REPLACEMENT AND RELOCATION OF
SANITARY SEWERS IN WICHITA AND LEWIS AND IN THE ALLEY BETWEEN LEWIS AND WATERMAN

PROJECT NO: 468-76-245-82623-000-000-001
INDEX CODE: 621375

GENERAL NOTES

1. Interurban traffic generated outside the project area and local business or apartment traffic generated within the project area are to be carried through construction as further promulgated by project special provisions.

2. Underground utility service lines and overhead utility pole lines are to be adjusted as necessary by others prior to construction unless the 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, represent the best information obtainable for 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 proposed construction.

3. A saw cut of at least one-half the depth of existing surface courses or one-fourth the depth of existing total pavement thickness shall be provided at locations where proposed construction abuts an existing surface course or pavement for which partial removal of that surface or pavement is required, except when such saw cuts are within three (3) feet of an existing joint the limits of removal shall be extended to the existing joint. Such saw cuts will not be paid for directly and this cost shall be considered as subsidiary to the removal of the surface or pavement.

4. 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.

   All disposal sites must be approved by the Kansas Department of Health and Environment. Material either stockpiled or disposed of in a flood plain would require a Kansas State Board of Agriculture permit. Any material dumped in waters of the United States or wetlands is subject to U.S. Corps permitting regulations. Any material buried or stockpiled beyond approved of Engineers construction limits would require additional archeological investigations unless buried in a previously approved borrow location.

5. The Contractor shall give all property owners and/or tenants of developed property directly abutting the construction of this project a minimum of ten (10) days advance notice prior to start of construction.

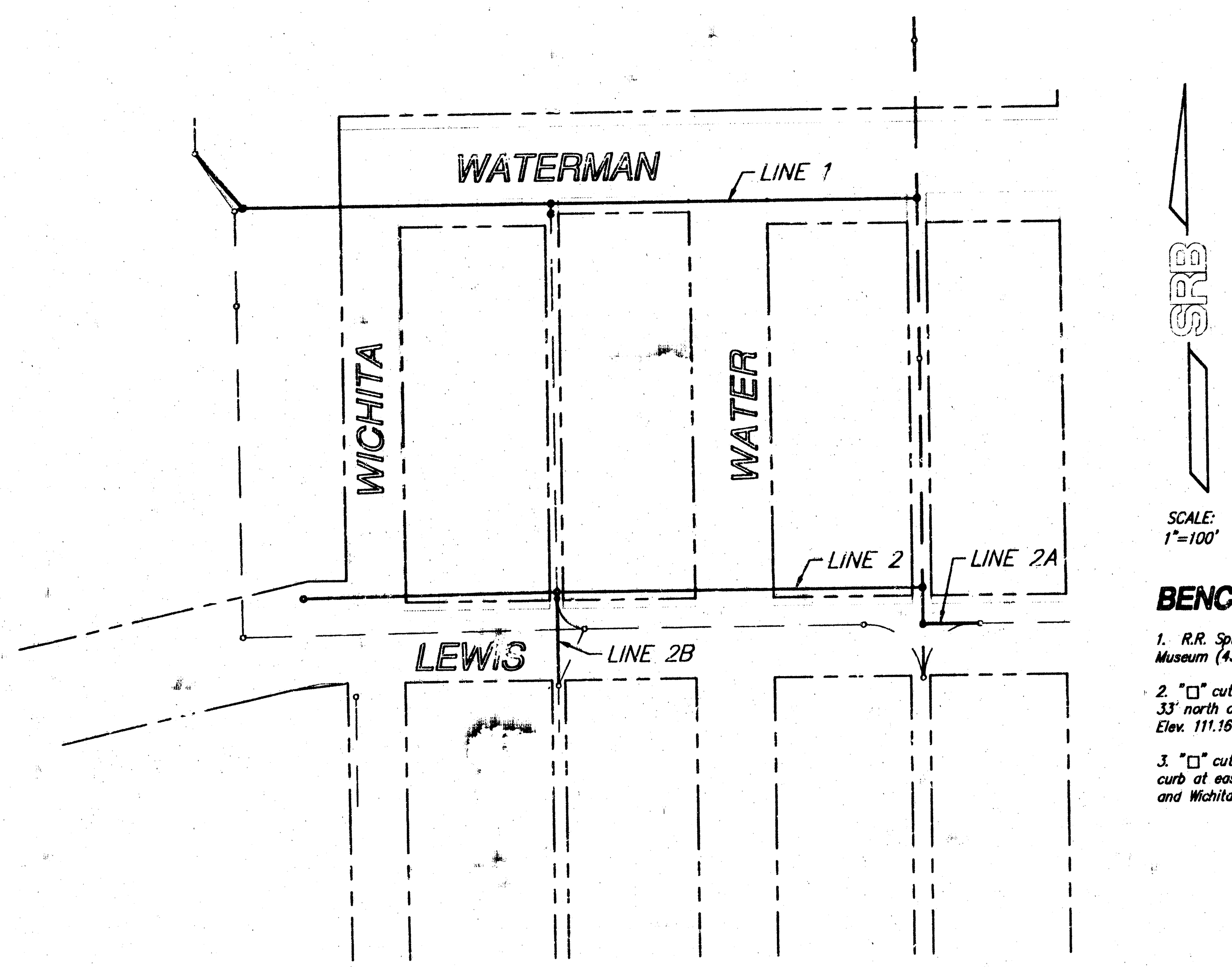
6. Only active building sewer lines which connect actual buildings to the sewer system are to be reconnected to the new sewer construction. Building sewer lines and/or connections which have been abandoned are not to be reconnected to the new sewer construction. It will be the sole responsibility of the Contractor to ascertain which such building sewer lines and/or connections are active and which such sewers and/or connections have been abandoned. All work involved with building sewer line construction and/or building sewer connections shall conform to the applicable sections of the Standard Specifications.

7. The Contractor shall be responsible for maintaining continuous flow of sewage through construction. Contractor's proposed method for maintaining sewage flow shall be approved by the Engineer. Cost of maintaining flow of sewage through construction will not be paid for directly and this cost shall be considered as subsidiary to other pay items of work.

8. The Contractor shall be responsible for preserving property irons. The Contractor will be required to re-establish any property irons which are damaged or destroyed by his construction operations. Such irons shall be re-established by a licensed land surveyor in accordance with state laws.

9. Pavement removal and/or replacement will be measured and paid for on the lineal foot basis as measured along the centerline of the water line regardless of width, pavement type and/or pavement thickness. Minimum limits of such pavement removal and replacement shall be one foot beyond the limits of the excavation made for the water line or the structure, except when such saw cuts are within three (3) feet of an existing joint the limits of removal shall be extended to the existing joint. Removal and replacement of existing pavement shall conform to the applicable sections of the City of Wichita Standard Specifications.

10. Water mains so indicated on these plans are to be abandoned or replaced by "others" after sanitary sewer construction (proj. #448-88916). Storm sewer pipes so noted are to be removed by "others" prior to sanitary construction (proj. #472-82928).



SCALE:
1"=100'

BENCH MARKS:

1. R.R. Spike in "H" Pole at N.W. cor. Children's Museum (435 S. Water) – Elev. 110.81 City Datum
2. "□" cut at top of curb wall in parking lot, 33' north of centerline of Waterman & Water Elev. 111.16 City Datum
3. "□" cut at top of curb, east end of widened curb at east end of southeast return at Dewey and Wichita – Elev. 107.11 City Datum

Booked
P-1
3/10/98
RPL

AS BUILT

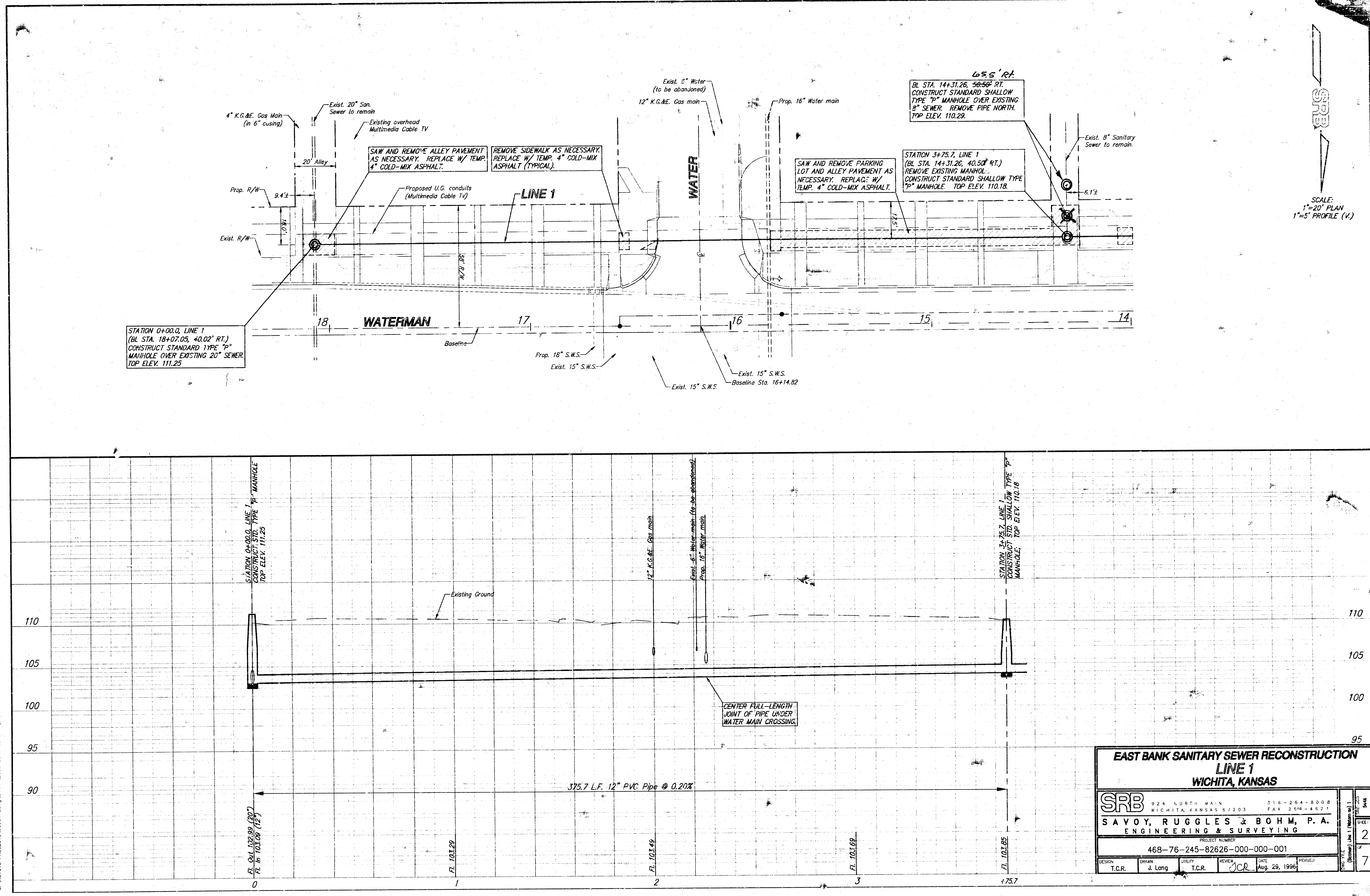
THOMAS CHARLES RUGGLES LICENSED 9621 9-20-96 KANSAS

SHEET INDEX

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

SRB 924 NORTH MAIN WICHITA, KANSAS 67203 316-264-8008 FAX 264-4621
SAVOY, RUGGLES & BOHM, P.A.
ENGINEERING & SURVEYING

S:\ACTIVE PROJECTS\JASON LANG\544X (EAST BANK SANITARY)\SANITARY COVER



G:\ACTIVE PROJECTS\Jason Lang\544X (East Bank Sanitary)\Line 1 (Waterman) 1

EAST BANK SANITARY SEWER RECONSTRUCTION
LINE 1
WICHITA, KANSAS

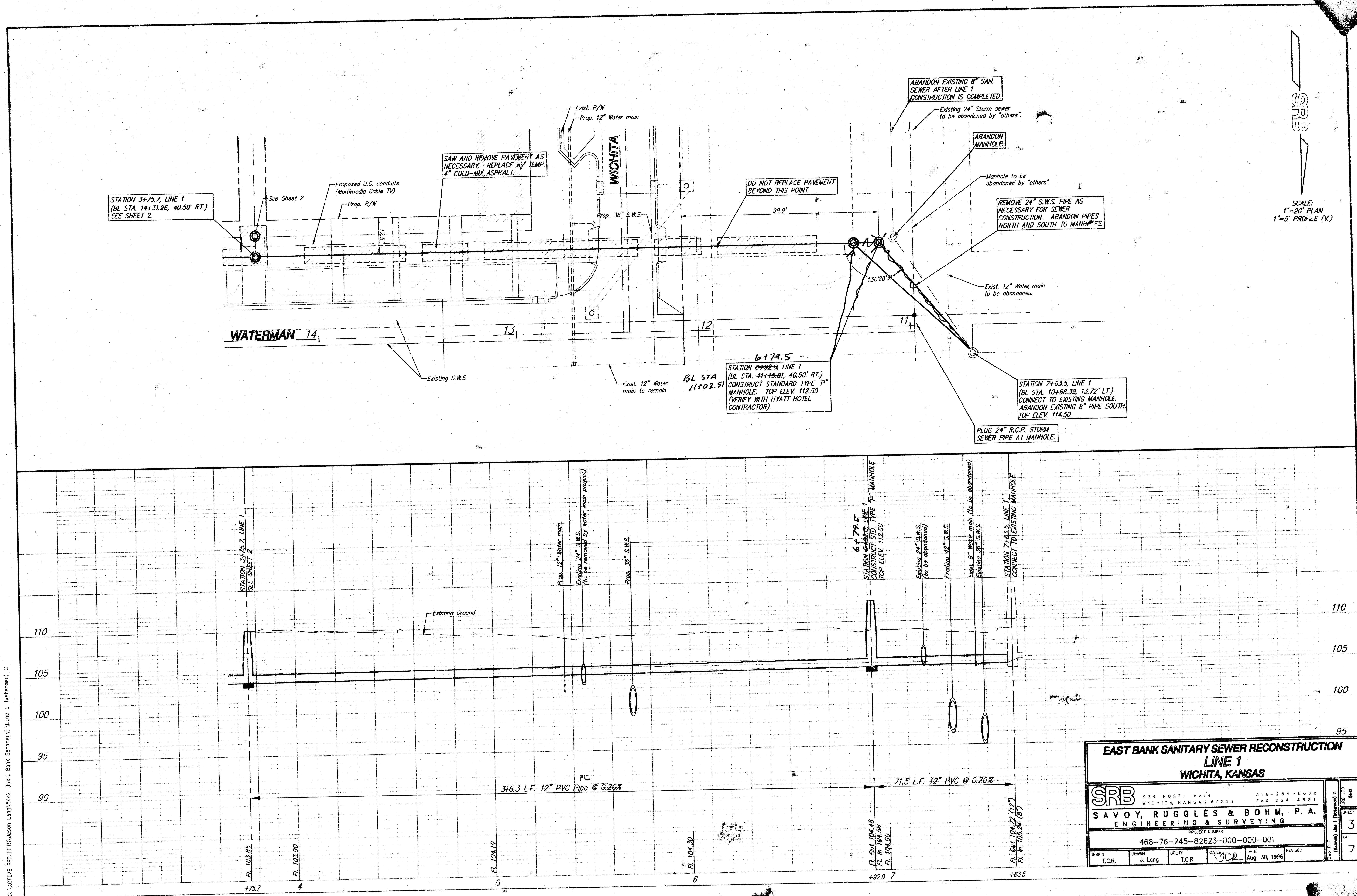
SRB 924 NORTH MAIN WICHITA, KANSAS 67203 316-264-8008 FAX 264-4621

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

PROJECT NUMBER
468-76-245-82626-000-000-001

DESIGN	DRAWN	UTILITY	REVIEW	DATE	REVISED
T.C.R.	J. Long	T.C.R.	JCR	Aug. 29, 1996	

SHEET 2 of 7



EAST BANK SANITARY SEWER RECONSTRUCTION
LINE 1
WICHITA, KANSAS

SRB
924 NORTH MAIN
WICHITA, KANSAS 67203
316-264-8008
FAX 264-4621

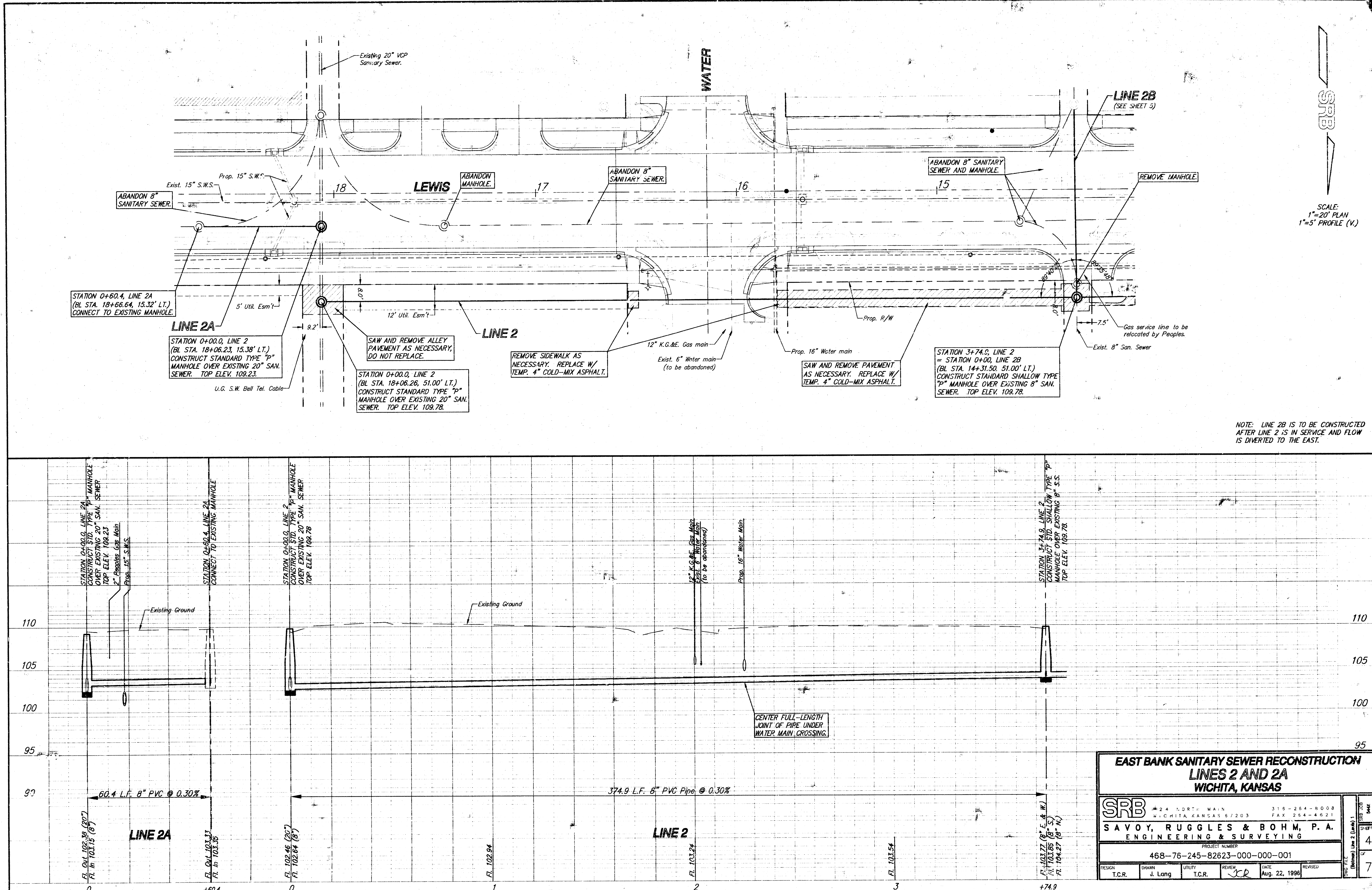
SAVOY, RUGGLES & BOHM, P. A.
ENGINEERING & SURVEYING

PROJECT NUMBER
468-76-245-82623-000-000-001

DESIGN	DRAWN	UTILITY	REVIEW	DATE	REVISED
T.C.R.	J. Lang	T.C.R.	JCR	Aug. 30, 1996	

Sheet 3 of 7

S:\ACTIVE PROJECTS\Jason Lang\544X (East Bank Sanitary)\Line 1 (Waterman) 2



EAST BANK SANITARY SEWER RECONSTRUCTION

LINES 2 AND 2A

WICHITA, KANSAS

SRB 424 NORTH MAIN WICHITA, KANSAS 67203 316-264-8008 FAX 264-4621

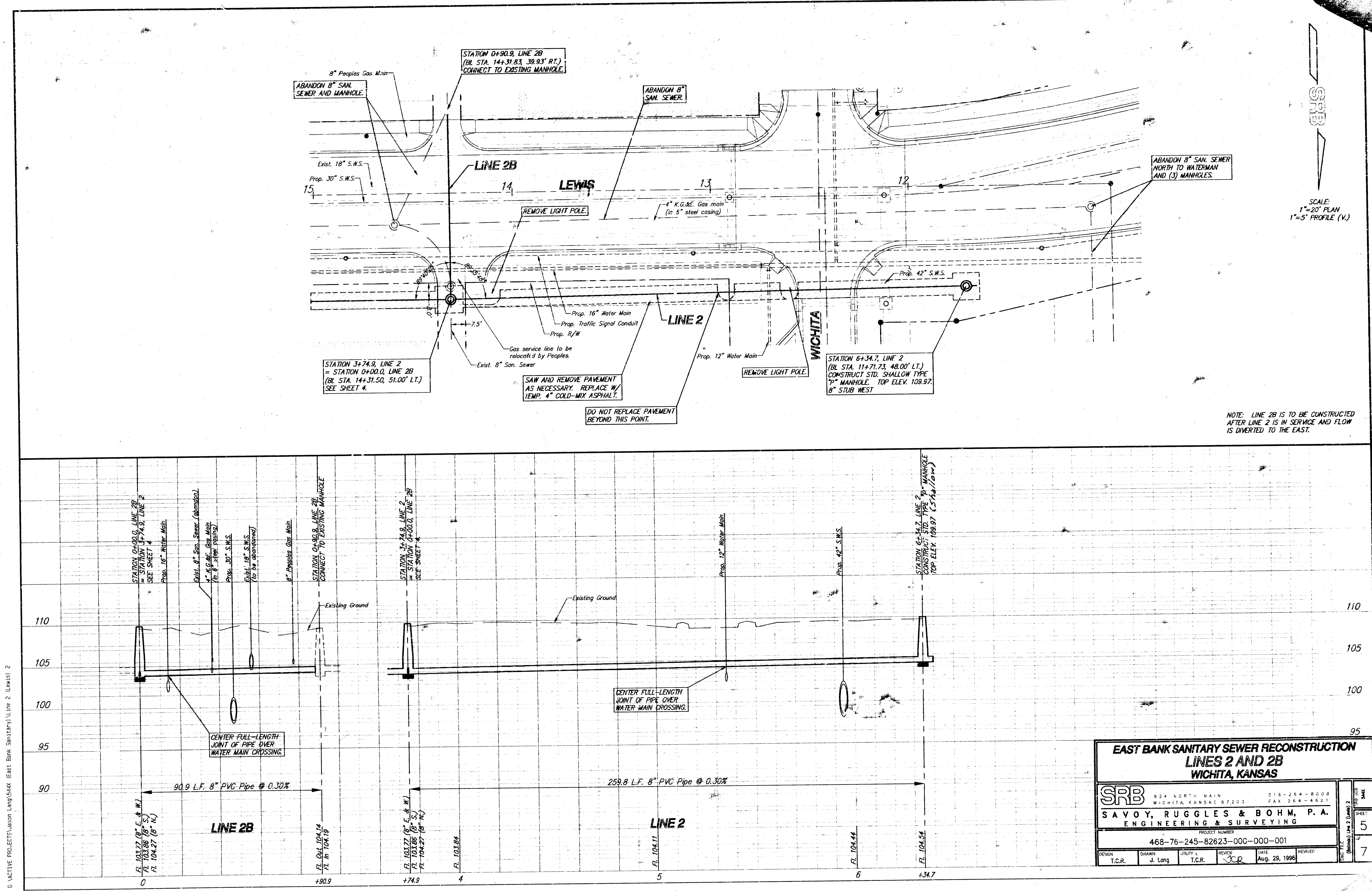
SAVOY, RUGGLES & BOHM, P. A.
ENGINEERING & SURVEYING

PROJECT NUMBER
468-76-245-82623-000-000-001

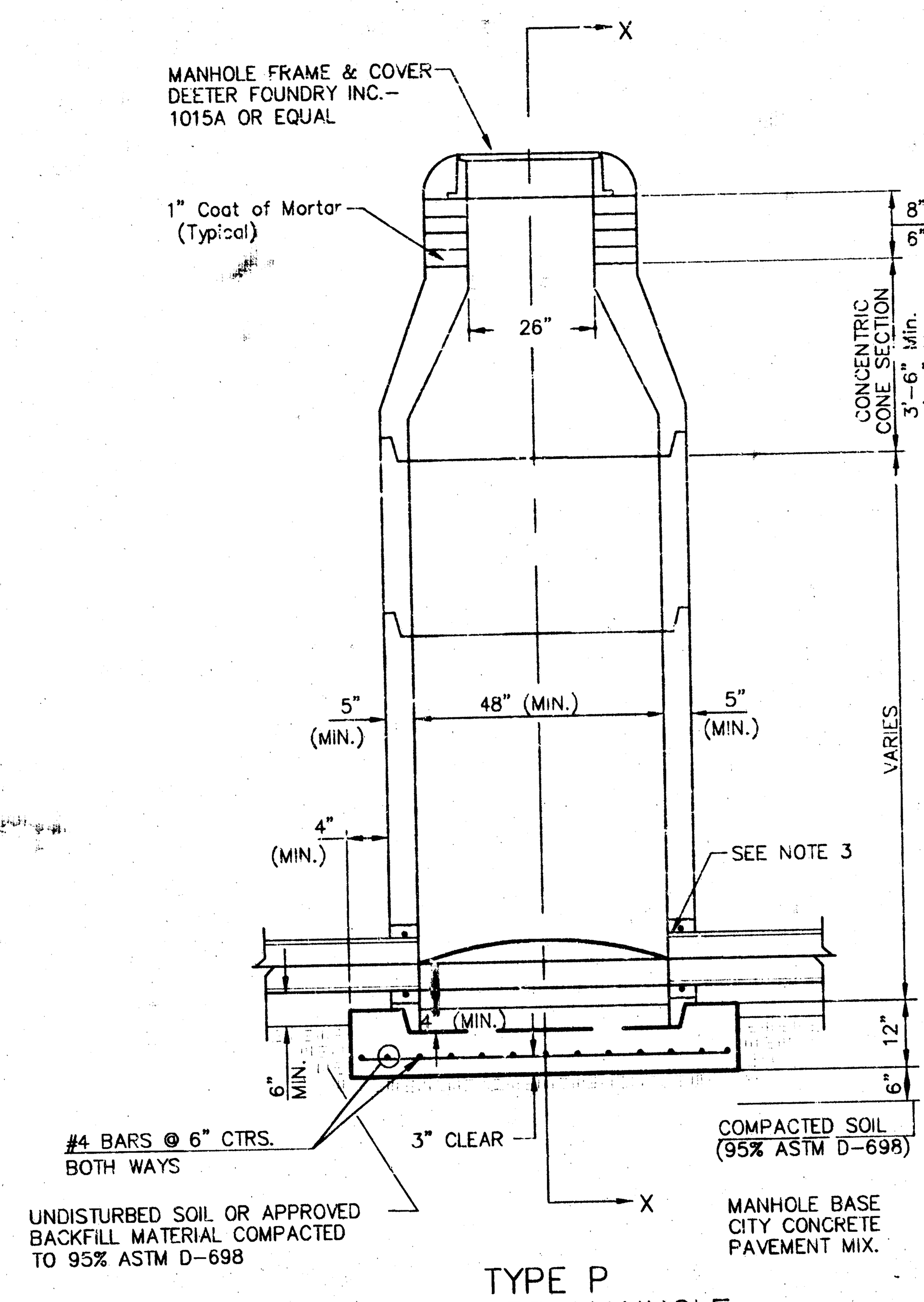
DESIGN	DRAWN	UTILITY	REVIEW	DATE	REVISED
T.C.R.	J. Lang	T.C.R.	JCR	Aug. 22, 1996	

SHEET 4 of 7

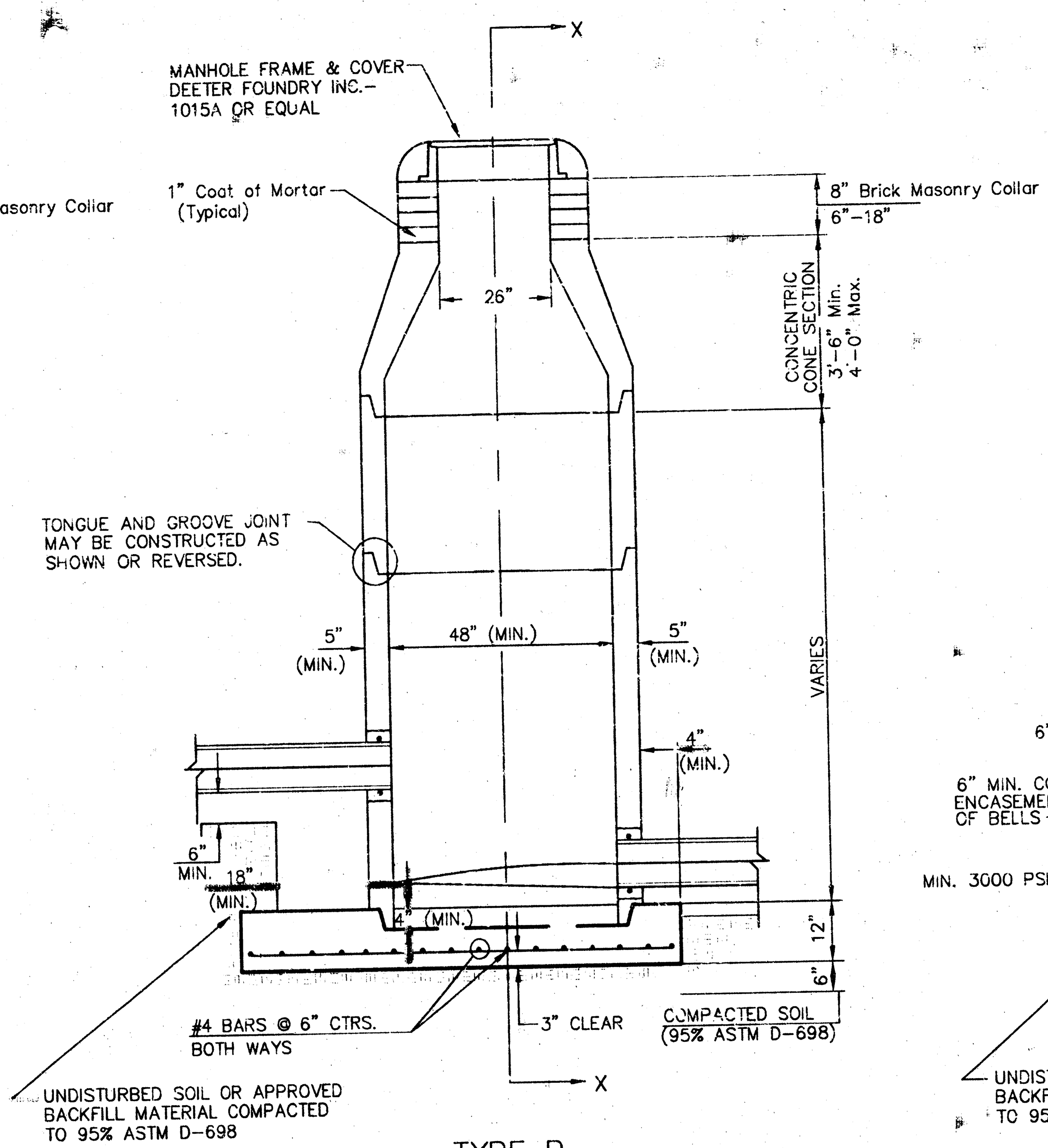
G:\ACTIVE PROJECTS\Jason Lang\544X (East Bank Sanitary)\Line 2 (Lewis) 1


STATION 0+90.9, LINE 2B
(BL STA. 14+31.83, 39.93' RT.)
CONNECT TO EXISTING MANHOLE.
8" Peoples Gas Main
ABANDON 8" SAN. SEWER AND MANHOLE.
ABANDON 8" SAN. SEWER.
Exist. 18" S.W.S.
Prop. 30" S.W.S.
LINE 2B
LEWIS
REMOVE LIGHT POLE.
4" K.G.&E. Gas main (in 5" steel casing)
ABANDON 8" SAN. SEWER NORTH TO WATERMAN AND (3) MANHOLES.
Prop. 42" S.W.S.
Prop. 16" Water Main
Prop. Traffic Signal Conduit
Prop. R/W
LINE 2
Gas service line to be relocated by Peoples.
Exist. 8" San. Sewer
Prop. 12" Water Main
REMOVE LIGHT POLE.
WICHITA
STATION 3+74.9, LINE 2
= STATION 0+00.0, LINE 2B
(BL STA. 14+31.50, 51.00' LT.)
SEE SHEET 4.
SAW AND REMOVE PAVEMENT AS NECESSARY. REPLACE W/ TEMP. 4" COLD-MIX ASPHALT.
DO NOT REPLACE PAVEMENT BEYOND THIS POINT.
STATION 6+34.7, LINE 2
(BL STA. 11+71.73, 48.00' LT.)
CONSTRUCT STD. SHALLOW TYPE "P" MANHOLE. TOP ELEV. 109.97.
8" STUB WEST
SCALE:
1"=20' PLAN
1"=5' PROFILE (V.)
NOTE: LINE 2B IS TO BE CONSTRUCTED AFTER LINE 2 IS IN SERVICE AND FLOW IS DIVERTED TO THE EAST.
STATION 0+00.0, LINE 2B = STATION 3+74.9, LINE 2 SEE SHEET 4
Prop. 16" Water Main
Exist. 8" San. Sewer (abandon)
4" K.G.&E. Gas Main (in 6" steel casing)
Prop. 30" S.W.S.
Exist. 18" S.W.S. (to be abandoned)
8" Peoples Gas Main
STATION 0+90.9, LINE 2B CONNECT TO EXISTING MANHOLE
Existing Ground
STATION 3+74.9, LINE 2 = STATION 0+00.0, LINE 2B SEE SHEET 4
Prop. 12" Water Main
Prop. 42" S.W.S.
STATION 6+34.7, LINE 2 CONSTRUCT STD. TYPE "P" MANHOLE (Shallow) TOP ELEV. 109.97
CENTER FULL-LENGTH JOINT OF PIPE OVER WATER MAIN CROSSING.
90.9 L.F. 8" PVC Pipe @ 0.30%
259.8 L.F. 8" PVC Pipe @ 0.30%
LINE 2B
LINE 2
FL 103.77 (8" E. & W.)
FL 103.86 (8" S.)
FL 104.27 (8" N.)
FL Out 104.14
FL In 104.19
FL 103.84
FL 104.11
FL 104.44
FL 104.54
110
105
100
95
90
0
+90.9
+74.9
4
5
6
+34.7
EAST BANK SANITARY SEWER RECONSTRUCTION
LINES 2 AND 2B
WICHITA, KANSAS
SRB
924 NORTH MAIN
WICHITA, KANSAS 67203
316-264-8008
FAX 264-4621
SAVOY, RUGGLES & BOHM, P. A.
ENGINEERING & SURVEYING
PROJECT NUMBER
468-76-245-82623-000-000-001
DESIGN T.C.R.
DRAWN J. Long
UTILITY T.C.R.
REVIEW JCR
DATE Aug. 29, 1996
REVISED
SHEET 5 7
G:\ACTIVE PROJECTS\Jason Lang\544X (East Bank Sanitary)\Line 2 (Lewis) 2

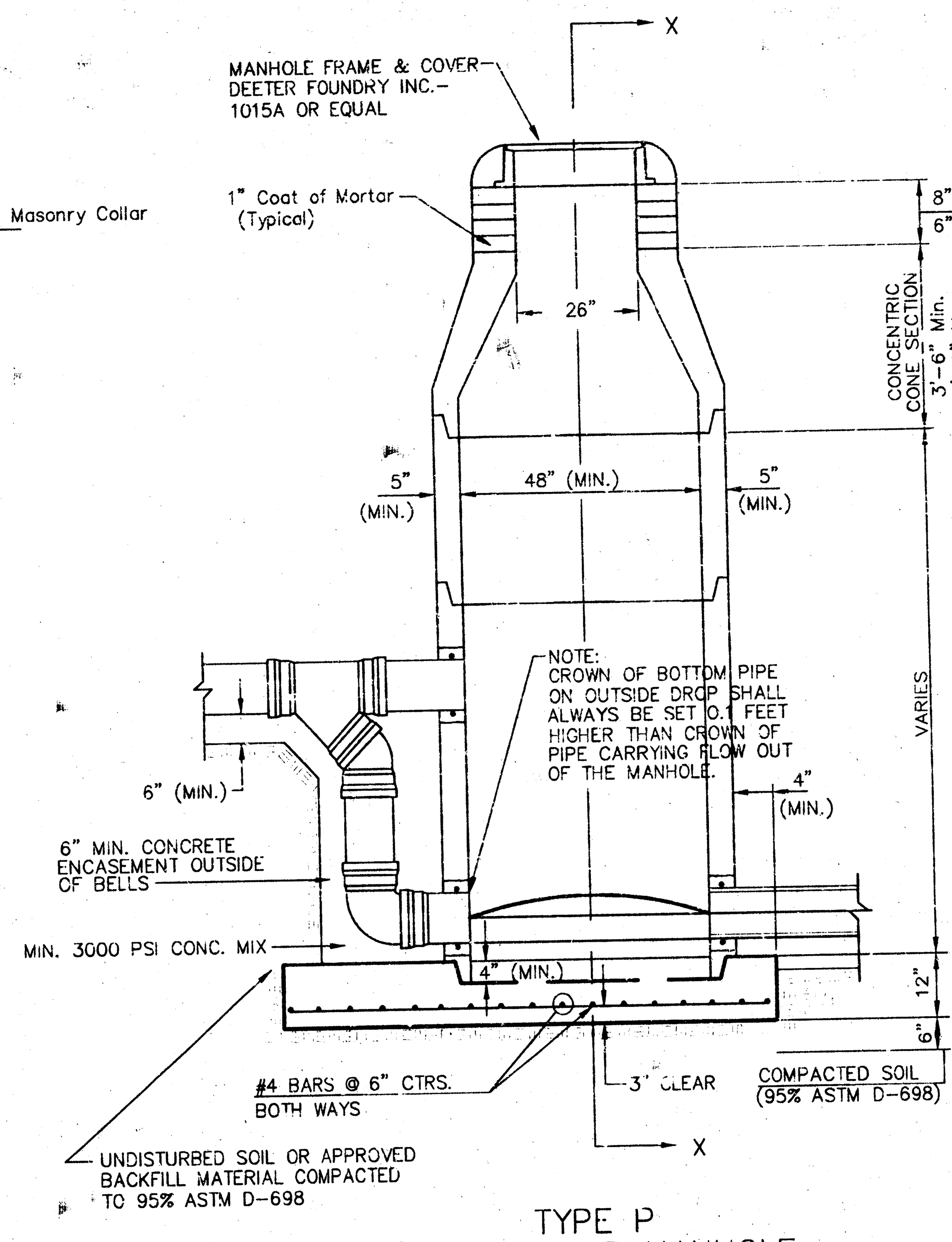
SEWER APPURTENANCES DETAILS



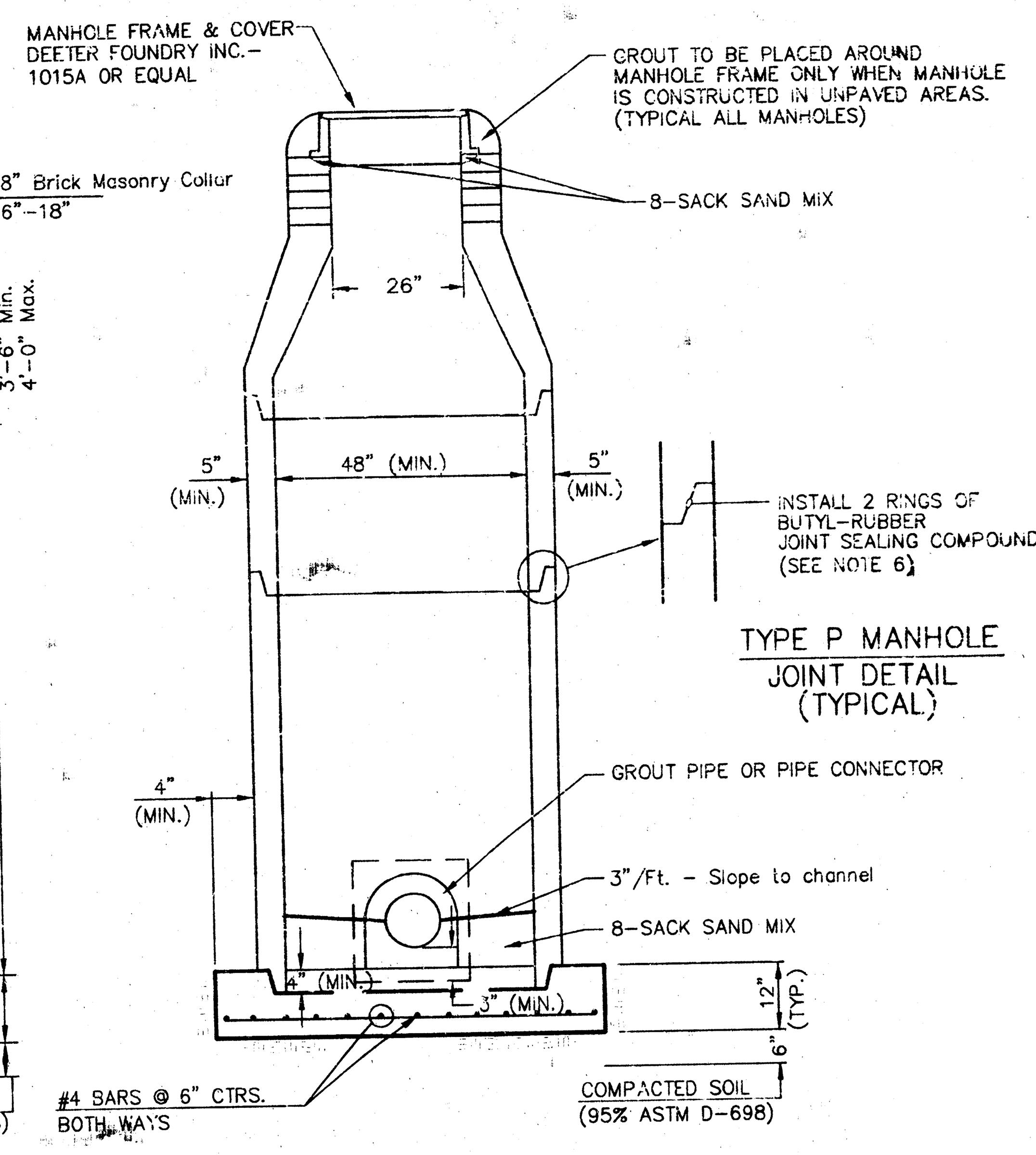
TYPE P
STANDARD MANHOLE



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 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 TNEMEC SERIES 36 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 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.
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 MAHOLE. 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.
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.

G:\ACTIVE PROJECTS\Jason Lang\544X (East Bank Sanitary)\Type P Manhole Details

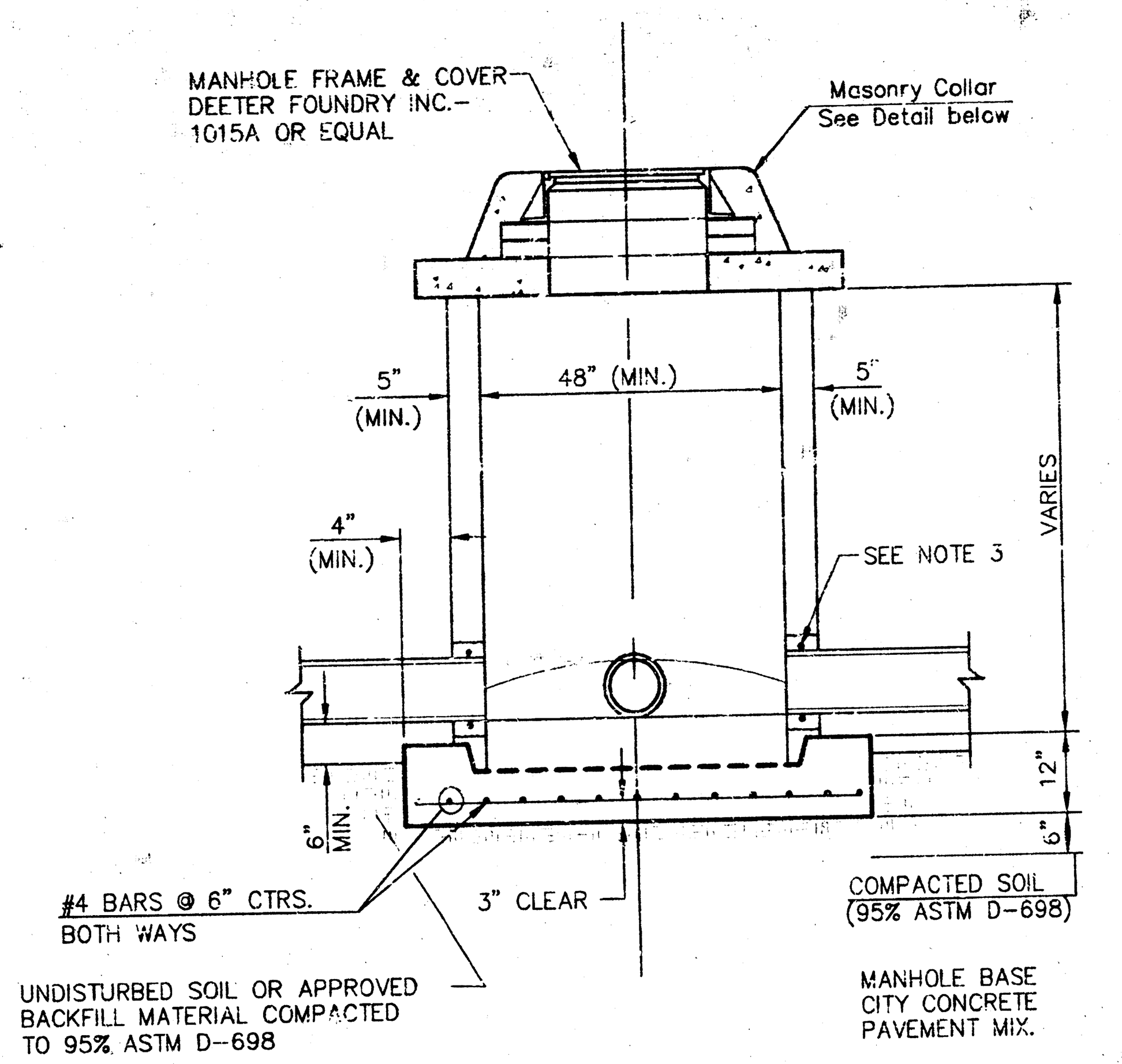
CITY OF WICHITA STANDARD
TYPE "P" MANHOLE DETAILS
WICHITA, KANSAS

SRB
924 NORTH MAIN
WICHITA, KANSAS 67203
316-264-8008
FAX 264-4621
SAVOY, RUGGLES & BOHM, P. A.
ENGINEERING & SURVEYING

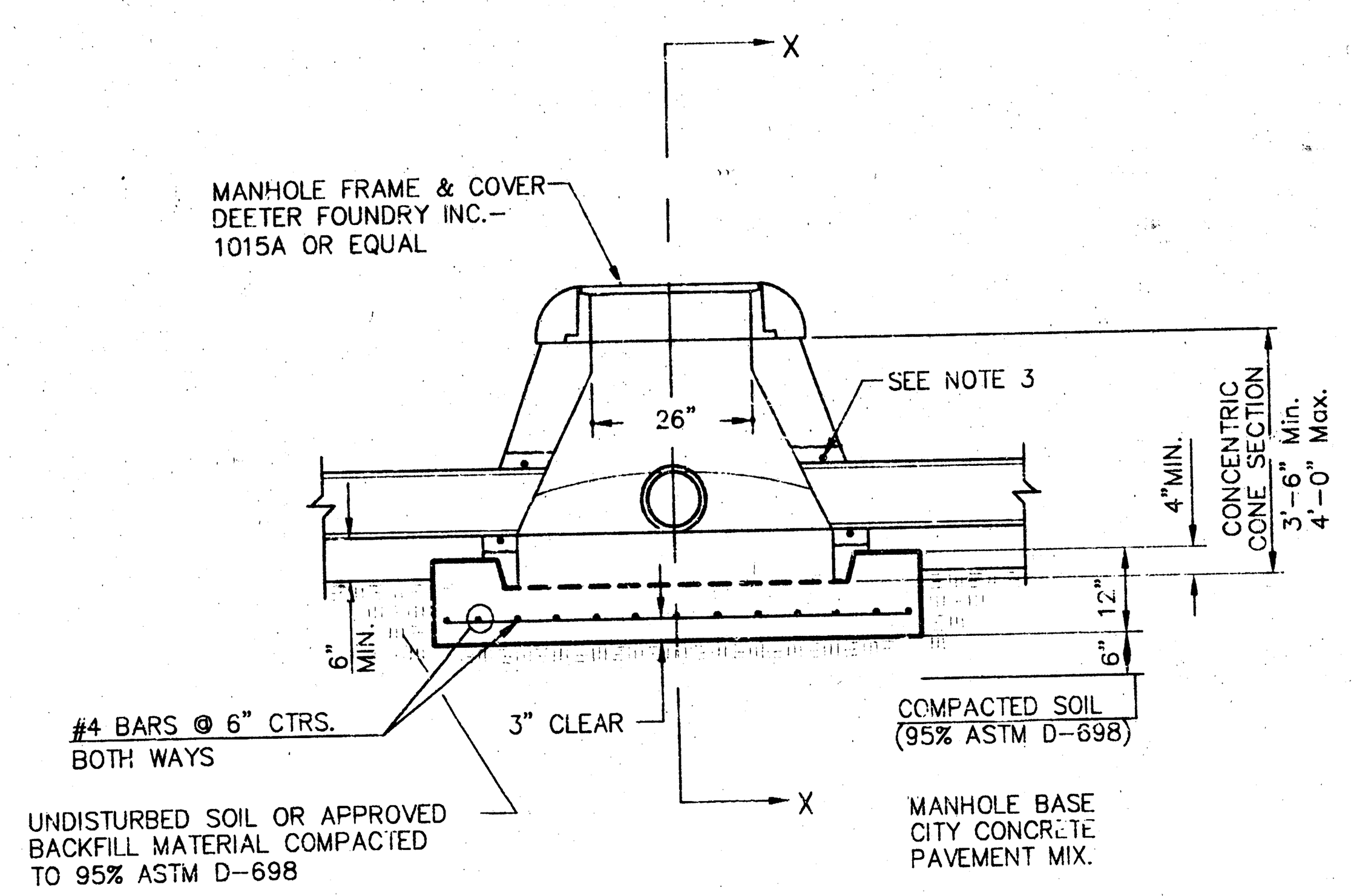
PROJECT NUMBER
468-76-245-82623-000-000-001

DESIGN	DRAWN	UTILITY	REVIEW	DATE	REVISED
COW				Aug. 22, 1996	

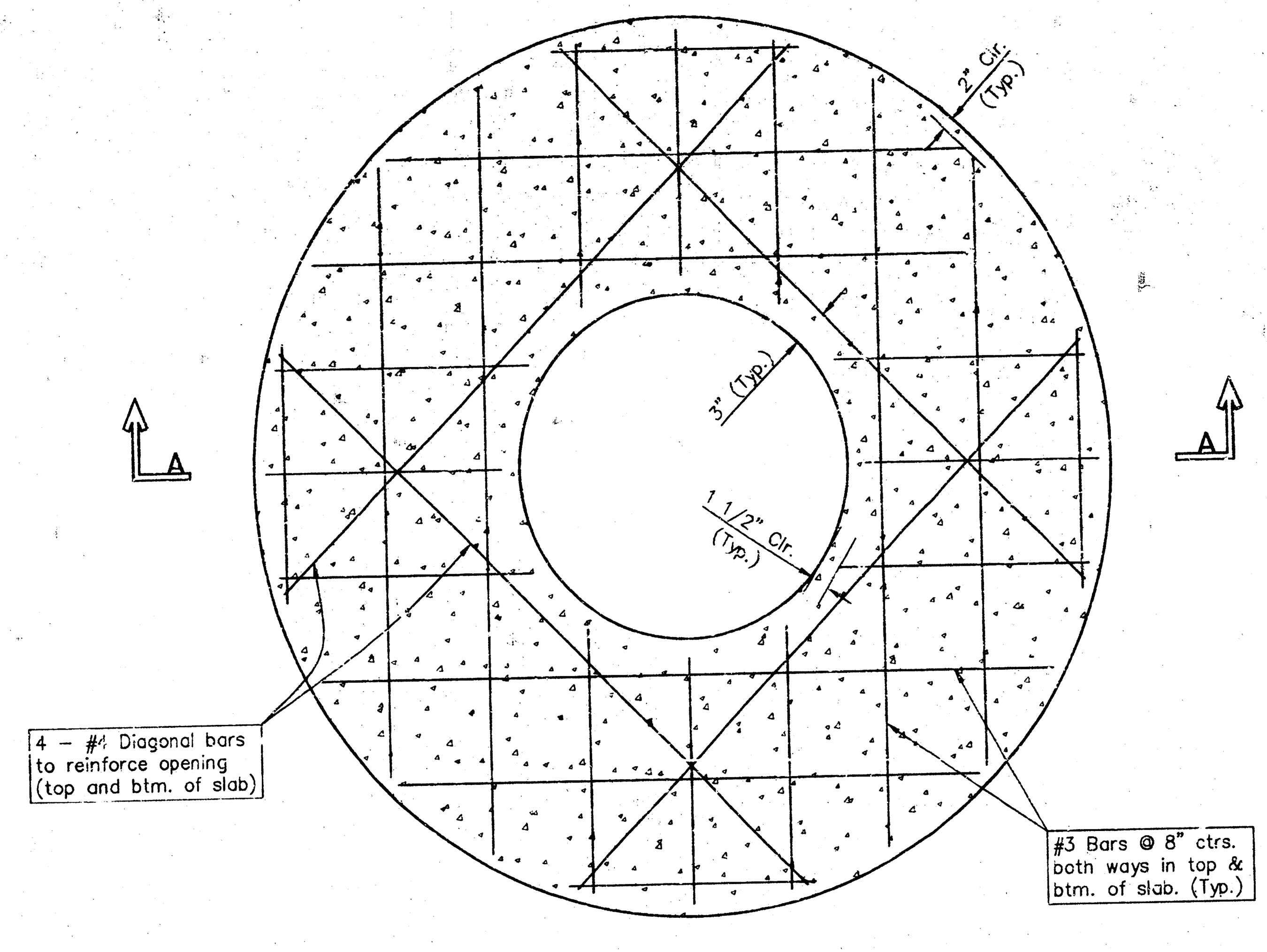
DWG FILE (Batman) Type P Manhole Details
SRB JOB 544X



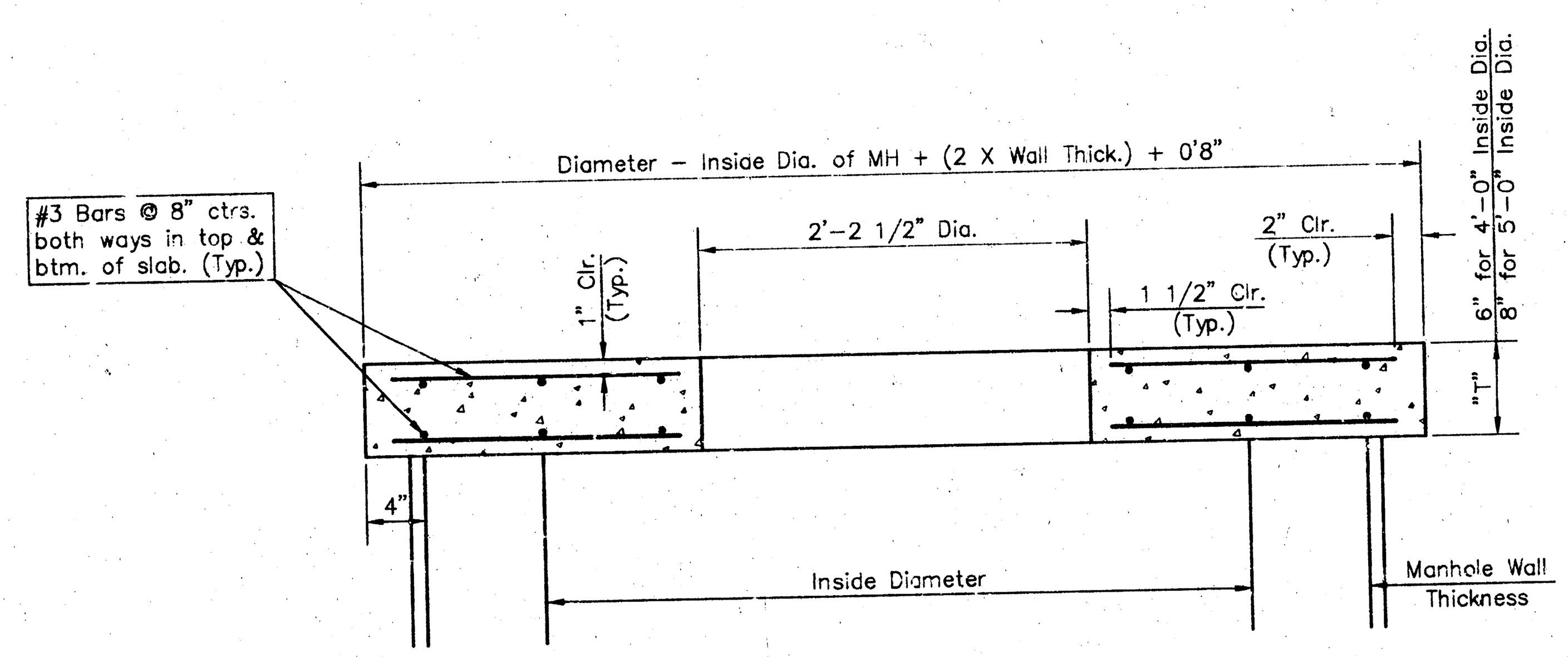
SHALLOW TYPE "P" MANHOLE



SPECIAL SHALLOW TYPE "P" MANHOLE

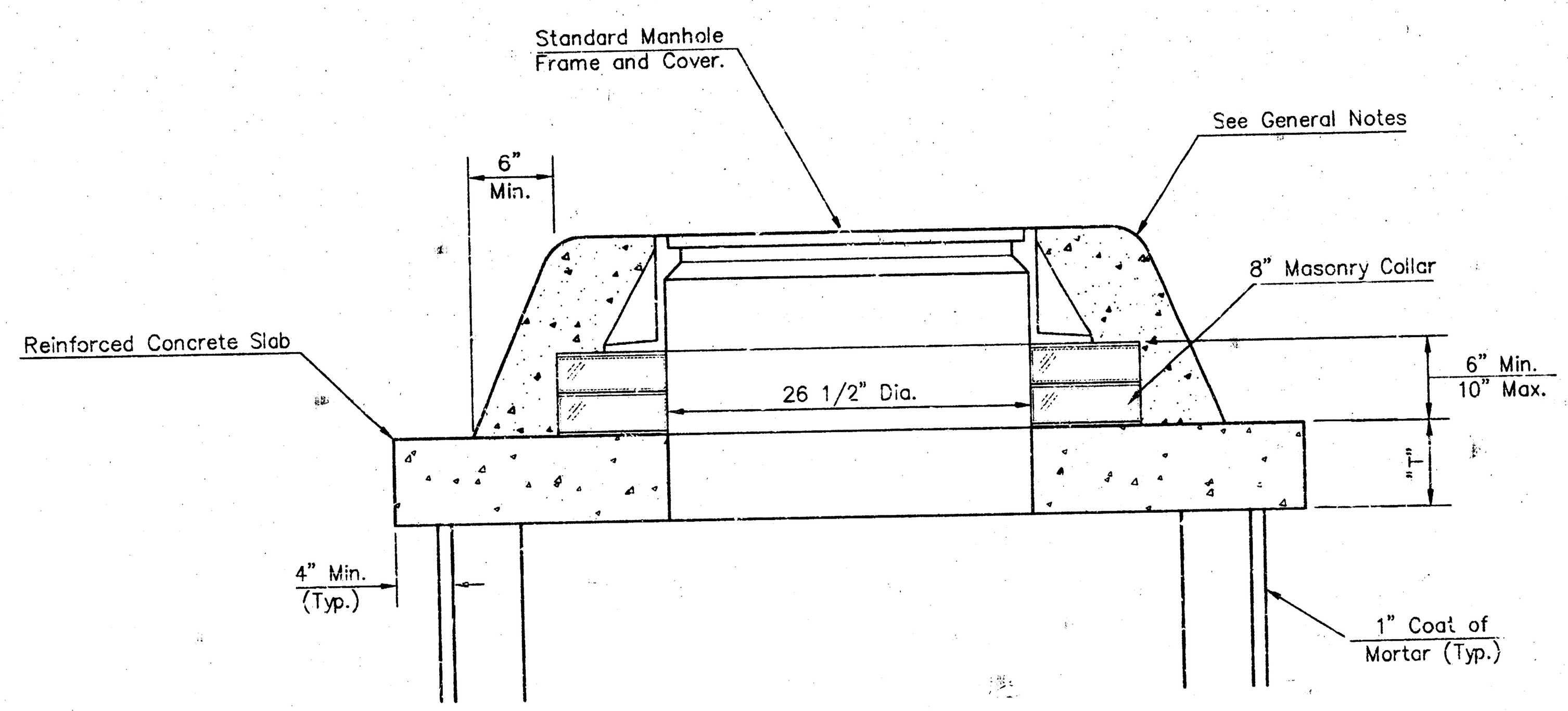


PLAN



SECTION A–A

CONCRETE SLAB DETAILS



MASONRY COLLAR DETAIL

GENERAL 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 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 TNEMEC 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.
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13. 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 MAHOLE. 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.
14. 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.
15. ALL BRICK USED IN MANHOLE CONSTRUCTION SHALL MEET GRADE SW OF ASTM C652 OR C62–87.

EAST BANK SANITARY SEWER RECONSTRUCTION
SHALLOW TYPE "P" MANHOLE DETAILS
WICHITA, KANSAS

SRB
924 NORTH MAIN
WICHITA, KANSAS 67203
316–264–8008
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PROJECT NUMBER
468–76–245–82623–000–000–001

DESIGN	DRAWN	UTILITY	REVIEW	DATE	REVISED
JCR			JCR	Aug. 22, 1996	11-2-3-12

DWG FILE (Batman) Shallow Type P Manhole Details
SRB JOB 544X
SHEET 7 OF 7

G:\ACTIVE PROJECTS\Jason Lang\544X (East Bank Sanitary)\Shallow Type P Manhole Details