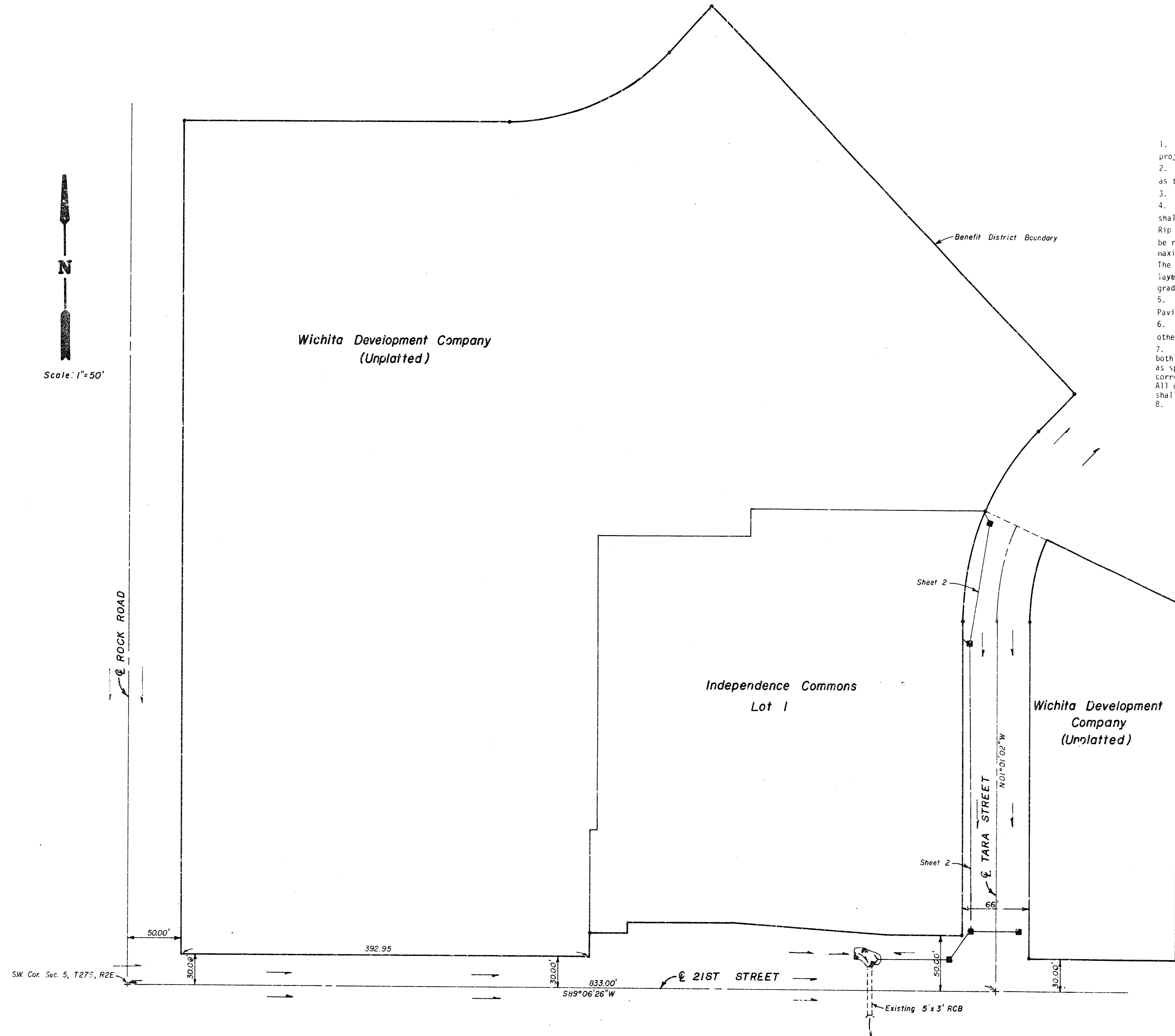
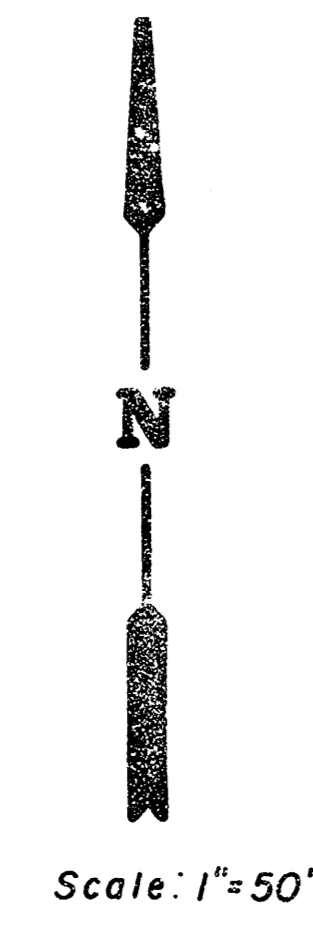


# STORM WATER SEWER NO. 168



**GENERAL NOTES**

1. Cost of plug pipe with 2" wooden bulkhead shall be incidental to project.
2. The trip of inlets and manholes as noted on the plans may vary so as to meet proposed curb elevations or pavement elevations.
3. All Concrete unless otherwise noted shall be "6 Sack Concrete".
4. Rock Rip Rap on this project shall be type 3. The type 3 Rip Rap shall be 12 in. Rip Rap on 6 in. sand and Gravel bedding. The Rock Rip Rap and Gravel protection shall be hard, dense, durable, and shall be reasonably well graded. The size range of rock used shall have a maximum size of 1 cubic foot, and a minimum size of 1 1/2 inches. The 6 in. sand and Gravel bedding for Rip Rap shall be a continuous layer of sand and gravel or sand and crushed rock, reasonably well graded to a maximum of 1 1/2 in. in size.
5. Storm Water Sewer Contractor to Coordinate Construction with Paving and Sanitary Sewer Contractor.
6. Storm Water Sewer Contractor to Coordinate Construction with all other Utilities Contractor.
7. All metal pipes shall be heli-alli corrugated pipe fully coated both inside and outside. The coating may be bituminous or polymeric as specified in AASHTO designation M246-70, Type B. All such coated corrugated pipe shall be smooth flow pipes for sizes 24" Diameter or larger. All connections for these fully coated or fully paved and full coated pipe shall be fairly watertight constructed using rubber type coupler or equal.
8. Type 1A Inlets to be used at all locations unless otherwise noted.

- INDEX**
1. Title page
  2. Plan sheets
  3. Type 1A Inlet
  4. Miscellaneous drainage details



As B-1-31280

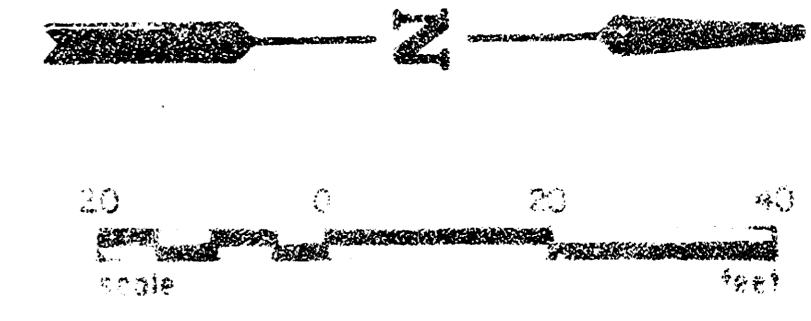
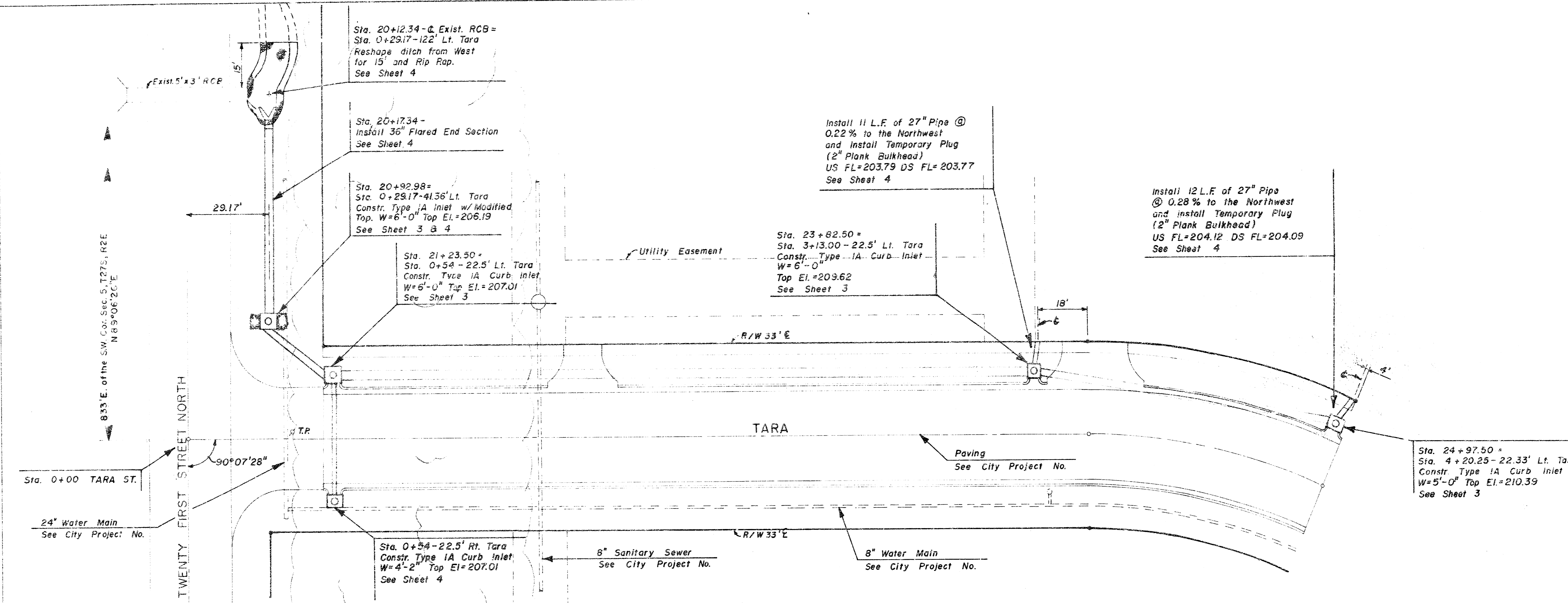
**STORM WATER SEWER NO. 168**  
**INDEPENDENCE COMMONS**

City of Wichita, Kansas  
 Dean Sellers-Acting City Engineer  
 Date \_\_\_\_\_  
 Proj. No. 468-76-245-80914-000-000-001

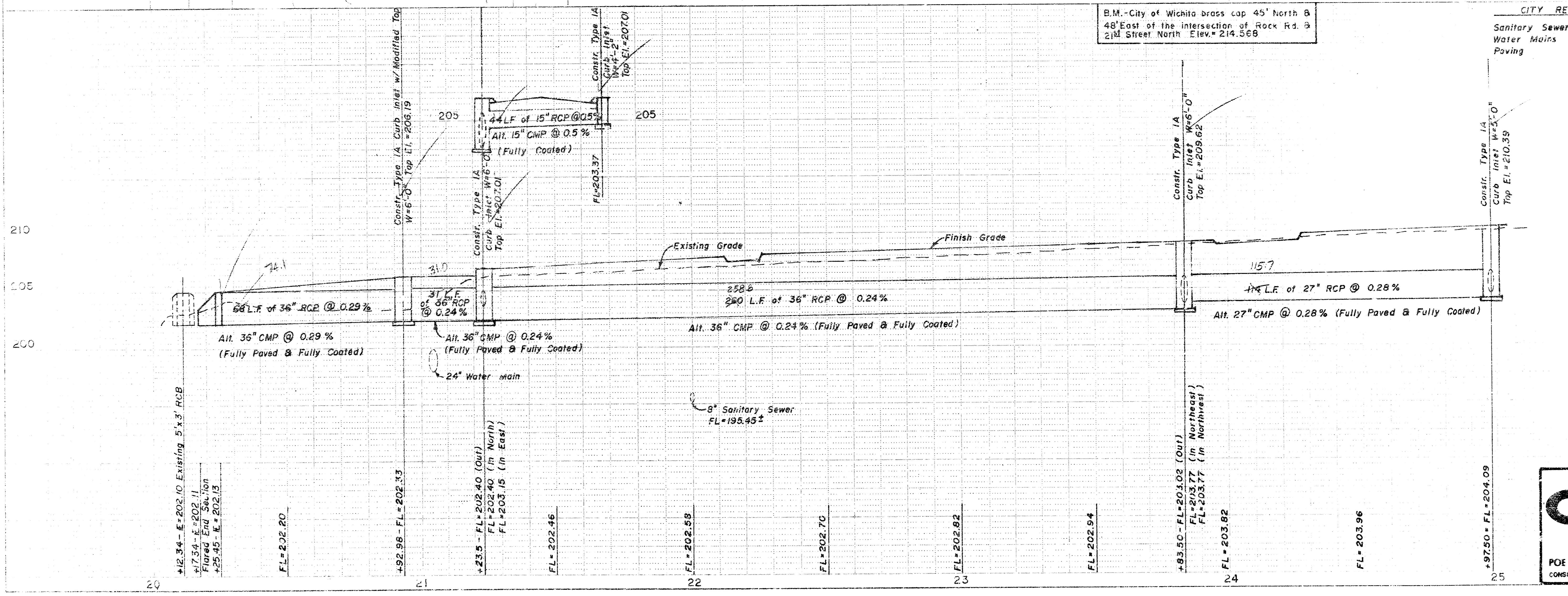
**dp** POE ASSOCIATES OF KANSAS, INC.  
 CONSULTING ENGINEERS 1/4

STATE	FISCAL YEAR	SHEET NO.	TOTAL SHEETS

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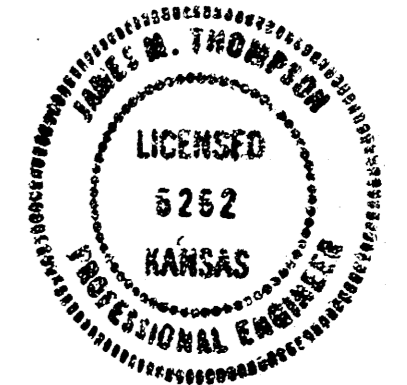
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B.M. - City of Wichita brass cap 45' North & 48' East of the intersection of Rock Rd. & 21st Street North Elev. = 214.568

CITY REFERENCE PROJECTS

Sanitary Sewer	#468-76-245-80509-000-000-00-1
Water Mains	#448-80-325-80604-000-000-00-1
Paving	#472-76-245-80875-000-000-00-1

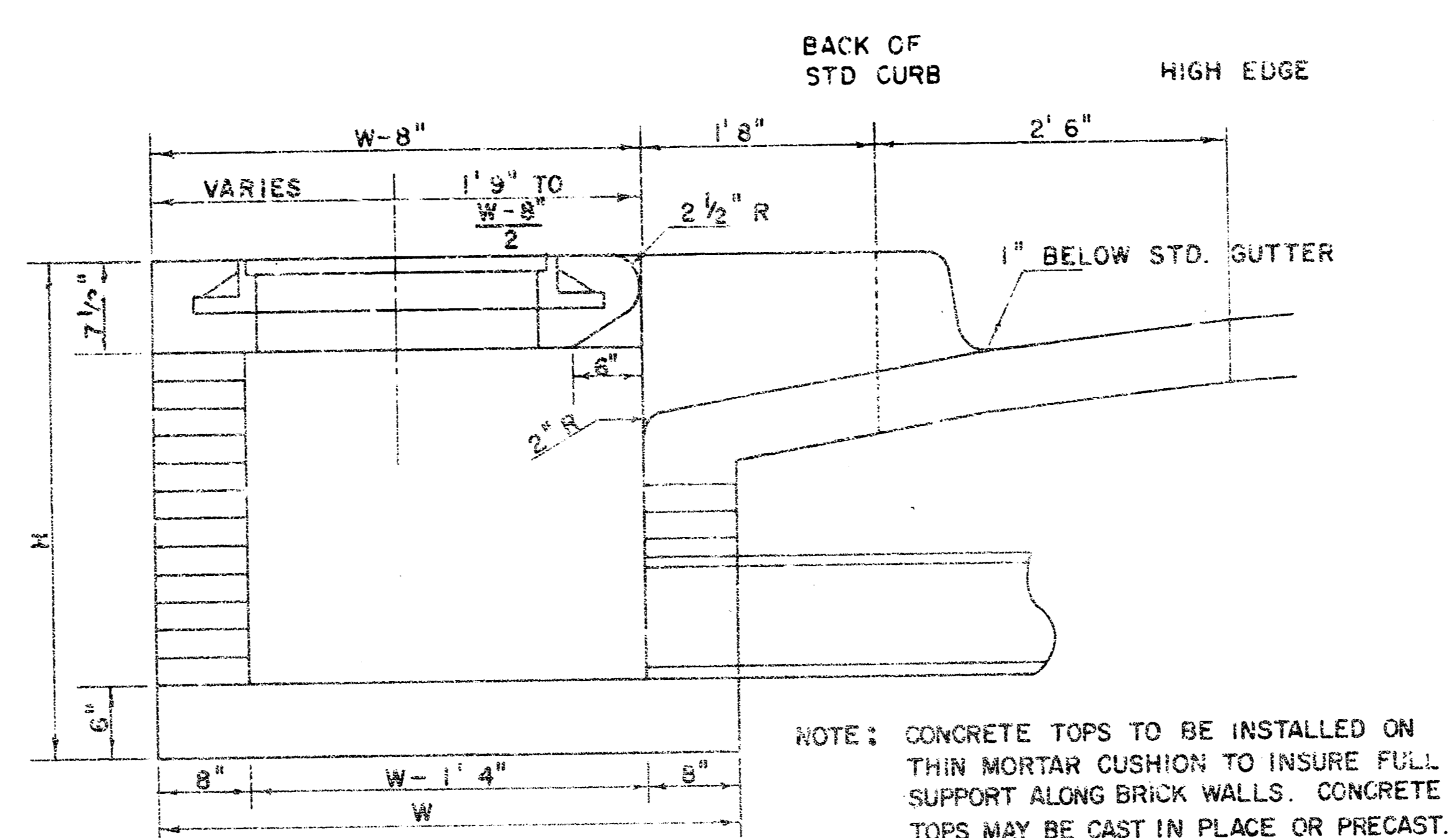
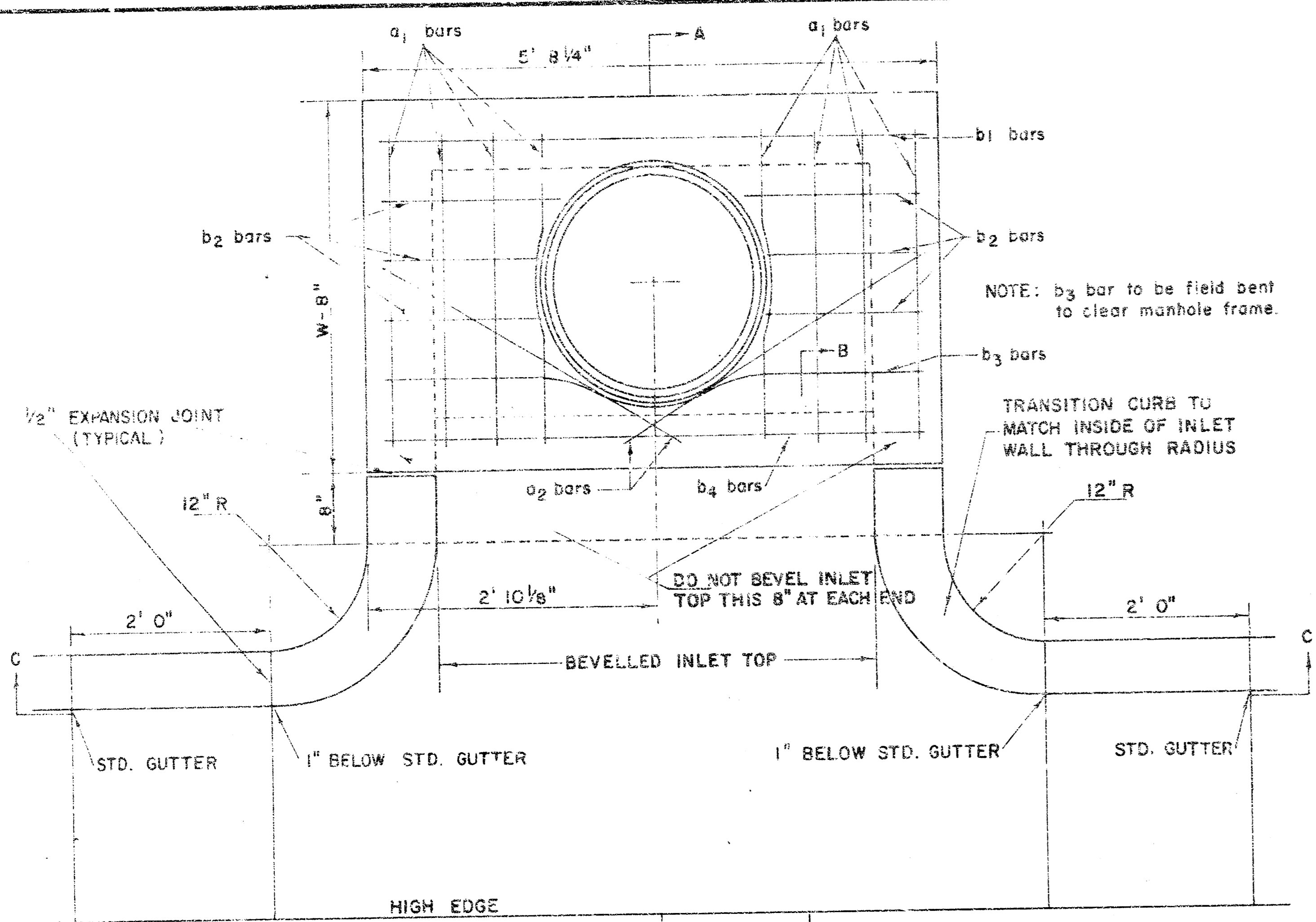


**POE & ASSOCIATES**  
 CONSULTING ENGINEERS

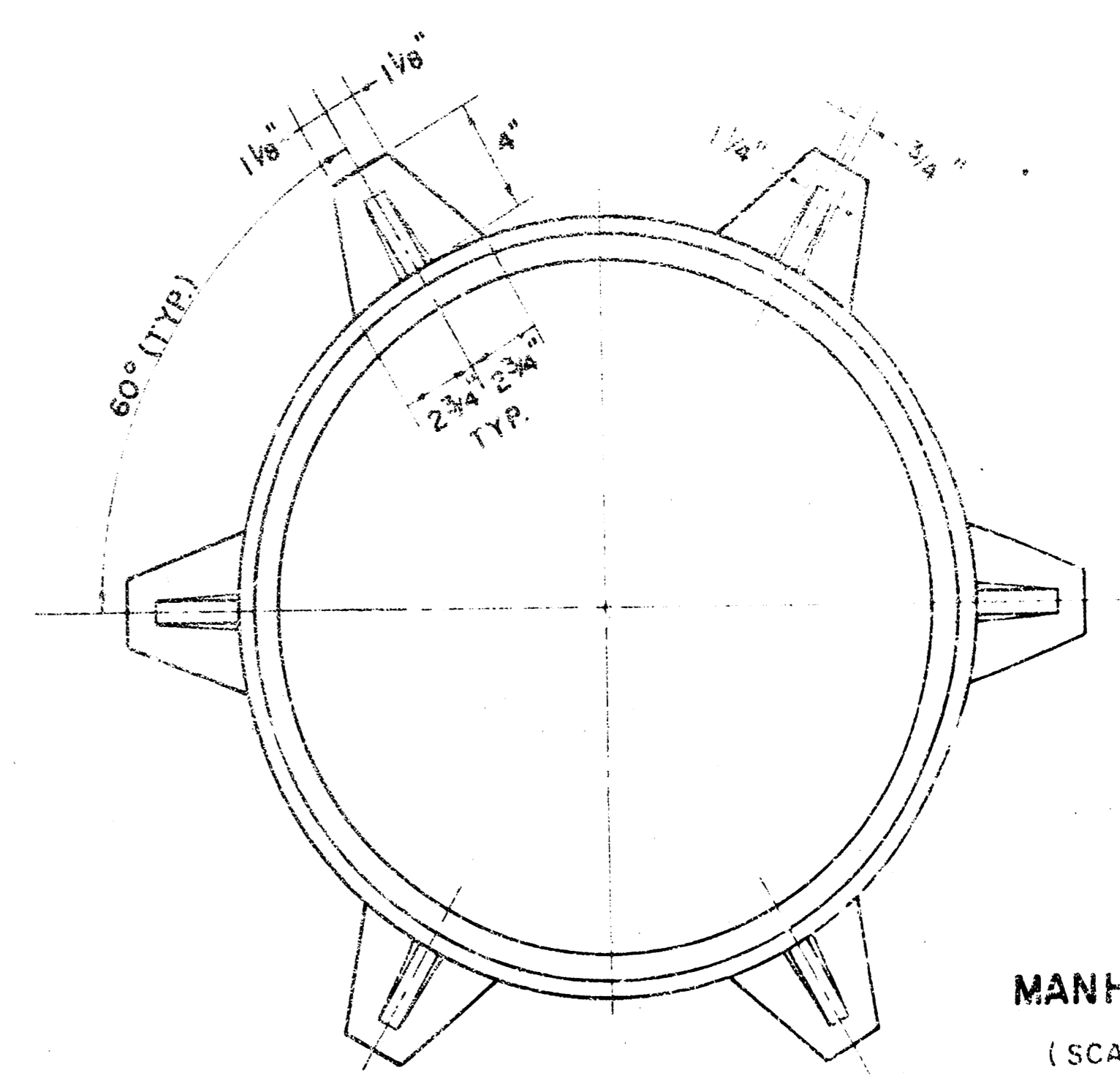
**CITY OF WICHITA**  
 Dept. Public Works

**TARA-STORM GEWERS**  
 468-76-245-80814-000-000-00-1

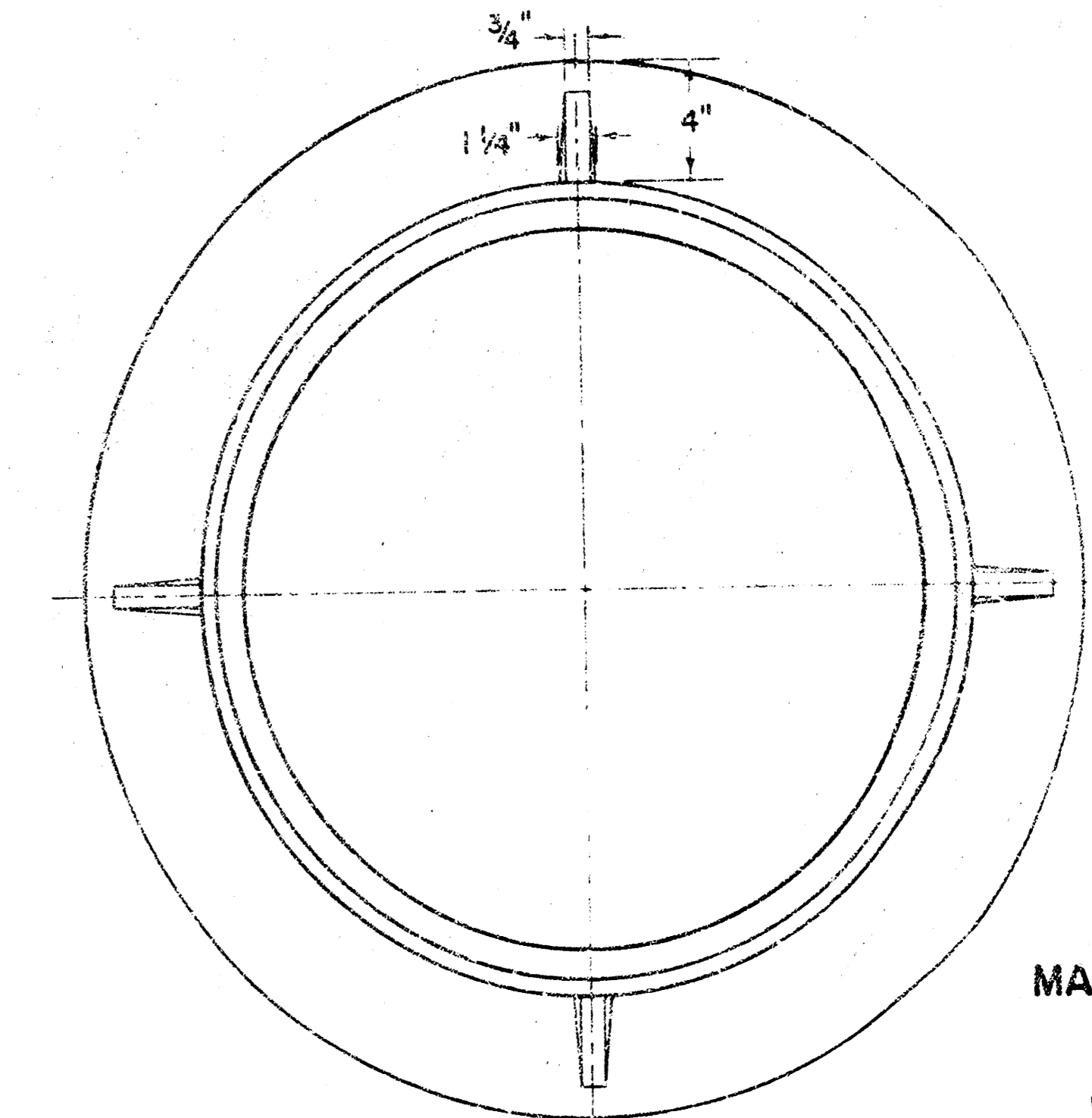
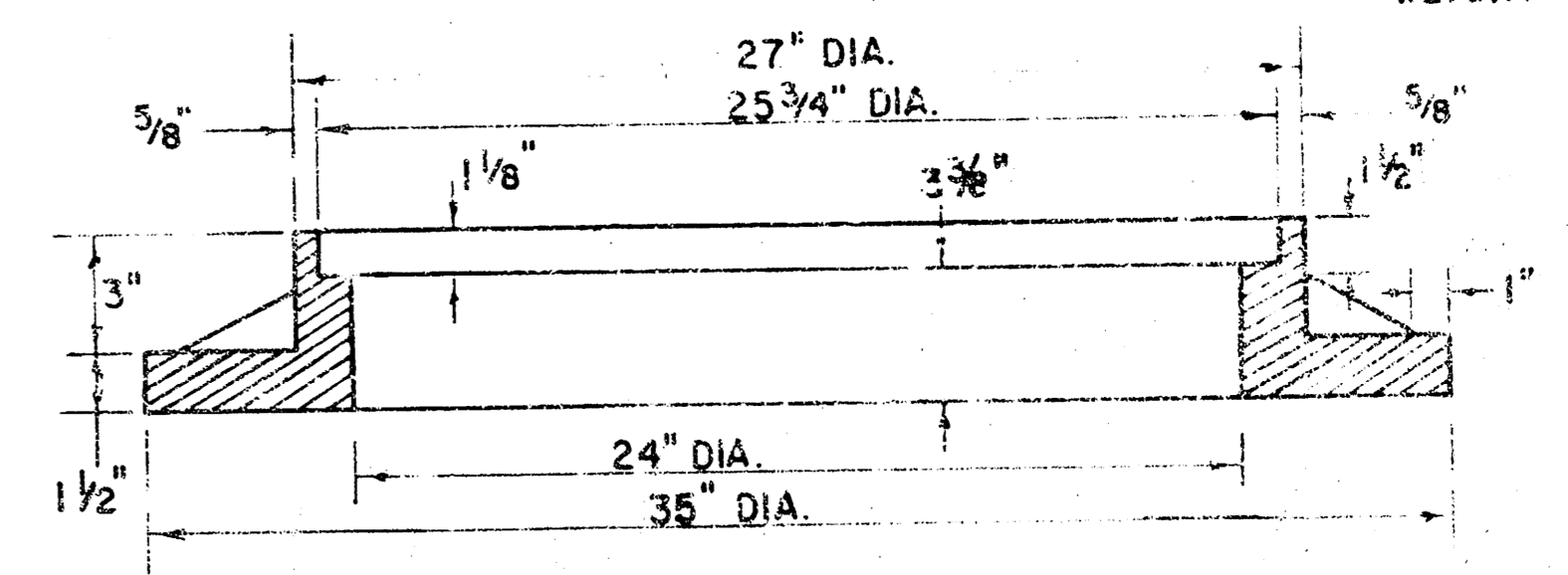
ENGINEER: JMT	ENG. TECH: JW
DRAWN BY: JW	SCALE: 3/4" = 1'
DATE: SEPT, 1979	SHEET: 4/4



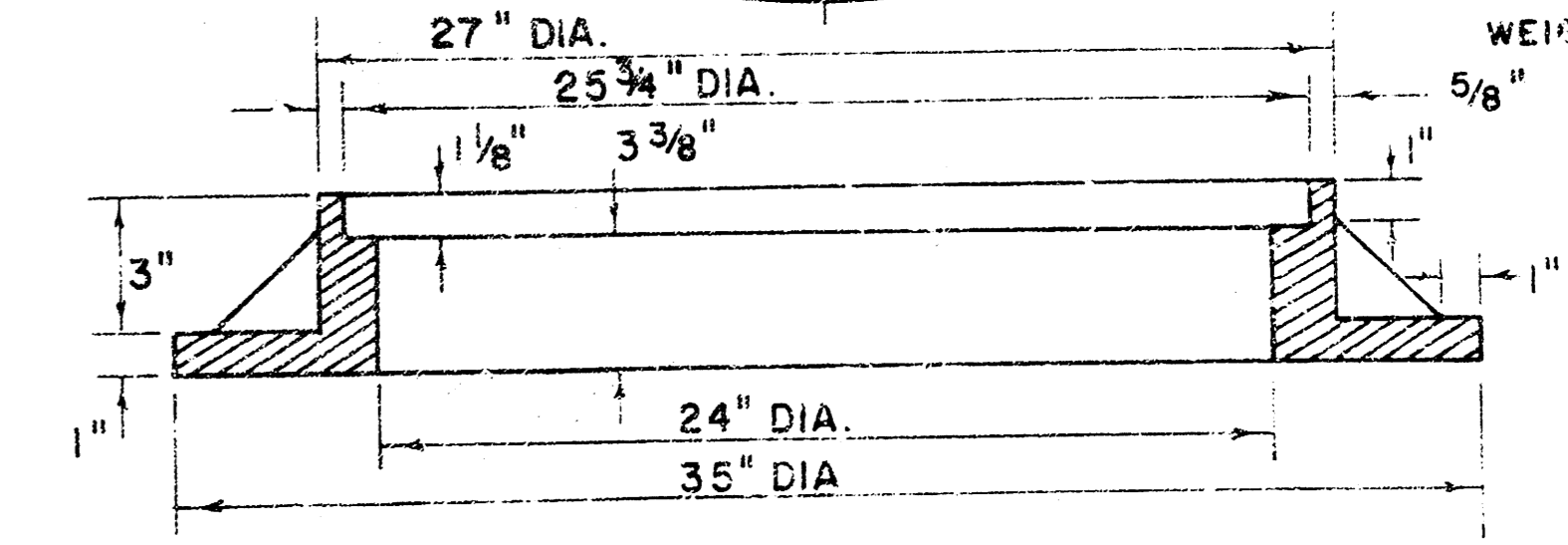
SECTION A-A  
(SCALE 1" = 1'0")



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



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



PLAN (SCALE 1" = 1'0")

STEEL SCHEDULE

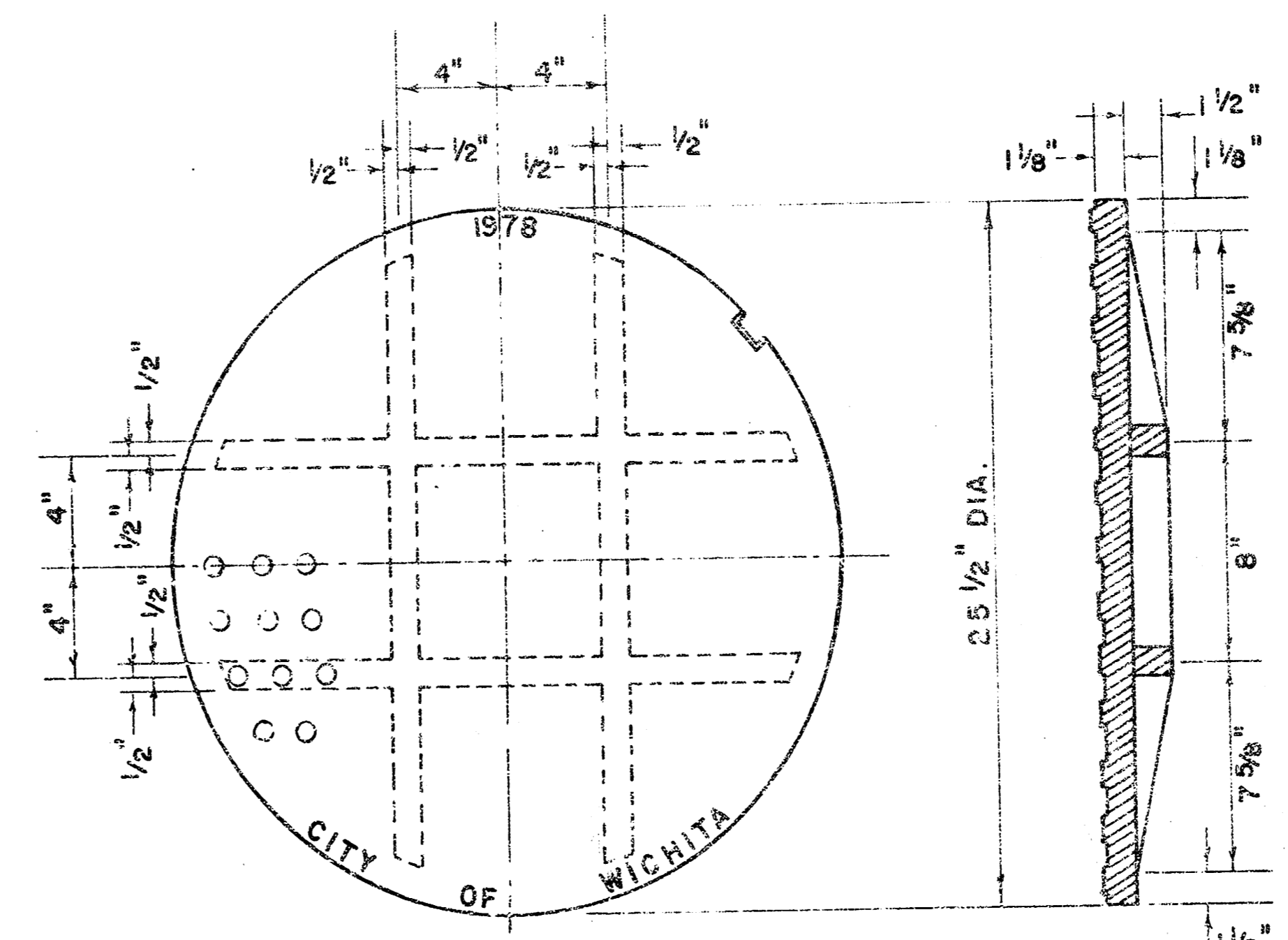
BAR NUMBER	a <sub>1</sub>	o <sub>2</sub>	b <sub>1</sub>	b <sub>2</sub>	b <sub>3</sub>	b <sub>4</sub>	WT. LBS.
1	8	2	1	3	5	7	9
2	4	4	4	4	4	4	6
3	4'2"	6'5"	3'4"	5'5"	-	-	60*
4	5'0"	8'1"	4'4"	5'5"	-	-	77*
5	6'0"	10'1"	5'4"	5'5"	-	-	97*
6	7'0"	11'1"	6'4"	5'5"	-	-	111*
7	8'0"	12'1"	7'4"	5'5"	-	-	124*

\* NOTE: a<sub>2</sub> BARS TO BE PLACED APPROX. 2" BELOW TOP OF INLET COVER

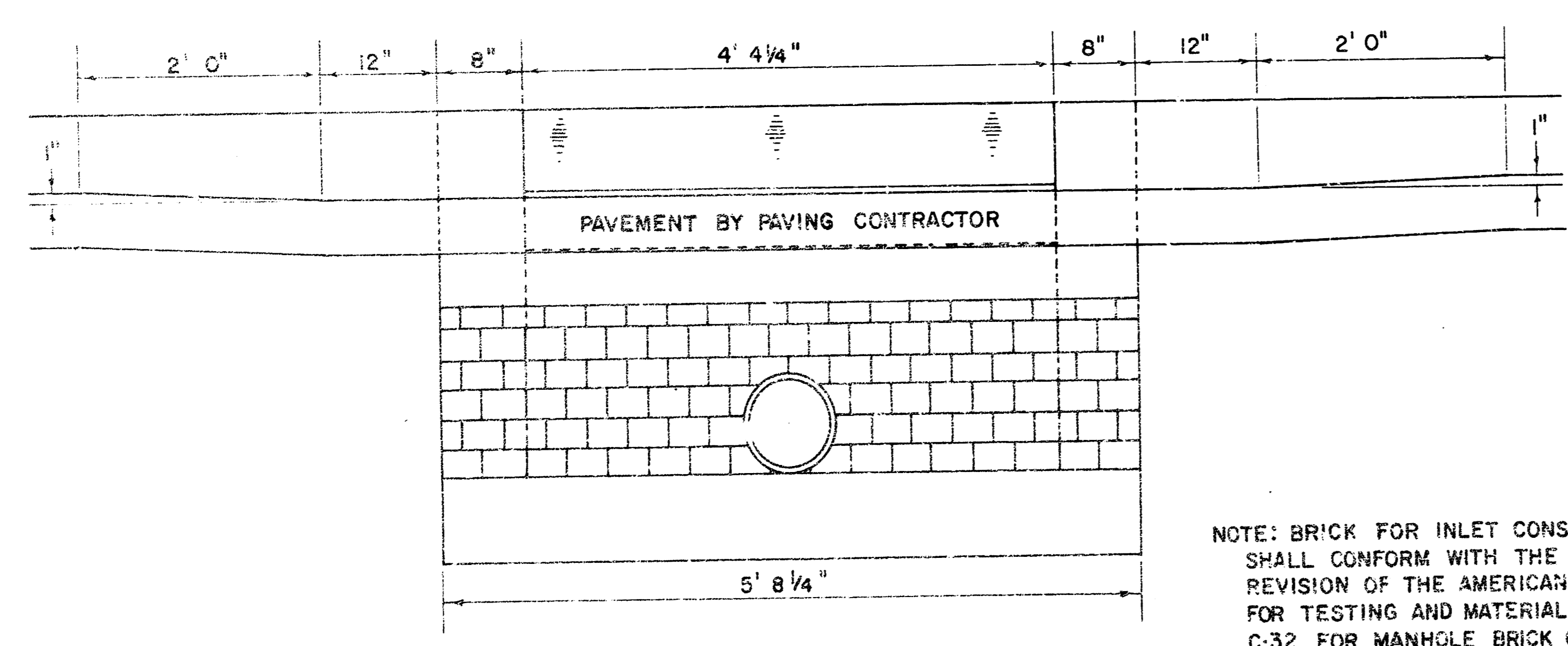
BENDING DIAGRAM

W	PRE-CAST TOP SIZE	PIPE SIZE	CU. YD. CONC.
4' 2"	3'6" x 5'8 1/4" x 7 1/2"	21" & SMALLER	0.46 *
5' 0"	4'4" x 5'8 1/4" x 7 1/2"	24" & 30"	0.57 *
6' 0"	5'4" x 5'8 1/4" x 7 1/2"	36" & 42"	0.71 *
7' 0"	6'4" x 5'8 1/4" x 7 1/2"	48" & 54"	0.84 *
8' 0"	7'4" x 5'8 1/4" x 7 1/2"	60" & 66"	0.97 *

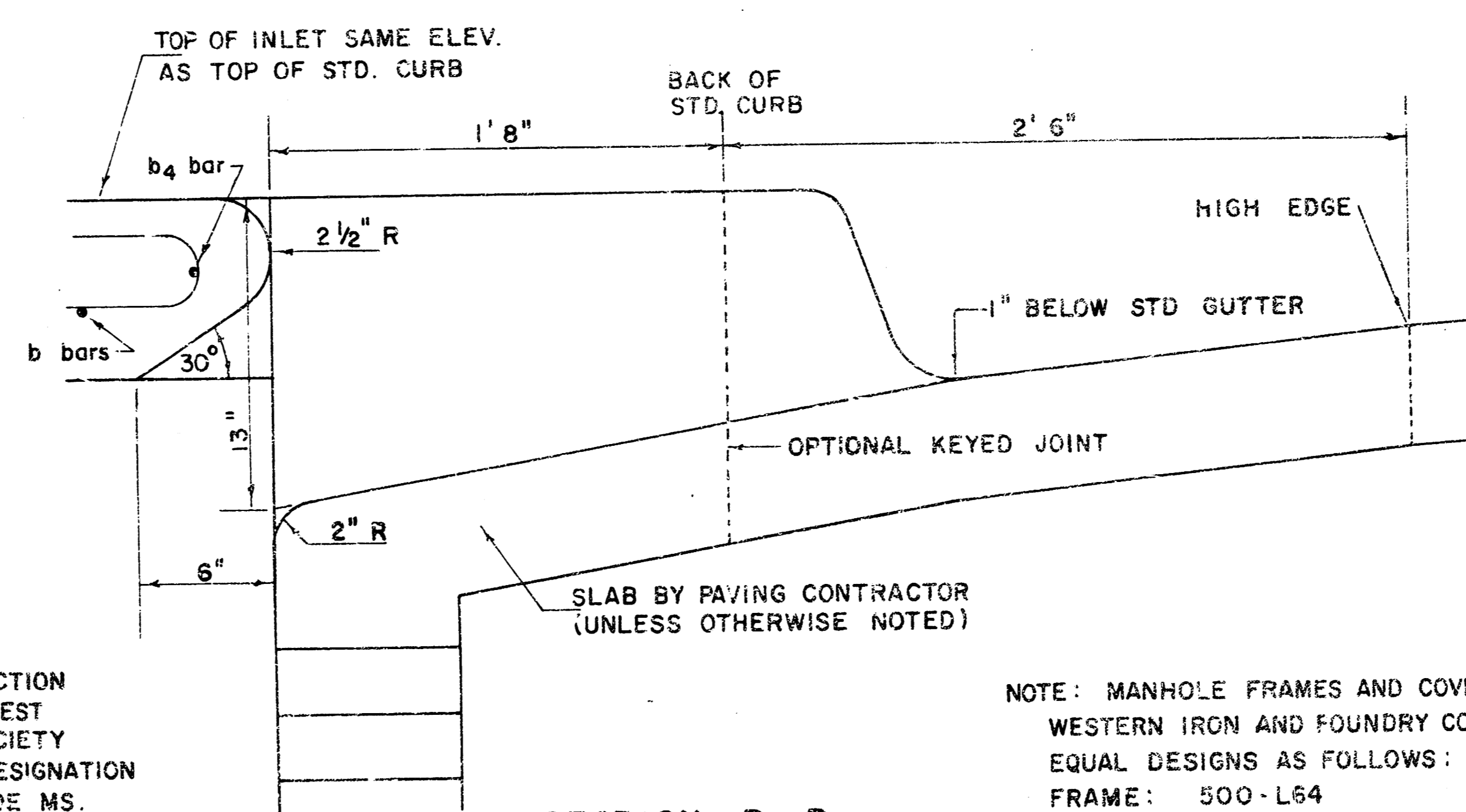
\* GROSS VOLUME



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



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

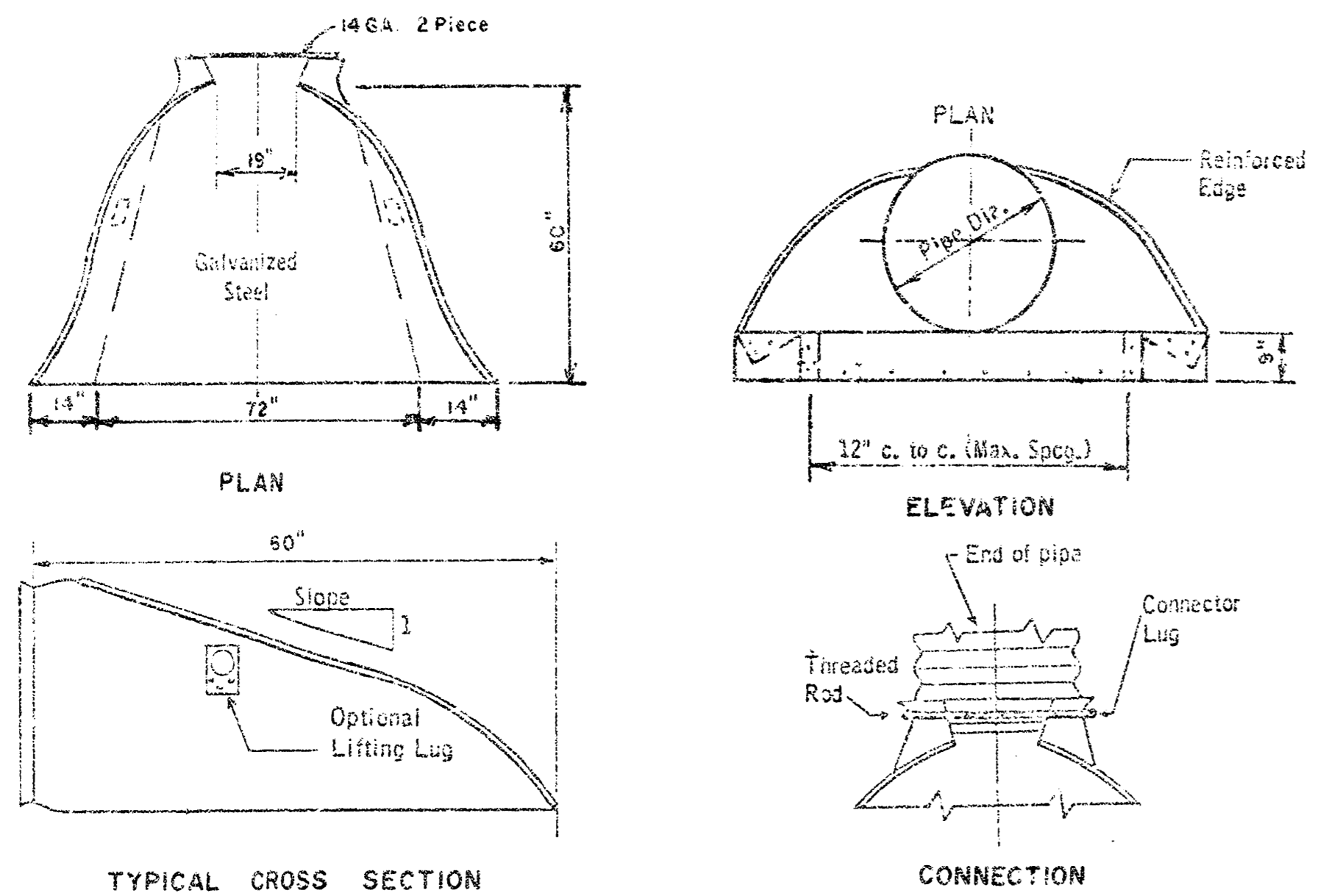


SECTION B-B  
(SCALE 1" = 6")

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.

NOTE: MANHOLE FRAMES AND COVER ARE WESTERN IRON AND FOUNDRY CO. INC. OR EQUAL DESIGNS AS FOLLOWS:  
FRAME: 500-L64  
FRAME (ALTERNATE): 500-A4  
COVER: 222-54 "NOBBY"

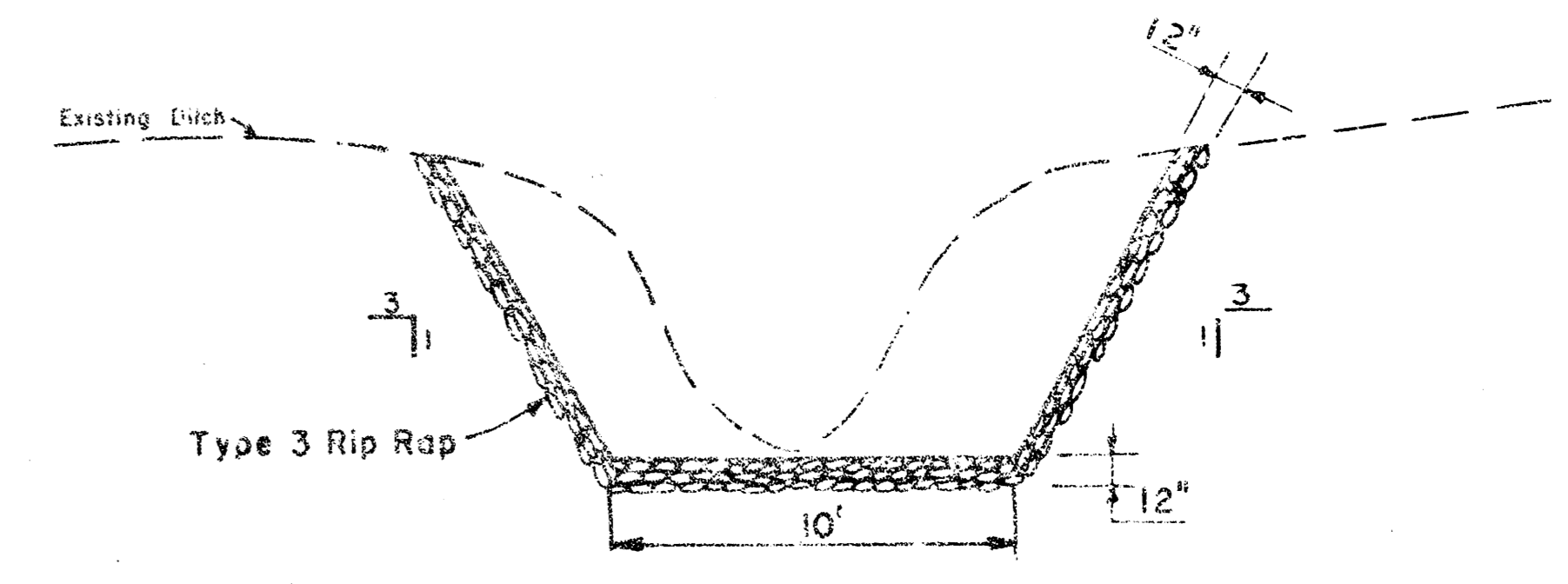
DETAIL STANDARD TYPE IA CURB INLET  
CITY OF WICHITA, KANSAS  
R. W. LINN - CITY ENGINEER  
OCTOBER 1978



**36" STEEL FLARED END SECTION**

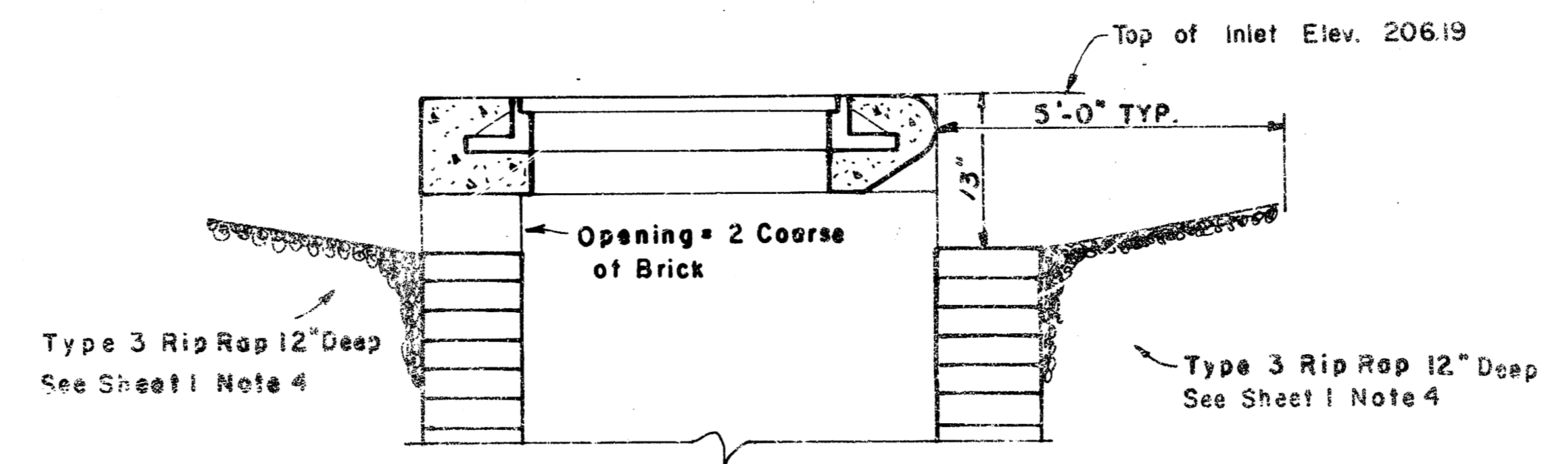
NOTE: Steel Flared End Section shall be used when steel pipe is selected and shall comply with the City of Wichita Standard Specifications.

NOTE: All Construction requirements shall comply with methods for Type IA Curb Inlet See Sheet 3



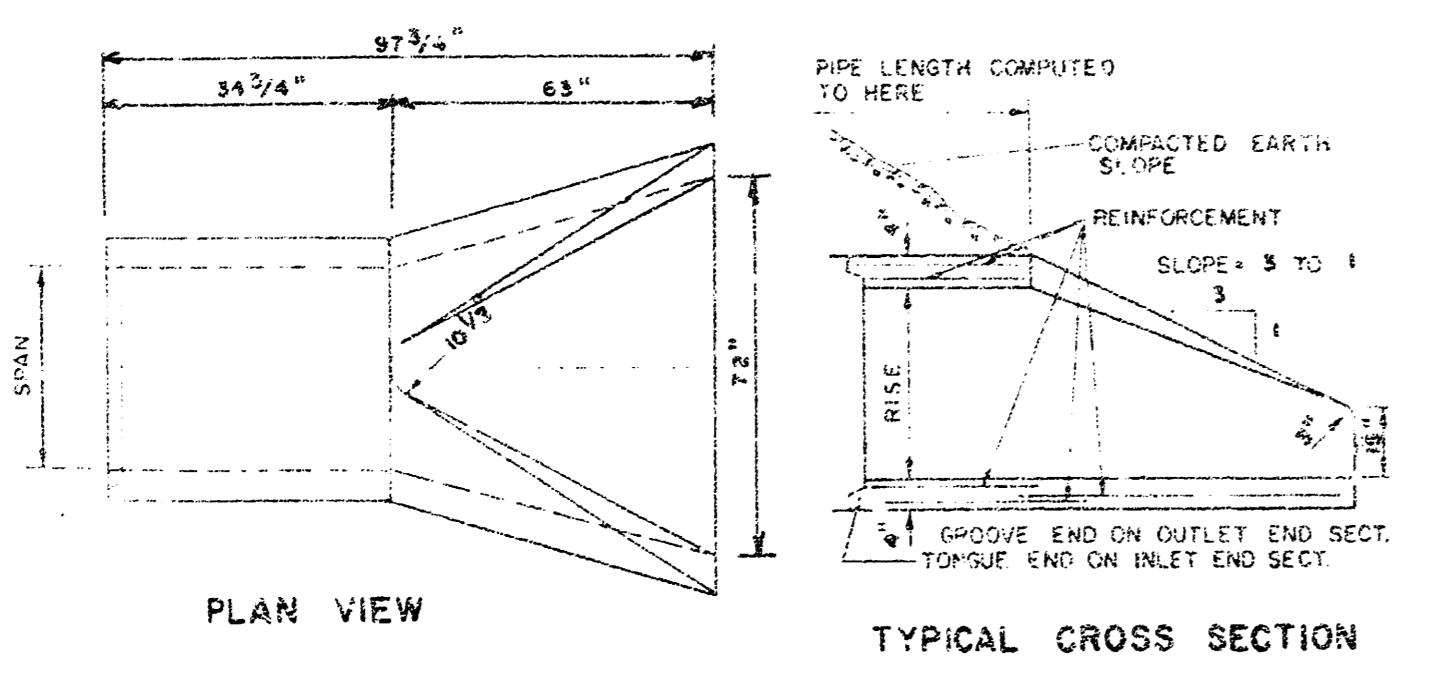
**TYPICAL DRAINAGE DITCH**

See Sheet 1 Note 4



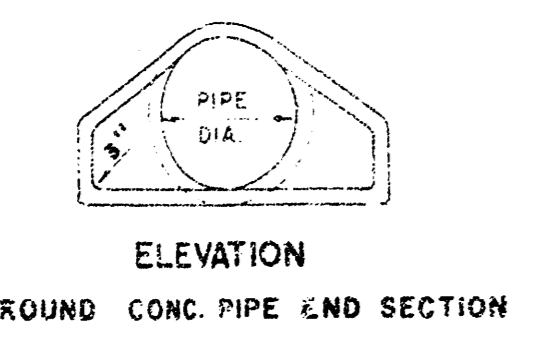
**TYPICAL SECTION**

**MODIFIED TOP FOR A TYPE IA CURB INLET**



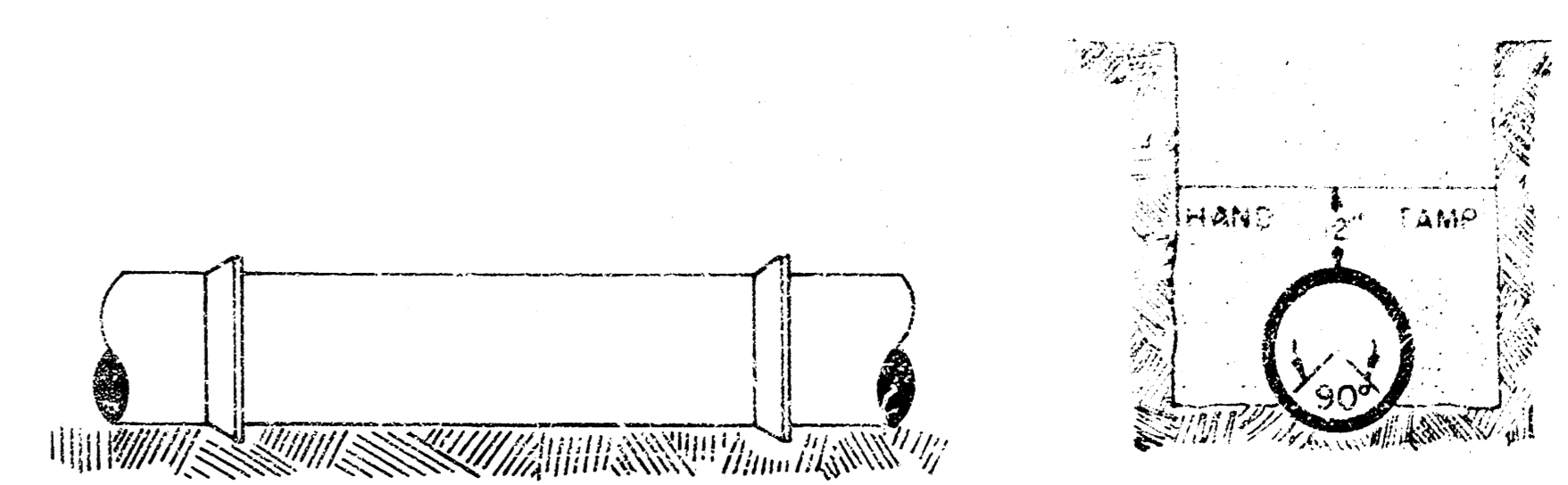
**PLAN VIEW**

**TYPICAL CROSS SECTION**

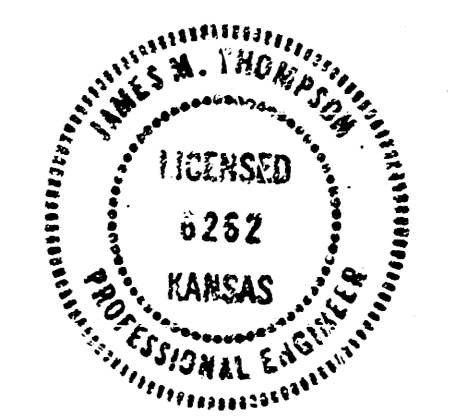


**ELEVATION**

**36" R.C. FLARED END SECTION**



**ORDINARY BEDDING METHOD**  
STORM SEWER PIPE



<b>dp</b>	CITY OF WICHITA Dept. Public Works	
	MISC. DRAINAGE DETAILS	
	ENGINEER JMT	ENG. TECH. JW
	DRAWN BY JLW	SCALE 1/4" = 1'-0"
POE & ASSOCIATES CONSULTING ENGINEERS	DATE: SEPT. 1979	SHEET 6 / 4