

INTERSECTION OF THIRD & RIVERVIEW RIVERVIEW AVE.

N. L. LOT 1, BLK. 2, PARK PLAZA 2ND ADDN. TO
N. L. LOT 44, ON RIVERVIEW, WATERMAN'S ADDN. TO WATERMAN'S ADDN.

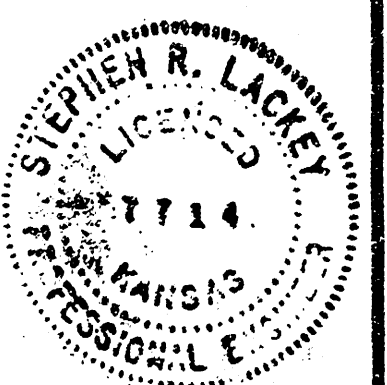
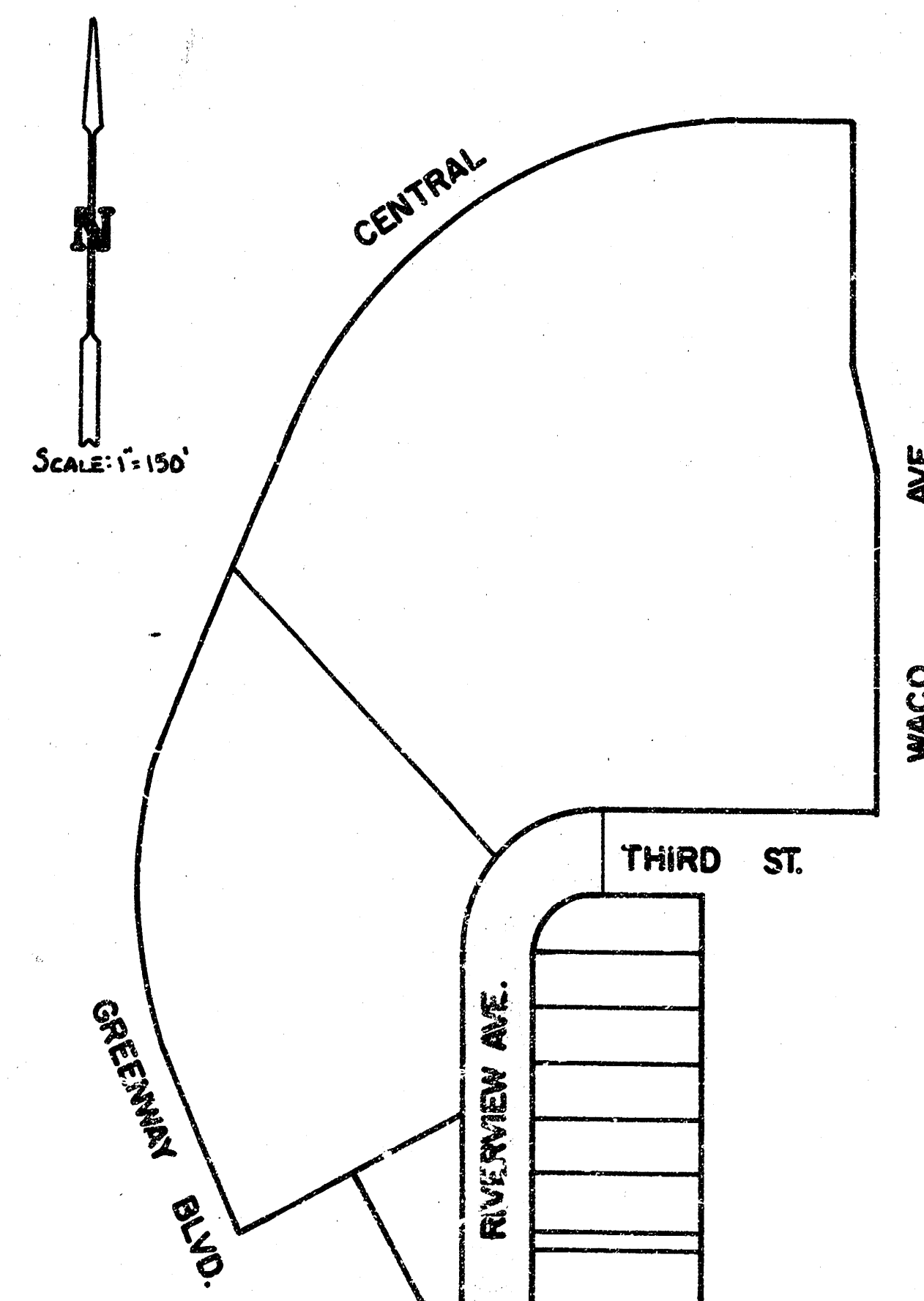
CITY OF WICHITA, KANSAS

DEPARTMENT OF ENGINEERING

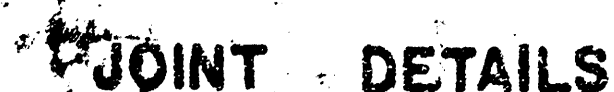
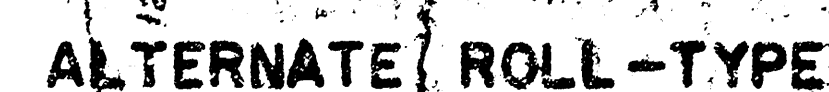
R. W. BRUGGEMAN—DIRECTOR OF ENGINEERING/CITY ENGINEER

PROJ. No. 472 76 245 80943 000 000 001

DATE:



TYPICAL SECTIONS OF 30' CONCRETE PAVEMENT



1. CONTRACTION JOINTS MAY BE CONSTRUCTED IN INTEGRAL CURB BY SAWING WITH AN APPROVED CONCRETE SAW. THE SAW CUT SHALL EXTEND THROUGH THE CURB TO THE PAVEMENT. SAWED CONTRACTION JOINTS SHALL HAVE A MAXIMUM SPACING OF 10'.

2. INTEGRAL CURB SHALL BE TIED TO THE PAVEMENT BASE WITH SHORT DEFORMED DOWEL BARS SPACED AT 2'-6" INTERVALS. THESE DOWEL BARS SHALL NOT BE LESS THAN 1/2" OR MORE THAN 3/4" IN DIAMETER.

CITY OF WICHITA, KANSAS
DEPARTMENT OF ENGINEERING

R. W. BRUGGEMAN - DIRECTOR OF ENGINEERING/CITY ENGINEER

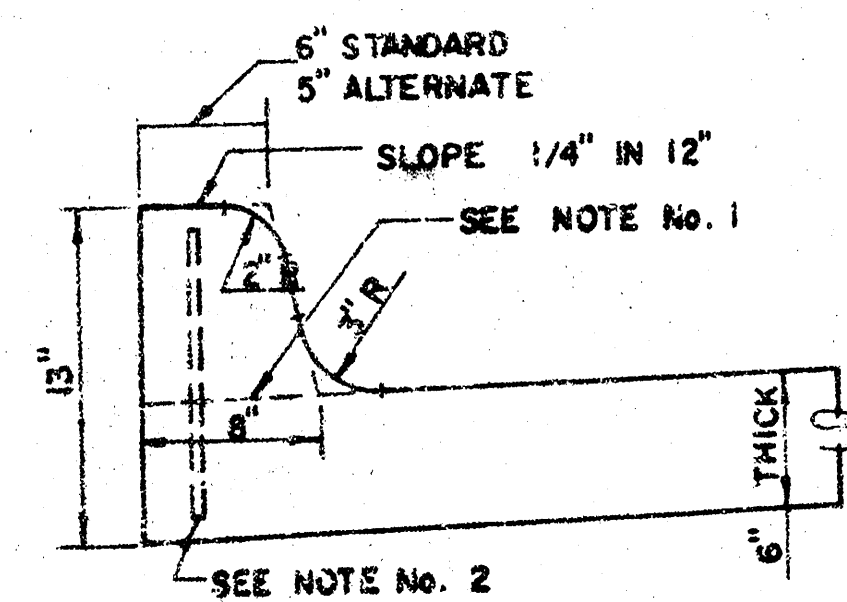
DATE: PROJ. No. 472 76 245 80943 000 000 00 21

THIRD ST.

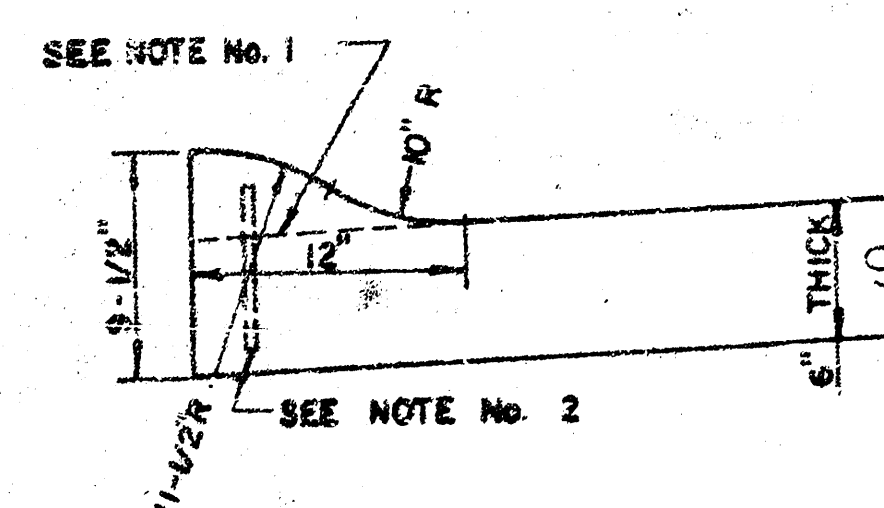
GENERAL NOTES

1. CONTRACTION JOINTS MAY BE CONSTRUCTED IN INTEGRAL CURB BY SAWING WITH AN APPROVED CONCRETE SAW. THE SAW CUT SHALL EXTEND THROUGH THE CURB TO THE PAVEMENT. SAWED CONTRACTION JOINTS SHALL HAVE A MAXIMUM SPACING OF 10'.

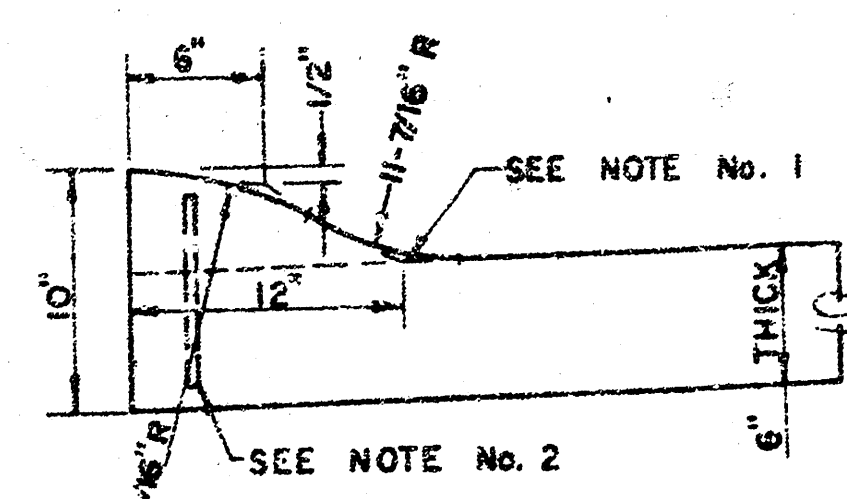
2. INTEGRAL CURB SHALL BE TIED TO THE PAVEMENT BASE WITH SHORT DEFORMED DOWEL BARS SPACED AT 2'-6" INTERVALS. THESE DOWEL BARS SHALL NOT BE LESS THAN 1/2" OR MORE THAN 3/4" IN DIAMETER.



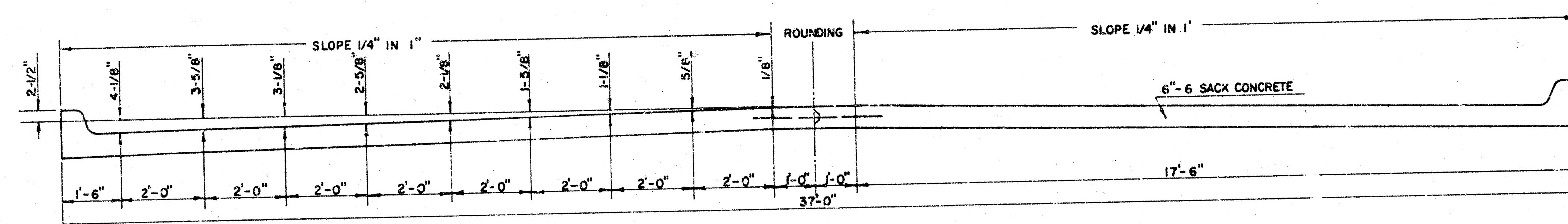
INTEGRAL CURB



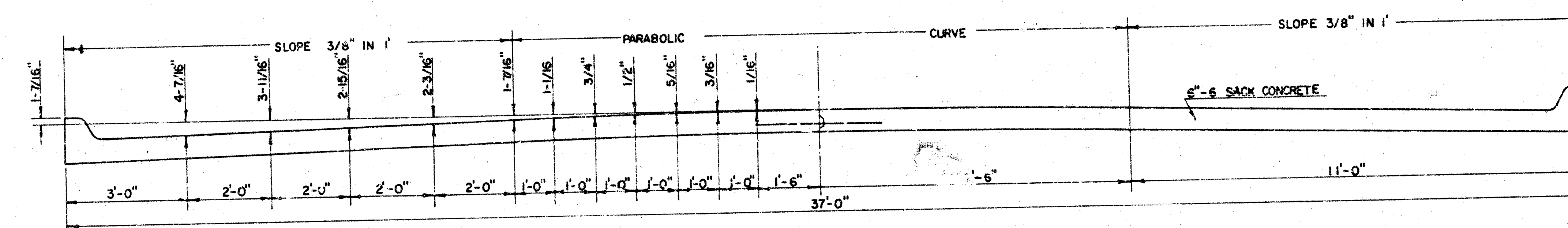
ROLL-TYPE



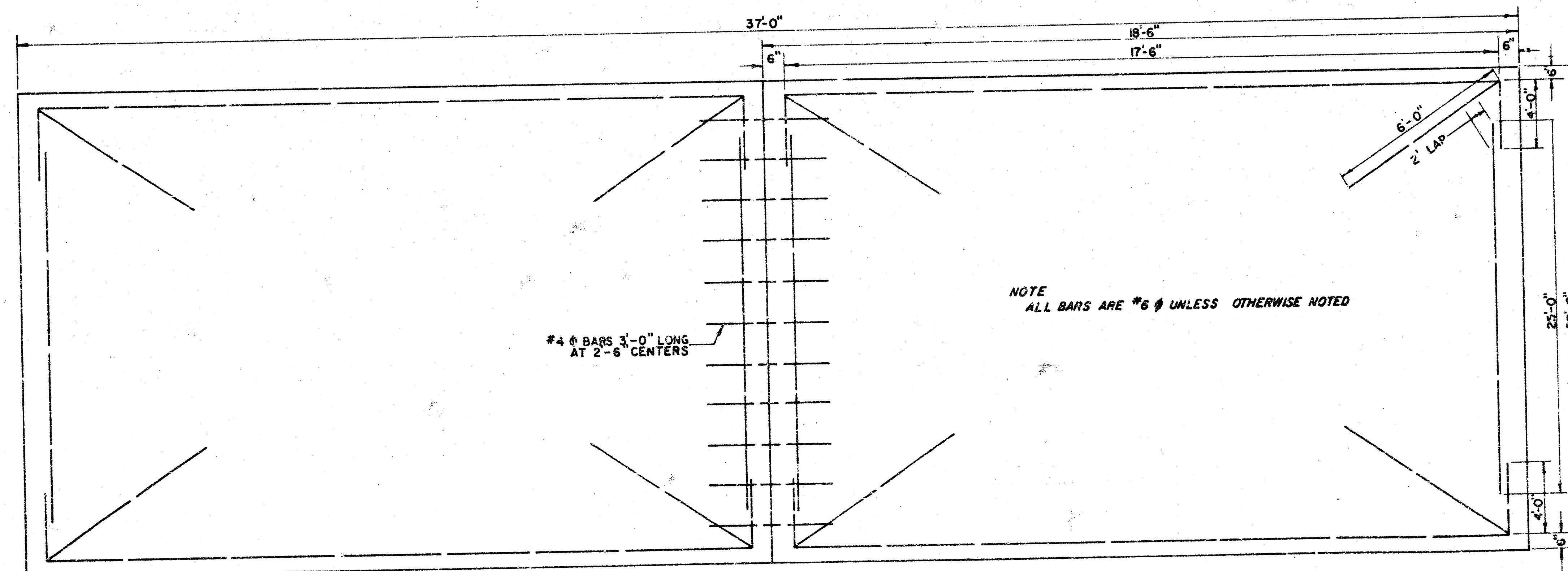
ALTERNATE ROLL-TYPE



ALTERNATE CROWN



STANDARD CROWN
TYPICAL SECTION 36'-0" CONCRETE PAVEMENT

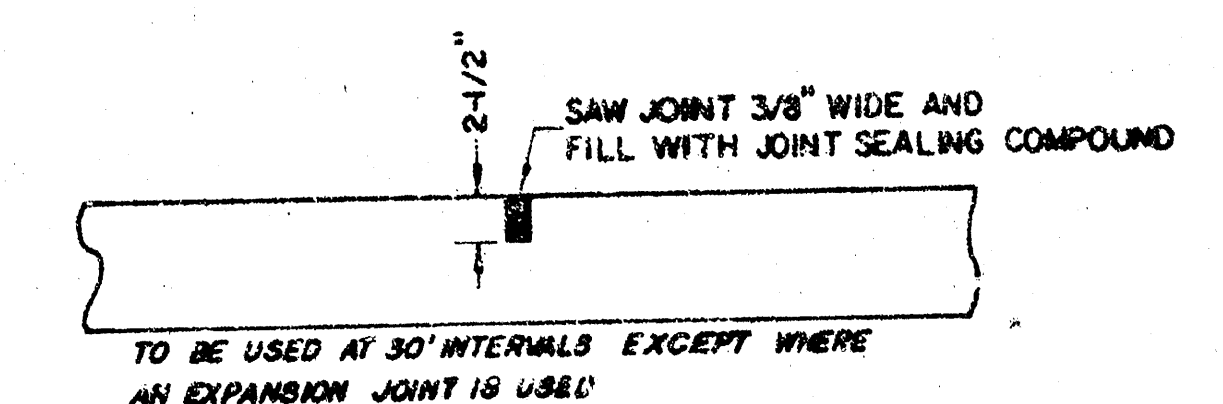


STEEL PATTERN

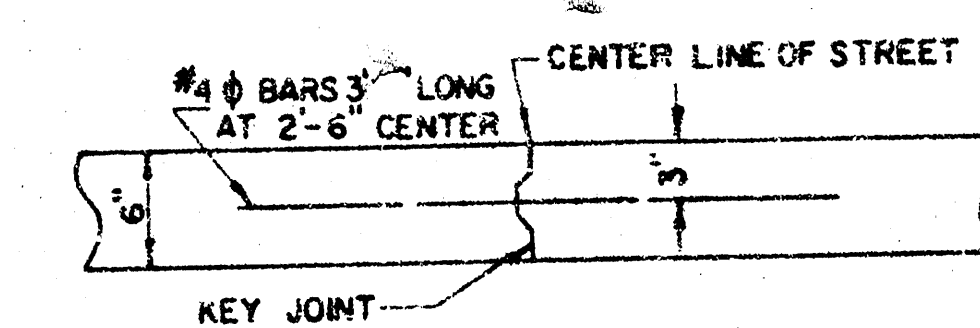
NO SCALE

NOTE
ALL BARS ARE #6 UNLESS OTHERWISE NOTED

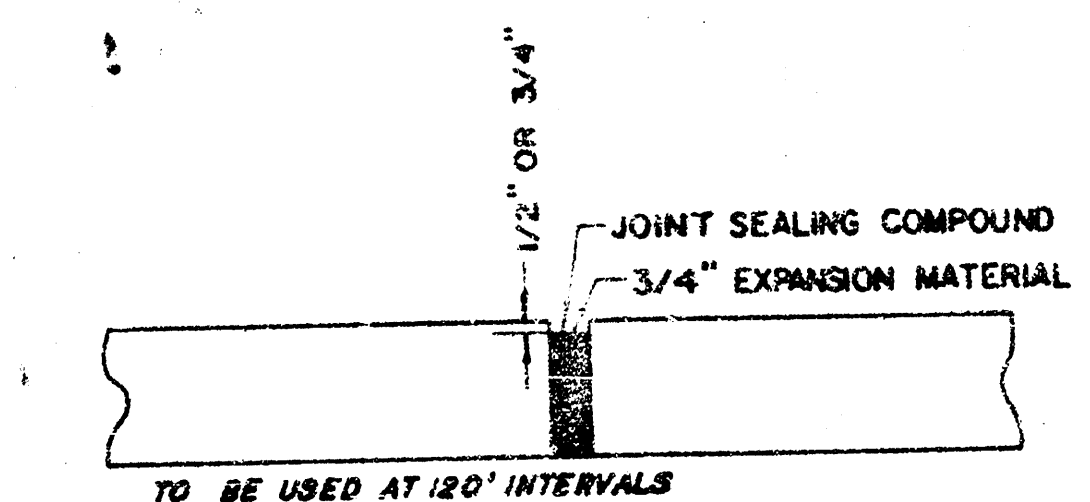
#4 BARS 3'-0" LONG
AT 2'-6" CENTERS



CONTRACTION JOINT DETAIL



KEY JOINT DETAIL



EXPANSION JOINT DETAIL

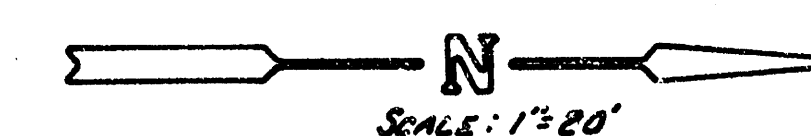
6" CONCRETE PAVEMENT /w INT. CURB
CITY OF WICHITA, KANSAS
-DEPARTMENT OF ENGINEERING-
R. W. BRUGGEMAN

DIRECTOR OF ENGINEERING/CITY ENGINEER
DATE: PROJ. No. 472.76 245 60943 000 000 001

B.M. = 111.75 ~ R.R. Spike N. F. P.P. S.E. Cor. Waco & 3rd St.
 B.M. = 113.87 ~ "X" On Walk N.W. Cor. OF Bldg. S.E. Cor. Main & Central
 B.M. = 114.07 ~ N.E. Cor. Conc. Base R.R. Signal Box S.W. Cor. 3rd & Wichita
 B.M. = 112.15 ~ R.R. Spike N. F. P.P. S.W. Cor. 3rd & Riverview

PI NO V.C.
 EL. = 112.67

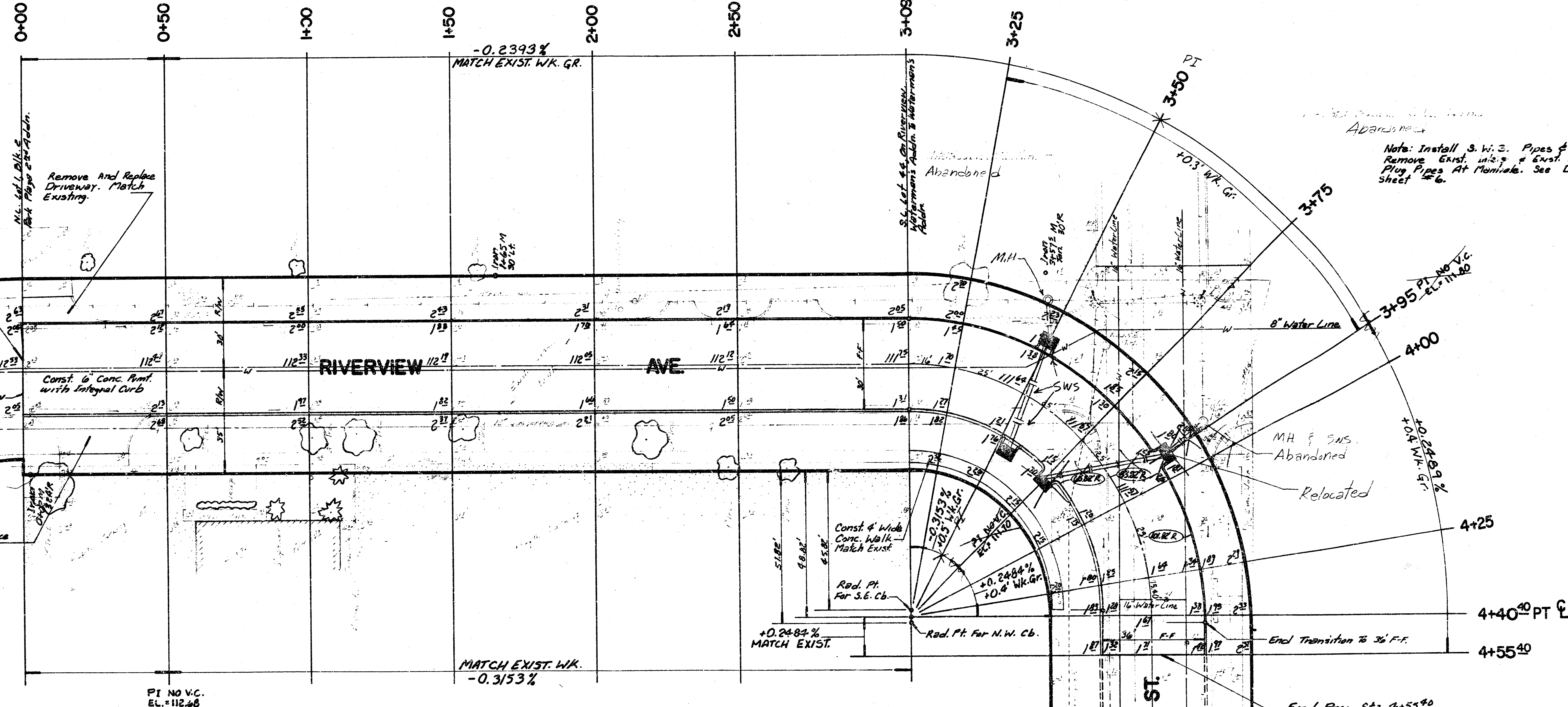
Begin Transition
 From 30' F.F. To 30' F.F.



42'-20' DRIVES

± 15 30' E. OF W. C.

Begin Proj. Sta. 0+00
 Match Exist. Point



Note: Install S.W. 2" Pipes & Inlets.
 Remove Exst. 12" & Exst. Inlet Leads.
 Plug Pipes At Manhole. See Details
 Sheet #6.

CAUTION
 UNDERGROUND
 UTILITIES
 EXISTENCE OF UTILITIES SHALL BE
 DETERMINED BY THE FIELD ENGINEER. SUB-GRADE
 TREATMENT MAY CONSIST OF LIME TREATMENT,
 CEMENT TREATMENT, SUB-GRADE MODIFICATION,
 OR ANY COMBINATION OF THESE.

EARTHWORK

PROPERTY	EXCAVATION
X-SECTION	220.5 C.Y.
10%	23.1 C.Y.
TOTAL	243.6 C.Y.

CURVE DATA S.W. CURB

R = 65.82'
 $\Delta = 89^\circ 49' 30''$
 L = 103.19'
 T = 65.62'
 C = 92.92'
 D = 81.04816"/100'
 D = 0.8104816"/ft.

CURVE DATA E

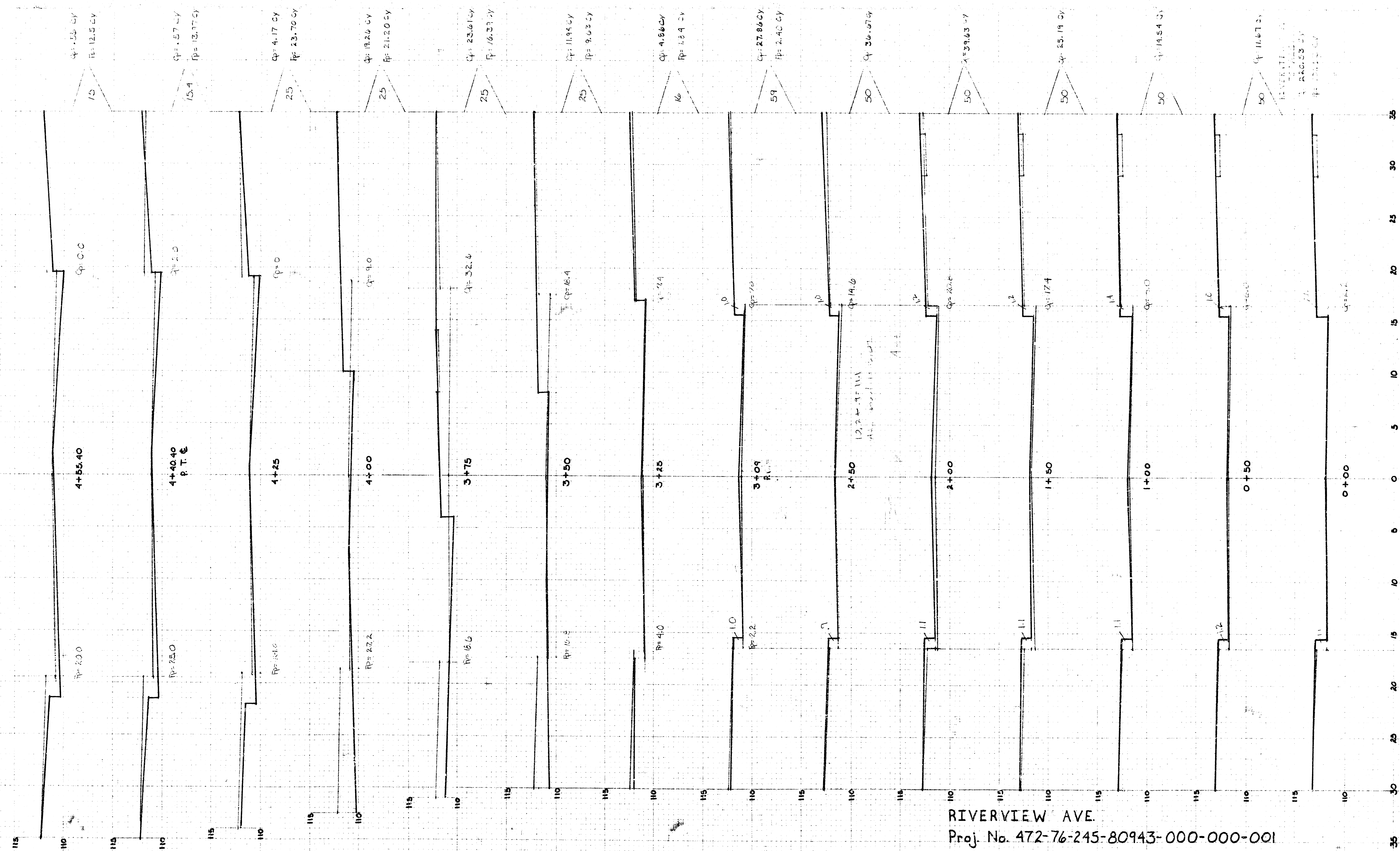
R = 83.82'
 $\Delta = 89^\circ 49' 30''$
 L = 131.41'
 T = 83.56'
 C = 118.36'
 D = 68.35477"/100'
 D = 0.6835477"/ft.

CURVE DATA N.W. CURB

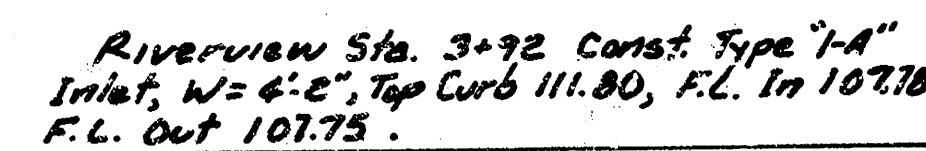
R = 101.82'
 $\Delta = 89^\circ 49' 30''$
 L = 159.65'
 T = 101.51'
 C = 143.78'
 D = 56.27015"/100'
 D = 0.5627015"/ft.

1,724 S.Y. MANIPULATION

**INTERSECTION OF THIRD &
 RIVERVIEW;
 RIVERVIEW AVE.**
 472 76 345 80943 000 000 001 4/8



BM 111.75 R.R. Spike N.E. P.P. S.E. Cor. Waco & 3rd.
BM 114.01 N.E. Cor. Conc. Base R.R. Signal Box S.W. Cor. 3rd & Wichita.
BM 112.15 R.R. Spike N. E. P.P. S.W. Cor. 3rd & Riverview.



Connect To Exist. Manhole
F.L. In 107.73, F.L. Out 106.42.
Cost To Be Incidental To Proj.

Scale:
Plan: 1"=20'
Profile: Horiz. 1"=20'
Vert. = 5'

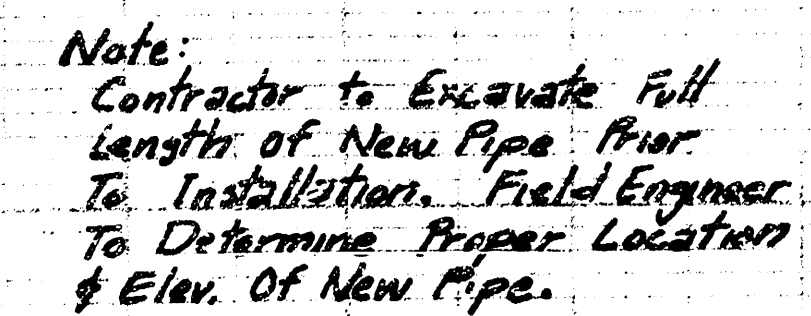
Riverview Sta. 3+75 Const. Type "I-A" Inlet,
W=4'-2", Top Curb 111.70, F.L. Out 107.85.

10.31.90

A diagram showing a traverse with the following data:

- Line 1: Bearing 101.82° , Distance R .
- Line 2: Bearing 83.87° , Distance E .
- Line 3: Bearing $44^\circ 50' 00''$.
- Line 4: Bearing $57^\circ 21' 00''$.

RIVERMEN



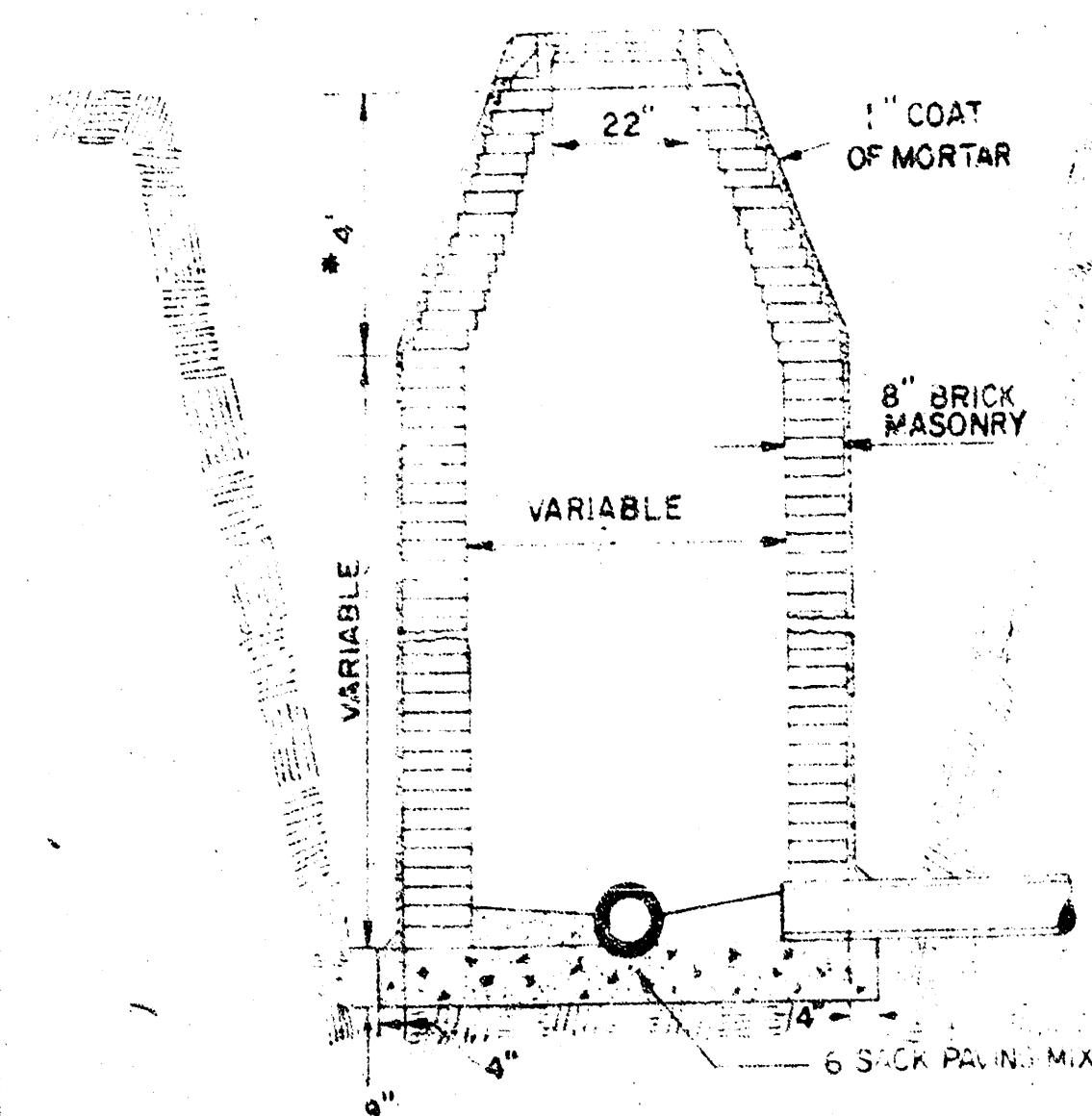
INTERSECTION OF THIRD
& RIVERVIEW;
RIVERVIEW AVE

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15.

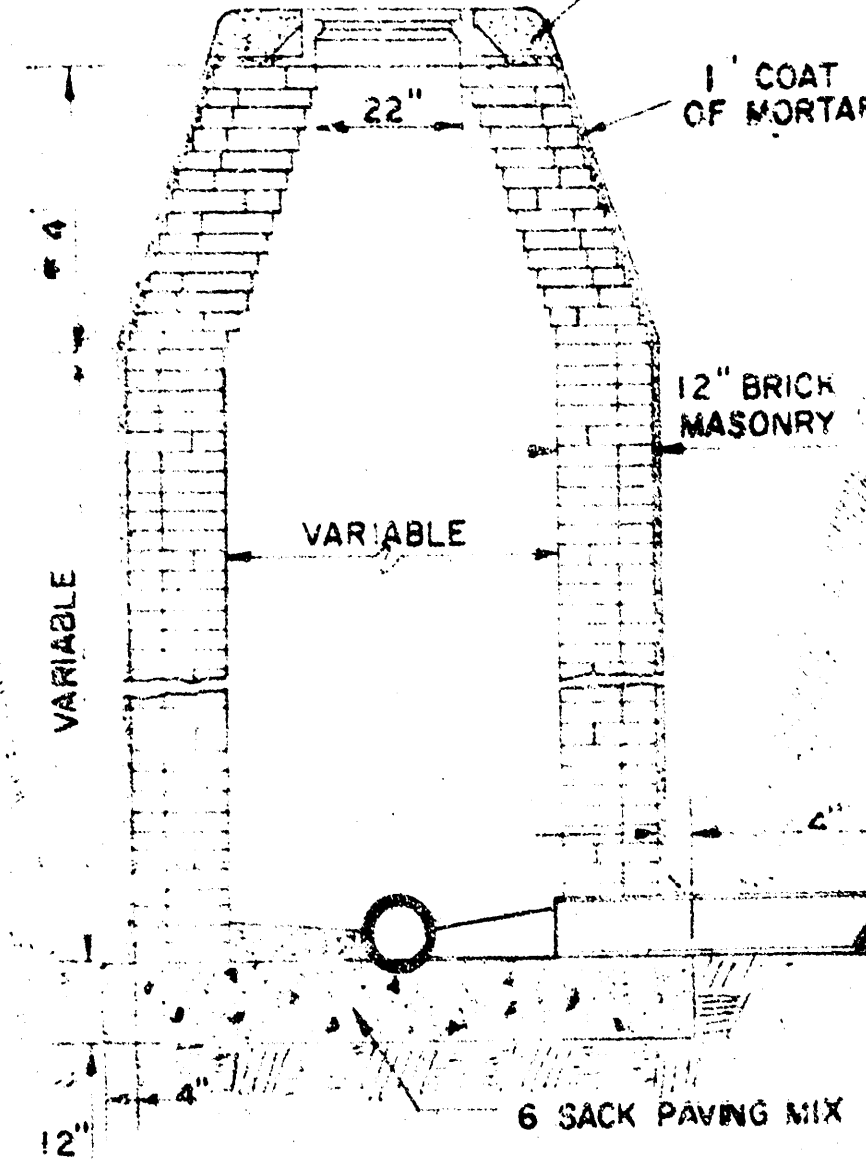
25

 $\frac{6}{8}$



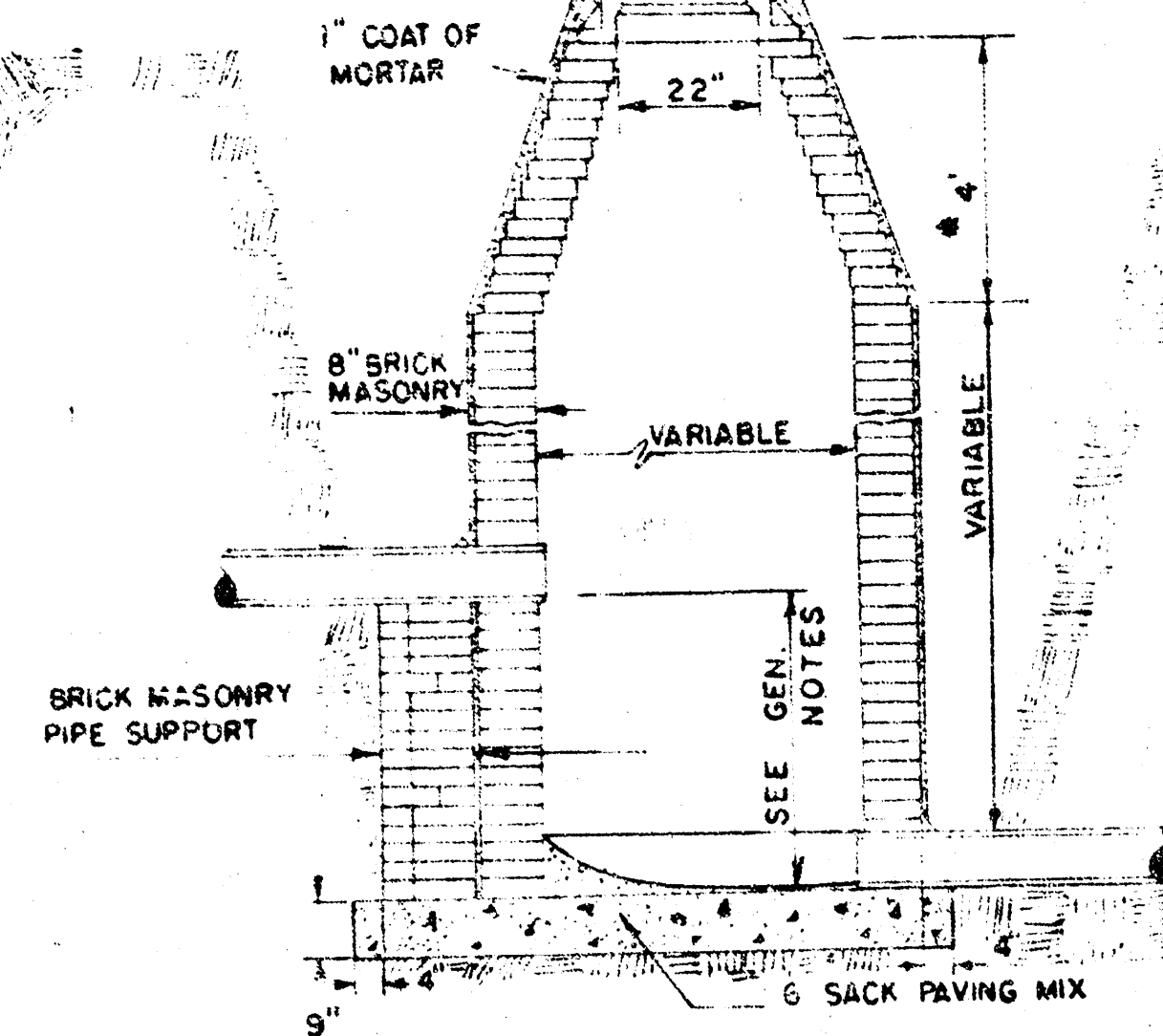
STANDARD MANHOLE
TYPE "A"

* DRAW-6' ON 5' DIA. MH.

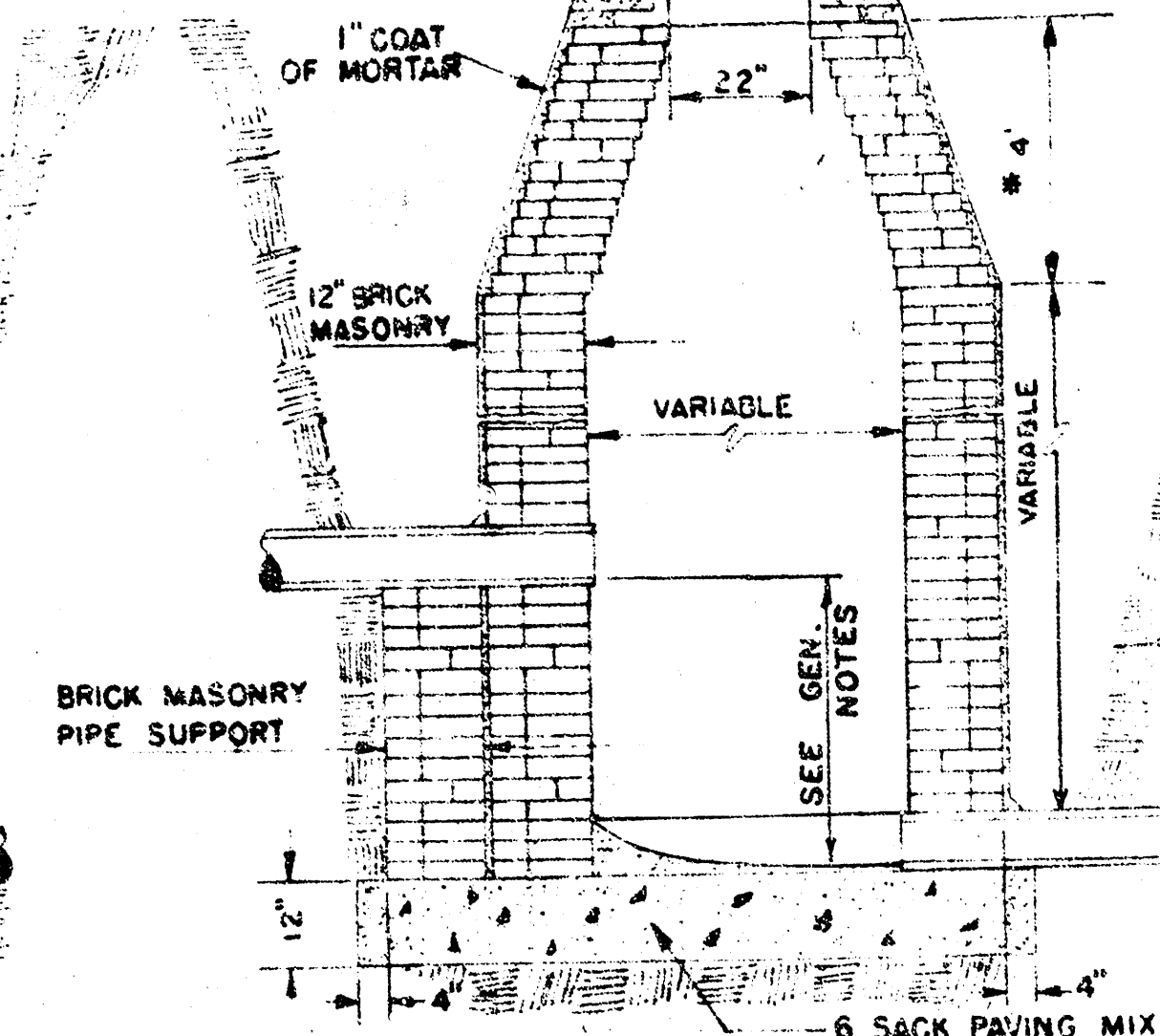


STANDARD MANHOLE
TYPE "B"

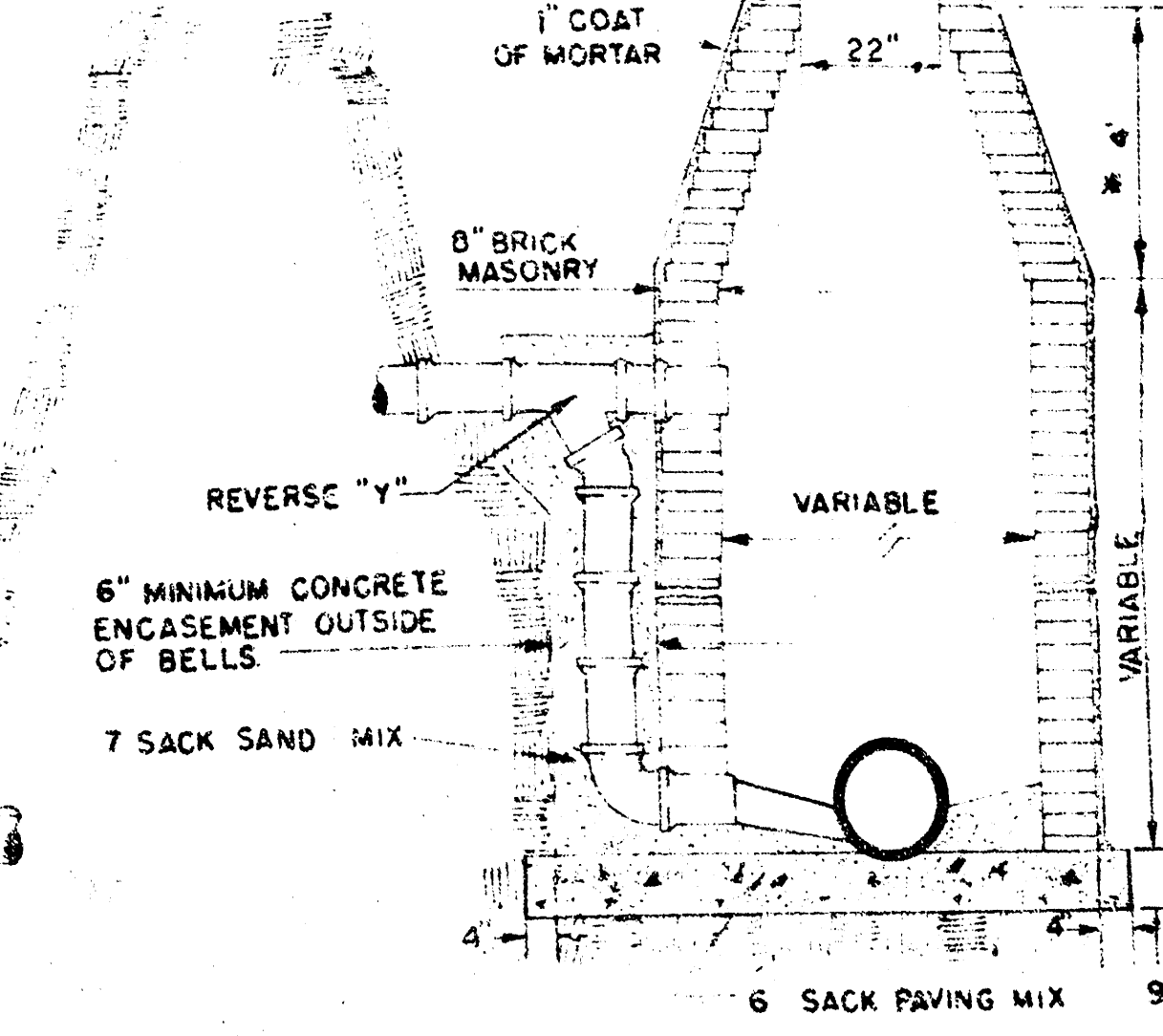
GROUT TO BE PLACED AROUND MANHOLE RING ONLY WHEN MANHOLE IS CONSTRUCTED IN UNPAVED AREAS. (TYPICAL ALL MANHOLES)



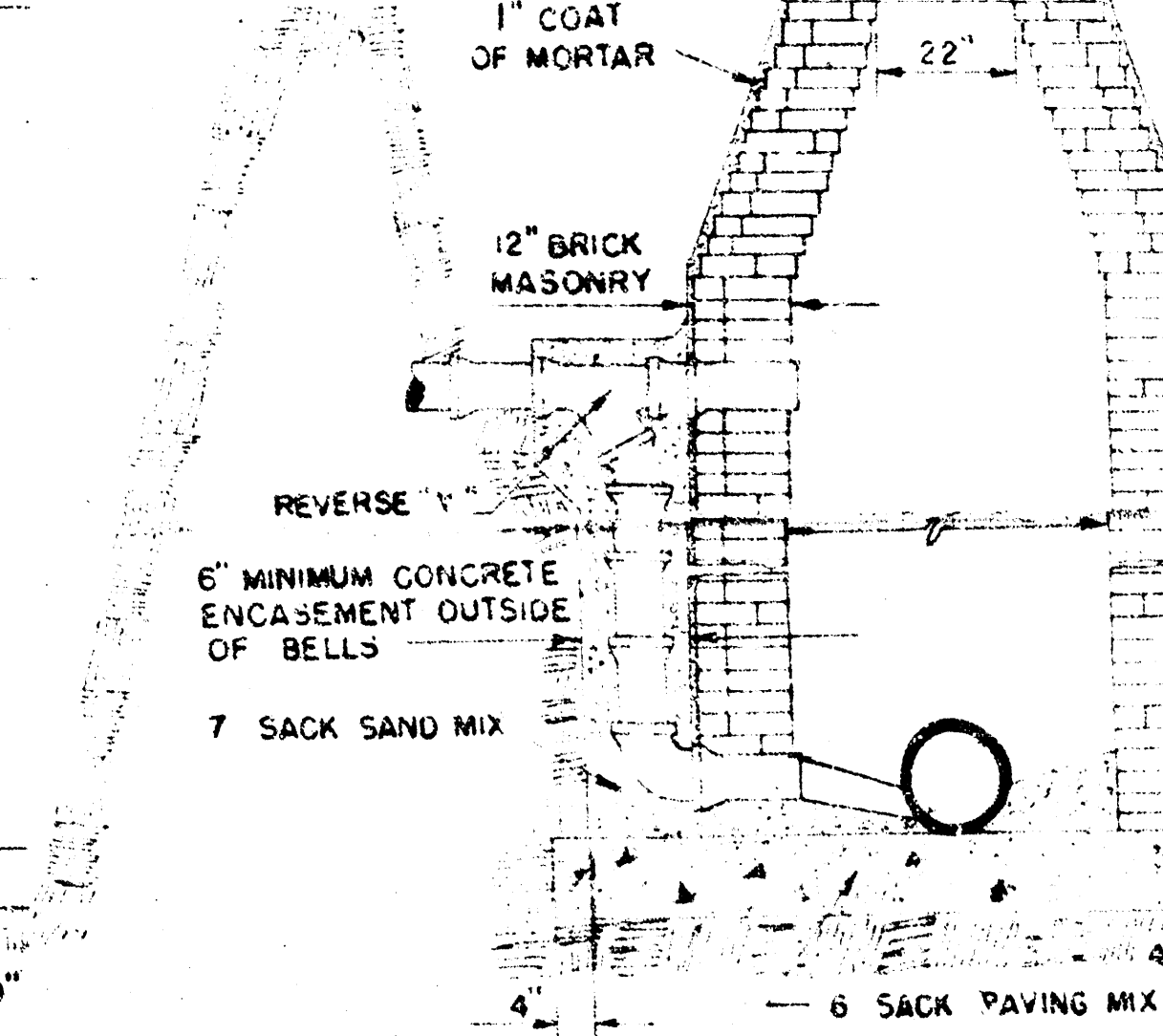
INSIDE DROP MANHOLE
TYPE "A"



INSIDE DROP MANHOLE
TYPE "B"

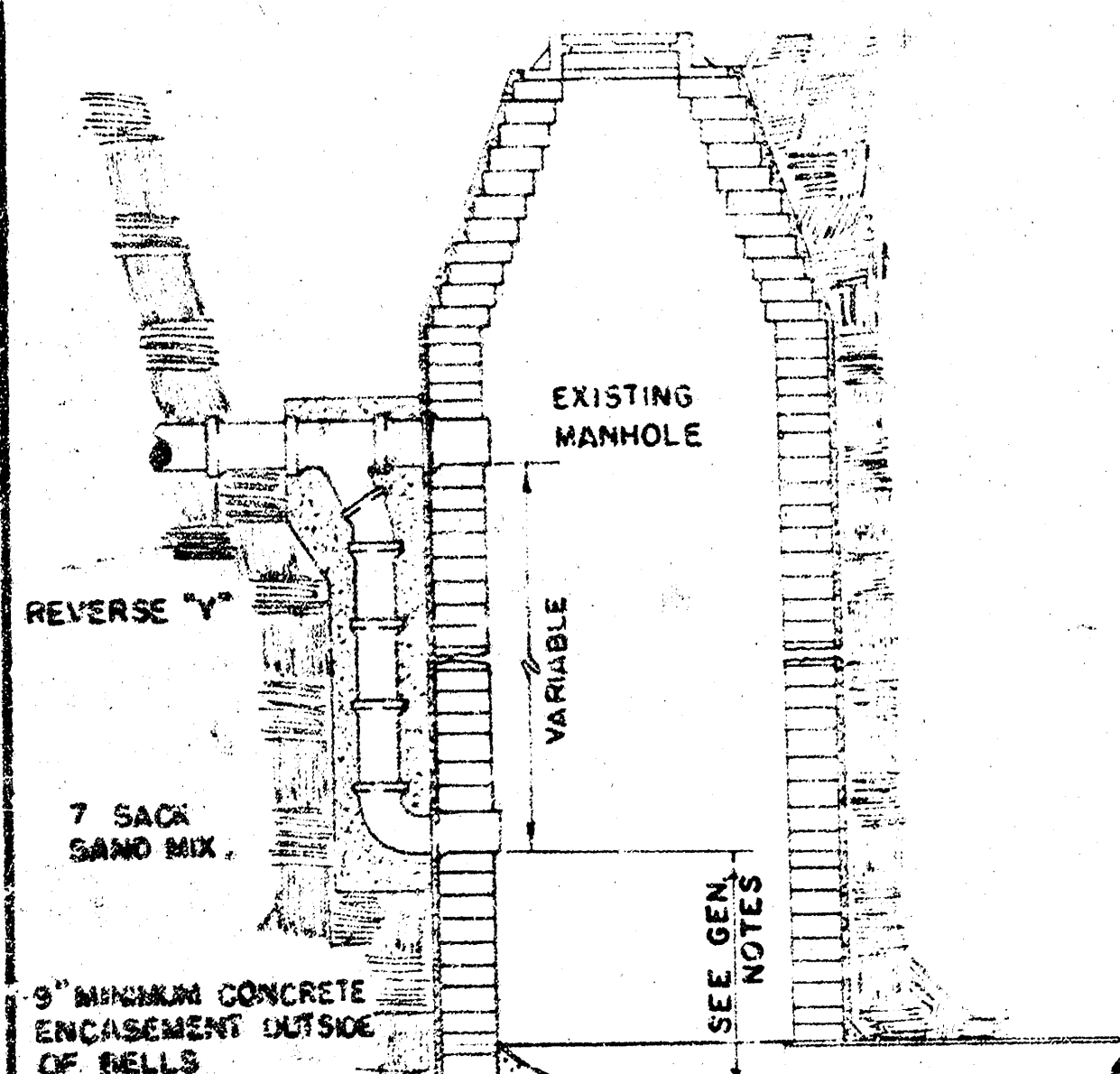


OUTSIDE DROP MANHOLE
TYPE "A"



OUTSIDE DROP MANHOLE
TYPE "B"

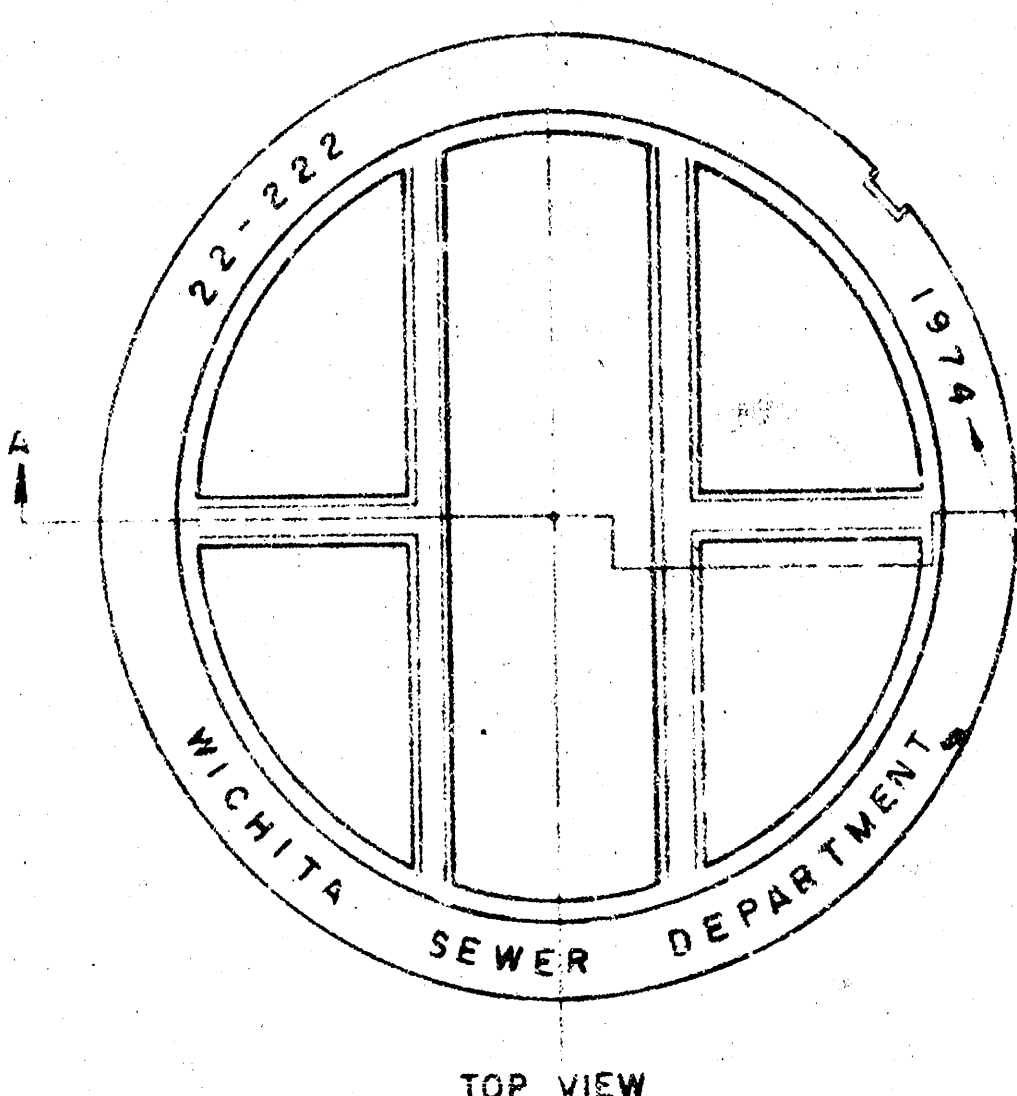
NOTE: REINFORCING STEEL SHALL BE INSTALLED IN THE MANHOLE BASES 6" ABOVE THE BOTTOM. REINFORCING STEEL SHALL CONSIST OF NO. 4 BARS PLACED ON 6" CENTERS IN BOTH DIRECTIONS. THE COST OF REINFORCING STEEL IS TO BE INCLUDED IN THE PRICE BID FOR THE MANHOLE.



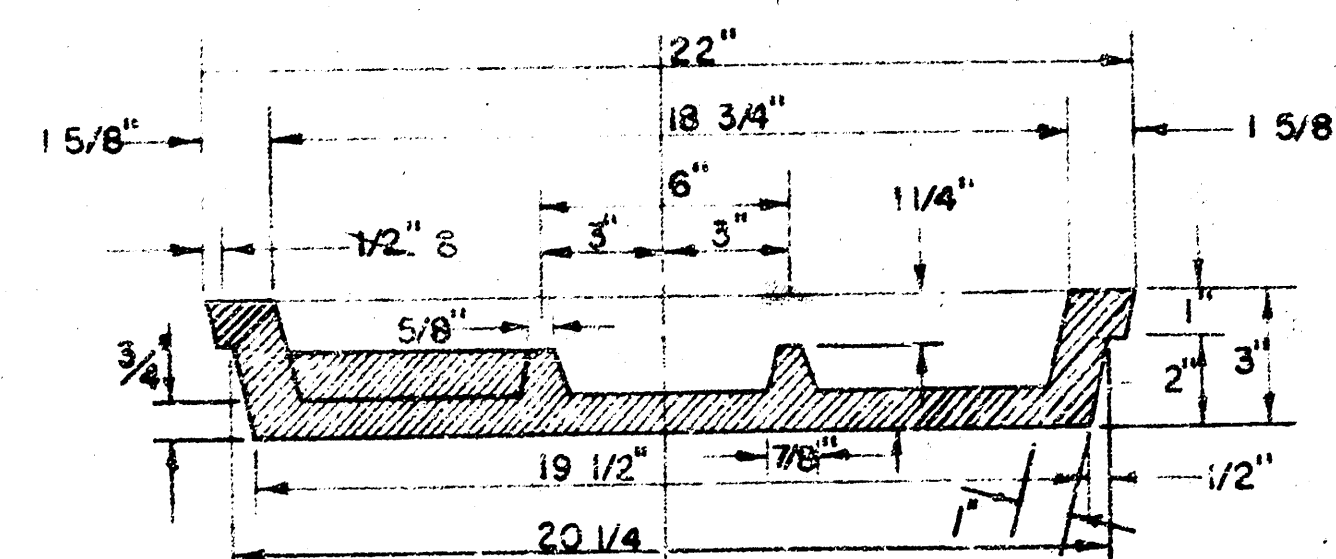
DETAIL OF OUTSIDE DROP STACK
CONSTRUCTED ON EXISTING MANHOLE (USE ONLY WHEN NO OTHER PIPE ARE FLOWING INTO MANHOLE)

GENERAL NOTES

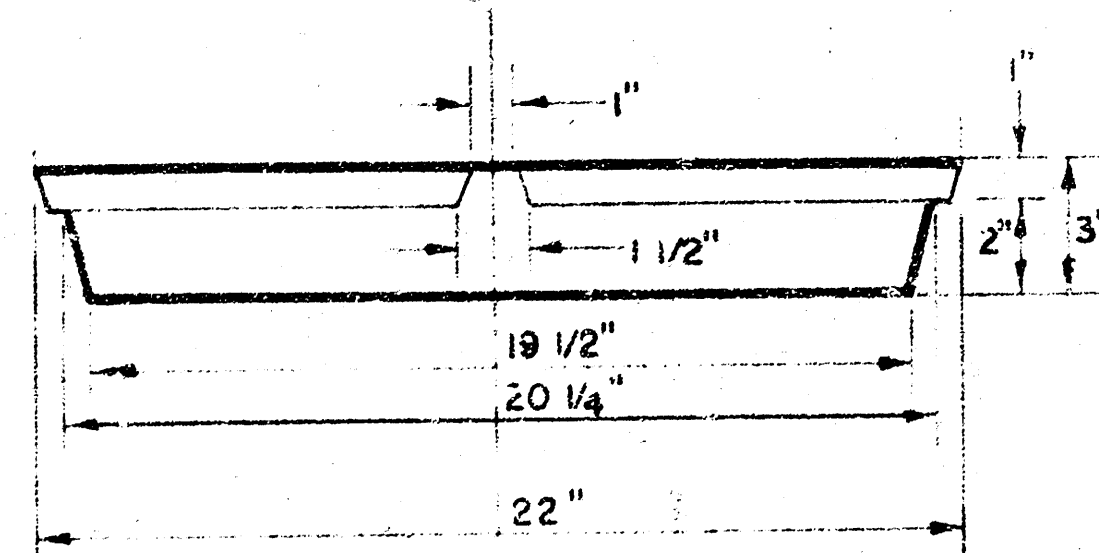
- MORTAR USED IN MASONRY CONSTRUCTION SHALL CONTAIN 9 SACKS OF CEMENT PER CUBIC YARD.
- STANDARD MANHOLES TYPE "A" OR TYPE "B" AND STANDARD INSIDE DROP MANHOLES TYPE "A" OR TYPE "B" SHALL BE BID AS STANDARD MANHOLES FOR THE TYPE AND DIAMETER INDICATED. OUTSIDE DROP MANHOLES SHALL BE BID AS STANDARD OUTSIDE DROP MANHOLES FOR THE TYPE AND DIAMETER INDICATED. ALL MANHOLE DIAMETERS WILL BE 4' UNLESS INDICATED OTHERWISE. MANHOLES WITH PIPE SIZES LARGER THAN 24" SHALL BE 5' DIAMETER.
- THE FLOORS OF ALL MANHOLES SHALL BE SHAPED TO INCREASE HYDRAULIC EFFICIENCY USING 6 SACK SAND MIX CONCRETE.
- PIES INSTALLED WITHIN THE MANHOLE EXCAVATION SHALL BE CRADLED WITH CONCRETE TO THE LIMITS OF THE WHOLE EXCAVATION. COST OF CRADLE WITHIN MANHOLE EXCAVATION SHALL BE INCLUDED IN THE PRICE BID FOR THE MANHOLE. CRADLE SHALL EXTEND TO FIRST JOINT OUTSIDE OF MANHOLE WHEN CLAY PIPE IS USED.



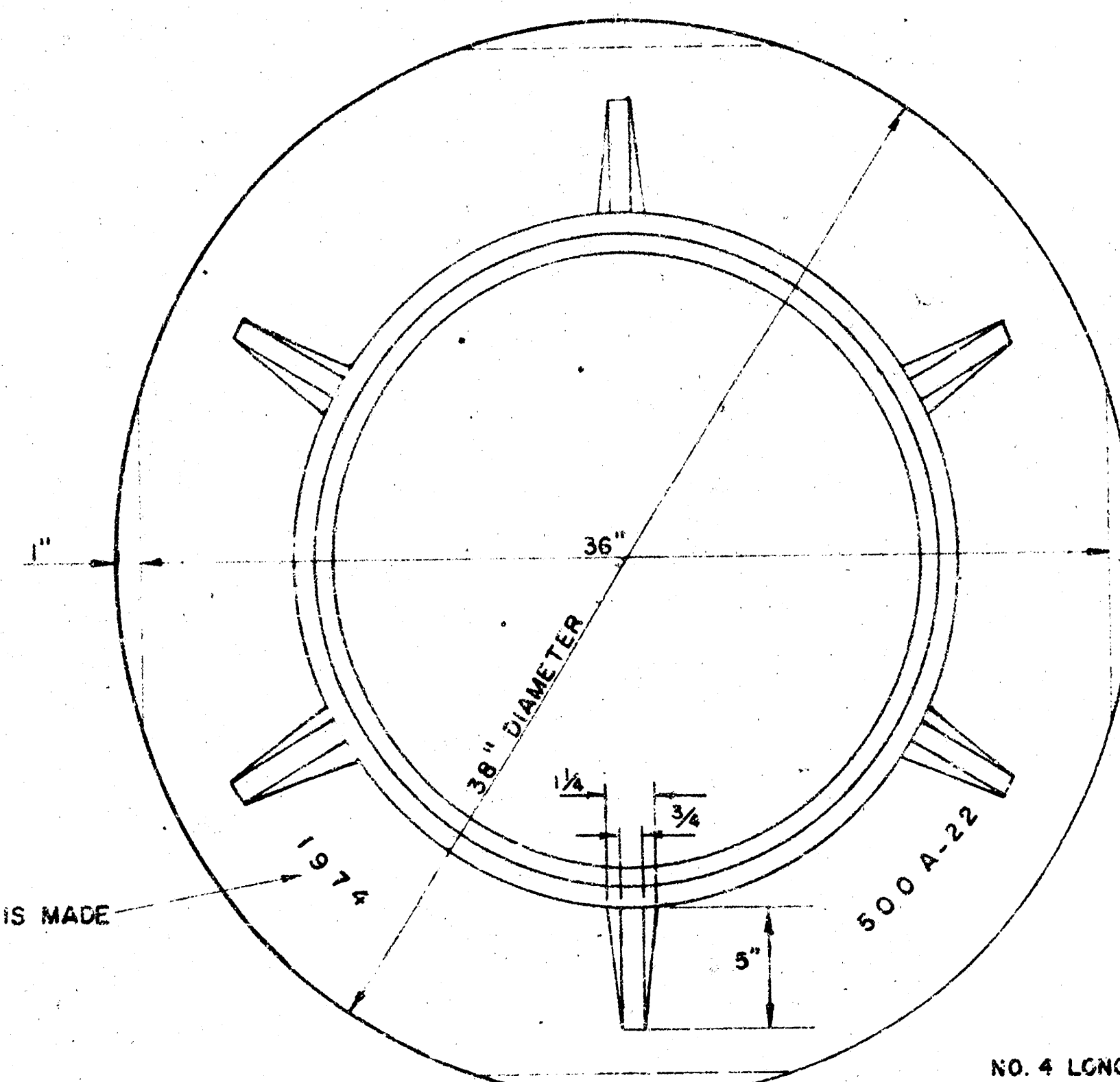
TOP VIEW
MANHOLE COVER
WEIGHT 110 LBS.



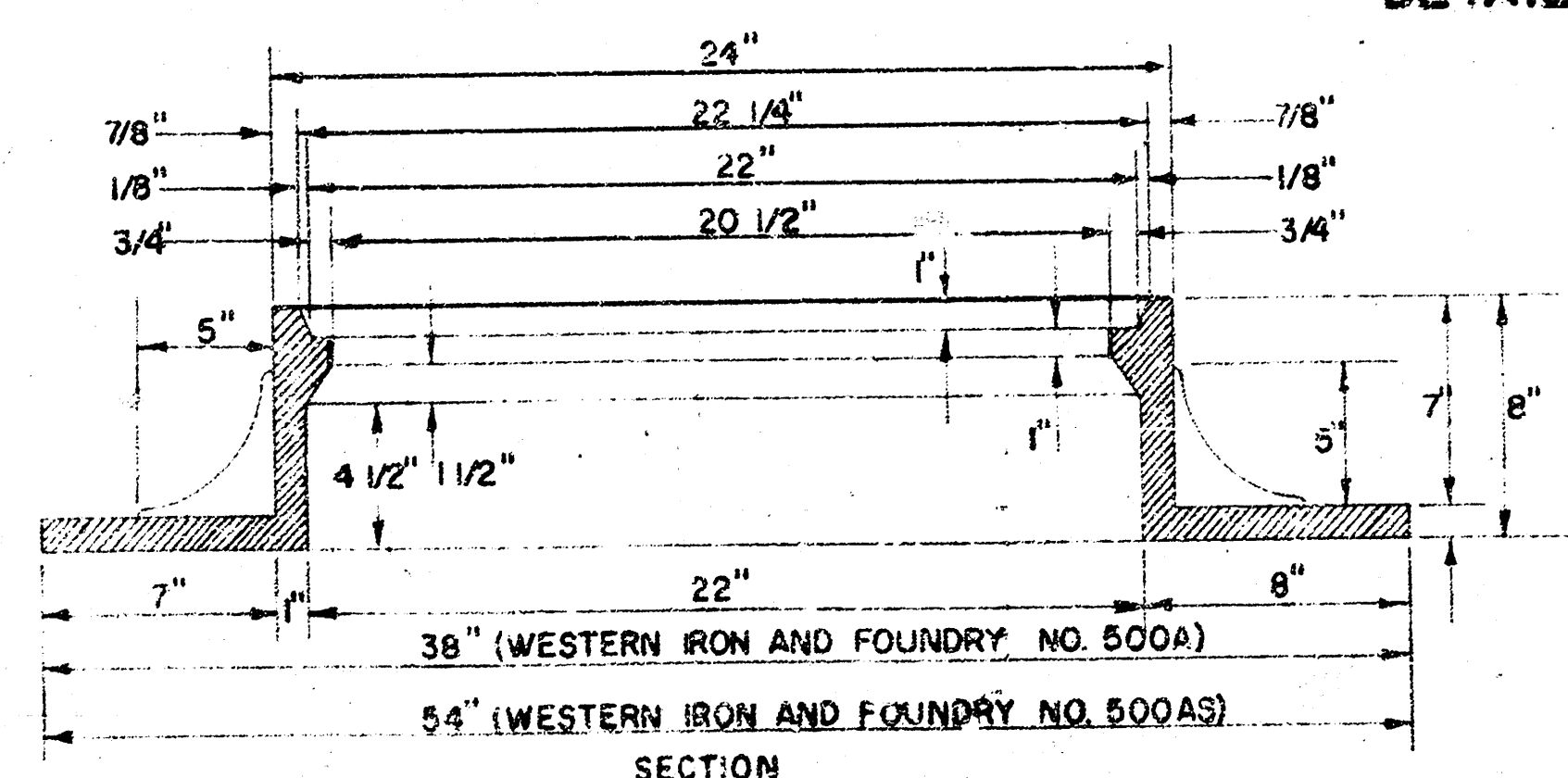
SECTION A-A
MANHOLE COVER



SIDE VIEW
MANHOLE COVER



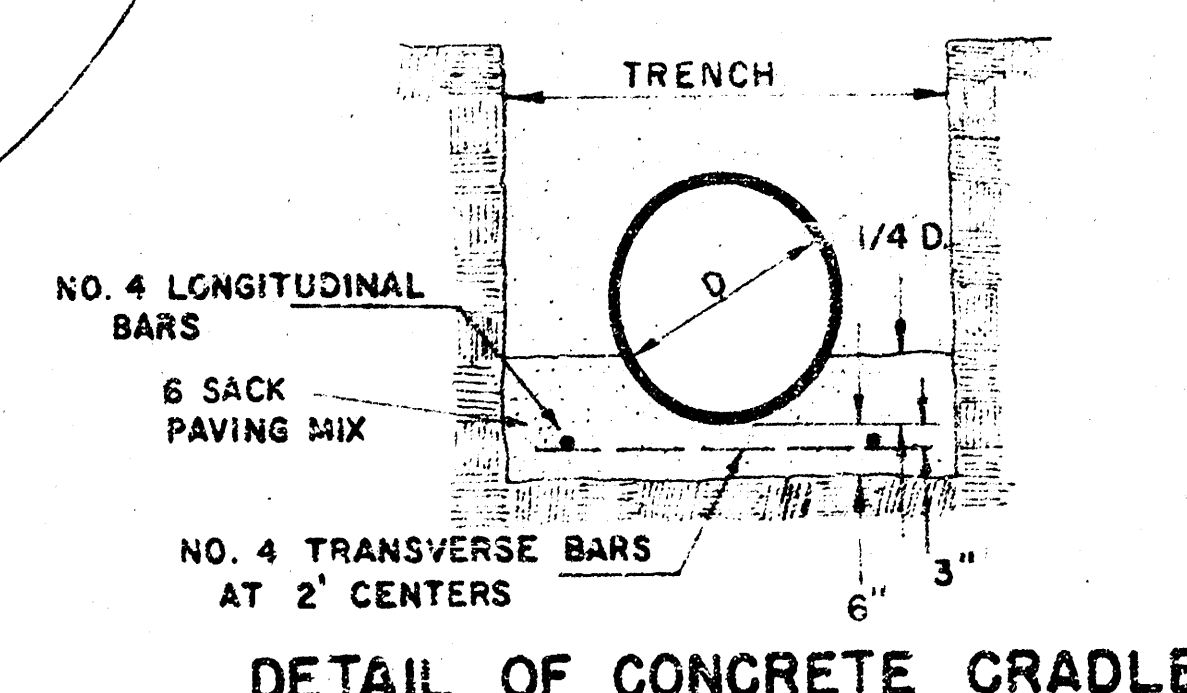
TOP VIEW
MANHOLE RING
WEIGHT 325 LBS. RING NO. 500A
WEIGHT 800 LBS. RING NO. 500AS



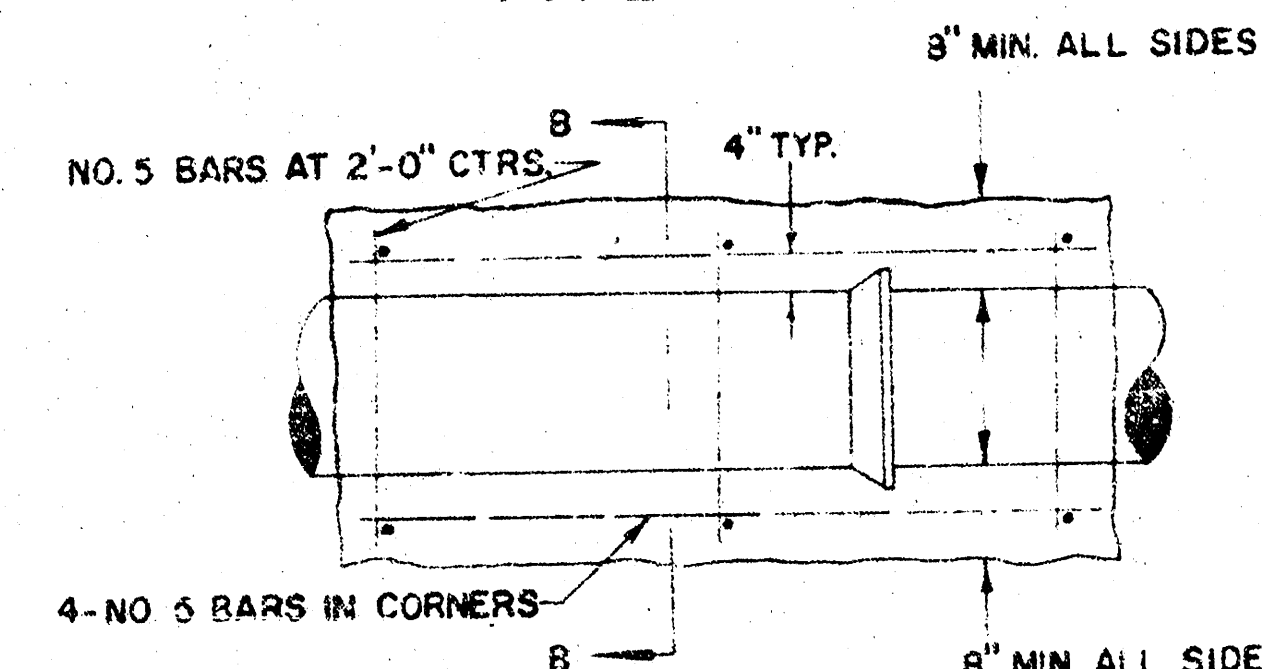
SECTION
MANHOLE RING

OUTSIDE CIRCUMFERENCE OF COVER AND THE INNER FACE AND SEAT OF RING TO BE MACHINE FIT.

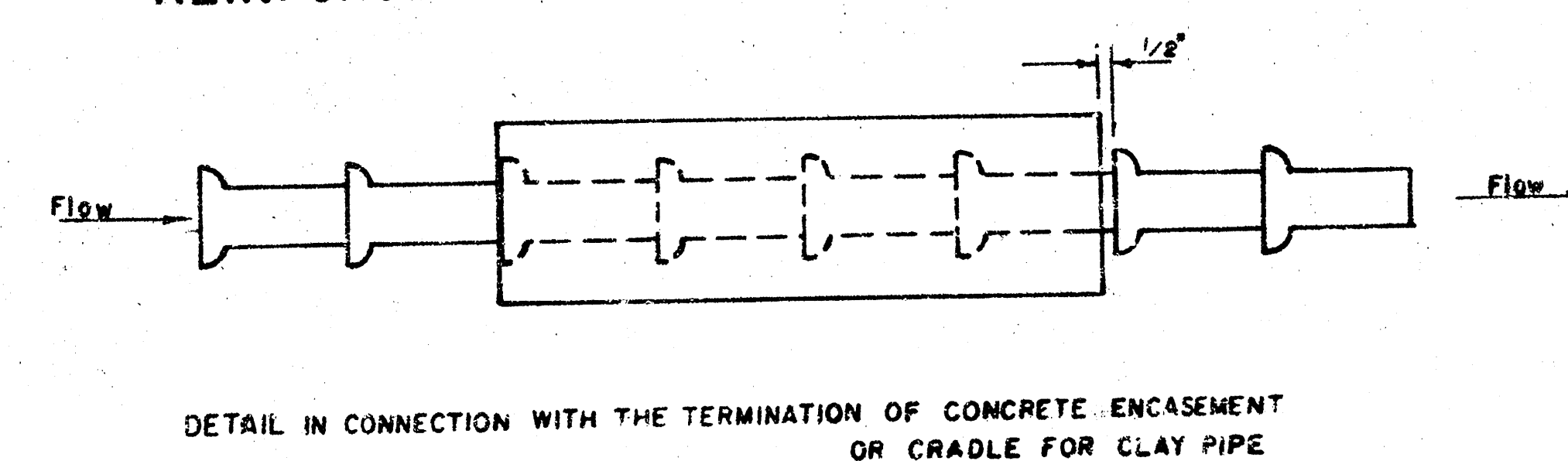
THIS PORTION OF FLANGE MAY BE OMITTED



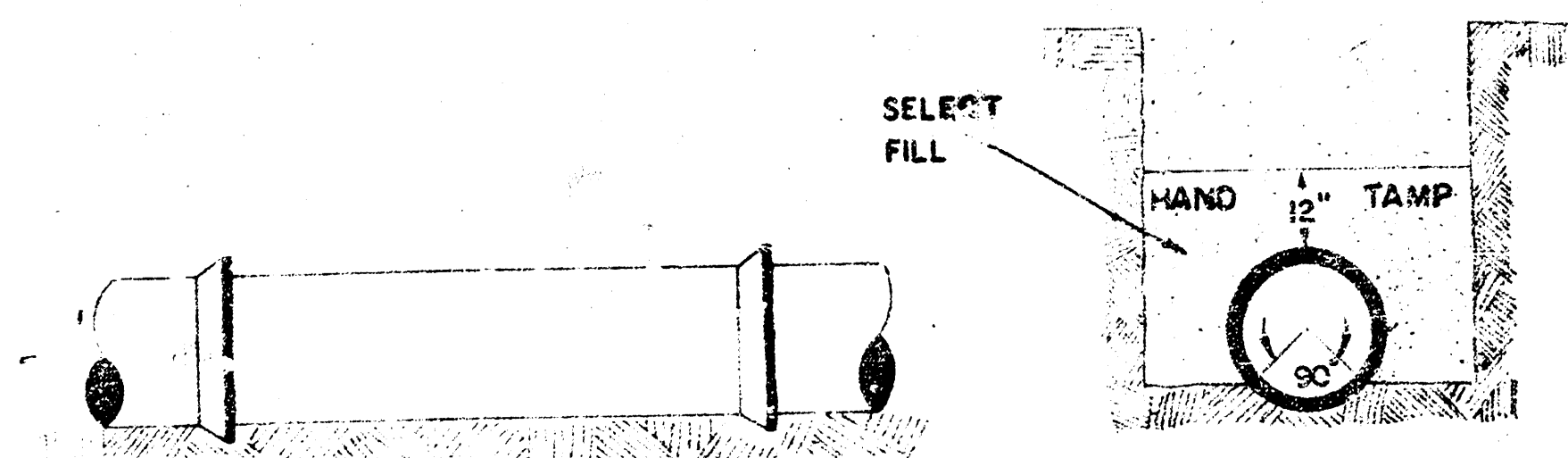
DETAIL OF CONCRETE CRADLE



REINFORCED CONCRETE ENCASEMENT



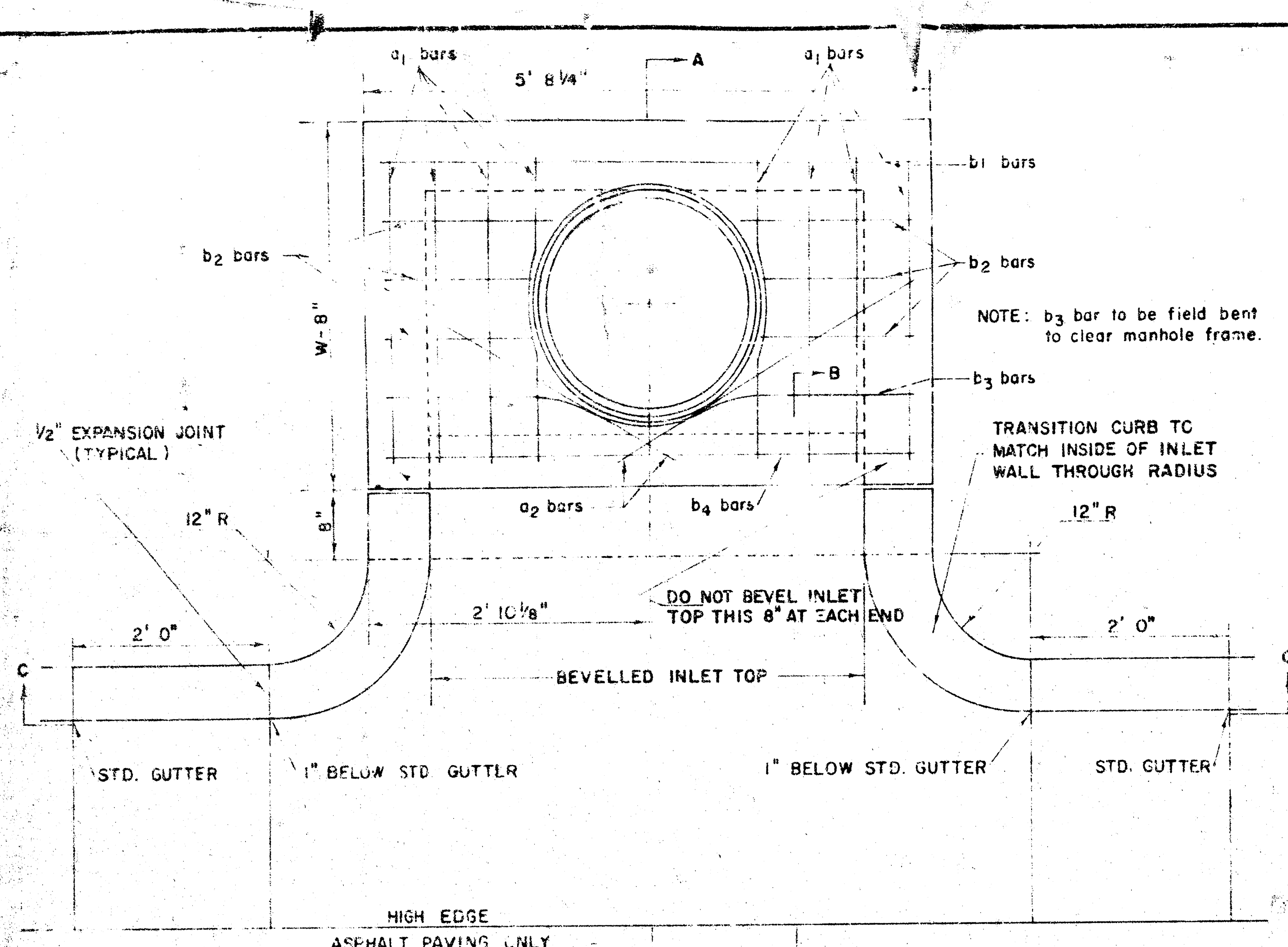
ORDINARY BEDDING METHOD
STORM SEWER PIPE



REVISED 4-4-80
DETAILS OF
SEWER APPURTENANCES
ADOPTED AS STANDARD DESIGN
BY
ENGINEERING DIVISION
CITY OF WICHITA, KANSAS

1974

26



PLAN (SCALE 1" = 1' 0")

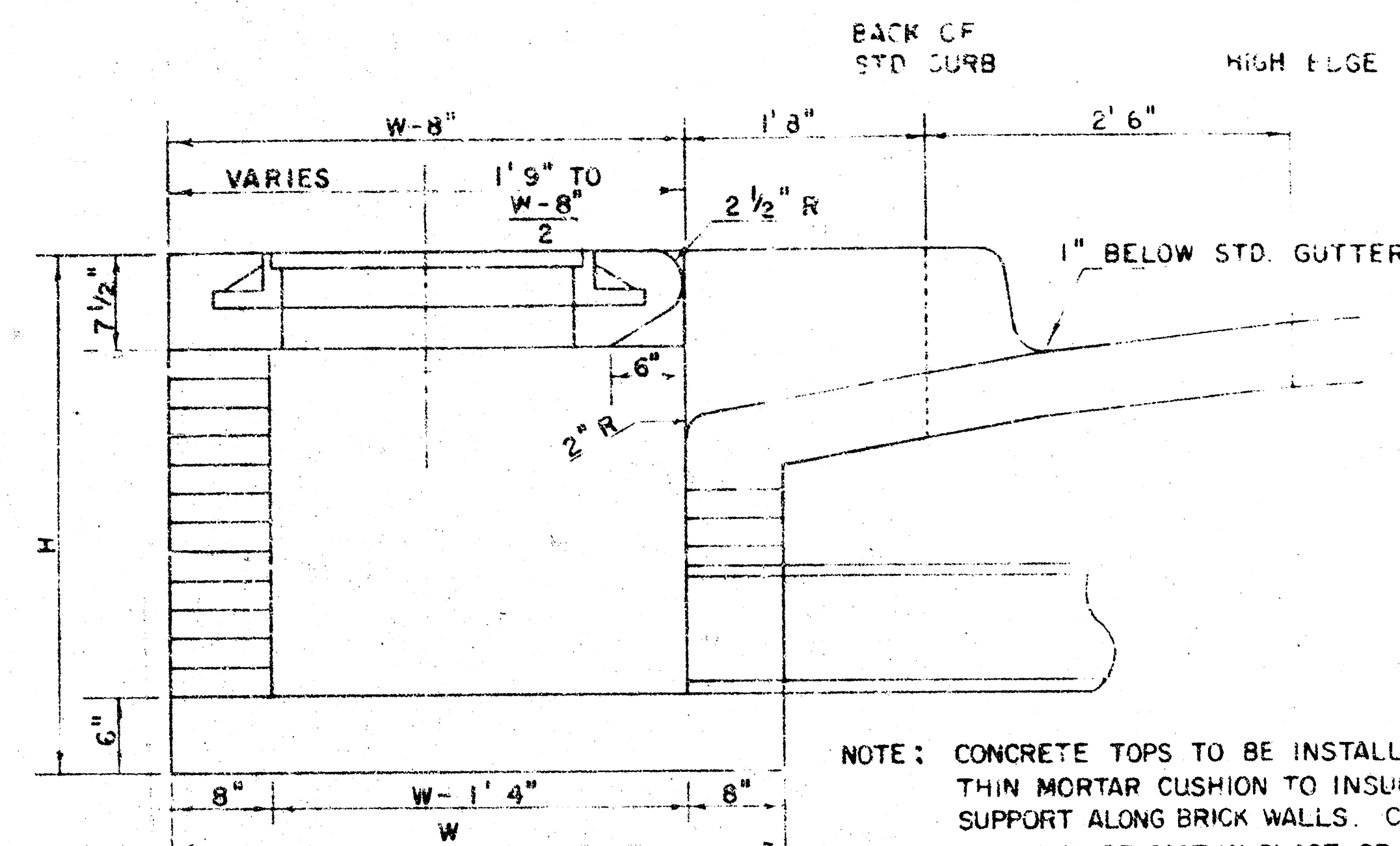
STEEL SCHEDULE											
BAR	a ₁	a ₂	b ₁	b ₂	b ₃	b ₄	b ₅	b ₆	b ₇	b ₈	WT. LBS.
NUMBER	8	2	1	3	5	7	9	6	1	1	
SIZE	#4	#4	#4	#4	#4	#4	#4	#4	#4	#6	
W=4'2"	6'5"	3'4"	5'5"	-	-	-	-	1'5"	5'6"	5'5"	60*
W=5'0"	8'1"	4'4"	-	5'5"	-	-	-	1'5"	5'6"	5'5"	77*
W=6'0"	10'1"	5'4"	-	-	5'5"	-	-	1'5"	5'6"	5'5"	97*
W=7'0"	11'1"	6'4"	-	-	-	5'5"	-	1'5"	5'6"	5'5"	111*
W=8'0"	12'1"	7'4"	-	-	-	-	5'5"	1'5"	5'6"	5'5"	124*

* NOTE: a₂ BARS TO BE PLACED APPROX. 2" BELOW TOP OF INLET COVER

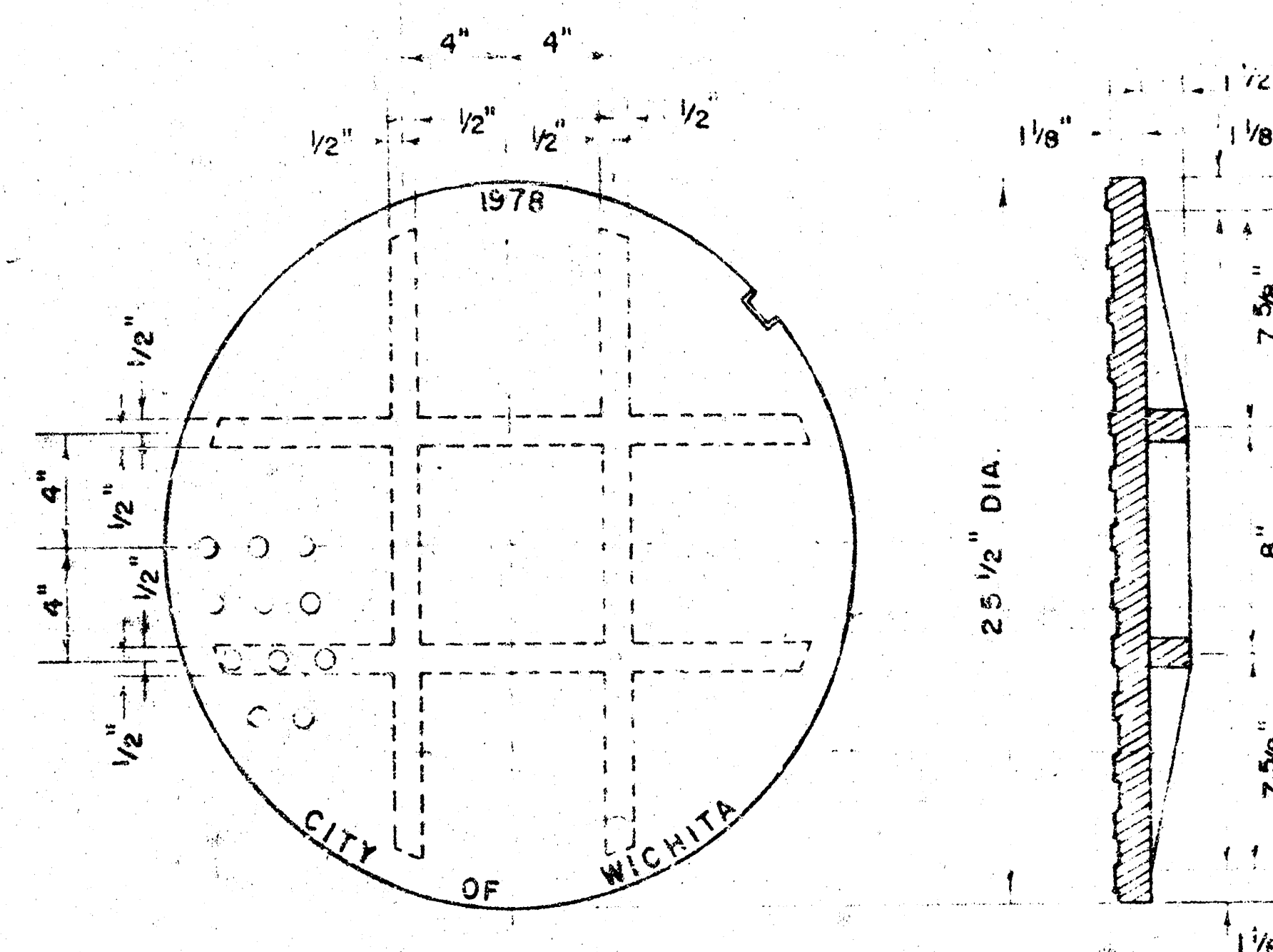
BENDING DIAGRAM

STANDARD CURB INLET PRECAST TOPS			
W	PRE-CAST TOP SIZE	PIPE SIZE	CU. YD. CONC.
4' 2"	36" x 5' 8 1/4" x 7 1/2"	21" & SMALLER	0.46 *
5' 0"	44" x 5' 8 1/4" x 7 1/2"	24" & 30"	0.57 *
6' 0"	54" x 5' 8 1/4" x 7 1/2"	36" & 42"	0.71 *
7' 0"	64" x 5' 8 1/4" x 7 1/2"	48" & 54"	0.84 *
8' 0"	74" x 5' 8 1/4" x 7 1/2"	60" & 66"	0.97 *

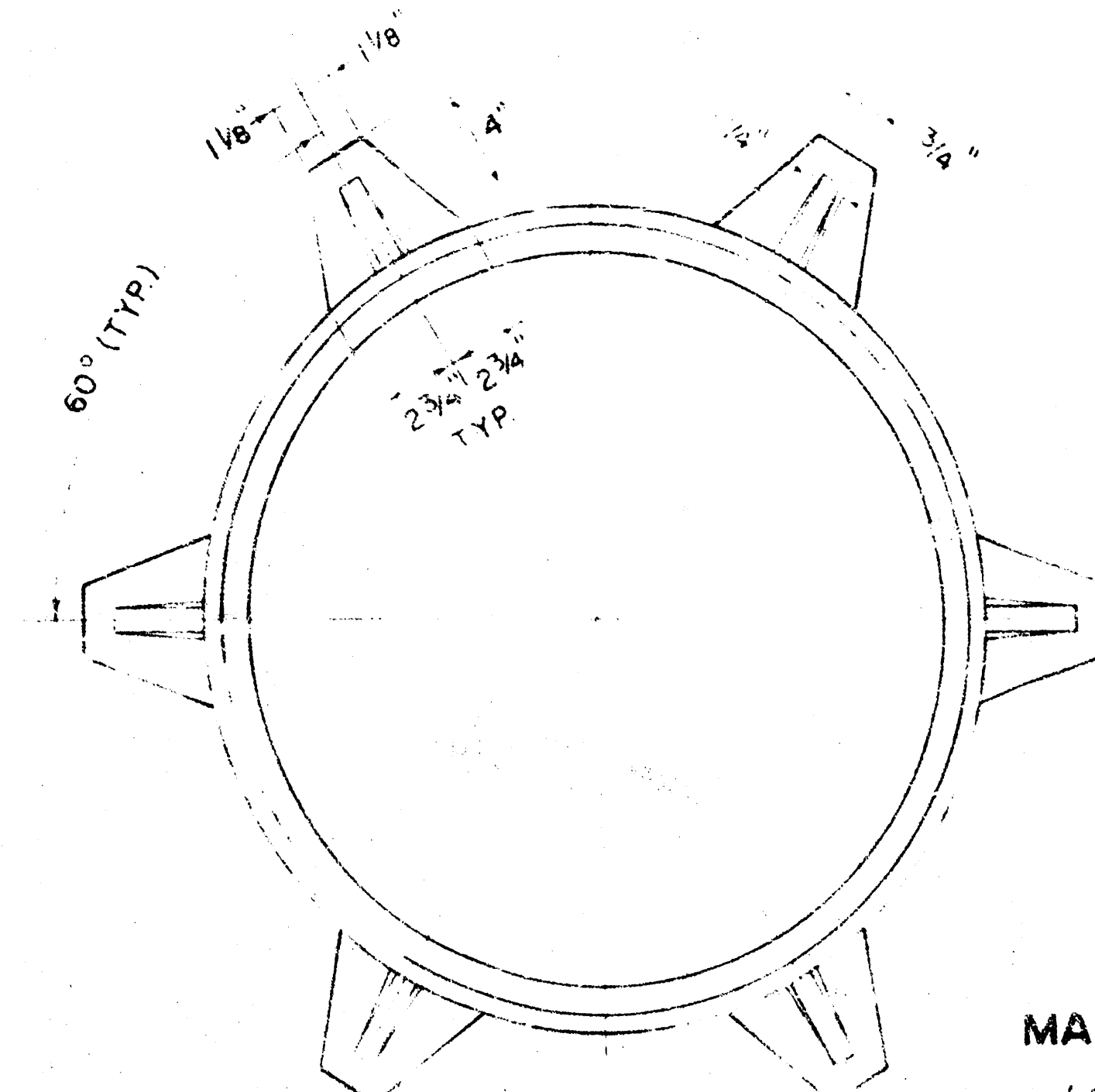
* GROSS VOLUME



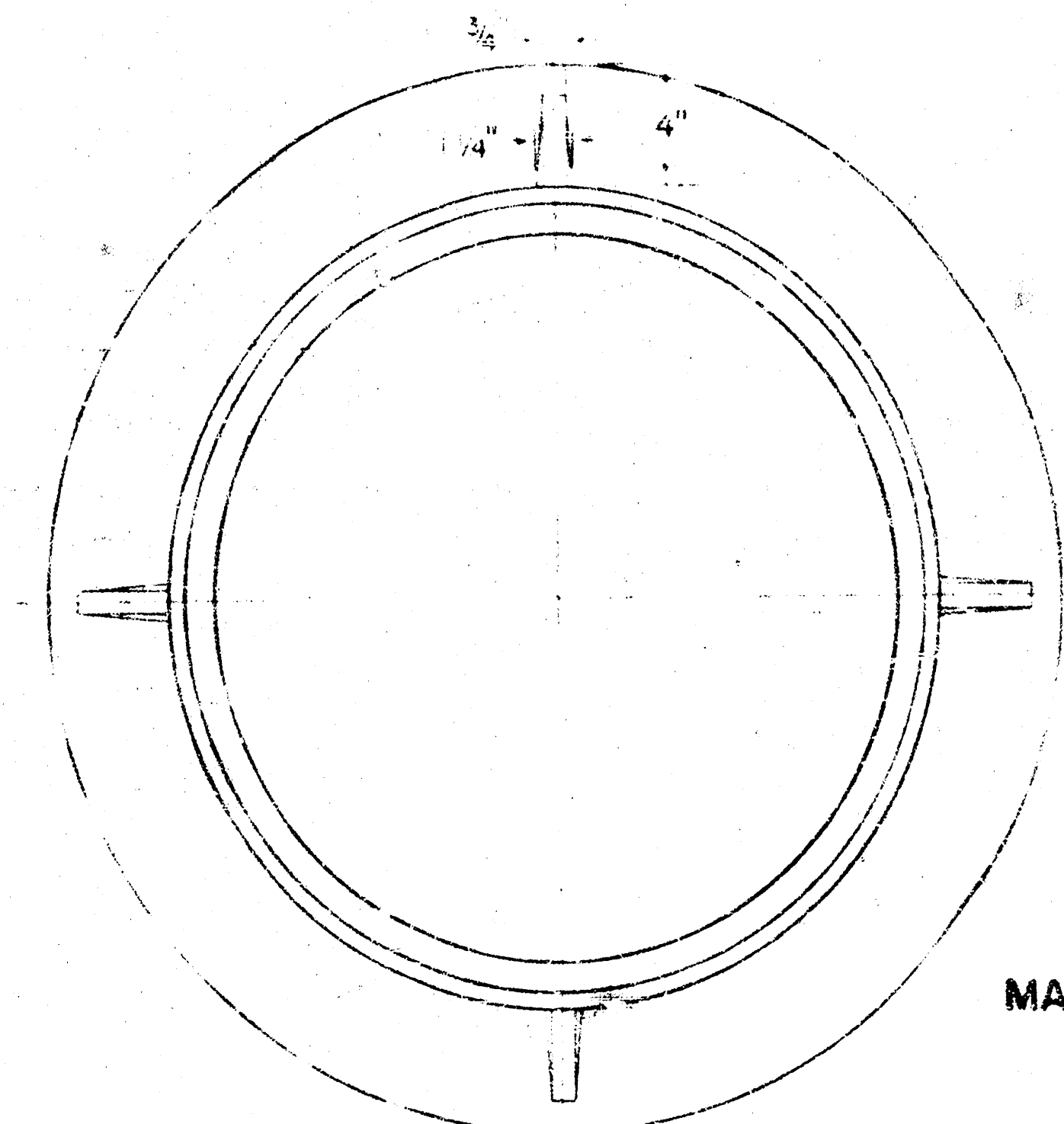
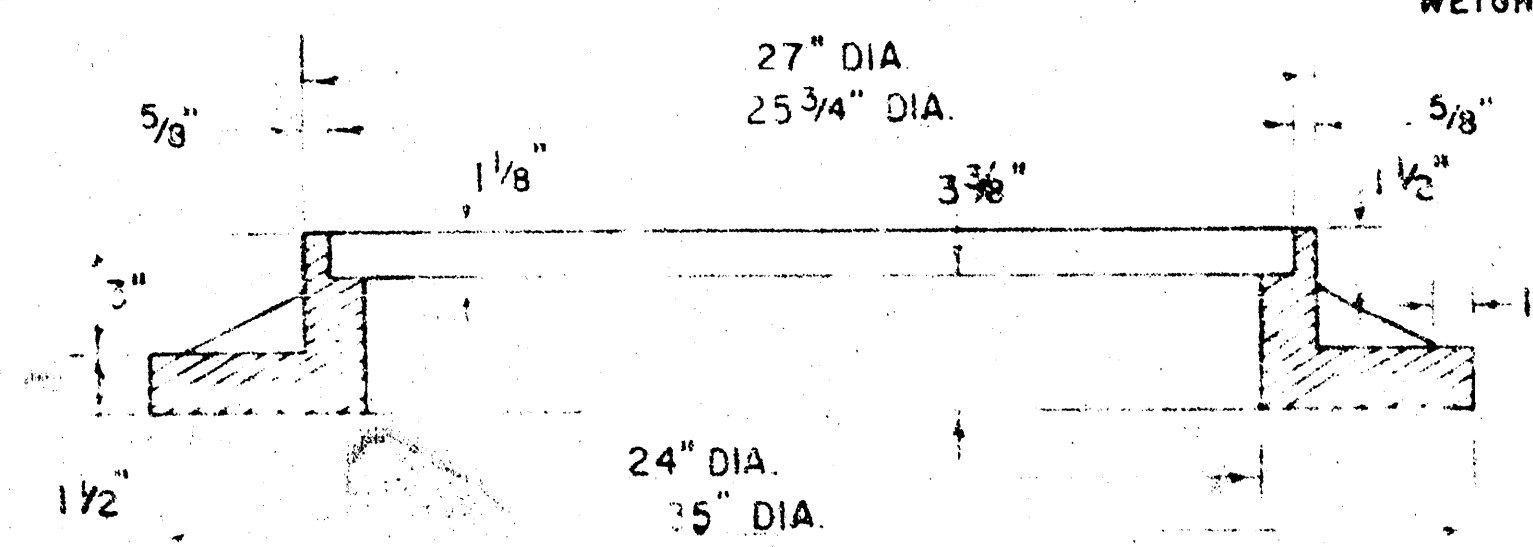
SECTION A-A
(SCALE 1" = 1' 0")



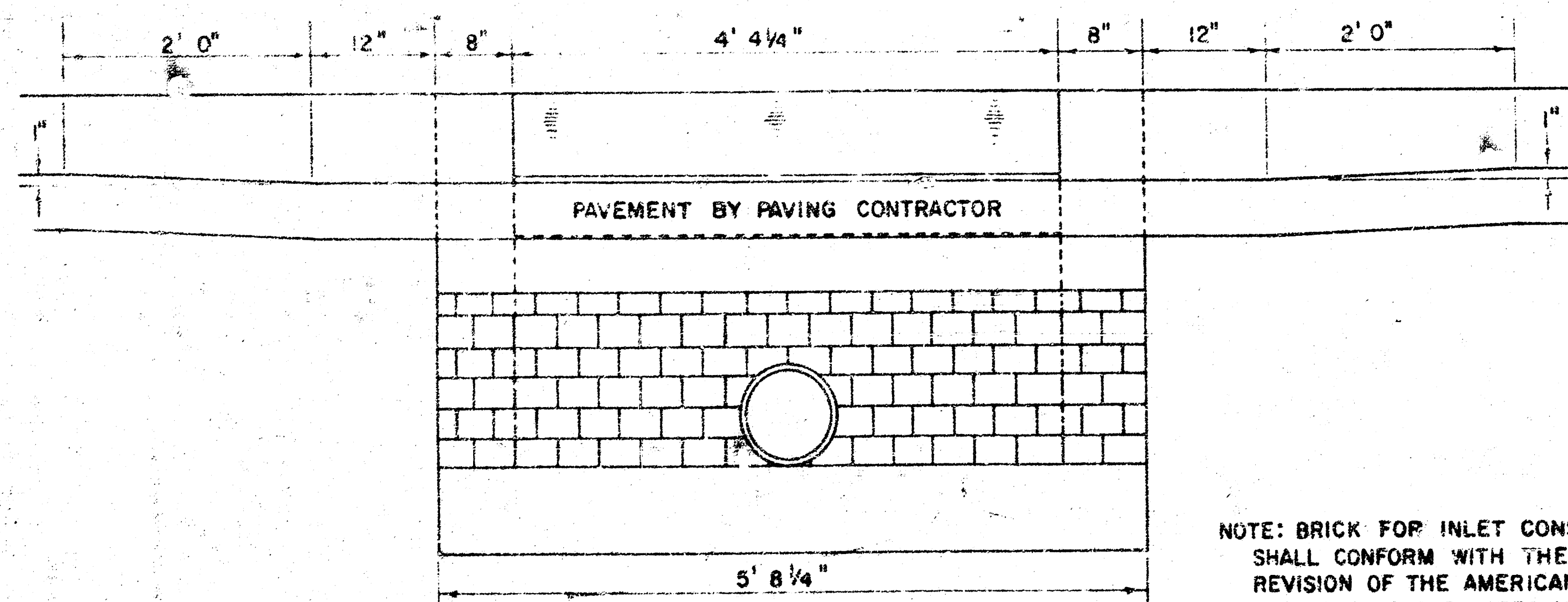
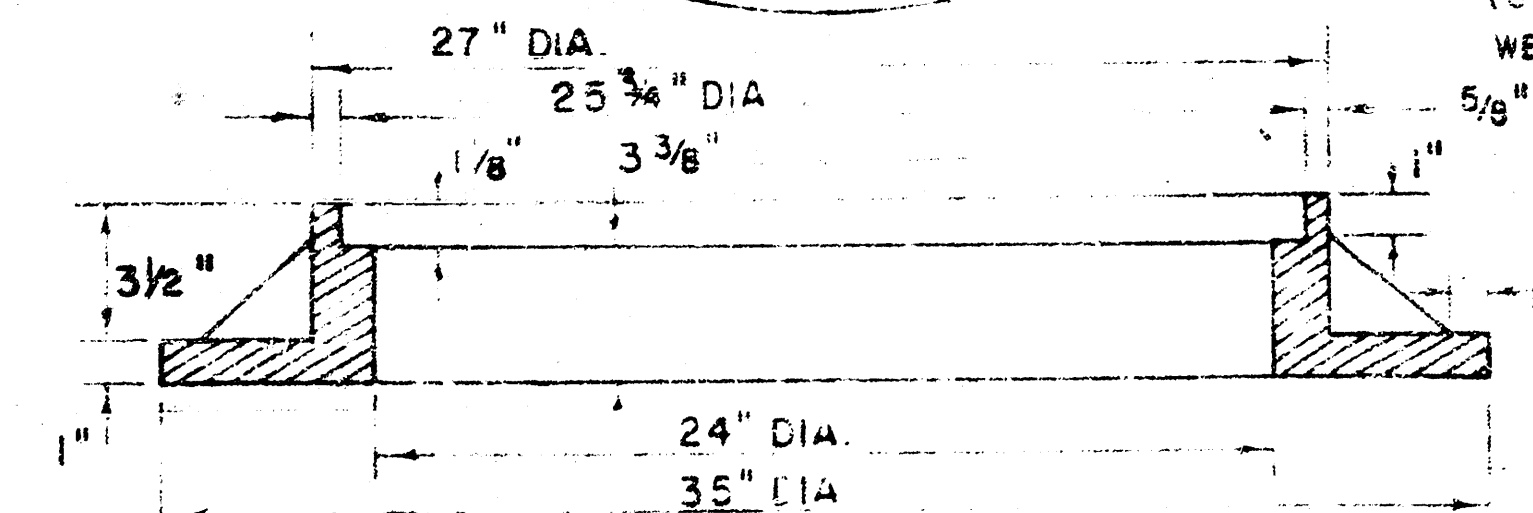
MANHOLE COVER
(SCALE 1" = 6")
WEIGHT = 170 LBS.



MANHOLE FRAME
(SCALE 1" = 6")
WEIGHT = 180 LBS.

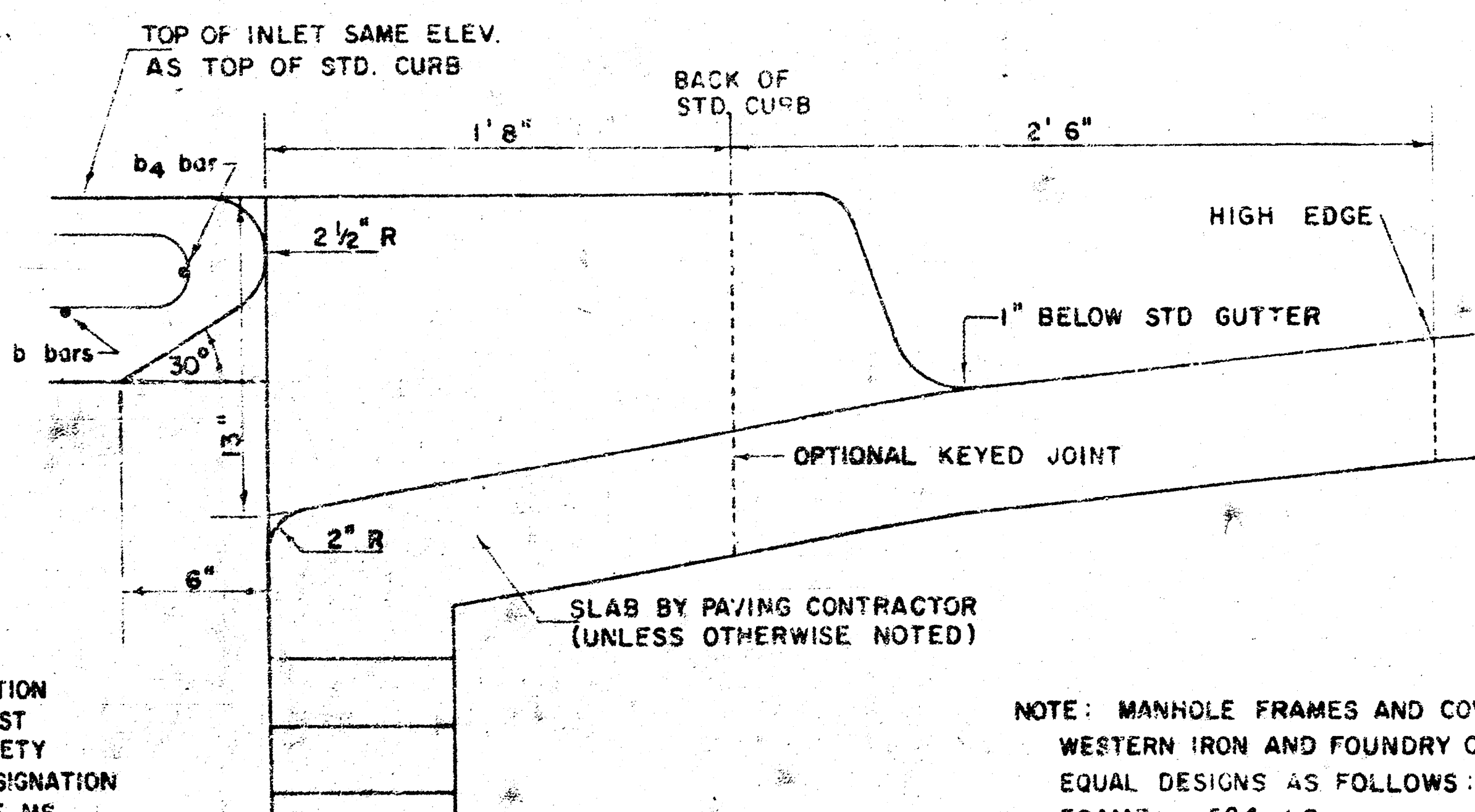


MANHOLE FRAME
(ALTERNATE)
(SCALE 1" = 6")
WEIGHT = 180 LBS.



SECTION C-C
(SCALE 1" = 1' 0")

NOTE: BRICK FOR INLET CONSTRUCTION SHALL CONFORM WITH THE LATEST REVISION OF THE AMERICAN SOCIETY FOR TESTING AND MATERIALS DESIGNATION C-32 FOR MANHOLE BRICK GRADE MS.



SECTION B-B
(SCALE 1" = 6")

NOTE: MANHOLE FRAMES AND COVER ARE WESTERN IRON AND FOUNDRY CO. INC. OR EQUAL DESIGNS AS FOLLOWS:
FRAME: 524-L6
FRAME (ALTERNATE): 500 A4
COVER: 222 S4 "NOBBY"

DETAIL STANDARD TYPE IA CURB INLET
CITY OF WICHITA, KANSAS
R. W. LINN - CITY ENGINEER
OCTOBER 1978