

(LATERAL 241, SOUTHWEST INTERCEPTOR)

MAY, 1987

1. CONTRACTOR WILL BE REQUIRED TO PROVIDE A MINIMUM ADVANCE NOTICE OF TWENTY-FOUR (24) HOURS TO UTILITY COMPANIES PRIOR TO STARTING ANY EXCAVATION AS FOLLOWS:

KANSAS ONE-CALL 1-800-344-7233

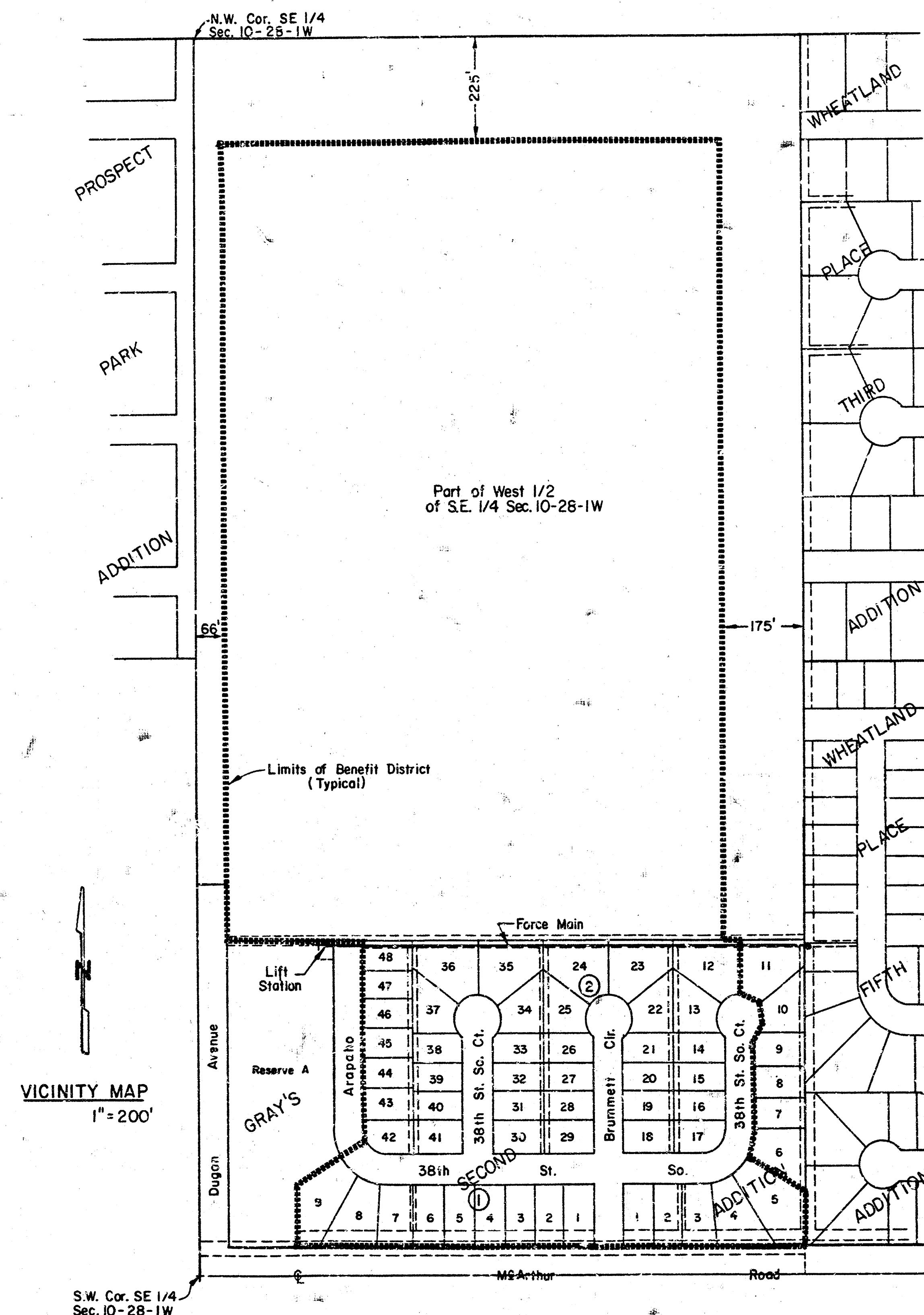
THE CONTRACTOR MUST NOTIFY THE FOLLOWING IN CASE OF AN EMERGENCY;

CABLEVISION	262-4270 OR 263-2061
KANSAS GAS & ELECTRIC	264-1141
SOUTHWESTERN BELL TELEPHONE COMPANY	1-571-2611

2. 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.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PRESERVING PROPERTY IRONS. THE CONTRACTOR WILL BE REQUIRED TO RE-ESTABLISH PROPERTY IRONS WHICH ARE DAMAGED OR DESTROYED BY HIS CONSTRUCTION OPERATIONS. SUCH IRONS SHALL BE RE-ESTABLISHED BY A LICENSED LAND SURVEYOR OR A LICENSED PROFESSIONAL ENGINEER IN ACCORDANCE WITH STATE LAWS.
4. CONTRACTOR TO INSTALL GRAVITY SEWER PRIOR TO INSTALLATION OF FORCE MAIN.

1. THE LUMP SUM PRICE BID FOR FURNISHING AND INSTALLING LIFT STATION WITH STANDBY POWER AND MISCELLANEOUS APPURTENANCES COMPLETE IN PLACE SHALL INCLUDE ALL COSTS FOR FURNISHING AND INSTALLING THE LIFT STATION AND STANDBY POWER MODULE AS INDICATED ON THE SITE PLAN COMPLETE IN PLACE AND IN OPERATION. SUCH LUMP SUM BID SHALL INCLUDE THE COST OF CONSTRUCTING AND/OR INSTALLING COMPLETE SUGRADE, CONCRETE PAD, ACCESS DRIVE, POWER POLE, ELECTRICAL CONDUIT, ELECTRICAL WIRING, DISCONNECT SWITCH, ELECTRICAL POWER SUPPLY, WATER GAS FUEL SUPPLY, FINISHED GRADING AND ANY OTHER INCIDENTALS NECESSARY TO COMPLETE THE WORK.

1. THE CONTRACTOR SHALL INSTALL A 10" X 12" CRESSOTED WOOD ELECTRIC SERVICE POLE IN A LOCATION APPROVED BY THE ENGINEER.
2. A 2" CONDUIT SHALL BE INSTALLED UNDERGROUND FROM THE DISCONNECT SWITCH LOCATED ON THE ELECTRIC SERVICE POLE TO THE LIFT STATION MODULE AND FROM THE LIFT STATION MODULE TO THE STANDBY POWER MODULE AND FROM THE STANDBY POWER MODULE TO THE DISCONNECT SWITCH LOCATED ON THE ELECTRIC SERVICE POLE. A 3/4" CONDUIT SHALL BE INSTALLED UNDERGROUND BETWEEN THE LIFT STATION MODULE AND THE ELECTRIC SERVICE POLE TO FACILITATE CONNECTION OF THE ALARM SYSTEM BY OTHERS. THE ELECTRICAL POWER SUPPLY TO THE METER BASE MUST BE UNDERGROUND. ALL ELECTRICAL WIRING SHALL CONFORM TO THE CITY OF WICHITA CODE.
3. A UL LISTED LIGHTNING ARRESTOR SHALL BE INSTALLED AFTER THE DISCONNECT SWITCH FOR VOLTAGE SURGE PROTECTION OF THE AUTOMATIC TRANSFER SWITCH AND ALL SECONDARY WIRING.
4. THE CRUSHED ROCK-GRAVEL DRIVE APPROACH TO THE LIFT STATION, COMPLETE WITH CURBVERT, SHALL BE CONSTRUCTED AS INDICATED ON THE PLAN AND SHALL BE INCLUDED AS PART OF THE LUMP SUM PRICE BID FOR FURNISHING AND INSTALLING THE LIFT STATION.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ARRANGEMENTS WITH ARKLA GAS COMPANY (JERRY MATKINS, 9242-8350) FOR EXTENSION OF GAS SERVICE TO THE LIFT STATION SITE, AND FOR PAYMENT OF COSTS OF SUCH EXTENSION AND METER SETTING. LOCATION OF METER TO BE ACCEPTABLE TO ARKLA GAS COMPANY AND TO THE CITY OF WICHITA SEWER MAINTENANCE DEPARTMENT.
6. THE CONTRACTOR SHALL CONTACT K.G. & E. (BOB CARSON, 261-6733) TO MAKE ARRANGEMENTS FOR ELECTRICAL SERVICE.



LOTS 1 THROUGH 9 INCLUSIVE, BLOCK 1 & LOTS 1 THROUGH 5
INCLUSIVE, AND LOTS 12 THROUGH 48 INCLUSIVE, BLOCK 2
GRAY'S SECOND ADDITION.

AN UNPLATTED TRACT OF LAND IN THE SOUTHEAST QUARTER,
SECTION 10, T28S, R1W OF THE 6th PM. DESCRIBED AS
FOLLOWS: THE WEST HALF OF SAID SOUTHEAST QUARTER,
EXCEPT THAT PORTION PLATTED AS GRAY'S SECOND ADDITION,
EXCEPT THE WEST 66 FEET, EXCEPT THE EAST 175 FEET
AND EXCEPT THE NORTH 225 FEET.

Sheet No.	Description
1	Cover Sheet
2	Plan & Profile
3	Site Plan & Details, Force Main & Lift Station
4	Stand-By Generator & Receiving M.H. Details
5-6	Lift Station
7-9	Manhole Details

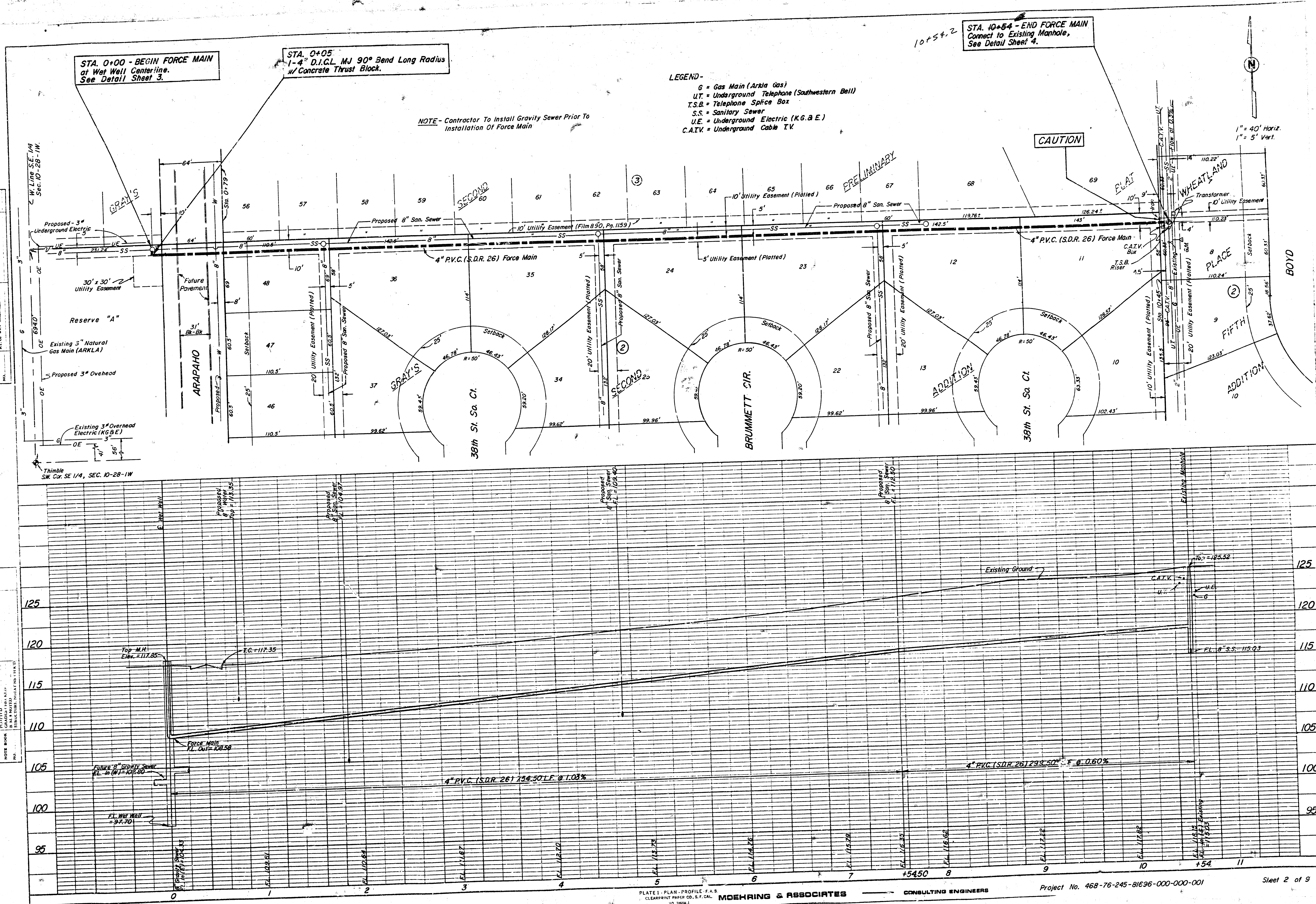
AS BOLT
12-87
ML

MOEHRING & ASSOCIATES
CONSULTING ENGINEERS
WICHITA



PLAN
 SURVEYED
 PLANNED
 NOTE: MARK
 ALIGNMENT CHECKED
 RT. OF WAY CHECKED
 NO.

PROFILE
 SURVEYED
 PLANNED
 NOTE: MARK
 ALIGNMENT CHECKED
 RT. OF WAY CHECKED
 NO.



LEGEND-

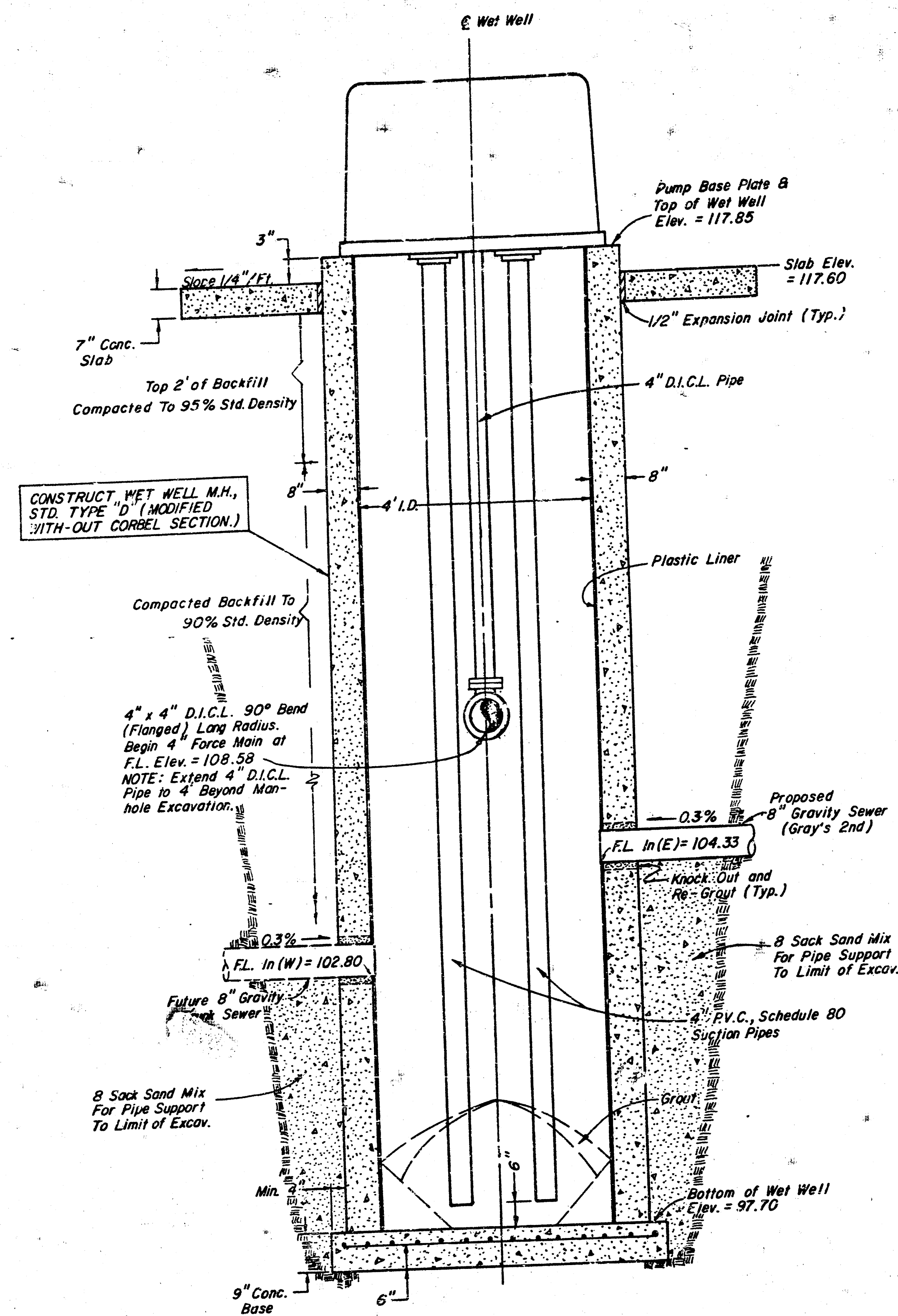
- G = Gas Main (Arkla Gas)
- U.T. = Underground Telephone (Southwestern Bell)
- T.S.B. = Telephone Splice Box
- S.S. = Sanitary Sewer
- U.E. = Underground Electric (K.G. & E.)
- C.A.T.V. = Underground Cable TV

NOTE - Contractor To Install Gravity Sewer Prior To Installation Of Force Main

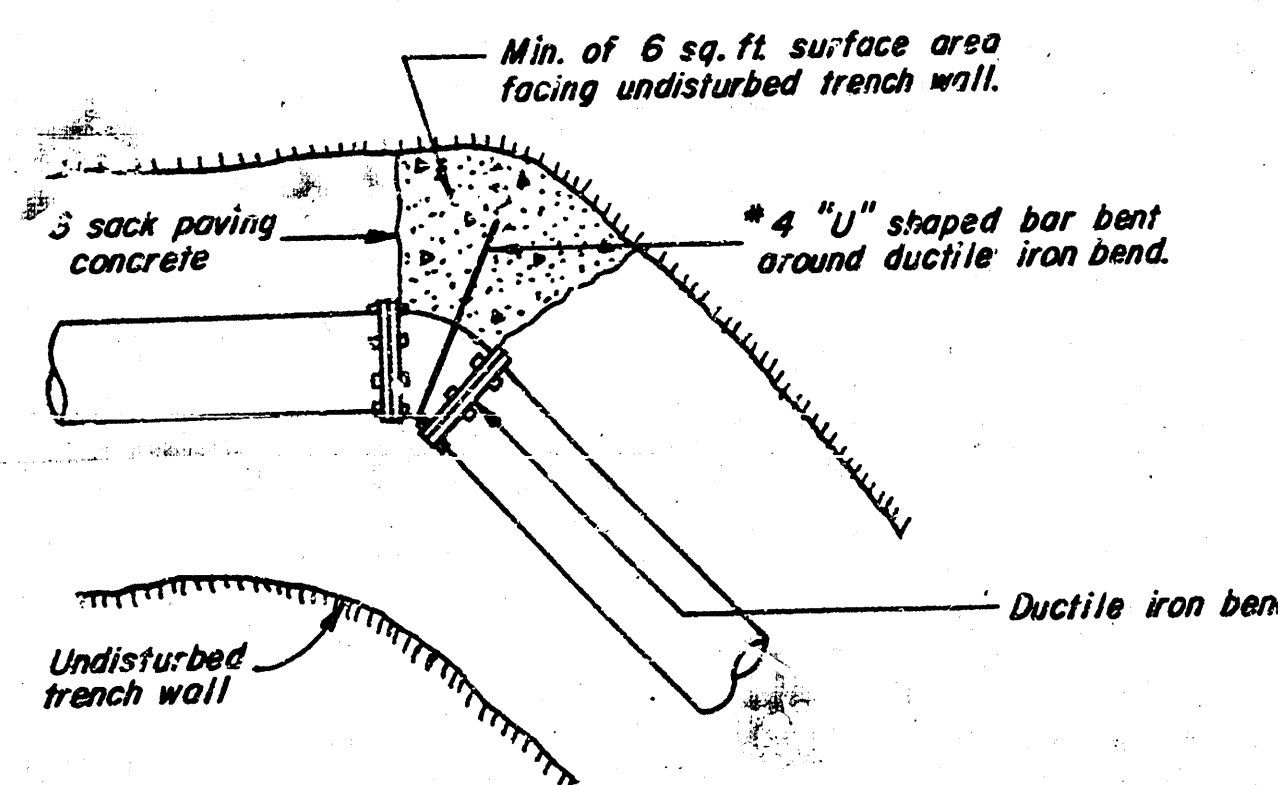
STA. 10+54.2 - END FORCE MAIN
 Connect to Existing Manhole,
 See Detail Sheet 4.

CAUTION

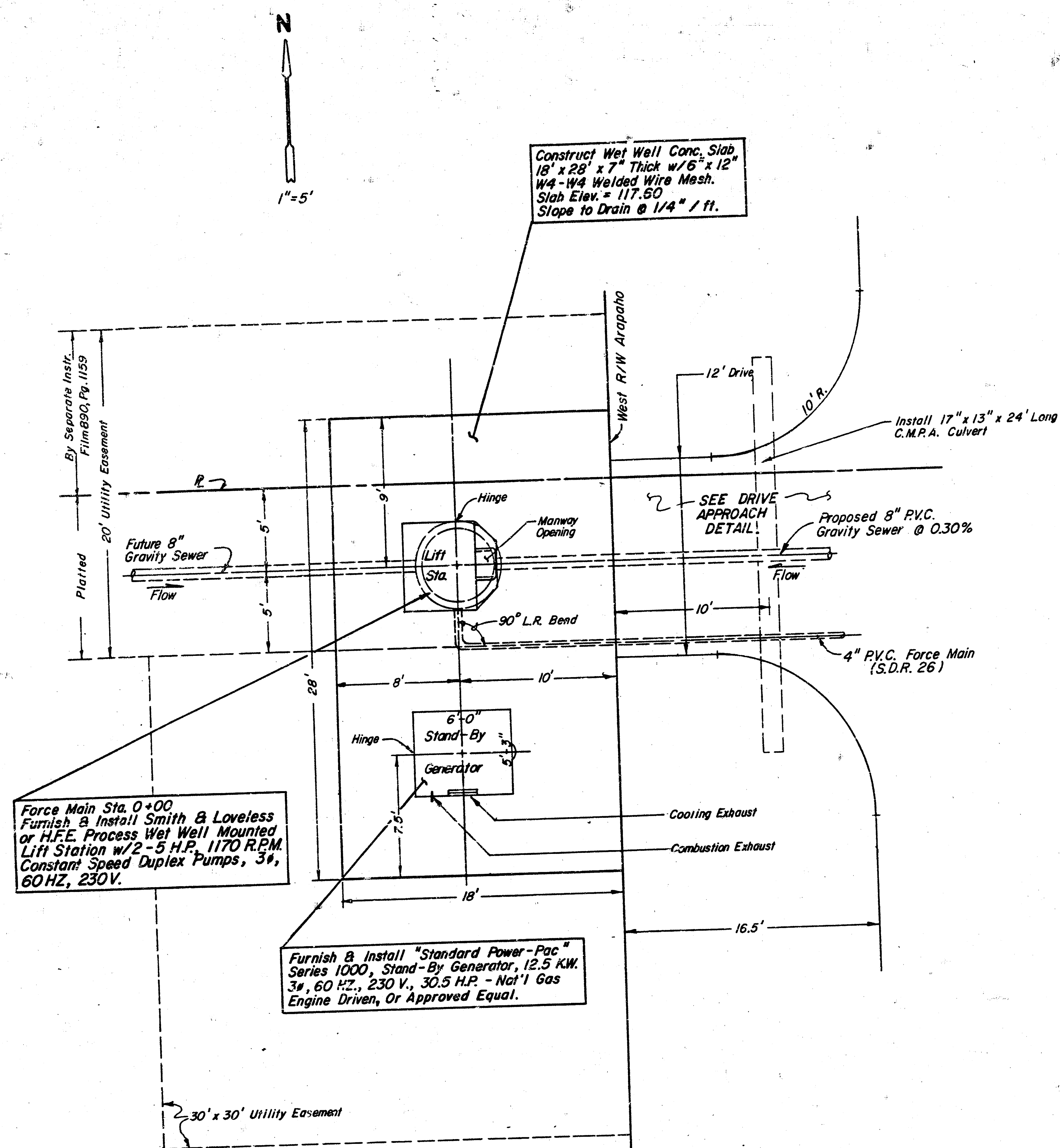
1" = 40' Horiz.
 1" = 5' Vert.



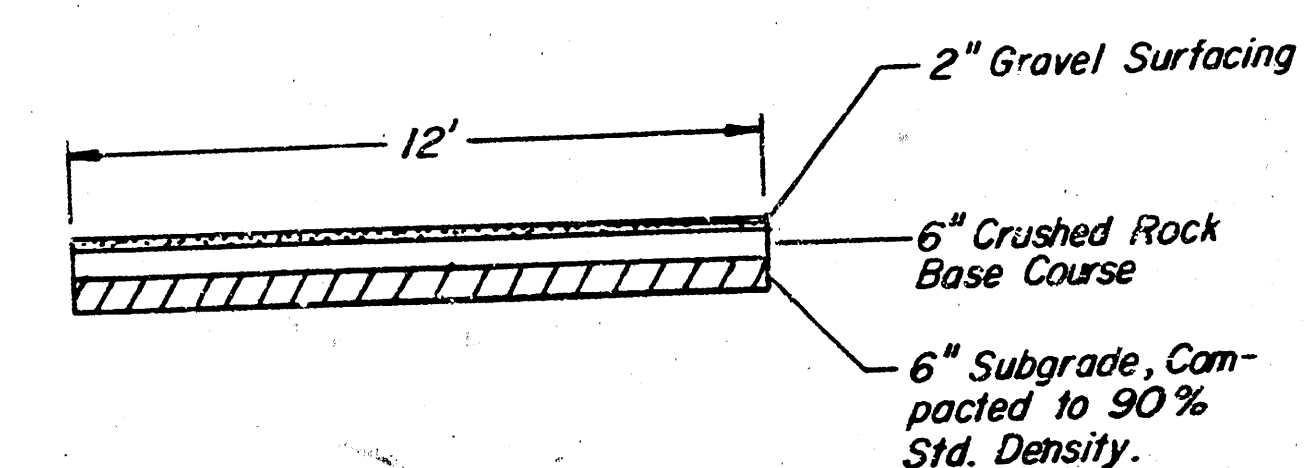
LIFT STATION
SECTIONAL ELEVATION
NO SCALE



THRUST BLOCK DETAIL
NO SCALE

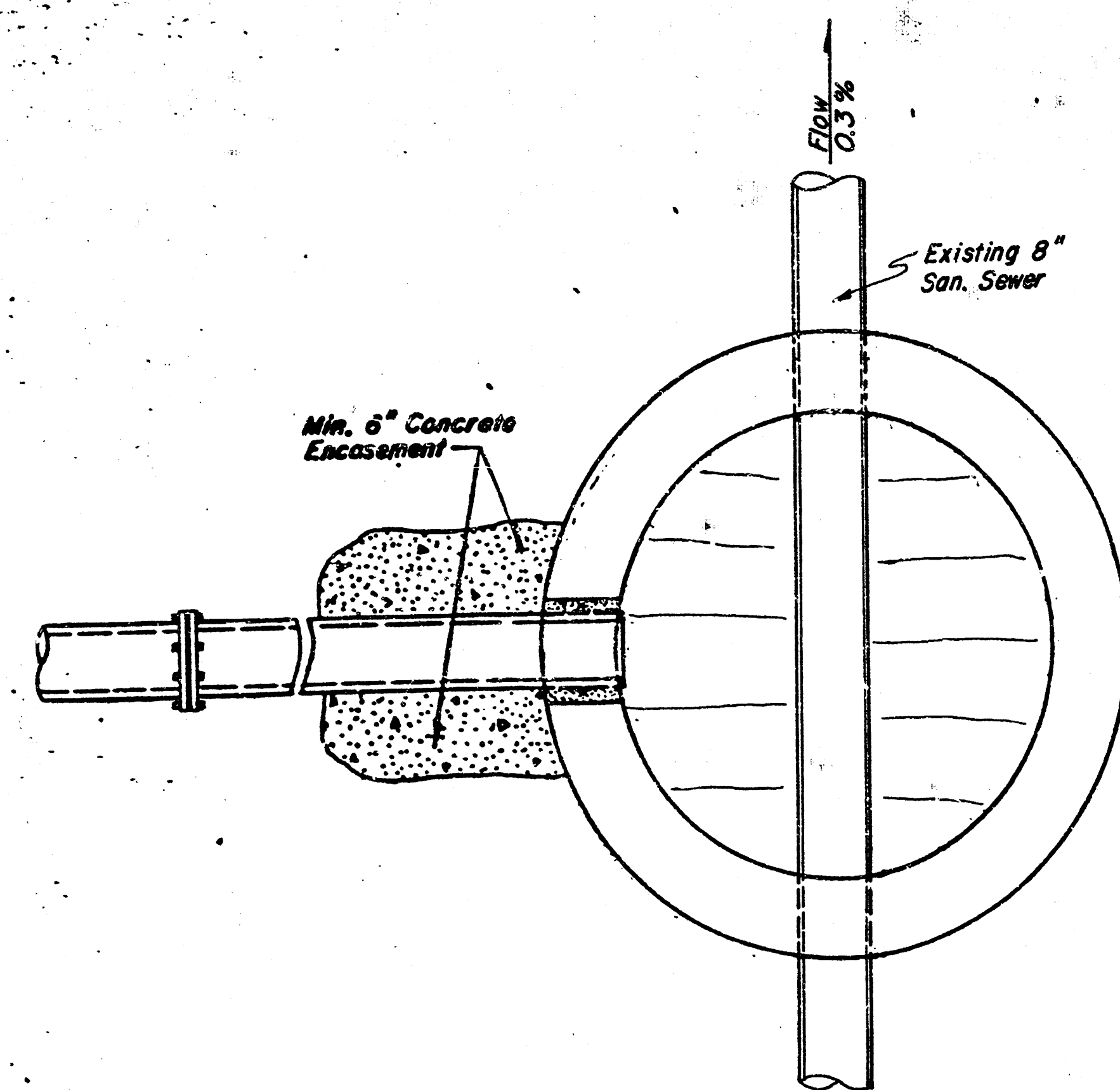


LIFT STATION
PLAN VIEW
1" = 5'

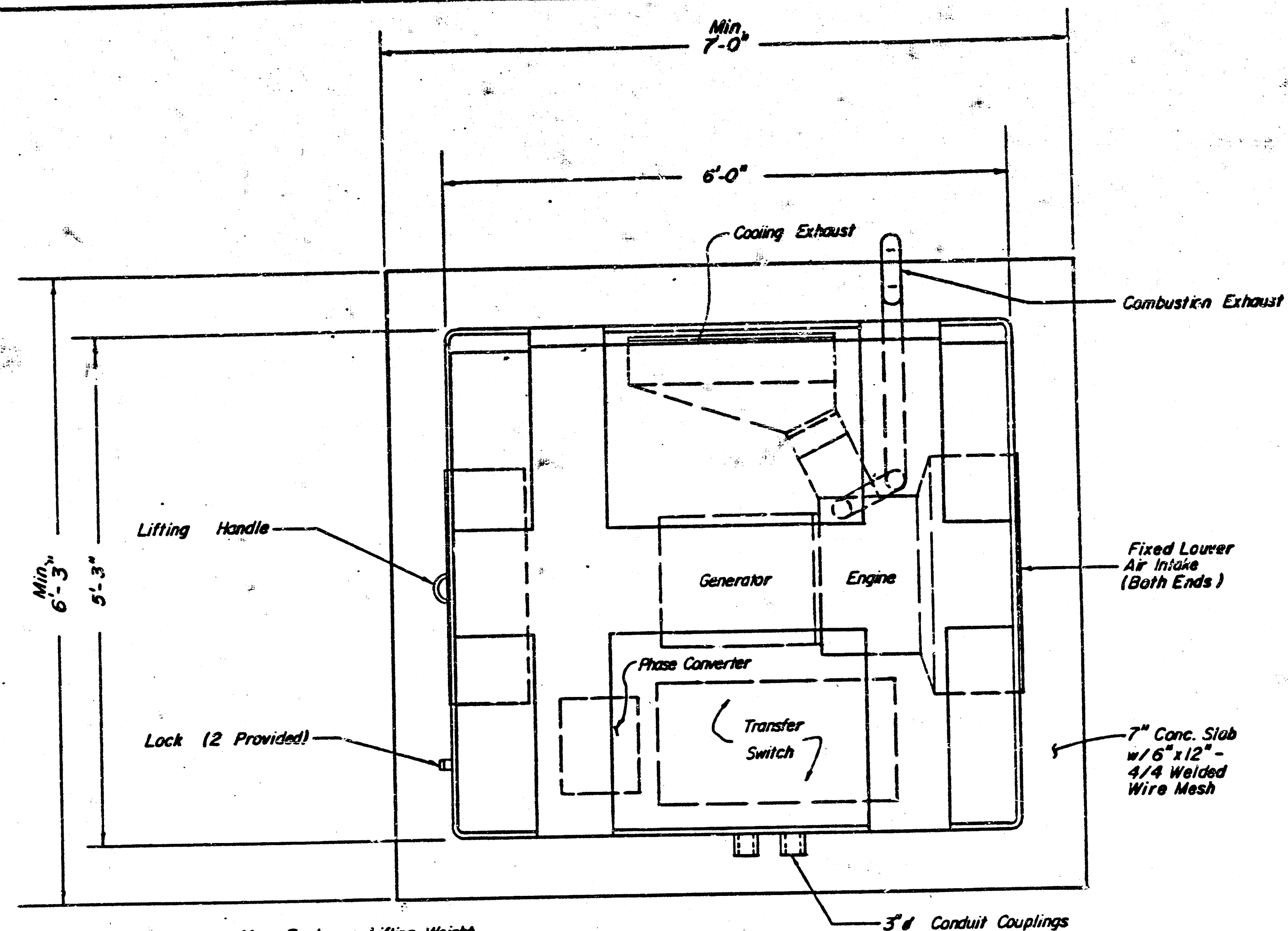


DRIVE APPROACH
SECTION

Crushed Rock Shall Be Type AB-3 per Section 1104, 1980 Edition of KDOT Std. Spec's.



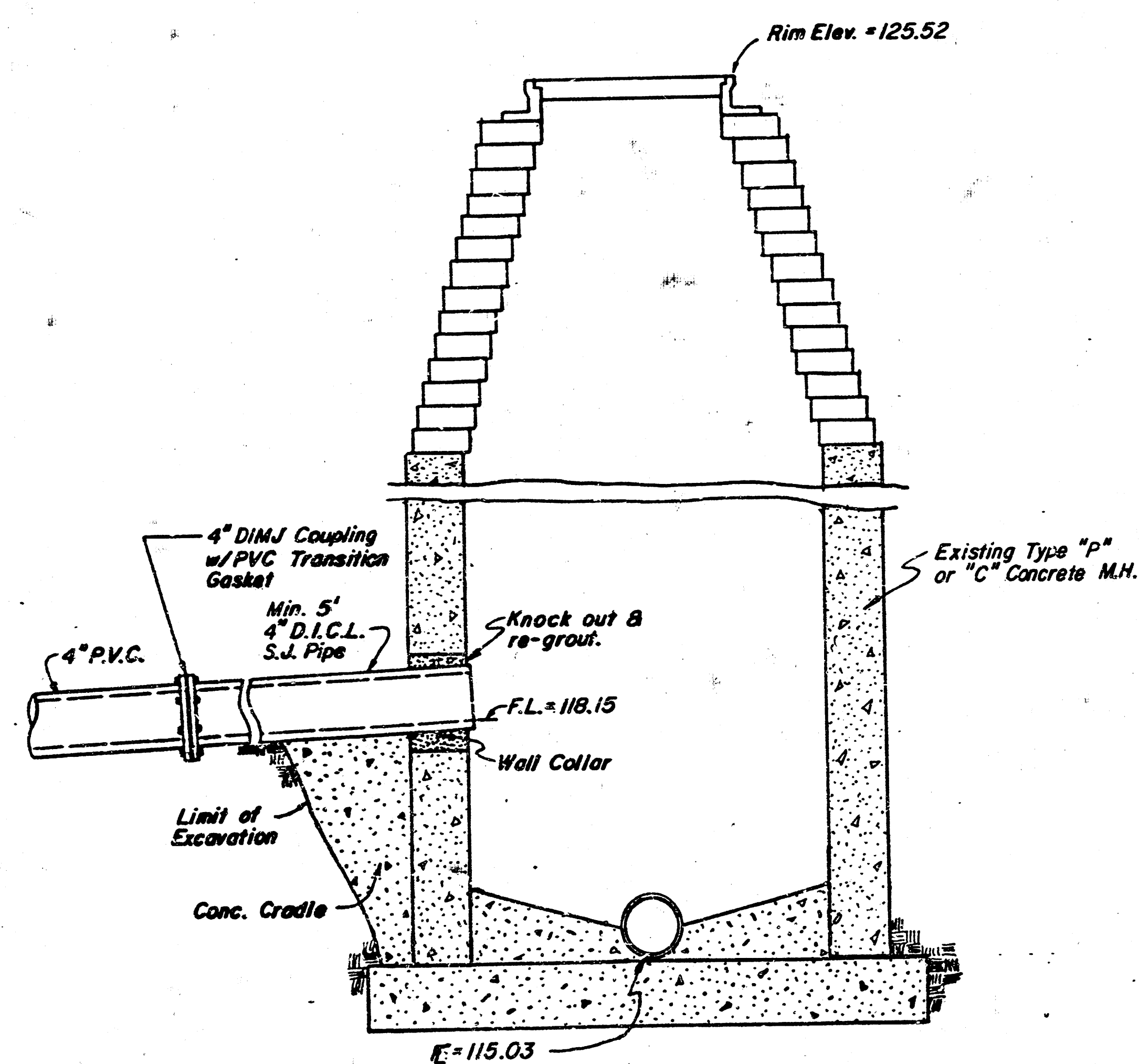
PLAN



Max. Enclosure Lifting Weight
Not To Exceed 40lbs. At
Lifting Handle.

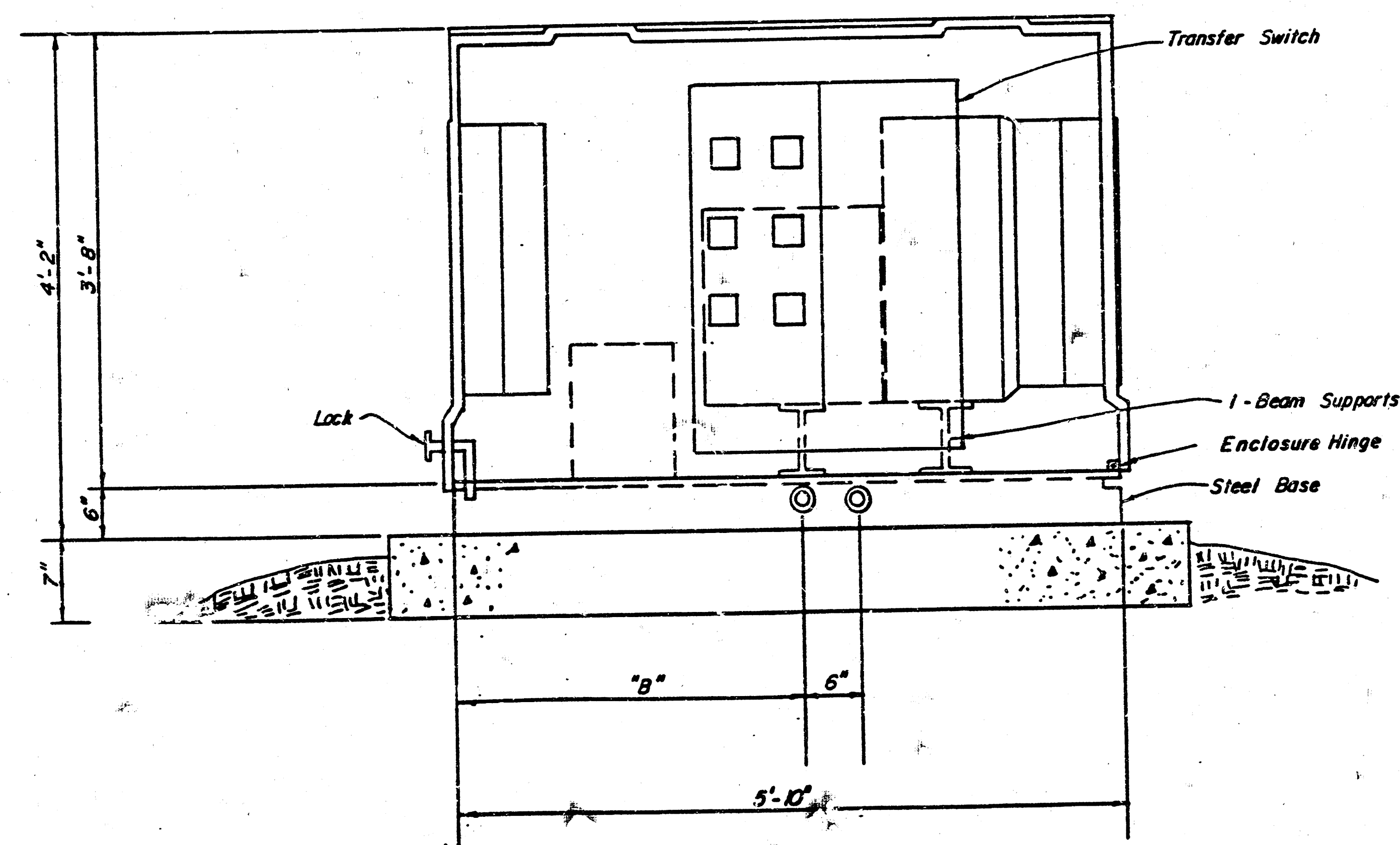
TOP VIEW

STAND-BY GENERATOR DETAILS
STANNARD POWER EQUIPMENT CO.
SERIES 1000
(N.T.S.)

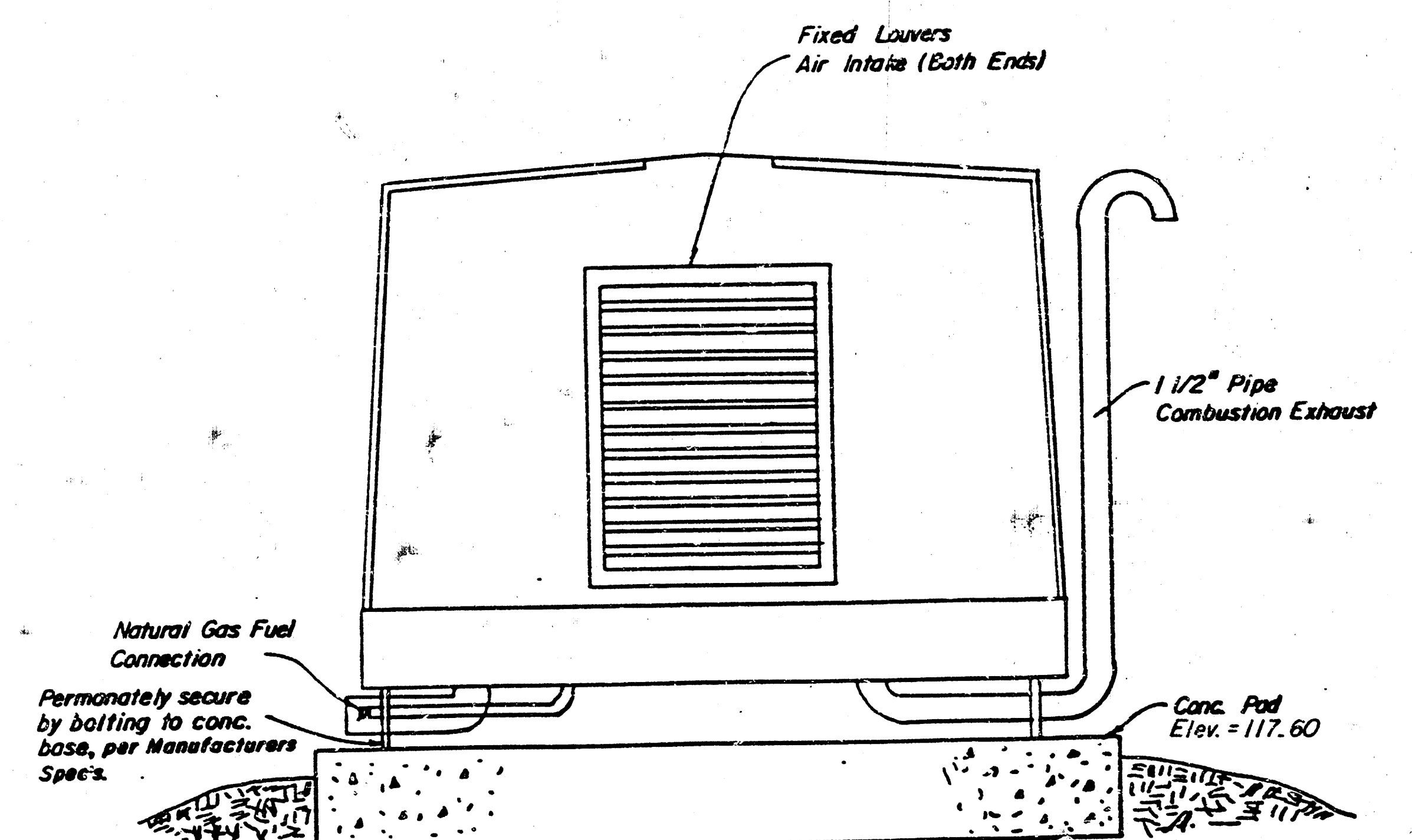


RECEIVING MANHOLE
CONNECTION DETAIL

SECTION
3/4" = 1'

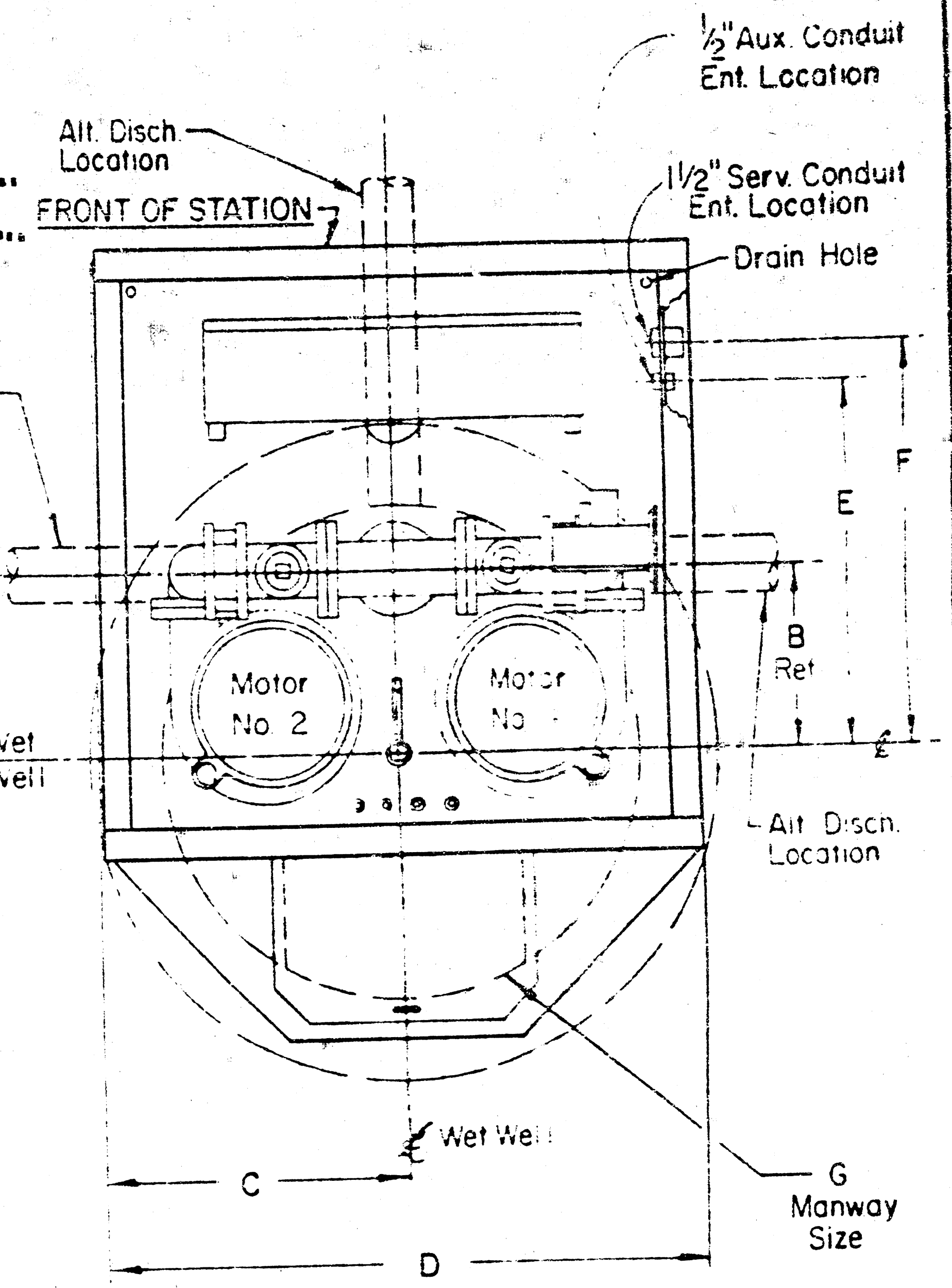
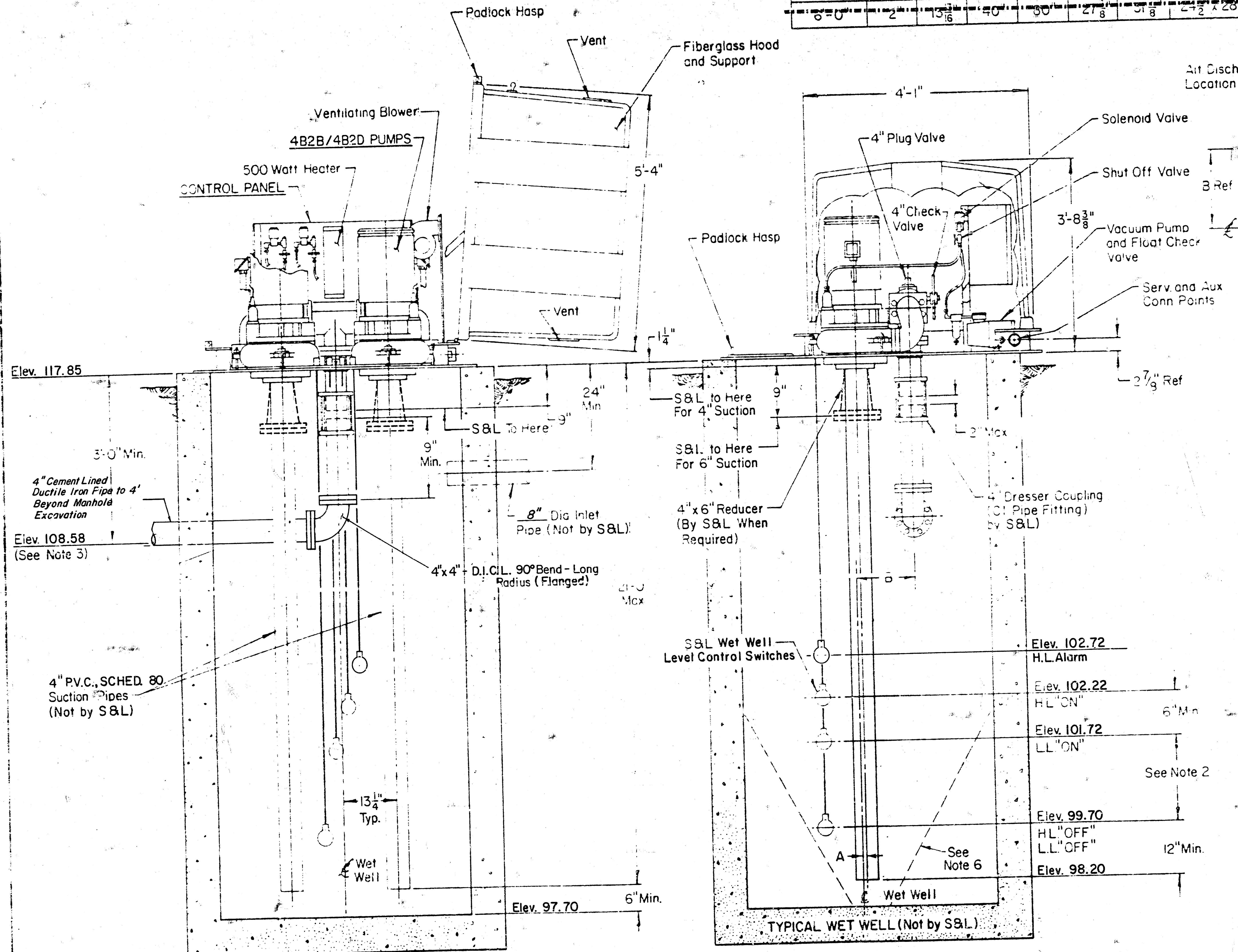


SECTIONAL ELEVATION



END VIEW

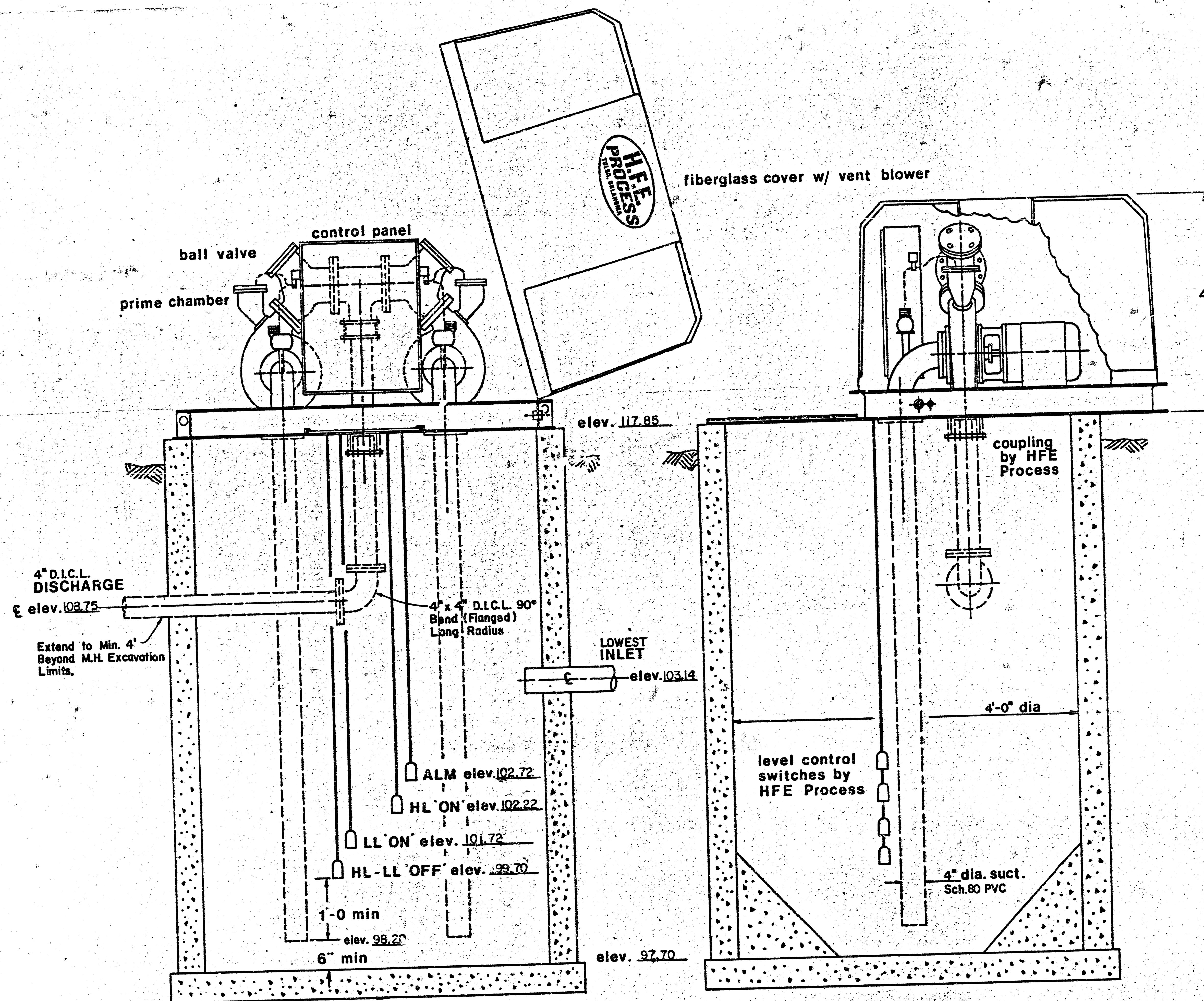
WET WELL DIAMETER	DIM. A	DIM. B	DIM. C	DIM. D	DIM. E	DIM. F	MANWAY G
4'-0"	4"	15 13/16"	33"	66"	27 7/8"	32 3/8"	14" x 24"
5'-0"	5"	19 13/16"	34"	68"	33 3/8"	37 1/8"	24" x 24"
6'-0"	6"	23 13/16"	40"	80"	37 3/8"	41 1/8"	24" x 24"



PLAN VIEW
MACH. CHAMBER
(Shown Less Cover)

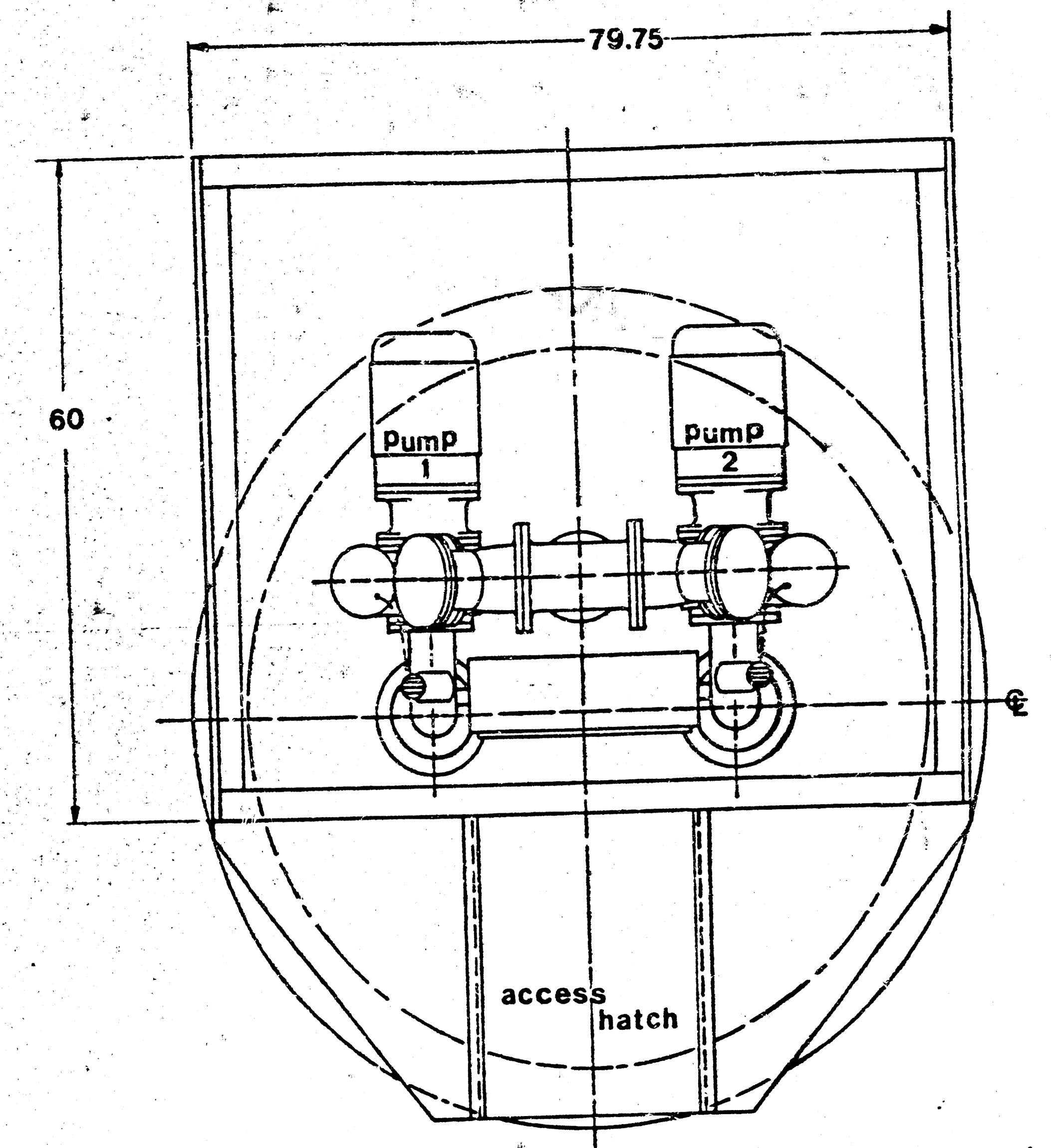
- NOTES:
1. Maximum Capacity - 400 G.P.M.
 2. Volume In Gallons Between L.L. "ON" and L.L. "OFF" Should Equal Pumping Rate in G.P.M.
 3. If End of Discharge Line is Below Elevation of Discharge Line at Point of Leaving Wet Well, Consult Factory.
 4. If Discharge Line is Less than 200 Feet in Length a Check Valve May be Required - Consult Factory.
 5. Pump Motors - 20 H.P. Maximum.
 6. Provide 60° Slope in Wet Well - As Required.

4B2B/4B2D PUMPS		87D196	
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DESIGNED BY	D. Fisher	DATE	2-79
CHECKED BY	M.E.W.	DATE	2-79
APPROVED BY	C.V.	DATE	3-79
SCALE	none	SHEET	5
ORIGINAL NO.	N78-16	CODE	9
Smith & Lovell, Inc.		87D196	
WET WELL MOUNTED PUMP LIFT STA. - MODEL "S"		4" PIPING - 4', 5' & 6' DIA. WELL	
Eq. 1		87D196	



FRONT ELEVATION

SIDE ELEVATION



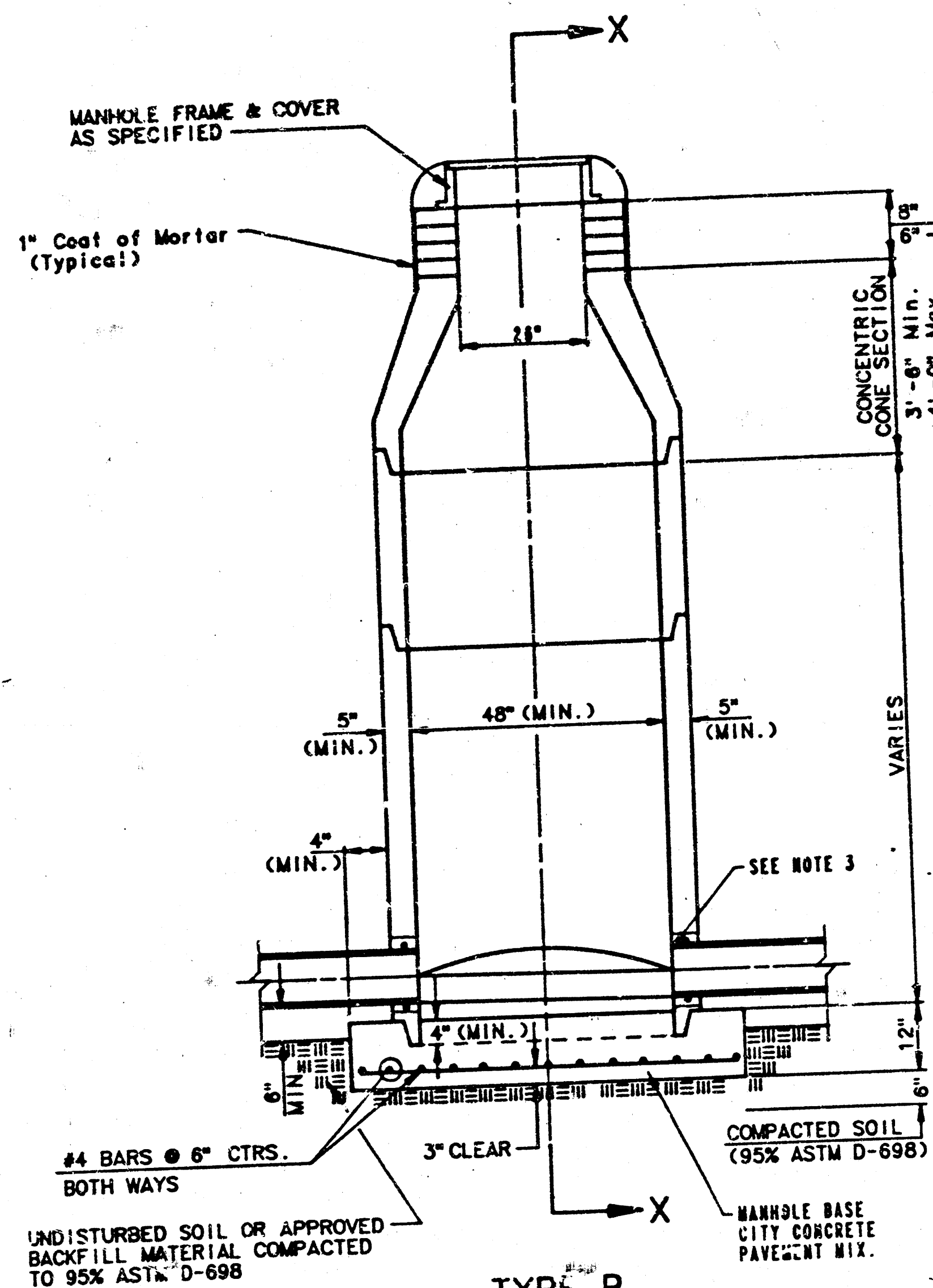
PLAN VIEW

NOTES: 500 watt heater - std.
250 cfm vent fan - std.
1.5 & .75" service conn.

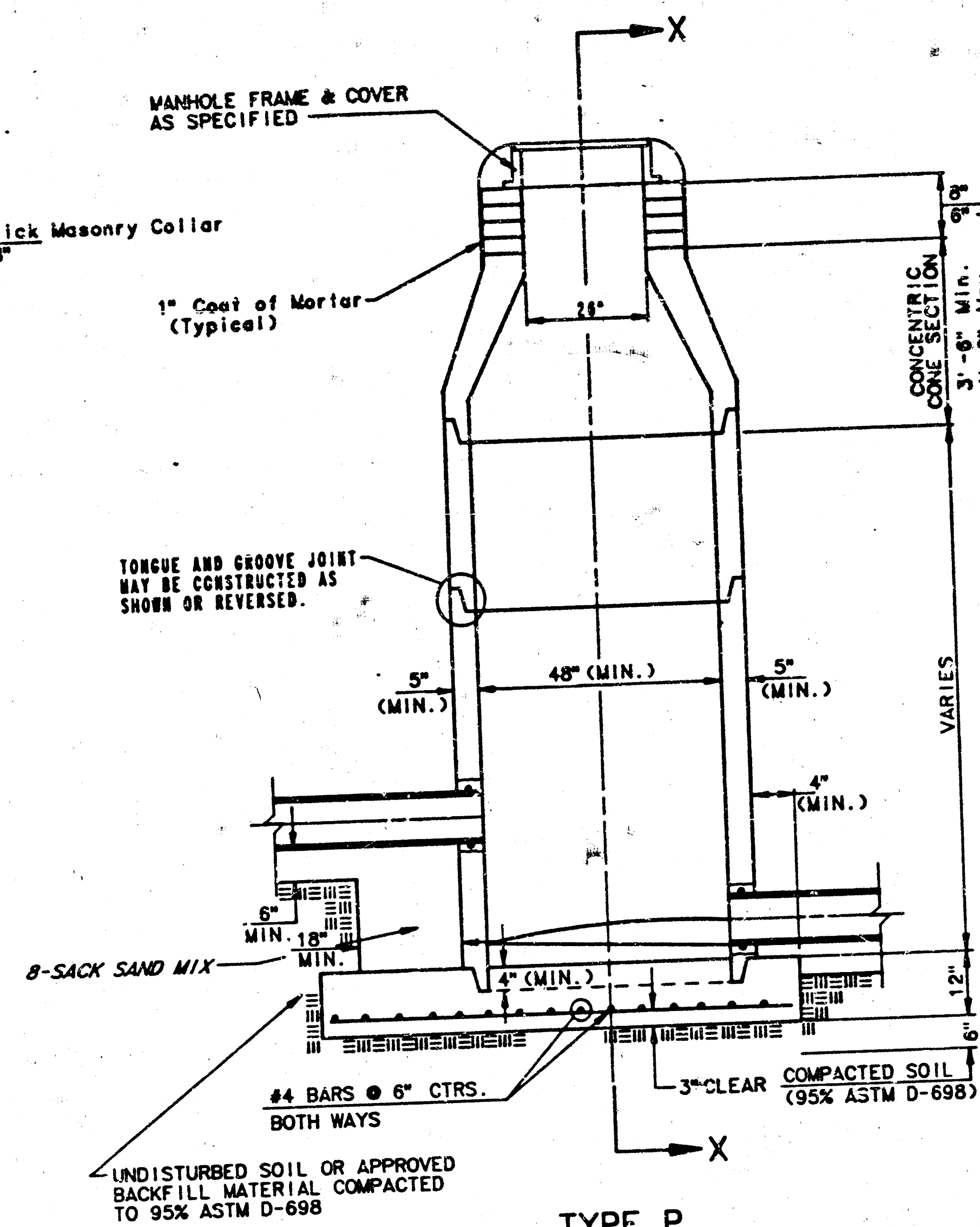
H.F.E. PROCESS
TULSA, OKLAHOMA

Project No. 1 HARRISON COMPANY - TULSA
468-75-245-81636-000-001 Sheet 6 of 9

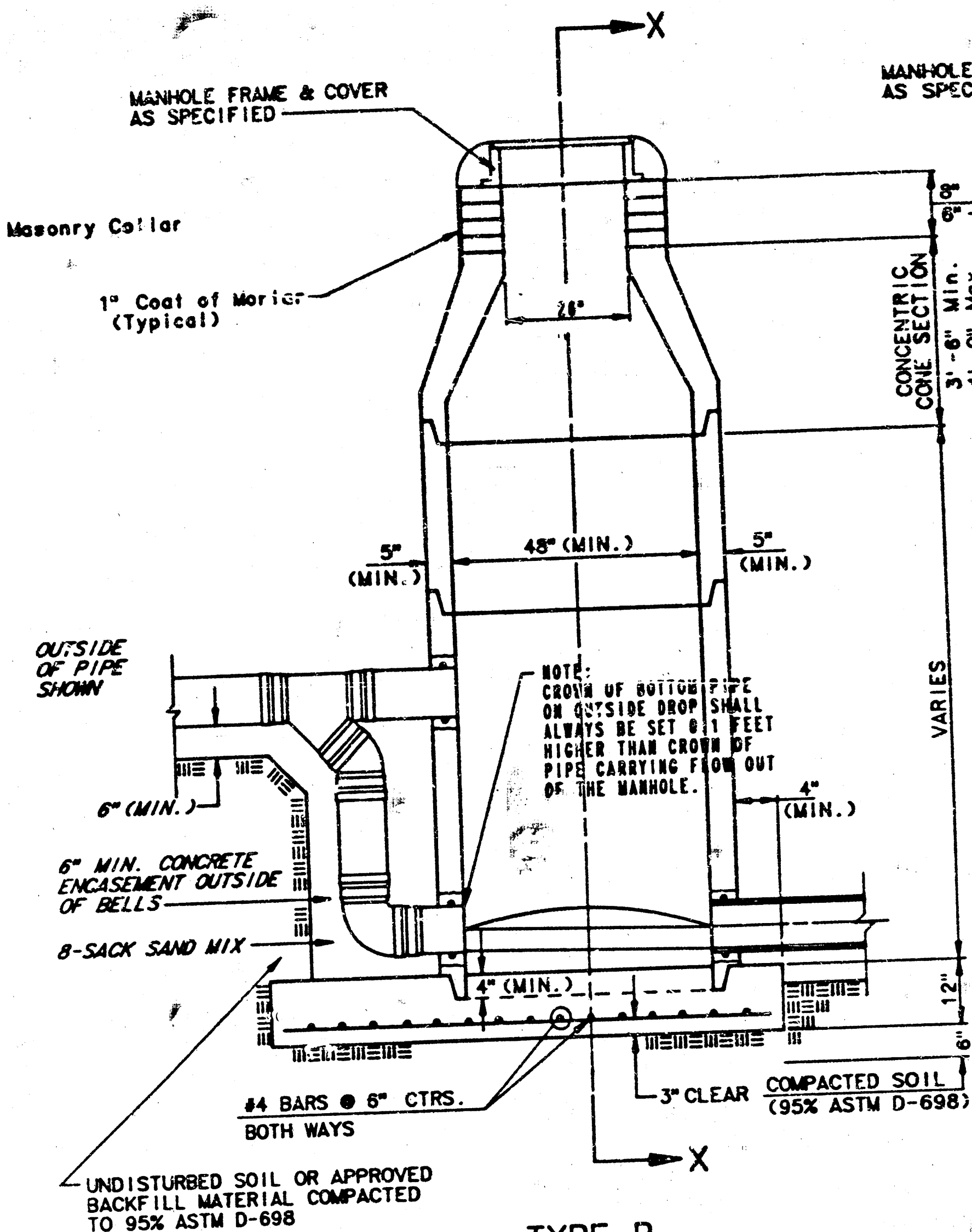
SEWER APPURTENANCES DETAILS
ADOPTED AS STANDARD DESIGN
BY
CITY OF WICHITA



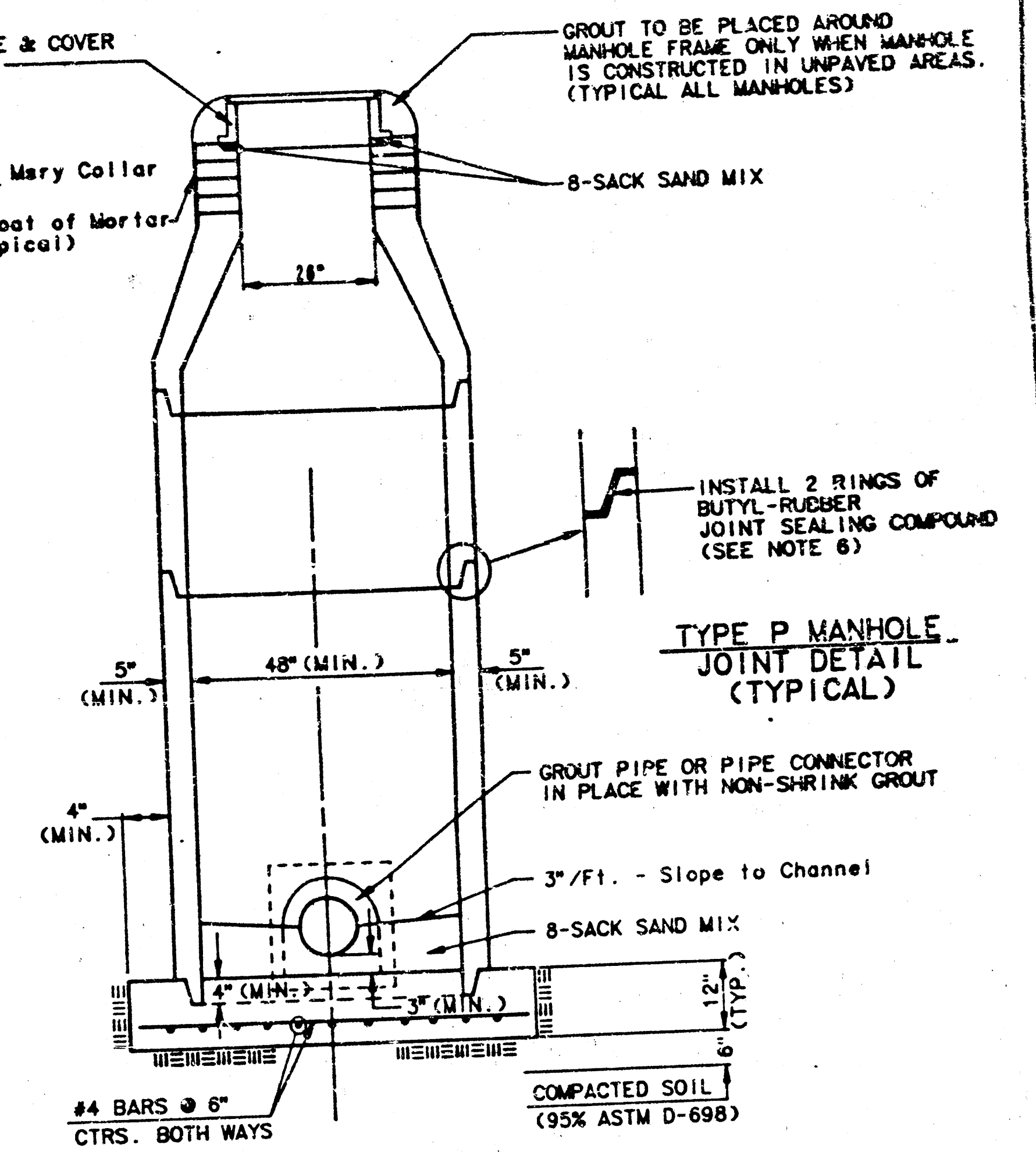
TYPE P
STANDARD MANHOLE



TYPE P
INSIDE DROP MANHOLE



TYPE P
OUTSIDE DROP MANHOLE



SECTION X
(TYPICAL)

GENERAL NOTES
CAST WHOLE NOTES

1. ALL PRECAST CONCRETE MANHOLE SECTIONS SHALL CONFORM TO THE LATEST REVISION 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 THE SEWER TO THE MANHOLE WALL WHEN A U.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.
4. ALL INSIDE SURFACES OF THE CONCRETE MANHOLE WHICH WOULD BE EXPOSED TO SEWER GAS SHALL BE COATED WITH 2 COATS TENEAC SERIES 68 HI-BUILD EPOXYGLOE. DRY THICKNESS OF 8 MILS (MIN.)
5. EXTERIOR MANHOLE WALLS SHALL BE COATED WITH 1 COAT MOBILARMA 333 BITUMINOUS COATING.
6. JOINT SEALING COMPOUND SHALL BE KERT 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 SCAPED 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 4 BAGS OF CEMENT PER CUBIC YARD OF CONCRETE USED IN MANHOLE BASES OF CONCRETE TO THE REQUIREMENTS OF CONCRETE FOR CONCRETE PAVEMENT CONSTRUCTION AS SPECIFIED IN THE CITY STANDARD PAVING SPECIFICATIONS USING CITY CONCRETE PAYMENT MIX WITHOUT AIR ENTRAINING ADJUTIVE. MORTAR SHALL BE PLACED AROUND THE MANHOLE RING AS SHOWN ON THE DRAWINGS WHEN MANHOLES ARE CONSTRUCTED IN UNPAVED AREAS. MANHOLES CONSTRUCTED WHERE THERE ARE MANHOLES SMALLER THAN 24" SHALL BE 24" OR LARGER AREAS OF 4". MANHOLES CONSTRUCTED WHERE THERE ARE MANHOLES 24" OR LARGER SHALL HAVE AN INSIDE DIAMETER OF 5". COMPLETED MANHOLE SHALL BE WITHOUT LEAKS AND WATER TIGHT.

- [illegible]

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 4" FOR INFLOWING PIPES SIZED 12" OR SMALLER AND 2" FOR INFLOWING PIPES LARGER THAN 12". THE CROWN 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 CONCRETE CONE. THE COLLAR WILL HAVE 8" WALLS AND A VERTICAL HEIGHT OF 6" MINIMUM AND 16" MAXIMUM. A 1" COAT OF MORTAR WILL BE PLASTERED ON THE OUTSIDE OF THE COLLAR.

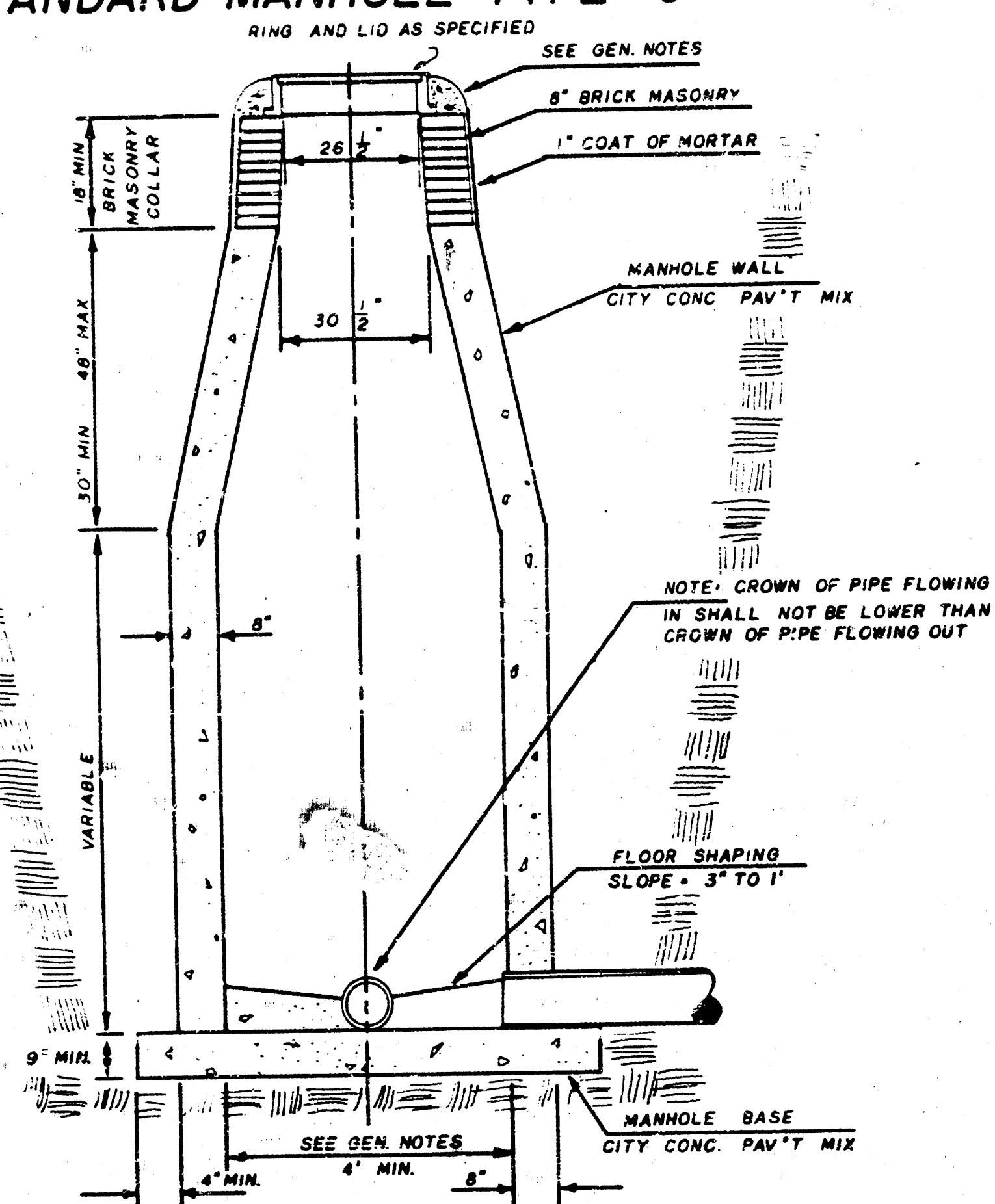
SEWER APPURTENANCES DETAILS

ADOPTED AS STANDARD DESIGN

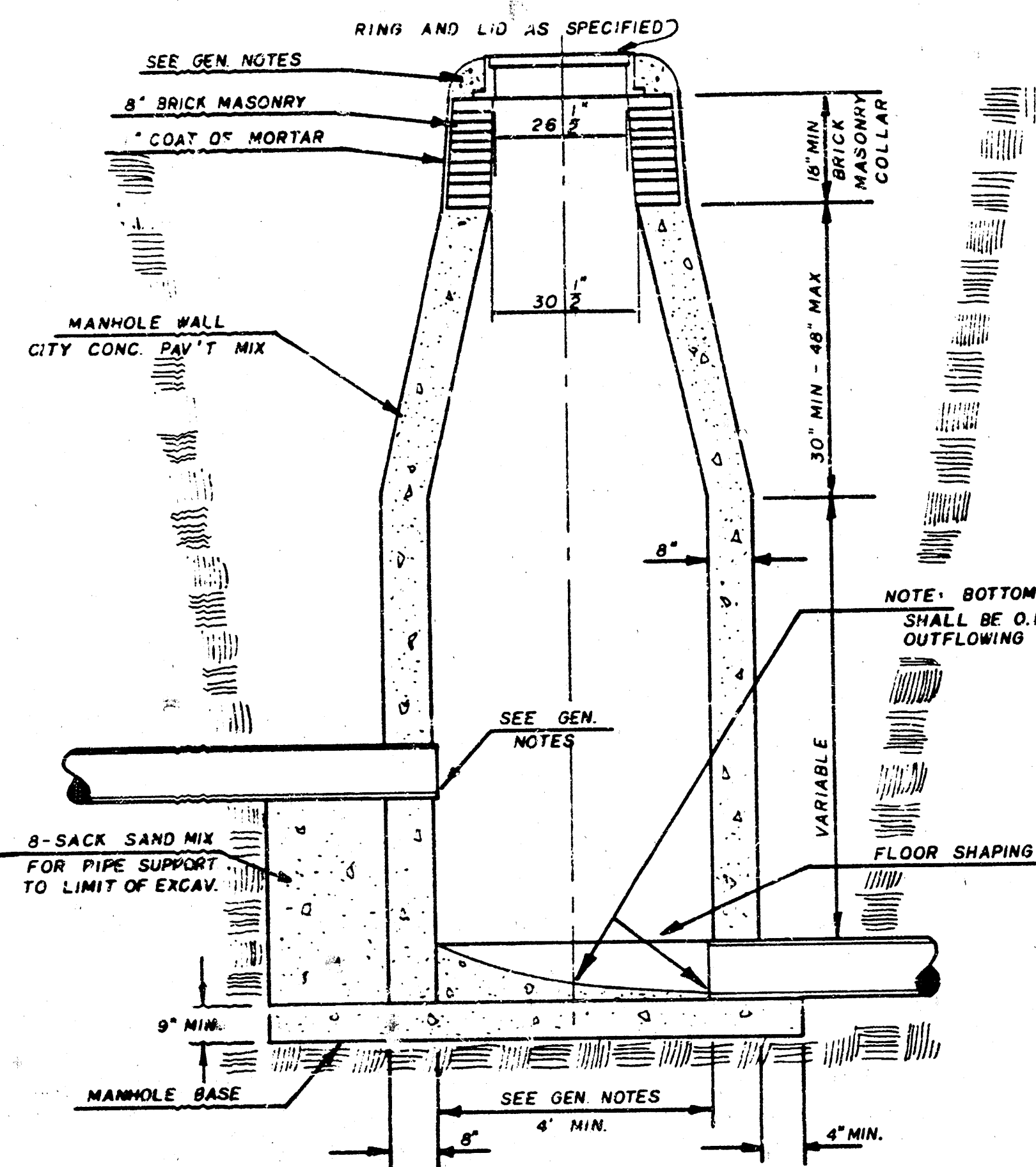
BY

City of Wichita, Kansas

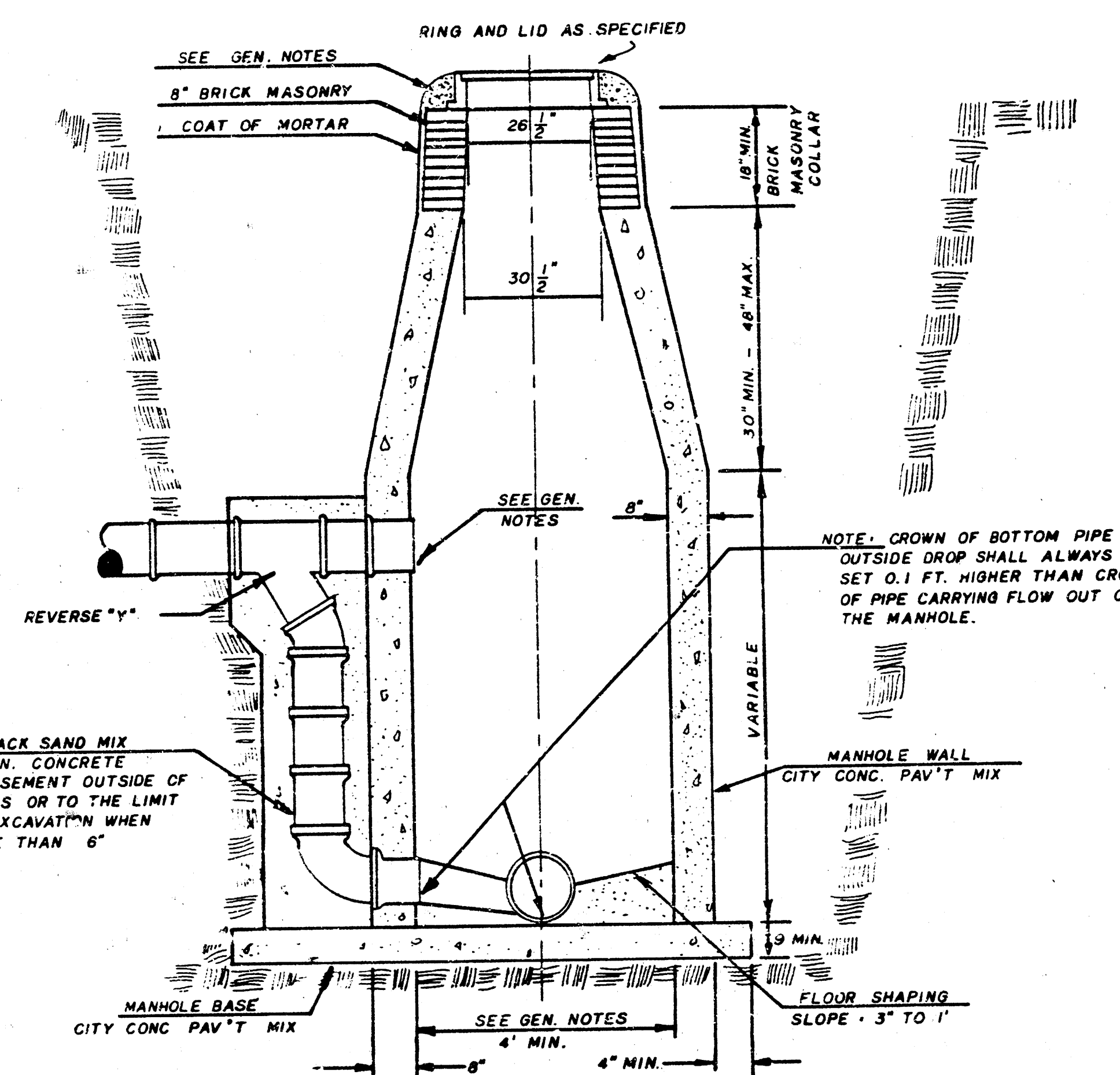
STANDARD MANHOLE TYPE "C"



INSIDE DROP MANHOLE TYPE "C"



OUTSIDE DROP MANHOLE TYPE "C"



GENERAL NOTES

- MORTAR USED IN MASONRY CONSTRUCTION SHALL CONTAIN 8 SACKS OF CEMENT PER CUBIC YARD. CONCRETE USED IN MANHOLE WALLS AND 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. TYPE "C" MANHOLES CAN BE CONSTRUCTED ONLY WHERE PIPE SIZES ARE 8" OR SMALLER. THE INSIDE DIAMETER OF TYPE "C" MANHOLES SHALL BE 4'. COMPLETED MANHOLE SHALL BE WITHOUT LEAKS AND WATER TIGHT.
- REINFORCING STEEL SHALL BE INSTALLED IN THE MANHOLE BASE. REINFORCING STEEL SHALL CONSIST OF NO. 4 BARS PLACED ON 6" CENTERS IN BOTH DIRECTIONS. REINFORCING STEEL SHALL BE PLACED 6" ABOVE THE BOTTOM OF THE MANHOLE BASE. COST OF FURNISHING AND INSTALLING REINFORCING STEEL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE MANHOLE.
- AN OPENING SHALL BE CUT IN THE MANHOLE WALL FOR THE UPPER INLET PIPE FOR INSIDE AND OUTSIDE DROP MANHOLES. THE UPPER INLET PIPE SHALL BE GROUTED INTO THIS OPENING WITH NON-SHRINK GROUT. THE EXTERIOR OF THIS COMPLETED CONNECTION SHALL BE SEALED WITH AN APPROVED BITUMINOUS COATING SUCH THAT THE CONNECTION WILL BE WATER TIGHT.
- 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 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 GRADED 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.
- THE VERTICAL DROP IN INSIDE DROP MANHOLES SHALL NOT EXCEED 4' 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.
- STANDARD MANHOLES TYPE "C" AND STANDARD INSIDE DROP MANHOLES TYPE "C" SHALL BE BID AS STANDARD MANHOLES FOR THE TYPE AND DIAMETER INDICATED. OUTSIDE DROP MANHOLES TYPE "C" SHALL BE BID AS STANDARD OUTSIDE DROP MANHOLES FOR THE TYPE AND DIAMETER INDICATED. ALL MANHOLE DIAMETERS WILL BE 4' UNLESS INDICATED OTHERWISE.

MANHOLE FRAME AND COVER DETAIL

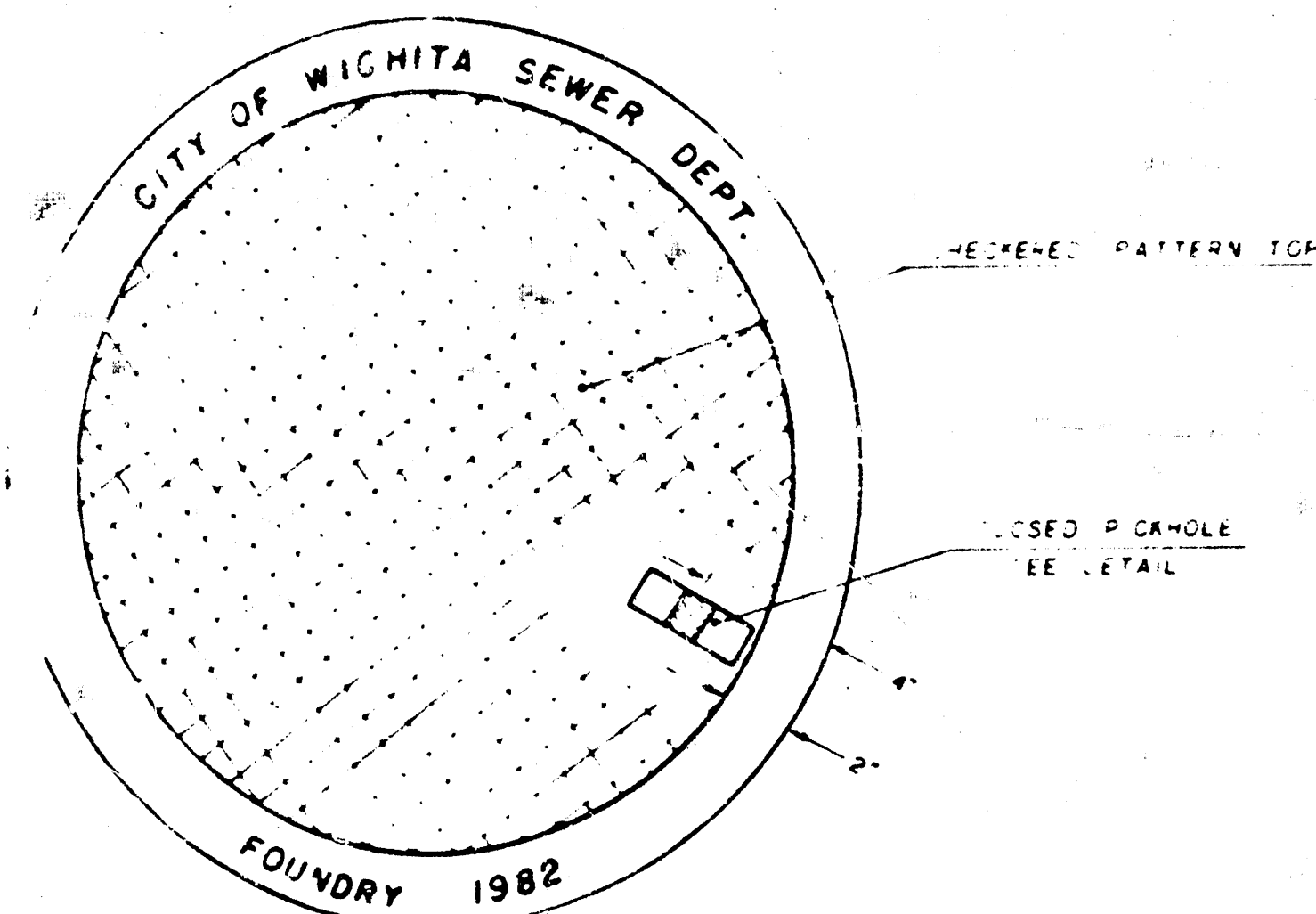
ADOPTED AS STANDARD DESIGN

BY

City of Wichita, Kansas

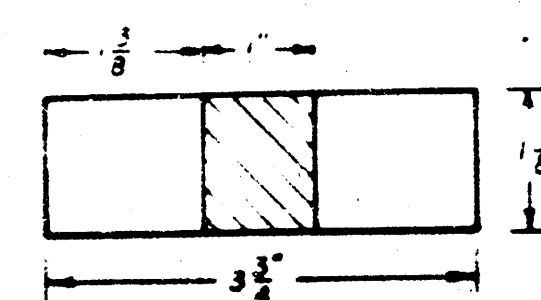
MANHOLE COVER

Weight: 180 Lbs.

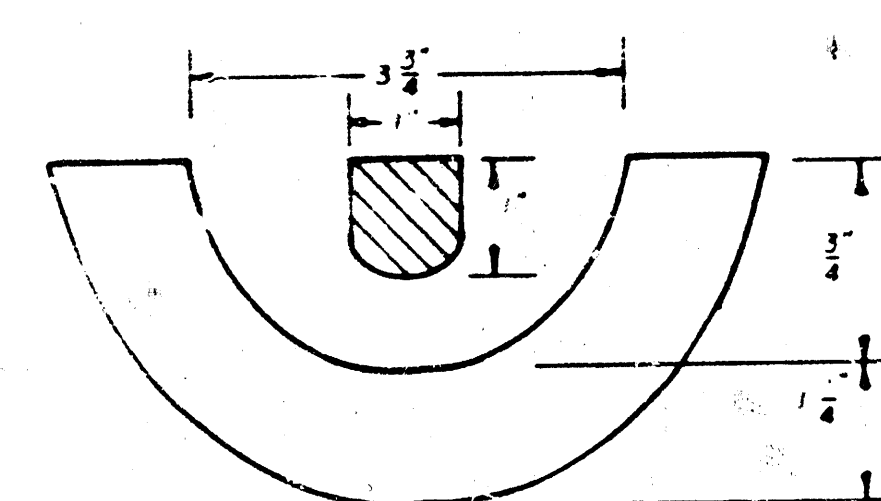


TOP VIEW

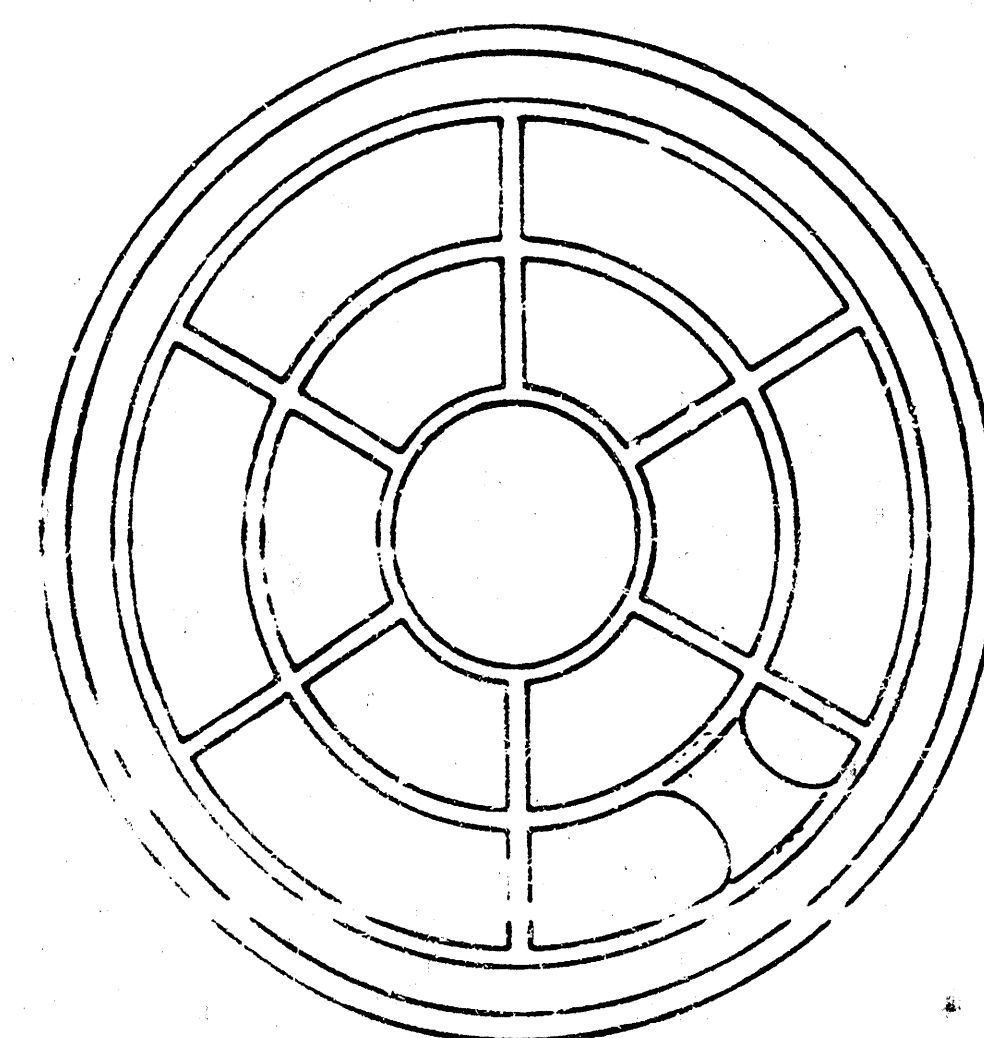
PICKHOLE DETAIL



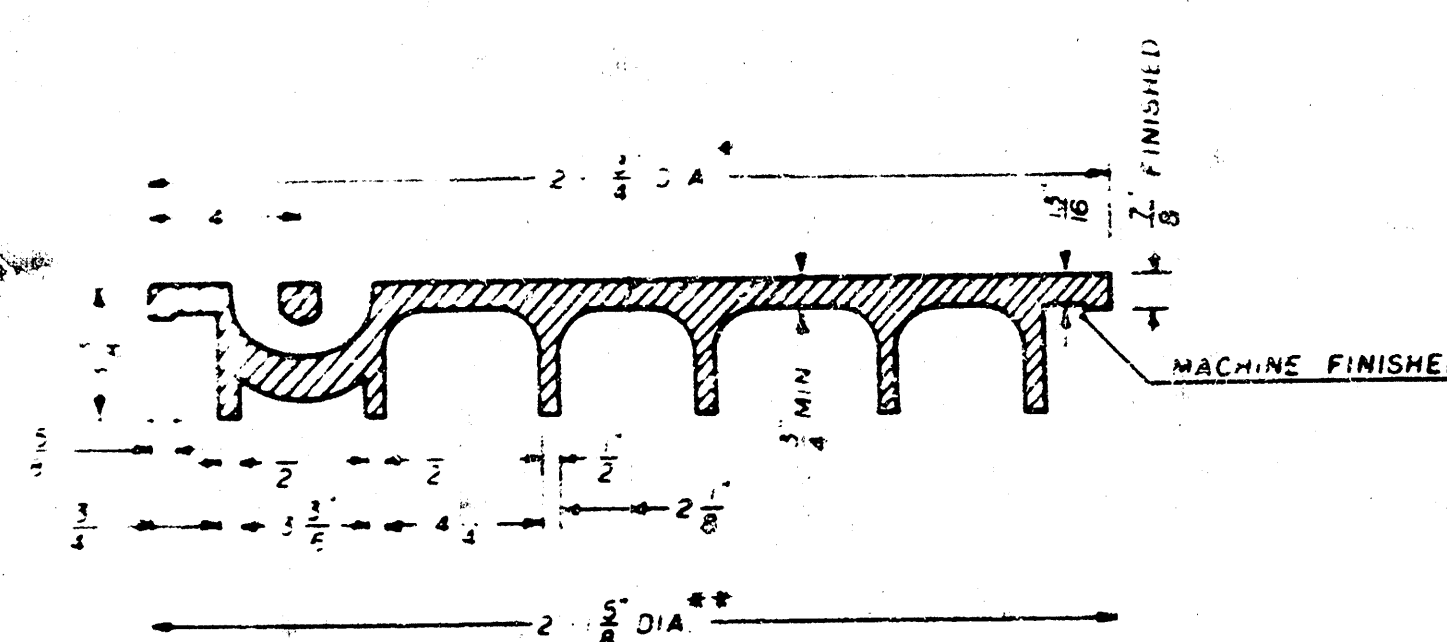
TOP VIEW



SECTION VIEW



BOTTOM VIEW

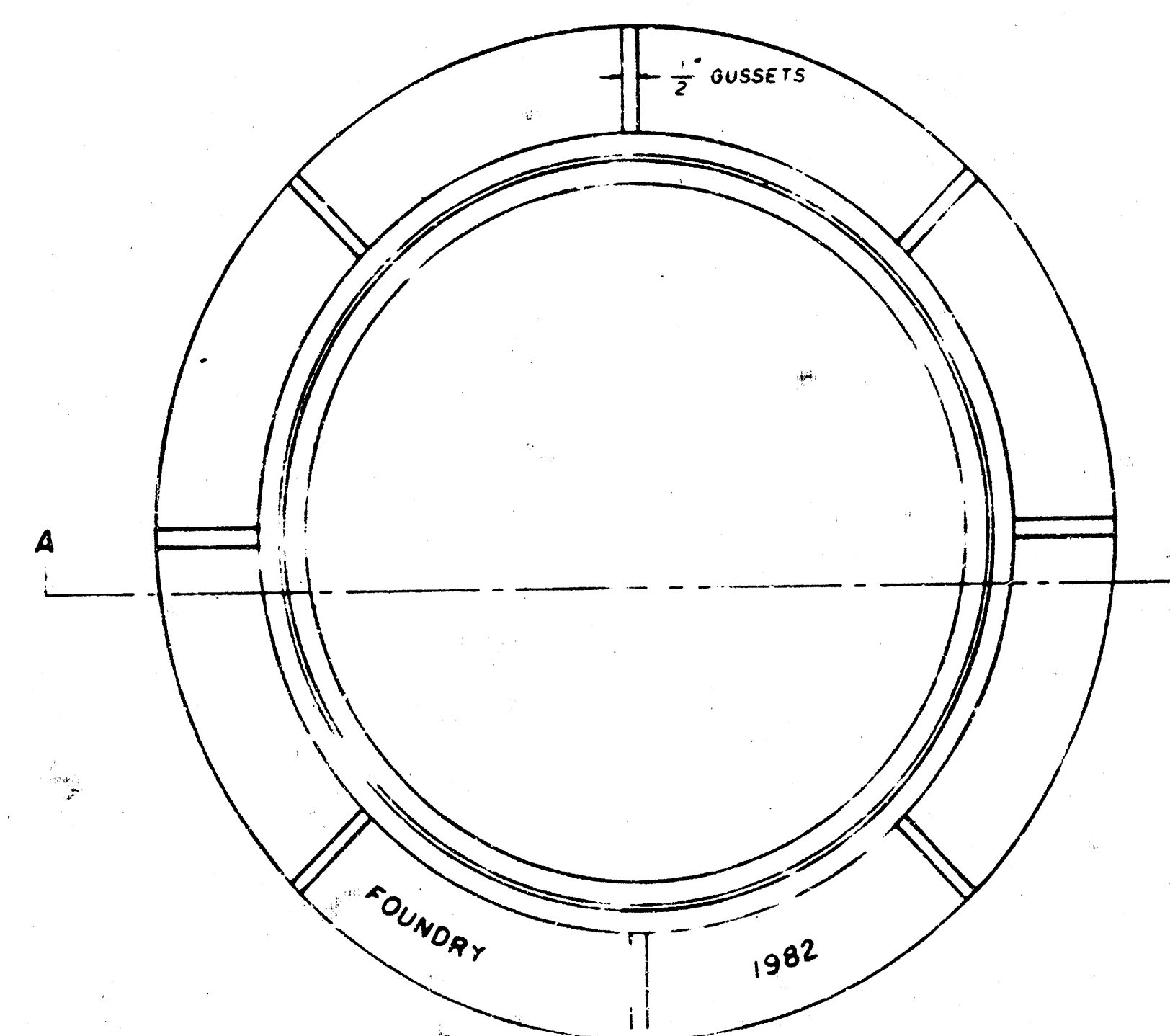


SECTION VIEW

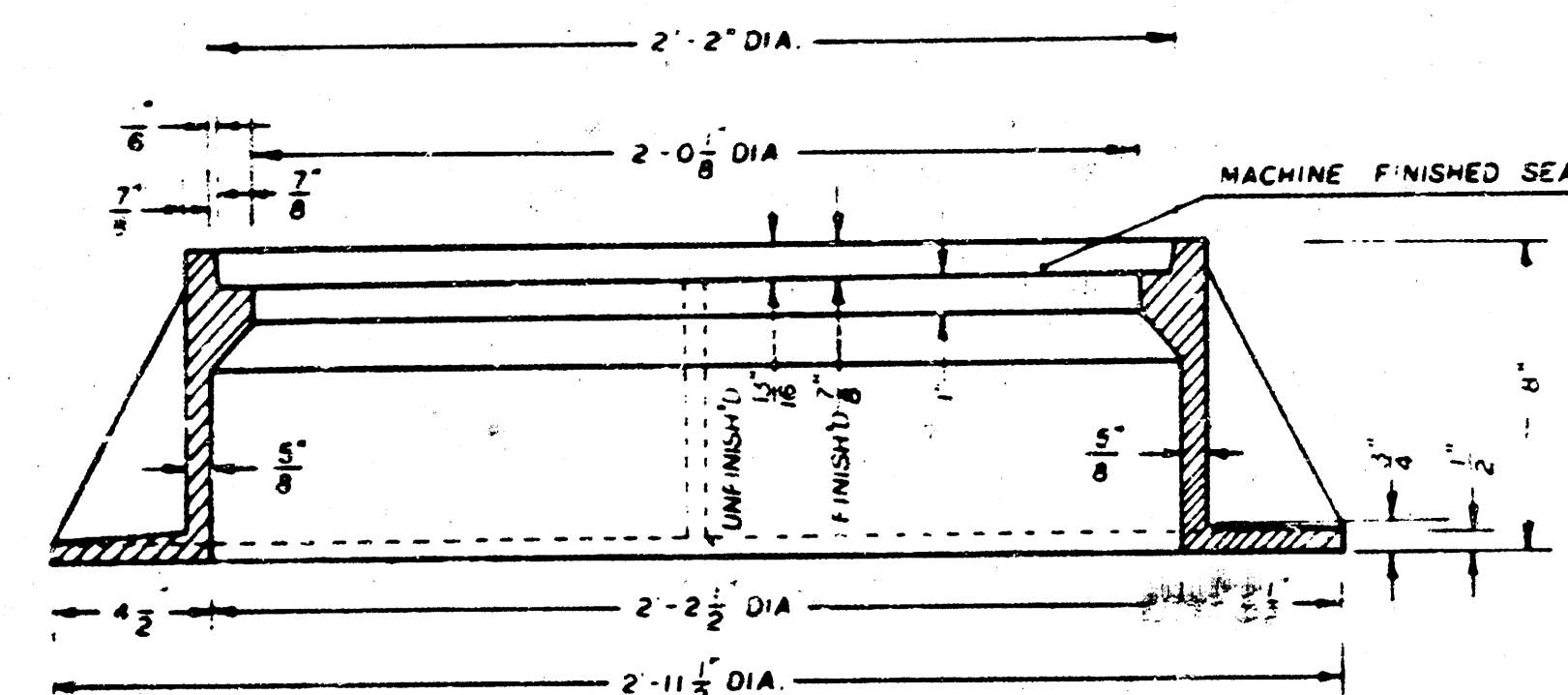
* OUTSIDE DIA. TOP OF COVER
** OUTSIDE DIA. BOTTOM OF COVER

MANHOLE FRAME

Weight: 240 Lbs.



TOP VIEW



SECTION A-A

GENERAL NOTES

1. MANHOLE CASTINGS SHALL BE MANUFACTURED USING GOOD QUALITY GRAY IRON CONFORMING TO CLASS 10 OF A.S.T.M. DESIGNATION A-48. DIMENSIONS AND WEIGHTS SHOWN ON THE DRAWING 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.