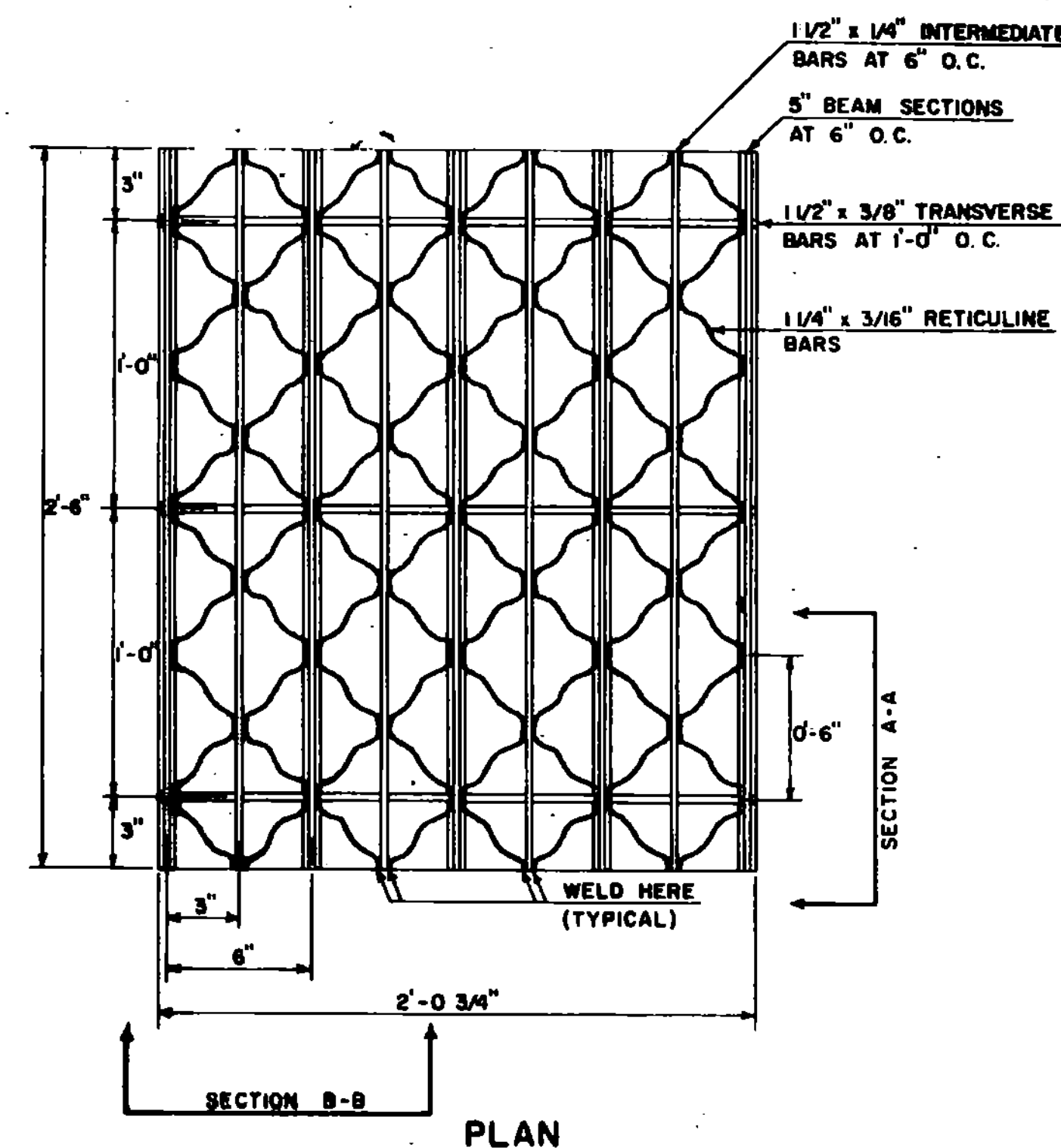
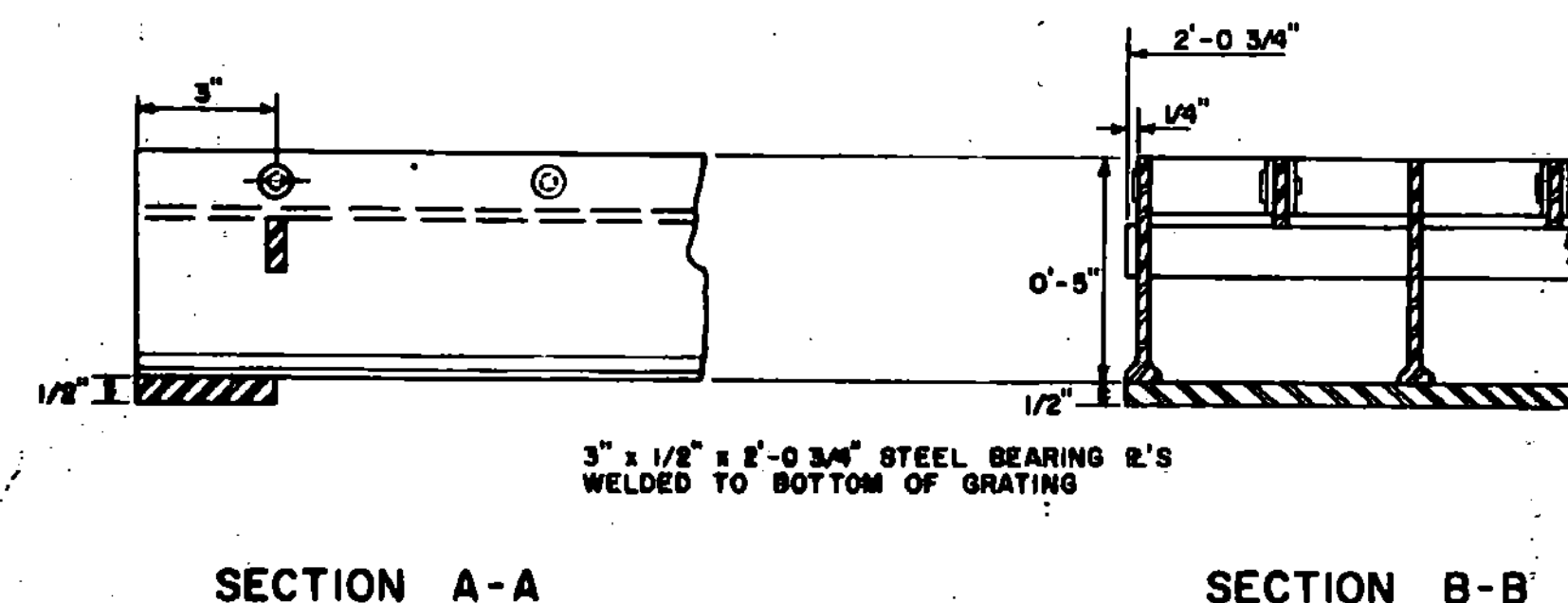


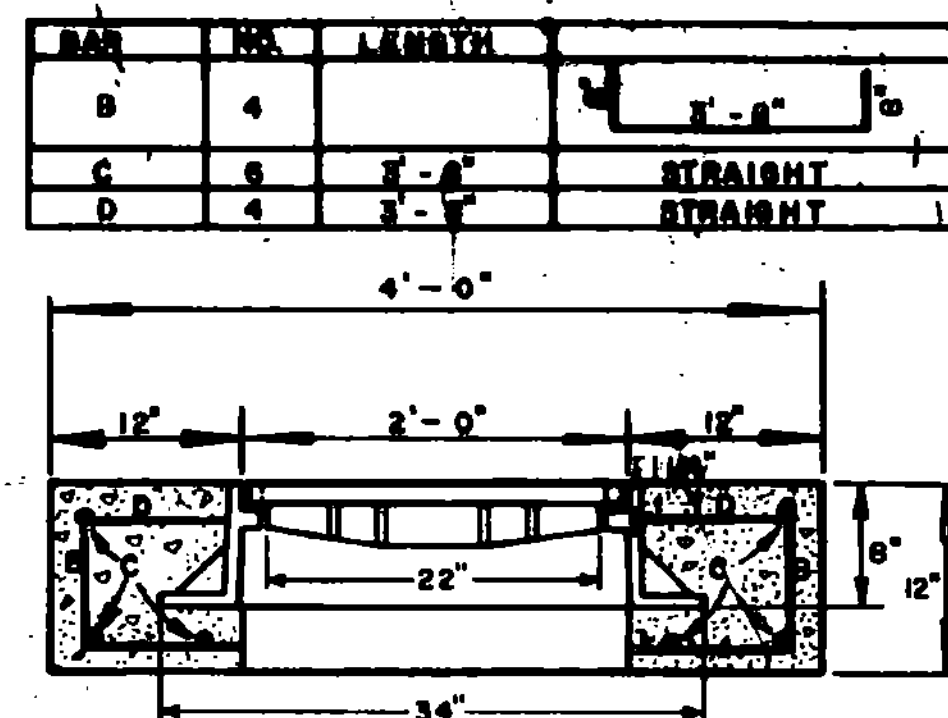
STEEL GRATE



GRATE SIZE	SINGLE 24 3/4" x 30"
	DOUBLE 24 3/4" x 64"
WEIGHT	95 LBS OR MORE
GRATES SHALL BE CAPABLE OF SUPPORTING H-20 (32,000 LB. AXLE LOAD) INCLUDING 30% IMPACT.	
UNIT STRESSES (LBS PER SQ. IN.)	
MAIN BAR PARALLEL TO TRAFFIC	H-20 48"
MAIN BAR PERPENDICULAR TO TRAFFIC	H-20 38"

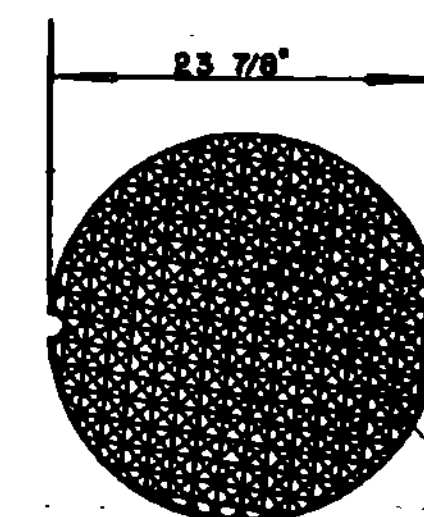


CAST IRON COVER WITH FRAME



ELEVATION

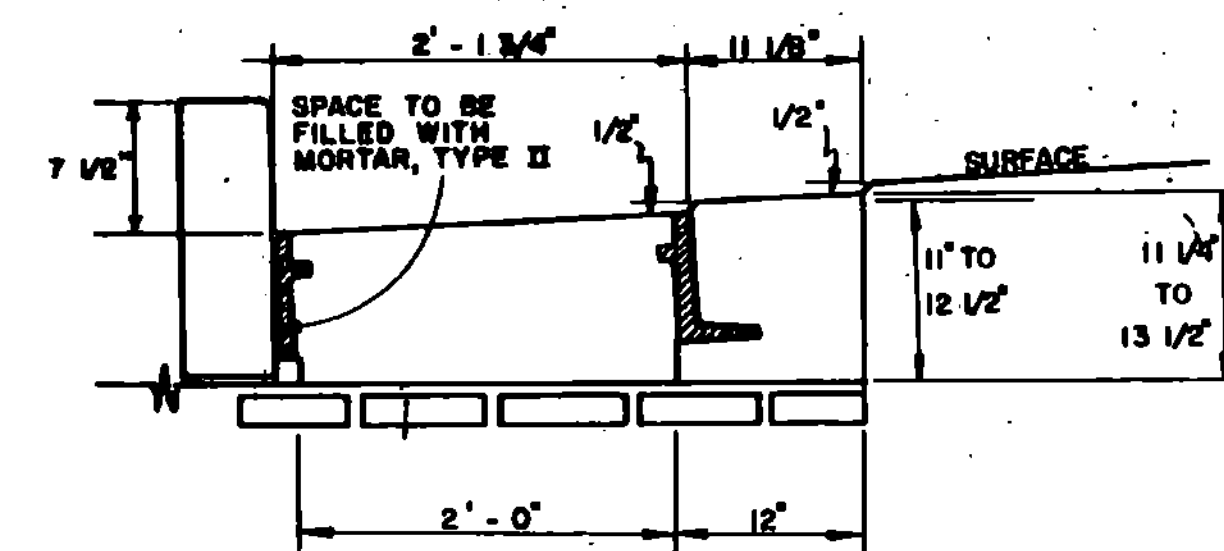
ALL REINFORCING STEEL TO BE NO. 5 DEFORMED BARS



PLAN

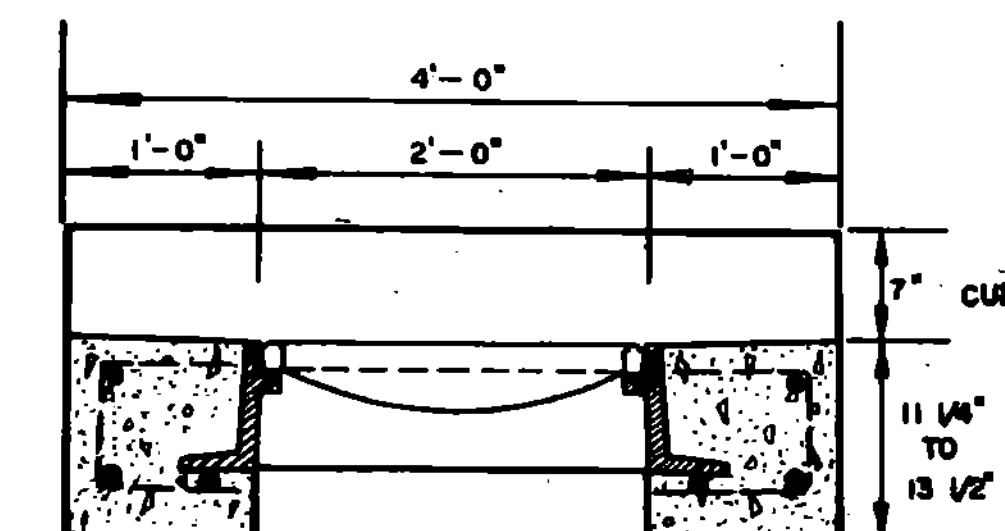
GENERAL NOTES:
WEIGHT OF FRAME
AND COVER = 425 LBS

CAST IRON GRATE WITH FRAME

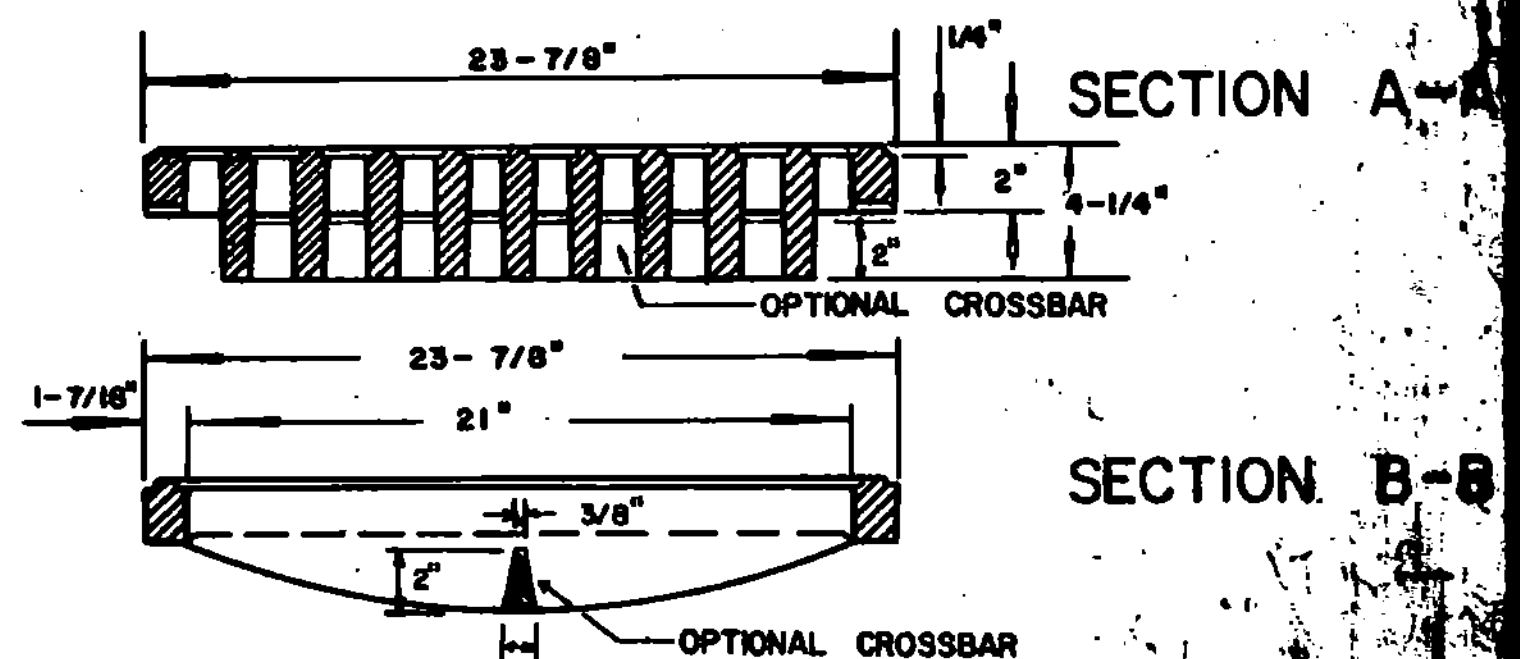
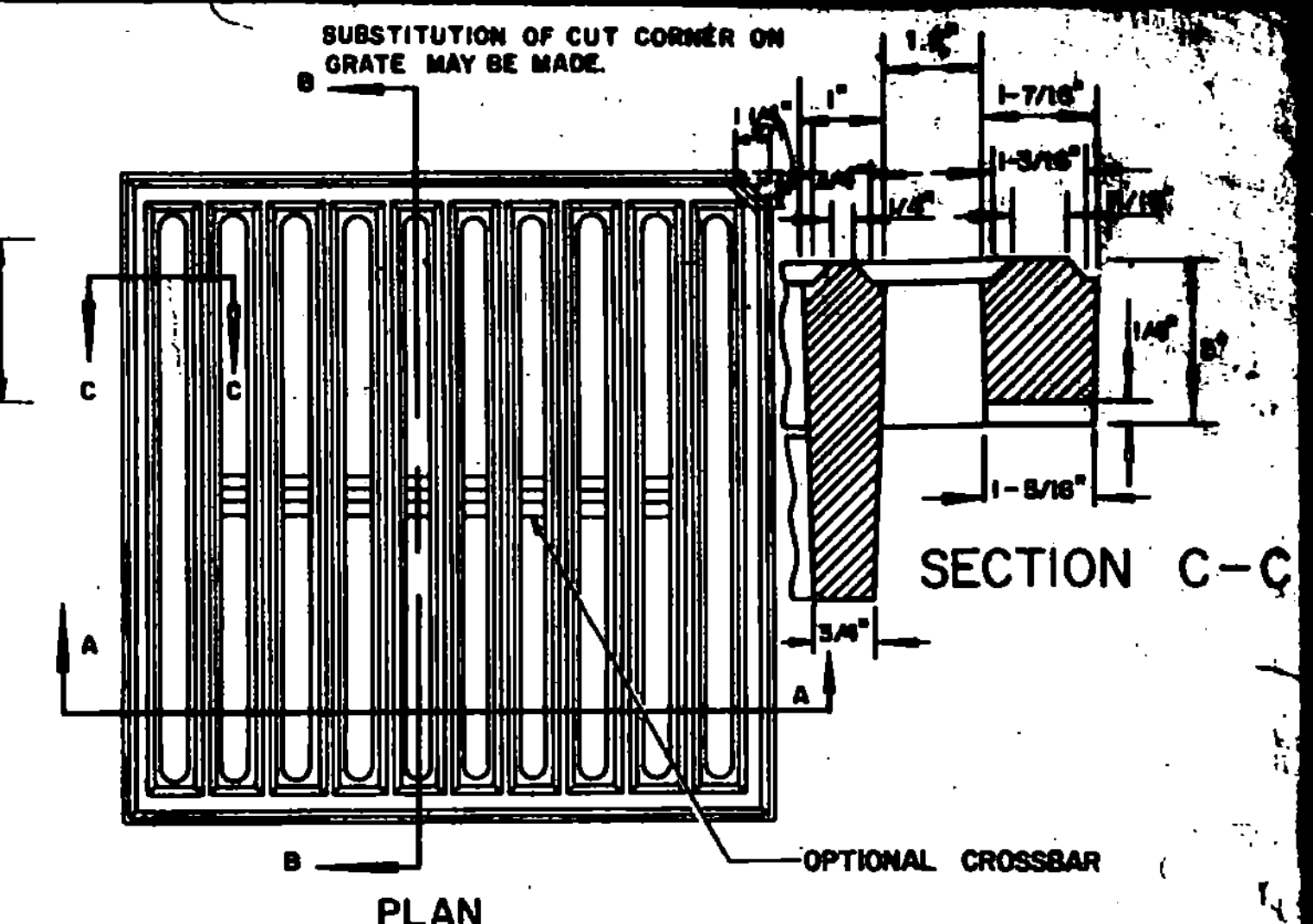


ELEVATION OF REINFORCED CONCRETE DROP INLET WITH VERTICAL GRANITE CURB AND 3 FLANGE CAST IRON FRAME FOR CAST IRON GRATE.

SEE STANDARD D-9 FOR CONCRETE VOLUME, REINFORCING STEEL SCHEDULE AND CURB JOINT DETAIL.



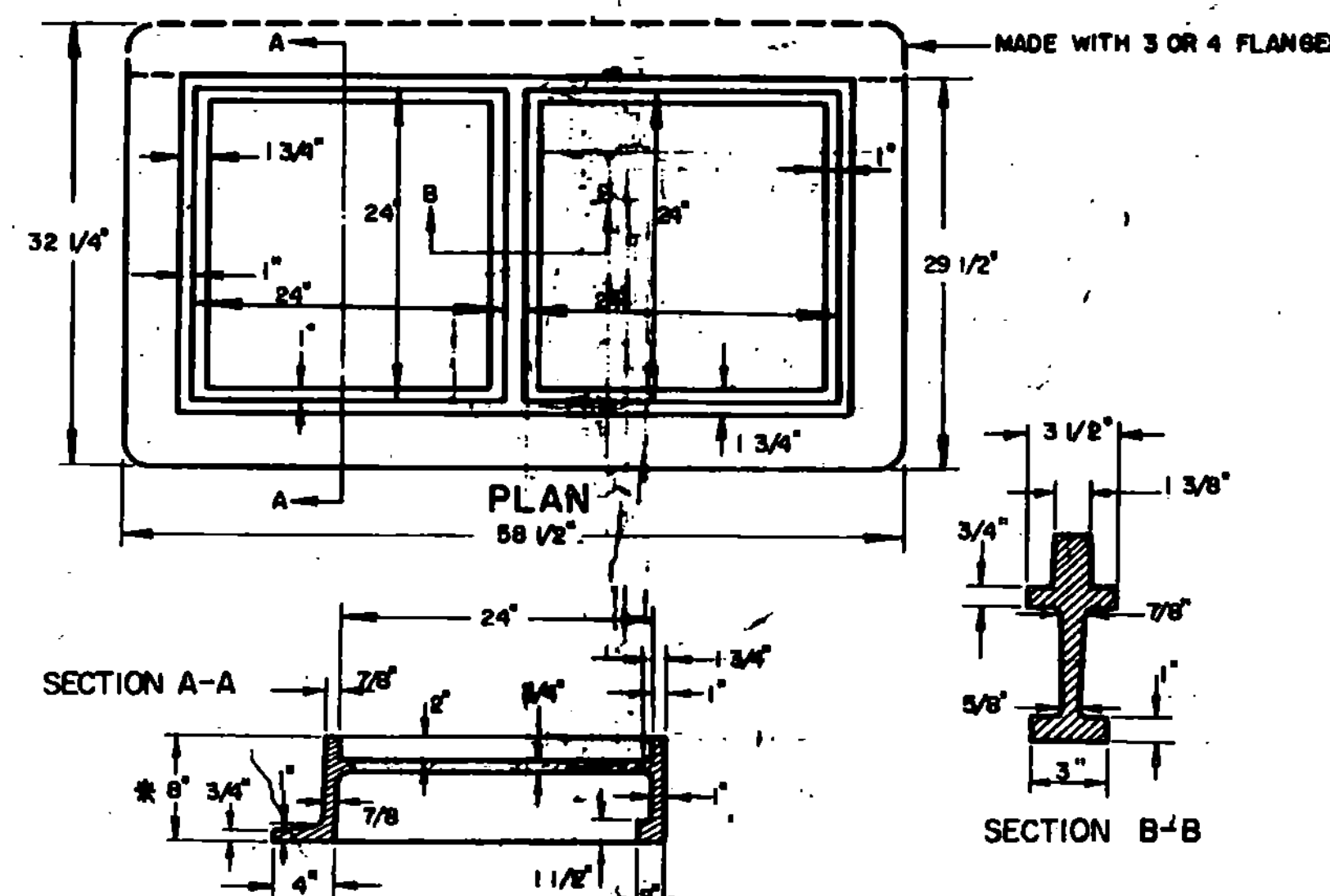
ELEVATION



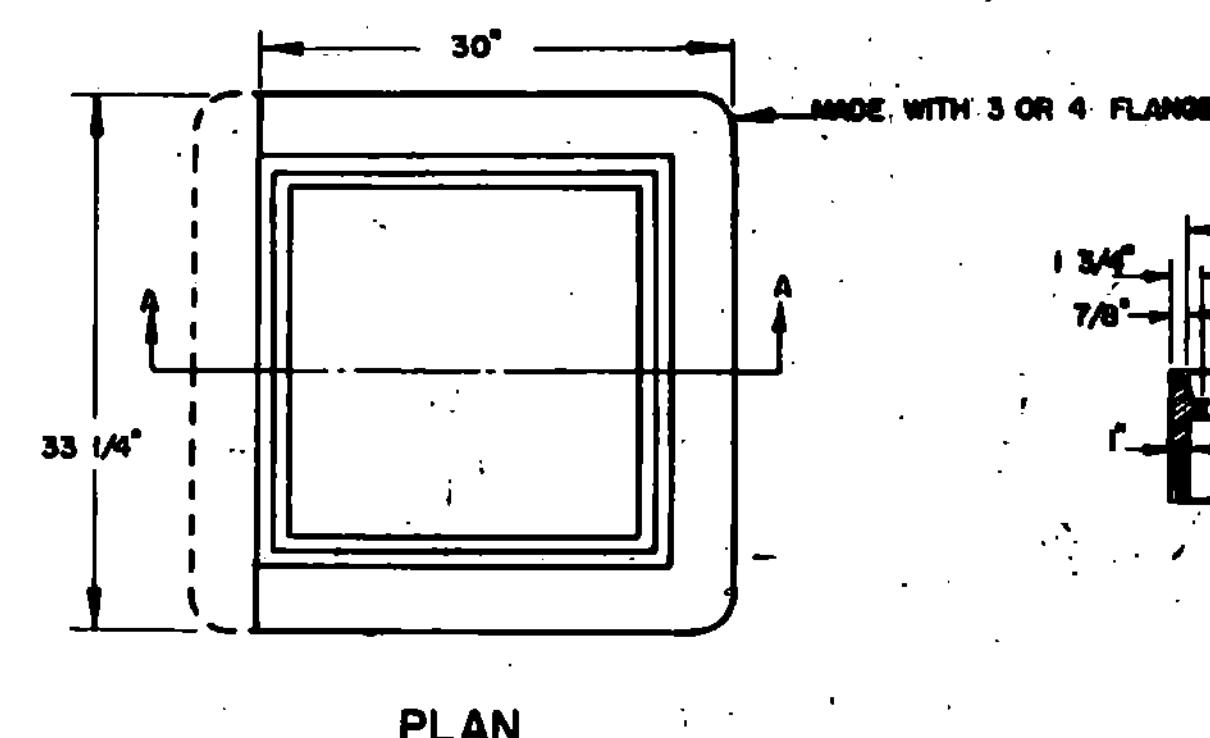
CAST IRON GRATE, TYPE A

USE OF THE TYPE A GRATE IS PROHIBITED WHERE BICYCLE TRAFFIC IS EXPECTED.

WEIGHT OF 3 FLANGED FRAME AND GRATE	220 LBS
FRAME	260 LBS
TOTAL	480 LBS



RECTANGULAR CAST IRON FRAME FOR TWO 24" SQUARE CAST IRON GRATES



SQUARE CAST IRON FRAME FOR CAST IRON GRATE TYPE A

*NOTE: FRAME DEPTH TO BE "6" WHEN USED IN CONJUNCTION WITH DROP INLET DETAILED ON STANDARD D-6.

REVISIONS AND CORRECTIONS

APRIL 28, 1978: CAST IRON COVER CHANGED FROM SQUARE TO CIRCULAR
BENT. A, 1980. OPTIONAL CROSSBAR ADDED TO A GRATE;
NOTE ADDED TO A GRATE FRAME DETAIL.
AUG 24, 1981, NOTE, ADDED RESTRICTING USE OF TYPE A GRATE

APPROVED

DATE Dec 6, 1971

R. H. Canoll
CHIEF ENGINEER
E. H. Stuchwing
ASS. CHIEF ENGINEER
G. M. Lane
HIGHWAY ENGINEER

DRAWN: G. A. J.
TRACED: A. A. J.

STEEL GRATE

CAST IRON GRATE TYPE A

CAST IRON COVER



D-11