

3/17/2023 7:18:25 AM P:\StandDraw\DESIGN STANDARDS\Standards Drawings\Standard Roadway Drawings - CURRENT\In Progress\10-108.00 Erosion Prevention and Sediment Control IP\180.02 Slope Devices IP\ECSTR3D-2

REV. 12-18-03: REPLACED TABLE 3 AND MODIFIED GENERAL NOTES (B), (D), AND (I)

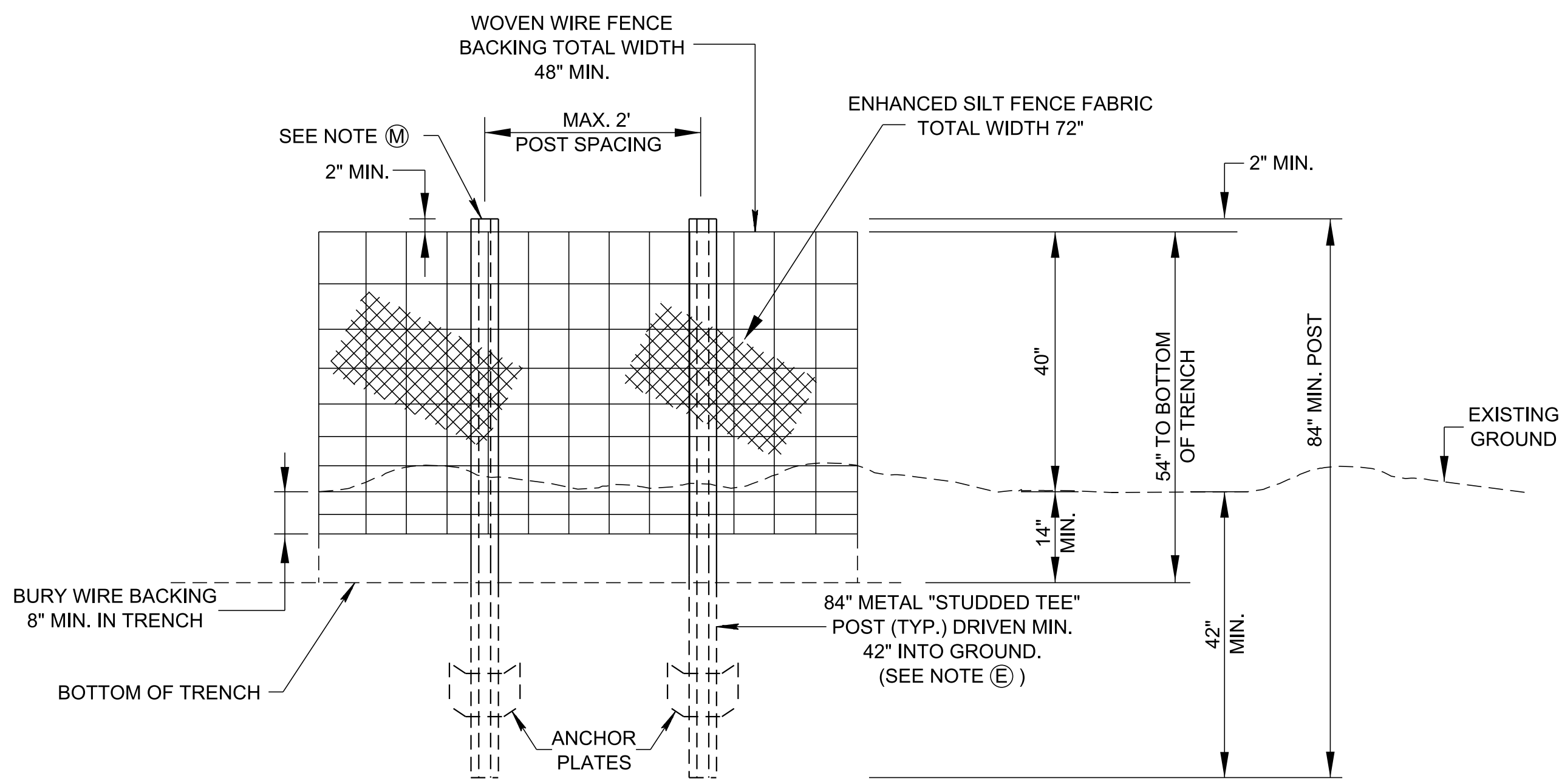
REV. 7-29-04: CHANGED VALUES IN TABLE 3 FROM MEAN TO MARV VALUES.

REV. 4-15-06: MODIFIED NOTE (H) ADDED NOTE (I). REVISED TABLE TITLE. REORDERED GENERAL NOTES. REFORMATTED SHEET. REVISED NOTES. MISC. EDITS TO DRAWING.

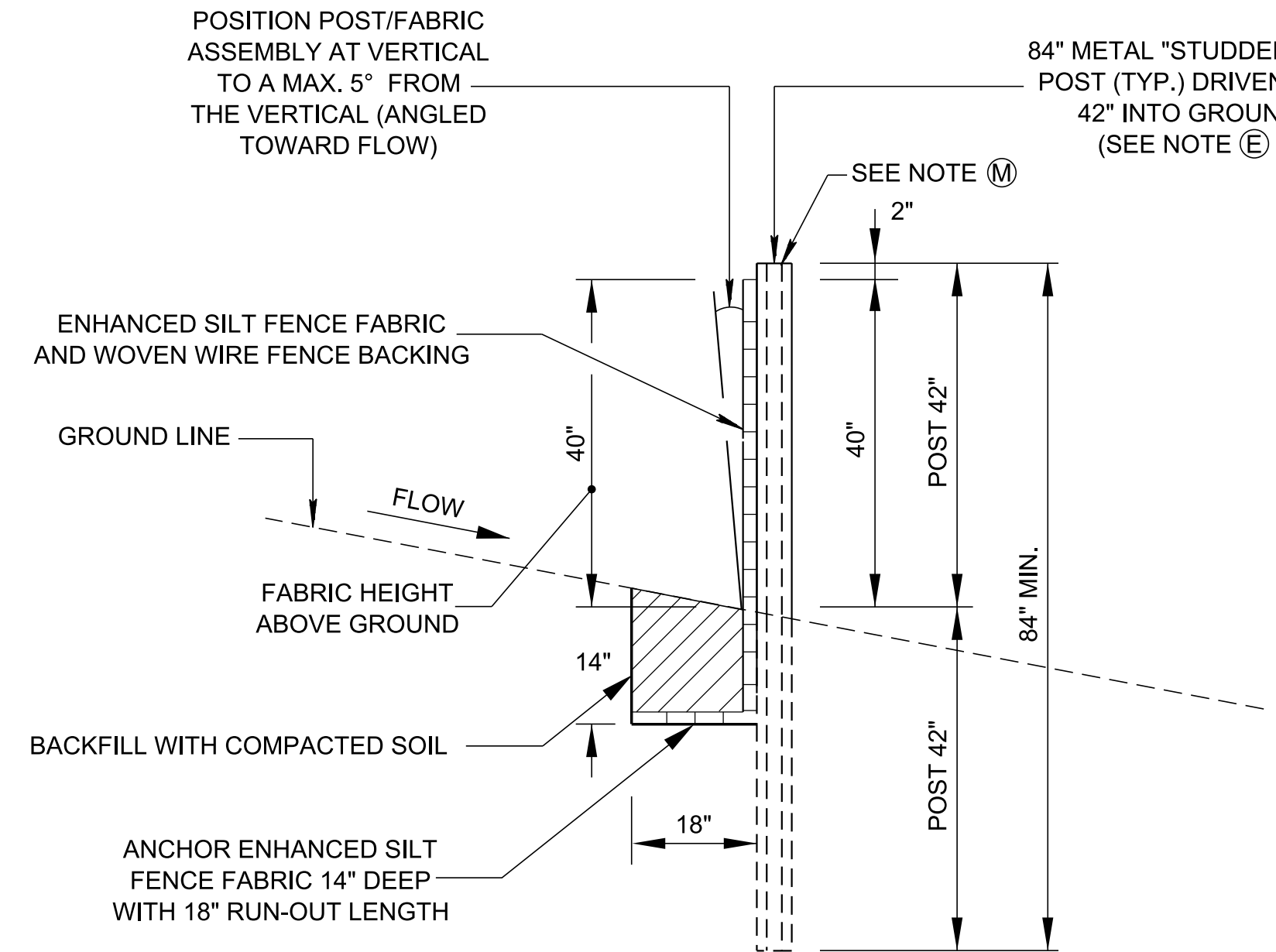
REV. 4-1-08: REMOVED TEMPORARY REFERENCE, REVISED GENERAL NOTES, AND MISC. EDITS TO DRAWING.

REV. 06-28-19: ADDED NOTE (M). REDREW SHEET.

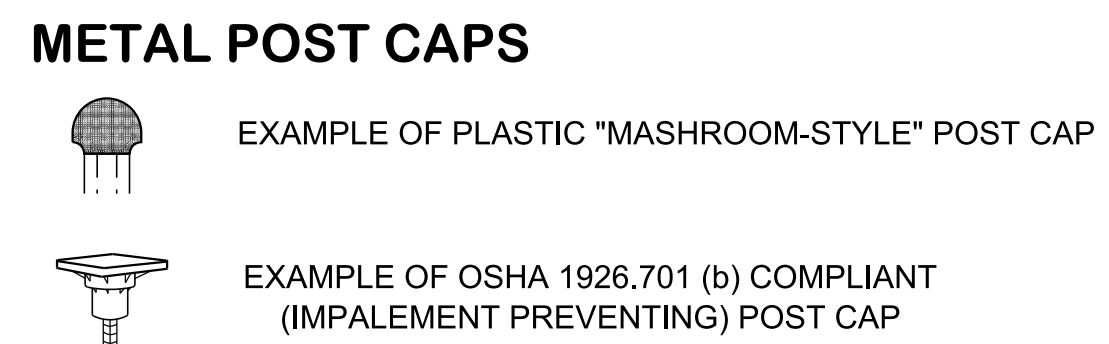
REV. 03-01-23: REVISED GENERAL NOTE (M). ADDED METAL POST CAPS LEGEND.



**ELEVATION VIEW**



**SECTIONAL VIEW**



SILT FENCE WITH WIRE BACKING FABRIC SPECIFICATIONS	
FABRIC PROPERTY AND TEST METHODS	REQUIRED PHYSICAL PROPERTIES (MARV VALUES OF TEST DATA)
GEOTEXTILE FABRIC TYPE	WOVEN MONOFILAMENT
APPARENT OPENING SIZE (ASTM D4751)	# 30 TO # 80 STANDARD SIEVE
WATER FLUX (ASTM D4491)	≥ 110 GPM/FT <sup>2</sup>
TENSILE STRENGTH (ASTM D4632)	≥ 370 LB. (WARP DIRECTION) X 230 LB. (FILL DIRECTION)
ULTRAVIOLET STABILITY (AFTER 500 HRS PER ASTM D4355)	≥ 90%
BURST STRENGTH (ASTM D3786)	≥ 470 PSI
PUNCTURE STRENGTH (ASTM D4833)	≥ 110 LB.
TRAPEZOIDAL TEAR (ASTM D4533)	≥ 115 LB. (WARP DIRECTION) X 75 LB. (FILL DIRECTION)
PERMEABILITY (ASTM D4491)	≥ 0.02 INCHES/SEC
THICKNESS (ASTM D5199)	≤ 35 MILS

**ENHANCED SILT FENCE GENERAL NOTES**

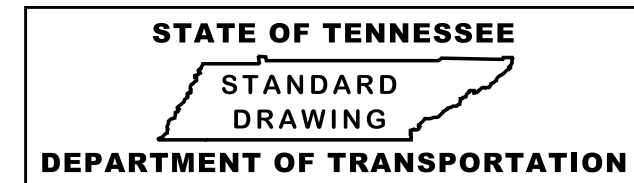
- (A) ENHANCED SILT FENCE IS TO BE USED WHERE INTERCEPTION OF CONCENTRATED FLOWS (e.g. SWALES, DITCHES, RUTS ALONG SLOPE) ARE ANTICIPATED. LIMITS OF FLOW APPLICATIONS FOR USE OF ENHANCED SILT FENCE ARE GIVEN ON STANDARD DRAWINGS EC-STR-4 AND EC-STR-4A. DO NOT USE ENHANCED SILT FENCE IN OR ADJACENT TO NATURAL WATER RESOURCES (WETLANDS OR STREAMS).
- (B) ENHANCED SILT FENCE SHOULD NOT BE USED TO REPLACE SILT FENCE WITH WIRE BACKING.
- (C) WHEN TWO SECTIONS OF ENHANCED SILT FENCE FABRIC ADJOIN EACH OTHER THEY SHALL BE JOINED ACCORDING TO THE DETAILS ON STANDARD DRAWING EC-STR-3E.
- (D) MAINTENANCE SHALL BE PERFORMED AS NEEDED; CAPTURED SOIL MATERIAL SHALL BE REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE AND/OR WHEN EVIDENCE OF FILTER CLOGGING IS NOTED.
- (E) STEEL POSTS SHALL BE ROLLED FROM HIGH CARBON STEEL AND SHALL HAVE A MINIMUM WEIGHT OF 1.25 LB/FT. POSTS SHALL BE HOT-DIPPED GALVANIZED OR PAINTED WITH HIGH GRADE WEATHER RESISTANT STEEL PAINT. STEEL POSTS SHALL BE EQUIPPED WITH AN ANCHOR PLATE HAVING A MINIMUM AREA OF 14 SQUARE INCHES. POSTS SHALL BE STUDDED, EMBOSSED, OR PUNCHED TO AID IN THE ATTACHMENT OF THE WIRE BACKING. POSTS AND ANCHOR PLATES SHALL CONFORM TO THE REQUIREMENTS OF ASTM A702.
- (F) STEEL POSTS SHALL HAVE A PROJECTION FOR FASTENING WIRE TO THEM. WOVEN WIRE FENCE BACKING TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES. THE WIRE FASTENERS SHOULD BE EVENLY SPACED WITH AT LEAST SIX PER POST.
- (G) WOVEN WIRE FENCE BACKING SHALL MEET THE REQUIREMENTS FOR ASTM A-116 FOR NO. 11 FARM, DESIGN NO. 1047-6-11, CLASS 3 COATING.
- (H) FILTER FABRIC SHALL BE FASTENED SECURELY TO WOVEN WIRE FENCE BACKING WITH TIES SPACED EVERY 24 INCHES ALONG TOP AND MID SECTION.
- (I) FOR TRENCH-BASED INSTALLATIONS, ENHANCED SILT FENCING SHALL BE INSTALLED PER THE FOLLOWING STEPS AND IN THE FOLLOWING ORDER:
  1. EXCAVATE TRENCH A MAXIMUM OF 18 INCHES WIDE 14 INCHES DEEP. THE TRENCH SHALL BE HAND-CLEANED FOLLOWING EXCAVATION TO REMOVE BULKY DEBRIS SUCH AS ROCKS, STICKS, AND SOIL CLOUDS FROM THE TRENCH.
  2. DRIVE AND SET SUPPORT POSTS PER SPACING REQUIREMENTS GIVEN ON THE APPLICABLE FENCE DETAIL.
  3. ATTACH WOVEN WIRE FENCE BACKING TO POSTS AND FABRIC TO THE WIRE BACKING USING WIRE TIES. SPACING AND DENSITY OF TIES SHALL BE INSTALLED ACCORDING TO NOTES (F) AND (H).
  4. INSTALL FABRIC IN TRENCH.
  5. BACKFILL TRENCH (OVER-FILL) WITH SOIL PLACED AROUND FABRIC.
  6. COMPACT SOIL BACKFILL WITH MECHANICAL EQUIPMENT. DO NOT DAMAGE THE FABRIC DURING COMPACTION (DAMAGED FABRIC SHALL BE REPLACED).
- (J) ONLY ENHANCED SILT FENCE FABRIC LISTED ON THE QUALIFIED PRODUCTS LIST MAY BE USED. ANY PRODUCTS LISTED ON THE QUALIFIED PRODUCTS LIST AS AN APPROVED ALTERNATE MAY ALSO BE USED.
- (K) ENHANCED SILT FENCE SHALL BE PAID FOR UNDER THE FOLLOWING ITEM NUMBER:
 

209-08.04, TEMPORARY ENHANCED SILT FENCE, L.F.

PAYMENT SHALL INCLUDE ALL MATERIALS AND LABOR NECESSARY FOR CONSTRUCTION, MAINTENANCE, AND REMOVAL OF THE ENHANCED SILT FENCE.
- (L) SEDIMENT SHALL BE REMOVED FROM BEHIND THE ENHANCED SILT FENCE WHEN IT HAS ACCUMULATED TO ONE-HALF THE ORIGINAL HEIGHT OF THE STRUCTURE AND PAID FOR UNDER ITEM NUMBER 209-05, SEDIMENT REMOVAL, PER C.Y.
- (M) OSHA 1926.701(B) COMPLIANT (IMPALEMENT PREVENTING) POST CAPS SHALL BE REQUIRED FOR ANY METAL POST ABOVE WHICH PEOPLE MAY BE WORKING AND THE RISK OF FALLING DOWN ONTO THE POST IS PRESENT; REGARDLESS OF HOW HIGH THE POST STICKS UP OUT OF THE GROUND. PLASTIC "MUSHROOM-STYLE" POST CAPS SHALL BE REQUIRED FOR ANY METAL POST WITH AN INSTALLED HEIGHT LESS THAN 36" ABOVE THE GROUND AND WHEN THERE ARE NO WORKERS CONDUCTING WORK ABOVE THE POSTS. NO CAPS SHALL BE REQUIRED FOR METAL POSTS WITH AN INSTALLED HEIGHT OF 36" OR GREATER AND WHEN THERE ARE NO WORKERS CONDUCTING WORK ABOVE THE POSTS. ALL CAPS SHALL BE ORANGE OR YELLOW TO ENHANCE VISIBILITY. WHEN REQUIRED, PAYMENT OF POST CAPS SHALL BE INCLUDED IN THE TOTAL COST OF SILT FENCE.

EROSION CONTROL PLAN LEGEND: \* ESF \* ESF \* ESF \* ENHANCED SILT FENCE

NOT TO SCALE



ENHANCED  
SILT FENCE