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November 29, 2016

Robert Stein, Chairman
Connecticut Siting Council
10 Franklin Square
New Britain, CT 06051

**Re: Petition No. 1251- 900 Line Rebuild Project
Development & Management Plan**

Dear Chairman Stein:

On behalf of The Connecticut Light and Power Company doing business as Eversource Energy ("Eversource" or the "Company") and pursuant to Condition 1 of the November 10, 2016 ruling of the Connecticut Siting Council ("Council") on the subject petition, enclosed are the original and 15 copies of Eversource's Development and Management Plan ("D&M Plan") for the 900 Line Rebuild Project ("Project") to reduce permanent impacts from access road construction.

The D&M Plan is set forth below and is comprised of text and the attached drawings. The specifics of the D&M Plan are applicable to the entire length of the Project (3.8 miles), which is located between Eversource's structure 6590 at the Mansfield Junction and continues to structure 6629, located at the Skungamaug Substation in Coventry, Connecticut.

DEVELOPMENT AND MANAGEMENT PLAN

As the Council is aware, the Project was initiated as a maintenance project in anticipation of structure replacements that were to be no taller than the existing structures being replaced. After initial Project activities had begun, final engineering determined that most of the structures would need to increase in height to accommodate the new conductor and to comply with updated clearance requirements. At the time of this final engineering determination, the Project was immediately stopped until a ruling from the Council approving the Project could be requested and granted. To date, all access roads and work pads have been constructed.

Upon review of the access road installation, the Council determined that the installation was too robust and has directed Eversource to modify the existing installation, in accordance with the Council's expectations regarding consistency with Eversource's past practices. In response to the Council's directive, Eversource will implement the following steps, per the Company's Best Management Practices Manual: Connecticut Construction and Maintenance Environmental Requirements, 2011 ("BMPs"), which was prepared for Eversource by Tighe & Bond. Since the Petition's filing, the BMP manual has been updated and was reissued in September 2016. Eversource's proposed action is consistent with both editions of the BMPs:

- 1) Reduce any upland access road areas to no more than a 16 foot total width in all cases, including any graveled shoulder areas.
- 2) Implement temporary and permanent erosion and sedimentation ("E&S") controls, as necessary, per the enclosed illustrations from the BMPs.
- 3) Seed any disturbed areas and remove temporary E&S controls after stabilization is achieved.

Accordingly, Eversource requests that the Council approve the proposed D&M Plan.

Sincerely,

A handwritten signature in black ink, appearing to read "Kathleen C. Stanley". The signature is fluid and cursive, with the first name "Kathleen" being the most prominent part.

Enclosures

SOIL EROSION AND SEDIMENTATION CONTROL

EROSION AND SEDIMENTATION (E&S) CONTROL MEASURES WILL BE INSTALLED PRIOR TO THE START OF CONSTRUCTION AND MAINTAINED THROUGHOUT TO AVOID OR MINIMIZE THE POTENTIAL FOR SURFACE WATER RUNOFF, EROSION, AND SEDIMENTATION TO OCCUR OUTSIDE OF WORK LIMITS. THESE MEASURES WILL COMPLY WITH THE 2002 CONNECTICUT GUIDELINES FOR EROSION AND SEDIMENT CONTROL ([HTTP://WWW.CT.GOV/DEEP/LIB/DEEP/WATER_INLAND/SESC/SECS_CHAPTER_1_5.PDF](http://www.ct.gov/deep/lib/deep/water_inland/esc/secs_chapter_1_5.pdf)), WITH EVERSOURCE'S BMP MANUAL ([HTTP://WWW.TRANSMISSION-NU.CINSTOM/CONTRACTORS/PDF/CT_BMP.PDF](http://www.transmission-nu.cinstom/contractors/pdf/ct_bmp.pdf)), AS WELL AS APPLICABLE PERMIT CONDITIONS. THE FOLLOWING ARE OBJECTIVES OF THE E&S MEASURES:

- A. INSTALLING AND MAINTAINING EROSION AND SEDIMENT CONTROL MEASURES DURING CONSTRUCTION;
- B. PROTECTING WATER RESOURCE AREAS DURING CONSTRUCTION;
- C. MINIMIZING THE QUANTITY AND DURATION OF SOIL EXPOSURE (STABILIZE EXPOSED SOILS IMMEDIATELY UPON COMPLETION OF GRADING OR STOCKPILING);
- D. INSPECTING THE WORK AREAS AND MAINTAINING EROSION AND SEDIMENT CONTROLS AS NECESSARY UNTIL FINAL STABILIZATION AND INSPECTION ARE ACHIEVED

THE APPLICATION OF THE TECHNIQUES IN THE FIELD WILL BE DETERMINED BY THE CONTRACTOR FIELD CONSTRUCTION PERSONNEL AND WILL DEPEND ON SITE-SPECIFIC CONDITIONS. FACTORS THAT MAY BE CONSIDERED IN THE SELECTION OF EROSION AND SEDIMENT CONTROLS FOR SITE-SPECIFIC AREAS MAY INCLUDE:

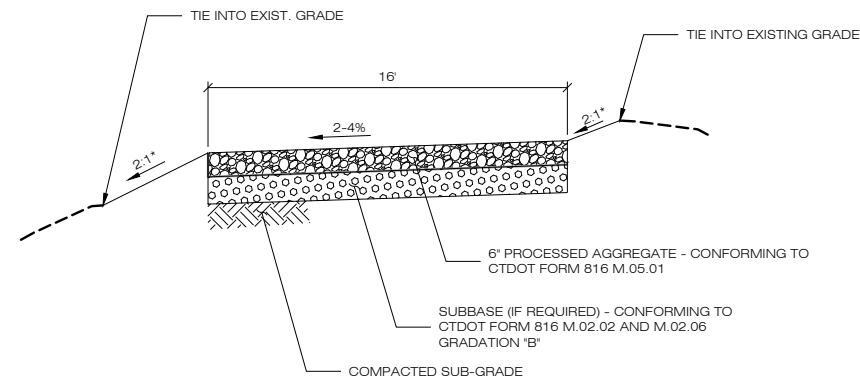
- A. SIZE OF THE AREA AFFECTED;
- B. TYPE OF PROPOSED CONSTRUCTION ACTIVITIES;
- C. TYPE AND TEXTURE OF SOIL
- D. AMOUNT OF ROCK PRESENT;
- E. STEEPNESS AND LENGTH OF SLOPE;
- F. AMOUNT AND TYPE OF VEGETATIVE COVER;
- G. PROXIMITY AND DIRECTION TO WATERCOURSES OR WETLANDS;
- H. ANTICIPATED WEATHER CONDITIONS AND GROUND CONDITIONS.

EROSION AND SEDIMENTATION CONTROL NOTES

1. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS OF THE “2002 CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL”, CTDEEP BULLETIN NO. 34, AND ALL AMENDMENTS AND ADDENDA THERETO AS PUBLISHED BY THE CONNECTICUT DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION.
2. LAND DISTURBANCE SHALL BE KEPT TO THE MINIMUM NECESSARY FOR CONSTRUCTION OPERATIONS.
3. INSTALL ALL CONTROL MEASURES AS SHOWN ON THE PLANS AND ELSEWHERE AS NECESSARY TO PREVENT SOIL EROSION AND SEDIMENT TRANSPORT TO RESOURCE AREAS. ADDITIONAL CONTROLS, NOT DEPICTED ON THE PLANS, MAY BE NECESSARY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ASSESS THE NEED FOR, AND INSTALL ADDITIONAL CONTROLS THAT ARE WARRANTED BY SITE CONDITIONS.
4. IN SOME LOCATIONS, RETAINING WALLS MAY BE NECESSARY TO PROVIDE A LEVEL WORK AREA WHERE STEEP TOPOGRAPHY EXISTS. IT IS THE RESPNSIBILITY OF THE CONTRACTOR TO DETERMINE THE EXACT LOCATION OF RETAINING WALLS, CONSTRUCTION METHODS UTILIZED, AND SAFETY MEASURES DEPLOYED.
5. UPON COMPLETION OF CONSTRUCTION, IT IS THE CONTRACTORS RESPONSIBILITY TO REMOVE RETAINING WALLS, REGRADE AND STABILIZE SLOPES IN COMPLIANCE WITH THE 2002 CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL.
6. INSPECT AND MAINTAIN CONTROL MEASURES THROUGHOUT THE CONSTRUCTION PERIOD. INSPECTIONS SHALL BE CONDUCTED AFTER EACH RAINSTORM AND DURING MAJOR STORM EVENTS TO DETERMINE IF ALL CONTROL MEASURES ARE ADEQUATELY IN PLACE AND EFFECTIVE.
7. SEDIMENT REMOVED SHALL BE PROPERLY DISPOSED OF IN AN APPROPRIATE UPLAND AREA WITHIN THE DEFINED LIMITS OF DISTURBANCE
8. STOCKPILE TOPSOIL IN LEVEL UPLAND AREAS AND CONTAIN USING HAY BALES AND/OR SILT FENCE AROUND THE PERIMETER.
9. STOCKPILING OF EXCESS SOIL GENERATED AS A RESULT OF STRUCTURE / FOUNDATION INSTALLATION WORK WITHIN WETLANDS IS PROHIBITED, EXCEPT THAT SOILS OR OTHER EXCAVATED MATERIAL MAY BE TEMPORARILY STOCKPILED AND CONTAINED ON THE WORK PAD LOCATED WITHIN A WETLAND PRIOR TO TRANSPORT TO AN UPLAND AREA
10. IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS, STABILIZATION OF OPEN SOIL SURFACES WILL BE IMPLEMENTED WITHIN 7 DAYS AFTER GRADING OR CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, UNLESS WEATHER PROHIBITS SEED GERMINATION.
11. WHERE NECESSARY, IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS, SUITABLE TOPSOIL, SEEDBED PREPARATION, AND WATER SHALL BE PROVIDED FOR EFFECTIVE ESTABLISHMENT OF VEGETATIVE COVER.
12. THE CONSTRUCTION CONTRACTOR SHALL KEEP ALL PAVED ROADWAYS CLEAN.
13. INSPECT AND MAINTAIN TEMPORARY EROSION AND SEDIMENTATION CONTROLS UNTIL RESTORATION HAS BEEN DETERMINED TO BE EFFECTIVE AS DEFINED BY CONFORMANCE TO THE CT DEEP GENERAL PERMIT FOR THE DISCHARGE OF STORMWATER AND DEWATERING WASTEWATERS ASSOCIATED WITH CONSTRUCTION ACTIVITIES.

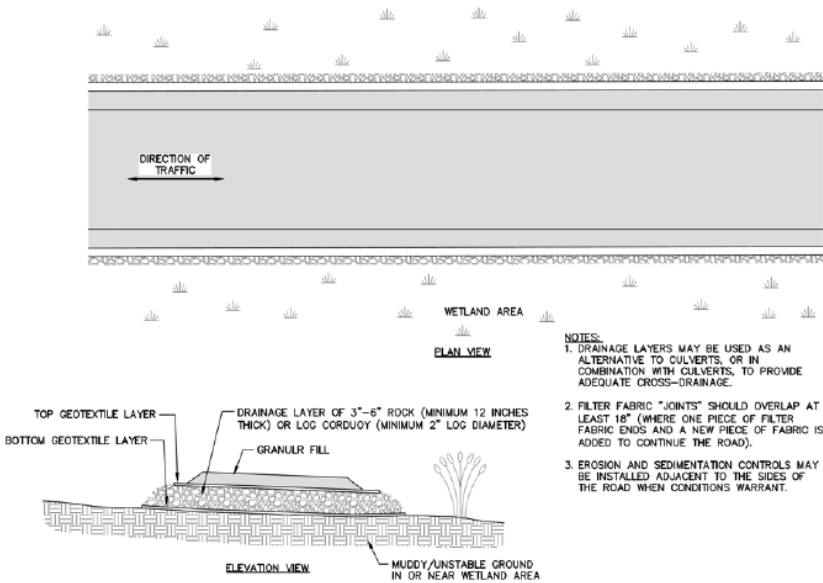
								EVERSOURCE ENERGY
								900 Line Rebuild Project
								EROSION & SEDIMENTATION CONTROL NOTES
								Detail Sheet 01 of 04
NO.	DATE	REVISIONS	BY	CHK	APP	APP		<div>DAVISON ENVIRONMENTAL</div> <div>ALL-POINTS TECHNOLOGY CORPORATION</div>

ACCESS ROAD TYPICAL DETAILS



- NOTES:
- 1. SUBBASE MAY CONSIST OF NATIVE MATERIALS IF FOUND ACCEPTABLE BY THE ENGINEER. SUBBASE TO BE COMPACTED TO 95% MAX DRY DENSITY.
 - 2. SUBBASE IS TO BE FREE FROM DEBRIS AND UNSUITABLE MATERIALS.
 - 3. THE PREFERRED CUT AND FILL SLOPE IS 2:1, HOWEVER THE ENGINEER OF RECORD MAY REVISE THE CUT SLOPE TO 1.5:1 IF CUT SLOPE IS ROCK OR WELL CEMENTED SOIL.

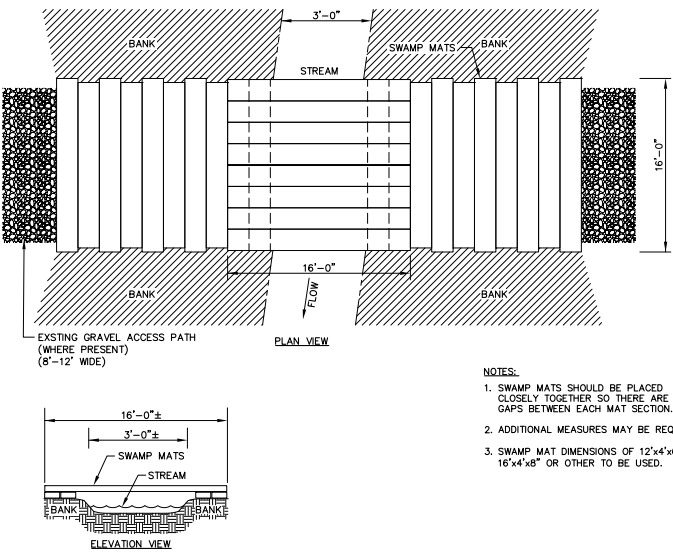
GRAVEL ACCESS ROAD
SCALE : N.T.S.



- NOTES:
- 1. DRAINAGE LAYERS MAY BE USED AS AN ALTERNATIVE TO CULVERTS, OR IN COMBINATION WITH CULVERTS, TO PROVIDE ADEQUATE CROSS-DRAINAGE.
 - 2. FILTER FABRIC "JOINTS" SHOULD OVERLAP AT LEAST 18" (WHERE ONE PIECE OF FILTER FABRIC ENDS AND A NEW PIECE OF FABRIC IS ADDED TO CONTINUE THE ROAD).
 - 3. EROSION AND SEDIMENTATION CONTROLS MAY BE INSTALLED ADJACENT TO THE SIDES OF THE ROAD WHEN CONDITIONS WARRANT.

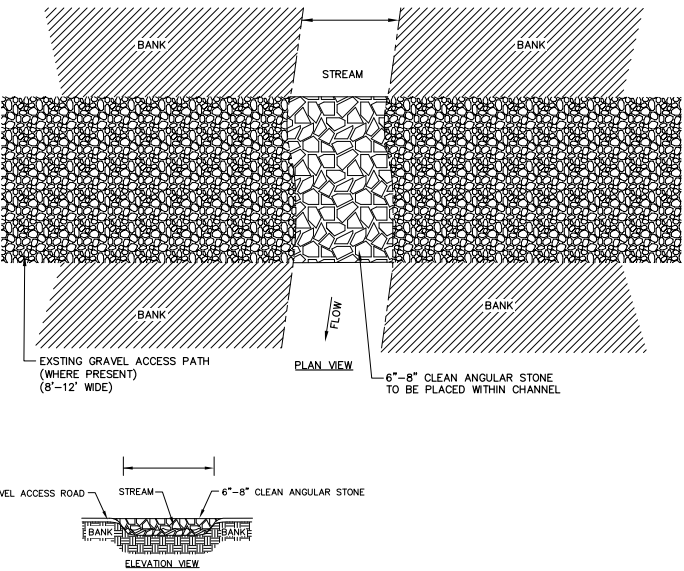
PERMEABLE ROAD WETLAND CROSSING
SCALE: NTS

STREAM CROSSING TYPICAL DETAILS

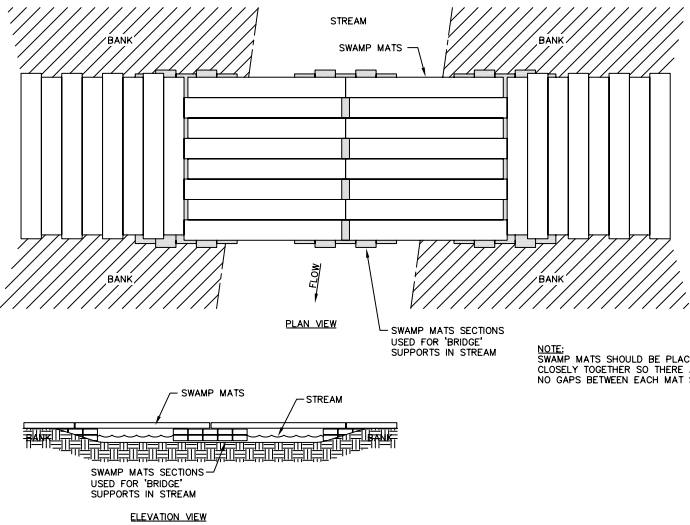


- NOTES:
- 1. SWAMP MATS SHOULD BE PLACED CLOSELY TOGETHER SO THERE ARE NO GAPS BETWEEN EACH MAT SECTION.
 - 2. ADDITIONAL MEASURES MAY BE REQUIRED.
 - 3. SWAMP MAT DIMENSIONS OF 12'x4'x6", 16'x4'x8" OR OTHER TO BE USED.

SWAMP MAT BRIDGE
FOR TEMPORARY STREAM CROSSING
SCALE: NTS

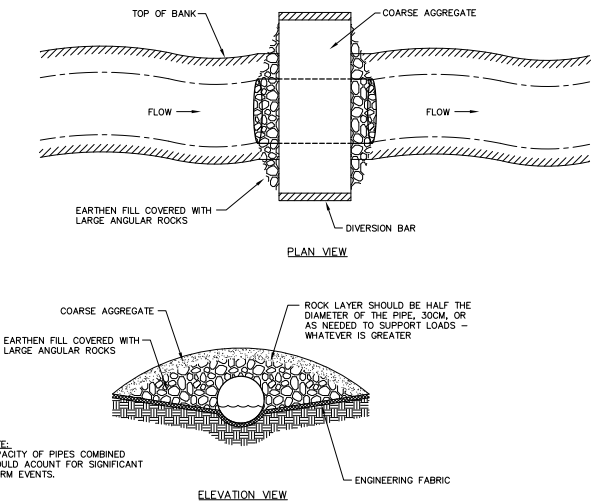


HARD BOTTOM FOR
INTERMITTENT STREAM CROSSING
SCALE: NTS



NOTE:
SWAMP MATS SHOULD BE PLACED CLOSELY TOGETHER SO THERE ARE NO GAPS BETWEEN EACH MAT SECTION.

SWAMP MAT BRIDGE
FOR TEMPORARY STREAM CROSSING
SCALE: NTS



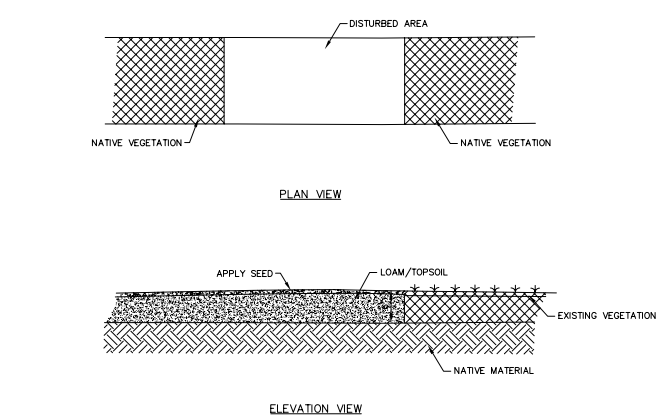
NOTE:
CAPACITY OF PIPES COMBINED SHOULD ACCOUNT FOR SIGNIFICANT STORM EVENTS.

CULVERT CROSSING
FOR LONGER-TERM BUT TEMPORARY ACCESS
SCALE: NTS

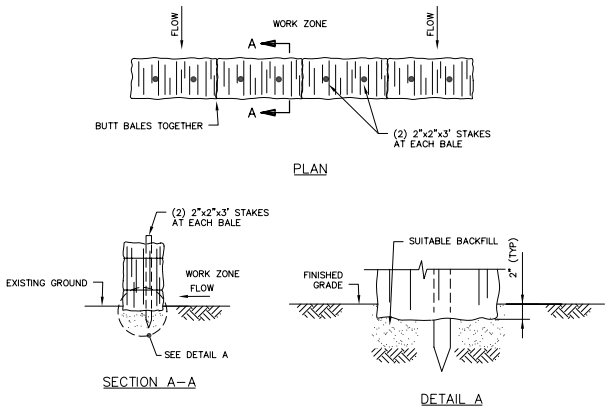
SOME DETAILS SHOWN HERE ARE FROM EVERSOURCE'S
BEST MANAGEMENT PRACTICES MANUAL: CONNECTICUT
PREPARED BY TIGHE&BOND, SEPTEMBER 2016

							EVERSOURCE ENERGY	
							900 Line Rebuild Project	
							ACCESS ROAD AND STREAM CROSSING TYPICAL DETAILS	
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NO.	DATE	REVISIONS	BY	CHK	APP	APP	DAVISON ENVIRONMENTAL	ALL-POINTS TECHNOLOGY CORPORATION

EROSION AND SEDIMENTATION CONTROL
TYPICAL DETAILS

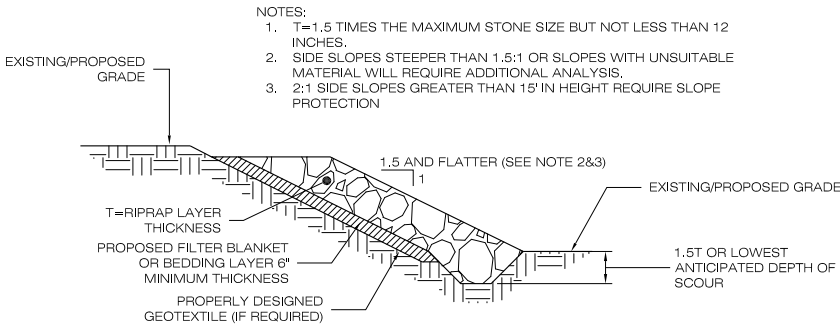


LOAMING AND SEEDING
SCALE: NTS

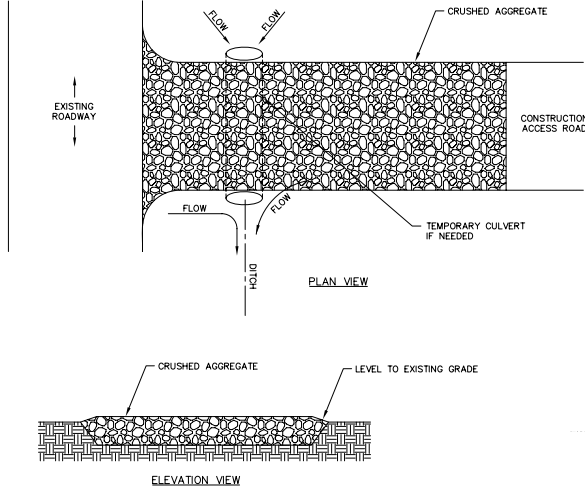
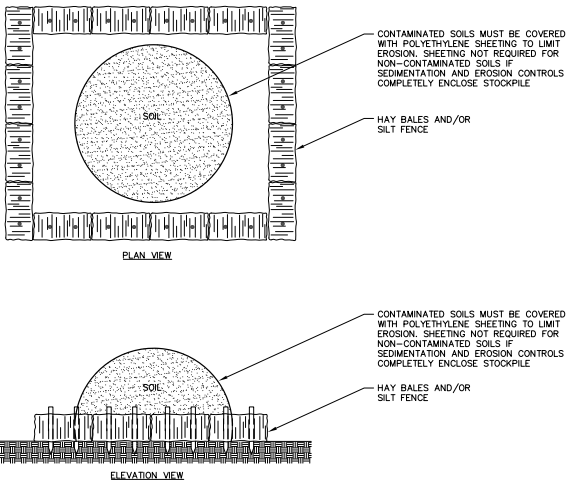
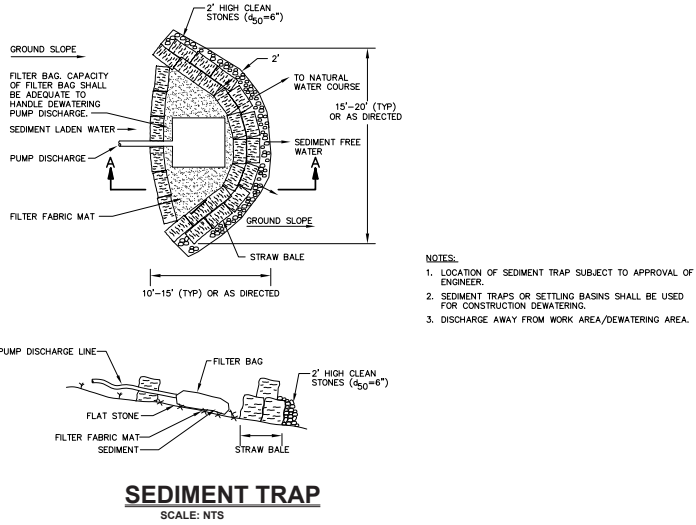
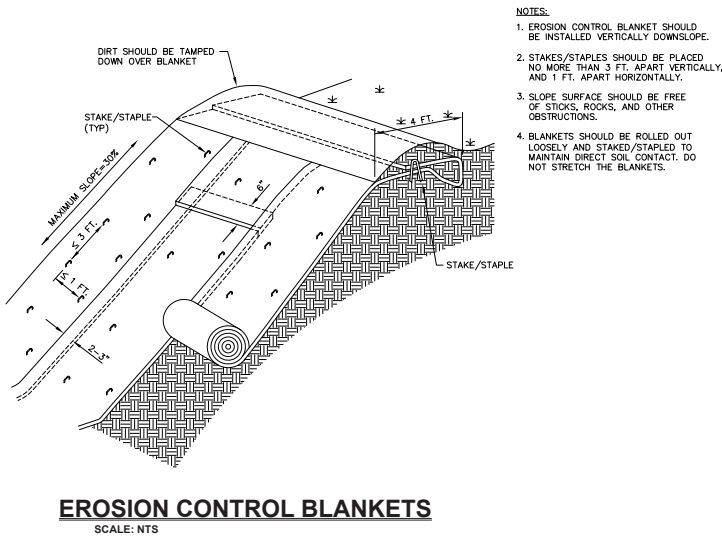
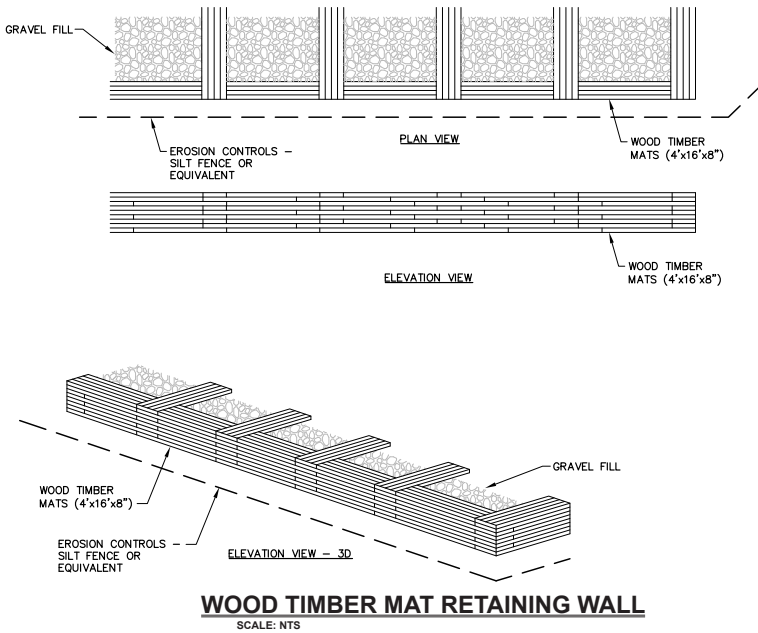


NOTE:
STRAW BALES MAY BE SUBSTITUTED FOR HAY BALES.

HAY BALES USAGE
SCALE: NTS



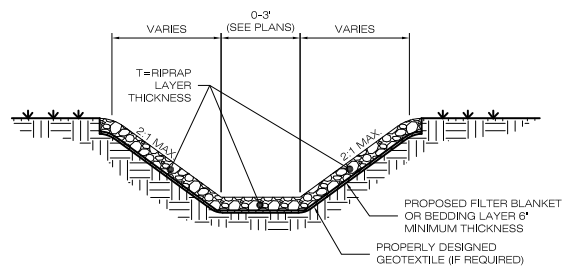
RIPRAP SLOPE PROTECTION
SCALE : NTS



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PREPARED BY TIGHE&BOND, SEPTEMBER 2016

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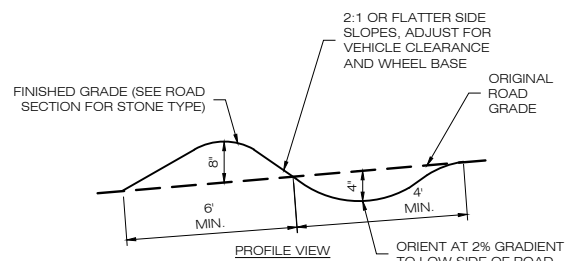
EROSION AND SEDIMENTATION CONTROL **TYPICAL DETAILS**



- NOTES:
1. $T = 1.5$ TIMES THE MAXIMUM STONE SIZE BUT NOT LESS THAN 12 INCHES.
 2. THE TOTAL HEIGHT OF THE LINING IS DEPENDENT UPON THE DESIGN DEPTH OF FLOW PLUS RUNUP DUE TO CHANNEL CURVATURE, PLUS FREEBOARD.
 3. IN CHANNELS WITH SIGNIFICANT BOTTOM WIDTHS LOW FLOW CHANNELS MAY BE INCORPORATED.
 4. SIDE SLOPES STEEPER THAN 2:1 OR SLOPES WITH UNSUITABLE MATERIAL WILL REQUIRE ADDITIONAL ANALYSIS.
 5. STONE CHECK DAMS SHALL BE INSTALLED IN ALL SWALES

RIPRAP LINED SWALE

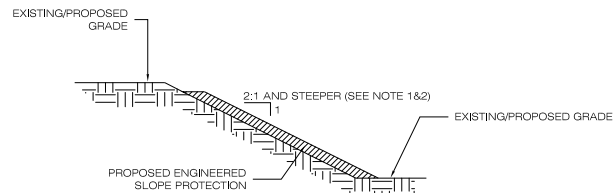
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- NOTES:**
1. SHALL BE ORIENTATED AT A 10 DEGREE ANGLE DOWNGRADE.
 2. RIP-RAP OUTFALL SHALL BE INSTALLED AT OUTFALL TO AVOID WASHOUT.
 3. WATER BARS SHALL MAINTAIN A MINIMUM OF 6" STONE IN ALL AREAS.
 4. WATERBARS SHALL DISCHARGE TO A STABLE AREA OR HAVE A RIP-AP OUTFALL SHALL BE INSTALLED TO AVOID WASHOUT.
 5. DAMAGED OR ERODED WATERBARS SHALL BE RESTORED TO ORIGINAL DIMENSIONS WITHIN 48 HOURS OF INSPECTION.
 6. MAINTENANCE OF WATERBARS SHALL BE PROVIDED UNTIL ROADWAY, SKIDTRAIL, OR DITCH HAS ACHIEVED PERMANENT STABILIZATION.
 7. WATERBARS SHALL BE INSTALLED PRIOR TO ANY SWITCH BACK OR SHARP CURVE.

WATERBAR DETAIL

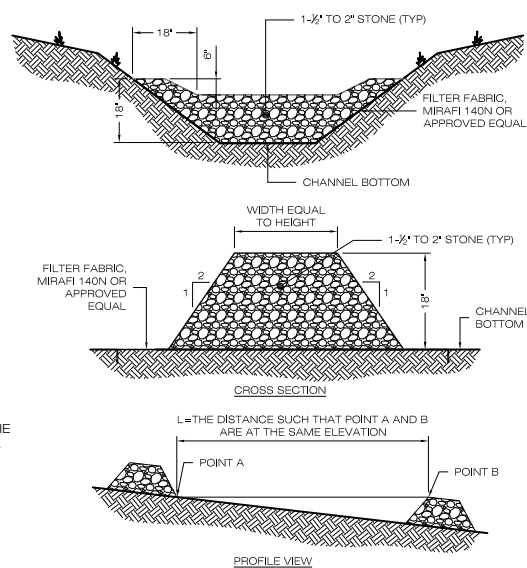
SCALE : N.T.S.



- NOTES:
1. SIDE SLOPES STEEPER THAN 2:1 WILL REQUIRE AN ENGINEERED SLOPE PROTECTION TO BE PROVIDED BY THE CONTRACTOR FOR REVIEW BY THE ENGINEER. RIPRAP SLOPE PROTECTION WILL NOT BE ACCEPTABLE.
 2. 2:1 SIDE SLOPES GREATER THAN 15' IN HEIGHT REQUIRE ENGINEERED SLOPE PROTECTION TO BE PROVIDED BY THE CONTRACTOR FOR REVIEW BY THE ENGINEER. RIPRAP SLOPE PROTECTION WILL NOT BE ACCEPTABLE.

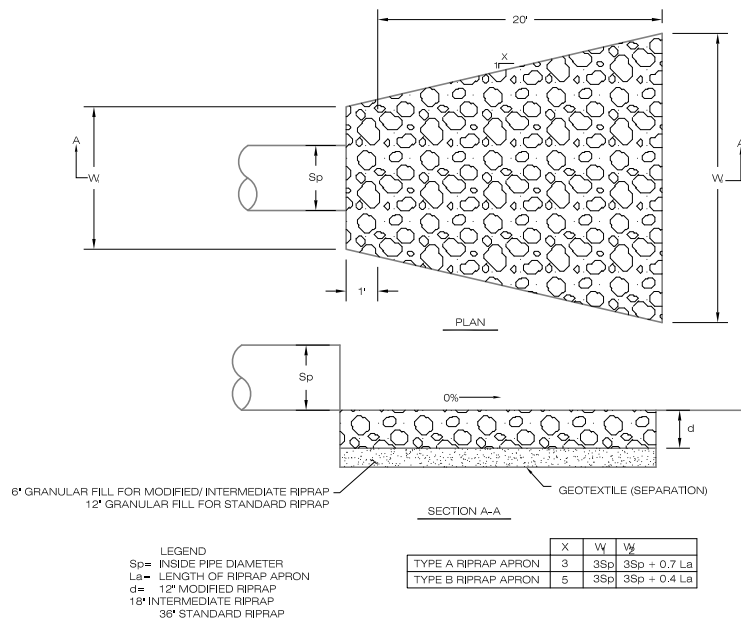
ENGINEERED SLOPE PROTECTION

SCALE : NTS



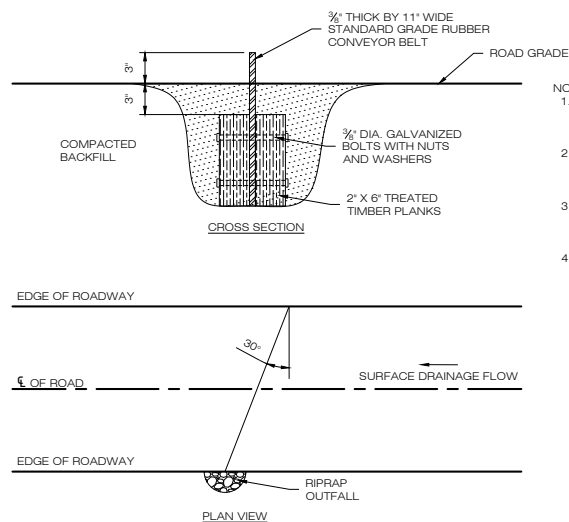
STONE CHECK DAM

SCALE : NTS



RIPRAP OUTLET PROTECTION

SCALE : NTS



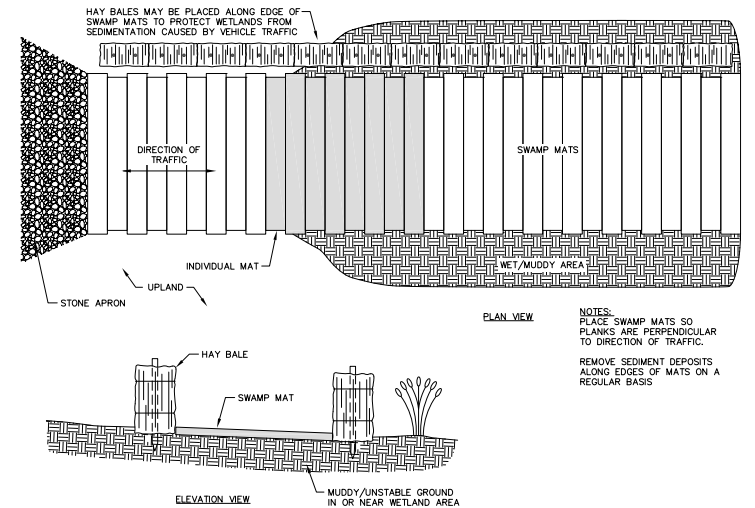
- NOTES:
1. DEFLECTORS SHALL BE USED ON ACCESS ROADS WITH SLOPES GREATER THAN 10 PERCENT OR WHERE SPECIFIED.
 2. DURING CONSTRUCTION DEFLECTORS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT.
 3. ACCUMULATED SEDIMENT SHALL BE REMOVED FROM DEFLECTOR WITHIN 24 HOURS OF INSPECTION.
 4. BELTS SHALL BE REPLACED WHEN WORN OR NO LONGER EFFECTIVE.

RECOMMENDED WATER DEFLECTOR SPACING	
PERCENT SLOPE	SPACING (FT)*
2%	245
5%	125
7.5%	100
10%	80
15%	60
20%	45
25%	40
30%	35

* OR AS DIRECTED BY THE
ENGINEER OF RECORD.

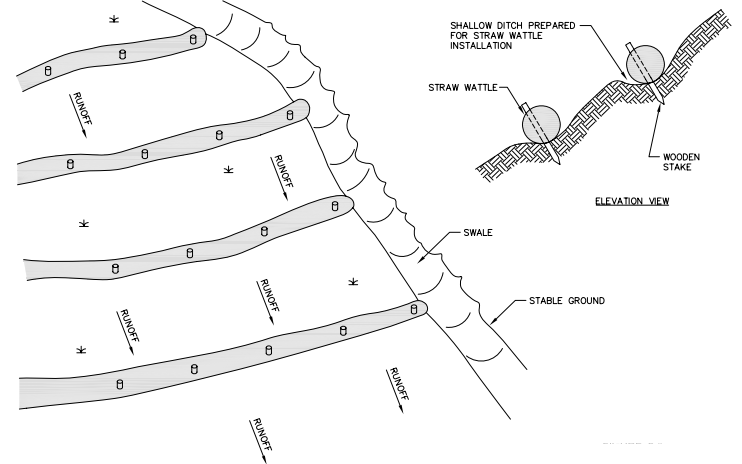
WATER DEFLECTOR

SCALE : NTS






SWAMP MAT USE

SCALE: NTS



STRAW WATTLE USAGE

SCALE: NTS

									
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