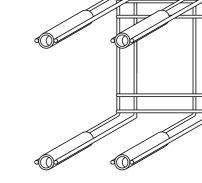
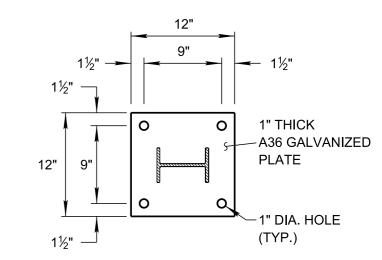


ALTERNATE DETAIL A ALTERNATE POST ATTACHMENT **USING ANCHOR BOLTS**

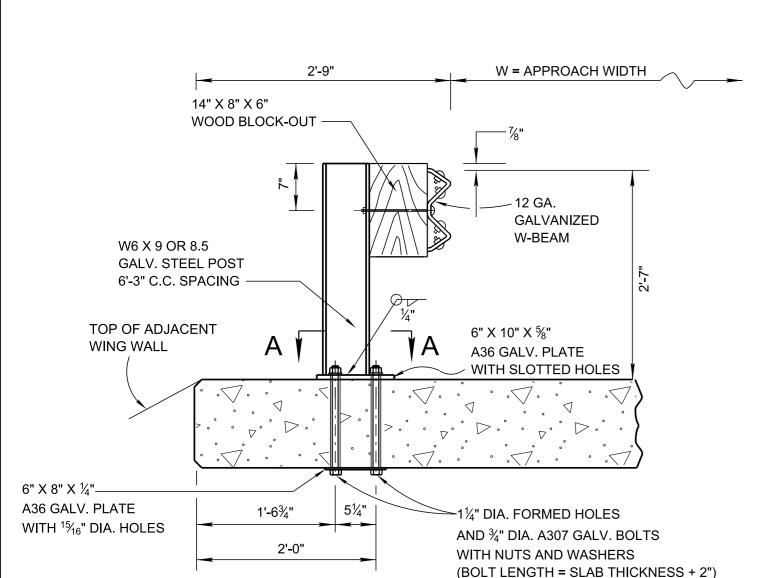
SEE BASEPLATE DETAILS



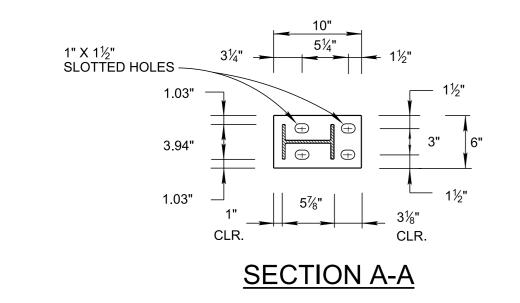
INSERT ASSEMBLY FOR ¾" DIA. X 4" HEX HEAD A307 BOLTS

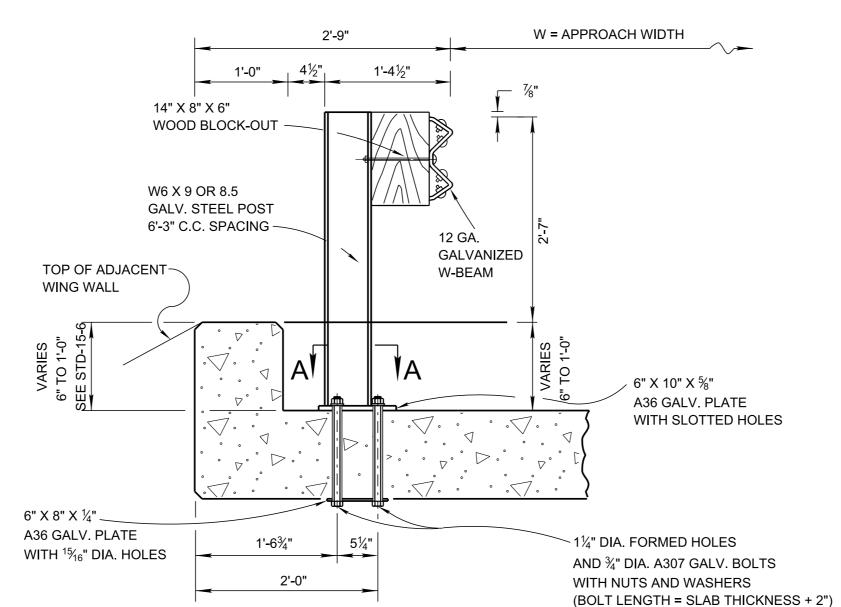


BASEPLATE DETAILS



DETAIL FOR CONCRETE DECK USED AS A RIDING SURFACE

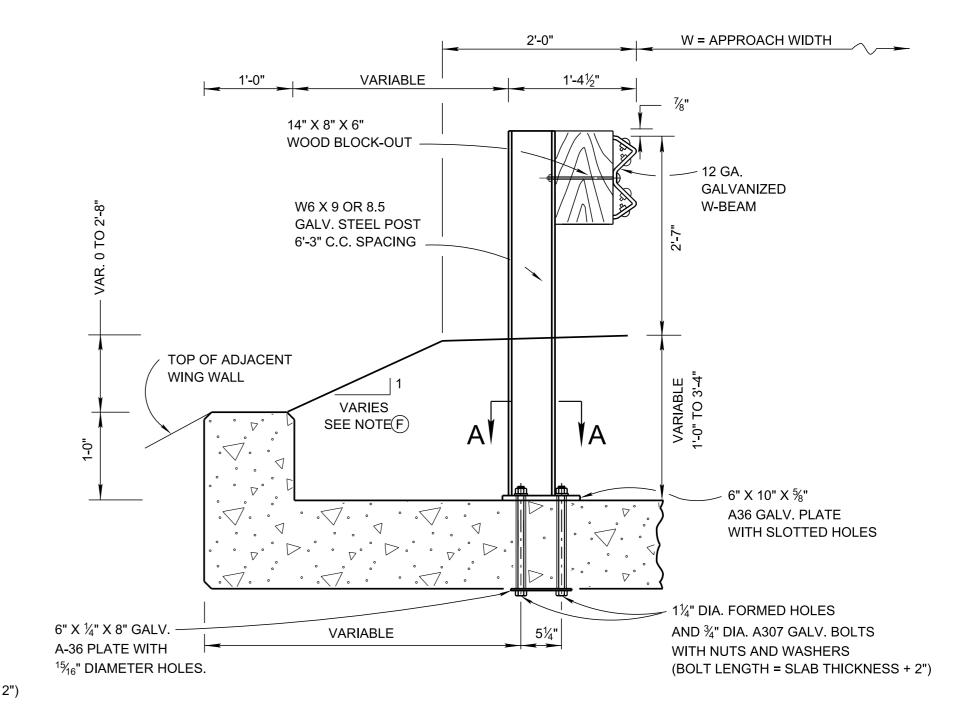




DETAIL FOR CONCRETE DECK WITH 6" TO 1'-0" OF ROADWAY FILL COVER

DESIGN NOTES

- WHEN DEPTH OF FILL AT FACE OF GUARDRAIL EXCEEDS 3'-4", USE ITEM NUMBER 705-06.01 AS SHOWN ON S-GR31-1.
- DO NOT USE ON PRECAST CONCRETE STRUCTURE WITHOUT PRIOR APPROVAL FROM MANUFACTURERS.
- THIS RAIL SYSTEM HAS BEEN TESTED AND PASSED BY THE CRITERIA SET FORTH BY AASHTO MASH TEST LEVEL 3, AS DOCUMENTED IN ROADSIDE SAFETY RESEARCH PROGRAM POOLED FUND STUDY NO. TPF-5(114) DATED NOV. 11, 2011.
- ANY REINFORCING STEEL THAT INTERFERES WITH THE 1 1/4" DIAMETER FORMED HOLES SHALL BE MOVED HORIZONTALLY TO PROVIDE A 1" MINIMUM CLEARANCE TO THE HOLE.



DETAIL FOR CONCRETE DECK WITH 1'-0" TO 3'-4" OF ROADWAY FILL COVER

GENERAL NOTES

- IN ORDER TO EXPEDITE INSTALLATION, GUARDRAIL POST MAY BE FIELD CUT TO ADJUST THE LENGTH REQUIRED. ALL CUT SURFACES MUST RECEIVE GALVANIZE COATING.
- FOR DIMENSIONS AND DETAILS NOT SHOWN SEE STANDARD STRUCTURES DRAWING NOS. STD-17-7 AND STD-17-8, AND STANDARD ROADWAY DRAWING S-GR31-1.
- TO BE PAID FOR UNDER ITEM NO: 705-01.04 METAL BEAM GUARD FENCE PER LF.
- ANCHOR BOLTS TO BE $\frac{7}{8}$ " DIA., ASTM A193, GRADE B7. NUTS AND WASHERS TO BE GALVANIZED.
- INSERT ASSEMBLY TO BE USED FOR CONNECTION OF POSTS OVER WALLS ONLY AND MAY NOT BE USED AS A SUBSTITUTE FOR PLATE ASSEMBLY ELSEWHERE.
- SLOPE TO MATCH ADJOINING ROADWAY SIDE SLOPE.

☐ MINOR REVISION -- FHWA APPROVAL NOT REQUIRED.

REV. 5-25-16: CORRECTED

REV. 7-5-17; CORRECTED

STD. DWG. NUMBERS ON

GEN. NOTE(B). ADDED GENERAL

NOTES(D)(E,)AND(F.) CHANGED

PAY ITEM NUMBER IN DESIGN

WELD DETAIL.

NOTE(1.)

STATE OF TENNESSEE DEPARTMENT OF **TRANSPORTATION**

SPECIAL CASE: **GUARDRAIL** ATTACHMENT TO CONCRETE **DECKS**

S-GRS-2

7-11-13