

# INDEX OF SHEETS

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C 3.4 Type 1 Curb Inlet  
C 3.5 Sanitary Sewer Plan and Profile  
C 3.6 Manhole Detail  
C 3.7 Plat

## 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:

Cox Communications 262-4270  
K.P.L. Gas Service Company 383-8650  
Kansas Gas & Electric Company 261-6152

Southwestern Bell Telephone Co. 1-800-870-8390  
Wichita Water & Sewer Dept. 268-4555  
Kansas Gas Service 832-3010

2. Existing utilities and their location, as shown on the plans, represent the best information available for design. Location information has been obtained from the various utility companies and is either from company record drawings or company provided field location. The Contractor will be required to work around existing utilities which do not conflict with the proposed construction.

3. The Contractor to verify utility locations prior to construction of this project.

4. Utility service and installation shall be coordinated with the respective utility owners. Contacts are:

Kansas Gas Service Charlene Lawless 1-888-482-4950  
KGE Russ Chitwood 261-6251  
Water & Sewer Dept. Bill Perkins 268-4555  
Southwestern Bell Bob Alley 268-2245  
Cox Communications Mark Anaya 262-4270

5. All lawn/turf areas disturbed by construction of proposed improvements shall be restored with sod. All costs for this work shall be subsidiary to the lump sum price bid for "Site Restoration."

6. Traffic affected by the construction of this project shall be handled in accordance with the latest edition of the Manual on Uniform Traffic Control Devices.

7. All commercial sign to be moved by others prior to construction, unless noted.

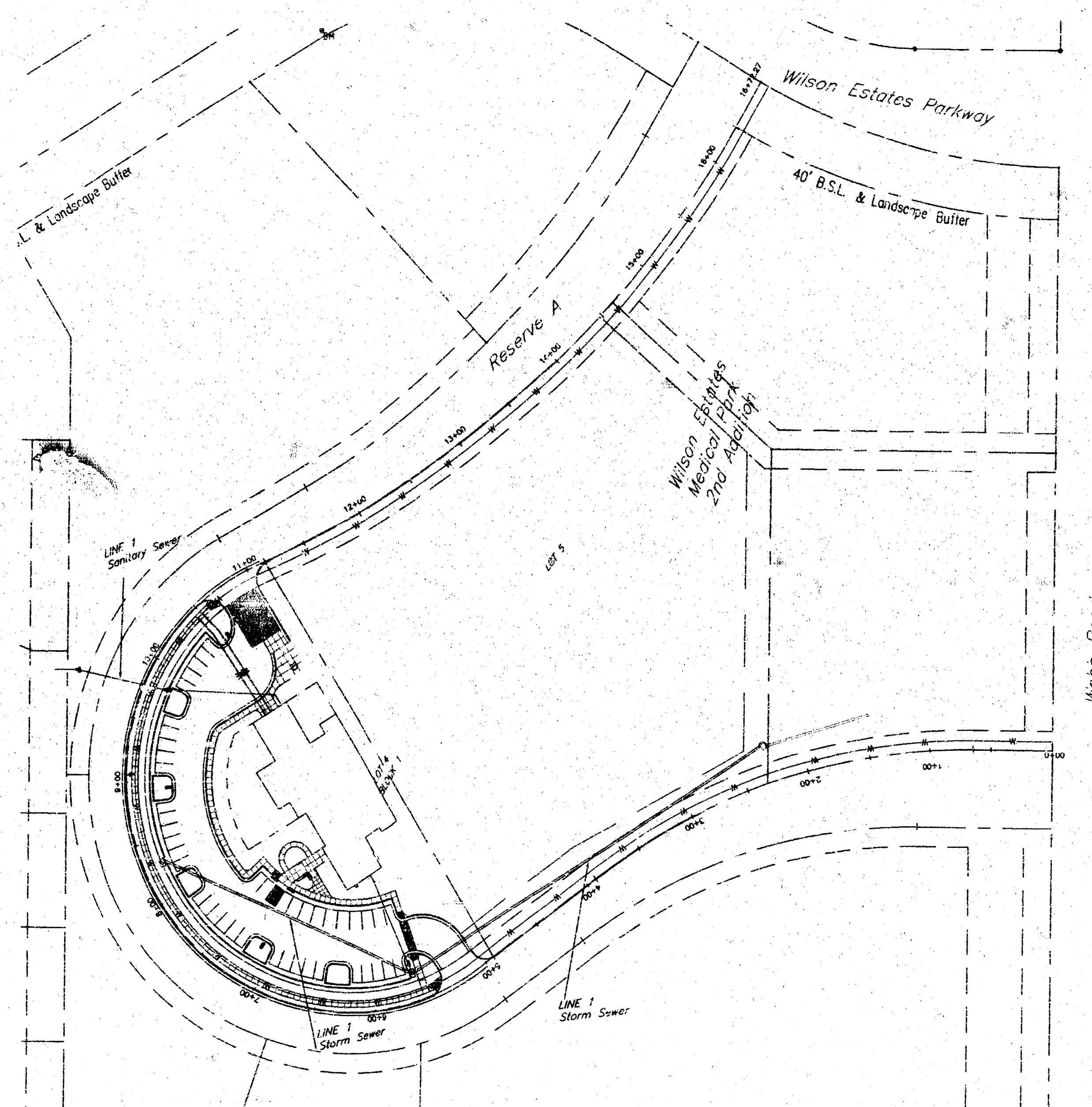
8. Properties within the project may have underground irrigation systems (lawn sprinklers) which conflict with the new construction. Contractor shall remove such components as needed during construction of the project. The irrigation system shall be reinstalled in like kind before project completion. Any irrigation system modifications required because of project improvements shall be coordinated with the property owner. Portion of underground irrigation systems not in conflict with new construction shall be protected from damage and shall remain in place. All work related to underground irrigations/sprinklers shall be subsidiary to Site Restoration.

## BENCHMARK

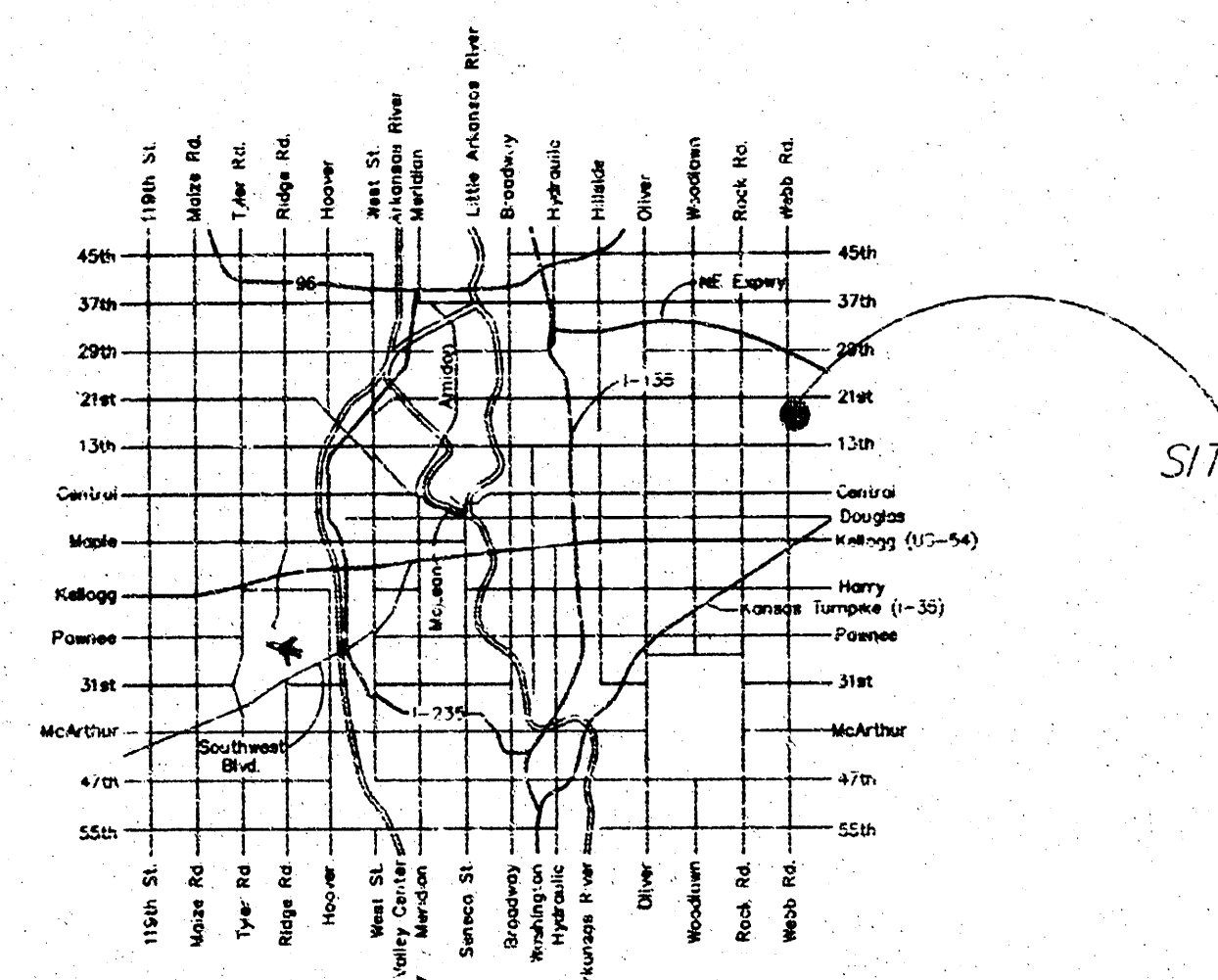
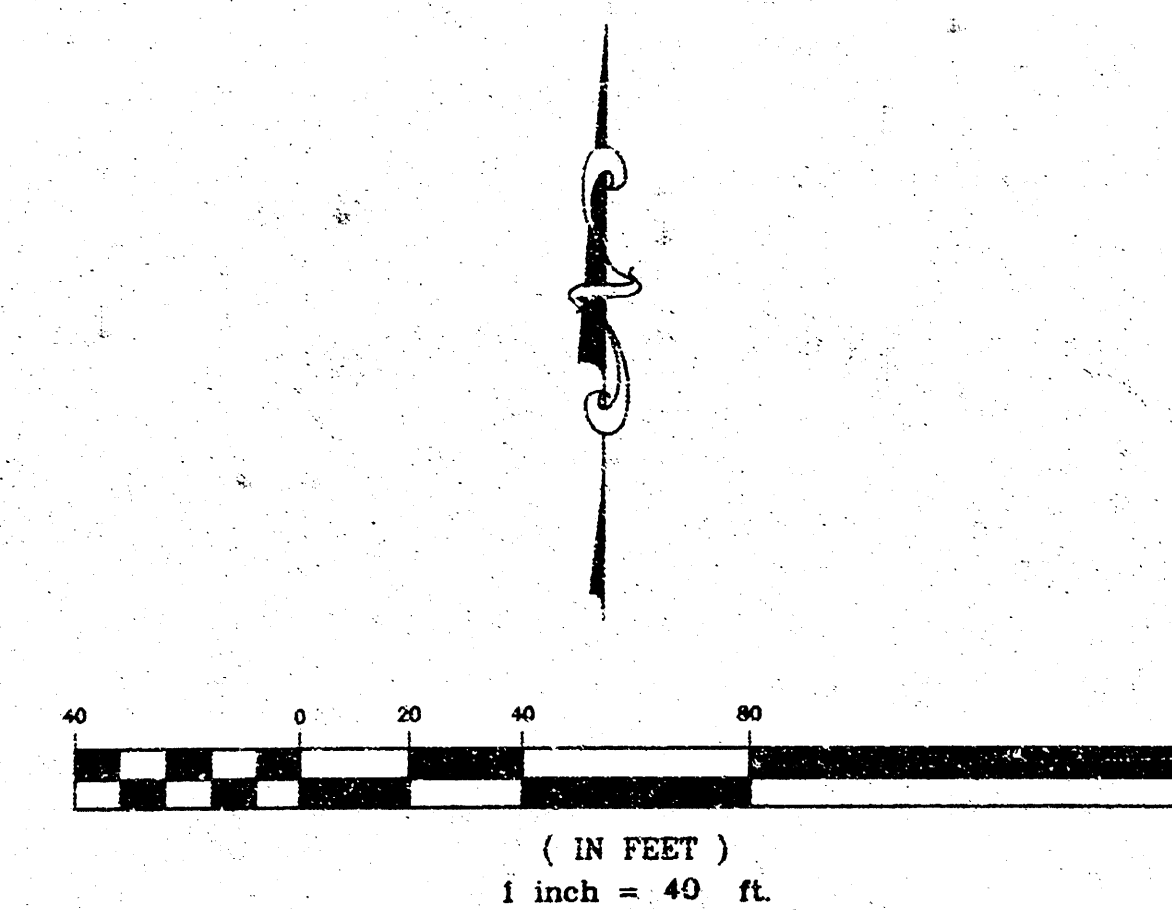
"0" N Side of Sidewalk in Reserve B  
S of Wilson Estate Parkway,  
20'± W of P.C.

Baseline  
0+00 is on North  
Line of Reserve A  
and West Line of  
Webb Road.

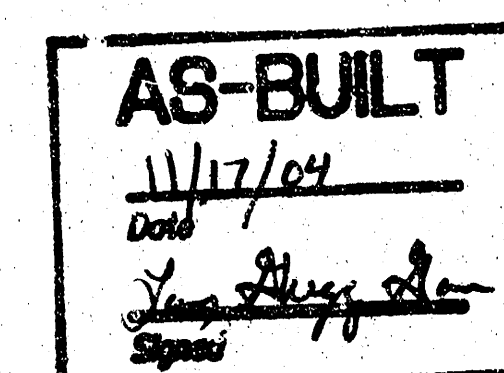
# STORM SEWER AND SANITARY SEWER FOR PART OF LOT 4, BLOCK 1, WILSON ESTATES MEDICAL PARK 2ND ADDITION (1861 NORTH WEBB ROAD) (PLASTIC SURGERY CENTER) 1478 PPS (607861) CITY OF WICHITA, KANSAS Jim Armour P.E., Acting City Engineer



Dondlinger & Sons, Inc. - Contractor  
L. Gann, R.E. Miller - Inspector  
Released 1/13/05  
As-Built  
.pdf by JDL 2/5/05 (San. Sewer)



LOCATION MAP



## CITY ENGINEER APPROVED AS NOTED

Sanitary Sewer VRT 10/21/04  
Storm Sewer VRT 10/21/04

## NOTE TO CONTRACTORS

Installation, 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).



STORM AND  
SANITARY  
SEWER PLAN

C 3.1

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PLASTIC SURGERY CENTER  
WILSON ESTATES  
1861 NORTH WEBB ROAD  
WICHITA, KANSAS

DATE  
FOR PERMIT 22 SEPT 04  
REVISIONS 1 06 Oct 04

STORM AND  
SANITARY  
SEWER PLAN

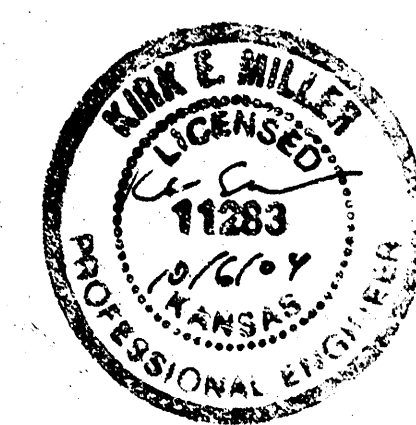
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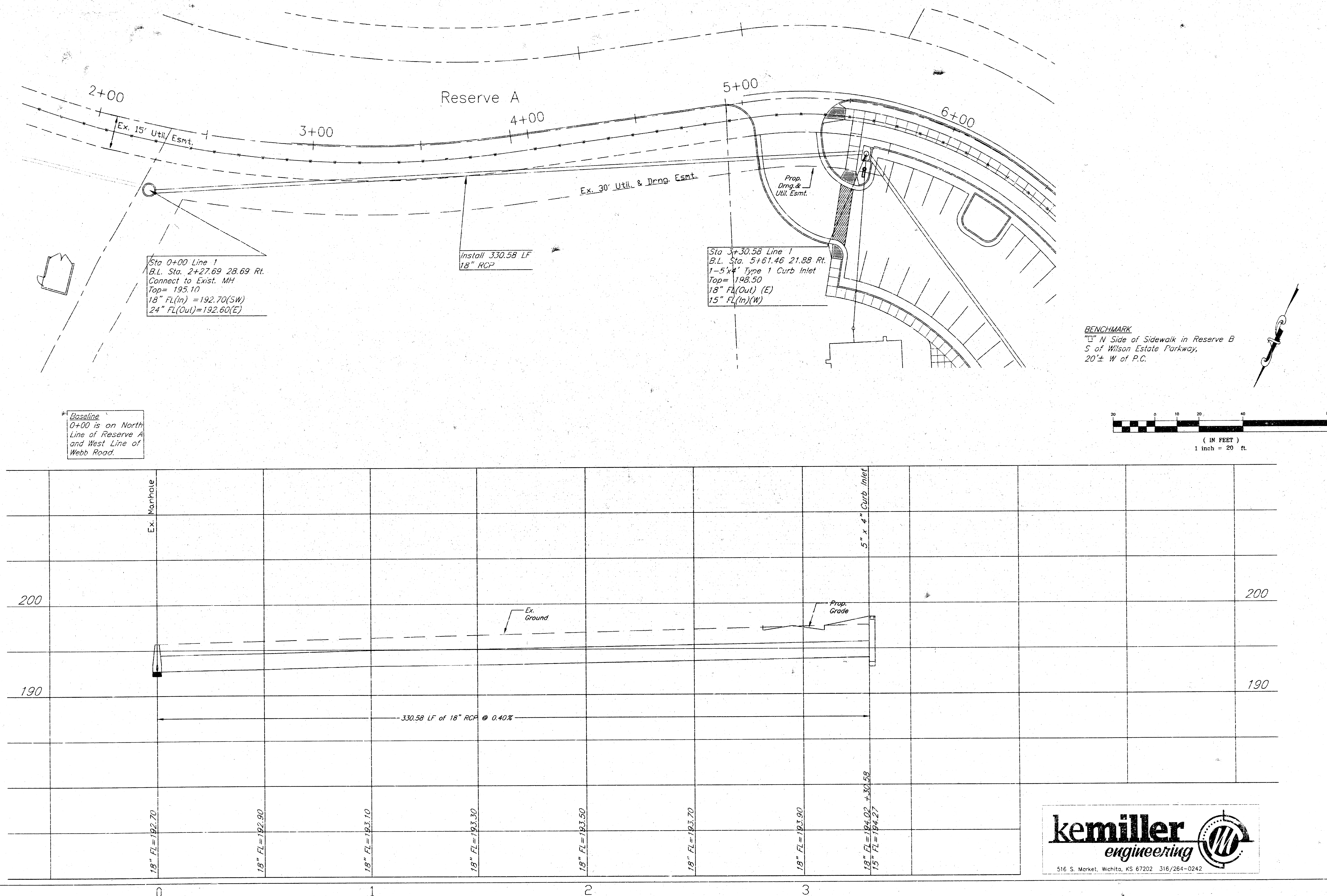


**PLASTIC SURGERY CENTER  
WILSON ESTATES**  
1861 NORTH WEBB ROAD  
WICHITA, KANSAS

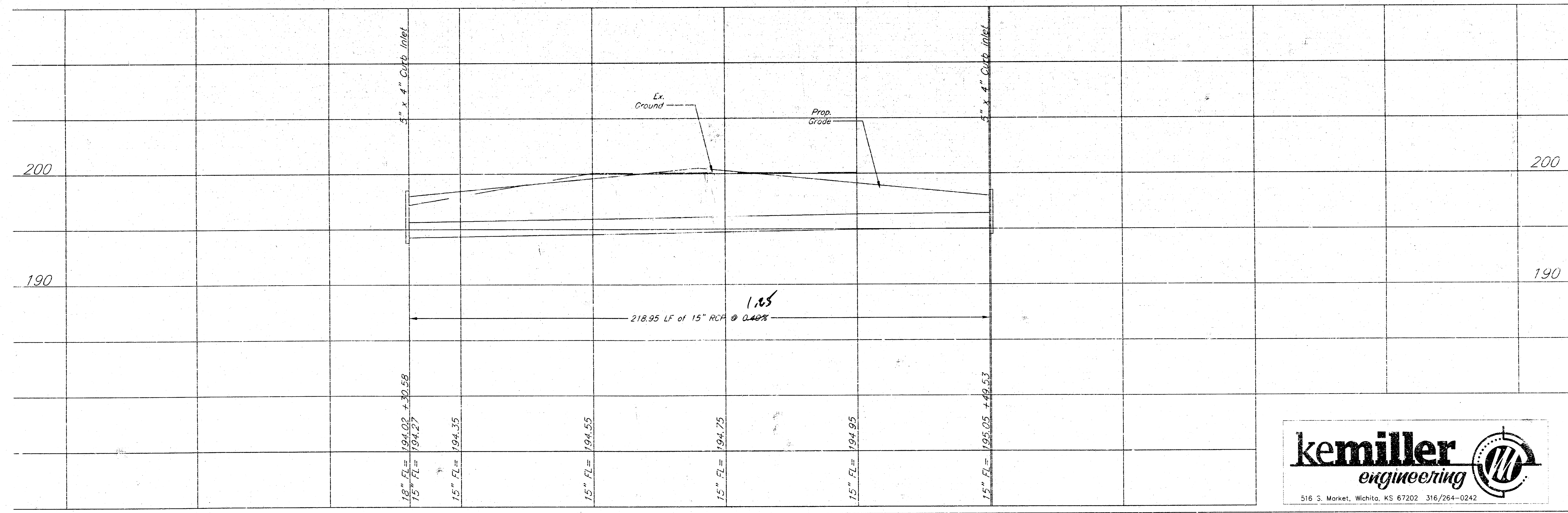
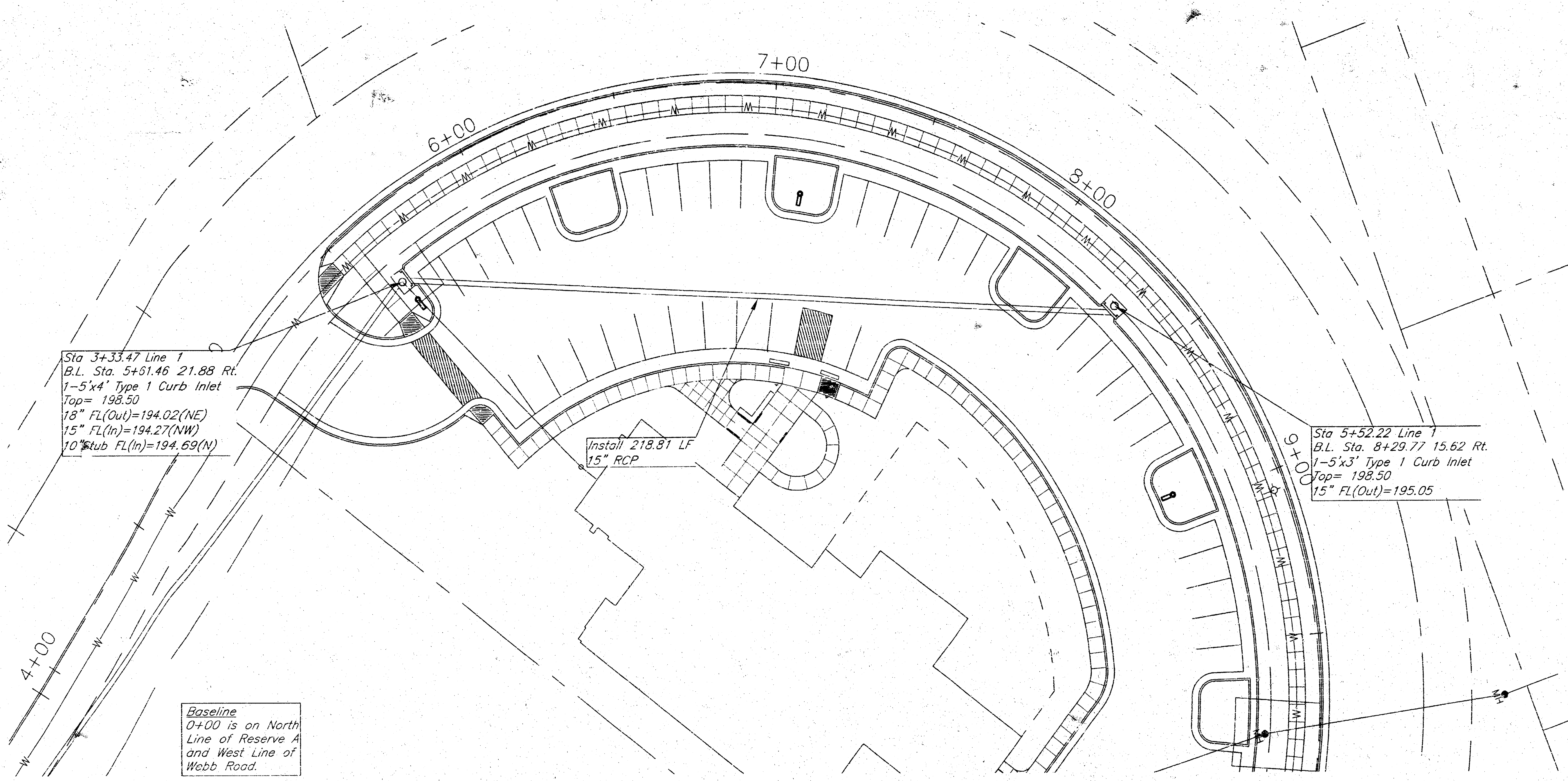
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STORM  
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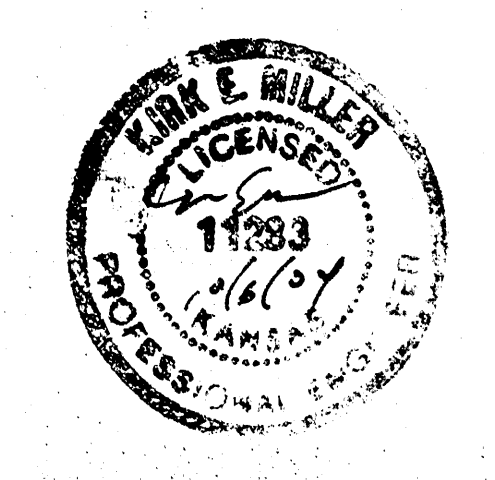
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TEL 316 263 4300 FAX 316 263 4301



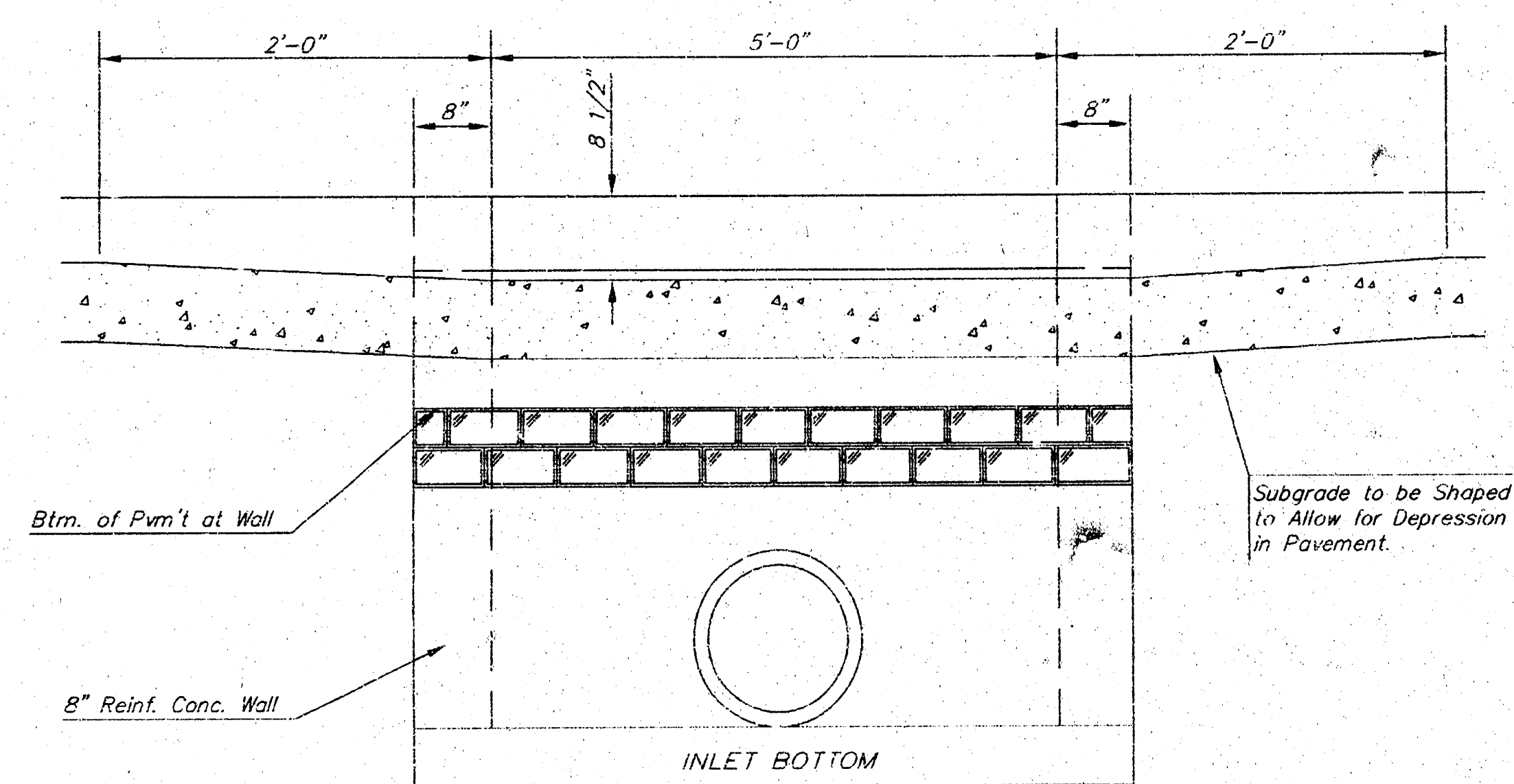
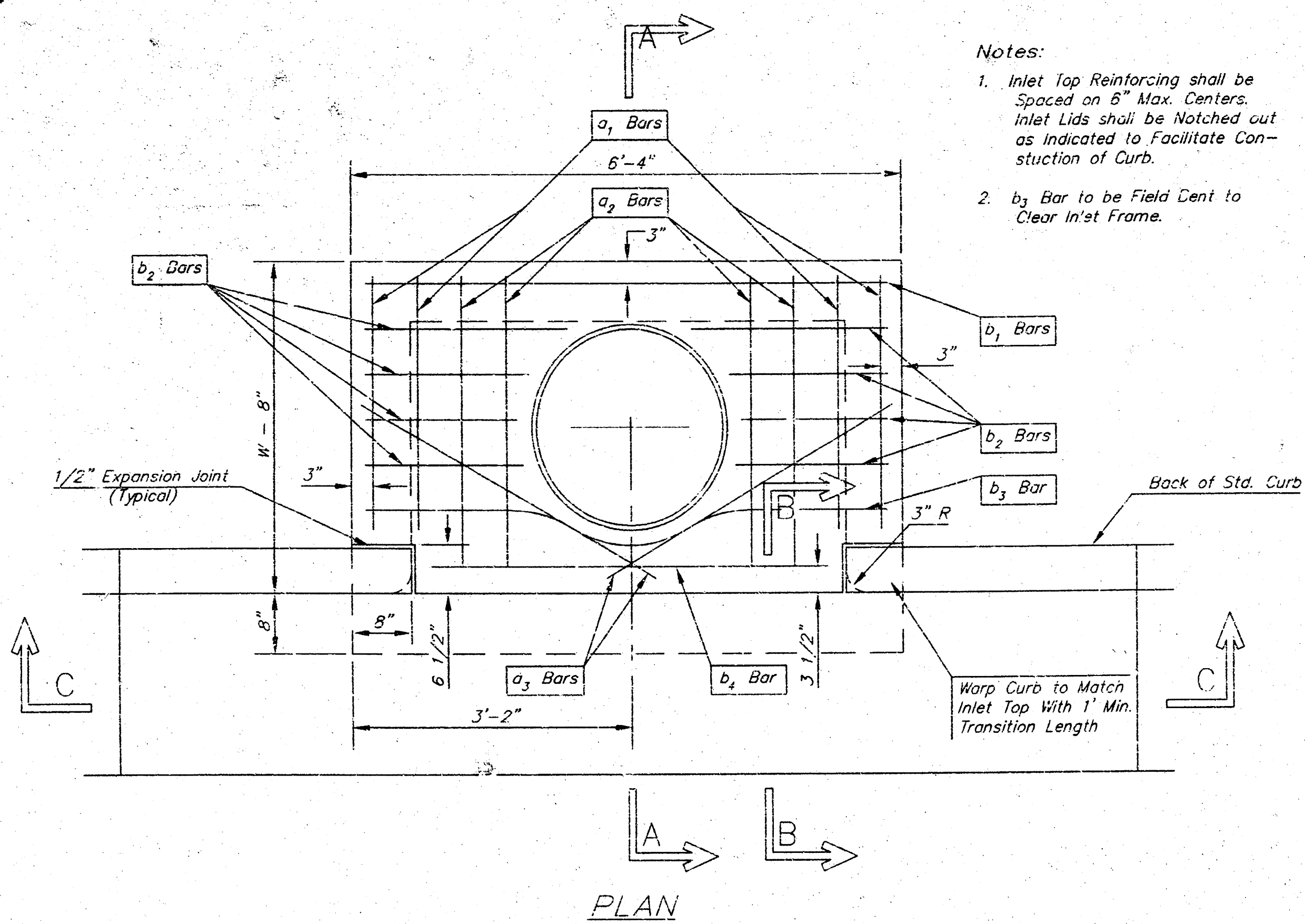
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WILSON ESTATES**  
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STORM  
SEWER LINE 1  
**C 3.3**

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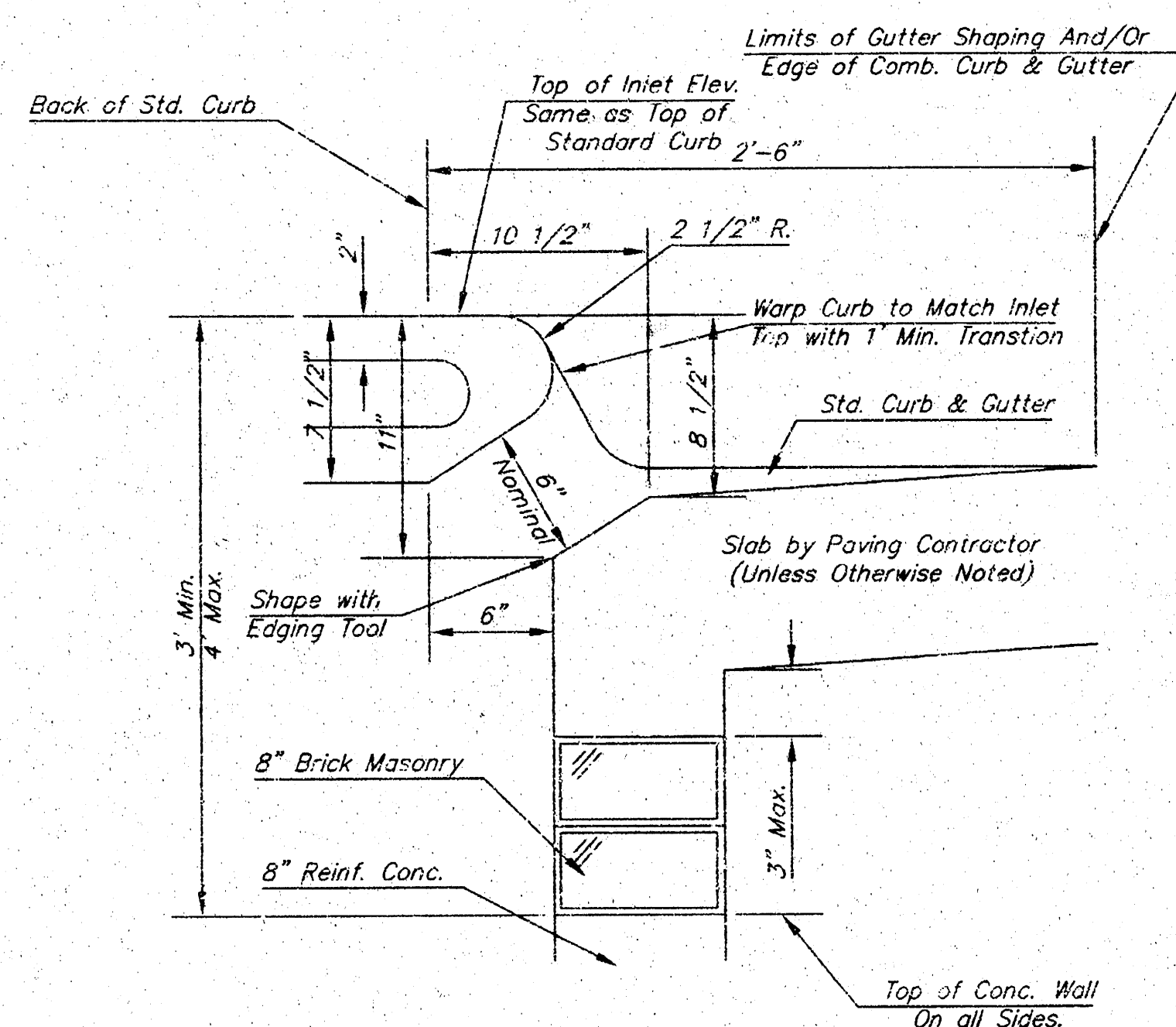
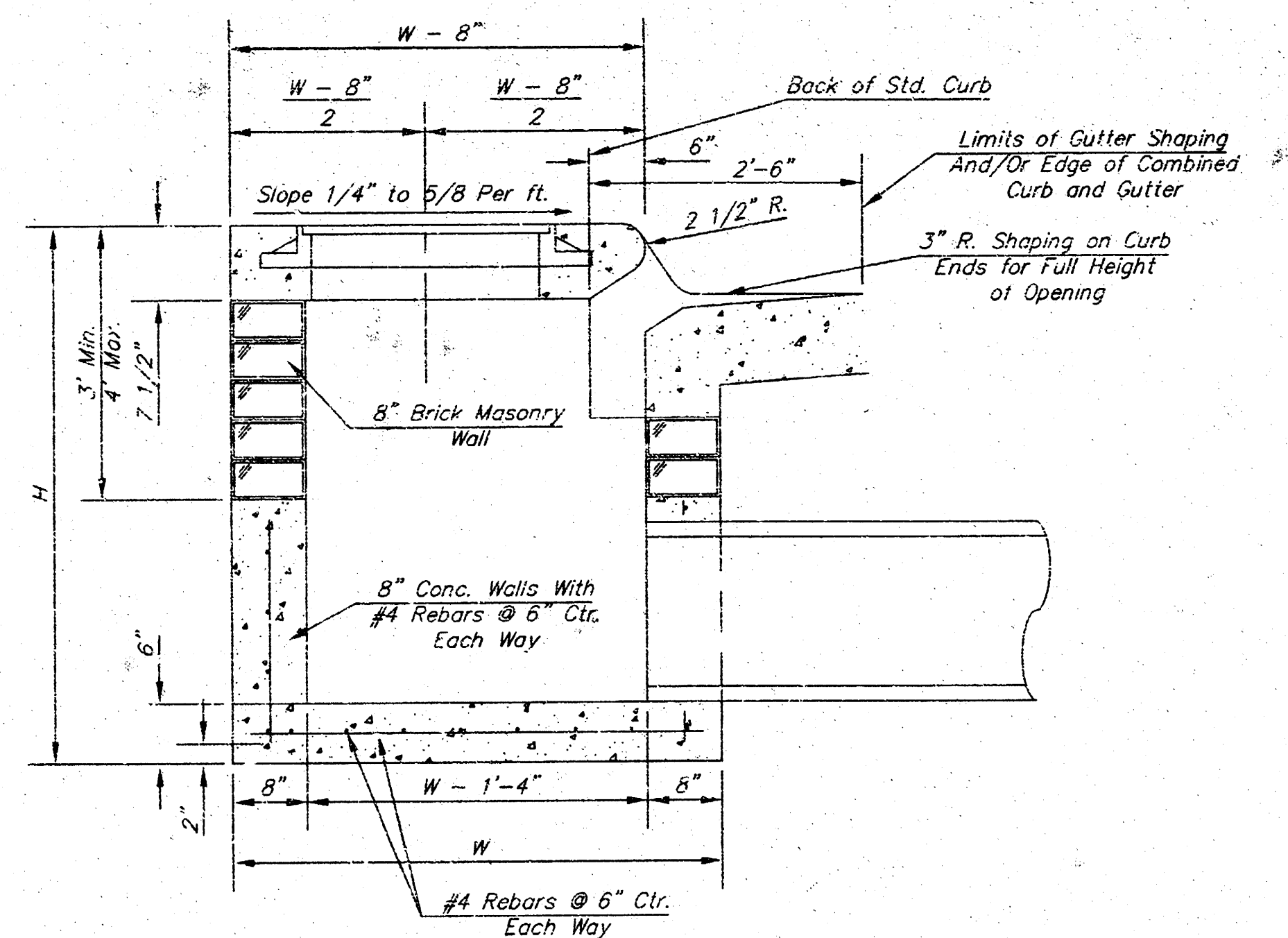
STEEL SCHEDULE

| BAR    | $a_1$   | $a_2$  | $a_3$  | $b_1$ |         |         |         | $b_2$   | $b_3$ | $b_4$ | WT.<br>Lbs. |       |
|--------|---------|--------|--------|-------|---------|---------|---------|---------|-------|-------|-------------|-------|
|        |         |        |        | #4-4" | #5-5'4" | #6-6'4" | #7-7'4" | #8-8'4" |       |       |             |       |
| NUMBER | 4       | 4      | 2      | 1     | 3       | 5       | 7       | 9       | 6     | 1     |             |       |
| SIZE   | #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" | 4'-8"       | 121±  |
|        | W=8'-4" | 13'-7" | 14'-7" | 8'-0" | -       | -       | -       | -       | 6'-1" | 1'-9" | 6'-2"       | 4'-8" |

Note:  $a_3$  Bars to be Placed Approx. 2" Below Top of Inlet Cover.

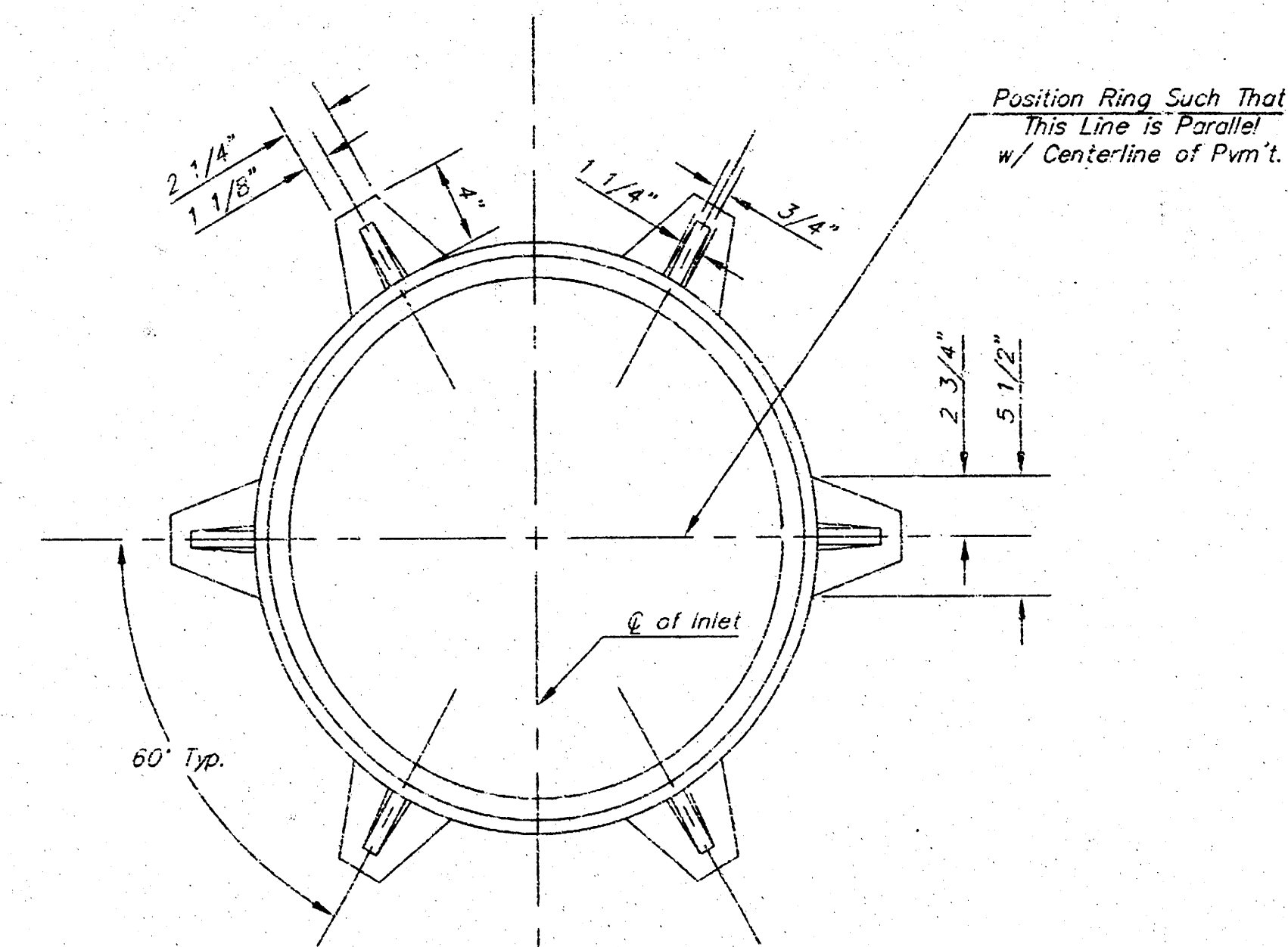
**STANDARD CURB INLET PRECAST TOPS**

| 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'-8" 6'-4" 7 1/2" | 50" & 56"     | 0.90±         |



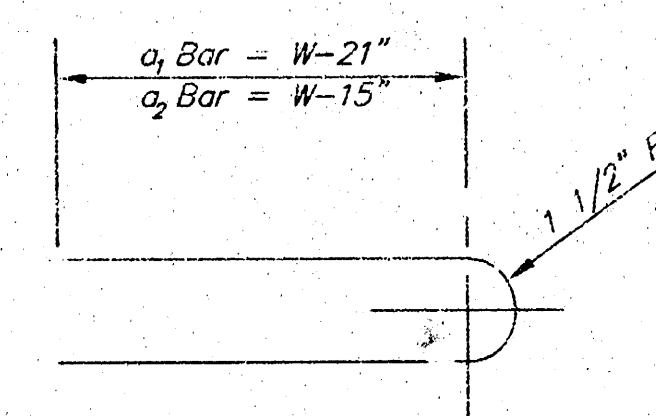
**GENERAL NOTES**

- 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.



**MANHOLE RING AND COVER**

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



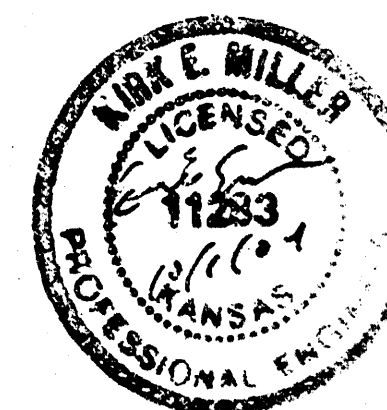
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| <p>THE CITY OF WICHITA</p> <p>CITY ENGINEER'S OFFICE<br/>CITY HALL - SEVENTH FLOOR<br/>452 NORTH MAIN STREET<br/>WICHITA, KANSAS 67202<br/>(316) 266-4501<br/>(316) 266-4111 FAX</p> | <p align="center"><b>STANDARD TYPE 1</b></p> <p align="center"><b>CURB INLET</b></p> <p align="center"><b>OPENING = 6" x 5'-0"</b></p> |                              |
|                                                                                                                                                                                      | <p>M. E. LINDEBAK P.E. - CITY ENGINEER</p>                                                                                             |                              |
|                                                                                                                                                                                      | <p>PROJECT NUMBER<br/>XXX-XXXXX</p>                                                                                                    | <p>INDEX CODE<br/>XXXXXX</p> |
|                                                                                                                                                                                      | <p>DATE<br/>MAR 96</p>                                                                                                                 | <p>SHEET X OF X</p>          |

**PLASTIC SURGERY CENTER**  
**WILSON ESTATES**  
1851 NORTH WEBB ROAD  
WICHITA, KANSAS

**INLET**  
**DETAILS**

**C3.4**

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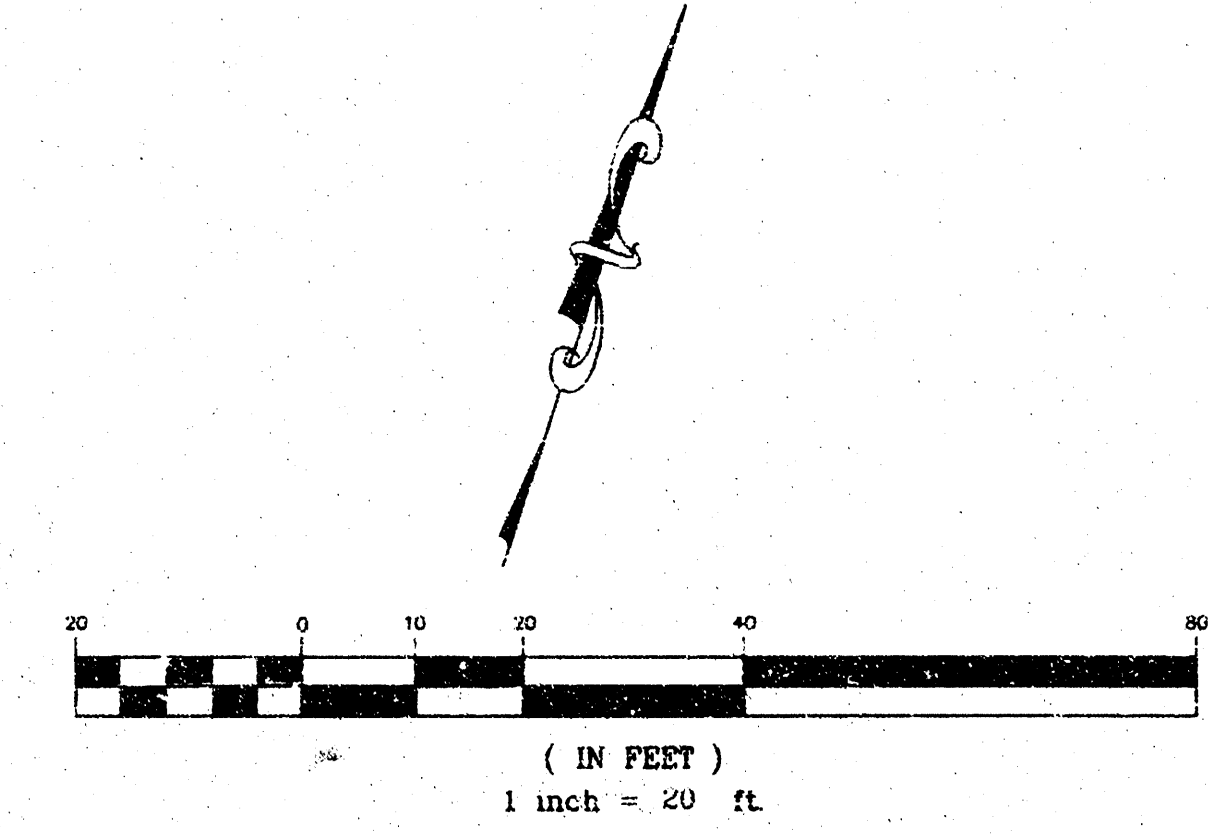
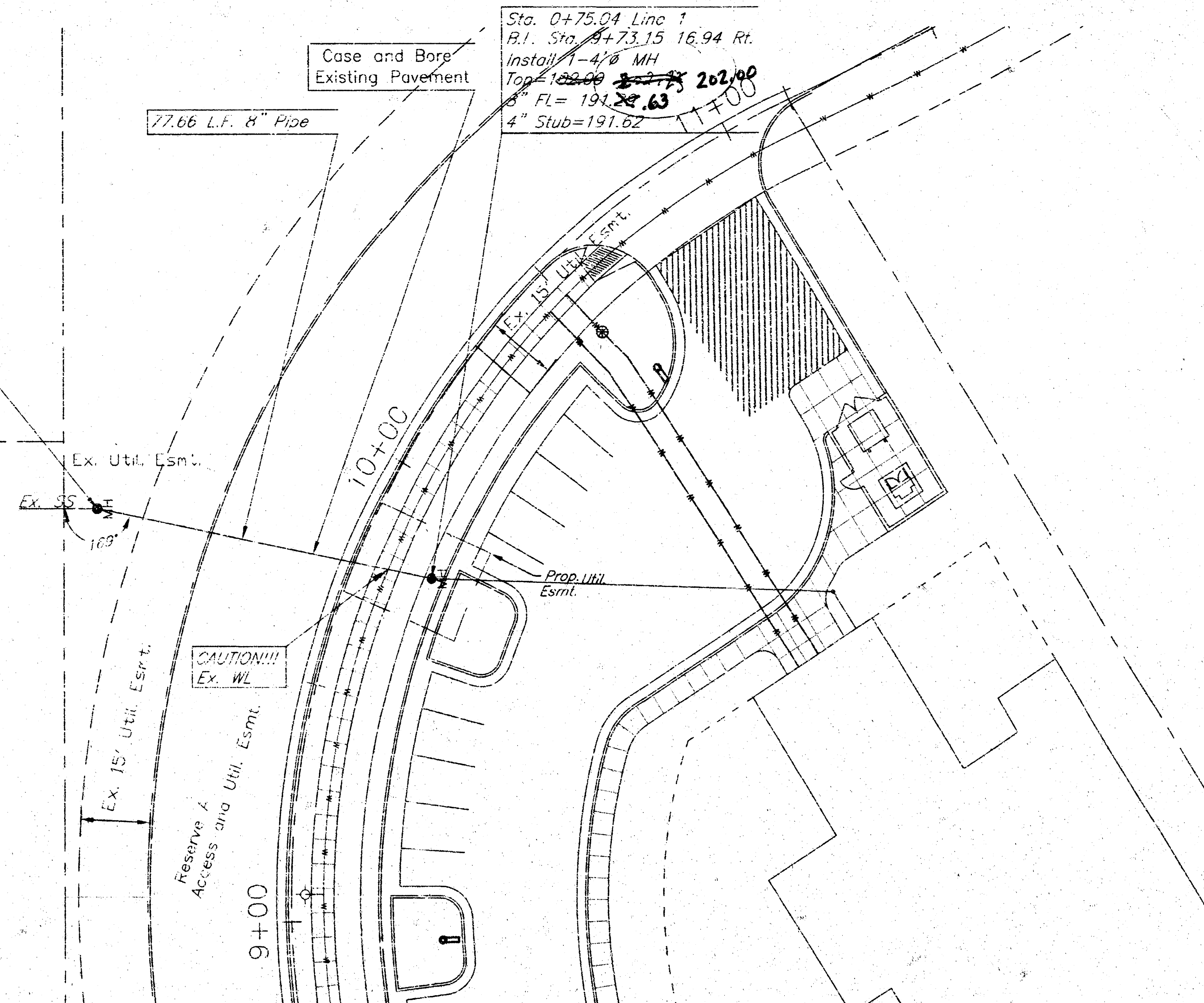


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Sta. 0+00.00 Line 1  
B.L. Sta. 9+81.72 57.72 LL  
Connect to ~~Ex. 15' Util. Esmt.~~ **Ex. 15' Util. Esmt.**  
8" Stub  
8" FL (S)= 190.99

Baseline  
0+00 is on North  
Line of Reserve A  
and West Line of  
Webb Road.



**BENCHMARK**  
"B" N Side of Sidewalk in Reserve B  
S of Wilson Estate Parkway,  
20'± W of P.C.



**PLASTIC SURGERY CENTER  
WILSON ESTATES**  
1851 NORTH WEBB ROAD  
WICHITA, KANSAS

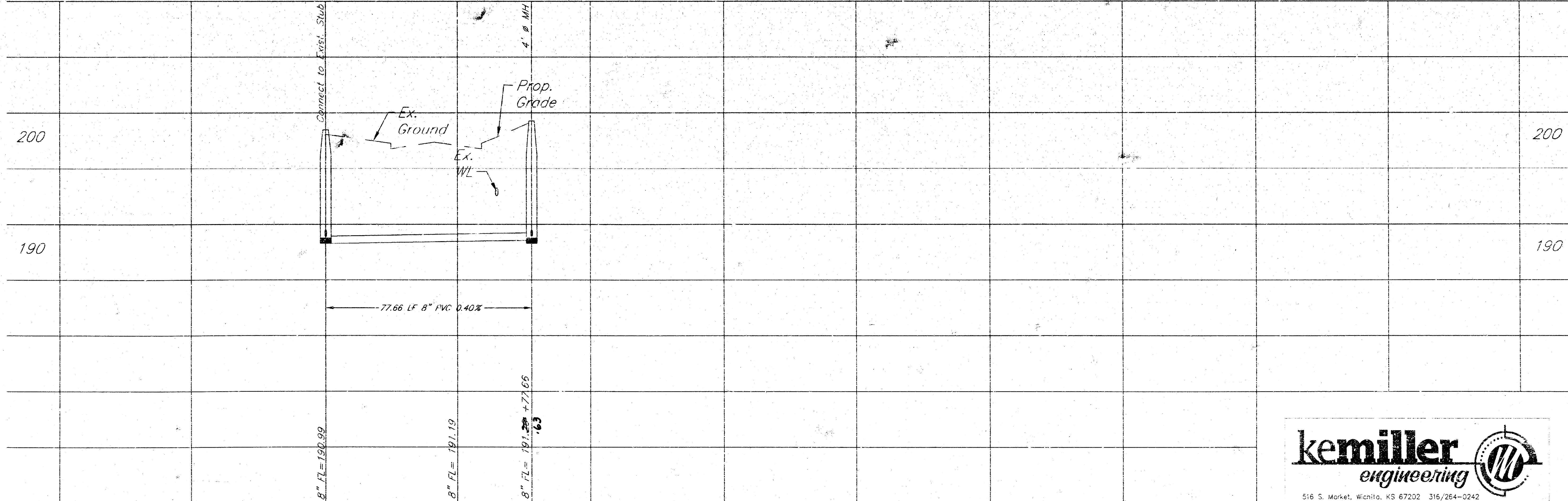
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SANITARY  
SEWER LINE 1  
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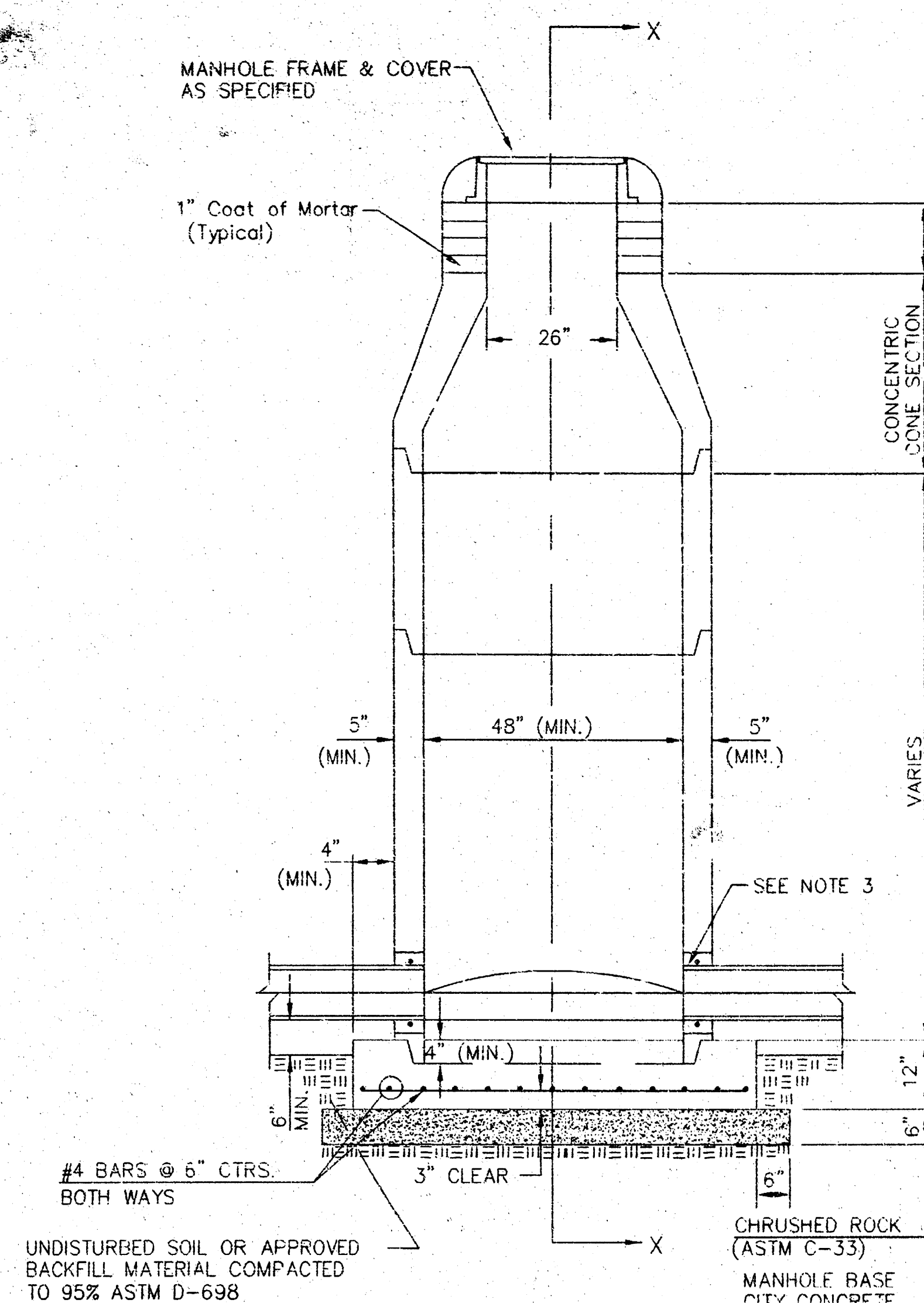


516 S. Market, Wichita, KS 67202 316/264-0242

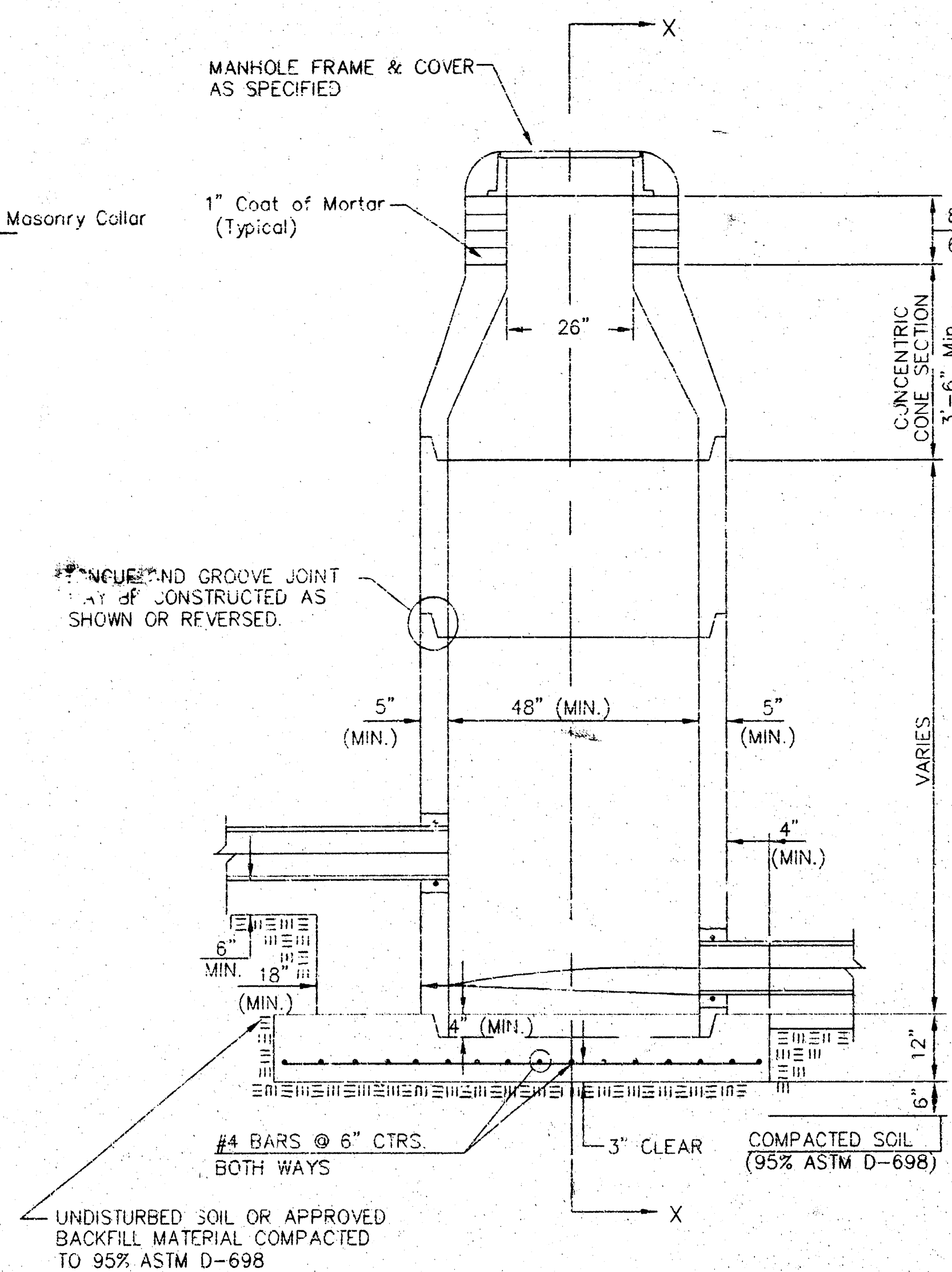




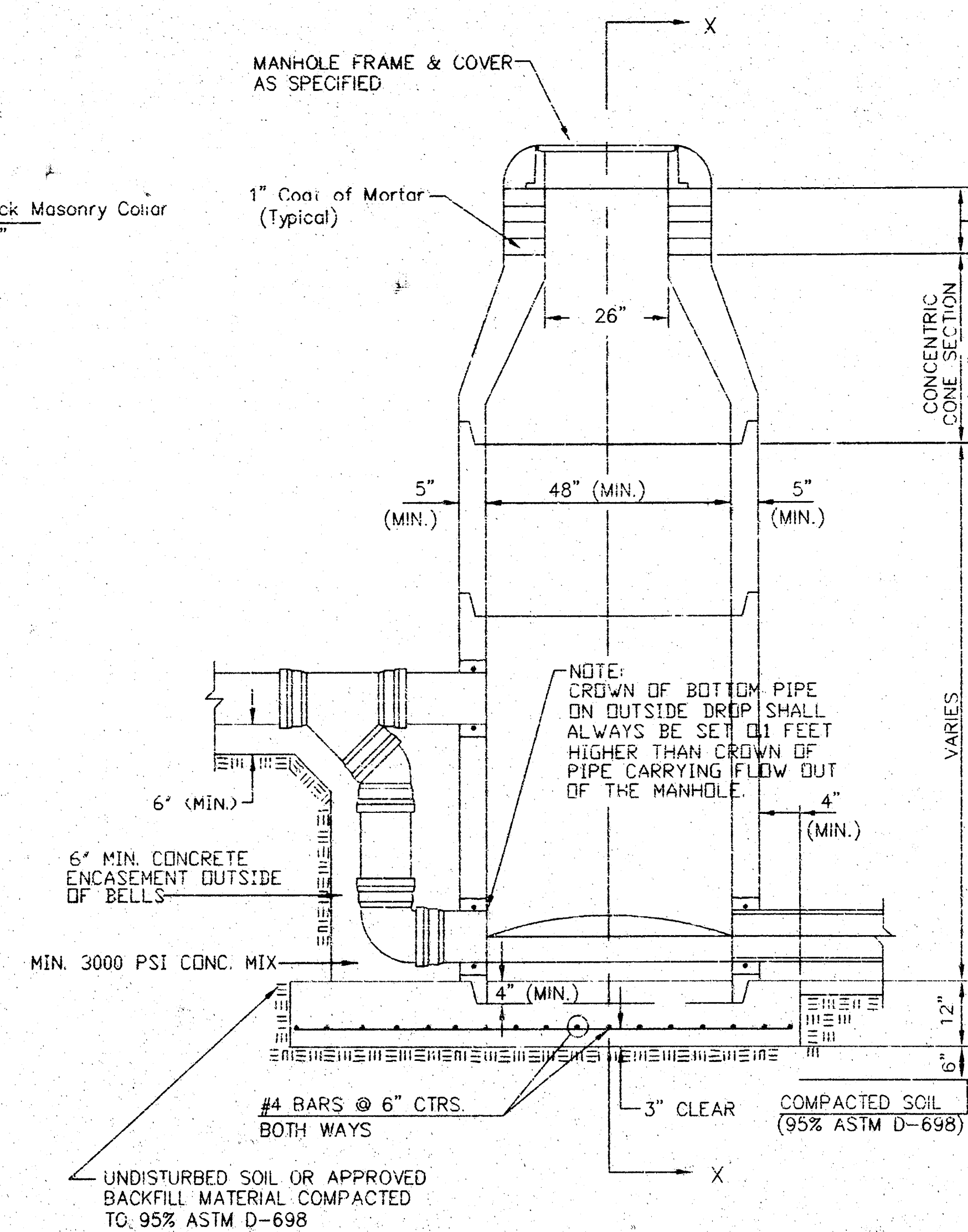
# SEWER APPURTENANCES DETAILS



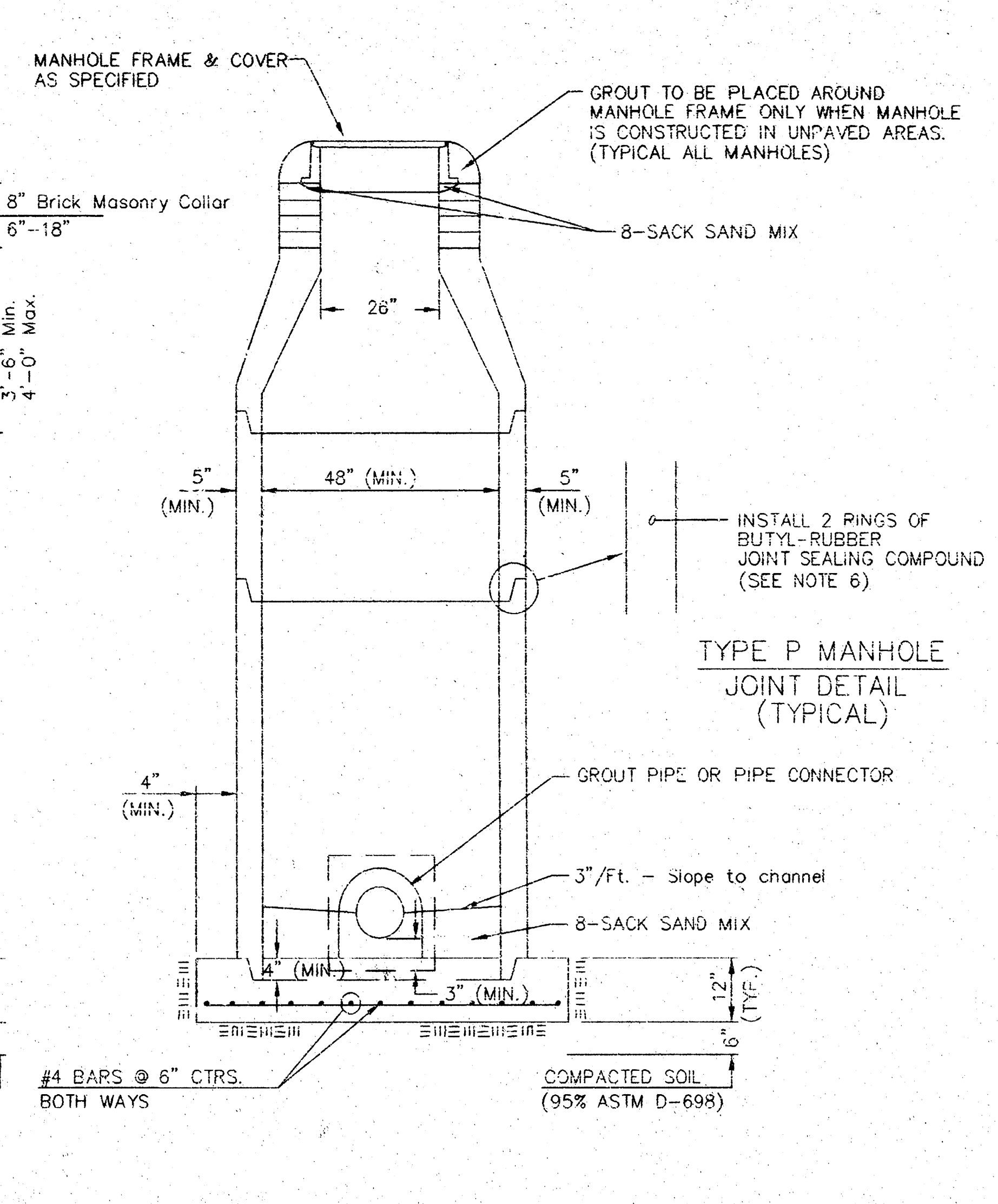
TYPE P  
STANDARD MANHOLE



TYPE P  
INSIDE DROP MANHOLE



TYPE P  
OUTSIDE DROP MANHOLE



SECTION X  
(TYPICAL)

## GENERAL NOTES

### PRECAST MANHOLE NOTES

1. ALL PRECAST CONCRETE MANHOLE SECTIONS SHALL CONFORM TO THE LATEST REVISIONS OF A.S.T.M. C478 AS MODIFIED BY THE SPECIFICATIONS.
2. NON-SHRINK GROUT SHALL BE NON-METALLIC TYPE.
3. APPROVED FLEXIBLE WATERSTOP GASKETS SHALL BE INSTALLED TO JOIN THE SEWER TO THE MANHOLE WALL WHEN A.B.S. COMPOSITE PIPE OR P.V.C. PIPE IS USED. FOR OTHER TYPES OF PIPE THE SEWER PIPE SHALL BE GROUTED IN PLACE WITH NON-SHRINK GROUT. THE SEWER PIPE SHALL BE SUPPORTED WITH CONCRETE ENCASEMENT A MINIMUM OF 3 FEET FROM THE MANHOLE WALL AND TO THE FIRST JOINT FOR V.C.P. SUCH THAT THE JOINT REMAINS FLEXIBLE.
4. ALL INSIDE SURFACES OF THE CONCRETE MANHOLE WHICH WOULD BE EXPOSED TO SEWER GAS SHALL BE COATED WITH 2 COATS TNEC SERIES 66 HI-BUILD EPOXOLINE, DRY THICKNESS OF 8 MILS (MIN.)
5. EXTERIOR MANHOLE WALLS SHALL BE COATED WITH 1 COAT MOBILARMA 633 BITUMINOUS COATING.
6. JOINT SEALING COMPOUND SHALL BE KENT SEAL NO. 2 OR APPROVED EQUAL.
7. PRECAST MANHOLES SHALL BE SET AT LEAST 4 INCHES INTO THE MANHOLE BASE.
8. TOP OF MANHOLE FLOOR SLAB SHALL BE AT LEAST 3 INCHES BELOW THE FLOW LINE OF THE OUTLET PIPE TO INSURE SUFFICIENT MINIMUM THICKNESS OF SHAPED INVERT.
9. LIFTING HOLES SHALL BE FILLED WITH NON-SHRINK GROUT AND THE INTERIOR SURFACE COATED AS SPECIFIED.
10. 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 PAVEMENT 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.

11. 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 AT LEAST 3" 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.
12. OPENINGS SHALL BE CUT INTO THE MANHOLE WALL WHEN OUTSIDE DROPS ARE CONSTRUCTED ON EXISTING MANHOLES. SUCH OPENINGS CUT INTO EXISTING MANHOLES SHALL BE AS SMALL AS PRACTICAL TO FACILITATE INSTALLING AND GROUTING THE NEW PIPE IN PLACE. WATERSTOP GASKETS SHALL BE USED WITH P.V.C. AND A.B.S. COMPOSITE PIPE. THE NEW PIPE SHALL BE GROUTED INTO THE OPENING USING AN APPROVED NONSHRINK GROUT FOR THE FULL MANHOLE WALL THICKNESS. THE EXTERIOR OF THE COMPLETED CONNECTION SHALL BE SEALED WITH AN APPROVED BITUMINOUS COATING SUCH THAT THE CONNECTION WILL BE WATER TIGHT. FLOOR OF MANHOLE SHALL BE MODIFIED TO FORM NEW FLOW CHANNEL FOR THE NEW CONNECTION AS INDICATED BY THE DRAWING. THIS WORK, INCLUDING MODIFICATION OF MANHOLE FLOOR, SHALL BE PAID FOR AT THE UNIT PRICE BID FOR OUTSIDE DROP STACK CONSTRUCTED ON EXISTING MANHOLE.
13. THE FLOORS OF ALL MANHOLES SHALL BE SHAPED WITH FLOW CHANNELS SUCH THAT THE MANHOLES WILL BE SELF CLEANING AND FREE OF AREAS WHERE SEDIMENTS 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 EXCEPT FOR INSIDE DROP MANHOLES. FLOW CHANNELS FOR INSIDE DROP MANHOLES SHALL BE CONSTRUCTED AS INDICATED BY THE DRAWING. 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.
14. 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 - VARIATION ON 10 CLAY PIPE JOINTS ADJACENT TO MANHOLE SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE MANHOLE.

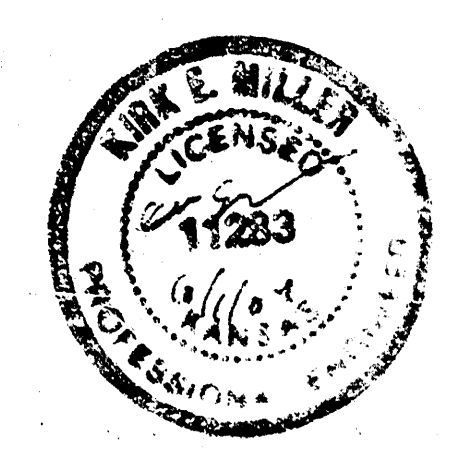
15. MANHOLE COVER CASTINGS AND MANHOLE FRAME CASTINGS SHALL CONFORM TO THE REQUIREMENTS AS INDICATED IN THE STANDARD SPECIFICATIONS AND AS SHOWN IN THE STANDARD DETAIL DRAWING.
16. THE VERTICAL DROP IN INSIDE DROP MANHOLES SHALL NOT EXCEED 2' FOR INFLOWING PIPES SIZED 12" OR SMALLER AND 2' FOR INFLOWING PIPES LARGER THAN 12". THE CROWNS OF INFLOWING PIPES SHALL NEVER BE SET LOWER THAN THE CROWN OF THE OUTFLOWING PIPE.
17. STANDARD MANHOLES AND STANDARD INSIDE DROP MANHOLES 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.
18. A BRICK MASONRY COLLAR SHALL BE INSTALLED BETWEEN THE CAST IRON FRAME AND THE CONCENTRIC CONE. THE COLLAR WILL HAVE 8" WALLS AND A VERTICAL HEIGHT OF 6" MINIMUM AND 18" MAXIMUM. A 1" COAT OF MORTAR WILL BE PLASTERED ON THE OUTSIDE OF THE COLLAR. THE USE OF PRE-CAST CONCRETE SPACERS FOR MANHOLE TOP ADJUSTMENT IS ALSO ALLOWED.
19. CRUSHED ROCK CONFORMING TO ASTM C-33 WITH A GRADATION OF NO. 67 SHALL BE INSTALLED AT THE BASE OF THE MANHOLE TO A DEPTH OF NO LESS THAN 6", AND SHALL EXTEND NO LESS THAN 6" OUTSIDE THE DIAMETER OF THE CONCRETE FLOOR OF THE MANHOLE.

|                                                                                                                                                                                      |                                            |                              |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|------------------------------|
| <p>THE CITY OF WICHITA</p> <p>CITY ENGINEER'S OFFICE<br/>CITY HALL - SEVENTH FLOOR<br/>435 NORTH MAIN STREET<br/>WICHITA, KANSAS 67202<br/>(316) 268-4001<br/>(316) 268-4114 FAX</p> | <p>STANDARD<br/>TYPE 'P'<br/>MANHOLES</p>  |                              |
|                                                                                                                                                                                      | <p>M. E. LINDEBAK P.E. - CITY ENGINEER</p> |                              |
|                                                                                                                                                                                      | <p>PROJECT NUMBER<br/>XXX-XXXX</p>         | <p>INDEX CODE<br/>XXXXXX</p> |
|                                                                                                                                                                                      | <p>DATE<br/>MAR 96</p>                     | <p>SHEET X OF X</p>          |

MANHOLE  
DETAILS

C 3.6

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PLASTIC SURGERY CENTER  
WILSON ESTATES  
1861 NORTH WEBB ROAD  
WICHITA, KANSAS

DATE  
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architecture  
8006 FIRST ST. STE 100 WICHITA, KS 67202  
TEL 316 263 4300 FAX



