

# STORM WATER SEWER IMPROVEMENTS

to serve

## Park Elementary School

1025 North Main

CITY OF WICHITA, KANSAS

Michael E. Lindobak, P.E. City Engineer

Private Project Number

1120 PPS (007861)

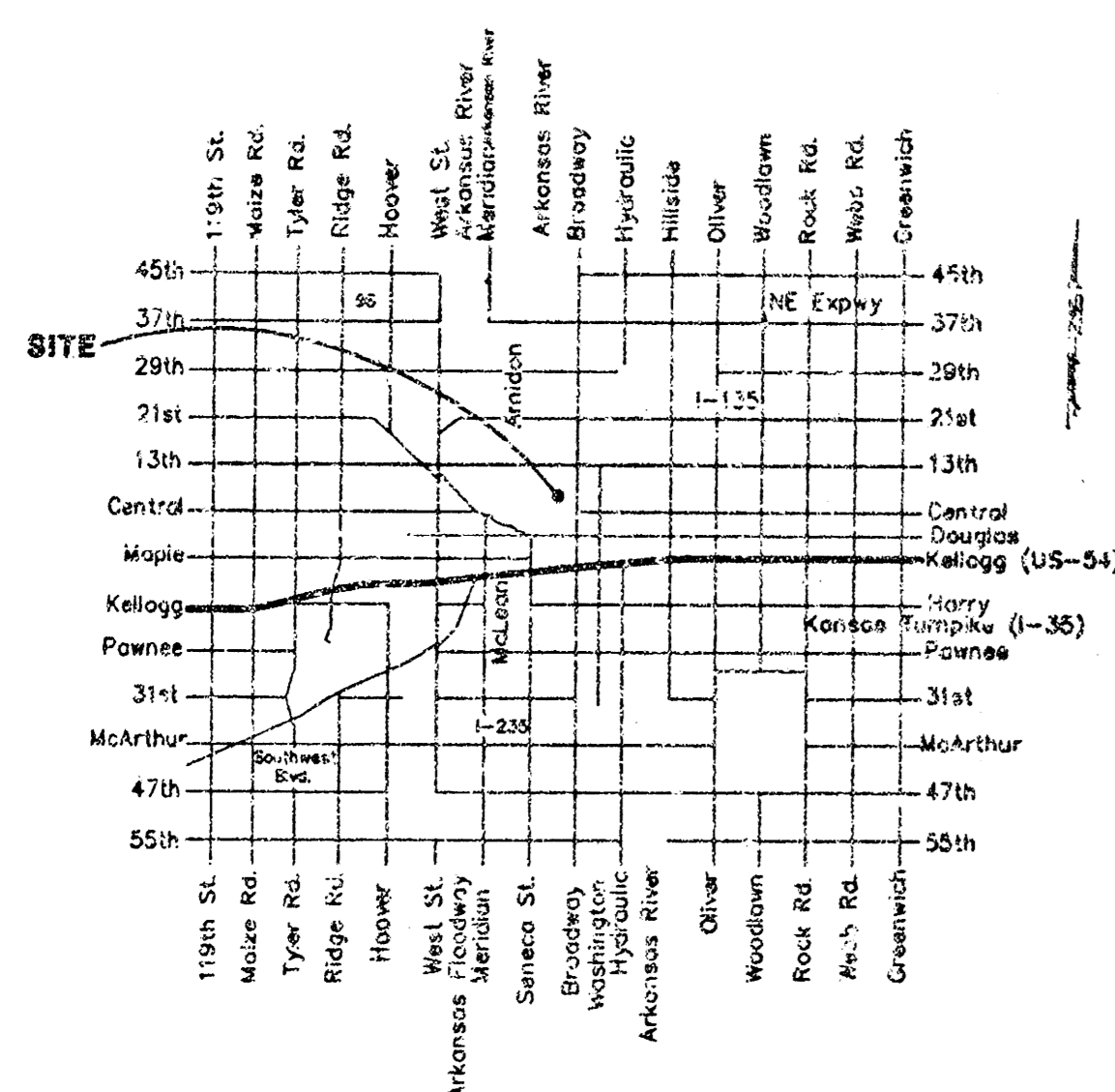
### Benchmark

"E" On Center North End of  
Curb Inlet, Found On South  
Bolt of Water St.  
Cut-de-sac.  
Elev.=116.83 (City Datum)

### Sheet Index

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### Location Map



APPROVED AS NOTED  
BY CITY ENGINEER OF WICHITA

Storm Sewer *Julianne Kallman 5-18-01*

#### 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).

### GENERAL NOTES:

- 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 557-2470

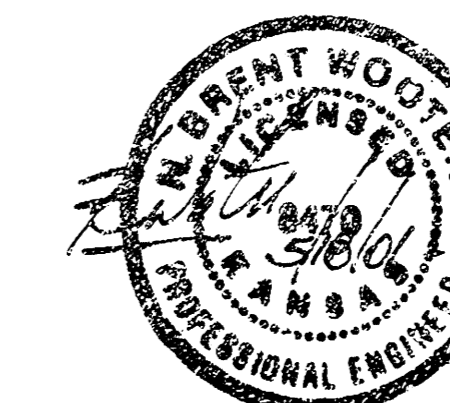
The Contractor must notify the following in case of an emergency:

Cox Communications	252-0651
Kansas Gas Service	393-3500
Kansas Gas & Electric Company	433-8200
Peoples Gas Company	942-3333
Southwestern Bell Telephone Company	1-800-344-7233
City of Wichita Water Dept.	268-4908
City of Wichita Traffic Engineering	265-4446

Scale: 1" = 60'

- 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.
- 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.
- All disturbed R/W areas not intended for pavement or sidewalk construction shall be seeded with Kansas Premium Fescue Blend at a rate of 8 lb./1000 Sq. Ft., fertilized with a 16-20-6 ratio at a rate of 4 lb./1000 Sq. Ft., and mulched with Prairie Hay at a rate of 92 lb./1000 Sq. Ft. Mulch shall be "patted" with forks or punched into soil to reduce loss due to wind.
- 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.
- 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 reestablished by a licensed land surveyor in accordance with state laws.
- 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. All disposal sites must be approved by the Kansas Department of Health and Environment. Material either stockpiled or disposed of in a flood plain would require a Kansas State Board of Agriculture permit. Any material dumped in waters of the United States or wetlands is subject to U.S. Corps of Engineers permitting regulations. Any material buried or stockpiled beyond approved construction limits would require additional archaeological investigations unless buried in a previously approved borrow location.
- Cuts made to paved surfaces on public property will be repaired by the City's contractor and charged against the owner/applicant. Unit repair prices are available from the City at 268-4418. A surcharge may be applicable; call 268-4418 for details. Repair costs to be paid prior to release of sewer service if sewer service is affected. Contractor shall obtain permit prior to construction.
- Contractor shall provide geotechnical services through Terrcon for all testing necessary for fill placed in the location of the removed 18" SWS line. Contact Keni Schwieger at 262-0171 for a proposal.

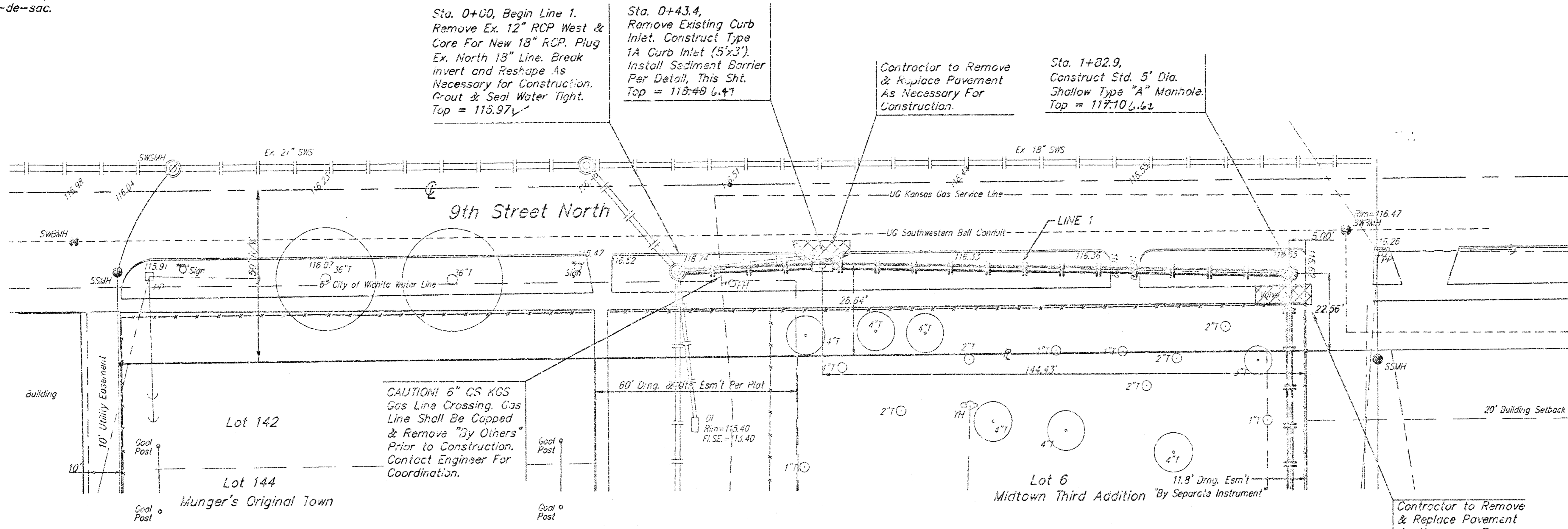
A.B. 8/01 KK



05/07/2001  
**BAUGHMAN COMPANY P.A.**  
ENGINEERING, SURVEYING, & PLANNING  
316-282-7271 • 316-268-4418 • WICHITA, KANSAS 67211  
P:\ENG\PA\KELLM\SSWICUV.DWG - SCL

18 14 0's 02

**BENCHMARK:**  
 "B" On Center North End of Curb Inlet, Found  
 On South Bulb of Water St. Cul-de-sac.  
 Elev.=116.63 (City Datum)



Sta. 0+00, Begin Line 1.  
 Remove Ex. 12\"/>

Sta. 0+43.4,  
 Remove Existing Curb  
 Inlet. Construct Type  
 1A Curb Inlet (5'x3').  
 Install Sediment Barrier  
 Per Detail, This Sht.  
 Top = 115.97

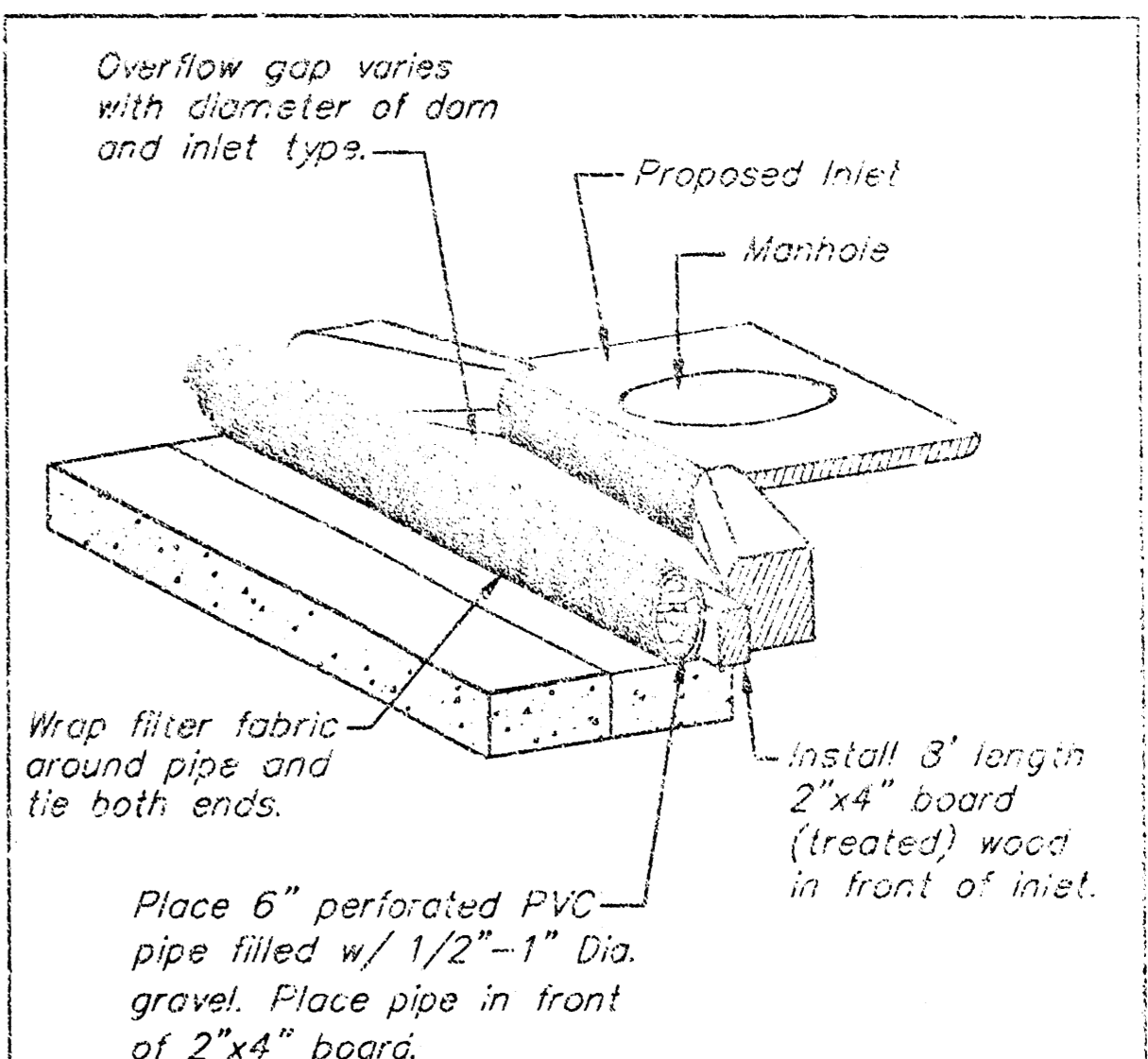
Contractor to Remove  
 & Replace Pavement  
 As Necessary For  
 Construction.

Sta. 1+82.9,  
 Construct Std. 5' Dia.  
 Shallow Type "A"  
 Manhole.  
 Top = 117.10

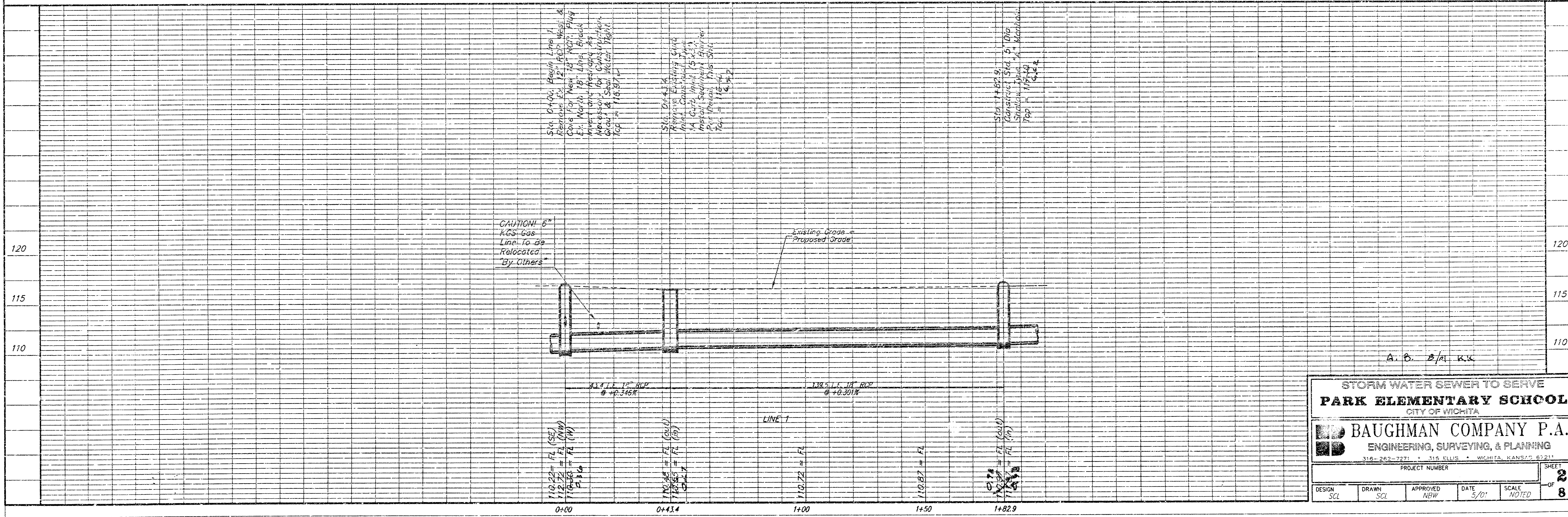
CAUTION! 6\"/>

Contractor to Remove  
 & Replace Pavement  
 As Necessary For  
 Construction.

SCALE:  
 1" = 20' HORIZONTAL  
 1" = 5' VERTICAL  
 • = IRON



**INLET PROTECTION**  
 Perforated Pipe w/ Gravel



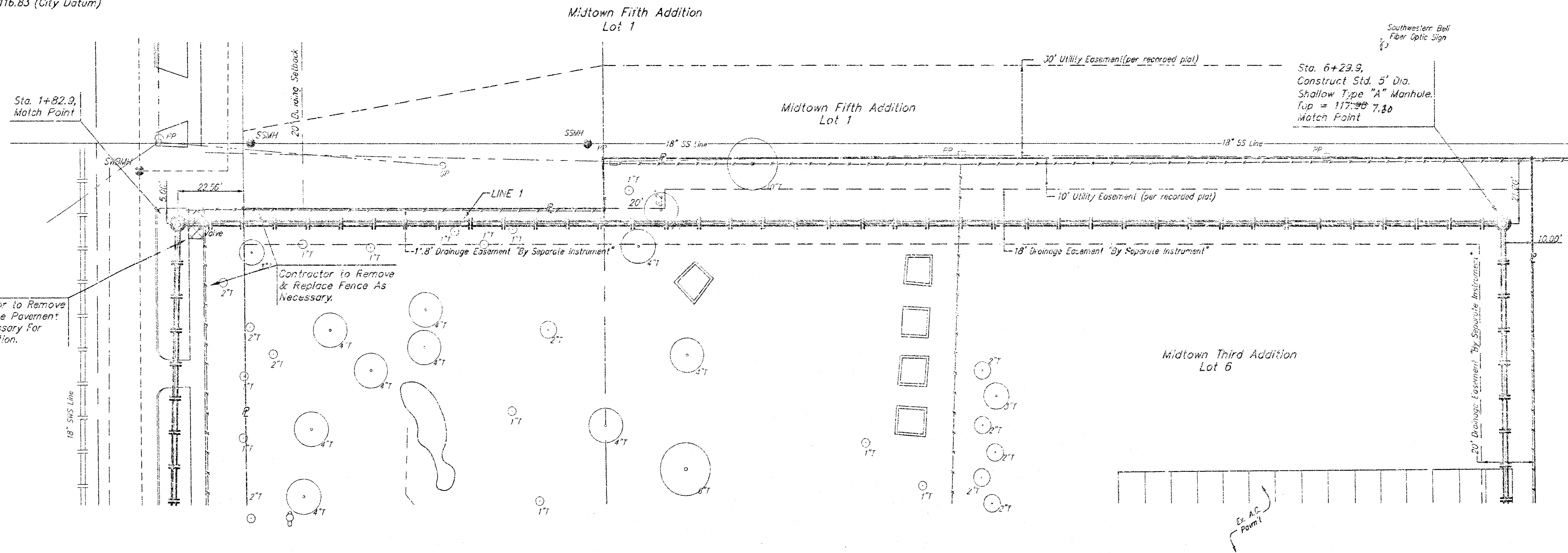
STORM WATER SEWER TO SERVE  
**PARK ELEMENTARY SCHOOL**  
 CITY OF WICHITA

**BAUGHMAN COMPANY P.A.**  
 ENGINEERING, SURVEYING, & PLANNING  
 316-263-7871 • 316 ELLIS • WICHITA, KANSAS 67211

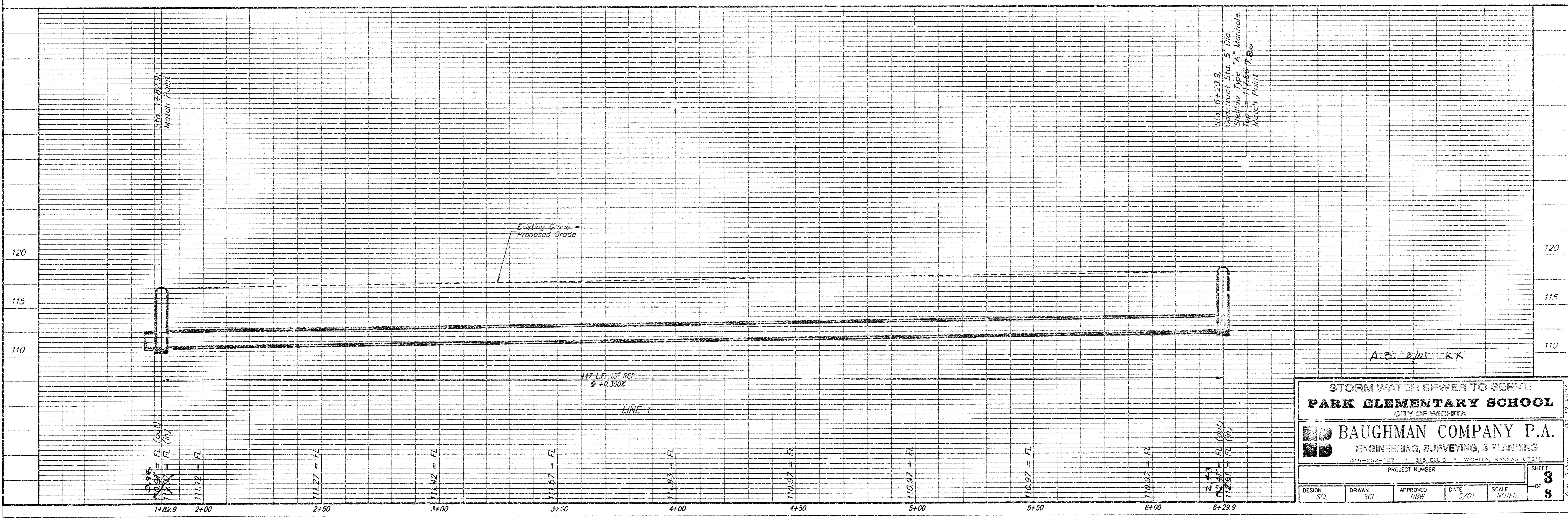
PROJECT NUMBER: \_\_\_\_\_ SHEET: **2** OF **8**

DESIGN: SCL	DRAWN: SCL	APPROVED: NFW	DATE: 5/01	SCALE: NOTED
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**BENCHMARK:**  
 □ On Center North End of Curb Inlet, Found  
 On South Bulb of Water St. Cul-de-sac.  
 Elev.=116.83 (City Datum)



SCALE:  
 1" = 20' HORIZONTAL  
 1" = 5' VERTICAL  
 • = IRON



STORM WATER SEWER TO SERVE  
**PARK ELEMENTARY SCHOOL**  
 CITY OF WICHITA

**BAUGHMAN COMPANY P.A.**  
 ENGINEERING, SURVEYING, & PLANNING  
 314-252-7231 • 315 ELLIS • WICHITA, KANSAS 67211

PROJECT NUMBER: \_\_\_\_\_ SHEET **3** OF **8**

DESIGN: SCL	DRAWN: SCL	APPROVED: NEW	DATE: 5/01	SCALE: NOTED
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A.B. 8/01 KX

**BENCHMARK:**  
 □ On Center North End of Curb Inlet, Found  
 On South Bulb of Water St. Cul-de-sac.  
 Elev.=116.83 (City Datum)

CAUTION! 6" Water Line  
 Crossing. To Be Capped  
 & Removed "By Others"  
 Prior to Construction.  
 Contact Engineer For  
 Coordination.

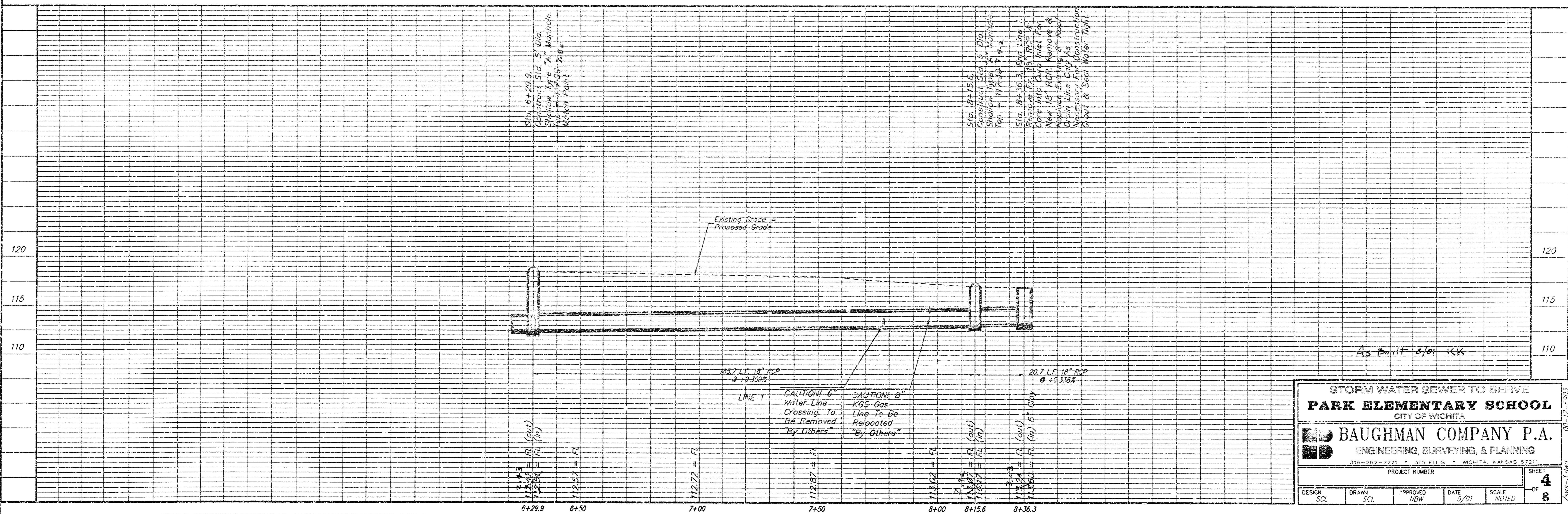
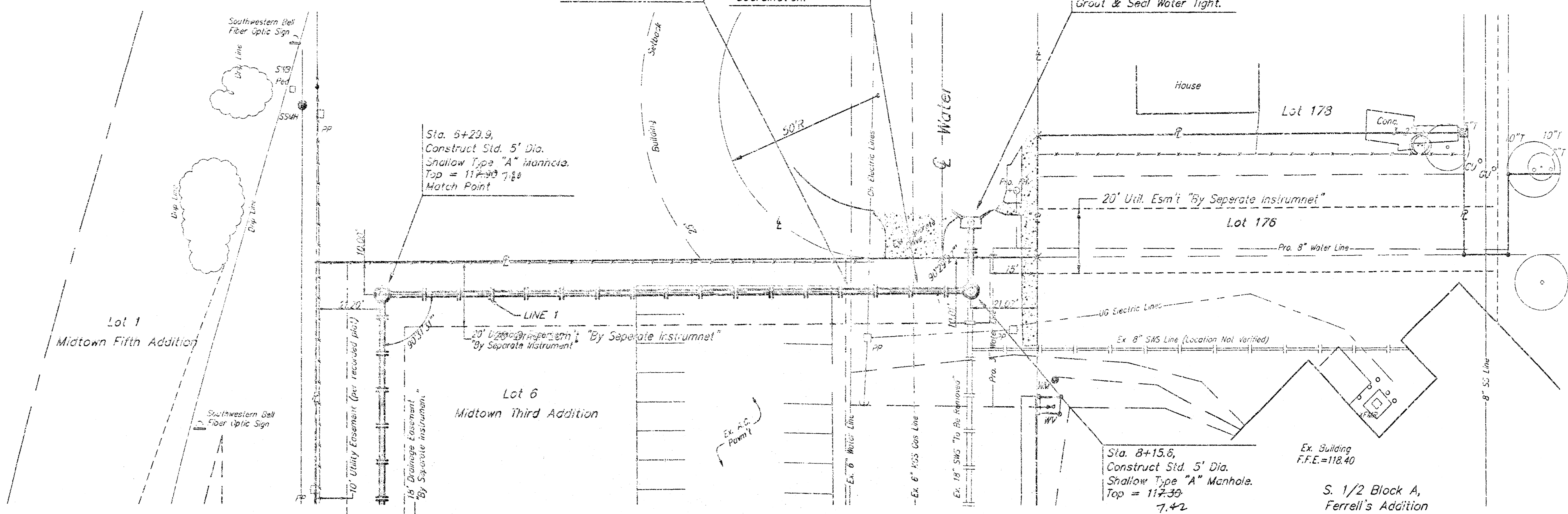
CAUTION! 8" CS KGS  
 Gas Line Crossing. Gas  
 Line Shall Be Capped  
 & Removed "By Others"  
 Prior to Construction.  
 Contact Engineer For  
 Coordination.

Sta. 8+36.3, End Line 1.  
 Remove Ex. 18" RCP &  
 Core into Curb Inlet For  
 New 18" RCP. Remove &  
 Replace Existing 8" Roof  
 Drain Line Only As  
 Necessary for Construction.  
 Grout & Seal Water Tight.

Sta. 6+29.9,  
 Construct Std. 5' Dia.  
 Shallow Type "A" Manhole.  
 Top = 117.39  
 Match Point

Sta. 8+15.6,  
 Construct Std. 5' Dia.  
 Shallow Type "A" Manhole.  
 Top = 117.39  
 7.42

SCALE:  
 1" = 20' HORIZONTAL  
 1" = 1' VERTICAL  
 ● = IRON



STORM WATER SEWER TO SERVE  
**PARK ELEMENTARY SCHOOL**  
 CITY OF WICHITA

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 316-262-7271 • 315 ELLIS • WICHITA, KANSAS 67211

PROJECT NUMBER \_\_\_\_\_ SHEET **4**  
 8

DESIGN: SCL DRAWN: SCL APPROVED: NEW DATE: 5/01 SCALE: NOTED

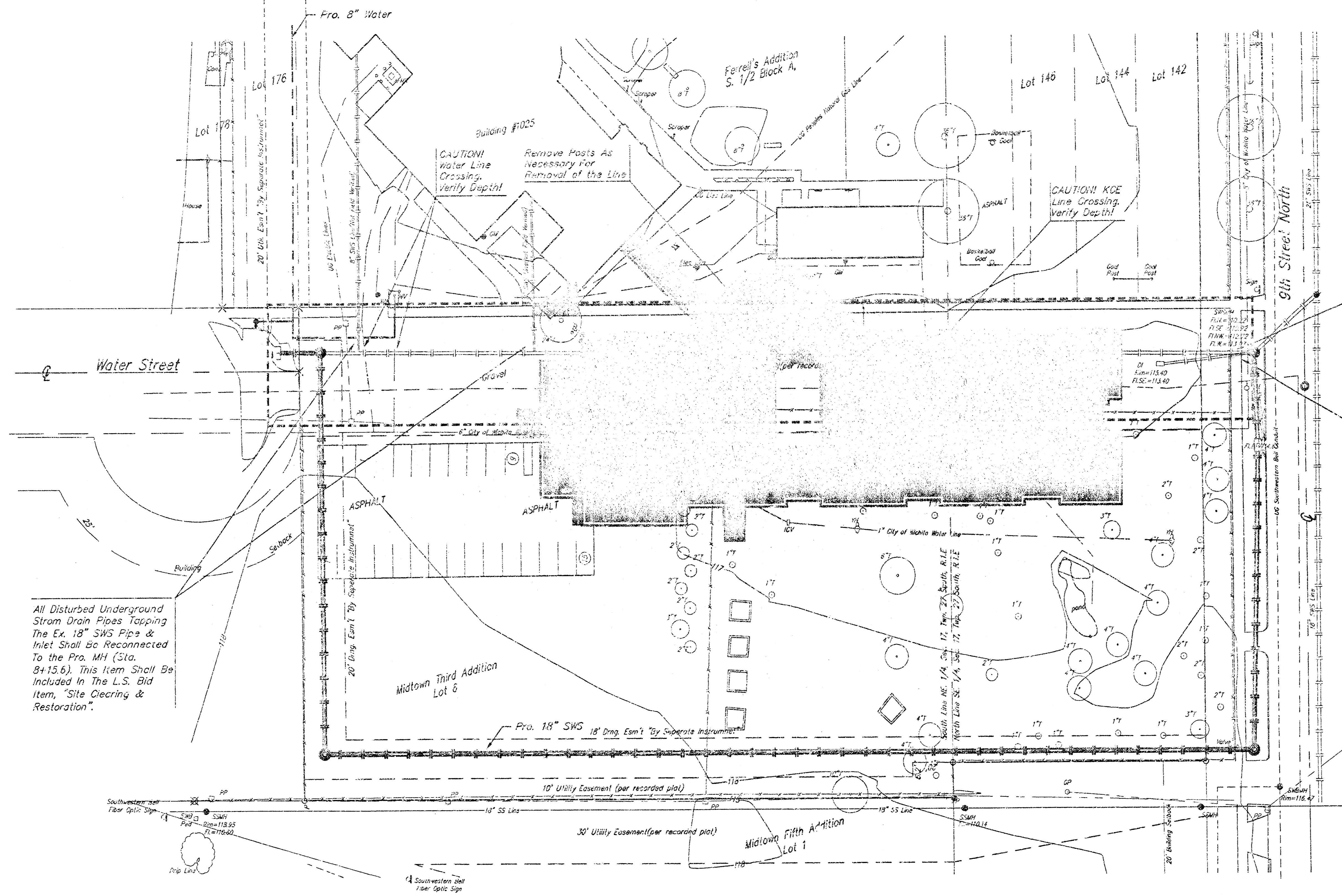
As Built 6/01 KK

**BENCHMARK:**  
 □ On Center North End of Curb Inlet, Found  
 On South Bulb of Water St. Cul-de-sac,  
 Elev.=116.83 (City Datum)

SCALE:  
 1" = 30'  
 ● = IRON

- = Fire Hydrant
- = Gas Meter
- = Gas Pipe
- = Gas Post (Blind)
- = Gas Anchor
- = Inspection Control Valve - Valve Box
- = Light Pole
- = Sign
- = Power Pole
- = Sign
- = Sanitary Sewer Manhole
- = Sewer Manhole
- = Stormwater Bell Manhole
- = Stormwater Bell Manhole
- = Tree
- = Traffic Box
- = Traffic Manhole
- = Water Meter
- = Water Valve
- = Transformer
- = Valve (Signal)

- = P.K. Nail Set
- = 1/4" Rebar in Thimble Found
- = 1/2" Iron Pipe in Thimble Found
- = 1" Iron Pipe in Thimble Found
- = Cased-in Manhole Found
- = Cased-in Cross Found
- = #6 Rebar in Thimble Found
- = 3/4" Iron Pipe in Thimble Found
- = 1/4" Iron Pipe Found
- = Cased-in Cross Set



Remove & Replace  
 Fence/Sidewalk As  
 Necessary For  
 Demolition. This  
 Item Shall Be  
 Included In The L.S.  
 Bid Item, "Site  
 Clearing &  
 Restoration".

Plug Existing 18" RCP &  
 Remove Line North To The  
 Curb Inlet Located In  
 Water St. Cul-De-Sac.  
 Back fill Line With Onsite  
 & Approved Offsite  
 Material. Material Shall Be  
 Replaced and Compacted  
 in 3" Lifts to at Least  
 95% Std. Proctor Max.  
 Density.

All Disturbed Underground  
 Storm Drain Pipes Tapping  
 The Ex. 18" SWG Pipe &  
 Inlet Shall Be Reconnected  
 To The Pro. MH (Sta.  
 84+15.6). This Item Shall Be  
 Included In The L.S. Bid  
 Item, "Site Clearing &  
 Restoration".

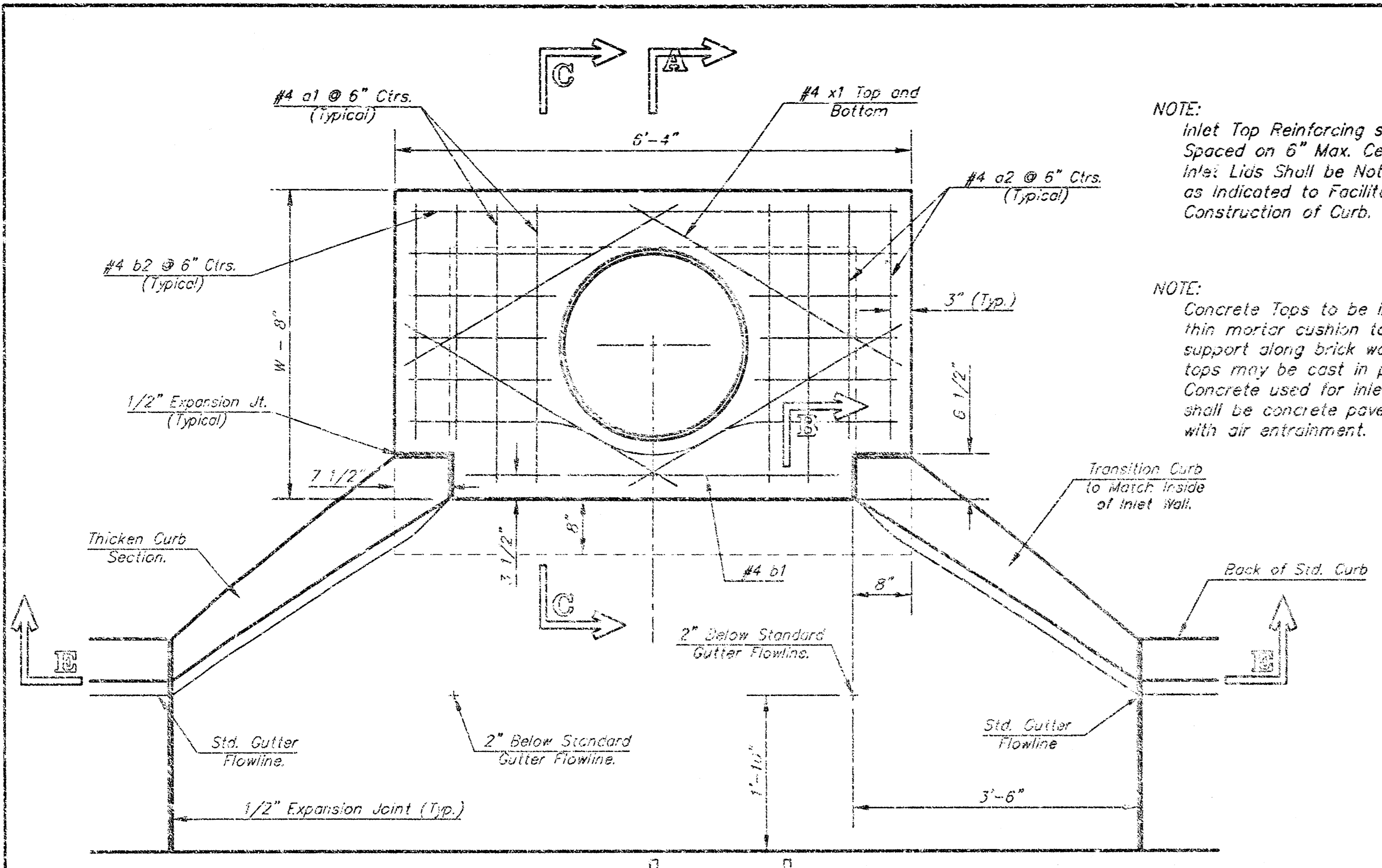
--- = DEMOLITION LIMITS

PARK ELEMENTARY SCHOOL  
**DEMOLITION PLAN**  
 CITY OF WICHITA

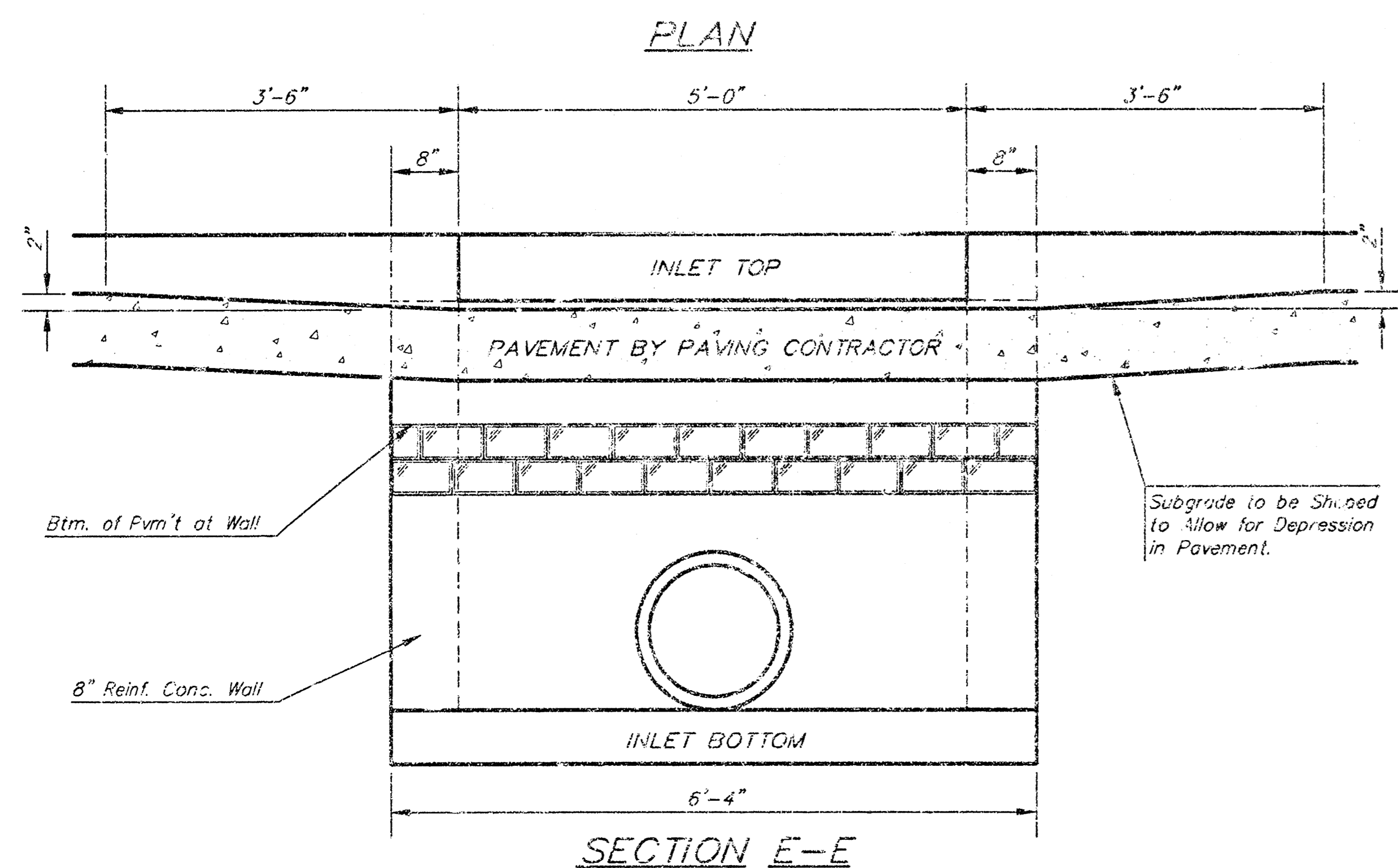
**BAUGHMAN COMPANY P.A.**  
 ENGINEERING, SURVEYING, & PLANNING

316-262-7271 • 315 E. 11th St. • WICHITA, KANSAS 67202

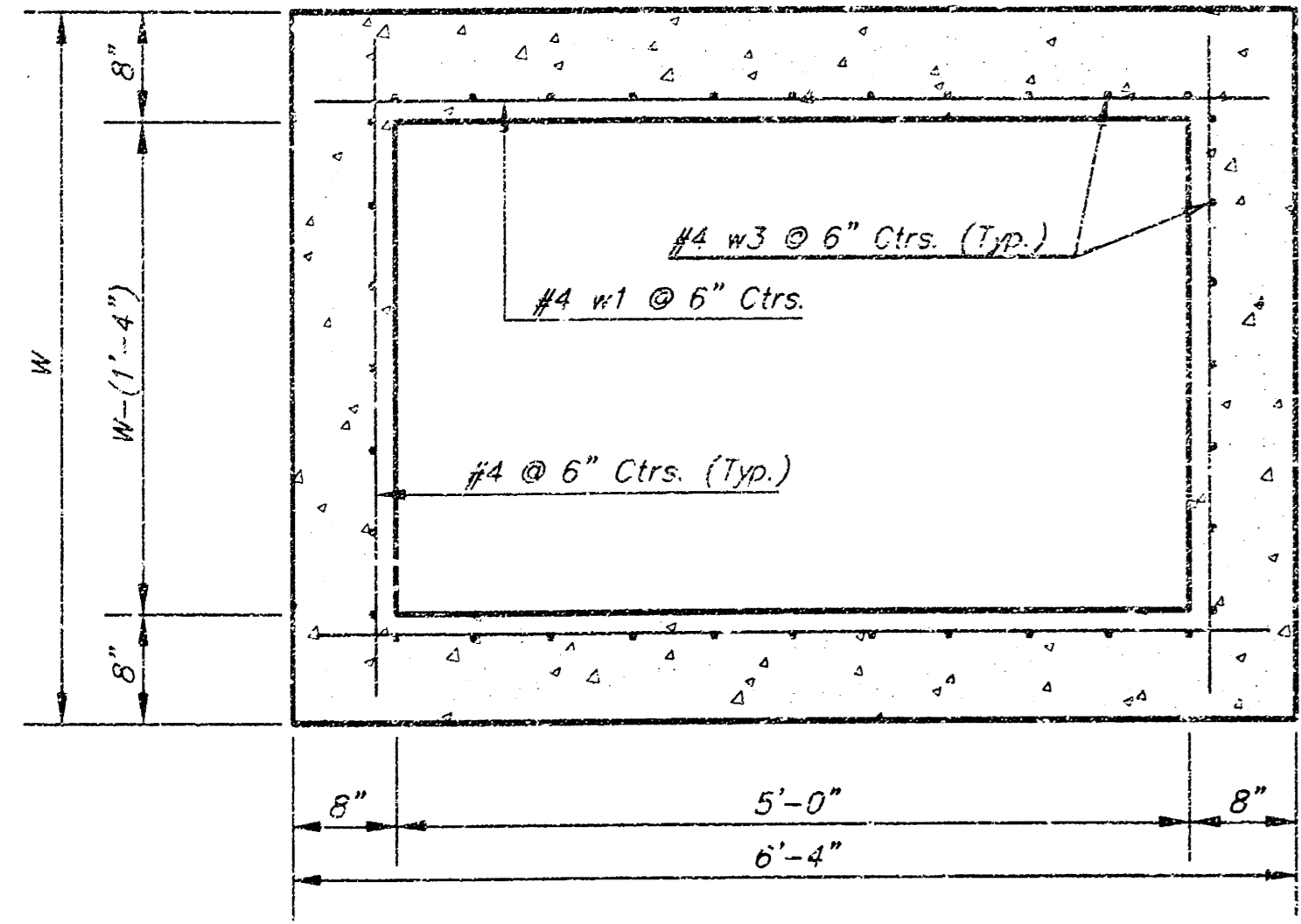
PROJECT NUMBER					SHEET OF 8
DESIGN SCL	DRAWN SCL	APPROVED RHW	DATE 05/01	SCALE NOTED	



NOTE: Expansion Joint Only in Curb Area With Concrete Pavement.



SECTION E-E



SECTION D-D

NOTE: Contractor shall have the option of constructing 8\"/>

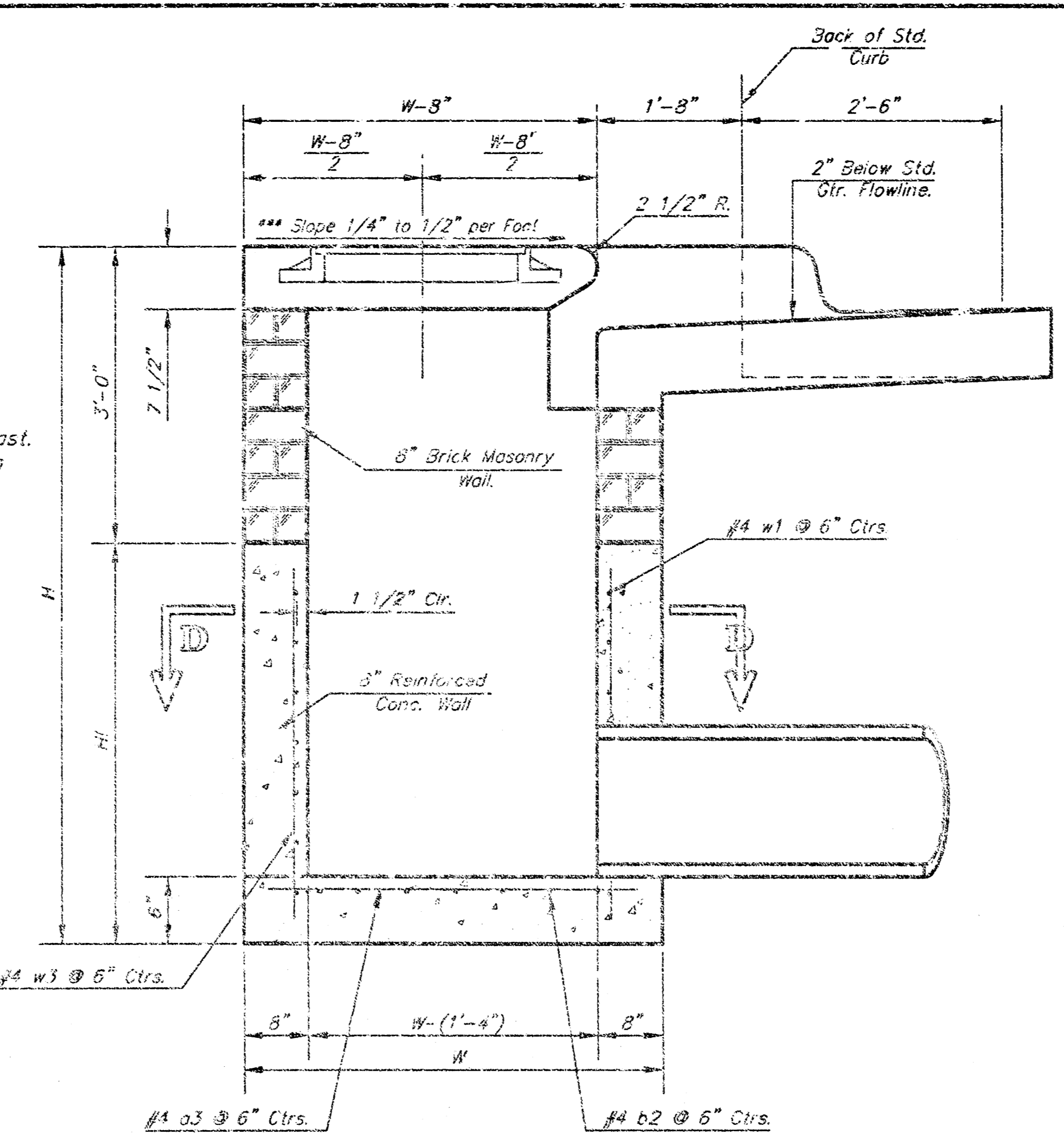
Additional curb and gutter construction necessary to connect set-back inlet to pavement will be paid for at the unit price bid for each inlet hookup.

Inlet invert shall be shaped with B 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.

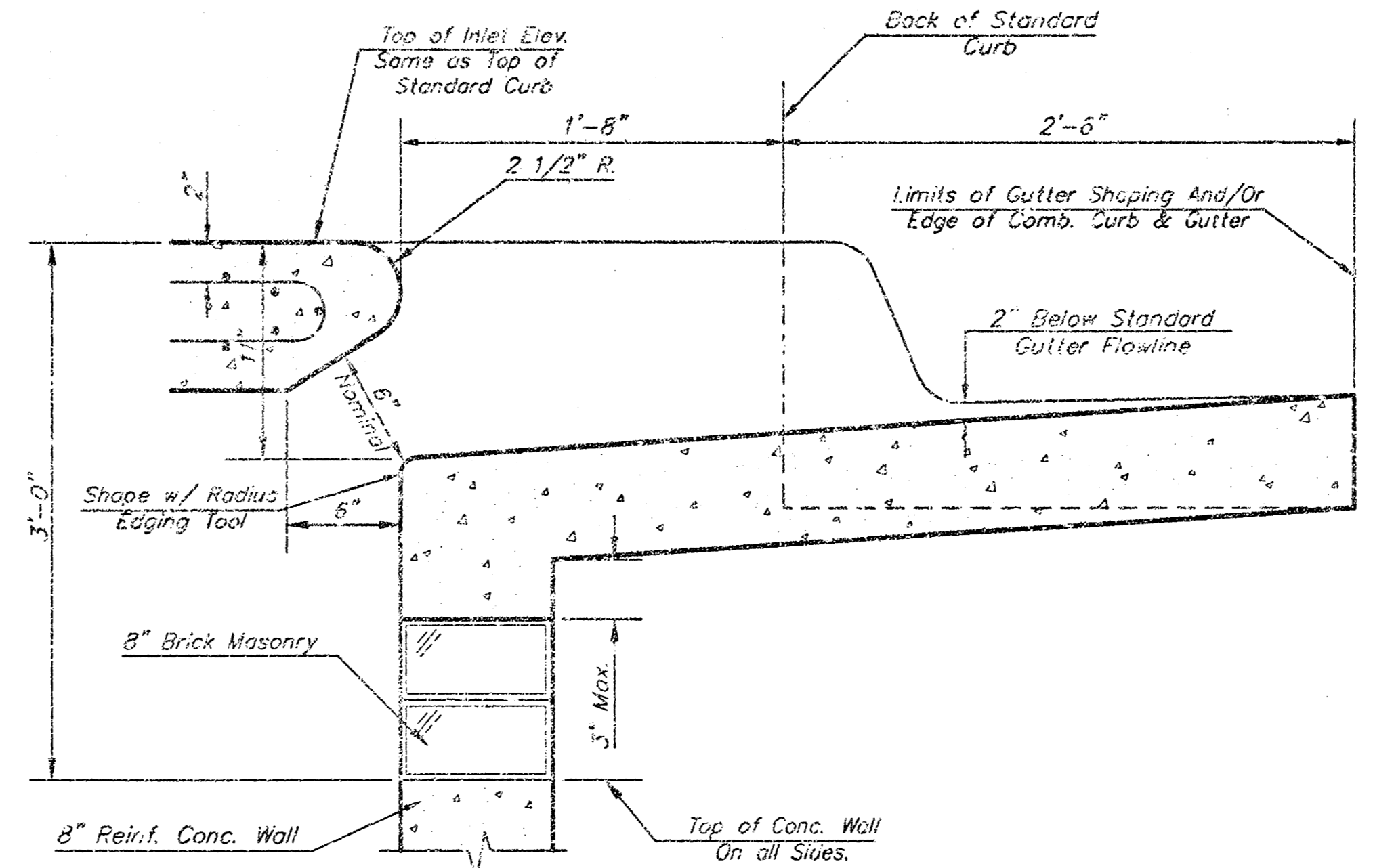
NOTE: Inlet Top Reinforcing shall be Spaced on 6\"/>

NOTE: 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 with air entrainment.

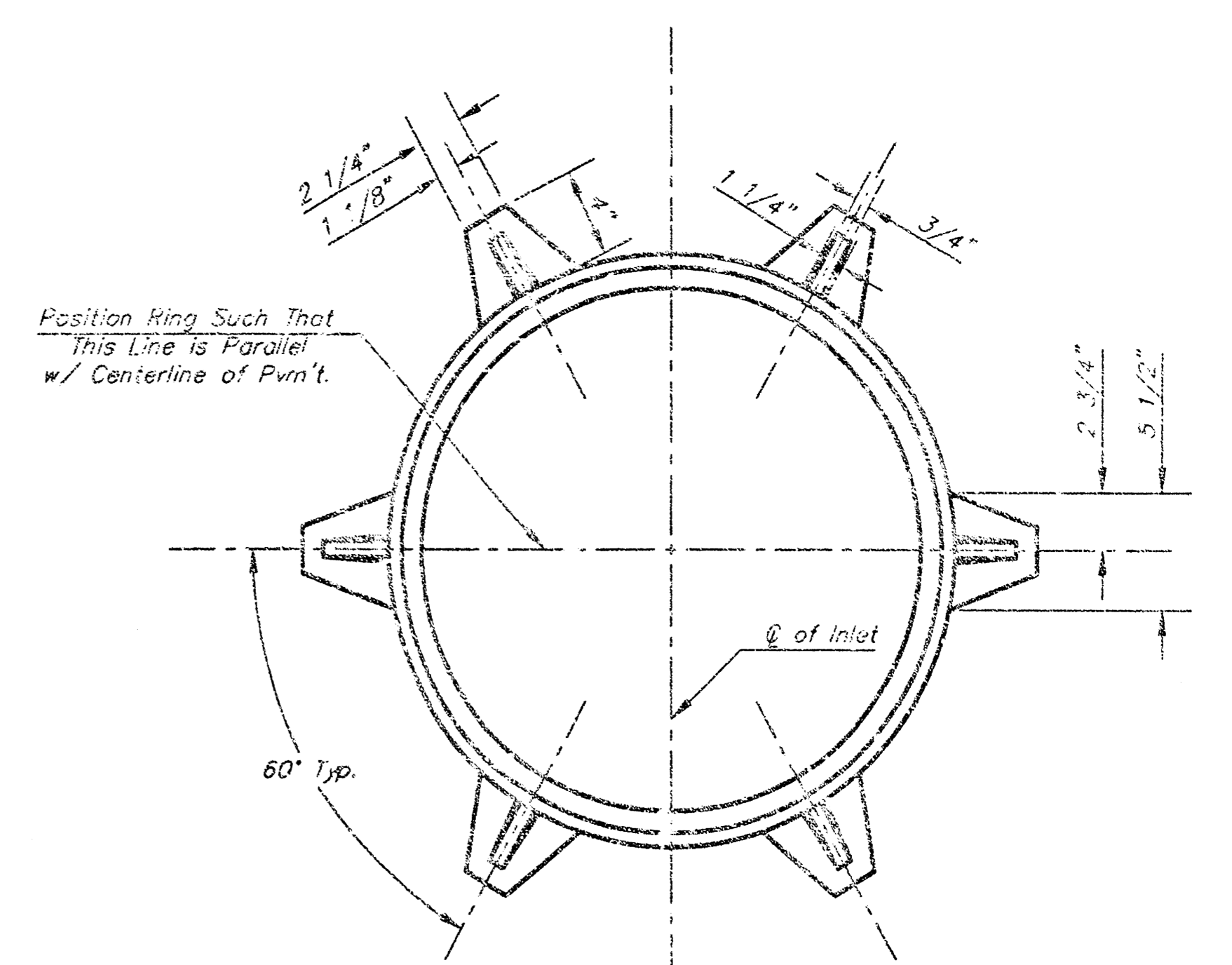


SECTION A-A

NOTE: Slope of inlet tops to match Sidewalk or Parking Slopes within Limits Indicated.



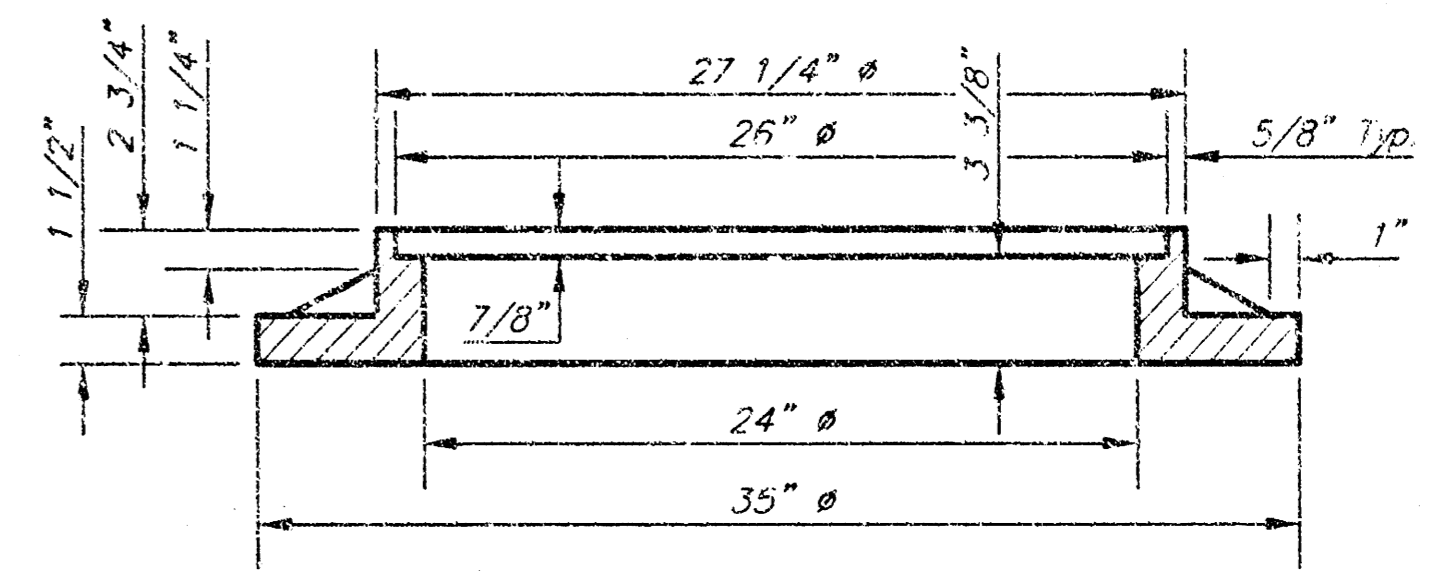
SECTION B-B



MANHOLE RING AND COVER

Weight = 180 Lbs.

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



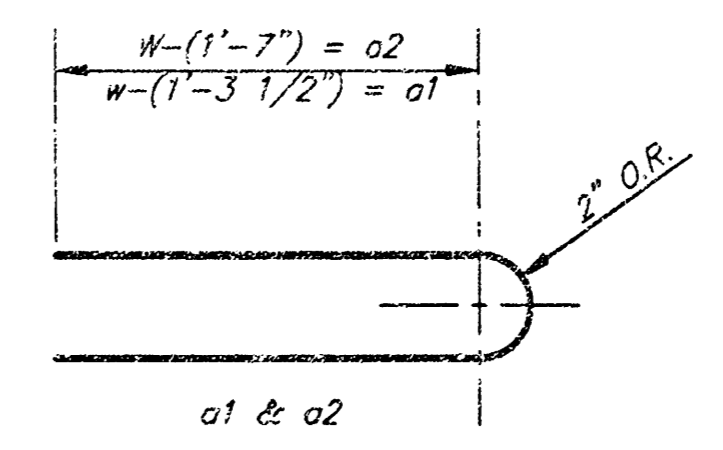
SECTION C-C

PRECAST SLAB AND FLOOR REINFORCING											
		W = 4'-4"		W = 5'-4"		W = 6'-4"		W = 7'-4"		W = 8'-4"	
MARK	SIZE	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH
*a1	#4	6	6'-7"	8	8'-7"	5	10'-7"	5	12'-7"	8	14'-7"
a2	#4	4	6'-0"	4	8'-0"	4	10'-0"	4	12'-0"	4	14'-0"
a3	#4	13	4'-1"	13	5'-1"	13	6'-1"	13	7'-1"	13	8'-1"
b1	#4	1	4'-9"	1	4'-9"	1	4'-9"	1	4'-9"	1	4'-9"
*b2	#4	23	5'-1"	29	5'-1"	35	5'-1"	41	5'-1"	47	5'-1"
x1	#4	8	3'-10"	8	4'-2"	8	4'-8"	8	4'-10"	8	5'-2"

WALL REINFORCING											
		W = 4'-4"		W = 5'-4"		W = 6'-4"		W = 7'-4"		W = 8'-4"	
MARK	SIZE	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH
w1	#4	①	6'-1"	①	6'-1"	①	6'-1"	①	6'-1"	①	6'-1"
w2	#4	①	4'-1"	①	5'-1"	①	6'-1"	①	7'-1"	①	8'-1"
w3	#4	②	32	②	36	②	40	②	44	②	48

\* Field Bend or Cut Reinforcing as Required for Clearance.  
 ① 4 (H = 12") (H = 21") Rounded down to nearest 0.5"  
 ② H = 3"



BENDING DIAGRAM

STANDARD CURB INLET PRECAST TOPS			
W	PRE-CAST TOP SIZE	PIPE SIZE	CU. YD. CONC.
4'-4"	3'-8" x 6'-4" x 7 1/2"	21" & SMALLER	0.384
5'-4"	4'-8" x 5'-4" x 7 1/2"	24" & 30"	0.514
6'-4"	5'-8" x 6'-4" x 7 1/2"	36" & 42"	0.644
7'-4"	6'-8" x 6'-4" x 7 1/2"	48" & 54"	0.774
8'-4"	7'-8" x 6'-4" x 7 1/2"	60" & 66"	0.904

Revised - Feb. 16, 1989

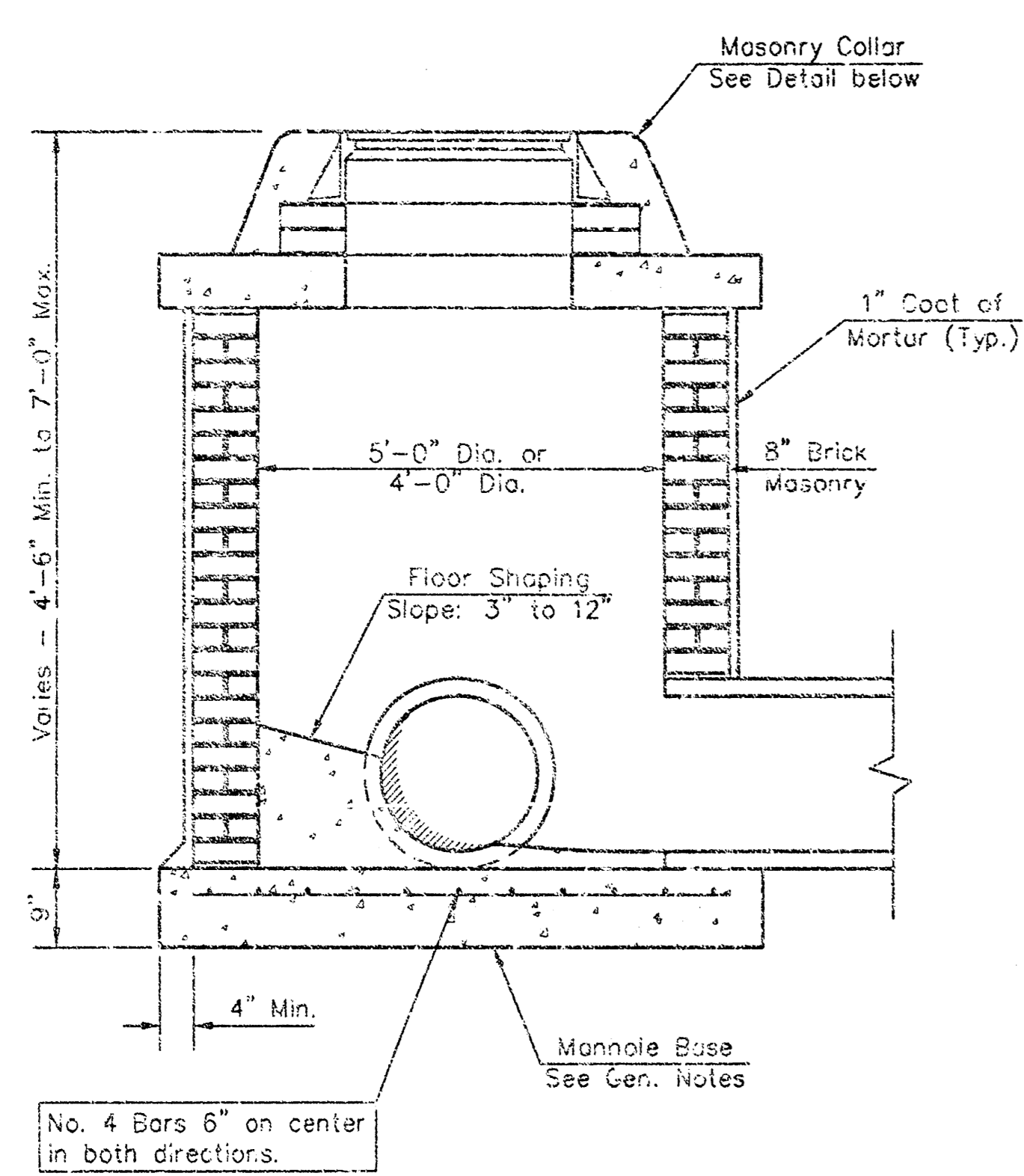
CITY OF WICHITA STANDARD TYPE 1A  
**Curb Inlet Details**  
 INLET OPENING = 8" X 5'-0"

**BAUGHMAN COMPANY P.A.**  
 ENGINEERING, SURVEYING, & PLANNING  
 316-262-2271 • 316 ELLIS • WICHITA, KANSAS 67204

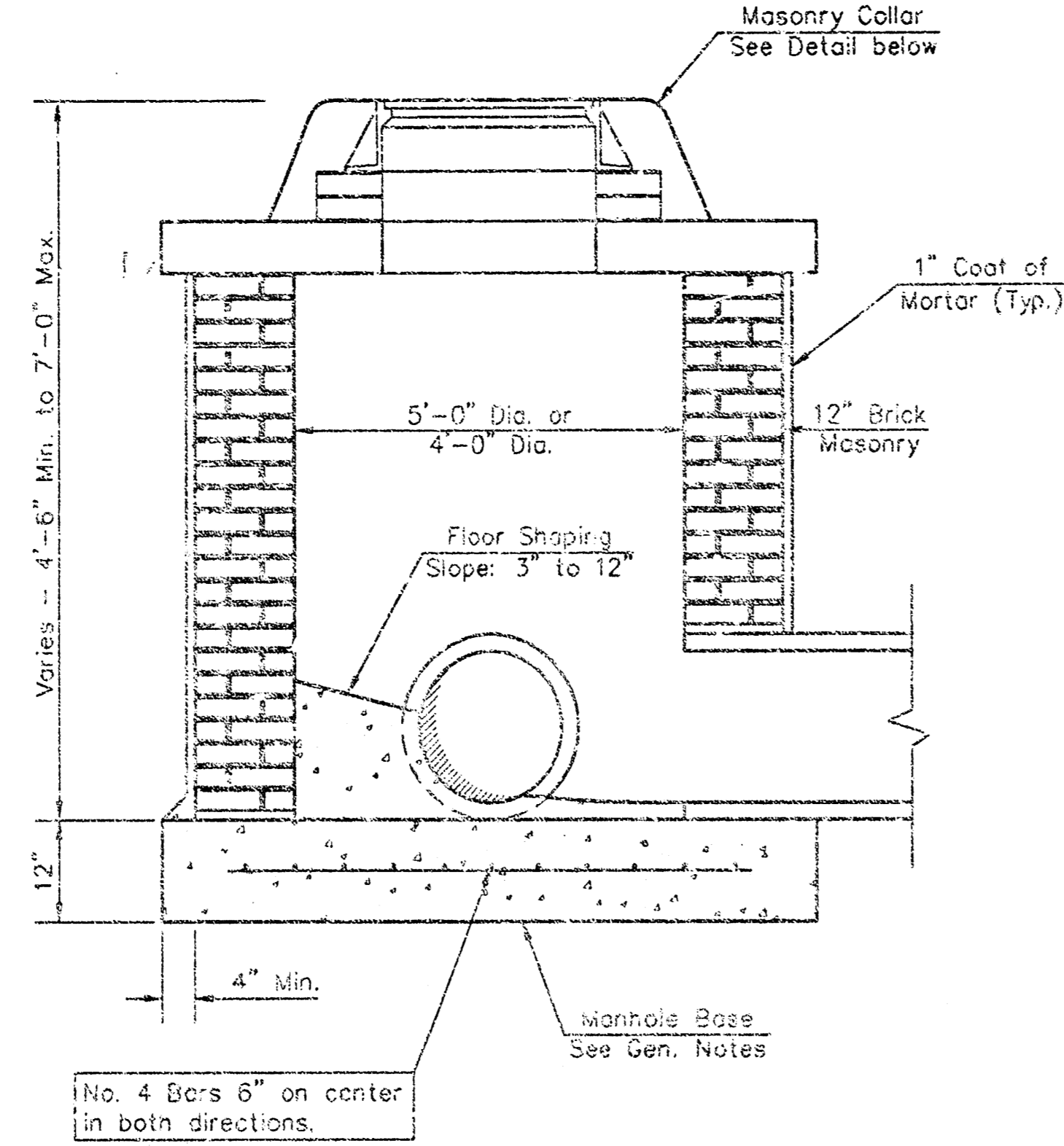
PROJECT NUMBER: \_\_\_\_\_

DESIGN: C.O.W.    DRAWN: Staff    APPROVED: \_\_\_\_\_    DATE: \_\_\_\_\_    SCALE: None

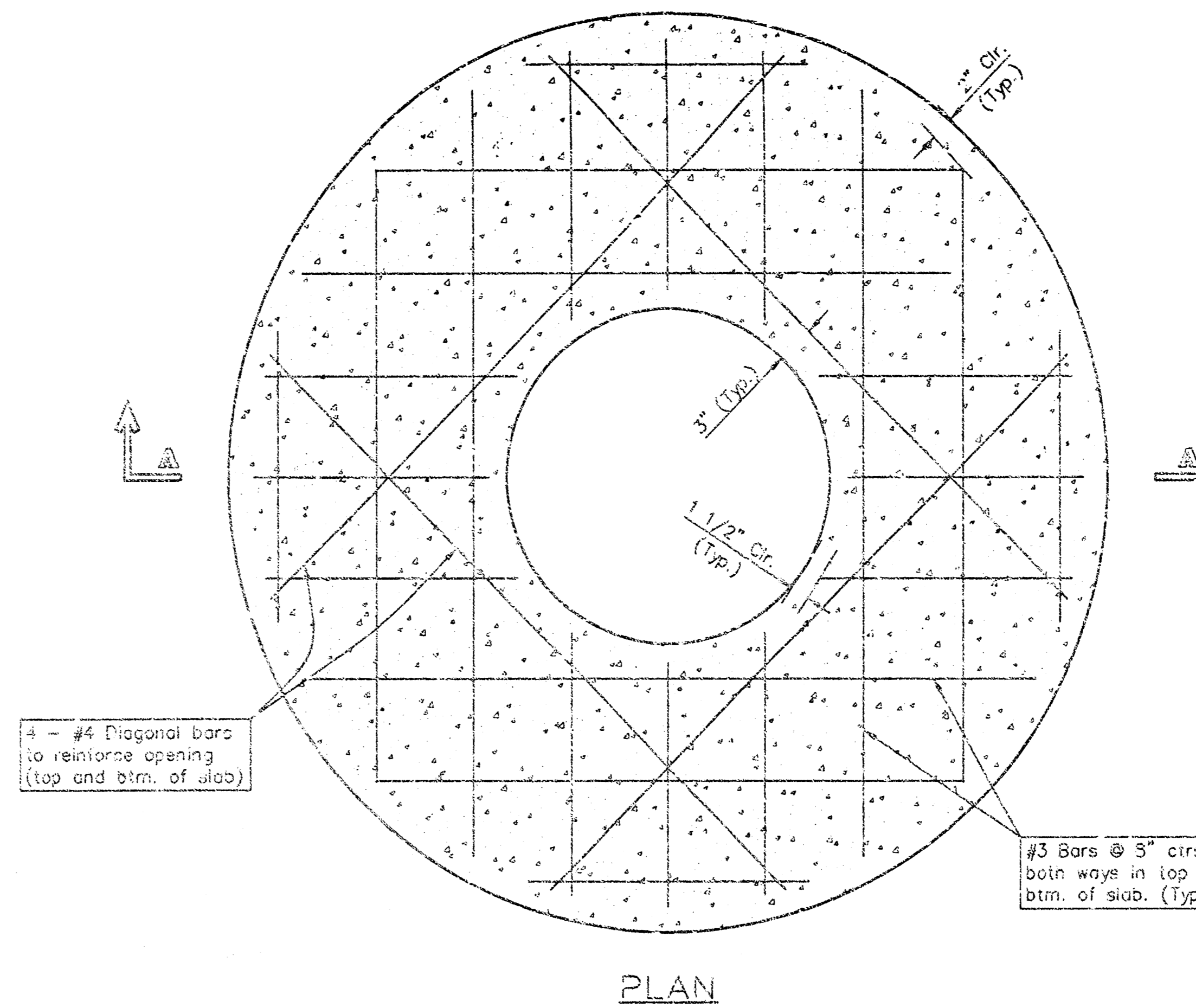
SHEET **6** OF **8**



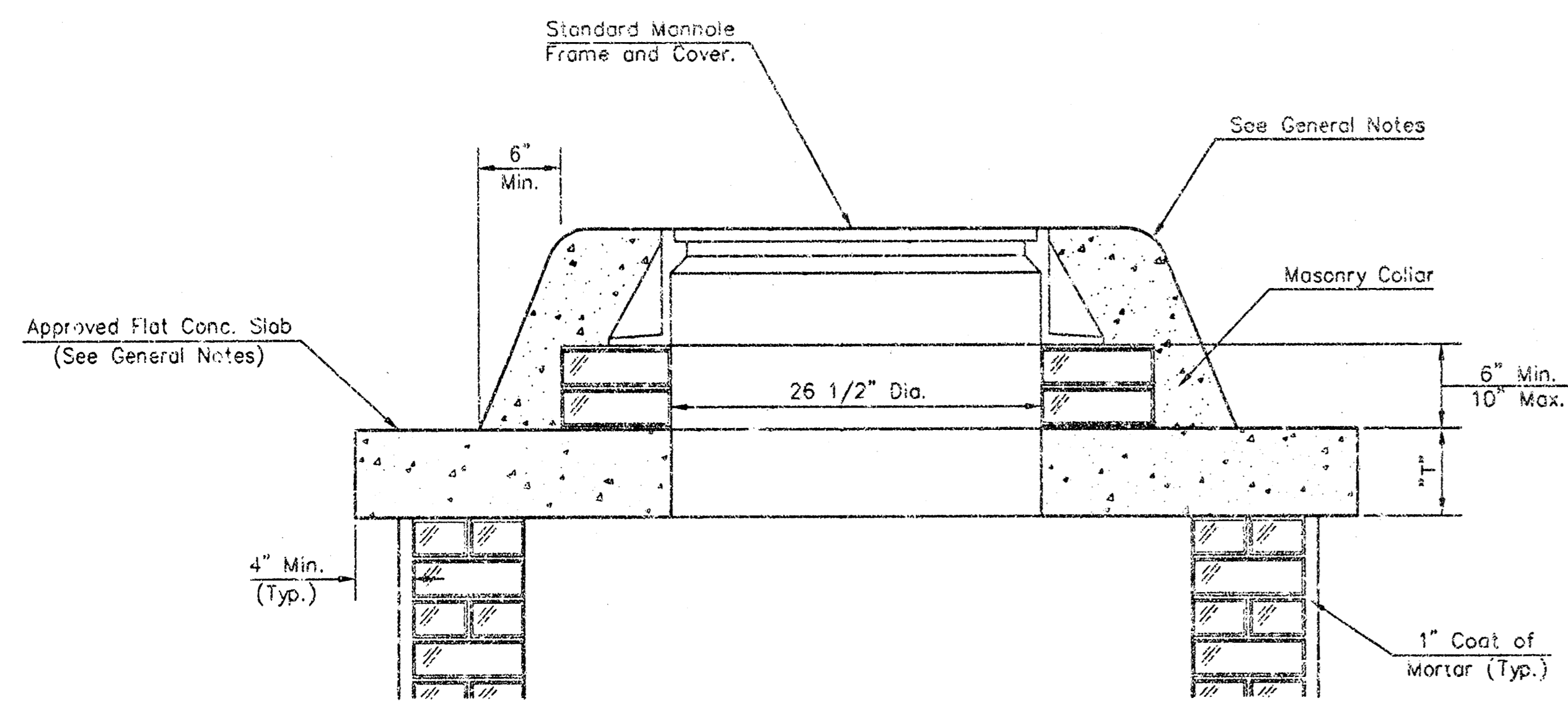
SHALLOW TYPE "A" MANHOLE



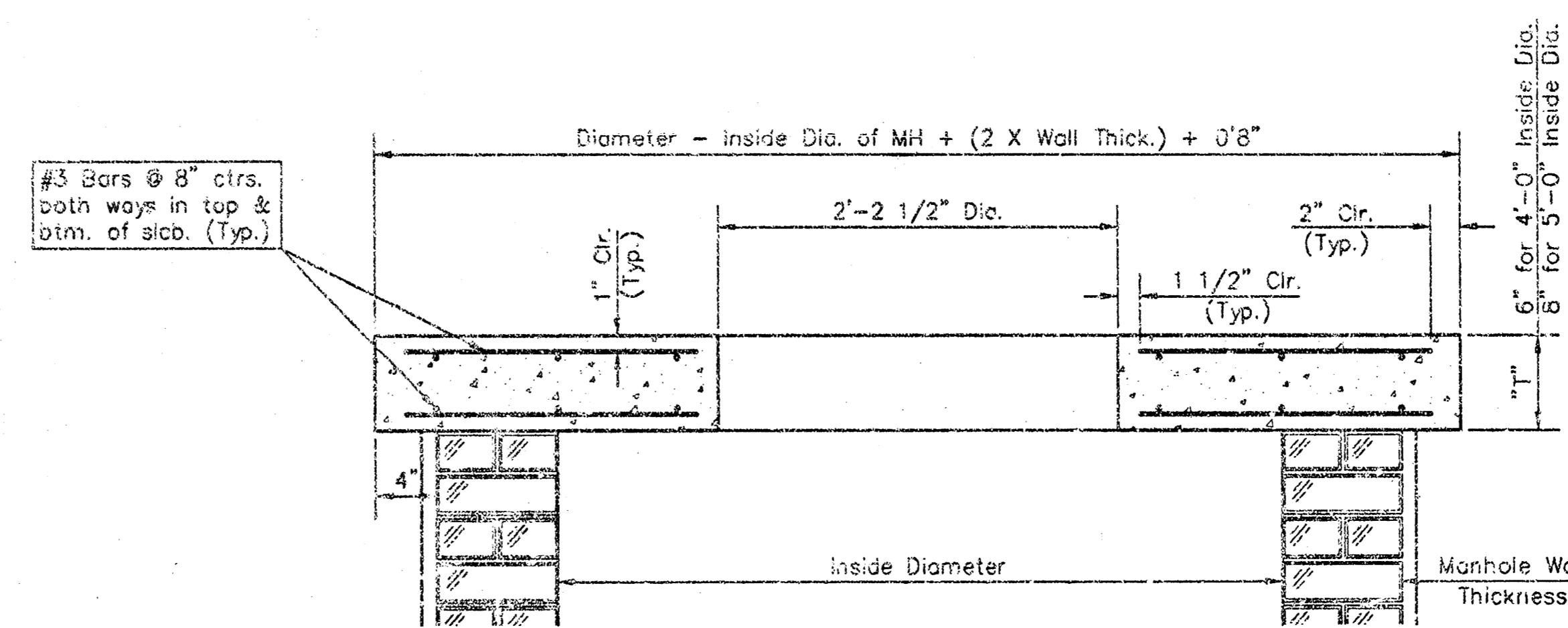
SHALLOW TYPE "B" MANHOLE



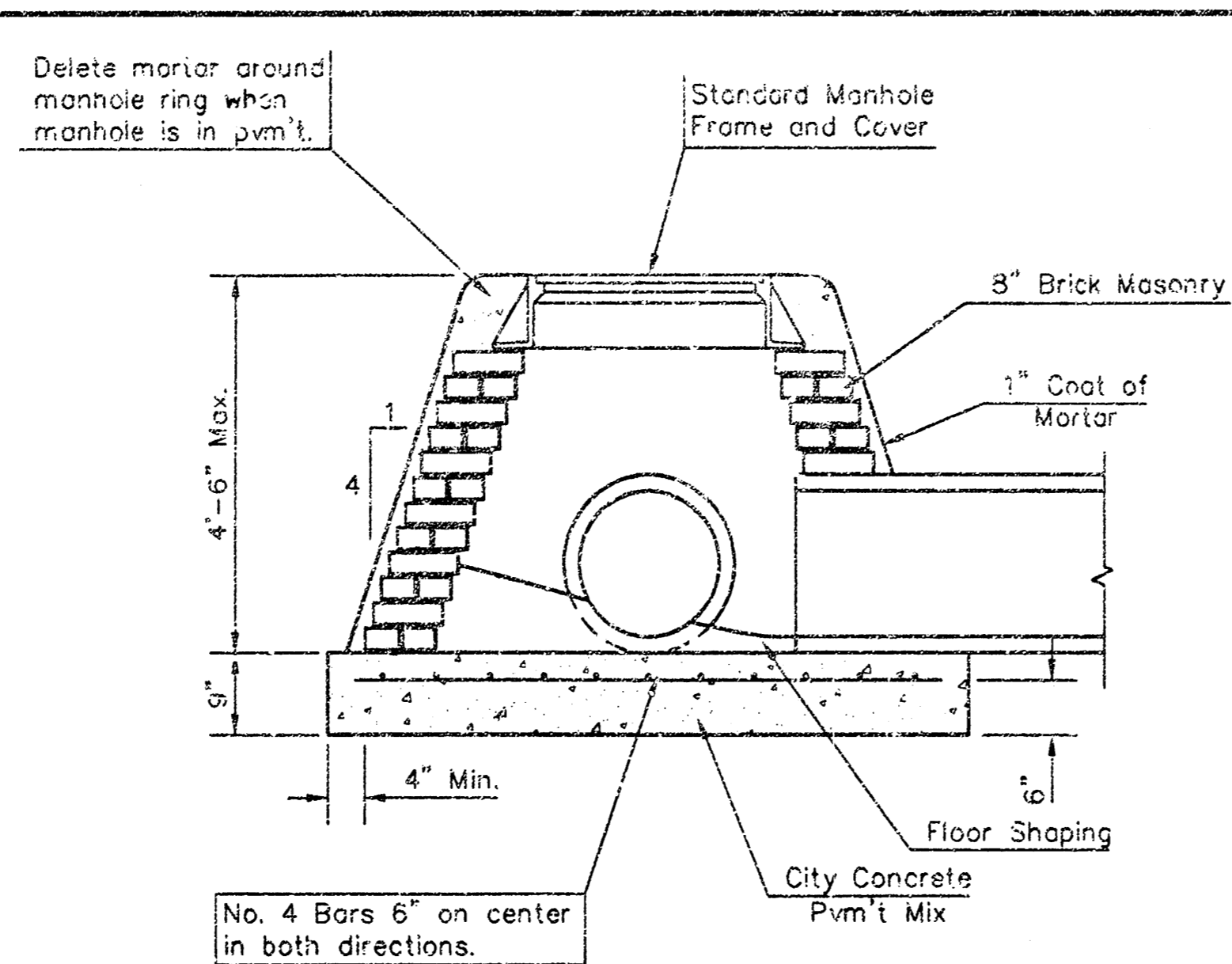
PLAN



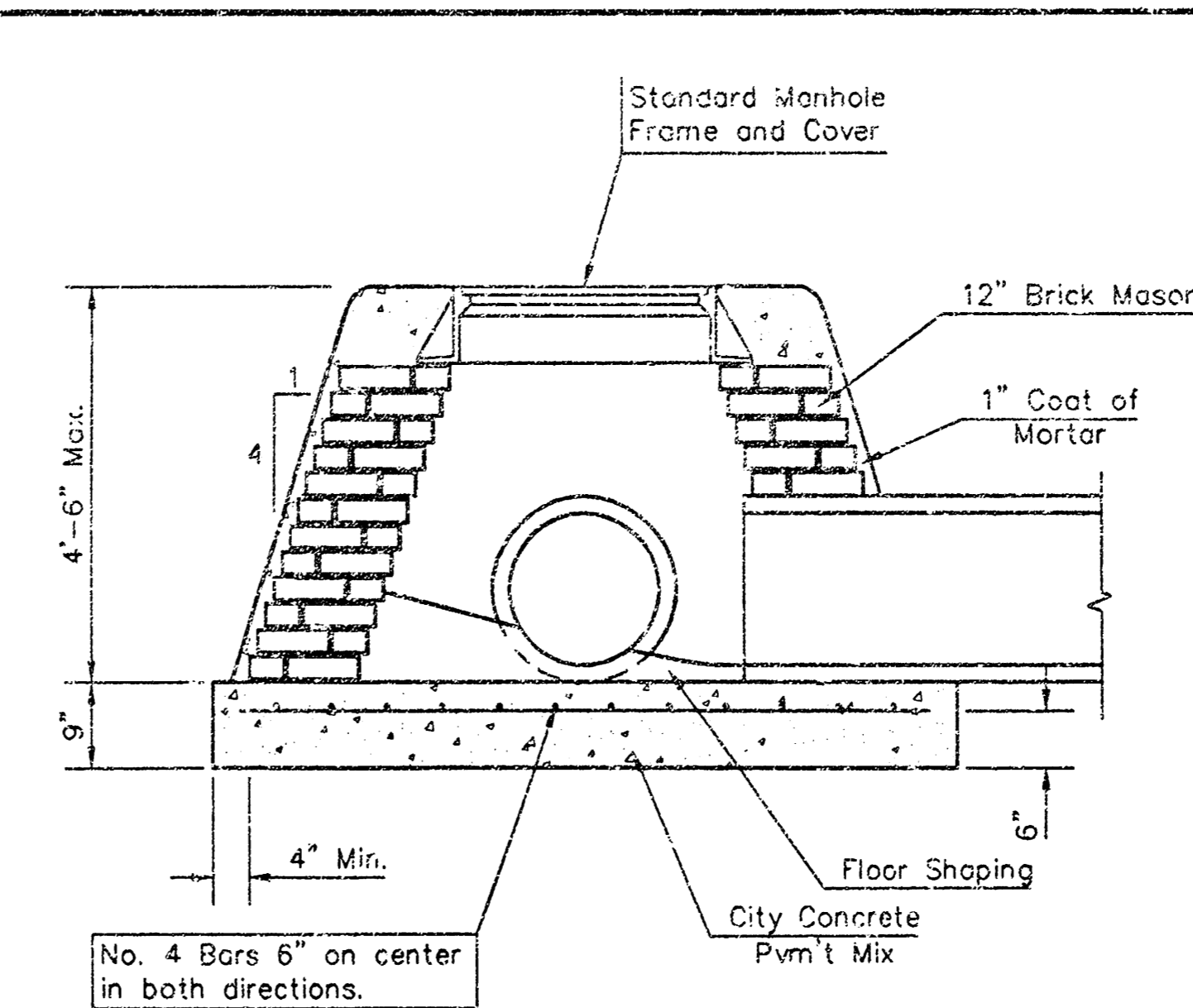
MASONRY COLLAR DETAIL



SECTION A-A  
FLAT CONCRETE SLAB DETAILS



SPECIAL SHALLOW TYPE "A" MANHOLE



SPECIAL SHALLOW TYPE "B" MANHOLE

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 remest 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. Type "A" shallow manholes can be used on sewers when the manhole is not located within public street pavement. 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 6" 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 all 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 by 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 "A" and "B" shall be paid for at the unit price bid per each for the type and diameter indicated. Standard special shallow manholes type "A" and "B" shall be paid for at the unit price bid per each for the type 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-B7.

CITY OF WICHITA, KANSAS  
**Std. Manhole Detail**  
 TYPE "A" AND TYPE "B"

**BAUGHMAN COMPANY P.A.**  
 ENGINEERING, SURVEYING, & PLANNING  
 315 E. 22<sup>ND</sup> ST. • WICHITA, KANSAS 67211

PROJECT NUMBER \_\_\_\_\_ SHEET **7** OF **8**

DESIGN: C.O.W. DRAWN: Staff APPROVED: \_\_\_\_\_ DATE: \_\_\_\_\_ SCALE: NONE

2025 1003 North Main, Wichita, Kansas  
 1003 North Main, Wichita, Kansas  
 Architectural Survey

**Park Elementary School**  
 1003 North Main, Wichita, Kansas  
 Architectural Survey

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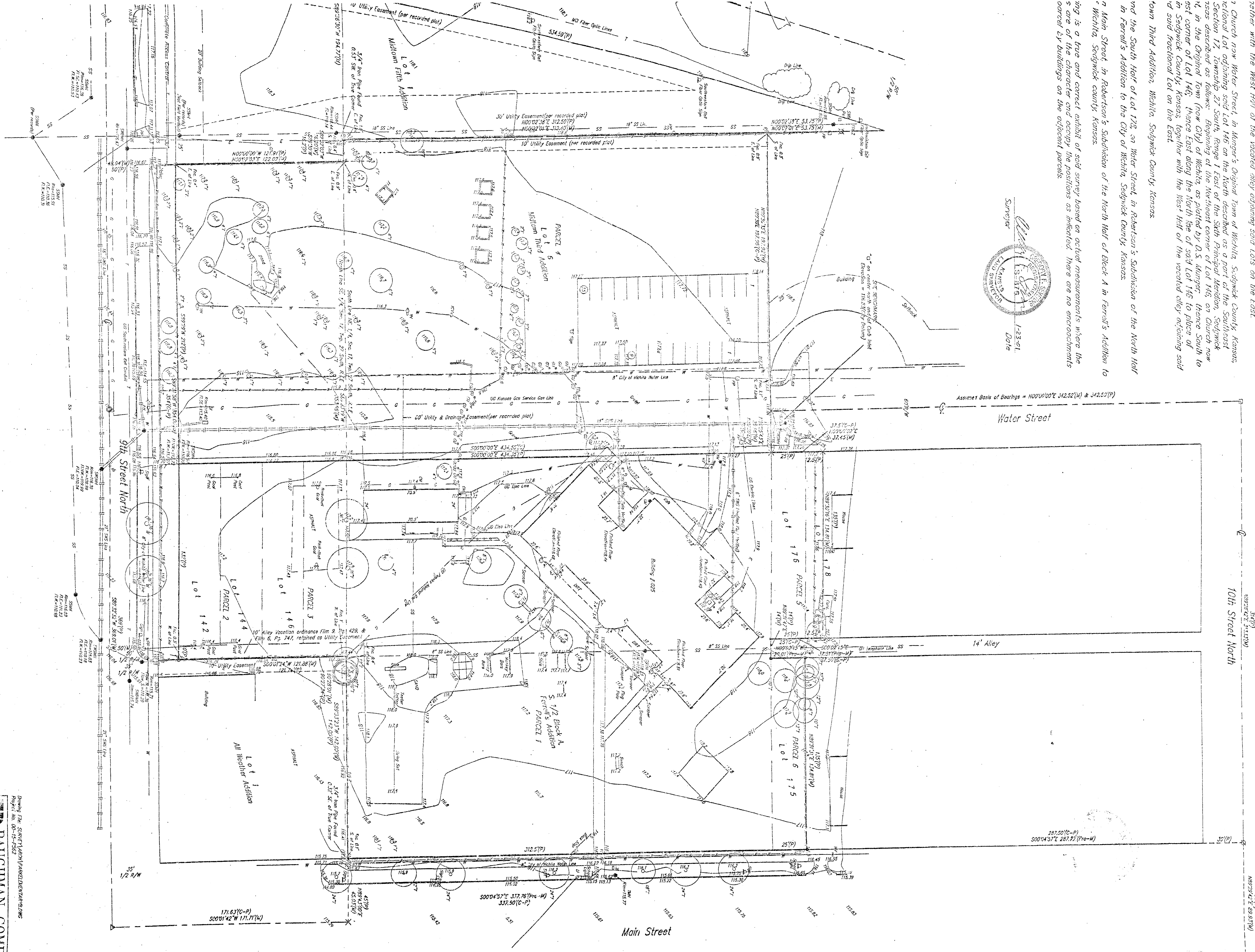
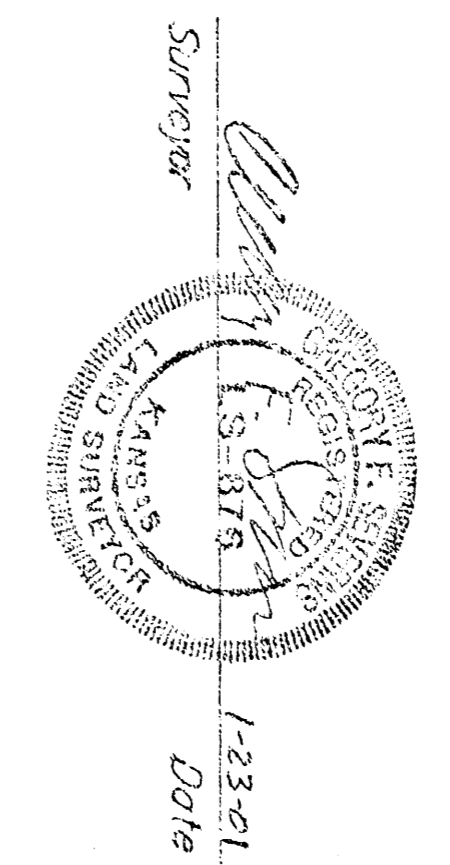
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- NOTES**
1. The utility locations represented on this survey were compiled by both field observation and information from the various utility companies. If any construction or relocation is planned for this site the various utility companies should be requested to verify their facilities in the field prior to final design or construction. Any utilities not shown are due to no response to Kansas One Call 1-800-878-7272.
  2. Sedgewick County Ordinance 211.501.1, Survey Field of 4,587 Acres.
  3. According to field notes on 12/14/18 RW 200328 0025 is structure date May 15, 1980.
  4. Property located hereon on 12/14/18 RW 200328 0025 is structure date May 15, 1980.
  5. Subject property is presently zoned "2 (Multi-Family)".
  6. The City of Wichita Building Inspection and the Metropolitan Planning Department needs to be contacted to determine if there are any requirements to receive a building permit for subject property.

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