

SPECIFICATION FOR CORRUGATED METAL PIPE

ULTRA FLO[®] PIPE – GALVANIZED STEEL

1.0 GENERAL

- 1.1 This specification covers the manufacture and installation of the galvanized ULTRA FLO (UF) corrugated steel pipe or pipe arch (PA) detailed in the project plans.

2.0 DESIGN STANDARDS

- 2.1 The UF pipe or PA meets the design parameters of the American Association of State Highway and Transportation Officials (AASHTO) Standard Specification for Highway Bridges, AASHTO LRFD Bridge Design, and/or the American Iron and Steel Institute (AISI).

3.0 MATERIAL

- 3.1 The galvanized steel coils shall conform to the applicable requirements of AASHTO M 218 or ASTM A929.

4.0 PIPE

- 4.1 The UF pipe or PA shall be manufactured with the $\frac{3}{4}$ " X $\frac{3}{4}$ " X 7 $\frac{1}{2}$ " external ribs in accordance with the applicable requirements of AASHTO M 36 or ASTM A760. The pipe sizes and gauges shall be as shown on the project plans.
- 4.2 All fabrication of the product shall occur within the United States.

5.0 COUPLING BANDS

- 5.1 Coupling bands for the UF shall be made of the same base metal and coatings as the UF to a minimum of 18 gauge.
- 5.2 Ends of the UF are rerolled with annular corrugations for proper indexing.
- 5.3 Connection fasteners will be provided.

6.0 HANDLING & ASSEMBLY

- 6.1 Refer to the recommendations of the National Corrugated Steel Pipe Association's (NCSPA).

7.0 INSTALLATION

- 7.1 The installation shall be in accordance with AASHTO Standard Specifications for Highway Bridges, LRFD Section 26, Division II, NCSPA, or ASTM A798 and in conformance with the project plans and specifications. If there are any inconsistencies or conflicts, the contractor must bring them to the attention of the project engineer.
- 7.2 It is always the contractor's responsibility to follow OSHA guidelines for safe practices.

8.0 CONSTRUCTION LOADS

- 8.1 Construction loads may be greater than design loads. The contractor shall follow the recommendations for additional compacted material per manufacturer's or NCSPA guidelines.