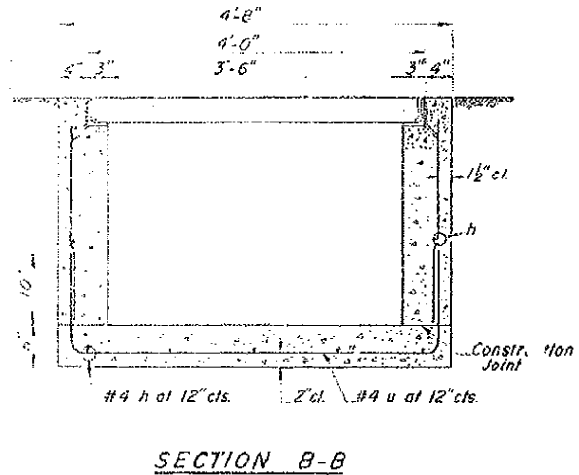


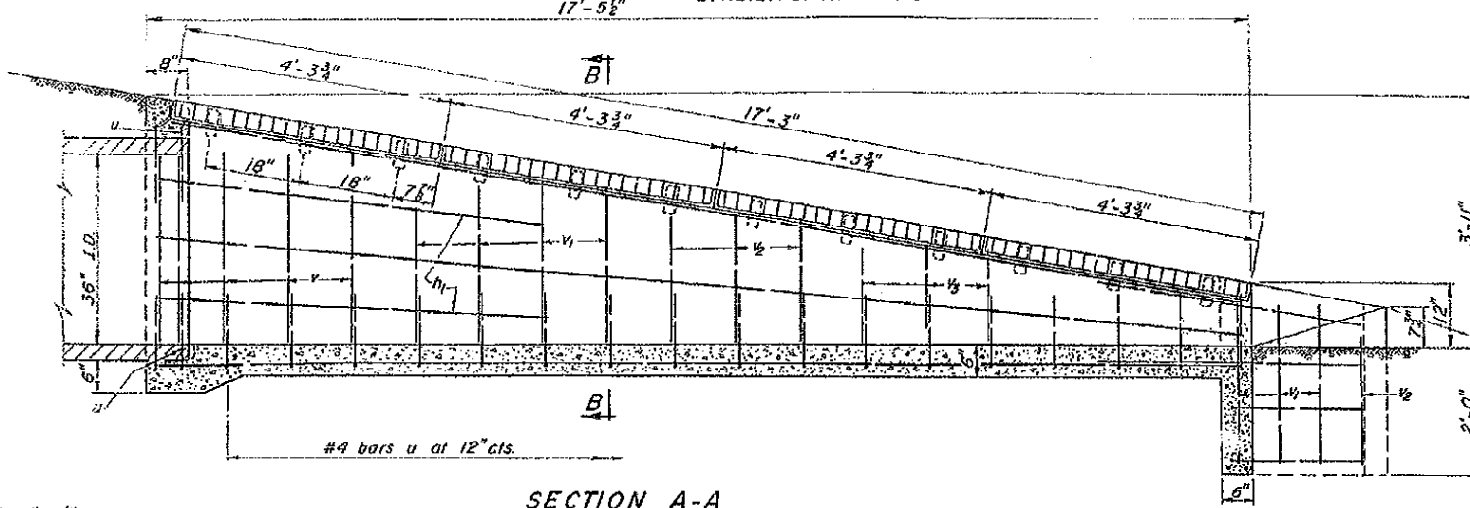
AS BUILT FOR INLET BOX HEADWALL

FOR INFORMATION ONLY

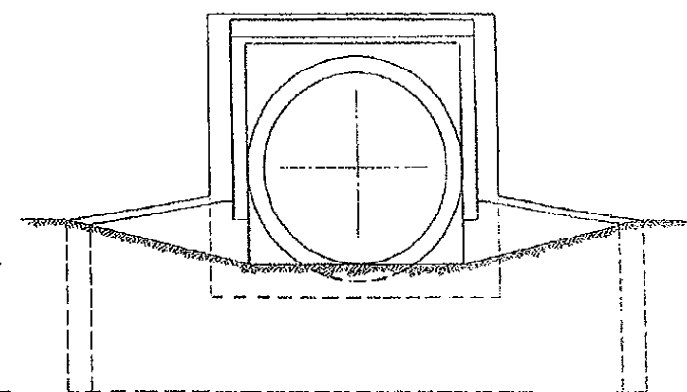
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS



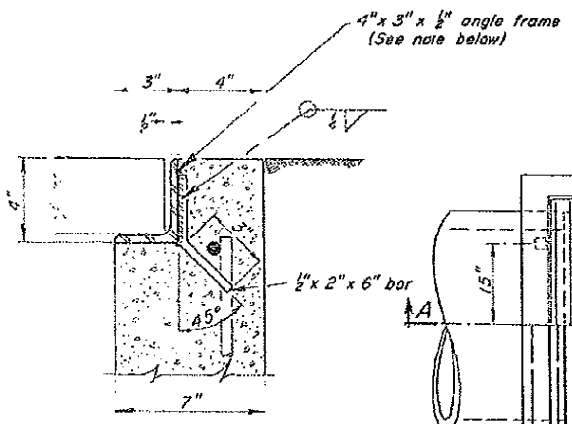
SECTION B-B



SECTION A-A

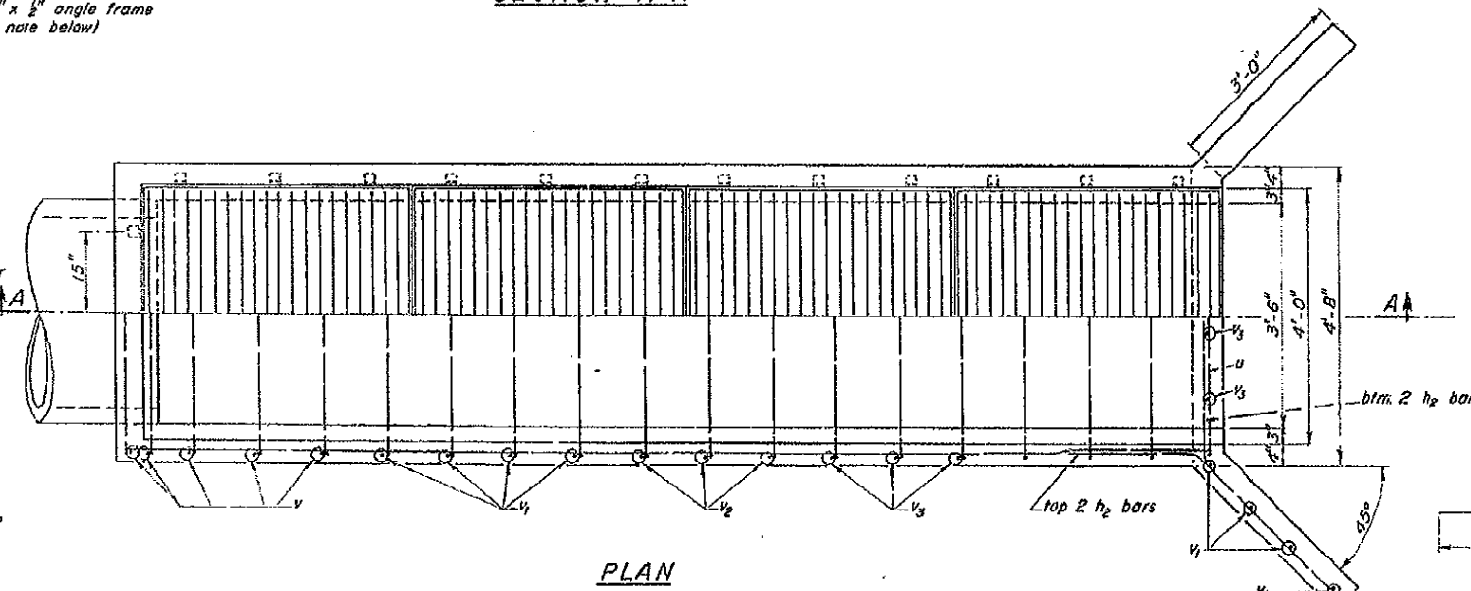


END VIEW
(Grating omitted for clarity)

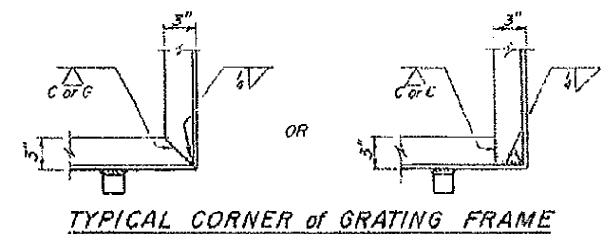


4" x 3" x 1/2" angle frame
(See note below)

NOTE:
The dimensions of the angle iron frames shall be as shown except that the 4" leg dimension may vary according to type of grating used. In all cases, the surface shall be flush with the top of edge of frame, wingwall and headwall. All frames shall be galvanized and anchored in concrete. They shall be factory assembled and all joints shall be welded per detail.



PLAN



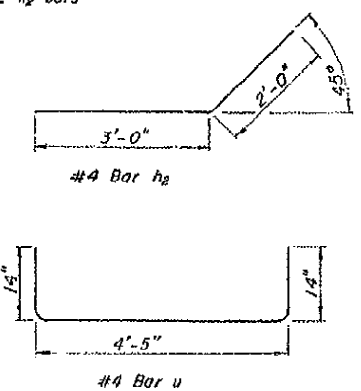
TYPICAL CORNER OF GRATING FRAME

GENERAL NOTES

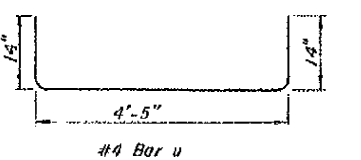
Class X concrete shall be used throughout.
Exposed edges shall be beveled 1/4".
The steel grating shall have the main bearing bars running perpendicular to the centerline of the culvert. The main bearing bars shall have a minimum section modulus of 4.22 inches cube per foot width of grating. The grating shall seat firmly in the frame but shall not be secured to the frame. The length and width of grating shall be such as to leave no more than 1/8" clearance on each side when in place in the frame. The grating shall be cut in such manner that all riveted or welded connections are left in fact. Grating shall be approved by the Engineer.
Steel grating and frame shall conform to ASTM designation A-36 and galvanized to ASTM designation A-123 after fabrication.
For backfilling and embankment, see Standard Specifications.
All bars shall be lapped 20 diameters unless otherwise specified.
The backs of sidewalls and wings above the top of the footing shall be waterproofed in accordance with Article 51.21 of the Standard Specifications.

BILL of MATERIAL

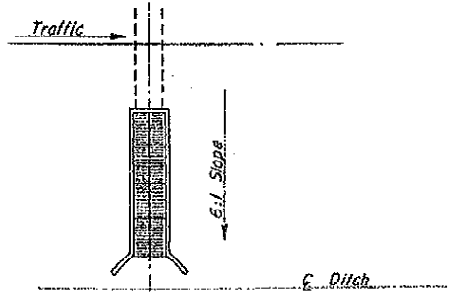
Bar	No.	Size	Length
h	9	#4	17'-0"
h ₁	4	#4	6'-3"
h ₂	8	#4	5'-0"
u	21	#4	6'-9"
v	10	#4	3'-0"
v ₁	14	#4	2'-6"
v ₂	8	#4	2'-0"
v ₃	10	#4	1'-6"
Cl. X Concrete		Cu. Yds.	3.9
Reinf. Bars		Lbs.	305
Steel Grating		Sq. Ft.	67.3



#4 Bar h₂



#4 Bar u



Sketch showing location and direction of main bearing bars in relation to C. Ditch

INLET BOX for 6:1 SIDE SLOPE
with 36" I.D. CULVERT at RIGHT
ANGLES to C. of DITCH

STANDARD 2248
(Full Size)

STATE OF ILLINOIS DEPARTMENT OF PUBLIC WORKS & BUILDINGS DIVISION OF HIGHWAYS	ISSUED 1-9-68
DESIGNED BY Engineer of Bridge and Traffic Structures	REVISIONS
APPROVED January 9 1968	