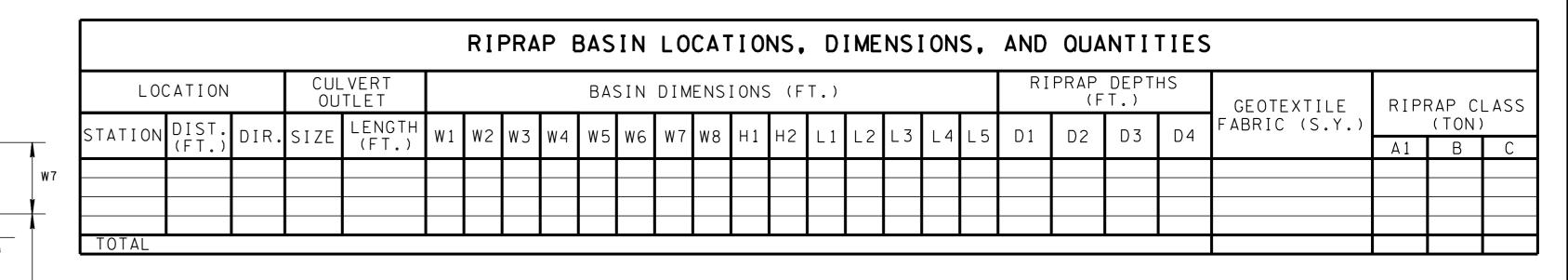


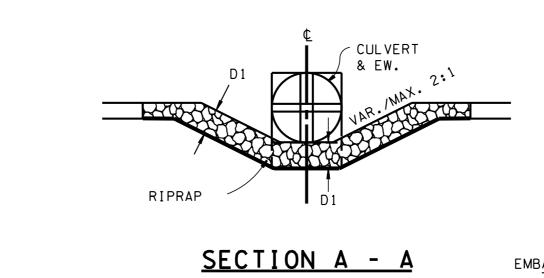
FROM ESC-STR-21 TO EC-STR-21.

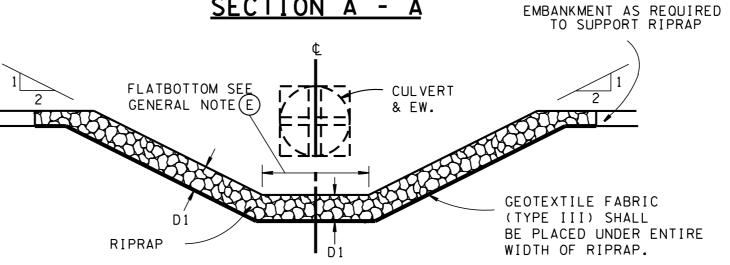
REV. 8-1-12: MINOR EDITS TO DRAWING AND GENERAL NOTES.

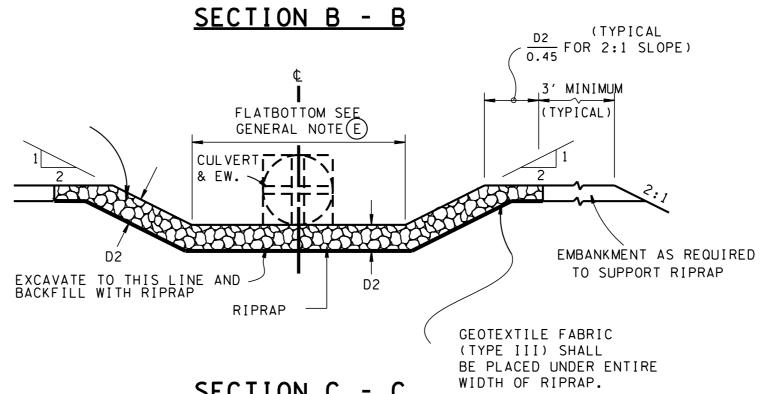
REV. 5-27-01: CHANGED DESCRIPTION OF ITEM NOS. 709-05.06 AND 709-05.07. CHANGED DRAWING NAME.

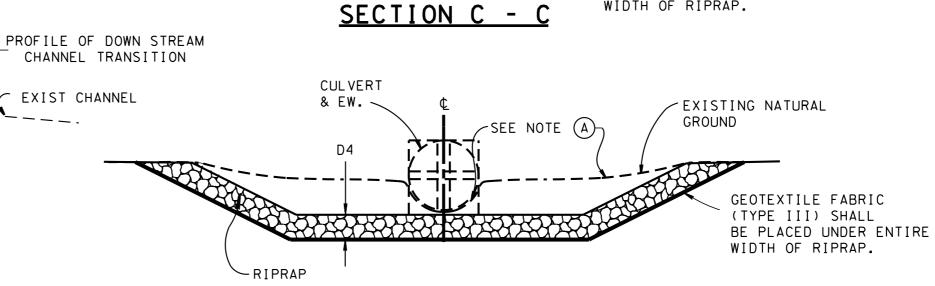
REV. 12-18-95: CHANGED DRAWING NO.











SECTION D - D

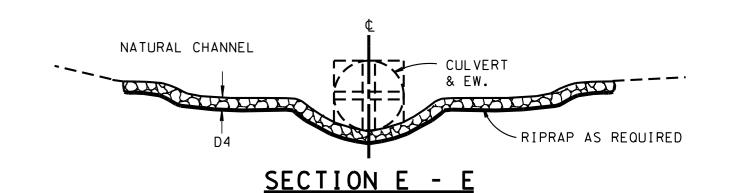
GENERAL NOTES

- WARP BASIN TO CONFORM TO THE NATURAL CHANNEL. TOP OF RIPRAP IN FLOOR OF BASIN DISSIPATOR POOL OR APRON SHALL BE AT THE SAME OR LOWER ELEVATION THAN THE NATURAL CHANNEL BOTTOM SECTION D-D. MODIFY FLATBOTTOM WIDTH IF THE OPTIONAL EXTENDED TRANSITION IS REQUIRED.
- MODIFY THE BASIN DIMENSIONS AS REQUIRED TO MATCH THE CONFIGURATION OF CULVERT END TREATMENTS.
- REFER TO TDOT DESIGN DIVISION DRAINAGE MANUAL (CHAPTER 9) FOR HYDRAULIC DESIGN PROCEDURES OF ENERGY DISSIPATORS FOR CULVERT AND CHANNELS.
- MODIFY DIMENSION W1 AS REQUIRED TO MATCH CULVERT WITH ENDWALL TYPE "A" (WITH OR WITHOUT CONCRETE PAVED APRONS OR OUTLETS).
- DESIRABLE SLOPE IS 0.0% IN DISSIPATOR POOL FLATBOTTOM AND IN APRON FLATBOTTOM.
- THE ENDWALL SHOWN IN THIS DRAWING IS FOR ILLUSTRATIVE PURPOSES ONLY. PERMANENT RIPRAP BASIN ENERGY DISSIPATOR MAY BE USED WITH ANY TYPE OF CULVERT ENDWALL.
- GEOTEXTILE FABRIC (TYPE III) SHALL MEET REQUIREMENTS OF THE STANDARD SPECIFICATION FOR GEOTEXTILES AASHTO DESIGNATION M-288, EROSION CONTROL.
- PERMANENT RIPRAP BASIN ENERGY DISSIPATORS SHALL BE PAID FOR UNDER THE FOLLOWING ITEM NUMBERS:

ROAD & DRAINAGE EXCAVATION (UNCLASSIFIED) PER CUBIC YARD 709-05.06 MACHINED RIP-RAP (CLASS A-1) PER TON 709-05.08 MACHINED RIP-RAP (CLASS B) PER TON

MACHINED RIP-RAP (CLASS C) PER TON 709-05.09 GEOTEXTILE (TYPE III) (EROSION CONTROL) 740-10.03 PER SQUARE YARD

PAYMENT SHALL INCLUDE ALL MATERIALS AND LABOR NECESSARY FOR CONSTRUCTION AND MAINTENANCE OF PERMANENT RIPRAP BASIN ENERGY DISSIPATORS.



■ MINOR REVISION -- FHWA APPROVAL NOT REQUIRED.

NOT TO SCALE

STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION

> PERMANENT RIPRAP BASIN **ENERGY**

EROSION CONTROL LEGEND:

TYPICAL CULVERT ENDWALL TYPE "U"

SEE NOTE F

SEE NOTE B

SEE NOTE B

CULVERT INVERT

FLOWLINE ELEVATION

CULVERT ENDWALL

SEE NOTE B

GEOTEXTILE FABRIC (TYPE III)

ELEVATION OR

RP ED

PERMANENT RIPRAP ENERGY DISSIPATOR

L4

OPTIONAL EXTENDED TRANSITION

✓ EXISTING CHANNEL

-SEE NOTE A

(TRANSITION AS REQUIRED

WITH OPTIONAL RIPRAP)

OPTIONAL EXTENDED TRANSITION

TOP OF NATURAL

CHANNEL

OPTIONAL RIPRAP

IN DOWN STREAM

CHANNEL

L5

- SEE NOTE (A)

TOE WALL

- SEE NOTE (A)

TRANSITION

APRON

2:1

PLAN VIEW

FLATBOTTOM SEE

ELEVATION VIEW

GENERAL NOTE (E)

SEE NOTE E

经现在

L2

APRON

L2

DISSIPATOR POOL

FLATBOTTOM SEE

LIMITS OF RIPRAP BASIN

DISSIPATOR POOL

TOP OF BERM & RIPRAP

L 1

L 1

GENERAL NOTE

2:1

DISSIPATORS

10-26-92 EC-STR-21