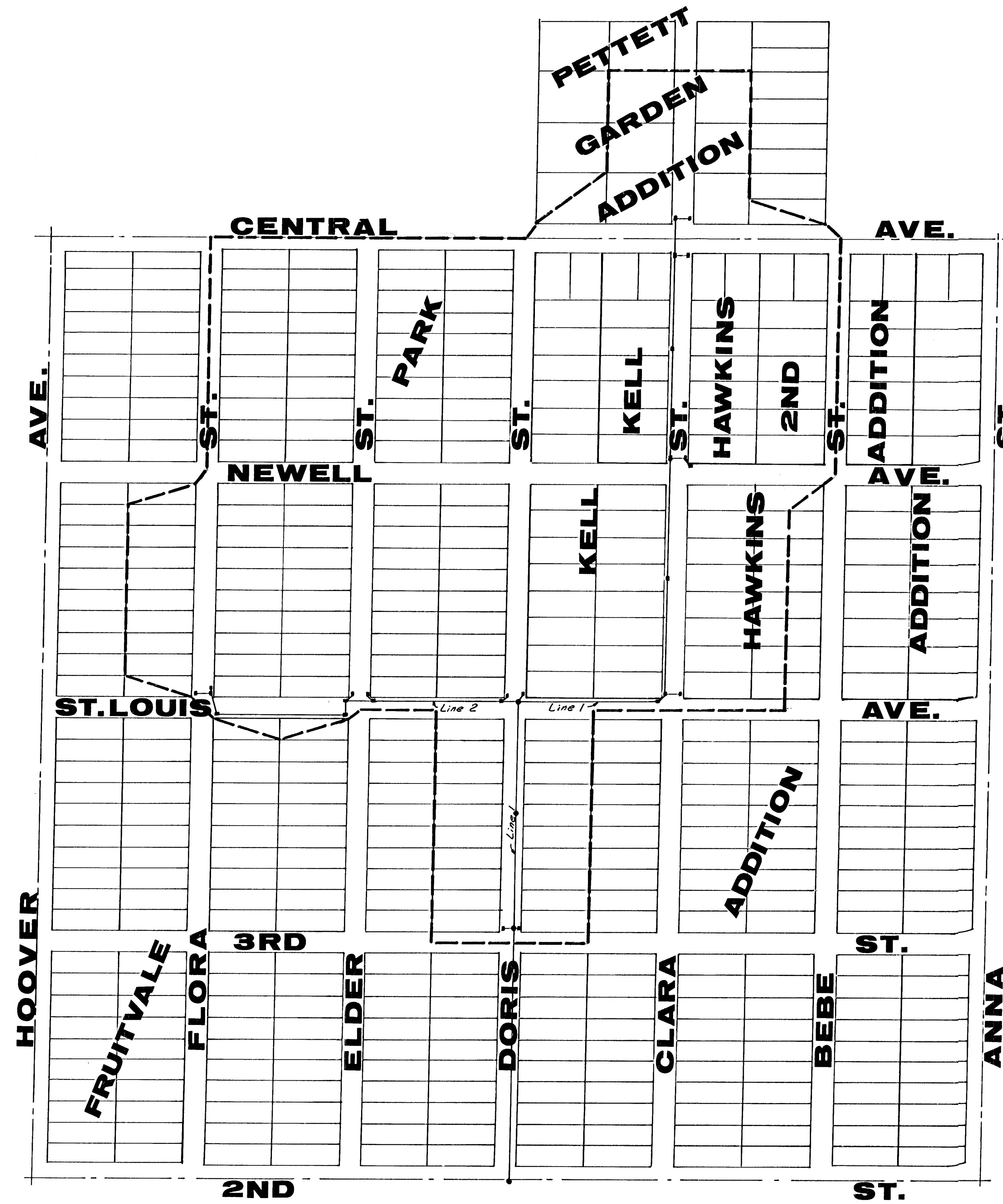


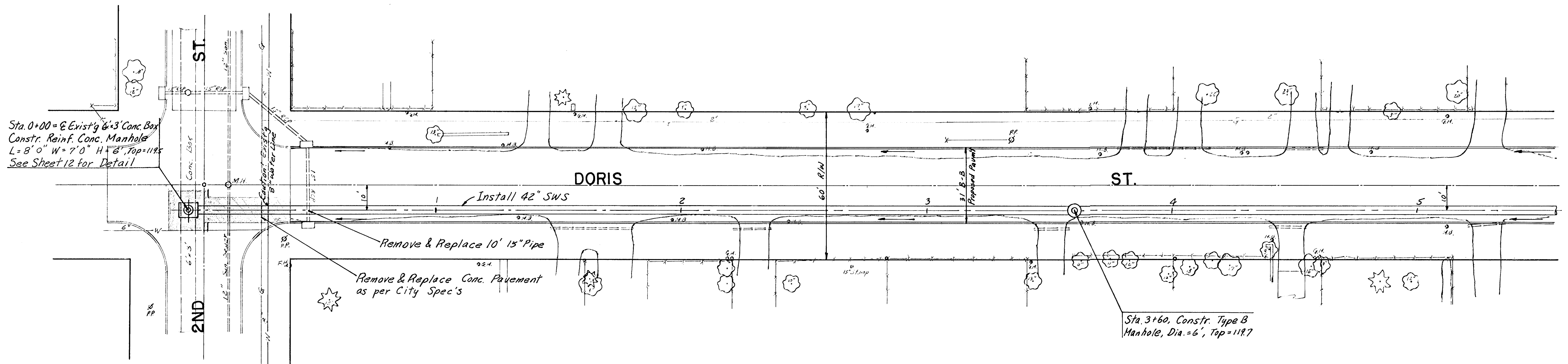
ORCHARD PARK DRAINAGE IMPROVEMENTS



Sheet	Content
1	Cover Sheet
2-8	Line 1
9-10	Line 2
11	Type IA Inlet
12	Reinf. Conc. Manhole
13	Type B Manhole

R.W. BRUGGEMAN, DIRECTOR OF ENGINEERING DEPARTMENT/
CITY ENGINEER
CITY OF WICHITA, KANSAS
PROJECT NO. 818 76 245 50208 430 000 000
DATE: _____

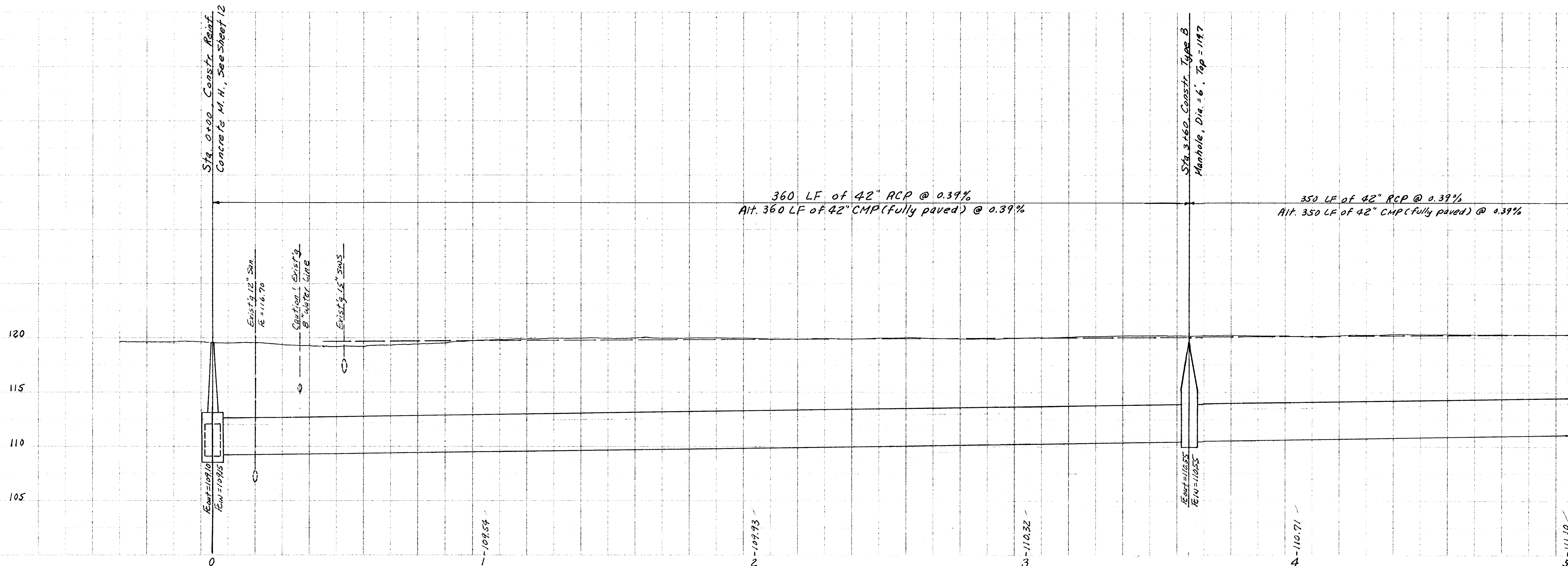
PLAN	DATE	BY	CHK
DATE	BY	CHK	
NOTE BOOK: 10/1/1975			
W.D.L. 420'			



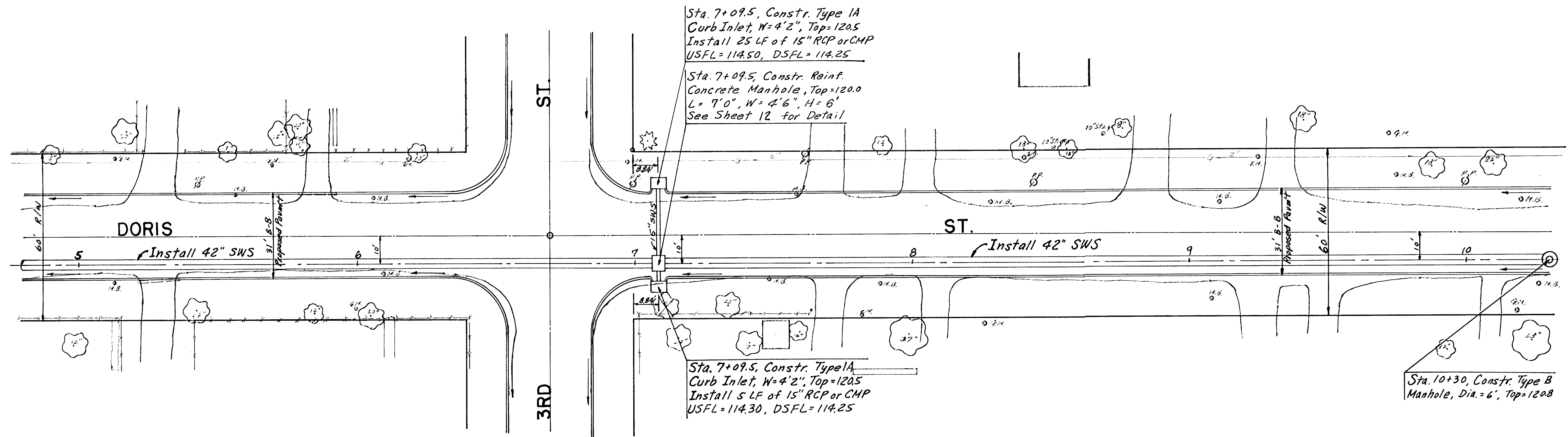
B.M. 119.60 "a" Cut top N-Cb 2nd 1 ft E. of E-End Ret.
NE Cor. 2nd & Doris

Scale: 1" = 20'

PROFILE	DATE	BY	CHK
DATE	BY	CHK	
NOTE BOOK: 10/1/1975			
W.D.L. 420'			



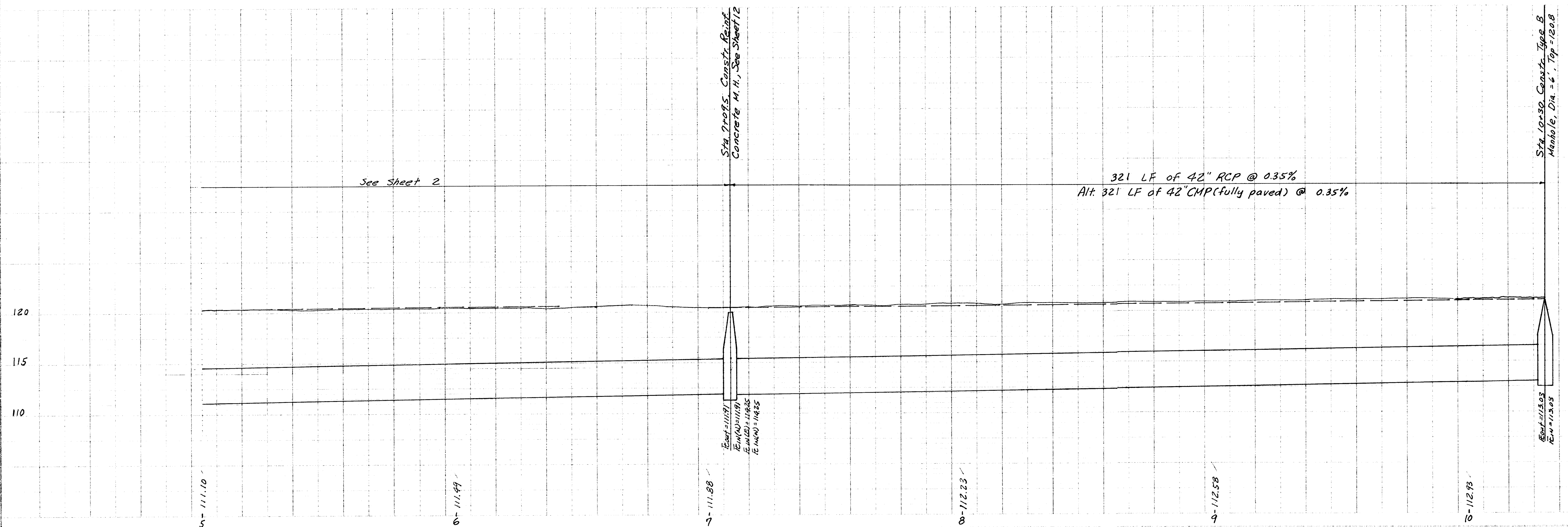
PLAN
 DATE: 10/1/11
 BY: J. K. 420
 CHECKED: J. K. 420
 NOTED: J. K. 420
 SCALE: 1" = 20'



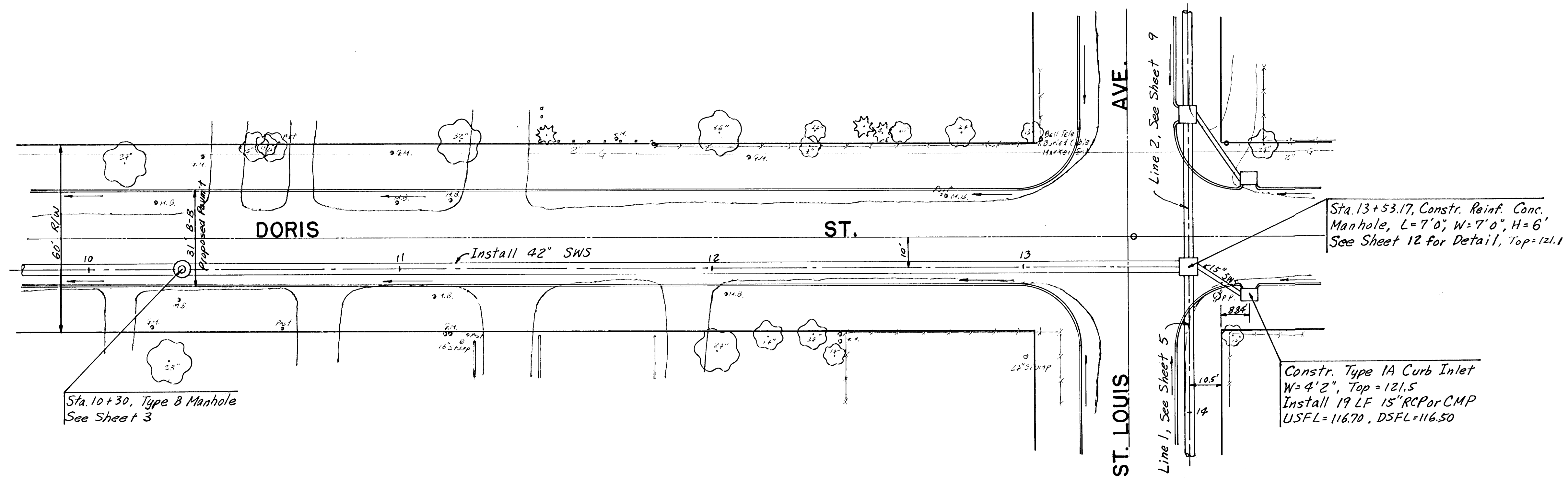
Scale: 1" = 20'

B.M. 121.16 R.R. Spike SE face Street Light Pole
 NW Cor. 3rd & Doris

PROFILE
 DATE: 10/1/11
 BY: J. K. 420
 CHECKED: J. K. 420
 NOTED: J. K. 420
 SCALE: 1" = 20'



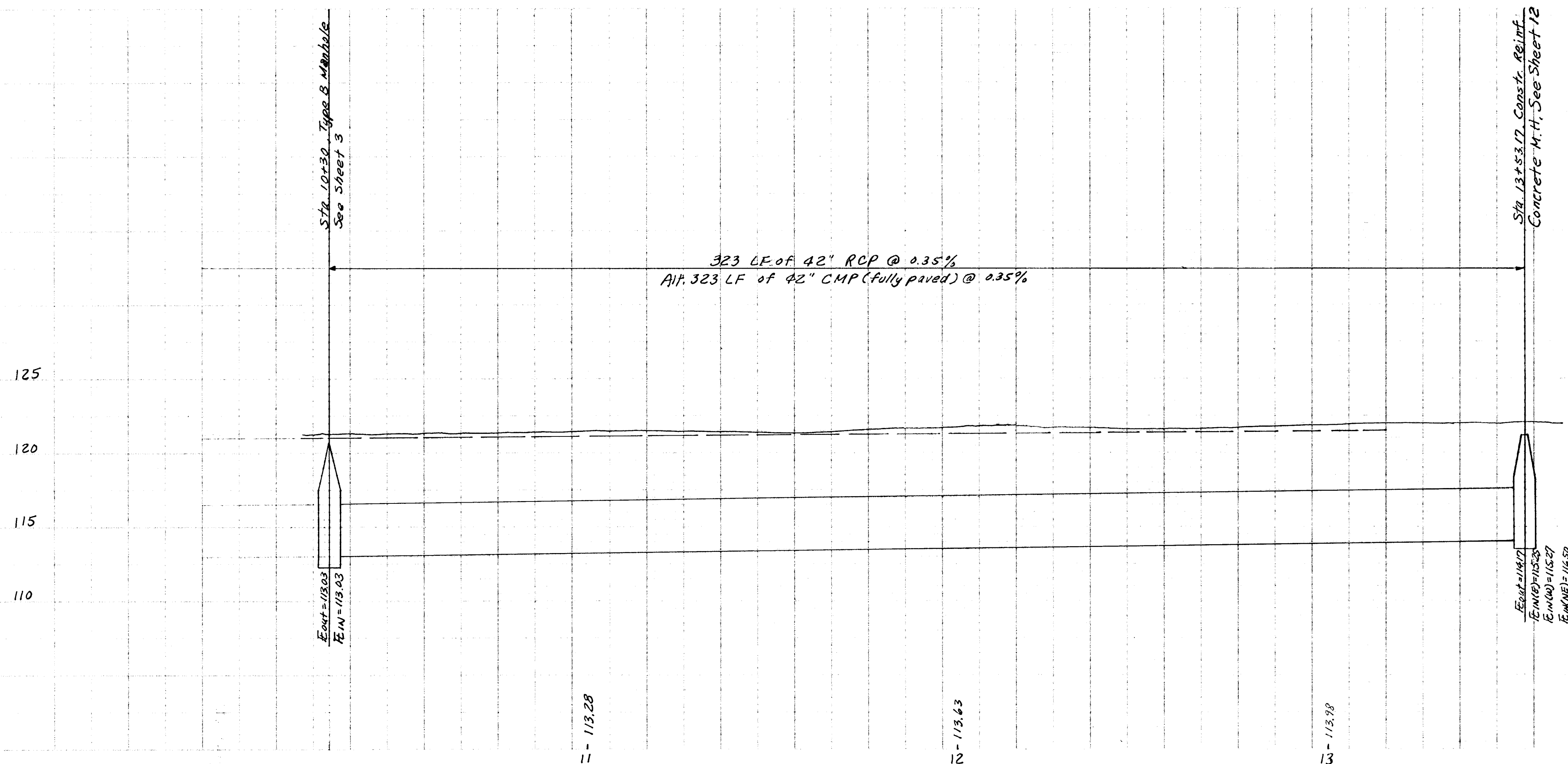
PLAN
DATE: 11/13/28
BY: [Signature]
CHECKED: [Signature]
NOTED: [Signature]
REVISION: [Signature]
SHEET 420



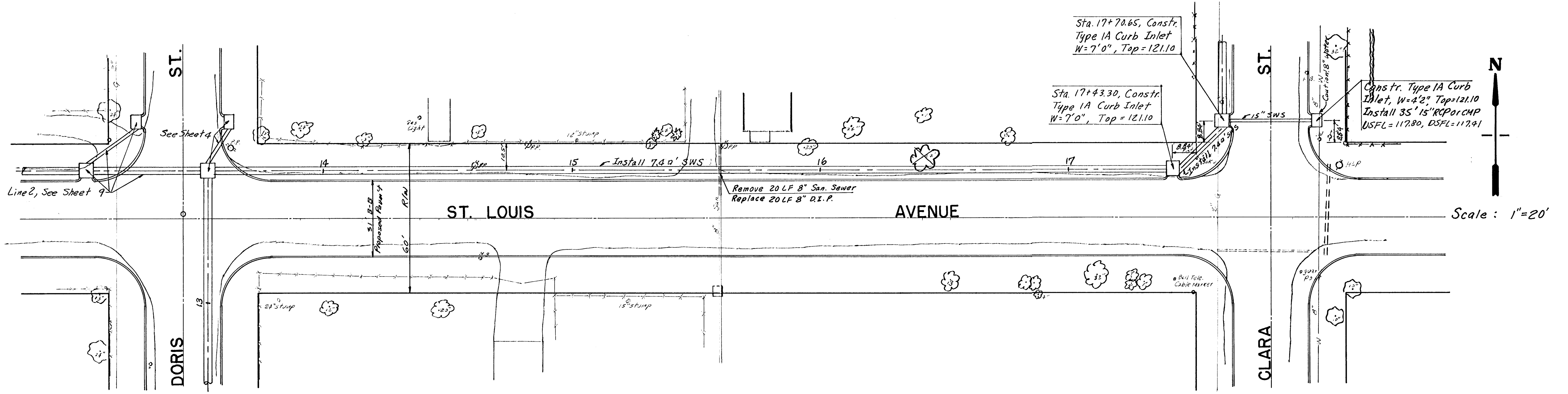
B.M. 122.86 RR Spike W. face Street Light Pole
NE Cor. St. Louis & Doris

Scale: 1"=20'

PROFILE
DATE: 11/13/28
BY: [Signature]
CHECKED: [Signature]
NOTED: [Signature]
REVISION: [Signature]
SHEET 420

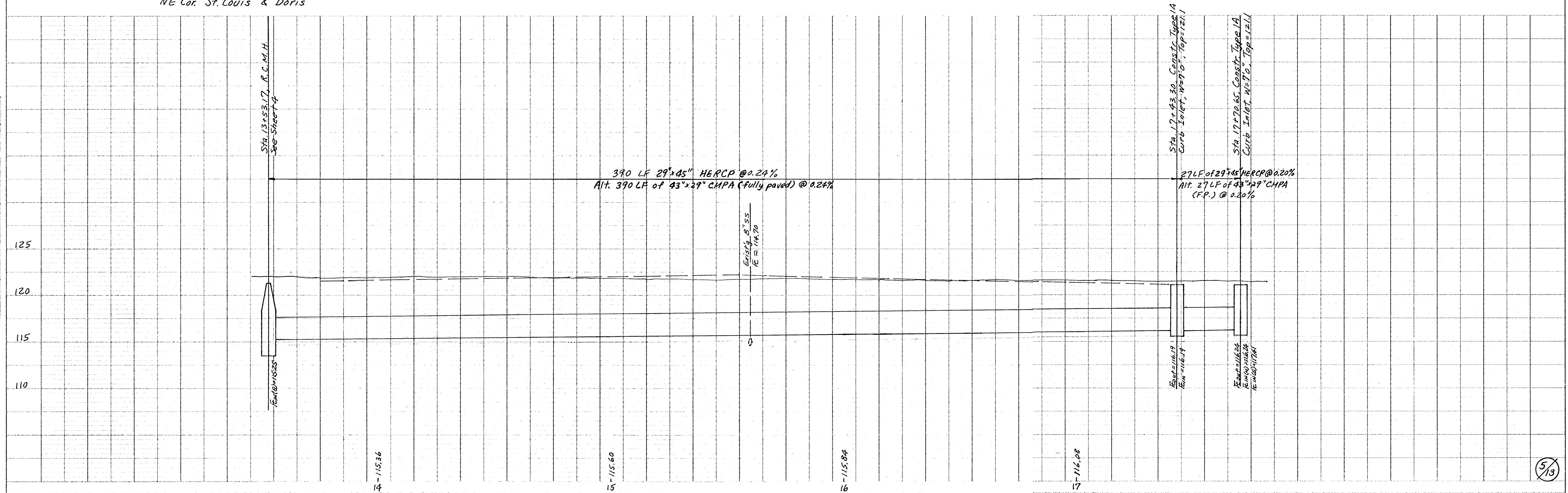


PLAN	DATE	BY
SURVEYED NOTE BOOK ALIGNED & CHECKED ST. OF WAY CANCELED N. 214420		

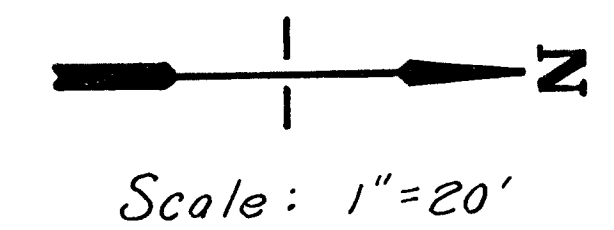


B.M. 122.86 RR Spike W. face Street Light Pole
NE Cor. St. Louis & Doris

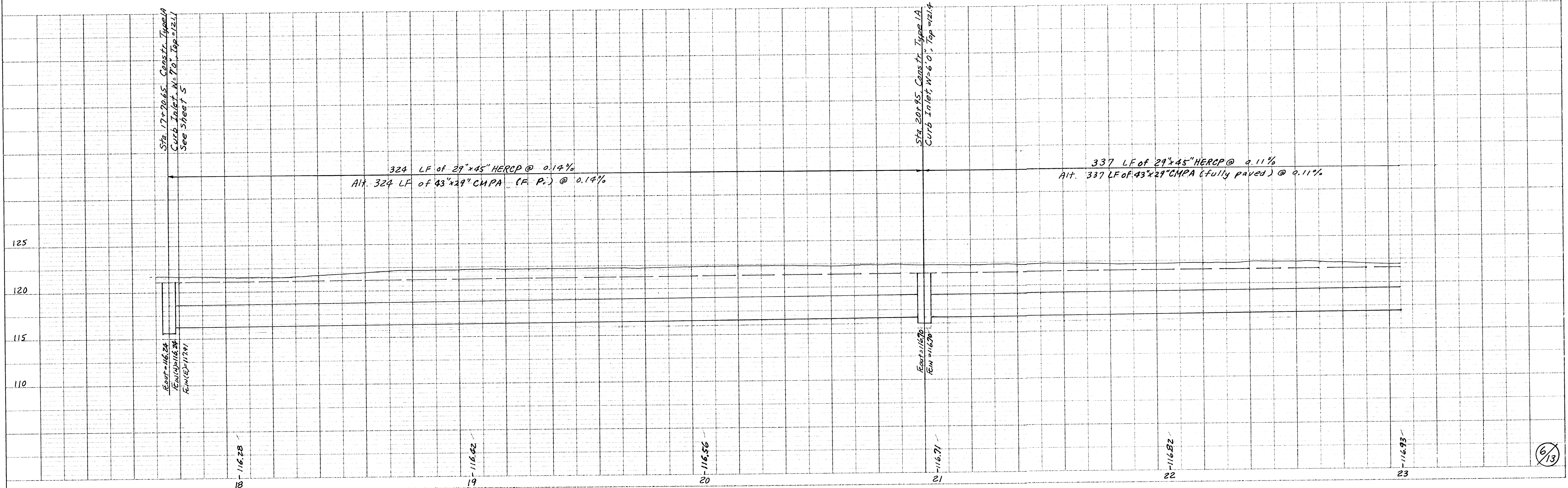
PROFILE	DATE	BY
SURVEYED NOTE BOOK CHANGES CHECKED STRUCTURE NOTED IN PLAN		



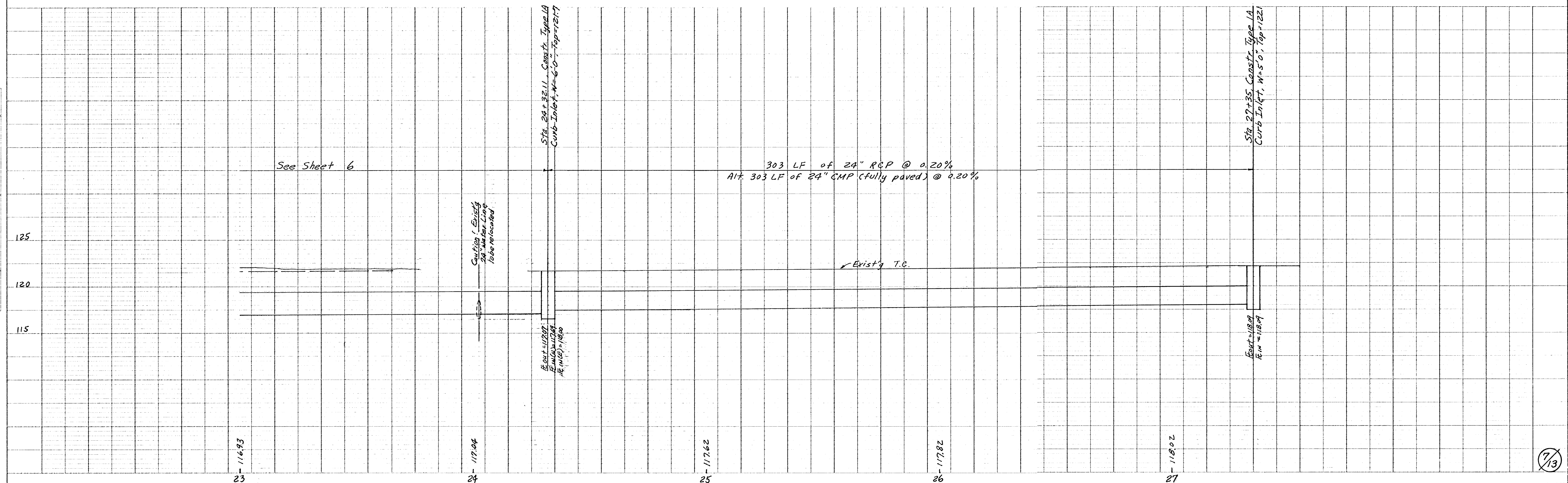
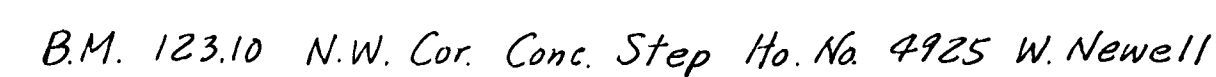
DATE	BY	PROFILE
		SUNNED
		PLOTTED
		GRADES CHECKED
		B. M. NOTED



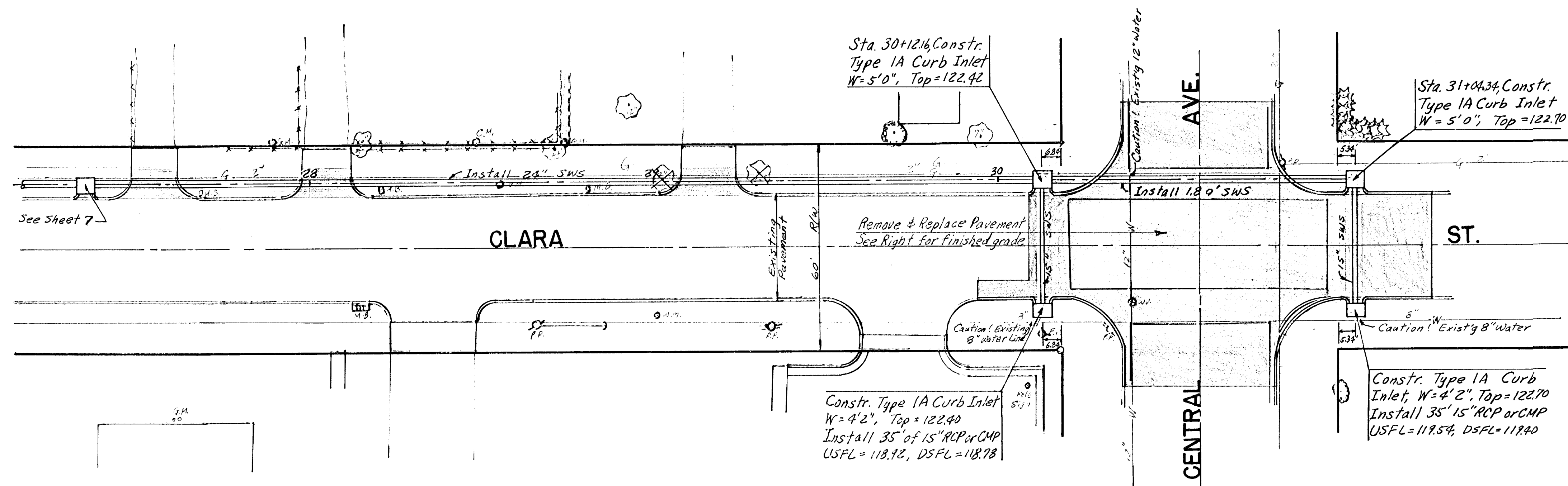
B.M. 125.01 NE Cor. Conc. Porch, Ho #505 Clara
B.M. 123.62 N.E Cor. Conc. Coping, Ho #541 Clara



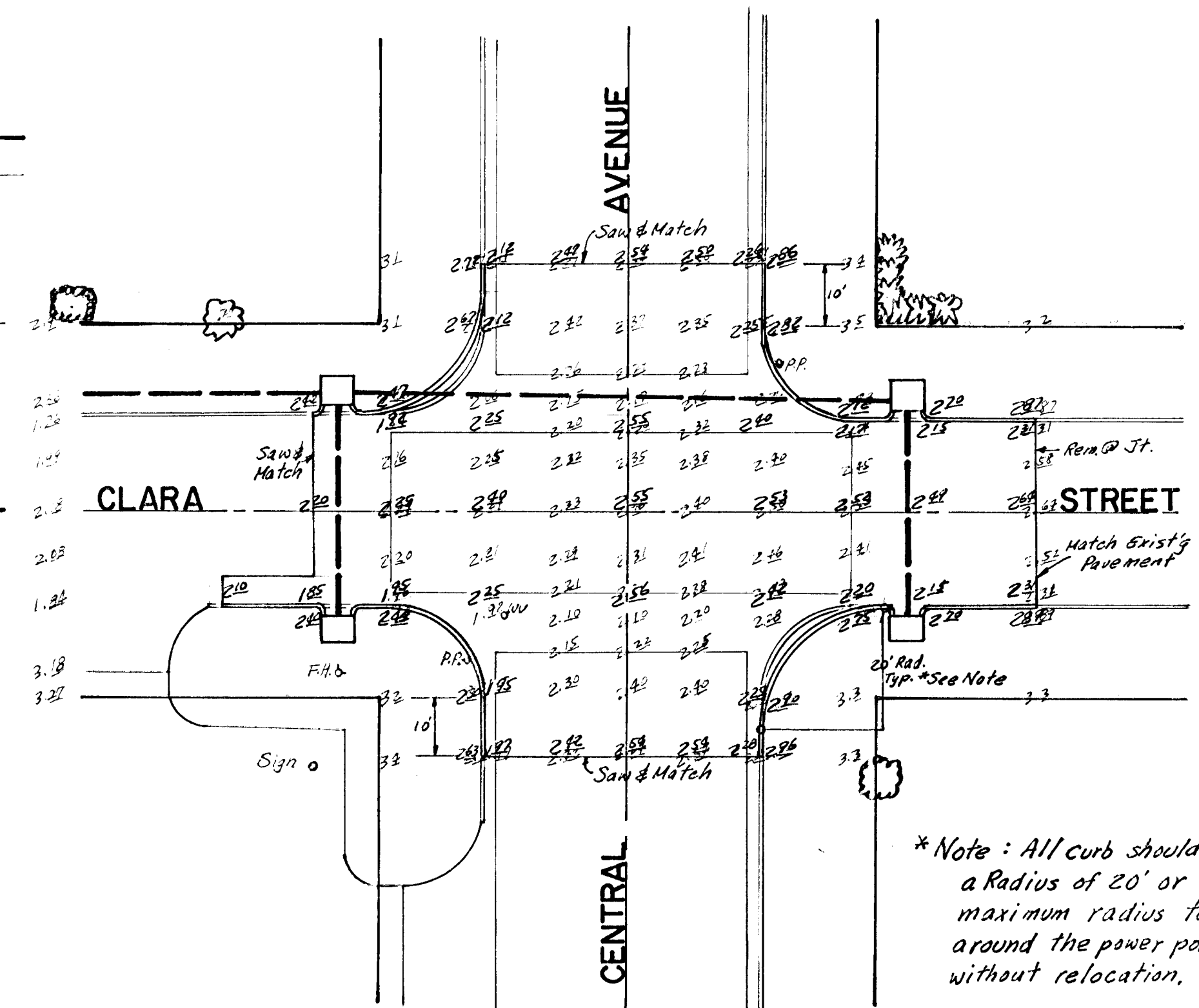
PROFILE NO. _____	SURVEYED _____ PLUMBED _____ SHAKES CHECKED _____ B. MS. NOTED _____ STRUCTURE NOTATIONS ON NO. _____	BY _____ DATE _____
	NOTE BOOK	



PLAN
DATE: 10/1/19
BY: [Signature]
CHECKED: [Signature]
NOTED: [Signature]
SCALE: 1"=20'



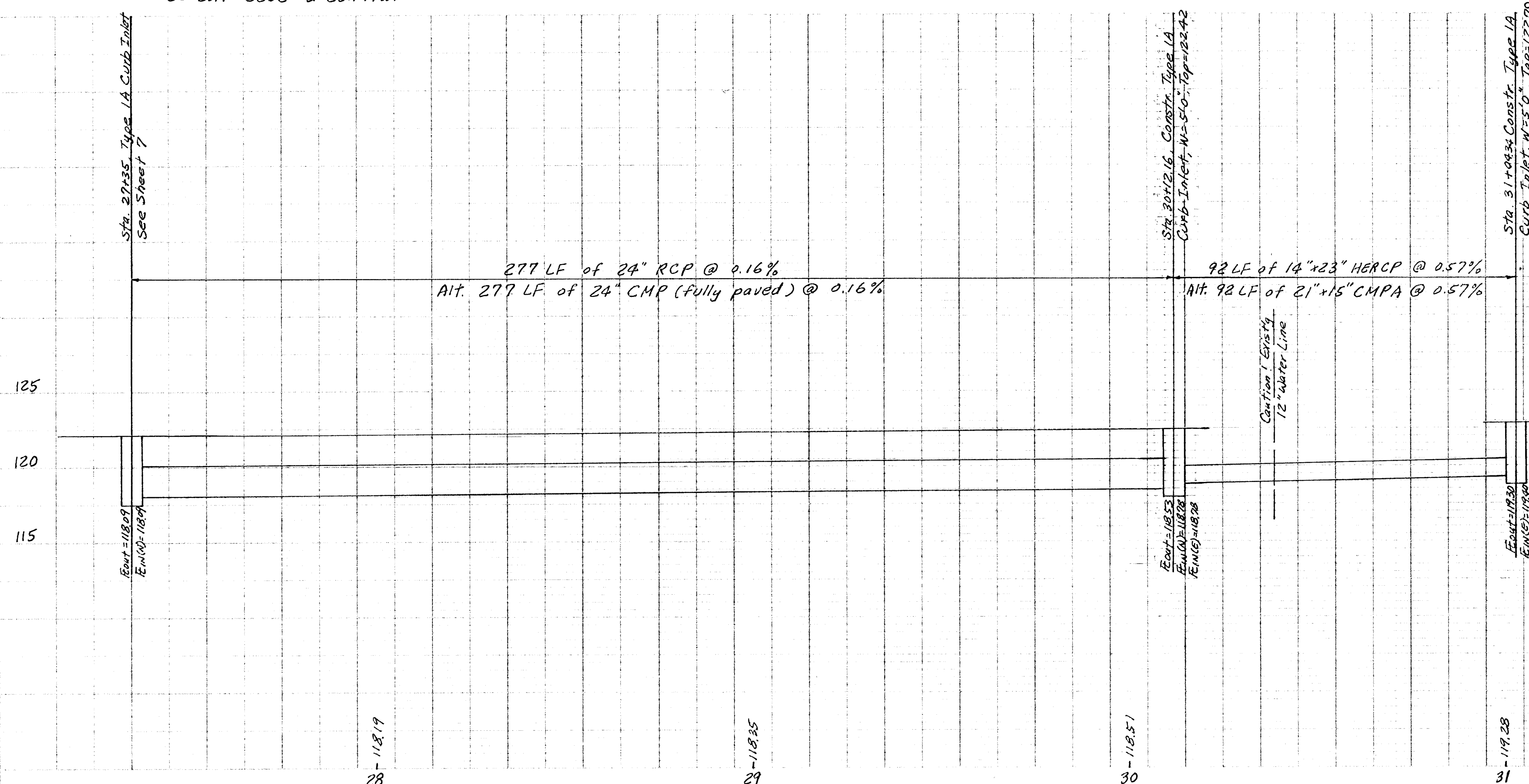
Scale: 1"=20'



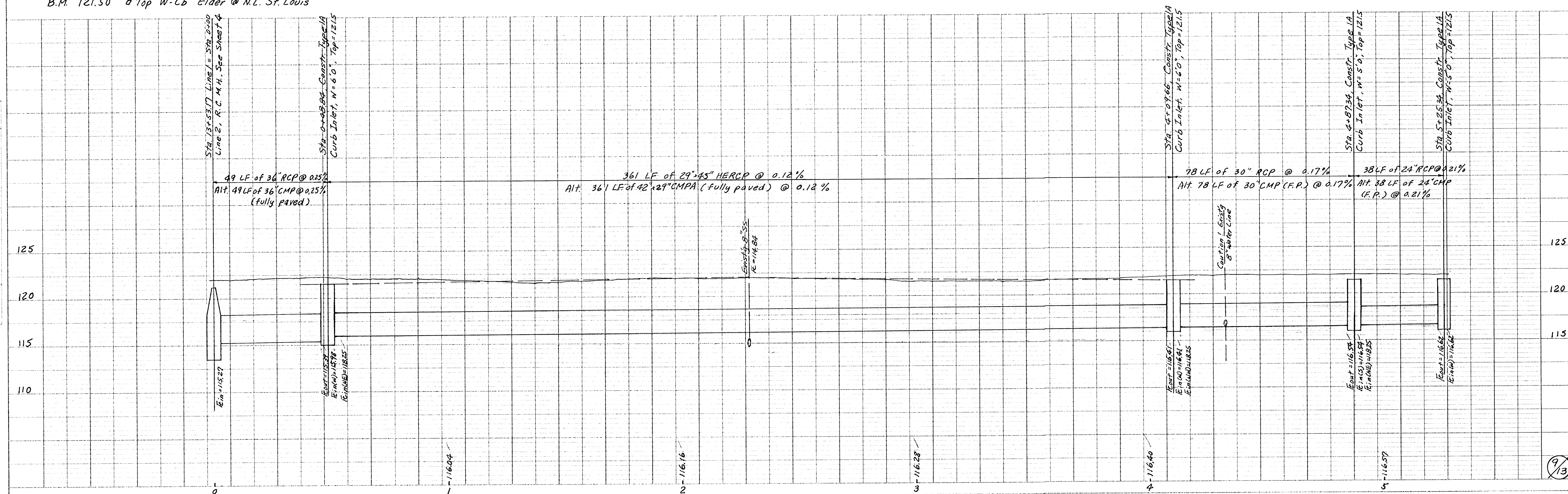
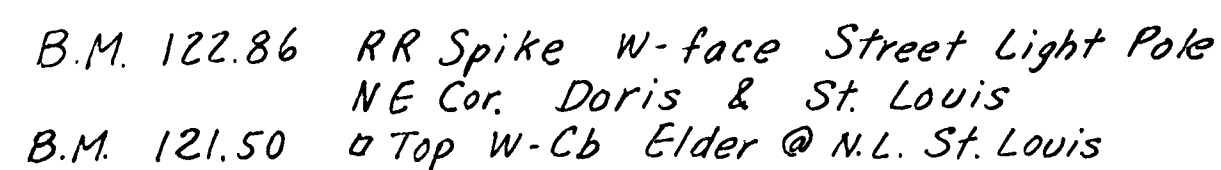
* Note: All curb should have a Radius of 20' or the maximum radius to warp around the power poles without relocation.

B.M. 125.32 S face Conc. wk. adj. to NW Cor. Quik Trip
4936 W. Central, SE Cor. Central & Clara
B.M. 123.90 Top E-Cb Bebe 2 ft N. of End of Rad.
SE Cor. Bebe & Central

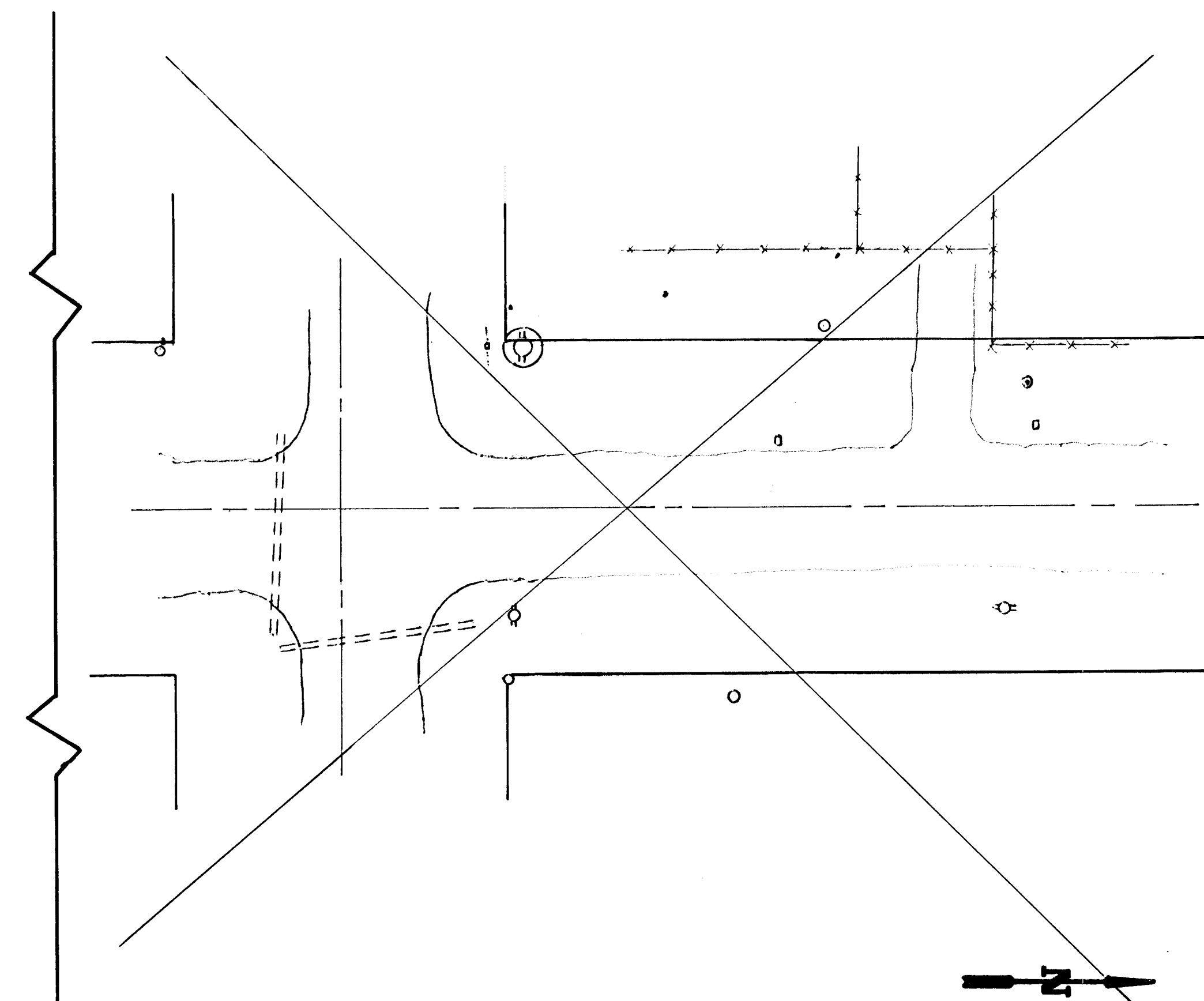
PROFILE
DATE: 10/1/19
BY: [Signature]
CHECKED: [Signature]
NOTED: [Signature]
SCALE: 1"=20'



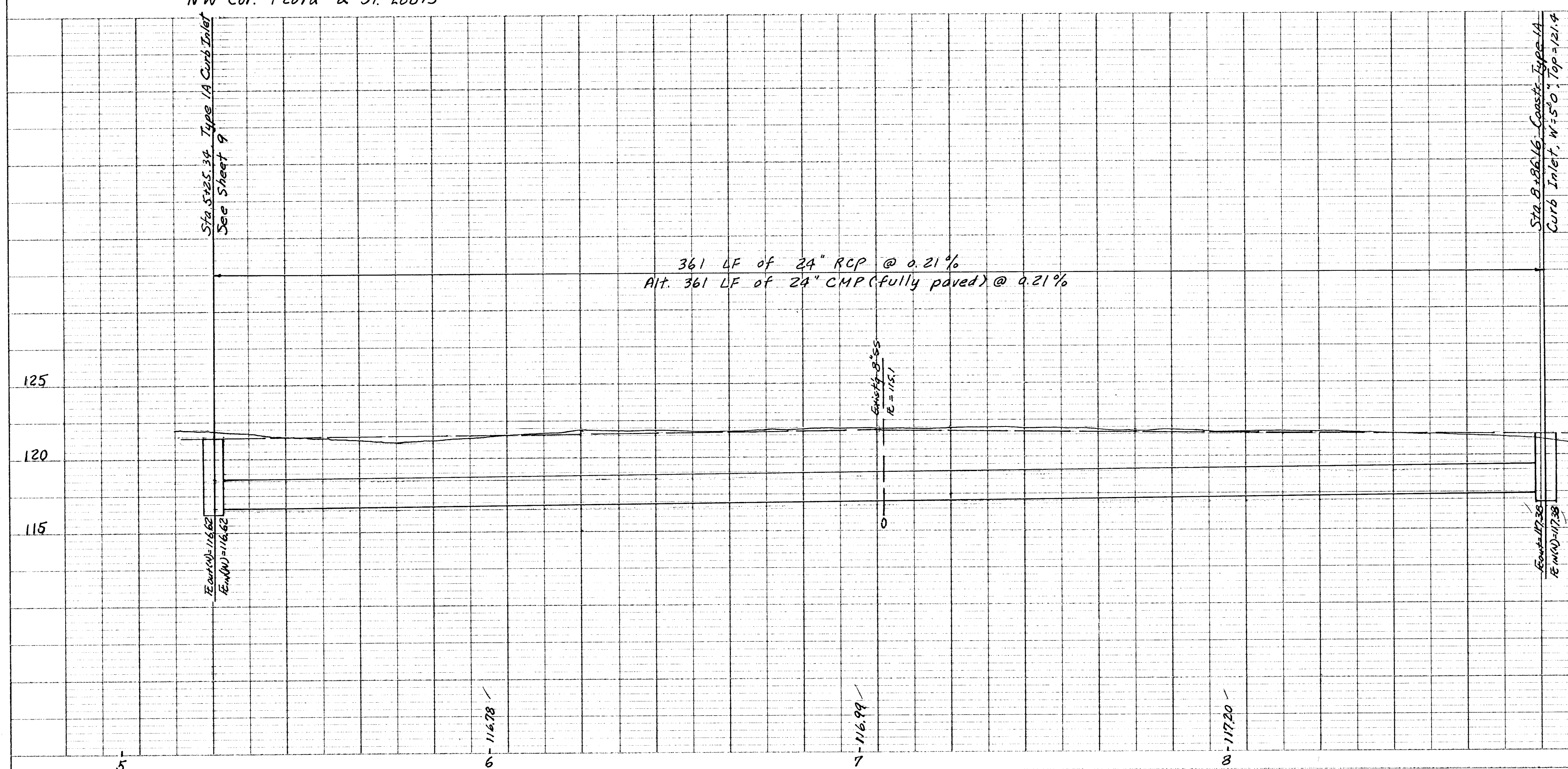
DATE	BY	PROFILE
10/10/10	10/10/10	TURNERS
10/10/10	10/10/10	PASTIO
10/10/10	10/10/10	GRANDS DUCARD
10/10/10	10/10/10	B. ME. NOTER
10/10/10	10/10/10	NOTE BOOK

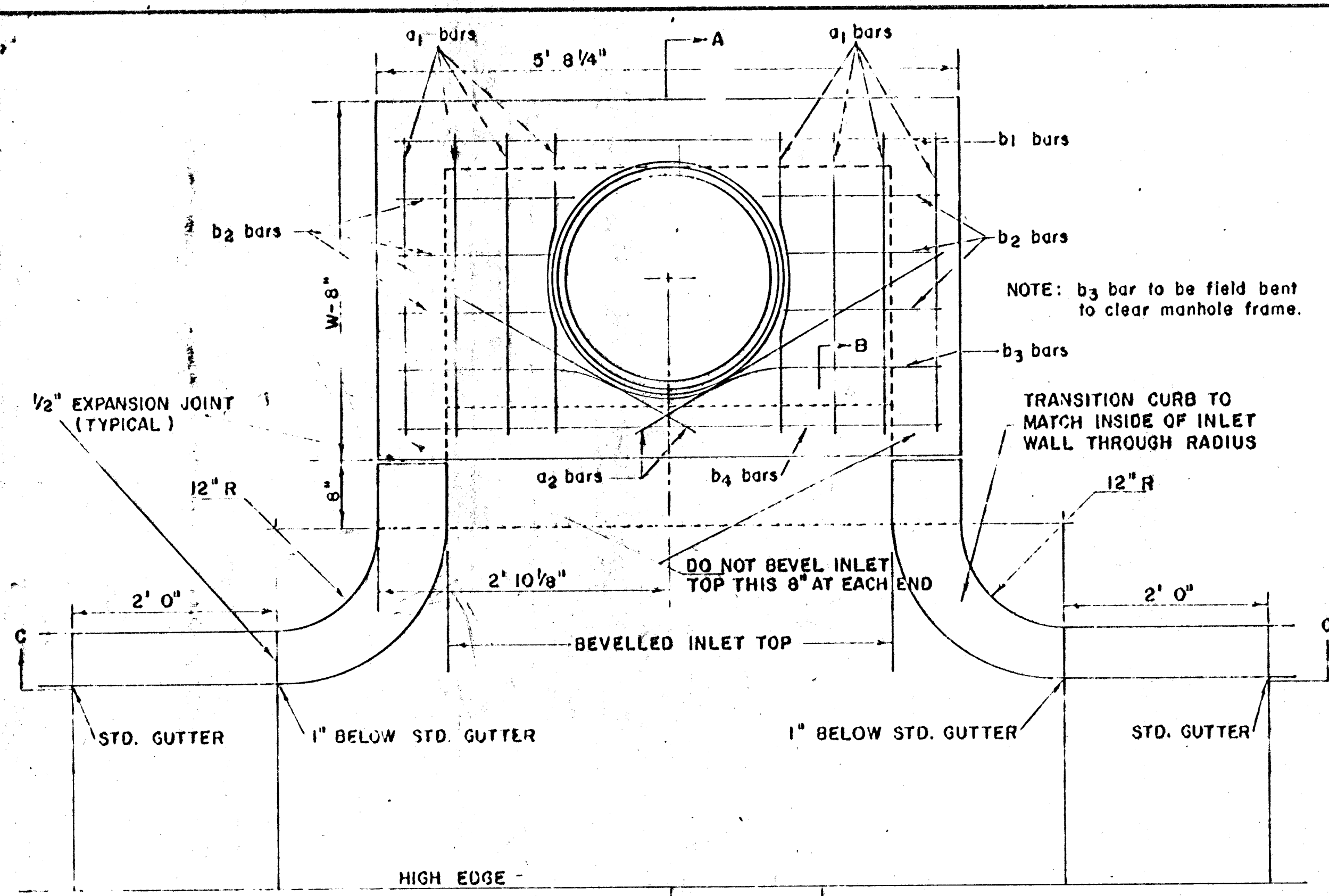


DATE	BY	PROFILE
		SUMMER
		PLUGGED
		GRADES ENCLD
		B. MS. NOTED
		NOTE BOOK



Scale: $1'' = 20'$





PLAN (SCALE 1" = 1' 0")

STEEL SCHEDULE

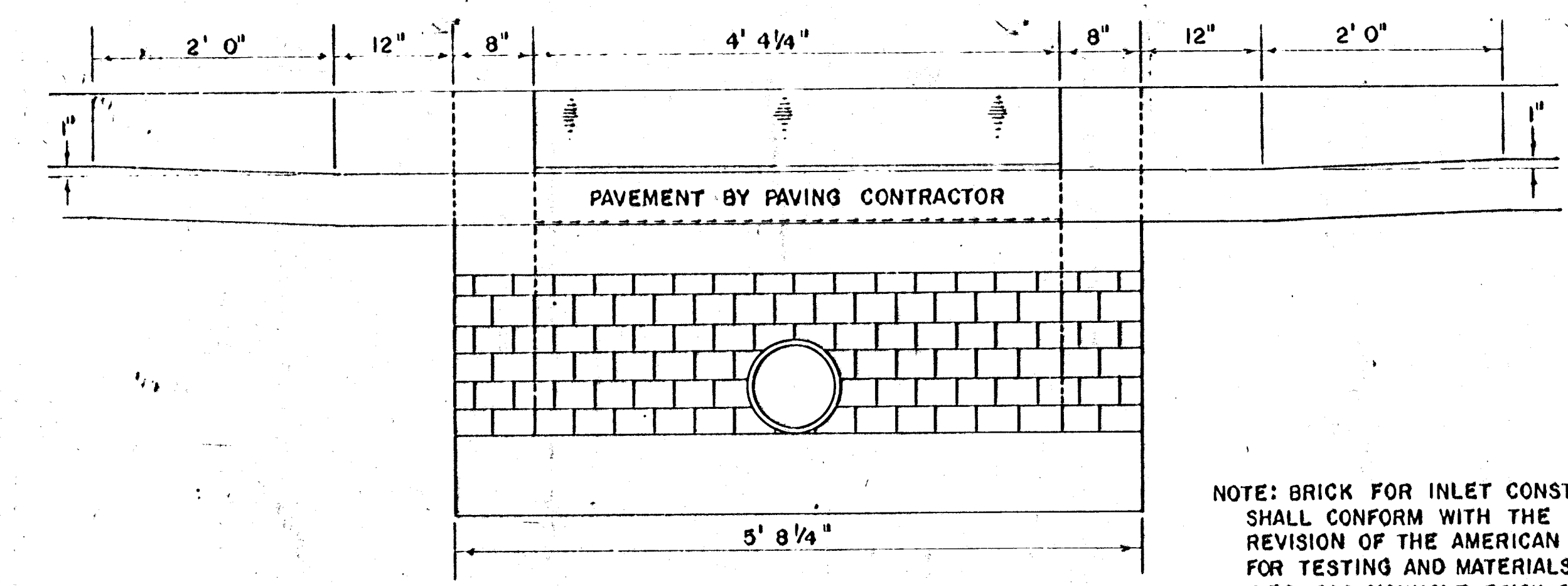
BAR	a ₁	a ₂	b ₁	b ₂	b ₃	b ₄	WT. LBS.
NUMBER	8	2	1	3	5	7	
SIZE	#4	#4	#4	#4	#4	#4	
W=4' 2"	6' 5"	3' 4"	5' 5"	-	-	-	60*
W=5' 0"	8' 1"	4' 4"	5' 5"	-	-	-	77*
W=6' 0"	10' 1"	5' 4"	5' 5"	-	-	-	97*
W=7' 0"	11' 1"	6' 4"	5' 5"	-	-	-	111*
W=8' 0"	12' 1"	7' 4"	5' 5"	-	-	-	124*

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

STANDARD CURB INLET PRECAST TOPS

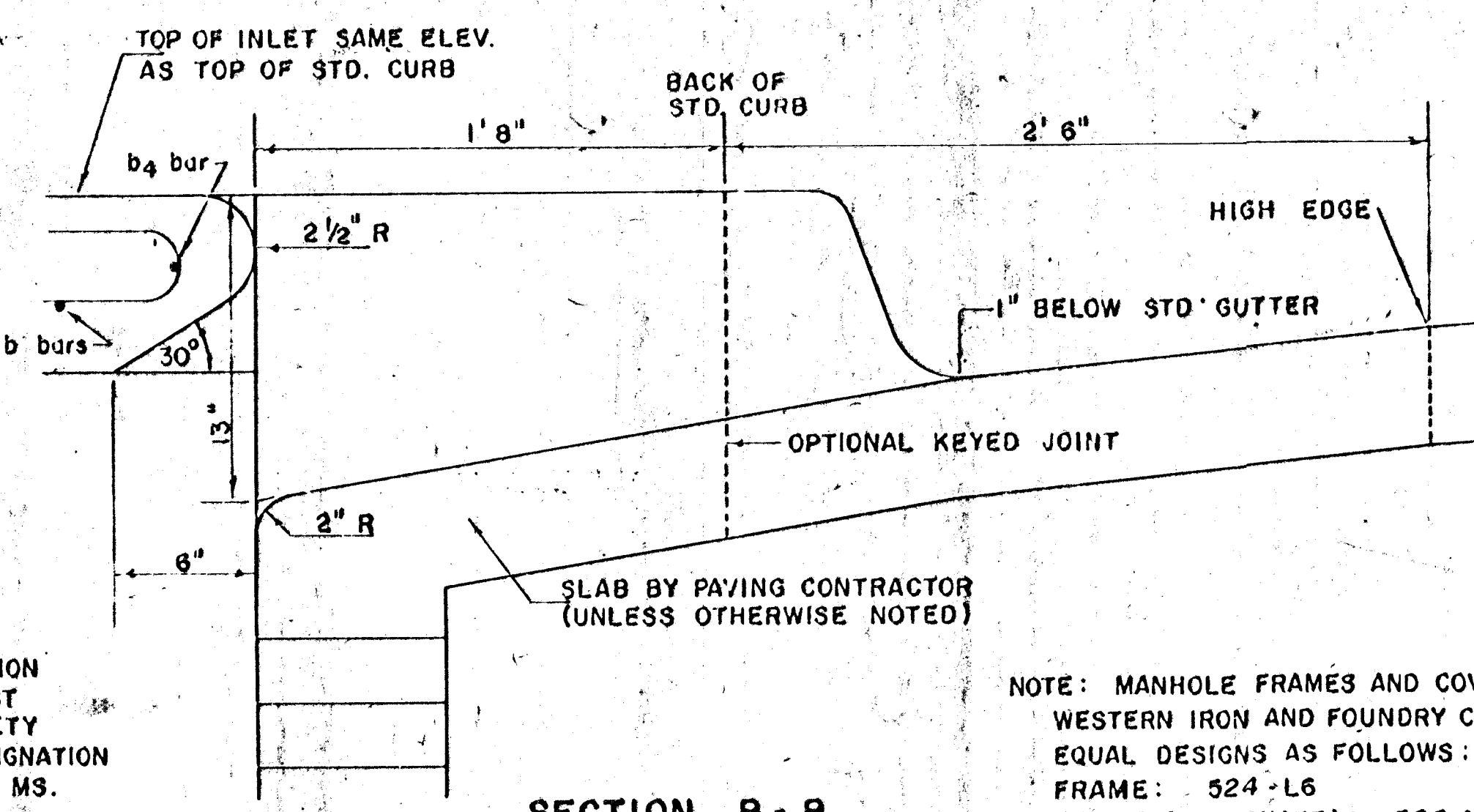
W	PRE-CAST TOP SIZE	PIPE SIZE	CU. YD. CONC.
4' 2"	36" x 5' 8 1/4" x 7 1/2"	21" & SMALLER	0.46 *
5' 0"	44" x 5' 8 1/4" x 7 1/2"	24" & 30"	0.57 *
6' 0"	54" x 5' 8 1/4" x 7 1/2"	36" & 42"	0.71 *
7' 0"	64" x 5' 8 1/4" x 7 1/2"	48" & 54"	0.84 *
8' 0"	74" x 5' 8 1/4" x 7 1/2"	60" & 66"	0.97 *

* GROSS VOLUME



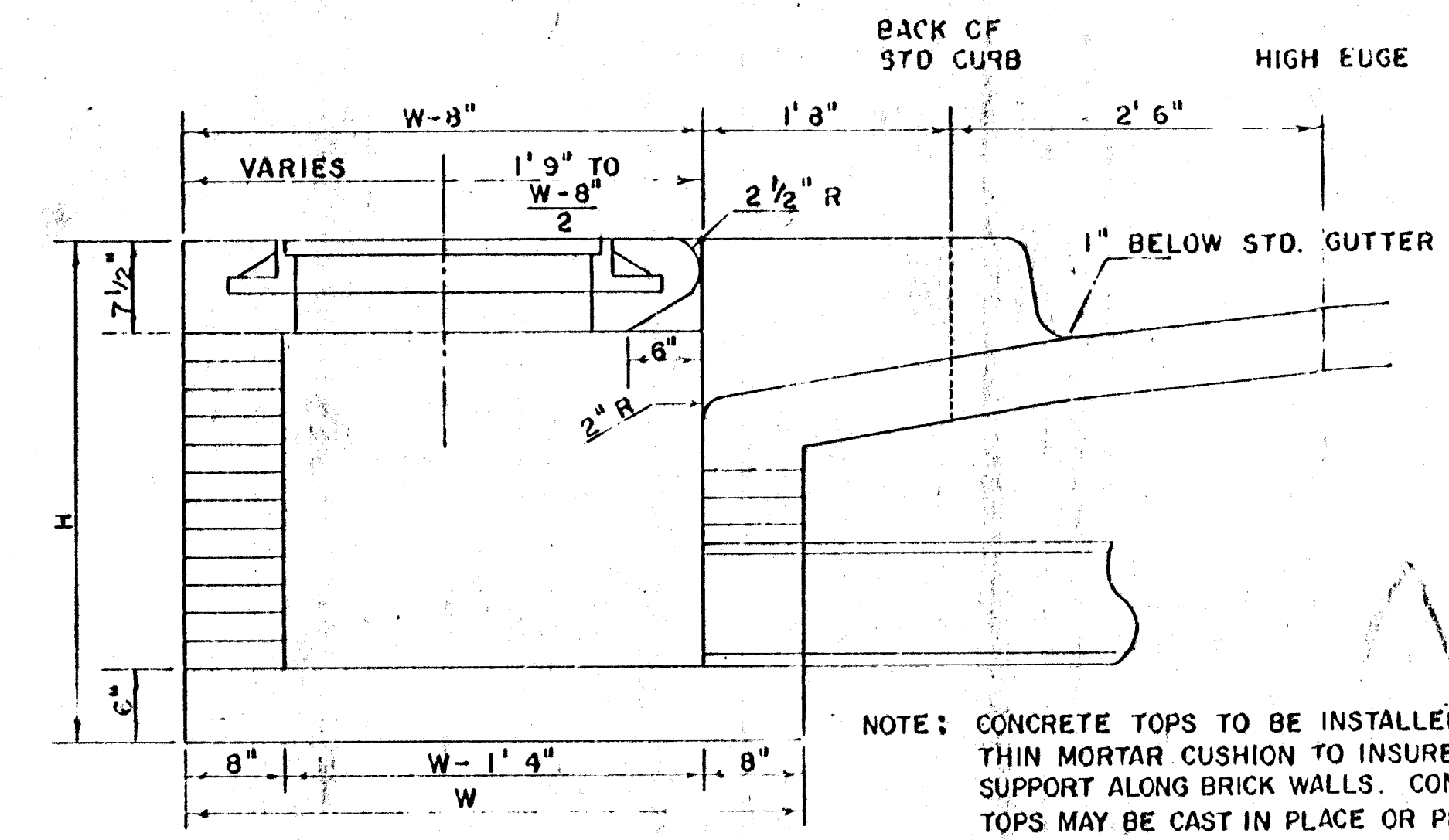
SECTION C - C
(SCALE 1" = 1' 0")

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.

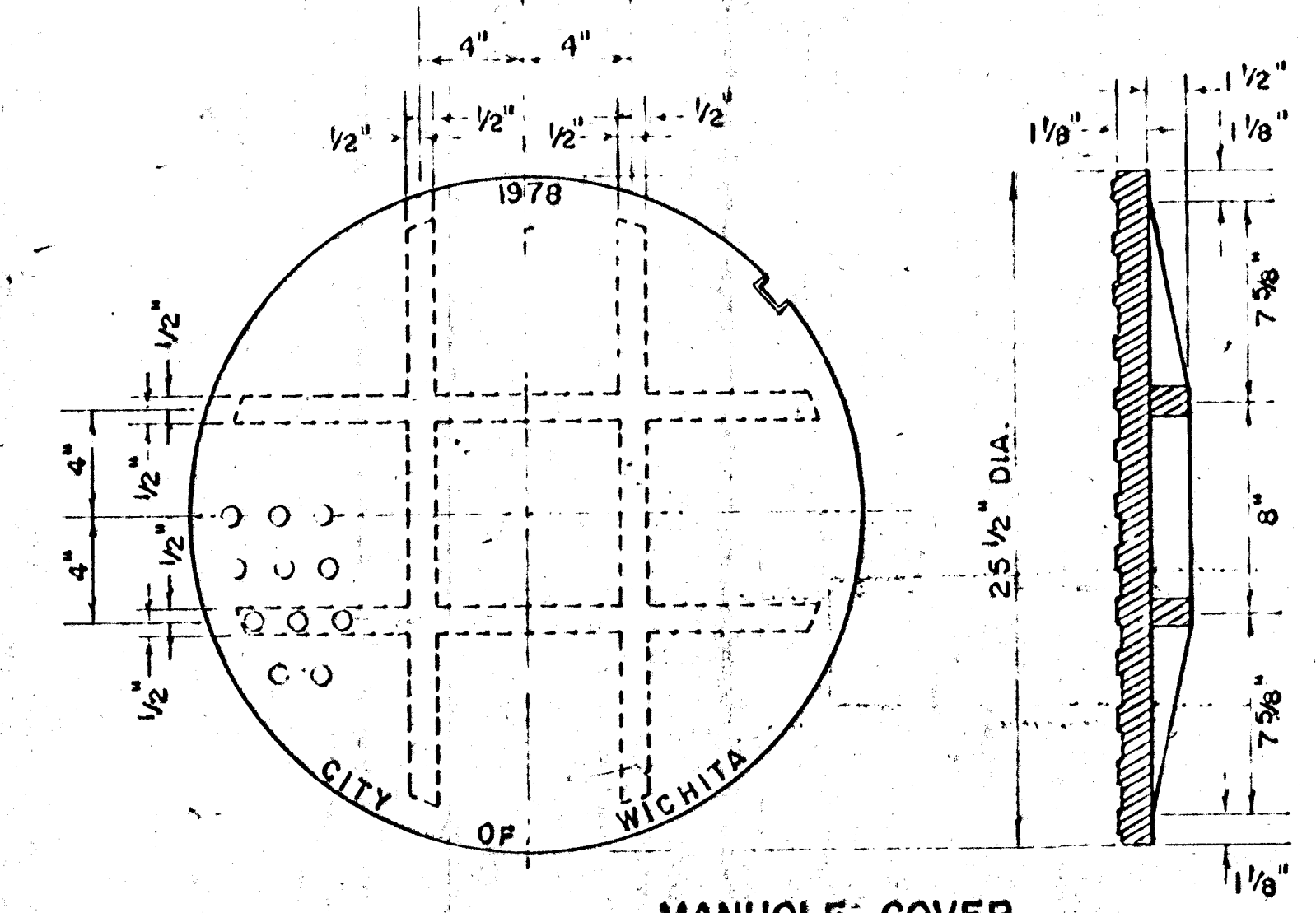


SECTION B - B
(SCALE 1" = 6")

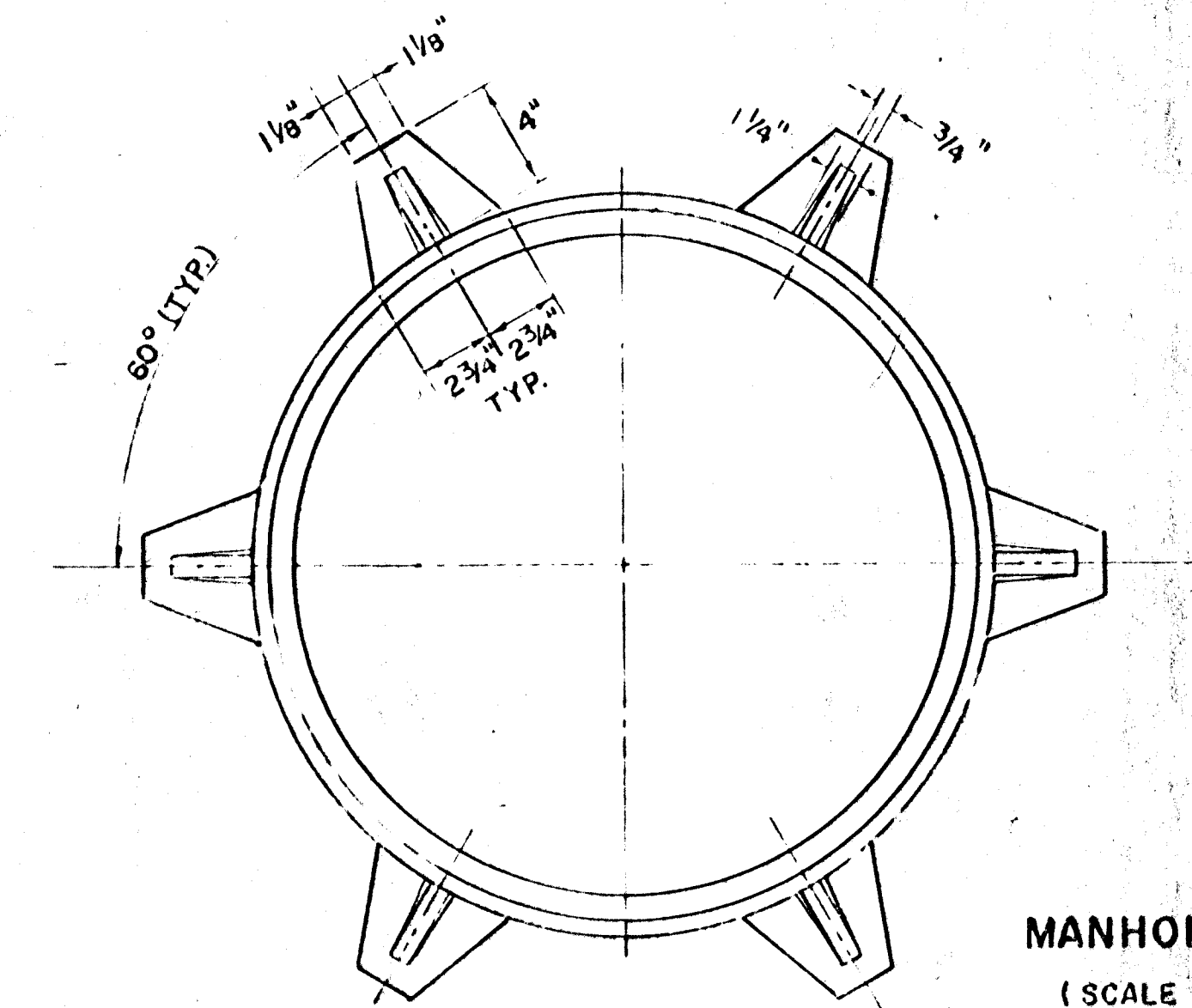
NOTE: MANHOLE FRAMES AND COVER ARE WESTERN IRON AND FOUNDRY CO. INC. OR EQUAL DESIGNS AS FOLLOWS:
FRAME: 524-L6
FRAME (ALTERNATE): 500 A4
COVER: 222 S4 "NOBBY"



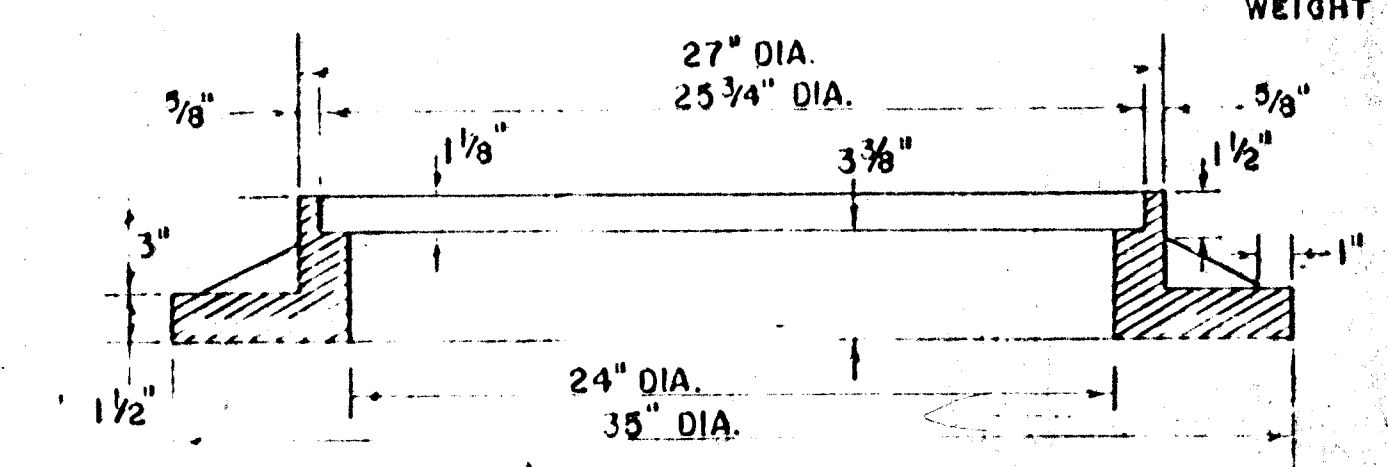
SECTION A - A
(SCALE 1" = 1' 0")



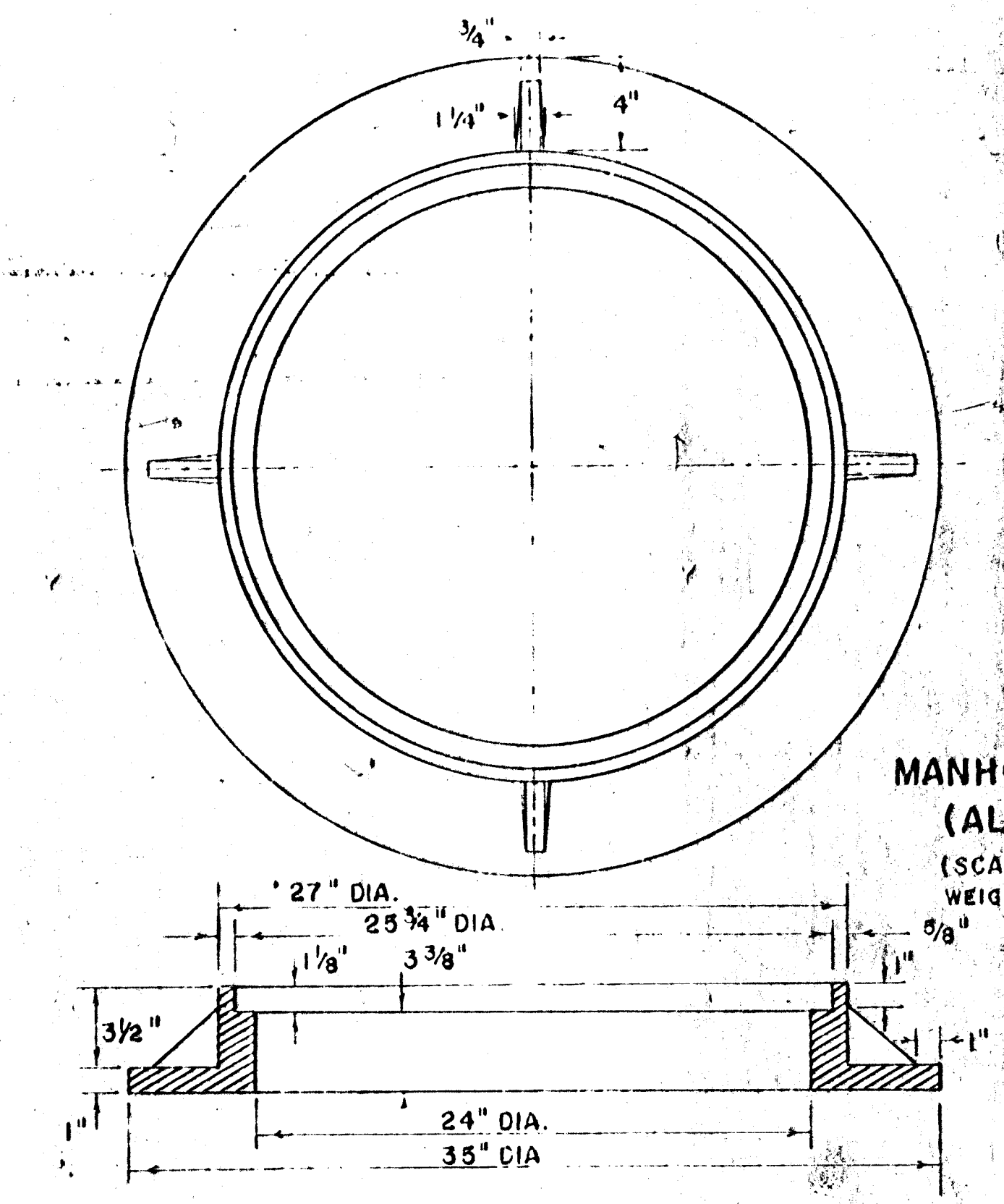
MANHOLE COVER
(SCALE 1" = 6")
WEIGHT = 170 LBS.



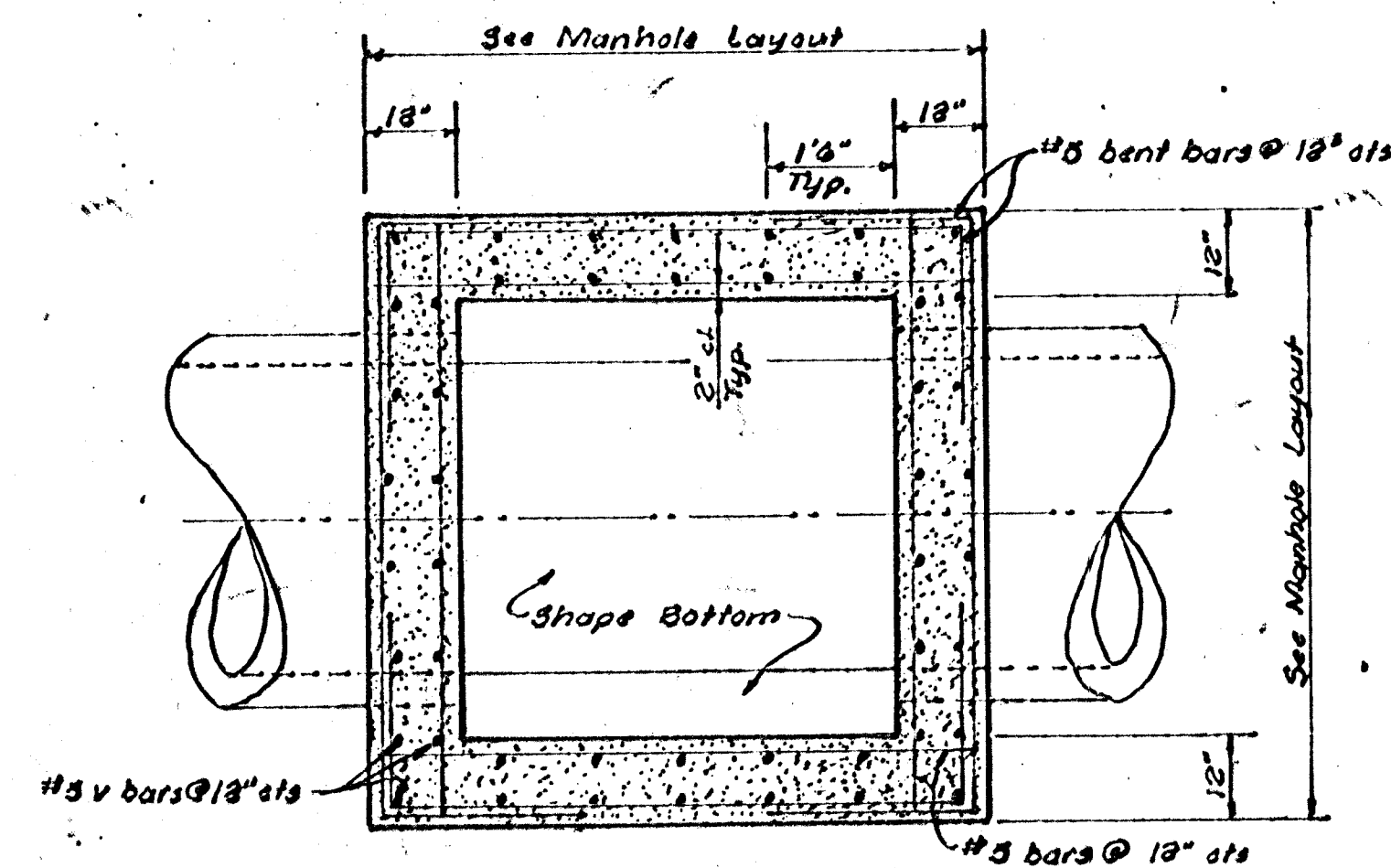
MANHOLE FRAME
(SCALE 1" = 6")
WEIGHT = 180 LBS.



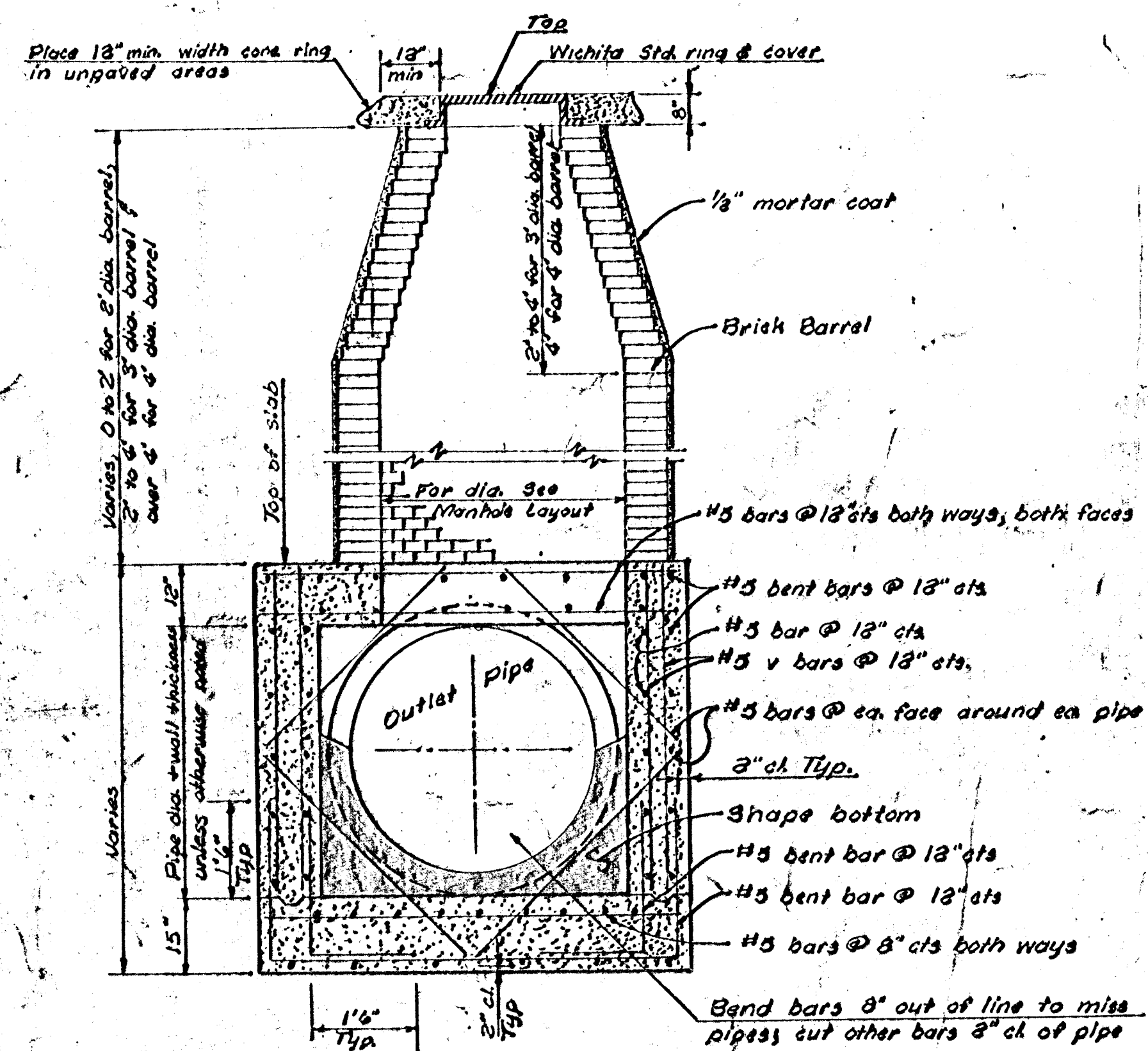
MANHOLE FRAME (ALTERNATE)
(SCALE 1" = 6")
WEIGHT = 180 LBS.



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



PLAN SECTION THRU WALLS
SCALE: 1/8" = 1'-0"



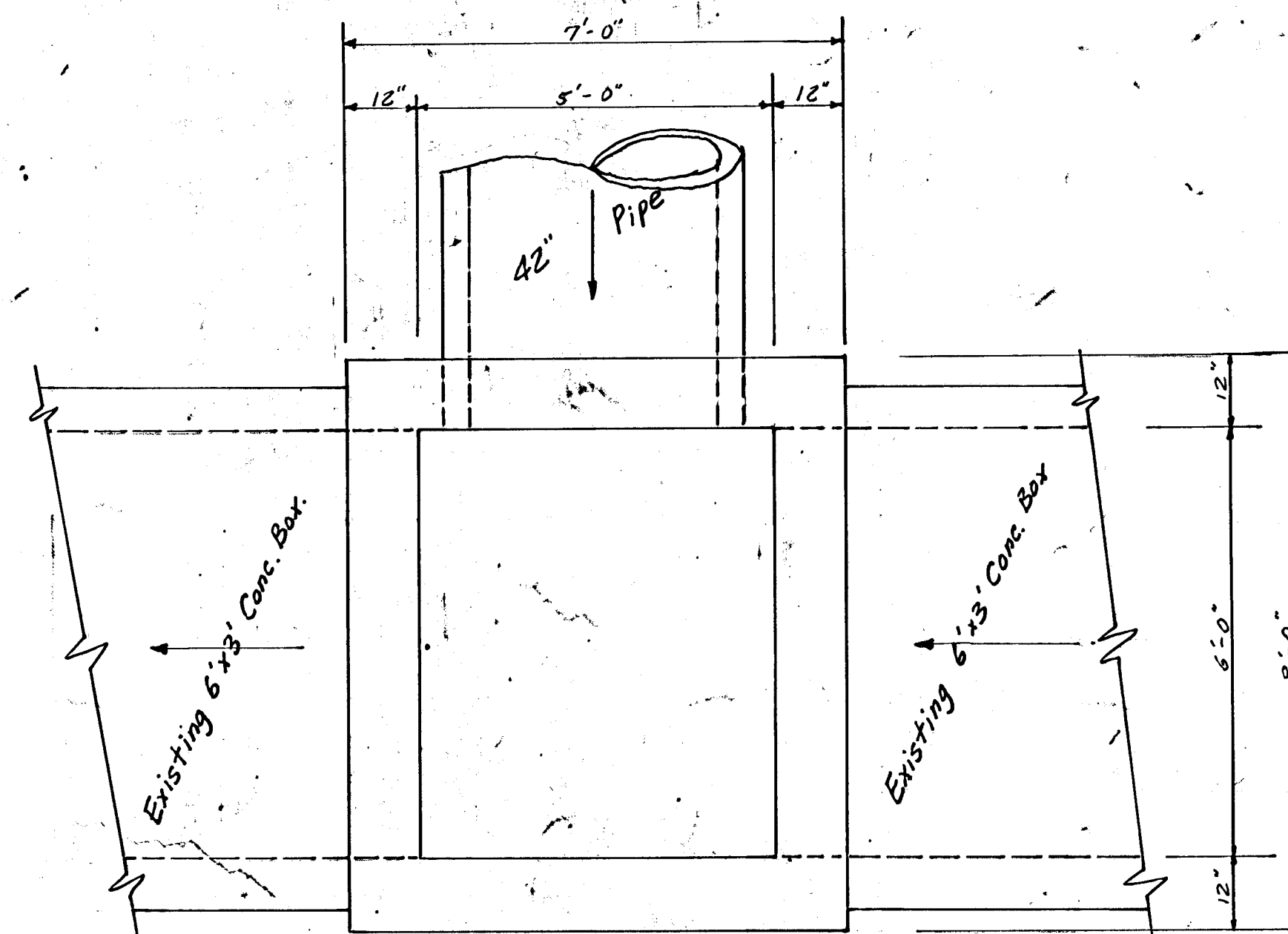
TYPICAL ELEVATION SECTION
SCALE: 1/8" = 1'-0"

STD. REINF. CONC. MANHOLE DETAILS

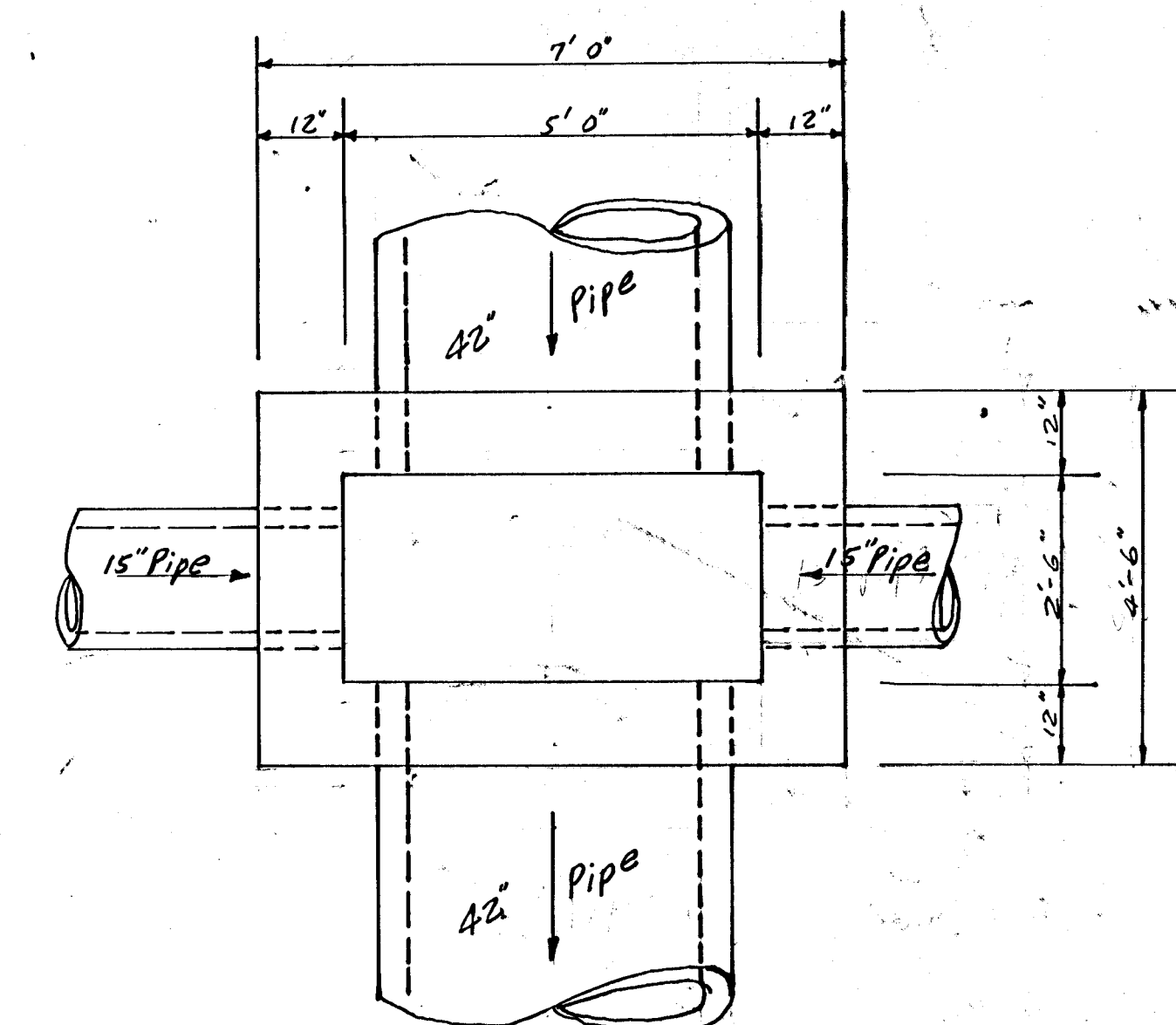
NOTE: ALL STD. REINF. CONCRETE MANHOLES TO BE AS SHOWN ABOVE AND TO BE BID AT ONE UNIT PRICE PER MANHOLE FOR ALL SUCH MANHOLES WITHIN THE PROJECT.

ALL STD. REINF. CONCRETE MANHOLES TYPE "B" TO HAVE BRICK BARRELS SAME AS FOR WICHITA STD. MANHOLE TYPE "B" MODIFIED IN DIAMETER AS SHOWN ABOVE. THE PAY FOR SUCH MANHOLE TO BE AT ONE UNIT PRICE PER MANHOLE AS BID FOR STD. REINF. CONCRETE MANHOLE TYPE "B".

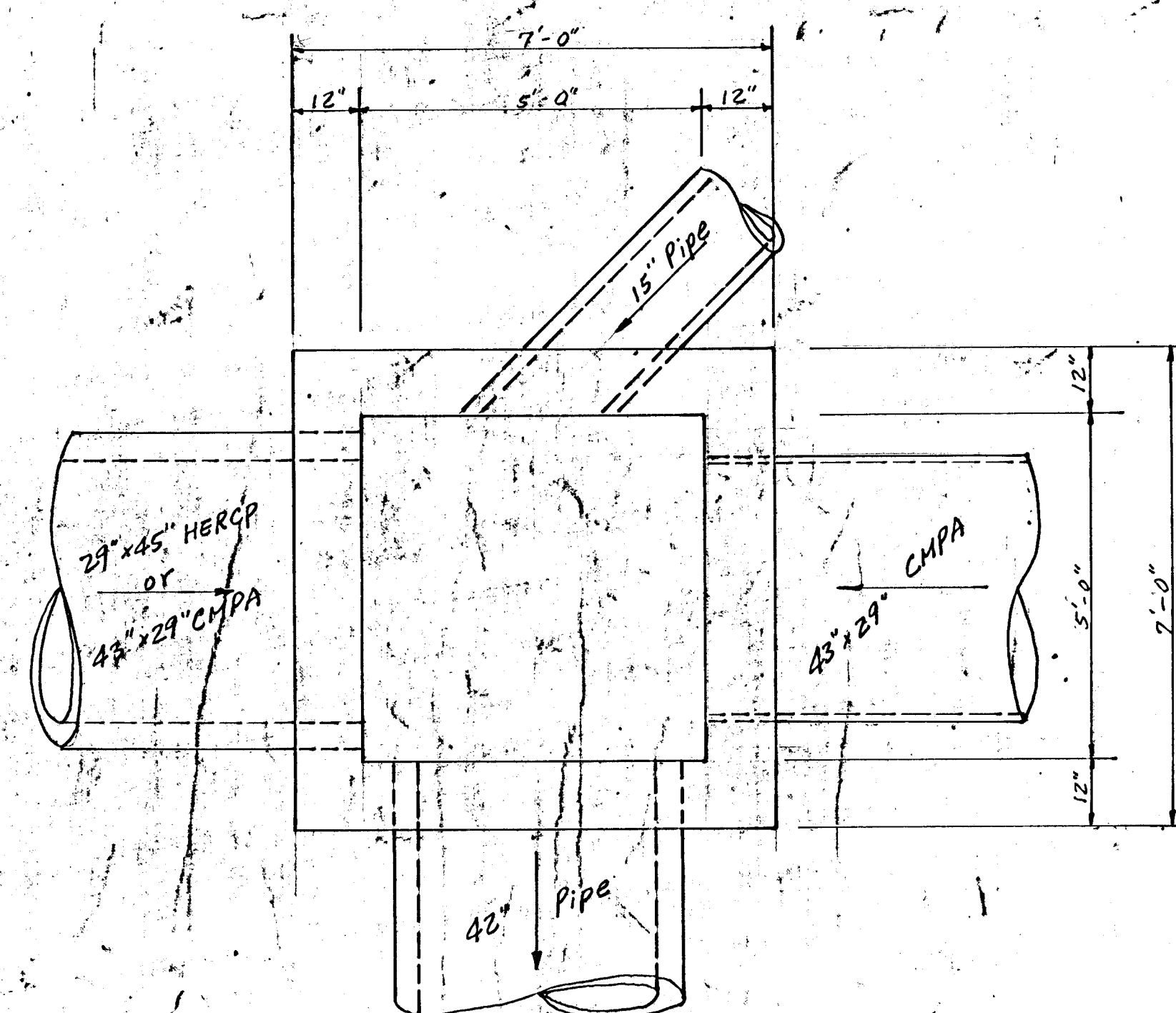
AT THE OPTION OF THE CONTRACTOR, THE REINF. CONCRETE PORTION OF THE MANHOLE MAY BE INCREASED IN HEIGHT UP TO A MAXIMUM OF 12" BELOW THE BOTTOM OF THE RING & COVER. THE BARREL DIAMETER SHALL BE PROPERLY ADJUSTED FOR SUCH ALTERATION IN ACCORDANCE WITH BARREL HEIGHT AS SHOWN ABOVE.



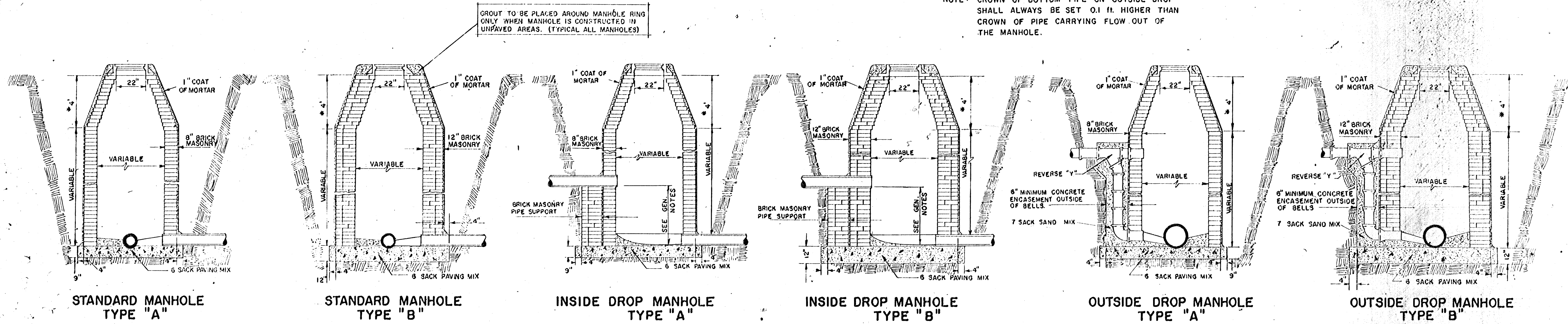
Manhole Layout : Doris & 2nd



Manhole Layout : Doris & 3rd



Manhole Layout : Doris & St. Louis



NOTE: CROWN OF BOTTOM PIPE ON OUTSIDE DROP SHALL ALWAYS BE SET 0.1 ft. HIGHER THAN CROWN OF PIPE CARRYING FLOW OUT OF THE MANHOLE.

STANDARD MANHOLE TYPE "A"

STANDARD MANHOLE TYPE "B"

INSIDE DROP MANHOLE TYPE "A"

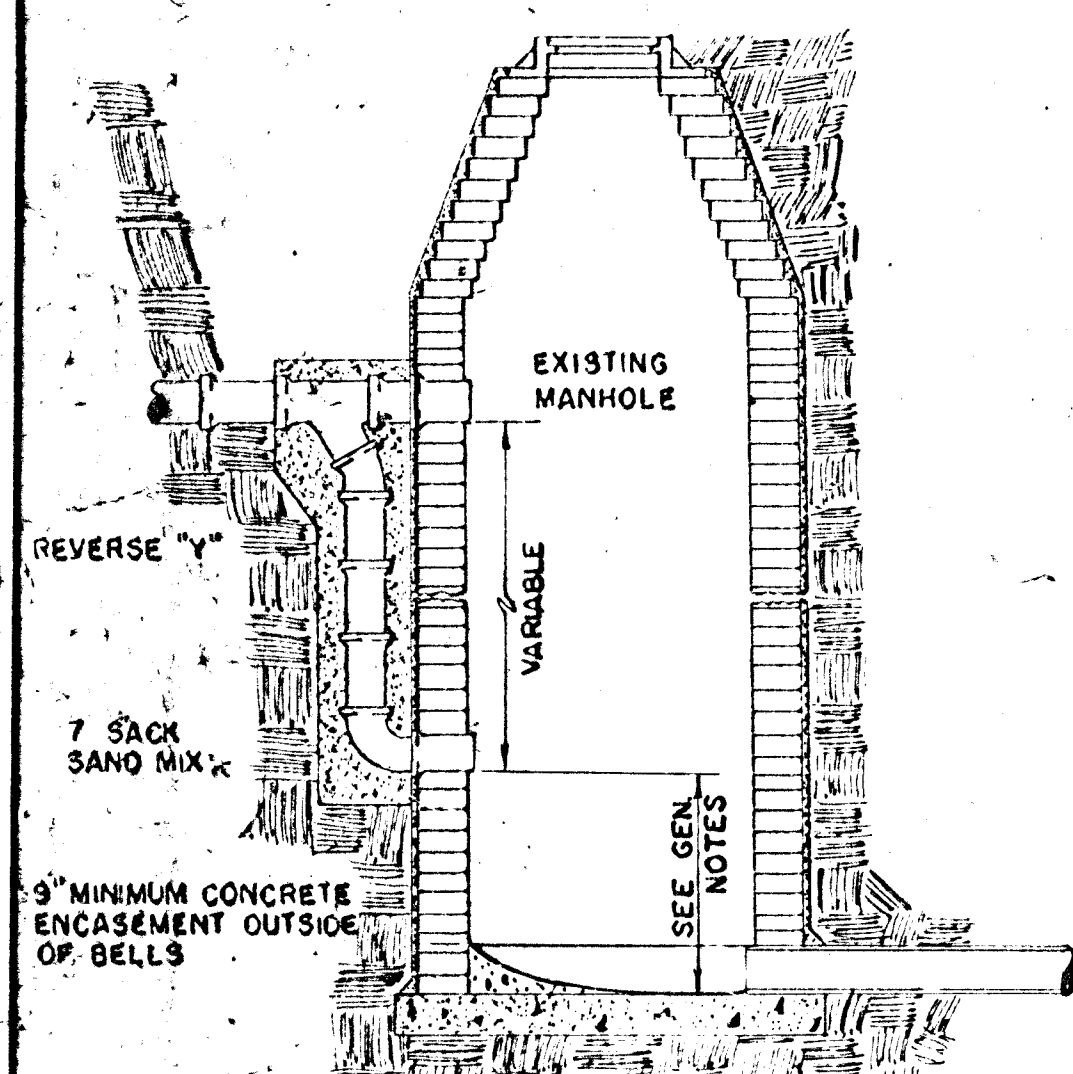
INSIDE DROP MANHOLE TYPE "B"

OUTSIDE DROP MANHOLE TYPE "A"

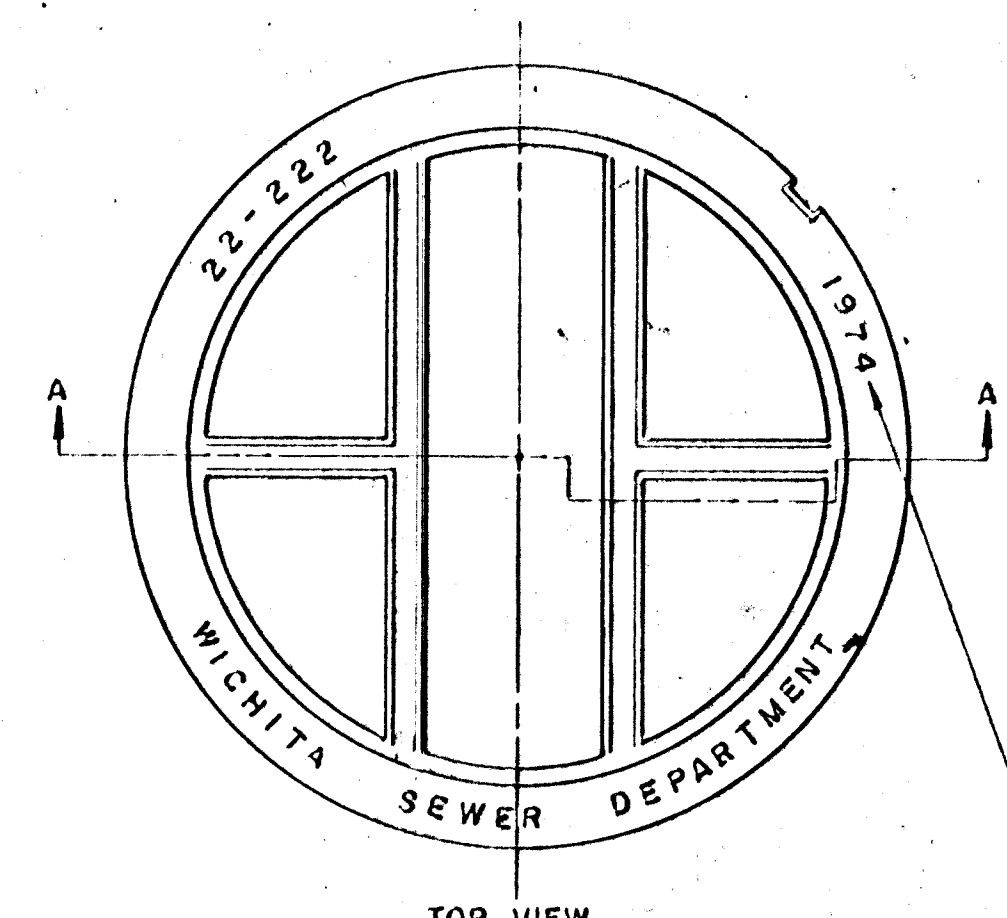
OUTSIDE DROP MANHOLE TYPE "B"

* DRAW = 6' ON 5' DIA. M.H.

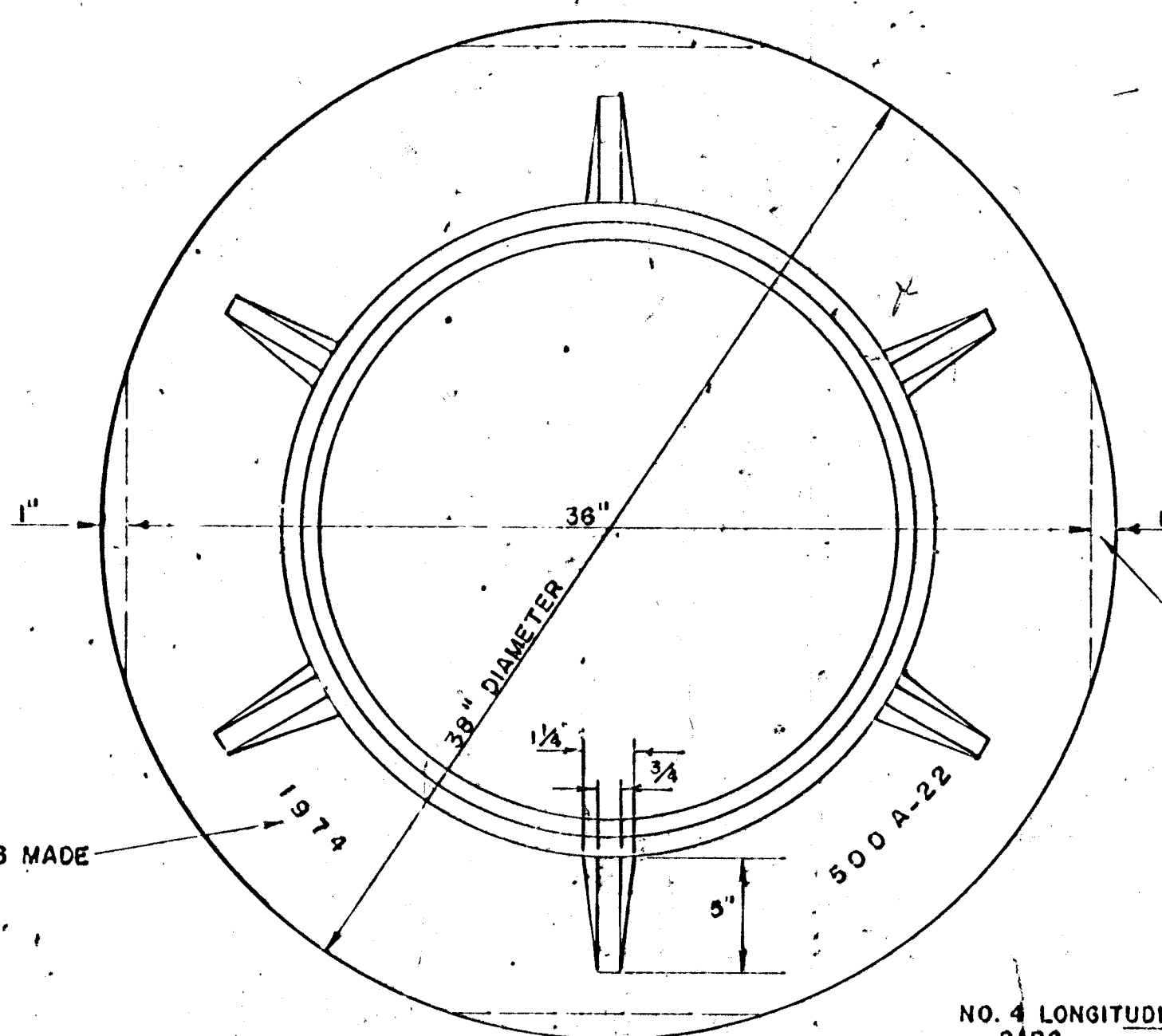
NOTE: REINFORCING STEEL SHALL BE INSTALLED IN THE MANHOLE BASES 8" ABOVE THE BOTTOM. REINFORCING STEEL SHALL CONSIST OF NO. 4 BARS PLACED ON 6" CENTERS IN BOTH DIRECTIONS. THE COST OF REINFORCING STEEL IS TO BE INCLUDED IN THE PRICE BID FOR THE MANHOLE.



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

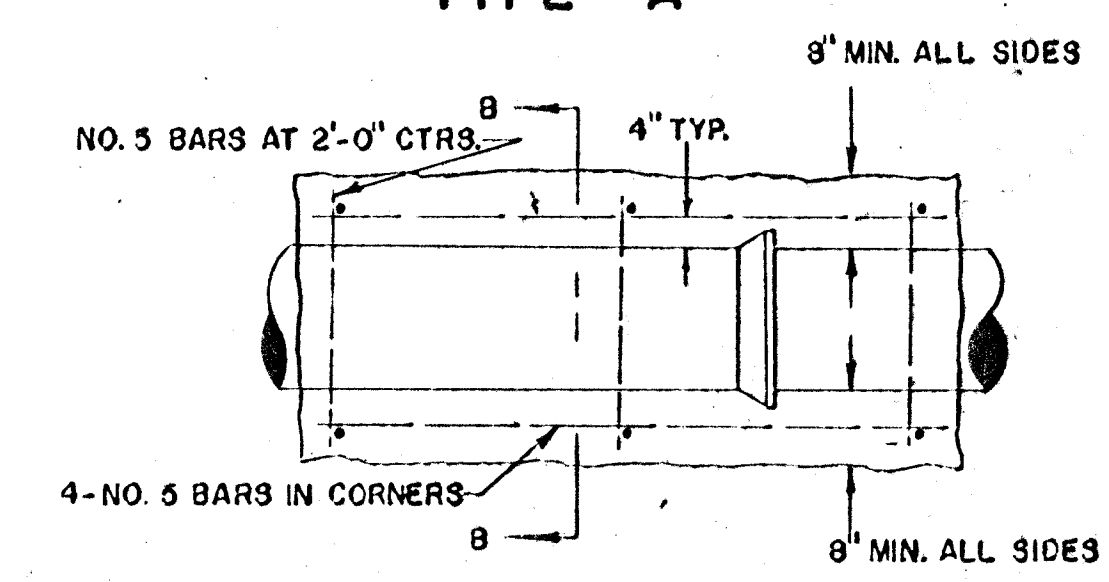


MANHOLE COVER
WEIGHT 110 LBS.

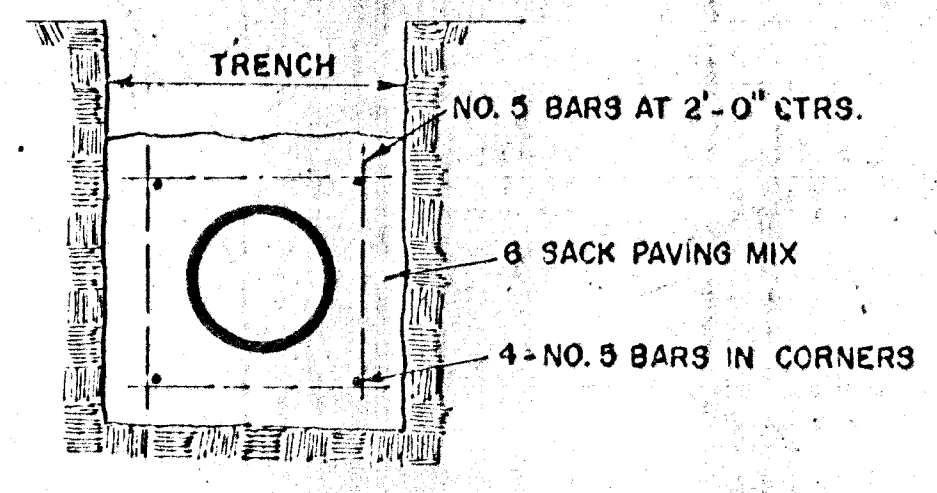


MANHOLE RING

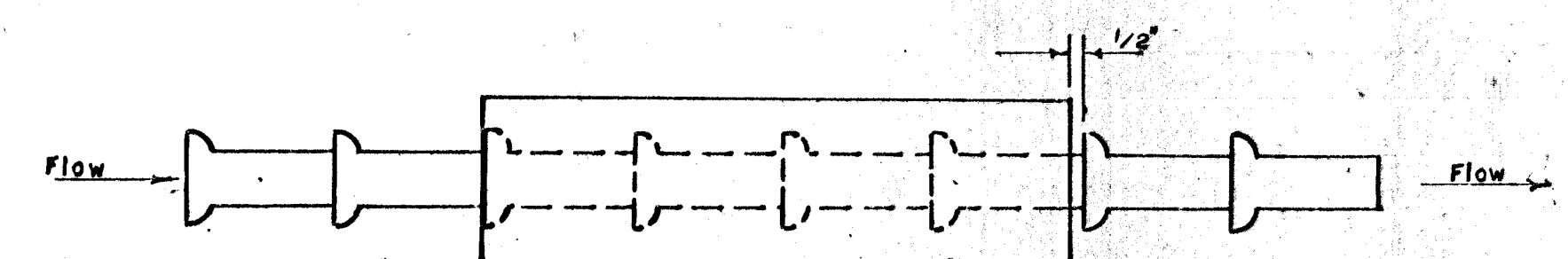
WEIGHT 325 LBS. RING NO. 500A
WEIGHT 800 LBS. RING NO. 500AS



REINFORCED CONCRETE ENCASMENT



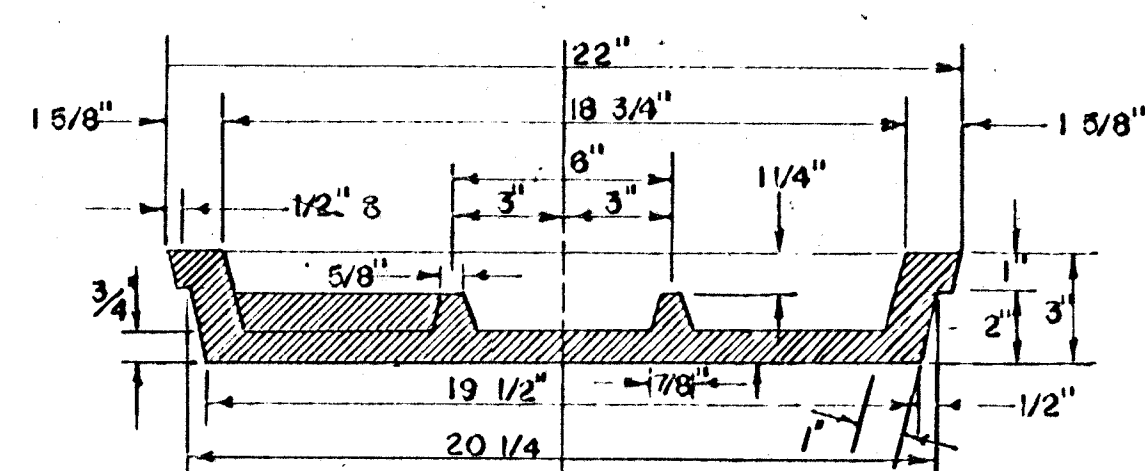
SECTION B-B



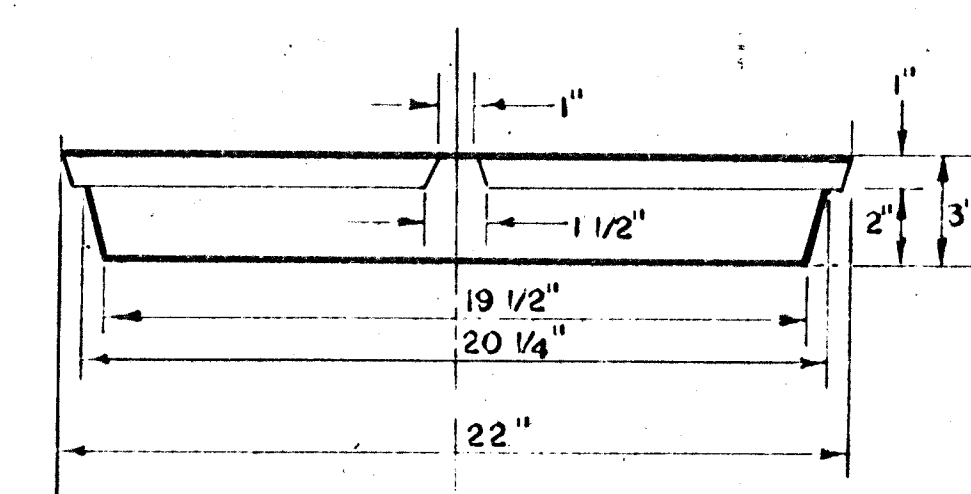
DETAIL IN CONNECTION WITH THE TERMINATION OF CONCRETE ENCASMENT OR CRADLE FOR CLAY PIPE

GENERAL NOTES

- MORTAR USED IN MASONRY CONSTRUCTION SHALL CONTAIN 8 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 8 SACK SAND MIX CONCRETE.
- PIPES INSTALLED WITHIN THE MANHOLE EXCAVATION SHALL BE CRADLED WITH CONCRETE TO THE LIMITS OF THE MANHOLE 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.

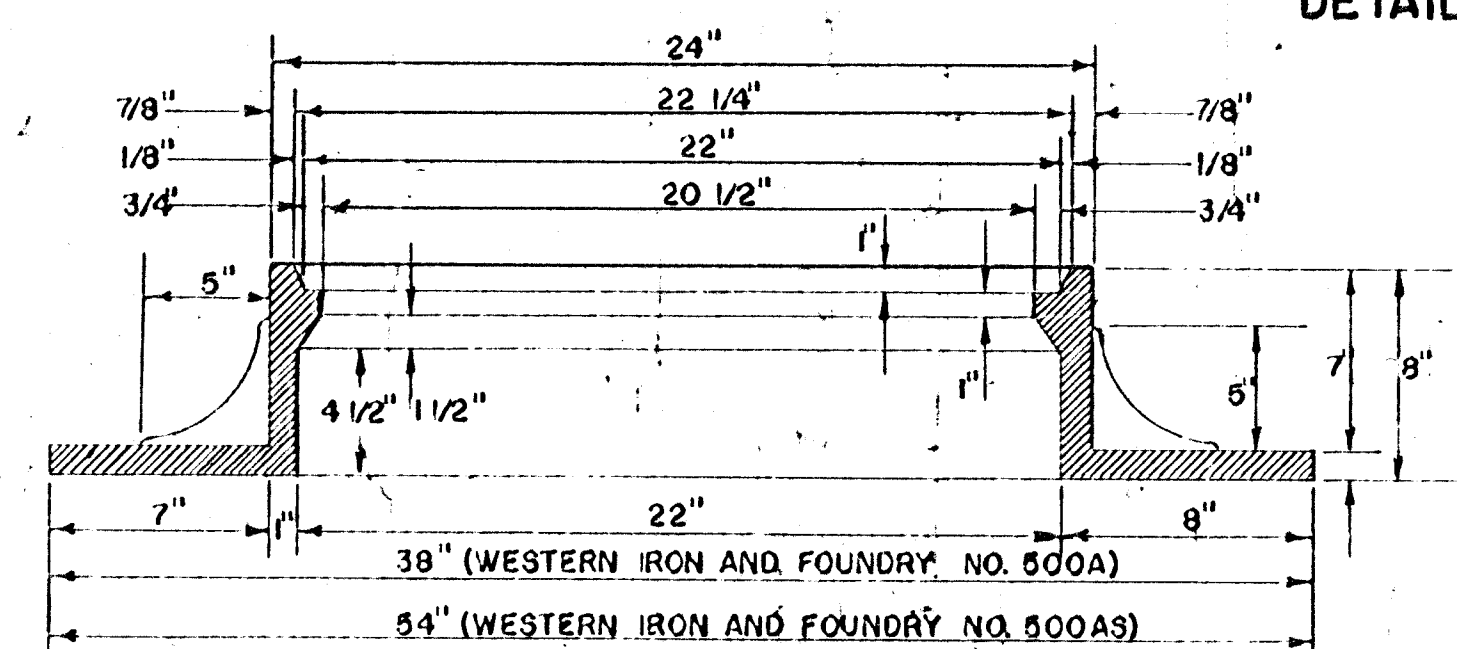


MANHOLE COVER



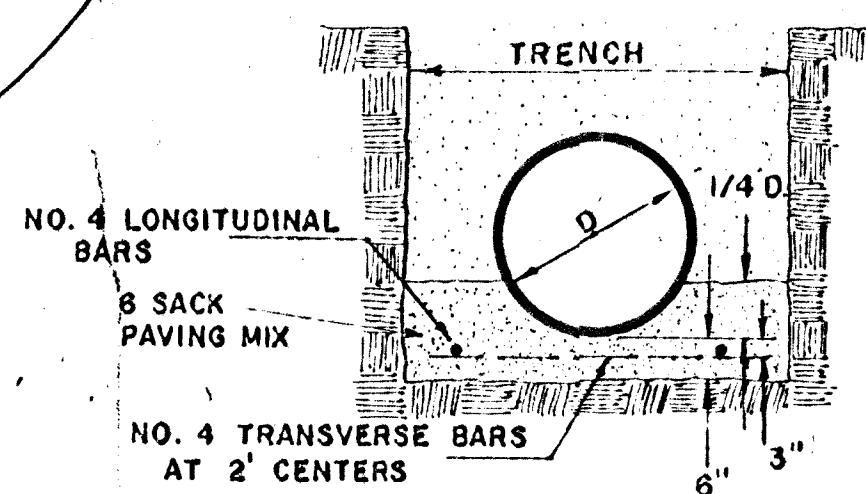
SIDE VIEW

MANHOLE COVER

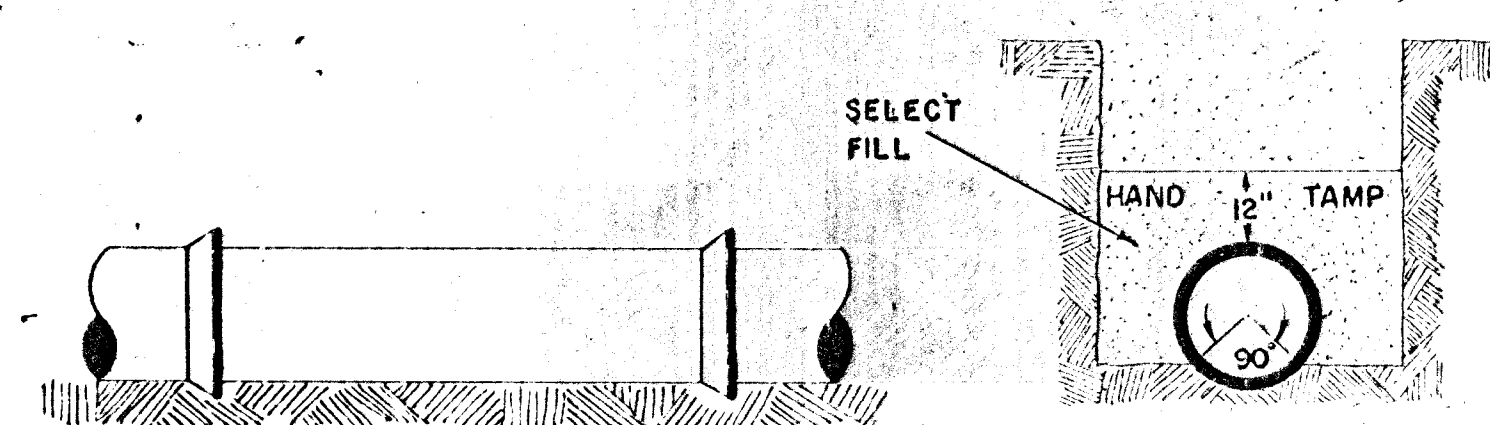


MANHOLE RING

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



DETAIL OF CONCRETE CRADLE



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

13/13