DISCLAIMER:
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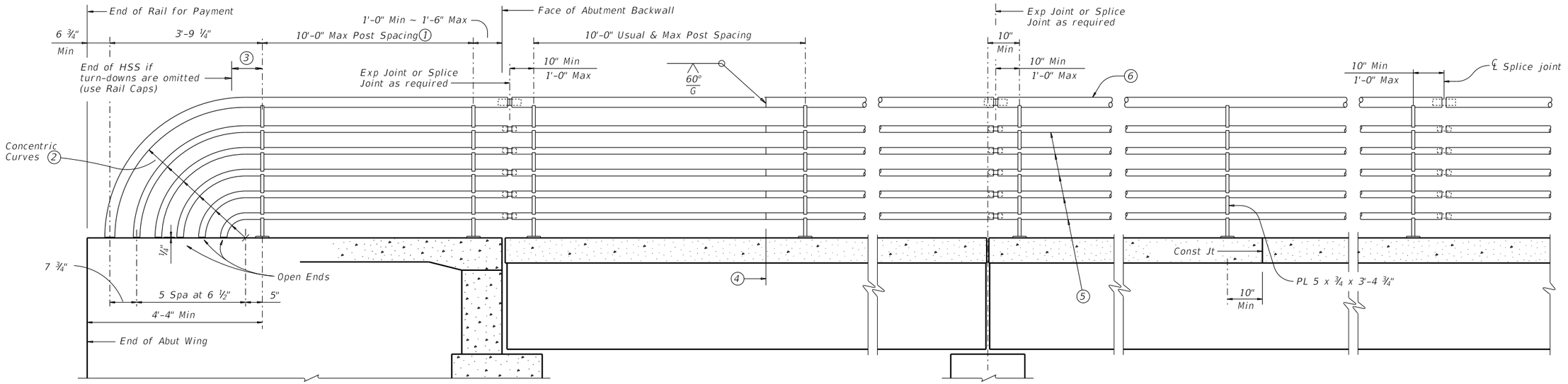
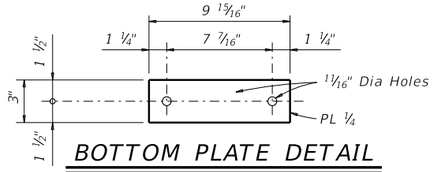
DATE:
FILE:

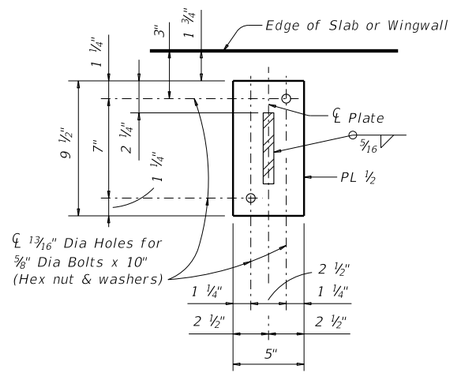


AT ABUTMENTS | AT SHOP SPLICE | AT ENDS OF UNIT | AT SLAB CONST JOINT | AT SPLICE JOINT

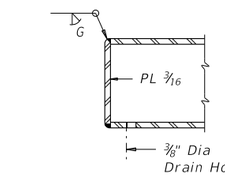
ROADWAY ELEVATION OF RAIL



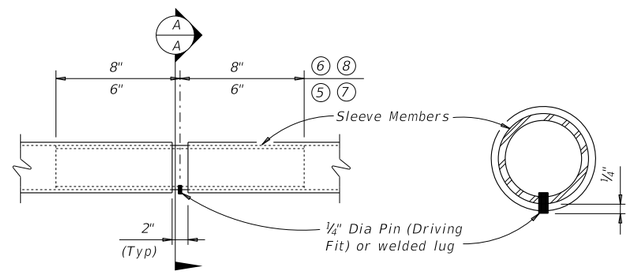
BOTTOM PLATE DETAIL



BASE PLATE DETAIL

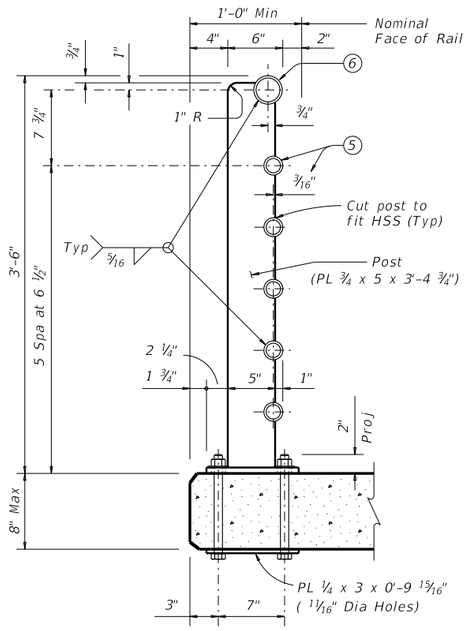


RAIL CAP DETAIL

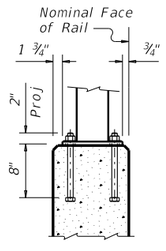


AT SPLICE OR EXP JTS | SECTION A-A

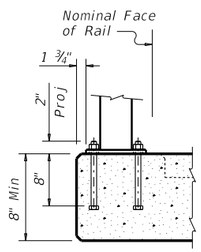
HSS SPLICE DETAIL



BASIC CONDITION



ON ABUT WING OR CIP RETAINING WALL



ON CULVERTS OR SLABS OVER 8" THICK

POST MOUNTING DETAILS

(1) Min of 2 posts required on wingwall

(2) Portion of railing with turn-downs to be used or omitted as indicated on Bridge Layout.

(3) 10" Min ~ 1'-6" Max if turn-downs are omitted.

(4) One shop splice per panel is permitted (with minimum 85 percent penetration). The weld may be square groove or single vee groove. Grind smooth.

(5) HSS 2.375 x 0.154

(6) HSS 3.500 x 0.216

(7) HSS 1.900 x 0.145

(8) HSS 2.875 x 0.203

CONSTRUCTION NOTES:

Panel lengths of railing must be attached to a minimum of three posts except at abutment wingwalls.

Face of rail and posts must be vertical transversely unless otherwise approved. Posts must be perpendicular to adjacent roadway grade. Use Type VIII epoxy mortar under post base plates if gaps larger than 1/16" exist.

For curved railing applications, fabricate the HSS rails to the radius when the radius is 600' or less. Submit shop drawings for approval when tubes are required to be fabricated to a radius. Shop drawings must be submitted to the Engineer for approval.

Round or chamfer exposed edges of HSS rail and HSS rail posts to approximately 1/16" by grinding.

MATERIAL NOTES:

Provide ASTM-A500 Grade B, A1085 or A53 Grade B for all HSS.

Provide ASTM-A36 for posts and plates.

Galvanize all steel components unless otherwise shown.

Anchor bolts must be ⅝" Dia ASTM A307 Grade A bolts (or A36 threaded rods with one tack welded hex nut each) with one hex nut and one hardened steel washer at each bolt. Threaded rods may be 0.557" minimum diameter with rolled threads. Nuts must conform to A563 requirements.

GENERAL NOTES:

Designed according to AASHTO LRFD Specifications.

Rail anchorage details shown on this standard may require modification for select structure types. See appropriate details elsewhere in plans for these modifications.

Do not use this railing on bridges with expansion joints providing more than 5" movement.

For all rails, submit erection drawings showing section lengths, splice locations, rail post spacing and anchor bolt setting for approval.

Average weight of railing is 30 plf.

Texas Department of Transportation

Bridge Division Standard

PEDESTRIAN RAIL

TYPE PR1

FILE:	rlstd028.dgn	DN: TxDOT	CK: TxDOT	DW: JTR	CK: TxDOT
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