

MSE WALL - DESIGN

- FINAL DRAWINGS SHALL ALL BE PREPARED BY THE FABRICATOR AND SUBMITTED TO THE ENGINEER FOR APPROVAL. ALL MATERIALS WITHIN THE MSE WALL VOLUME, METHODS OF CONSTRUCTION, AND THE QUALITY OF MATERIALS SHALL MEET THE REQUIREMENTS OF THE SPECIAL PROVISIONS FOR THIS PROJECT.
- SEE THE BORING LOGS FOR A DESCRIPTION OF THE IN-SITU SOIL CONDITIONS.
- SOIL PROPERTIES AND DESIGN PARAMETERS FOR BRIDGE NO. 85 SITE:

FOUNDATION SOIL DESIGN VALUES	
ALLOWABLE BEARING PRESSURE:	6 KSF
EMBEDMENT DEPTH:	4 FT
ANGLE OF INTERNAL FRICTION	
BACKFILL BEHIND THE FOOTINGS:	33°
SOIL BELOW FOOTING BEARING ELEVATION:	38°
COEFFICIENT OF SLIDING ALONG BASE OF FOOTING:	0.4
- THE DRAINED STATE OF THE BACKFILL MATERIAL SHALL BE CONSIDERED IN THE DESIGN. IF A FREE DRAINING MATERIAL IS ASSUMED IN THE DESIGN, A DRAINAGE SYSTEM SHALL BE PROVIDED FOR THE WALL SYSTEM CHOSEN. THE COST FOR THE DRAINAGE SYSTEM SHALL BE INCLUDED IN THE CORRESPONDING UNIT RETAINING WALL ITEM.
- EXPANSION AND CONTRACTION SHALL BE CONSIDERED IN THE DESIGN AND DETAILS. PROPER JOINTS SHALL BE DESIGNED, DETAILED AND INCLUDED IN THE MSE WALL.
- ALL WALL COMPONENTS SHALL HAVE A MINIMUM DESIGN LIFE OF 75 YEARS.

MSE WALL - CONSTRUCTION

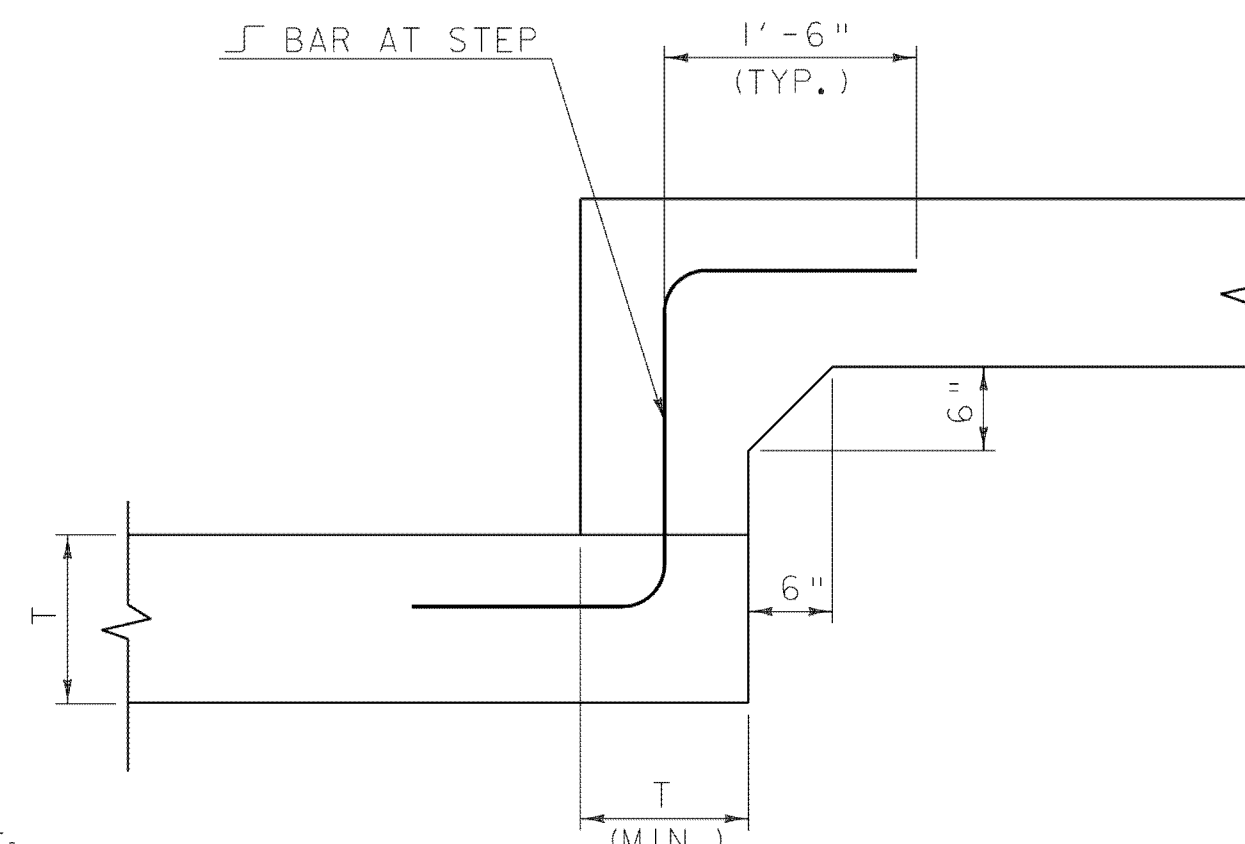
- ANY FOUNDATION MATERIAL BELOW THE MSE WALL VOLUME NOT MEETING THE CRITERIA OF THE DESIGN SHALL BE EXCAVATED AND REPLACED WITH GRANULAR BACKFILL FOR STRUCTURES OR OTHERWISE STABILIZED AS DIRECTED BY THE ENGINEER. GRANULAR BACKFILL FOR STRUCTURES IN THIS APPLICATION SHALL BE PAID UNDER ITEM 204.30 GRANULAR BACKFILL FOR STRUCTURES.
- BACKFILL MATERIAL SHALL BE COMPACTED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AND CONTRACT SPECIFICATIONS.
- THE CONTRACTOR SHALL ACCOMMODATE ANY PIPES, GEOMEMBRANE LINER, DRAINAGE STRUCTURES, FOUNDATIONS, RAILING POSTS, AND ANY SUCH APPURTENANCES THAT ARE WITHIN THE RETAINING WALL VOLUME.
- THE CONTRACTOR IS RESPONSIBLE FOR CONTROLLING THE STORM WATER DRAINAGE IN THE VICINITY OF THE WALL DURING CONSTRUCTION. STORM WATER RUNOFF IS TO BE COLLECTED AND DISCHARGED AWAY FROM THE WALL.
- ANY DAMAGE TO THE WALL SYSTEM DURING CONSTRUCTION SHALL BE REPAIRED BY THE CONTRACTOR TO THE SATISFACTION OF THE ENGINEER AT NO ADDITIONAL COST TO THE STATE. THIS INCLUDES STAINED OR DISCOLORED FACING ELEMENTS.

MSE WALL - MATERIAL NOTES

- THE EXPOSED FACES OF THE BRIDGE 85 AND MSE WALLS SHALL HAVE AN APPROVED STONE-FACED FINISH. CONTRACTOR SHALL SUBMIT FINISH SAMPLE TO ENGINEER FOR APPROVAL

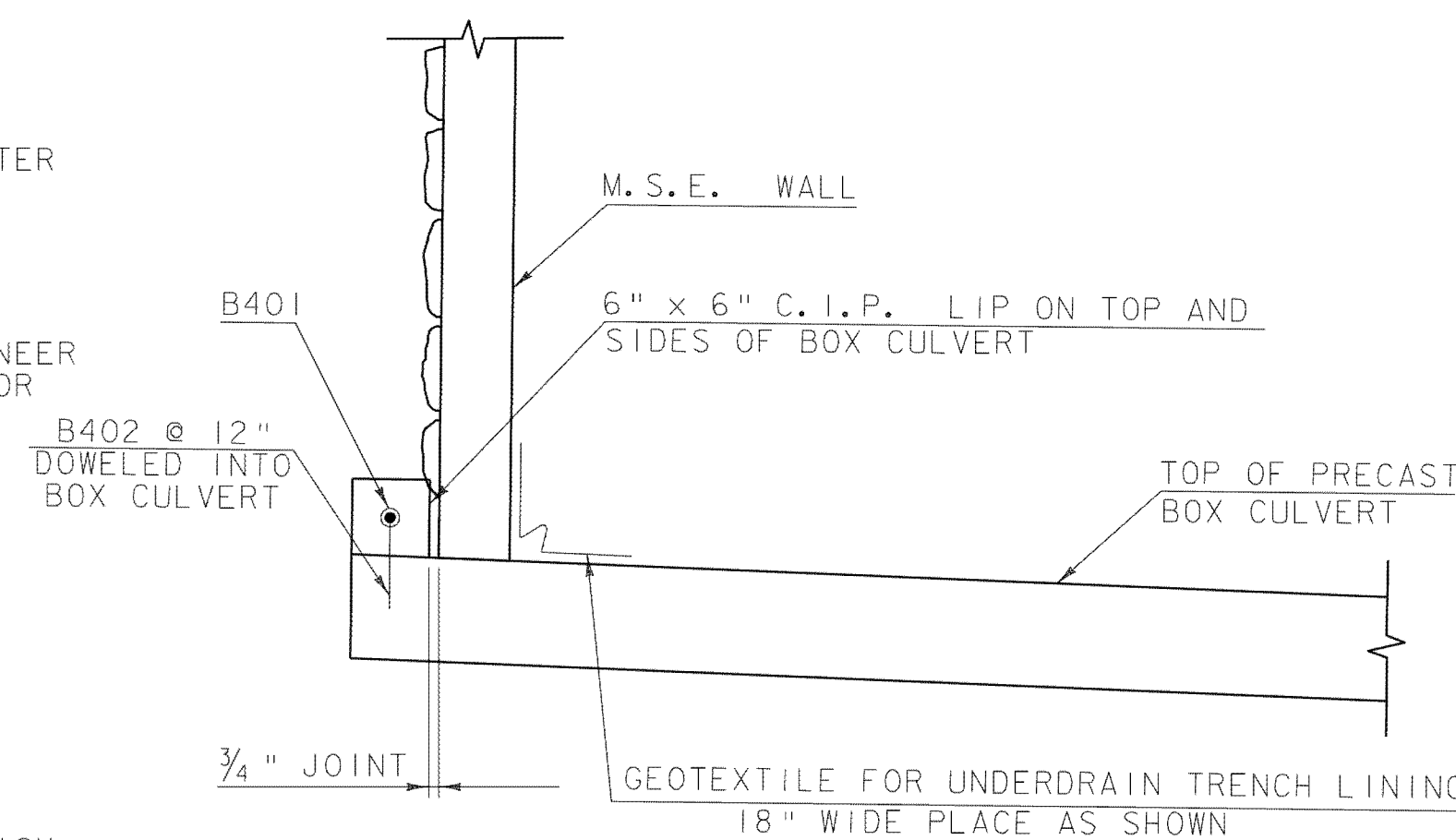
MSE WALL - RESTRICTIONS

- NO TIMBER ELEMENTS SHALL BE ALLOWED AS FINAL IN PLACE COMPONENTS OF MSE WALL SYSTEM SUPPORTING ROADWAY FILL.
- ALL EXPOSED EDGES OF WALL PANELS SHALL BE COVERED WITH FINISH COPING UNITS, AS SHOWN ON THE PLANS. THE COSTS FOR THIS SHALL BE INCLUDED IN THE BID PRICE FOR THE CORRESPONDING WALL ITEM.



NOTE:
LEVELING PAD SHALL BE LOW STRENGTH CONCRETE (2500 PSI MIN.).

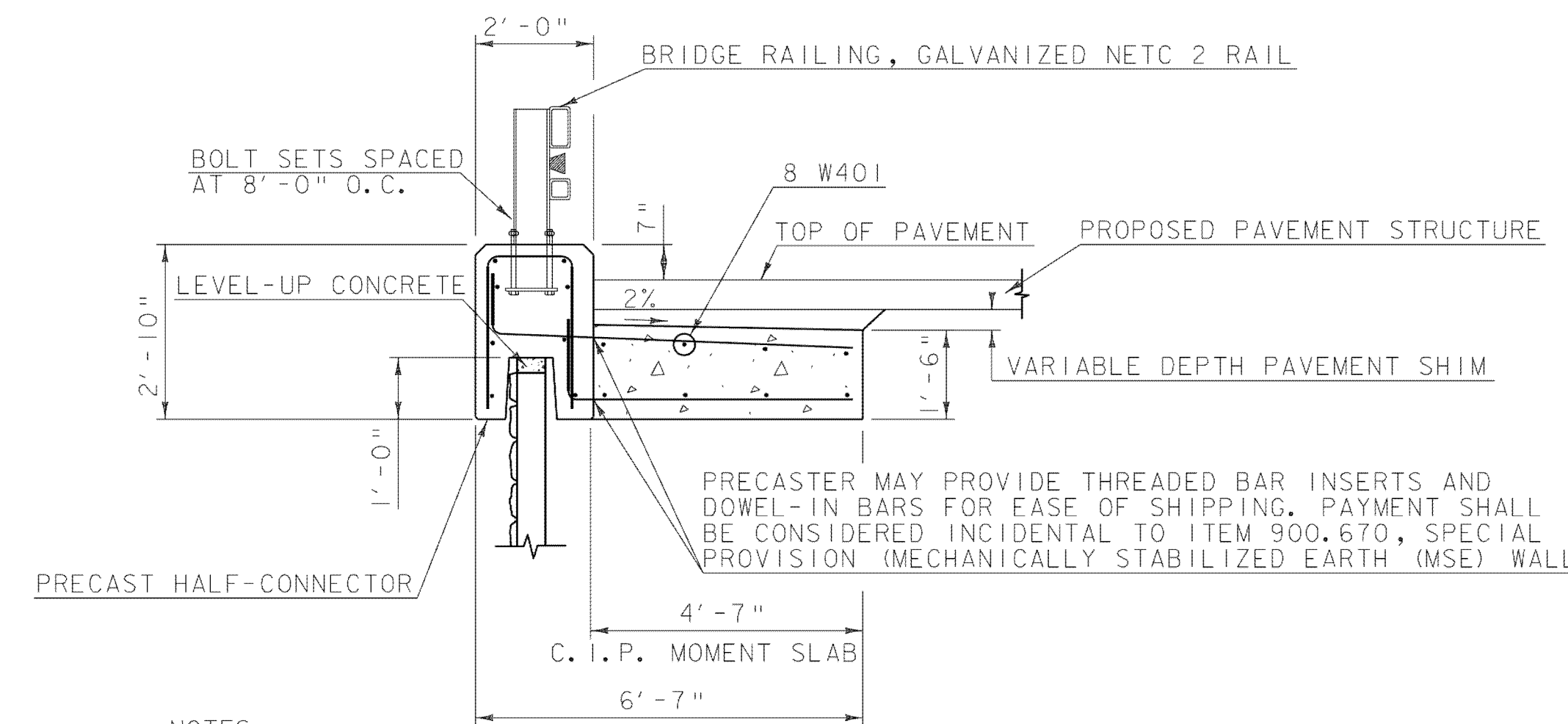
LEVELING PAD STEP DETAIL
NOT TO SCALE



NOTE:
GEOTEXTILE FOR UNDERDRAIN TRENCH LINING SHALL BE INCIDENTAL TO ITEM 900.670, SPECIAL PROVISION (MECHANICALLY STABILIZED EARTH RETAINING WALL)

BUTT JOINT DETAIL

SCALE 1" = 1'-0"
0

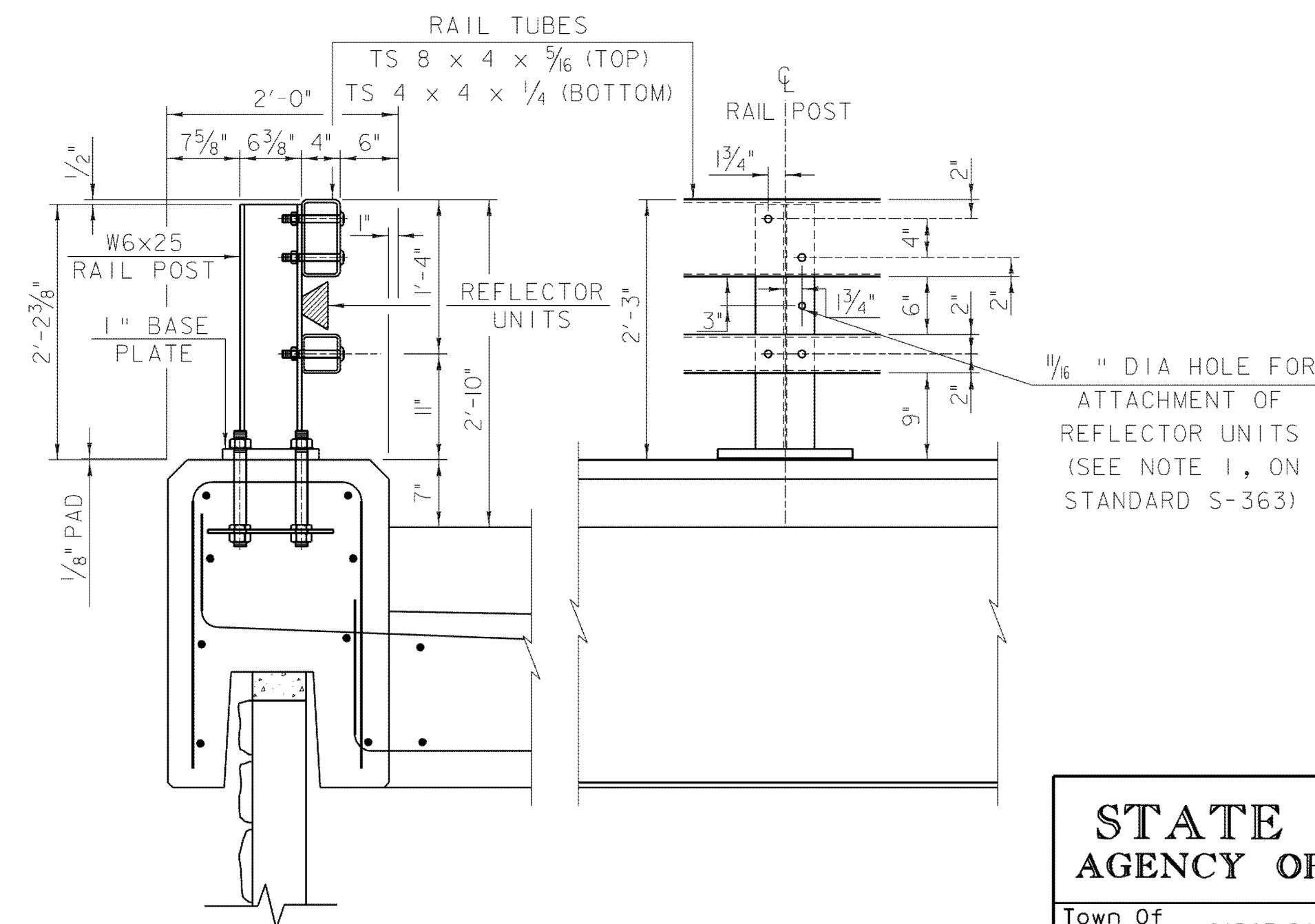


NOTES:

- ALL OPEN JOINTS IN THE PRECAST CONNECTOR SHALL BE 1/2" AND FILLED WITH 3/4" BACKING ROD AND CAULKED WITH SILICONE SEALANT. PAYMENT SHALL BE CONSIDERED INCIDENTAL TO ITEM 900.670, SPECIAL PROVISION (MECHANICALLY STABILIZED EARTH (MSE) WALL).
- PRECAST HALF CONNECTOR UNIT LENGTH = 16'-0" (TYP.)
- PRECAST HALF CONNECTORS, CAST-IN-PLACE MOMENT SLAB, LEVEL-UP CONCRETE, AND PAVEMENT SHIM SHALL BE CONSIDERED INCIDENTAL TO ITEM 900.670, SPECIAL PROVISION (MECHANICALLY STABILIZED EARTH (MSE) WALL).

PRECAST HALF CONNECTOR DETAIL

NOT TO SCALE



TYPICAL SECTION

ELEVATION

NOTES:

- REPLACE TYPICAL SECTION AND ELEVATION ON STANDARD S-360A WITH THOSE SHOWN ON THIS SHEET.
- FOR ADDITIONAL INFORMATION ON BRIDGE RAILING, SEE STANDARD S-360A

BRIDGE RAILING

SCALE 1" = 1'-0"
0

**STATE OF VERMONT
AGENCY OF TRANSPORTATION**

Town Of	CABOT-DANVILLE	Bridge No.	85
Highway No.	U.S. ROUTE 2	Log Sta.	
		Surv. Sta.	164+27
U.S. ROUTE 2 OVER EXISTING STREAM			
MISCELLANEOUS DETAILS			
Designed By	AMS/MAC	Drawn By	AA
Checked By	ECA/SMV	Date	09/22/2010
		Bridge Design Supervisor	SMV Date 9/2010
PROJECT	CABOT-DANVILLE	PROJECT NO.	F 028-3(26)
I.G.C. Info.		PRINTED:	10/25/2010
Bridge Sheet No.	BRI02	Sheet	102 of 250