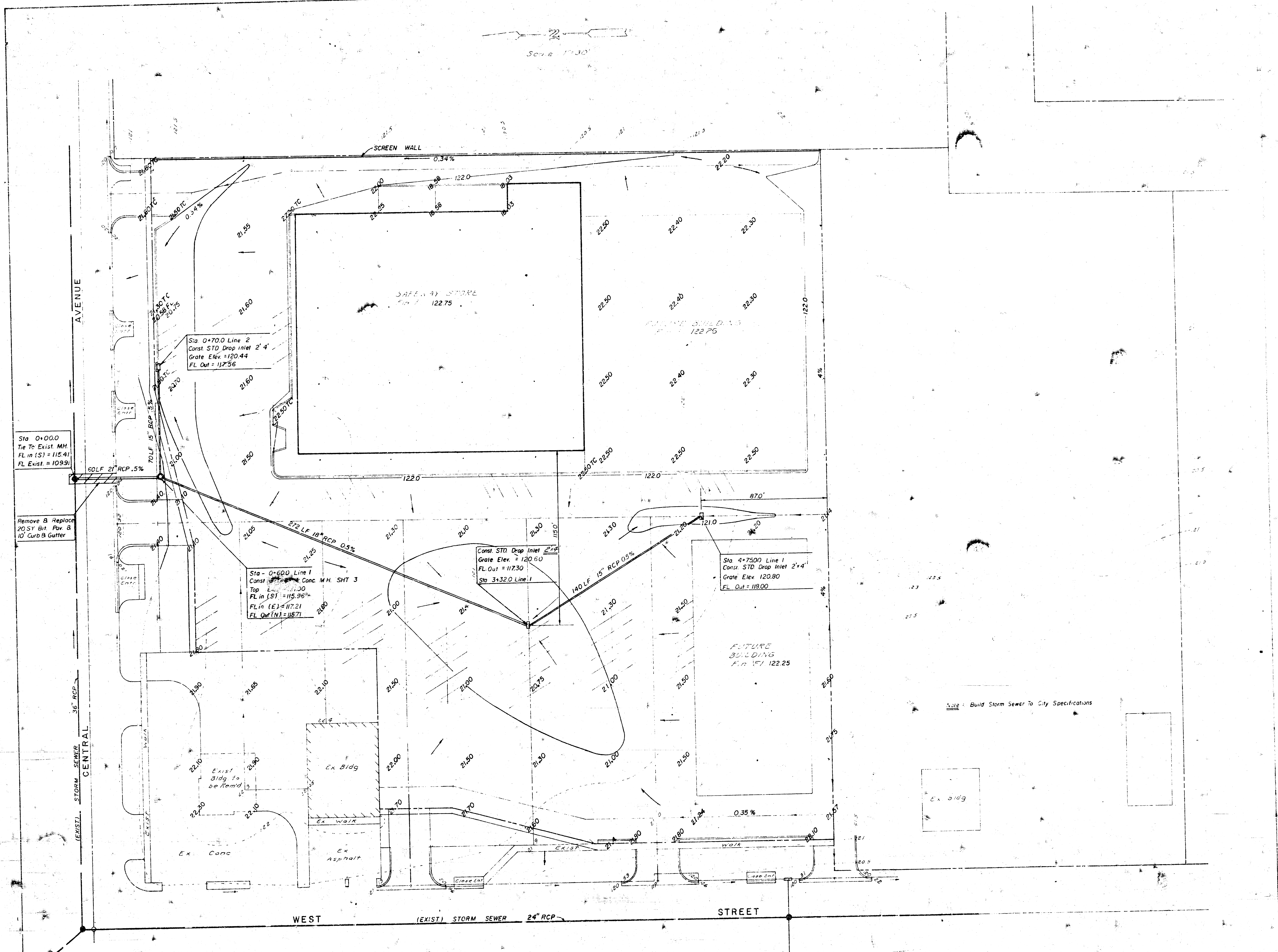
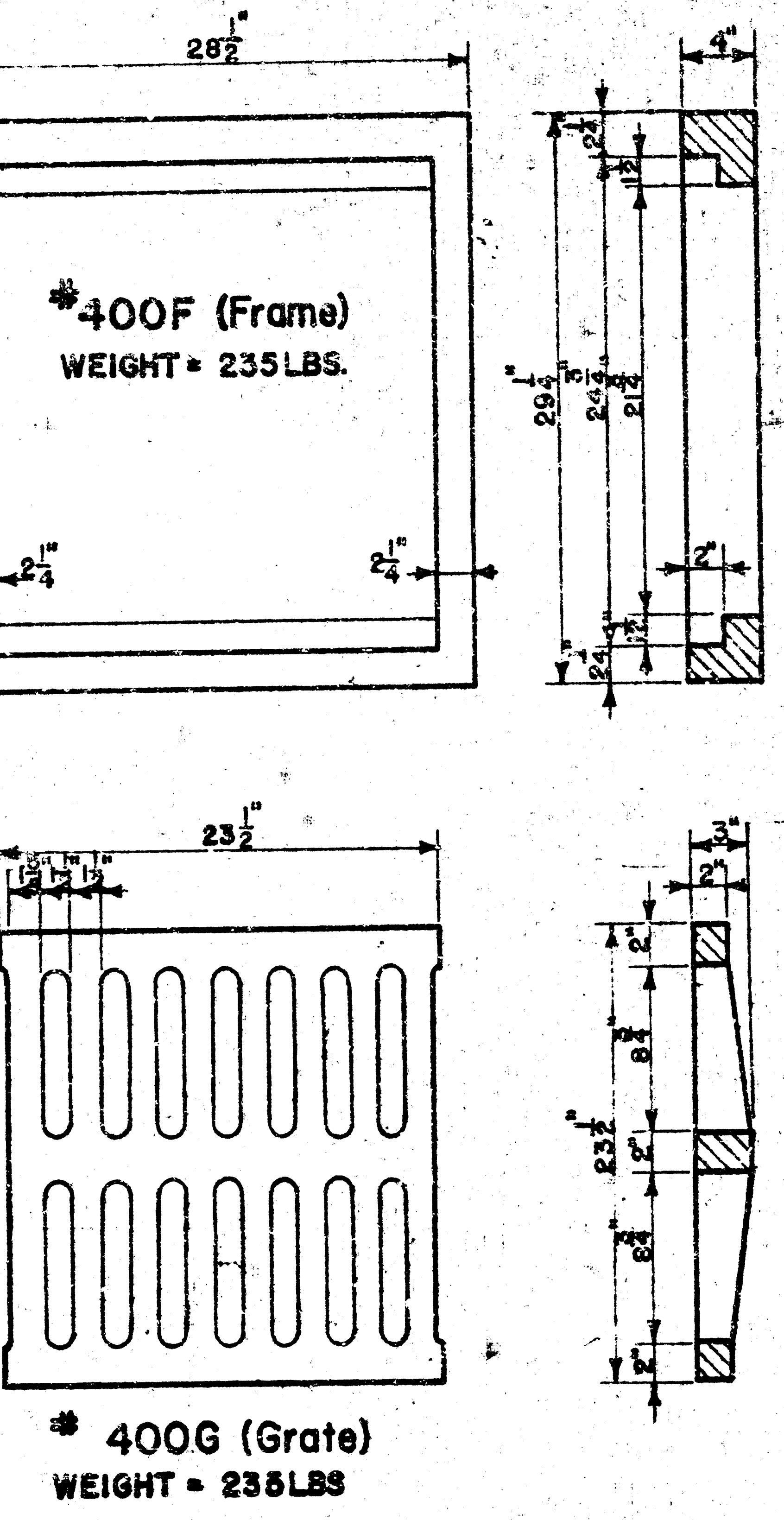

Scale 1"=30'
SCREEN WALL
0.34%
SAFEWAY STORE
F.F. 122.75
FUTURE BUILDING
F.F. 122.75
FUTURE BUILDING
F.F. 122.25
Sta. 0+70.0 Line 2
Const. STD Drop Inlet 2' 4'
Grate Elev. =120.44
FL Out = 117.56
Sta. 0+00.0
Tie To Exist. MH.
FL in (S) = 115.41
FL Exist. = 109.91
60LF 21" RCP .5%
70LF 15" RCP .5%
Remove & Replace
20 SY Bit. Pav. &
10' Curb & Gutter
272 LF 18" RCP 0.5%
Sta - 0+60.0 Line 1
Const Conc. M.H. SHT 3
Top Elev. 121.00
FL in (S) = 115.96
FL in (E) = 117.21
FL Out (N) = 115.71
Const. STD Drop Inlet 2'x4'
Grate Elev. = 120.60
FL Out = 117.30
Sta 3+32.0 Line 1
140 LF 15" RCP 0.5%
Sta. 4+75.00 Line 1
Const. STD Drop Inlet 2'x4'
Grate Elev. 120.80
FL Out = 118.00
87.0'
115.0'
122.0
121.0
4%
0.35 %
Note: Build Storm Sewer To City Specifications
Exist Bldg to be Rem'd
Ex Bldg
Ex Walk
Ex Conc
Ex Asphalt
Exist Walk
Walk
Close Entr
Close Ent
AVENUE
CENTRAL
(EXIST) STORM SEWER 36" RCP
WEST
STREET
(EXIST) STORM SEWER 24" RCP

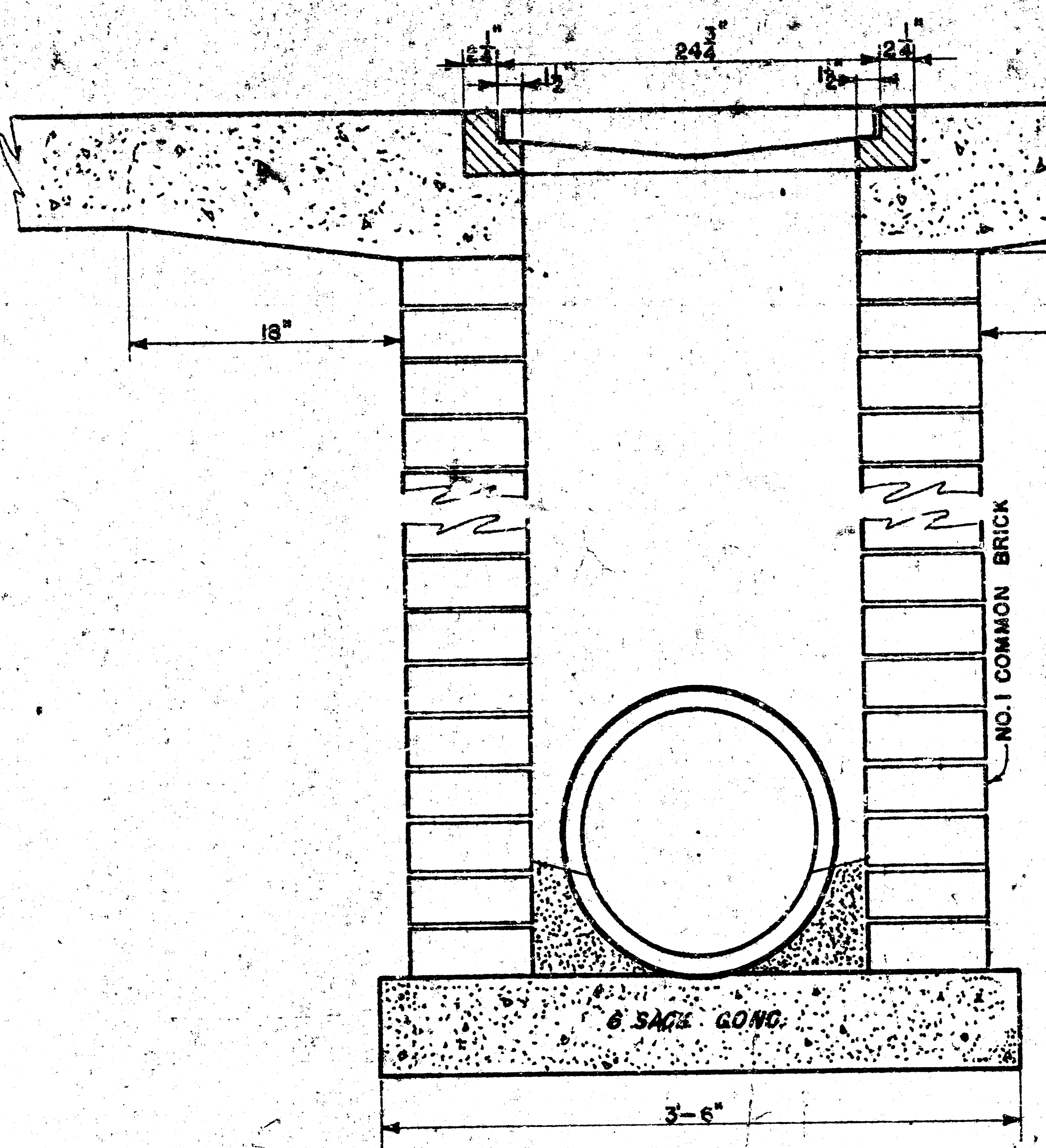
SITE GRADING & DRAINAGE PLAN

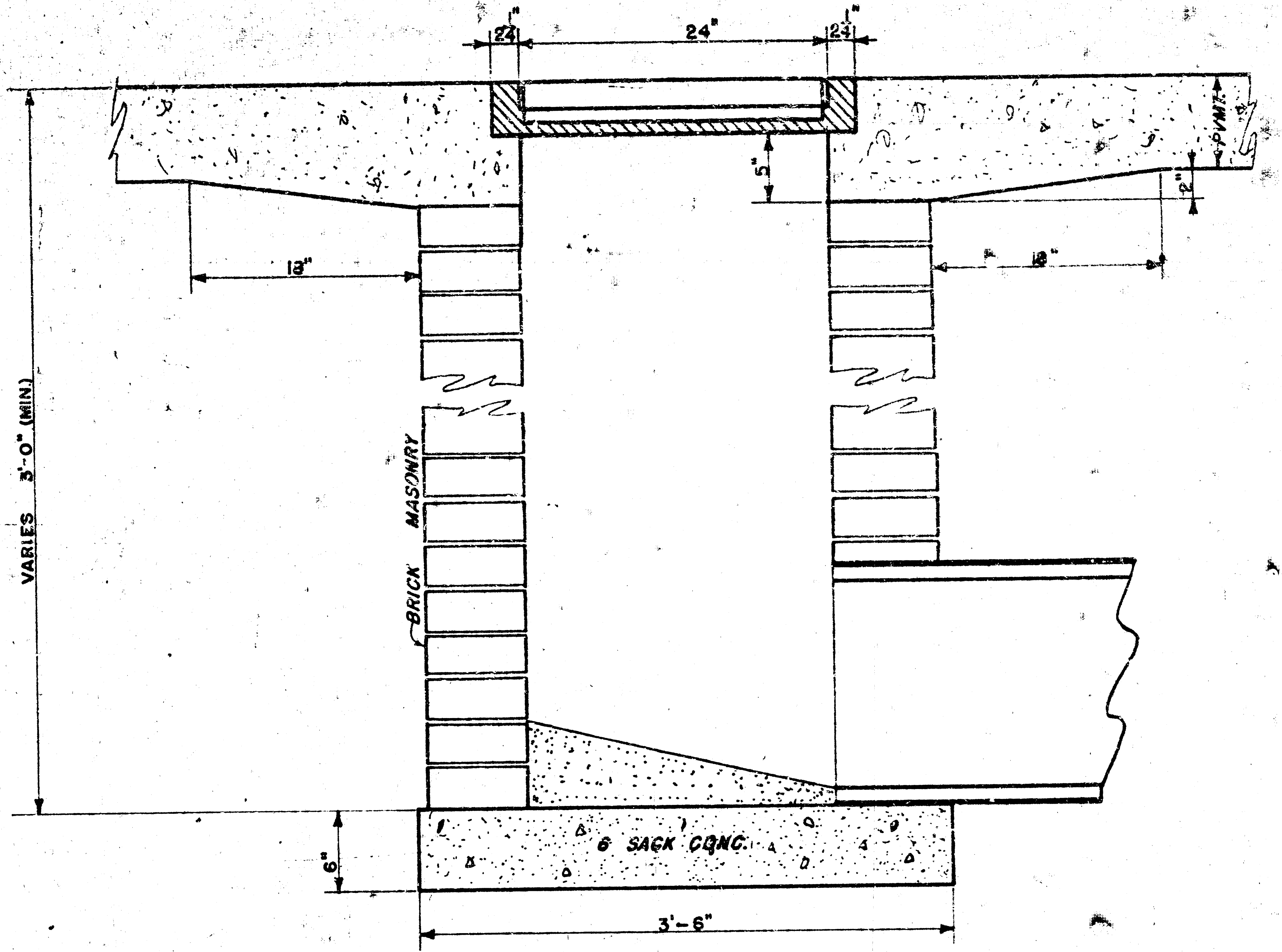
APPROVED AS NOTED

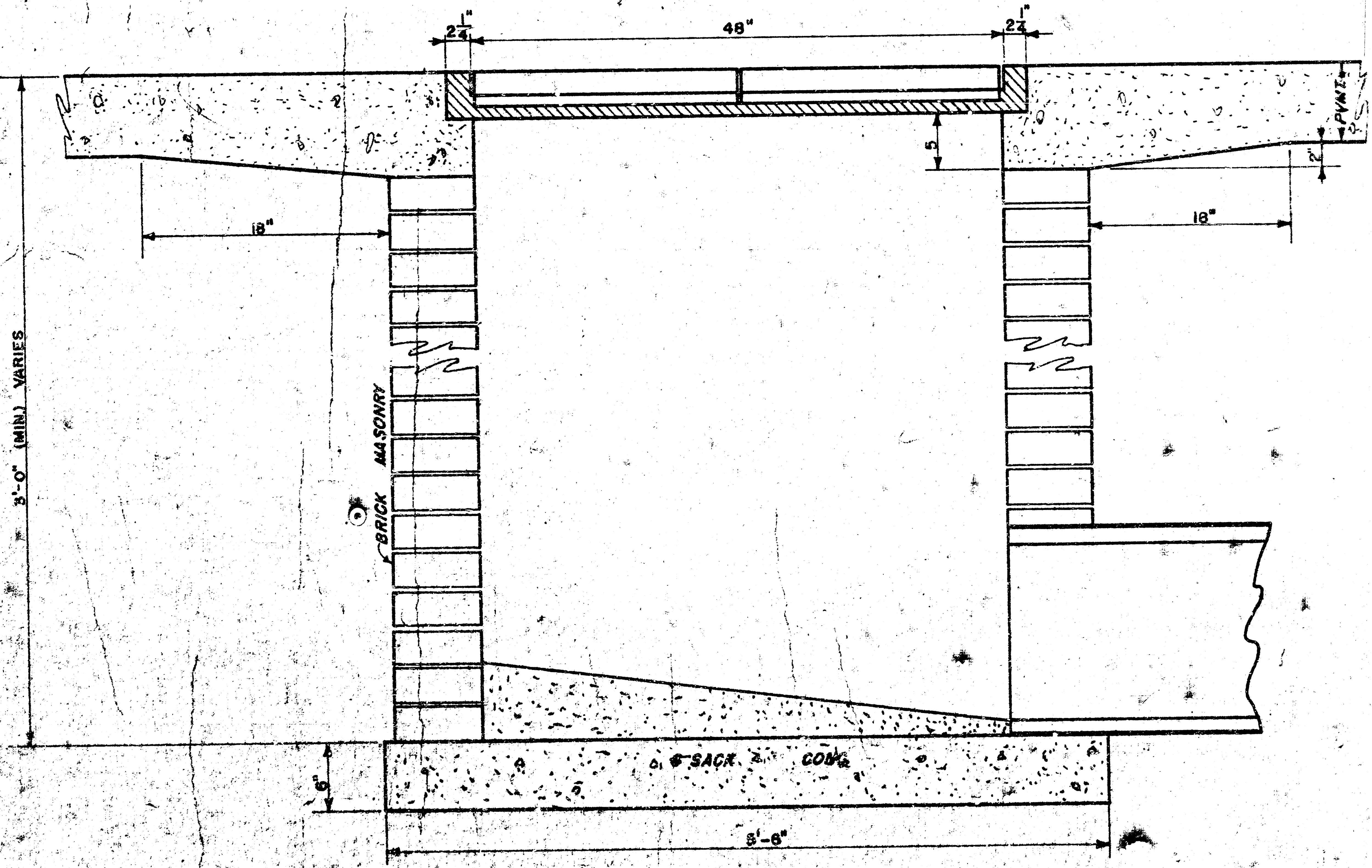
NOTE: Grates shall be imprinted on the top surface with "CITY OF WICHITA" using letters at least 1" in height. Other marking methods may be used only if approved by the engineer.

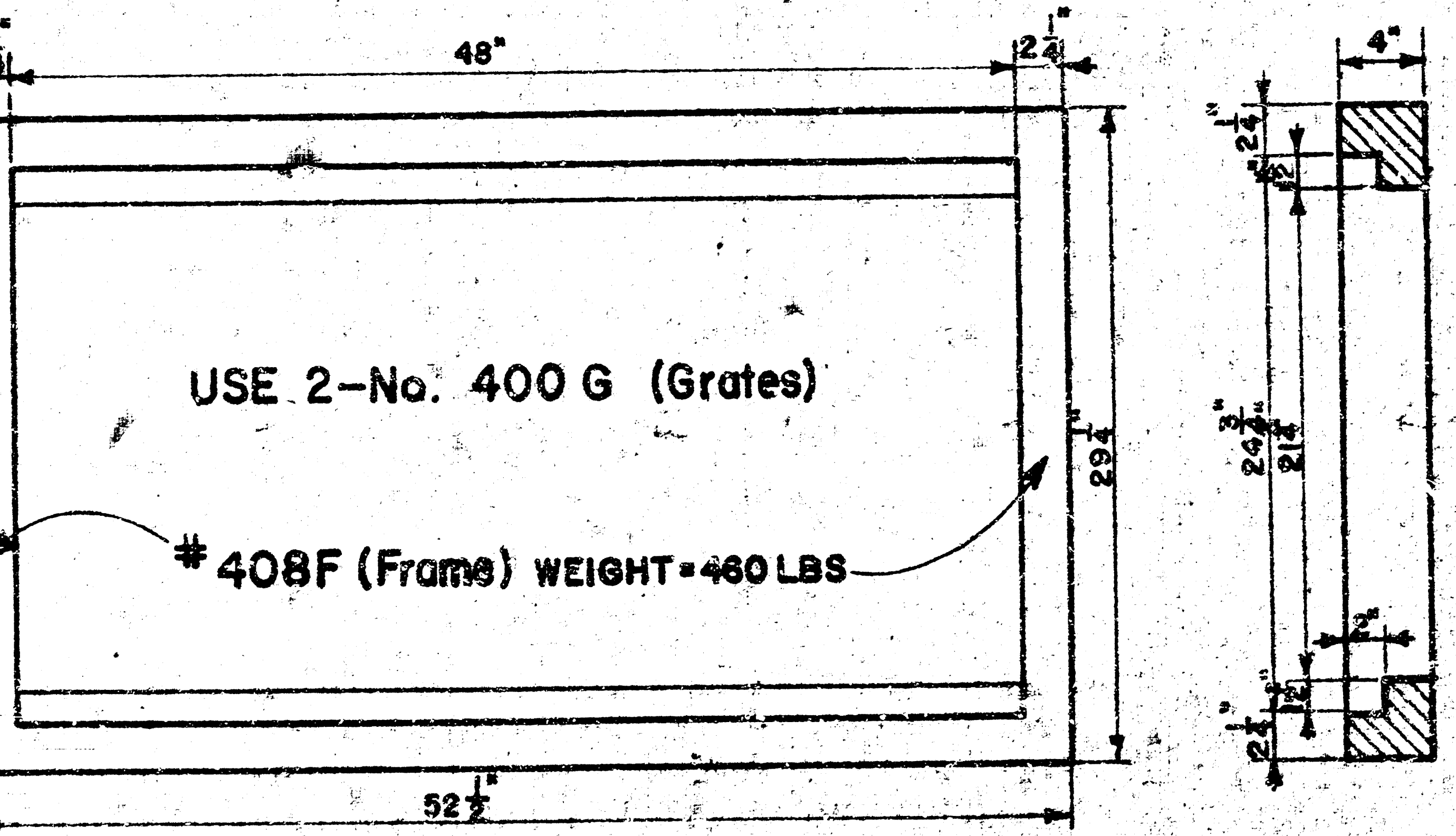

28½"
#400F (Frame)
WEIGHT = 235 LBS.
2¼"
4"
2"
29½"
24¼"
21¾"
23½"
#400G (Grate)
WEIGHT = 235 LBS

24"x24" Frame & Grate Detail


24¾"
2¼"
1½"
18"
NO. 1 COMMON BRICK
6 SACK CONC.
3'-6"


2¼"
24"
5"
2"
18"
PVMT.
VARIES 3'-0" (MIN.)
BRICK MASONRY
6"
6 SACK CONC.
3'-6"


2¼"
48"
5
2"
PVMT.
18"
3'-0" (MIN.) VARIES
BRICK MASONRY
6"
6 SACK CONC.
3'-6"

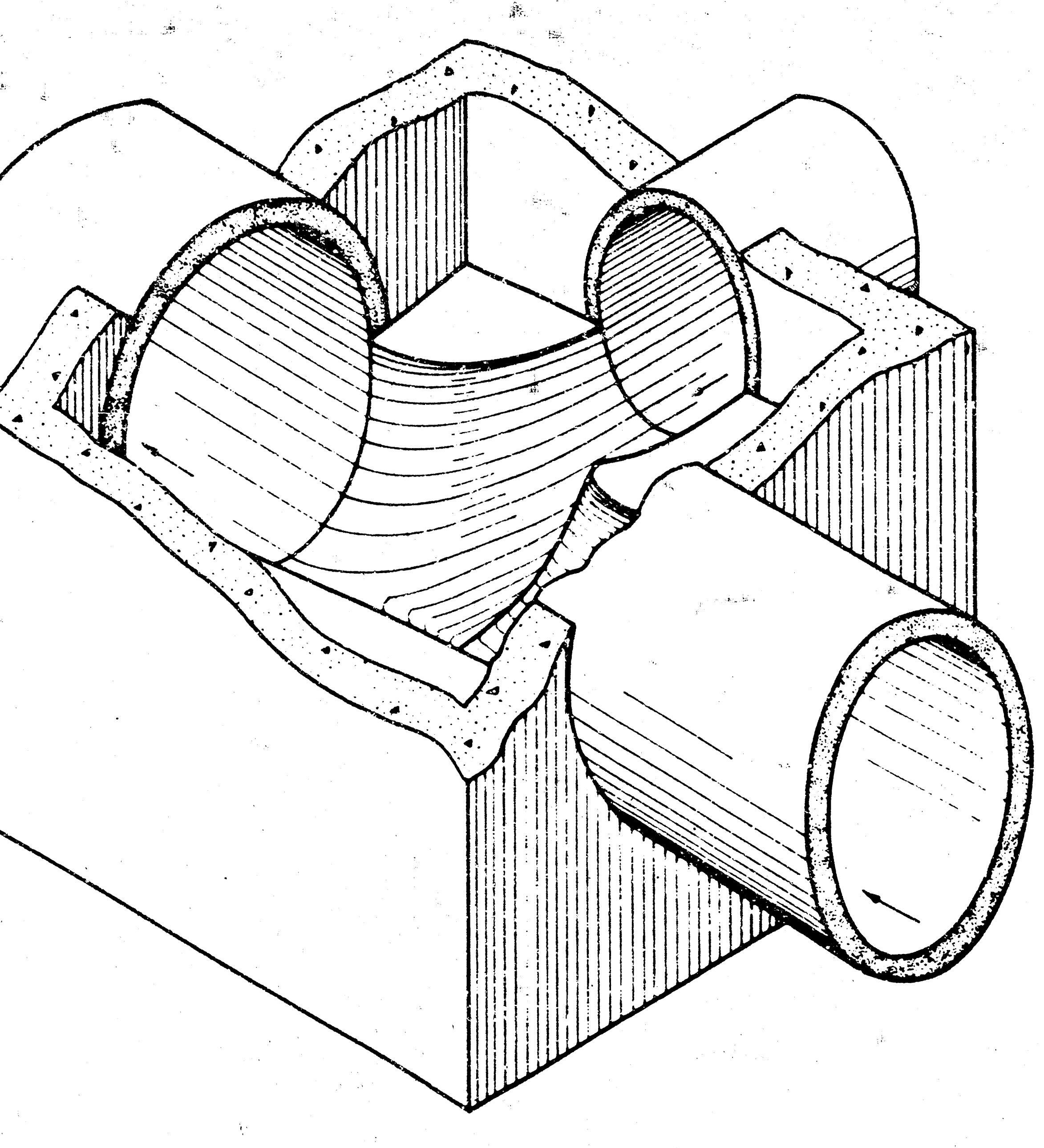

48"
2¼"
USE 2-No. 400 G (Grates)
#408F (Frame) WEIGHT = 460 LBS
29¼"
4"
2"
52½"

Double 24"x24" Frame Detail

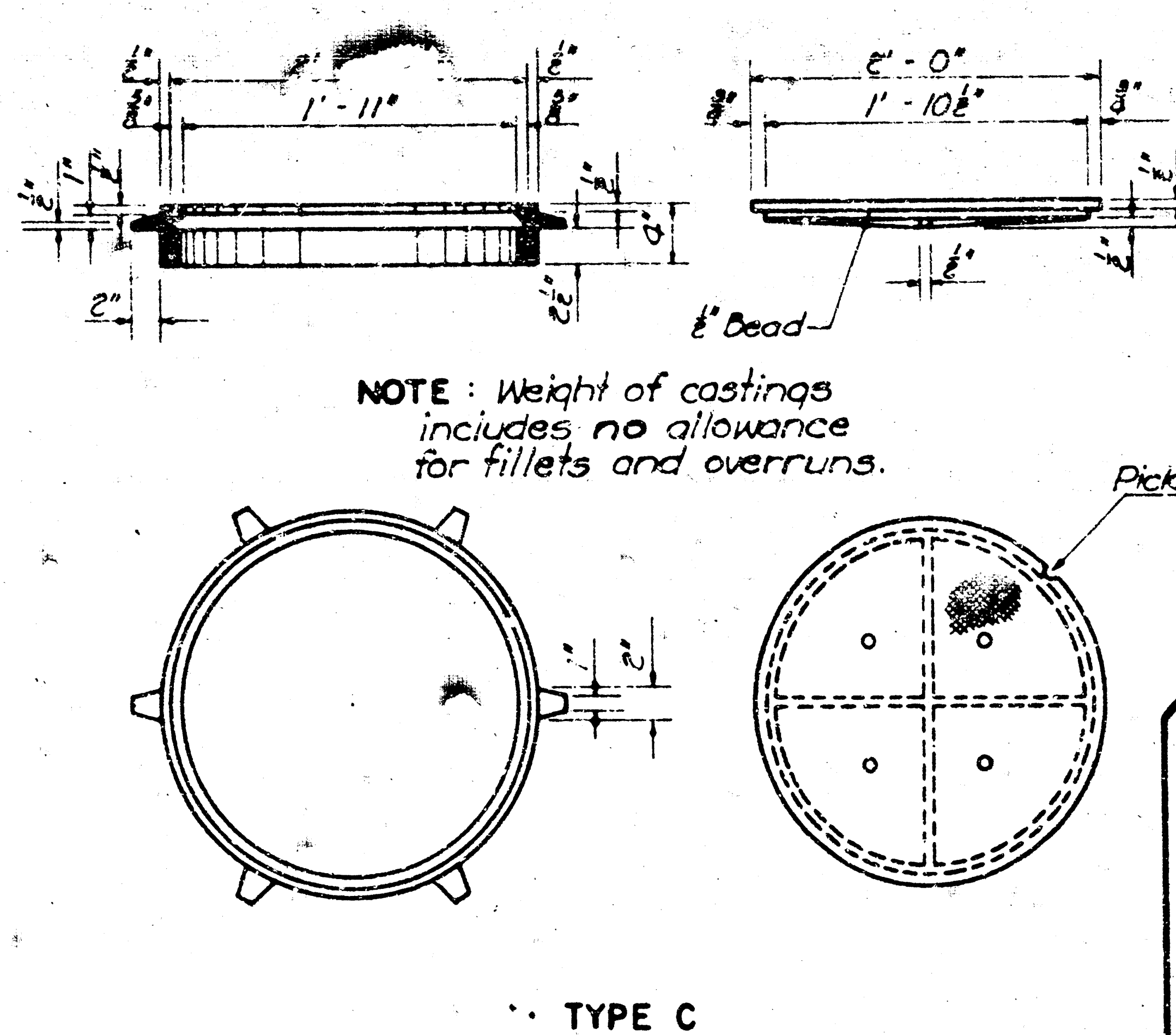
DROP INLET DETAILS

R. W. Linn City Engineer
City of Wichita, Kansas
Project
Project No.

FHWA REG. NO.	State	Proj. No.	Fiscal Year	Sheet No.	[illegible]
7	Kansas				



SECTIONAL VIEW (EXAMPLE IV)
Showing Floor Shaping

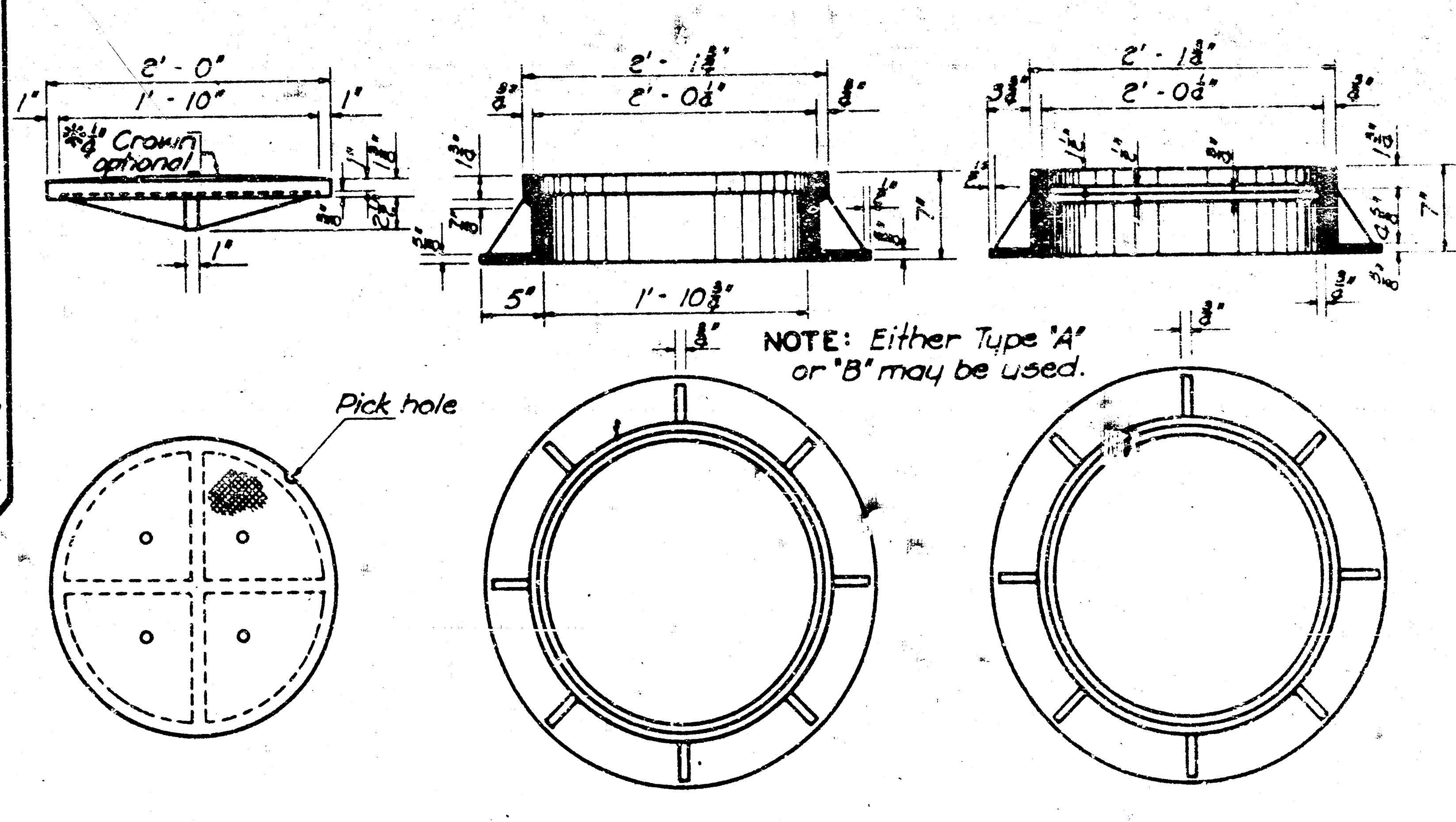


2'
1'-11"
2'-0"
1'-10½"
2"
½" Bead
Pick hole
2"

NOTE: Weight of castings includes no allowance for fillets and overruns.

TYPE C
CAST IRON MANHOLE RING
Weight - 53 Lbs.
CAST IRON MANHOLE COVER
Weight - 64 Lbs.

LIGHT TYPE MANHOLE COVER & RING



2'-0"
1'-10"
1"
1"
*¼" Crown optional
1"
Pick hole
2'-1¾"
2'-0¼"
5"
1'-10¾"
7"
2'-1¾"
2'-0¼"
7"

NOTE: Either Type "A" or "B" may be used.

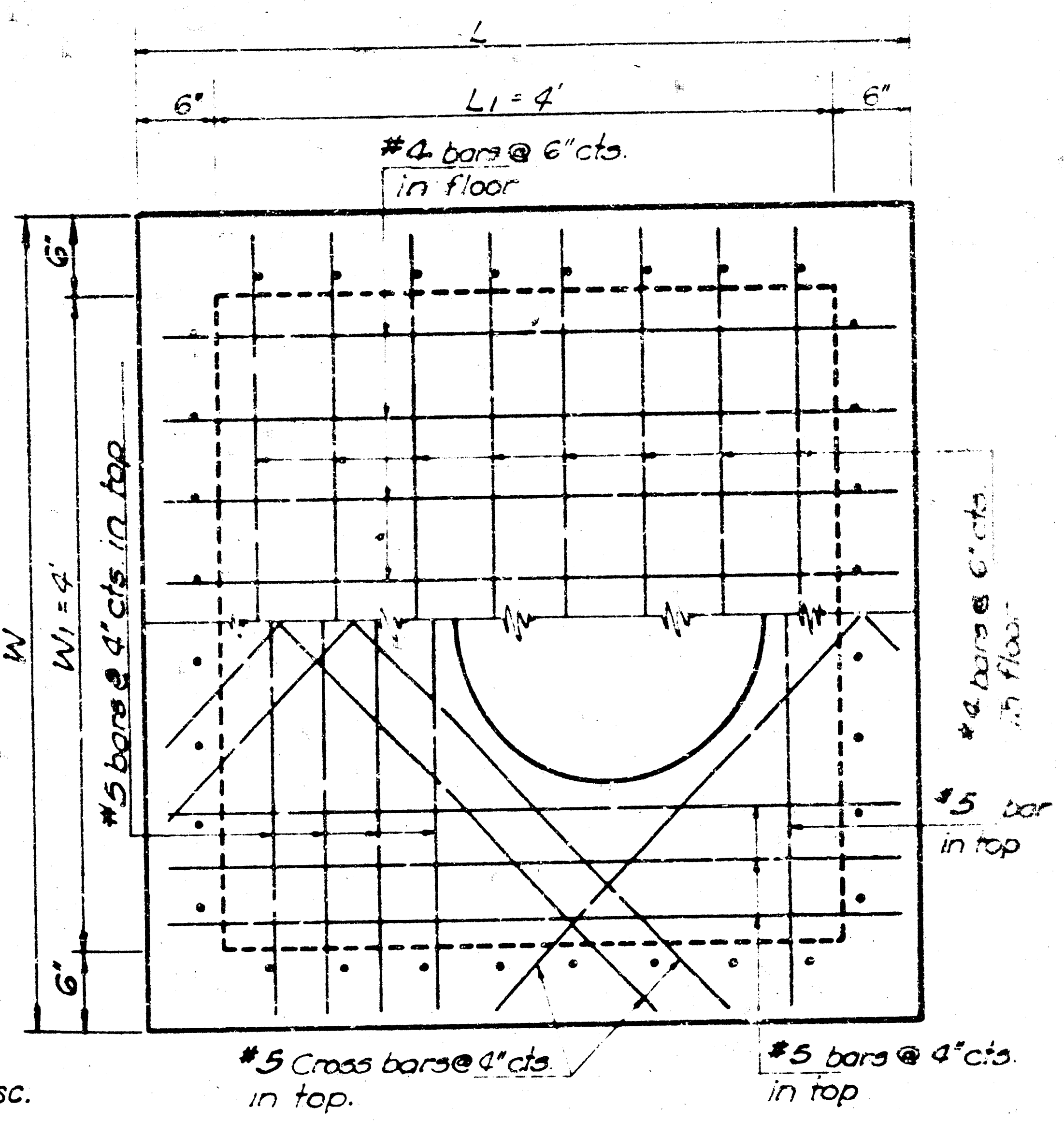
TYPE A & B
CAST IRON MANHOLE COVER
* Weight - 134 Lbs.
Note: The weight without ¼" crown shall be 9 lbs. less than shown above.

TYPE A
CAST IRON MANHOLE RING
Weight = 192 Lbs.

TYPE B
CAST IRON MANHOLE RING
Weight = 193 Lbs.

HEAVY TYPE MANHOLE COVER & RING

Where dimension "L" or "W" is greater than 6', use 8" slab thickness.

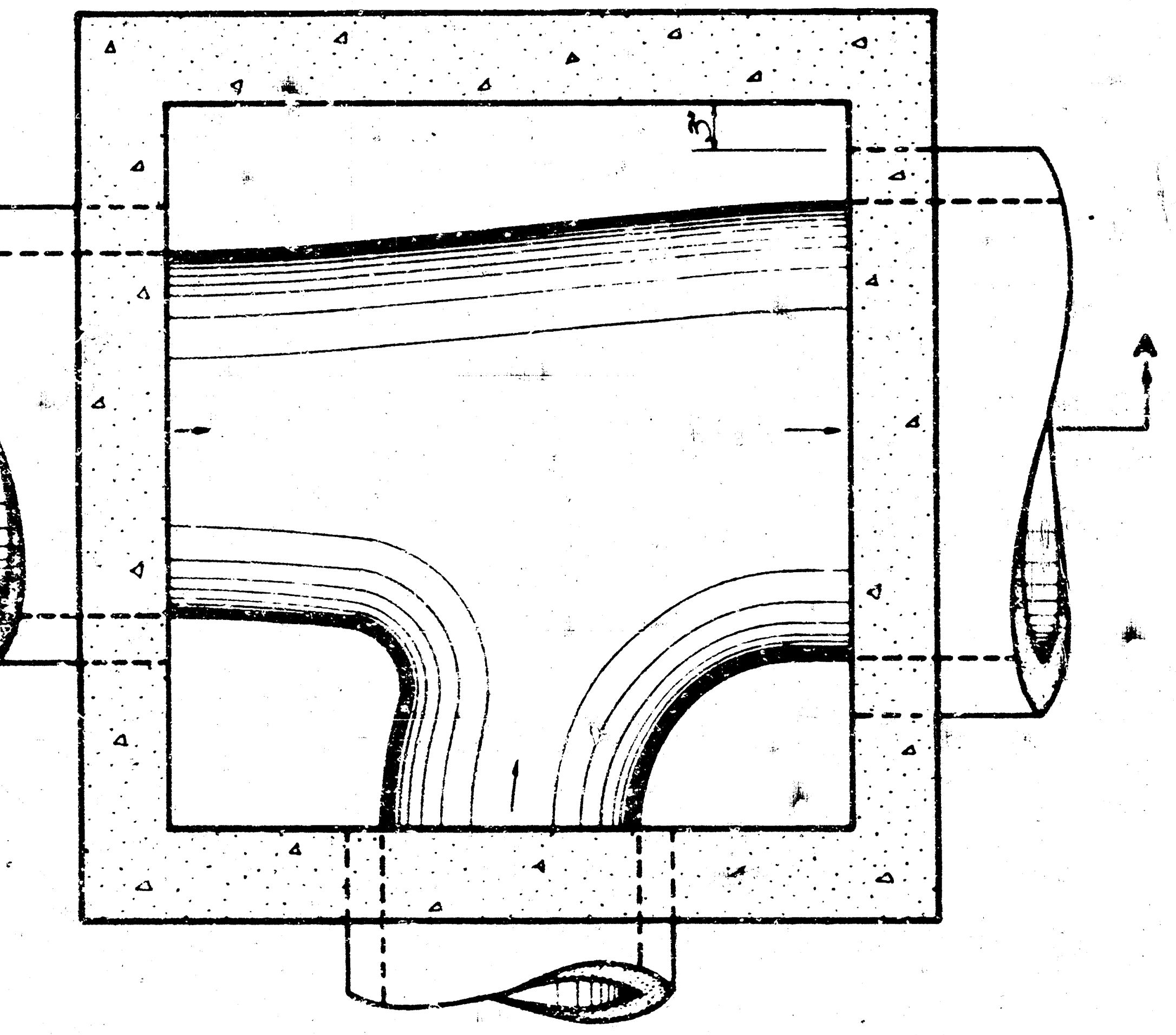


L
6"
L1 = 4'
6"
#4 bars @ 6" cts. in floor
W
W1 = 4'
#5 bars @ 4" cts. in top
6"
6"
#4 bars @ 6" cts. in floor
#5 bar in top
#5 Cross bars @ 4" cts. in top.
#5 bars @ 4" cts. in top

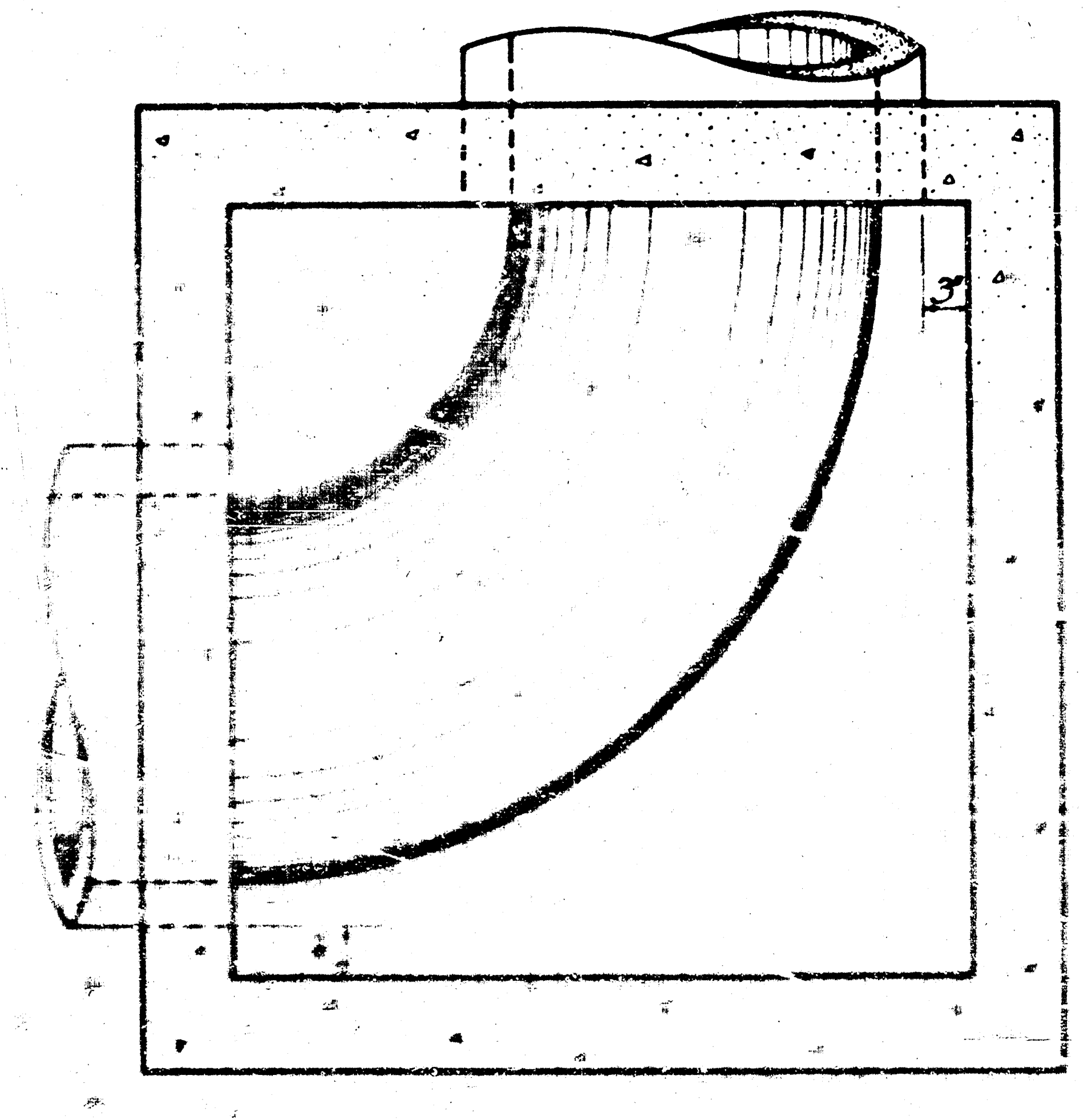
PLAN
(Showing top & floor Reinforcing.)

TYPICAL EXAMPLES OF VARIOUS PIPE COMBINATIONS

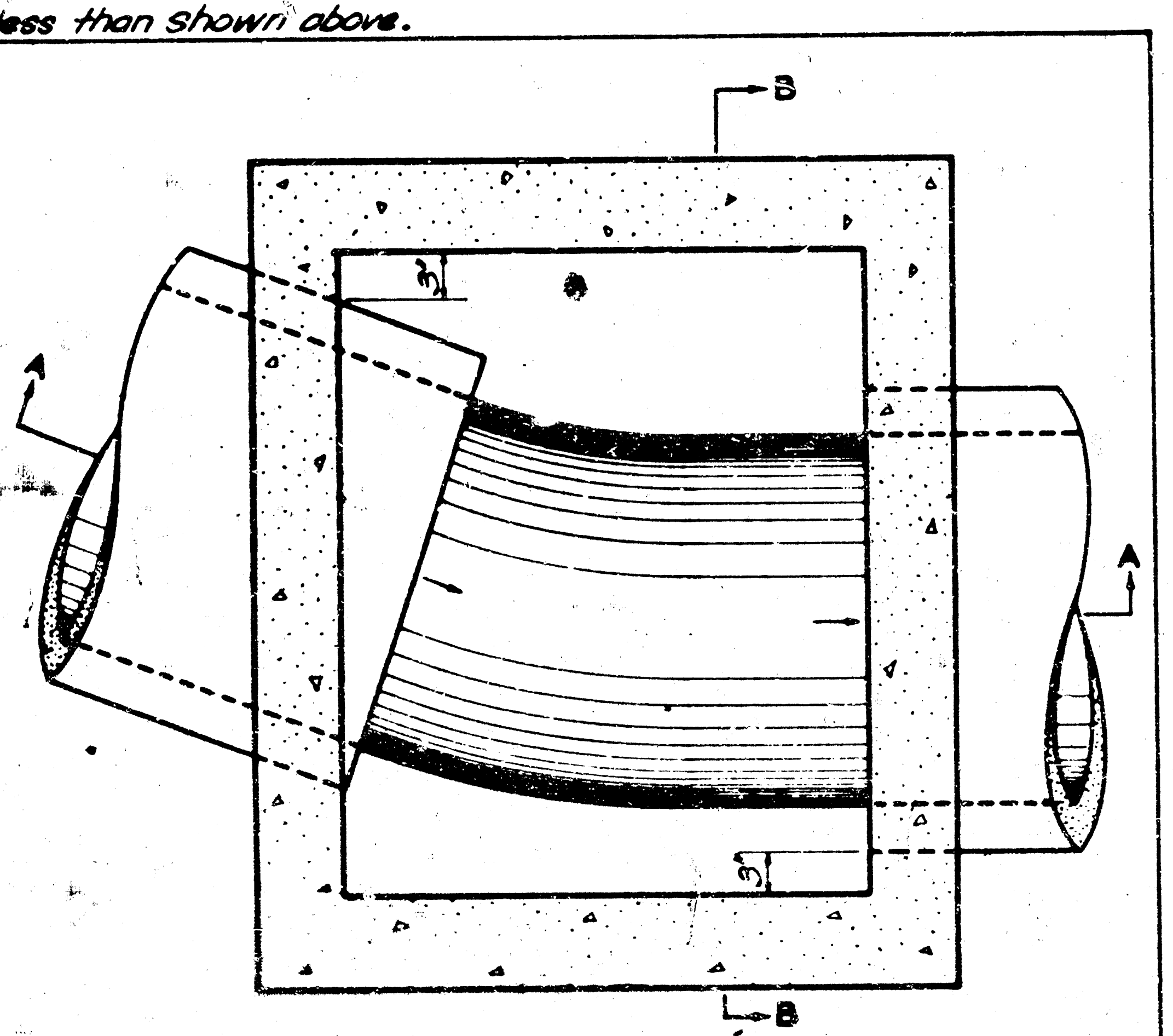
Showing method of shaping floor of manholes to provide increased hydraulic efficiency.
For reinforcing & other features see "PLAN" and "SECTION."



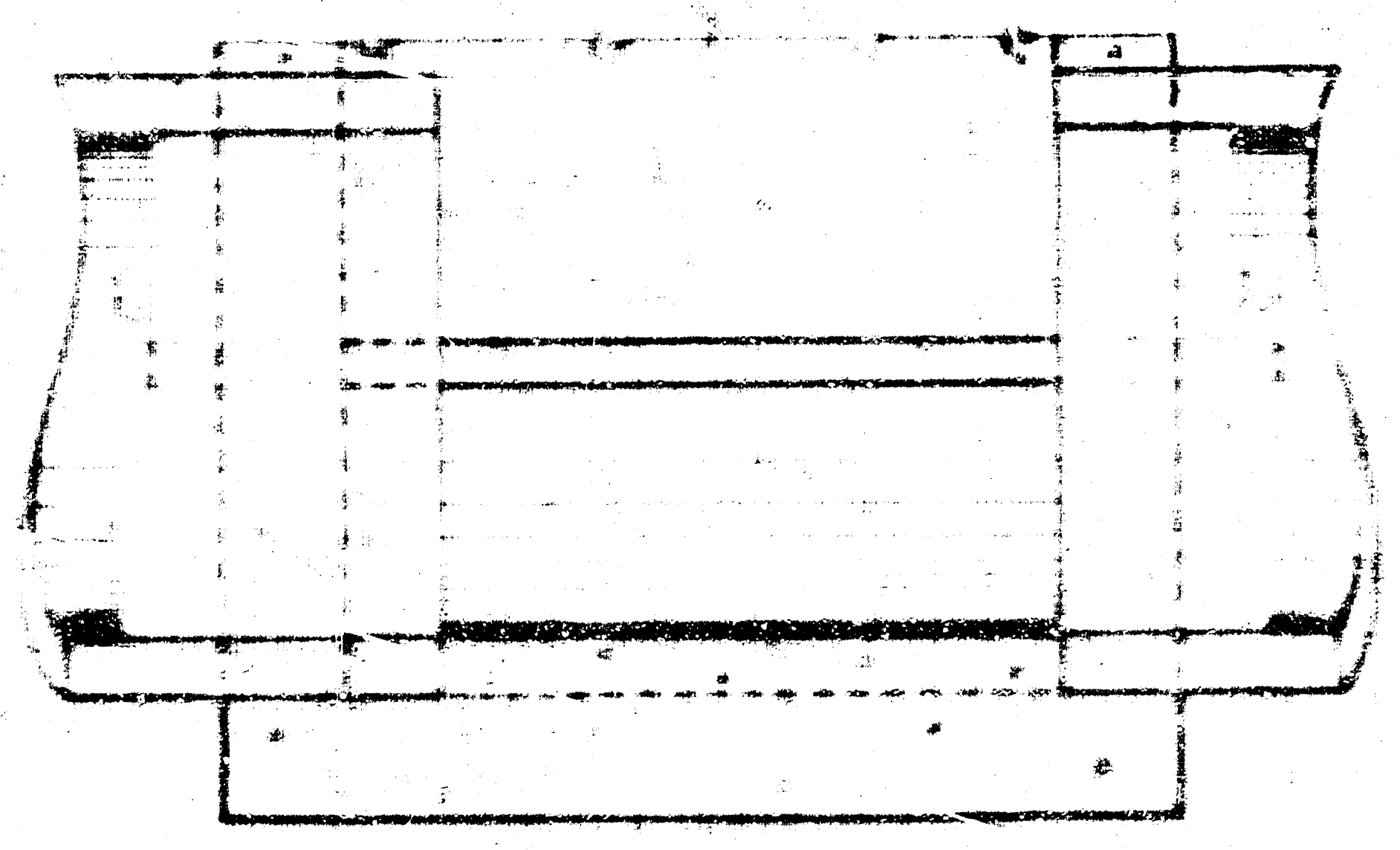
FLOOR PLAN (EXAMPLE IV)



FLOOR PLAN (EXAMPLE II)



FLOOR PLAN (EXAMPLE I)



SECTION A-A (EXAMPLE I)

NOTE: Class "A" concrete is to be used thruout. Bevel all exposed edges with a ¾" triangular moulding.

At the contractor's option Class "A" concrete (AE) may be used thruout, but payment shall be made as Cu. Yds of Class "A" concrete misc.

In general, pipes will enter and leave the manhole at various positions. Where possible bend bars around pipes.

Floor of manhole to be shaped as shown in various "EXAMPLES" with unreinforced Class "A" concrete.

Manhole opening and steps, where used, shall be placed to afford easy access to top of shaped invert. Top reinforcing bars to be adjusted accordingly.

All castings shall be gray iron and shall comply with ASTM A-48, Class 25 S.

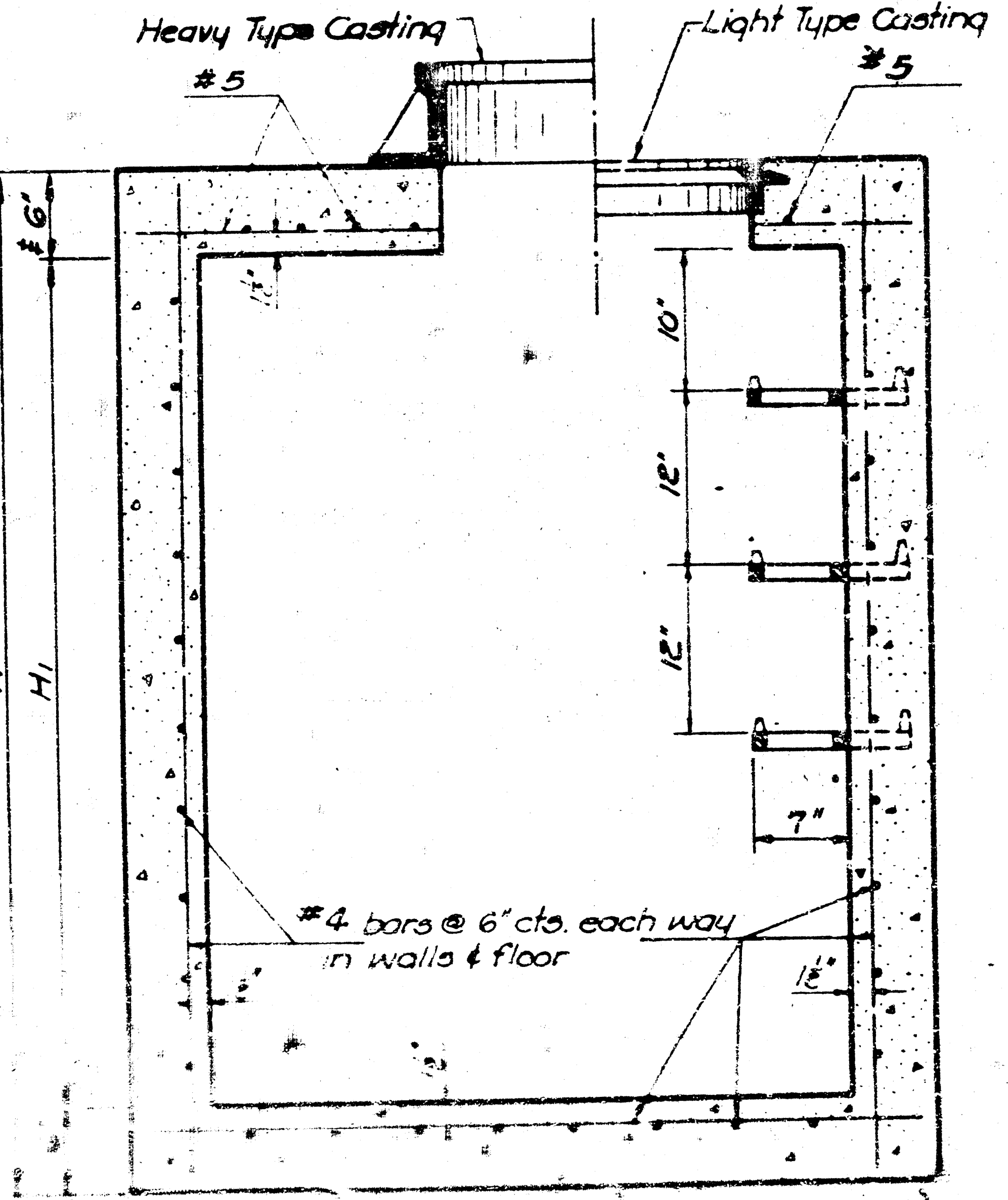
All exposed cast iron surfaces (rings & covers) not subjected to traffic, shall be painted either in the shop or in the field with one coat of a zinc dust paint, followed by two field coats of aluminum paint.

No deductions in concrete quantities shall be made for pipe openings.

No additions in concrete quantities shall be made for shaping floor of Manholes.

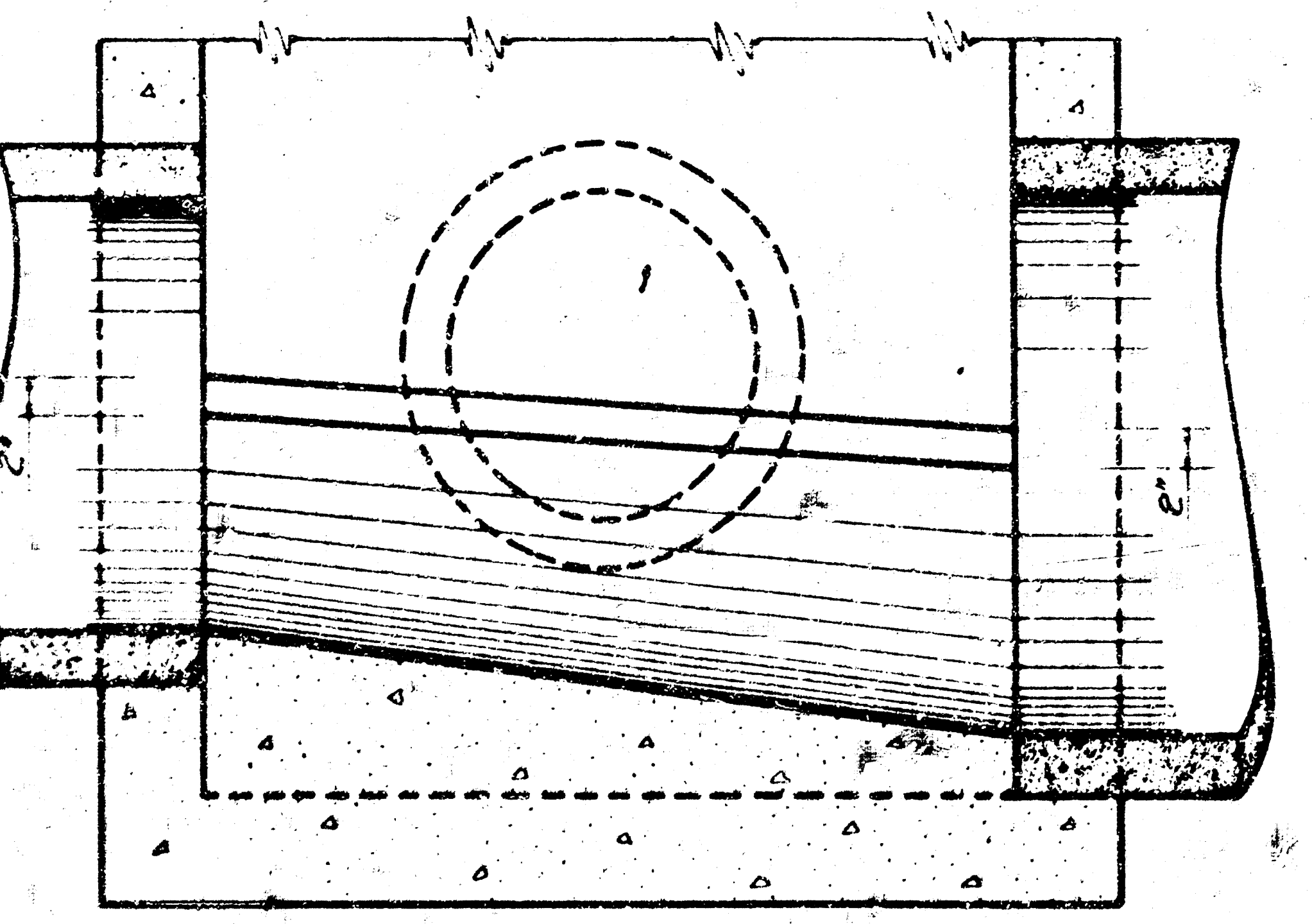
When so ordered by the Engineer, the top of the manhole shall be [illegible] to [illegible] the ground line or other conditions.

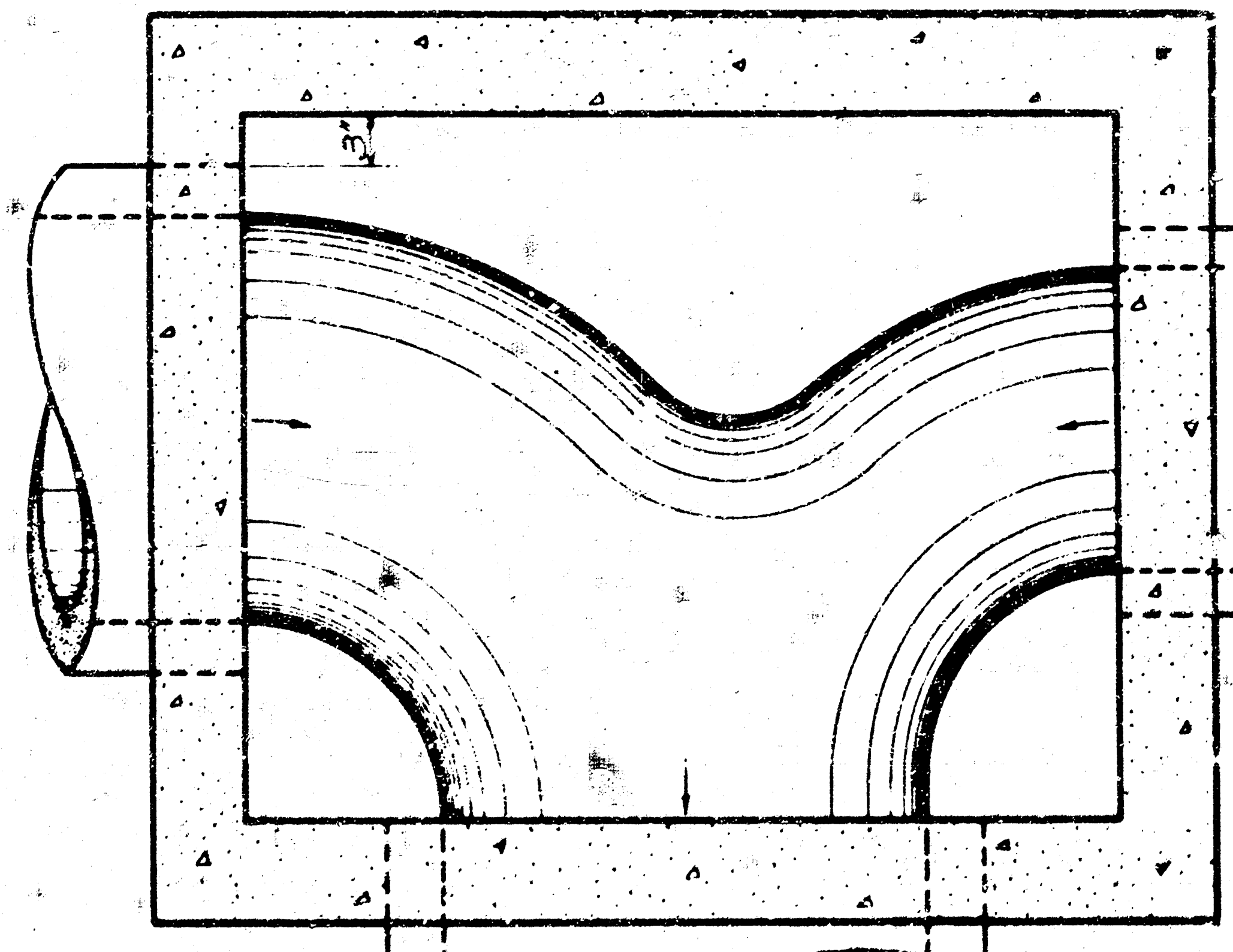
[illegible] shown on this sheet.

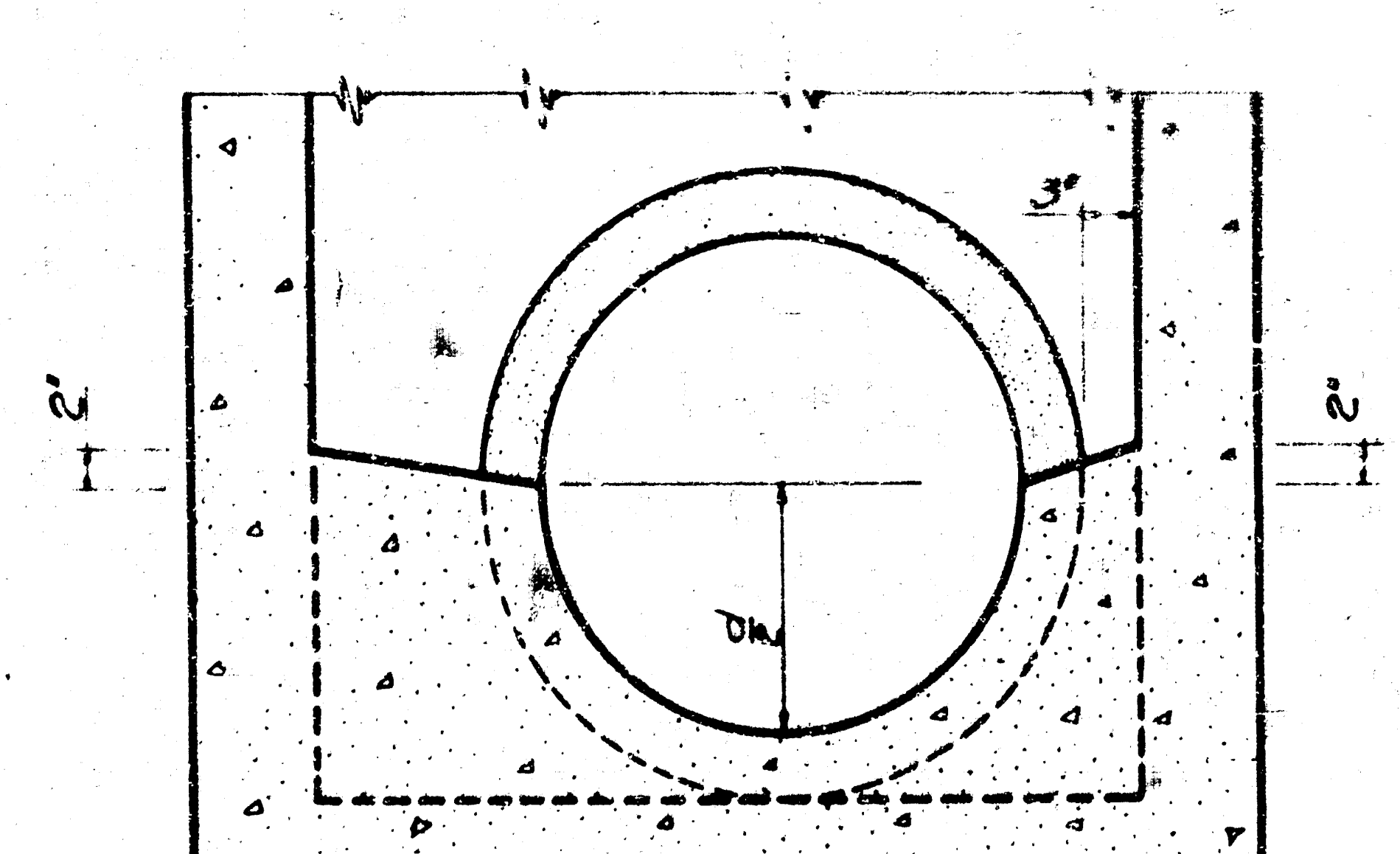


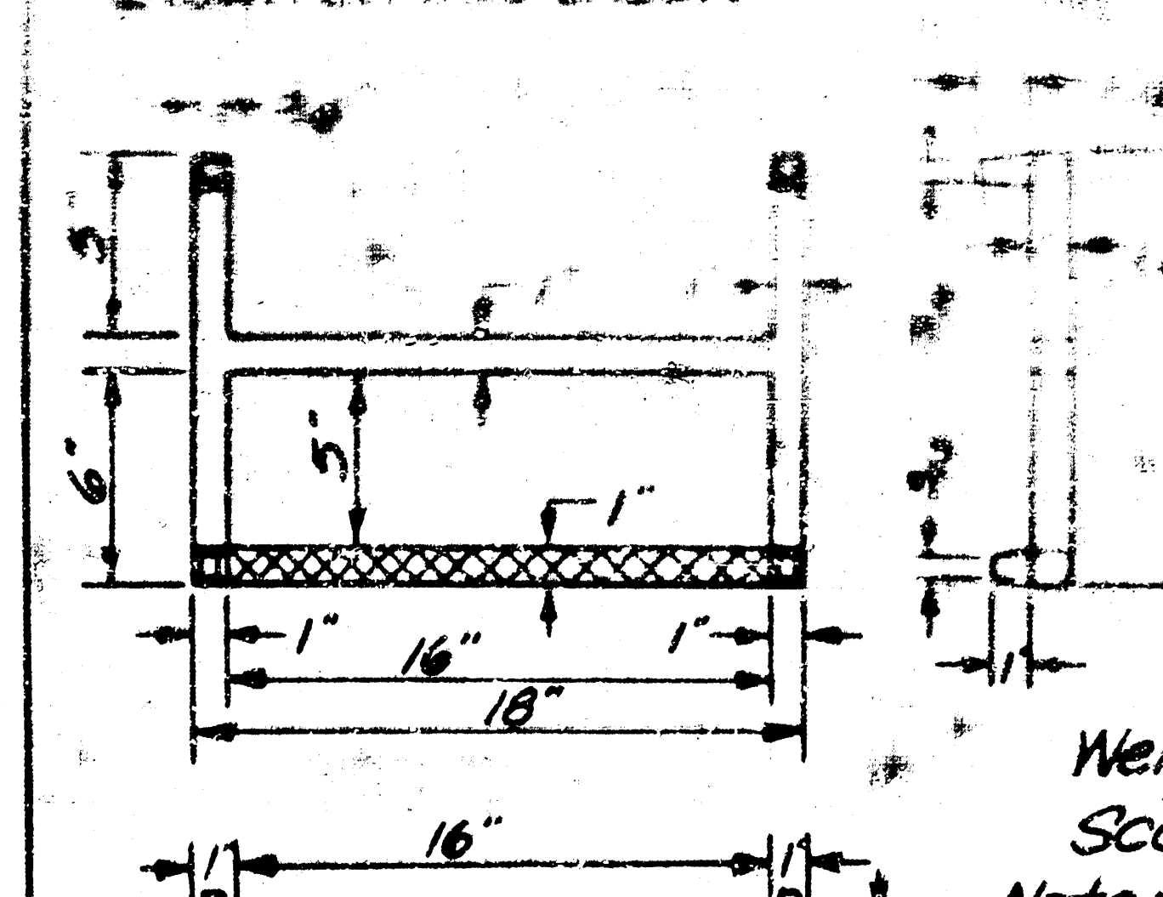
Heavy Type Casting
Light Type Casting
#5
#5
6"
10"
12"
12"
7"
H
H1
#4 bars @ 6" cts. each way in walls & floor
12"

SECTION (Showing Floor Shaping)









Weight: 19 lbs.
Scale: 1½" = 1'
Note: Steps

Note: Contractor has the option of using [illegible] cast iron covers as approved by the engineer. (See Special Provisions) Payment of quantities shall be [illegible]

6	[illegible]	Light Type M.H. Cover & Ring [illegible]
5	[illegible]	Changed M.H. Step & corner of crown of heavy M.H. cover
[illegible]	[illegible]	[illegible]

STATE HIGHWAY COMMISSION OF KANSAS

REINFORCED
CONCRETE MANHOLE