



**Lockport-Batavia Line #112
Rebuild Project**

Appendix A

Plan & Profile Drawings

Part 1 of 11



**Lockport-Batavia Line #112
Rebuild Project**

Appendix A

Plan & Profile Drawings

NIAGARA MOHAWK POWER CORPORATION D/B/A
NATIONAL GRID
LOCKPORT - BATAVIA 112
REBUILD PROJECT
ENVIRONMENTAL MANAGEMENT & CONSTRUCTION PLAN (EM&CP)
PSC CASE NO. 22-T-0654

SHEET NUMBER	TITLE	SHEET NUMBER	TITLE
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2	SHEET INDEX	34B	CONSTRUCTION PLAN & PROFILE
3	EM&CP LEGEND	35A	FORESTRY & REAL ESTATE PLAN
4	EM&CP NOTES SHEET	35B	CONSTRUCTION PLAN & PROFILE
5	EM&CP NOTES SHEET	36A	FORESTRY & REAL ESTATE PLAN
6	EROSION PREVENTION & SEDIMENT CONTROL NOTES	36B	CONSTRUCTION PLAN & PROFILE
7	EROSION PREVENTION & SEDIMENT CONTROL DETAILS	37A	FORESTRY & REAL ESTATE PLAN
8	EROSION PREVENTION & SEDIMENT CONTROL DETAILS	37B	CONSTRUCTION PLAN & PROFILE
9	EROSION PREVENTION & SEDIMENT CONTROL DETAILS	38A	FORESTRY & REAL ESTATE PLAN
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12	CIVIL CONSTRUCTION NOTES & DETAILS	39B	CONSTRUCTION PLAN & PROFILE
13	CIVIL CONSTRUCTION NOTES & DETAILS	40A	FORESTRY & REAL ESTATE PLAN
14	NYSDOT NOTES & DETAILS	40B	CONSTRUCTION PLAN & PROFILE
15	NYSDOT NOTES & DETAILS	41A	FORESTRY & REAL ESTATE PLAN
16A	NYSDOT NOTES & DETAILS	41B	CONSTRUCTION PLAN & PROFILE
16B	NYSDOT NOTES & DETAILS	42A	FORESTRY & REAL ESTATE PLAN
17A	FORESTRY & REAL ESTATE PLAN	42B	CONSTRUCTION PLAN & PROFILE
17B	CONSTRUCTION PLAN & PROFILE	43A	FORESTRY & REAL ESTATE PLAN
18A	FORESTRY & REAL ESTATE PLAN	43B	CONSTRUCTION PLAN & PROFILE
18B	CONSTRUCTION PLAN & PROFILE	44A	FORESTRY & REAL ESTATE PLAN
19A	FORESTRY & REAL ESTATE PLAN	44B	CONSTRUCTION PLAN & PROFILE
19B	CONSTRUCTION PLAN & PROFILE	45A	FORESTRY & REAL ESTATE PLAN
20A	FORESTRY & REAL ESTATE PLAN	45B	CONSTRUCTION PLAN & PROFILE
20B	CONSTRUCTION PLAN & PROFILE	46A	FORESTRY & REAL ESTATE PLAN
21A	FORESTRY & REAL ESTATE PLAN	46B	CONSTRUCTION PLAN & PROFILE
21B	CONSTRUCTION PLAN & PROFILE	47A	FORESTRY & REAL ESTATE PLAN
22A	FORESTRY & REAL ESTATE PLAN	47B	CONSTRUCTION PLAN & PROFILE
22B	CONSTRUCTION PLAN & PROFILE	48A	FORESTRY & REAL ESTATE PLAN
23A	FORESTRY & REAL ESTATE PLAN	48B	CONSTRUCTION PLAN & PROFILE
23B	CONSTRUCTION PLAN & PROFILE	49A	FORESTRY & REAL ESTATE PLAN
24A	FORESTRY & REAL ESTATE PLAN	49B	CONSTRUCTION PLAN & PROFILE
24B	CONSTRUCTION PLAN & PROFILE	50A	FORESTRY & REAL ESTATE PLAN
25A	FORESTRY & REAL ESTATE PLAN	50B	CONSTRUCTION PLAN & PROFILE
25B	CONSTRUCTION PLAN & PROFILE	51A	FORESTRY & REAL ESTATE PLAN
26A	FORESTRY & REAL ESTATE PLAN	51B	CONSTRUCTION PLAN & PROFILE
26B	CONSTRUCTION PLAN & PROFILE	52A	FORESTRY & REAL ESTATE PLAN
27A	FORESTRY & REAL ESTATE PLAN	52B	CONSTRUCTION PLAN & PROFILE
27B	CONSTRUCTION PLAN & PROFILE	53A	FORESTRY & REAL ESTATE PLAN
28A	FORESTRY & REAL ESTATE PLAN	53B	CONSTRUCTION PLAN & PROFILE
28B	CONSTRUCTION PLAN & PROFILE	54A	FORESTRY & REAL ESTATE PLAN
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		59B	STAMP ROAD ACCESS
		60A	STAMP ROAD ACCESS
		60B	STAMP ROAD ACCESS
		61A	STAMP ROAD ACCESS
		61B	STAMP ROAD ACCESS
		62A	STAMP ROAD ACCESS
		62B	STAMP ROAD ACCESS
		63A	STAMP ROAD ACCESS
		63B	STAMP ROAD ACCESS
		64	LEDGE ROAD MARSHALLING YARD

THE INFORMATION PROVIDED IN THE ENVIRONMENTAL MANAGEMENT AND CONSTRUCTION PLAN SUBJECT TO THIS COVER HAS BEEN PREPARED AND REVIEWED BY THE BELOW SIGNED DEPARTMENT LEADS OR BY A DESIGNEE UNDER THEIR DIRECTION. THE DETAILS PRESENTED ARE TRUE AND ACCURATE TO THE BEST KNOWLEDGE OF THE SIGNEEES.

DEPARTMENT LEAD SIGN-OFF

CONSTRUCTION	Kyle McNulty
ENVIRONMENTAL SERVICES	Mary Bitka
FORESTRY	Ryan Blothenburg
PROJECT MANAGEMENT	Nikki Carlson
REAL ESTATE	Kevin Cramer
SURVEY	Jason McCadden
TRANSMISSION ENGINEERING	Ryan Shene

This document has been reviewed and does not contain Critical Energy/Electric Infrastructure Information (CEII). 06/09/2025

ORIGINAL DATE	6/06/25	DRAWING NUMBER	L1-41568	DRAWING NUMBER	1
ISSUE DATE		ISSUE NUMBER	6.1-L10-M5	ISSUE NUMBER	
115KV TRANSMISSION LINES LOCKPORT - BATAVIA 112 REBUILD PROJECT EM & CP COVER					
DATE		DESCRIPTION OF ISSUE OR REVISION		DATE	

EXISTING FEATURES

PROPOSED FEATURES

- PROPERTY COUNTY TAX MAP
- CONTOUR LINE
- TOWN LINE
- FENCE
- OVERHEAD ELECTRIC
- UNDERGROUND ELECTRIC
- UNDER GROUND GAS LINE
- UNDER GROUND FIBER OPTIC
- UNDER GROUND WATER
- UNDERGROUND PETROLEUM
- UNDERGROUND STORM SEWER
- UNDERGROUND SANITARY SEWER
- UNDERGROUND TELEPHONE
- NIAGARA MOHAWK POWER CORP. EXISTING PROPERTY LINES
- NIAGARA MOHAWK POWER CORP. EXISTING EASEMENT LIMITS
- NIAGARA MOHAWK POWER CORP. LEGACY PROPERTY LINES
- PARK BOUNDARY LINE
- ADJOINER PROPERTY LINES
- TAX MAP IDENTIFICATION NUMBER (S.B.L)
- SUB-TRANSMISSION & TRANSMISSION LINES
- NIAGARA MOHAWK CORP. L&T DOCUMENT NUMBER
- WOOD POLES
- FLEX TOWERS
- SQUARE BASE TOWERS
- 3 LEGGED TOWERS
- GUY WIRES
- CULVERT
- DITCH
- STREAM CENTERLINE, I.D. NUMBER CLASS
- STREAM BANK, I.D. NUMBER & CLASS
- DEC WETLAND
- DEC WETLAND 100' ADJACENT AREA
- DELINEATED WETLANDS
- WATER BODY
- FEMA FLOODPLAIN

- SILT FENCE
- FILTER SOCK
- CULVERT
- BOX CULVERT
- ROCK OUTLET PROTECTION
- DITCH
- CONTOUR LINE (MAJOR)
- CONTOUR LINE (MINOR)
- PERMANENT STABILIZED CONSTRUCTION ENTRANCE
- TEMPORARY STABILIZED CONSTRUCTION ENTRANCE
- LIMIT OF DISTURBANCE
- FENCE
- PROPOSED PERMANENT EASEMENT
- TRANSMISSION LINES (115KV)
- PROPOSED STRUCTURE LOCATION
- PROPOSED INVASIVE SPECIES CLEANING STATION
- GATE TO BE INSTALLED
- TEMPORARY ORANGE CONSTRUCTION FENCE
- TYPE 1 - PROPOSED ACCESS OVER EXISTING, IMPROVE AS NECESSARY
- TYPE 2 - PERMANENT ACCESS ROADS & WORK AREAS
- TYPE 3 - TIMBER MAT DURING CONSTRUCTION PERVIOUS POST CONSTRUCTION
- TYPE 4 - TEMPORARY CONSTRUCTION WORK AREAS, PULLING PADS OR ACCESS, IMPROVE AS NECESSARY
- TYPE 5 - TIMBER MAT ACCESS ROADS & WORK AREAS
- TYPE 6 - BERM ACCESS, IMPROVE AS NECESSARY
- WILDLIFE MANAGEMENT AREA
- EROSION CONTROL FILTER STRIP

EXISTING #112 LINE STRUCTURES TO BE REMOVED.

CLEARING LIMITS FOR THE PROJECT WILL BE THE SAME AS THE LIMITS OF DISTURBANCE.

SYMBOLS SHOWN HERE MAY BE LARGER THEN REPRESENTED ON DETAILED DRAWING.

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ORIGINAL DATE	6/06/25
FILE NO.	6.1-L-10-M5
DRAWING NUMBER	L1-41568
REVISION NUMBER	3
115KV TRANSMISSION LINES	
LOCKPORT - BATAVIA 112	
REBUILD PROJECT	
EM & CP LEGEND	
PREPARED BY	
HP	
FISHER	
VL	
RW	
APPROVED	
ISS.	
DR.	
CK.	
APP.	
DR.	
DESCRIPTION OF ISSUE OR REVISION	
DATE	

<p>INTRODUCTION</p> <p>The Environmental Management and Construction Plan (EM&CP) Procedures for the Lockport-Batavia 112 Rebuild Project (the "Project") provide the project-specific procedures to be implemented during the construction of the Project to ensure environmental protection.</p> <p>1.0 METADATA</p> <p>Horizontal: NYSPCS Western Zone (NAD83) Vertical NAVD 88, GEOID 09</p> <p>2.0 ADDITIONAL INFORMATION</p> <p>Additional information associated with the EM&CP Drawings can be found in the appendices to the EM&CP narrative. Appendices of note include the following:</p> <ul style="list-style-type: none"> Appendix F - Forestry Practices Appendix G - Stormwater Pollution Prevention Plan (SWPPP) Appendix T - Agricultural Guidelines Appendix X - Traffic Management Plans Appendix Y - Culvert Drawings Appendix Z - Grading Plans Appendix AA - Transmission Structure and Hardware Drawings Appendix AC - Fencing Details, Guard Structures & Typical Drawings for Drain Tile Repairs <p>2.1 WORK HOURS</p> <p>Normal work hours are 7:00 am to 7:00 pm (Monday through Saturday).</p> <p>3.0 DRAWING SET FORMAT</p> <p>The EM&CP is presented in two page format. The two pages are intended to be used in support of each other and at no time shall one page or the other serve as the sole point of reference for information.</p> <p>Both pages (A & B) associated with a sheet number contain select duplicate information. Examples of this type of information include the bounds of the right-of-way, property owner information, property property acquisition information, existing and relocated circuit centerlines and structure numbers and locations, utility infrastructure not associated with the Project and the means of access to the Project right-of-way. Additionally, any reference drawings associated with particular right-of-way area such as grading, culvert installations are presented on both pages comprising a particular sheet.</p> <p>The first page (A) contains details pertaining to forestry activities and environmental protection details. Clearing and disposal types are presented explicitly on this page along with any and all clearing restrictions. The aerial photography provided on this page is intended to provide a means by which agricultural areas can be readily identified along with the corresponding notes overlaid on the aerial view.</p> <p>The second page (B) contains details associated with the construction of the transmission line itself. Information regarding the proposed transmission line structure, conductor, shield wire, and foundation type is presented on this page. Additionally, right-of-way topography details are presented in both the plan and profile view.</p> <p>4.0 CLEARING AND SLASH DISPOSAL PROCEDURES</p> <p>National Grid recognizes and considers the use of five (5) clearing and seven (7) disposal (slash disposal) methods to accomplish its ROW clearing and management goals. Utilizing the potential combinations of those clearing and disposal methods, National Grid conducted a detailed site-by-site analysis of the Project ROW to select the appropriate management technique for each site.</p> <p>The EM&CP drawings show the prescribed clearing and disposal method for each area of the ROW. All clearing and disposal activities will comply with the Invasive Species Control procedures found in the Appendix M of the EM&CP document.</p>	<p>4.1 DEFINITION OF CLEARING METHODS</p> <p>4.1.1 TYPE I CLEARING</p> <p>Type I clearing consists of clearing the designated areas of all woody plants, including the desirable species. All plants will be cut as close to the ground as practical, and after cutting the height of plants will not exceed six (6) inches above the ground line, unless otherwise directed by the Forester. Type I clearing will be utilized in circumstances where woody plants would hinder access and construction activities (i.e. in connection with clearing access roads, structure work areas, and wire-pulling sites). All clearing will be Type I on Sheets A&B unless otherwise indicated.</p> <p>4.1.2 TYPE II CLEARING</p> <p>Type II clearing consists of clearing the designated areas of all undesirable species and any woody plant species which have the potential to violate minimum clearance distance. All growth will be cut as close to the ground as practical, but in no case will after-cutting height exceed six (6) inches above ground line unless otherwise directed by the Forester. Reasonable care will be taken, in so far as is practical, to retain desirable species found within Type II clearing zones.</p> <p>NOTE: Minimum Clearance Distances are at maximum rated operating conditions.</p> <p>4.1.3 TYPE III CLEARING</p> <p>Type III clearing consists of clearing the designated areas, of only those tall-growing species which can be expected to violate the minimum clearance distance over the course of the routine maintenance cycle. Additionally, based on the conductor or ground clearances and species characteristics, in the absence of sufficient densities to manage desired vegetation in the ROW where existing circumstances such as unique landowner agreements, predetermined habitat management areas, desirable stream-buffer cover types, or water supply protection areas, "young" trees may be retained temporarily. Those woody plants which are removed will be cut as close to the ground as practical, but in no case will after-cutting height exceed six (6) inches above ground line unless otherwise directed by the Forester.</p> <p>4.1.4 TYPE IV CLEARING</p> <p>Type IV clearing consists of selectively removing or pruning, in the designated areas, those tall growing species which can be expected to violate minimum clearance distance over the course of the routine maintenance cycle.</p> <p>4.1.5 TYPE V CLEARING</p> <p>Type V clearing consists of selectively removing or pruning, in the designated areas, those tall growing species that National Grid's calculated desirable clear width or are at reasonable risk of falling in the ROW and contacting a conductor.</p> <p>4.2 PRUNING PROCEDURES</p> <p>When a tree is specified to be pruned, the specified portion(s) will be removed to prevent excessive broken limbs or other serious damage to the portion of the tree left in place or adjacent nearby or trees and shrubs. OFF-ROW trees that are not danger trees, but have branches that can grow to violate minimum clearance distance, also need to be managed. Those trees will be pruned or removed to achieve desired clearances. National Grid's strategic approach to managing danger trees is to prune or remove them where property rights allow, and to seek permission from land owners for such pruning or removal where such rights are limited.</p> <p>All pruning will be done in accordance with ANSI-A-300 arboricultural standards.</p>	<p>4.3 DANGER TREES</p> <p>A danger tree is a tree off the ROW that, if cut or if it failed, would contact electric lines. A hazard tree is a danger tree which due to species and/or structural defect is likely to fail and fall into the electrical facility. Danger trees will be removed along the entire Project ROW and will be selected and marked by the company representative at least two weeks prior to clearing in any given area for review and approval by DPS staff. Danger trees will be removed as follows:</p> <ol style="list-style-type: none"> Danger trees whose branches extend into Type I or II clearing areas, but whose trunks are outside such areas will be removed. Danger trees whose branches extend into a Type IV clearing area will be pruned or removed, as necessary, to ensure system reliability If conditions of disease, lean, unstable soils, weak variety, or other conditions which may cause a tree to fall and thereby have reasonable risk of contacting a conductor are observed, that tree will be removed. <p>As practical, all danger trees will be removed at the time of initial clearing and as part of the normal clearing activities. The slash from these danger trees will be disposed of in accordance with the slash disposal method designated for the section of ROW adjoining the area from which the danger trees have been removed. If an adjoining ROW area has no designated slash disposal method, the slash from those danger trees adjacent to those areas will be dropped and lopped (Type D) in wooded areas and chipped (Type E) and/or removed (Type G) in residential, commercial or agricultural areas.</p> <p>4.4 DEFINITION OF WOOD DISPOSAL METHODS</p> <p>4.4.1 TYPE A</p> <p>Type A wood disposal consists of separating, tree-length skidding, and yarding the merchantable timber (larger than 12" in diameter on the large end) in designated areas along the ROW. Where, in the opinion of the Forester, a site may be damaged by tree-length skidding, the timber will be bucked up into logs. To minimize disturbance, Type A disposal will not occur in wetlands unless it is designated on the EM&CP drawings as an area that timber can be removed with tracked equipment.</p> <p>4.4.2 TYPE D</p> <p>Type D wood disposal consists of dropping and lopping trees so that the slash lies as close to the ground as practical, with branches and limb wood not exceeding an average depth of twenty-four (24) inches.</p> <p>In wetlands and areas adjacent to streams, Type D wood disposal will adhere to the following additional conditions:</p> <ol style="list-style-type: none"> Only a selective portion of vegetation, as needed to prevent the blocking of flow and the trapping of debris, is to be removed from the water course and floodway, and all cuttings (regardless of location) are to be cut out and bucked to lie near ground level. However, where tree root bases are attached to the stream bank, they will be left in place. The remainder of the tree will be cut from the base prior to removal. Grubbing of tree roots in sensitive areas will be avoided to the greatest extent practicable; however, if grubbing is necessary, the appropriate erosion and sediment controls will be installed and all disturbed areas will be stabilized by the end of the work day. <p>In DEC wetlands and/or the Tonawanda Wildlife Management Area, Type D wood disposal will adhere to the following additional conditions:</p> <ol style="list-style-type: none"> No trees should be dropped on or near dikes, ditches, mowed administrative roads/areas, grassland/agricultural fields, or in emergent marsh/water areas where logs may end up blocking control boxes. Trees should also not be dropped in phragmites areas because this will make control more difficult. Trees should be dropped and/or dragged into dryer parts of woods. Placing logs on tops of invasive shrubs such as honeysuckle and autumn olive is also encouraged to help discourage these species. 	<p>d. In the area of woods between North/South Feeder Marshes and the Tonawanda Wildlife Management Area east boundary, trees should not be dropped in vernal pools.</p> <p>4.4.3 TYPE E</p> <p>Type E wood disposal consists of chipping slash on site.</p> <p>All woody material smaller than 12 inches in diameter on the large end will be chipped into a layer of no more than three (3) inches deep and may be disposed of on the entire Facility ROW or in the danger tree zone if the chipped material is from the slash originating from the danger tree removal, and the property rights allow, unless otherwise noted on EM&CP drawings. Chips shall be removed off-site to an approved location once a chip depth of three (3) inches has been achieved (see paragraph 4.7.2). No chips will be stored or disposed of in wetlands, active agriculture fields, or in close proximity (typically not within 50 feet) of streams. All disposal methods on Sheets A&B will consist of Type E unless otherwise indicated.</p> <p>4.4.4 TYPE G</p> <p>Type G wood disposal consists of removing all woody material from the ROW. In certain instances, this slash may be removed to another portion of the ROW that has a designated slash disposal method other than Type G. No Type G slash will be moved to wetlands or to areas in close proximity (typically not within 50 feet) of streams.</p> <p>National Grid will remove slash from the site whenever at least one of the following conditions justifies the use of Type G disposal:</p> <ol style="list-style-type: none"> Aesthetic consideration suggests that slash left on the site would create a negative visual impact; If the slash were chipped, chips to a depth of greater than three (3) inches would result over much of the site; On-site disposal would impact existing agricultural uses adversely; Species toxic to livestock must be removed from pastures in use; or Slash piled in stream buffer zones potentially could wash into stream channel during high water flow. <p>4.5 WETLANDS</p> <p>Vegetation clearing within wetlands and the one hundred foot adjacent areas associated with state-regulated wetlands will be conducted as follows:</p> <ol style="list-style-type: none"> Only the minimum vegetation necessary to allow proper installation will be removed. Slash that is cut may be left in place (drop and lop). Any slash that is not left in place will be removed from the wetland by manual means or tracked equipment in a manner to minimize disturbance to the wetland. No slash will be collected and permanently piled in a wetland. Under the direction of the Environmental Inspector, slash may be used for temporary corduroy road for clearing and construction equipment in place of mats but must be removed from the wetland upon the completion of the clearing activities. For vegetation management, the cutting of all undesirable or non-compatible tall-growing tree species which could interfere with transmission lines, and cutting -- but not the elimination or destruction -- of vegetation are allowed. Where "danger tree" clearing is required, the cutting of tall-growing species is allowed pursuant to selective clearing techniques. All work will be done in accordance with National Grid's TROWMP. 	<p>6/06/25</p> <p>6.1-L-10-M5</p> <p>L1-41568</p> <p>4</p>	<p>115KV TRANSMISSION LINES</p> <p>LOCKPORT - BATAVIA 112</p> <p>REBUILD PROJECT</p> <p>GENERAL NOTES</p> <p>4</p>	<p>PREPARED BY</p> <p>HP</p> <p>FISHER</p> <p>VL</p> <p>RW</p> <p>DATE</p>	<p>nationalgrid</p> <p>4</p> <p>5</p> <p>6</p>
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GENERAL NOTES:

DIG SAFELY NEW YORK: CALL BEFORE YOU DIG:

- 1. CALL BEFORE YOU DIG: IF DIGGING OR EXCAVATION WORK OF ANY TYPE IS PLANNED, THE CONTRACTOR IS REQUIRED BY NEW YORK STATE LAW TO CALL DIG SAFELY NEW YORK PRIOR TO DOING SO.
2. WAIT THE REQUIRED TIME: PROVIDE TWO FULL WORKING DAYS NOTICE PRIOR TO STARTING CONSTRUCTION WORK, NOT COUNTING THE DAY OF THE CALL, WEEKENDS OR HOLIDAYS. THIS PROVIDES TIME FOR THE UTILITIES TO LOCATE THE PROPOSED DIG SITE.
3. CONFIRM UTILITY RESPONSE: DIG SAFELY NEW YORK WILL NOTIFY ALL MEMBER UTILITIES OF THE PENDING EXCAVATION TO GO TO THE SITE AND MARK THE LOCATION OF THEIR UNDERGROUND LINES. BEFORE DIGGING ON THE STATED COMMENCEMENT DATE, CONFIRM THAT ALL UTILITIES HAVE RESPONDED AND MARKED THE PROPERTY OR INDICATED NO FACILITIES ARE PRESENT.
4. RESPECT THE MARKS: PRIOR TO THE COMMENCEMENT OF EXCAVATION, THE CONTRACTOR SHALL WALK THROUGH THE SITE TO BECOME FAMILIAR WITH THE MARKINGS AND THE LOCATIONS OF BURIED FACILITIES.
5. DIG WITH CARE: EXCAVATORS SHALL TAKE A PROACTIVE APPROACH TO SAFETY NOT ONLY FOR THEMSELVES BUT FOR THE PUBLIC BY INITIATING THE ONE CALL PROCESS AND ADHERING TO THE FIVE STEPS OF A SAFE EXCAVATION.

STORM WATER POLLUTION PREVENTION PLAN (SWPPP) NOTE:

THE EROSION AND SEDIMENT CONTROL MEASURES FOR THIS PROJECT SHALL BE IN COMPLIANCE WITH THE SWPPP PREPARED FOR THE PROJECT IN ACCORDANCE WITH THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION STATE POLLUTANT DISCHARGE ELIMINATION SYSTEM GENERAL PERMIT FOR STORM WATER DISCHARGES FROM CONSTRUCTION ACTIVITY (GP-0-25-001) OR THE GENERAL PERMIT EFFECTIVE AT THE COMMENCEMENT OF CONSTRUCTION ACTIVITIES.

GENERAL CONSTRUCTION NOTES:

- 1. THE ENVIRONMENTAL INSPECTOR SHALL BE NOTIFIED OF ANY CONDITIONS THAT VARY FROM THOSE SHOWN ON THE PLANS. THE CONTRACTOR'S WORK SHALL NOT VARY FROM THE PLANS WITHOUT THE EXPRESSED APPROVAL OF NATIONAL GRID AND DPS.
2. ALL WORK SHALL BE DONE IN STRICT COMPLIANCE WITH ALL APPLICABLE NATIONAL, STATE, AND LOCAL CODES, STANDARDS, ORDINANCES, RULES AND REGULATIONS AND THE EM&CP.
3. CONTRACTOR SHALL TAKE CARE TO PREVENT DAMAGE TO EXISTING UTILITIES. DAMAGED UTILITIES SHALL BE IMMEDIATELY REPAIRED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE.
4. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY EROSION CONTROL MEASURES IN ACCORDANCE WITH THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) AND THE "NEW YORK STATE STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL" AND THE EM&CP.
5. NO WORK, STORAGE OR TRESPASS SHALL BE PERMITTED BEYOND THE BOUNDARIES OF ANY EASEMENT OR PROPERTY LINE AND SHALL BE WITHIN THE WORK LIMITS SHOWN ON THE EM&CP DRAWINGS.
6. UNLESS OTHERWISE NOTED ON THE PLANS, ALL EXISTING FEATURES WHICH ARE DISTURBED OR DAMAGED DURING CONSTRUCTION, (INCLUDING BUT NOT LIMITED TO CULVERT PIPES, SWALES, TREES, SHRUBS, BUSHES, PLANTERS, SIGNS, ASPHALT DRIVES, CONCRETE DRIVES, GRAVEL DRIVES, CURBS, FENCES AND WALKWAYS), SHALL BE RESTORED AND/OR REPLACED IN KIND, SIZE, MATERIAL AND TYPE AS APPLICABLE AND AS DIRECTED BY THE ENVIRONMENTAL INSPECTOR.
7. RESTORE ALL SURFACES TO AS GOOD OR BETTER CONDITION THAN BEFORE CONSTRUCTION IMMEDIATELY FOLLOWING COMPLETION OF WORK IN ANY AREA, OR AS DIRECTED BY THE ENVIRONMENTAL INSPECTOR.
8. RESTRICT LOCATIONS OF ON-SITE MATERIALS AND EQUIPMENT STOCKPILES TO THE AREAS DESIGNATED BY THE ENVIRONMENTAL INSPECTOR. MAINTAIN ACCESS TO ALL BUILDINGS, ROADWAYS, AND WALKWAYS AT ALL TIMES.
9. SITE DRAINAGE SHALL BE MAINTAINED THROUGHOUT THE PERIOD OF CONSTRUCTION IN ACCORDANCE WITH THE SWPPP AND EM&CP. ROADS SHALL BE KEPT CLEAR OF MUD AND DEBRIS AT ALL TIMES.
10. PROVIDE WATER FOR DUST CONTROL, AS NEEDED AND IN ACCORDANCE WITH THE EM&CP.
11. CONTRACTOR OWNED EQUIPMENT TO BE STORED ON SITE SHALL BE LOCATED IN DESIGNATED MARSHALLING YARDS OR WORK AREAS SHOWN ON THE EM&CP DRAWINGS.
12. REMOVE ALL SNOW AND ICE AS NEEDED TO PERFORM WORK IN A SAFE MANNER. REMOVAL OPERATIONS SHALL NOT INTERFERE WITH THE OWNER'S AND/OR TOWN'S ABILITY TO REMOVE SNOW AND PROVIDE ICE CONTROL. ICE CONTROL ON MATING IN WETLANDS SHALL BE DONE IN ACCORDANCE WITH THE EM&CP NOTE 19 ON SHEET SA.
13. THE CONTROL OF EROSION AND SEDIMENT ORIGINATING FROM CONSTRUCTION OPERATIONS IS CONSIDERED A CRITICAL RESPONSIBILITY OF THE CONTRACTOR. EROSION AND SEDIMENT CONTROL DEVICES SHALL BE INSTALLED PRIOR TO COMMENCING WORK AND SITE DISTURBANCE UNLESS OTHERWISE APPROVED BY THE ENVIRONMENTAL INSPECTOR.

REMOVAL NOTES:

- 1. CONFORM TO APPLICABLE CODES FOR DUST CONTROL, RUNOFF CONTROL, AND HAULING, DISPOSAL AND STORAGE OF DEBRIS. OFFSITE DISPOSAL OF ANY MATERIAL REQUIRES PRIOR APPROVAL BY NATIONAL GRID AND DPS STAFF.
2. PROVIDE, ERECT, AND MAINTAIN TEMPORARY BARRIERS AND SECURITY DEVICES.
3. MAINTAIN EXISTING UTILITIES TO REMAIN IN SERVICE AND PROTECT THEM AGAINST DAMAGE DURING SELECTIVE DEMOLITION OPERATIONS. DO NOT INTERRUPT EXISTING UTILITIES SERVING OPERATING FACILITIES, EXCEPT WHEN AUTHORIZED.
4. PROTECT EXISTING FEATURES THAT ARE NOT TO BE DEMOLISHED.
5. CONDUCT OPERATIONS WITH MINIMUM INTERFERENCE TO PUBLIC OR PRIVATE ACCESSES.
6. MAINTAIN EGRESS AND ACCESS AT ALL TIMES. DO NOT CLOSE OR CONSTRUCT ROADWAYS OR SIDEWALKS WITHOUT OWNER'S PERMISSION. ALL PARKED OR TEMPORARILY PARKED CONSTRUCTION EQUIPMENT AND CONTRACTOR VEHICLES MUST REMAIN IN THE LOD TO THE MAXIMUM EXTENT PRACTICABLE.
7. CEASE OPERATIONS IMMEDIATELY IF ADJACENT STRUCTURES APPEAR TO BE IN DANGER.
8. ROUGH GRADE AND COMPACT AREAS AFFECTED BY DEMOLITION TO MAINTAIN SITE GRADES AND CONDITIONS.
9. FIELD VERIFY EXISTING CONDITIONS TO DETERMINE THE EXTENT OF REMOVALS REQUIRED.
10. CONDUCT DEMOLITION OPERATIONS AND REMOVE DEBRIS TO ENSURE MINIMUM INTERFERENCE WITH SELECTIVE DEMOLITION OPERATIONS. PREVENT INJURY TO PEOPLE AND DAMAGE TO ADJACENT BUILDINGS AND FACILITIES. ENSURE SAFE PASSAGE OF PEOPLE AROUND SELECTIVE DEMOLITION AREA AND ERECT TEMPORARY FENCING AS NECESSARY AS DIRECTED BY THE ENVIRONMENTAL INSPECTOR.
11. PROPERLY DISPOSE OF DEMOLISHED MATERIALS. ALL DEBRIS RESULTING FROM DEMOLITION ACTIVITIES SHALL BE DISPOSED OF OFF-SITE AT A FACILITY BY NATIONAL GRID AND DPS STAFF. DO NOT ALLOW DEMOLISHED MATERIALS TO ACCUMULATE ON SITE. ALL DEBRIS MATERIAL RESULTING FROM THE PROJECT SHALL STAY WITHIN THE LOD AND DESIGNATED WORK AREAS UNTIL PROPERLY DISPOSED OF.

GENERAL EROSION AND SEDIMENT CONTROL NOTES:

- 1. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IN STRICT COMPLIANCE WITH NEW YORK STATE STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL" NOVEMBER 2016 AND THE EM&CP.
2. PRIOR TO SITE DISTURBANCE, CONTRACTOR SHALL INSTALL EROSION AND SEDIMENT CONTROL MEASURES AS SHOWN ON THE PLANS UNLESS OTHERWISE DIRECTED BY THE ENVIRONMENTAL INSPECTOR.
3. EXCESS SOIL SHALL BE STOCKPILED WITHIN THE LIMITS OF SITE DISTURBANCE IF NOT USED IMMEDIATELY FOR GRADING PURPOSES. STRAW BALE BERM OR SILT FENCE AROUND THE PERIMETER TO BEGIN INSTALLATION WITHIN ONE BUSINESS DAY IF STOCKPILE SOIL IS EXPECTED TO REMAIN EXPOSED FOR GREATER THAN ONE DAY. STRAW BALE BERMS AND SILT FENCE SHALL BE ANCHORED AND MAINTAINED IN GOOD CONDITION UNTIL STOCKPILES ARE REMOVED AND STOCKPILING AREAS ARE BROUGHT TO FINAL GRADE AND PERMANENTLY STABILIZED.
4. APPLY SURFACE STABILIZATION AND RESTORATION MEASURES. AREAS UNDERGOING CLEARING OR GRADING AND ANY AREAS DISTURBED BY CONSTRUCTION ACTIVITIES WHERE WORK IS DELAYED, SUSPENDED, OR INCOMPLETE SHALL BE STABILIZED WITH TEMPORARY VEGETATIVE COVER WITHIN 14 DAYS (7 CALENDAR DAYS IF AUTHORIZED TO DISTURB GREATER THAN FIVE ACRES) AFTER CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS CEASED. AREAS UNDERGOING CLEARING OR GRADING AND ANY AREAS DISTURBED BY CONSTRUCTION ACTIVITIES WHERE WORK IS COMPLETE AND WILL NOT BE REDISTURBED SHALL BE STABILIZED AND RESTORED WITH PERMANENT VEGETATIVE COVER AS SITE AREAS ARE AVAILABLE AND WITHIN 14 DAYS (7 CALENDAR DAYS IF AUTHORIZED TO DISTURB GREATER THAN FIVE ACRES) AFTER WORK IS COMPLETE. SEEDING FOR PERMANENT VEGETATIVE COVER SHALL BE WITHIN THE SEASONAL LIMITATIONS. PROVIDE STABILIZATION WITH TEMPORARY VEGETATIVE COVER WITHIN 14 DAYS (7 CALENDAR DAYS IF AUTHORIZED TO DISTURB GREATER THAN FIVE ACRES) AFTER WORK IS COMPLETE, FOR SEEDING OUTSIDE PERMITTED SEEDING PERIODS.
5. DISTURBED AREAS SHALL BE SEEDDED IN ACCORDANCE WITH SEEDING SPECIFICATIONS IN THE EM&CP.
6. THE CONTRACTOR IS RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROL MEASURES THROUGHOUT THE COURSE OF CONSTRUCTION. CONTRACTOR TO REMOVE ALL TEMPORARY CONTROLS ONCE 80% VEGETATION IS ESTABLISHED AS DIRECTED BY THE ENVIRONMENTAL INSPECTOR.
7. THE CONTRACTOR IS RESPONSIBLE FOR CONTROLLING DUST IN ACCORDANCE WITH THE EM&CP.
8. WHEN ALL DISTURBED AREAS ARE STABLE AS DETERMINED BY THE ENVIRONMENTAL INSPECTOR, ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED.
9. SEDIMENT AND EROSION CONTROL MEASURES AS SHOWN ON THE PLANS SHALL BE INSPECTED, REPAIRED AND/OR MAINTAINED BY THE CONTRACTOR AS DIRECTED BY THE ENVIRONMENTAL INSPECTOR AND IN ACCORDANCE WITH THE SWPPP INSPECTIONS.
10. CLEAN OUT CATCH BASINS, DRAINAGE MANHOLES AND STORM DRAINAGE LINES THAT ARE WITHIN THE WORK LIMITS IF UPON INSPECTION IT IS FOUND THE ACCUMULATED DEBRIS AND SEDIMENT EXISTS FOLLOWING COMPLETION OF WORK.

STABILIZE CONSTRUCTION ENTRANCE:

INSPECT THE ENTRANCE PAD AND CHECK FOR MUD, SEDIMENT BUILD UP AND PAD INTEGRITY. RESHAPE PAD AS NEEDED FOR DRAINAGE AND RUNOFF CONTROL. WASH AND REPLACE STONE AS NEEDED. THE STONE IN THE ENTRANCE SHALL BE WASHED OR REPLACED WHENEVER THE ENTRANCE FAILS TO REDUCE MUD BEING TRACKED OFF-SITE BY VEHICLES. ALL SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED INTO PUBLIC "RIGHT-OF-WAY" MUST BE REMOVED BY BRUSHING OR SWEEPING.

FILTER BARRIERS (SILT FENCE AND COMPOST FILTER SOCKS):

FILTER BARRIERS SHALL BE INSTALLED PRIOR TO DISTURBANCE OF EXISTING SOIL SURFACES. INSPECT FOR DAMAGE EVERY SEVEN DAYS. MAKE ALL REPAIRS IMMEDIATELY. REMOVE SEDIMENT FROM THE UP SLOPE FACE OF THE BARRIERS BEFORE IT ACCUMULATES TO A HEIGHT EQUAL TO 1/3 THE HEIGHT OF THE BARRIER. IF THE FABRIC TEARS, BEGINS TO DECOMPOSE, OR IN ANY WAY BECOMES INEFFECTIVE, REPLACE THE AFFECTED SECTION IMMEDIATELY.

SOIL STOCKPILE:

INSPECT SEDIMENT CONTROL BARRIERS (SILT FENCE OR STRAW BALE) AND VEGETATION FOR DAMAGE EVERY SEVEN DAYS. STRAW BALES OR SILT FENCE SHALL BE CONSTRUCTED AROUND ALL STOCKPILES OF FILL, TOPSOIL, EXCAVATED OVERBURDEN THAT ARE TO REMAIN EXPOSED FOR PERIODS GREATER THAN ONE DAY. TOPSOIL AND FILL THAT IS TO REMAIN STOCKPILED ON-SITE SHALL BE STABILIZED BY SEEDING. STABILIZATION MEASURES MUST BE INITIATED BY THE END OF THE NEXT BUSINESS DAY AND COMPLETED WITHIN 14 CALENDAR DAYS FROM THE DATE THE CURRENT SOIL DISTURBANCE ACTIVITY CEASED (7 CALENDAR DAYS IF AUTHORIZED TO DISTURB GREATER THAN 5 ACRES). PRIOR TO SEEDING OPERATION, THE STOCKPILED MATERIAL SHALL BE GRADED AS NEEDED AND FEASIBLE TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDING PREPARATION, SEEDING, MULCH APPLICATION, AND MULCH ANCHORING. IF SEDIMENT CONTROL BARRIER TEARS, BEGINS TO DECOMPOSE, OR IN ANYWAY BECOMES INEFFECTIVE, REPLACE THE AFFECTED SECTION OF SEDIMENT CONTROL BARRIER IMMEDIATELY. REVEGETATE DISTURBED AREA TO STABILIZE SOIL STOCK PILE. IN NO CASE SHALL ERODIBLE MATERIALS BE STOCKPILED WITHIN 100 FEET OF ANY DITCH, STREAM, OR OTHER SURFACE WATER BODY. REMOVE THE SEDIMENT CONTROL BARRIER WHEN THE SOIL STOCKPILE HAS BEEN REMOVED.

DUST CONTROL:

DUST CONTROL WILL BE DONE IN ACCORDANCE WITH THE EM&CP AND SWPPP. SCHEDULE CONSTRUCTION OPERATIONS TO MINIMIZE THE AMOUNT OF DISTURBED AREAS AT ANY ONE TIME DURING THE COURSE OF WORK. TEMPORARY AND PERMANENT STABILIZATION MEASURE, SUCH AS SEEDING, MULCHING, AND PROVIDING EROSION AND SEDIMENT CONTROL BLANKETS, WILL PREVENT DUST FROM BLOWING OFF SITE. PROVIDE THESE MEASURES AS SOON AS FINAL GRADES ARE REACHED AND STOCKPILES AND DISTURBED AREAS TO BE LEFT FOR LONGER THAN SEVEN DAYS. THE CONTRACTOR SHALL PROVIDE DUST CONTROL AND VEHICLE WASHING TO PREVENT SEDIMENT FROM LEAVING THE CONSTRUCTION WORK AREAS. PAVED AREAS SHALL BE SWEEPED AND KEPT CLEAR OF DUST AND DEBRIS.

CHECK DAMS:

INSPECT CHECK DAMS EVERY SEVEN DAYS. IF SIGNIFICANT EROSION HAS OCCURRED BETWEEN STRUCTURES A LINER OF STONE OR OTHER SUITABLE MATERIALS SHOULD BE INSTALLED IN THAT PORTION OF THE CHANNEL. REMOVE SEDIMENT ACCUMULATED BEHIND THE DAM AS NEEDED TO ALLOW CHANNEL TO DRAIN THROUGH THE STONE CHECK DAM AND PREVENT LARGE FLOWS FROM CARRYING SEDIMENT OVER THE DAM. REPLACE STONES AS NEEDED TO MAINTAIN THE DESIGN CROSS SECTION OF THE STRUCTURES. REMOVE CHECK DAMS AS PER APPROVAL OF THE ENGINEER.

EROSION CONTROL BLANKET:

INSPECT THE BLANKET EVERY SEVEN DAYS. REPLACE WIRE STAPLES AS REQUIRED. REPAIR AND RESEED WHERE CRACKS AND DAMAGED VEGETATION IS EVIDENT. WHEN DAMAGED BEYOND REPAIR OR NO LONGER FUNCTIONING, THE BLANKET SHALL BE REPLACED.

DEWATERING BASIN:

IF REQUIRED, DEWATERING BASIN WILL BE CONSTRUCTED IN ACCORDANCE WITH THE DEWATERING BASIN DETAIL. INSPECT THE DAILY DURING OPERATION FOR CLOGGING OR OVERFLOW. CLEAR INLET AND DISCHARGE PIPES OF OBSTRUCTIONS.

GEOTEXTILE FILTER BAGS:

GEOTEXTILE FILTER BAGS MAY BE USED TO FILTER SEDIMENT LADEN WATER PRIOR TO DISCHARGE TO DRAINAGE AREAS AND OFF-SITE. THE BAG TRAPS AND RETAINS SEDIMENT FROM THE WATER. THE BAGS SHALL BE PLACED AT LEAST 50 FEET FROM ALL WETLANDS (IF POSSIBLE), STREAMS, AND SURFACE WATERS IN A VEGETATED, RELATIVELY LEVEL AREA. BAGS SHOULD BE REPLACED WHEN IT HAS REACHED 75% CAPACITY. A STRAW BALE DIKE OR FILTER SOCK MAY BE INSTALLED DOWN GRADIENT IN AREAS WHERE VEGETATED AREAS ARE NOT SUFFICIENT OR TO PROTECT SURFACE WATERS OR ADJACENT PROPERTIES.

SEEDING AND STABILIZATION:

AREAS WHERE SOIL DISTURBANCE HAS TEMPORARILY OR PERMANENTLY CEASED SHALL BE STABILIZED WITH SEED AND MULCH. STABILIZATION SHALL BE INITIATED BY THE END OF THE NEXT BUSINESS DAY AFTER COMPLETION OF DISTURBANCE ACTIVITIES AND COMPLETED WITHIN 14 DAYS OF THE SOIL DISTURBANCE ACTIVITY CEASING. IN AREAS DIRECTLY DISCHARGING TO A 305(G) WATERBODY SEGMENT, OR ARE AUTHORIZED TO DISTURB GREATER THAN FIVE ACRES, THE APPLICATION OF SOIL STABILIZATION MEASURES MUST BE INITIATED BY THE END OF THE NEXT BUSINESS DAY AND COMPLETED WITHIN 7 CALENDAR DAYS FROM THE DATE THE SOIL DISTURBANCE ACTIVITY CEASED. THESE AREAS HAVE BEEN IDENTIFIED AT THE FOLLOWING LOCATIONS.

- OAK ORCHARD CREEK, UPPER, AND TRIBUTARIES: STRUCTURE 159 TO 164 AND THEN STRUCTURE 172 TO 187

REFER TO THE SWPPP FOR ADDITIONAL INFORMATION.

TEMPORARY STABILIZATION:

- 1. ROUGH GRADE THE AREA AND REMOVE LARGE ROCKS AND DEBRIS.
2. ENSURE SLOPES ARE STABLE.
3. APPLY SEED PER THE RECOMMENDED MIXTURE AT THE RATE PROVIDED.
4. MULCH THE AREA WITH STRAW AT A RATE OF 2 TONS/ACRE (90 LBS/1000 SF) AND ANCHOR WITH NETTING OR TACKIFIER AS NECESSARY.
5. CONSULT WITH THE ENVIRONMENTAL INSPECTOR IF THE LISTED SEED MIX IS UNAVAILABLE.

Table with 4 columns: SEED MIX, VARIETY, RATE (LBS/ACRE), RATE (LBS/1000 SF). Rows include SPRING SUMMER/EARLY FALL, LATE FALL/EARLY WINTER, and WINTER RYE.

PERMANENT STABILIZATION:

- 1. COMPACTED SOILS SHALL BE CHISELED OR DISKED TO PROVIDE ADEQUATE ROOTING ZONE TO A MAXIMUM DEPTH OF 12 INCHES. REFER TO THE SOIL RESTORATION STANDARD IN THE NEW YORK STATE STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL FOR ADDITIONAL INFORMATION.
2. REMOVE ROCKS GREATER THAN 4" IN DIAMETER AND DEBRIS FROM THE GROUND SURFACE.
3. INCORPORATE SOIL AMENDMENTS INTO THE UPPER 2 INCHES OF SOIL. SOIL SHALL BE TESTED TO DETERMINE THE APPROPRIATE AMOUNT OF AMENDMENT REQUIRED. APPLY GROUND AGRICULTURAL LIMESTONE TO OBTAIN A pH OF 6.0
4. APPLY COMMERCIAL FERTILIZER AT A RATE OF 600 LBS/ACRE OF 5-5-10 OR EQUIVALENT.
5. APPLY SEED PER THE RECOMMENDED MIXTURE AT THE RATE PROVIDED.
6. MULCH THE AREA WITH STRAW AT A RATE OF 2 TONS/ACRE (90 LBS/1000 SF) AND ANCHOR WITH NETTING OR TACKIFIER AS NECESSARY.
7. CONSULT WITH THE ENVIRONMENTAL INSPECTOR IF THE LISTED SEED MIX IS UNAVAILABLE.

Table with 4 columns: APPLICATION, SEED MIX, RATE (LBS/ACRE), RATE (LBS/1000 SF). Rows include STANDARD EROSION CONTROL MIX and DITCH AND WATERWAY STABILIZATION MIX.

WETLANDS STABILIZATION AND RESTORATION:

- 1. BACKFILL SUBSOIL TO THE EXCAVATED AREA. REPLACE TOPSOIL AND VEGETATIVE ROOT MASS TO AS NEAR TO THE ORIGINAL POSITION AND CONTOUR AS POSSIBLE.
2. APPLY SEED PER THE RECOMMENDED MIXTURE AND THE RATE PROVIDED.
3. APPLY STRAW AT A RATE OF 2 TONS/ACRE (90 LBS/1000SF).
4. CONSULT WITH THE ENVIRONMENTAL INSPECTOR IF THE LISTED SEED MIX IS UNAVAILABLE.
5. CONTRACTOR WILL USE NORTHEAST WETLAND DIVERSITY MIX (STOMX-12) FROM SOUTHERN TIER CONSULTING OR FACW WETLAND MEADOW MIX (ERNM-122) FROM ERNST CONSERVATION SEEDS, OR A COMPARABLE MIX APPROVED BY DPS AND NYSDEC.
6. REMOVE EXCESS SPOIL FROM WETLAND AREA.

RESTORATION OF GRADED AREAS:

- 1. WHERE GRADING HAS OCCURRED, ALL AREAS WILL BE RESTORED TO A STABLE CONDITION WITH SLOPES NOT TO EXCEED 3:1.

RESTORATION OF AGRICULTURAL LANDS:

1. AGRICULTURAL LANDS ARE TO BE RESTORED IN ACCORDANCE WITH THE "NEW YORK STATE DEPARTMENT OF AGRICULTURE AND MARKET FERTILIZING, LIME, AND SEEDING RECOMMENDATIONS FOR RESTORATION OF CONSTRUCTION PROJECTS ON FARMLANDS IN NEW YORK STATE" PROVIDED IN APPENDIX T OF THE EM&CP DOCUMENT AND IN ACCORDANCE WITH SECTION L, AGRICULTURAL RESOURCES, OF THE COMMISSION ORDER.

SOIL RESTORATION:

- 1. SOIL RESTORATION SHALL BE COMPLETED IN ACCORDANCE WITH TABLE 4.6 BELOW (ADOPTED FROM THE NEW YORK STATE STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL "BLUE BOOK").
2. APPLYING 3 INCHES OF COMPOST OVER SUBSOIL. THE COMPOST SHALL BE WELL DECOMPOSED (MATURED AT LEAST 3 MONTHS), WEED-FREE, ORGANIC MATTER. IT SHALL BE AEROBICALLY COMPOSTED, POSSESS NO OBJECTIONABLE ODORS, AND CONTAIN LESS THAN 1% BY DRY WEIGHT, OF MAN-MADE FOREIGN MATTER. THE PHYSICAL PARAMETER OF THE COMPOST SHALL MEET THE STANDARD LISTED IN TABLE 5.2 COMPOST STANDARDS TABLE (OF THE BLUE BOOK), EXCEPT FOR "PARTICLE SIZE" 100% WILL PASS THE 1/2" SIEVE.
3. TILL COMPOST INTO SUBSOIL TO A DEPTH OF AT LEAST 12 INCHES USING A CAT-MOUNTED RIPPER, TRACTOR MOUNTED DISC, OR TILLER, TO MIX AND CIRCULATE AIR AND COMPOST IN THE SUBSOIL.
4. ROCK-PICK UNTIL UPLIFTED STONE/ROCK MATERIALS OF FOUR INCHES, AND LARGER SIZE ARE CLEANED OFF THE SITE.
5. APPLY TOPSOIL TO A DEPTH OF 6 INCHES.
6. VEGETATE AS REQUIRED BY THE SEEDING PLAN. USE APPROPRIATE GROUND COVER WITH DEEP ROOTS TO MAINTAIN THE SOIL STRUCTURE.
7. TOPSOIL MAY BE MANUFACTURED AS MIXTURE OR A MINERAL COMPONENT AND ORGANIC MATERIALS SUCH AS COMPOST.

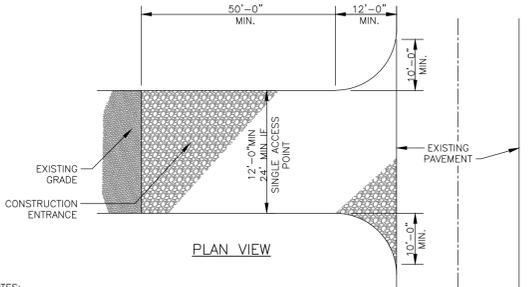
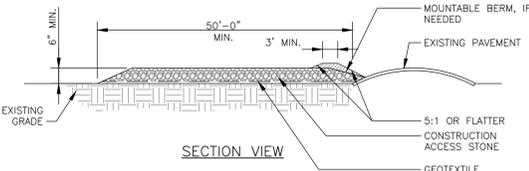
Table 4.6 SOIL RESTORATION REQUIREMENTS. Columns: TYPE OF SOIL DISTURBANCE, SOIL RESTORATION REQUIREMENT, COMMENTS/EXAMPLES. Rows include NO SOIL DISTURBANCE, MINERAL SOIL DISTURBANCE, AREAS WHERE TOPSOIL IS STRIPPED, AREAS OF CUT OR FILL, HEAVY TRAFFIC AREAS ON SITE, AREAS WHERE REVEGETATION REDUCTION AND/OR INFILTRATION PRACTICES ARE APPLIED, REDEVELOPMENT PROJECTS.

DEWATERING PLAN:

DEWATERING IS THE REMOVAL OF EXCESS RUNOFF AND GROUNDWATER THAT HAS ACCUMULATED AND IS OCCUPYING THE EXCAVATIONS TO ALLOW FOR THE CONSTRUCTION OF THE FOUNDATIONS AND THEN DRY BACKFILLING. THIS WILL REQUIRE THE FOLLOWING:

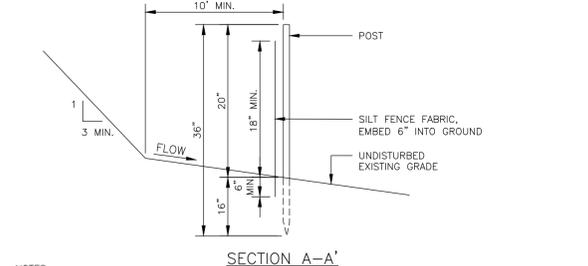
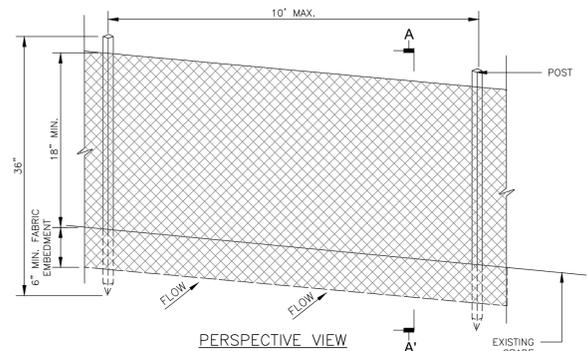
- 1. SEDIMENT FILTERING BAGS AND/OR OTHER EQUIVALENT SEDIMENT CONTROL STRUCTURES FOR PUMPED WATER SHOULD BE USED WHENEVER WATER IS PUMPED FROM THE EXCAVATION. SEDIMENT FILTER BAGS (USE ONLY NON-WOVEN GEOTEXTILE FILTER BAGS), WHEN IMPLEMENTED AND MAINTAINED PROPERLY, PREVENT THE DISCHARGE OF HEAVILY SILT-LADEN WATER, EFFECTIVELY TRAPPING PARTICLES LARGER THAN APPROXIMATELY 150 MICRONS. FILTER BAGS SHALL BE USED IN WELL-VEGETATED AREAS, PROVIDING ADDITIONAL FILTRATION UPON DISCHARGE. DISCHARGE TO AGRICULTURAL LANDS WILL NOT BE CONDUCTED IN ACTIVE CROP AREAS UNLESS DRY CONDITIONS ARE PRESENT AND LANDOWNER PERMISSION IS RECEIVED. THE PUMPING RATE SHOULD NOT EXCEED THE MAXIMUM RECOMMENDED BY THE MANUFACTURER (FOR EXAMPLE PUMPING RATE THROUGH THE FILTER BAGS SHALL BE NO GREATER THAN 750 GPM OR 1/2 THE MAXIMUM SPECIFIED BY THE MANUFACTURER, WHICHEVER IS LESS). THE FILTER BAGS WILL BE CHANGED WHEN THEY BECOME HALF FULL. THEIR SILT CONTENTS WILL NOT BE DEPOSITED ON AGRICULTURAL LANDS.
2. DISCHARGE INTO APPROVED UPLAND VEGETATED (GRASSY) AREAS ONTO STABLE EROSION-RESISTANT AREAS, LOCATED SUCH THAT IT DOES NOT ALLOW THE WATER TO RETURN TO THE ROW DITCH LINE.
3. BASED ON PREVIOUS EXPERIENCE, FILTER BAGS HAVE PROVIDED SUCCESSFUL MEANS IN CONTROLLING THE DISCHARGE OF TURBID WATERS. IF THE WATER BEING DISCHARGED FROM THE FILTER BAG APPEARS "MILKY" OR EXCESSIVELY CLOUDY, THEN SEDIMENT CORRALS CAN BE UTILIZED TO AUGMENT FILTER BAG USE, POSITIONED AT AT LEAST 50- FEET FROM ANY WATERBODY AND CLOSELY MONITORED TO ENSURE PROPER FUNCTION TO PREVENT TURBID WATER FROM ENTERING A WATERBODY.
4. DURING TRENCH DEWATERING OPERATIONS, USE FLOATS OR SUPPORTS TO ENSURE THE SUCTION INTAKE IS ELEVATED OFF OF THE BOTTOM OF THE SATURATED TRENCH. THIS WILL REDUCE SEDIMENTS SUSPENDED IN WATER.
5. FILTRATION BAGS, A STRAW BALE BASIN, FILTER CLOTH BASINS, OR A COMBINATION OF THESE DEVICES ARE ACCEPTABLE METHODS OF FILTRATION FOR DISCHARGE OF WATER IN AN INSUFFICIENTLY VEGETATED OR WETLAND AREA.

Vertical sidebar containing project information: ORIGINAL ISSUE DATE 6/06/25, FILE# 6.1-1-10-M5, DRAWING NUMBER L1-41568, NUMBER 6. Includes logos for nationalgrid and EROSION PREV. & SEDIMENT CONTROL NOTES. Includes a table for APPROVED BY with columns for BESS, HP, FISHER, VL, RW, DR, and APP.



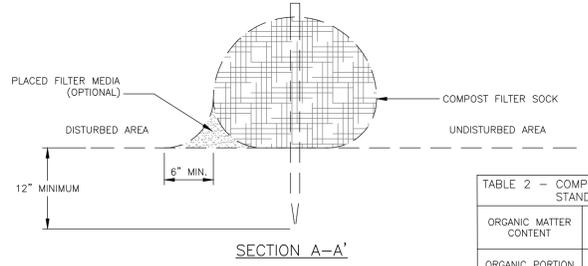
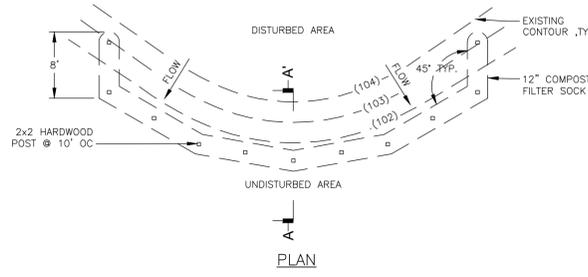
- NOTES:**
- CONSTRUCTION ACCESS STONE SIZE - MATRIX OF NYS DOT #4 AND #5 STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
 - GEOTEXTILE:
 - MIRAFI 500X OR APPROVED EQUAL.
 - SHALL BE PLACED UNDER THE ENTIRE STABILIZED CONSTRUCTION ENTRANCE PRIOR TO PLACING OF STONE.
 - SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ACCESS SHALL BE PIPED ACROSS THE STABILIZED CONSTRUCTION ACCESS. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM SHALL BE USED.
 - MAINTENANCE - THE CONSTRUCTION ACCESS SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO THE PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
 - WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ACCESS ONTO PUBLIC RIGHTS-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO A NYSDEC APPROVED SEDIMENT TRAPPING DEVICE.
 - TOP WITH CRUSHER RUN AS NECESSARY DURING CONSTRUCTION.

STABILIZED CONSTRUCTION ACCESS
NOT TO SCALE



- NOTES:**
- WHEN TWO SECTIONS OF SILT FENCE FABRIC ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY 6" AND FOLDED. FILTER CLOTH SHALL BE EITHER FILTER X, MIRAFI 100X, STABILINKA T140N, OR APPROVED EQUAL.
 - PREFABRICATED UNITS SHALL MEET THE MINIMUM REQUIREMENTS SHOWN.
 - MAINTENANCE SHALL BE PERFORMED IMMEDIATELY AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

STANDARD SILT FENCE
NOT TO SCALE



- NOTE:**
- COMPOST FILTER SOCKS SHALL BE PLACED ON THE CONTOUR WITH BOTH TERMINAL ENDS OF THE SOCK EXTENDED 8 FEET UPSLOPE AT A 45° ANGLE TO PREVENT BYPASS FLOW.
 - DIAMETERS DESIGNED FOR USE SHALL BE 12".
 - THE FLAT DIMENSION OF THE SOCK SHALL BE AT LEAST 1.5 TIMES THE NOMINAL DIAMETER.
 - THE MAXIMUM SLOPE LENGTH (IN FEET) ABOVE A COMPOST FILTER SOCK SHALL NOT EXCEED THE LIMITS SHOWN ON TABLE 1.

TABLE 2 - COMPOST FILTER MEDIA STANDARDS

ORGANIC MATTER CONTENT	25% - 100% DRY WEIGHT
ORGANIC PORTION	FIBROUS AND ELONGATED
pH	6.0 - 8.0
MOISTURE CONTENT	30% - 60%
PARTICLE SIZE	100% PASSING A 1" SCREEN AND 10-50% PASSING A 3/8" SCREEN
SOLUBLE SALT CONCENTRATION	5.0 dS/m (mmhos/cm) MAXIMUM

COMPOST FILTER SOCK
NOT TO SCALE

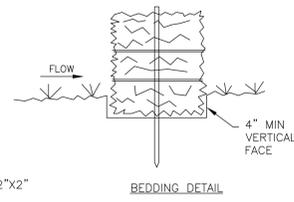
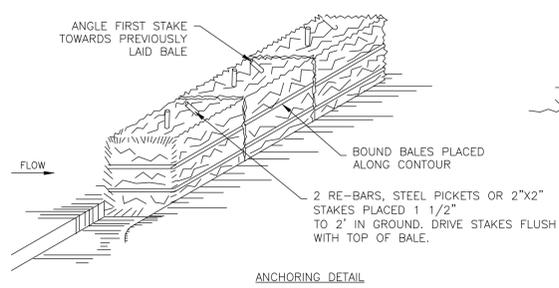
TABLE 1 - MAXIMUM SLOPE LENGTH ABOVE COMPOST FILTER SOCK (FEET)

DIA (IN)	SLOPE %						
	2	5	10	20	25	33	50
8	225	200	100	5	20	-	-
12	250	225	125	65	50	40	25
18	275	250	150	70	55	45	30
24	350	275	200	130	100	60	35
32	450	325	275	150	120	75	50

- THE COMPOST INFILL SHALL BE WELL DECOMPOSED (MATURED AT LEAST 3 MONTHS), WEED-FREE, ORGANIC MATTER. IT SHALL BE AEROBICALLY COMPOSTED, POSSESS NO OBJECTIONABLE ODORS, AND CONTAIN LESS THAN 1% BY DRY WEIGHT, OF MAN-MADE FOREIGN MATTER. THE PHYSICAL PARAMETERS OF THE COMPOST SHALL MEET THE STANDARDS LISTED IN TABLE 5.2-COMPOST FILTER MEDIA STANDARDS TABLE*. NOTE ALL BIOSOLIDS COMPOST PRODUCED IN NEW YORK STATE (OR APPROVED FOR IMPORTATION) MUST MEET NYS DEC'S 6 NYCRR PART 360 (SOLIDS WASTE MANAGEMENT FACILITIES) REQUIREMENTS. THE PART 360 REQUIREMENTS ARE EQUAL TO OR MORE STRINGENT THAN 40 CFR PART 503 WHICH ENSURE SAFE STANDARDS FOR PATHOGEN REDUCTION AND HEAVY METALS CONTENT. WHEN USING COMPOST FILTER SOCKS ADJACENT TO SURFACE WATER, THE COMPOST SHOULD HAVE A LOW NUTRIENT VALUE.
 - THE COMPOST FILTER SOCK FABRIC MATERIAL SHALL MEET THE MINIMUM SPECIFICATIONS GIVEN IN TABLE 5.3-COMPOST SOCK FABRIC MINIMUM SPECIFICATIONS TABLE*.
 - COMPOST FILTER SOCKS SHALL BE ANCHORED IN EARTH WITH 2X2 WOODEN STAKES DRIVEN 12" INTO THE SOIL ON 10 FOOT CENTER ON THE CENTERLINE OF THE SOCK. ON UNEVEN TERRAIN, EFFECTIVE GROUND CONTACT CAN BE ENHANCED BY THE PLACEMENT OF A FILLET OR FILTER MEDIA ON THE DISTURBED AREA SIDE OF THE COMPOST SOCK.
 - ALL SPECIFIC CONSTRUCTION DETAILS AND MATERIAL SPECIFICATIONS SHALL APPEAR ON THE EROSION AND SEDIMENT CONTROL CONSTRUCTIONS DRAWINGS WHEN COMPOST FILTER SOCKS ARE INCLUDED IN THE PLAN.
- *TABLE FROM THE 2016 NYS STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL.

TABLE 3 - COMPOST SOCK FABRIC MINIMUM SPECIFICATIONS

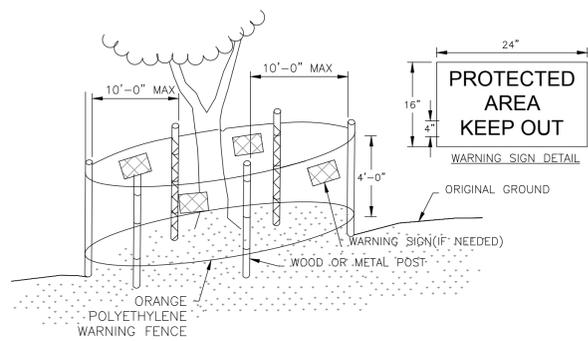
MATERIAL TYPE	3 MIL HDPE	5 MIL HDPE	5 MIL HDPE	MULTI-FILAMENT POLYPROPYLENE	HEAVY DUTY MULTI-FILAMENT POLYPROPYLENE
MATERIAL CHARACTERISTICS	PHOTODEGRADABLE	PHOTODEGRADABLE	BIODEGRADABLE	PHOTODEGRADABLE	PHOTODEGRADABLE
SOCK DIAMETERS	12", 18"	12", 18", 24", 32"	12", 18", 24", 32"	12", 18", 24", 32"	12", 18", 24", 32"
MESH OPENING	3/8"	3/8"	3/8"	3/8"	1/8"
TENSILE STRENGTH		26 PSI	26 PSI	44 PSI	202 PSI
ULTRAVIOLET STABILITY % ORIGINAL STRENGTH (ASTM G-155)	23% AT 1000 HR.	23% AT 1000 HR.		100% AT 1000 HR.	100% AT 1000 HR.
MINIMUM FUNCTIONAL LONGEVITY	6 MONTHS	9 MONTHS	6 MONTHS	1 YEAR	2 YEARS



- NOTES:**
- BALES SHALL BE PLACED AT THE TOE OF A SLOPE OR ON THE CONTOUR AND IN A ROW WITH ENDS TIGHTLY ABUTTING THE ADJACENT BALES.
 - EACH BALE SHALL BE EMBEDDED IN THE SOIL A MINIMUM OF 4 INCHES, AND PLACED SO THE BINDINGS ARE HORIZONTAL.
 - BALES SHALL BE SECURELY ANCHORED IN PLACE BY EITHER TWO STAKES OR RE-BARS DRIVEN THROUGH THE BALE. THE FIRST STEEL IN EACH BALE SHALL BE DRIVEN TOWARD THE PREVIOUSLY LAID BALE AT AN ANGLE TO FORCE THE BALES TOGETHER. STAKES SHALL BE DRIVEN FLUSH WITH THE BALE.
 - INSPECTION SHALL BE FREQUENT AND REPAIR/REPLACEMENT SHALL BE MADE PROMPTLY, AS NEEDED.
 - BALES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFULNESS SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.
 - DRAINAGE AREA SHALL BE NO MORE THAN 0.25 ACRES PER 100 FEET OF STRAW BALE DIKE FOR SLOPES LESS THAN 25%.
 - STRAW BALE DIKE SHALL BE USED WHERE EROSION COULD OCCUR IN THE FORM OF SHEET EROSION.
 - STRAW BALE DIKE SHALL NOT BE USED WHEN A CONCENTRATION OF WATER IS FLOWING TO THE BARRIER.
 - MAXIMUM ALLOWABLE SLOPE LENGTHS CONTRIBUTING TO THE STRAW BALE DIKES:

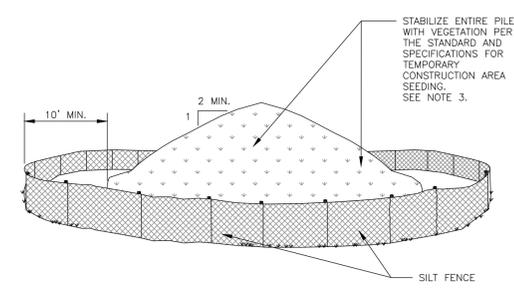
SLOPE STEEPNESS	MAX. SLOPE LENGTH(FT)
2:1	25
3:1	50
4:1	75

STRAW BALE DIKE
NOT TO SCALE



- NOTES:**
- TEMPORARY FENCING MAY BE USED TO PROTECT SENSITIVE AREAS OR TO PREVENT THE PUBLIC ACCESSING A WORK AREA.
 - FENCING SHALL BE PLACED AS INDICATED ON THE EROSION AND SEDIMENT CONTROL PLANS OR AS DIRECTED BY THE ENVIRONMENTAL MONITOR.
 - PLACE SIGNS AS NEEDED.

TEMPORARY FENCING
NOT TO SCALE

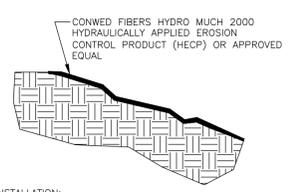


- NOTES:**
- AREA CHOSEN FOR STOCKPILING OPERATIONS SHALL BE DRY, STABILIZED AND LOCATED AWAY FROM KNOWN WORK AREAS TO PREVENT RELOCATION.
 - MAXIMUM STOCKPILE HEIGHT SHALL BE 12 FEET.
 - EACH PILE SHALL BE SURROUNDED WITH SILT FENCING, INSTALLED PER SILT FENCE DETAIL, THEN STABILIZED IN ACCORDANCE WITH THE NYSDEC STANDARD AND SPECIFICATIONS FOR TEMPORARY CONSTRUCTION AREA SEEDING WITHIN 7 DAYS OF COMPLETION.
 - A PERIMETER DIKE/SWALE SHALL BE LOCATED UP-SLOPE OF THE TOPSOIL STOCKPILE TO DIVERT STORMWATER AROUND THE STOCKPILE.

STABILIZED SOIL STOCKPILE
NOT TO SCALE

ORIGINAL ISSUE DATE	6/06/25
FILE #	6.1-L-10-M5
DRAWING NUMBER	L1-41568
PROJECT	REBUILD PROJECT
CONTROL DETAILS	EROSION PREV. & SEDIMENT CONTROL DETAILS
DATE	

115KV TRANSMISSION LINES	LOCKPORT - BATAVIA 112
PREPARED BY	nationalgrid
HP APPROVED	FISHER
RR APPROVED	VL
CK APPROVED	RW
APP.	DR.
DESCRIPTION OF ISSUE OR REVISION	
ACCOUNT NUMBER	



INSTALLATION:

STRICTLY COMPLY WITH EQUIPMENT MANUFACTURER'S INSTALLATION INSTRUCTIONS AND RECOMMENDATIONS. USE APPROVED HYDRO-SPRAYING MACHINES WITH FAN-TYPE NOZZLE (50 DEGREES TIP), TO ACHIEVE OPTIMUM SOIL SURFACE COVERAGE. APPLY HM FROM OPPOSING DIRECTIONS TO SOIL SURFACE. ROUGH SURFACES (ROCKY TERRAIN, CAT TRACKS AND RIPPED SOILS) MAY REQUIRE HIGHER APPLICATION RATES TO ACHIEVE 75% COVER. SLOPE INTERRUPTION DEVICES OR WATER DIVERSION TECHNIQUES ARE RECOMMENDED WHEN SLOPE LENGTHS EXCEED 30 FEET (9m). MAXIMUM SLOPE LENGTH IS FOR PRODUCT APPLICATIONS ON A 4H:1V SLOPE. FOR APPLICATION ON STEEPER SLOPES, SLOPE INTERRUPTION LENGTHS MAY NEED TO BE DECREASED BASED ON ACTUAL SITE CONDITIONS. NOT RECOMMENDED FOR CHANNELS OR AREAS WITH CONCENTRATED WATER FLOW. NO CHEMICAL ADDITIVES WITH THE EXCEPTION OF FERTILIZER, LIMING AND BIOSTIMULANT MATERIALS SHOULD BE ADDED TO THIS PRODUCT. TO ENSURE PROPER APPLICATION RATES, MEASURE AND STAKE AREA.

- APPLY FERTILIZER WITH SPECIFIED PRESCRIPTIVE AGRONOMIC FORMULATIONS. SEED AND HM AT A RATE OF 50 LB PER 100 GALLONS (23 KG/380 LITERS) OF WATER OVER PROPERLY PREPARED SURFACES. CONFIRM LOADING RATES WITH EQUIPMENT MANUFACTURER.
- DO NOT APPLY ON SATURATED SOILS OR SUBSTRATES. DO NOT APPLY IF PRECIPITATION IS ANTICIPATED WITHIN 24-48 HOURS. APPLICATION RATES: THESE APPLICATION RATES ARE FOR STANDARD CONDITIONS. DESIGNERS MAY NEED TO INCREASE APPLICATION RATES ON ROUGH SURFACES. CONSULT APPLICATION AND LOADING CHARTS TO DETERMINE NUMBER OF BAGS TO BE ADDED FOR DESIRED AND APPLICATION RATE.

SLOPE GRADIENT/CONDITION	ENGLISH	SI
≤ 4H TO 1V	2000 lb/ac	2250 kg/ha
2H TO 1V AND 5H TO 1V	2500 lb/ac	2800 kg/ha
2.5H TO 1V AND 5.2H TO 1V	3000lb/ac	3400 kg/ha

*FOR STABILIZING DISTURBED SLOPES 2H:1V OR STEEPER NOT FOR USE IN DRAINAGE CHANNEL APPLICATIONS.

SEE COMPREHENSIVE CSI FORMATTED SPECIFICATION FOR FURTHER DETAILS

PRODUCT SPECIFICATION NOTE: OWNER'S APPROVED EQUIVALENTS WILL BE ALLOWED FOR ITEMS SHOWN ON THIS SHEET.

CONWED FIBERS HYDRO MULCH
NOT TO SCALE

FLEXTERRA HP-FGM

>BETTER EROSION CONTROL-FLEXTERRA HP-FGM IMMEDIATELY BONDS TO THE SOIL SURFACE. IT'S FLEXIBLE YET STABLE MATRIX RETAINS >99% SOIL, VASTLY REDUCING TURBIDITY OF RUNOFF FOR UP TO 18 MONTHS. HP ALSO FEATURES GREATER WET BOND STRENGTH YIELDING INCREASED RESISTANCE TO SHEET FLOW.

>GREATER SEED GERMINATION AND GROWTH-HIGH PERFORMANCE MATRIX OUTPERFORMS TRADITIONAL FLEXTERRA FGM WITH 600% BETTER INITIAL GERMINATION AND 250% INCREASED BIOMASS DUE TO A COMBINATION OF OPTIMIZED WATER AND NUTRIENT RETENTION.

>SAFER FOR THE ENVIRONMENT- UNLIKE ROLLED EROSION CONTROL BLANKETS, FLEXTERRA HP-FGM HAS NO NETS OR THREADS TO ENDANGER WILDLIFE. IT USES 100% BIODEGRADABLE CRIMPED INTERLOCKING FIBERS AND 100% RECYCLED AND PHYTO-SANTIZED WOOD FIBERS. FLEXTERRA HP-FGM IS 100% SAFE FOR AQUATIC AND TERRESTRIAL LIFE FORMS.

>EARTH FRIENDLY AND SUSTAINABLE RESULTS-FLEXTERRA HP-FGM IS A RESULT OF PROFILE'S GREEN DESIGN ENGINEERING, CREATING COST-EFFECTIVE AND ENVIRONMENTALLY SUPERIOR SOLUTIONS THROUGH THE DESIGN, MANUFACTURE AND APPLICATION OF SUSTAINABLE EROSION CONTROL AND VEGETATION ESTABLISHMENT TECHNOLOGIES.

TECHNICAL DATA

PHYSICAL PROPERTIES	TEST METHOD	UNITS	MINIMUM VALUE
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- MASS UNIT AREA ASTM D6586 g/m²(oz/yd²) 407(12)
- THICKNESS ASTM D525 mm(in) 5.6(0.22)
- WET BOND STRENGTH ASTM D6818 N/m(lb/ft) 131(9)
- GROUND COVER ASTM D567 % 99
- WATER-HOLDING CAPACITY ASTM D7347 % 1700
- MATERIAL COLOR OBSERVED r=0 GREEN

ENVIRONMENTAL PROPERTIES	TEST METHOD	UNITS	MINIMUM VALUE
--------------------------	-------------	-------	---------------

- BIODEGRADABILITY ASTM % 100
- FUNCTIONAL LONGEVITY ASTM r=0 UP TO 18 MONTHS
- ECOTOXICITY EPA % 96-HR LC50>100%
- EFFLUENT TURBIDITY LARGE SCALE NTU <100

PERFORMANCE PROPERTIES	TEST METHOD	UNITS	MINIMUM VALUE
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- COVER FACTOR LARGE SCALE r=0 <0.01
- PERCENT EFFECTIVENESS LARGE SCALE % >99
- CURE TIME OBSERVED HOURS 0-2
- VEGETATION ESTABLISHMENT ASTM D7322 % >80

PRODUCT COMPOSITION	TYPICAL VALUE
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- THERMALLY PROCESSED WOOD FIBERS (WITHIN A PRESSURIZED VESSEL) 80%±3%
- CROSS-LINKED BIOPOLYMERS AND WATER ABSORBENTS 10%±1%
- CRIMPED, MAN-MADE BIODEGRADABLE INTERLOCKING FIBERS 5%±1%
- PROPRIETARY MINERAL ACTIVATOR 5%±1%

*WHEN UNIFORMLY APPLIED AT A RATE OF 3500 kg/ha (35000 lbs/ac) UNDER LABORATORY CONDITIONS.

1. ASTM TEST METHODS DEVELOPED FOR ROLLED EROSION CONTROL PRODUCTS THAT HAVE BEEN MODIFIED TO ACCOMMODATE HYDRAULIC EROSION CONTROL PRODUCTS.

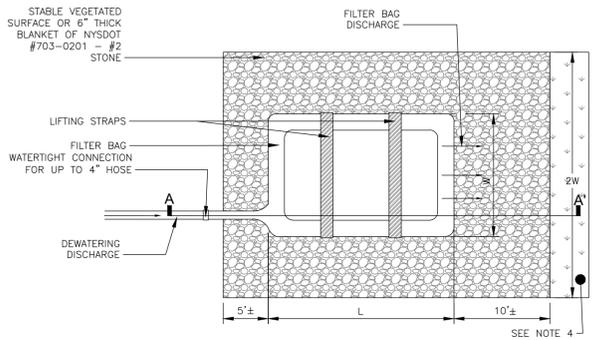
2. FUNCTIONAL LONGEVITY IS THE ESTIMATED TIME PERIOD BASED UPON FIELD OBSERVATIONS THAT A MATERIAL CAN BE ANTICIPATED TO PROVIDE EROSION CONTROL AND NUTRIENT RETENTION AS SPECIFIED BY CONDITIONS, AS WELL AS SITE SPECIFIC CONDITIONS, INCLUDING BUT NOT LIMITED TO: TYPICAL WETTING EVENT CONDITIONS, SOIL, BIOLOGICAL ACTIVITY, VEGETATION ESTABLISHMENT AND OTHER ENVIRONMENTAL FACTORS.

3. LARGE SCALE TESTING CONDUCTED AT 10% WATER RESIDUAL MOISTURE FOR PROPER TESTING INFORMATION PLEASE CONTACT A PROFILE TECHNICAL SERVICE REPRESENTATIVE AT 866-325-6262.

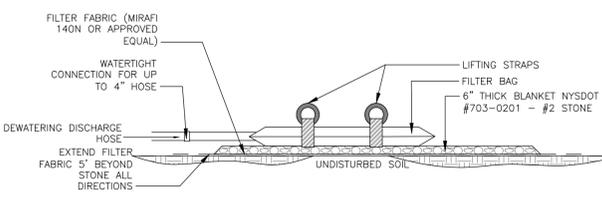
4. COVER FACTOR IS CALCULATED AS SOIL LOSS RATIO OF TREATED SURFACE VERSUS UNIMPAIRED CONTROL SURFACE.

5. R & EFFECTIVENESS = ONE MINUS COVER FACTOR MULTIPLIED BY 100.

6. RELATED TO A TEMPERATURE GREATER THAN 143 DEGREES C (289 DEGREES F) FOR 8 MINUTES AT A PRESSURE GREATER THAN 345 MPa (500 PSI) IN ORDER TO BE THERMALLY RETRO-PROCESSED AND TO ACHIEVE PHYTO-SANTIZATION.

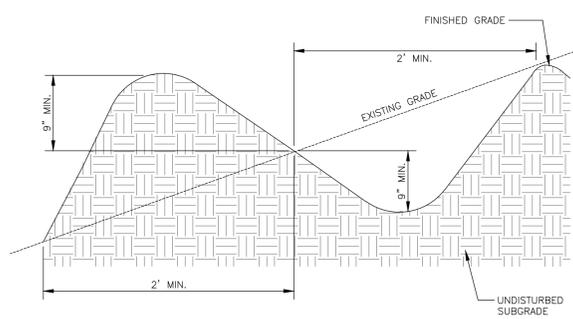


PLAN VIEW



SECTION A-A'

FILTER BAG DETAIL
NOT TO SCALE



CROSS SECTION

NOTES:

- ALL PERIMETER DIKE/SWALE SHALL HAVE UNINTERRUPTED POSITIVE DOWNWARD SLOPE TO A STABILIZED OUTLET.
- DIVERTED RUNOFF FROM DISTURBED AREAS SHALL BE CONVEYED TO A NYSDEC APPROVED SEDIMENT TRAPPING DEVICE.
- DIVERTED RUNOFF FROM AN UNDISTURBED AREA SHALL OUTLET INTO AN UNDISTURBED STABILIZED AREA AT A NON-EROSIVE VELOCITY.
- THE SWALE SHALL BE EXCAVATED OR SHAPED TO LINE GRADE, AND CROSS SECTION AS REQUIRED TO MEET THE CRITERIA SPECIFIED IN THE STANDARD AND SPECIFICATIONS FOR PERIMETER DIKE/SWALE.
- STABILIZATION OF THE AREA DISTURBED BY THE DIKE/SWALE SHALL BE INSTALLED IN ACCORDANCE WITH THE STANDARD AND SPECIFICATIONS FOR TEMPORARY CONSTRUCTION AREA SEEDING LOCATED ON PAGE 4.58 OF THE 2016 NYSDEC STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL.
- PERIODIC INSPECTION AND REQUIRED MAINTENANCE MUST BE PROVIDED AFTER EACH RAIN EVENT AND/OR SWPPP INSPECTION.
- MAX DRAINAGE AREA LIMIT: 2 ACRES.

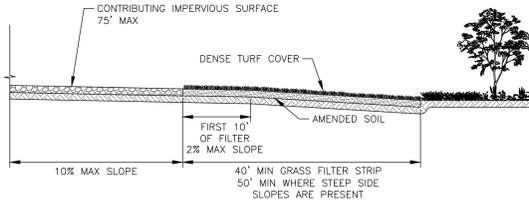
SWALE DETAIL
NOT TO SCALE

TABLE 1: GEOTEXTILE MATERIAL ATTRIBUTES

MINIMUM GRAB TENSILE STRENGTH	200 lbs.
MINIMUM GRAB TENSILE ELONGATION	50%
MINIMUM TRAPEZOID TEAR STRENGTH	80 lbs.
MULLEN BURST STRENGTH	380 psi
MINIMUM PUNCTURE STRENGTH	130 lbs.
APPARENT OPENING SIZE	40 -80 US SIEVE
MINIMUM UV RESISTANCE	70%
MINIMUM FLOW THRU RATE	70 gpm/sq ft

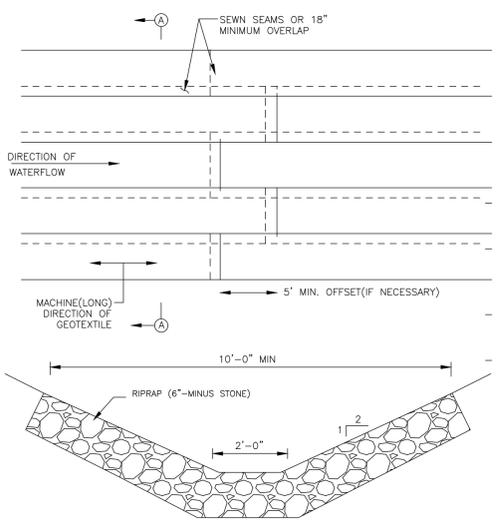
NOTES:

- DO NOT OVER PRESSURIZE FILTER BAG OR DISCHARGE INTO AT A RATE IN EXCESS OF THE MANUFACTURER'S RECOMMENDATIONS.
- LOCATE DISCHARGE SITE ON FLAT, STABILIZED UPLAND AREAS AND A MINIMUM OF 100' FROM STREAMS, WETLANDS, STORM DRAIN INLET, AND POINTS OF CONCENTRATED FLOW.
- DOWN GRADIENT RECEIVING AREA MUST BE WELL VEGETATED OR OTHERWISE STABLE TO PREVENT EROSION.
- INSTALL MANUFACTURER APPROVED LIFTING STRAPS UNDERNEATH BAG PRIOR TO USE.
- PREVENT STORMWATER RUNOFF FROM ENTERING THE AREA OF THE FILTER BAG VIA INSTALLATION LOCATION SELECTION AND/OR TEMPORARY BERMS/SWALES.
- THE BAG SHALL BE REPLACED WHEN IT HAS REACHED 75% SEDIMENT STORAGE CAPACITY OR SOONER IF SEDIMENT PASS THROUGH IS OBSERVED.
- INSPECTION OF DEWATERING FACILITIES IS TO BE PERFORMED FREQUENTLY EACH DAY FOR SIGNS OF SEDIMENT PASS THROUGH, EROSION, AND/OR CONCENTRATED FLOW.
- IF COLLECTED DEWATERING DISCHARGE IS CONTAMINATED WITH GREASE, OR OTHER TOXIC/HAZARDOUS MATERIALS, THE CONTRACTOR SHALL CONTACT THE APPROPRIATE AUTHORITY AND CEASE DEWATERING ACTIVITIES AND WORK IMMEDIATELY.
- THE OWNER'S REPRESENTATIVE SHALL HAVE THE AUTHORITY TO STOP DEWATERING OPERATIONS AS CONDITIONS DICTATE.



SHEET FLOW TO FILTER STRIP PROFILE VIEW

SHEET FLOW TO RIPARIAN BUFFERS OR FILTER STRIPS (RR-2)
NOT TO SCALE



RIPPRAP SWALE DETAIL
NOT TO SCALE

ORIGINAL ISSUE DATE	6/06/25
FILE #	6.1-L-10-M5
DRAWING NUMBER	L1-41568
PROJECT NUMBER	9
115KV TRANSMISSION LINES	
LOCKPORT - BATAVIA 112	
REBUILD PROJECT	
EROSION PREV. & SEDIMENT CONTROL DETAILS	
PREPARED BY	HP
APPROVED	FISHER
DES.	RR
CK.	VL
APP.	RW
DATE	DR.
nationalgrid	
ACCOUNT NUMBER	