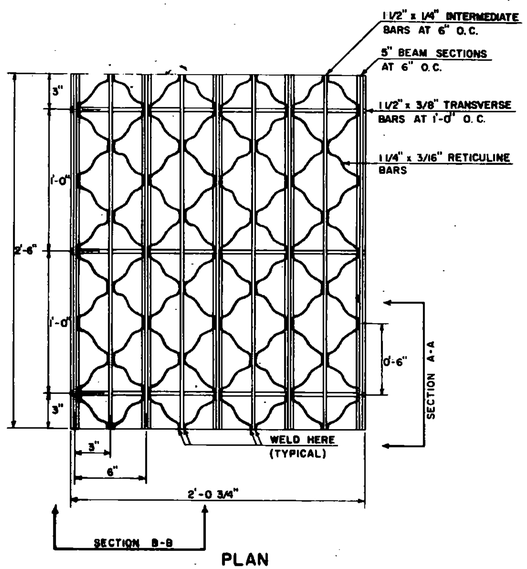
STEEL GRATE



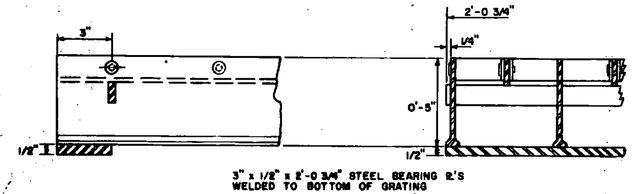
PLAN

GRATE SIZE SINGLE 24 3/4" x 30"
DOUBLE 24 3/4" x 54"

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.)		18,000	20,000
MAIN BAR PARALLEL TO TRAFFIC	H-20	49"	53"
MAIN BAR PERPENDICULAR TO TRAFFIC	H-20	39"	42"



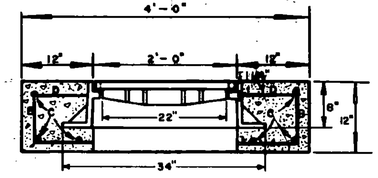
3" x 1/8" x 2'-0 3/4" STEEL BEARING 2's WELDED TO BOTTOM OF GRATING

SECTION A-A

SECTION B-B

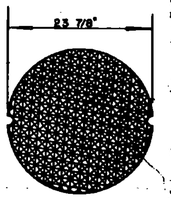
CAST IRON COVER WITH FRAME

BAR	NO.	LENGTH	
B	4		2'-8"
C	6	2'-8"	STRAIGHT
D	4	3'-8"	STRAIGHT



ELEVATION

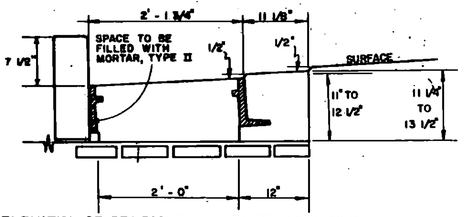
ALL REINFORCING STEEL TO BE No. 5 DEFORMED BARS



PLAN

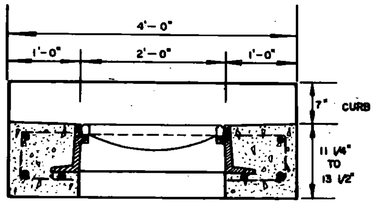
GENERAL NOTES:
WEIGHT OF FRAME AND COVER = 425 LBS

CAST IRON GRATE WITH FRAME



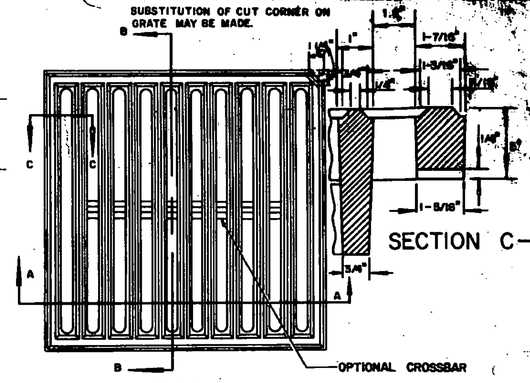
ELEVATION OF REINFORCED CONCRETE DROP INLET WITH VERTICAL GRANITE CURB AND 3 FLANGE CAST IRON FRAME FOR CAST IRON GRATE.

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



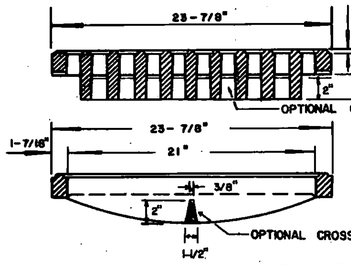
ELEVATION

SUBSTITUTION OF CUT CORNER ON GRATE MAY BE MADE.



PLAN

SECTION C-C



SECTION A-A

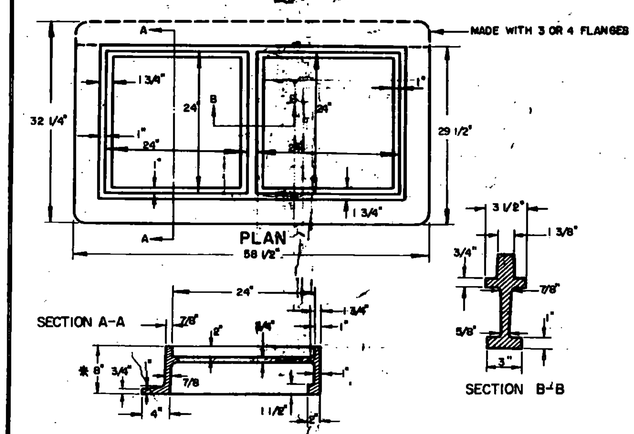
SECTION B-B

WEIGHT OF 3 FLANGED FRAME AND GRATE

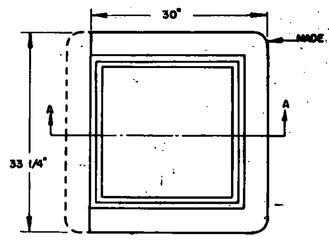
GRATE	220 LBS
FRAME	260 LBS
TOTAL	480 LBS

CAST IRON GRATE, TYPE A

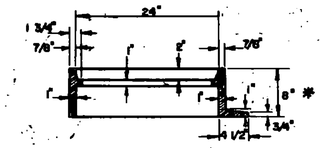
USE OF THE TYPE A GRATE IS PROHIBITED WHERE BICYCLE TRAFFIC IS EXPECTED.



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



PLAN



SECTION A-A

SQUARE CAST IRON FRAME FOR CAST IRON GRATE TYPE A

THIS FRAME TO BE PLACED IN DROP INLET TOP BEFORE CONCRETE IS POURED.

4 FLANGES UNLESS OTHERWISE INDICATED. FRAMES TO BE FURNISHED WITH 3 FLANGES WHEN USED IN CONJUNCTION WITH CURB OR AS DIRECTED BY THE ENGINEER.

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

REVISIONS AND CORRECTIONS

APRIL 25, 1972. CAST IRON COVER CHANGED FROM SQUARE TO CIRCULAR
SEPT. 4, 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. A. Carroll
CHIEF ENGINEER

E. H. Stuckney
ASST. CHIEF ENGINEER

G. M. Lane
HIGHWAY ENGINEER

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

STEEL GRATE
CAST IRON GRATE TYPE A
CAST IRON COVER

VERMONT AGENCY OF TRANSPORTATION

STANDARD

D-11