

SANITARY SEWER IMPROVEMENTS TO SERVE LARK 4TH ADDITION

Private Project Number
673 PPS (607861)

CITY OF WICHITA, KANSAS
Michael E. Lindebak, City Engineer

GENERAL NOTES:

1. Contractor will be required to provide notice to utility companies a minimum of twenty-four (24) hours prior to any excavation, as follows:

Kansas One-Call 687-2470

The Contractor must notify the following in case of an emergency:

Cablevision 262-4270
or
K.P.L. Gas Service Company 263-2061
Kansas Gas & Electric Company 263-7511
Arkia Gas Company 264-1141
or
Southwestern Bell Telephone Company 942-8350
City of Wichita Water Department 263-8161
City of Wichita Sewer Maintenance 271-2611
268-4308
268-4071

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. The Contractor will be required to work around existing utilities within the right-of-way which do not conflict with proposed construction.

3. Properties within project limits may have underground sprinkler systems in public right-of-way which conflict with new construction. Contractor will be required to remove such improvements should they not be removed by 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. Portions of underground sprinkler systems 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.

4. The Contractor shall notify pipeline companies at least 24 hours in advance of any work being performed across and/or adjacent to pipelines.

5. Trees and shrubs in public right-of-way which are in direct conflict with proposed new construction shall be removed by the Contractor with the Engineer's approval. Trees and shrubs which are not in direct conflict with proposed new construction shall be saved and protected from damage.

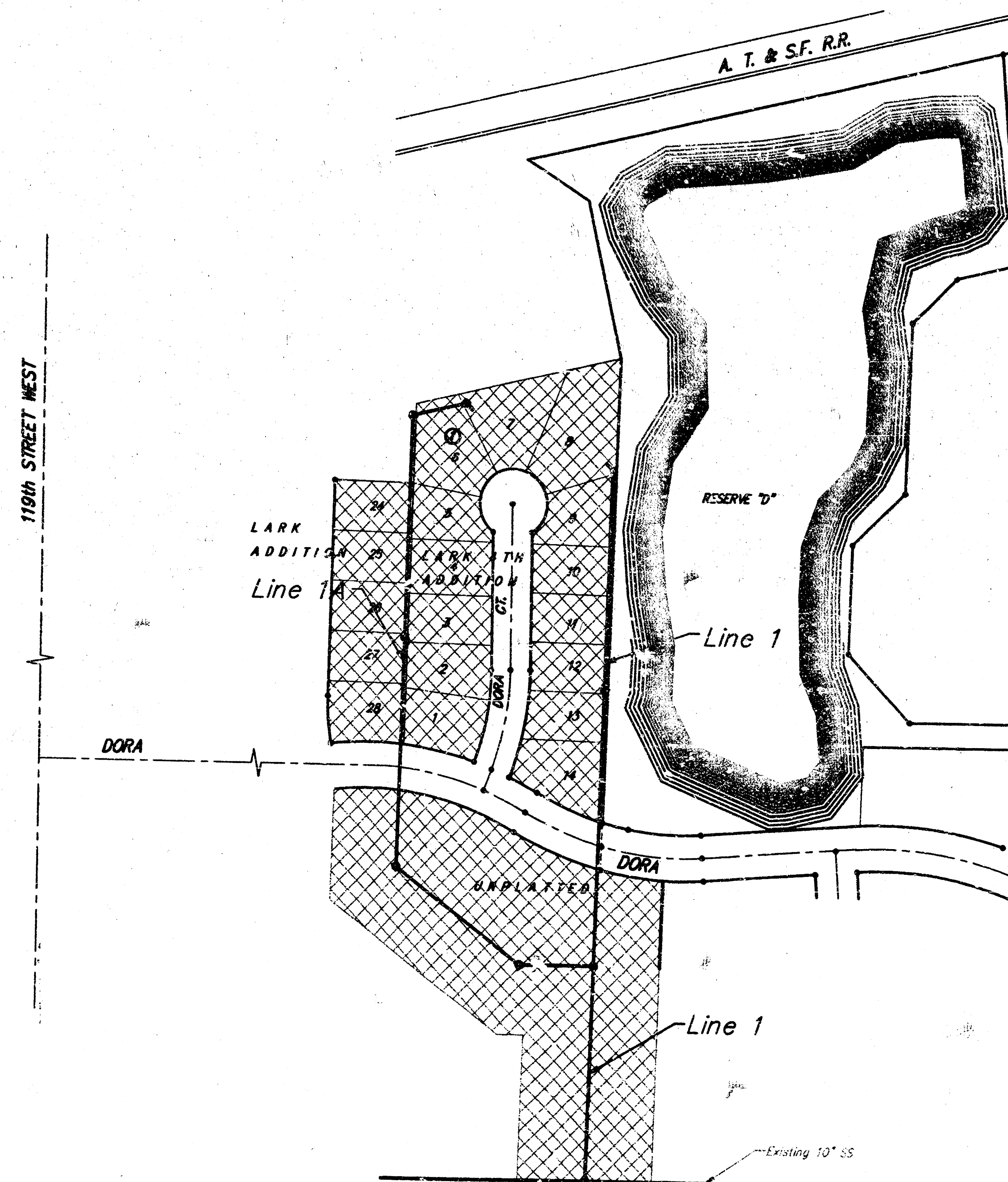
6. The Contractor shall give all property owners and/or tenants of developed property abutting the construction of this project a minimum of ten (10) days advance notice prior to start of construction.

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 the 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. Contractor shall grade the sanitary sewer alignment to the profile and elevations shown on the easement grading plan. All costs for grading shall be paid as lump sum for easement grading.

10. All areas disturbed by construction operations shall be seeded with ryegrass at a rate of 300 lbs/acre immediately following construction in that area.



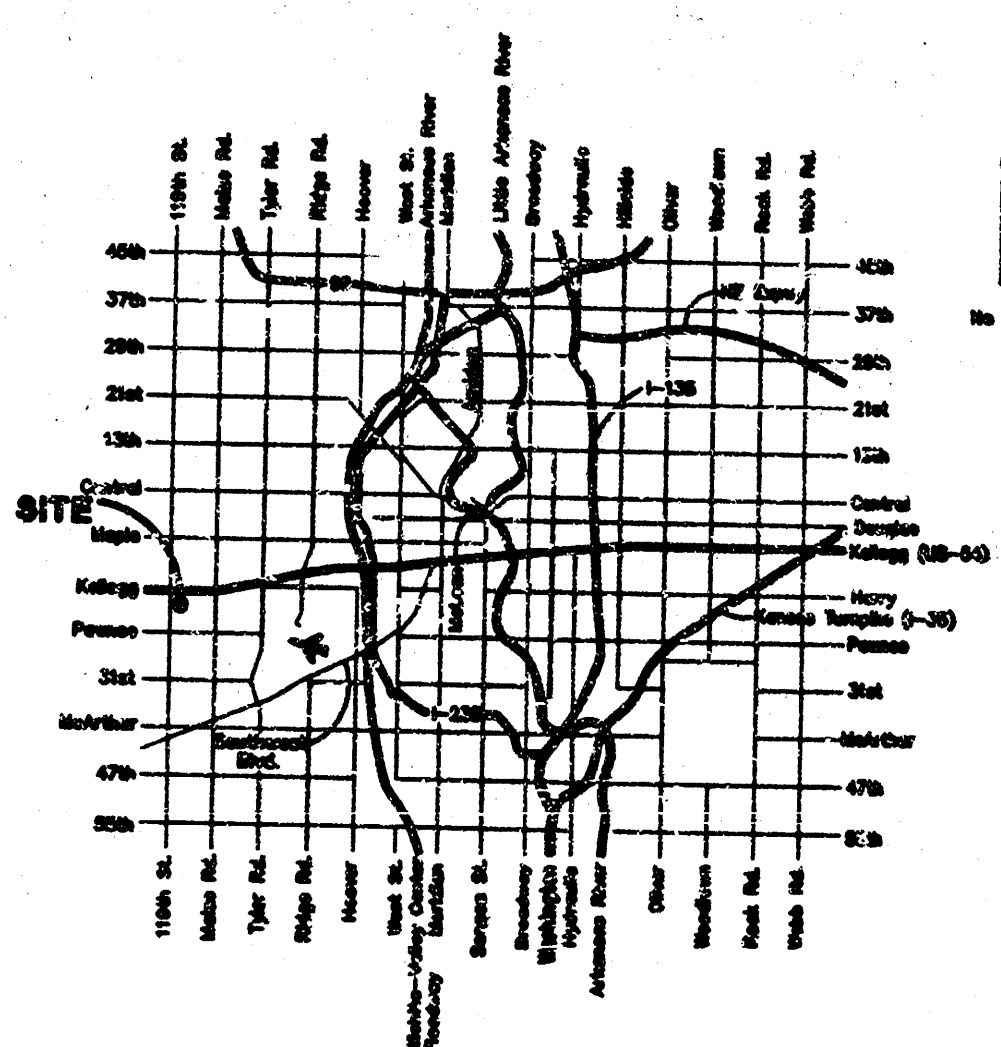
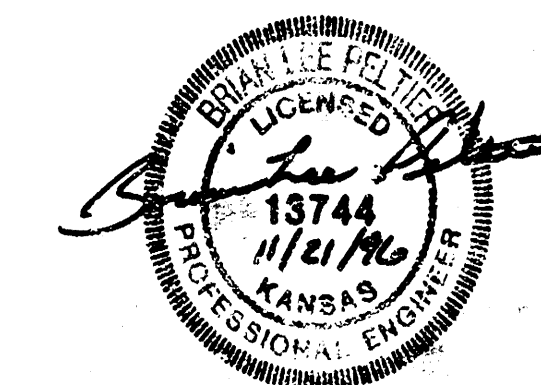
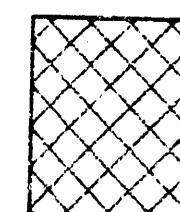
APPROVED AS NOTED
BY CITY ENGINEER OF WICHITA
Sanitary Sewers 11/22/96 VRH

NOTE TO CONTRACTORS

Inspection and testing for this project is 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. All Construction and Materials shall comply with the City of Wichita Specifications and Standards (on file and available in the City Engineer's Office).

Booked
N. 272
9/19/97
RDL

Benefit District:



BENCHMARK:

BM #1 "X" On Top of Curb Located on the East Side of Shefford 12.5' South of the North Line of Pawnee Mesa Addition. Elevation = 143.56 (City Datum)

BM #2 R.R. Spike in East Side of P.P. Located 112.5' North of the North R/W of Dora and 41.5' East of the E of 119th Street West. Elevation = 145.26 (City Datum)

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- 3 Line 1A
- 4 Standard Manhole Detail
- 5 MH Cover & Frame Detail
- 6 Riser Detail
- 7 Easement Grading Plan
- 8 Copy of Plat

INSPECTOR: LYLE POWERS BAUGHMAN CO.
ASBUILT: 4/5/97 JFB BAUGHMAN CO.

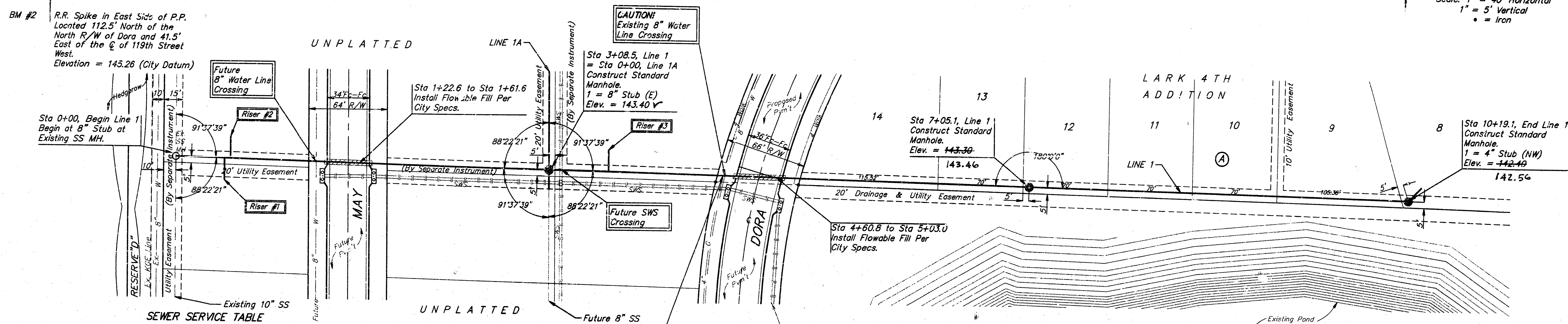
BAUGHMAN COMPANY P.A.
ENGINEERING, SURVEYING & PLANNING
316-262-7271 • 315 ELLIS • WICHITA, KANSAS 67211

BENCHMARKS:

BM #1 "On Top of Curb Located on the East Side of Shefford 12.5' South of the North Line of Pawnee Mesa Addition. Elevation = 143.56 (City Datum)

BM #2 R.R. Spike in East Side of P.P. Located 112.5' North of the North R/W of Dora and 41.5' East of the C of 119th Street West. Elevation = 145.26 (City Datum)

Scale: 1" = 40' Horizontal
1" = 5' Vertical
• = Iron

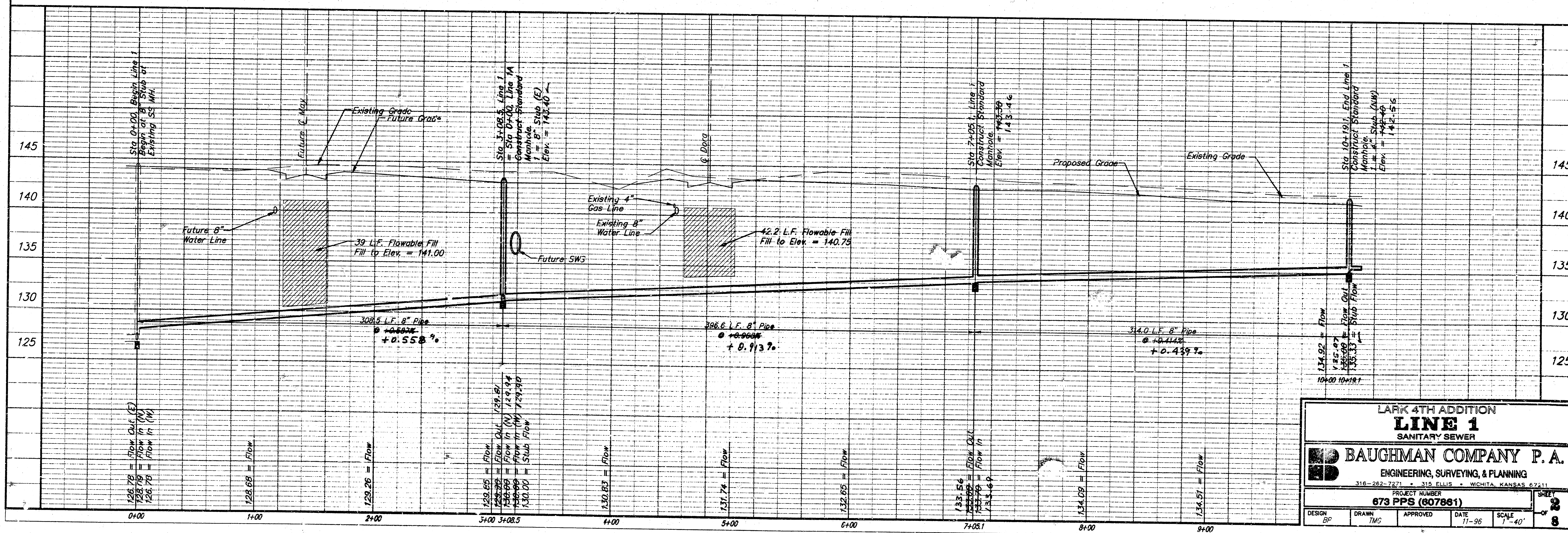


SEWER SERVICE TABLE

NUMBER	TYPE	LOCATION			FOR INFORMATION ONLY		
		LOT NO.	BLOCK NO.	STATION	APPROXIMATE LENGTH 4" PIPE	VERTICAL	HORIZONTAL
1	8" X 4' Tee Saddle			0+40.0/R/L	13.0'	10'	
2	8" X 4' Tee Saddle			0+45.0/Lt.	13.0'	5'	
3	8" X 4' Tee Saddle			3+57.8/Lt.	7.5'	5'	

NOTE: Vertical Riser Pipe shall be extended to 2' minimum above ground water elevation and 4' maximum below proposed ground elevation.

ASBOLT: 4/5/97 9FB



LARK 4TH ADDITION
LINE 1
SANITARY SEWER

BAUGHMAN COMPANY P.A.
ENGINEERING, SURVEYING, & PLANNING
310-282-7271 • 315 ELLIS • WICHITA, KANSAS 67211

PROJECT NUMBER
673 PPS (607861)

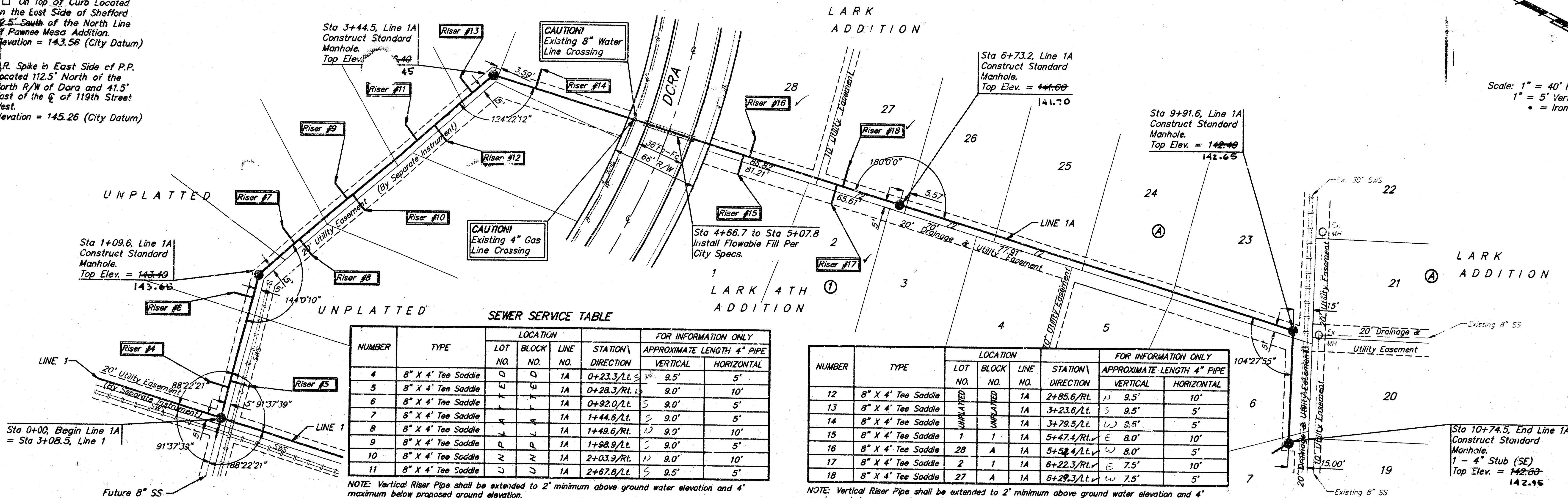
DESIGN: BP DRAWN: TMS APPROVED: DATE: 7-96 SCALE: 1"=40'

SHEET: 2 OF 8

BENCHMARKS:

BM #1 "On Top of Curb Located on the East Side of Shefford 12.5' South of the North Line of Pawnee Mesa Addition. Elevation = 143.56 (City Datum)

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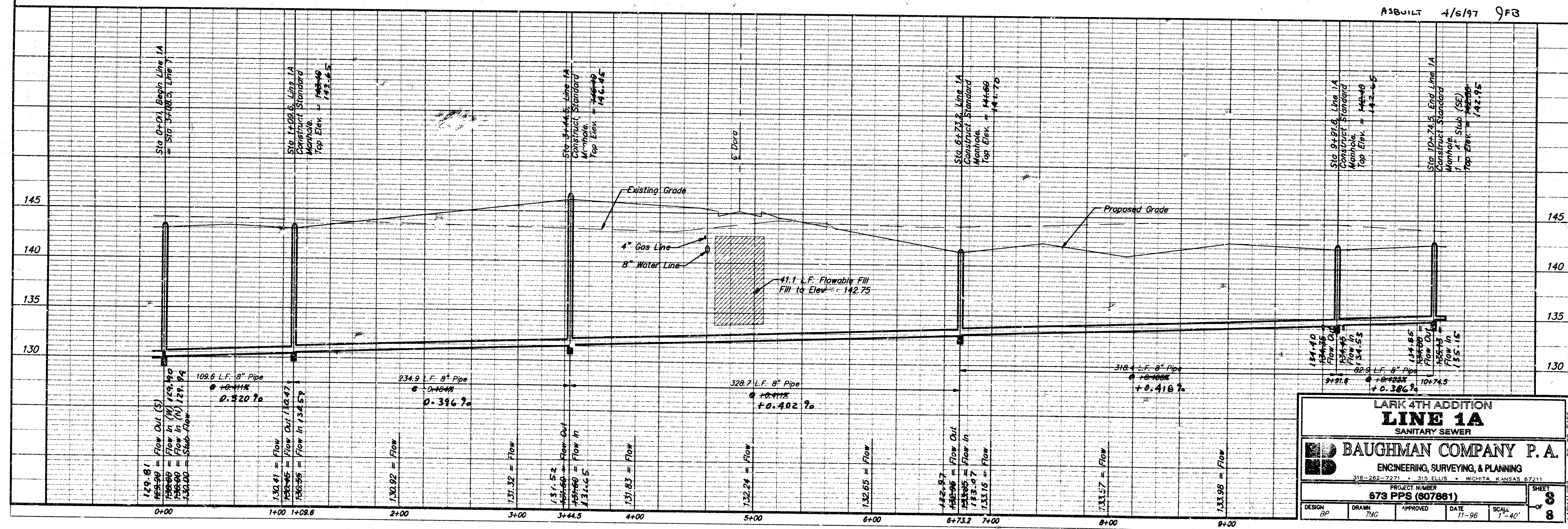
SEWER SERVICE TABLE

NUMBER	TYPE	LOCATION		STATION	FOR INFORMATION ONLY	
		LOT NO.	BLOCK NO.		APPROXIMATE LENGTH 4" PIPE	
4	8" X 4" Tee Saddle	Q	Q	1A 0+23.3/Lt.	9.5'	5'
5	8" X 4" Tee Saddle	U	U	1A 0+28.3/Rt.	9.0'	10'
6	8" X 4" Tee Saddle	X	X	1A 0+92.0/Lt.	9.0'	5'
7	8" X 4" Tee Saddle	X	X	1A 1+44.6/Lt.	9.0'	5'
8	8" X 4" Tee Saddle	X	X	1A 1+49.6/Rt.	9.0'	10'
9	8" X 4" Tee Saddle	Q	Q	1A 1+98.9/Lt.	9.0'	5'
10	8" X 4" Tee Saddle	Z	Z	1A 2+03.9/Rt.	9.0'	10'
11	8" X 4" Tee Saddle	Q	Q	1A 2+67.8/Lt.	9.5'	5'

NOTE: Vertical Riser Pipe shall be extended to 2' minimum above ground water elevation and 4' maximum below proposed ground elevation.

NUMBER	TYPE	LOCATION		STATION	FOR INFORMATION ONLY	
		LOT NO.	BLOCK NO.		APPROXIMATE LENGTH 4" PIPE	
12	8" X 4" Tee Saddle	UNPLATTED	UNPLATTED	1A 2+85.6/Rt.	9.5'	10'
13	8" X 4" Tee Saddle	UNPLATTED	UNPLATTED	1A 3+23.6/Lt.	9.5'	5'
14	8" X 4" Tee Saddle	UNPLATTED	UNPLATTED	1A 3+79.5/Lt.	9.5'	5'
15	8" X 4" Tee Saddle	1	1A	5+47.4/Rt.	8.0'	10'
16	8" X 4" Tee Saddle	28	A	5+58.4/Lt.	8.0'	5'
17	8" X 4" Tee Saddle	2	1A	6+22.3/Rt.	7.5'	10'
18	8" X 4" Tee Saddle	27	A	6+29.3/Lt.	7.5'	5'

NOTE: Vertical Riser Pipe shall be extended to 2' minimum above ground water elevation and 4' maximum below proposed ground elevation.



LARK 4TH ADDITION
LINE 1A
SANITARY SEWER

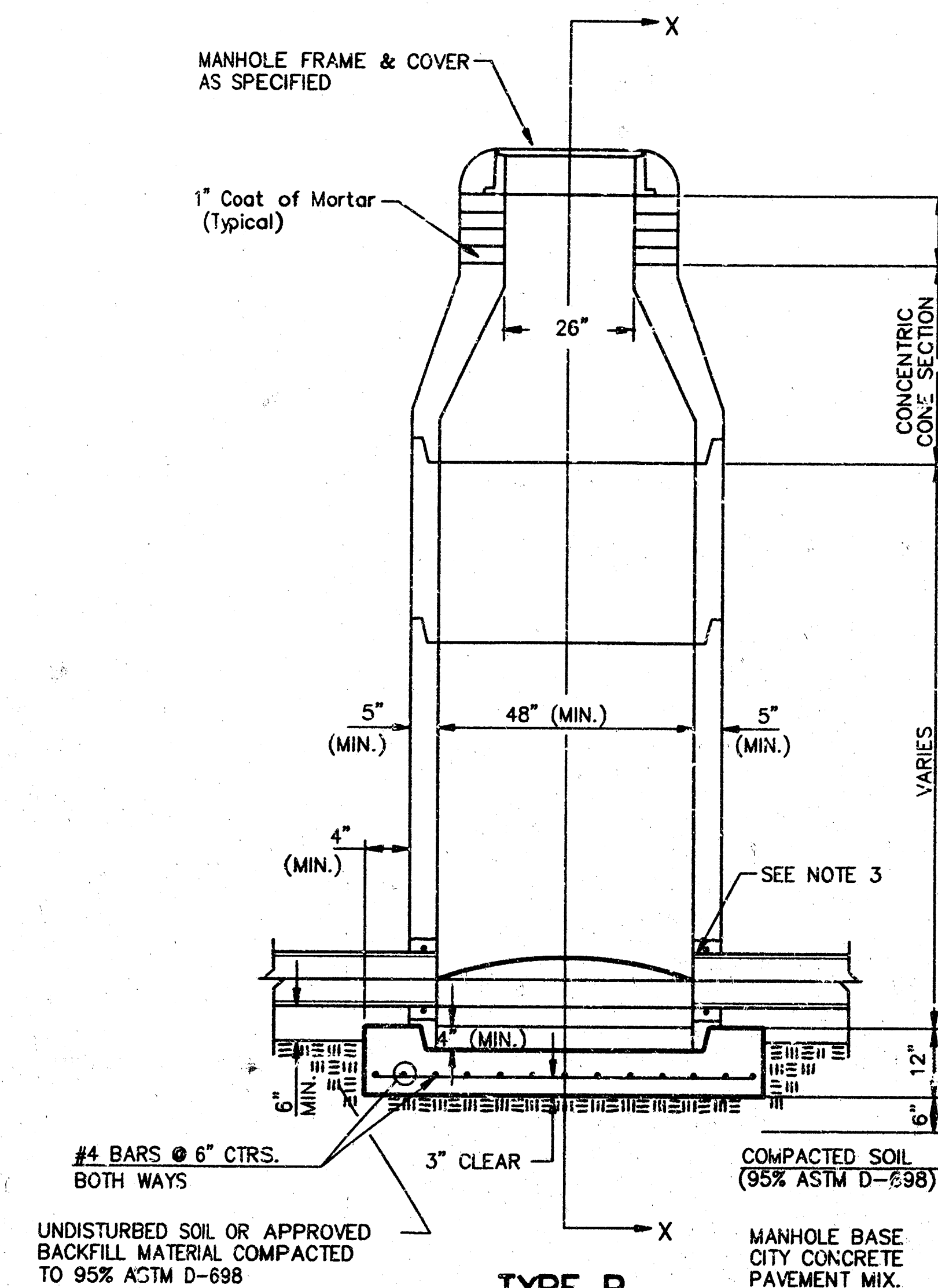
BAUGHMAN COMPANY P.A.
ENGINEERING, SURVEYING, & PLANNING
316-252-2221 • 316 ELLIS • WICHITA, KANSAS 67211

PROJECT NUMBER: **673 PPS (607881)**

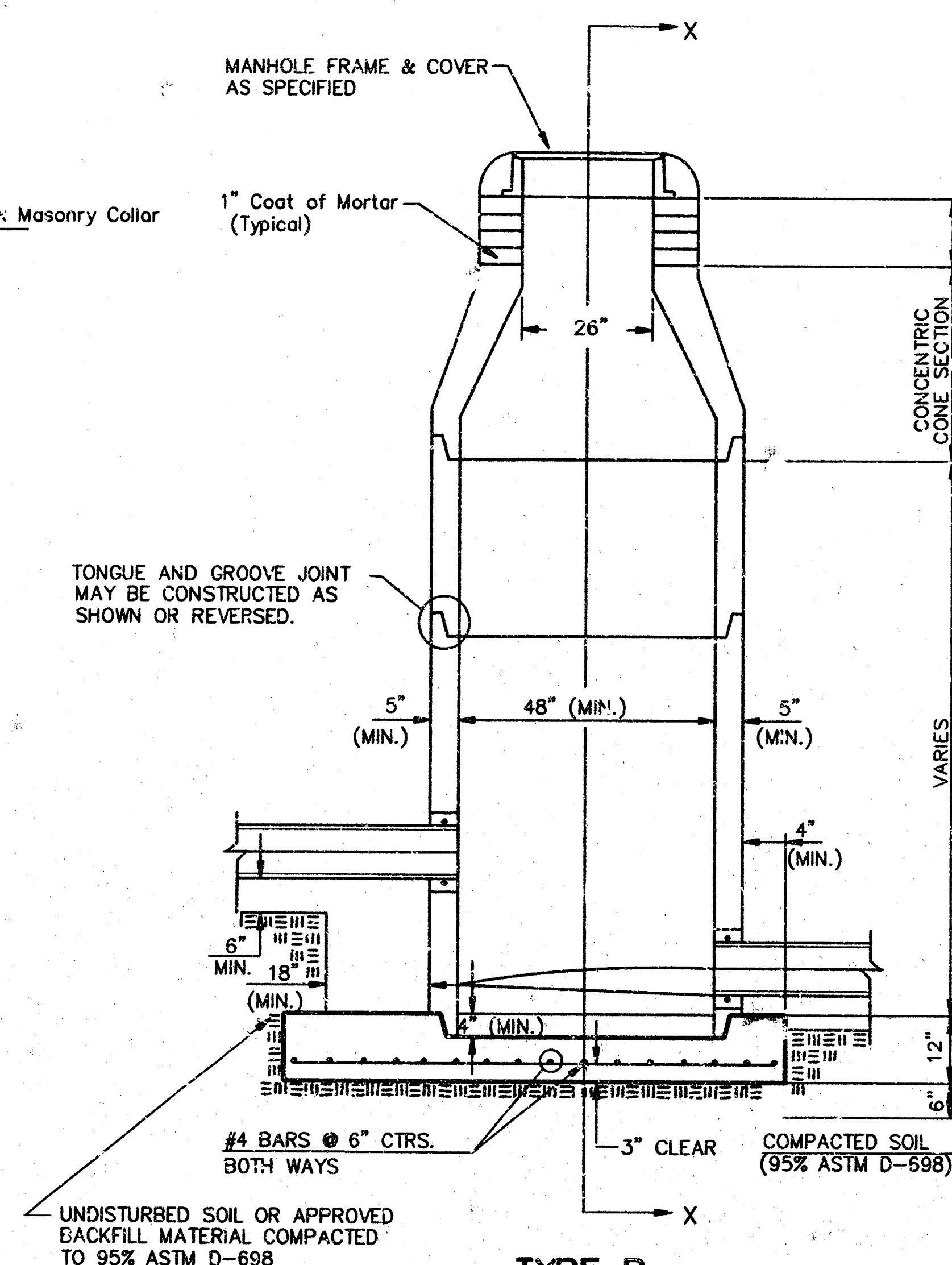
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SHEET: **8** OF **8**

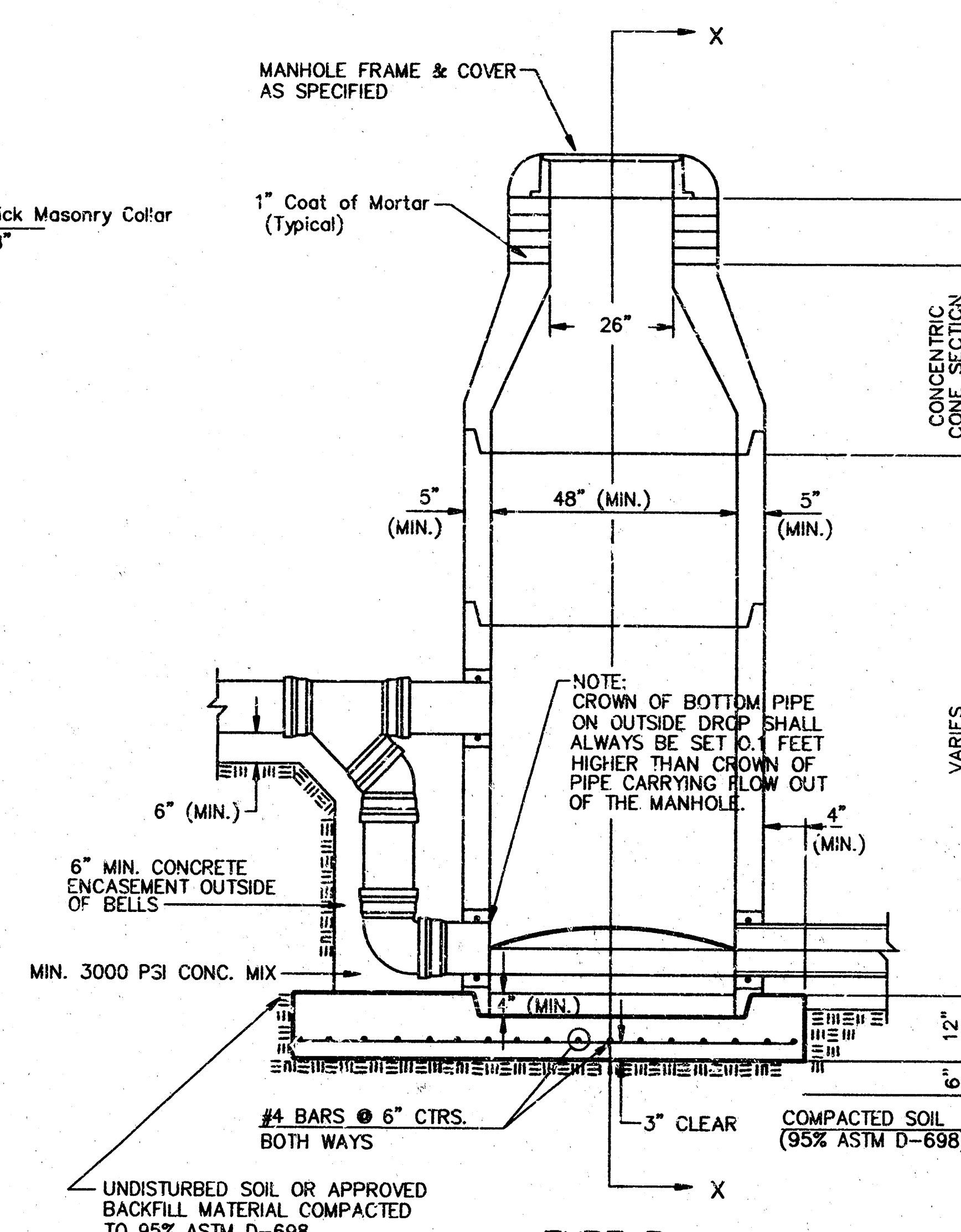
SEWER APPURTENANCES DETAILS



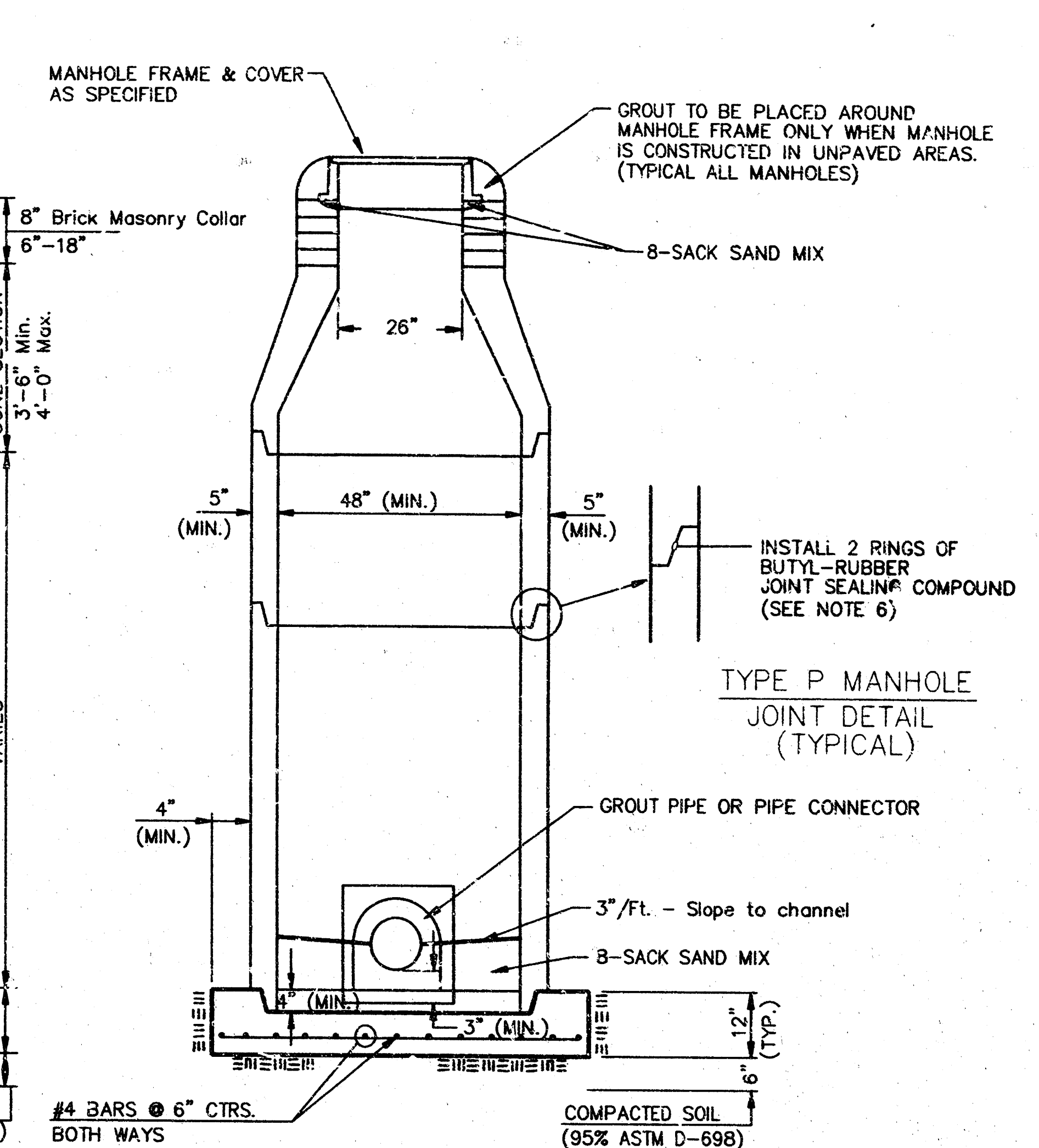
**TYPE P
STANDARD MANHOLE**



**TYPE P
INSIDE DROP MANHOLE**



**TYPE P
OUTSIDE DROP MANHOLE**



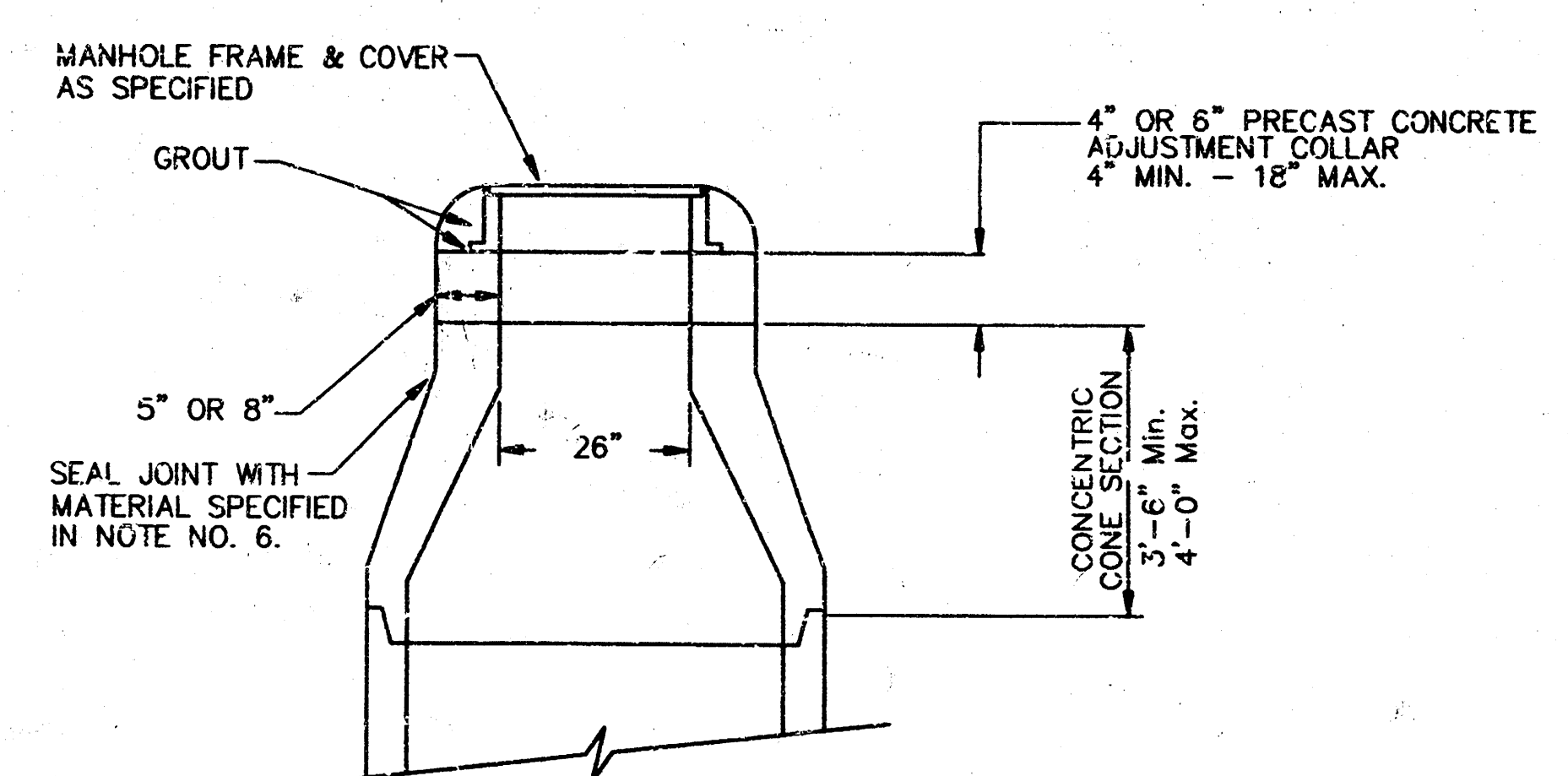
**SECTION X
(TYPICAL)**

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 TMEC SERIES 86 HI-BUILD EPOXYLINE, DRY THICKNESS OF 8 MILS (MIN.)
- EXTERIOR MANHOLE WALLS SHALL BE COATED WITH 1 COAT MOBILARMA 833 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 AS SPECIFIED IN THE CITY STANDARD PAVING SPECIFICATIONS USING CITY CONCRETE PAYMENT 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.
- 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.
- 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 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 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 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.
- 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.
- 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.



**ALTERNATE CONSTRUCTION
IN UNPAVED AREAS**

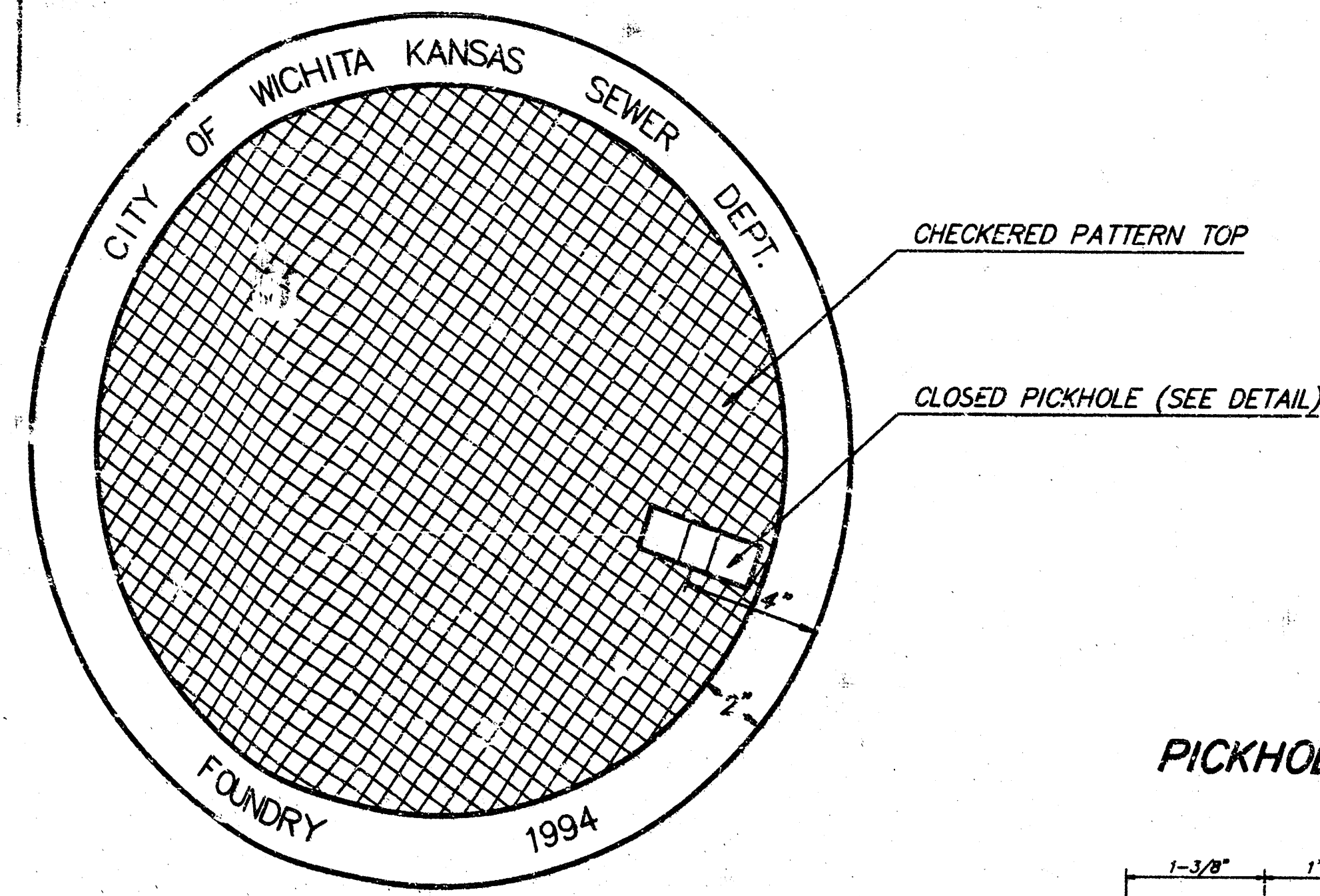
CITY OF WICHITA					
STD. MANHOLE DETAILS					
& SEWER APPURTENANCES DETAILS					
BAUGHMAN COMPANY P. A.					
ENGINEERING, SURVEYING, & PLANNING					
318-262-7271 • 315 ELLIS • WICHITA, KANSAS 67211					
PROJECT NUMBER					
673 PPS (607861)					
DESIGN	DRAWN	APPROVED	DATE	SCALE	SHEET
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					3

96-08-E465
LAW 4 PMH

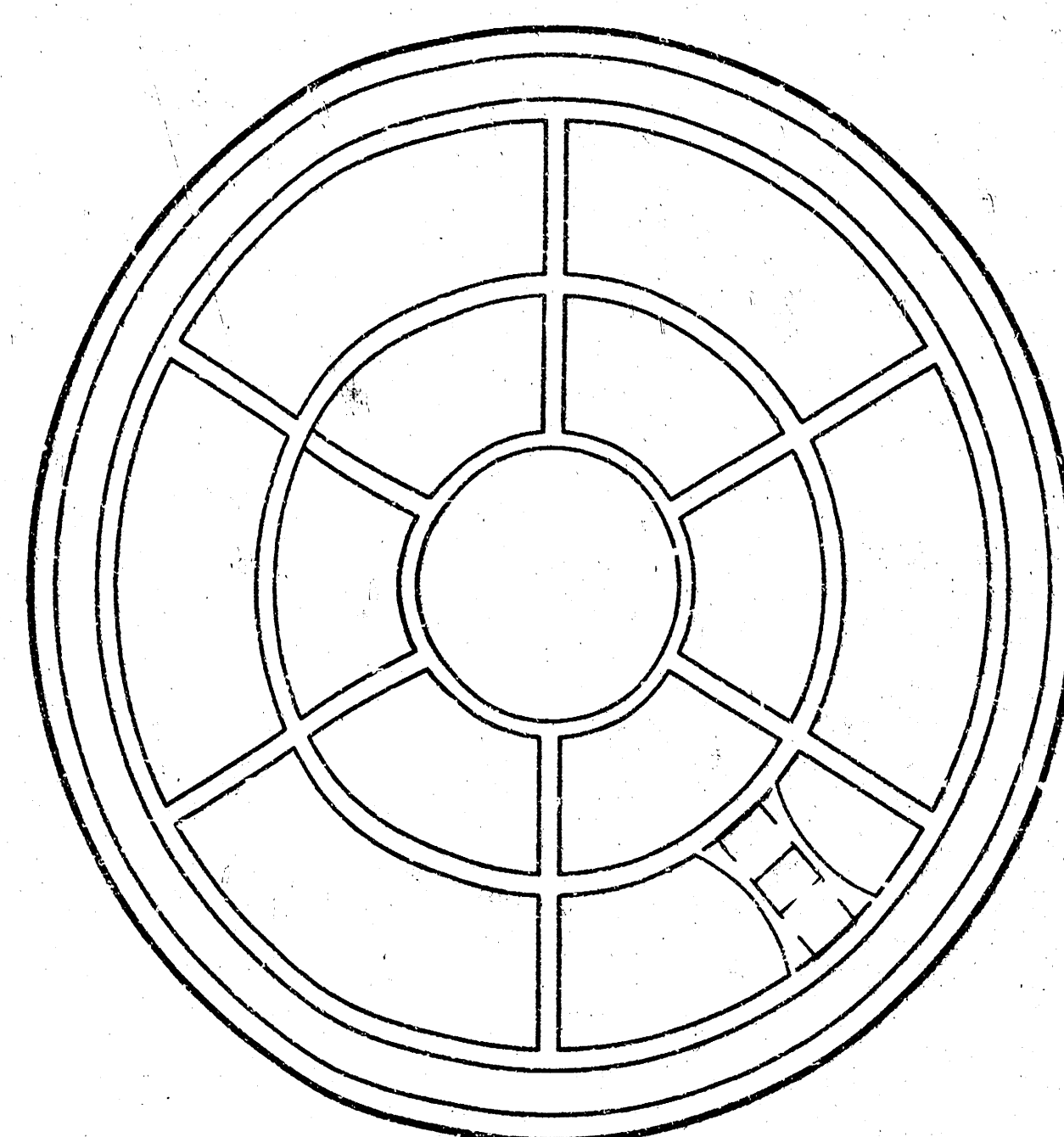
MANHOLE FRAME AND COVER DETAIL

ADOPTED AS STANDARD DESIGN BY
CITY OF WICHITA, KANSAS

MANHOLE COVER
Weight = 180 Lbs.

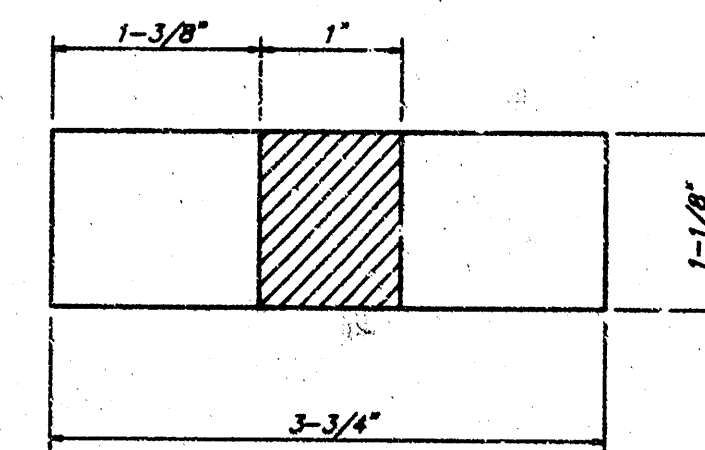


TOP VIEW

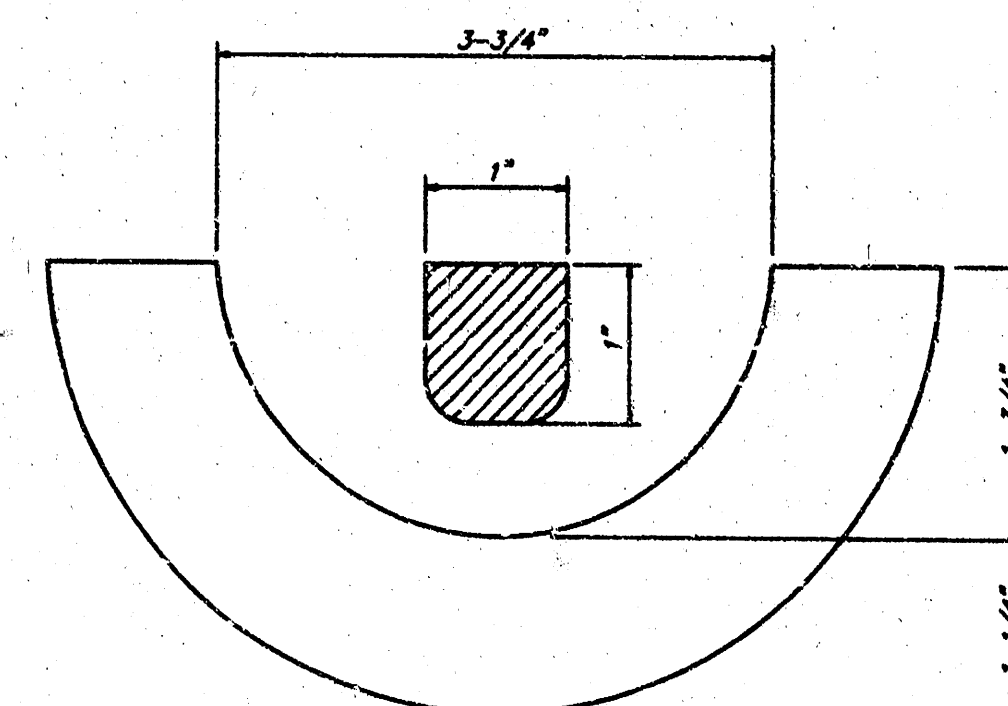


BOTTOM VIEW

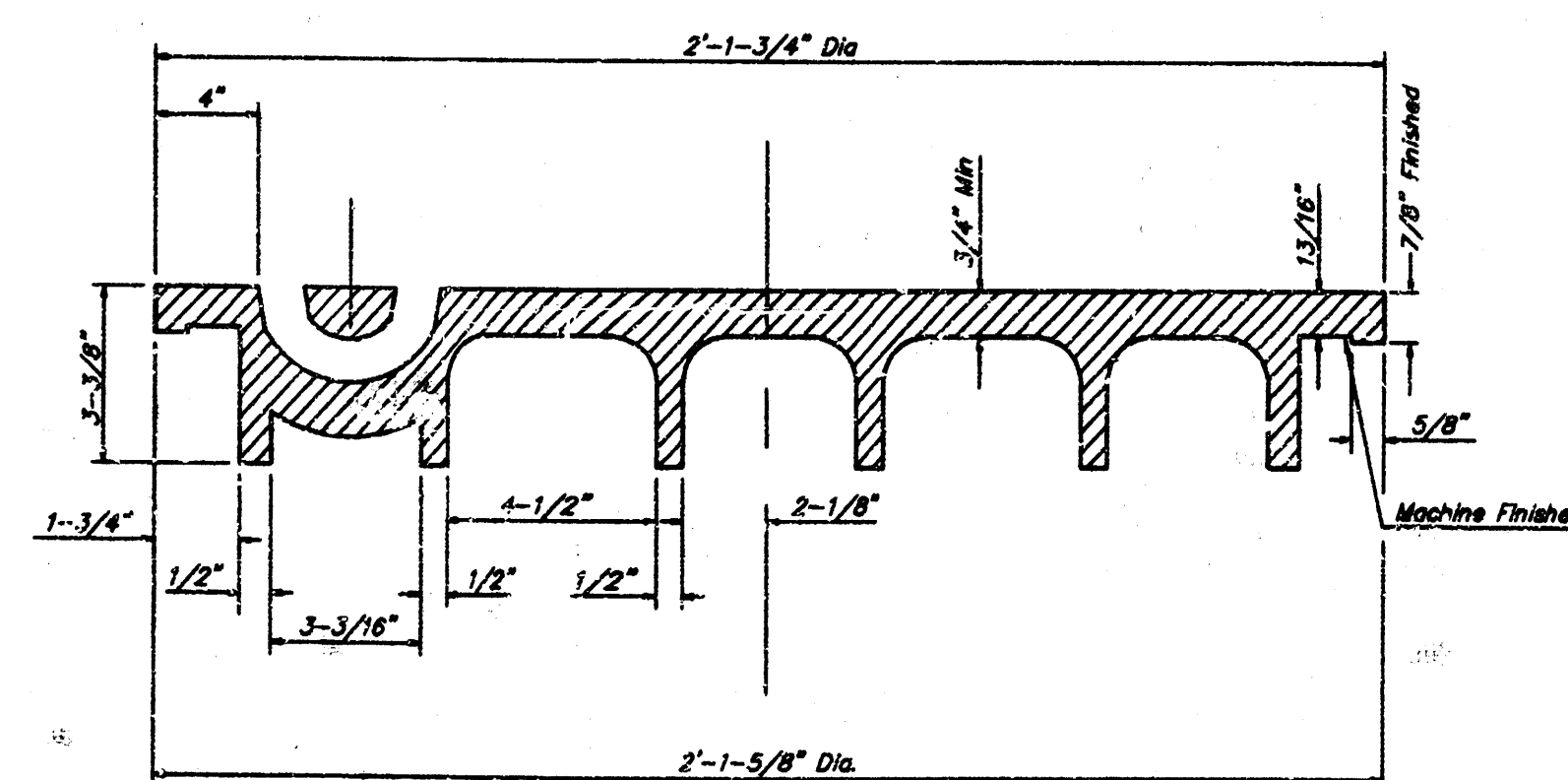
PICKHOLE DETAIL



TOP VIEW

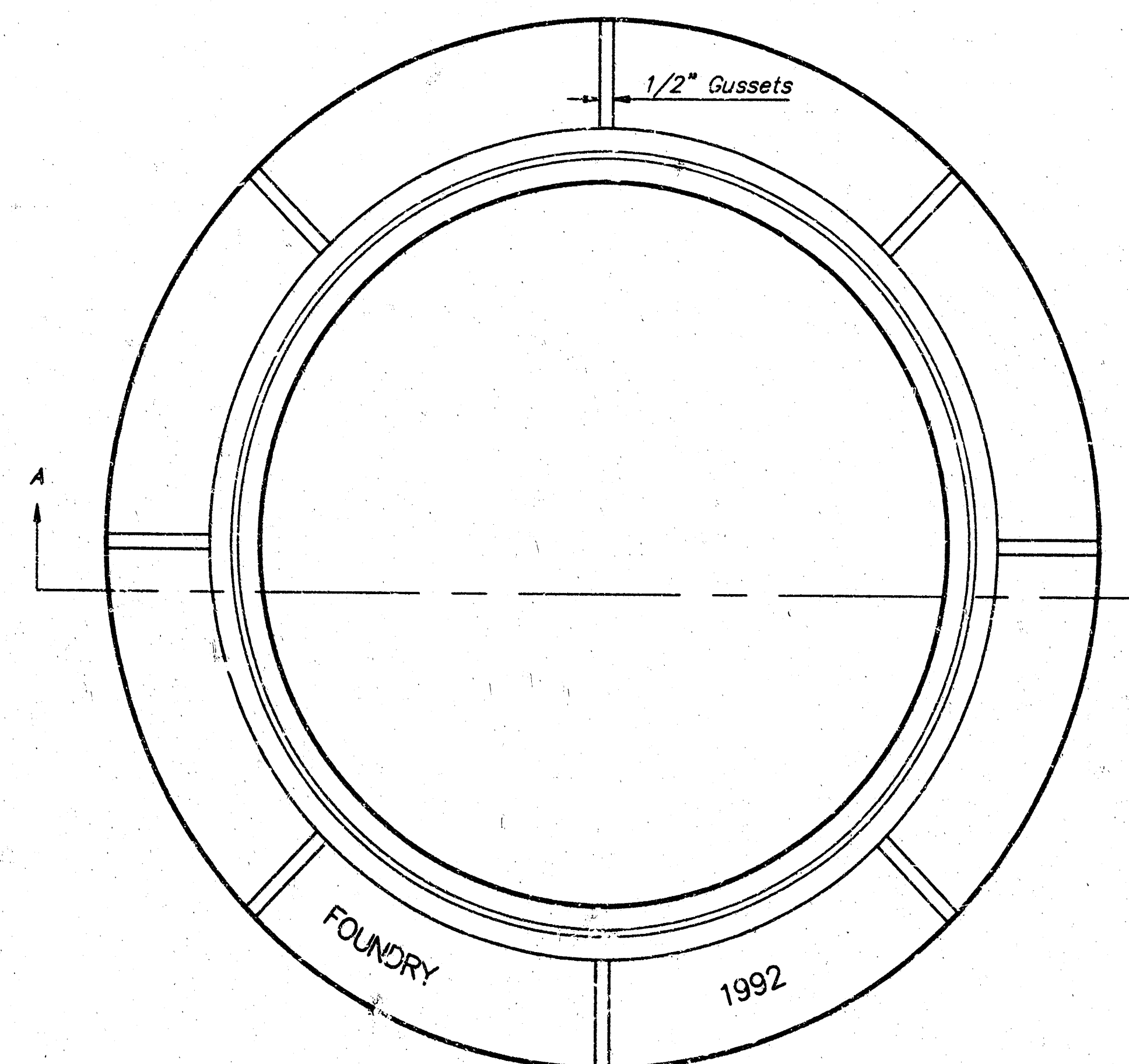


SECTION VIEW

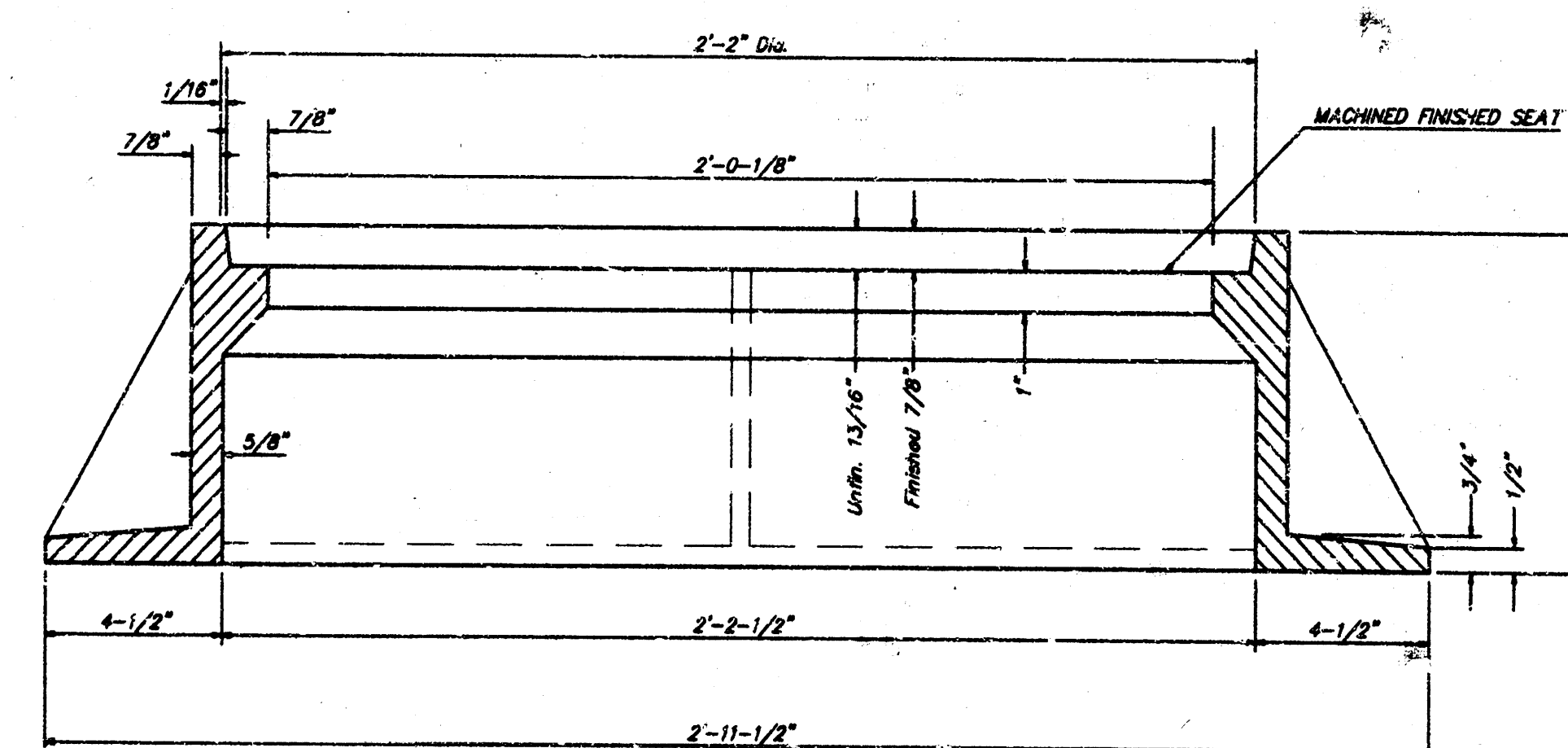


SECTION VIEW

MANHOLE FRAME
Weight = 240 Lbs.



TOP VIEW



SECTION A-A

GENERAL NOTES

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.

MANHOLE CASTINGS SHALL BE COATED WITH AN ASPHALT PAINT RESULTING IN A SMOOTH, TOUGH AND TENACIOUS COATING WHICH IS NOT BRITTLE OR TACKY.

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.

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 AS THESE SURFACES SHALL MAKE FULL CONTACT FOR THEIR FULL CIRCUMFERENCE TO PRECLUDE THE COVER FROM ROCKING IN THE FRAME.

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 INCH 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 BLOCKOUTS 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.

MANHOLE FRAME AND COVER DETAIL
ADOPTED AS STANDARD DESIGN BY
CITY OF WICHITA, KANSAS

BAUGHMAN COMPANY P.A.
ENGINEERING, SURVEYING, & PLANNING
316-282-7271 • 316-282-7272 • WICHITA, KANSAS 67211

PROJECT NUMBER
873 PPS (607881)
DESIGN: [] DRAWN: [] APPROVED: [] DATE: 11-96 SCALE: NONE
SHEET 5 OF 8

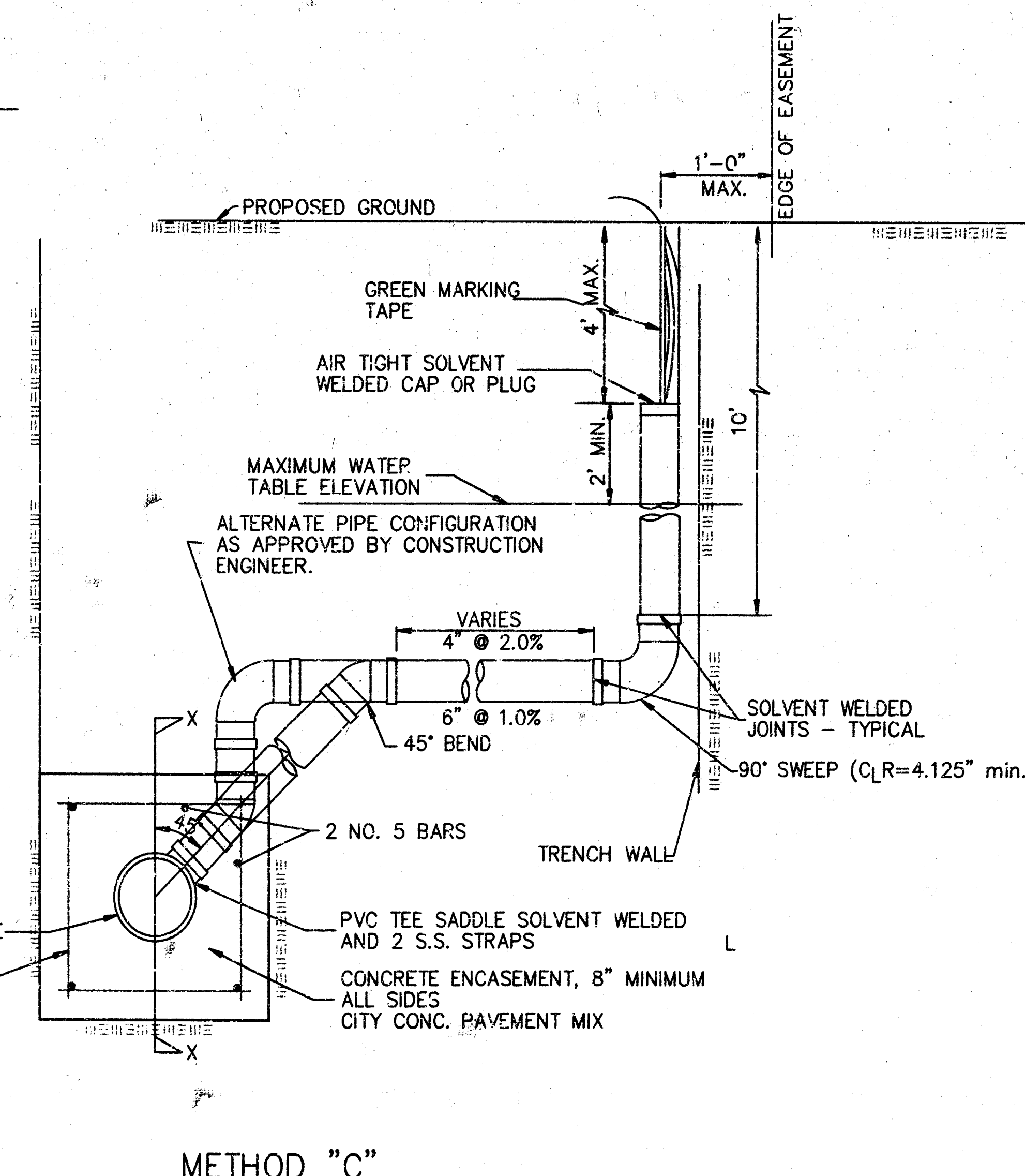
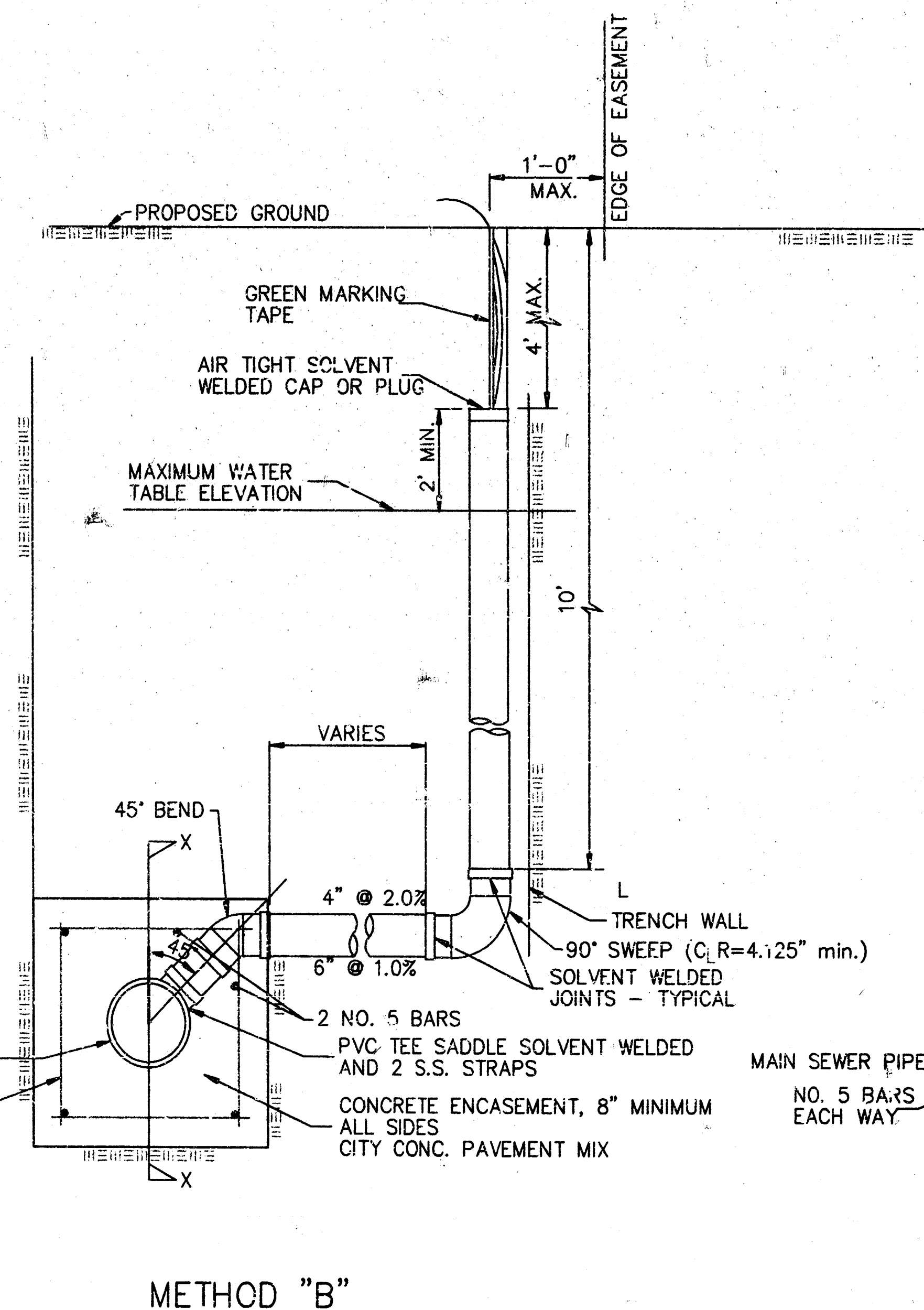
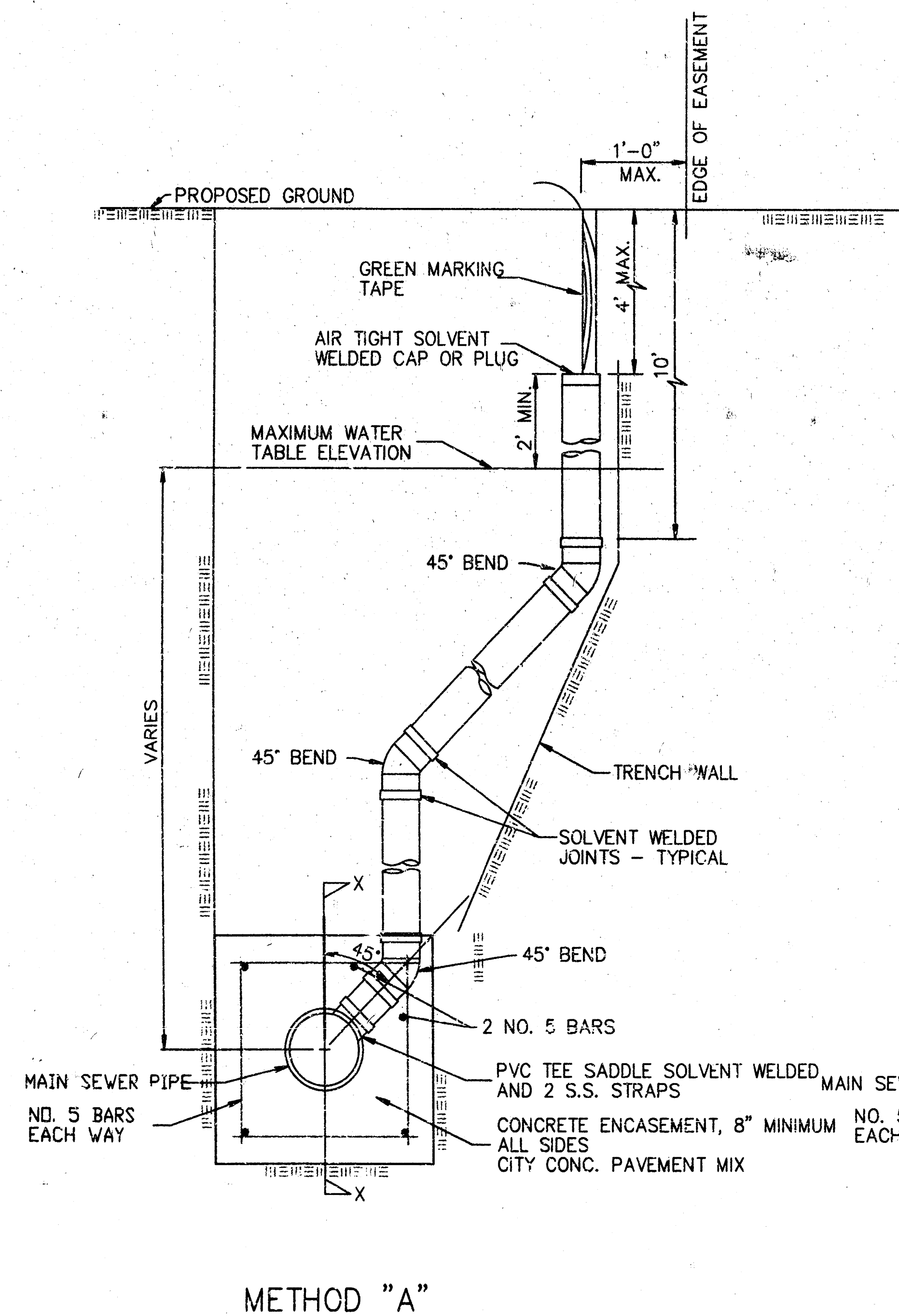
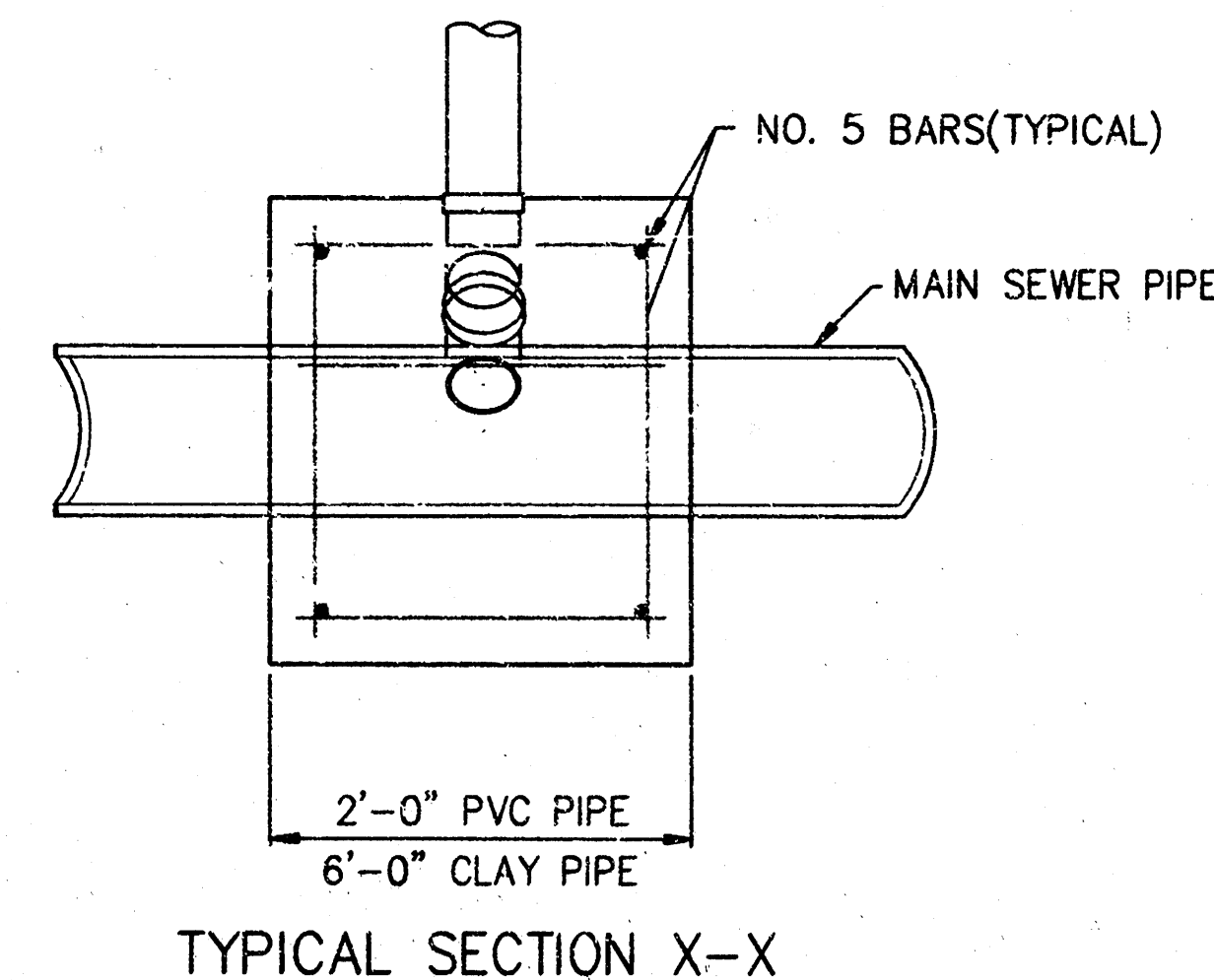
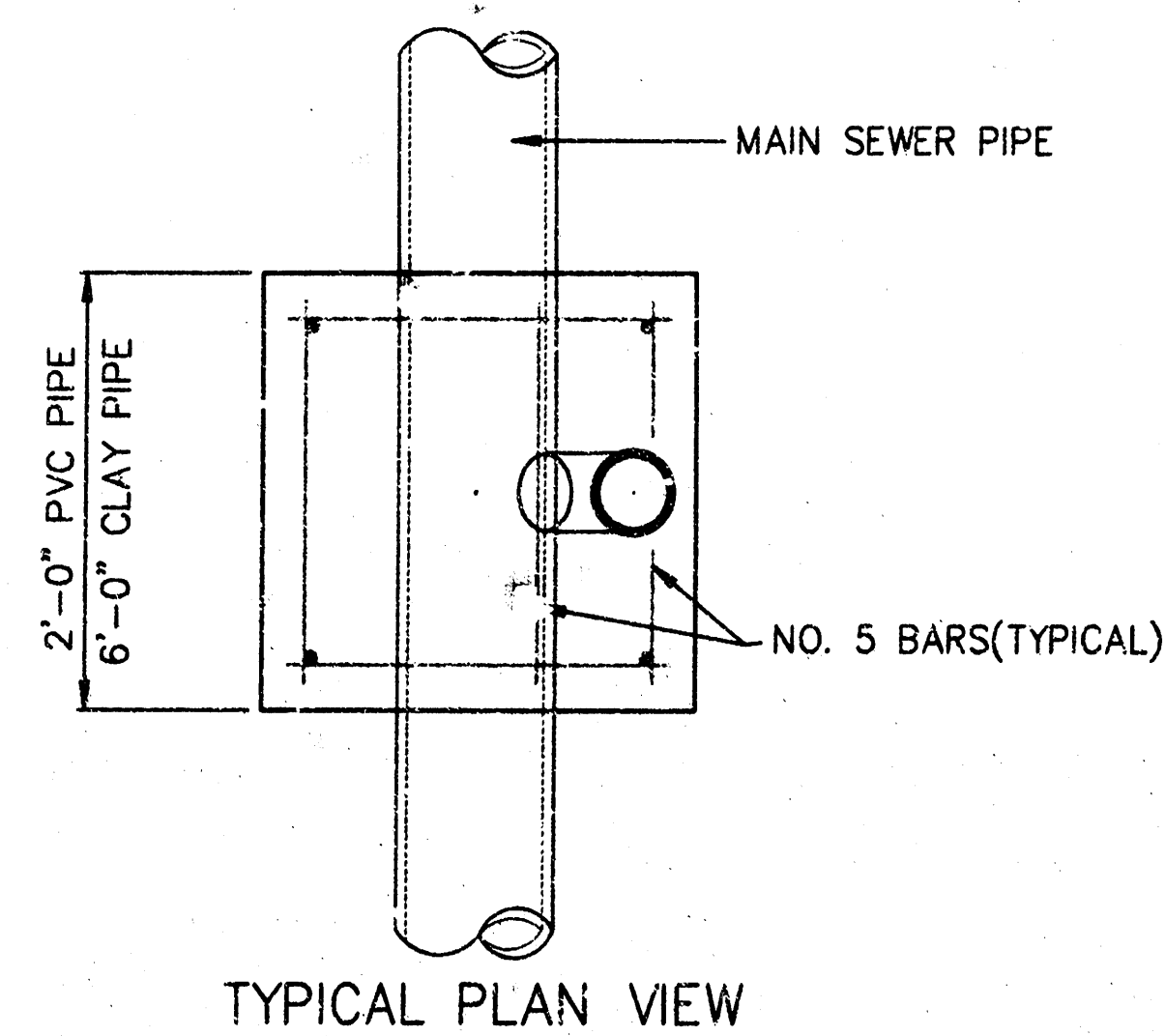
VERTICAL RISER DETAILS

ADOPTED AS STANDARD DESIGN

BY

CITY OF WICHITA, KANSAS

OCTOBER 1992



NOTE: RISER PIPE REQUIREMENTS AT MANHOLE STUBS SHALL BE SIMILAR TO THOSE SHOWN ABOVE.

GENERAL NOTES

- RISERS.** Risers shall be installed to serve all lots or tracts where the sanitary sewer main is below the water table. Risers shall also be installed to serve all lots and tracts where the sanitary sewer main depths greater than 12 feet below the proposed ground elevation. Installation of risers because of field conditions shall be approved by the Construction Engineer. The location of the risers to serve developed property shall be approved by the property owner and the Construction Engineer.
- PIPE STUBS.** Pipe stubs shall be installed in manholes where locations of manholes will provide satisfactory service connection as determined by the Construction Engineer. The vertical distance between the flowline of the manhole pipe stub and the flowline of the sanitary sewer main out of the manhole shall not exceed 2 feet. Risers shall be utilized at manhole pipe stubs as indicated in Note 1. Manhole pipe stubs shall be set such that the top of the stub is not lower than the top of the sanitary sewer main.
- SIZING.** Pipe stubs and risers shall be sized according to the plans and riser table where risers are indicated by the plans. Where risers or pipe stubs are required because of field conditions, the risers and stubs shall be six-inch diameter for commercial or industrial properties and 4" or 6" diameter for residential properties, based on lot size and sanitary sewer main depth. Sizing of risers and stubs shall be approved by the Construction Engineer prior to installation.
- RISER OR STUB MATERIAL.** Risers and stubs shall be constructed of SDR 35 PVC Pipe or Schedule 40 PVC Pipe, meeting the requirements of the latest revision of A.S.T.M. All pipe joints shall be solvent welded.
- REINFORCED CONCRETE ENCASEMENT.** Riser connections to clay pipe sanitary sewers shall be reinforced concrete encased both ways from the riser centerline. The reinforced concrete encasement shall extend three feet from the riser centerline or stop at the first sanitary sewer pipe joint within three feet of the riser centerline. Riser connections to PVC Sanitary Sewer mains shall be reinforced concrete encased one foot each way from the riser centerline. The concrete encasement shall be reinforced using reinforcing steel as shown in the appropriate drawing. The concrete shall conform to the City Standard Specifications for concrete pavement.
- BEDDING.** Bedding around the sanitary sewer riser shall be compacted Bedding Type 1 or 2. The bedding shall be placed and compacted from the depth of the sanitary sewer main to the top of the sanitary sewer riser pipe. Compacted Bedding Type 1 or 2 shall be required for all risers whether constructed in vertical wall or sloped wall trenches. Bedding material and construction practices shall be approved by the Construction Engineer prior to installation.
- SUPPORT OF RISERS.** Sanitary sewer riser pipe shall be supported during trench backfill. The riser pipe shall be held in a vertical position at all times until trench backfill and compaction has been completed. Contractor's methods for supporting and backfilling the riser pipe shall be approved by the Construction Engineer.
- PLUGGING.** The ends of the riser pipes and manhole stubs shall be plugged using an airtight solvent welded cap or plug. Cap or plug fittings shall be approved by the Construction Engineer prior to installation. Caps or plugs which do not provide an airtight seal will not be accepted.
- TOP OF THE RISER PIPE.** The top elevation of the sanitary sewer riser pipe shall be built per plan elevations, unless otherwise directed by the Construction Engineer. Where riser elevations are not shown on the plans, the top of the risers shall be set at an elevation four feet below the proposed ground surface. If ground water is encountered, the top of the riser pipe shall be set at an elevation two feet (min.) above the maximum water table elevation, regardless of the riser elevation shown on the plans.
- MARKING.** Locations of the ends of the sanitary sewer riser pipe shall be marked by fastening green colored plastic tape to the end of the riser. The tape shall be supported by a length of wooden 2 x 4, extending from the top of the riser pipe to the proposed ground surface. The green tape shall be visible and extend one foot above the proposed ground surface. The green tape shall be 4 mil Polyethylene film with a minimum width of three inches, specifically manufactured for the purpose of identification of underground sewers.
- LOCATION MEASURES.** The project inspector shall record and document the location of all risers constructed as measured from the nearest manhole, indicating the direction from the manhole, the direction and distance from the main, riser size, and elevation of the top of the riser.
- RISER LOCATION.** The riser shall be located per plan if shown. If not shown on the plan, the riser shall be located at the center of the lot, within one foot of the property side of the easement for the lot being served. All riser locations shall be approved by the Construction Engineer prior to installation.
- PAYMENT.** "Sanitary sewer risers" shall be paid for at the contract unit price per each, which price shall be full compensation for all pipe, fittings, marking tape, length of wooden 2 x 4, reinforced concrete encasement, support during backfill, backfill, labor, site restoration, and any other items necessary to complete the work.

"Manhole stubs" shall be paid for at the contract unit price per each, which shall be full compensation for all labor, material, and incidentals necessary to complete the work, including all pipe, fittings, reinforced concrete encasement, and all other items as required and listed for "Sanitary Sewer Risers".

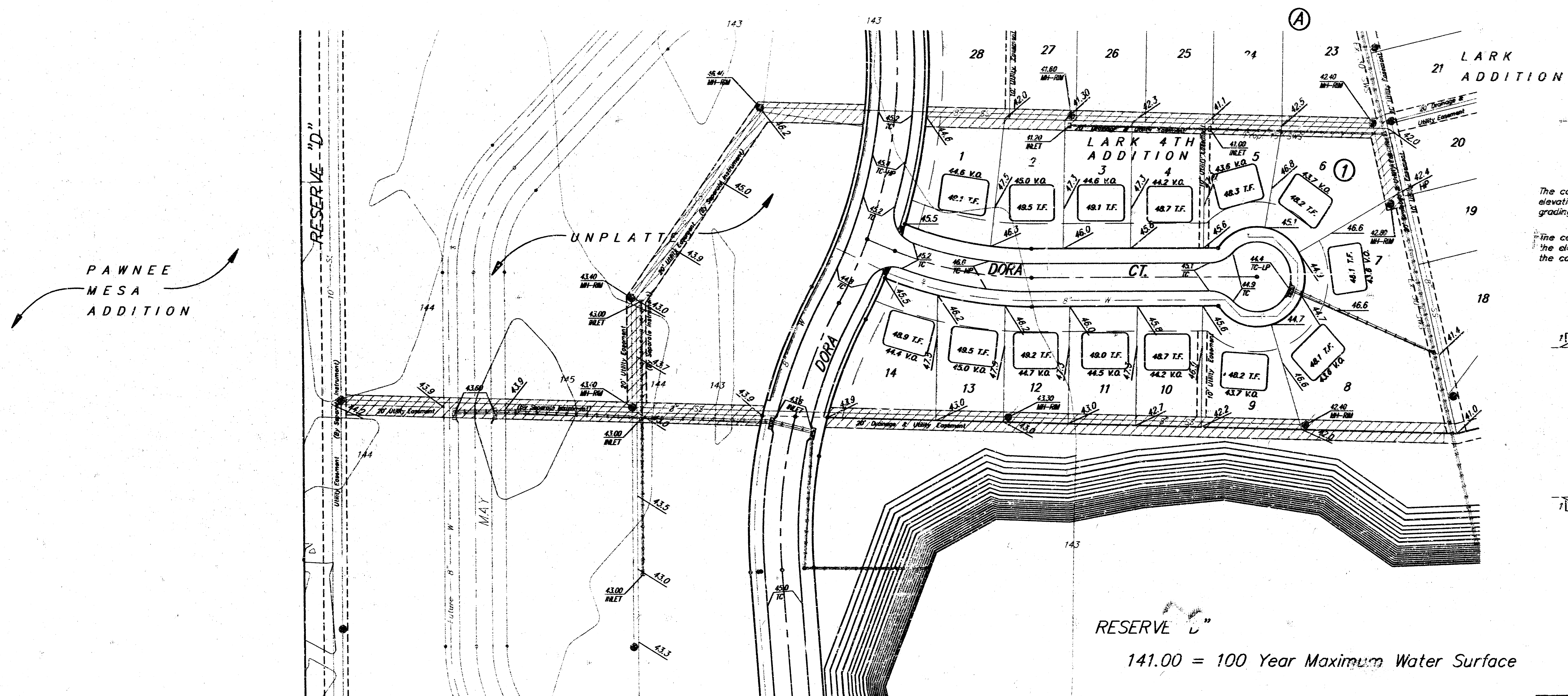
City of Wichita Standard			
Riser Details			
BAUGHMAN COMPANY P.A.			
ENGINEERING, SURVEYING, & PLANNING			
310-262-7271 • 315 ELLIS • WICHITA, KANSAS 67211			
PROJECT NUMBER			
673 PPS (807881)			
DESIGN	DRAWN	APPROVED	DATE
			11-96
SCALE		NONE	
SHEET		6	
OF		8	

BENCHMARKS:

BM #1 - 1" On Top of Curb Located on the East Side of Shefford 12.5' South of the North Line of Pawnee Mesa Addition. Elevation = 143.56 (City Datum)

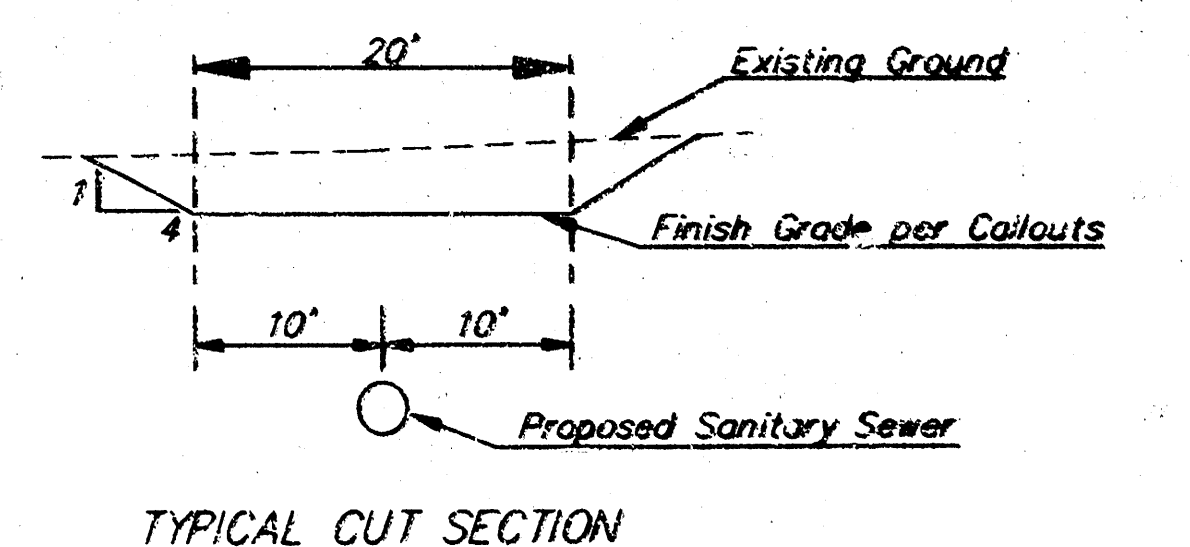
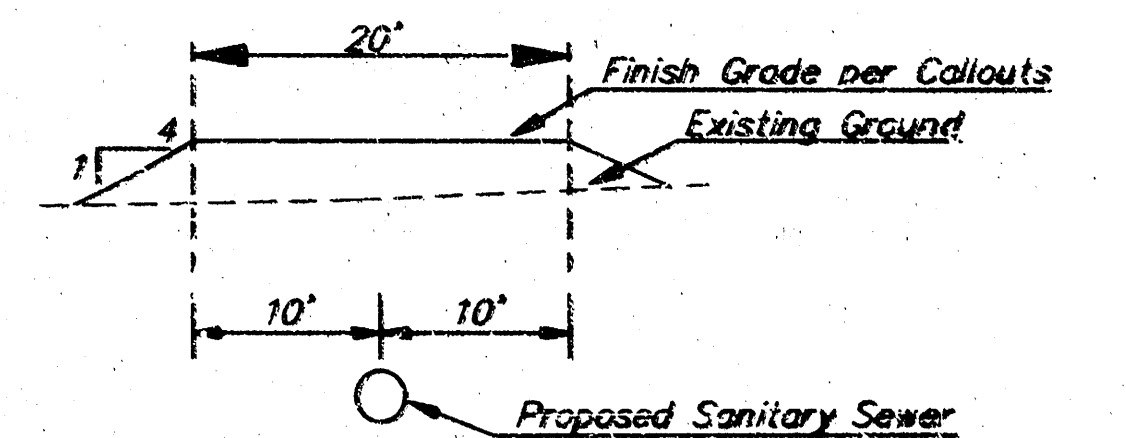
BM #2 - R.R. Spike in East Side of P.P. Located 112.5' North of the North R/W of Dora and 41.5' East of the C of 119th Street West. Elevation = 145.26 (City Datum)

Scale: 1" = 60' Horizontal
• = Iron



The contractor shall grade the easements as shown to the elevations given on the easement grading plan. All costs for grading shall be incidental to the Easement Grading Bid Item.

The contractor shall 'straight' grade the easements between the elevations given. Where a callout designates 'Match', the contractor will grade to the existing ground elevation.

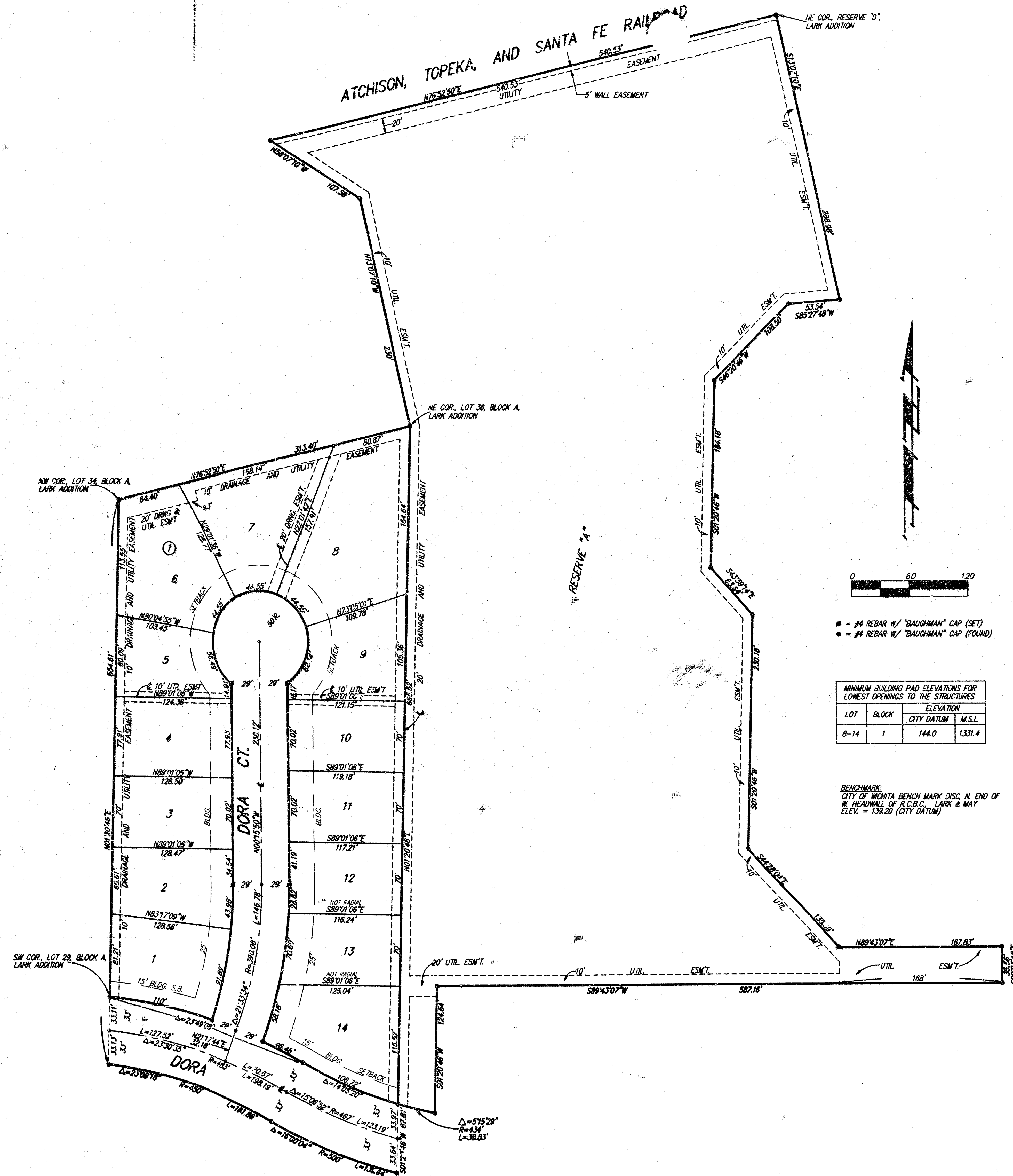


EASEMENT GRADING

LARK 4TH ADDITION			
ESMT. GRADING PLAN			
SANITARY SEWER			
BAUGHMAN COMPANY P.A.			
ENGINEERING, SURVEYING, & PLANNING			
315-262-2271 • 315 ELLIS • WICHITA, KANSAS 67211			
PROJECT NUMBER			
073 PPS (007861)			
DESIGN	DRAWN	APPROVED	DATE
GP	TAC		11-96
SCALE			1" = 40'
SHEET			7
OF			8

LARK 4TH ADDITION

WICHITA, SEDGWICK COUNTY, KANSAS



State of Kansas) SS We, Baughman Company, P.A., Surveyors in
Sedgwick County) do hereby certify that we have surveyed
and platted "LARK 4TH ADDITION", Wichita, Sedgwick County, Kansas and
that the accompanying plat is a true and correct exhibit of the
property surveyed, described as follows: A tract of land in the NW1/4
of Sec. 31, Twp. 27-S, R-1-W of the 6th P.M., Sedgwick County,
Kansas, described as and being a replat of the following: Lots 29,
30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, and 45,
Block A, Lark Addition, Wichita, Sedgwick County, Kansas, together
with Reserve "D" as platted in said Lark Addition, together with
Dora Ct. as platted in said Block A, and together with that part of
Dora as platted in said Lark Addition lying east of the west line of
said Lot 29 as extended south to the south line of said Dora.

Existing public easements and dedications being vacated by
virtue of K.S.A. 12-512(b).
Baughman Company, P.A.

Gregory F. Severns
Surveyor

Know all men by these presents that we,
the undersigned, have caused the land in the surveyors certificate to be
platted into Lots, a Block, Streets, and a Reserve to be known as "LARK 4TH
ADDITION", Wichita, Sedgwick County, Kansas. The utility easements are
hereby granted as indicated for the construction and maintenance of all
public utilities. The drainage easement is hereby granted as indicated
for drainage purposes. The drainage and utility easements are hereby
granted as indicated for drainage purposes and for the construction and
maintenance of all public utilities. The wall easement is hereby granted as
indicated for the construction and maintenance of a private wall and
utility main lines and service lines shall be allowed to cross this easement.
The streets are hereby dedicated to and for the use of the public.
Reserve "A" is hereby reserved for drainage purposes, lakes, landscaping,
sidewalks, gazebos, and utilities as confined to easements. Reserve "A"
shall be owned and maintained by the Homeowners Association for the
addition. The Minimum Building Pad Elevations for the lowest opening
to the structures shall be as shown on the face of the plat.

Paul E. Kelsey

State of Kansas) SS The foregoing instrument acknowledged be-
Sedgwick County) fore me, this _____ day of _____, 1996, by Paul E. Kelsey,
a single person.

My App't. Exp. _____

We, the undersigned, holders of a mortgage
on the above described property, do hereby consent to this plat of
"LARK 4TH ADDITION", Wichita, Sedgwick County, Kansas.

State Bank of Colwich

State of Kansas) SS The foregoing instrument acknowledged be-
Sedgwick County) fore me, this _____ day of _____, 1996, by
_____ of the State Bank of Colwich, on
behalf of the bank.

My App't. Exp. _____ Notary Public

This plat of "LARK 4TH ADDITION", Wichita,
Sedgwick County, Kansas has been submitted to and approved by
the Wichita-Sedgwick County Metropolitan Area Planning Commission,
Wichita, Kansas.
Dated this _____ day of _____, 1996.
Wichita-Sedgwick County Metropolitan Area Planning Commission

Susan Osborne-Howes
Chair

Marvin S. Krout
Secretary

This plat approved and all dedications
shown hereon accepted by the City Council of the City of Wichita,
Kansas, this _____ day of _____, 1996.

Bob Knight
Mayor

Pat Burnett
City Clerk

Entered on transfer record this _____ day
of _____, 1996.

Susan E. Crockett-Spoon
County Clerk

State of Kansas) SS This is to certify that this plat has been
Sedgwick County) filed for record in the office of the Register of Deeds, this _____ day
of _____, 1996, at _____ o'clock _____ M., and is duly recorded.

Pat Kettler
Register of Deeds
8/8
Deputy