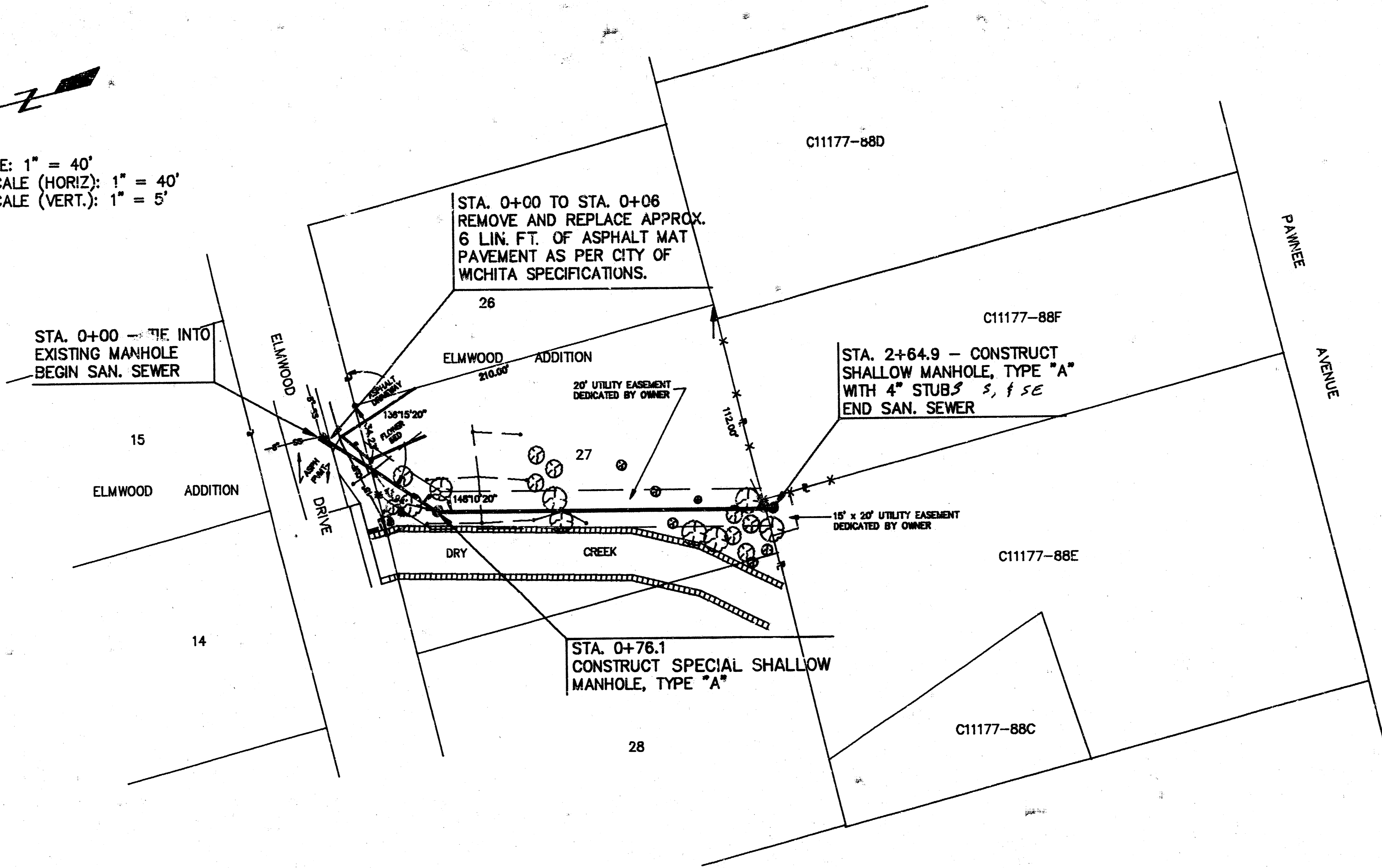


PLAN SCALE: 1" = 40'
 PROFILE SCALE (HORIZ): 1" = 40'
 PROFILE SCALE (VERT.): 1" = 5'



- LEGEND**
- = EXISTING SAN. SEWER AND SIZE
 - = PROPOSED SAN. SEWER LINE
 - - - = UNDERGROUND SPRINKLER LINE w/HEADS
 - x—x— = CHAIN LINK FENCE
 - ▨ = GABION CREEK LINER
 - ⊙ = TREE
 - * = EVERGREEN TREE

BENCHMARK

CITY OF WICHITA BRASS DISC ON THE SE CORNER OF RCBC @ PAWNEE AVE. AND DRY CREEK (WEST OF ROOSEVELT). ELEV. = 115.50

CITY OF WICHITA BRASS DISC @ EAST END OF THE SOUTH HUBGUARD ON BRIDGE OVER DRY CREEK ON ELMWOOD DRIVE. ELEV. = 118.77

NOTE:

COMPACT BACKFILL IN STREET RIGHT-OF-WAY FROM STA. 0+00 TO STA. 0+35 AS PER CITY OF WICHITA SPECIFICATIONS.

NOTE:

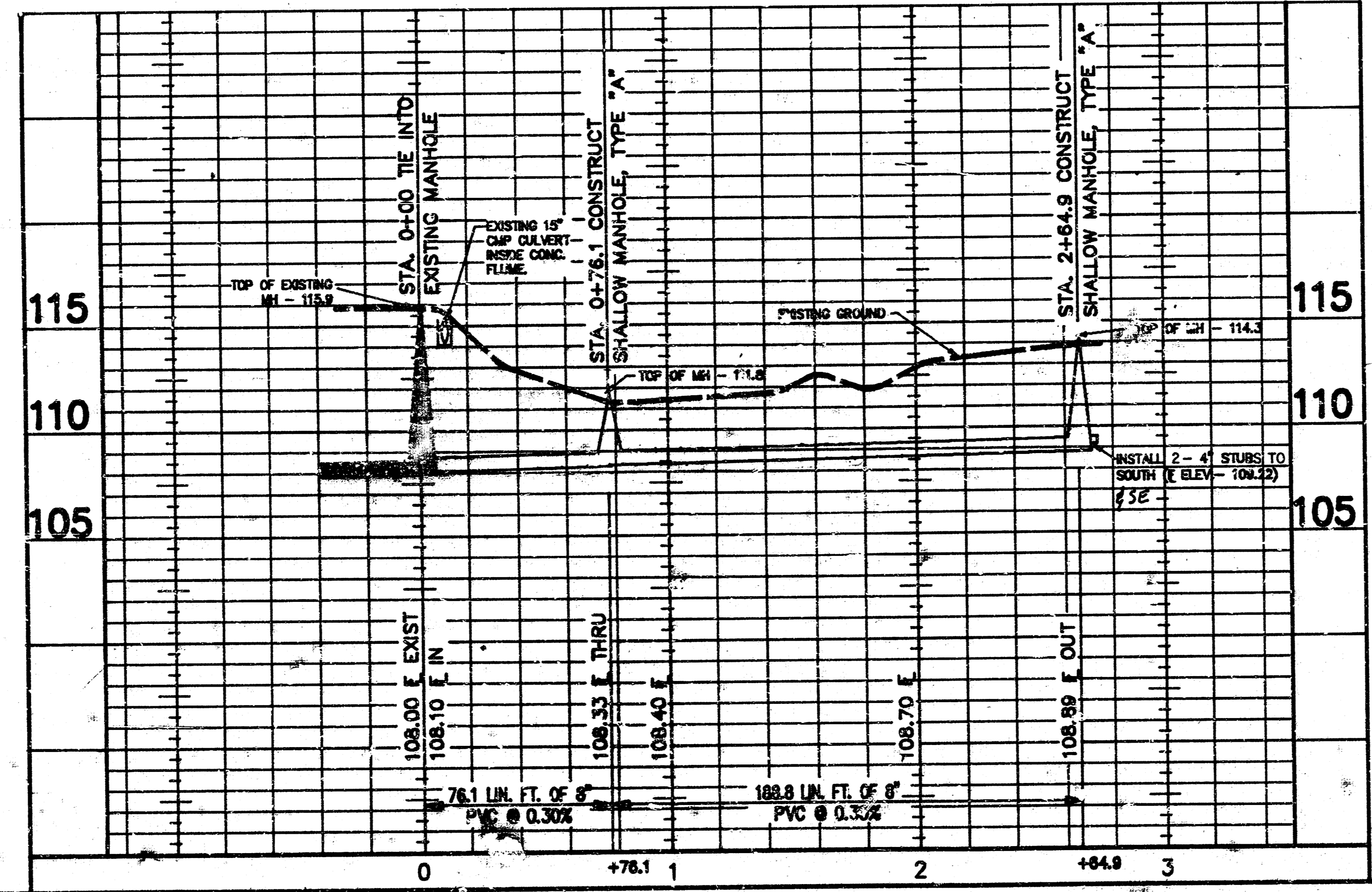
REMOVE AND REPLACE SPRINKLER SYSTEM TO A GOOD WORKING CONDITION. THE COST SHALL BE INCLUDED IN SITE RESTORATION.

NOTE:

CONTRACTOR SHALL RESEED AND FERTILIZE ANY AREAS THAT ARE DAMAGED DUE TO CONSTRUCTION OF THE SANITARY SEWER LINE.

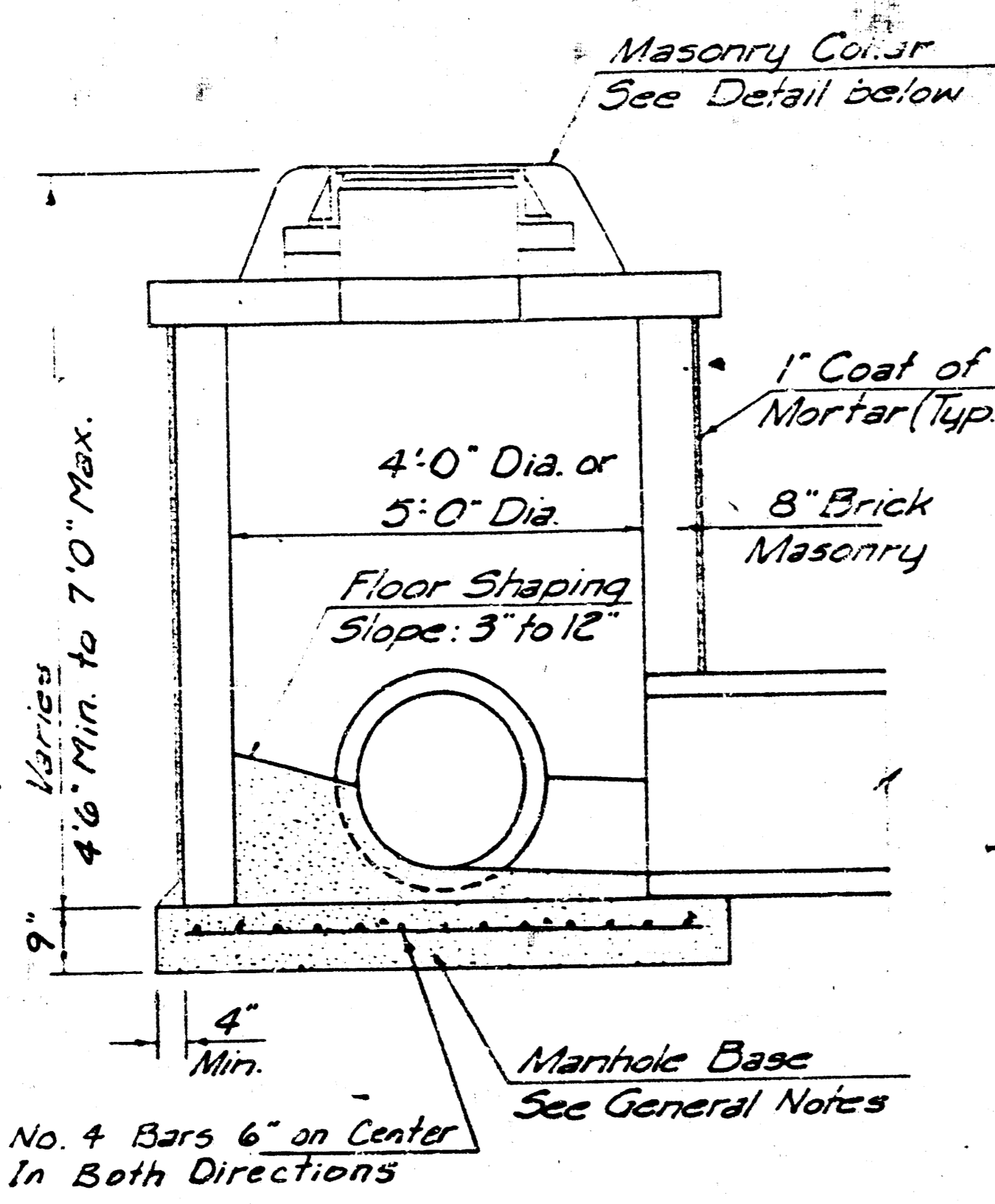
NOTE:

CONTRACTOR SHALL MAINTAIN A MINIMUM DEPTH OF 30 INCHES OF GROUND COVER OVER THE TOP OF PIPE AND GRADE THE AREA TO DRAIN.

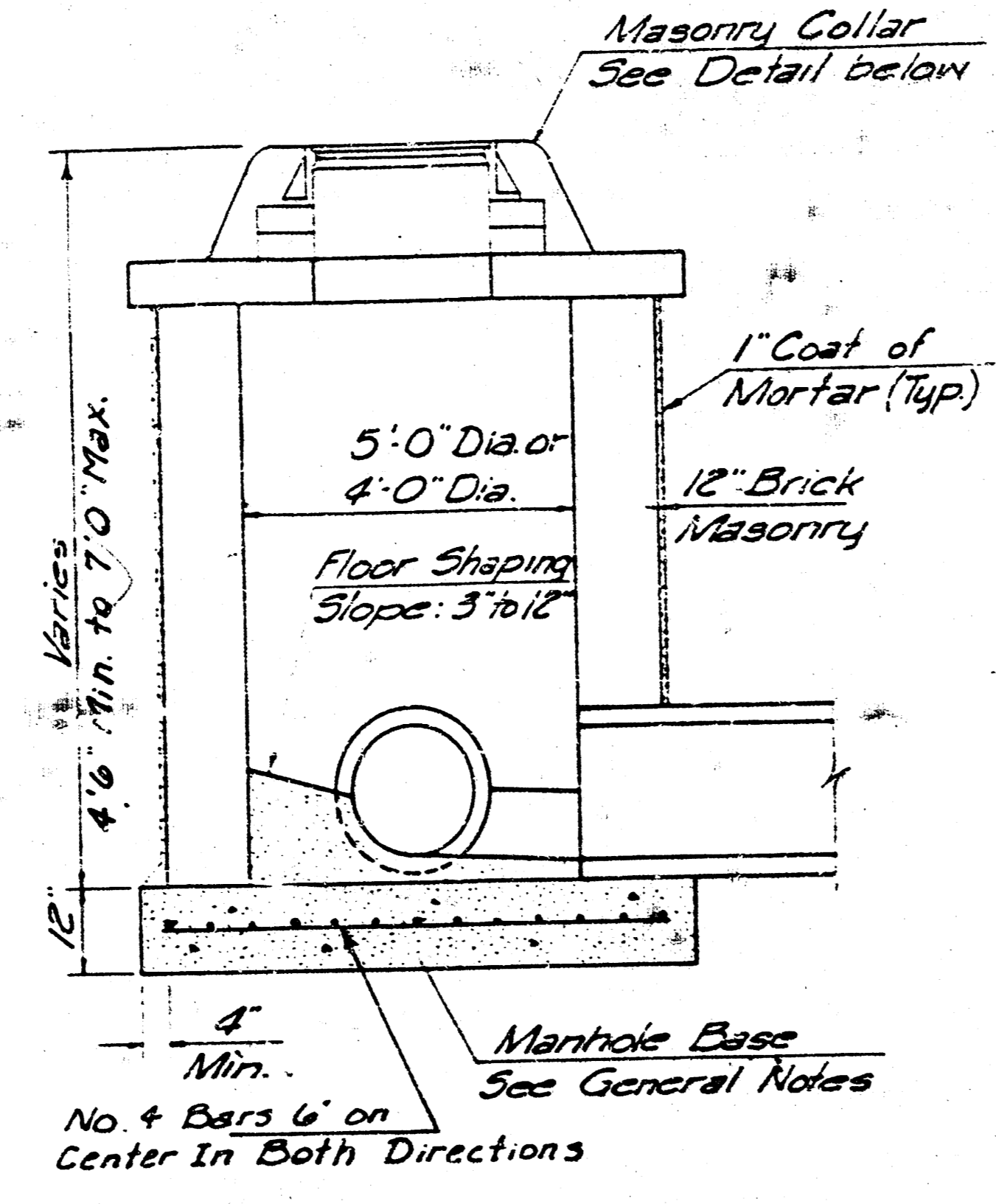


REV. A	5 JUN 90	JMC	CHANGED NOTE ON SPRINKLERS
WICHITA, KANSAS SANITARY SEWER EXTENSIONS			
PLAN AND PROFILE LAT. 71, MAIN 1, SAN. SEWER NO. 12 PROJECT NO. 468-76-245-82043-000-000-001			
CASTLE & ASSOCIATES ENGINEERS WICHITA, KANSAS		DSG DR CH APP	DWG FILE NO 9020 - D - 60,065
DATE	APRIL	1980	SHEET NO 2 OF 4

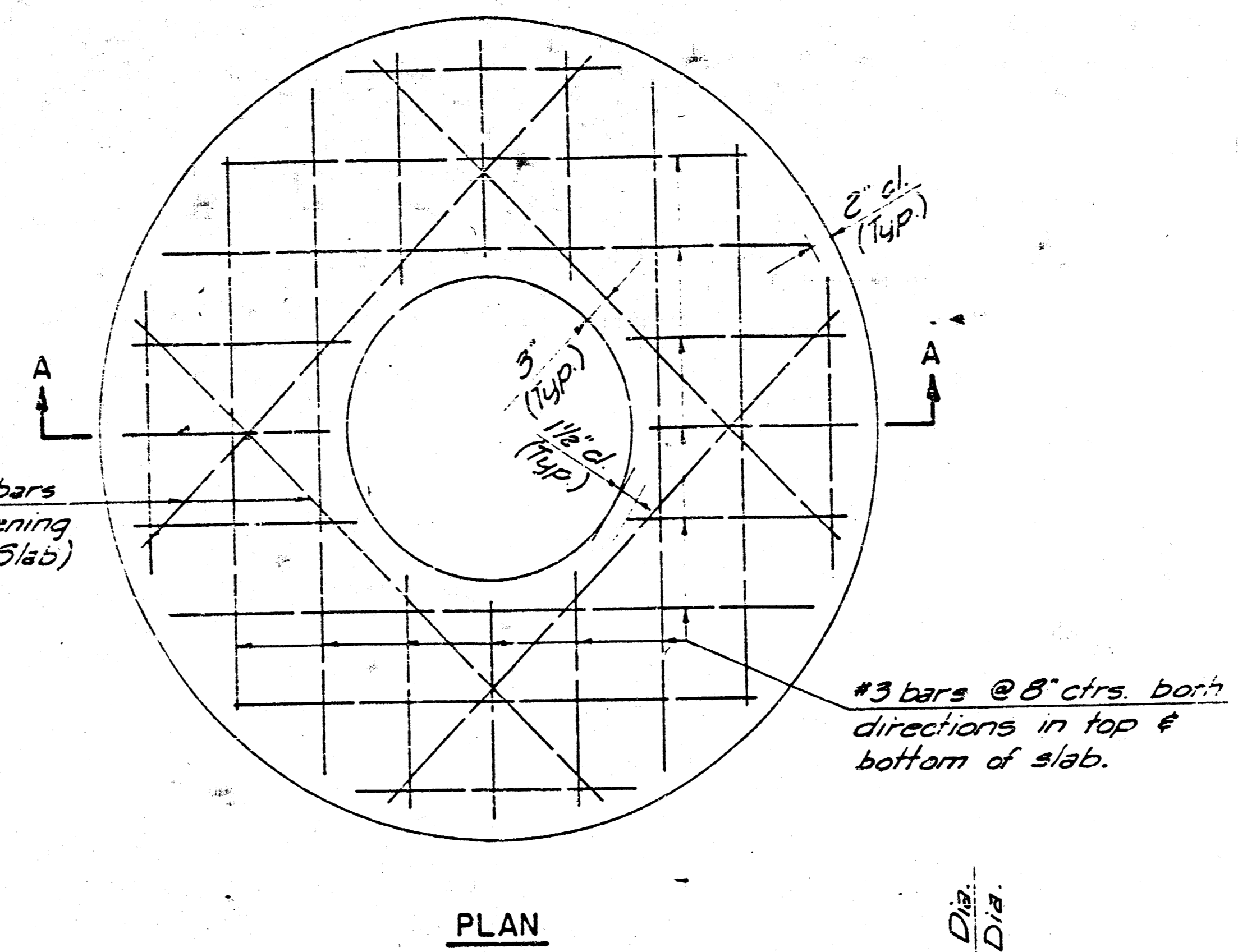
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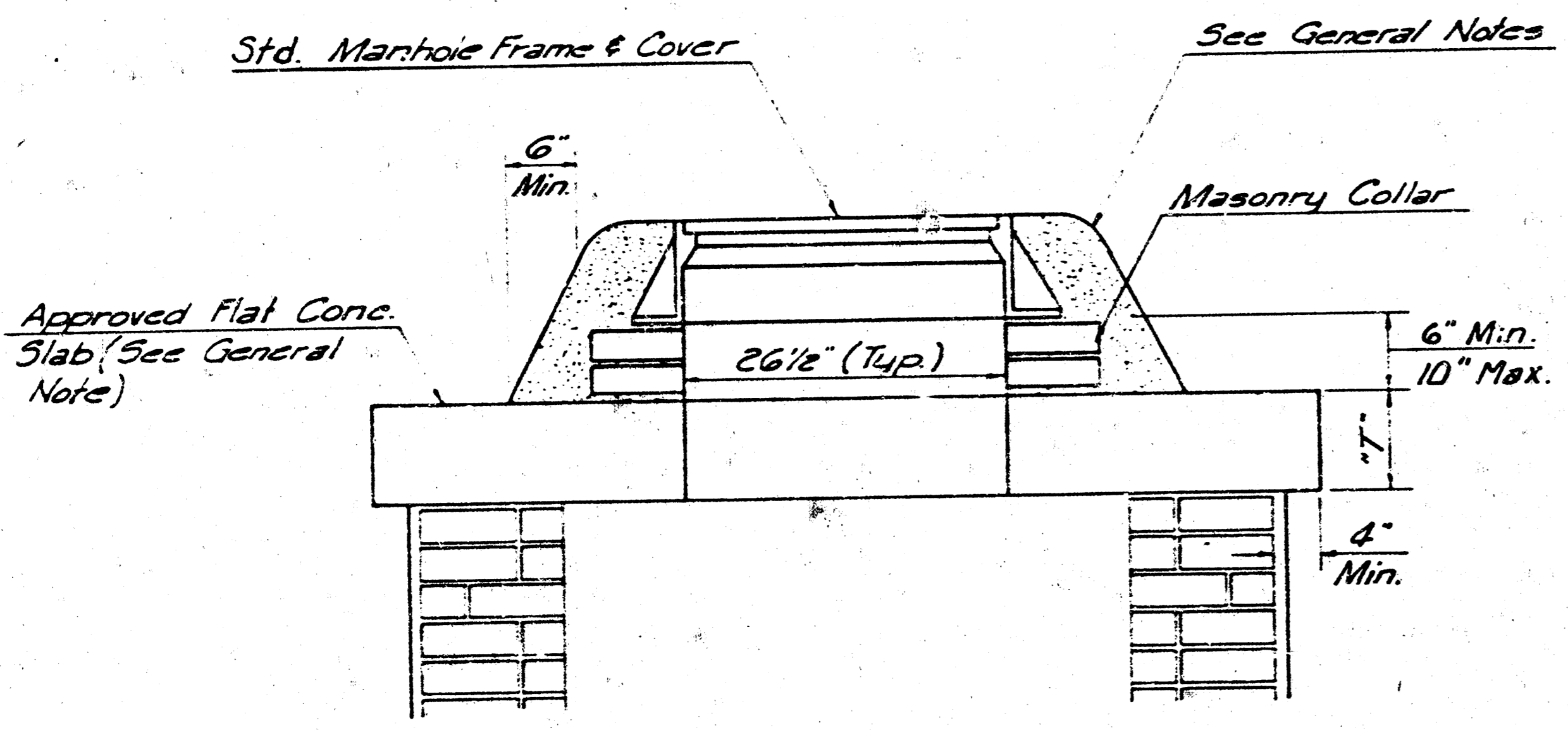
SHALLOW TYPE "A" MANHOLE



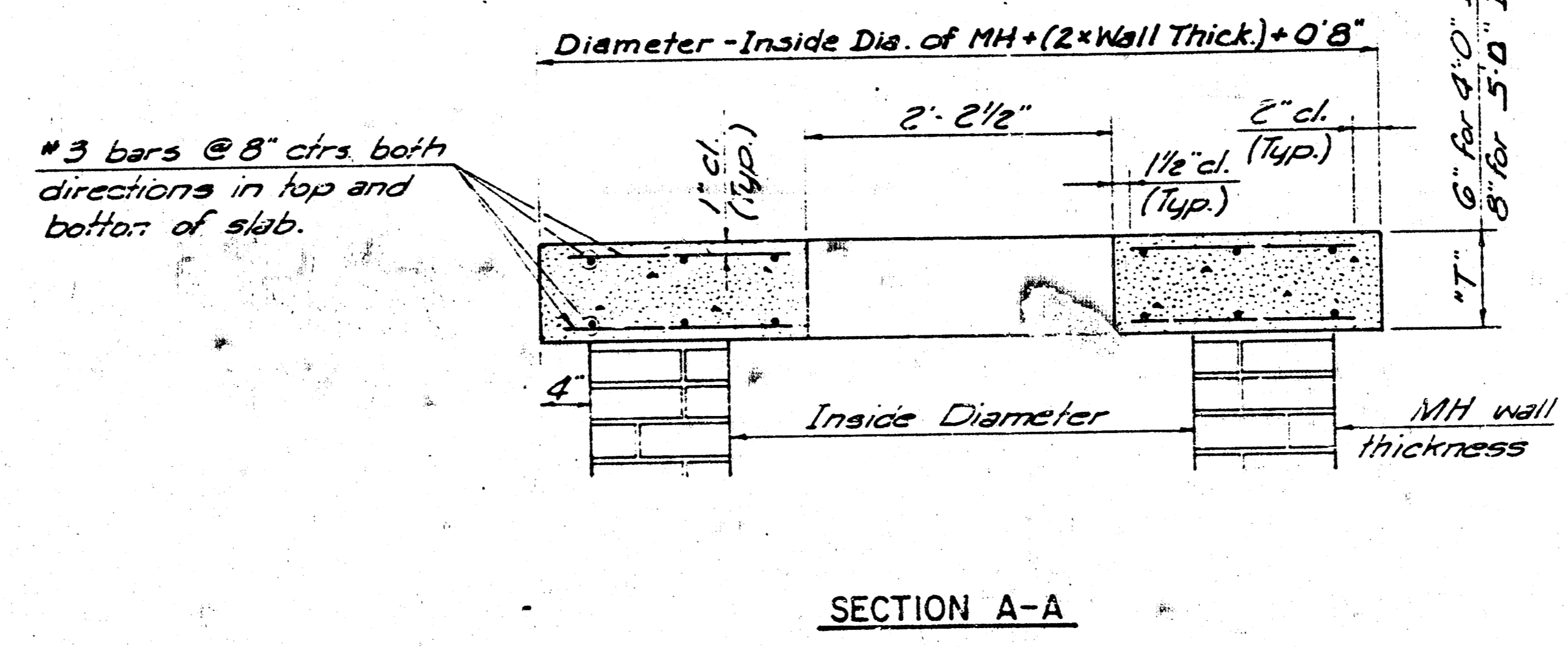
SHALLOW TYPE "B" MANHOLE



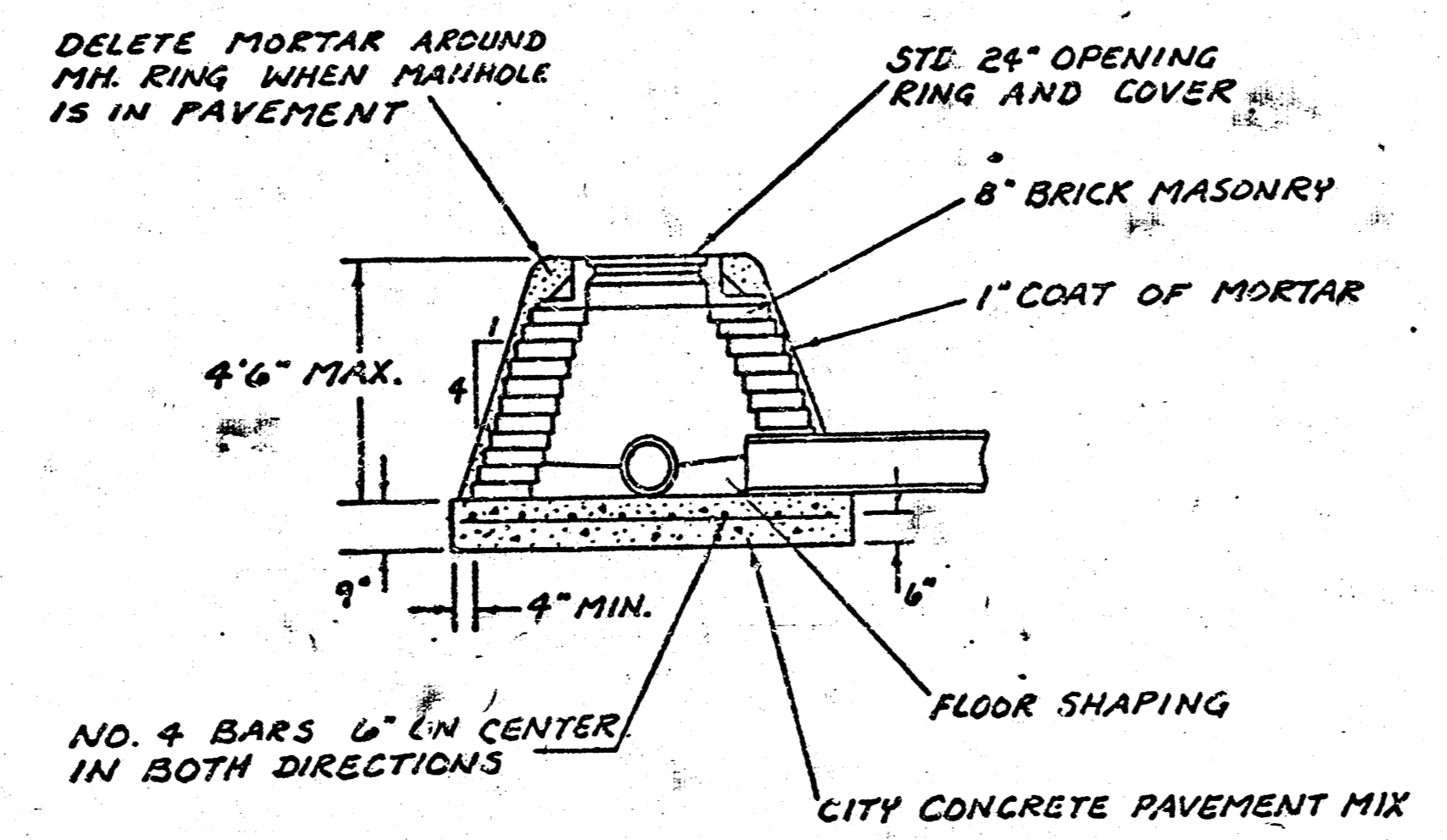
PLAN



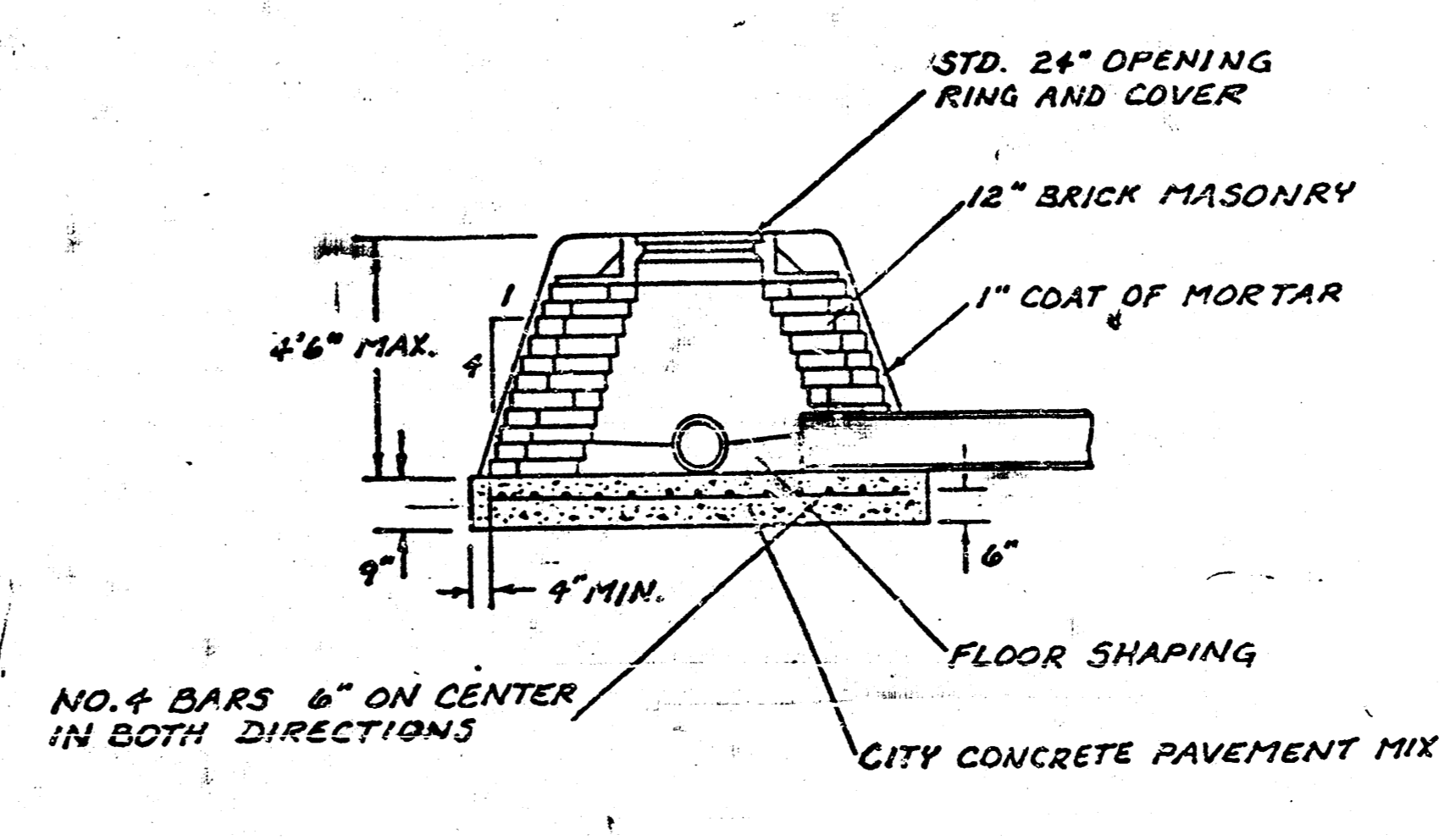
MASONRY COLLAR DETAIL



**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 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. 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.

**CITY OF WICHITA, KANSAS
STANDARD SHALLOW MANHOLES
TYPE 'A' AND TYPE 'B'**

PROJECT NO. 468-78-245-82043-000-000-001		
9020-D-60,066 SHEET NO. 3 OF 4		
Designed by	Checked by	Job No.
Drawn by	Date	

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MANHOLE FRAME AND COVER DETAIL

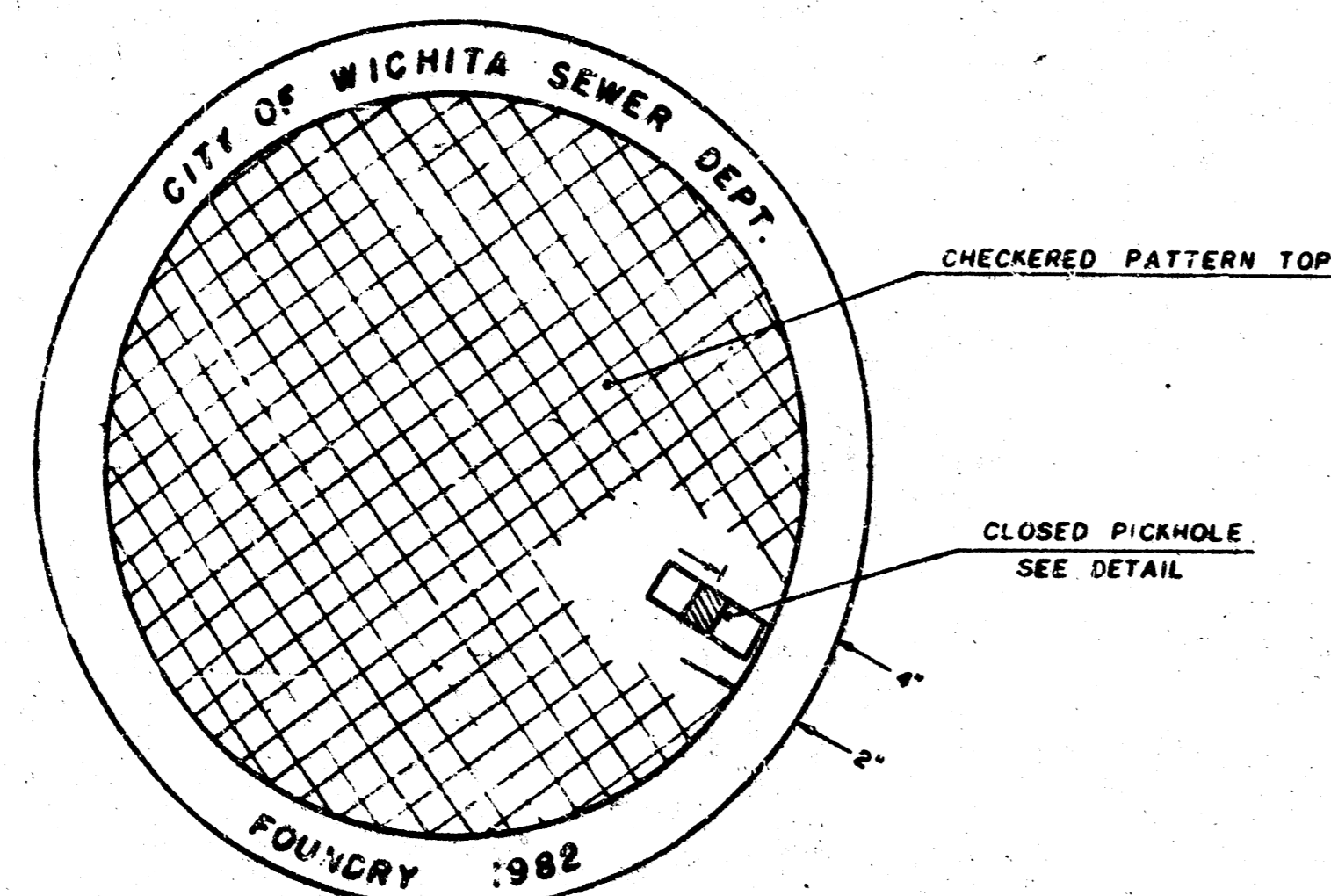
ADOPTED AS STANDARD DESIGN

BY

City of Wichita, Kansas

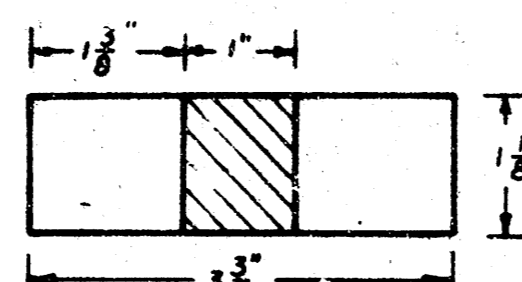
MANHOLE COVER

Weight: 180 Lbs.

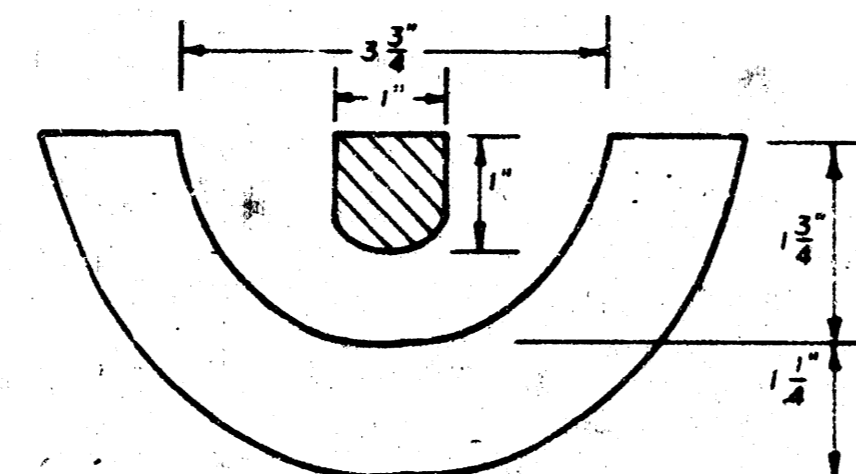


TOP VIEW

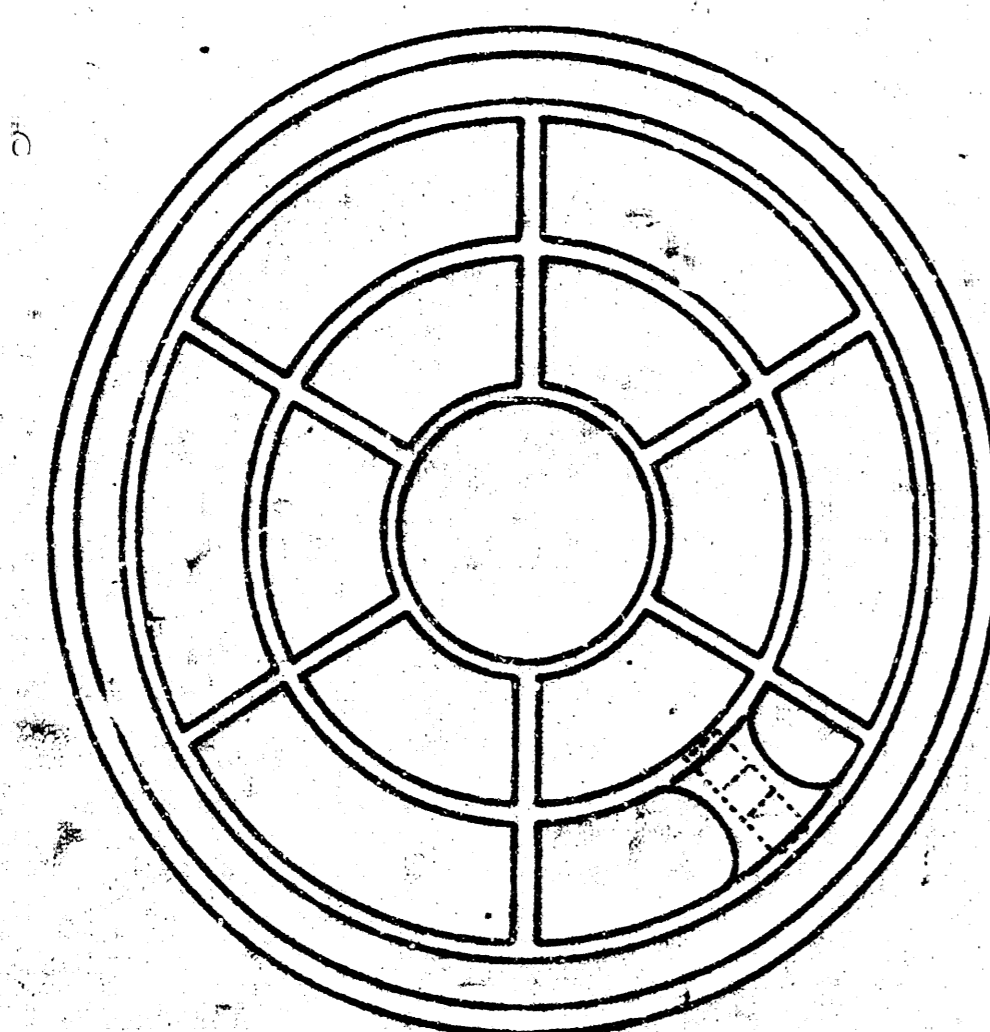
PICKHOLE DETAIL



TOP VIEW



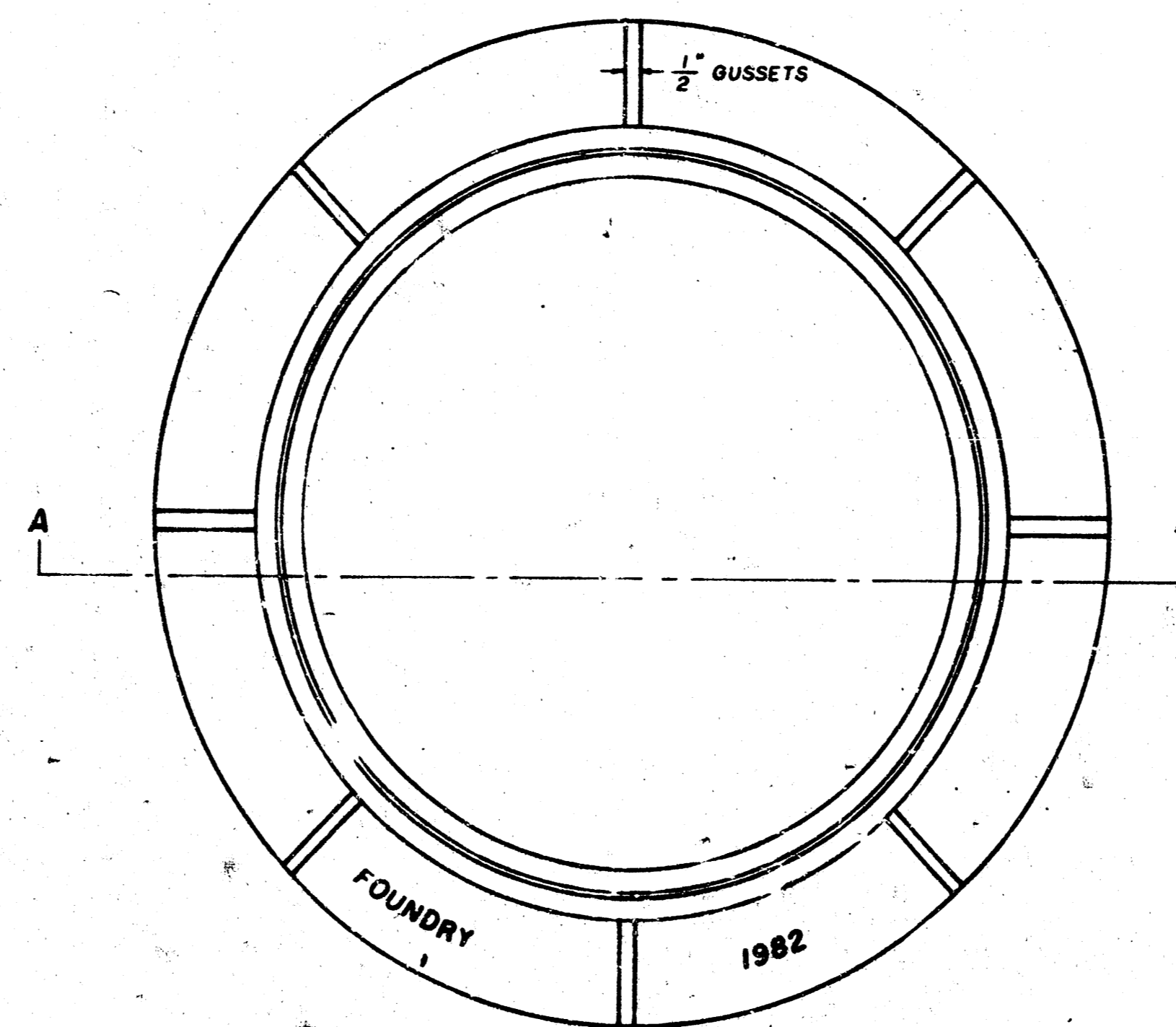
SECTION VIEW



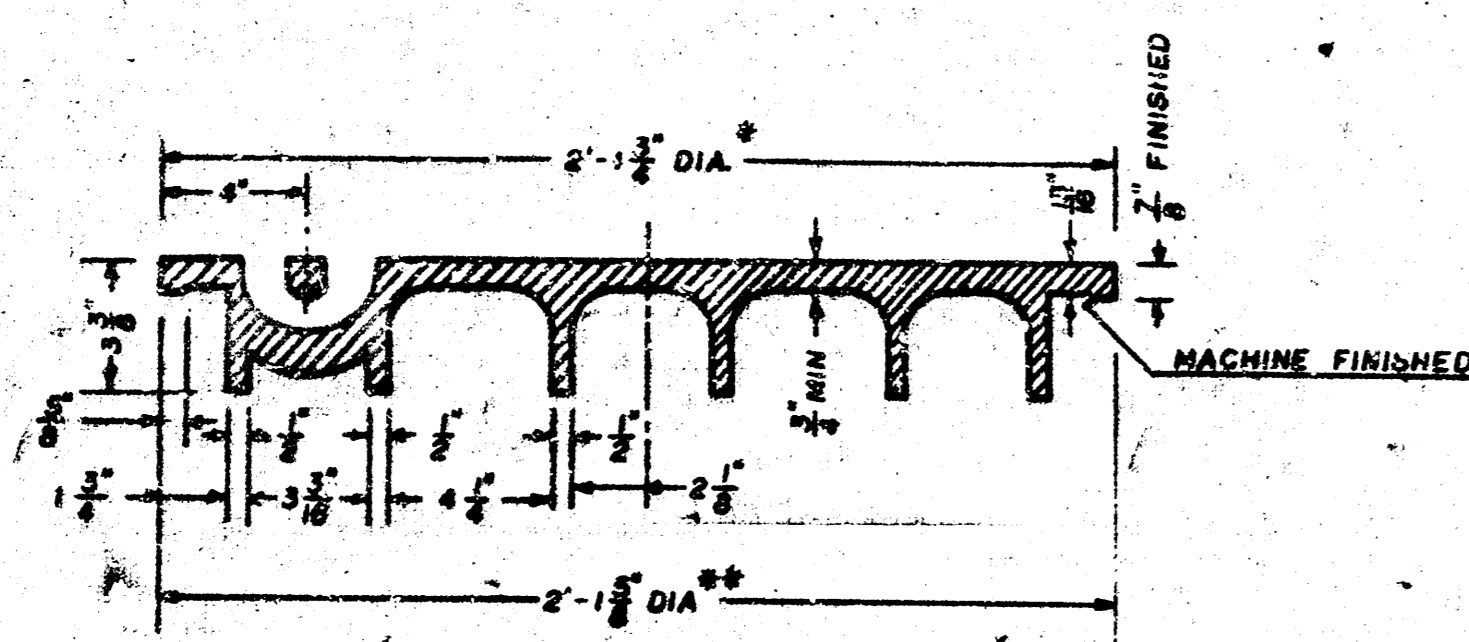
BOTTOM VIEW

MANHOLE FRAME

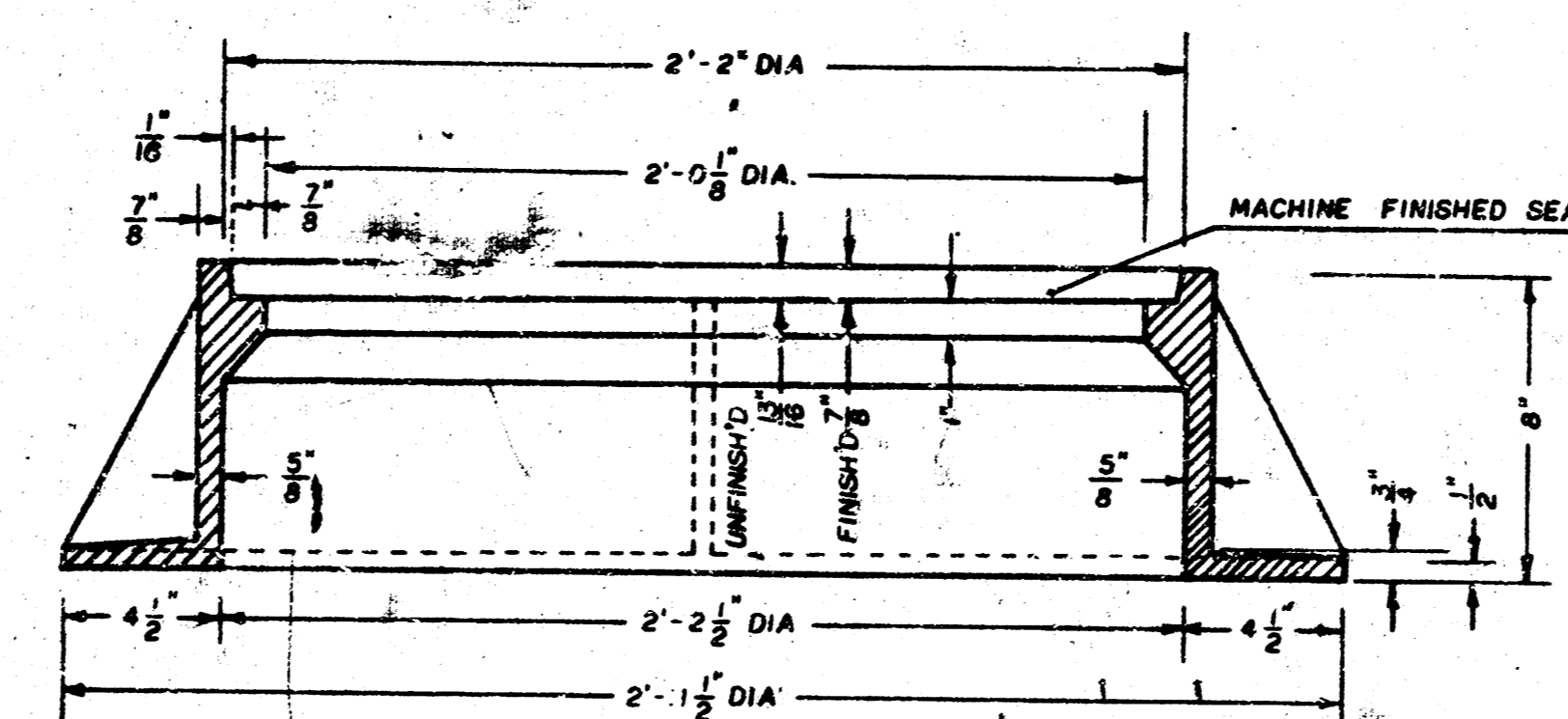
Weight: 240 Lbs.



TOP VIEW



SECTION VIEW



SECTION A-A

* OUTSIDE DIA. TOP OF COVER
** OUTSIDE DIA. BOTTOM OF COVER

GENERAL NOTES

1. MANHOLE CASTINGS SHALL BE MANUFACTURED USING GOOD QUALITY GRAY IRON CONFORMING TO CLASS 30 OF A.S.T.M. DESIGNATION A-48. DIMENSIONS AND WEIGHTS SHOWN ON THE DETAILED DRAWINGS SHALL BE CONSIDERED AS MINIMUM REQUIREMENTS AND ANY DEVIATIONS FROM THE DIMENSIONS SHOWN MUST BE SPECIFICALLY APPROVED. THE FINISHED CASTINGS SHALL BE OF UNIFORM QUALITY, FREE FROM BLOWHOLES, POROSITY, HARD SPOTS, SHRINKAGE DISTORTIONS OR OTHER DEFECTS.
2. MANHOLE CASTINGS SHALL BE COATED WITH AN ASPHALT PAINT RESULTING IN A SMOOTH, TOUGH AND TENACIOUS COATING WHICH IS NOT BRITTLE OR TACKY.
3. MANHOLE CASTINGS SHALL BE MANUFACTURED SUCH THAT A COVER MANUFACTURED BY ANY ONE FOUNDRY WILL FIT INTERCHANGEABLY INTO A FRAME MANUFACTURED BY ANOTHER FOUNDRY AND STILL MEET ALLOWABLE CLEARANCES AND NON-ROCKING REQUIREMENTS. THIS WILL REQUIRE MANUFACTURING OF THE MATCHING FACES ON THE COVER AND THE FRAME TO CLOSE TOLERANCES.
4. THE OUTSIDE CIRCUMFERENCE OF THE VERTICAL FACE OF THE COVER AND THE INSIDE CIRCUMFERENCE OF THE VERTICAL FACE IN THE FRAME RECESS SHALL BE MANUFACTURED TO TOLERANCES SUCH THAT THE CLEARANCE BETWEEN THE COVER AND FRAME WILL NOT EXCEED 1/8" AT ANY POINT AROUND THE CIRCUMFERENCE OF THE COVER. THE SEATING SURFACES BETWEEN THE COVER AND FRAME SHALL BE MACHINED SUCH THAT THESE SURFACES SHALL MAKE FULL CONTACT FOR THEIR FULL CIRCUMFERENCE TO PRECLUDE THE COVER FROM ROCKING IN THE FRAME.
5. THE MANHOLE FRAME AND COVER SHALL BE MARKED WITH LETTERING INDICATING THE NAME OF THE MANUFACTURER AND THE YEAR WHEN THE COVER OR FRAME WAS CAST. THE COVER SHALL BE FURTHER IDENTIFIED WITH REGARDS TO OWNERSHIP USING LETTERS AT LEAST 1" IN HEIGHT. THIS IDENTIFICATION SHALL BE "CITY OF WICHITA SEWER DEPARTMENT". THE WORD DEPARTMENT MAY BE ABBREVIATED. THE TEXTURE OF THE TOP SURFACE OF THE COVER SHALL BE MANUFACTURED IN A CHECKERED PATTERN DESIGN AS INDICATED ON THE DRAWINGS. SMOOTH BLOCKOUTS SHALL BE UTILIZED TO HIGHLIGHT THE LETTERING ON THE COVER SURFACE. THE TOTAL AREA OF SMOOTH SURFACE BLOCKOUT SHALL NOT EXCEED THE AREA AS INDICATED ON THE DRAWING. POSITIONING OF SMOOTH BLOCKOUTS AND LETTERING MAY VARY FROM THAT SHOWN ON THE DETAILED DRAWING.