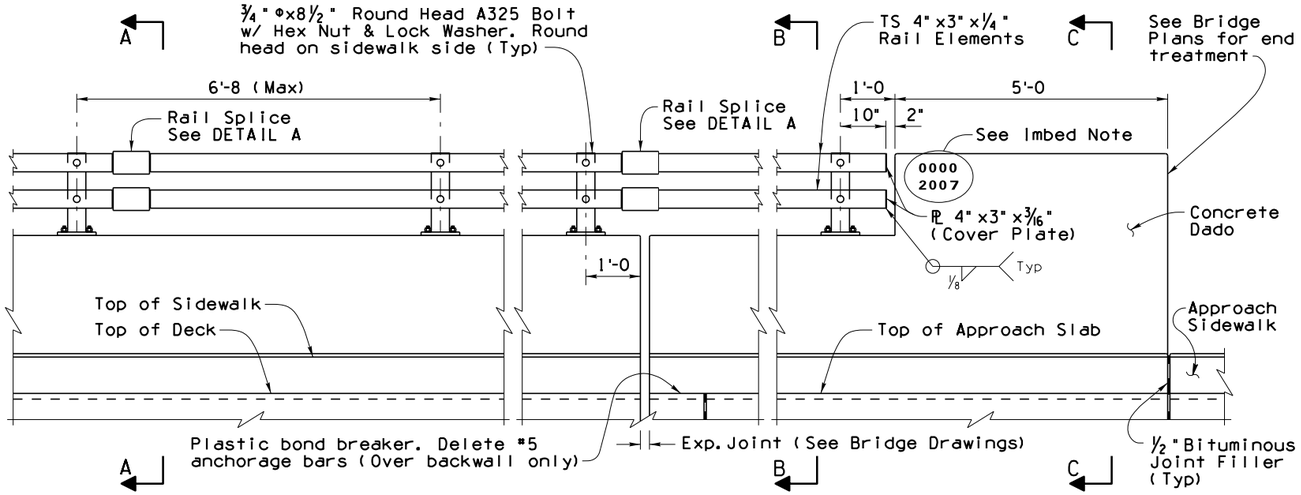
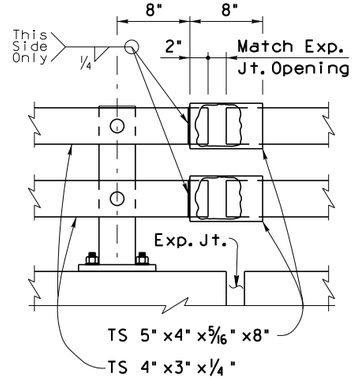


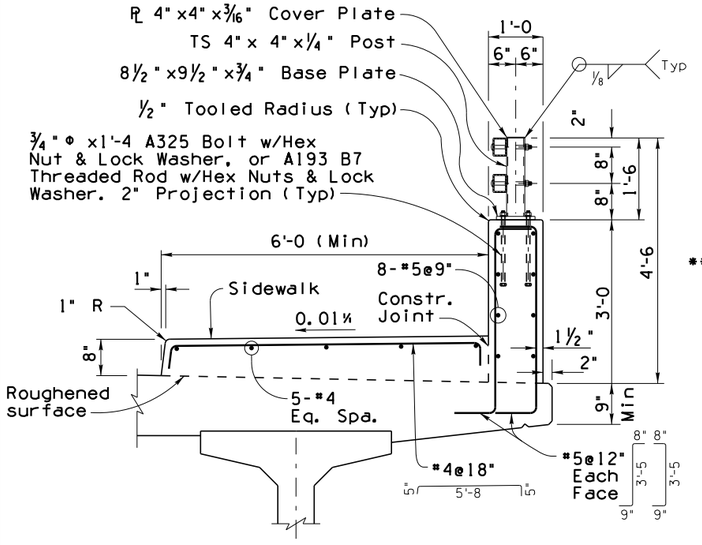
TYPICAL PANEL ELEVATION | ELEVATION AT EXP. JT. | ELEVATION AT END POST

NOTE:

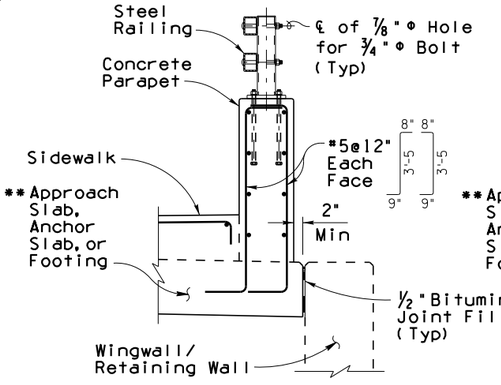
For rail splices not at expansion joints, provide 1 inch gap and weld both ends of splice tube



DETAIL A
(Exp. Splice Shown)

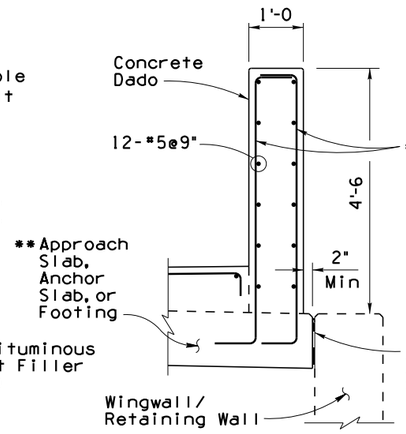


SECTION A-A



SECTION B-B

** See SD 1.10 for footing details



SECTION C-C

GENERAL NOTES:

Construction Specification - Arizona Department of Transportation Standard Specifications for Road and Bridge Construction, latest Edition.

Design Specifications - AASHTO LRFD Bridge Design Specifications, 8th Edition 2017.

This barrier has been evaluated and approved to be of equal strength to barriers with like geometry, which were successfully crash tested to meet MASH 16 requirements for Test Level 4.

Design Loads:

Dynamic Load (For barrier Design) = 80^{k}

Dynamic load is based on NCHRP 20-07(395) MASH Equivalency of NCHRP Report 350 - Approved Bridge Railings.

Equivalent Static Load (For footing design) = 28^{k}

Footing design is based on NCHRP Report 663.

All Concrete shall be Class "S" (f'c = 4000 psi).

Reinforcing steel shall conform to ASTM Specification A615. All reinforcing shall be furnished as Grade 60. All reinforcing shall be epoxy coated at locations above EL. 4000 ft.

All bends and hooks shall meet the requirements of AASHTO LRFD Article 5.10. All bend dimensions for reinforcing steel shall be out-to-out of bars. All placement dimensions for reinforcing steel shall be to center of bars unless noted otherwise.

All reinforcing steel shall have 1½ inch clear cover unless noted otherwise.

Structural tubing (TS) shall be ASTM A500 Grade B. All other structural steel shall conform to ASTM A36 unless noted otherwise.

All welding shall conform to the requirements of the American Welding Society, ANSI/AASHTO/ AWS D1.5 Bridge Welding Code, latest Edition.

Concrete parapets on continuous superstructures shall have ½" bituminous joint filler in open joints over piers.

Imbed ½", Bridge Number and Year Built, using 1½"w x 2"h number impressions in concrete, located as shown at the approach end of the outside lane.

Labor and materials for railing, parapet, dado, anchorage bars, sidewalk and PEDESTRIAN FENCE (SD 1.13) are included in the pay item (Item No. 6011132).

Dimensions shall not be scaled from drawings.

RAILING NOTES:

See Bridge Plans for rail layout, elevation, joint locations and rail end treatments.

All exposed steel edges shall be ground smooth. All structural steel rail assembly components shall be galvanized after fabrication in accordance with ASTM A123. All galvanizing that has been damaged in handling, transportation or welding shall be repaired by the application of a paste compound of an approved zinc powder and flux.

All post bolt heads shall be on sidewalk side. All bolts, nuts and washers shall be galvanized in accordance with the requirements of ASTM A153.

For fence attachment details, see SD 1.13. (Lower rail tube is not required with fence).

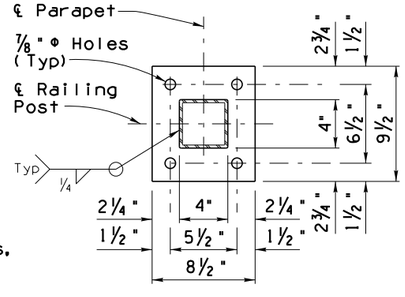
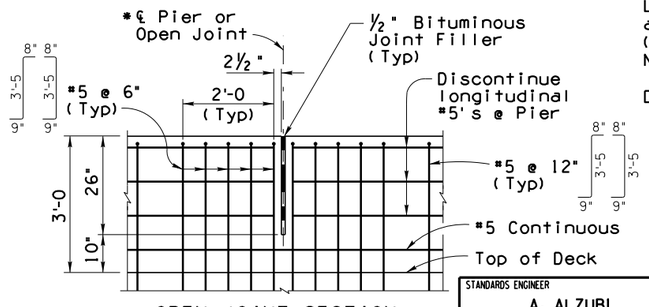


PLATE DETAIL



OPEN JOINT SECTION AT CONTINUOUS PIERS ONLY

* Parapet Stirrups Reinforcement at expansion joints is similar to stirrup reinforcement near open joints at continuous piers

Item	Combination Pedestrian-Traffic Bridge Railing
Item No.	6011132
Measurement	Linear Foot

STANDARDS ENGINEER
A. ALZUBI
RECOMMENDED FOR APPROVAL
GROUP MANAGER
D. EBERHART
APPROVED
STANDARDS COMMITTEE APPROVED FOR DISTRIBUTION 01/20 DATE

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
BRIDGE GROUP STANDARD DRAWING

COMBINATION PEDESTRIAN-TRAFFIC BRIDGE RAILING

DRAWING NO.
SD 1.12

PRIOR DISTRIBUTION DATE 03/09