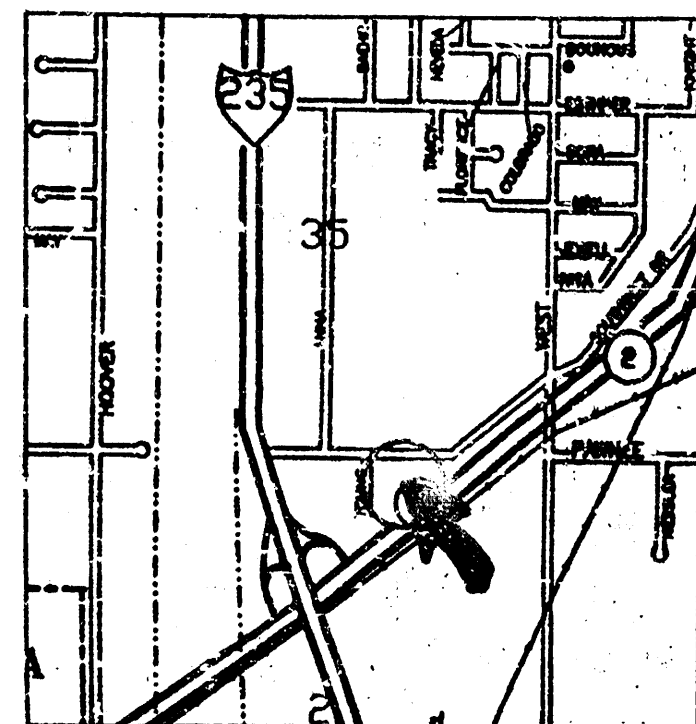
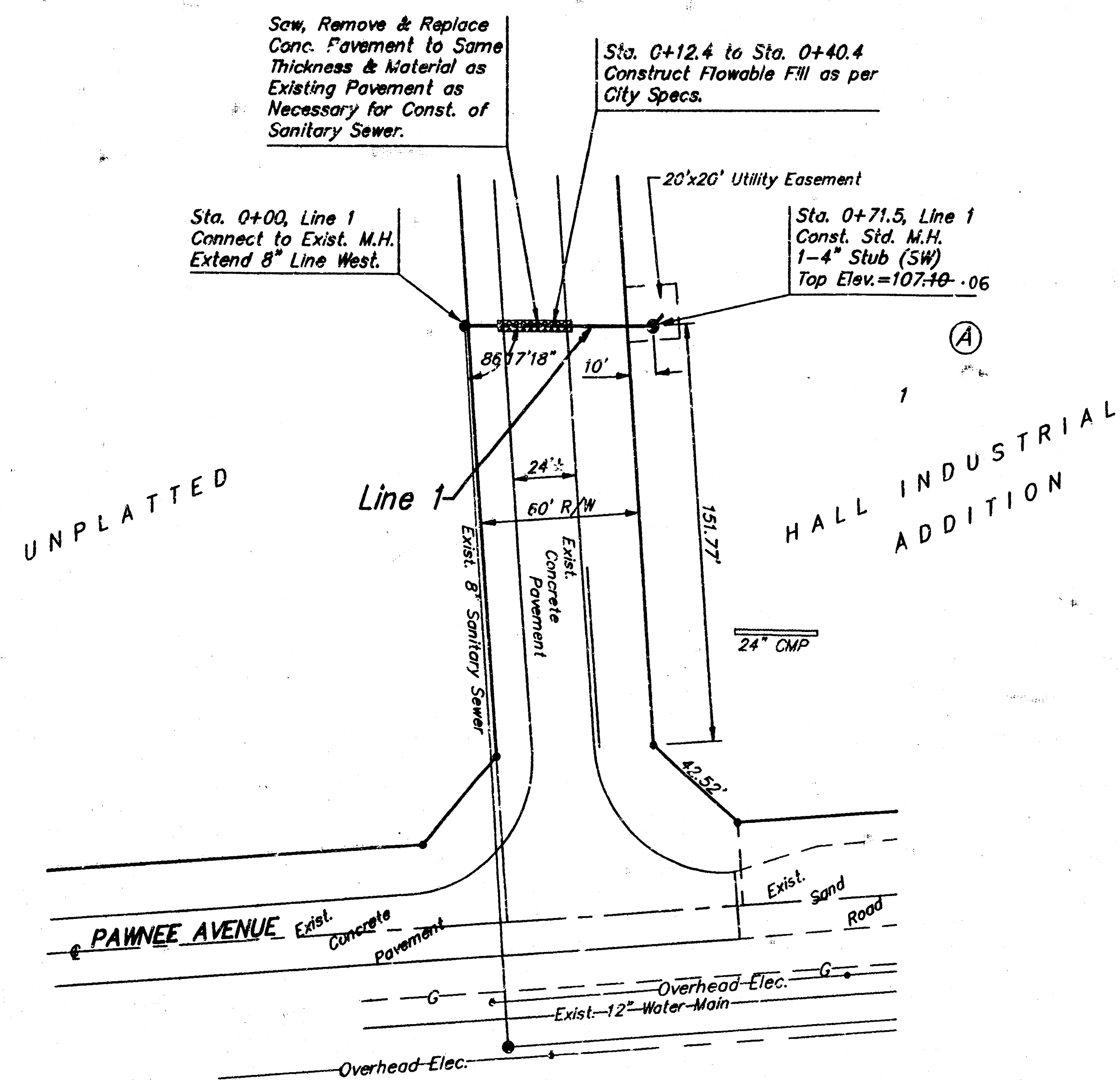


Benchmark
 "V" Notch on S. Rim of Manhole, 45.8' N. & 2' E.
 of Cross on the N. Line of the N.E. 1/4, Sec. 2,
 Twp. 28-S, R-1-W, Said Cross Being 1549.1' E.
 of the N.W. Corner of said N.E. 1/4, 2-28-1W
 Elev. = 107.33 City Datum



Site Location



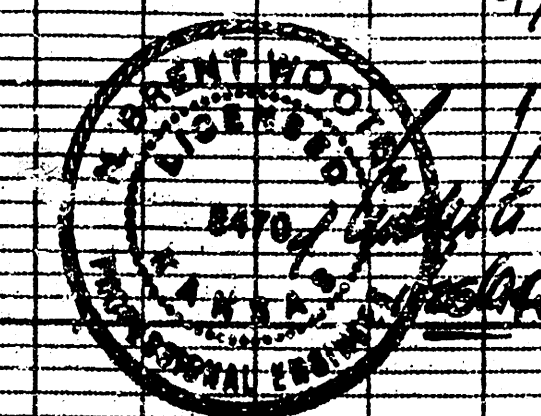
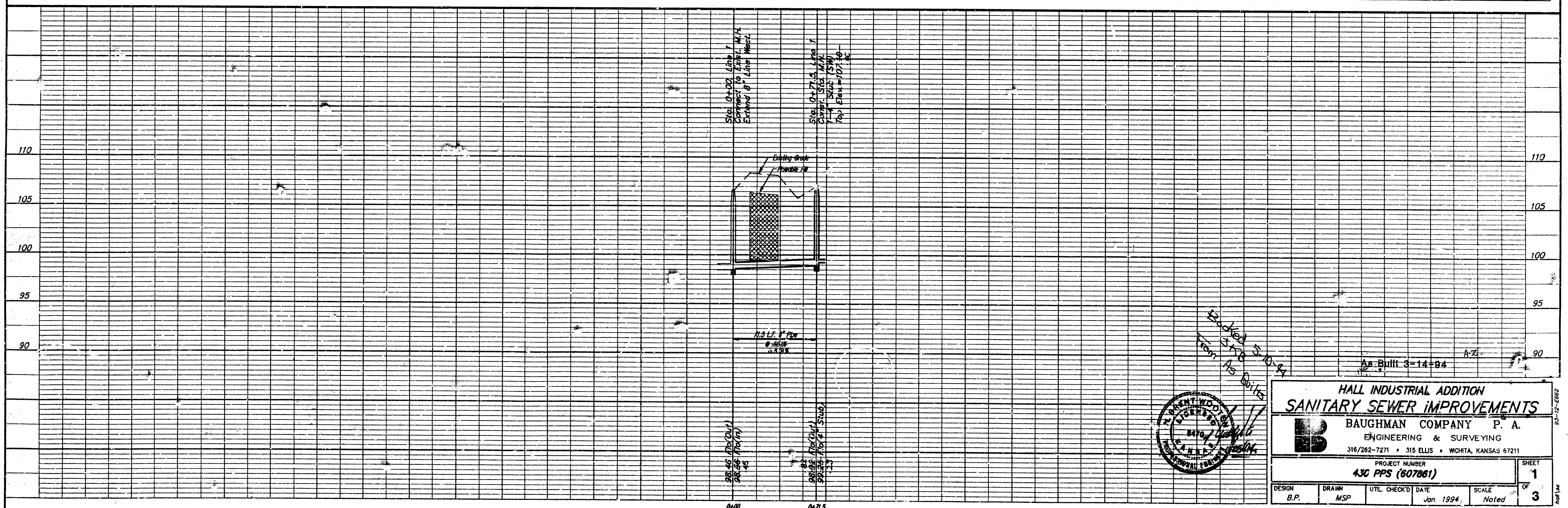
Scale: 1" = 40' Horizontal
 1" = 5' Vertical
 • = Iron

APPROVED AS NOTED
 BY CITY ENGINEER OF WICHITA
 Sanitary Sewers VRH 1/26/94

Storm Sewers _____
 Driveway Approaches _____
 Water Mains _____
 Paving _____

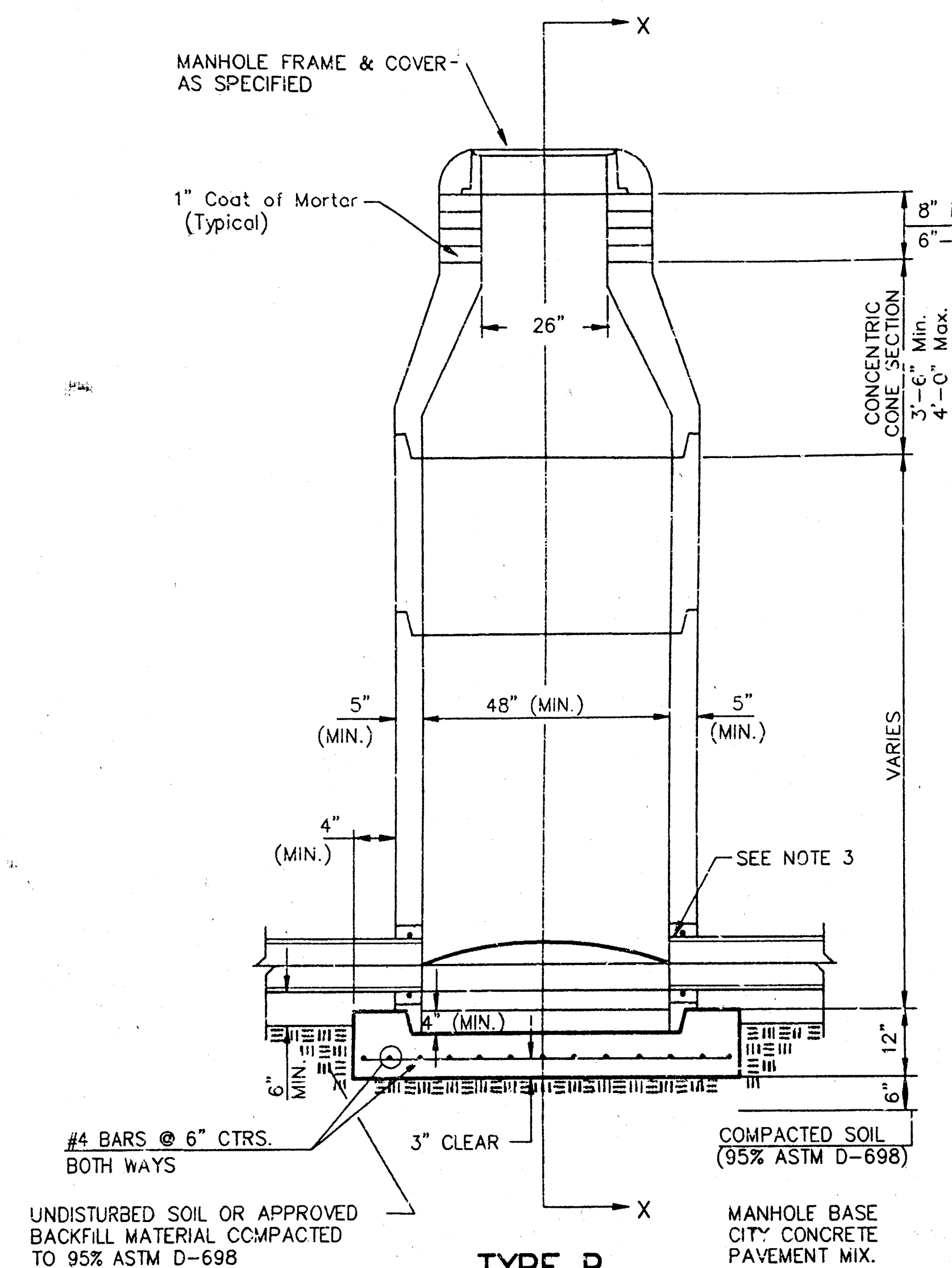
NOTE TO CONTRACTORS
 Inspection and testing for this project is to be provided by a Licensed Consulting Engineering firm under contract with the Owner/Developer. Said inspection is to be in accordance with the City of Wichita standard construction engineering practices and certified by a Licensed Professional 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.

NOTE: All Construction to be in Accordance to City of Wichita Standard Specifications.

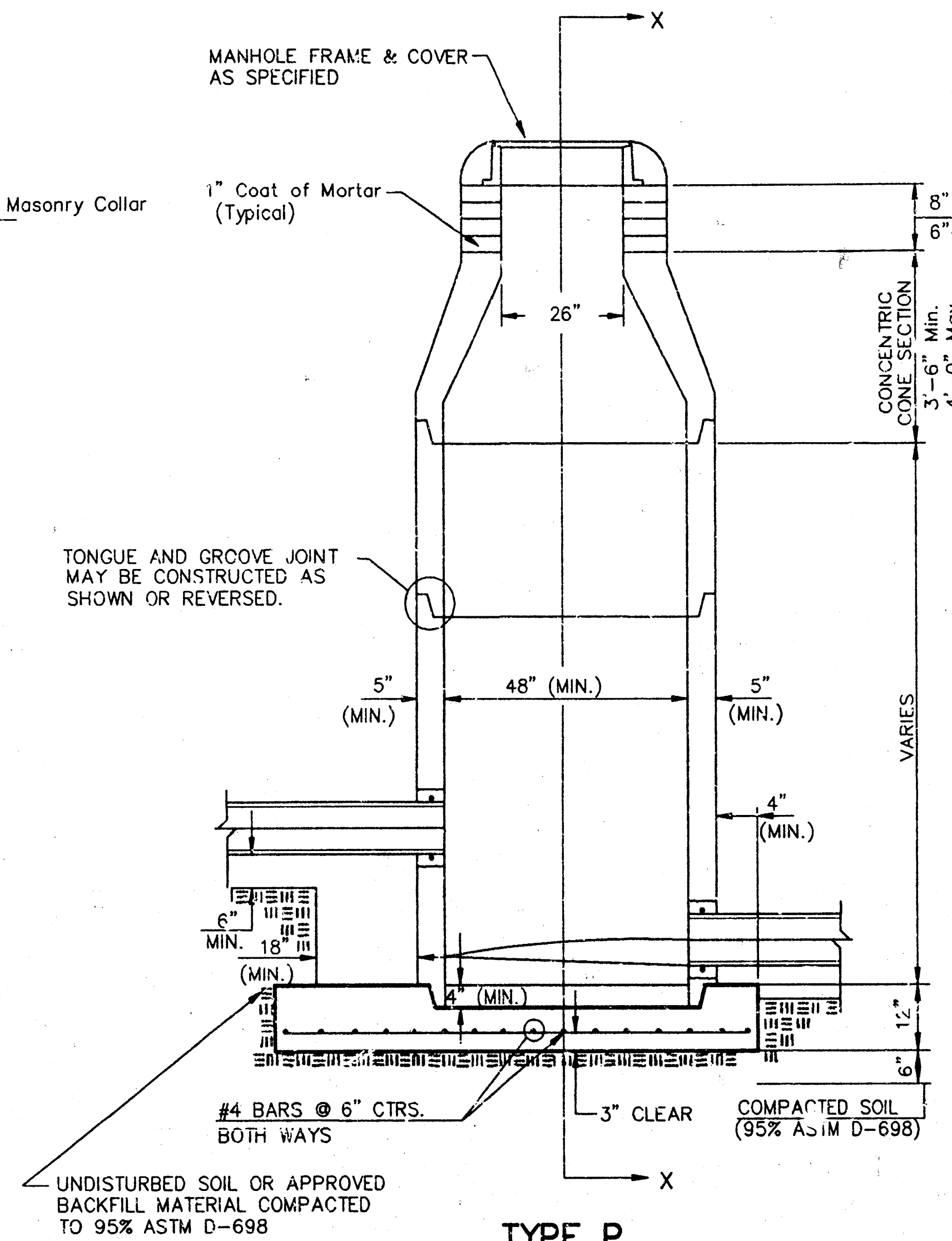


HALL INDUSTRIAL ADDITION			
SANITARY SEWER IMPROVEMENTS			
BAUGHMAN COMPANY P. A.			
ENGINEERING & SURVEYING			
316/262-7271 • 315 ELLIS • WICHITA, KANSAS 67211			
PROJECT NUMBER 430 PPS (607861)			
DESIGN	DRAWN	URL CHECKED	DATE
B.P.	MSP		Jan. 1994
SCALE			Noted
SHEET			1
OF			3

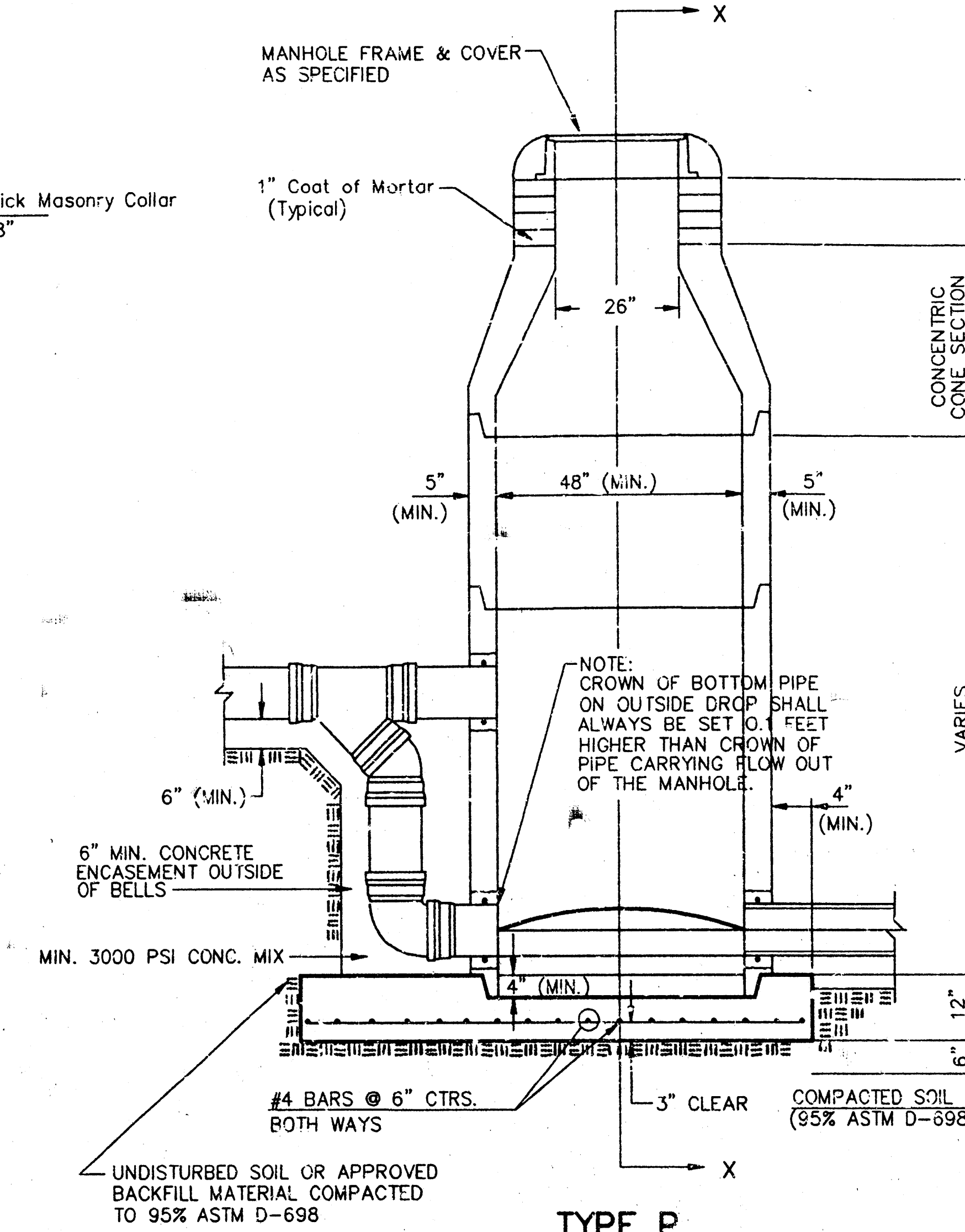
SEWER APPURTENANCES DETAILS



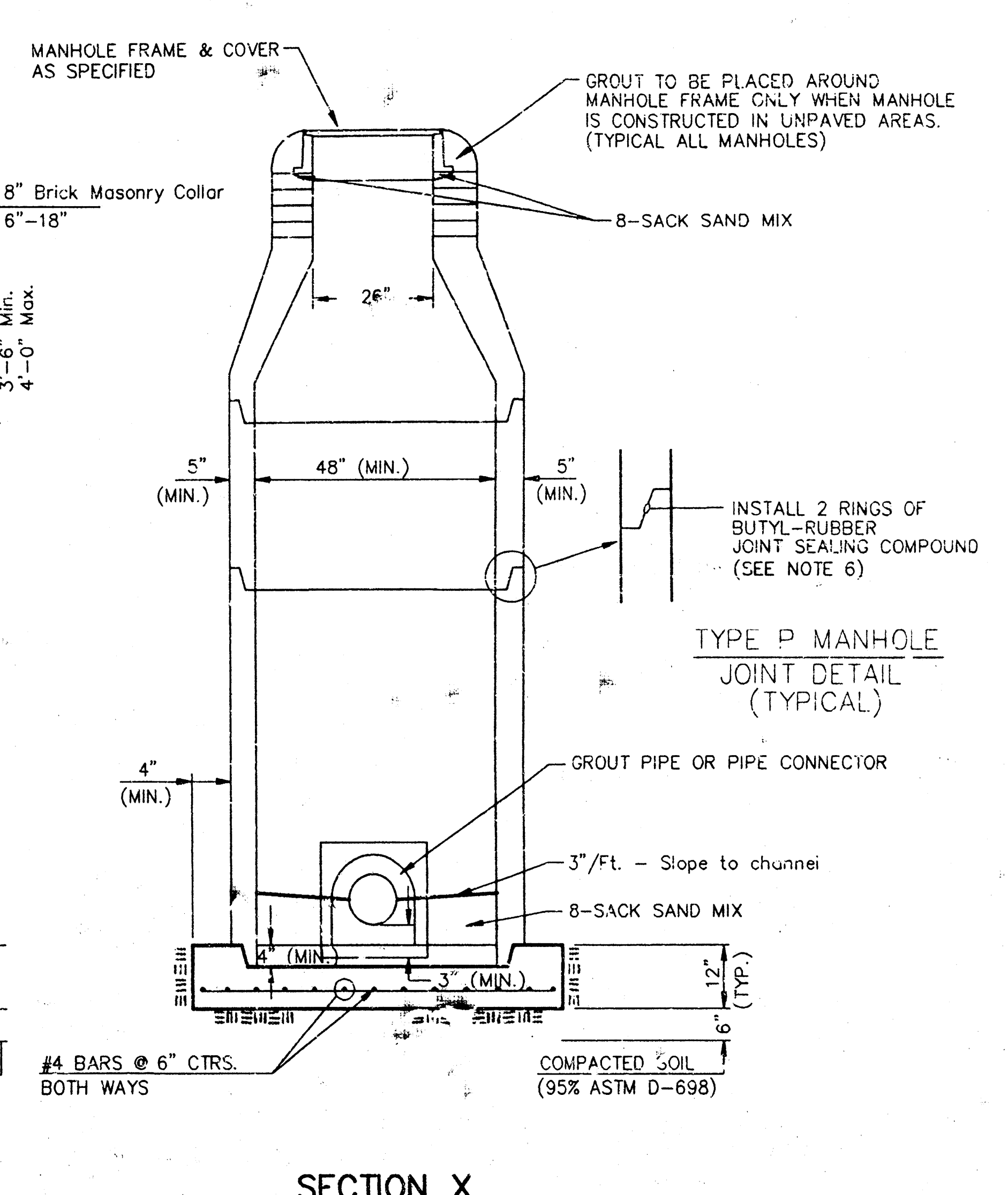
**TYPE P
STANDARD MANHOLE**



**TYPE P
INSIDE DROP MANHOLE**



**TYPE P
OUTSIDE DROP MANHOLE**



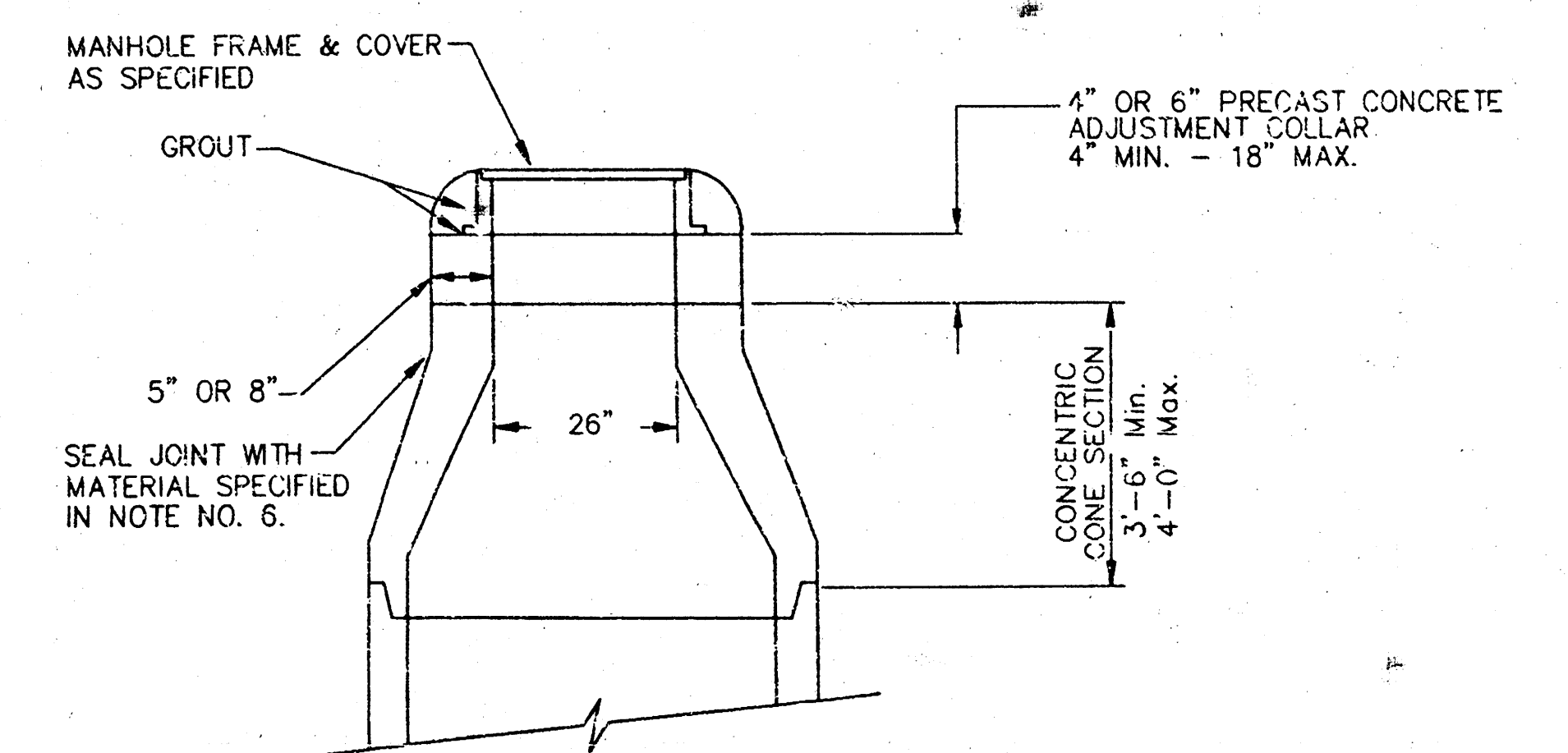
**SECTION X
(TYPICAL)**

GENERAL NOTES

- ALL PRECAST CONCRETE MANHOLE SECTIONS SHALL CONFORM TO THE LATEST REVISIONS OF A.S.T.M. C47, 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 TNECO SERIES 66 HI-BUILD EPOXOLINE, 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 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.

- 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 NEAR 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.
- 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.

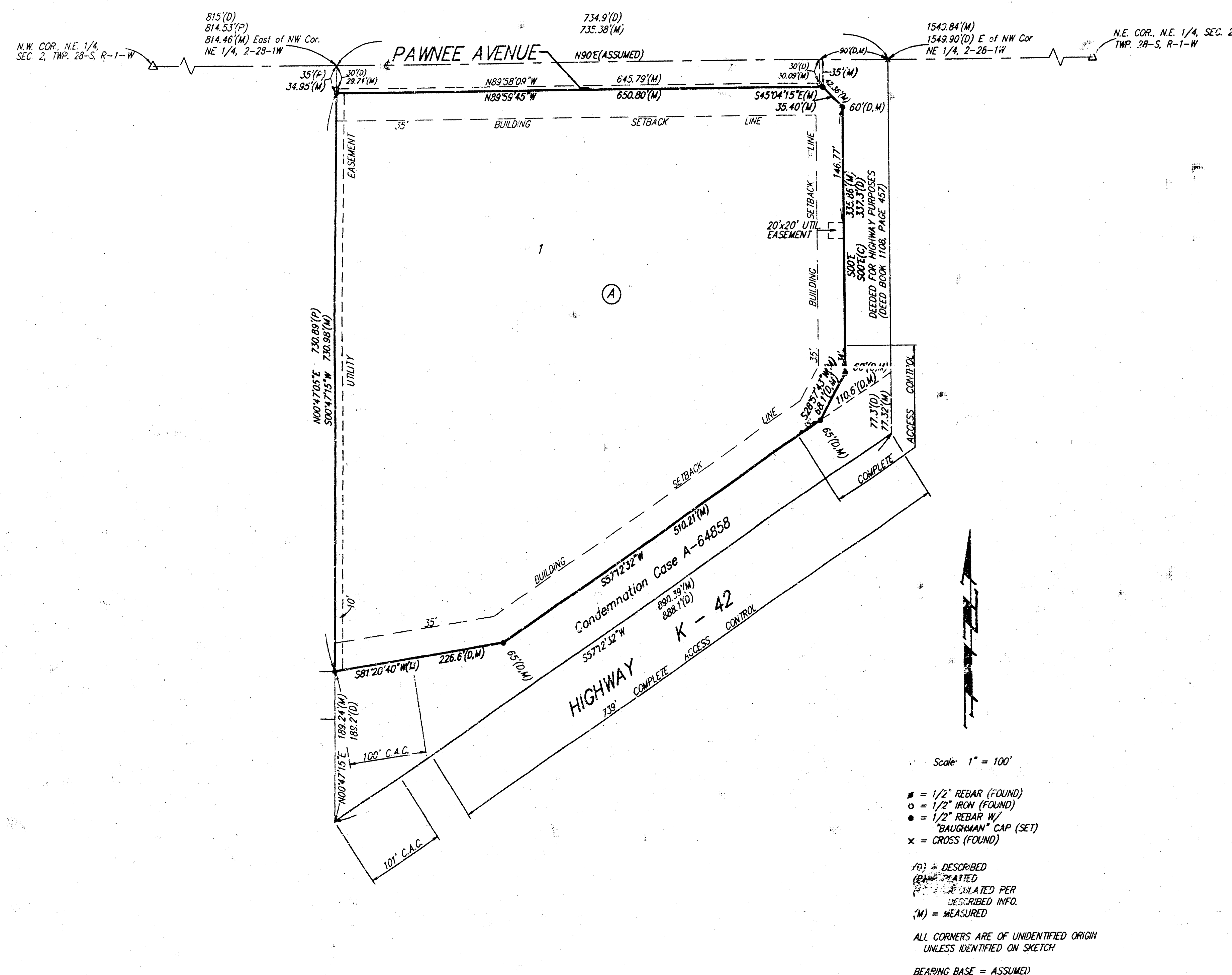


**ALTERNATE CONSTRUCTION
IN UNPAVED AREAS**

CITY OF WICHITA, KANSAS				
STANDARD MANHOLE DETAILS				
SEWER APPURTENANCES DETAILS				
BAUGHMAN COMPANY P. A.				REV.
ENGINEERING & SURVEYING				NOV.
316/262-7271 • 315 ELLS • WICHITA, KANSAS 67211				1993
PROJECT NUMBER				SHEET
436 PPS (607861)				2
DESIGN	DRAWN	APPROVED	DATE	SCALE
			Jan. 1994	None
				OF 3

HALL INDUSTRIAL ADDITION

WICHITA, SEDGWICK COUNTY, KANSAS



State of Kansas) SS We, Baughman Company P.A., Surveyors in
County of Sedgwick) do hereby certify that we have surveyed
and platted "HALL INDUSTRIAL ADDITION" to Wichita, Sedgwick County,
Kansas, and that the accompanying plat is a true and correct exhibit
of the property surveyed, and described as follows: A tract in the
Northeast Quarter of Section 2, Township 28 South, Range 1 West of
the Sixth Principal Meridian, Sedgwick County, Kansas, described as
follows: Beginning 815 feet east of the Northwest corner of said
Northeast Quarter, being the Northeast corner of Vanderhoff Gardens;
thence east along the North line of said Northeast Quarter, 734.9 feet;
thence south at right angles to the North line of said Section, to Northwest
right-of-way line of Highway #42 as condemned in Case 101403; thence
southwest along Northwest right-of-way line of said Highway to the
Southeast corner of Vanderhoff Gardens; thence north along the East line
of Vanderhoff Gardens, 955.19 feet more or less, to point of beginning;
EXCEPT the north 30 feet for road, AND EXCEPT a tract of land for
highway right-of-way in the Northeast Quarter of Section 2, Township 28
South, Range 1 West described as follows: Beginning at a point on the
present Northwest right-of-way line of Highway K-42, said point being
875.1 feet Southwest from the North line of said Quarter Section as
measured along said right-of-way line; thence Southwest along said
right-of-way line, 888.1 feet; thence North 189.2 feet; thence Easterly
226.6 feet to a point 65.0 feet Northwest at right angles from said
right-of-way line; thence Northeast parallel to said right-of-way line
to a point 77.3 feet North of the place of beginning; thence South 77.3 feet
to the place of beginning; AND EXCEPT a tract of land in the Northeast
Quarter of Section 2, Township 28 South, Range 1 West described as follows:
Beginning at a point on the North line, 1549.9 feet East of the Northwest
corner of said Quarter Section; thence South 396.4 feet to the present
Northwest right-of-way line of Highway K-42; thence Southwest along
said right-of-way line 110.6 feet; thence Northeast 68.1 feet to a point
60 feet West of said South course; thence North 337.3 feet; thence North-
westerly to a point on the South right-of-way line of the public road, 30.0
feet South and 90.0 feet West of the place of beginning; thence North,
30.0 feet to the North line of said Quarter Section; thence East 90.0 feet
along said North line of the place of beginning.

Date _____

Baughman Company, P.A.

Gregory F. Severns
Surveyor

Know all men by these presents that we,
the undersigned, have caused the land described in the surveyors
certificate to be platted into a lot and a block to be known as
"HALL INDUSTRIAL ADDITION", Wichita, Sedgwick County, Kansas. The
utility easements are hereby granted as indicated for the construction
and maintenance of all public utilities. Access controls as depicted on
the face of the plat are granted to the City of Wichita, Kansas. The
permitted entrance locations shall be as determined by the City Engineer
of the City of Wichita, Kansas.

Scott C. Hall

Lindsey M. Hall

State of Kansas) SS The foregoing instrument acknowledged be-
Sedgwick County) fore me this _____ day of _____, 1994, by Scott C. Hall and
Lindsey M. Hall, husband and wife.

My App't Exp. _____ Notary Public

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

The First National Bank of Anthony

(Title)

State of Kansas) SS The foregoing instrument acknowledged be-
Johnson County) fore me this _____ day of _____, 1994, by _____
_____ of The First National Bank of Anthony, on behalf of the bank.
(Title)

Notary Public

My App't Exp. _____

This plat of "HALL INDUSTRIAL 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 _____, 1994.
Wichita-Sedgwick County Metropolitan Area Planning Commission.

Chairman
James D. Miner

Secretary
Marvin S. Krout

This plat approved and all dedications
shown hereon accepted by the City Council of the City of Wichita,
Kansas, this _____ day of _____, 1994.

Mayor
Elmo Broadfoot

Deputy City Clerk
Pat Burnett

Entered on transfer record this _____ day
of _____, 1994.

County Clerk
Susan E. Crockett-Spoon

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 _____, 1994, at _____ o'clock _____ M., and is duly
recorded.

Register of Deeds
Pat Kettler

Deputy
Ed Resa

436 FPS (507861)