EROSION AND SEDIMENT CONTROL NOTES:

- 1. The Erosion and Sediment Control Plan is only to be referred to for the installation of erosion and sediment control measures. For all other construction related activities, including, but not limited to, grading and utilities, refer to the appropriate
- 2. The owner's field representative (O.F.R.) will be responsible for the implementation and maintenance of erosion and sediment control measures on this site prior to and during construction.
- 3. All construction activities involving the removal or disposition of soil are to be provided with appropriate protective measures to minimize erosion and contain sediment disposition within. Minimum soil erosion and sediment control measures shall be implemented as shown on the plans and shall be installed in accordance with "New York Standards and Specifications For Erosion and Sediment Control," latest
- 4. Wherever feasible, natural vegetation should be retained and protected. Disturbance shall be minimized in the areas required to perform construction. No more than 5 acres of unprotected soil shall be exposed at any one time.
- 5. When land is exposed during development, the exposure shall be kept to the shortest practical period of time, but in no case more than 7 days after the construction activity in that portion of the site has ceased. Disturbance shall be minimized in the areas required to perform construction.
- 6. All construction vehicles shall be kept clear of the watercourses and wetland control areas outside the areas of proposed development. Silt fence and orange construction fence shall be installed in the areas where the grading is in close proximity of the watercourses or wetland control areas.
- 7. The stabilized construction entrances, silt fence, and orange construction fence shall be installed as shown on the plans prior to beginning any clearing, grubbing or earthwork.
- 8. All topsoil to be stripped from the area being developed shall be stockpiled and immediately seeded with Lolium perenne aristatum or Lolium perenne multiflorum for temporary stabilization. Lolium perenne aristatum shall be used for winter seeding and Lolium perenne multiflorum shall be used for spring and summer seeding. 9. Any graded areas not subject to further disturbance or construction traffic shall,
- within 7 days of final grading, receive permanent vegetation cover in combination with a suitable mulch. All seeded areas to receive a minimum 4" topsoil (from stockpile area) and be seeded and mulched as follows: • Seed mixtures as noted in the Planting Notes on Drawing SP-1 are to be planted between March 21 and May 20, or between August 15 and October 15 or as
- Mulch: Salt hay or small grain straw applied at a rate of 90 lbs./1000 S.F. or 2 tons/acre, to be applied and anchored according to "New York Standards and Specification For Erosion and Sediment Control," latest edition.
- 10. Grass seed mixes may be applied by either mechanical or hydroseeding methods. Seeding shall be performed in accordance with the current edition of the "NYSDOT Standard Specification, Construction and Materials, Section 610-3.02, Method No. 1". Hydroseeding shall be performed using materials and methods as approved by the site
- 11. Cut or fill slopes equal to or steeper than 3:1 shall be stabilized immediately after grading with Curlex'l Single Net Erosion Control Blanket, or approved equal.
- 12. Paved roadways shall be kept clean at all times.

is diverted to soil erosion and sediment control facilities.

directed by project representative:

- 13. The site shall at all times be graded and maintained such that all stormwater runoff
- 14. All storm drainage outlets shall be stabilized, as required, before the discharge points become operational.
- 15. Stormwater from disturbed areas must be passed through erosion control barriers before discharge beyond disturbed areas or discharged into other drainage systems.
- 16. Erosion and sediment control measures shall be inspected and maintained on a daily basis by the O.F.R. to insure that channels, temporary and permanent ditches and pipes are clear of debris, that embankments and berms have not been breached and that all straw bales and silt fences are intact. Any failure of erosion and sediment control measures shall be immediately repaired by the contractor and inspected for approval by the O.F.R. and/or site engineer.
- 17. Dust shall be controlled by sprinkling or other approved methods as necessary, or as directed by the O.F.R.
- 18. Cut and fills shall not endanger adjoining property, nor divert water onto the property of others.
- 19. All fills shall be placed and compacted in 6" lifts to provide stability of material and to prevent settlement.
- 20. The O.F.R. shall inspect downstream conditions for evidence of sedimentation on a weekly basis and after rainstorms.
- 21. As warranted by field conditions, special additional erosion and sediment control measures, as specified by the site engineer, the Wetlands Inspector, the Town Engineer and/or NYCDEP shall be installed by the contractor.
- 22. Erosion and sediment control measures shall remain in place until all disturbed areas are suitably stabilized.
- 23. After completion of the site improvements, the owner will assume responsibility for maintenance of the roads, parking lots, drainage systems and stormwater facilities. Each spring the paved areas shall be cleaned to remove the winter accumulation of traction sand. After this is completed all drain inlet and catch basin sumps should be cleaned. All pipes should be checked for debris and blockage and cleaned as required. During the cleaning process, the drain inlets, catch basins and pipes should be inspected for structural integrity and overall condition. Repairs and/or replacements should be made as required.
- 24. Inspection of the stormwater basins should be performed every 6 months and after large storm events. These inspections should, at a minimum, check the outlet pipes for blockage and the general overall integrity of the basin and appurtenances.
- 25. Maintain basin vegetation including removal of trees and replacement of vegetation that should die. Remove any litter which accumulates as necessary. Typically, the accumulated silt will be required to be removed every 10 to 20 years. Any accumulated silt shall be removed from the stormwater basins once the site has been stabilized.
- 26. Refer to the Stormwater Pollution Prevention Plan for additional details regarding long-term maintenance of the storm drainage facilities.

REQUIRED EROSION CONTROL SWPPP CONTENTS:

- Pursuant to the NYSDEC "SPDES General Permit for Stormwater Discharges from Construction Activity" (GP-0-15-002), all Stormwater Pollution Prevention Plans (SWPPP) shall include erosion and sediment control practices designed in conformance with the most current version of the technical standard, "New York Standards and Specifications for Erosion and Sediment Control." Where erosion and sediment control practices are not designed in conformance with this technical standard, the owner or operator must demonstrate equivalence to the technical standard. The following list of required SWPPP components is provided in accordance with Part III.B.1a-I of General Permit
- a. Background Information: The subject project consists of the construction of a 57,500 sf building, a well and septic system, landscaping, lighting utility infrastructure and associated stormwater management practices
- b. Site map / construction drawing: This plan serves to satisfy this SWPPP requirement for planimetric design and details.
- c. Description of the soils present at the site: Onsite soils located within the proposed limits of disturbance consist of Paxton Fine Sandy Loam (PnC) and Charlton Loam (ChB), as identified on the Soil Conservation Service Web Soil Survey. This soil type belongs to the Hydrologic Soil Group "B" and "C".
- d. Construction phasing plan / sequence of operations: The project will not be phased. A Construction Sequence and Erosion and Sediment Control Maintenance Schedule has been provided. The Erosion and Sediment Control Notes contained hereon outline a general sequence of operations for the proposed project. In general all erosion and sediment control facilities shall be installed prior to commencement with land disturbing activities, and areas of disturbance shall be limited to the shortest period of time as practicable. The total limits of disturbance is approximately 8 acres, therefore the subject project has been phased, refer to Drawing SP-4.
- e. Description of erosion and sediment control practices: This plan, and details / notes shown hereon serve to satisfy this SWPPP requirement.
- f. Temporary and permanent soil stabilization plan: The Erosion and Sediment Control Notes and Details provided hereon identify temporary and permanent stabilization measures to be employed with respect to specific elements of the project, and at the various stages of development.
- a. Site map / construction drawing: This plan serves to satisfy this SWPPP requirement for erosion control notes and details.
- h. The dimensions, material specifications, installation details, and operation and maintenance requirements for all erosion and sediment control practices: The Details, Erosion and Sediment Control Notes and Erosion and Sediment Control Maintenance Schedule serve to satisfy this SWPPP requirement.
- i. An inspection schedule: Inspections are to be performed bi-weekly and by a qualified professional as required by the General Permit GP-0-15-002. In addition, the Owner's Field Representative (OFR) shall perform additional inspections as cited in the Erosion and Sediment Control Notes.
- i. A description of pollution prevention measures that will be used to control litter, construction chemicals and construction debris: In general, all construction litter / debris shall be collected and removed from the site. The general contractor shall supply either waste barrels or dumpster for proper waste disposal. Any construction chemicals utilized during construction shall either be removed from site daily by the contractor or stored in a structurally sound and weatherproof building. No hazardous waste shall be disposed of onsite, and shall ultimately be disposed of in accordance with all federal, state and local regulations. Material Safety Data Sheets (MSDS), material inventory, and emergency contact numbers shall be maintained by the general contractor for all construction chemicals utilized onsite. Finally, temporary sanitary facilities (portable toilets) shall be provided onsite during the entire length of construction, and inspected weekly for evidence of leaking holding tanks.
- k. A description and location of any stormwater discharges associated with industrial activity other than construction at the site: There are no known industrial stormwater discharges present or proposed at the site.
- I. Identification of any elements of the design that are not in conformance with the technical standard, "New York Standards and Specifications for Erosion and Sediment Control." All proposed elements of this SWPPP have been designed in accordance with the "New York Standards and Specifications for Erosion and Sediment Control."

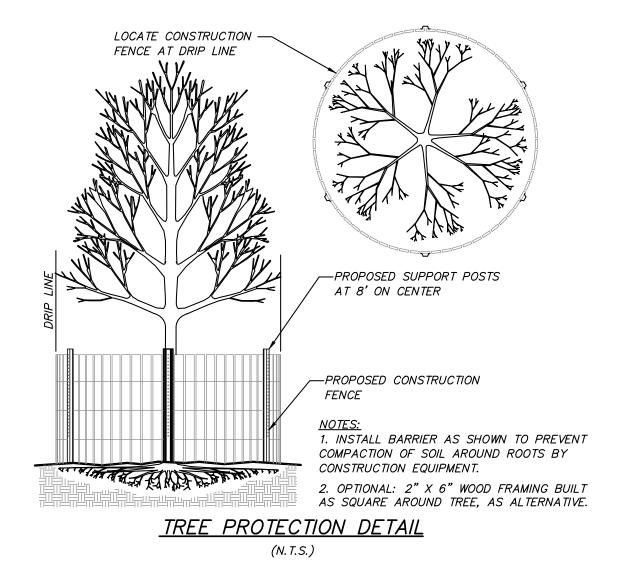
REQUIRED POST-CONSTRUCTION STORMWATER MANAGEMENT PRACTICE COMPONENTS:

- 1. Pursuant to the NYSDEC "SPDES General Permit for Stormwater Discharges from Construction Activity" (GP-0-15-002), all construction projects needing post-construction stormwater management practices shall prepare a SWPPP that also includes practices designed in conformance with the most current version of the technical standard, New York State Stormwater Management Design Manual ("Design Manual"). Where post-construction stormwater management practices are not designed in conformance with this technical standard, the owner or operator must demonstrate equivalence to the technical standard. The following list of SWPPP components is provided in accordance with Part III.B.2a-g and III.B.3:
- a. Identification of all post-construction stormwater management practices to be constructed as part of the project: The project plan set, and details/notes shown hereon serve to satisfy this SWPPP requirement.
- b. A site map/construction drawing(s) showing the specific location and size of each post-construction stormwater management practice: This plan, and details/notes shown hereon serve to satisfy this SWPPP requirement.
- c. The dimensions, material specifications and installation details for each post-construction stormwater management practice: This plan, and details/notes

shown hereon serve to satisfy this SWPPP requirement.

- d. Identification of any elements of the design that are not in conformance with the Design Manual. Include the reason for the deviation or alternative design and provide information which demonstrates that the deviation or alternative design is equivalent to the technical standards: All post-construction stormwater management practices are in conformance with the Design Manual.
- e. A hydrologic and hydraulic analysis for all structural components of the stormwater management control system: The required analysis is provided in the report titled Preliminary Stormwater Pollution Prevention Plan for W.B. New York.
- f. A detailed summary (including calculations) of the sizing criteria that was used to design all post-construction stormwater management practices. At a minimum, the summary shall address the required design criteria from the applicable chapter of the Design Manual; including the identification of and justification for any deviations from the Design Manual, and identification of any design criteria that are not required based on the redevelopment criteria or waiver criteria included in the Design Manual; The stormwater practices are sized in accordance with the Design Manual, specifically chapters 4, 6, and 10. The stormwater facilities have been designed to provide water quality volume treatment (treatment of the 1 year 24-hour design storm per the Enhanced Phosphorus Removal Standards). Channel Protection Volume is not required as the extended detention orifice would be less than 3" to provide 24-hour center of mass detention of the 1 year 24-hour design storm. A down stream analysis conducted in accordance with the Design Manual has revealed that the Overbank Flood Control and Extreme Flood Control is not required. Calculations are provided in report entitled Preliminary Stormwater Pollution Prevention Plan for W.B. New York. All practices are designed in accordance with the Design Manual.
- q. 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. The Permanent Stormwater Facilities Maintenance Schedule provided on these plans serves to satisfy this requirement.
- 2. Enhanced Phosphorus Removal Standards Beginning on September 30, 2008, 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 Enhanced Phosphorus Removal Standards included in the most current version of the technical standard, New York Stormwater Management Design Manual. At a minimum, the post-construction stormwater management practice component of the SWPPP shall include items 2.a - 2.g above. The permanent stormwater practices for this project have been sized according to chapter 10 of the Design Manual Enhanced Phosphorus Removal Standards. Please see 2.a - 2.g above.

PERMANENT STORMWATER FACILITIES MAINTENANCE SCHEDULE					
PRACTICE/FACILITY	MONTHLY	AFTER MAJOR STORM EVENTS	BI-ANNUALLY	YEARLY	EVERY 5 to 10 YEARS
GRASS & RIP RAP SWALES	Ensure contributing areas clean of debris, no evidence of erosion, & mowing performed.	Inspect for erosion, soil permeability & evidence of flow going around structures.	Inspect & clean Mow & remove debris & litter. Revegetate as needed.	Inspect & clean accumulated sediment.	Inspect for & remove accumulated sediment
INFILTRATION BASINS AND EXTENDED DETENTION BASINS	Inspect first few months after construction for eroding soils & slumpage & repair immediately	outlets for clogging, eroding soils on the basin berm &	Mow berms and exterior embankments Remove debris & litter from basins & outlet structures. Remove Sediment if accumulated greater than an 1"	-	Inspect for & remove accumulated sediment
SUBSURFACE STORMWATER COLLECTION SYSTEMS	_	_	Inspect & clean	Inspect, clean, repair and/or replace structures. Remove debris.	_
STORMWATER BASIN	Inspect first few months after construction for eroding soils & slumpage & repair immediately	Inspect orifices, inlets & outlets for clogging, eroding soils on the basin berm & embankments, & sources of erosion; & stabilize and/or repair immediately.	exterior embankments Remove debris & litter	-	Inspect for & remove accumulated sediment
CATCH BASIN SUMPS		_	Inspect for damage to frame and grate, and pipe inlets/outlets. Clean accumulated sediment in sump.	-	-

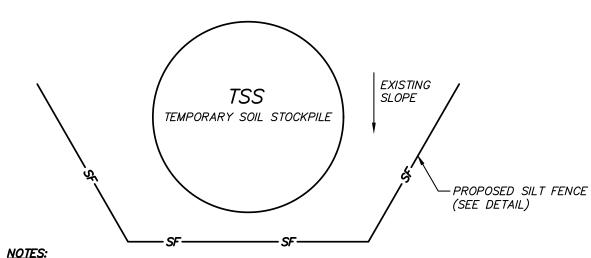


TREE PROTECTION NOTES:

- 1. Trees to be preserved in proximity to disturbance areas shall be marked in the field by the Landscape Architect prior to start of
- 2. Install tree protection measures prior to start of site clearing &
- 3. No construction equipment shall be parked and no earth or construction materials shall be stockpiled or stored under the canopy of trees to be preserved.
- 4. During tree removal operations associated with construction, do not damage adjacent trees to remain. Lower limbs and tree trunks, do not drop them.

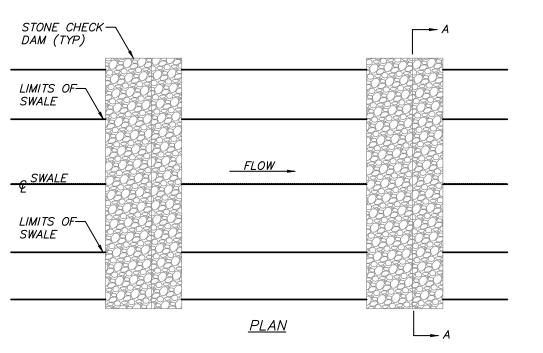
5. Carefully tie back any tree branches that conflict with construction

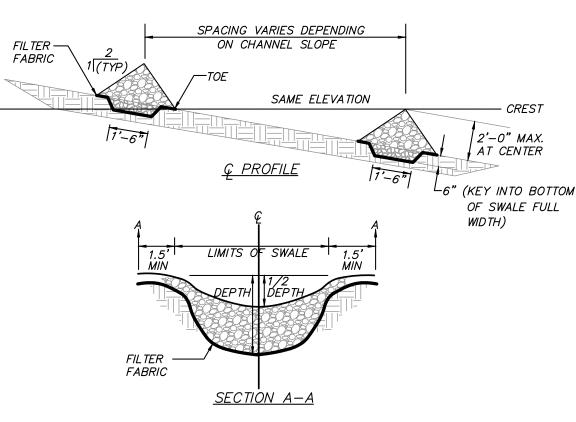
- 6. Where trenching for utilities is required within a root zone, tunneling under and around roots shall be by hand digging. If roots 3" or larger are encountered immediately adjacent to the location of new construction and relocation is not practical, the roots shall be hand pruned under the supervision of a Certified Arborist or Landscape Architect to 6" back from the new construction limit. All exposed roots to receive appropriate treatment prior to backfilling.
- 7. If tree protection fencing to protect the root zone is not possible, six to eight inches of wood chip mulch and 3/4 inch plywood shall be placed over the entire affected root zone area to prevent soil
- 8. Any tree damaged during construction activities must be immediately repaired by a qualified arborist at no additional cost to the owner.



- 1. AREA CHOSEN FOR STOCKPILE LOCATION SHALL BE DRY AND STABLE
- 2. MAXIMUM SLOPE OF STOCKPILE SHALL BE 2:1.
- 3. UPON COMPLETION OF SOIL STOCKPILING, EACH PILE SHALL BE IMMEDIATELY SEEDED WITH K31 PERENNIAL TALL FESCUE.
- 4. ALL STOCKPILES SHALL BE PROTECTED WITH SILT FENCING INSTALLED ON THE

TEMPORARY SOIL STOCKPILE DETAIL (N.T.S.)

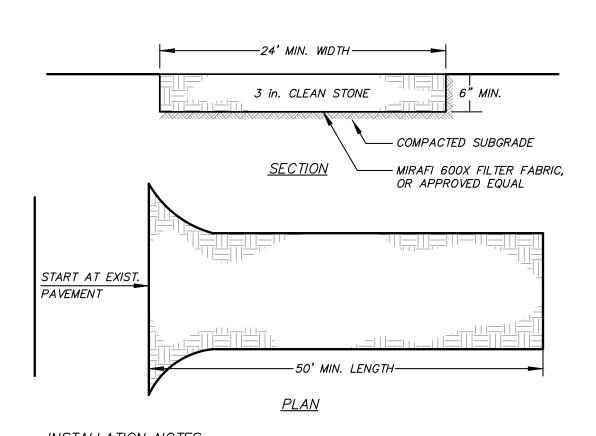




NOTES:

- STONE SHALL BE PLACED ON A FILTER FABRIC FOUNDATION. 2. SET SPACING OF CHECK DAMS SO 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 LINER AS APPROPRIATE.
- CHECK DAMS ARE NOT SUBJECT TO DAMAGE OR BLOCKAGE FROM DISPLACED STONE. STONE CHECK DAM DETAIL

5. ENSURE THAT CHANNEL APPURTENANCES SUCH AS CULVERT ENTRANCES BELOW



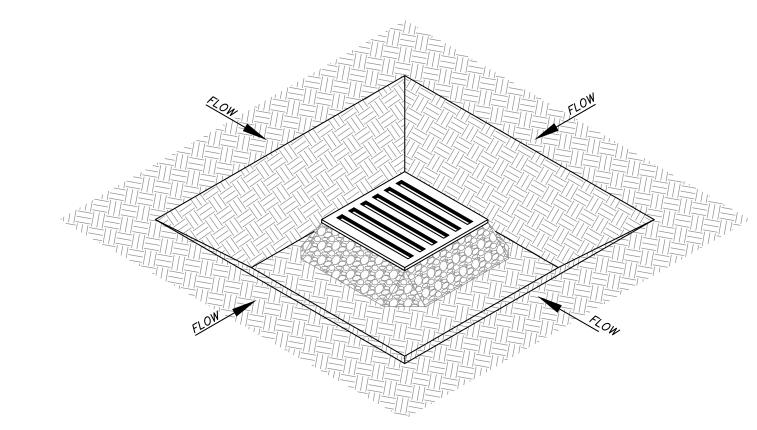
INSTALLATION NOTES 1. STONE SIZE - USE 3" STONE

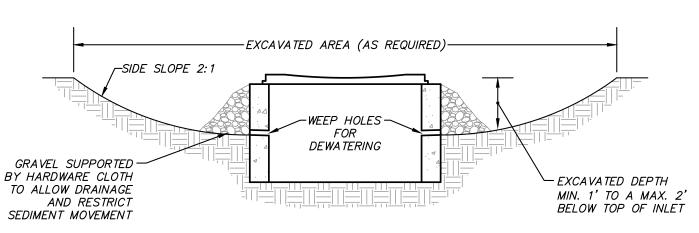
- 2. LENGTH AS REQUIRED, BUT NOT LESS THAN 50 FEET (EXCEPT ON A SINGLE RESIDENCE LOT WHERE A 30 FOOT MINIMUM LENGTH WOULD APPLY.)
- 3. THICKNESS NOT LESS THAN SIX (6) INCHES.
- 4. WIDTH 10 FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCUR.
- 5. FILTER CLOTH WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE. FILTER CLOTH WILL NOT BE REQUIRED ON A SINGLE FAMILY
- 6. SURFACE WATER ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED. 7. MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT OF WAY THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO
- PUBLIC RIGHT OF WAY MUST BE REMOVED IMMEDIATELY. 8. WASHING - WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHT OF WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN

TRAP SEDIMENT. ALL SEDIMENT SPILLED. DROPPED, WASHED OR TRACKED ONTO

APPROVED SEDIMENT TRAPPING DEVICE. 9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER

> STABILIZED CONSTRUCTION ENTRANCE DETAIL (N. T. S.)

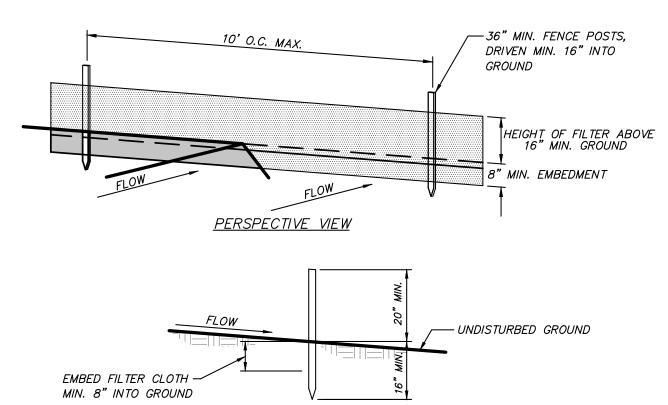




- 1. CLEAR THE AREA OF ALL DEBRIS THAT WILL HINDER EXCAVATION
- 2. GRADE APPROACH TO THE INLET UNIFORMLY AROUND THE BASIN 3. WEEP HOLES SHALL BE PROTECTED BY GRAVEL
- 4. UPON STABILIZATION OF CONTRIBUTING DRAINAGE AREA, SEAL WEEP HOLES, FILL EXCAVATION WITH STABLE SOIL TO FINAL GRADE, COMPACT IT PROPERLY, AND STABILIZE WITH PERMANENT SEEDING
- 5. MAXIMUM DRAINAGE AREA = 1 ACRE

(N.T.S.)

EXCAVATED DROP INLET PROTECTION DETAIL



<u>CONSTRUCTION NOTES FOR FABRICATED SILT FENCE</u> 1. FILTER CLOTH TO BE FASTENED SECURELY TO POSTS AT TOP AND MID SECTION. 2. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN

EACH OTHER THEY SHALL BE OVERLAPPED BY

3. MAINTENANCE SHALL BE PERFORMED AS NEEDED

AND MATERIAL REMOVED WHEN "BULGES"

SIX INCHES AND FOLDED.

DEVELOP IN THE SILT FENCE.

POSTS: STEEL EITHER T OR U TYPE OR 2" HARDWOOD FILTER CLOTH: FILTER X, MIRAFI 100X, STABILINKA T140N, OR APPROVED EQUAL PREFABRICATED UNIT: GEOFAB, ENVIROFENCE, OR APPROVED

SILT FENCE DETAIL (N. T. S.)

> 8 9-16-20 RE-ISSUED FOR CONSTRUCTION ISSUED FOR CONSTRUCTION 7 8-26-20 REVISED FOR FINAL PERMITTING 6 6-30-20 5 | 6-15-20 | REVISED PER NYCDEP SUBMISSION 4 6-10-20 TOWN BOARD SUBMISSION RESUBMISSION TO TOWN BOARD 3 4-17-20 2 3-21-20 RESUBMISSION TO PLANNING BOARD 1 2-3-20 RESUBMISSION TO PLANNING BOARD DATE

Carmel, NY 10512 (845) 225-9690 / / ENGINEERING. SURVEYING & (845) 225-9717 fax LANDSCAPE ARCHITECTURE, P.C. www.insite-eng.com RESTAURANT DEPOT U.S. ROUTE 6, TOWN OF SOUTHEAST, PUTNAM COUNTY. NEW YORK DRAWING NO. 20174.100 NUMBER MANAGER

CHECKED

12-23-19

AS NOTED

J.F.R.