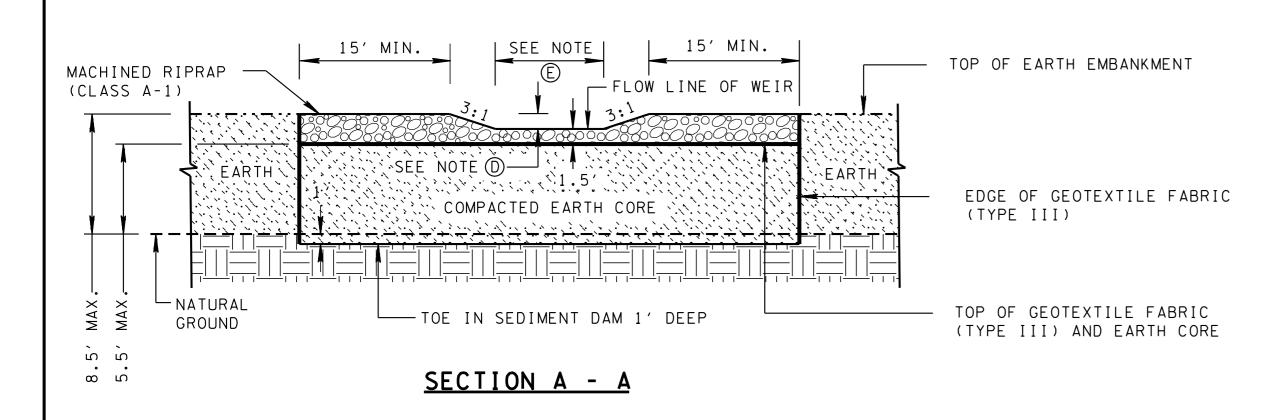


PLAN VIEW OF ROCK FACED SPILLWAY WITH EARTH CORE AND ADJOINING EARTH EMBANKMENT

FLOM



SEDIMENT EMBANKMENT GENERAL NOTES

- ROCK AND EARTH SEDIMENT EMBANKMENTS ARE FOR TEMPORARY USE. WHERE A PERMANENT FACILITY IS REQUIRED, CONSIDER THE USE OF A SEDIMENT BASIN, WHICH CAN BE CONVERTED INTO A PERMANENT DETENTION BASIN. THIS SHALL NOT BE PLACED IN STREAMS, WETLANDS, OR OTHER NATURAL WATER RESOURCES.
- AT MOST SITES, TEMPORARY ROCK AND EARTH SEDIMENT EMBANKMENTS SHALL BE DESIGNED TO CREATE AN IMPOUNDMENT VOLUME EQUAL TO THE RUNOFF VOLUME FROM THE 2-YEAR, 24-HOUR RAINFALL EVENT. AT SITES WHICH DRAIN TO EXCEPTIONAL TENNESSEE WATERS OR SEDIMENT-IMPAIRED STREAMS, THE IMPOUNDMENT VOLUME SHALL BE EQUAL TO THE RUNOFF FROM THE 5-YEAR, 24-HOUR EVENT. IN NO CASE SHALL THE IMPOUNDMENT VOLUME EXCEED FIFTEEN (15) ACRE-FEET.
- ROCK AND EARTH SEDIMENT EMBANKMENTS SHALL ONLY BE USED WHEN THE WATER IMPOUNDMENT AREA CAN BE CONTAINED WITHIN THE RIGHT-OF-WAY OR WITHIN A DRAINAGE EASEMENT FOR THE PROJECT.
- THE TOP OF THE SEDIMENT EMBANKMENT SHOULD BE A MINIMUM OF ONE (1) FOOT ABOVE THE 25 YEAR DESIGN FLOW DEPTH OVER THE WEIR. THE MINIMUM HEIGHT OF THE OVERFLOW WIER IS 1.5 FEET.
- THE WEIR MUST BE DESIGNED TO PASS THE PEAK 25-YEAR FLOW RATE WITHOUT OVERTOPPING THE EMBANKMENT.
- THE HEIGHT OF THE OVERFLOW WEIR SHOULD BE SET SUCH THAT ALL FLOWS IN EXCESS OF THE DESIGN IMPOUNDMENT VOLUME SHALL PASS OVER THE WEIR.
- FOR EARTH-FILL EMBANKMENTS, A CUT-OFF TRENCH SHALL BE EXCAVATED ALONG THE CENTERLINE OF THE EMBANKMENT. THE TRENCH MUST EXTEND AT LEAST ONE (1) FOOT INTO A STABLE, IMPERVIOUS LAYER OF SOIL AND HAVE A MINIMUM DEPTH OF 2 FEET. THE MINIMUM BOTTOM WIDTH SHALL BE 4 FEET. BUT ALSO MUST BE WIDE ENOUGH TO PERMIT OPERATION OF COMPACTION EQUIPMENT. THE SIDE SLOPES SHALL BE NO STEEPER THAN 1H:1V.
- THE EARTH EMBANKMENT SHALL BE COMPACTED AS REQUIRED FOR ANY STRUCTURE WHICH IS INTENDED TO IMPOUND WATER.
- THE EXPOSED SLOPES OF THE EARTH EMBANKMENT SHOULD BE STABILIZED WITH TEMPORARY SEEDING WITH MULCH OR OTHER STABILIZATION METHODS.
- ROCK AND EARTH SEDIMENT EMBANKMENT IMPOUNDMENTS SHOULD BE DEWATERED WITH A DEWATERING STRUCTURE (EC-STR-1) OR SEDIMENT FILTER BAG (EC-STR-2) AS NEEDED.
- ROCK AND EARTH SEDIMENT EMBANKMENTS SHALL BE PAID FOR UNDER THE FOLLOWING ITEM NUMBERS:

ROAD AND DRAINAGE EXCAVATION (UNCLASSIFIED) PER CUBIC YARD 203-01 709-05.06 MACHINED RIPRAP (CLASS A-1) PER TON

740-10.03 GEOTEXTILE (TYPE III) (EROSION CONTROL) PER SQUARE YARD 801-01.07 TEMPORARY SEEDING (WITH MULCH) PER UNIT

DEWATERING STRUCTURES AND SEDIMENT FILTER BAGS SHALL BE PAID FOR UNDER THEIR RESPECTIVE ITEM NUMBERS.

PAYMENT SHALL INCLUDE ALL MATERIALS, EXCAVATION, AND LABOR NECESSARY FOR CONSTRUCTION, MAINTENANCE, AND REMOVAL OF THE ROCK AND EARTH SEDIMENT EMBANKMENTS.

SEDIMENT SHALL BE REMOVED FROM BEHIND THE ROCK AND EARTH SEDIMENT EMBANKMENT WHEN IT HAS ACCUMULATED TO ONE-HALF THE ORIGINAL HEIGHT OF THE STRUCTURE AND PAID FOR UNDER ITEM NUMBER 209.05, SEDIMENT REMOVAL PER CUBIC YARD.

☐ MINOR REVISION -- FHWA APPROVAL NOT REQUIRED.

REV. 12-18-95: CHANGED DRAWING NO. FROM ESC-STR-13 TO EC-STR-13.

REV. 5-27-01: CHANGED ITEM NO. 740-03.01 TO 740-10.03.

NOT TO SCALE

STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION

ROCK AND EARTH SEDIMENT **EMBANKMENT**

7-29-94 | EC-STR-13

EROSION CONTROL PLAN LEGEND:

ROCK AND EARTH SEDIMENT EMBANKMENT