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CIVIL & STRUCTURAL ENGINEERING

**QUARRY MANAGEMENT
131-143 U.S. ROUTE 6
SECTION 57 BLOCK 1 LOTS 96 & 97, 80.42, 3.1 & 3.2
TOWN OF DEERPARK
ORANGE COUNTY, NY**

STORMWATER POLLUTION PREVENTION PLAN REPORT

*Amended Site Plan
03/19/2025*

**Owner of Property: Port Jervis Terminal, LLC
131 US Route 6
Port Jervis, NY 12771**

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A stormwater management assessment has been conducted for the proposed project in order to protect the waters of the State of New York from the adverse impacts of stormwater runoff. This report presents an analysis of the project in accordance with the New York State Department of Environmental Conservation SPDES General Permit for Stormwater Discharges from Construction Activity Permit No. GP-0-25-001 and the New York State Stormwater Management Design Manual. As required, the Stormwater Pollution Prevention Plan is designed, where appropriate, to incorporate green infrastructure techniques that preserve natural resources and utilize the existing hydrology of the site, provide runoff reduction practices, water quality treatment practices, apply volume and peak control practices for channel protection, overbank flood control, and extreme flood control as appropriate.

In accordance with Appendix B, Table 2 of the SPDES General Permit for Construction Activity, GP-0-25-001, Commercial developments that involve soil disturbances of more than one (1) acre of land, require the preparation of a full SWPPP that includes post-construction stormwater management practices. In total, approximately 8.20 acres of soil disturbance is expected during the construction of this project. Therefore, this project requires the development of a full SWPPP, including erosion and sediment controls, green infrastructure site planning techniques, runoff reduction volume practices and post-construction stormwater management practices.

The general contractor and subcontractors performing any activity that involves soil disturbance will be required to comply with the terms and conditions of the SWPPP for the project identified as a condition of authorization to discharge stormwater. The SPDES General Permit and SWPPP must be kept on file at the project site.

As required by the conditions described in the SPDES general permit, the SWPPP shall be kept current and changes made to reflect changes in the design, construction, and operation or in the maintenance of the project.

The complete set of construction drawings and specifications are provided as separate documents; however, they should be considered an integral component of the SWPPP and are referenced throughout this document.

1.0 Owner / Operator Information

The owner and operator of this project is:

Contact Name: Steve Caruso
Company Name: Quarry Management Holdings, LLC
Address: 237 Masthope Plank Rd Suite C
Lackawaxen, PA 18435
Phone Number: (732) 673-5726
Email Address: s.caruso@quarrymgmt.com

The terms “developer”, “contractor”, “operator”, “permittee” and “owner” in the following report and on the plans refers to Steve Caruso of Quarry Management Holdings, LLC, and are used interchangeably. The duties of the operator include the following:

- Implement the SWPPP and administer the construction sequence.
- Oversee maintenance practices identified as BMP’s.
- Conduct inspection and monitoring activities.
- Identify other potential pollutant sources and add to the plan.
- Identify any deficiencies in the SWPPP and make corrections.

This Stormwater Pollution Prevention Plan (SWPPP) Report is to be used with and referenced to the following documents.

- “Amended Site Plan for Quarry Management Holdings, LLC, 131-143 U. S. Route 6, Section 57 Block 1 Lots 96, 97, 80.42, 3.1 & 3.2, Town of Deerpark, NY.” drawings T-1 and S-1 through S-10, dated 03/03/25.

2.0 Project Site Information

The project site has increased from the two original lots known as Lots 96 & 97 to include three (3) more tax lots known as Lots 80.42, 3.1 and 3.2. The entire area is approximately 30.14 acres located on the northwest side of U. S. Route 6 and the southeast side of Lime Kiln Road in the Town of Deerpark, Orange County, NY, approximately 1 mile north of the I-84 Exit 1 off-ramp. The property is known as Section 57 Block 1 Lots 96, 97, 80.42, 3.1 and 3.2 in the Town of Deerpark, NYSDEC Region 3. The coordinates of the site are below:

<i>Approximate Coordinate Position @ Center of Project</i>	
<i>Latitude</i>	<i>41.358753 (41° 21' 31.5"N)</i>
<i>Longitude</i>	<i>-74.6757322 (74° 40' 24.3"W)</i>

Lots 96 & 97 were previously used as a commercial truck and large equipment sales yard with approximately 7.0 acres that were cleared and considered to be impervious area. The three additional lots are all residential properties. Lots 3.1 and 3.2 contain existing single family dwellings. Lot 80.42 is vacant. The nearest surface waterbodies are the Lime Kiln Creek that is a tributary to the Delaware River and flows along Lime Kiln Road, and a freshwater pond located approximately 350 feet southwest and across the state highway from the site. No state regulated wetlands are located on the site. The waterbodies on and near the project site appear on the National Wetlands Inventory maps and are not identified in the SPDES General Permit for Stormwater Discharges from Construction Activities, Appendix E. The project is located in the Delaware River watershed which is not identified in Appendix C.

According to the USDA Natural Resources Conservation service soil survey, the parcels contain the following soils:

		Hydrologic Soil Group	
• AC	Alden extremely stony soils	4.92 acres	C (16.3%)
• MdB	Mardin gravelly silt loam, 3 to 8% slopes	2.40 acres	D (8.0%)
• RSD	Rock outcrop – Nassau complex, hilly	0.44 acres	D (1.5%)
• SwC	Swartswood gravelly loam, 8% to 15% slopes	0.08 acres	C (0.2%)
• SXC	Swartswood and Mardin soils, sloping, very stony	15.76 acres	C (52.3%)
• SXD	Swartswood and Mardin soils, moderately steep, very stony	1.38 acres	C (4.6%)
• UF	Udifluvents – Fluvaquents complex, frequently flooded	4.78 acres	A (15.9%)
• W	Water	0.38 acres	- (1.2%)

The soil report from the USDA Natural Resources Conservation Service includes the soil summary and appears in the Appendix.

The cleared and developed area is mainly level. The site drops steeply towards Lime Kiln Road, north of the property, and slopes up towards Interstate 84, south of the property. The existing elevations range from 590 to 720.

3.0 Project Description

The name of this project is Quarry Management. The nature of this project is a redevelopment with an increase in impervious area. The proposed improvements include an expansion of the gravel parking lot for the processing, stockpiling and storage of materials.

The Amended Site Plan proposes the consolidation of lots 96 & 97 and a lot line change with the three additional parcels to create a 21.4 acre parcel for the Quarry Management business. The remaining area will be two residential lots.

A large stormwater basin shall be installed at the base of the graded slope. A second stormwater basin has been constructed in the northeast corner of the property. Drainage swales shall direct runoff to the stormwater management facilities. No runoff will enter a combined sewer system.

The proposed area to be disturbed is 8.7 acres. There is approximately 4.75 acres of existing impervious area which shall remain. The size of the proposed impervious area is 8.13 acres for a net increase of 3.38 acres of impervious surface. This is not a phased project and less than 5 acres shall be disturbed at a time. The project began construction in the winter of 2019. The anticipated completion date is the winter of 2026.

4.0 Erosion & Sediment Control

4.1 Temporary Erosion & Sediment Control Practices

The Erosion and Sediment Control plan for the proposed development shall utilize silt fence, vegetated swales, stone-lined swales, stone check dams, a sediment basin and slope matting to be installed prior to and during construction. These controls will contain the silt and sediment on site. They are to be maintained during construction by the contractor and will remain in place throughout the period of construction until vegetation is established and the site is stabilized.

Silt Fence: Silt Fence will be installed around all low lying areas as necessary to prevent sediment from entering them. In addition, silt fence shall be installed on the downslope side of all disturbed areas as shown on the Erosion and Sediment Control plan.

Vegetated / Stone-Lined Swales: Vegetated and Stone-lined Swales shall be installed to direct runoff to the stormwater management facilities. The bottom and sides of the swale shall either be vegetated or lined with stone to remove large and coarse particulate from the stormwater. Pollutant removal is also facilitated through infiltration. Stone is used in steeper slopes to prevent erosion.

Stone Check Dam: Stone Check Dams shall be installed to reduce the velocity of runoff along the swales. The dams also trap sediment and prevent erosions. They are to be placed perpendicular to the flow of the runoff.

Sediment Basin: A sediment basin shall be constructed as shown on the plans. Water from disturbed areas shall be directed to the basin before leaving the site. A 6-inch diameter perforated pipe will dewater the basin. Upon completion of the retaining wall and stabilization of the site, the sediment basin will be converted to a stormwater basin. The basin will be pumped to be reasonably dry. Discharge from the pump will be filtered through a dewatering filter bag. After filtering, the water will be discharged to the structural level spreader. An excavator will remove accumulated sediment and shall dispose of it in

accordance with applicable regulations. Construction of the stormwater pond will then begin.

Surface Stabilization: Stabilization of the sloped surfaces will be accomplished with stone and slope matting as specified in the Erosion and Sediment Control Plan.

Dust Control: Dust control is not anticipated to be a concern. Should excessive dust be generated by construction activities, the contractor will control it by sprinkling water on the disturbed areas.

4.2 Permanent Erosion & Sediment Control Practices

Upon stabilization of the site, the swales, stone lined surfaces and stormwater basin will provide sediment control.

5.0 Identification of Potential Stormwater Contaminants.

The purpose of this section is to identify pollutants that could impact stormwater during and after construction of the project and provide practices that will prevent stormwater pollution.

Petroleum Products: All on-site vehicles will be monitored for leaks and receive regular preventative maintenance to reduce the chance of leakage. Petroleum products will be stored in tightly sealed containers that are clearly labeled. 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 a sealable plastic bin 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 stormwater system but will be properly disposed of according to manufacturer's instructions or state and local regulations.

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

Waste Disposal: All waste materials and litter will be collected and stored in a secure metal dumpster from a licensed solid waste management company. The dumpster will meet 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 as often as necessary and the trash will be hauled to a transfer station. No construction waste materials will be buried on site. All personnel will be instructed regarding the correct procedures for waste disposal.

Hazardous Waste: All hazardous waste materials will be disposed of in the manner specified by the local or state regulations or by the manufacturer. Site personnel will be instructed in these practices.

Sanitary Waste: Sanitary Portable units shall be provided. All sanitary waste will be collected from portable units as needed by a licensed sanitary waste management contractor.

Recyclable Waste: All recyclable waste (cardboard, wood, etc.) shall be collected and recycled.

Refueling: All refueling, repair and changing of equipment and vehicle fluids shall be conducted in a designated area if practicable. This area will be designed in a manner to reduce the potential for contamination of on-site resources. For refueling, repair, and changing of equipment and vehicles outside of designated areas, care should be taken to avoid activities within 100-feet of wetlands, streams, water bodies or other environmentally sensitive areas.

Spill Prevention: The following practices shall be used to reduce the risk of spills or other accidental exposure of materials and substances on site during construction to stormwater runoff:

- Products will be kept in original containers with their original manufacturer's label, unless they are not resealable.
- Original labels and materials safety data sheets will be retained.
- An effort will be made to store only enough products 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.
- Substances will not be mixed with one another unless recommended by the manufacturer.
- Whenever possible, all of a product will be used before disposing of the container.
- Manufacturer's recommendations for proper use and disposal will be followed.
- The site superintendent will inspect daily to ensure the proper use and disposal of materials on site.
- Manufacturer's recommended methods for spill cleanup will be 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, goggles, kitty litter, sand, sawdust, and plastic and metal trash containers specifically for this purpose.
- All spills will be cleaned immediately after discovery.
- The spill area will be kept well ventilated and personnel will wear appropriate protective clothing to prevent injury from contact with a hazardous substance.
- Spills of any size of toxic or hazardous material will be reported to the NYSDEC and/or the Town of Deerpark Building Department.

6.0 Stormwater Management Plan

6.1 Site Planning

The following site planning practices were used to prepare the final site plan for this project:

Reduction of Clearing and Grading: Clearing and grading is limited to the minimum amount needed for the proposed working area and stormwater management facilities.

6.2 Water Quality Treatment Volume

This project is a redevelopment that includes both new development and redevelopment activities. In accordance with chapter 9 of the New York State Stormwater Design Manual, the stormwater management practices for the new development portion shall be designed in accordance with the sizing criteria in Chapter 4 and 25% of the existing impervious area. Compacted areas were considered as impervious cover when calculating the water quality treatment volume.

The total water quality volume for this project before runoff reduction is calculated using the following equation:

$$WQv = \frac{P * Rv * A}{12}$$

where:

WQv = water quality volume (in acre-feet)

P = 90% Rainfall Event Number

Rv = 0.05 + 0.009(I), where I is percent impervious cover

A = site area in acres (Contributing area)

For this project, the total contributing area is 16.56 acres, which is separated into two drainage areas, A & B. The water quality calculations below consider gravel areas to be impervious.

Drainage Area A:

The total contributing area in Drainage Area A is 12.56 acres with 0.5 acres of impervious area and 10.94 acres of gravel. The existing impervious area is 0.5 acres and 8.7 acres of gravel; therefore, the increase in impervious area is 0 acres and the increase in gravel area is 2.24 acres.

New Development:

P = 1.4

Rv = 0.05 + 0.009 (18)

Existing Impervious Area:

P = 1.4

Rv = 0.05 + 0.009(73)

$$I = 18\% (2.24 / 12.56)$$

$$WQ_v = (1.4 * 0.21 * 12.56) / 12$$

$$= 0.308 \text{ Ac-ft (13,404 cf)}$$

$$I = 73\% (9.2 / 12.56)$$

$$WQ_v = [(1.4 * 0.71 * 12.56) / 12] \times 25\%$$

$$= 0.316 \text{ Ac-ft (13,758 cf)}$$

Total WQ_v for Drainage Area A = **0.624 Ac-ft (27,182 cf)**

Drainage Area B:

The total contributing area in Drainage Area B is 4.0 acres with 0 acres of impervious surfaces and 1.0 acres of gravel. There is no existing impervious area and 3.0 acres of gravel in Drainage Area B, therefore, the increase in impervious area is 0 acres and the increase in gravel area is 2.0 acres.

New Development:

$$P = 1.4$$

$$R_v = 0.05 + 0.009 (50)$$

$$I = 50\% (2.0 / 4.0)$$

$$WQ_v = (1.4 * 0.5 * 4.0) / 12$$

$$= 0.233 \text{ Ac-ft (10,164 cf)}$$

Existing Impervious Area:

$$P = 1.4$$

$$R_v = 0.05 + 0.009 (25)$$

$$I = 25\% (1.0 / 4.0)$$

$$WQ_v = [(1.4 * 0.275 * 4.0) / 12] \times 25\%$$

$$= 0.032 \text{ Ac-ft (1,394 cf)}$$

Total WQ_v for Drainage Area B = **0.265 Ac-ft (11,543 cf)**

6.3 Runoff Reduction Techniques & Standard SMP's with RR_v Capacity

Runoff reduction techniques consist of stormwater systems with RR_v Capacity such as swales, stone check dams and bioretention ponds.

6.4 Minimum RR_v Required

For this project, the minimum RR_v is $RR_{vmin} = \frac{P * R_v * A_{ic} * S}{12}$

Drainage Area A:

$$P = 1.4$$

$$R_v = 0.95$$

$$\text{New impervious area (A}_{ic}) = 2.24 \text{ acres}$$

$$S = 0.3$$

$$RR_{vmin} = \frac{1.4 * 0.95 * 2.24 * 0.3}{12} = 0.074 \text{ Ac-ft (3,244 cf)}$$

Drainage Area B:

$$P = 1.4$$

$$R_v = 0.95$$

New impervious area (A_{ic}) = 2.0 acres

$S = 0.3$

$$RR_{vmin} = \frac{1.4 * 0.95 * 2.0 * 0.3}{12} = \mathbf{0.066Ac-ft} \text{ (2,897 cf)}$$

6.5 Standard SMP's

The standard stormwater management practices for this project consist of stormwater ponds which have been designed to fit in with the topography of the site. The ponds have been designed as bioretention ponds, sized to contain the Water Quality Volume (WQv) in a four foot deep planting soil bed, a surface mulch layer and a six inch deep surface ponding area. Each pond will also have a 6" diameter underdrain. The stormwater is pretreated by the use of vegetated and stone-lined swales with stone check dams.

The required filter bed area is computed using the following equation:

$$A_f = \frac{WQ_v df}{k (hf + df) tf}$$

where:

A_f	=	surface area of filter bed (sf)
WQ_v	=	water quality volume (cubic-feet)
df	=	Filter bed depth (ft)
k	=	coefficient of permeability of filter media (ft/day)
hf	=	Average height of water above filter bed (ft)
tf	=	Design filter drain time (days)

Drainage Area A:

$$A_f = \frac{27,182 \text{ cf} * 4}{0.5 (.5 + 4) 2} = 24,162 \text{ sf}$$

The actual surface area of the proposed stormwater facility in Drainage Area A is 26,136 sf.

Drainage Area B:

$$A_f = \frac{11,543 \text{ cf} * 4}{0.5 (.5 + 4) 2} = 10,260 \text{ sf}$$

The actual surface area of the proposed stormwater facility in Drainage Area B is 10,890 sf.

The bioretention ponds provide more than the minimum required RRv and more than the calculated WQv.

The below table summarizes the differences between the pre-development discharge and post-construction discharge as outlined in the attached calculations.

Drainage Area A:

	Pre-Development (cfs)	Post-Construction (cfs)	Net Difference
1 Year	26.01 cfs	0.86 cfs	-25.15 cfs
2 Year	35.06 cfs	1.09 cfs	-33.97 cfs
10 Year	60.86 cfs	1.58 cfs	-59.28 cfs
100 Year	121.28 cfs	19.36 cfs	-101.92 cfs

Drainage Area B:

	Pre-Development (cfs)	Post-Construction (cfs)	Net Difference
1 Year	5.23 cfs	0.21 cfs	-5.02 cfs
2 Year	7.72 cfs	0.47 cfs	-7.25 cfs
10 Year	15.33 cfs	1.00 cfs	-14.33 cfs
100 Year	34.43 cfs	13.49 cfs	-20.94 cfs

The post-construction peak rates of runoff are less than the pre-development values.

The secondary outlet device is an emergency spillway (weir) that is 10' wide and is 6" below the top of the berm for Pond A and 12" below the top of the berm for Pond B. As the calculations show, peak flow elevations will not exceed the emergency overflow elevations for the 1, 2, 10 and 100 year storm events.

6.6 Bioretention Pond Materials & Landscaping

The planting soil should be a sandy loam, loamy sand or a loam / sand mix (should contain a minimum of 35 to 60 % sand, by volume). The clay content for these soils should be less than 25 % by volume. A permeability of at least 1.0 feet per day (0.5 inches per hour) is required. (a conservative default value of 0.5 feet per day is used for design). The design rate may be increased to 2 feet/day if field observation, post-construction infiltration testing, or other equivalent testing (as determined by the District) is provided to confirm the design rate is achieved.) The soil should be free of stones, stumps, roots, or other woody material over 1 inch in diameter. For best results, brush or seeds from noxious weeds should not be present in the soils. Placement of the planting

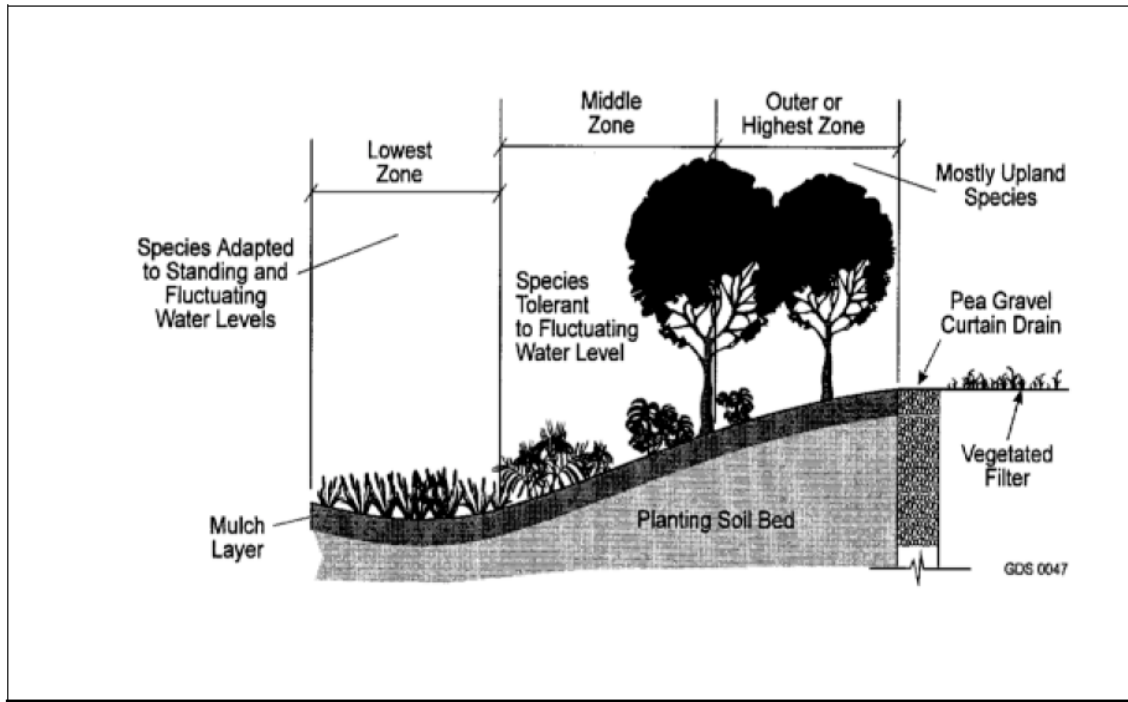
soil should be in lifts of 12 to 18 inches, loosely compacted (tamped lightly with a dozer or backhoe bucket). The specific characteristics are presented in the following table:

PARAMETER	VALUE
PH Range	5.2 to 7.0
Organic Matter	1.5 to 4.0%
Magnesium	35 lbs per Acre (Min.)
Phosphorous	75 lbs per Acre (Min.)
Potassium	85 lbs per Acre (Min.)
Soluble Salts	≤ 500 ppm
Clay	10 to 25%
Silt	30 to 55%
Sand	35 to 60%

The mulch layer plays an important role in the performance of the bioretention system. It helps maintain soil moisture and avoids surface sealing that reduces permeability. Mulch helps prevent erosion and provides a microenvironment suitable for soil biota at the mulch/soil interface. It also serves as a pretreatment layer, trapping the finer sediments that remain suspended after the primary pretreatment.

The mulch layer should be standard landscape style, single or double shredded hardwood mulch. The mulch layer should be free of other materials, such as weed seeds, soil, roots, etc. The mulch should be applied to a maximum depth of three inches. Grass clippings should not be used as a mulch. Alternatively, pea gravel or other similar natural gravel may be used.

Landscaping is critical to the performance and function of bioretention areas. Native plant species shall be used and vegetation shall be selected based on the specific zone of hydric tolerance as shown in the below figure:



Lowest Zone: Zones 2-3
 Middle Zone: Zones 3-4
 Outer Zone: Zones 5-6

Woody vegetation shall not be located at inflow locations. Trees should be located along the perimeter of the facility, as site conditions allow. A tree density of approximately one tree per 100 sf (10 feet on-center) is recommended; shrubs at five feet on-center and herbaceous vegetation at approximately 2.5 feet on-center.

The following plantings are recommended:

	Trees	Shrubs	Herbaceous Vegetation
Lowest Zone (Zones 2-3)	X	Buttonbush	Arrow Arum; Broomsedge,
Middle Zone (Zones 3-4)	Bald Cypress	Elderberry	Tufted Hairgrass
Outer Zone (Zones 5-6)	American Elm	Bayberry	X

The owner may choose to substitute plantings that are of the same zone of hydric tolerance. A list of native plantings and their hydric tolerance is included in the Appendix.

7.0 Construction Sequence

The Erosion and Sediment Control plan for the proposed project utilizes silt fence, inlet protection, and a sediment basin to be installed prior to and during construction to contain silt and sediment on site. These facilities will be placed as shown on the plans and are to be maintained during construction to ensure that they will continue to remove sediment throughout the period of construction.

There will be existing topsoil on site to be stockpiled. All areas of construction that will not be stabilized within 14 days will receive temporary seeding as specified on the plans. When construction is completed, topsoil will be brought in and spread to a depth of 6 inches and a permanent vegetative cover established. Upon determination that the vegetation cover has reached a level where sedimentation will not be a problem, all the sedimentation controls can then be removed.

The following construction sequence will take place for implementing the erosion and sediment controls:

1. Schedule on-site pre-construction meeting with engineer, landowner, and township at least one week prior to the start of construction.
2. Install perimeter silt fence.
3. Construct sediment infiltration basins as shown on the plan. Erosion controls must be constructed, stabilized, and functional before new site disturbance begins.
4. Clear and grub site. Strip topsoil and stockpile as shown on the erosion and sedimentation control plan and stabilize in accordance with the seeding and mulching specifications.
5. Initiate earth moving activities for site development. Unsuitable material is to be removed from the project site. Contractor shall be solely responsible for all erosion and sedimentation control measure at any off-site spoil areas. Place and compact material in areas of fill to obtain necessary grades.
6. Rough grade site, stabilize and seed excess stockpile material as shown on the erosion and sedimentation control plan sheet. Install silt fence around the stockpile immediately after the soil is stockpiled.
7. The site grading activities shall be initiated and proceed in such a manner as to direct all storm water from disturbed areas to the sediment control structures.
8. Stabilize all grass areas in accordance with the seeding and mulching specifications.
9. Rough grade site, working grade towards "rough" final grade elevations of parking lot.

10. Place and compact subbase in areas to be paved and place the gravel / item #4 course as soon as it is practical.
11. Clean out & reseed and re-stabilize infiltration basins where necessary.
12. Reseed, re-mulch and re-stabilize where necessary.
13. Remove silt fencing only after entire site has been stabilized, vegetated areas shall be considered permanently stabilized when a uniform 70% vegetative cover of erosion resistant perennial specified has been achieved, or the disturbed area is covered with an acceptable bmp which permanently minimizes accelerated erosion and sedimentation. Until such time as this standard is achieved, interim stabilization measures and temporary erosion and sediment control bmps that are used to treat project runoff may not be removed. During periods of drought, irrigation should be utilized until stabilization has occurred.

8.0 Inspections & Maintenance Procedures

8.1 Inspections

Inspection procedures and schedules as stated in the New York State Stormwater Management Design Manual shall be employed for this project.

Specifically, visual inspections of all cleared and graded areas during construction should be performed daily and within 24 hours of significant storm event of ½" of rain or more. The inspections should be conducted by a representative of the SWPPP operator or a Licensed Professional. The inspections should focus on the condition of the BMP's and identify repairs prior to the next storm event. The inspections should also identify areas where sediment needs removal and stockpiled.

In the absence of major storm events, weekly inspections should be performed to confirm condition of BMP's due to other factors such as groundwater, wind, and other structural factors. Reseeding and mulching should be given special attention in exposed areas that do not have permanent stabilization.

The inspections should also place special emphasis on potential pollutants of construction materials and products such as petroleum and concrete waste.

Inspection reports should be maintained on a weekly basis and recorded for future reference.

8.2 Maintenance

The following maintenance shall occur during the construction and shall be the responsibility of the owner / developer:

A legally binding maintenance agreement shall be in place.

All soil erosion and sediment control practices will be checked for stability and operation following every runoff-producing rainfall but in no case less than once every week. Any needed repairs will be made immediately to maintain all practices as designed.

The sediment basin will be cleaned out when the level of sediment reaches more than 6" in depth.

Sediment will be removed from behind the silt fence when it becomes 6" deep at the fence. The silt fence will be repaired as necessary to maintain a barrier.

All seeded areas will be fertilized, reseeded as necessary, and mulched to maintain a vigorous, dense vegetative cover.

The following maintenance shall occur after completion of the construction and shall be the responsibility of the owner:

The stormwater ponds shall be inspected monthly. Vegetation height shall be limited to 18". Any wind-blown or floating trash / debris shall be removed and disposed of. The accumulated sediment shall be measured with a calibrated rod and the readings shall be recorded in a log. The filter beds shall be cleaned out when accumulated sediment reaches a depth of 1". If water ponds on the filter bed for greater than 48 hours, then the filter material shall be removed and replaced.

9.0 Appendix

9.1 SPDES Permit

9.2 Letter of Continued Coverage

9.3 SWPPP Operator Certification Statement

9.4 SWPPP Preparer Certification Statement

9.5 Aerial Map

9.6 Orange County GIS Topography Map

9.7 NRCS Custom Soil Resource Report

9.8 Pre and Post Development Plans

9.9 Hydrocad Calculations (Pre & Post Construction)

9.10 Bioretention Pond Maintenance Checklist

9.11 Native Plant Guide for Stormwater Management Areas (NY)