

# STORM WATER SEWER IMPROVEMENTS TO SERVE AUTOZONE

Private Project Number  
**755 PPS (607861)**

CITY OF WICHITA, KANSAS

Incorporated 1857, Reincorporated 1906, City of Wichita, Kansas

## GENERAL NOTES:

1. Contractor will be required to provide notice to utility companies a minimum of twenty-four (24) hours prior to any excavation, as follows:

Kansas One-Call 687-2470

The Contractor must notify the following in case of an emergency:

Cablevision	262-4270
or	263-2061
K.P.L. Gas Service Company	263-7511
Kansas Gas & Electric Company	264-1141
Arka Gas Company	942-8350
or	263-8161
Southwestern Bell Telephone Company	1-571-2611
City of Wichita Water Department	268-4908
City of Wichita Sewer Maintenance	268-4071

2. Underground utility service lines and overhead utility pole lines are to be adjusted as necessary by others prior to construction unless the plans specifically call for their adjustment by the Contractor or unless the plans specifically identify a utility to be adjusted by its owner during construction. Existing utilities and their location, as shown on the plans, represent the best information obtainable for design. The Contractor will be required to work around existing utilities within the right-of-way which do not conflict with proposed construction.

3. The Contractor shall be responsible for preserving property irons. The Contractor will be required to re-establish any property irons which are damaged or destroyed by his construction operations. Such irons shall be re-established by a licensed land surveyor in accordance with state laws.

4. Contractor shall not start work on the project until the project inspector is assigned to the project and is present on the site. Any work done without inspection will be required to be uncovered for inspection.

5. All areas disturbed by construction operations shall be seeded with rye grass at a rate of 300 lbs/acre immediately following construction in that area. Ground shall be prepared per City of Wichita specifications prior to seeding.

6. The Contractor shall notify pipeline companies at least 24 hours in advance of any work being performed across and/or adjacent to pipelines.

7. Trees and shrubs in public right-of-way which are in direct conflict with proposed new construction shall be removed by the Contractor with the Engineer's approval. Trees and shrubs which are not in direct conflict with proposed new construction shall be saved and protected from damage.

8. The Contractor shall give all property owners and/or tenants of developed property abutting the construction of this project a minimum of ten (10) days advance notice prior to start of construction.

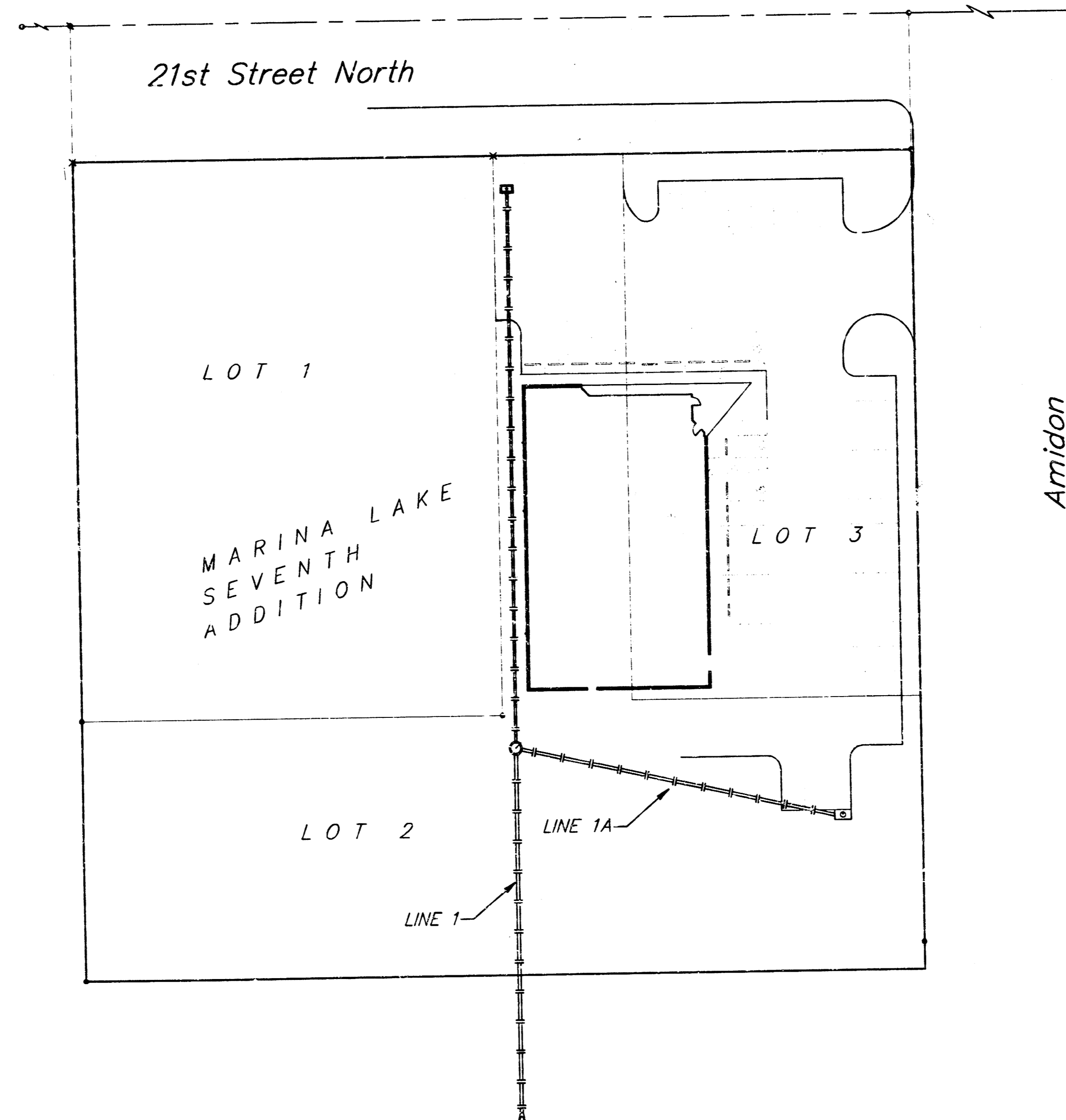
9. Rubble from the removal of miscellaneous structures and excess excavation which is to be wasted shall be disposed of on sites to be provided by the Contractor. These sites shall be approved by the engineer as to suitability, appearance and site location. Locations that, in the opinion of the Engineer, will leave an unsightly appearance will not be approved.

## BENCHMARK:

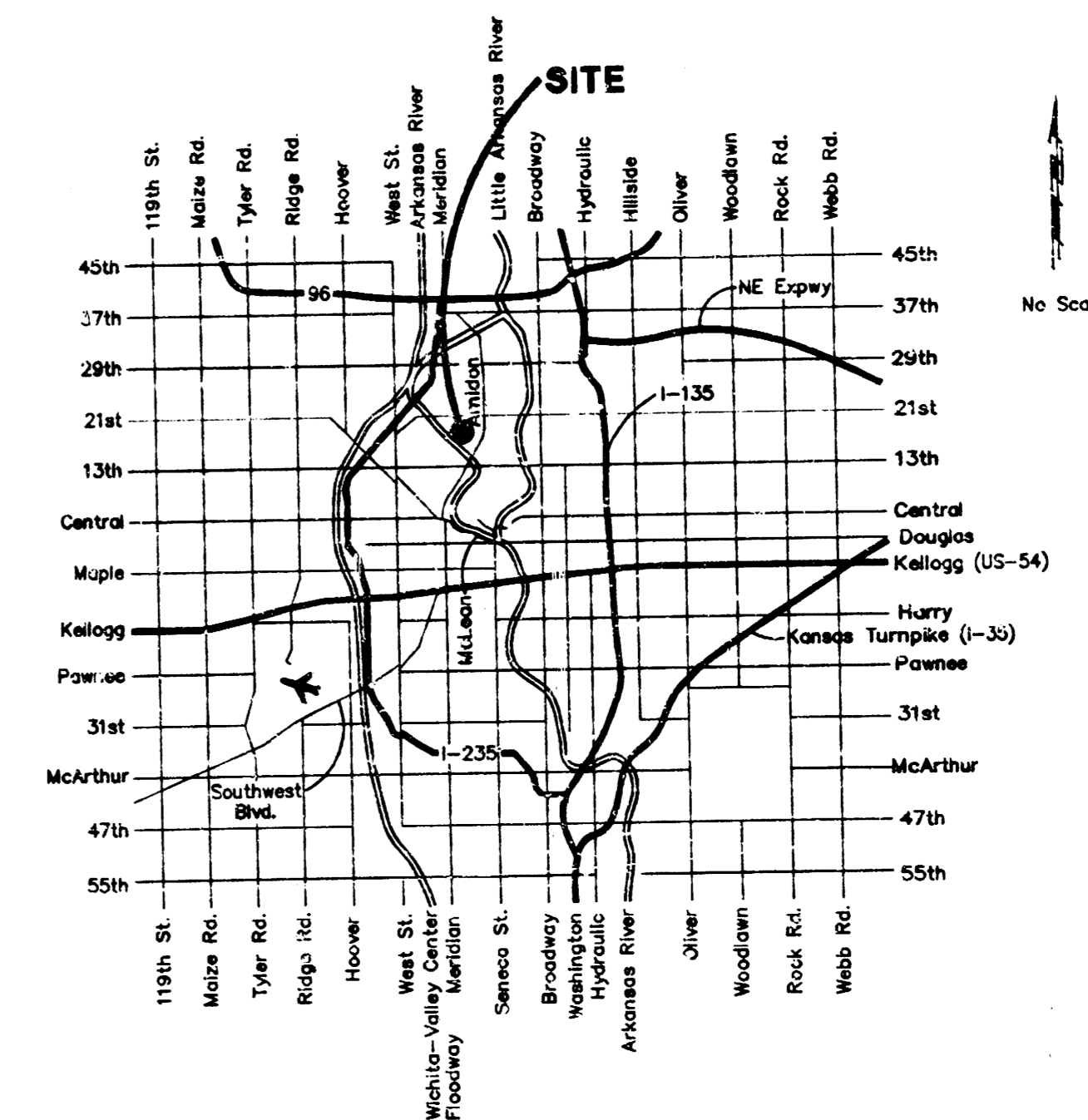
"3" Cut in South Side of Sidewalk at NE Corner Lot 1, Marina Lakes Addition.  
Elevation = 125.54 (City Datum)

## INDEX:

- 1 Title Sheet
- 2 Storm Water Sewer Line 1
- 3 Type 1 Curb Inlet Detail
- 4 Shallow Manhole Detail
- 5 2'x4' Drop Inlet Detail
- 6 Copy of Marina Lake Seventh Addition Plat



SCALE:  
1" = 40'



BOOKED  
7-22-98  
D.397  
MCG

APPROVED AS NOTED  
BY CITY ENGINEER OF WICHITA

Storm Sewers VRH 11/13/97

NOTE TO CONTRACTORS

Inspection and testing for this project is to be provided by a Licensed Consulting Engineering Firm under contract with the Owner/Developer. Said inspection to be in accordance with the City of Wichita standard construction engineering practices and certified by a Licensed Professional Engineer. No work shall be performed in dedicated easements or public right-of-way by the Contractor without such inspection nor shall any work be commenced without written authorization by the City Engineer. All Construction and Materials shall comply with the City of Wichita Specifications and Standards (on file and available in the City Engineer's Office).

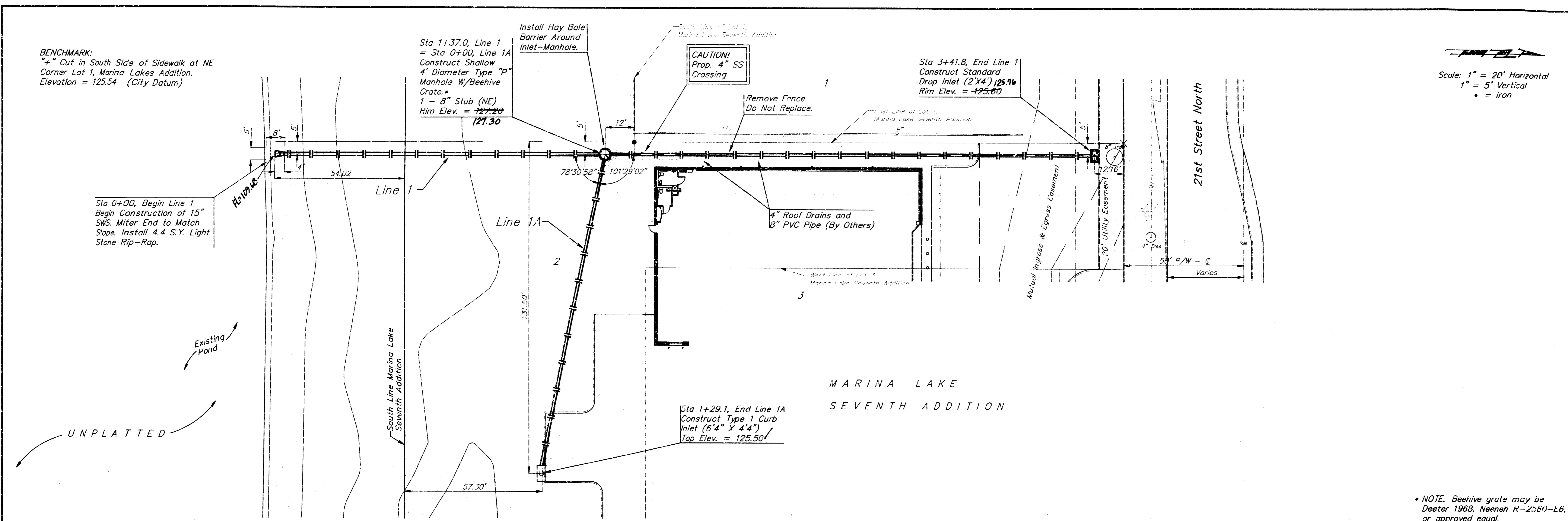


PROJECT INSPECTED BY L.P. BAUGHMAN COMPANY P.A.  
AS BUILT 1-21-98 BAUGHMAN CO. DJ

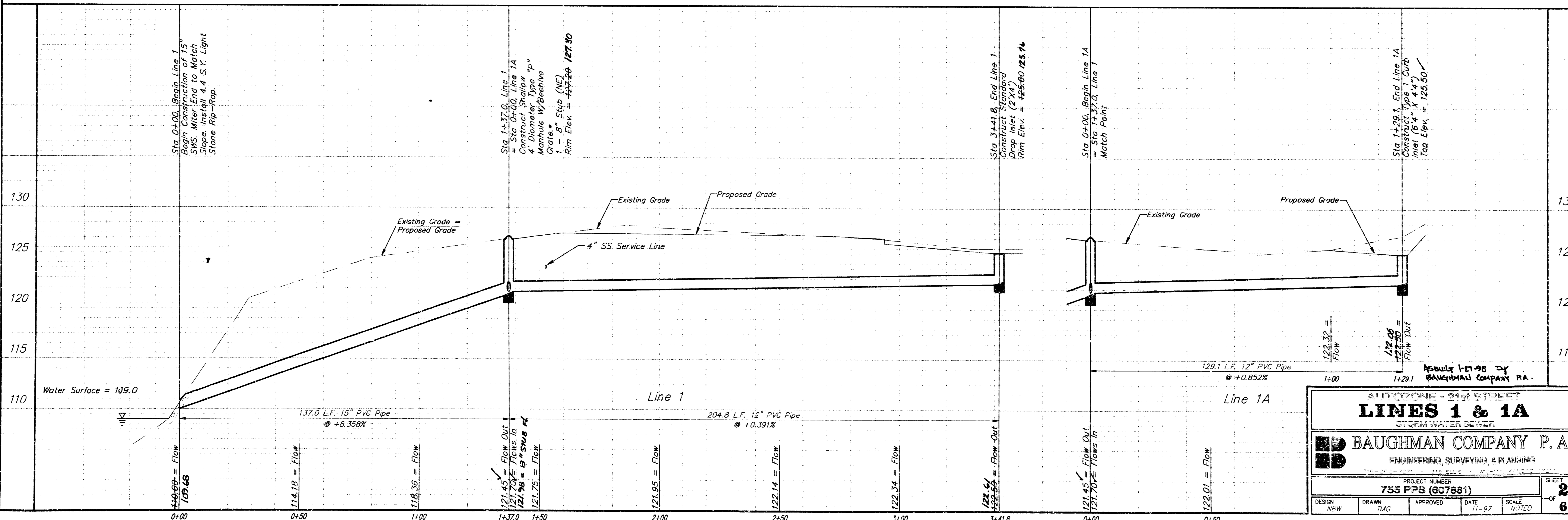
**BAUGHMAN COMPANY P. A.**  
ENGINEERING, SURVEYING, & PLANNING

BENCHMARK:  
 "+" Cut in South Side of Sidewalk at NE  
 Corner Lot 1, Marina Lakes Addition.  
 Elevation = 125.54 (City Datum)

Scale: 1" = 20' Horizontal  
 1" = 5' Vertical  
 • = Iron



\* NOTE: Beehive grate may be  
 Deeter 1968, Neenen R-2560-L6,  
 or approved equal.



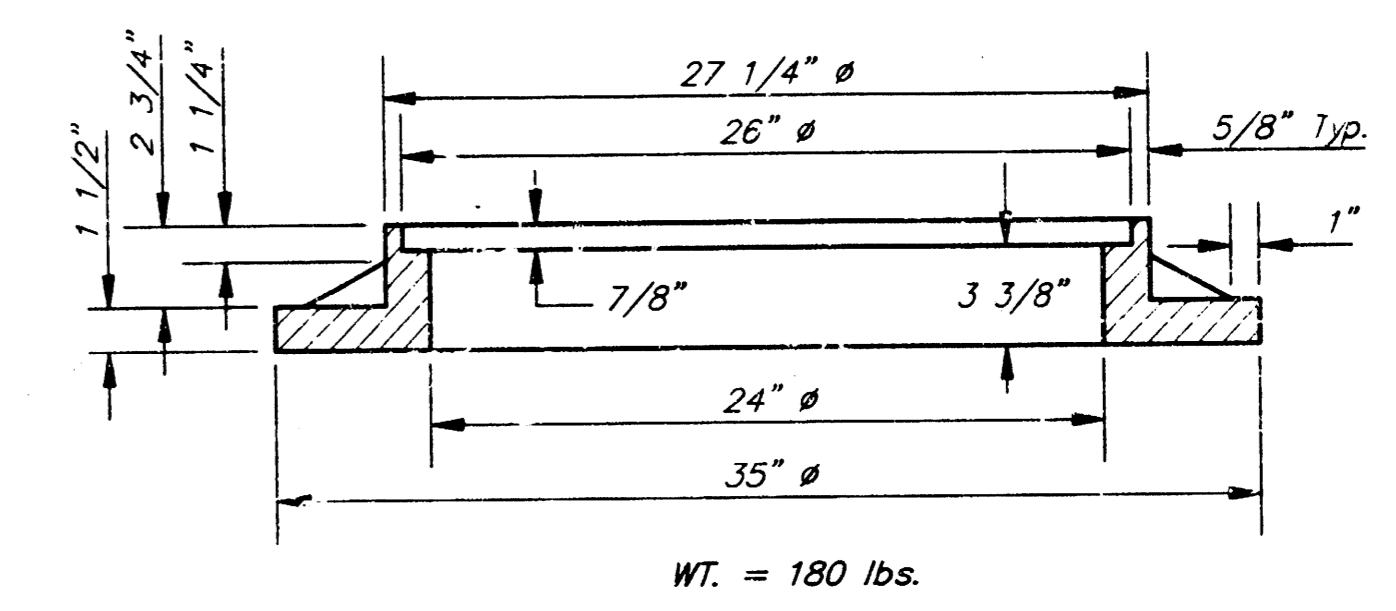
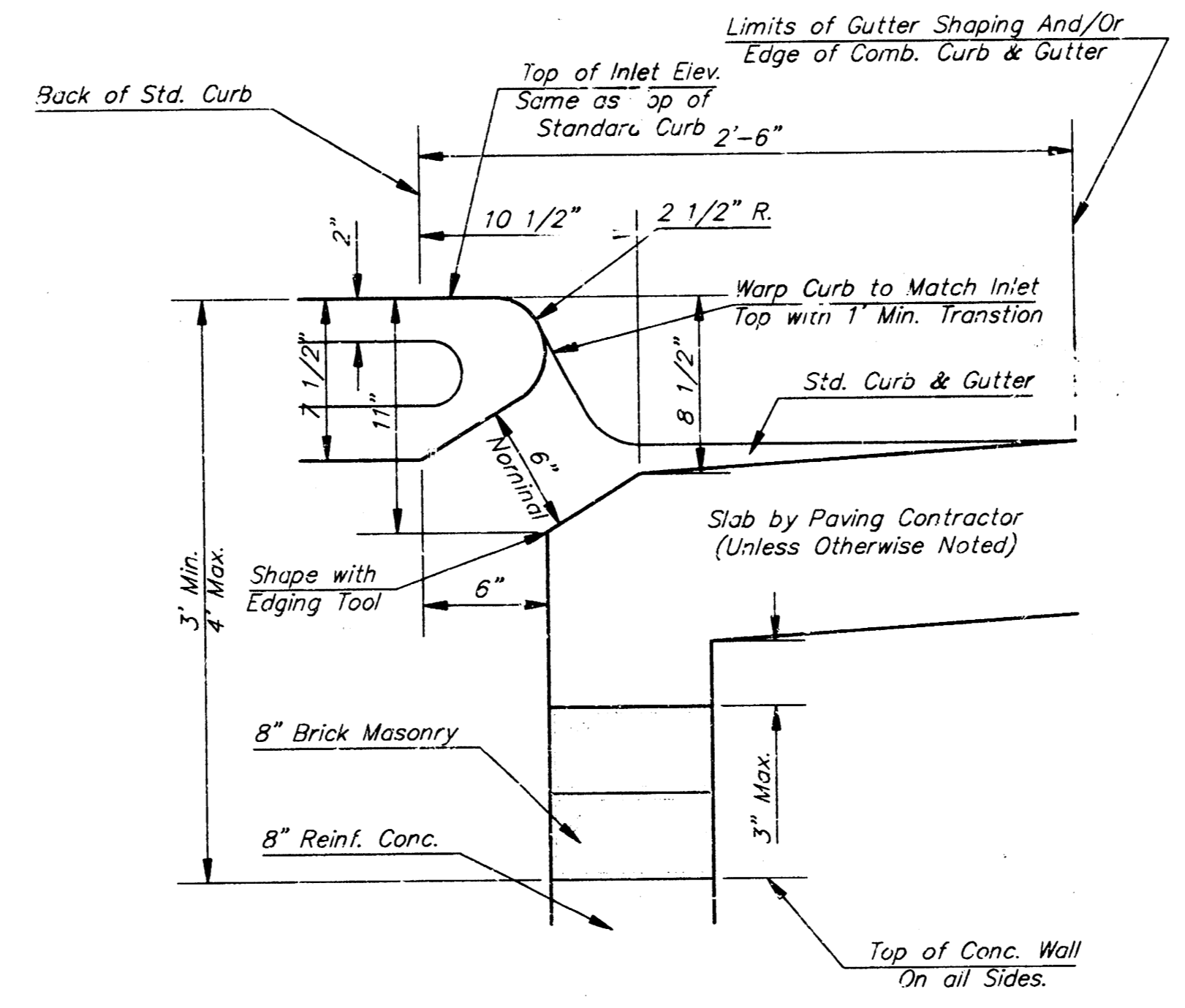
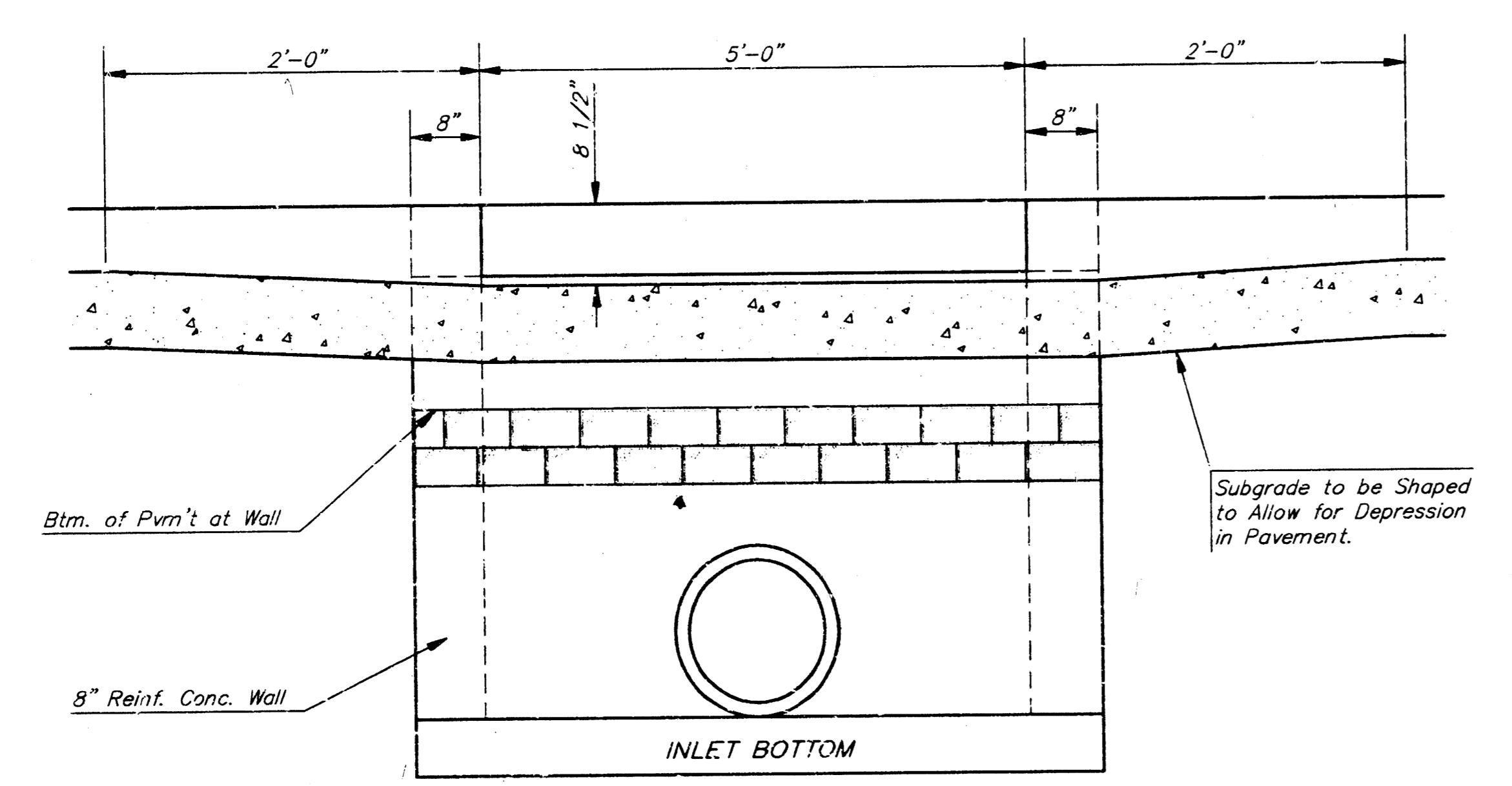
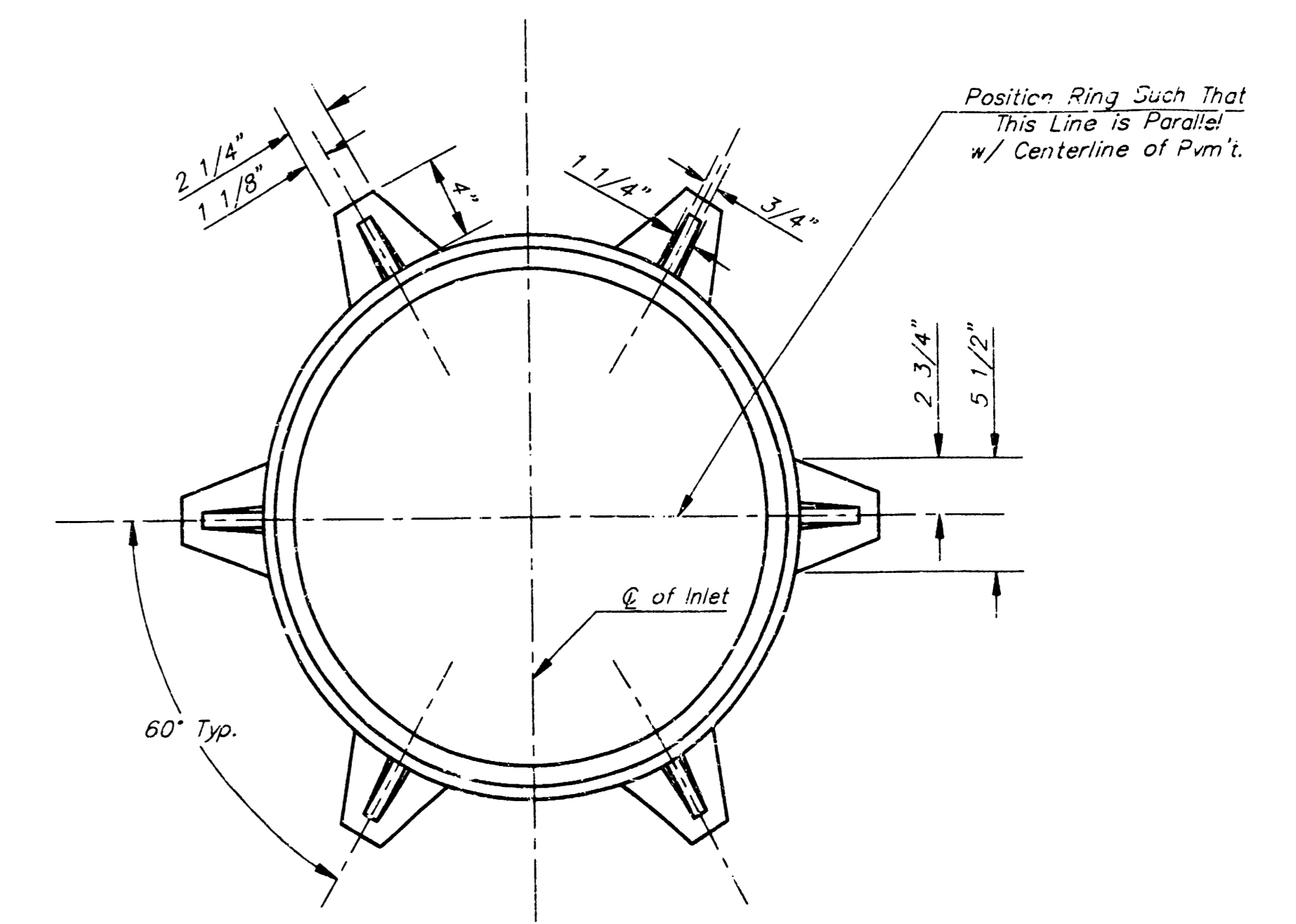
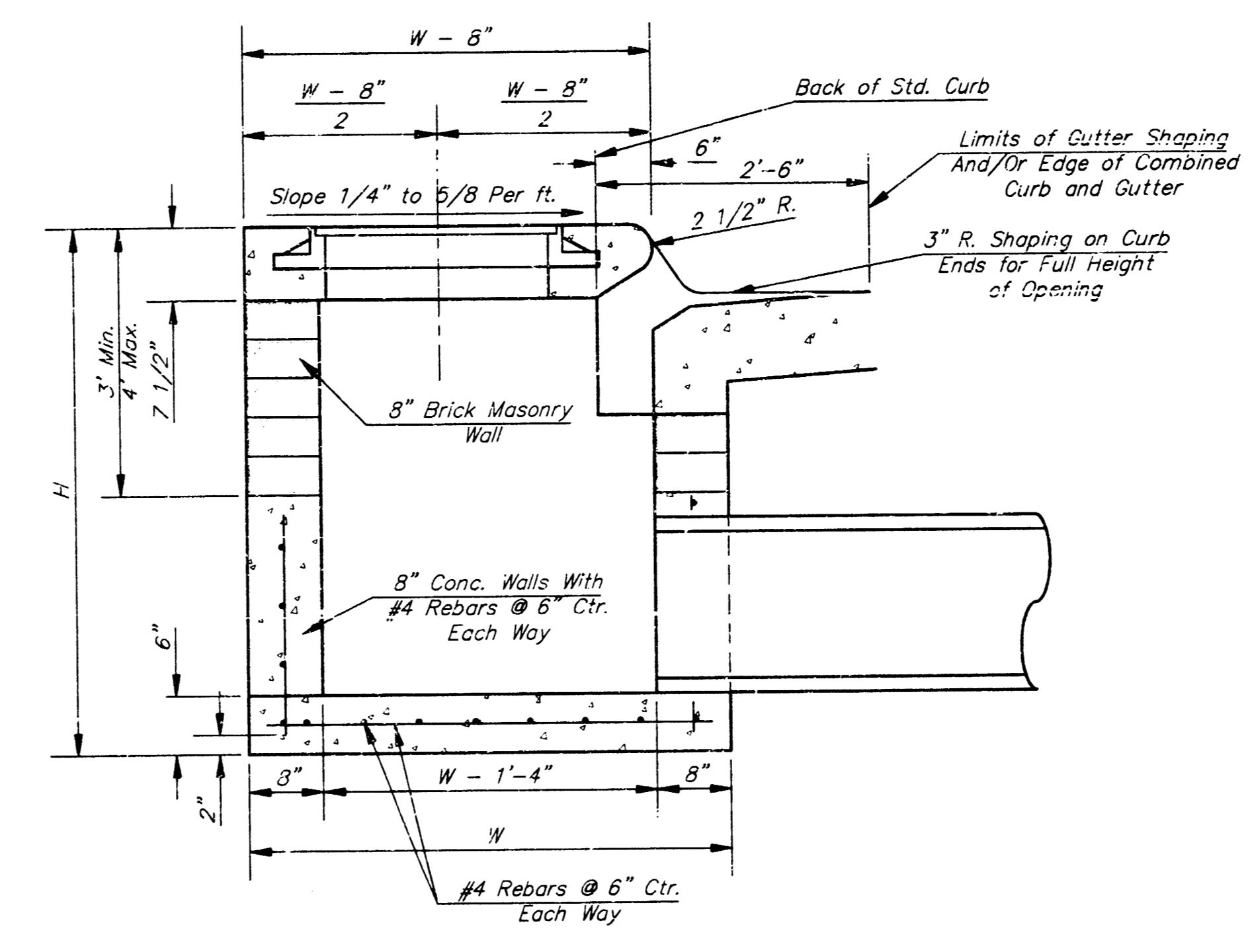
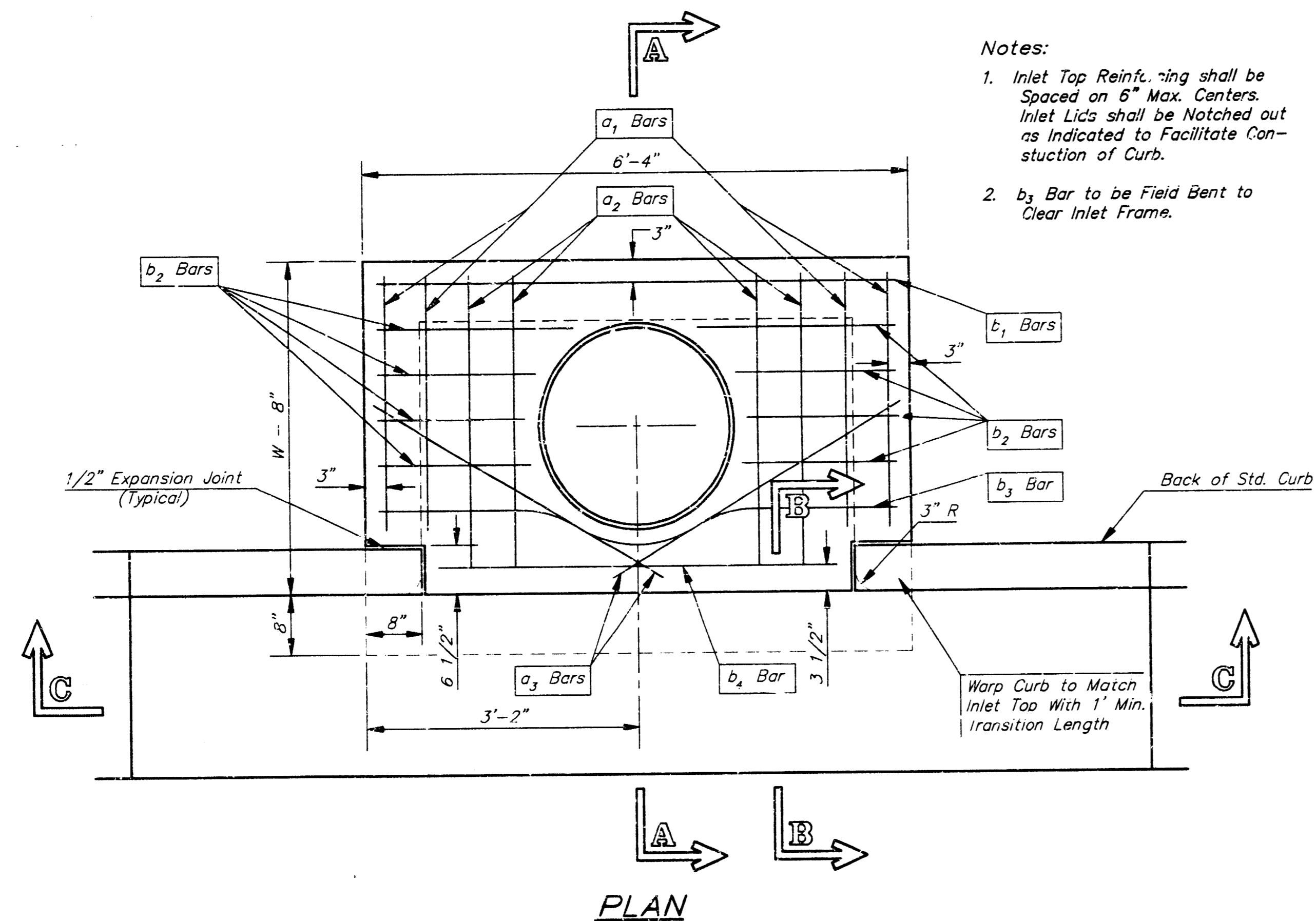
ASHTON - 21st STREET  
**LINES 1 & 1A**  
 STORM WATER SEWER

**BAUGHMAN COMPANY P.A.**  
 ENGINEERING, SURVEYING, & PLANNING

PROJECT NUMBER  
**755 PFS (S07881)**

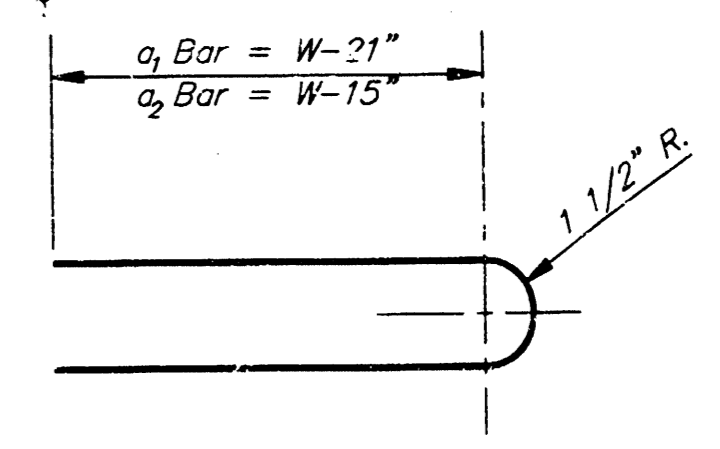
DESIGN: NWB    DRAWN: TMC    APPROVED: [Signature]    DATE: 11-97    SCALE: NOTED

SHEET **2** OF **6**



**MANHOLE RING AND COVER**

\*See City of Wichita Standard Manhole Ring and Cover Detail Sheet for Cover Details to Be Used With Inlet Frame.



**BENDING DIAGRAM**

**STEEL SCHEDULE**

BAR	b <sub>1</sub>										WT. Lbs.	
	a <sub>1</sub>	a <sub>2</sub>	a <sub>3</sub>	W-4'-4"	W-5'-1"	W-6'-4"	W-7'-4"	W-8'-4"	b <sub>2</sub>	b <sub>3</sub>		b <sub>4</sub>
NUMBER	4	4	2	1	3	5	7	9	6	1	1	
SIZE	#4	#4	#4	#4	#4	#4	#4	#4	#4	#4	#6	
LENGTH	W-4'-4"	5'-7"	6'-7"	4'-0"	6'-1"	-	-	-	1'-9"	6'-2"	4'-8"	60±
	W-5'-4"	7'-7"	8'-7"	5'-0"	-	6'-1"	-	-	1'-9"	6'-2"	4'-8"	81±
	W-6'-4"	9'-7"	10'-7"	6'-0"	-	-	6'-1"	-	1'-9"	6'-2"	4'-8"	101±
	W-7'-4"	11'-7"	12'-7"	7'-0"	-	-	-	6'-1"	-	1'-9"	6'-2"	121±
W-8'-4"	13'-7"	14'-7"	8'-0"	-	-	-	-	6'-1"	1'-5"	6'-2"	141±	

Note: a<sub>3</sub> Bars to be Placed Approx. 2" Below Top of Inlet Cover.

**STANDARD CURB INLET PRECAST TOPS**

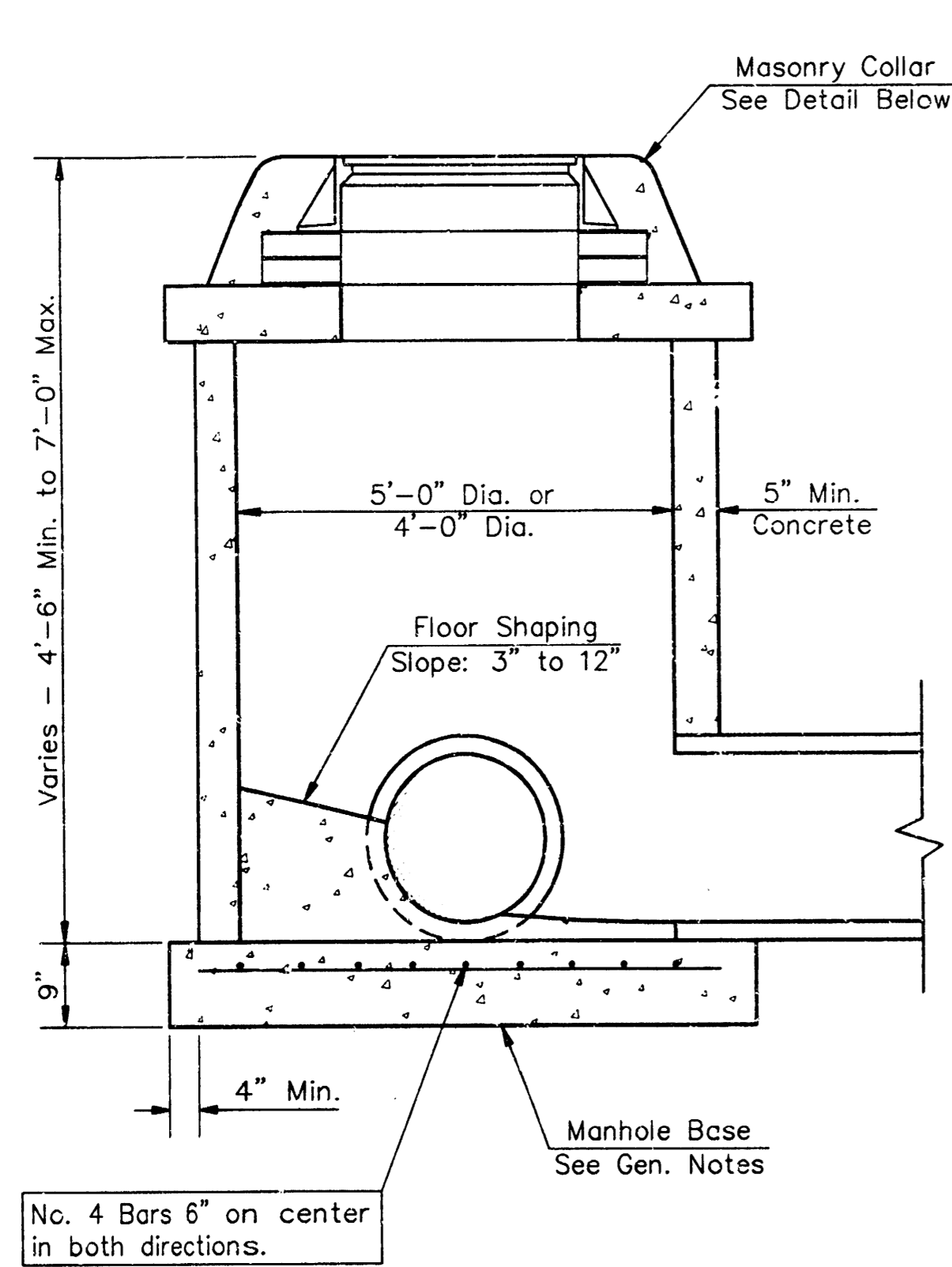
W	PRE-CAST TOP SIZE	PIPE SIZE	CU. YD. CONC.
4'-4"	3'-8" 6'-4" 7 1/2"	21" & SMALLER	0.38±
5'-4"	4'-8" 6'-4" 7 1/2"	24" & 30"	0.51±
6'-4"	5'-8" 6'-4" 7 1/2"	36" & 42"	0.64±
7'-4"	6'-8" 6'-4" 7 1/2"	48" & 54"	0.77±
8'-4"	7'-6" 6'-4" 7 1/2"	60" & 66"	0.90±

**GENERAL NOTES**

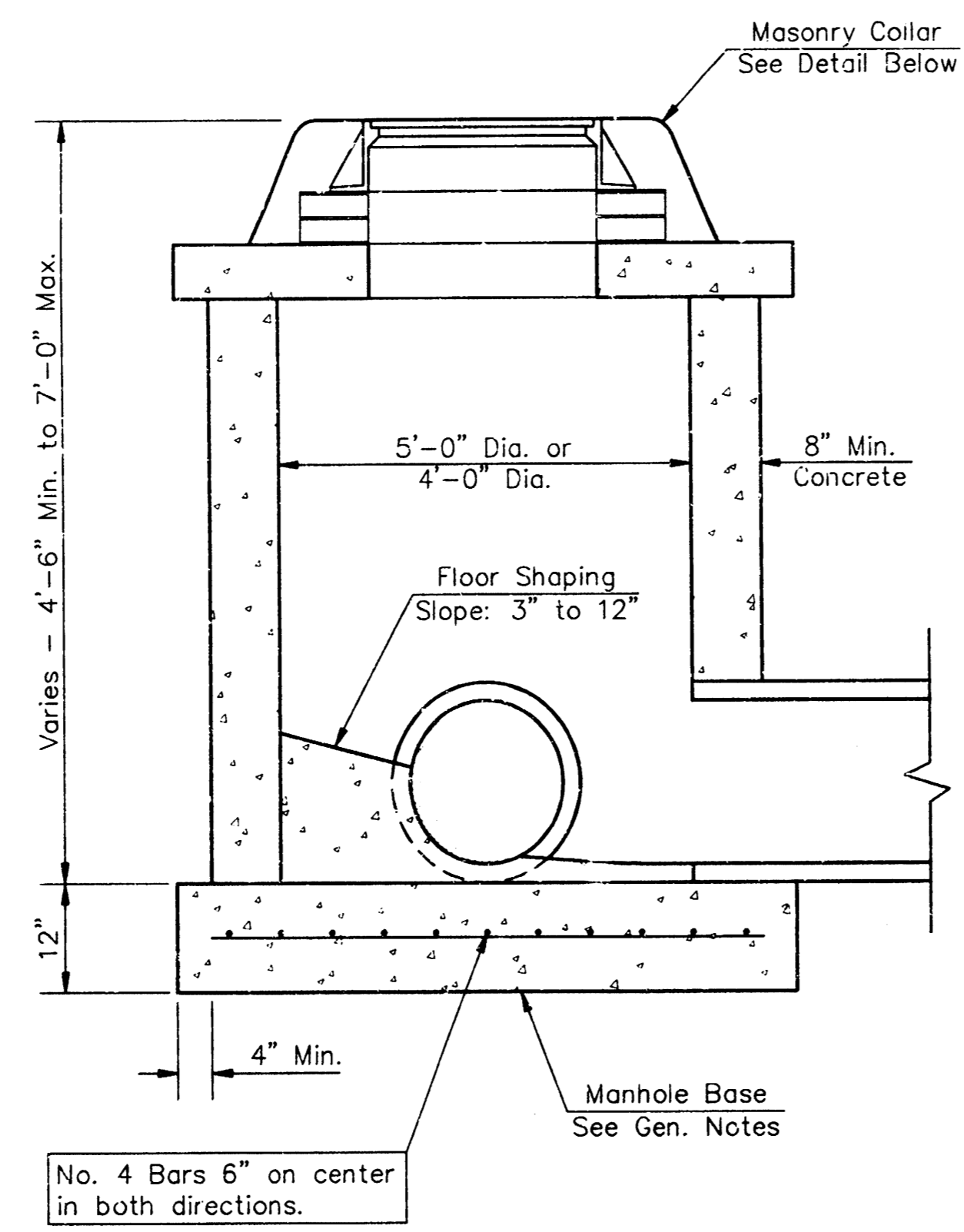
- Concrete tops to be installed on thin mortar cushion to insure full support along brick walls. Concrete tops may be cast in place or precast. Concrete used for inlet construction shall be concrete pavement mix.
- Contractor shall have the option of constructing 8" brick masonry walls between the concrete inlet base and top on this inlet when W=6'-4" and H=7'-0" or less.
- Inlet invert shall be shaped with 8 sack sand mix concrete to create flow channels and to increase hydraulic efficiency such that the inlet will be self cleaning between all inlet and/or outlet pipes.
- The ends of all pipes installed in inlets shall be cut off flush with the inside face of the inlet wall.

Revised - Dec. 21, 1984

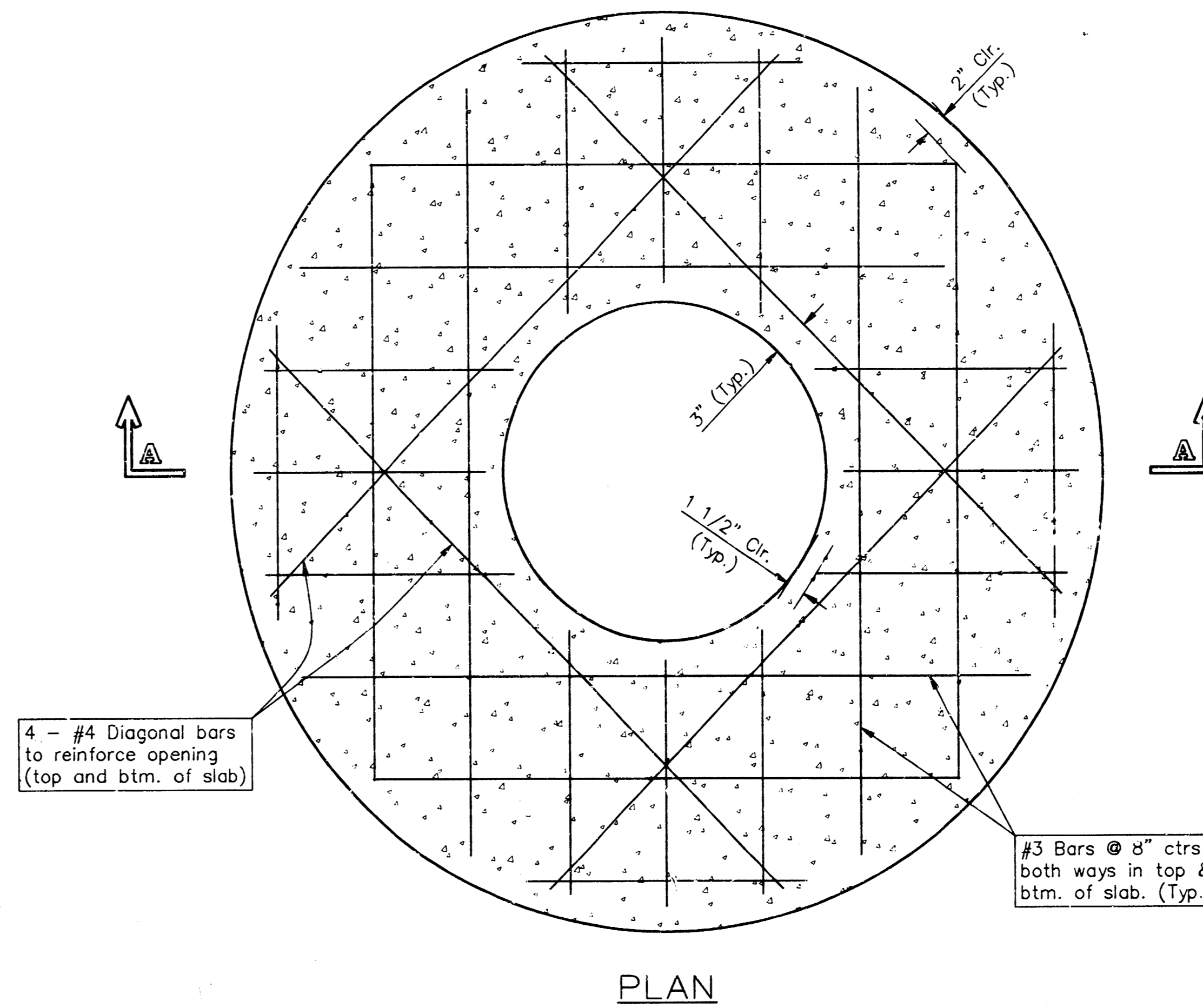
CITY OF WICHITA, KANSAS  
**TYPE 1 CURB INLET**  
 INLET OPENING = 6" X 5'-0"  
**BAUGHMAN COMPANY P. A.**  
 ENGINEERING, SURVEYING, & PLANNING  
 110-262-7271 • 316 ELLIS • WICHITA, KANSAS 67211  
 PROJECT NUMBER  
**755 PPS (607861)**  
 SHEET **3** OF **6**  
 DESIGN: [ ] DRAWN: [ ] APPROVED: [ ] DATE: 11-17 SCALE: NONE



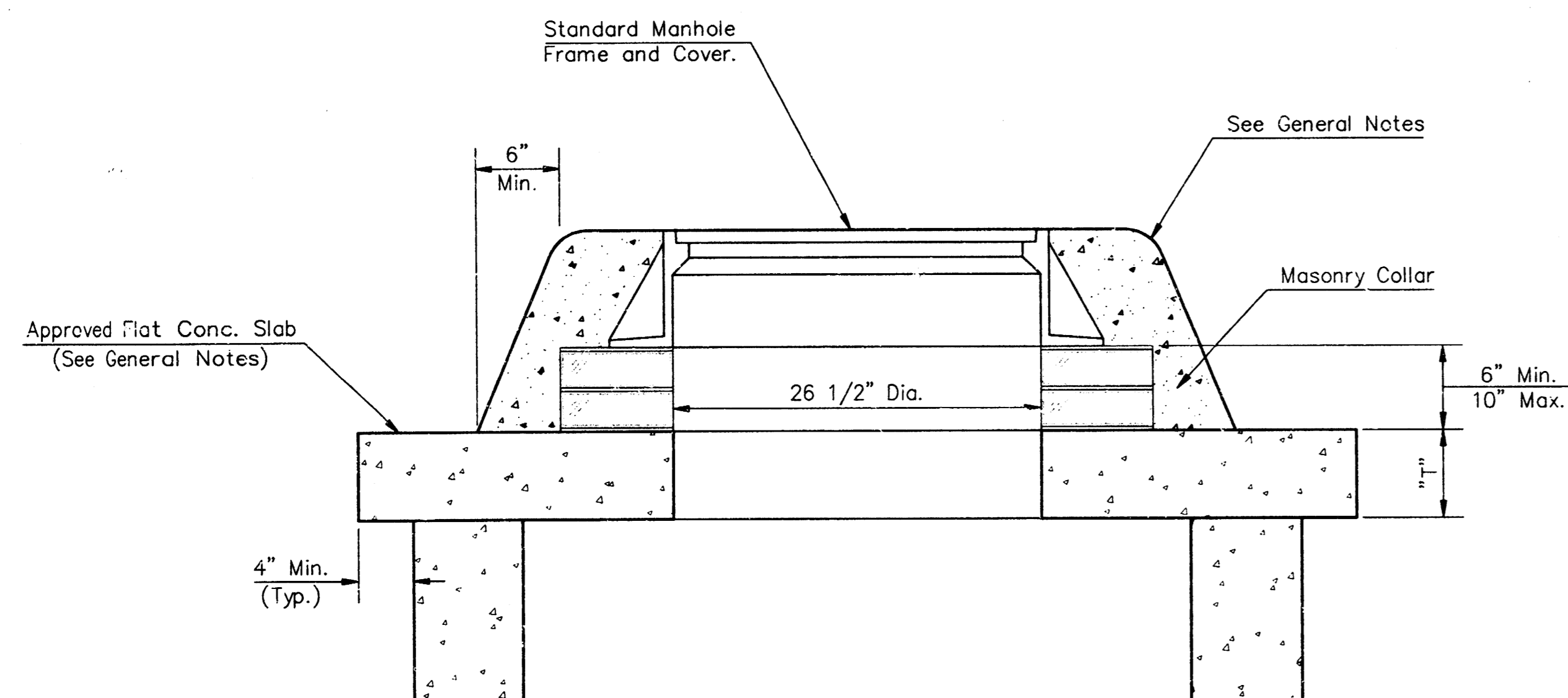
**SHALLOW TYPE "P" MANHOLE**



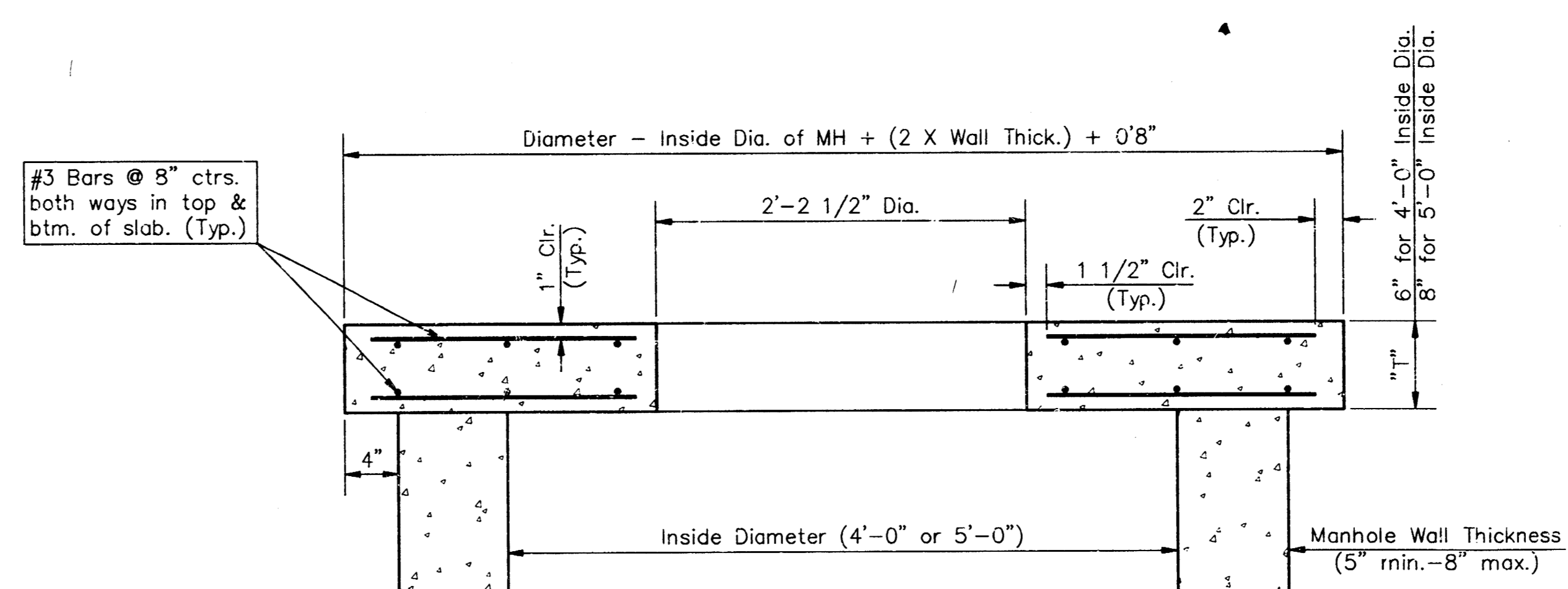
**SHALLOW TYPE "C" MANHOLE**



**PLAN**



**MASONRY COLLAR DETAIL**



**SECTION A-A**

**FLAT CONCRETE SLAB DETAILS**

**GENERAL NOTES**

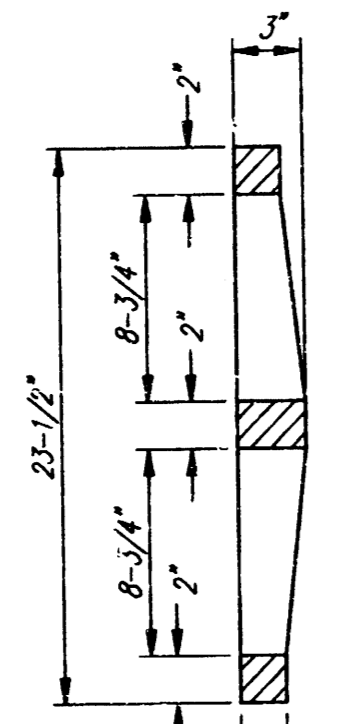
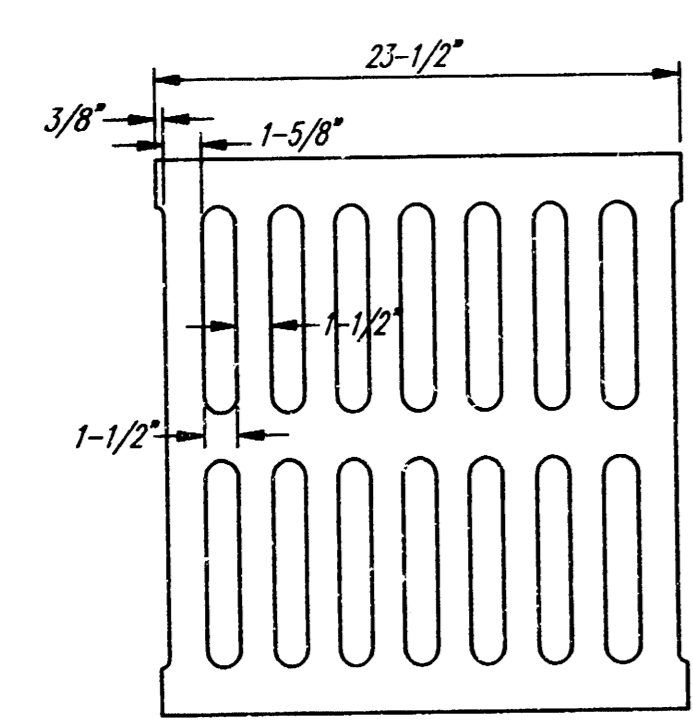
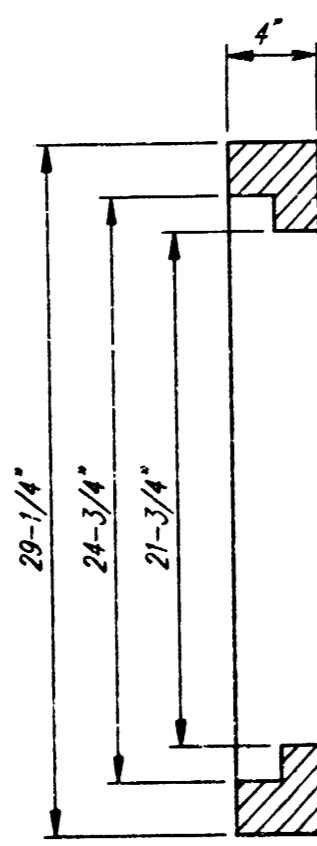
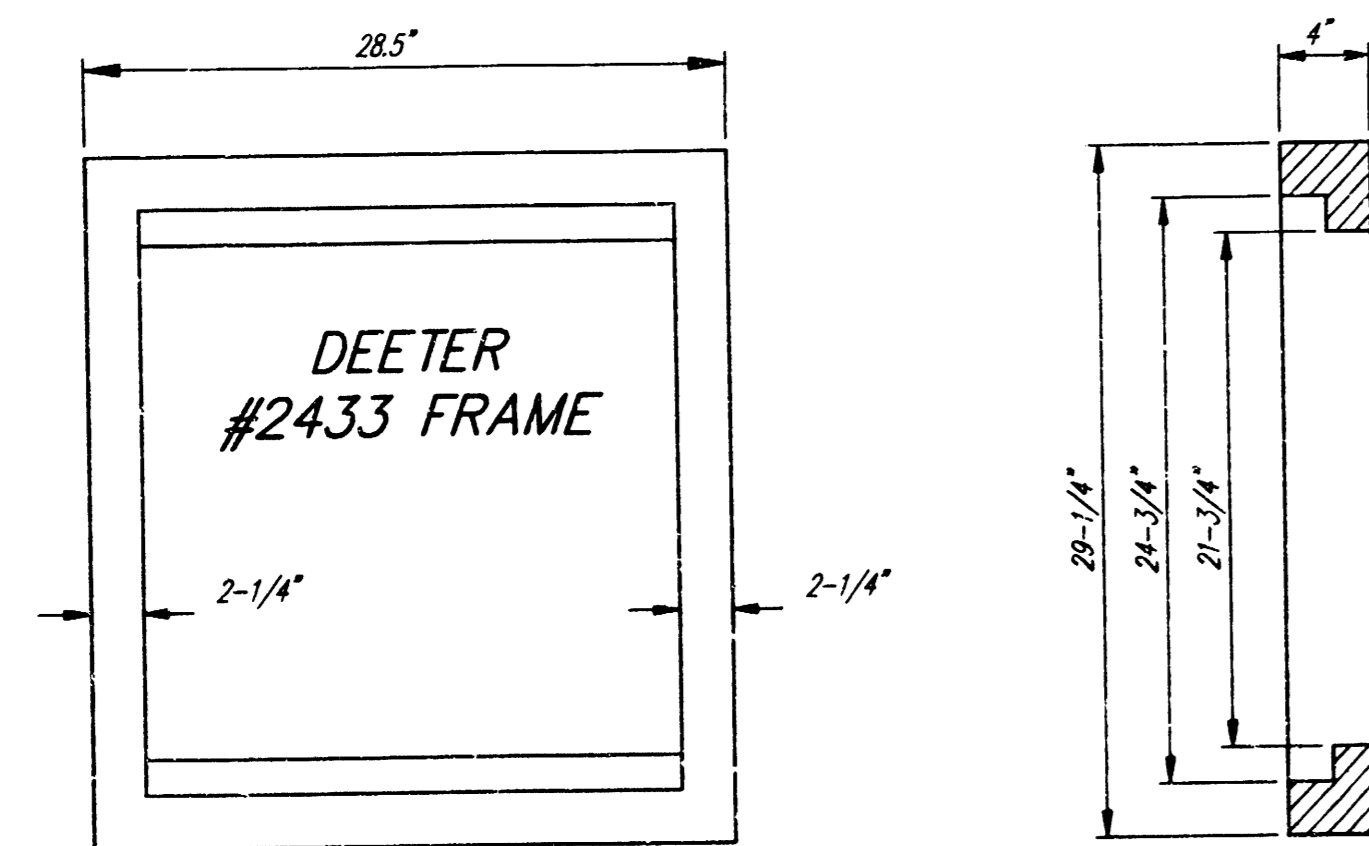
- Mortar used in masonry construction shall contain 8 sacks of cement per cubic yard. Concrete used in manhole bases shall conform to the requirements of concrete for concrete pavement construction as specified in the city standard paving specifications using city concrete cement mix without air entraining admixture. Mortar shall be placed around the manhole ring as shown on the drawings when manholes are constructed in unpaved areas. Manholes constructed where pipe sizes are smaller than 24" shall have an inside diameter of 4". Manholes constructed where pipe sizes are 24" or larger shall have an inside diameter of 5". Completed manhole shall be without leaks and water tight.
- Reinforcing steel shall be installed in the manhole bases and shall consist of no. 4 bars placed on 6" centers in both directions. The manhole base reinforcement shall be placed 5" above the bottom of the manhole base. All costs for furnishing and installing reinforcing steel shall be included in the unit price bid for the manhole.
- The floors of all manholes shall be shaped with flow channels such that the manholes will be self cleaning and free of areas where solids could be deposited as sewage flows through the manhole from oil inlet pipes to the outlet pipe. Flow channels shall be formed to match the bottom halves of the inflowing pipes and the outflowing pipe as shown on the drawings. Manhole floors shall have slopes of 3 inches per foot in the areas outside of the flow channels sloped toward the flow channels. Pipes laid through manholes shall have the top half removed to neat lines for the full inside diameter of the manhole. Manhole floors shall then be shaped around the bottom half of the pipe which forms the flow channel.
- Pipes installed within the excavation made for the manhole shall be cradled with concrete to the limits of the manhole excavation. When clay pipe is used, the cradle shall extend to the first joint outside the manhole. The cradle shall be terminated at the clay pipe joint in a manner which will maintain the flexibility of the joint. Cost of cradle within manhole excavation or to clay pipe joints adjacent to manhole shall be included in the unit price bid for the manhole.
- Manhole cover castings and manhole frame castings shall conform to the requirements as indicated in the standard specifications and as shown in the standard detail drawings.
- The crowns of inflowing pipes shall never be set lower than the crown of the outflowing pipe.
- Standard shallow manholes type "P" and "C" shall be paid for at the unit price bid per each for the type and diameter indicated. All standard shallow manhole diameters will be 4' unless indicated otherwise.
- All brick used in manhole construction shall meet Grade SW of ASTM C652 or C62-87.

**CITY OF WICHITA, KANSAS**  
**STANDARD SHALLOW MANHOLES**  
**TYPE 'P' AND TYPE 'C'**

PROJECT NUMBER: **755 PPS (607861)** SHEET / OF: **4 / 6**

**BAUGHMAN COMPANY P. A.**  
 ENGINEERING & SURVEYING  
 316/262-7271 • 315 ELLIS • WICHITA, KANSAS 67211

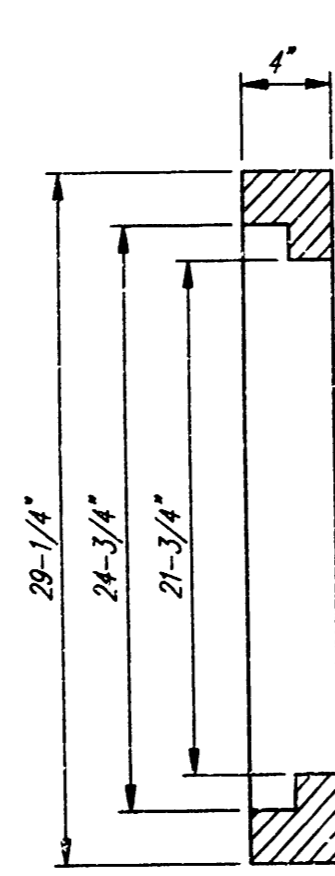
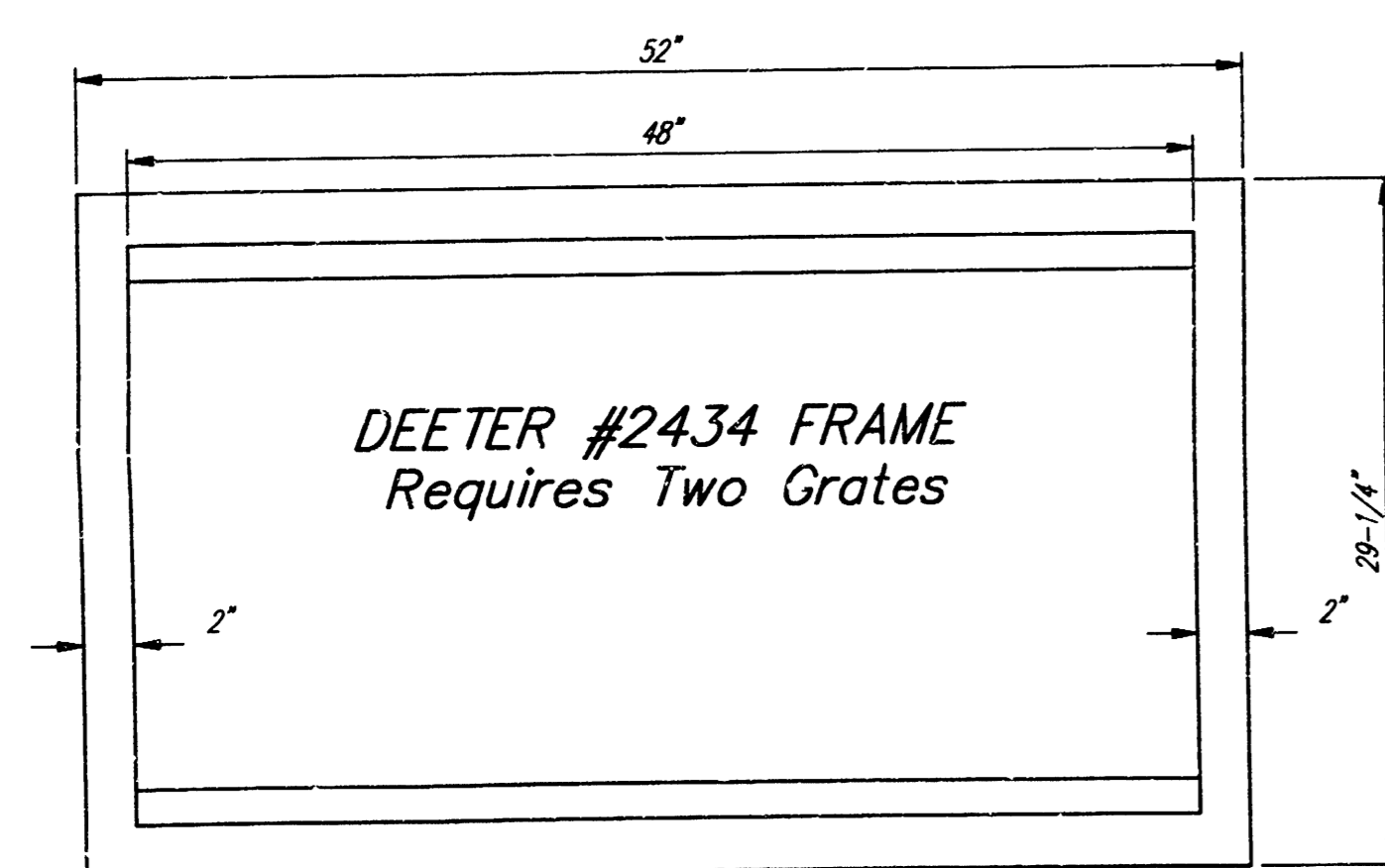
DETAIL\SHL\MMH2.DWG



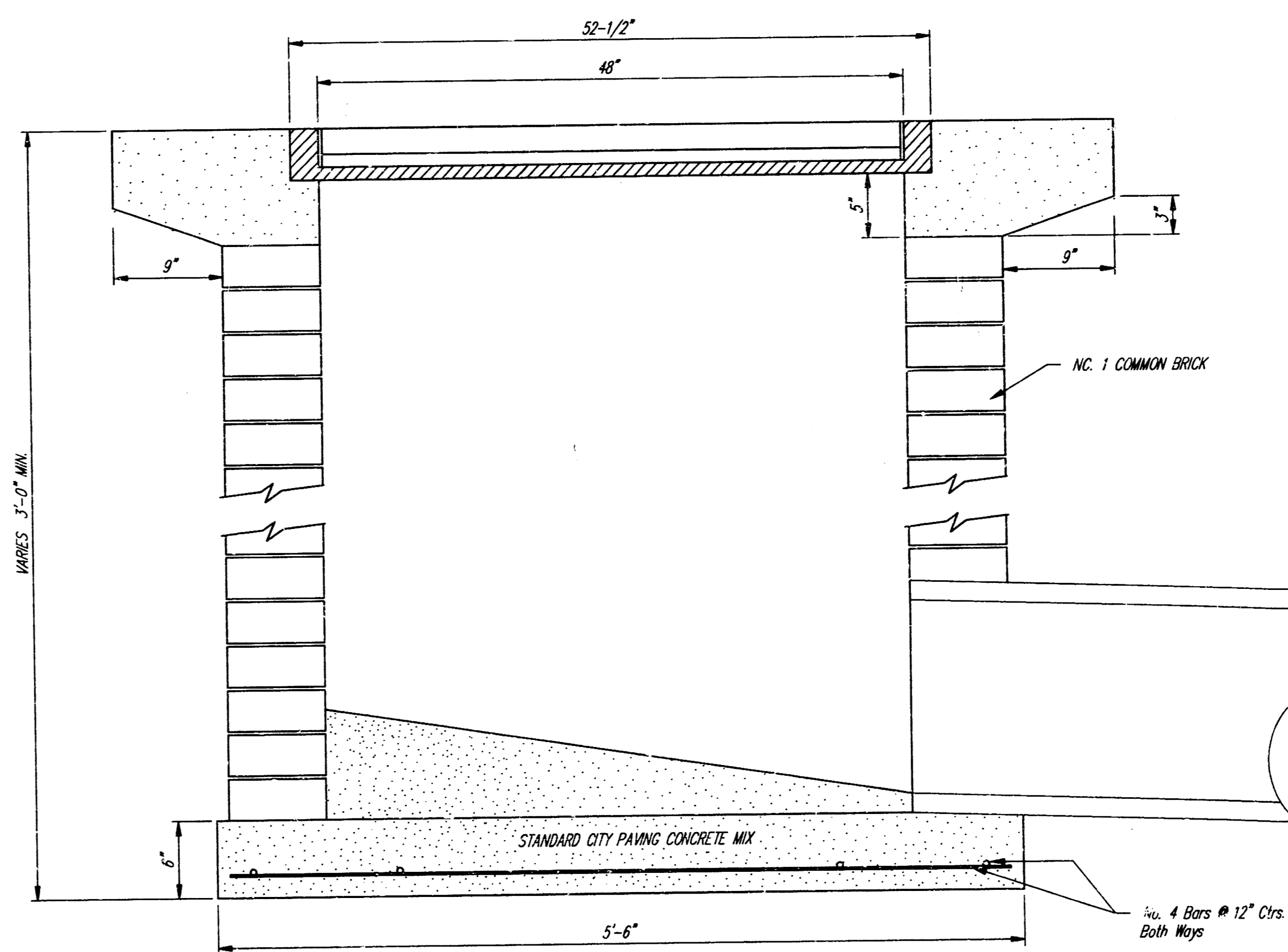
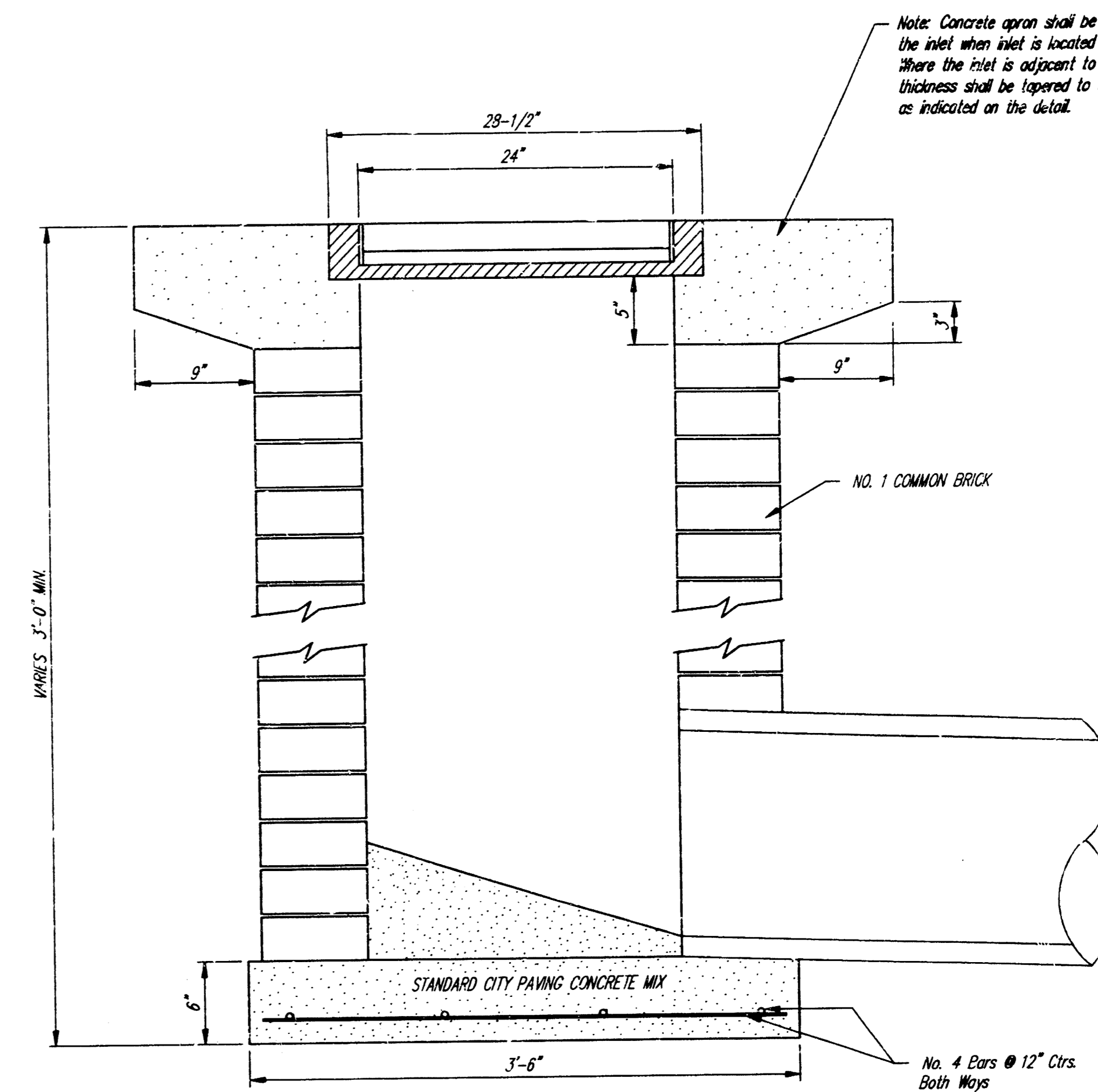
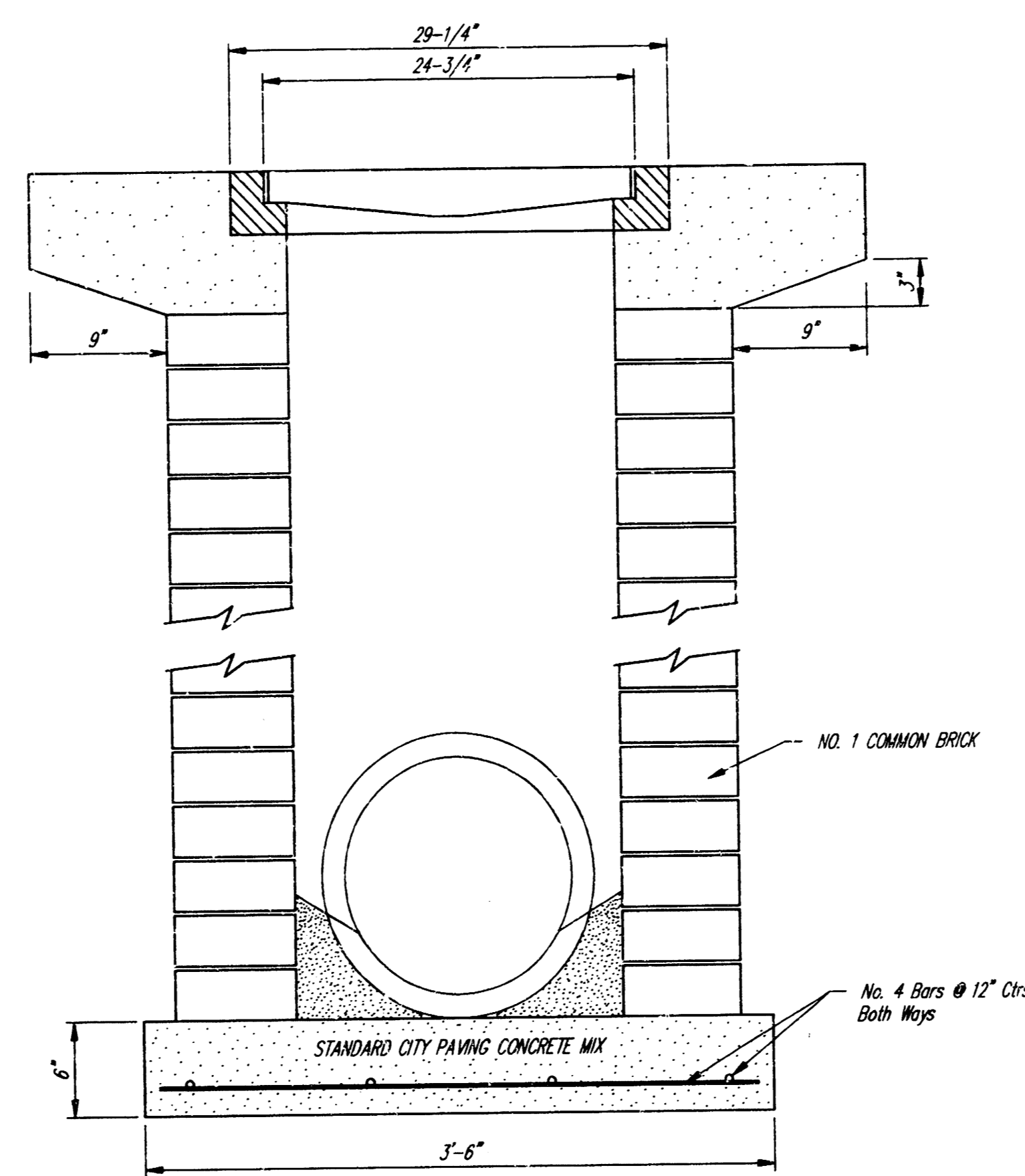
DEETER #2433 GRATE

24" x 24" Frame and Grate Detail

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 approved by the engineer.



Double 24" x 24" Frame Detail



City of Wichita Standard			
<b>Drop Inlet</b>			
<b>BAUGHMAN COMPANY P. A.</b>			
ENGINEERING, SURVEYING, & PLANNING			
316-262-7271 • 315 S. LUIS • WICHITA, KANSAS 67211			
PROJECT NUMBER		SHEET	
755 PPS (607881)		5	
DESIGN	DRAWN	APPROVED	DATE
C.O.W.	Staff		11-27
SCALE		PAGE	
		6	

REVISIONS PERMITS 17-10-1880

