



56 Prospect Street
P.O. Box 270
Hartford, CT 06141-0270

Kathleen M. Shanley
Manager – Transmission Siting
Tel: 860-728-4527

June 26, 2019

Ms. Melanie Bachman, Executive Director
Connecticut Siting Council
Ten Franklin Square
New Britain, CT 06051

Re: *Docket No. 461A: Greenwich Substation and Line Project
Development and Management Plan Greenwich Substation Construction
Submission of Information Regarding Temporary Detention Basin*

Dear Ms. Bachman:

As recommended by the Connecticut Siting Council (Council) in its March 29, 2019 letter approving the above-referenced Development and Management (D&M) Plan, the Connecticut Light and Power Company doing business as Eversource Energy (Eversource) hereby provides to the Council the attached two drawings that illustrate the location of and details regarding the temporary detention basin that will be situated on the Greenwich Substation property during the construction of the facility. The detention basin, which is referenced in Section E.2.1 (page 28) of the D&M Plan, will be used for temporary stormwater management during the substation construction.

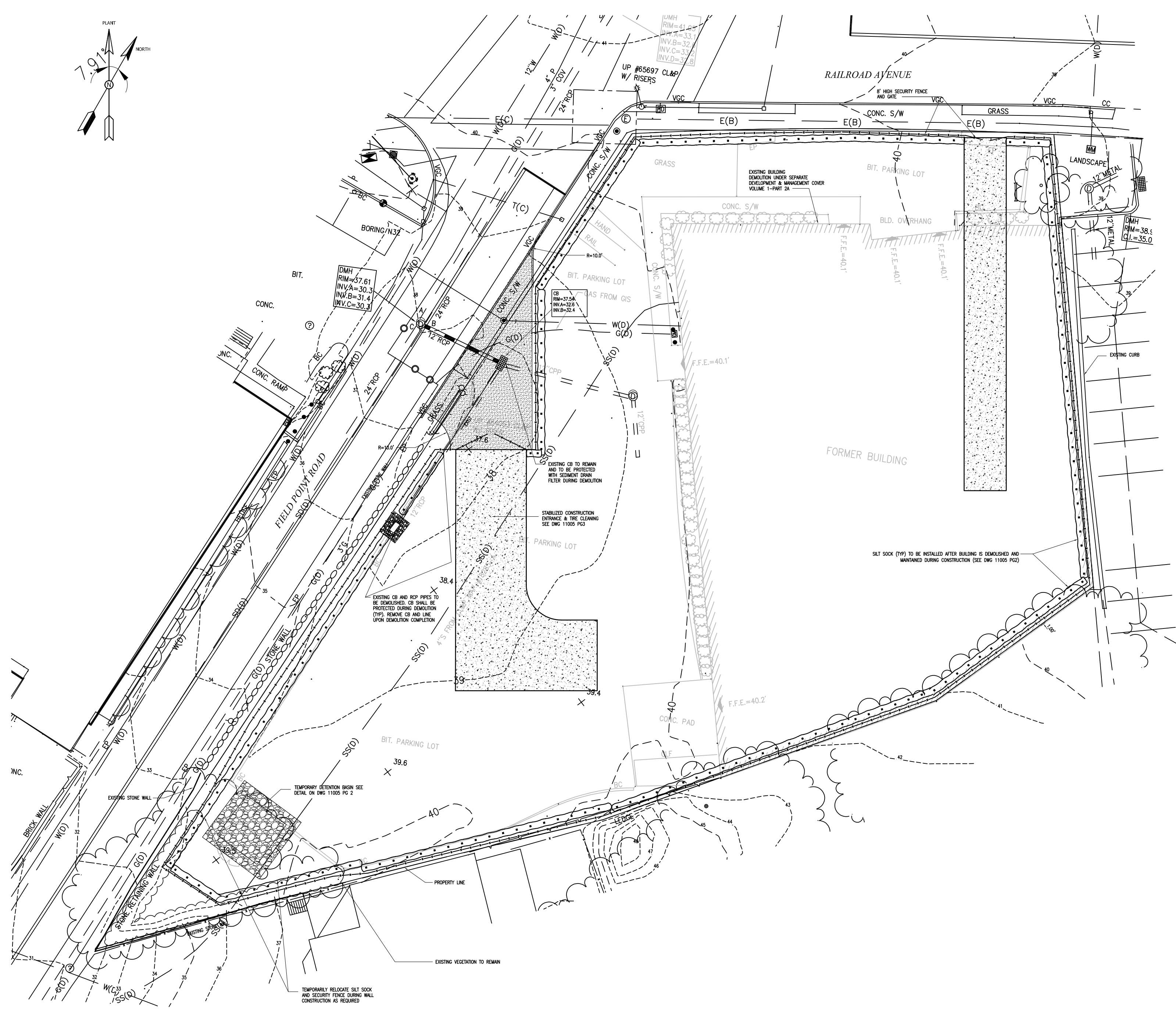
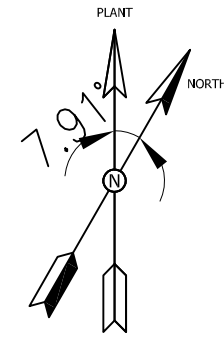
Enclosed please find this original and two copies of this requested information. Should you have any questions regarding this information, please do not hesitate to contact me at via e-mail at kathleen.shanley@eversource.com or telephone at (860) 728-4527.

Sincerely,

A handwritten signature in blue ink, appearing to read "Kathleen M. Shanley". The signature is stylized and cursive.

Kathleen M. Shanley

Attachments: D&M Plan Drawings 15712-11005 PG1 and 15712-11005 PG 2 (dated 4/8/2019)



PROJECT DESCRIPTION

- 1.1 THE GREENWICH NEW 115-KILOVOLT (KV) ELECTRICAL SUBSTATION IS TO BE CONSTRUCTED ON COMMERCIAL ZONED PROPERTY AT 290 RAILROAD AVENUE AT THE INTERSECTION WITH FIELD POINT ROAD IN GREENWICH, CT. THE PROPERTY IS IDENTIFIED BY THE GREENWICH ASSESSOR'S OFFICE ON MAP 01 AS LOT 2389/5, AND IS LOCATED WITHIN A GENERAL BUSINESS ZONE. TWO POWER TRANSFORMERS, SWITCHGEAR, CONTROL ENCLOSURE AND THE BALANCE OF ELECTRICAL EQUIPMENT ARE LOCATED IN THE SUBSTATION YARD. THE POWER TRANSFORMERS WILL BE SURROUNDED BY THE CONCRETE CONTAINMENT AND SEPARATED BY FIRE WALLS.
- 1.2 THE TOTAL AREA OF THE PROJECT SITE IS 0.81 ACRES. TO ACCOMMODATE THE NEW SUBSTATION, THE EXISTING COMMERCIAL BUILDING CURRENTLY OCCUPYING APPROXIMATELY 45% OF THE SITE AREA WILL BE REMOVED AS PART OF THE PROJECT. THE REMAINDER OF THE SITE IS FULLY DEVELOPED AND COVERED WITH IMPERVIOUS SURFACES. THE SITE IS ESSENTIALLY LEVEL WITH A GENTLE SLOPE TO A SINGLE CATCH BASIN LOCATED NEAR ITS WESTERN BORDER. THE SITE IS LOCATED WITHIN THE SOUTHWEST COAST MAJOR DRAINAGE BASIN. NO TIDAL OR FRESH WATER WETLANDS/WATERCOURSES OR COASTAL RESOURCES ARE LOCATED ON THE SITE. ACCORDING TO THE SUMMARY OF THE ENVIRONMENTAL CONDITIONS PROVIDED WITH THE MUNICIPAL CONSULTATION FILING (MCF) THAT WAS SUBMITTED TO THE TOWN OF GREENWICH FEBRUARY 6, 2015. IN ADDITION, THE SITE IS NOT LOCATED WITHIN EITHER THE 100-YEAR OR 500-YEAR FLOOD ZONES ESTABLISHED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) OR WITHIN FLOOD SURGE LIMITS. APPROXIMATELY 0.025 ACRE PORTION OF THE SITE IS PHYSICALLY LOCATED WITHIN THE COASTAL BOUNDARY.

ADJACENT PROPERTY

- 2. THE PROJECT PROPERTY IS IRREGULARLY SHAPED. THE SITE HAS FRONTAGE ON RAILROAD AVENUE TO THE NORTH AND FIELD POINT ROAD ON THE WEST. THE SITE BORDERS COMMERCIAL PROPERTIES TO THE SOUTH AND EAST.

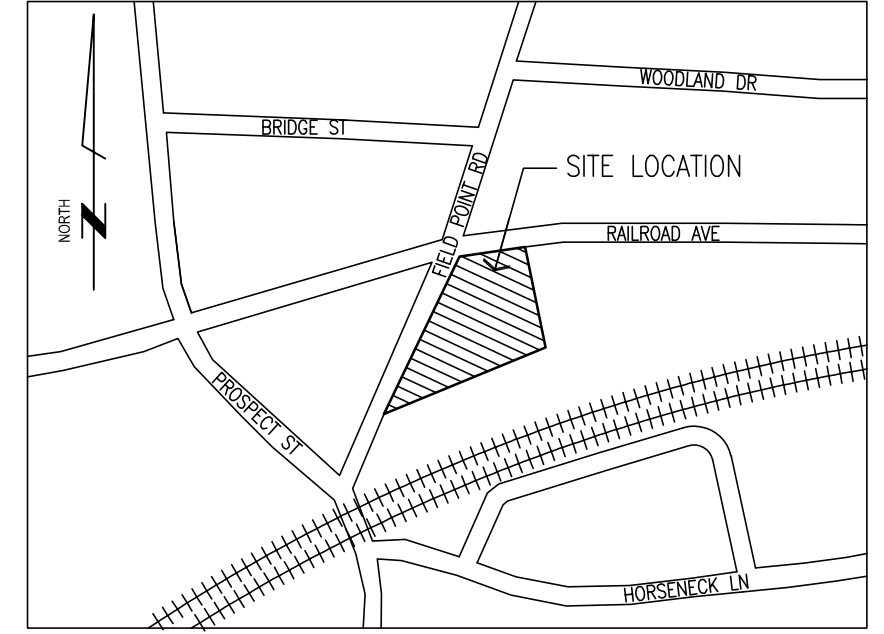
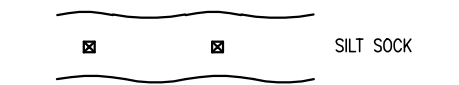
GENERAL REQUIREMENTS

- 3.1 NOT USED
- 3.2 THE CUMULATIVE POST-PEAK DEVELOPMENT RUN-OFF RATES FROM THE SITE SHALL BE MAINTAINED OR REDUCED FROM THE PRE-DEVELOPMENT RUN-OFF RATES. TO MINIMIZE THE IMPERVIOUS AREAS THE PAVED AREAS SHALL BE KEPT TO A MINIMUM.
- 3.3 THE GENERAL CONTRACTOR IS A RESPONSIBLE PARTY FOR IMPLEMENTING THE EROSION AND SEDIMENT CONTROL PLAN. THE RESPONSIBILITY INCLUDES THE MAINTENANCE AND INSTALLATION OF CONTROL MEASURES AND INFORMING ALL PARTIES OF THE REQUIREMENTS AND OBJECTIVES OF THE PLAN. EROSION CONTROL MEASURES SHALL BE CHECKED AS REQUIRED AND AFTER EVERY STORM BY THE ON-SITE CONSTRUCTION MANAGER. ALL ITEMS IDENTIFIED REQUIRING MAINTENANCE/REPLACEMENT SHALL BE COMPLETED IMMEDIATELY.
- 3.4 EXISTING VEGETATION OUTSIDE NEW PERIMETER WALL SHALL BE PRESERVED BY USING TEMPORARY SEEDING AND MULCHING TO PREVENT AND MINIMIZE EROSION. EXISTING TREES AT THE SOUTH BOUNDARY OF THE PROPERTY SHALL BE PROTECTED.
- 3.5 TO REDUCE EROSION HAZARDS, CONSTRUCTION SHALL BE PHASED TO MINIMIZE LAND DISTURBANCE AT ANY GIVEN TIME. WHERE CONSTRUCTION ACTIVITIES HAVE PERMANENTLY CEASED OR HAVE TEMPORARILY BEEN SUSPENDED FOR MORE THAN SEVEN DAYS, SOIL STABILIZATION MUST BE IMPLEMENTED WITHIN THREE DAYS.
- 3.6 AREAS WHICH REMAIN INACTIVE FOR AT LEAST THIRTY DAYS SHALL RECEIVE TEMPORARY SEEDING IN ACCORDANCE WITH THE GUIDELINES.
- 3.7 THE CONTRACTOR MUST INSTALL ANY ADDITIONAL TEMPORARY OR PERMANENT MEASURES NECESSARY TO CONTROL EROSION/SEDIMENTATION ON- AND OFF-SITE DEPENDING ON WEATHER CONDITIONS AND WORK SEQUENCE.
- 3.8 NOT USED
- 3.9 CONTRACTOR IS RESPONSIBLE TO ENSURE THAT NO DEBRIS, LITTER, OR OTHER MATERIALS ARE DISCHARGED IN THE WATERS OF THE STATE OF CONNECTICUT.

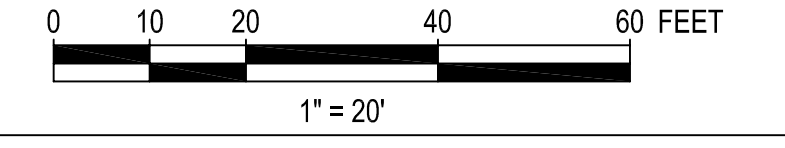
SOIL EROSION AND SEDIMENT CONTROL DEVICES & MEASURES

- 4.1 THE SOIL EROSION AND SEDIMENT CONTROL DEVICES TO BE IMPLEMENTED AS PART OF THE SITE DEVELOPMENT SHALL BE INSTALLED AS INDICATED ON THE DRAWING 15712-11005P02 AND/OR DESCRIBED BELOW. FOR FURTHER REFERENCE SEE THE STATE OF CONNECTICUT 2002 GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL (THE GUIDELINES).
- 4.2 ORGANIC MULCHES (HAY OR STRAW), OR NETTING AND MATS ARE TO BE USED DURING CONSTRUCTION TO PREVENT EROSION BY PROTECTING THE EXPOSED SOIL, AND TO PROMOTE THE GROWTH OF VEGETATION. ORGANIC MULCH MATERIALS AND APPLICATION RATES SHALL BE IN ACCORDANCE WITH FIGURE 7-1 OF THE GUIDELINES.
- 4.3 STRAW OR HAY MULCH MUST BE ANCHORED IMMEDIATELY AFTER SPREADING USING A TRACTOR-DRAWN MULCH ANCHORING TOOL, LIQUID MULCH BINDERS, NETTING OR OTHER MEANS OF ANCHORING ALLOWED BY THE GUIDELINES. MULCHES MUST BE INSPECTED PERIODICALLY AND, IN PARTICULAR, AFTER RAINSTORMS, AND RE-APPLIED IMMEDIATELY IF EROSION IS OBSERVED.
- 4.4 NOT USED
- 4.5 TEMPORARY AND PERMANENT VEGETATIVE COVERS SHALL BE INSTALLED TO STABILIZE SOIL AND REDUCE DAMAGE FROM SEDIMENT DEPOSITS, WIND AND/OR RUNOFF EROSION. VEGETATIVE COVERS SHALL BE INSTALLED ON ALL DISTURBED AREAS NOT PROTECTED BY OTHER EROSION CONTROL MEASURES AND ARE NOT INTENDED FOR PRIMARY CONSTRUCTION.

LEGEND



290 RAILROAD AVENUE
KEY MAP
GREENWICH, CONNECTICUT
NTS



D&M PLAN SUBMITTAL 04/08/2019

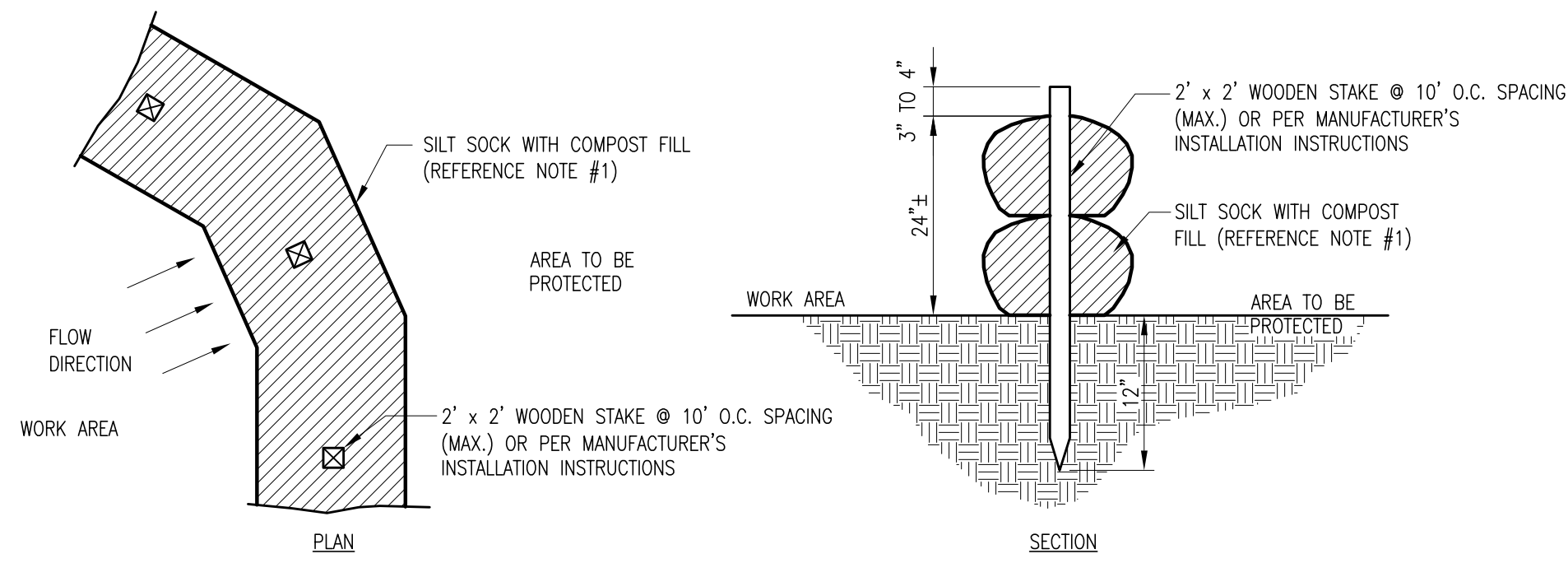
REVISIONS DURING CONSTRUCTION

NO.	DATE	DESCRIPTION



TITLE: GREENWICH 28F
SOIL EROSION & SEDIMENT CONTROL PLAN & NARRATIVE
CIVIL PLAN & DETAILS
GREENWICH, CT

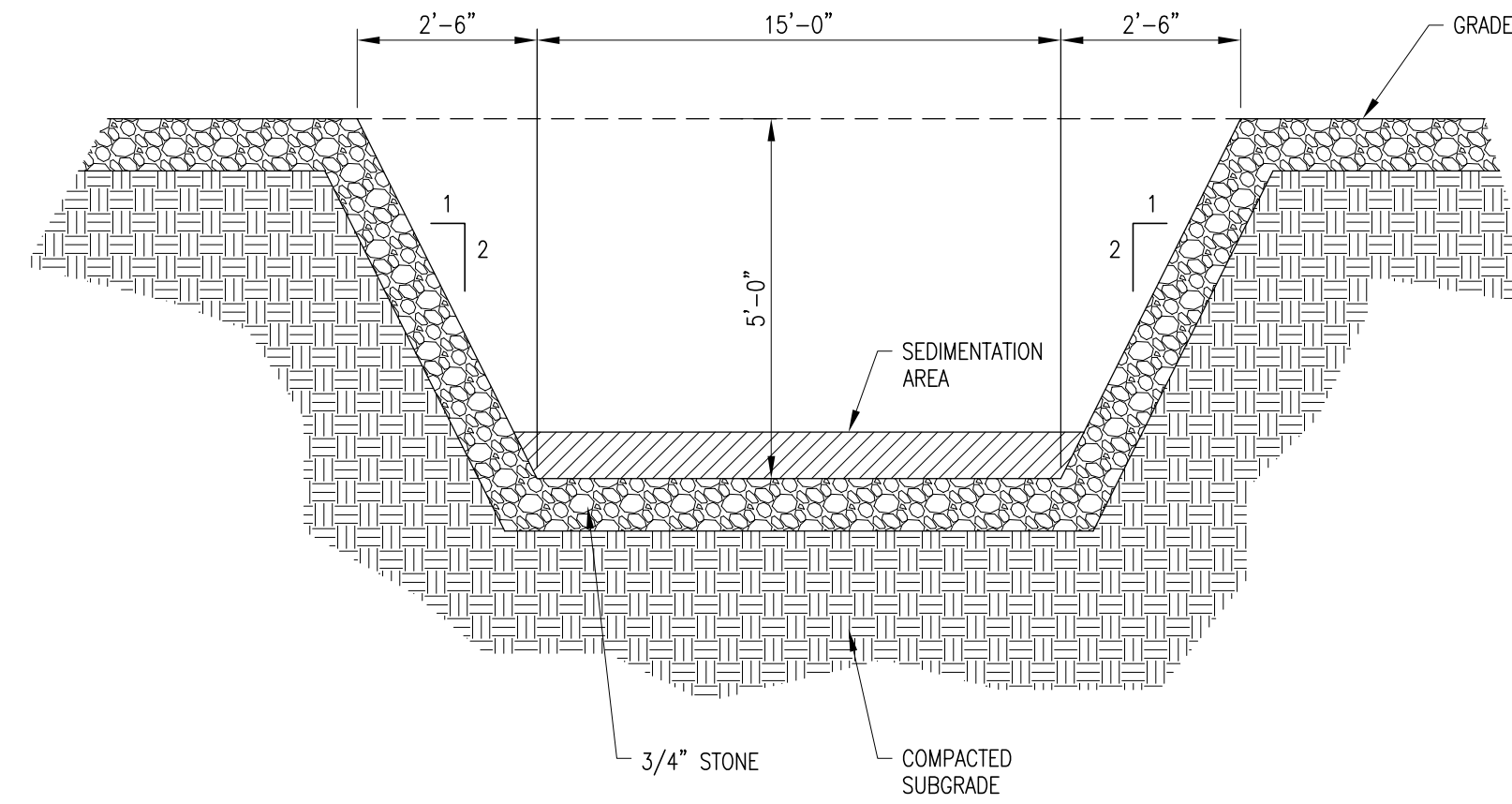
BY	PCS (PE)	DWG	TK (PE)	APP	VR (PE)	APP
DATE	-	DATE	-	DATE	-	DATE
H-SCALE	1"=20'	SIZE	D	FIELD BOOK & PAGES		
V-SCALE	1"=20'	V.S.		R.E. DWG		
R.E. PROJ. NUMBER		DWG NO.		15712-11005 PG 1		



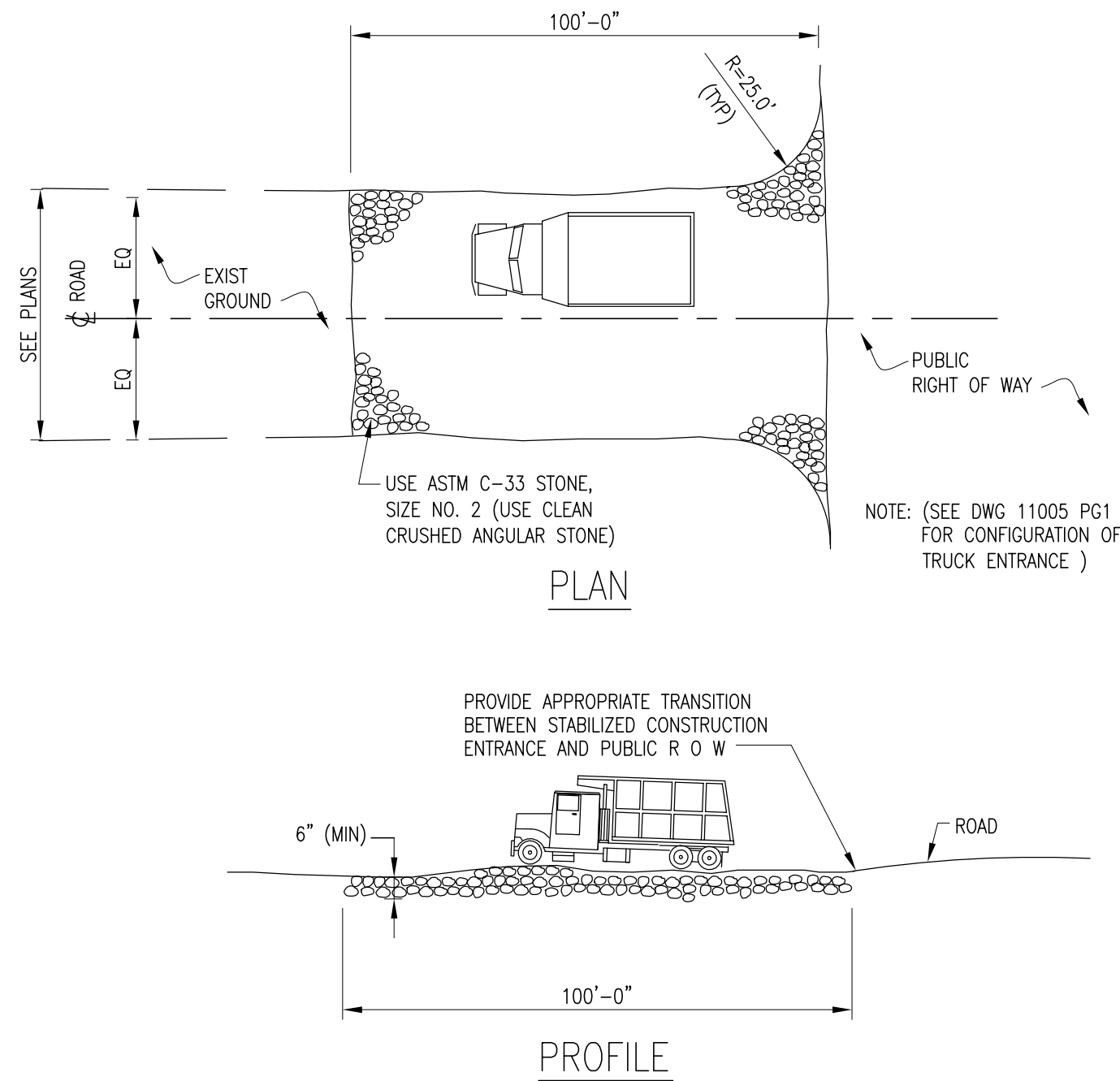
SILT SOCK DETAIL
DETAIL 1

SILT SOCK NOTES:

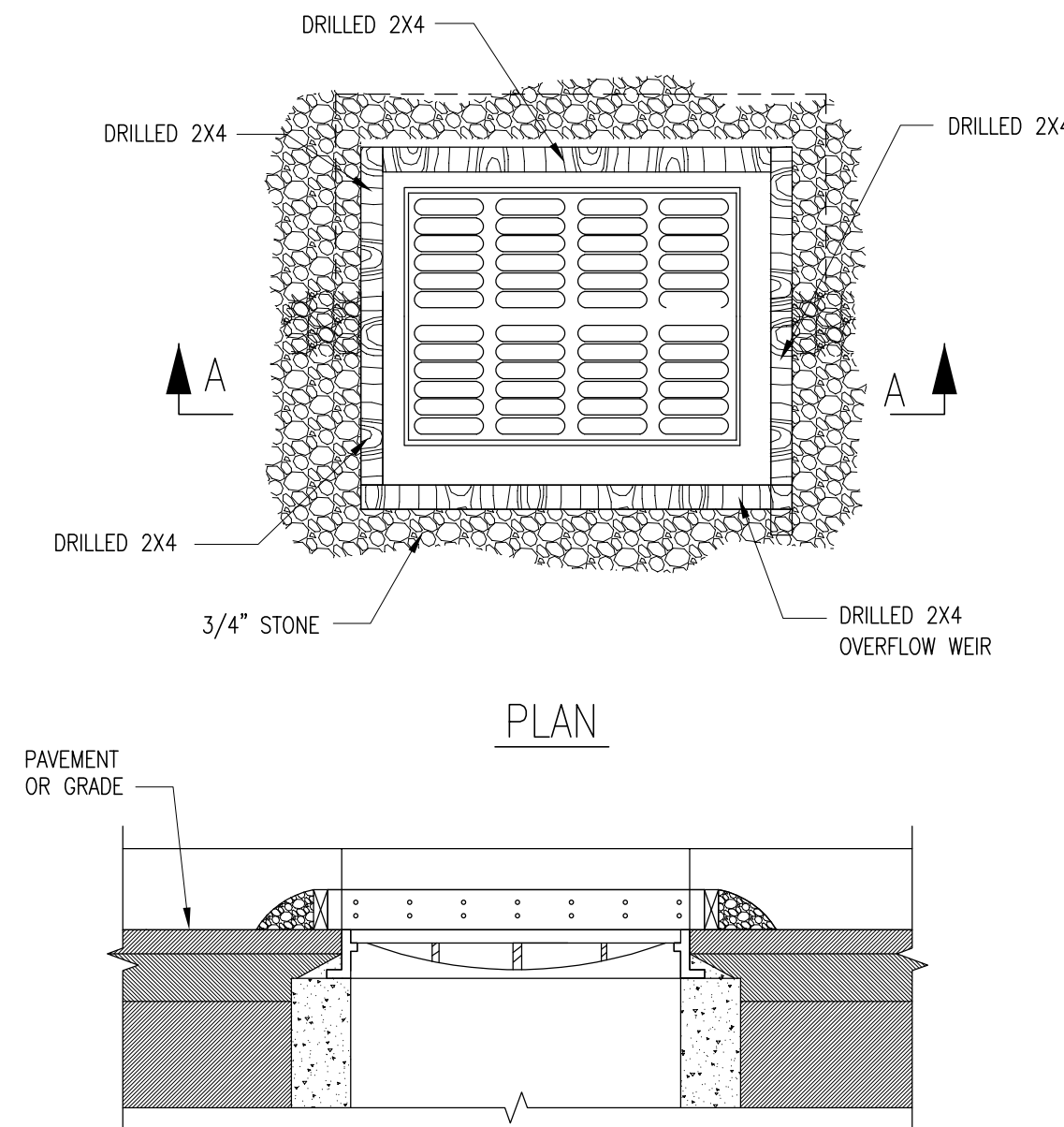
1. SILT SOCK SHALL BE BY FILTREXX SILTSOXX OR APPROVED EQUAL BY EVERSOURCE.
2. THE SILT SOCK SHALL BE PLACED AT LOCATIONS INDICATED ON PLANS ON DWG 11005 PG 1.
3. THE CONTRACTOR SHALL MAINTAIN THE SILT SOCK IN A FUNCTIONAL CONDITION AT ALL TIMES AND IT SHALL BE ROUTINELY INSPECTED. REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
4. THE CONTRACTOR SHALL REMOVE SEDIMENTS COLLECTED AT THE BASE OF THE SILT SOCK WHEN THEY REACH 1/3 OF THE EXPOSED HEIGHT OF THE DEVICE OR AS DIRECTED BY THE OWNER'S REPRESENTATIVE. SEDIMENT TRAPPED BY THIS PRACTICE SHALL BE DISPOSED OF IN AN APPROVED SITE IN A MANNER THAT WILL NOT CONTRIBUTE TO ADDITIONAL SILTATION.



TYPICAL DETENTION BASIN DETAIL
DETAIL 2



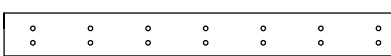
STABILIZED CONSTRUCTION ENTRANCE AND TIRE WASH
DETAIL 3



SECTION A-A
STORM SEWER INLET PROTECTION

NOTES:

1. INLET TO BE "BOXED" IN WITH 2X4'S STOOD ON EDGE.
2. 2 ROWS OF 1/2" HOLES TO BE DRILLED IN BOARDS, 6" O.C.
3. 3/4" STONE TO BE PILED AROUND "BOX" TO FILTER SEDIMENT



TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES

- 5.1 THE FOLLOWING ARE PLANNED AS TEMPORARY EROSION/ SEDIMENTATION CONTROL MEASURES DURING CONSTRUCTION:
- 5.2 A CRUSHED STONE STABILIZED CONSTRUCTION ENTRANCE SHALL BE PLACED AT THE SITE ACCESS ONTO FIELD POINT ROAD AND RAILROAD AVENUE.
- 5.3 SILT SOCK SHALL BE INSTALLED AND MAINTAINED UNTIL PROTECTED AREA IS RE-VEGETATED OR STABILIZED. SILT SOCK SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL GREATER THAN 0.1 INCH AND AT LEAST DAILY DURING PROLONGED RAINFALL. REFER TO CHAPTER 7 OF THE "GUIDELINES" FOR ADDITIONAL MAINTENANCE REQUIREMENTS.
- 5.4 DUST CONTROL SHALL BE USED TO PREVENT BLOWING AND MOVEMENT OF DUST FROM EXPOSED SOIL SURFACES AND REDUCE THE PRESENCE OF DUST WHICH MAY CAUSE OFF-SITE DAMAGE, BE A HEALTH HAZARD TO HUMANS, WILDLIFE, AND PLANT LIFE. THE NEED FOR DUST CONTROL WILL BE MINIMIZED BY REDUCING AREA OF LAND DISTURBANCE AT ANY ONE TIME, MAINTAINING AS MUCH VEGETATION AS PRACTICABLE, USE OF MULCHING AND TEMPORARY VEGETATIVE COVER. THE CONTRACTOR SHALL USE MECHANICAL SWEEPERS ON PAVED AREAS AND UTILIZE FINE WATER SPRAYS NEAR SOURCES OF DUST. THE EXPOSED SOIL AREAS SHALL BE PERIODICALLY MOISTENED. SPRAY-ON ADHESIVES DILUTED IN WATER MAY BE USED.
- 5.5 TEMPORARY SOIL STOCKPILES SHALL BE PROTECTED BY A SEDIMENT BARRIER. SIDE SLOPES OF THE STOCKPILES SHALL NOT EXCEED 2:1. THE STOCKPILES SHALL BE STABILIZED BY TEMPORARY SEEDING OR COVERING WITH MULCH.
- 5.6 TEMPORARY VEGETATIVE COVERS SHALL BE INSTALLED ON ALL DISTURBED AREAS NOT INTENDED FOR PRIMARY CONSTRUCTION AND HAVING THE POTENTIAL TO PRODUCE SEDIMENT AND CAUSE ON- AND OFF-SITE DAMAGES. SUCH AREAS SHALL BE COVERED WITH TOPSOIL AND SEED PER FIGURE 8-1 OF THE GUIDELINES. FOR ADDITIONAL SEEDING REQUIREMENTS REFER TO CHAPTER 6 OF THE GUIDELINES.
- 5.7 STONE CHECK DAMS SHALL BE INSTALLED AT ANY EVIDENT CONCENTRATED FLOW DISCHARGE POINTS.
- 5.8 STORM DRAIN CATCH BASIN INLET PROTECTION SHALL BE PROVIDED THROUGH THE USE OF SILT SOCK AROUND THE CATCH BASINS AS INDICATED ON DRAWINGS. THE BARRIERS SHALL ONLY BE REMOVED WHEN THE TRIBUTARY DRAINAGE AREA HAS BEEN STABILIZED.
- 5.9 SEQUENCE OF INSTALLATION
 - A. FIELD STAKEOUT THE LIMITS OF ALL CONSTRUCTION ACTIVITIES.
 - B. INSTALL ANTI-TRACKING PAD AT CONSTRUCTION ENTRANCE AS SHOWN ON THE PLAN.
 - C. INSTALL SILT SOCK BARRIERS AS NECESSARY TO CONTROL DRAINAGE ALONG THE ENTRY DRIVE. AT THE END OF EACH WORKING DAY, ANY ACCUMULATED SILT SHALL BE SWEEPED FROM THE EXISTING TOWN ROADS.
 - D. INSTALL SILT SOCK AROUND BOUNDARY OF THE CONSTRUCTION AREA.
 - E. CLEAR ALL VEGETATION FROM THE CONSTRUCTION AREA.

PERMANENT EROSION CONTROL MEASURES

- ALL PERMANENT EROSION CONTROL MEASURES SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE RECOMMENDATIONS OF THE GUIDELINES, INCLUDING THE FOLLOWING MEASURES:
- 6.1 PERMANENT VEGETATIVE COVER SHALL BE ESTABLISHED ON ALL DISTURBED/EXPOSED AREAS THAT ARE NOT SUBJECT TO OTHER RESTORATION, SUCH AS PAVING, RIPRAP, ETC. INSTALLATION AND MAINTENANCE REQUIREMENTS OF THE GUIDELINES SHALL BE FOLLOWED. EXPOSED AREAS SHALL BE LOAMED, LIMED, FERTILIZED, AND SEEDED. LIMESTONE AND FERTILIZER SHALL BE APPLIED IN ACCORDANCE WITH THE RESULTS OF SOIL TESTING OR AS RECOMMENDED BY THE GUIDELINES.
 - 6.2 ALL PERMANENT SEEDING SHALL BE DONE IN THE SPRING OR LATE SUMMER (BEFORE OCTOBER 1). ANY AREAS TO BE SEEDD OUTSIDE OF THIS TIME FRAME SHALL BE COVERED WITH AN EROSION CONTROL BLANKET TO STABILIZE THE SOIL UNTIL GROWTH CAN BE ESTABLISHED. SEEDING MIXTURES SHALL BE SELECTED IN ACCORDANCE WITH FIGURES 8-2 OR 8-3 OF THE GUIDELINES OR AS RECOMMENDED BY THE SOIL CONSERVATION SERVICE. HYDROSEEDING SHALL BE USED WHERE INDICATED ON THE PLANS AND IN CRITICAL AREAS. MULCH SHALL BE APPLIED AND ANCHORED AS RECOMMENDED UNDER "EROSION AND SEDIMENT CONTROL DEVICES" ABOVE. SLOPES STEEPER THAN 3:1 SHALL RECEIVE NORTH AMERICAN GREEN S75 OR S150 STRAW TURF REINFORCEMENT BLANKET OR APPROVED EQUAL.
 - 6.3 THE RIPRAP APRONS AND PLUNGE POOLS SHALL BE CONSTRUCTED AND STABILIZED WHERE SHOWN ON THE CONSTRUCTION DRAWINGS AND AT THE PIPE OUTLETS PRIOR TO DIRECTING RUNOFF TO EITHER STORMWATER RENOVATION AREA AND AT ALL STORM DRAINAGE OUTLETS.

STORM DRAINAGE SYSTEM MAINTENANCE

- 7.1 STORM DRAINAGE FEATURES SHALL BE INSPECTED ON AN ANNUAL BASIS. ANY FLOATABLES, TRASH, DEBRIS OR SEDIMENT BUILD-UP SHALL BE REMOVED BY A LICENSED CONTRACTOR. GRASS-LINED SWALES IF CONSTRUCTED WILL BE MOWED.
- 7.2 THE ON-SITE STORM DRAINAGE FEATURES MUST BE MAINTAINED IN GOOD WORKING CONDITION IN ACCORDANCE WITH THE INTENT OF THESE PLANS.

D&M PLAN SUBMITTAL 04/08/2019

REVISIONS DURING CONSTRUCTION

NO.	DATE	DESCRIPTION

EVERSOURCE ENERGY

TITLE
**GREENWICH 28F
SOIL EROSION & SEDIMENT CONTROL DETS & NARRATIVE
CIVIL PLAN & DETAILS
GREENWICH, CT**

BY	PCS (PEI)	DRW	TK (PEI)	APP	VR (PEI)	APP	
DATE	-	DATE	-	DATE	-	DATE	
H-SCALE	N.T.S.	SIZE	D	FIELD BOOK & PAGES			
V-SCALE	N.T.S.	V.S.	-	R.E. DWG			
R.E. PROJ. NUMBER						DWG NO.	15712-11005 PG 2