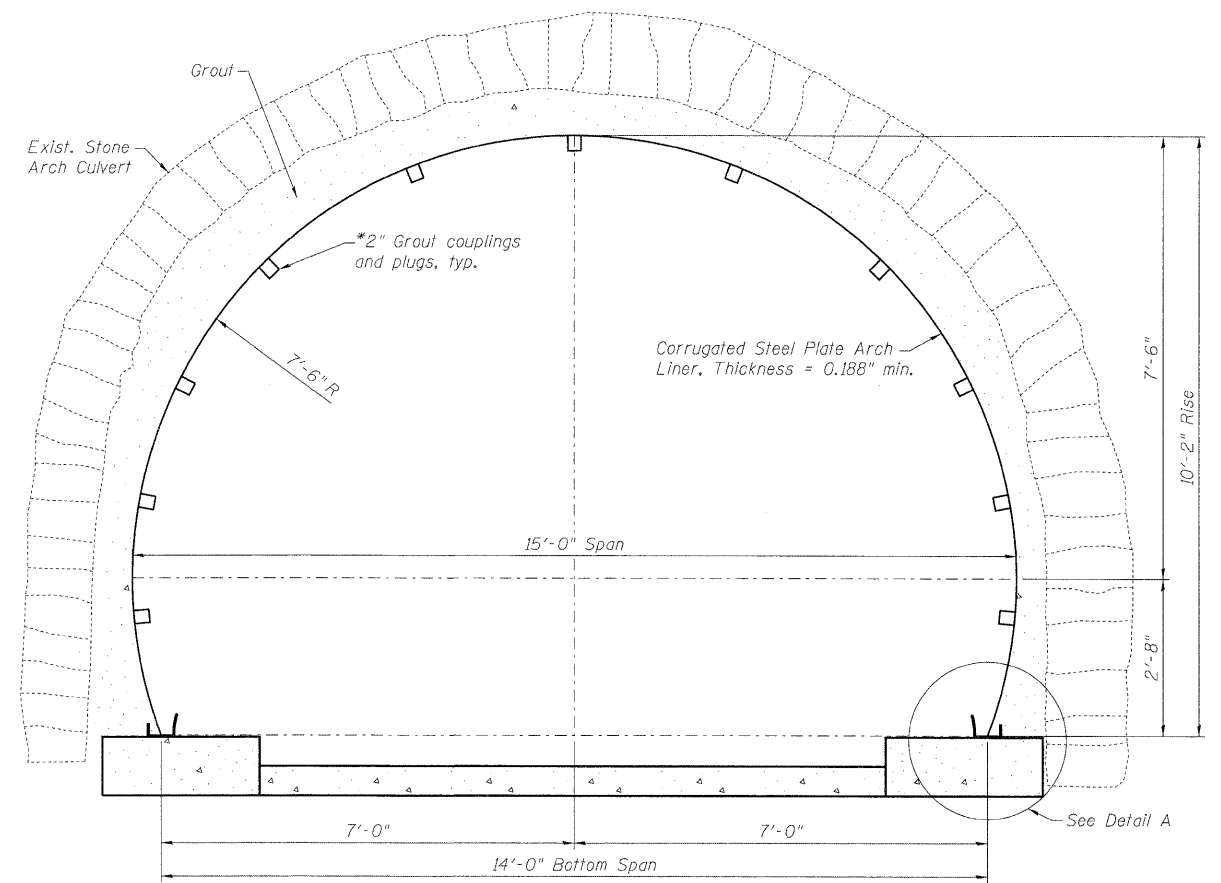


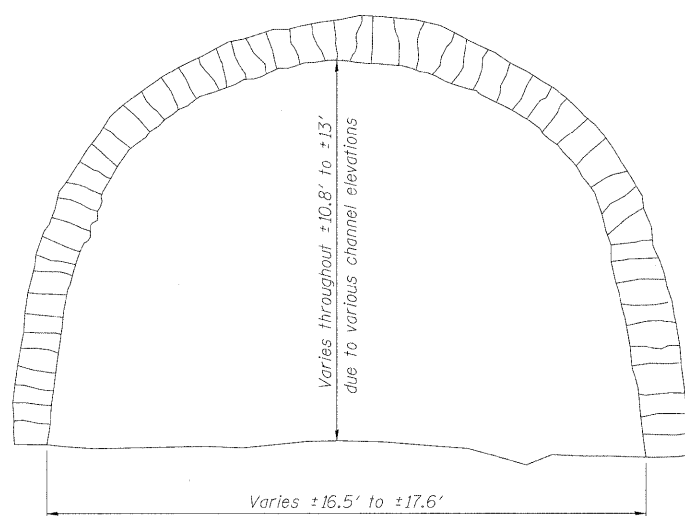
WEST END STEEL LINER SECTION



EAST END STEEL LINER SECTION

SECTION THROUGH PROPOSED CORRUGATED STEEL PLATE ARCH LINER

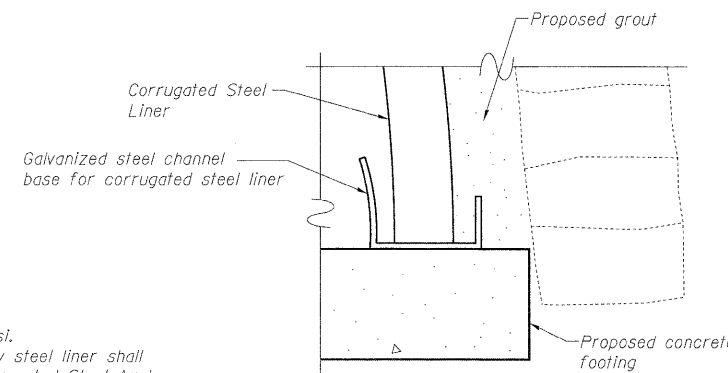
* Location and spacing of grout couplings shall be in accordance with manufacturer's recommendations. Typically, grouting proceeds from bottom to top with a two foot maximum per lift. Both sides of the arch may be done simultaneously or alternately, but sides must be allowed to set before beginning the next lift.



SECTION THROUGH EXISTING STONE ARCH CULVERT

GENERAL NOTES

The grout shall be pumped in at a pressure no greater than 5 psi. Cost of concrete removal and reinforcement cutting to fit the new steel liner shall not be paid for separately, but shall be included in the cost of Corrugated Steel Arch Liner.
 The cost including all material, equipment and labor to install the steel arch liner, anchor bolts, connecting bolts, grout, and all other material required to build the steel arch liner shall be included in the cost of Corrugated Steel Arch Liner.
 Bottom of proposed footings shall not be set below the elevation of existing footings. The Engineer and Contractor are to evaluate the condition of the base of stone arch culvert for possible undermining prior to footing excavation. The Contractor is responsible for maintaining the stability of the existing stone arch culvert walls. If excavation below the level of the bottom of the stone arch is determined to be required, any work necessary to maintain stability should be paid for Article 109.04.



DETAIL A

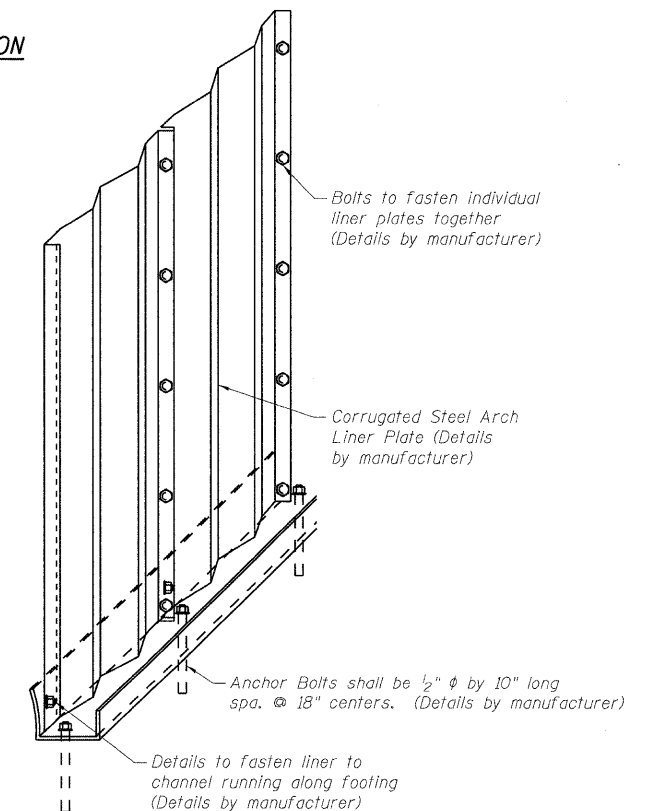


PLATE CONNECTION DETAILS