

GENERAL NOTES:

The dimensions shown shall be verified at the site by the Contractor before fabrication of the components. The Contractor is responsible for using the correct pipe diameter, correct dimensions, and proper fit of the safety grate into the headwall opening.

Bolts, lock nuts, washers, and plates shall be installed at all locations as shown.

The bolts, nuts, and washers shall conform to the requirements of Articles 1006.09 and 1006.27(f) of the Standard Specifications. All fabrications shall be complete and ready for assembly prior to galvanizing.

Structural Steel Shapes and Plates shall be in accordance with Article 1006.04 Standard Specifications. Galvanized Steel Pipe shall be in accordance with Article 1006.27(b) of the Standard Specifications.

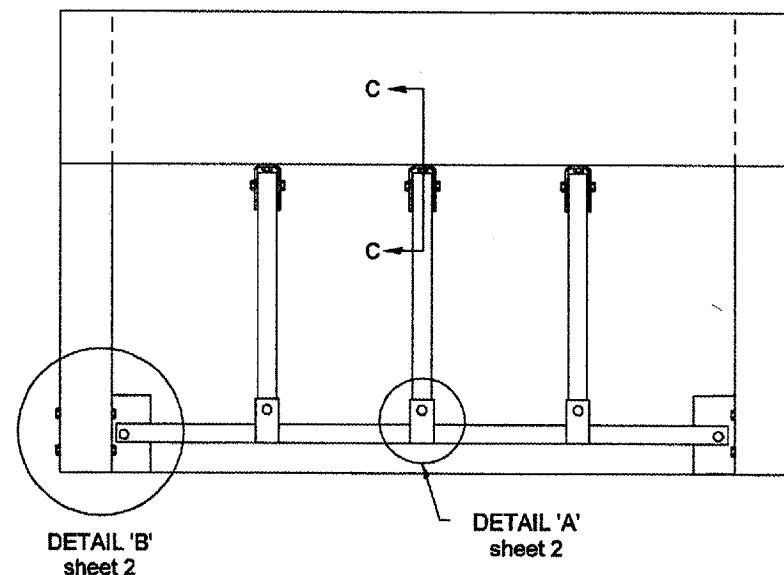
Gas Metal-Arc and Flux-Cored Arc welding may be used for welding incidental items as indicated on this sheet, provided that the fabricator furnishes certifications for the gas, uses approved filler metal and qualified welders.

Pipe furnished shall meet the requirements of ASTM A-53, Schedule 40, Grade B, including galvanizing.

The Contractor may encounter reinforcing steel when drilling holes through the existing structure walls

Holes drilled in the Precast Concrete Box Culvert End Section shall be cored to the diameter noted. If cone-out on the other end of the hole occurs, the hole shall be filled with grout to correct the diameter of the hole.

This work will be paid for at the contract unit price per each for "Grating for Box Culvert, Location 1" which price shall include all materials and labor necessary to complete the work.



GRATE & CROSS BAR SIZE REQUIREMENTS		
Length of Span	Nominal Pipe Size	O.D. Size
0'-12'	3.0"	3.5"
12'-16'	3.5"	4.0"
16'-20'	4.0"	4.5"

Not to Scale

FILE NAME = c:\projects\1180bridge\devbox.dgn	USER NAME = hudsonme	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 10.0000' / IN.	CHECKED -	REVISED -
	PLOT DATE = 12/10/2007	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

Box Culvert Loc 1. Grate Detail

SCALE: SHEET NO. OF SHEETS STA. TO STA.

F.A.S. RTE. 1195	SECTION 112B1BR-3	COUNTY KNOX	TOTAL SHEETS 76	SHEET NO. 38
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 88896	