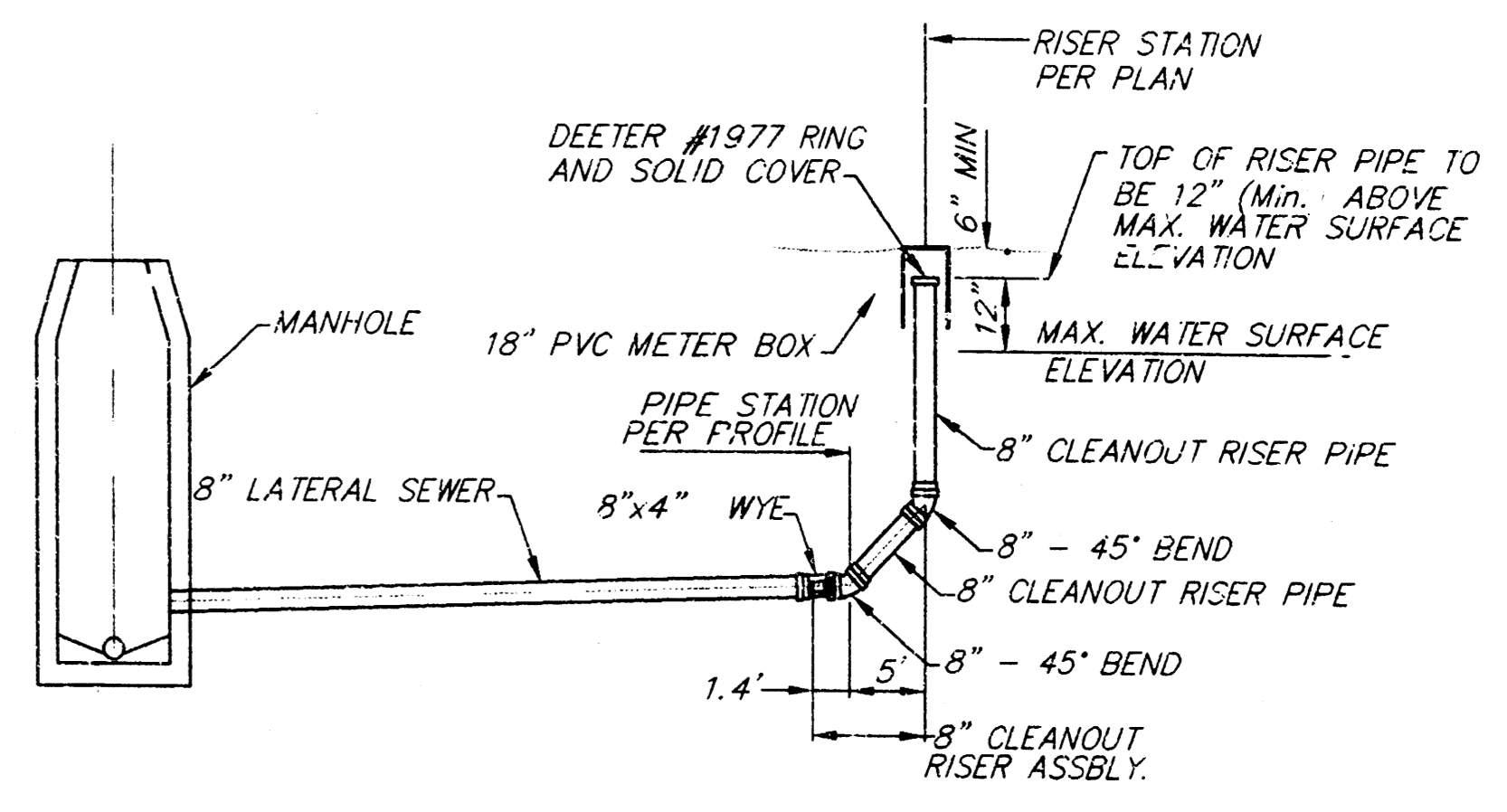
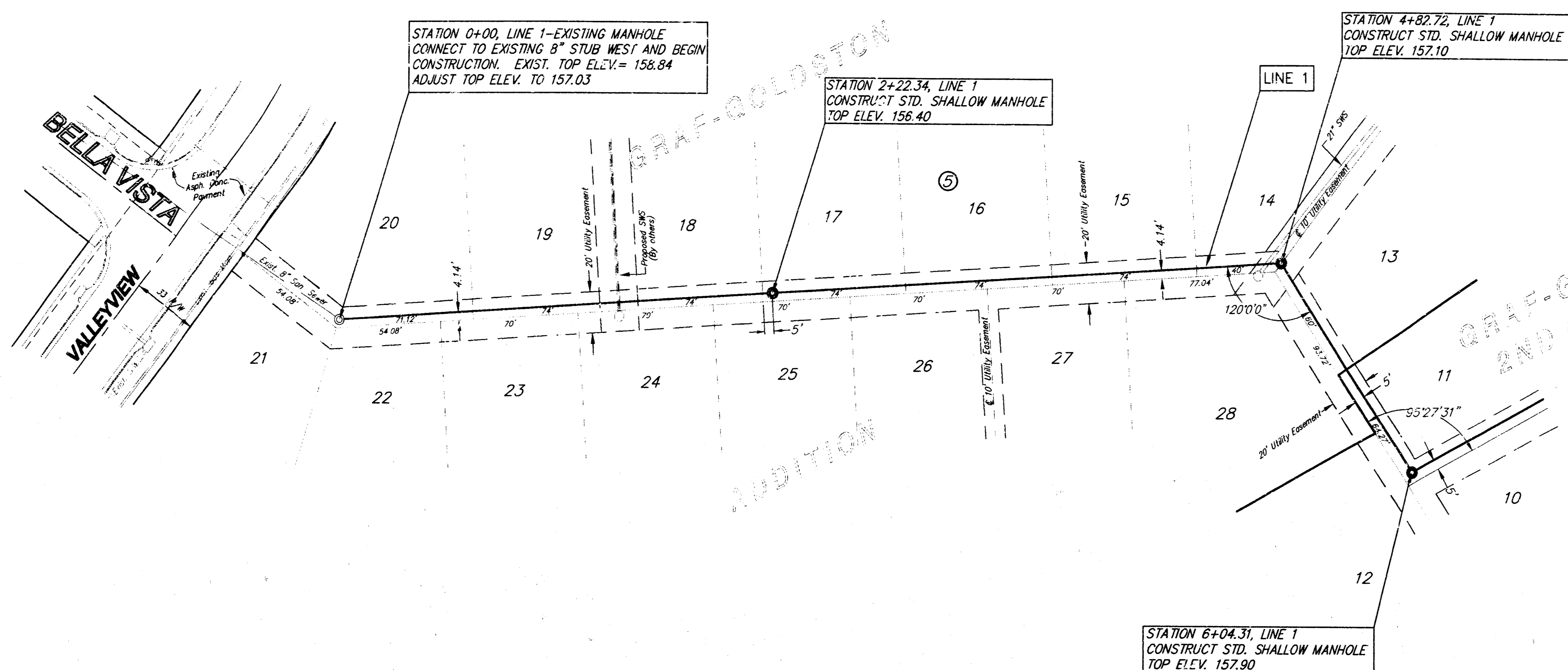
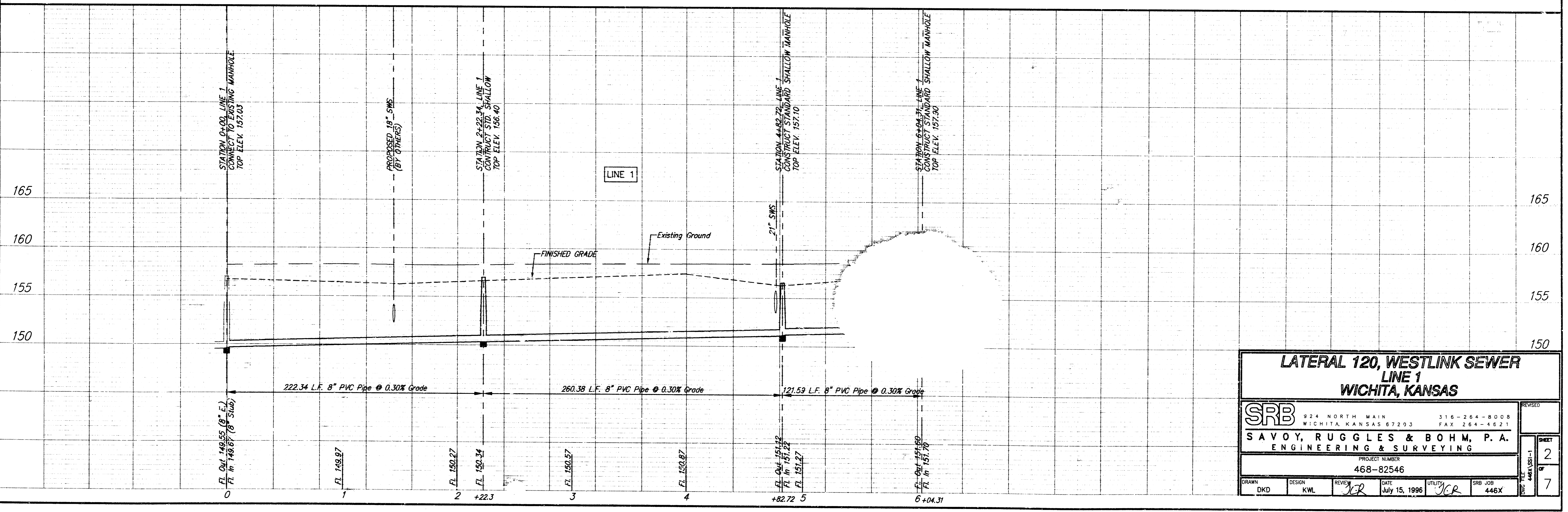




SCALE:
1" = 40' PLAN
1" = 5' PROFILE (VERT.)



8" CLEANOUT RISER DETAIL



**LATERAL 120, WESTLINK SEWER
LINE 1
WICHITA, KANSAS**

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

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

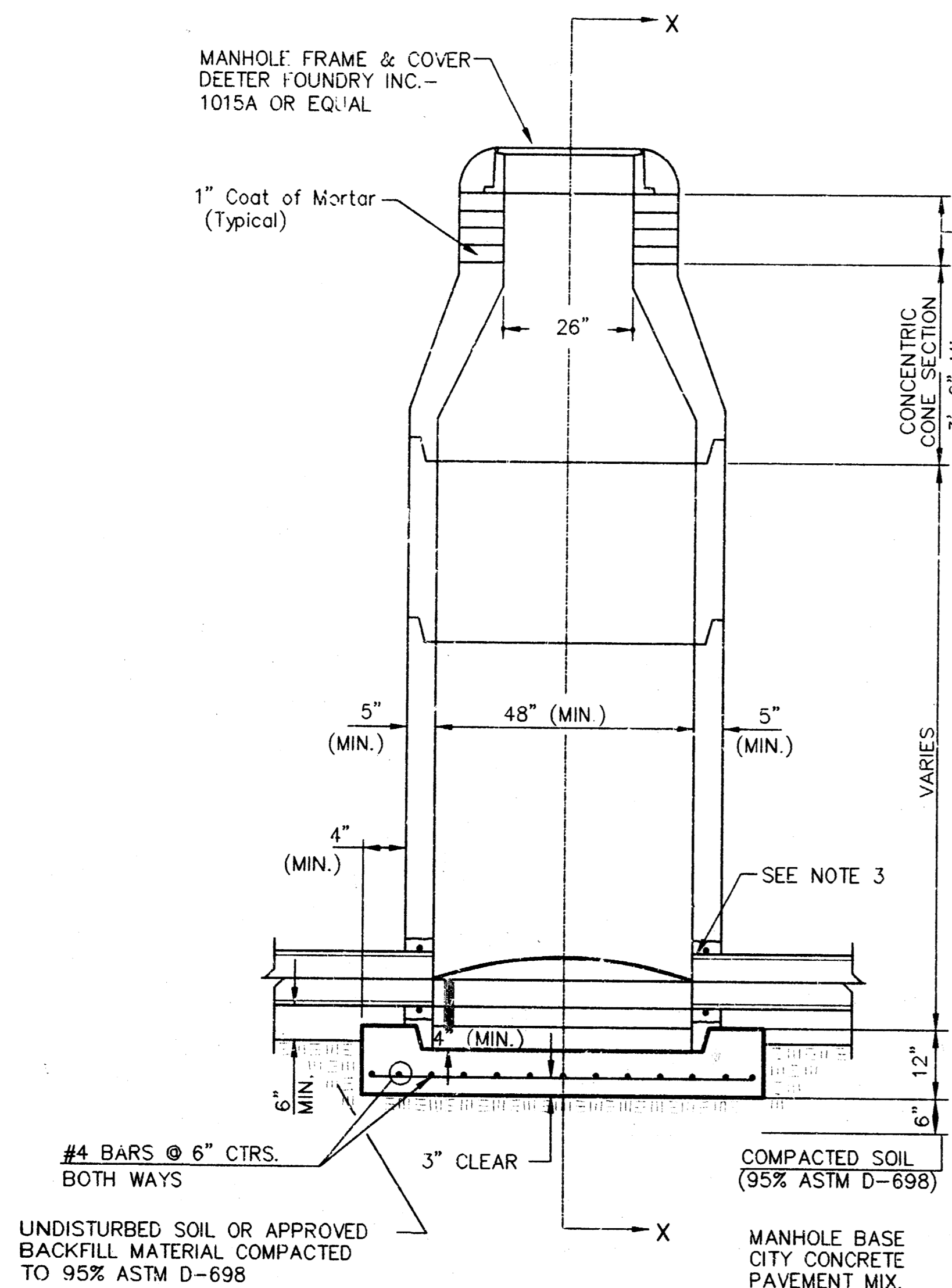
PROJECT NUMBER
468-82546

DRAWN DKD	DESIGN KWL	REVIEW JCR	DATE JULY 15, 1996	UTILITY SRB	SRB JOB 446X
--------------	---------------	---------------	-----------------------	----------------	-----------------

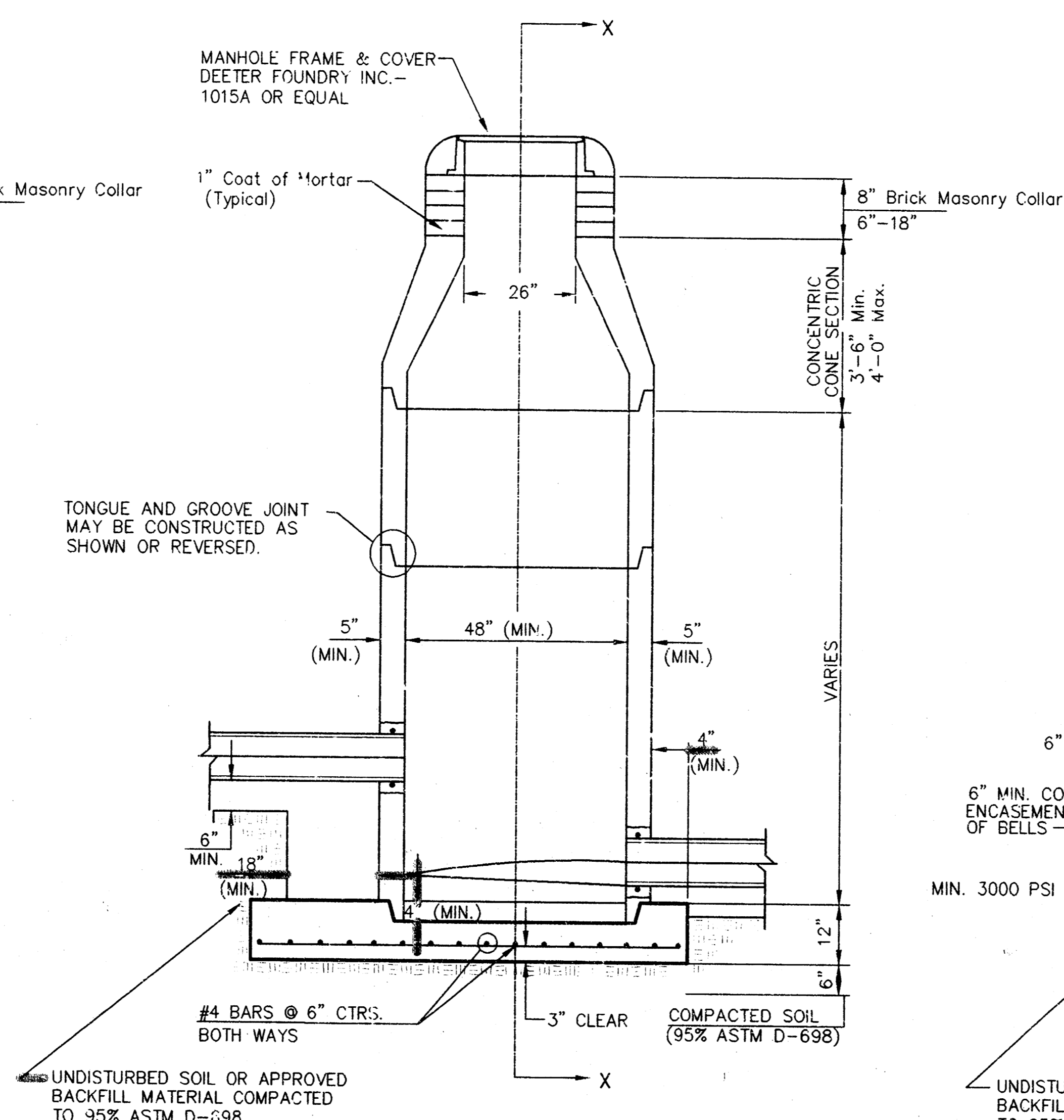
REVISED	SHEET 2 OF 7
DATE 4/15/96	

F:\Metric Projects\Don Devore\446\ (Graf-Goldston and SRB)\s1-1

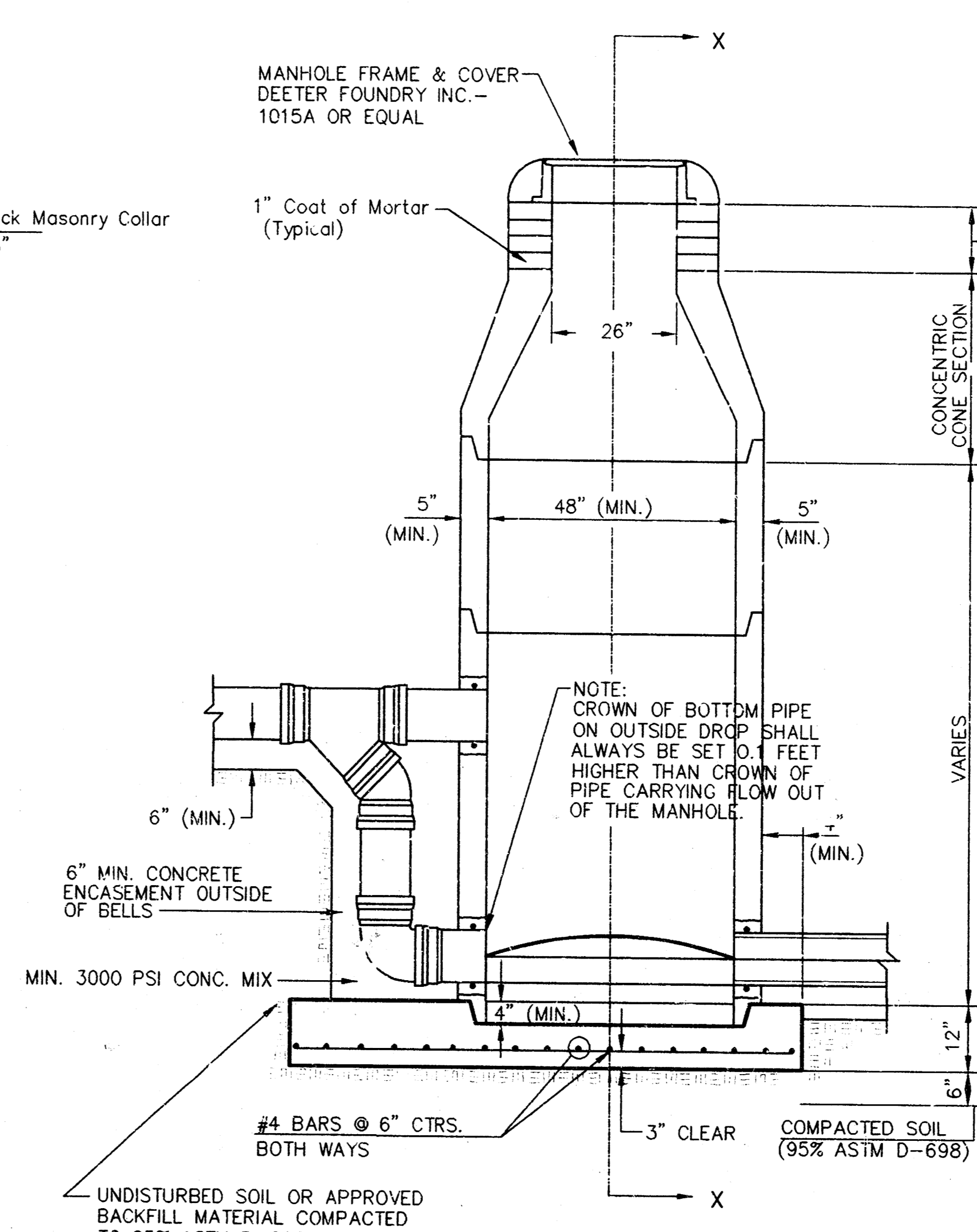
SEWER APPURTENANCES DETAILS



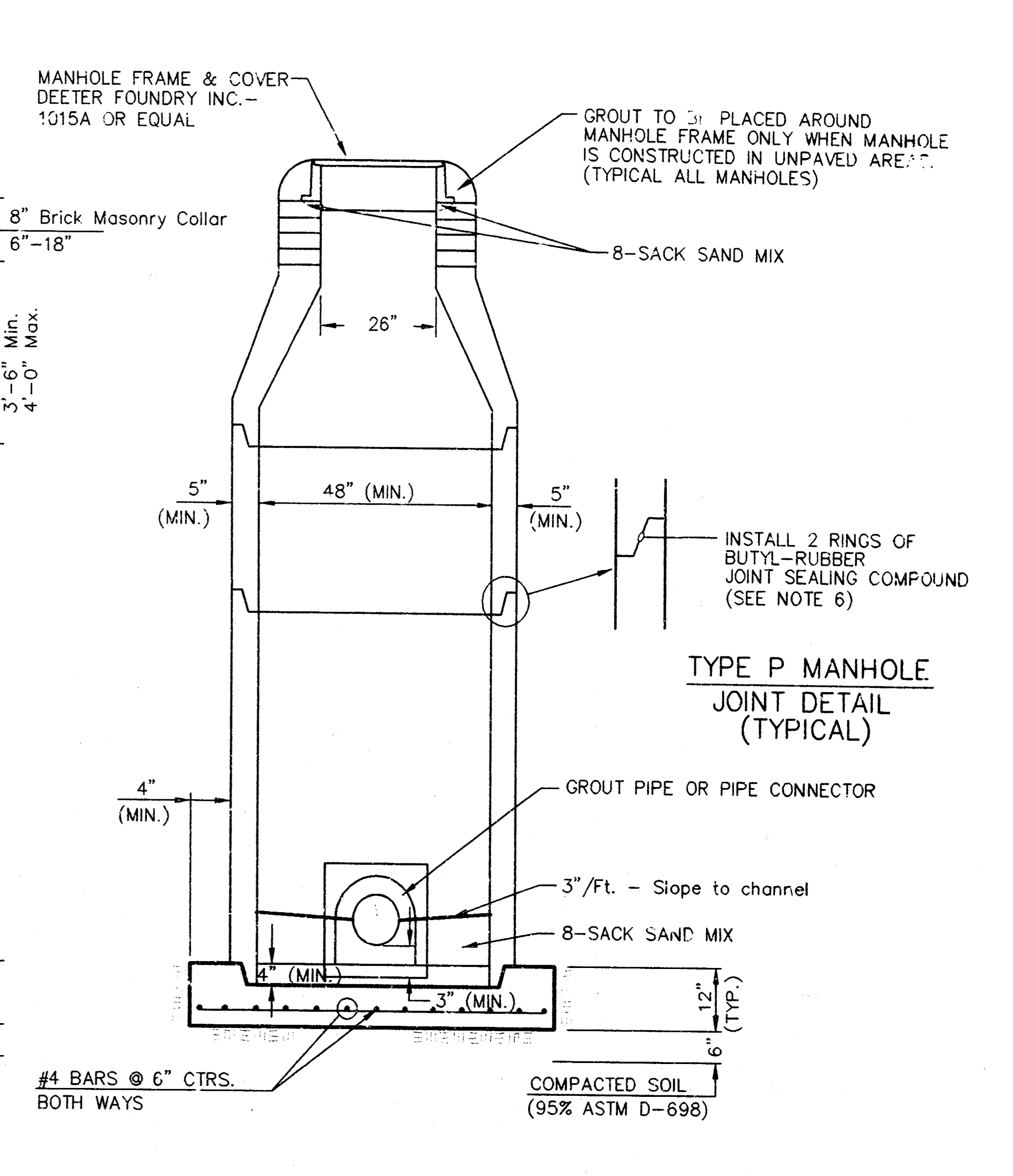
**TYPE P
STANDARD MANHOLE**



**TYPE P
INSIDE DROP MANHOLE**



**TYPE P
OUTSIDE DROP MANHOLE**



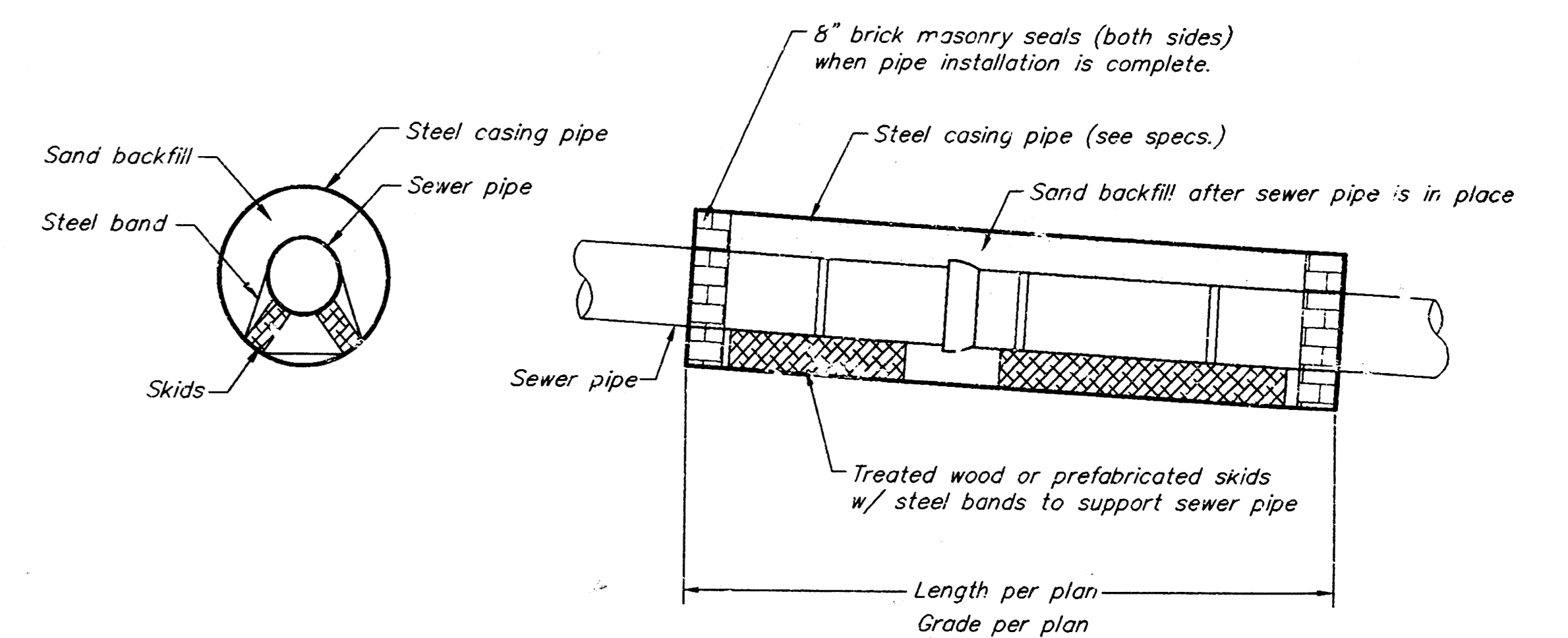
**SECTION X
(TYPICAL)**

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 TNEMC 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.
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 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 MAINTAINED 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.

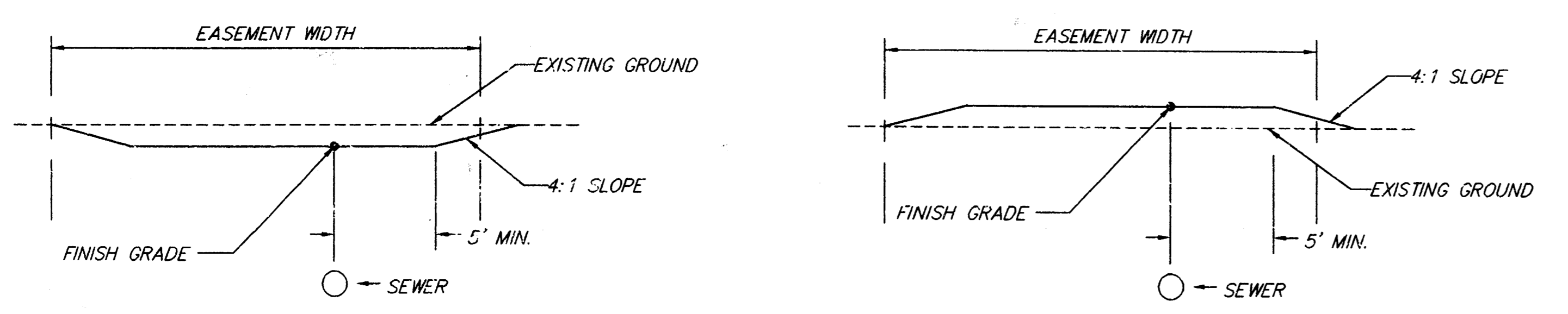
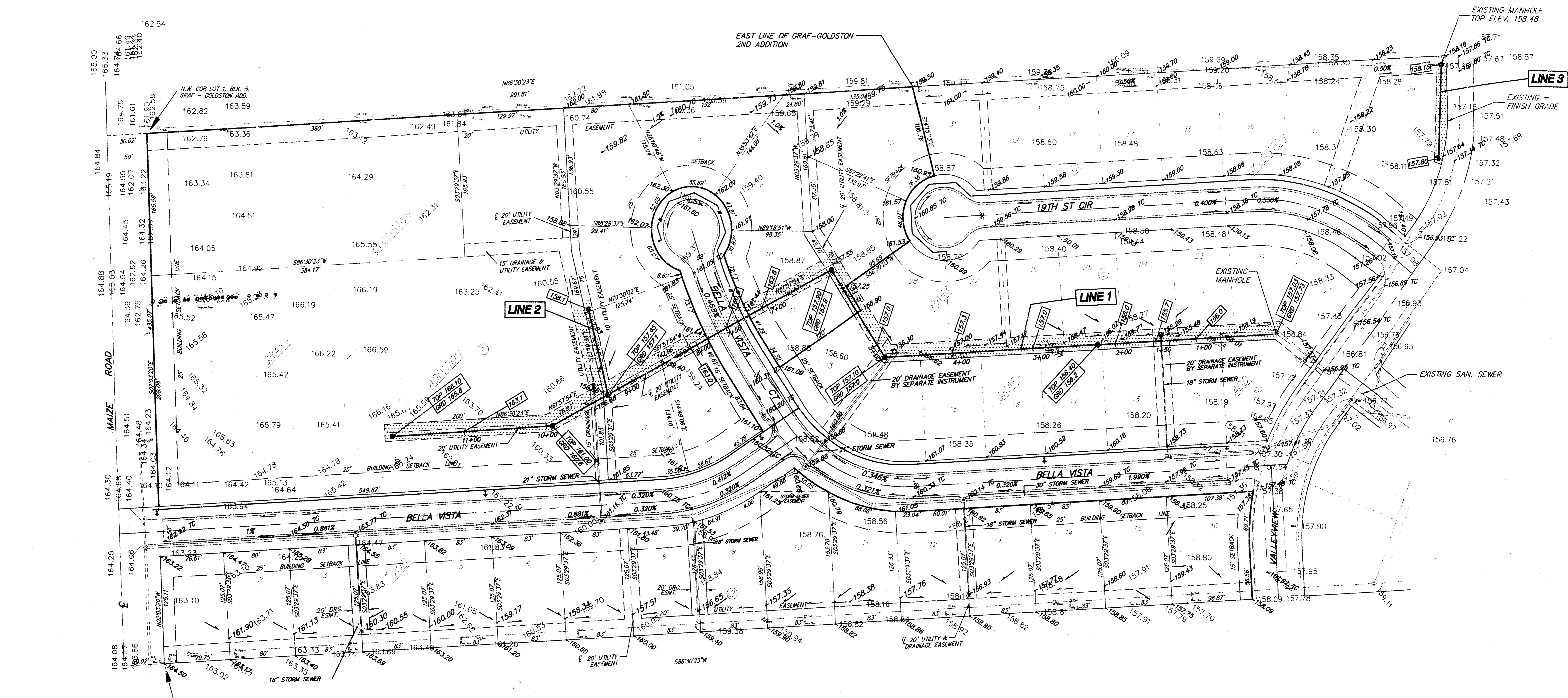


**BORING AND JACKING
STEEL PIPE CASING DETAIL**

NO SCALE

STANDARD MANHOLE DETAILS
SEWER APPURTENANCES DETAILS
CITY OF WICHITA, KANSAS

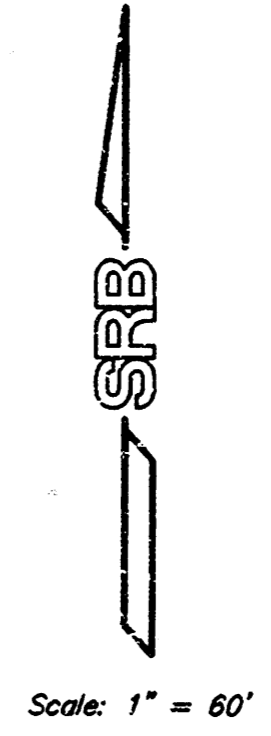
4
7



TYPICAL GRADING SECTION

LEGEND

- FINISH ELEVATION - THIS PROJECT
- PROPOSED TOP OF CURB ELEVATION
- PROPOSED GROUND ELEVATION
- EXISTING GROUND ELEVATION
- GRADING AREA - THIS PROJECT



EASEMENT GRADING PLAN FOR LATERAL 120, WESTLINK SEWER			
SRB		924 NORTH MAIN WICHITA, KANSAS 67203 316-264-8009 FAX 264-4621	
SAVOY, RUGGLES & BOHM, P.A. ENGINEERING & SURVEYING			
PROJECT NUMBER 468-82546			
DRAWN DKD	DESIGN T.C.R.	REVIEW JCR	DATE July 9, 1996
		UTILITY JCR	SRB JOB 446Y
			REVISION 5 7

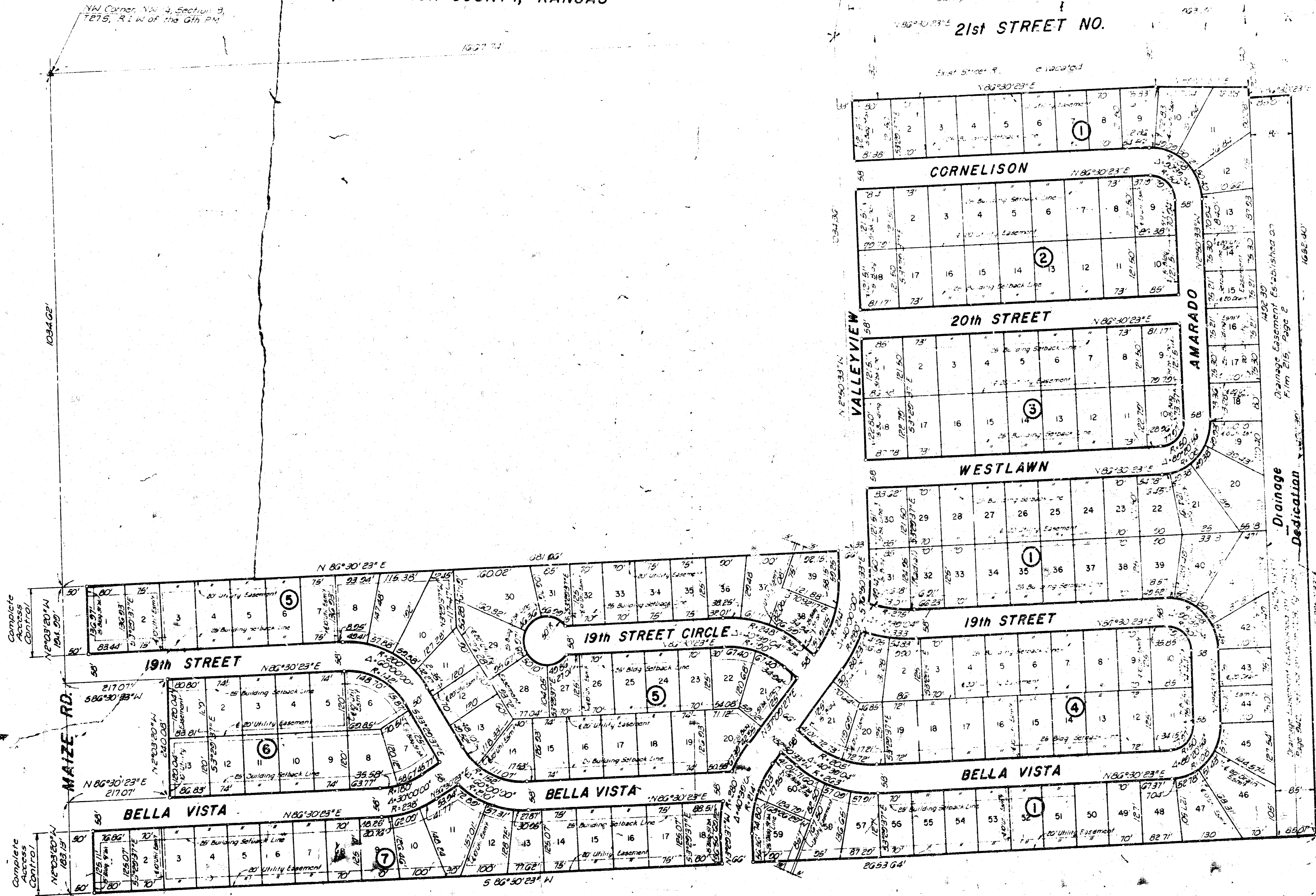
c:\active\projects\don\diverney\468\lateral-goldston 2nd ssi\GRADE

1-11-71

GRAF - GOLDSTON ADDITION

TO WICHITA, SEDGWICK COUNTY, KANSAS

NW Corner, NW 1/4, Section 9,
T21S, R12W of the 6th PM



Bench Mark - City of Wichita
A.V. 2100 and east 400'
south of 21st Street
E. 1/4 of Sec. No.
51, 35, 10, M. 22

Drainage Easement established on
Film 215, Page 2

Drainage Dedication

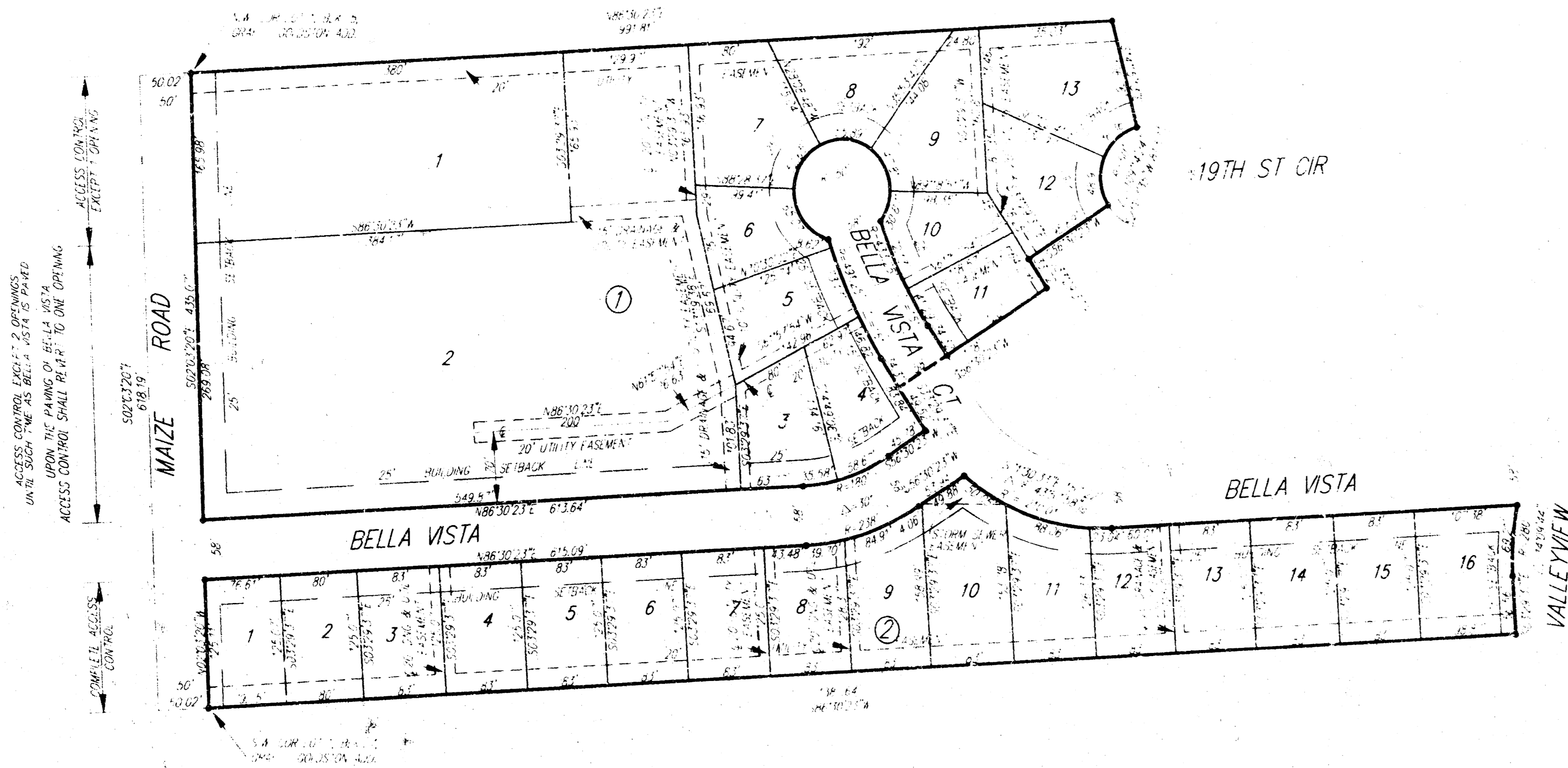
M-1 7-276

M-1 7-276

6

GRAF - GOLDSTON 2ND ADDITION

WICHITA, SEDGWICK COUNTY, KANSAS



ACCESS CONTROL SHALL BE PROVIDED
UPON THE PAVING OF BELLA VISTA
ACCESS CONTROL SHALL RELY TO ONE DRIVEWAY
ACCESS CONTROL SHALL RELY TO ONE DRIVEWAY
ACCESS CONTROL SHALL RELY TO ONE DRIVEWAY

State of Kansas) SS
Sedgwick County)
The foregoing instrument acknowledged before me, this ____ day of ____
1995, by _____ of Emprise Bank, on behalf
of the corporation.

My App't. Exp. _____ Notary Public

State of Kansas) SS
Sedgwick County)
The foregoing instrument acknowledged before me, this ____ day of ____
1995, by _____ of The American Baptist Extension
Corporation, on behalf of the corporation.

My App't. Exp. _____ Notary Public

State of Kansas) SS
Sedgwick County)
The foregoing instrument acknowledged before me, this ____ day of ____
1995, by _____ of Fidelity Savings Association of
Kansas, FSB, on behalf of the corporation.

My App't. Exp. _____ Notary Public

1" = 100'
• = 1/2" Rebar/SRB Cap

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

DWG. HLL 0022-PR-SAM
PROJECT NO. 9403222F

State of Kansas) SS
Sedgwick County)
We, Savoy, Ruggles & Bohm, P.A., Surveyors in aforesaid county and state do
hereby certify that we have surveyed and platted this plat of "GRAF-GOLDSTON
2ND ADDITION", Wichita, Sedgwick County, Kansas, and that the accompanying
plat is a true and correct exhibit of said survey, described as and being a re-
print of the following described property:

Lots 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, and Lots 29 and 30, in Block 5,
and Lots 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, and 13, in Block 6 and Lots
1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17 and 18 in Block 7,
Graf - Goldston Addition to Wichita, Sedgwick County, Kansas, and Lot 1,
Block 1, West Towne Baptist Church Addition, Sedgwick County, Kansas,
and all of 19th Street extending east from the east line of Maize Road to
the south line of Lot 12, in said Block 5, extended southwesterly to the
northeasterly line of Lot 7, in said Block 6.

All being situated in the NW1/4 of Sec. 8, Twp. 27-S. R-1-W of the 6th
P.M., Sedgwick County, Kansas.

Said 19th Street and all other public easements and dedications being vacat-
ed by virtue of K.S.A. 12-512(b).

Date _____ Savoy, Ruggles & Bohm, P.A.

Mark A. Savoy Surveyor

Know all men by these presents that we, the undersigned, have caused the
land described in the surveyors certificate to be platted into Lots, Blocks and
Streets to be known as "GRAF-GOLDSTON 2ND ADDITION", Wichita, Sedgwick
County, Kansas. The utility easements are hereby granted for the construct-
ion and maintenance of all public utilities. The drainage and utility easement
is hereby granted for drainage purposes and for the construction and mainten-
ance of all public utilities. The Street is hereby dedicated to and for the use
of the public. All abutters rights of access to or from Maize Road, over and
across the west line of Lots 1 and 2, Block 1, and Lot 1, Block 2, are hereby
granted to the City of Wichita, provided however that Lot 1, Block 1, shall
have access to Maize Road at one location over the west line thereof and
that Lot 2 shall have access to Maize Road at two locations until such time
as Bella Vista is paved, and that upon such paving, Lot 2 shall have access
to Maize Road at one location, all as shall be determined by the City Engineer
of the City of Wichita, Kansas.

Courtland Development Corporation

Joe Graf President
West Towne Baptist Church, Inc.

Bob Shank President
West Congregation of Jehovah's Witnesses

Richard E. Wiechman Shirley A. Wiechman

We, the undersigned, a portion of the above desc-
ribed plat of "GRAF-GOLDSTON 2ND ADD-
ITION",

Emprise Bank

American Baptist Extension Corporation

Fidelity Savings Association of Kansas, FSB

This plat of "GRAF-GOLDSTON 2ND ADDITION", Wichita, Sedgwick County, Kansas
has been submitted to and approved by the Wichita-Sedgwick County Metropol-
itan Area Planning Commission, Wichita, Kansas.
Dated this ____ day of ____ 1995
Wichita-Sedgwick County Metropolitan Area Planning Commission.

John W. McKay, Jr. Chairman

Marvin S. Krout Secretary

This plat approved and all dedications shown hereon accepted by the Board
of Commissioners of the City of Wichita, Kansas, this ____ day of ____
1995.

Bob Knight Mayor

Pat Burnett Deputy City Clerk

Susan E. Crockett-Spoon County Clerk

State of Kansas) SS
Sedgwick County)
This is to certify that this plat has been filed for record in the office of the
Register of Deeds, this ____ day of ____ 1995, at ____ o'clock
____ M., and is duly recorded.

Pat Kettler Register of Deeds

Ed Resa Deputy

State of Kansas) SS
Sedgwick County)
The foregoing instrument acknowledged before me, this ____ day of ____
1995, by Joe Graf, President of Courtland Development Corporation, on behalf
of the corporation.

My App't. Exp. _____ Notary Public

State of Kansas) SS
Sedgwick County)
The foregoing instrument acknowledged before me, this ____ day of ____
1995, by Bob Shank, President of West Towne Baptist Church, Inc., on behalf
of the corporation.

My App't. Exp. _____ Notary Public

State of Kansas) SS
Sedgwick County)
The foregoing instrument acknowledged before me, this ____ day of ____
1995, by _____ of West Congregation of Jehovah's
Witnesses, on behalf of the congregation.

My App't. Exp. _____ Notary Public

State of Kansas) SS
Sedgwick County)
The foregoing instrument acknowledged before me, this ____ day of ____
1995, by Richard E. Wiechman and Shirley A. Wiechman, husband and wife.

My App't. Exp. _____ Notary Public