

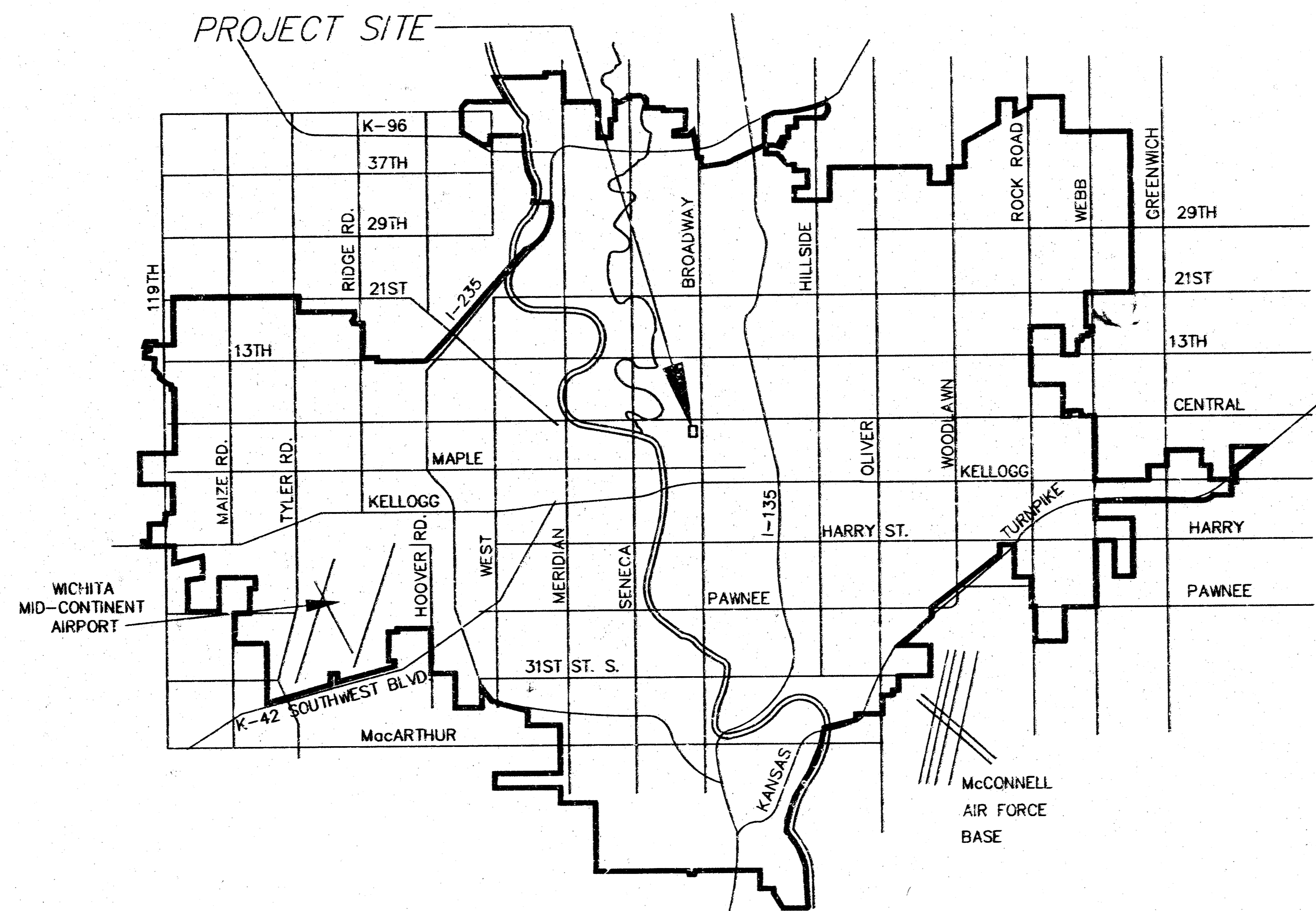
PRIVATE STORM SEWER TO SERVE
KOCH CENTER - SALVATION ARMY

LOTS 98, 100, 102, 104, 106, 110, 112, 116 AND 118
 GREIFFENSTEIN'S ORIGINAL TOWN

PRIVATE PROJECT #783PPS
 INDEX CODE 607861

GENERAL NOTES

- All work on this project shall conform to City of Wichita Standard Specifications for storm sewers and drainage.
- Only active building drain lines which connect actual buildings to the storm sewer system are to be reconnected to the new storm sewer construction. Building drain lines and/or connections which have been abandoned are not to be reconnected to the new storm sewer construction. It will be the sole responsibility of the Contractor to ascertain which such building drain lines and/or connections are active and which such drains and/or connections have been abandoned. All work involved with building drain line construction and/or building drain line connections shall conform to the applicable sections of the City of Wichita Code.
- New roof drains to be connected to the storm sewer will require permits from the Office of Central Inspection.
- Traffic will not be affected by construction on this project.
- All off-site areas disturbed by storm sewer construction shall be restored in accordance with City of Wichita Administrative Regulation AR7B.



INDEX OF SHEETS

- TITLE SHEET
- STORM SEWER PLAN AND PROFILE
- SHALLOW MANHOLES TYPE "P" AND "C"
- DROP INLET 2'x2'/2'x4'

BENCH MARKS

TOP "V" NOTCH @ N.W. COR
 LOT 144 ON MARKET
 ELEV.=111.38 (CITY DATUM)

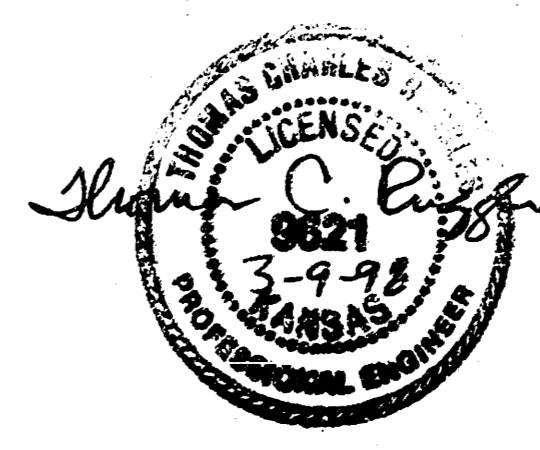
BOOKED
 7-28-00
 MCG
 D-471

APPROVED AS NOTED
 BY CITY ENGINEER OF WICHITA

Sanitary Sewers _____
 Storm Sewers VRH 3/10/98
 Driveway Approaches _____
 Water Mains _____
 Paving _____

NOTE TO CONTRACTORS

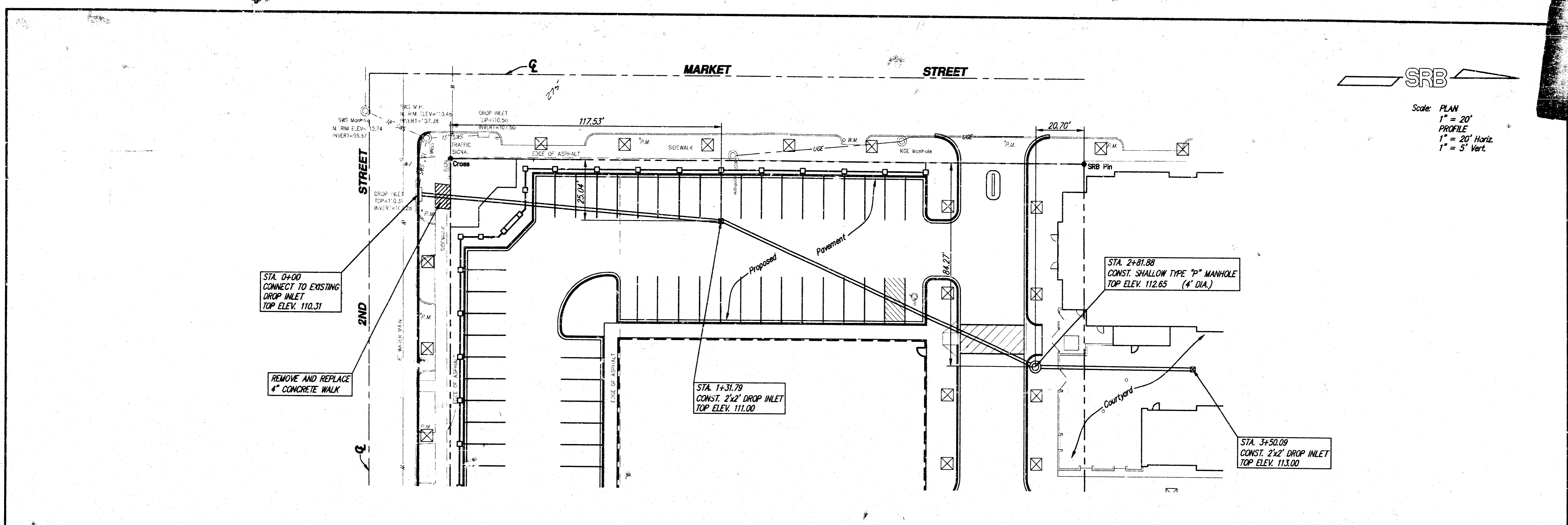
Inspection and testing for this project are to be provided by a Licensed Consulting Engineering Firm under contract with the Owner/Developer. Said inspection to be in accordance with the City of Wichita standard construction engineering practices and certified by a Licensed Professional Engineer. No 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.



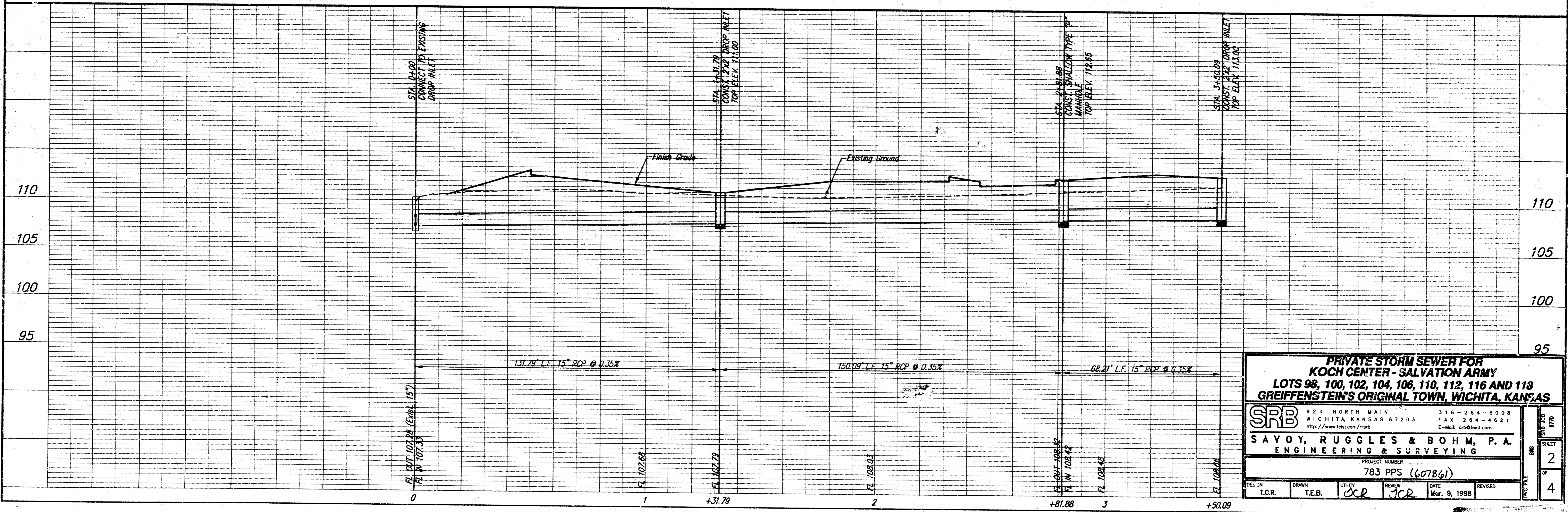
CITY OF WICHITA, KANSAS
MICHAEL E. LINDEBAK - CITY ENGINEER

SRB 824 NORTH MAIN 316-254-
 WICHITA, KANSAS 67203 FAX 264-
 http://www.1alt.com/~srb E-mail: srb@1alt.com
SAVOY, RUGGLES & BOHM,
 ENGINEERING & SURVEYING

F:\Active Projects\Tom Brooks\9770(Koch Center Salvation Army)\SMS.dwg Mon Mar 09 12:46:24 1998 TEB



SRB
 Scale: PLAN
 1" = 20'
 PROFILE
 1" = 20' Horiz
 1" = 5' Vert.



**PRIVATE STORM SEWER FOR
 KOCH CENTER - SALVATION ARMY
 LOTS 98, 100, 102, 104, 106, 110, 112, 116 AND 118
 GREIFFENSTEIN'S ORIGINAL TOWN, WICHITA, KANSAS**

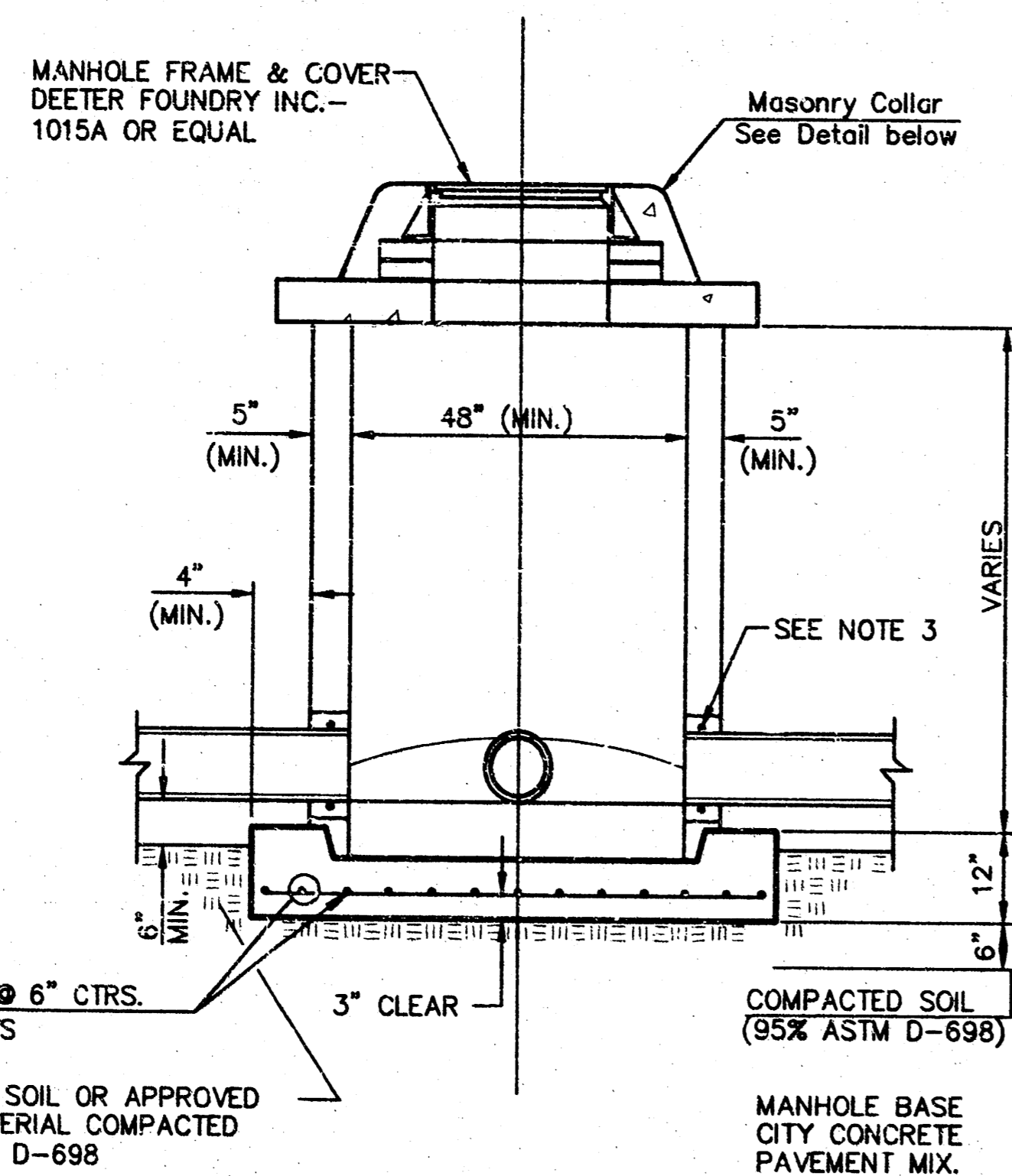
SRB
 924 NORTH MAIN WICHITA, KANSAS 67203
 316-264-8008 FAX 264-4621
 http://www.srb.com E-Mail: srb@srb.com

**SAVOY, RUGGLES & BOHM, P. A.
 ENGINEERING & SURVEYING**

PROJECT NUMBER
 783 PPS (6078(61))

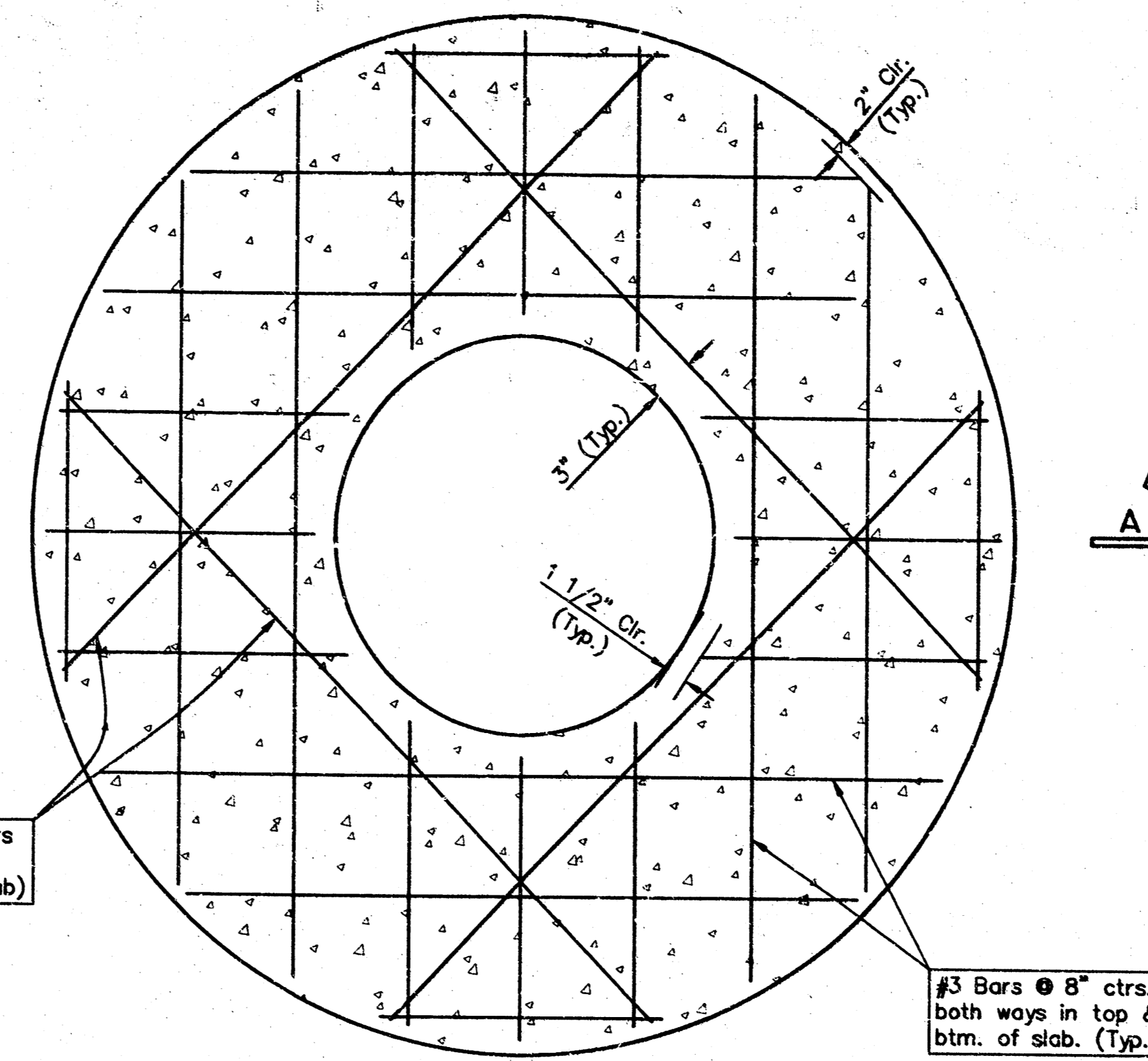
DESIGN T.C.R.	DRAWN T.E.B.	UTILITY JCR	REVIEW JCR	DATE Mar. 9, 1998	REVISED
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SHEET 2 OF 4



UNDISTURBED SOIL OR APPROVED BACKFILL MATERIAL COMPACTED TO 95% ASTM D-698

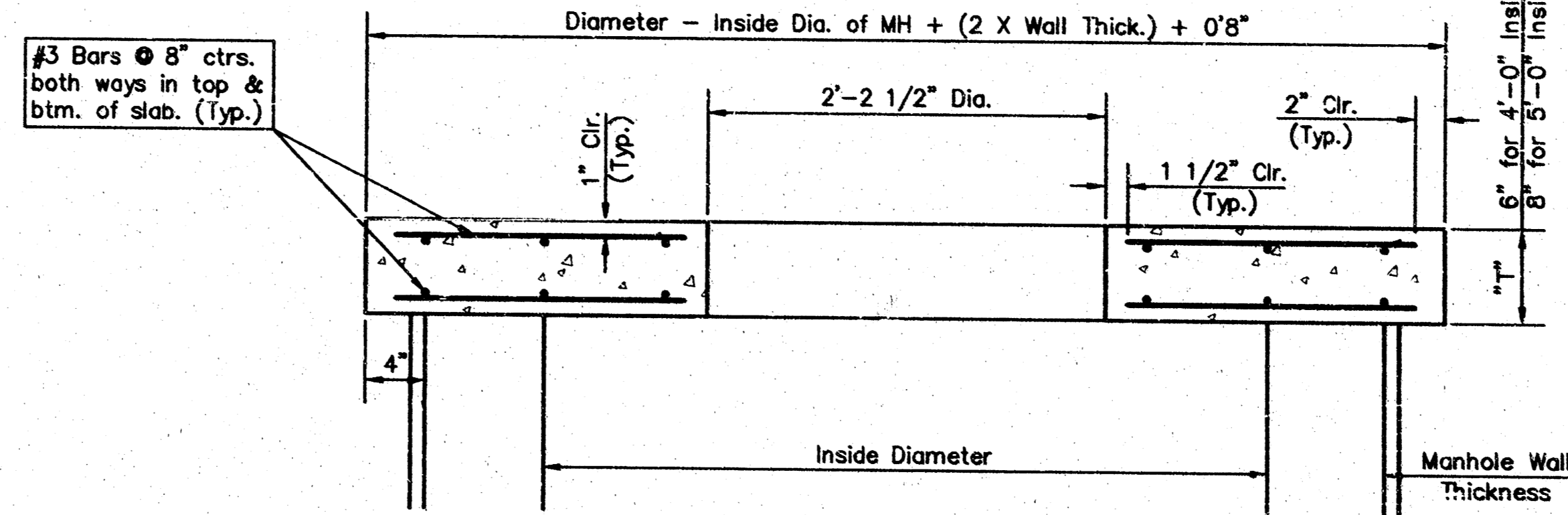
SHALLOW TYPE "P" MANHOLE



PLAN

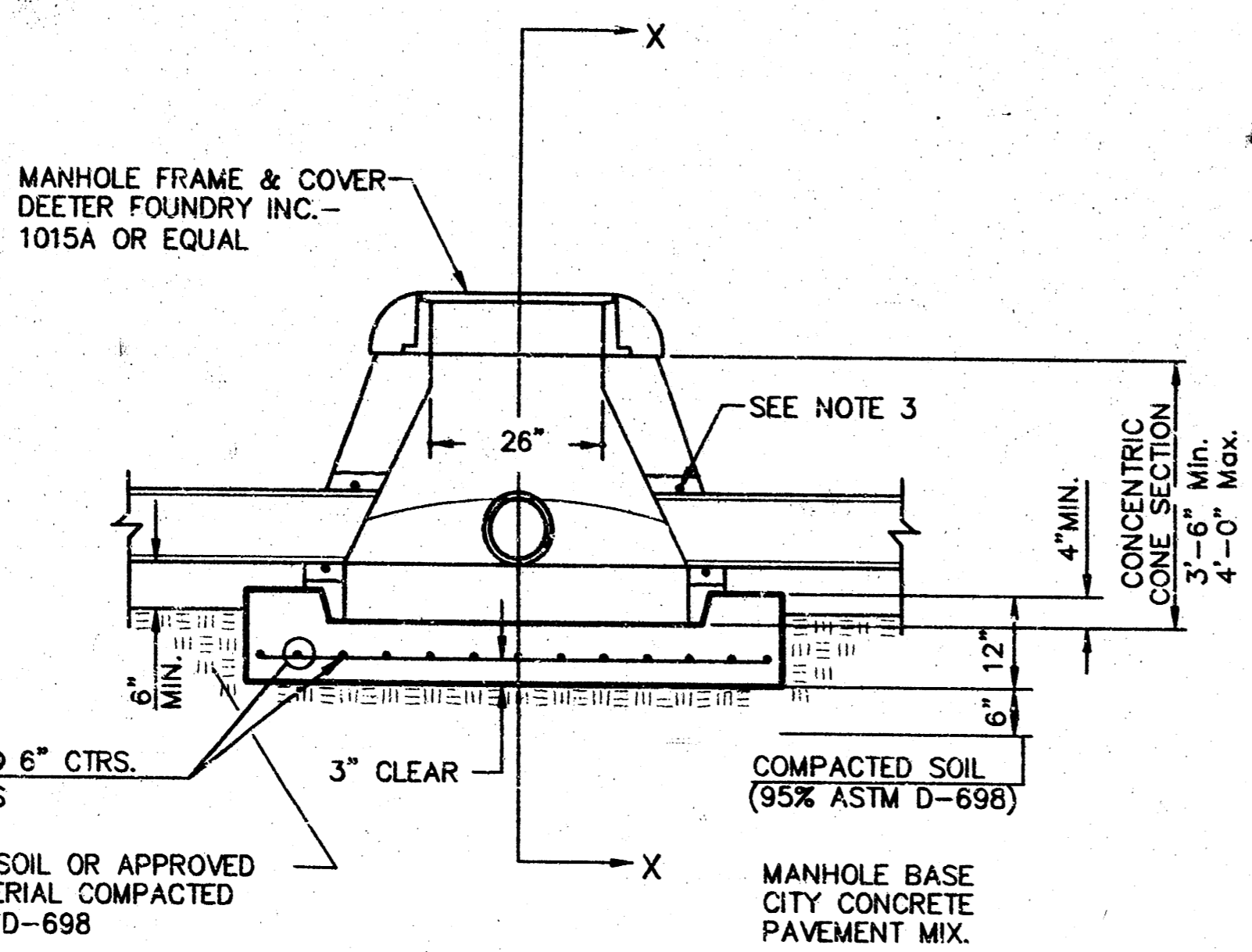
4 - #4 Diagonal bars to reinforce opening (top and btm. of slab)

#3 Bars @ 8" ctrs. both ways in top & btm. of slab. (Typ.)



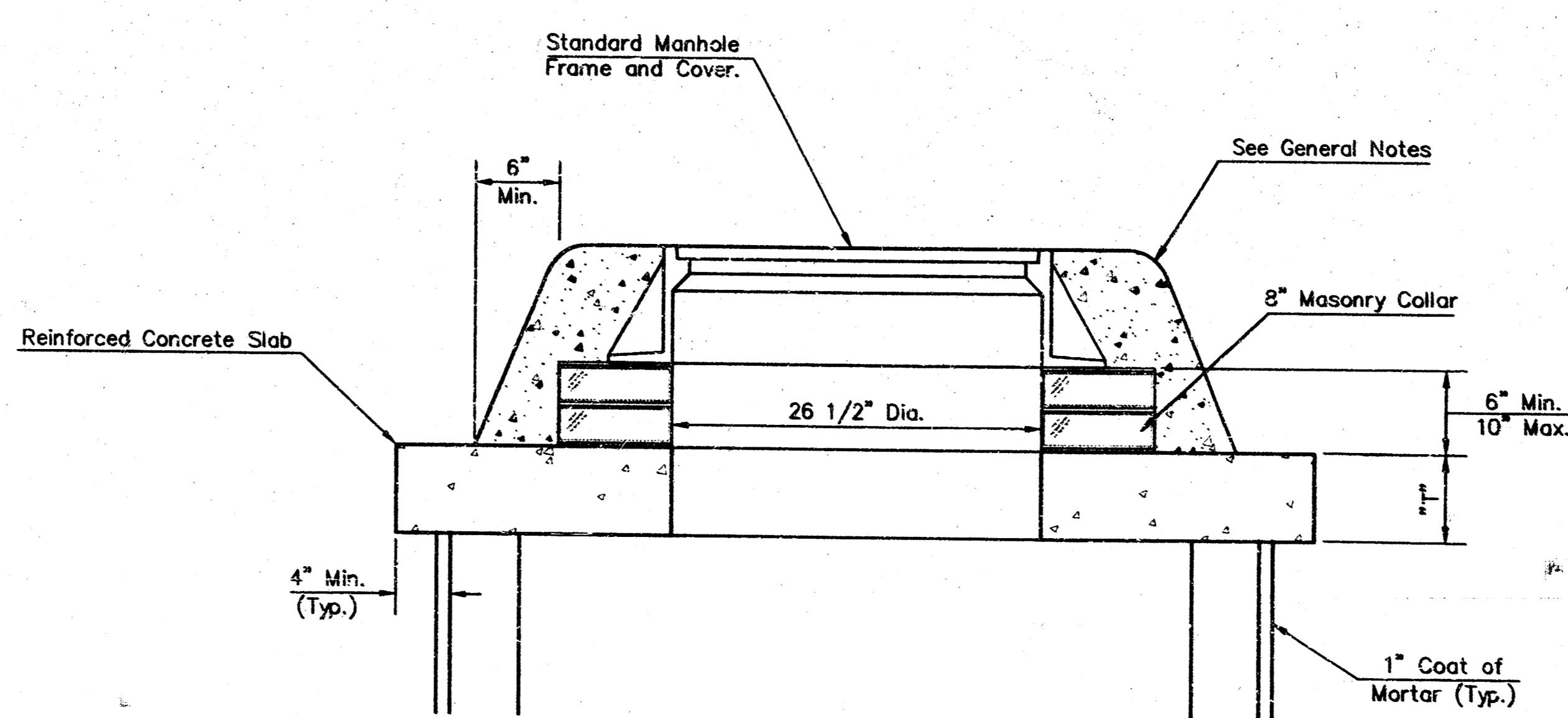
SECTION A-A

CONCRETE SLAB DETAILS



UNDISTURBED SOIL OR APPROVED BACKFILL MATERIAL COMPACTED TO 95% ASTM D-698

SPECIAL SHALLOW TYPE "P" MANHOLE



MASONRY COLLAR DETAIL

GENERAL NOTES

- ALL PRECAST CONCRETE MANHOLE SECTIONS SHALL CONFORM TO THE LATEST REVISIONS OF A.S.T.M. C478 AS MODIFIED BY THE SPECIFICATIONS.
- NON-SHRINK GROUT SHALL BE NON-METALLIC TYPE.
- 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 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.
- ALL INSIDE SURFACES OF THE CONCRETE MANHOLE WHICH WOULD BE EXPOSED TO SEWER GAS SHALL BE COATED WITH 2 COATS TNEPEC SERIES 66 HI-BUILD EPOXYLINE DRY THICKNESS OF 8 MILS (MIN.)
- EXTERIOR MANHOLE WALLS SHALL BE COATED WITH 1 COAT MOBILARMA 633 BITUMINOUS COATING.
- JOINT SEALING COMPOUND SHALL BE KENT SEAL NO. 2 OR APPROVED EQUAL.
- PRECAST MANHOLES SHALL BE SET AT LEAST 4 INCHES INTO THE MANHOLE BASE.
- 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.
- LIFTING HOLES SHALL BE FILLED WITH NON-SHRINK GROUT AND THE INTERIOR SURFACE COATED AS SPECIFIED.
- 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 OF 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.
- 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.
- 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 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 LAND 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 DRAWING.
- ALL BRICK USED IN MANHOLE CONSTRUCTION SHALL MEET GRADE SW OF ASTM C652 OR C62-87.

SHALLOW TYPE 'P' MANHOLE DETAILS
WICHITA, KANSAS

SRB 924 NORTH MAIN WICHITA, KANSAS 67203 316-264-8008 FAX 264-4621
http://www.felst.com/~srb E-mail: srb@net.com

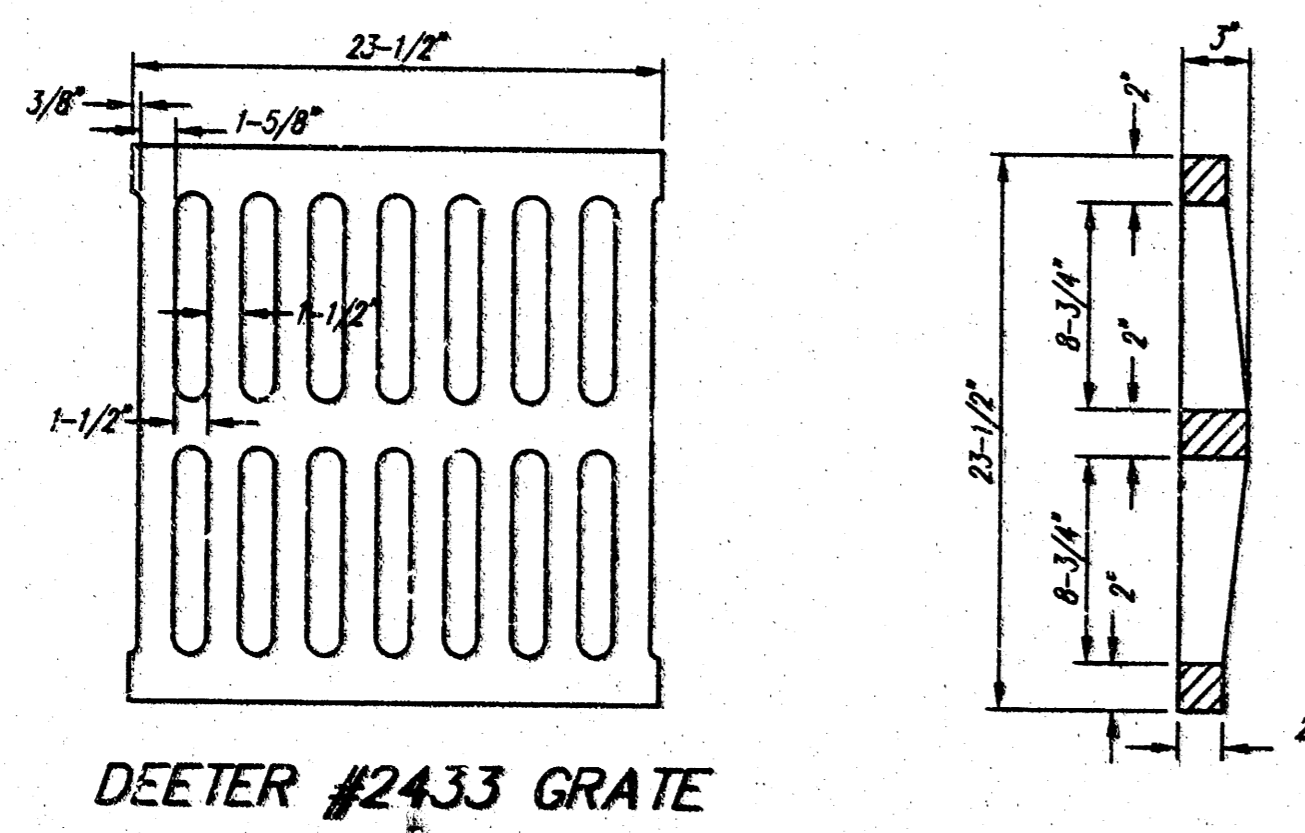
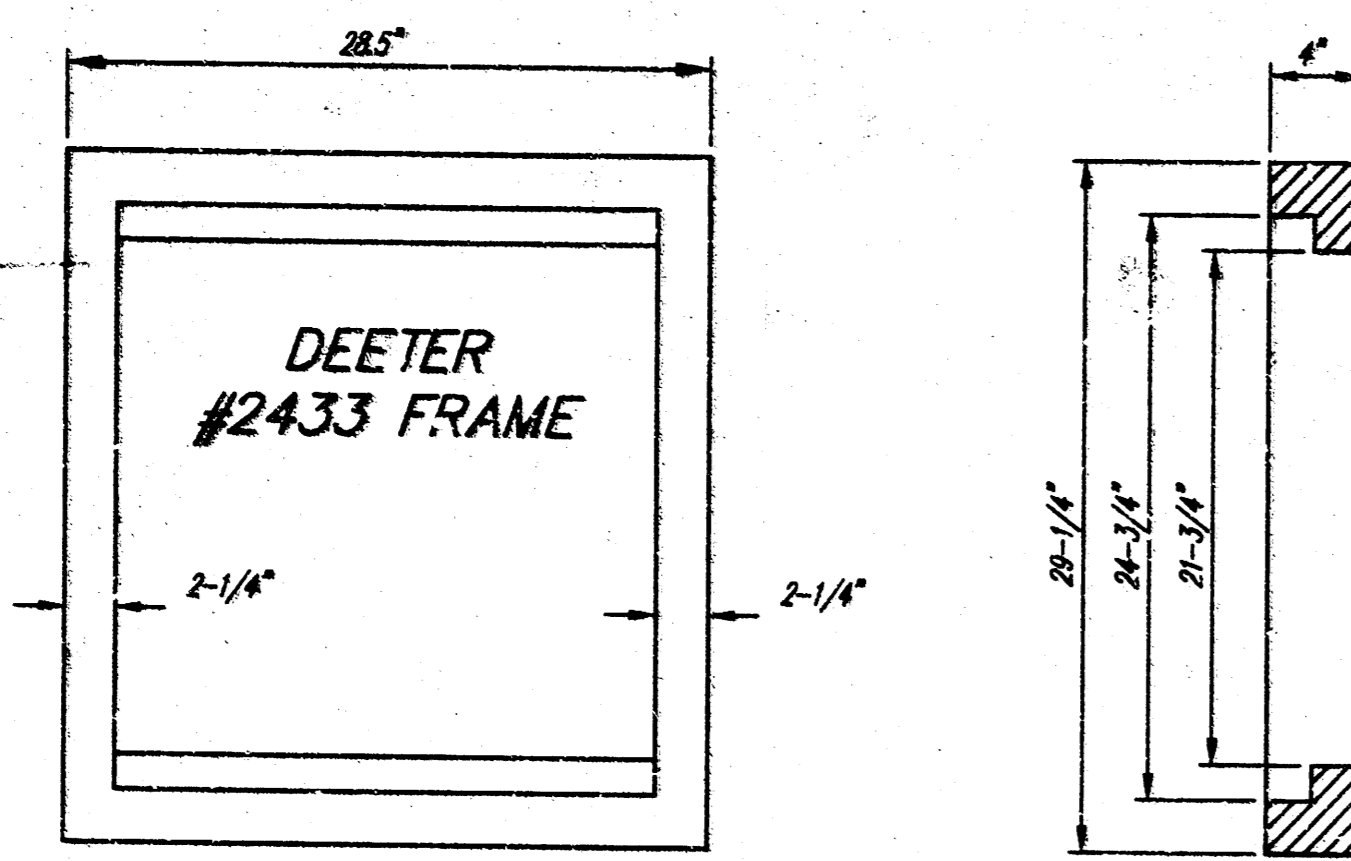
SAVOY, RUGGLES & BOHM, P.A.
ENGINEERING & SURVEYING

PROJECT NUMBER: 783 PPS (607861)

DESIGN: JCL DRAWN: JL UTILITY REVIEW: DATE:

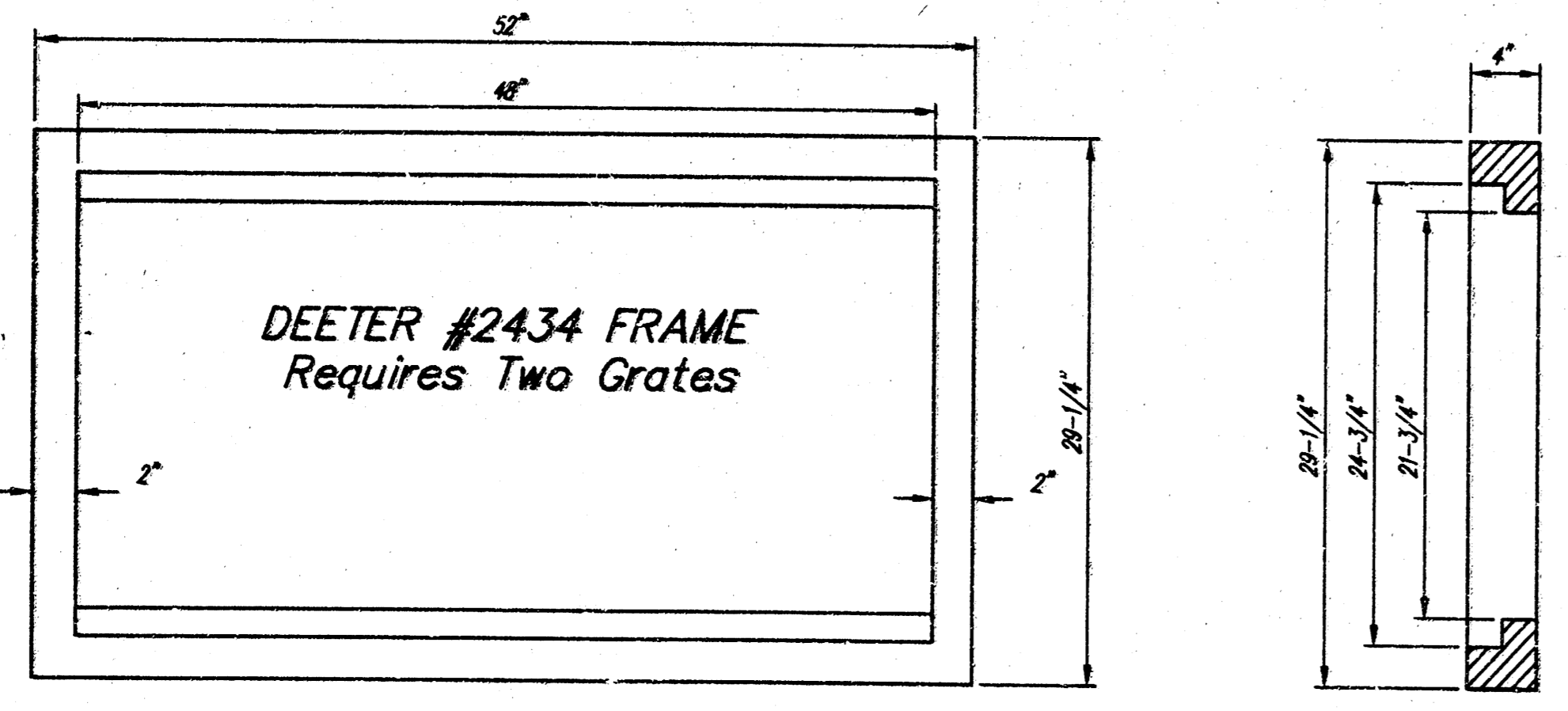
SHEET 3 OF 4

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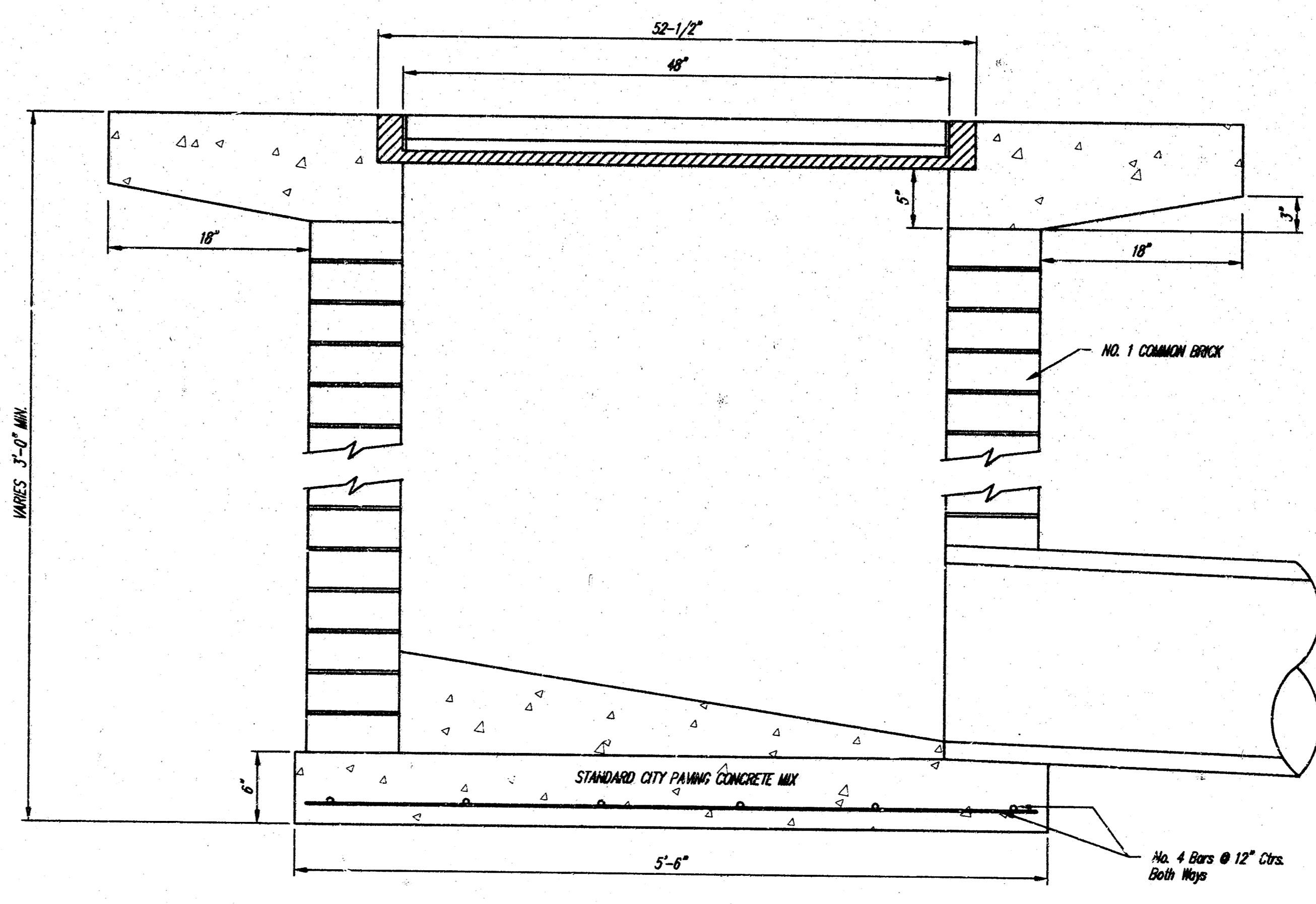
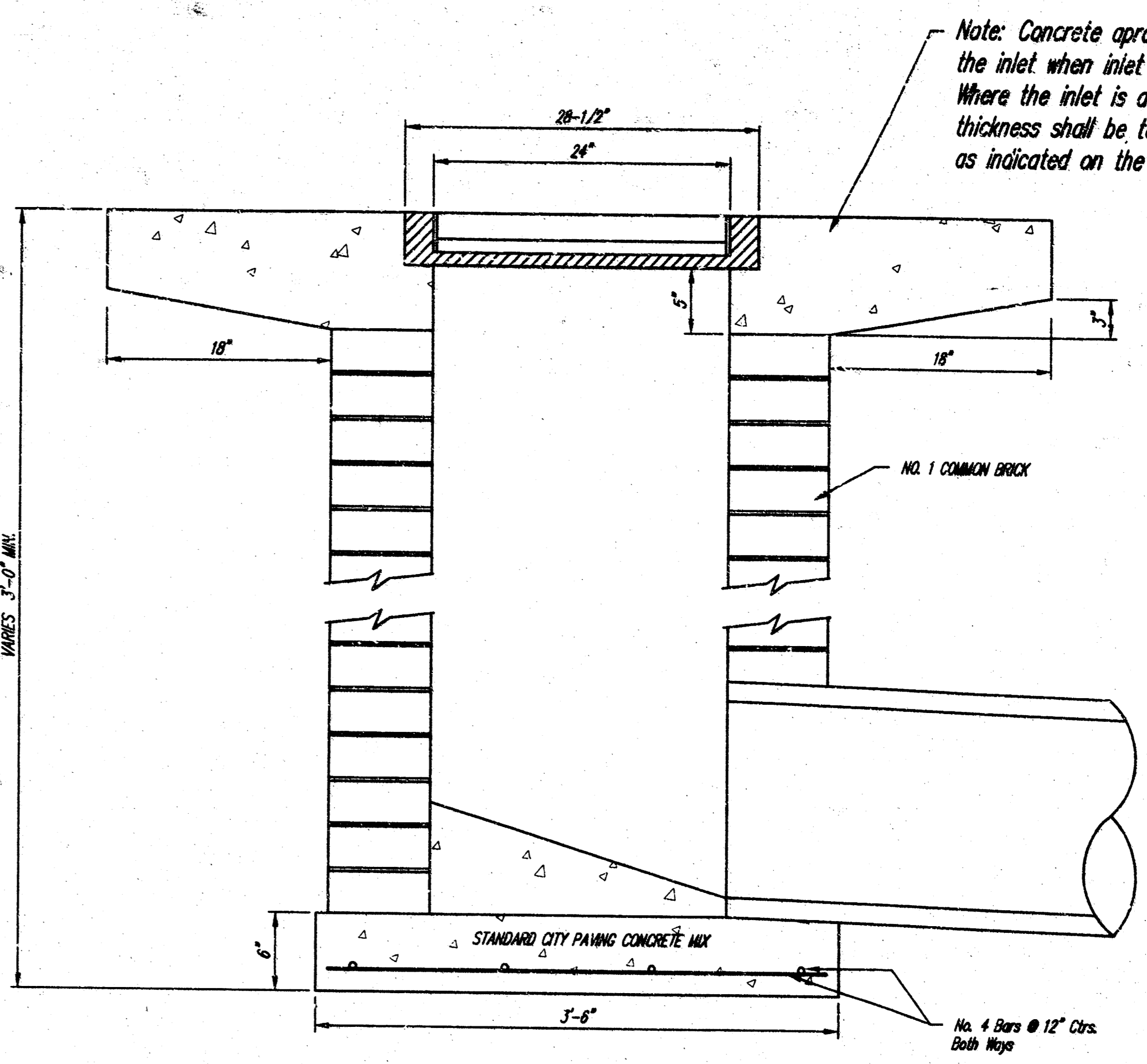
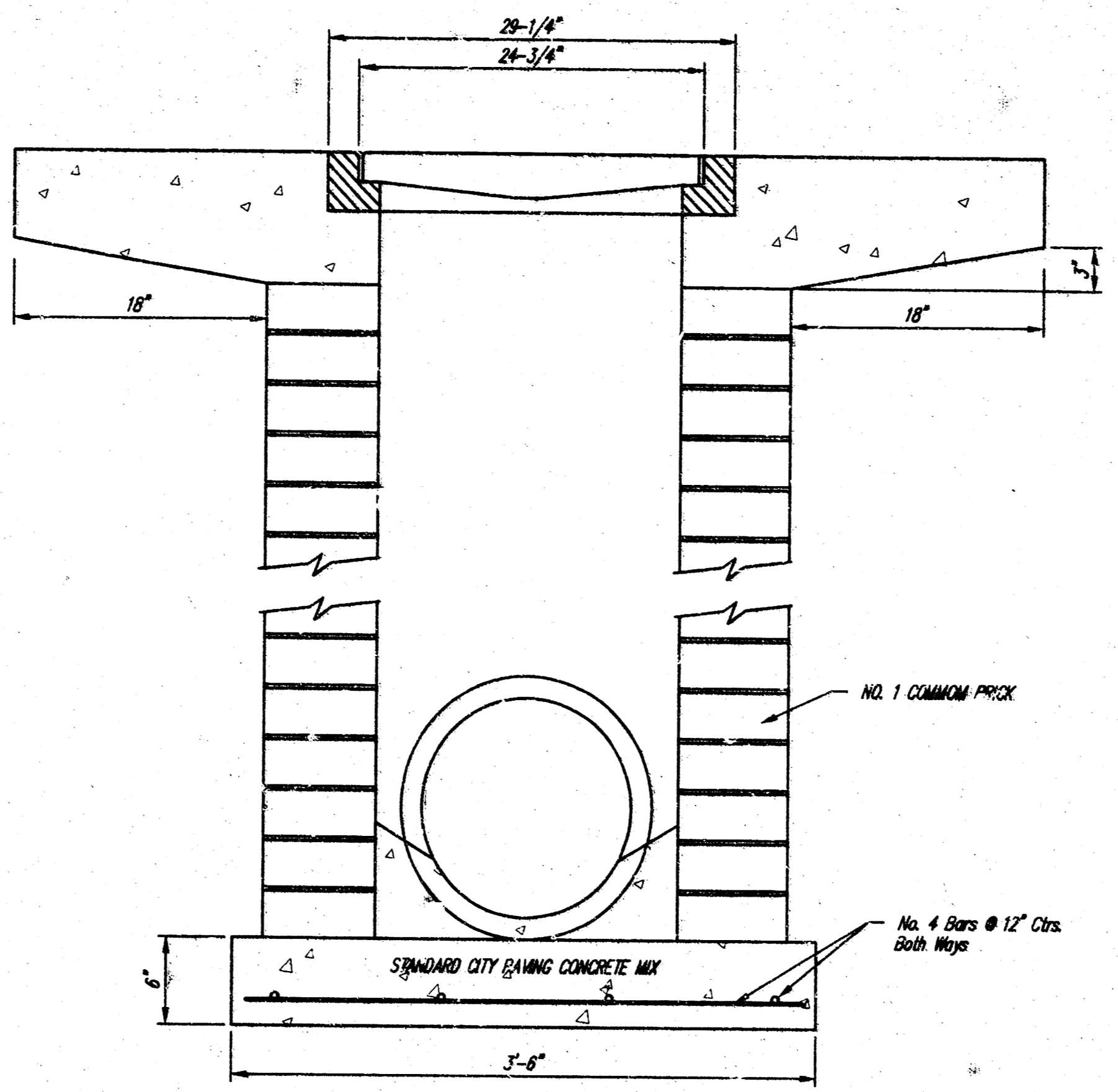


NOTE: Grates shall be imprinted on the top surface with "CITY OF WICHITA" using letters at least 1" in height. Other marking methods may be approved by the engineer.

24" x 24" Frame and Grate Detail



Double 24" x 24" Frame Detail



<p>THE CITY OF WICHITA</p> <p>CITY ENGINEER'S OFFICE CITY HALL - SEVENTH FLOOR 455 NORTH MAIN STREET WICHITA, KANSAS 67202 (316) 268-4541 (316) 268-2114 FAX</p>	DROP INLET 2'x2' / 2'x4'	
	M. E. LINDEBAK P.E. - CITY ENGINEER	
	PROJECT NUMBER 783 PPS	INDEX CODE 607861
	DATE MAR 96	SHEET 4 OF 4

19-03-04-15

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