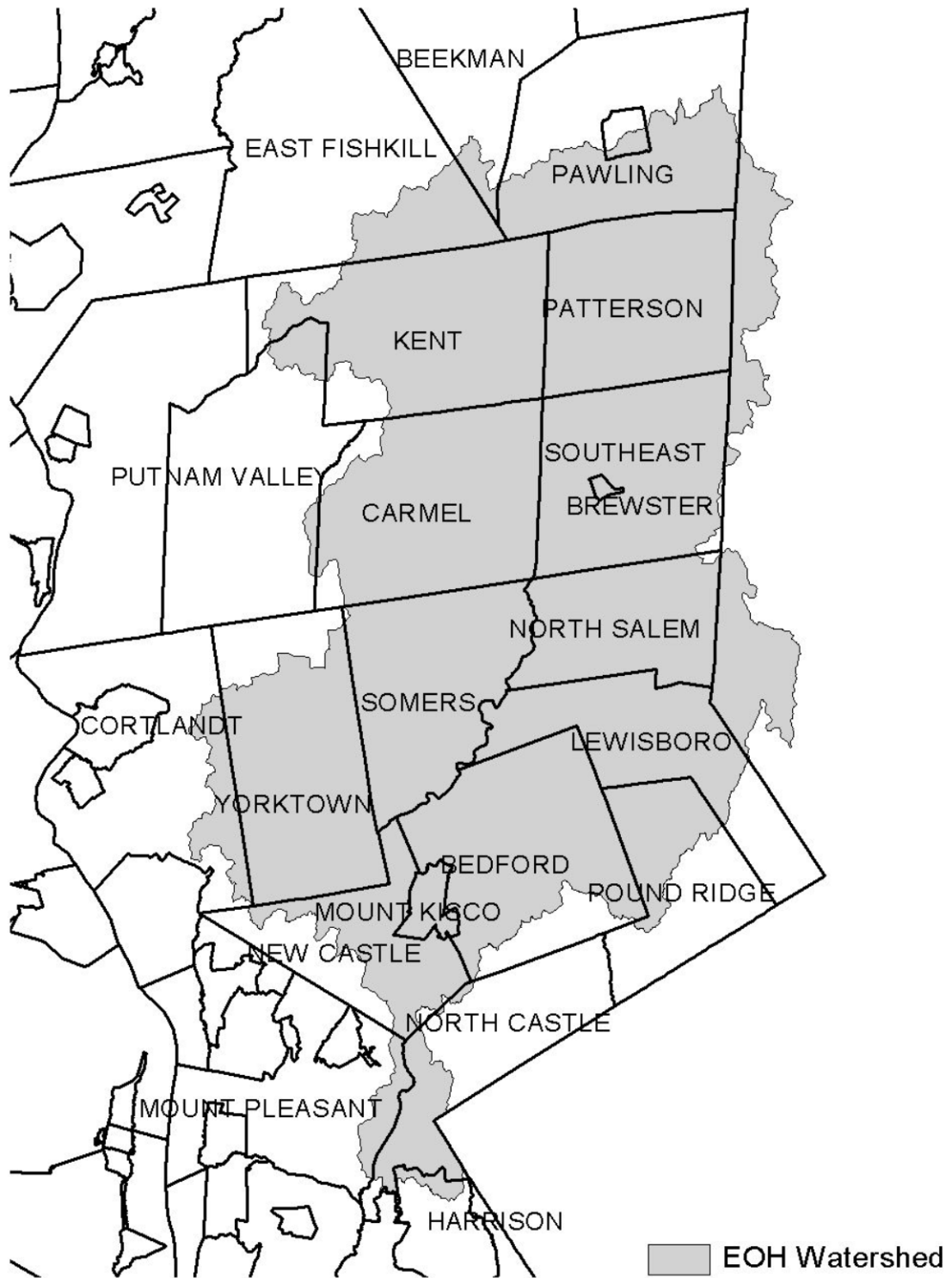


Figure 2 - Onondaga Lake Watershed



Figure 3 - Greenwood Lake Watershed

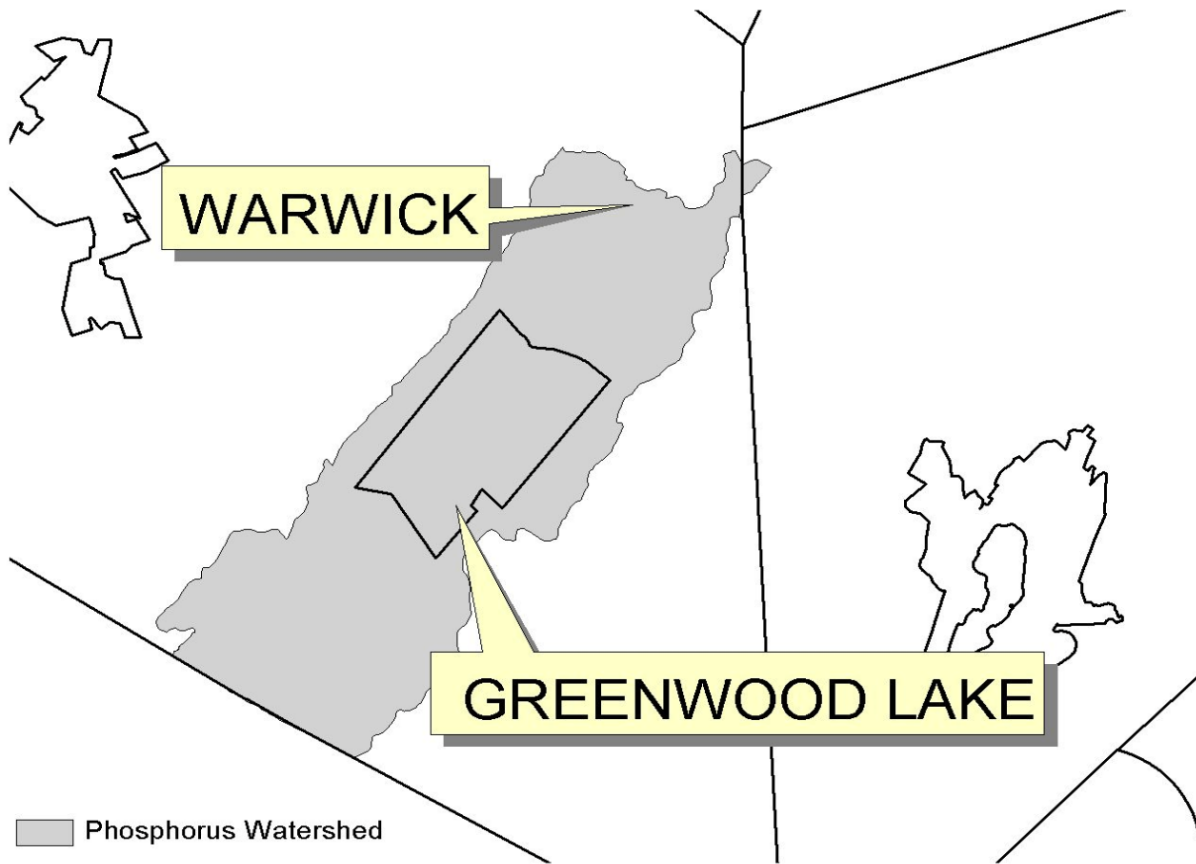


Figure 4 - Oscawana Lake Watershed

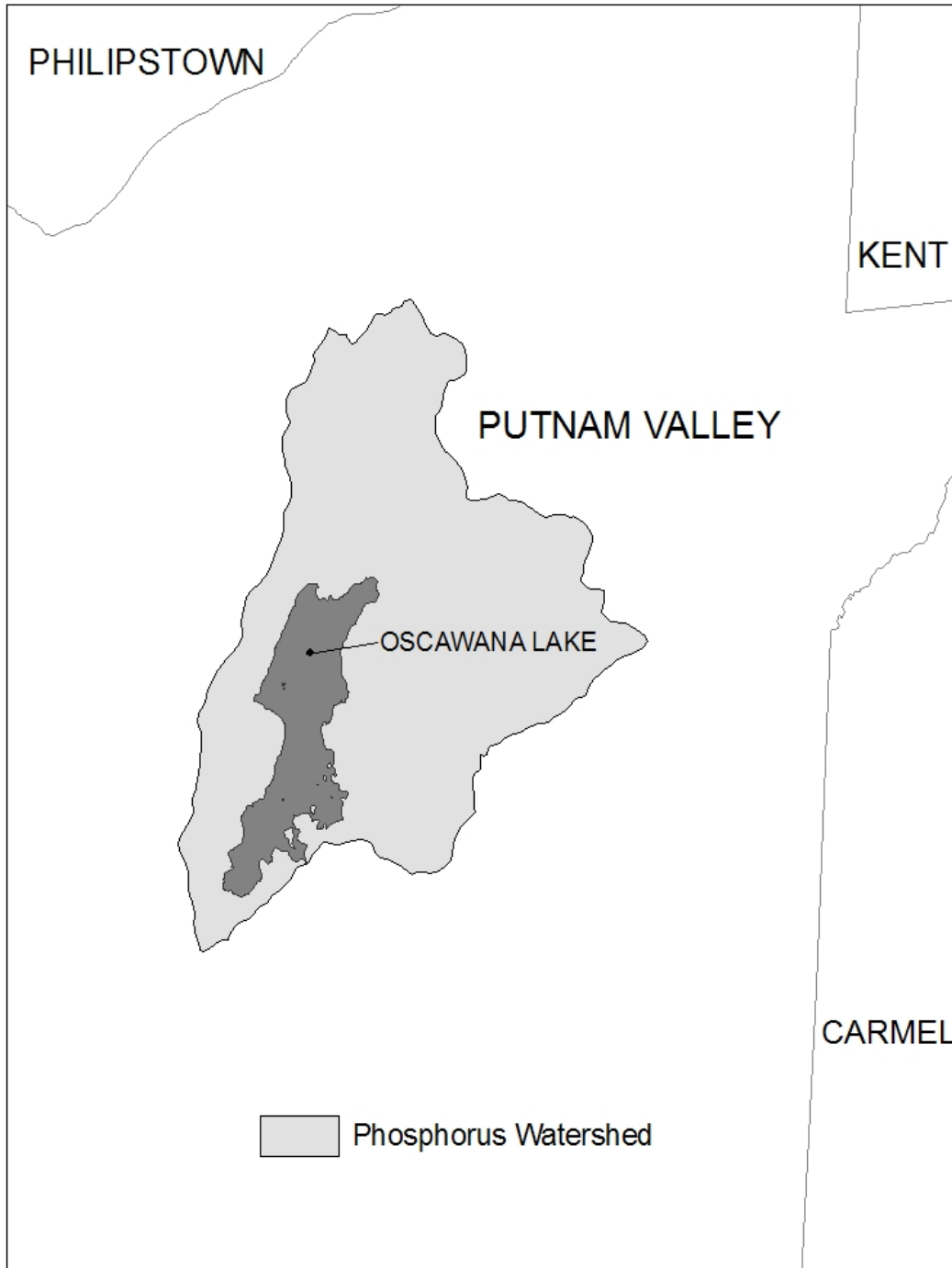
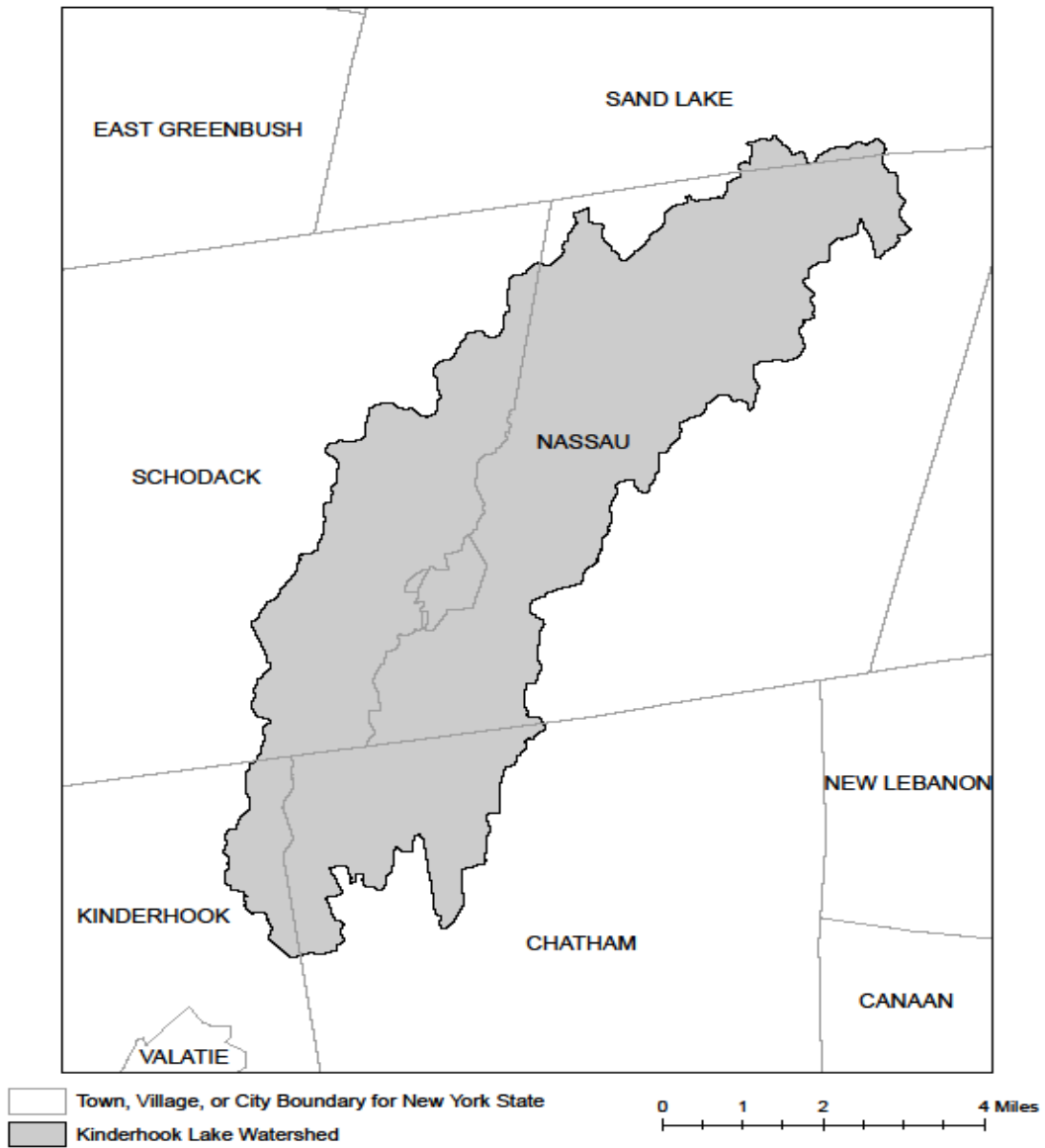


Figure 5: Kinderhook Lake Watershed



XI. **APPENDIX D**

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

List of 303(d) segments impaired by pollutants related to *construction activity* (e.g. silt, sediment or nutrients). *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	COUNTY	WATERBODY
Albany	Ann Lee (Shakers) Pond, Stump Pond	Greene	Sleepy Hollow Lake
Albany	Basic Creek Reservoir	Herkimer	Steele Creek tribs
Allegheny	Amity Lake, Saunders Pond	Kings	Hendrix Creek
Bronx	Van Cortlandt Lake	Lewis	Mill Creek/South Branch and tribs
Broome	Whitney Point Lake/Reservoir	Livingston	Conesus Lake
Broome	Fly Pond, Deer Lake	Livingston	Jaycox Creek and tribs
Broome	Minor Tribs to Lower Susquehanna (north)	Livingston	Mill Creek and minor tribs
Cattaraugus	Allegheny River/Reservoir	Livingston	Bradner Creek and tribs
Cattaraugus	Case Lake	Livingston	Christie Creek and tribs
Cattaraugus	Linlyco/Club Pond	Monroe	Lake Ontario Shoreline, Western
Cayuga	Duck Lake	Monroe	Mill Creek/Blue Pond Outlet and tribs
Chautauqua	Chautauqua Lake, North	Monroe	Rochester Embayment - East
Chautauqua	Chautauqua Lake, South	Monroe	Rochester Embayment - West
Chautauqua	Bear Lake	Monroe	Unnamed Trib to Honeoye Creek
Chautauqua	Chadakoin River and tribs	Monroe	Genesee River, Lower, Main Stem
Chautauqua	Lower Cassadaga Lake	Monroe	Genesee River, Middle, Main Stem
Chautauqua	Middle Cassadaga Lake	Monroe	Black Creek, Lower, and minor tribs
Chautauqua	Findley Lake	Monroe	Buck Pond
Clinton	Great Chazy River, Lower, Main Stem	Monroe	Long Pond
Columbia	Kinderhook Lake	Monroe	Cranberry Pond
Columbia	Robinson Pond	Monroe	Mill Creek and tribs
Dutchess	Hillside Lake	Monroe	Shipbuilders Creek and tribs
Dutchess	Wappinger Lakes	Monroe	Minor tribs to Irondequoit Bay
Dutchess	Fall Kill and tribs	Monroe	Thomas Creek/White Brook and tribs
Erie	Green Lake	Nassau	Glen Cove Creek, Lower, and tribs
Erie	Scajaquada Creek, Lower, and tribs	Nassau	LI Tribs (fresh) to East Bay
Erie	Scajaquada Creek, Middle, and tribs	Nassau	East Meadow Brook, Upper, and tribs
Erie	Scajaquada Creek, Upper, and tribs	Nassau	Hempstead Bay
Erie	Rush Creek and tribs	Nassau	Hempstead Lake
Erie	Ellicott Creek, Lower, and tribs	Nassau	Grant Park Pond
Erie	Beeman Creek and tribs	Nassau	Beaver Lake
Erie	Murder Creek, Lower, and tribs	Nassau	Camaans Pond
Erie	South Branch Smoke Cr, Lower, and tribs	Nassau	Halls Pond
Erie	Little Sister Creek, Lower, and tribs	Nassau	LI Tidal Tribs to Hempstead Bay
Essex	Lake George (primary county: Warren)	Nassau	Massapequa Creek and tribs
Genesee	Black Creek, Upper, and minor tribs	Nassau	Reynolds Channel, east
Genesee	Tonawanda Creek, Middle, Main Stem	Nassau	Reynolds Channel, west
Genesee	Oak Orchard Creek, Upper, and tribs	Nassau	Silver Lake, Lofts Pond
Genesee	Bowen Brook and tribs	Nassau	Woodmere Channel
Genesee	Bigelow Creek and tribs	Niagara	Hyde Park Lake
Genesee	Black Creek, Middle, and minor tribs	Niagara	Lake Ontario Shoreline, Western
Genesee	LeRoy Reservoir	Niagara	Bergholtz Creek and tribs
Greene	Schoharie Reservoir	Oneida	Ballou, Nail Creeks
		Onondaga	Ley Creek and tribs
		Onondaga	Onondaga Creek, Lower and tribs

APPENDIX E

List of 303(d) segments impaired by pollutants related to construction activity, cont'd.

COUNTY	WATERBODY	COUNTY	WATERBODY
Onondaga	Onondaga Creek, Middle and tribs	Suffolk	Great South Bay, West
Onondaga	Onondaga Creek, Upp, and minor tribs	Suffolk	Mill and Seven Ponds
Onondaga	Harbor Brook, Lower, and tribs	Suffolk	Moriches Bay, East
Onondaga	Ninemile Creek, Lower, and tribs	Suffolk	Moriches Bay, West
Onondaga	Minor tribs to Onondaga Lake	Suffolk	Quantuck Bay
Onondaga	Onondaga Creek, Lower, and tribs	Suffolk	Shinnecock Bay (and Inlet)
Ontario	Honeoye Lake	Sullivan	Bodine, Montgomery Lakes
Ontario	Hemlock Lake Outlet and minor tribs	Sullivan	Davies Lake
Ontario	Great Brook and minor tribs	Sullivan	Pleasure Lake
Orange	Monhagen Brook and tribs	Sullivan	Swan Lake
Orange	Orange Lake	Tompkins	Cayuga Lake, Southern End
Orleans	Lake Ontario Shoreline, Western	Tompkins	Owasco Inlet, Upper, and tribs
Oswego	Pleasant Lake	Ulster	Ashokan Reservoir
Oswego	Lake Neatahwanta	Ulster	Esopus Creek, Upper, and minor tribs
Putnam	Oscawana Lake	Ulster	Esopus Creek, Lower, Main Stem
Putnam	Palmer Lake	Ulster	Esopus Creek, Middle, and minor tribs
Putnam	Lake Carmel	Warren	Lake George
Queens	Jamaica Bay, Eastern, and tribs (Queens)	Warren	Tribs to L.George, Village of L George
Queens	Bergen Basin	Warren	Huddle/Finkle Brooks and tribs
Queens	Shellbank Basin	Warren	Indian Brook and tribs
Rensselaer	Nassau Lake	Warren	Hague Brook and tribs
Rensselaer	Snyders Lake	Washington	Tribs to L.George, East Shr Lk George
Richmond	Grasmere, Arbutus and Wolfes Lakes	Washington	Cossayuna Lake
Rockland	Congers Lake, Swartout Lake	Washington	Wood Cr/Champlain Canal, minor tribs
Rockland	Rockland Lake	Wayne	Port Bay
Saratoga	Ballston Lake	Wayne	Marbletown Creek and tribs
Saratoga	Round Lake	Westchester	Lake Katonah
Saratoga	Dwaas Kill and tribs	Westchester	Lake Mohegan
Saratoga	Tribs to Lake Lonely	Westchester	Lake Shenorock
Saratoga	Lake Lonely	Westchester	Reservoir No.1 (Lake Isle)
Schenectady	Collins Lake	Westchester	Saw Mill River, Middle, and tribs
Schenectady	Duane Lake	Westchester	Silver Lake
Schenectady	Mariaville Lake	Westchester	Teatown Lake
Schoharie	Engleville Pond	Westchester	Truesdale Lake
Schoharie	Summit Lake	Westchester	Wallace Pond
Schuyler	Cayuta Lake	Westchester	Peach Lake
St. Lawrence	Fish Creek and minor tribs	Westchester	Mamaroneck River, Lower
St. Lawrence	Black Lake Outlet/Black Lake	Westchester	Mamaroneck River, Upp, and tribs
Steuben	Lake Salubria	Westchester	Sheldrake River and tribs
Steuben	Smith Pond	Westchester	Blind Brook, Lower
Suffolk	Millers Pond	Westchester	Blind Brook, Upper, and tribs
Suffolk	Mattituck (Marratooka) Pond	Westchester	Lake Lincolndale
Suffolk	Tidal tribs to West Moriches Bay	Westchester	Lake Meahaugh
Suffolk	Canaan Lake	Wyoming	Java Lake
Suffolk	Lake Ronkonkoma	Wyoming	Silver Lake
Suffolk	Beaverdam Creek and tribs		
Suffolk	Big/Little Fresh Ponds		
Suffolk	Fresh Pond		
Suffolk	Great South Bay, East		
Suffolk	Great South Bay, Middle		

Note: The list above identifies those waters from the final New York State "2014 Section 303(d) List of Impaired Waters Requiring a TMDL/Other Strategy", dated January 2015, that are impaired by silt, sediment or nutrients.

XIII. APPENDIX F

LIST OF NYS DEC REGIONAL OFFICES

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

**APPENDIX M. CONSTRUCTION SITE INSPECTION AND
MAINTENANCE LOG SHEETS**

Standardized Qualified Inspector Form



Project Name and Location of Project: _____ _____ _____ Municipality: _____ County: _____ Qualified Inspector: _____ Qualified Inspector Title: _____	Date:	Weather:
	Permit #: NYR10	
	Entry Time:	Exit Time:

5 Acre Waiver: Yes No

Name of SPDES Permittee: _____

Phone: _____ Fax: _____

Name of Representative on Site: _____

Qualified Inspector's Credentials & Certification

Qualified Inspector (QI) means a person that is knowledgeable in the principles and practices of erosion and sediment control (ESC). A person is considered qualified under the following conditions:

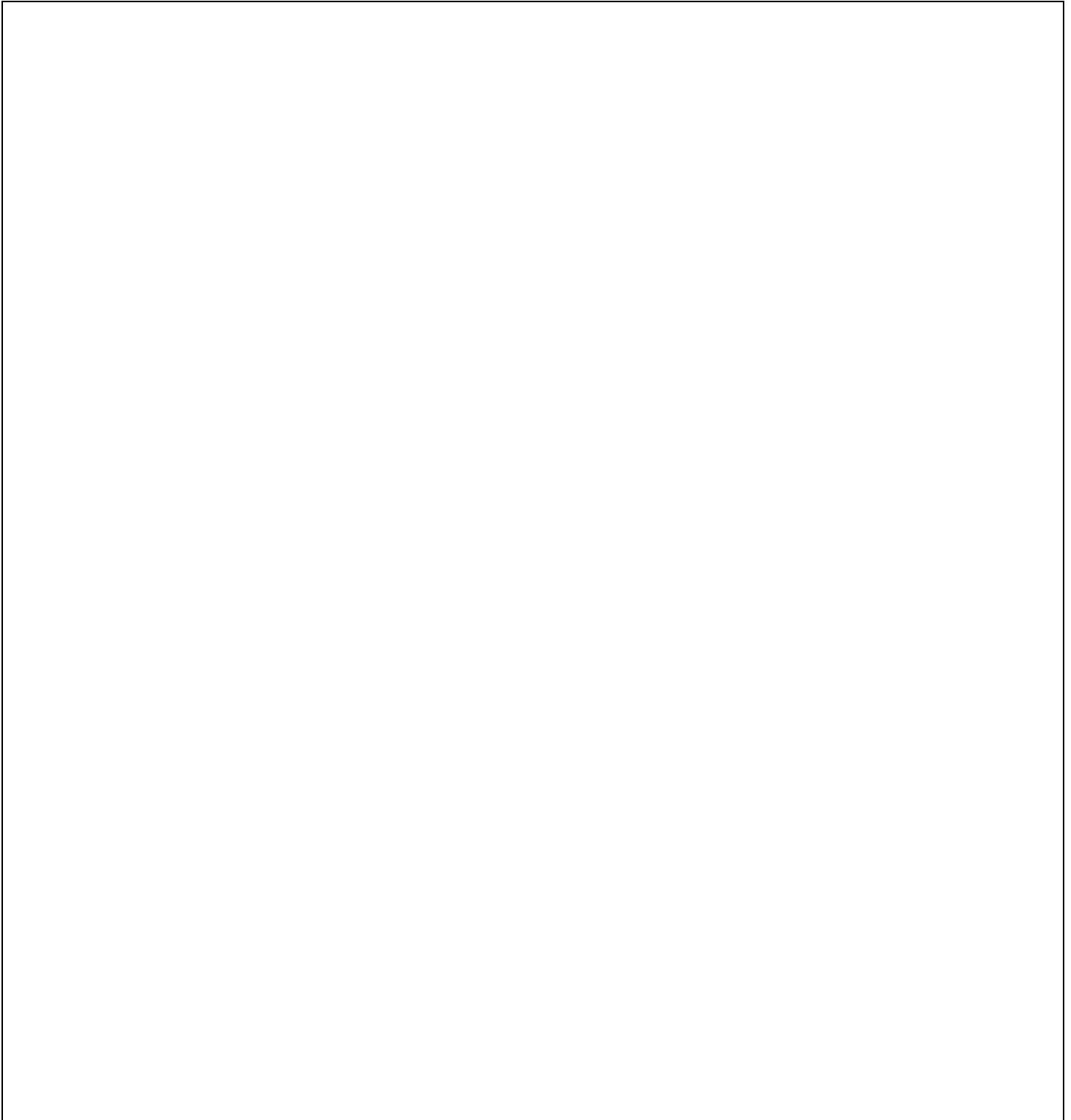
1. A licensed Professional Engineer; licensed Landscape Architect with documented training and education in the principles and practices of ESC;
2. An individual certified in ESC by CPESC, Incorporated or any other agency endorsed by the NYS Department of Environmental Conservation Office of Water Resources;
3. An individual working under the direct supervision of a qualified licensed Professional Engineer or qualified licensed Landscape Architect with documented training and education in the principles and practices of ESC **and has** completed the four (4) hour training program in the principles and practices of erosion and sediment control from either a Soil and Water Conservation District, CPESC or any other agency endorsed by the NYS Department of Environmental Conservation Office of Water Resources. This initial training must be completed no later than May 1, 2010. After receiving the initial training, an individual working under the direct supervision of a qualified licensed Professional Engineer or qualified licensed Landscape Architect must complete four (4) hours of training every three (3) years.
4. Any other individual endorsed by the NYS Department of Environmental Conservation by written documentation.
5. 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.1

STATE POLLUTANT DISCHARGE ELIMINATION SYSTEM FOR CONSTRUCTION ACTIVITIES
Standardized Qualified Inspector Form

Part I. CONSTRUCTION DURATION INSPECTIONS

Page 2 of _____

- a. SITE PLAN/SKETCH OF AREAS DISTURBED AT TIME OF INSPECTION AND AREAS THAT HAVE BEEN STABILIZED (TEMPORARY OR FINAL) SINCE LAST INSPECTION:



Part I. CONSTRUCTION DURATION INSPECTIONS

Page 3 of _____

STATE POLLUTANT DISCHARGE ELIMINATION SYSTEM FOR CONSTRUCTION ACTIVITIES
Standardized Qualified Inspector Form

b. Other Permit Required Reporting

Maintaining Water Quality - *Attach Color Photographs of the site documenting discharge points and site conditions.*

Describe the condition of runoff at all points of discharge.

Is there an increase in turbidity causing a substantial visible contrast to natural conditions? _____

Is there residue from oil and floating substances, visible oil film, or globules or grease? _____

Is there evidence of silt deposition from project in a stream, wetland, or other water body? _____

If yes, where? _____ remedial measure needed? _____

Provide a description of the conditions of all natural water bodies within or immediately adjacent to the project. _____

Area of Disturbance

Total area of disturbance (as shown on sketch plan and not including areas that have temporary or permanent stabilization measures applied) _____

Are all disturbances within the limits of the SWPPP? _____

Weather Conditions

A description of the weather and soil conditions (e.g. dry, wet, saturated) at the time of the inspection;

General Housekeeping

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? _____

Describe corrective action(s): _____

Date correction needed: _____

c. Runoff Controls *Direct runoff away from exposed soil surfaces and control water that falls onto the site*

Runoff conveyance systems N A

Are all runoff conveyance systems called for in the SWPPP installed, stabilized and working? _____

If not, what specific areas need detailing? _____

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? _____

Describe corrective action(s): _____

Date correction needed: _____

Runoff Control Structures N A

Have all required runoff control structures (rock outlets and aprons) been installed and constructed per plan and according to the Blue Book? _____ Installed concurrently with pipe installation? _____

Describe corrective action(s): _____

Date correction needed: _____

Standardized Qualified Inspector Form

Temporary Stream or Channel Crossing N A

Have construction crossings at concentrated flow areas been culverted? _____

Describe corrective action(s): _____

Date correction needed: _____

Stone Check Dam N A

Installed per standards? _____ channel stable (flow is not eroding soil underneath or around the structure). _____ does sediment need to be removed? _____

Describe corrective action(s): _____

Date correction needed: _____

Excavation Dewatering N A

1. Flowing water N A – Upstream berm (sandbags, inflatable dams, etc. with one-foot minimum freeboard) and downstream berms are installed per plan? _____ and functioning? (clean water from upstream pool is being pumped to the downstream pool)? _____

2. Sediment laden water from work area N A - Is being discharged to a silt-trapping device? _____

3. Groundwater from excavations N A - is being managed properly (sumps and sediment control)? _____

Describe corrective action(s): _____

Date correction needed: _____

d. Soil Stabilization *Basic erosion control is achieved by covering all bare ground areas.*

Topsoil and Spoil Stockpiles N A

Stabilized - sediment controls at downhill slope? _____

Describe corrective action(s): _____

Date correction needed: _____

Revegetation/Stabilization N A

Has temporary or permanent seeding *and* mulch (as shown on site sketch plan) been applied to areas that have been inactive for 14 days or less (or, inactive for 7 days if over 5 acres disturbed)? _____

Has soil preparation been applied as specified in the SWPPP and in accordance with the Blue Book (Assure that all the necessary soil testing/fertilizer/lime, topsoil, decompaction has been applied)? _____

Have rolled erosion control products specified for steep slopes or channels been installed? _____

Describe corrective action(s): _____

Date correction needed: _____

e. Sediment Controls

Stabilized Construction Entrance N A

Stone is clean and all access areas covered (entrances, construction routes, materials storage areas, equipment parking)? _____ Tracking onto public streets is minimized and cleaned daily? _____

Describe: _____

Date correction needed: _____

STATE POLLUTANT DISCHARGE ELIMINATION SYSTEM FOR CONSTRUCTION ACTIVITIES
Standardized Qualified Inspector Form

Page 5 of _____

Silt Fence N A

Installed on contour? not across conveyance channels? _____ At least 10 feet from toe of slope? _____ At appropriate spacing intervals based on slope? _____ Wrapped ends for continuous support? _____ Fabric is tight, without rips or frayed areas? _____ Posts are stable? _____ buried 6 inches minimum? _____ Any “bulges”? _____

Describe: _____

Date correction needed: _____

Temporary Sediment Trap N A

Is outlet structure constructed properly? _____ geotextile fabric has been placed beneath rock fill? _____ Maintenance – depth of sediment in basin? _____ 50% capacity? _____

Describe: _____

Date correction needed: _____

Temporary Sediment Basin N A

Is basin and outlet structure constructed per the approved plan? _____
Are basin side slopes stabilized with seed/mulch? _____

Maintenance – depth of sediment in basin? _____ 50% capacity? _____

Describe: _____

Date correction needed: _____

Drop Inlet Protection N A

Type(s) of inlet control? _____

Installed per Blue Book specifications: drainage area (typically 1 acre)? _____

Appropriate for location? _____

Describe: _____

Date correction needed: _____

f. Digital Color Photographs of Deficient BMPs

The *qualified inspector* shall attach paper color copies of the digital photographs to this inspection report of deficient BMPs with date stamp, that clearly show the condition of all practices that have been identified as needing corrective actions.

g. Digital Color Photographs of BMPs that have been Corrected

The *qualified inspector* shall attach paper color copies of the digital photographs to this inspection report of corrected BMPs with date stamp, that clearly show the condition of the practice(s) after the corrective actions has been completed.

STATE POLLUTANT DISCHARGE ELIMINATION SYSTEM FOR CONSTRUCTION ACTIVITIES
Standardized Qualified Inspector Form

Page 6 of _____

h. Post-Construction Stormwater Management

Report of any corrective action(s) that must be taken to install, correct, repair, replace or maintain any deficiencies identified with the construction of the post-construction stormwater management practice(s).

Report the current phase of construction of all post-construction stormwater management practice(s) and whether the installation appears to be geometrically consistent with the approved hydraulic design (e.g. the pond, the outlet structure, orifice, pipe sizing and slope is geometrically consistent with the SWPPP): _____

i. Revisions to SWPPP

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 other report, 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 and/or the MS4, they shall promptly submit such facts or information. 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 permit violation (GP-0-10-001 Part VII.G)

j. Inspection Notes and Signature

Inspection Notes:

STATE POLLUTANT DISCHARGE ELIMINATION SYSTEM FOR CONSTRUCTION ACTIVITIES
Standardized Qualified Inspector Form

Page 7 of _____

PART I. j. Signature

GP-0-10-001 Part VII.Q

Articles 175 and 210 of the New York State Penal Law provide for Criminal penalty of a fine and/or imprisonment for falsifying forms and reports required by this permit.

Qualified Inspector (print name)

Date of Inspection

Signature

The above signed acknowledges that, to the best of his/her knowledge, all information provided on the forms is accurate and complete.

Title: _____ Address: _____

Phone: _____ Email: _____

CPESC#: _____

Stormwater Training Number for *Trained Individuals*: _____

P.E. or L.A. Supervisor Name for *Trained Individuals*: _____

Compliance certification:

Received and reviewed by _____ Title: _____

The above signed acknowledges receipt of this inspection report

APPENDIX N. MS4 ACCEPTANCE FORM



New York State 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:

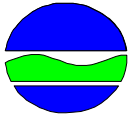
Signature:

Date:

VI. Additional Information

APPENDIX O. NOTICE OF INTENT

NOTICE OF INTENT



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

NYR
(For DEC use only)

Stormwater Discharges Associated with Construction Activity Under State Pollutant Discharge Elimination System (SPDES) General Permit # GP-0-15-002
All sections must be completed unless otherwise noted. Failure to complete all items may result in this form being returned to you, thereby delaying your coverage under this General Permit. Applicants must read and understand the conditions of the permit and prepare a Stormwater Pollution Prevention Plan prior to submitting this NOI. Applicants are responsible for identifying and obtaining other DEC permits that may be required.

- IMPORTANT -
RETURN THIS FORM TO THE ADDRESS ABOVE
OWNER/OPERATOR MUST SIGN FORM

Owner/Operator Information

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

Owner/Operator Contact Person Last Name (NOT CONSULTANT)

Owner/Operator Contact Person First Name

Owner/Operator Mailing Address

City

State Zip -

Phone (Owner/Operator) - - Fax (Owner/Operator) - -

Email (Owner/Operator)

FED TAX ID - (not required for individuals)

3. Select the predominant land use for both pre and post development conditions.
SELECT ONLY ONE CHOICE FOR EACH

**Pre-Development
Existing Land Use**

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

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**Post-Development
Future Land Use**

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

Number of Lots

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

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

Total Site Area	Total Area To Be Disturbed	Existing Impervious Area To Be Disturbed	Future Impervious Area Within Disturbed Area																				
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5. Do you plan to disturb more than 5 acres of soil at any one time? Yes No

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

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7. Is this a phased project? Yes No

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

Start Date	End Date										
<table border="1" style="width: 60px; height: 25px;"> <tr> <td></td><td></td><td></td><td></td><td></td> </tr> </table>						<table border="1" style="width: 60px; height: 25px;"> <tr> <td></td><td></td><td></td><td></td><td></td> </tr> </table>					

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

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

Two rows of 25 empty grid boxes for text entry.

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

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

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

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

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

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

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

Post-construction Stormwater Management Practice (SMP) Requirements

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

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

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

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

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

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

Total WQv Required

. acre-feet

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

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

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

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

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

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

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

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

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

WQv Provided

						
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Owner/Operator Certification

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

Print First Name

D i a n a

MI

Print Last Name

J a k i m o s k i

Owner/Operator Signature



Date

1 0 / 2 4 / 2 0 1 8

APPENDIX P. NOTICE OF TERMINATION (BLANK)



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

(NOTE: Submit completed form to address above)

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

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

I. Owner or Operator Information

1. Owner/Operator Name:

2. Street Address:

3. City/State/Zip:

4. Contact Person:

4a. Telephone:

5. Contact Person E-Mail:

II. Project Site Information

5. Project/Site Name:

6. Street Address:

7. City/Zip:

8. County:

III. Reason for Termination

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

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

9c. Other (Explain on Page 2)

IV. Final Site Information:

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

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

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

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

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

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

- Post-construction stormwater management practice(s) and any right-of-way(s) needed to maintain practice(s) have been deeded to the municipality.
- Executed maintenance agreement is in place with the municipality that will maintain the post-construction stormwater management practice(s).
- For post-construction stormwater management practices that are privately owned, the deed of record has been modified to include a deed covenant that requires operation and maintenance of the practice(s) in accordance with the operation and maintenance plan.
- For post-construction stormwater management practices that are owned by a public or private institution (e.g. school, college, university), or government agency or authority, policy and procedures are in place that ensures operation and maintenance of the practice(s) in accordance with the operation and maintenance plan.

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

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

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

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

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

Printed Name:

Title/Position:

Signature:

Date:

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

VII. Qualified Inspector Certification - Final Stabilization:

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

Printed Name:

Title/Position:

Signature:

Date:

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

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

Printed Name:

Title/Position:

Signature:

Date:

IX. Owner or Operator Certification

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

Printed Name:

Title/Position:

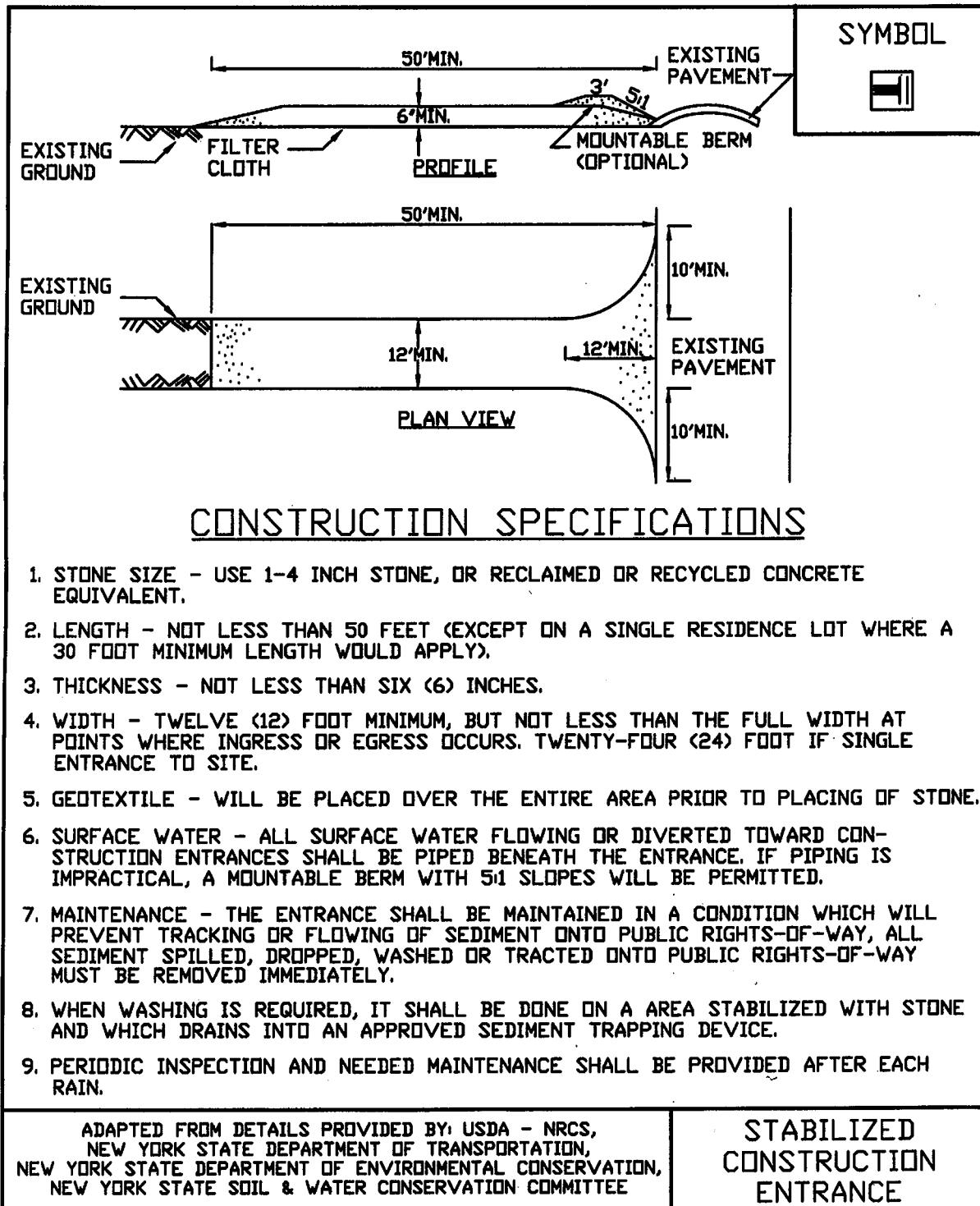
Signature:

Date:

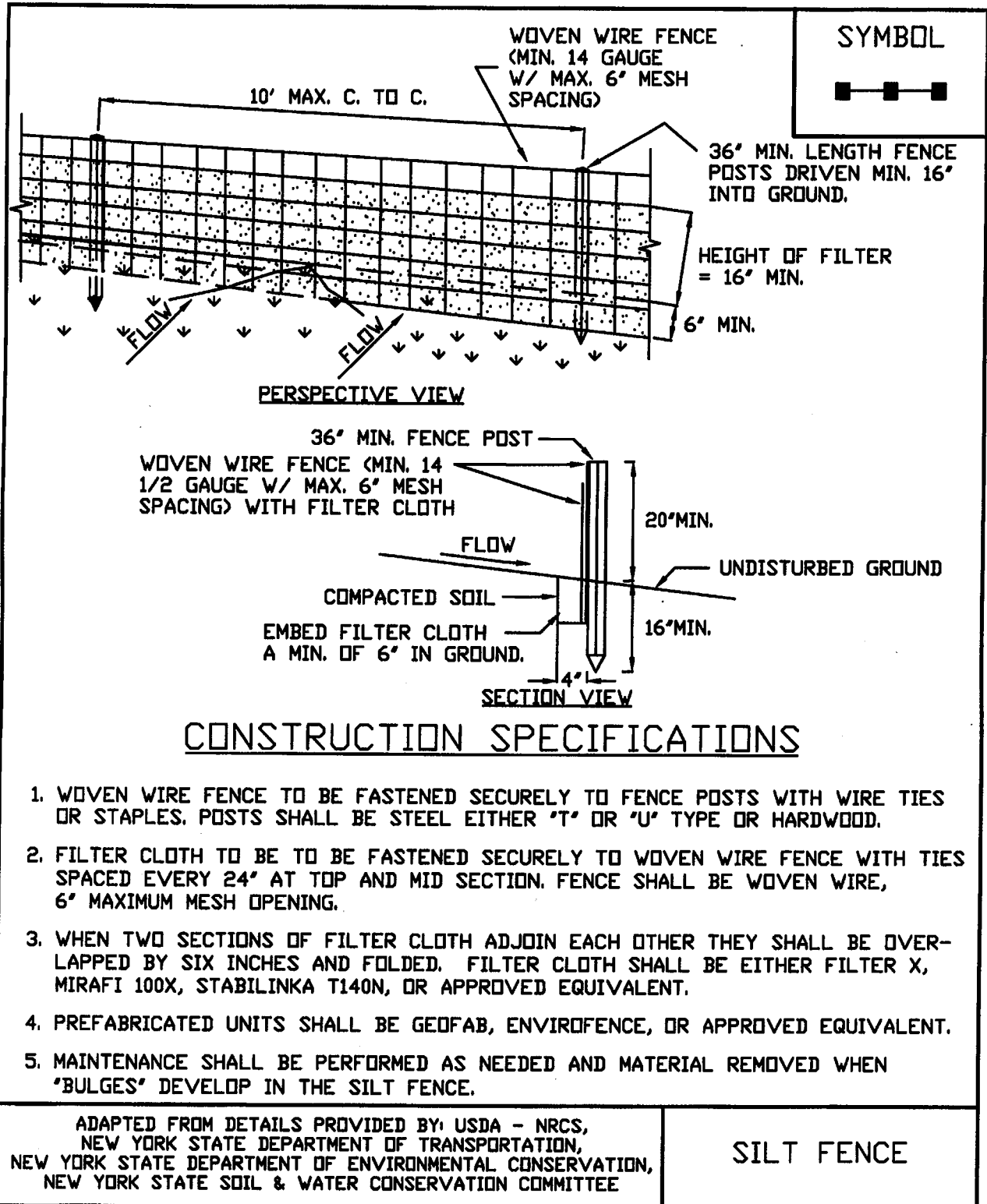
(NYS DEC Notice of Termination - January 2010)

APPENDIX Q. EROSION CONTROL DETAILS

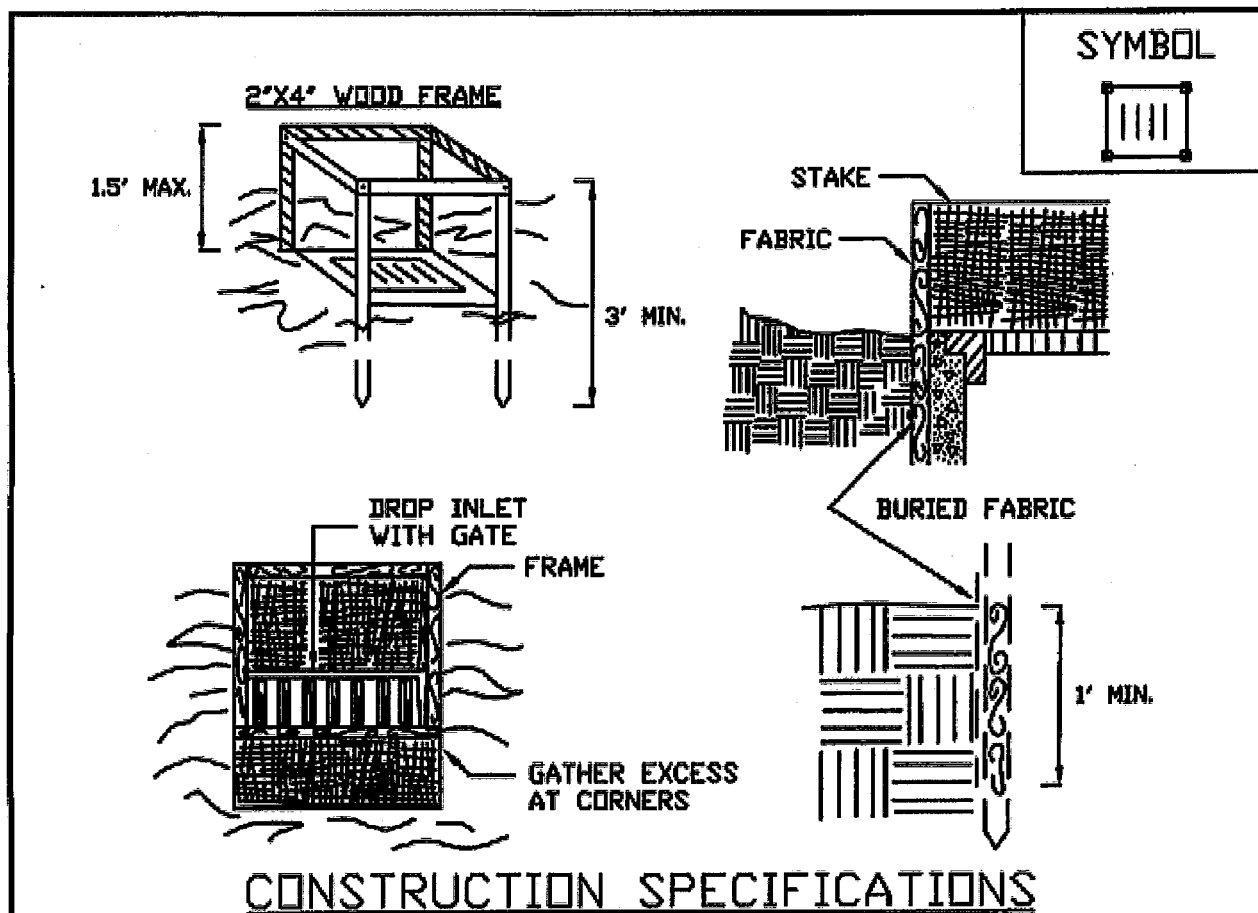
**Figure 5A.35
Stabilized Construction Entrance**



**Figure 5A.8
Silt Fence**



**Figure 5A.12
Filter Fabric Drop Inlet Protection**



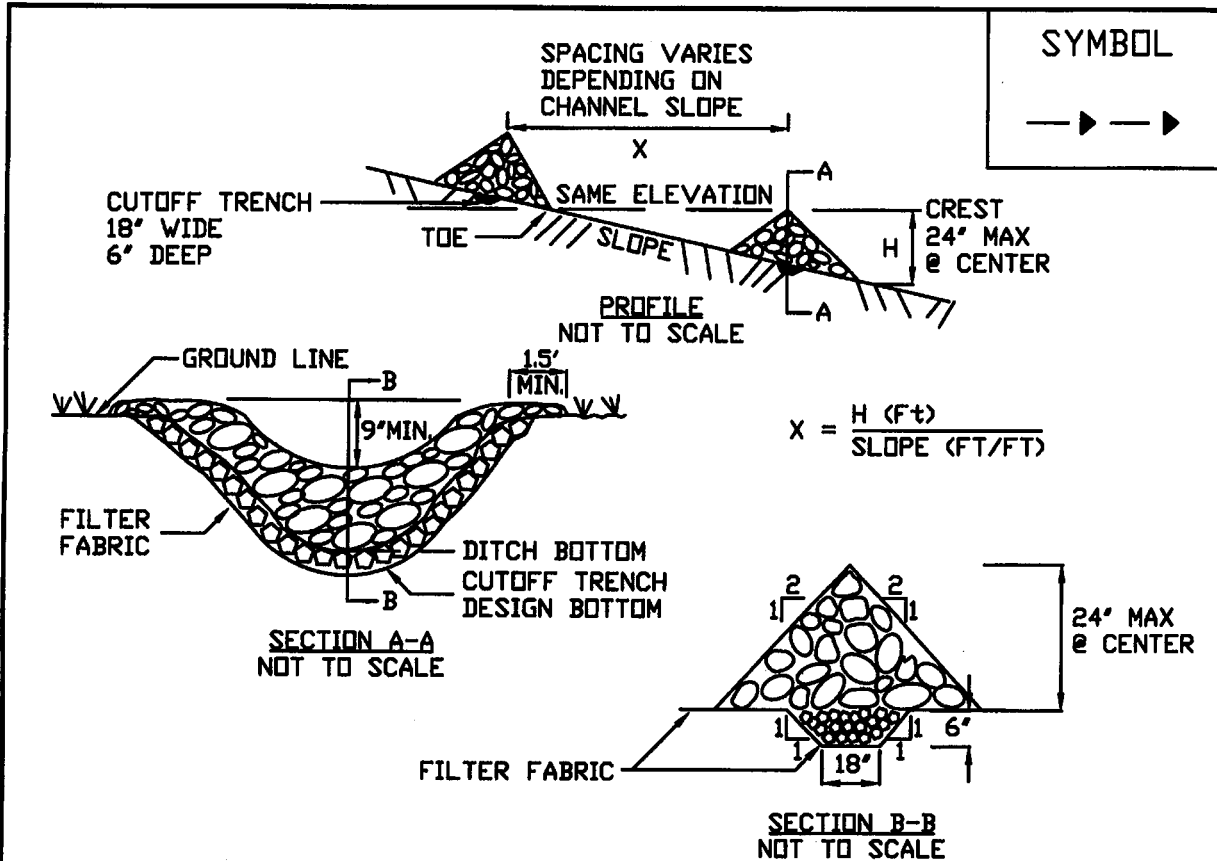
1. FILTER FABRIC SHALL HAVE AN EDS OF 40-85. BURLAP MAY BE USED FOR SHORT TERM APPLICATIONS.
2. CUT FABRIC FROM A CONTINUOUS ROLL TO ELIMINATE JOINTS. IF JOINTS ARE NEEDED THEY WILL BE OVERLAPPED TO THE NEXT STAKE.
3. STAKE MATERIALS WILL BE STANDARD 2" x 4" WOOD OR EQUIVALENT. METAL WITH A MINIMUM LENGTH OF 3 FEET.
4. SPACE STAKES EVENLY AROUND INLET 3 FEET APART AND DRIVE A MINIMUM 18 INCHES DEEP. SPANS GREATER THAN 3 FEET MAY BE BRIDGED WITH THE USE OF WIRE MESH BEHIND THE FILTER FABRIC FOR SUPPORT.
5. FABRIC SHALL BE EMBEDDED 1 FOOT MINIMUM BELOW GROUND AND BACKFILLED. IT SHALL BE SECURELY FASTENED TO THE STAKES AND FRAME.
6. A 2" x 4" WOOD FRAME SHALL BE COMPLETED AROUND THE CREST OF THE FABRIC FOR OVER FLOW STABILITY.

MAXIMUM DRAINAGE AREA 1 ACRE

ADAPTED FROM DETAILS PROVIDED BY: USDA - NRCS,
NEW YORK STATE DEPARTMENT OF TRANSPORTATION,
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION,
NEW YORK STATE SOIL & WATER CONSERVATION COMMITTEE

**FILTER FABRIC
DROP INLET
PROTECTION**

**Figure 5A.9
Check Dam**



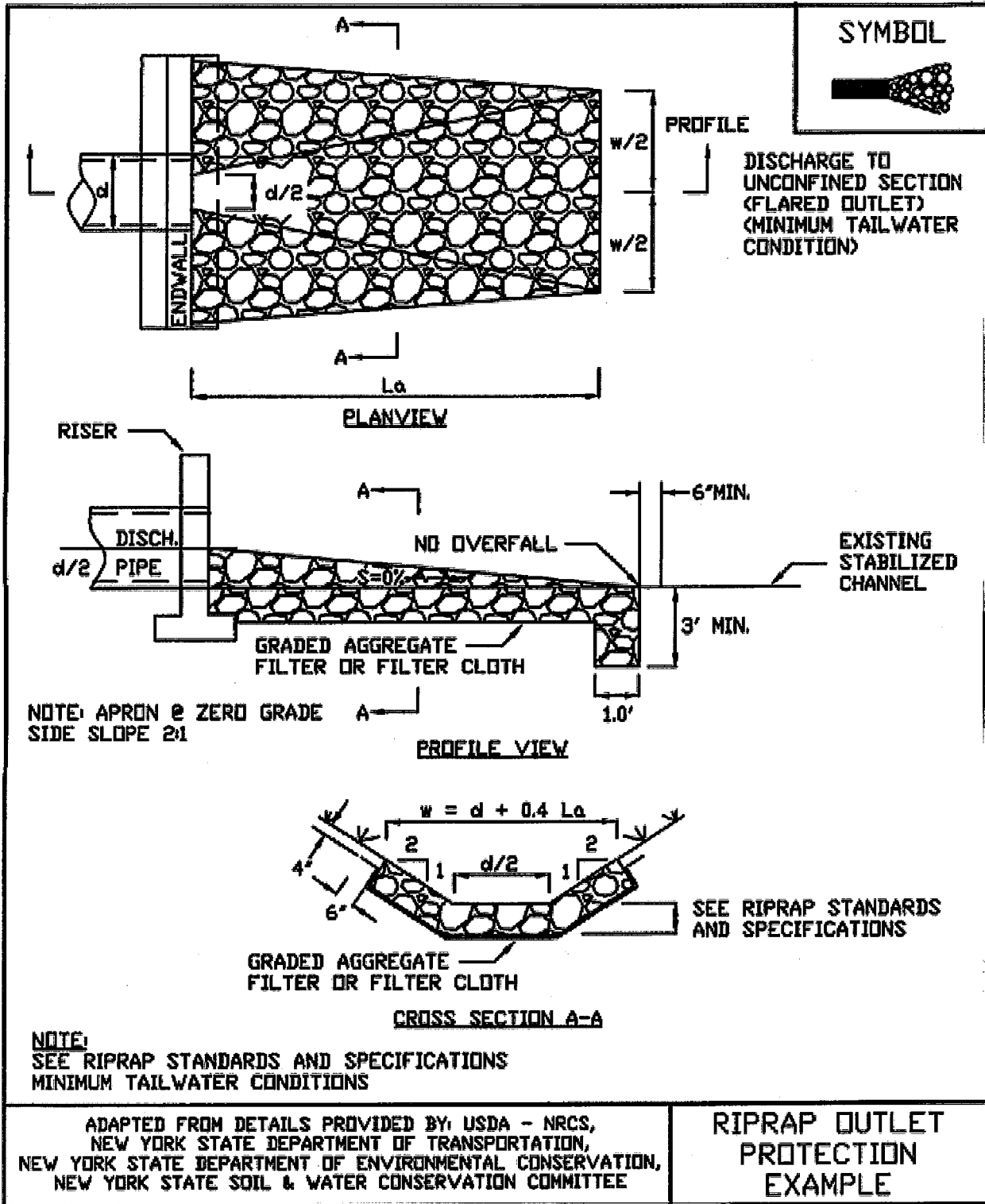
CONSTRUCTION SPECIFICATIONS

1. STONE WILL BE PLACED ON A FILTER FABRIC FOUNDATION TO THE LINES, GRADES AND LOCATIONS SHOWN IN THE PLAN.
 2. SET SPACING OF CHECK DAMS TO ASSUME THAT THE ELEVATIONS OF THE CREST OF THE DOWNSTREAM DAM IS AT THE SAME ELEVATION OF THE TOE OF THE UPSTREAM DAM.
 3. EXTEND THE STONE A MINIMUM OF 1.5 FEET BEYOND THE DITCH BANKS TO PREVENT CUTTING AROUND THE DAM.
 4. PROTECT THE CHANNEL DOWNSTREAM OF THE LOWEST CHECK DAM FROM SCOUR AND EROSION WITH STONE OR LINER AS APPROPRIATE.
 5. ENSURE THAT CHANNEL APPURTENANCES SUCH AS CULVERT ENTRANCES BELOW CHECK DAMS ARE NOT SUBJECT TO DAMAGE OR BLOCKAGE FROM DISPLACED STONE.
- MAXIMUM DRAINAGE AREA 2 ACRES.

ADAPTED FROM DETAILS PROVIDED BY: USDA - NRCS,
NEW YORK STATE DEPARTMENT OF TRANSPORTATION,
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION,
NEW YORK STATE SOIL & WATER CONSERVATION COMMITTEE

CHECK DAM

Figure 5B.14
Riprap Outlet Protection Detail (1)



APPENDIX R. MAINTENANCE INSPECTION REPORTS

Stormwater Pond/Wetland Operation, Maintenance and Management Inspection Checklist

Project _____
 Location: _____
 Site Status: _____

 Date: _____
 Time: _____

 Inspector: _____

Maintenance Item	Satisfactory/ Unsatisfactory	Comments
1. Embankment and emergency spillway (Annual, After Major Storms)		
1. Vegetation and ground cover adequate		
2. Embankment erosion		
3. Animal burrows		
4. Unauthorized planting		
5. Cracking, bulging, or sliding of dam		
a. Upstream face		
b. Downstream face		
c. At or beyond toe		
downstream		
upstream		
d. Emergency spillway		
6. Pond, toe & chimney drains clear and functioning		
7. Seeps/leaks on downstream face		
8. Slope protection or riprap failure		
9. Vertical/horizontal alignment of top of dam "As-Built"		

Maintenance Item	Satisfactory/ Unsatisfactory	Comments
10. Emergency spillway clear of obstructions and debris		
11. Other (specify)		
2. Riser and principal spillway (Annual)		
Type: Reinforced concrete _____ Corrugated pipe _____ Masonry _____		
1. Low flow orifice obstructed		
2. Low flow trash rack. a. Debris removal necessary		
b. Corrosion control		
3. Weir trash rack maintenance a. Debris removal necessary		
b. corrosion control		
4. Excessive sediment accumulation insider riser		
5. Concrete/masonry condition riser and barrels a. cracks or displacement		
b. Minor spalling (<1")		
c. Major spalling (rebars exposed)		
d. Joint failures		
e. Water tightness		
6. Metal pipe condition		
7. Control valve a. Operational/exercised		
b. Chained and locked		
8. Pond drain valve a. Operational/exercised		
b. Chained and locked		
9. Outfall channels functioning		
10. Other (specify)		

Maintenance Item	Satisfactory/ Unsatisfactory	Comments
3. Permanent Pool (Wet Ponds) (monthly)		
1. Undesirable vegetative growth		
2. Floating or floatable debris removal required		
3. Visible pollution		
4. Shoreline problem		
5. Other (specify)		
4. Sediment Forebays		
1. Sedimentation noted		
2. Sediment cleanout when depth < 50% design depth		
5. Dry Pond Areas		
1. Vegetation adequate		
2. Undesirable vegetative growth		
3. Undesirable woody vegetation		
4. Low flow channels clear of obstructions		
5. Standing water or wet spots		
6. Sediment and / or trash accumulation		
7. Other (specify)		
6. Condition of Outfalls (Annual , After Major Storms)		
1. Riprap failures		
2. Slope erosion		
3. Storm drain pipes		
4. Endwalls / Headwalls		
5. Other (specify)		
7. Other (Monthly)		
1. Encroachment on pond, wetland or easement area		

Maintenance Item	Satisfactory/ Unsatisfactory	Comments
2. Complaints from residents		
3. Aesthetics a. Grass growing required		
b. Graffiti removal needed		
c. Other (specify)		
4. Conditions of maintenance access routes.		
5. Signs of hydrocarbon build-up		
6. Any public hazards (specify)		
8. Wetland Vegetation (Annual)		
1. Vegetation healthy and growing Wetland maintaining 50% surface area coverage of wetland plants after the second growing season. (If unsatisfactory, reinforcement plantings needed)		
2. Dominant wetland plants: Survival of desired wetland plant species Distribution according to landscaping plan?		
3. Evidence of invasive species		
4. Maintenance of adequate water depths for desired wetland plant species		
5. Harvesting of emergent plantings needed		
6. Have sediment accumulations reduced pool volume significantly or are plants "choked" with sediment		
7. Eutrophication level of the wetland.		
8. Other (specify)		

Comments:

Actions to be Taken:

Bioretention Operation, Maintenance and Management Inspection Checklist

Project:
 Location:
 Site Status:

Date:

Time:

Inspector:

MAINTENANCE ITEM	SATISFACTORY / UNSATISFACTORY	COMMENTS
1. Debris Cleanout (Monthly)		
Bioretention and contributing areas clean of debris		
No dumping of yard wastes into practice		
Litter (branches, etc.) have been removed		
2. Vegetation (Monthly)		
Plant height not less than design water depth		
Fertilized per specifications		
Plant composition according to approved plans		
No placement of inappropriate plants		
Grass height not greater than 6 inches		
No evidence of erosion		
3. Check Dams/Energy Dissipaters/Sumps (Annual, After Major Storms)		
No evidence of sediment buildup		

MAINTENANCE ITEM	SATISFACTORY / UNSATISFACTORY	COMMENTS
Sumps should not be more than 50% full of sediment		
No evidence of erosion at downstream toe of drop structure		
4. Dewatering (Monthly)		
Dewaterers between storms		
No evidence of standing water		
5. Sediment Deposition (Annual)		
Swale clean of sediments		
Sediments should not be > 20% of swale design depth		
6. Outlet/Overflow Spillway (Annual, After Major Storms)		
Good condition, no need for repair		
No evidence of erosion		
No evidence of any blockages		
7. Integrity of Filter Bed (Annual)		
Filter bed has not been blocked or filled inappropriately		

Comments:

Actions to be Taken:

Open Channel Operation, Maintenance, and Management Inspection Checklist

Project:
 Location:
 Site Status:

Date:

Time:

Inspector:

MAINTENANCE ITEM	SATISFACTORY/ UNSATISFACTORY	COMMENTS
1. Debris Cleanout (Monthly)		
Contributing areas clean of debris		
2. Check Dams or Energy Dissipators (Annual, After Major Storms)		
No evidence of flow going around structures		
No evidence of erosion at downstream toe		
Soil permeability		
Groundwater / bedrock		
3. Vegetation (Monthly)		
Mowing done when needed		
Minimum mowing depth not exceeded		
No evidence of erosion		
Fertilized per specification		
4. Dewatering (Monthly)		
Dewaterers between storms		

MAINTENANCE ITEM	SATISFACTORY/ UNSATISFACTORY	COMMENTS
5. Sediment deposition (Annual)		
Clean of sediment		
6. Outlet/Overflow Spillway (Annual)		
Good condition, no need for repairs		
No evidence of erosion		

Comments:

Actions to be Taken:

Stormwater/Wetland Pond Construction Inspection Checklist

Project:

Location:

Site Status:

Date:

Time:

Inspector:

CONSTRUCTION SEQUENCE	SATISFACTORY/ UNSATISFACTORY	COMMENTS
Pre-Construction/Materials and Equipment		
Pre-construction meeting		
Pipe and appurtenances on-site prior to construction and dimensions checked		
1. Material (including protective coating, if specified)		
2. Diameter		
3. Dimensions of metal riser or pre-cast concrete outlet structure		
4. Required dimensions between water control structures (orifices, weirs, etc.) are in accordance with approved plans		
5. Barrel stub for prefabricated pipe structures at proper angle for design barrel slope		
6. Number and dimensions of prefabricated anti-seep collars		
7. Watertight connectors and gaskets		
8. Outlet drain valve		
Project benchmark near pond site		
Equipment for temporary de-watering		

CONSTRUCTION SEQUENCE	SATISFACTORY/ UNSATISFACTORY	COMMENTS
2. Subgrade Preparation		
Area beneath embankment stripped of all vegetation, topsoil, and organic matter		
3. Pipe Spillway Installation		
Method of installation detailed on plans		
A. Bed preparation		
Installation trench excavated with specified side slopes		
Stable, uniform, dry subgrade of relatively impervious material (If subgrade is wet, contractor shall have defined steps before proceeding with installation)		
Invert at proper elevation and grade		
B. Pipe placement		
Metal / plastic pipe		
1. Watertight connectors and gaskets properly installed		
2. Anti-seep collars properly spaced and having watertight connections to pipe		
3. Backfill placed and tamped by hand under "haunches" of pipe		
4. Remaining backfill placed in max. 8 inch lifts using small power tamping equipment until 2 feet cover over pipe is reached		

CONSTRUCTION SEQUENCE	SATISFACTORY/ UNSATISFACTORY	COMMENTS
3. Pipe Spillway Installation		
Concrete pipe		
1. Pipe set on blocks or concrete slab for pouring of low cradle		
2. Pipe installed with rubber gasket joints with no spalling in gasket interface area		
3. Excavation for lower half of anti-seep collar(s) with reinforcing steel set		
4. Entire area where anti-seep collar(s) will come in contact with pipe coated with mastic or other approved waterproof sealant		
5. Low cradle and bottom half of anti-seep collar installed as monolithic pour and of an approved mix		
6. Upper half of anti-seep collar(s) formed with reinforcing steel set		
7. Concrete for collar of an approved mix and vibrated into place (protected from freezing while curing, if necessary)		
8. Forms stripped and collar inspected for honeycomb prior to backfilling. Parge if necessary.		
C. Backfilling		
Fill placed in maximum 8 inch lifts		
Backfill taken minimum 2 feet above top of anti-seep collar elevation before traversing with heavy equipment		

CONSTRUCTION SEQUENCE	SATISFACTORY/ UNSATISFACTORY	COMMENTS
4. Riser / Outlet Structure Installation		
Riser located within embankment		
A. Metal riser		
Riser base excavated or formed on stable subgrade to design dimensions		
Set on blocks to design elevations and plumbed		
Reinforcing bars placed at right angles and projecting into sides of riser		
Concrete poured so as to fill inside of riser to invert of barrel		
B. Pre-cast concrete structure		
Dry and stable subgrade		
Riser base set to design elevation		
If more than one section, no spalling in gasket interface area; gasket or approved caulking material placed securely		
Watertight and structurally sound collar or gasket joint where structure connects to pipe spillway		
C. Poured concrete structure		
Footing excavated or formed on stable subgrade, to design dimensions with reinforcing steel set		
Structure formed to design dimensions, with reinforcing steel set as per plan		
Concrete of an approved mix and vibrated into place (protected from freezing while curing, if necessary)		
Forms stripped & inspected for "honeycomb" prior to backfilling; parge if necessary		

CONSTRUCTION SEQUENCE	SATISFACTORY/ UNSATISFACTORY	COMMENTS
5. Embankment Construction		
Fill material		
Compaction		
Embankment		
1. Fill placed in specified lifts and compacted with appropriate equipment		
2. Constructed to design cross-section, side slopes and top width		
3. Constructed to design elevation plus allowance for settlement		
6. Impounded Area Construction		
Excavated / graded to design contours and side slopes		
Inlet pipes have adequate outfall protection		
Forebay(s)		
Pond benches		
7. Earth Emergency Spillway Construction		
Spillway located in cut or structurally stabilized with riprap, gabions, concrete, etc.		
Excavated to proper cross-section, side slopes and bottom width		
Entrance channel, crest, and exit channel constructed to design grades and elevations		

CONSTRUCTION SEQUENCE	SATISFACTORY / UNSATISFACTORY	COMMENTS
8. Outlet Protection		
A. End section		
Securely in place and properly backfilled		
B. Endwall		
Footing excavated or formed on stable subgrade, to design dimensions and reinforcing steel set, if specified		
Endwall formed to design dimensions with reinforcing steel set as per plan		
Concrete of an approved mix and vibrated into place (protected from freezing, if necessary)		
Forms stripped and structure inspected for "honeycomb" prior to backfilling; parge if necessary		
C. Riprap apron / channel		
Apron / channel excavated to design cross-section with proper transition to existing ground		
Filter fabric in place		
Stone sized as per plan and uniformly placed at the thickness specified		
9. Vegetative Stabilization		
Approved seed mixture or sod		
Proper surface preparation and required soil amendments		
Excelsior mat or other stabilization, as per plan		

CONSTRUCTION SEQUENCE	SATISFACTORY/ UNSATISFACTORY	COMMENTS
10. Miscellaneous		
Drain for ponds having a permanent pool		
Trash rack / anti-vortex device secured to outlet structure		
Trash protection for low flow pipes, orifices, etc.		
Fencing (when required)		
Access road		
Set aside for clean-out maintenance		
11. Stormwater Wetlands		
Adequate water balance		
Variety of depth zones present		
Approved pondscaping plan in place Reinforcement budget for additional plantings		
Plants and materials ordered 6 months prior to construction		
Construction planned to allow for adequate planting and establishment of plant community (April-June planting window)		
Wetland buffer area preserved to maximum extent possible		

Comments:

Actions to be Taken:

Stormwater Pond/Wetland Operation, Maintenance and Management Inspection Checklist

Project _____
 Location: _____
 Site Status: _____

 Date: _____
 Time: _____

 Inspector: _____

Maintenance Item	Satisfactory/ Unsatisfactory	Comments
1. Embankment and emergency spillway (Annual, After Major Storms)		
1. Vegetation and ground cover adequate		
2. Embankment erosion		
3. Animal burrows		
4. Unauthorized planting		
5. Cracking, bulging, or sliding of dam		
a. Upstream face		
b. Downstream face		
c. At or beyond toe		
downstream		
upstream		
d. Emergency spillway		
6. Pond, toe & chimney drains clear and functioning		
7. Seeps/leaks on downstream face		
8. Slope protection or riprap failure		
9. Vertical/horizontal alignment of top of dam "As-Built"		

Maintenance Item	Satisfactory/ Unsatisfactory	Comments
10. Emergency spillway clear of obstructions and debris		
11. Other (specify)		
2. Riser and principal spillway (Annual)		
Type: Reinforced concrete _____ Corrugated pipe _____ Masonry _____		
1. Low flow orifice obstructed		
2. Low flow trash rack. a. Debris removal necessary		
b. Corrosion control		
3. Weir trash rack maintenance a. Debris removal necessary		
b. corrosion control		
4. Excessive sediment accumulation insider riser		
5. Concrete/masonry condition riser and barrels a. cracks or displacement		
b. Minor spalling (<1")		
c. Major spalling (rebars exposed)		
d. Joint failures		
e. Water tightness		
6. Metal pipe condition		
7. Control valve a. Operational/exercised		
b. Chained and locked		
8. Pond drain valve a. Operational/exercised		
b. Chained and locked		
9. Outfall channels functioning		
10. Other (specify)		

Maintenance Item	Satisfactory/ Unsatisfactory	Comments
3. Permanent Pool (Wet Ponds) (monthly)		
1. Undesirable vegetative growth		
2. Floating or floatable debris removal required		
3. Visible pollution		
4. Shoreline problem		
5. Other (specify)		
4. Sediment Forebays		
1. Sedimentation noted		
2. Sediment cleanout when depth < 50% design depth		
5. Dry Pond Areas		
1. Vegetation adequate		
2. Undesirable vegetative growth		
3. Undesirable woody vegetation		
4. Low flow channels clear of obstructions		
5. Standing water or wet spots		
6. Sediment and / or trash accumulation		
7. Other (specify)		
6. Condition of Outfalls (Annual , After Major Storms)		
1. Riprap failures		
2. Slope erosion		
3. Storm drain pipes		
4. Endwalls / Headwalls		
5. Other (specify)		
7. Other (Monthly)		
1. Encroachment on pond, wetland or easement area		

Maintenance Item	Satisfactory/ Unsatisfactory	Comments
2. Complaints from residents		
3. Aesthetics a. Grass growing required		
b. Graffiti removal needed		
c. Other (specify)		
4. Conditions of maintenance access routes.		
5. Signs of hydrocarbon build-up		
6. Any public hazards (specify)		
8. Wetland Vegetation (Annual)		
1. Vegetation healthy and growing Wetland maintaining 50% surface area coverage of wetland plants after the second growing season. (If unsatisfactory, reinforcement plantings needed)		
2. Dominant wetland plants: Survival of desired wetland plant species Distribution according to landscaping plan?		
3. Evidence of invasive species		
4. Maintenance of adequate water depths for desired wetland plant species		
5. Harvesting of emergent plantings needed		
6. Have sediment accumulations reduced pool volume significantly or are plants "choked" with sediment		
7. Eutrophication level of the wetland.		
8. Other (specify)		

Comments:

Actions to be Taken:

Infiltration Basin Construction Inspection Checklist

Project:
 Location:
 Site Status:

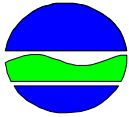
Date:

Time:

Inspector:

CONSTRUCTION SEQUENCE	SATISFACTORY/ UNSATISFACTORY	COMMENTS
1. Pre-Construction		
Runoff diverted		
Soil permeability tested		
Groundwater / bedrock depth		
2. Excavation		
Size and location		
Side slopes stable		
Excavation does not compact subsoils		
3. Embankment		
Barrel		
Anti-seep collar or Filter diaphragm		
Fill material		

NOTICE OF INTENT



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

NYR
(For DEC use only)

Stormwater Discharges Associated with Construction Activity Under State Pollutant Discharge Elimination System (SPDES) General Permit # GP-0-15-002
All sections must be completed unless otherwise noted. Failure to complete all items may result in this form being returned to you, thereby delaying your coverage under this General Permit. Applicants must read and understand the conditions of the permit and prepare a Stormwater Pollution Prevention Plan prior to submitting this NOI. Applicants are responsible for identifying and obtaining other DEC permits that may be required.

- IMPORTANT -
RETURN THIS FORM TO THE ADDRESS ABOVE
OWNER/OPERATOR MUST SIGN FORM

Owner/Operator Information

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

Owner/Operator Contact Person Last Name (NOT CONSULTANT)

Owner/Operator Contact Person First Name

Owner/Operator Mailing Address

City

State Zip -

Phone (Owner/Operator) - - Fax (Owner/Operator) - -

Email (Owner/Operator)

FED TAX ID - (not required for individuals)

3. Select the predominant land use for both pre and post development conditions.
SELECT ONLY ONE CHOICE FOR EACH

**Pre-Development
Existing Land Use**

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

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**Post-Development
Future Land Use**

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

Number of Lots

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

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

Total Site Area	Total Area To Be Disturbed	Existing Impervious Area To Be Disturbed	Future Impervious Area Within Disturbed Area																				
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5. Do you plan to disturb more than 5 acres of soil at any one time? Yes No

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

A	B	C	D												
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7. Is this a phased project? Yes No

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

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

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

Two rows of empty grid boxes for text entry.

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

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

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

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

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

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

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

Post-construction Stormwater Management Practice (SMP) Requirements

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

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

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

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

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

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

Total WQv Required

. acre-feet

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

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

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

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

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

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

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

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

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

WQv Provided

						
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Owner/Operator Certification

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

Print First Name

D i a n a

MI

Print Last Name

J a k i m o s k i

Owner/Operator Signature



Date

1 0 / 2 4 / 2 0 1 8