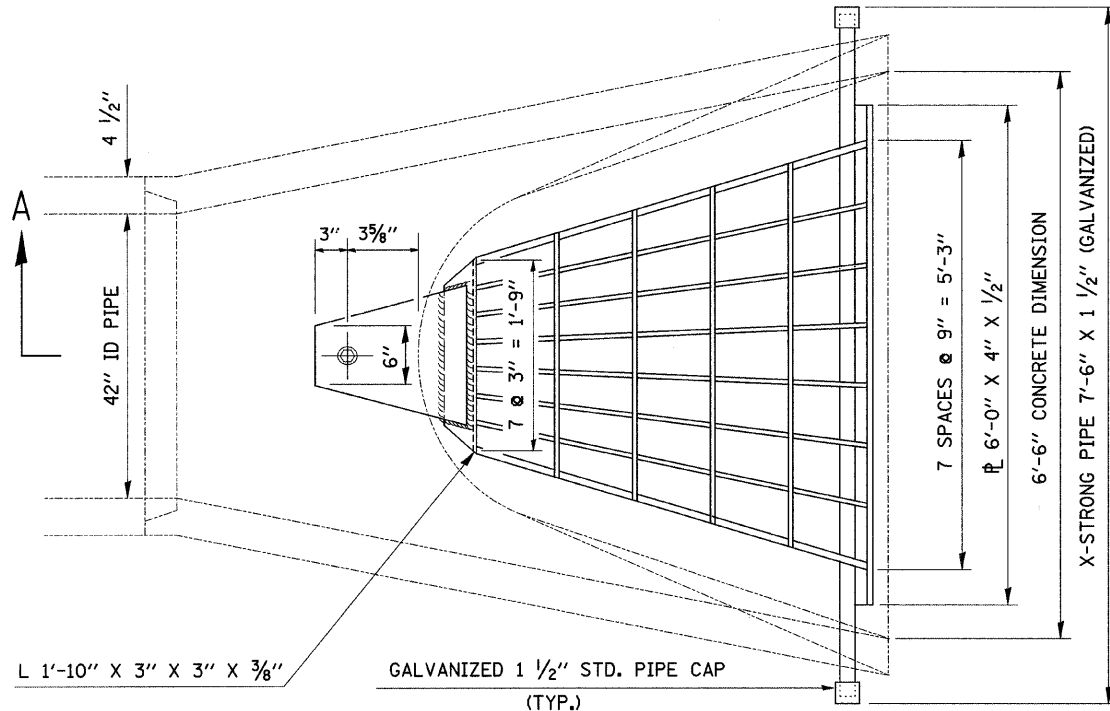


F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
549	117 T	OGLE	86	70
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

# GRATING FOR ARCH DIAMETER CONCRETE FLARED END SECTION (FOR 42", 48", & 54" PIPE)

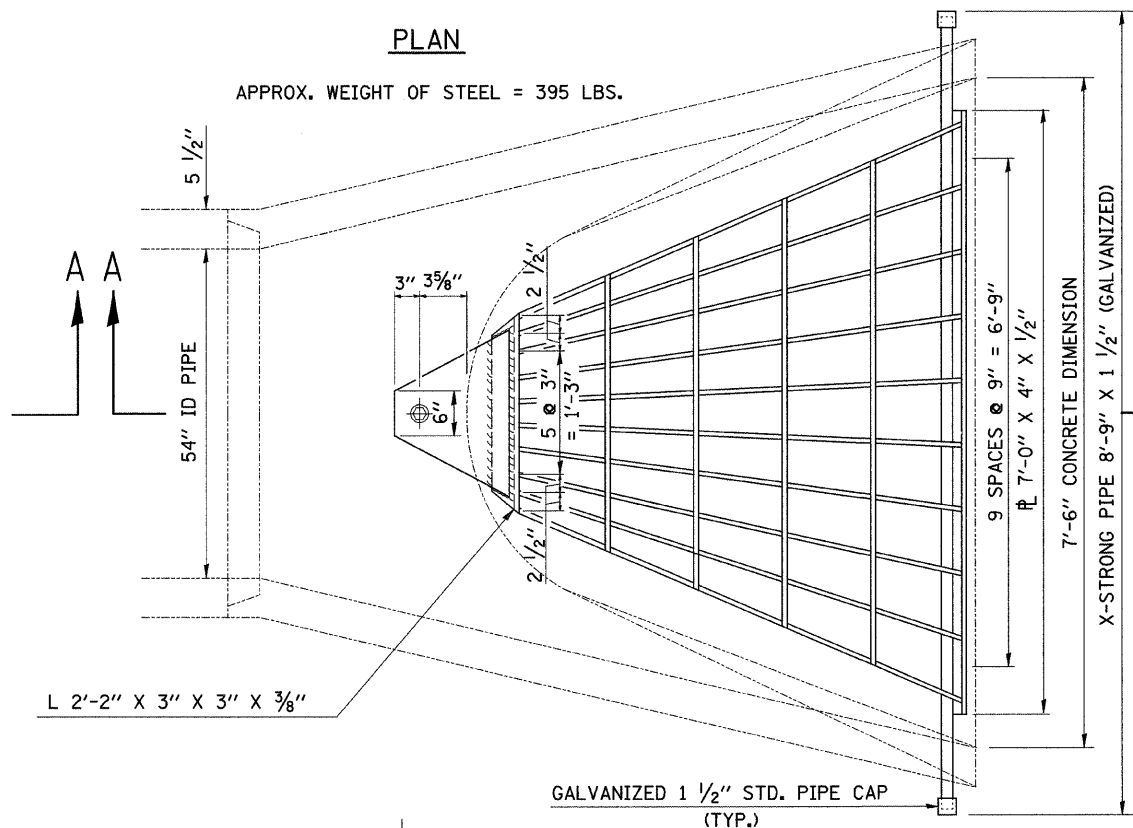
PLAN

APPROX. WEIGHT OF STEEL = 305 LBS.



PLAN

APPROX. WEIGHT OF STEEL = 395 LBS.



**GENERAL NOTES**

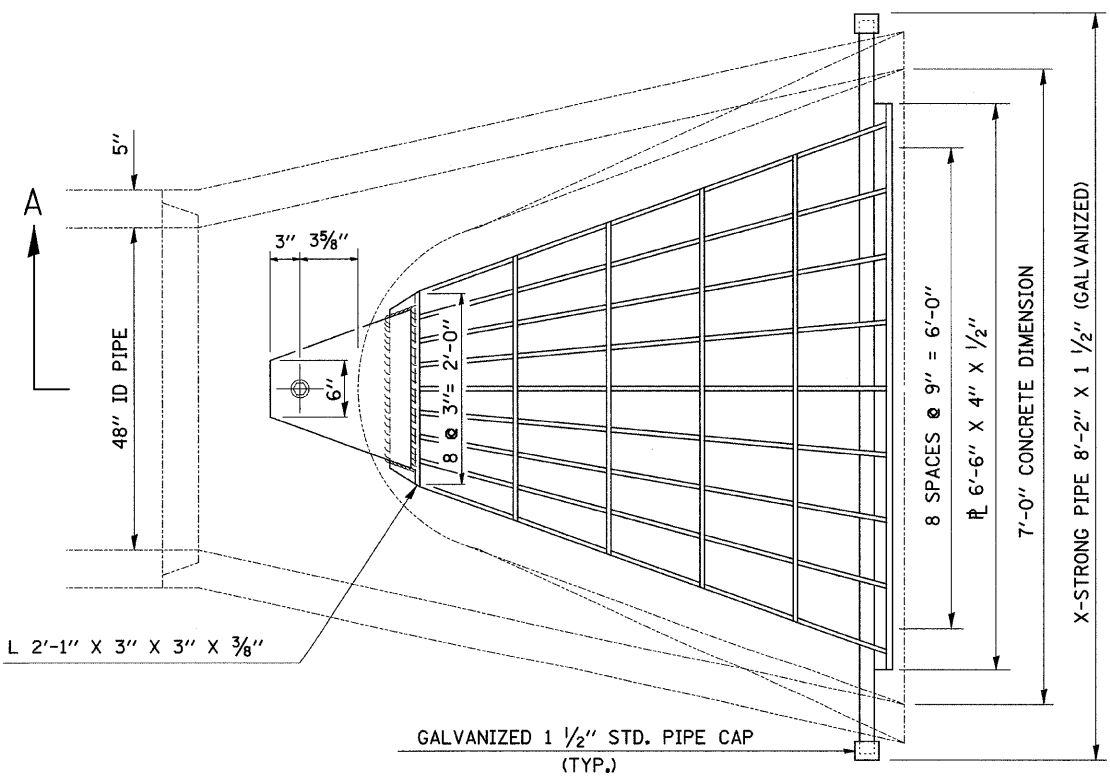
GRATING DETAILS SHOWN ARE INTENDED FOR USE WITH PARTICULAR SIZES OF PRECAST REINFORCED CONCRETE ARCH DIAMETER FLARED END SECTIONS AS SHOWN ON DISTRICT STANDARD 86.2

THE GRATING SHALL BE DONE IN ACCORDANCE WITH ARTICLE 542.07(b)(2) OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

THE CORED HOLES IN THE PRECAST CONCRETE FLARED 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.

APPROXIMATE WEIGHT OF STEEL SHOWN INCLUDES TOTAL WEIGHT OF GRATING, BOLTS, WASHERS, NUTS AND STEEL PIPE.

THE CONTRACT UNIT PRICE " EACH " FOR GRATING FOR CONCRETE FLARED END SECTION EQUIVALENT ROUND-SIZE OF THE SIZE INDICATED SHALL INCLUDE FABRICATION AND INSTALLATION OF THE GRATING AS DETAILED HEREON, INCLUDING FABRICATION OF THE NECESSARY MOUNTING HOLES IN THE FLARED END SECTION, THIS PRICE DOES NOT INCLUDE THE COST OF THE PRECAST CONCRETE FLARED END SECTION.



PLAN

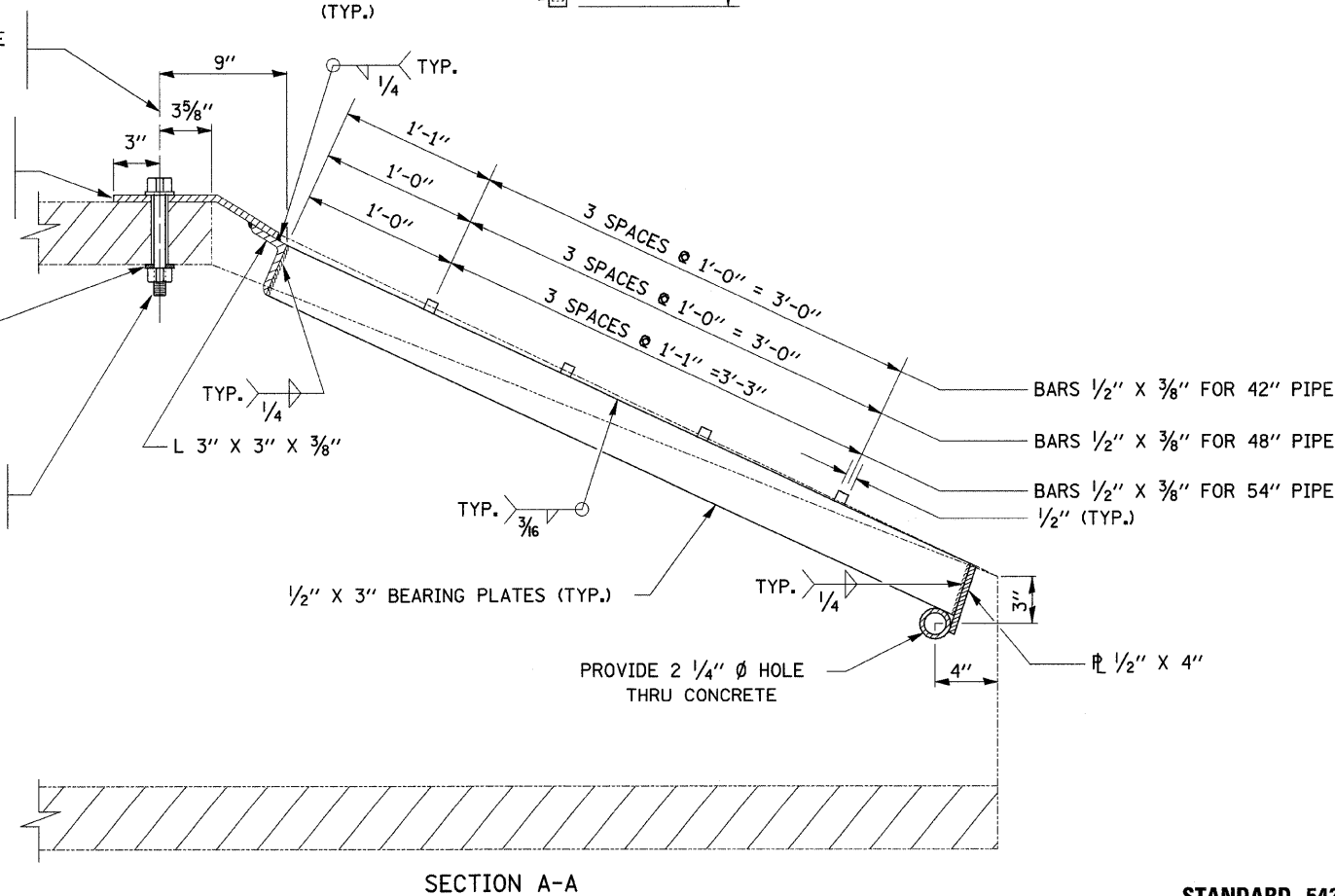
APPROX. WEIGHT OF STEEL = 335 LBS.

1 1/8" Ø HOLE THRU 3/8" PLATE  
1 1/4" Ø HOLE THRU CONCRETE

3/8" PLATE SHALL CONFORM TO SURFACE SHAPE OF CONCRETE FLARED END SECTION

1/4" X 4" X 4" PLATE WASHER  
1 1/16" Ø HOLE

1" Ø BOLT WITH FLAT WASHER AND HEX NUT



SECTION A-A

STANDARD 542311 (SPECIAL)

PLOT DATE = Fri Dec 28 13:45:38.1 2007  
FILE NAME = c:\p\projects\210705\10705.dwg  
PLOT SCALE = 50.0000 / IN.  
REFERENCE = SHEET#