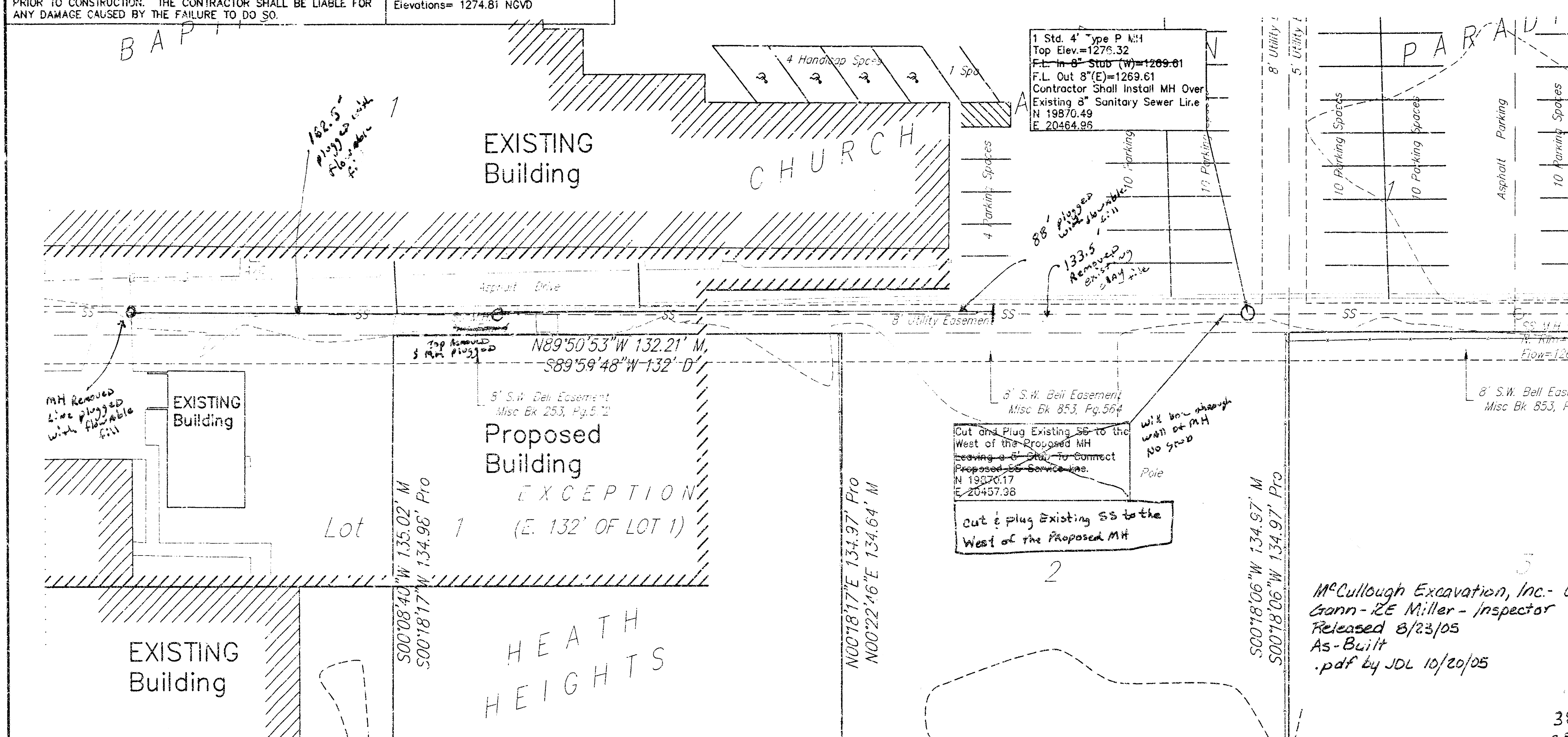


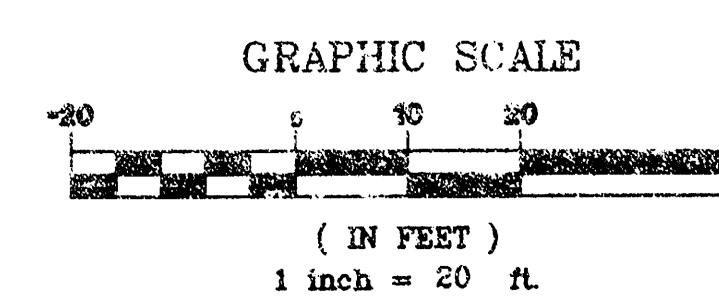
SITE BENCHMARK
Square Cut Top of Curb At E. Curb
Return S.E. Corner of Seneca & 45th.
Street South
Elevations= 1274.81 NGVD

TO SERVE
GLENVILLE BAPTIST CHURCH
4604 S. SENECA
WICHITA, KANSAS

C.O.W. PRIV. PROJ. NO. 1527 PPS (607361)
JIM ARMOUR, P.E., CITY ENGINEER
MARCH 2005



McCullough Excavation, Inc.- Contractor
Grann - RE Miller - Inspector
Released 8/23/05
As-Built
.pdf by JDL 10/20/05



384.0 Total of
250.5 plugged
133.5 Removed

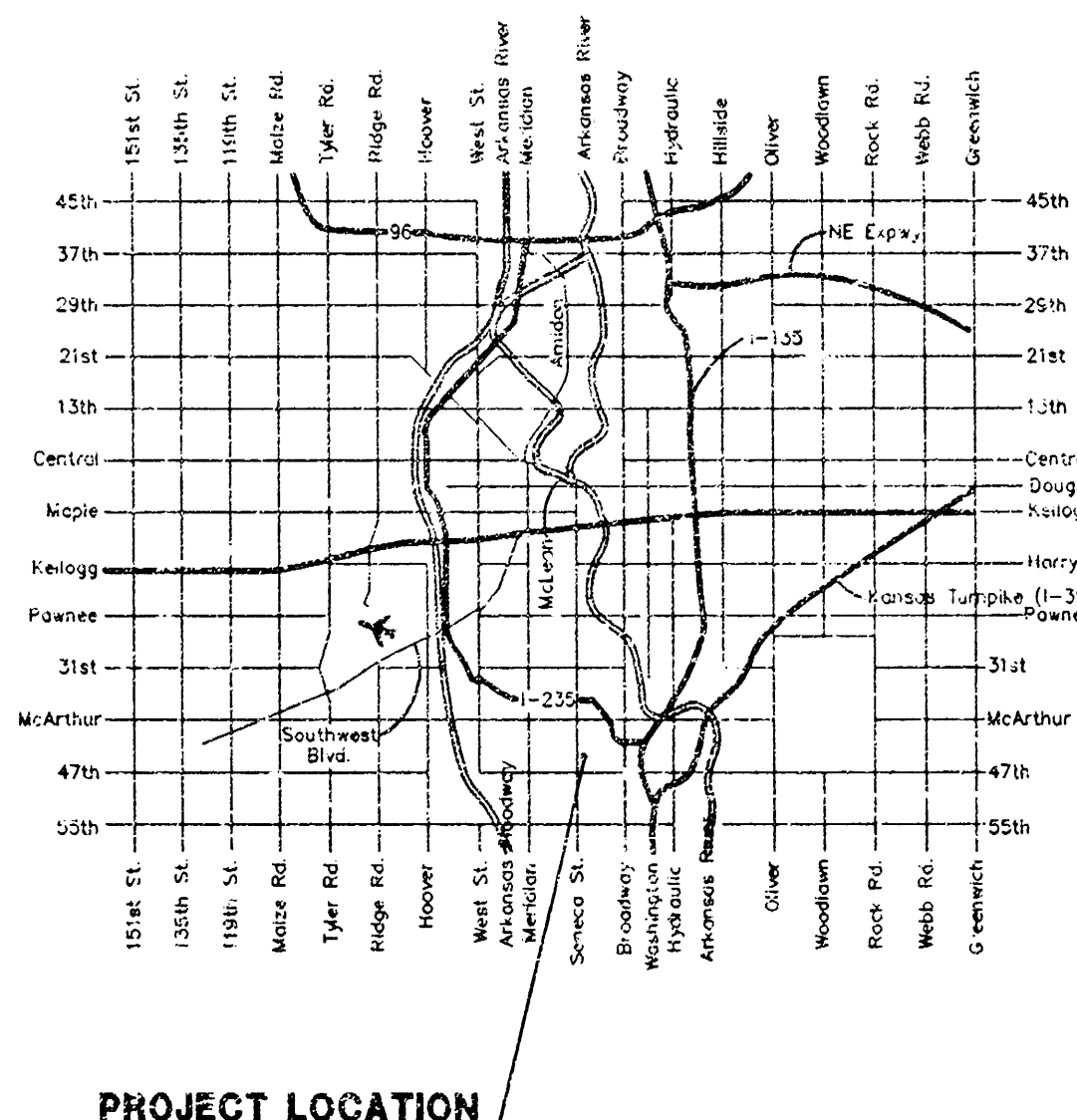
AS-BUILT
8/22/05
Date K.E. Miller
By [Signature]
Signed [Signature]

GENERAL NOTES

- GENERAL NOTES**
- ALL ELEVATIONS SHOWN ARE BASED ON CITY OF WICHITA DATUM (MEAN SEA LEVEL ELEV.= 1187.4 = CITY DATUM).
1. CONTRACTOR WILL BE REQUIRED TO PROVIDE A MINIMUM ADVANCE NOTICE OF FORTY-EIGHT(48)HOURS TO UTILITY COMPANIES PRIOR TO STARTING ANY EXCAVATION AS FOLLOWS
- | | |
|--|----------------|
| KANSAS ONE CALL | 1-800-344-7233 |
| THE CONTRACTOR MUST NOTIFY THE FOLLOWING IN CASE OF AN EMERGENCY | |
| COX COMMUNICATIONS | 262-0661 |
| KANSAS GAS SERVICE | 632-3011 |
| WESTAR ENERGY | 261-6512 |
| AQUILA | 947-0086 |
| SBC | 1-800-470-8390 |
2. THE CONTRACTOR SHALL NOTIFY PIPELINE COMPANIES AT LEAST 24 HOURS IN ADVANCE OF ANY WORK BEING PERFORMED ACROSS AND/OR ADJACENT TO PIPELINES.
3. COST OF EXCAVATION, HAULING AND PUMPING OF EXCESS EXCAVATION SHALL BE SUBSIDIARY TO OTHER ITEMS OF WORK.
4. THE CONTRACTOR SHALL NOTIFY THE INSPECTOR FOR THIS PROJECT 48 HOURS PRIOR TO BEGINNING CONSTRUCTION. THE CONTRACTOR SHALL NOT START WORK ON THE PROJECT UNTIL THE PROJECT INSPECTOR ASSIGNED TO THE PROJECT IS PRESENT ON SITE. ANY WORK DONE WITHOUT INSPECTION WILL BE REQUIRED TO BE UNCOVERED FOR INSPECTION.
5. THE CONTRACTOR SHALL GIVE ALL PROPERTY OWNERS AND/OR TENANTS OF DEVELOPED PROPERTY DIRECTLY ADJUTING THE CONSTRUCTION OF THIS PROJECT A MINIMUM OF TEN (10) DAYS ADVANCE NOTICE PRIOR TO START OF CONSTRUCTION.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PRESERVING PROPERTY IRONS. THE CONTRACTOR WILL BE REQUIRED TO REESTABLISH ANY PROTECTED 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.
7. THE CONTRACTOR SHALL RESTORE ALL DITCHES, SWALES, ROAD SHOULDERS, ENTRANCES AND BANK LINES TO THEIR ORIGINAL SLOPES AND GRADES EXCEPT AS SHOWN OTHERWISE.
8. INTERURBAN TRAFFIC GENERATED OUTSIDE THE PROJECT AREA SHALL BE CARRIED THROUGH CONSTRUCTION.
9. UNDERGROUND UTILITY SERVICE LINES AND OVERHEAD UTILITY POLE LINES ARE TO BE ADJUSTED AS NECESSARY BY OTHERS PRIOR TO CONSTRUCTION. IF ANY OTHER 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, SHALL BE REESTABLISHED IN ACCORDANCE WITH DESIGN. LOCATION INFORMATION HAS BEEN OBTAINED FROM THE VARIOUS UTILITY COMPANIES AND IS EITHER FROM COMPANY RECORD DRAWINGS OR COMPANY PROVIDED FIELD LOCATIONS. THE CONTRACTOR WILL BE REQUIRED TO WORK AROUND EXISTING UTILITIES WITHIN THE RIGHT-OF-WAY WHICH DO NOT CONFLICT WITH CONSTRUCTION.

10. 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 LOCATION, TYPE AND CAPACITY. THE 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 ENGINEER. MATERIALS STORED IN AN INVESTIGATOR MATERIAL EITHER STOCKPILED OR DISPOSED OF IN A FLOODPLAIN WILL REQUIRE A KANSAS STATE BOARD OF AGRICULTURE PERMIT. MATERIALS STOCKPILED IN AN INVESTIGATOR MATERIALS OR WETLANDS IS SUBJECT TO U.S. CORPS OF ENGINEERS PERMITTING REGULATIONS. ANY MATERIAL BURIED OR STOCKPILED BEYOND APPROVED CONSTRUCTION LIMITS WILL REQUIRE AN ADDITIONAL PERMIT. MATERIALS UNLESS BURNED IN A PREVIOUSLY APPROVED BORROW LOCATION.
11. PROPERTIES WITHIN THE PROJECT LIMITS MAY HAVE UNDERGROUND'S RINKLER SYSTEMS IN THE PUBLIC RIGHT-OF-WAY WHICH CONFLICT WITH NEW CONSTRUCTION. CONTRACTOR WILL BE REQUIRED TO REMOVE SUCH INTERFERING SYSTEMS. CONTRACTOR SHALL NOTIFY THEIR OWNER AT THE TIME OF CONSTRUCTION OF THE PROJECT. THE CONTRACTOR WILL BE REQUIRED TO SALVAGE ALL SPRINKLER HEADS AND/OR VALVES AND GIVE SUCH MATERIAL TO THEIR OWNER. IF FOUND, CONTRACTOR SHALL BE REQUIRED NOT IN CONFLICT WITH NEW CONSTRUCTION SHALL BE PROTECTED FROM DAMAGE AND SHALL REMAIN IN PLACE. ALL WORK IN CONNECTION WITH UNDERGROUND SPRINKLER SYSTEMS SHALL BE CONSIDERED AS SUBSIDIARY TO THE CONTRACT PAY ITEMS OF WORK.
12. ALL PROPOSED STUBS AND PLUGGED PIPES SHALL BE LOCATED WITH GREEN PLASTIC TAPE.
13. THE CONTRACTOR MUST EXAMINE THE CONSTRUCTION SITE PRIOR TO SHIMING AND EXCAVATION AS TO THE WORK SHOWN FOR COMPLETION. AFTER BIDS HAD BEEN RECEIVED, THE CONTRACTOR SHALL NOT ASSERT THAT THERE WAS A MISUNDERSTANDING OF THE QUANTITIES OF WORK OR OF THE NATURE FOR THE WORK TO BE COMPLETED.
14. EXISTING UTILITIES AND THEIR LOCATION, AS SHOWN ON THE RECORD DRAWINGS, SHALL BE THE BASIS FOR THE AVAILABLE FOR DESIGN. LOCATION INFORMATION HAS BEEN OBTAINED FROM THE VARIOUS UTILITY COMPANIES AND IS EITHER FROM COMPANY RECORD DRAWINGS OR COMPANY PROVIDED FIELD SURVEY DATA. THE CONTRACTOR SHALL BE REQUIRED TO REVEAL ANY ADDITIONAL EXISTING UTILITIES MAY ALSO BE ENCOUNTERED. THE CONTRACTOR WILL BE REQUIRED TO WORK AROUND EXISTING UTILITIES WHICH ARE LOCATED WITHIN THE PROJECT. THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION DURING TRENCHING OPERATIONS TO AVOID DAMAGING THESE LINES. A. LINES DAMAGED SHALL BE REPLACED OR REPAIRED IMMEDIATELY AS REQUIRED BY THE ENGINEER AT THE CONTRACTOR'S EXPENSE.

15. THE CONTRACTOR SHALL CONTAIN HIS OPERATIONS TO PERMIT TRAFFIC THROUGH AND ACROSS CONSTRUCTION AT EXISTING ROADWAYS AT ALL TIMES. THE CONTRACTOR SHALL ERECT WARNING SIGNS, FLASHING LIGHTS, AND BARRICADE IN COMPLIANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES. IN THE EVENT OF A CHANGE IN THE GENERAL CONDITIONS, THE CONTRACTOR SHALL LIMIT THE EXTENT OF TRENCH TO REMAIN OPEN OVERNIGHT AND WEEKENDS TO LESS THAN 50 FEET.
16. ALL LAWN/TURF AREAS DISTURBED BY CONSTRUCTION OF THE PROPOSED IMPROVEMENTS SHALL BE RESTORED WITH THE SAME GRASS/SOD AS EXISTING. RESTORATION OF DISTURBED AREAS SHALL INCLUDE, BUT NOT BE LIMITED TO, TOP SOIL PREPARATION, SEEDING, MULCH, AND/OR RESEEDING. ALL RESEEDING WORK SHALL BE IN ACCORDANCE WITH THE CITY OF WICHITA STANDARD SPECIFICATIONS AND THE CITY OF WICHITA ADMINISTRATIVE REGULATION NO. AR78 WHICH GOVERNS CLEANUP AND RESTORATION OR REPLACEMENT FOLLOWING CONSTRUCTION. ALL FERTILIZER AND PESTICIDE SHALL BE SUPPLIED TO THE LUMP SUM PRICE BID FOR 'SITE RESTORATION'.



Map of the Glenville Baptist Church Addition

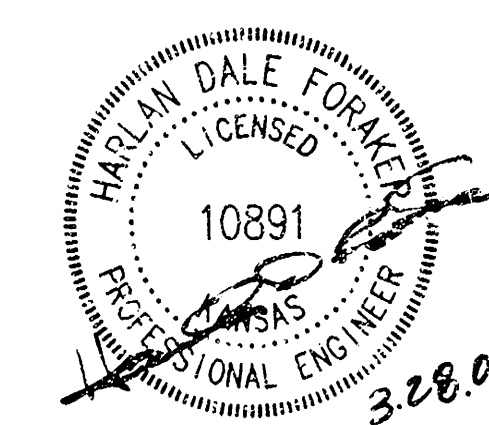
Legend:

- CHURCH
- ADDITION
- LOT
- STREET
- WATER
- RAILROAD
- BRIDGE
- ROAD
- TRAIL
- POLE
- POST
- STONE
- WOOD
- GRASS
- WATER
- RAILROAD
- BRIDGE
- ROAD
- TRAIL
- POLE
- POST
- STONE
- WOOD
- GRASS

Map Details:

- Church Building:** GLENVILLE BAPTIST CHURCH
- Church Addition:** GLENVILLE BAPTIST CHURCH ADDITION
- Streets:** 4TH STREET, 1ST STREET, 2ND STREET
- Lot Numbers:** 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100
- Scale:** 1 inch = 100 feet
- North Arrow:** Points North

Benefit District



APPROVED AS NOTED
By CITY ENGINEER OF WICHITA

Sanitary Sewers URH 3/28/05
Storm Sewers URH 3/28/05
Driveway Approaches _____
Water Mains _____
Paving _____

NOTE TO CONTRACTOR

INSPECTION AND TESTING FOR THIS PROJECT IS TO BE PROVIDED BY A LICENSED CONSULTING ENGINEERING FIRM UNDER CONTRACT TO 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 THE PUBLIC RIGHT-OF-WAY BY THE CONTRACTOR WITHOUT THE WRITTEN AUTHORIZATION OF THE CITY. NO WORK SHALL BE COMMENCED IN DEDICATED EASEMENTS OR PUBLIC RIGHT-OF-WAY WITHOUT WRITTEN AUTHORIZATION BY THE CITY ENGINEER.

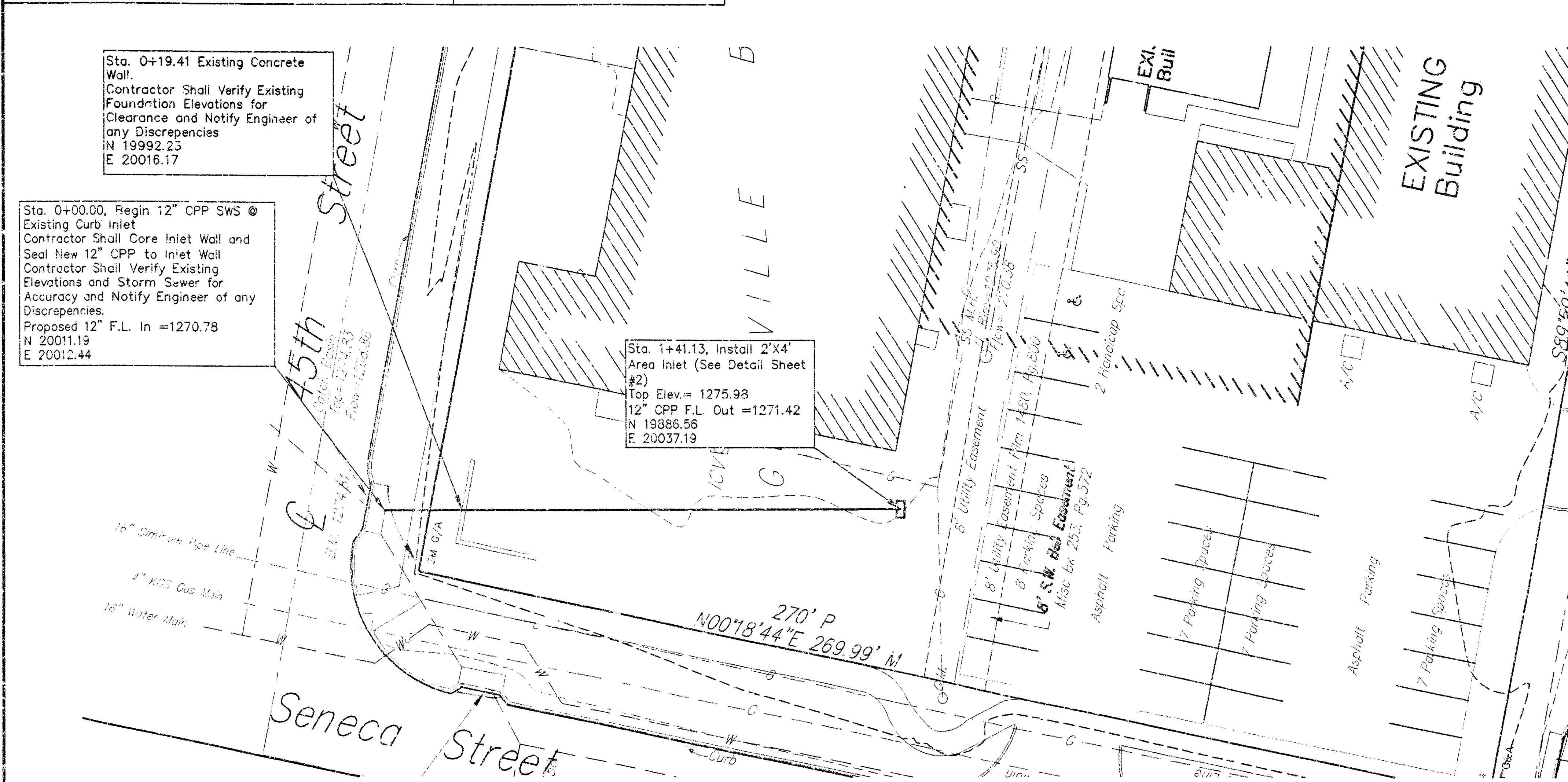
SANITARY SEWER IMPROVEMENTS
GLENVILLE BAPTIST CHURCH
 WICHITA, SEDGWICK COUNTY, KANSAS
 C.O.W. PRIV. PROJ. NO.:1527 PPS (507861)
CERTIFIED ENGINEERING DESIGN, P.A.

810 WEST DOUGLAS, SUITE C
WICHITA, KANSAS 67203
316/262-8808 FAX: 316/262-1669

DESIGNED: HDF	SCALE: 1"=20'	SHEET 1
DRAWN: BAP	DATE: 2/05	
CHECKED: HDF	CED FILE: GLENVILLE-BASE	TOTAL 4

UTILITIES SHOWN REPRESENT THE BEST INFORMATION AVAILABLE FOR DESIGN. ADDITIONAL UTILITIES MAY BE PRESENT ON THIS PROJECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT LOCATION, DEPTH AND SIZE OF ALL UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE LIABLE FOR ANY DAMAGE CAUSED BY THE FAILURE TO DO SO.

SITE BENCHMARK
Square Cut Top of Curb At E. Curb
Return S.E. Corner of Seneca & 45th.
Street South
Elevations= 1274.81 NGVD

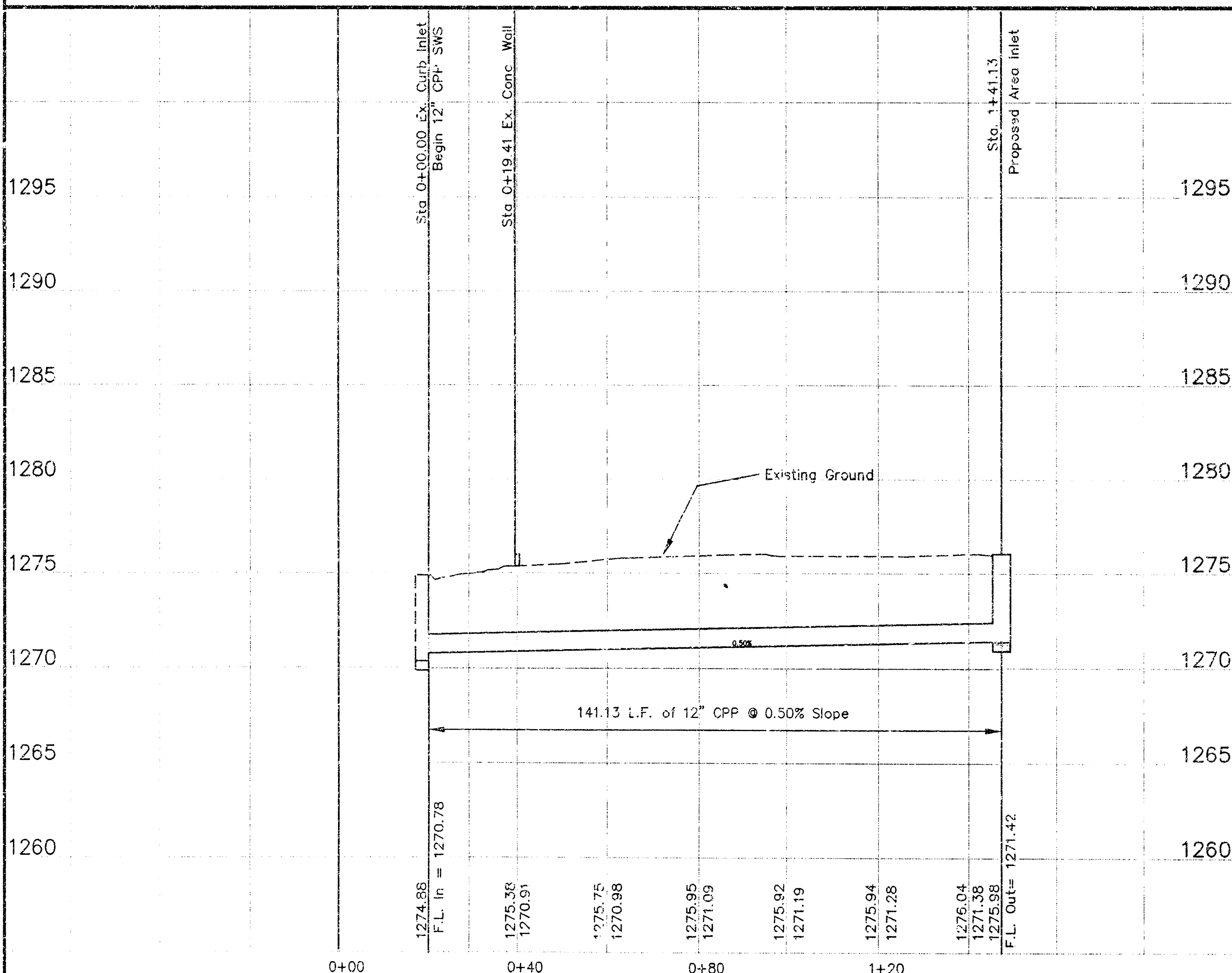


Sta. 0+19.41 Existing Concrete Wall.
Contractor Shall Verify Existing Foundation Elevations for Clearance and Notify Engineer of any Discrepancies
N 19992.25
E 20016.17

Sta. 0+00.00, Begin 12" CPP SWS @ Existing Curb Inlet
Contractor Shall Core Inlet Wall and Seal New 12" CPP to Inlet Wall
Contractor Shall Verify Existing Elevations and Storm Sewer for Accuracy and Notify Engineer of any Discrepancies.
Proposed 12" F.L. In =1270.78
N 20011.19
E 20012.44

Sta. 1+41.13, Install 2'x4' Area Inlet (See Detail Sheet #2)
Top Elev. = 1275.93
12" CPP F.L. Out =1271.42
N 19850.56
E 20037.19

STORM WATER SEWER IMPROVEMENTS

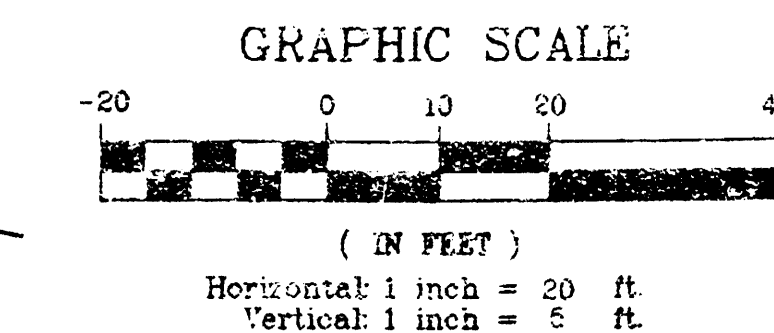


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KANSAS ONE CALL 1-800-344-7233
CONTRACTOR MUST NOTIFY THE FOLLOWING IN AN EMERGENCY:
COX COMMUNICATIONS 282-0651
KANSAS GAS SERVICE 832-3101
WESTAR ENERGY 261-8512
AQUILA 941-0096
SBC 1800-370-8330
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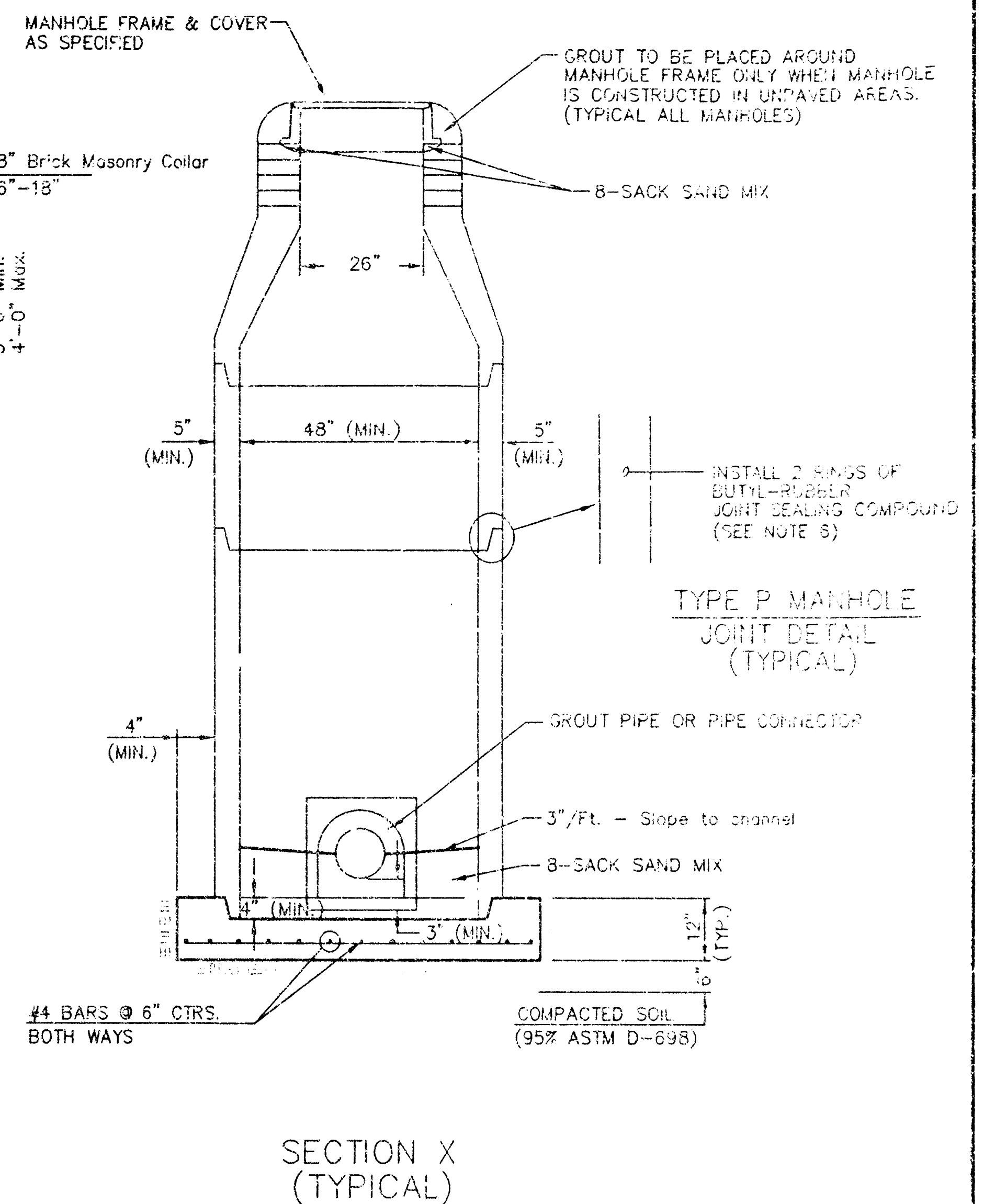
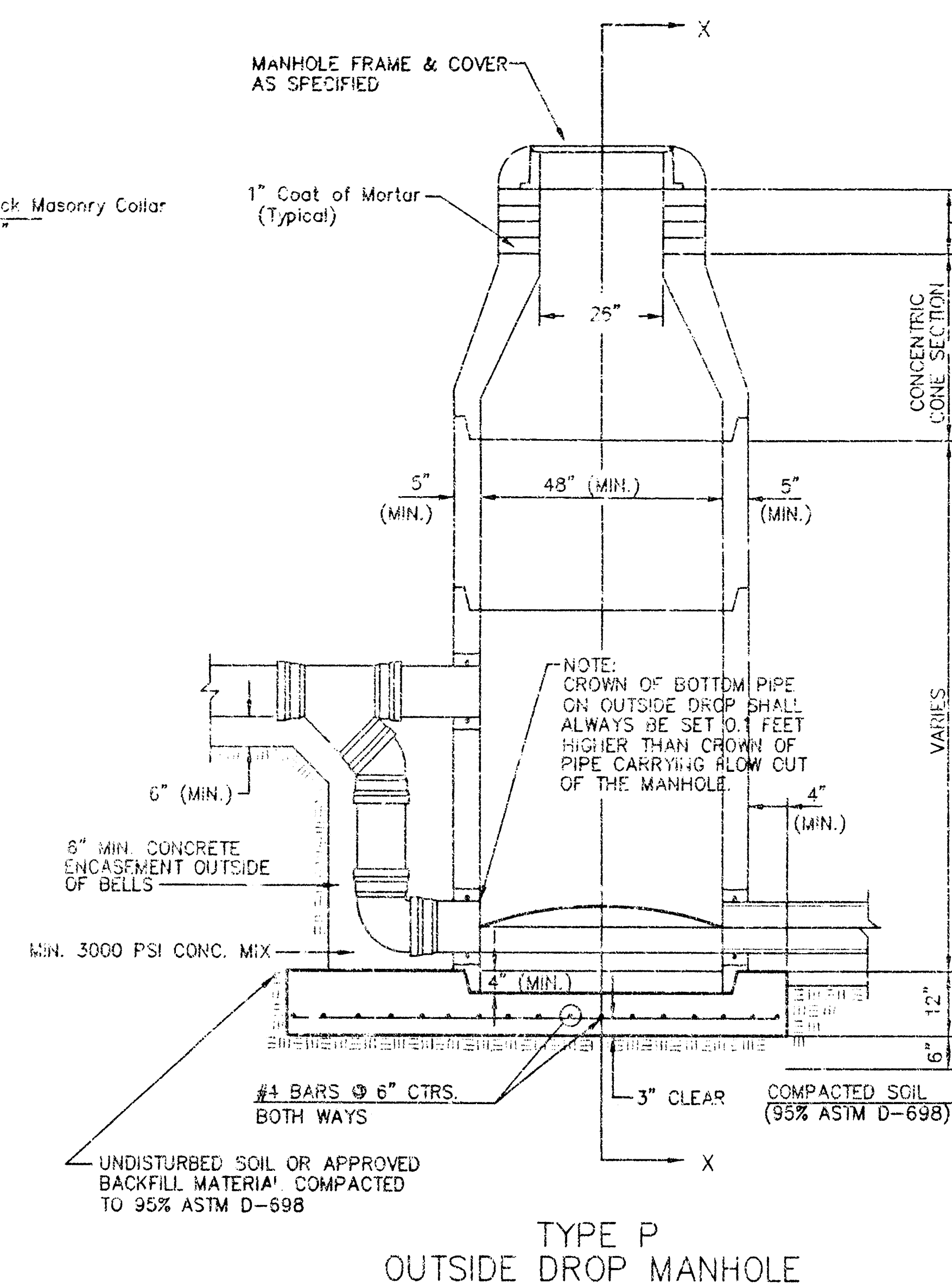
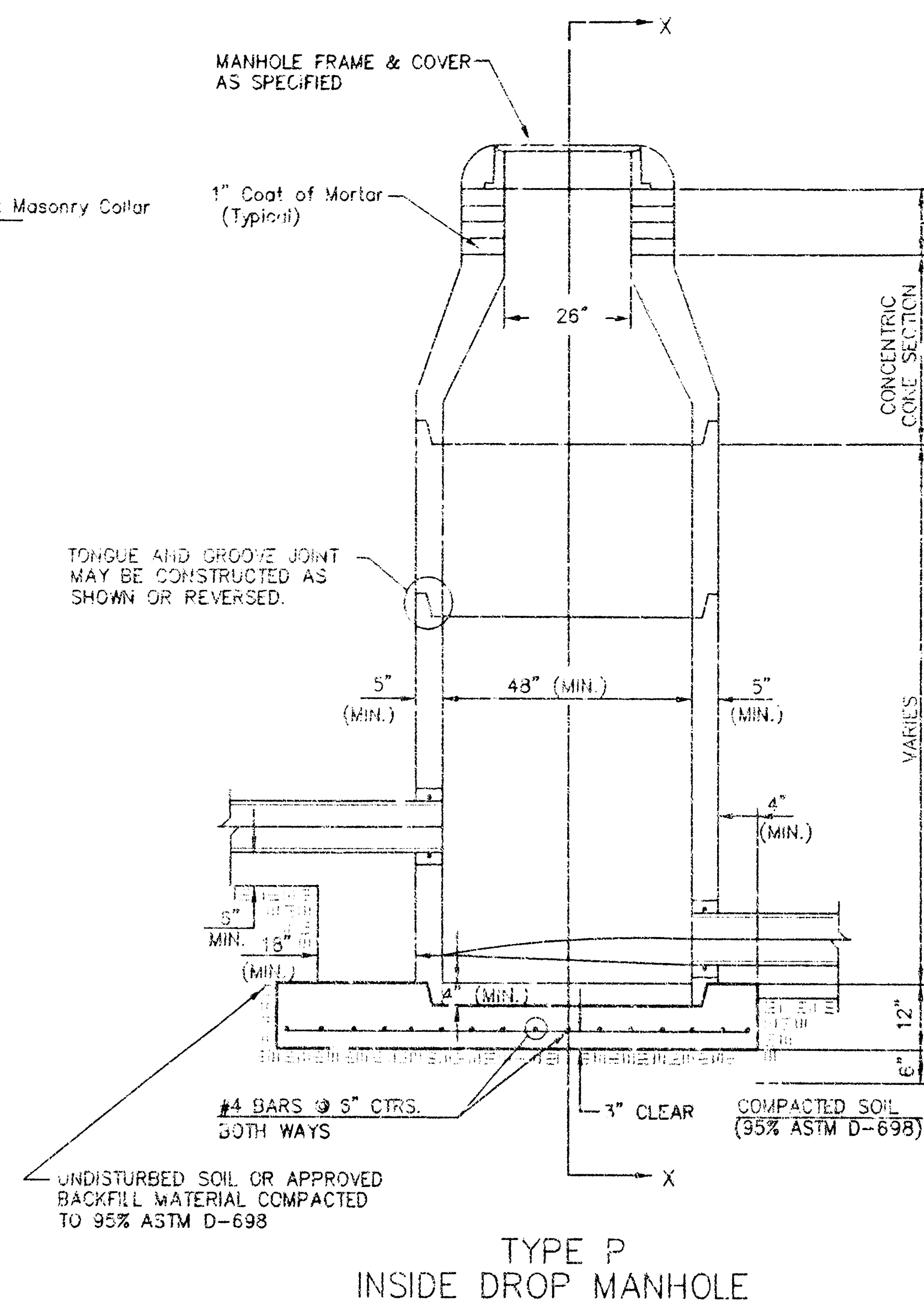
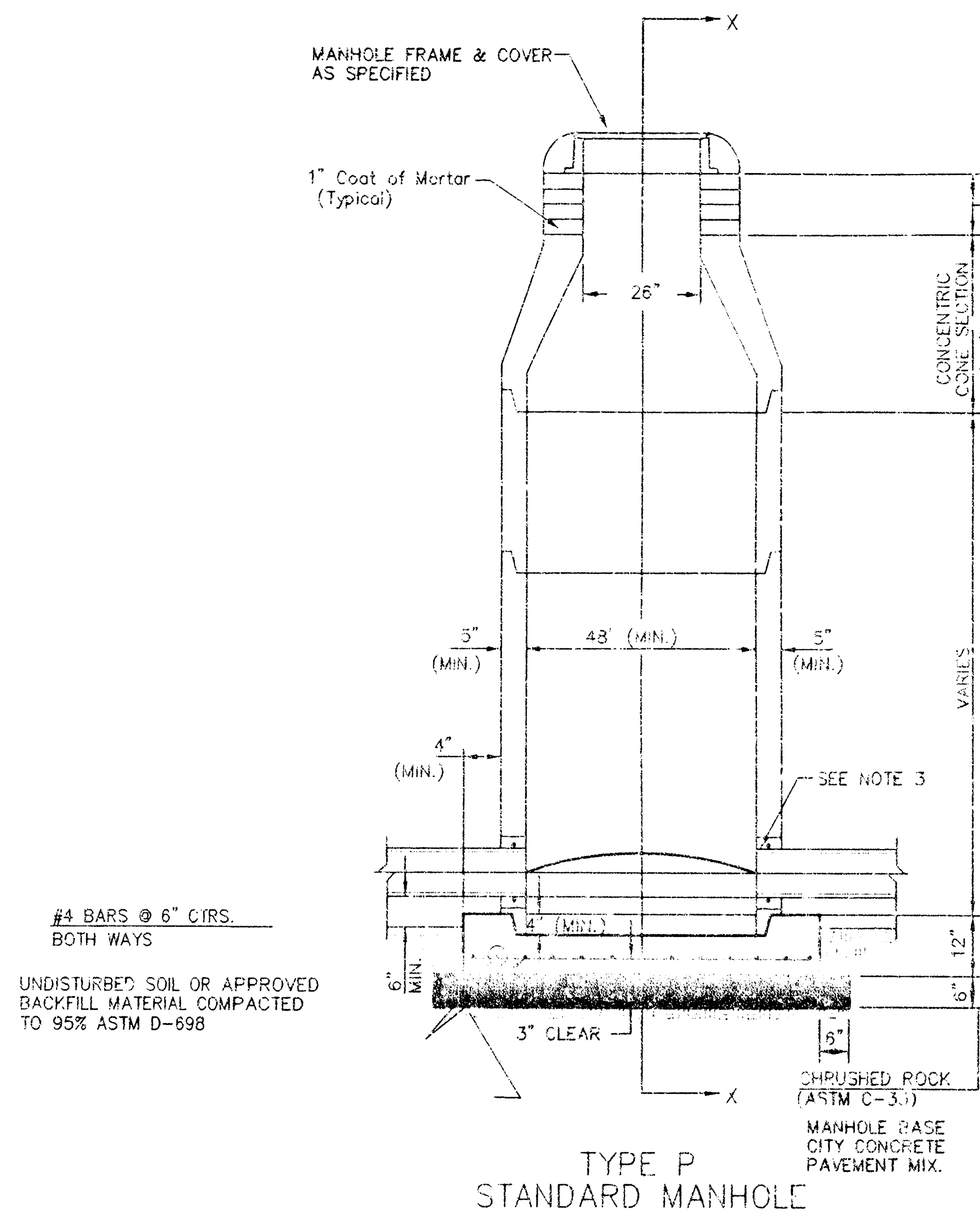


LEGEND
G = GAS MAIN
W = WATER MAIN
S = SANITARY SEWER
SW = SLOPE WATER SEWER
UE = UNDER GROUND ELECTRIC
UT = UNDER GROUND TELEPHONE

HORIZONTAL CONTROL POINTS			
C.P. NO. 1	N 20016.77 E 20003.64	1/4" Iron Pin Along 45th Street North of Bus Barn	1/4" Iron Pin Along 45th Street North of Bus Barn
C.P. NO. 2	N 19992.77 E 20073.76	1/4" Iron Pin Along 45th Street North of Bus Barn	1/4" Iron Pin Along 45th Street North of Bus Barn
C.P. NO. 3	N 19730.03 E 19998.51	1/4" Rebar With Griffiths Assoc. Cap. S.W. Corner of lot S of Parking Lot	1/4" Rebar With Griffiths Assoc. Cap. S.W. Corner of lot S of Parking Lot

STORM WATER SEWER IMPROVEMENTS		
GLENVILLE BAPTIST CHURCH		
WICHITA, SEDGWICK COUNTY, KANSAS		
C.O.W. PRIV. PROJ. NO.:1527 PPS (607561)		
CERTIFIED ENGINEERING DESIGN, P.A.		
810 WEST DOUGLAS, SUITE C		
WICHITA, KANSAS 67203		
PH.(316)262-8806 FAX.(316)262-1669		
DESIGNED: HOF	SCALE: 1"=20'	SHEET
DRAWN: BAP	DATE: 2/05	2
CHECKED: HOF	SED FILE: GLENVILLE-BASE	TOTAL 4

SEWER APPURTENANCES DETAILS



GENERAL NOTES

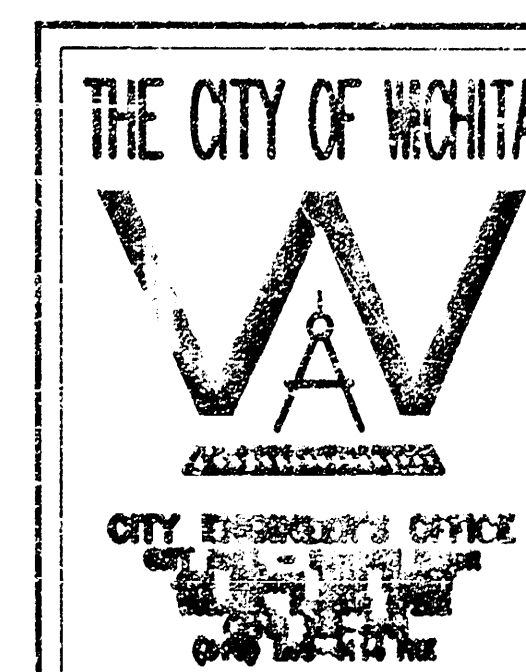
PRECAST MANHOLE NOTES

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 WHEN A.B.S. COMPOSITE PIPE OR P.V.C. PIPE IS USED. FOR OTHER TYPES OF PIPE THE SEWER SHALL BE GROUTED IN PLACE WITH NON-SHRINK GROUT. THE SEWER PIPE SHALL BE SURVEYED WITH CONCRETE ENCASUREMENT 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 WY LD. BE EXPOSED TO SEWER GAS SHALL BE COATED, WITH 2 COATS INEMEC SERIES 66 HI-BUILD EPOXYOLINE, DRY THICKNESS OF 8 MILS (MIN.)
5. EXTERIOR MANHOLE WALLS SHALL BE COATED WITH 1 COAT M-BILARMA 633 BITUMINOUS COATING.
6. JOINT SEALING COMPOUND SHALL BE KEW 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 CITY STANDARD PAVEMENT SPECIFICATIONS USING CITY CONCRETE PAVEMENT MIX WITH CUT AIR ENTRAINING MIXTURE. MORTAR SHALL BE PLACED AROUND THE MANHOLE CEMENTS GIVING ON THE DRAINAGE 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 TO BE 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 EXTERIOR OF THE PIPE SHALL BE COATED WITH AN APPROVED NONSHRINKING 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. FLOW CHANNELS SHALL BE FORMED USING A NEW FLOW CHANNEL FOR THE NEW CONNECTION AS INDICATED BY THE DRAWING. THIS WORK, INCLUDING MODIFICATION OF MANHOLE FLOOR, SHALL BE INCLUDED IN 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 SOLIDS COULD BE ACCUMULATED. FLOW CHANNELS 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. THE OUTSIDE PIPES WILL SHOW BY THE DRAWINGS EXCEPT FOR INSIDE DROP MANHOLES. FLOW CHANNELS FOR OUTSIDE DROP MANHOLES SHALL BE CONSTRUCTED AS INDICATED BY THE DRAWING. MANHOLE FLOORS SHALL HAVE SLOPES OF 1/4 INCHES PER FOOT IN THE DIRECTION OF THE FLOW. INSIDE OF THE FLOORS THROUGH THE FLOW CHANNELS. PIPES LAID THROUGH MANHOLES SHALL HAVE A 1/4" 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 CRAWLED WITH CONCRETE TO THE LIMITS OF THE MANHOLE. THE CRAWL SHALL BE USED TO LIFT THE PIPE AND SHALL EXTEND TO THE FIRST JOINT OUTSIDE THE MANHOLE. THE CRAWL SHALL BE TERMINATED AT THE CLAY PIPE JOINT IN A MANNER WHICH WILL MAINTAIN THE FLEXIBILITY OF THE JOINT. COST OF CRAWL WITHIN THE EXCAVATION AND EXCAVATION OF THE EXISTING MANHOLE SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE MANHOLE.

13. 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 C-15T IRON FRAME AND THE CONCRETE COLLAR. THE COLLAR WILL HAVE OF 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 4" AND SHALL EXCEED 6" LESS THAN 6" OUTSIDE THE DIAMETER OF THE CONCRETE FLOOR OF THE MANHOLE.

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.

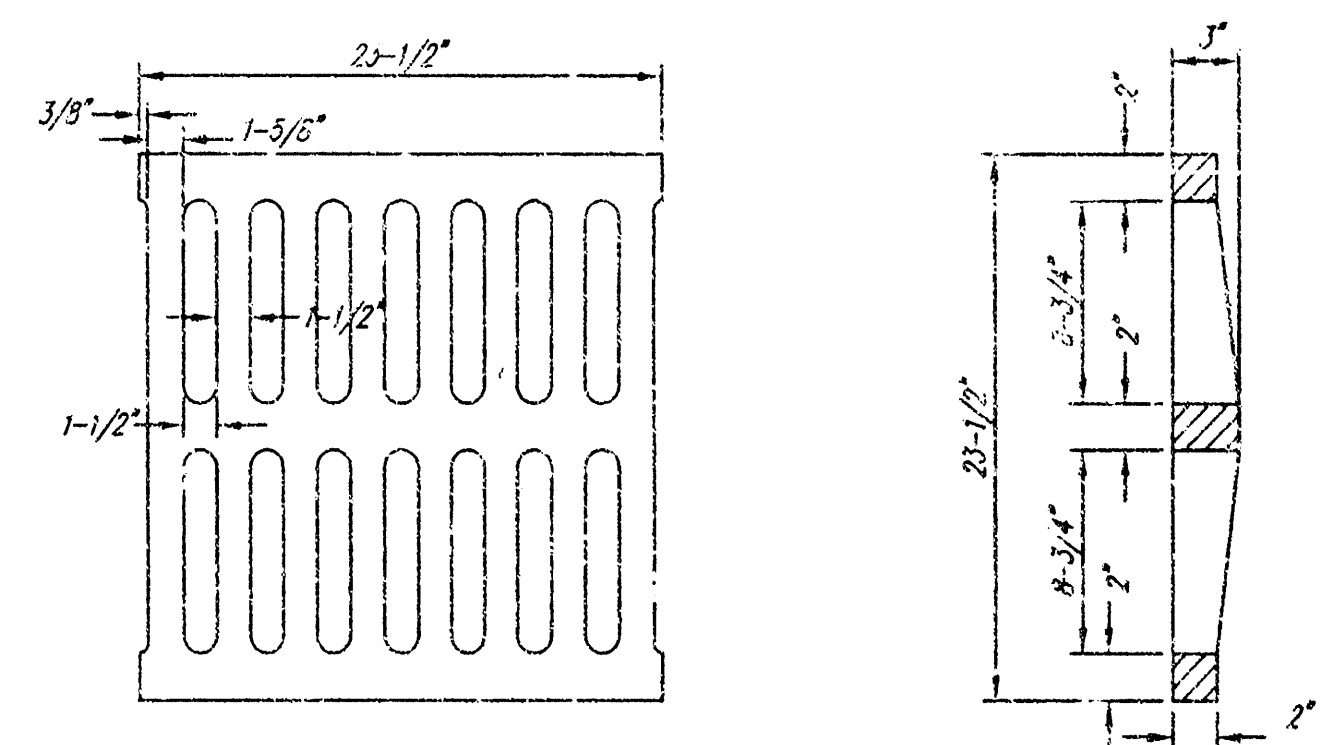
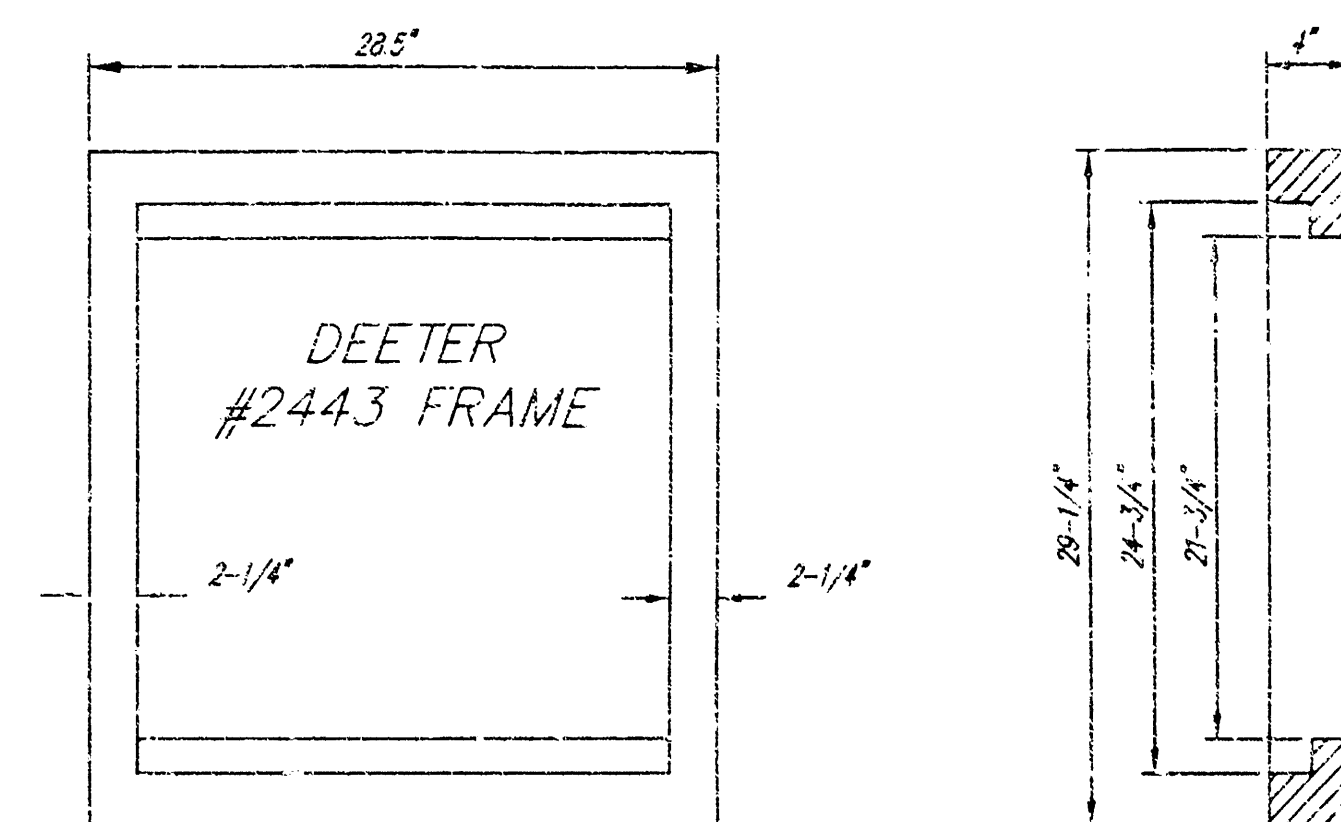


STANDARD
TYPE 'P'
MANHOLES

JIM ADAMS P.E. - CITY ENGINEER

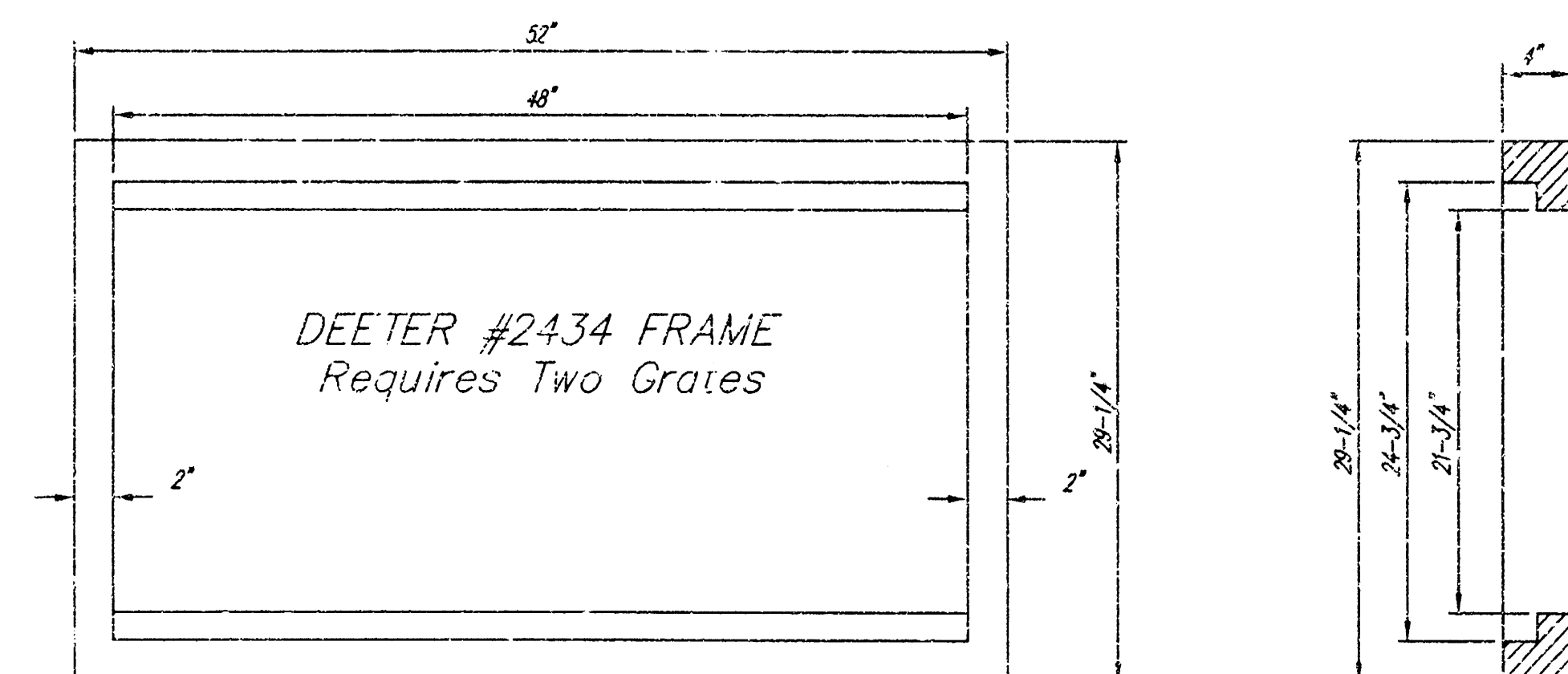
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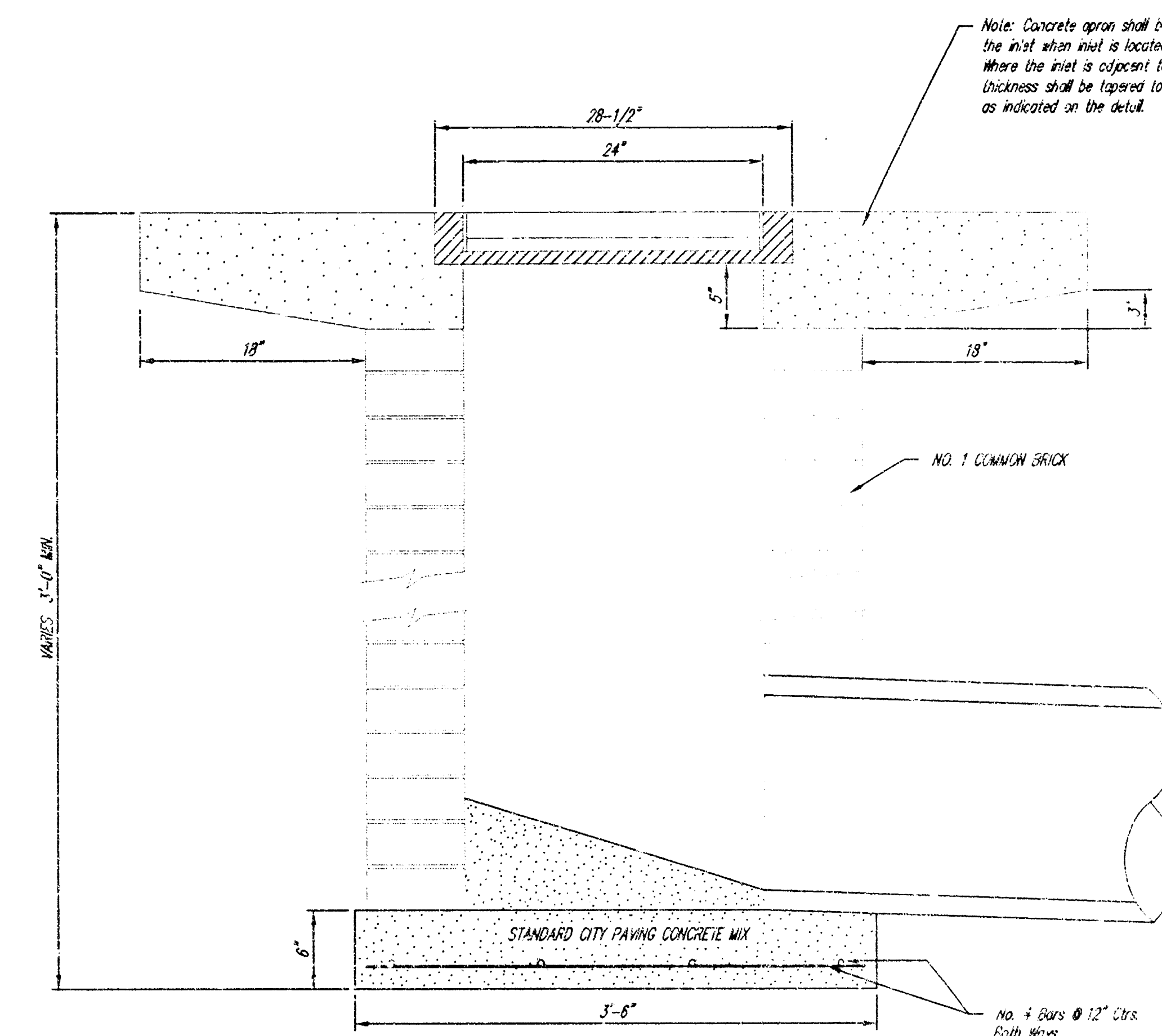
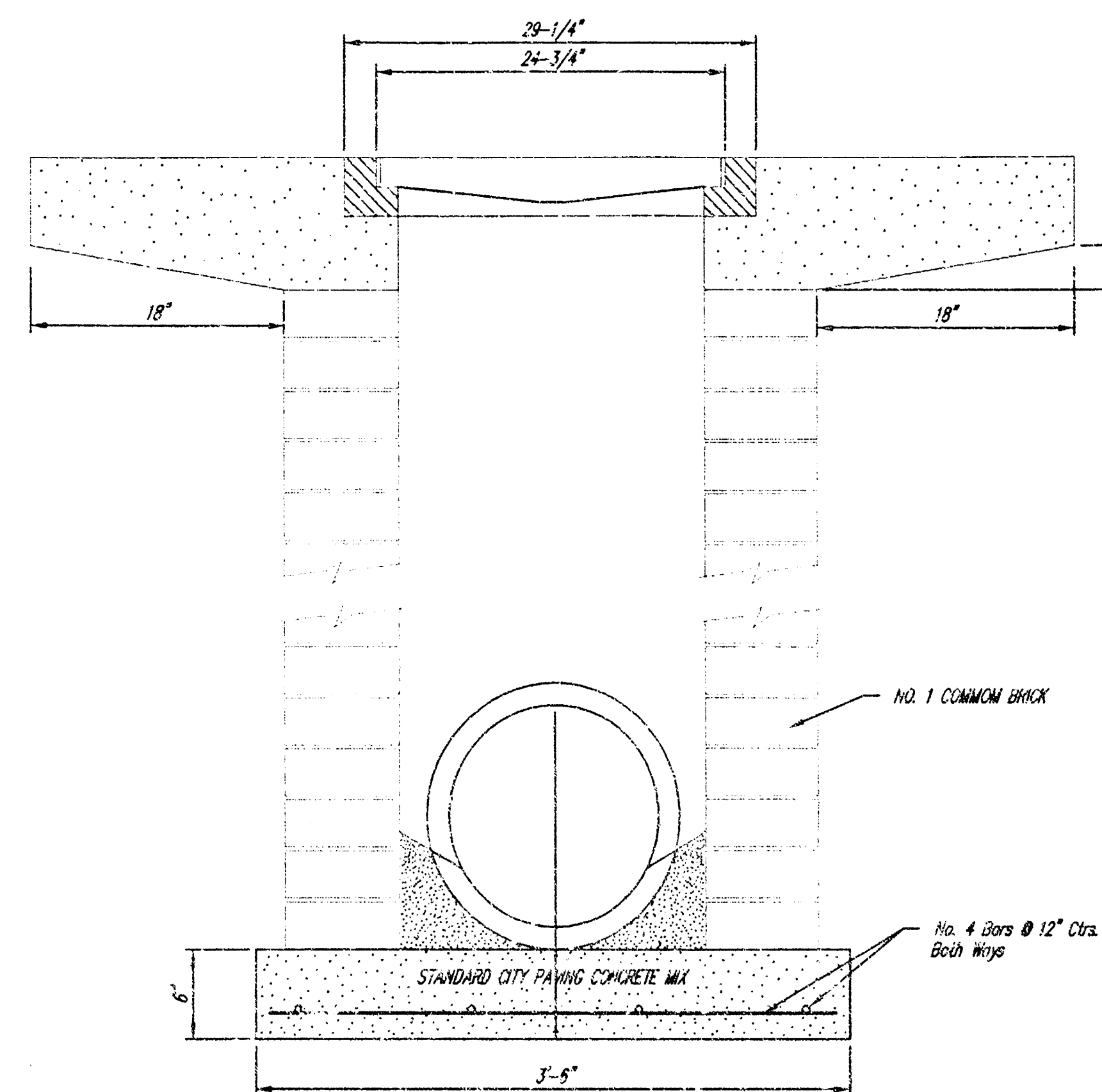
DEETER #2433 GRATE

24" x 24" Frame and Grate Detail

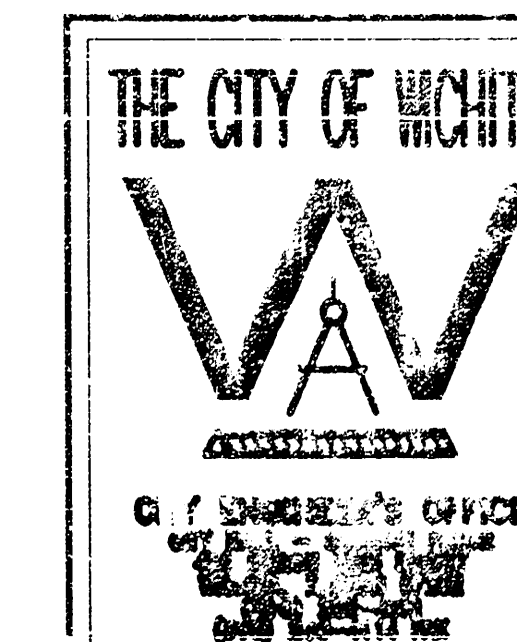
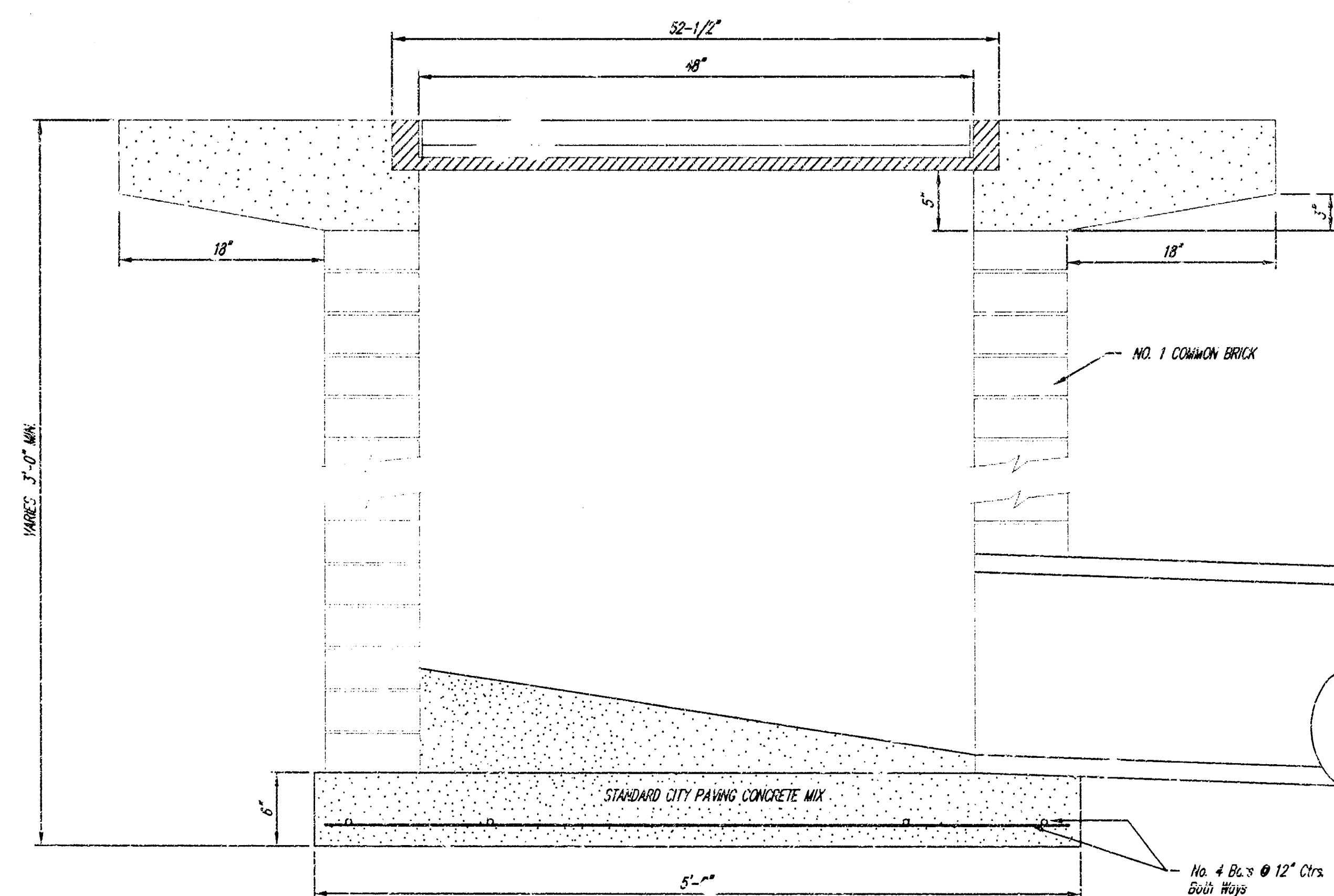


Double 24" x 24" Frame Detail

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.



Note: Concrete apron shall be constructed around the inlet when inlet is located in an unpaved area. Where the inlet is adjacent to pavement, the pavement thickness shall be tapered to the inlet at 18 inches as indicated on the detail.



DROP INLET 2' X 2' 2' X 4'	
JIM ANDERSON P.E. - CITY ENGINEER	
PROJECT NUMBER 1827	DRAWING NUMBER 807881
DATE FALL 06	SHEET 4 OF 4

DROPINLET.DWG