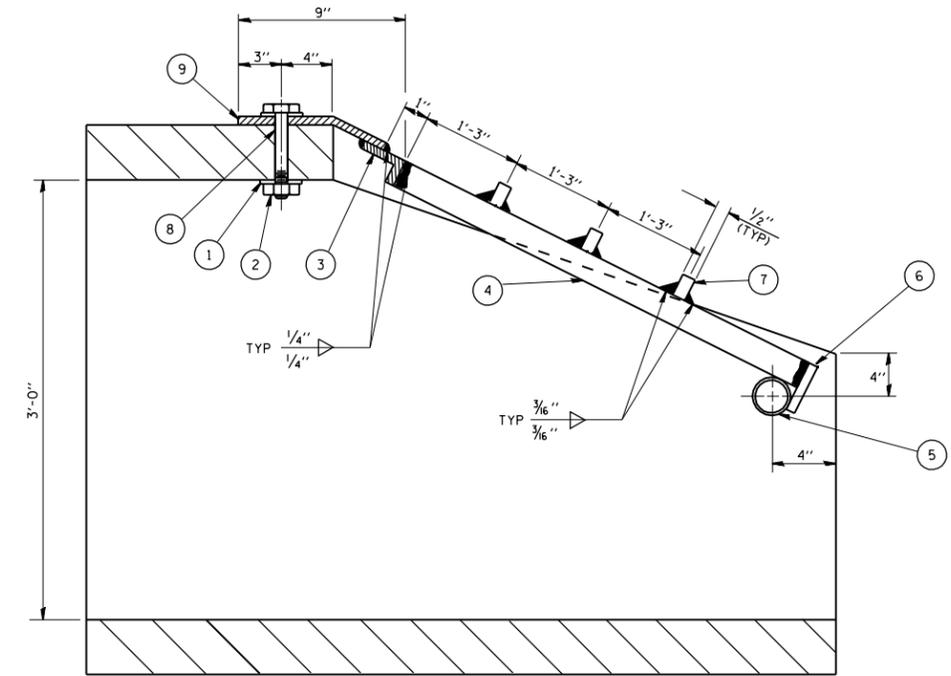
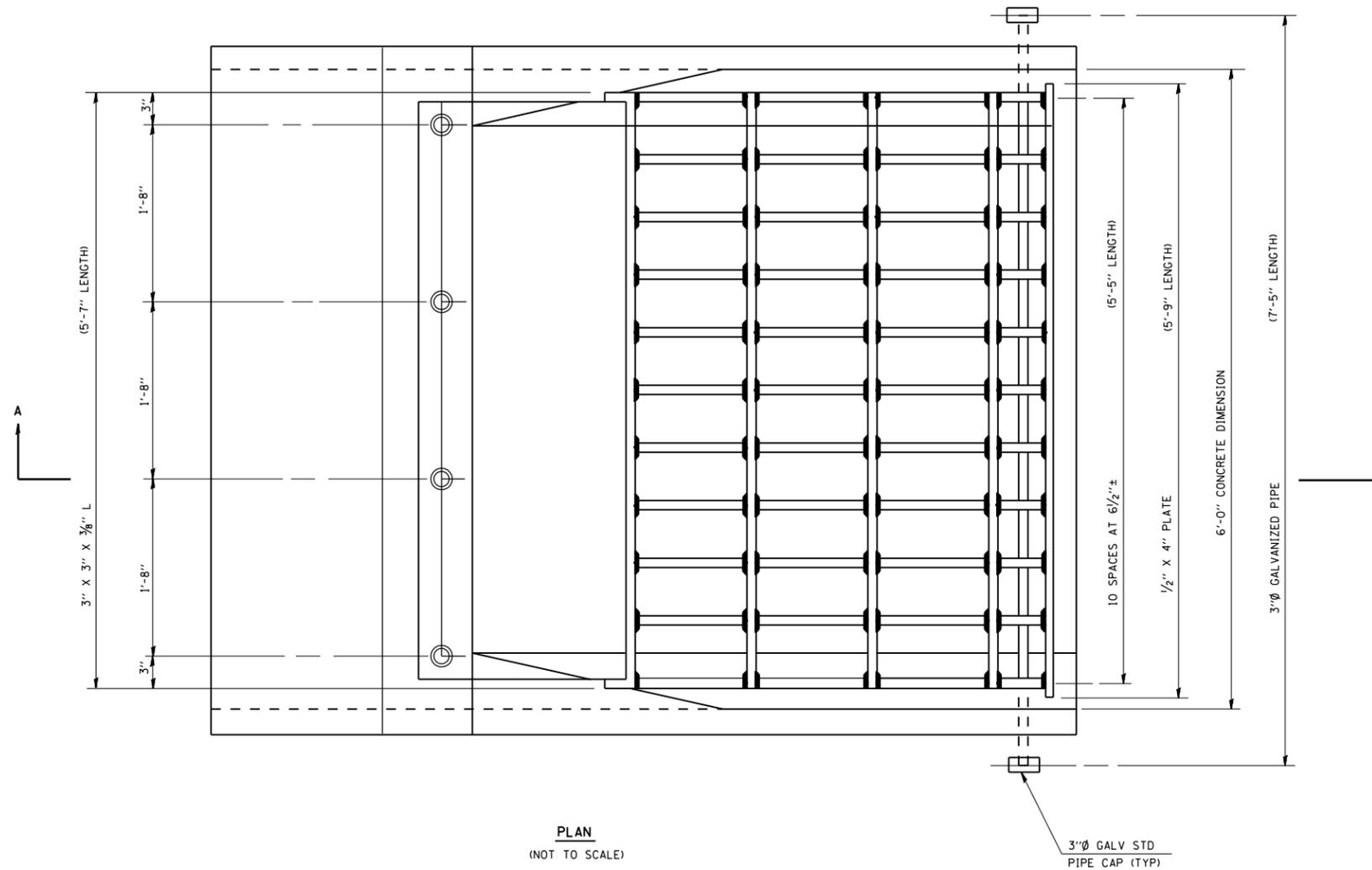


GRATING FOR PRECAST CONCRETE BOX CULVERT END SECTION 6' X 3'



GENERAL NOTES

1. STRUCTURAL STEEL SHAPES AND PLATES SHALL BE IN ACCORDANCE WITH ARTICLE 706.04 OF THE STANDARD SPECIFICATIONS AND SHALL BE GALVANIZED IN ACCORDANCE WITH AASHTO M-111.
2. GALVANIZED STEEL PIPE SHALL BE IN ACCORDANCE WITH ARTICLE 706.27(B) OF THE STANDARD SPECIFICATIONS AND SHALL MEET THE REQUIREMENTS OF ASTM A-53, GRADE B.
3. BOLTS, NUTS AND WASHERS SHALL BE IN ACCORDANCE WITH ARTICLE 706.27(F) OF THE STANDARD SPECIFICATIONS AND SHALL BE GALVANIZED IN ACCORDANCE WITH AASHTO M-232.
4. ALL FABRICATION SHALL BE COMPLETE AND READY FOR ASSEMBLY BEFORE GALVANIZING.
5. THE CORED HOLES IN THE CONCRETE END SECTIONS SHALL BE TO THE DIAMETERS NOTED. IF CONE-OUT ON THE OTHER END OF THE HOLE OCCURS THE HOLE SHALL BE FILLED WITH GROUT TO CORRECT DIAMETER OF THE HOLE.
6. THE CONTRACT UNIT PRICE "EACH" FOR GRATED BOX CULVERT END SECTIONS, CULVERT NO. 01 OF THE SIZE INDICATED SHALL INCLUDE FABRICATION AND INSTALLATION OF THE GRATING AS DETAILED HEREON, INCLUDING FABRICATION OF NECESSARY MOUNTING HOLE IN THE SECTION.

LEGEND

- ① 1/4" X 4" X 4" PLATE WASHER; 1 1/6" Ø HOLE
- ② 1" Ø BOLT WITH FLAT WASHER AND HEX NUT
- ③ L 3" X 3" X 3/8"
- ④ 1/2" X 3" BAR (TYP)
- ⑤ PROVIDE 3, 3/4" Ø HOLE THRU CONCRETE
- ⑥ 1/2" X 4" BAR
- ⑦ BARS 1/2" X 3/8" (TYP)
- ⑧ 1/8" Ø HOLE THRU 3/8" PLATE; 1/4" Ø HOLE THRU CONCRETE
- ⑨ 3/8" PLATE SHALL CONFORM TO SURFACE SHAPE OF CONCRETE END SECTION

FILE NAME = boxcul.dgn	USER NAME = rjo	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GRATING FOR PRECAST CONCRETE BOX CULVERT END SECTION 6' X 3'	F.A.P. RTE. 103	SECTION 27-1-VHB-1	COUNTY ST. CLAIR	TOTAL SHEETS 277	SHEET NO. 109
	PLOT SCALE = 100.0000' / IN.	CHECKED -	REVISIED -		SCALE:	SHEET NO. OF SHEETS STA. TO STA.		CONTRACT NO. 76884		
	PLOT DATE = 10/17/2011	DATE - 10/19/11	REVISIED -		FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT					