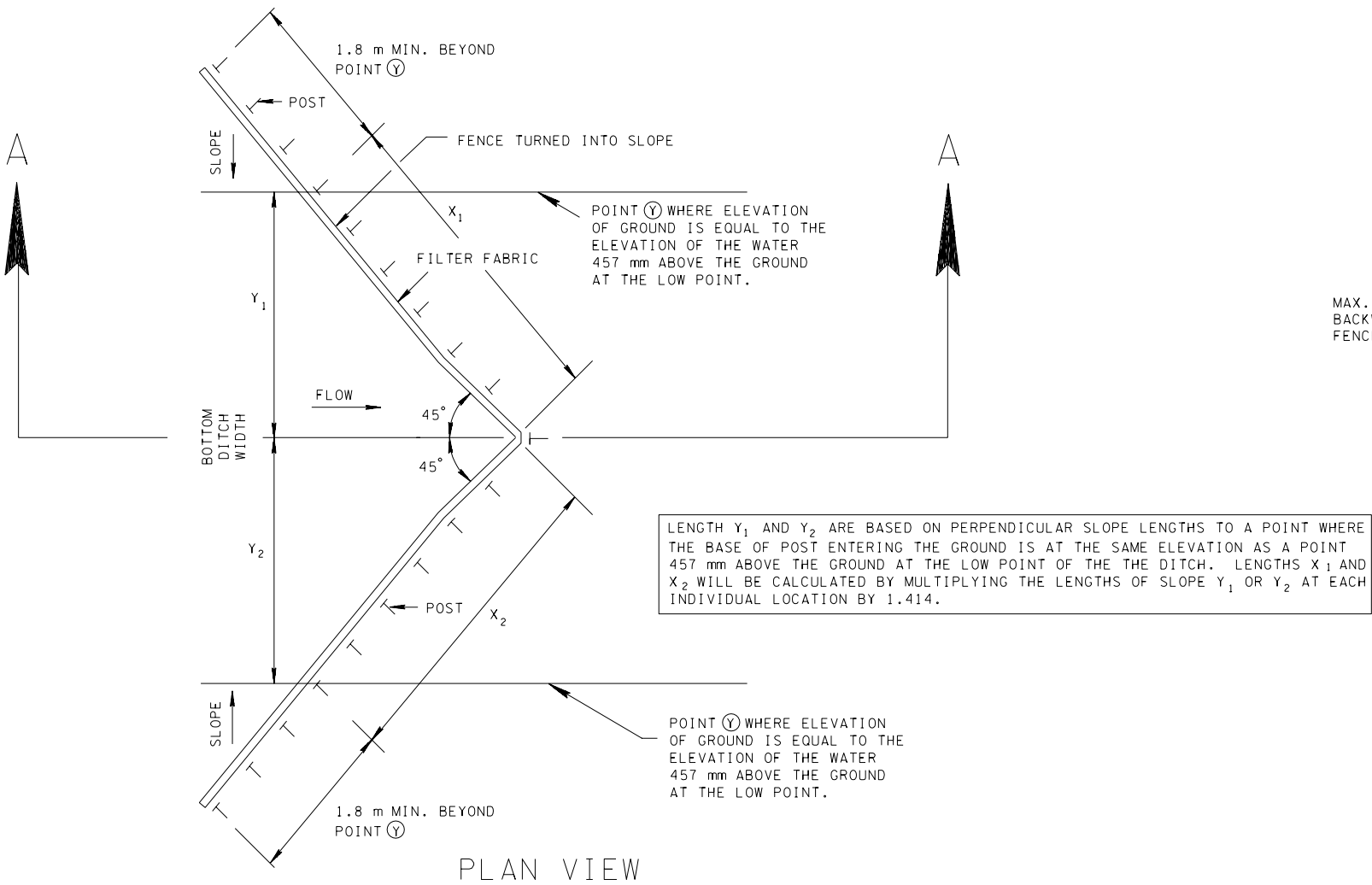
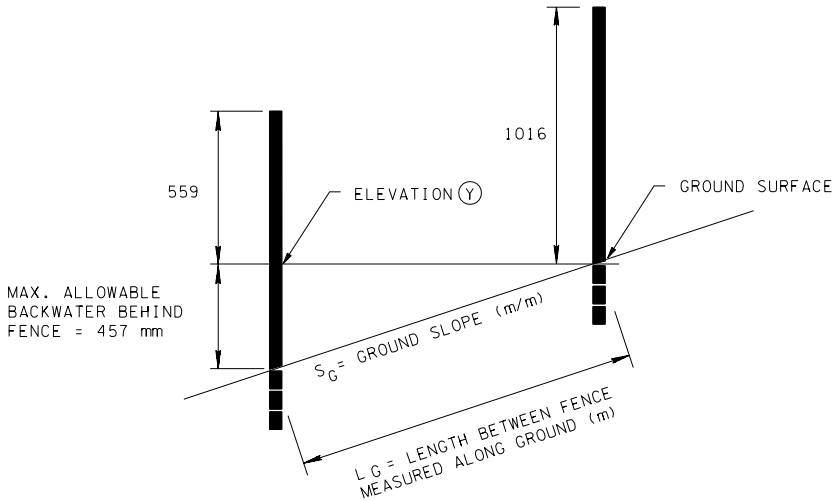
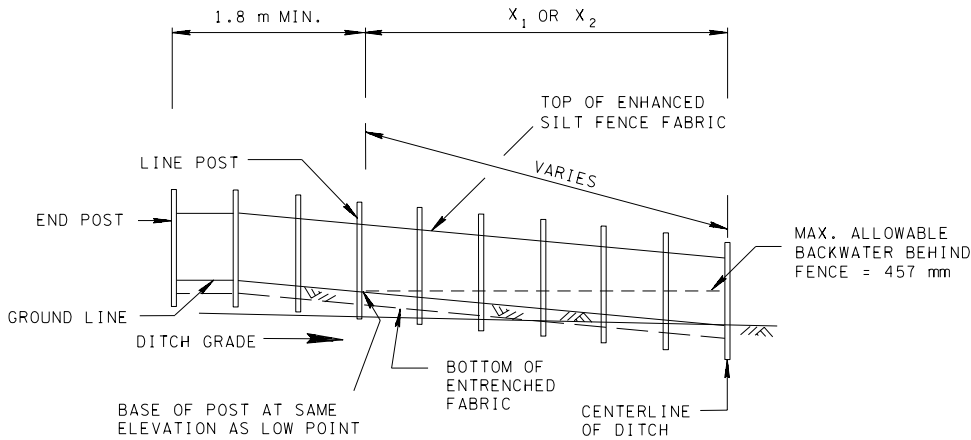


TYPE EC IA



PLAN VIEW

EROSION CONTROL PLAN LEGEND: ➤ TEMPORARY TYPE EC IA FILTER BARRIER EROSION DITCH CHECK



SPACING FOR ENHANCED SILT FENCE

| GROUND SLOPE<br>$S_G$ (m/m) | ⊕ RECOMMENDED SPACING, ( $L_G$ )<br>BETWEEN ENHANCED<br>SILT FENCE (m) |
|-----------------------------|------------------------------------------------------------------------|
| 0.01                        | 46                                                                     |
| 0.02                        | 23                                                                     |
| 0.03                        | 15                                                                     |
| 0.04                        | 12                                                                     |
| 0.05                        | 9                                                                      |
| 0.06 AND STEEPER            | 8                                                                      |

⊕ RECOMMENDED SPACING REFERS TO SPACING BETWEEN ENHANCED SILT FENCE FILTER LOCATIONS, BASED ON BACKWATER EFFECTS (USING 457 mm MAXIMUM BACKWATER BEHIND FENCE)

| TABLE 5          |                    |                                                                                   |                                                        |
|------------------|--------------------|-----------------------------------------------------------------------------------|--------------------------------------------------------|
| DITCH SIDESLOPES | $X_1$ OR $X_2$ (m) | TOTAL AVAILABLE SURFACE AREA OF FABRIC IN DITCH AT 0.46 m OF FLOW DEPTH ( $m^2$ ) | * MAX. ALLOWABLE DESIGN PEAK FLOW FROM WATERSHED (CFS) |
| 2:1              | 1.3                | 0.59                                                                              | 101.95                                                 |
| 3:1              | 2.0                | 0.88                                                                              | 152.93                                                 |
| 4:1              | 2.6                | 1.18                                                                              | 203.90                                                 |
| 5:1              | 3.2                | 1.48                                                                              | 254.88                                                 |
| 6:1              | 3.9                | 1.77                                                                              | 305.86                                                 |
| 7:1              | 4.5                | 2.07                                                                              | 356.83                                                 |
| 8:1              | 5.2                | 2.36                                                                              | 404.98                                                 |
| 9:1              | 5.8                | 2.66                                                                              | 455.95                                                 |
| 10:1             | 6.5                | 2.95                                                                              | 506.93                                                 |

\* BASED ON 2445 LITERS PER MIN./ $m^2$  (0.10 CM/SEC PERMEABILITY) ENHANCED SILT FENCE FABRIC AND MAXIMUM ALLOWABLE BACKWATER BEHIND FABRIC FENCE OF 0.46 m FOR TRIANGULAR CROSS-SECTION DITCH. SEE TABLE 3 FOR ENHANCED SILT FENCE FABRIC SPECIFICATION ON STANDARD DRAWING ECM-STR-3D.

GENERAL NOTES

- (A) A DITCH WITH A TRINANGULAR CROSS-SECTION IS ASSUMED.
- (B) DESIGN FLOWS FOR STORMWATER TREATMENT (E.G., 2 YEAR/24 HOUR STORM EVENT FLOWS) SHOULD BE ROUTED THROUGH ENHANCED SILT FENCE FILTERS WITH NO BYPASSING OR OVERFLOWS. FLOWS IN EXCESS OF THE FLOW -THROUGH CAPACITES GIVEN IN TABLE 5 ABOVE SHOULD BE ACCOMODATED BY BYPASSING EXCESS FLOWS.
- (C) ANCHOR AND INSTALL TEMPORARY ENHANCED SILT FENCE PER DETAILS AND SPECIFICATIONS SHOWN ON STANDARD DRAWING ECM-STR-3D. THE LOCATIONS AND SPACING OF ENHANCED SILT FENCE FILTERS, ALONG A DITCH SHOULD BE BASED ON COMBINATION OF HYDRAULIC PROPERTIES OF THE FENCE MATERIAL (TABLE 5) AND THE SPACING TABLE (SHOWN ABOVE). TO INSURE THAT THE TREATMENT REQUIREMENTS OF NOTE (B) ARE ACHIEVED, AND TO PREVENT OVERTOPPING, IT IS ALSO RECOMMENDED THAT BACKWATER ANALYSIS BE PERFORMED (E.G., STANDARD-STEP METHOD).
- (D) THE FLOW VALUES IN TABLE 5 ASSUME NO CLOGGING EFFECTS AT THE ENHANCED SILT FENCE SURFACE WITH SOLIDS. IN ORDER TO INSURE MINIMAL INFLUENCE FROM FILTER CLOGGING, FILTER FENCES SHOULD BE REGULARLY CLEANED BY DRYBRUSHING OF FABRIC SURFACE AND/OR PRESSURE WASHING OF FILTER.



MINOR REVISION -- FHWA APPROVAL NOT REQUIRED.

ALL UNITS ARE IN MILLIMETERS UNLESS NOTED OTHERWISE.

STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION

TEMPORARY EROSION  
CHECK/FILTER USING  
ENHANCED SILT FENCE  
IN A TRIANGULAR  
CROSS-SECTION DITCH