

CONSTRUCTION PLANS

LATERAL 121 WAR INDUSTRIES SEWER

TURTLE RUN 2ND ADDITION

TO

THE CITY OF WICHITA, KANSAS

MICHAEL E. LINDEBAK, P.E. - CITY ENGINEER

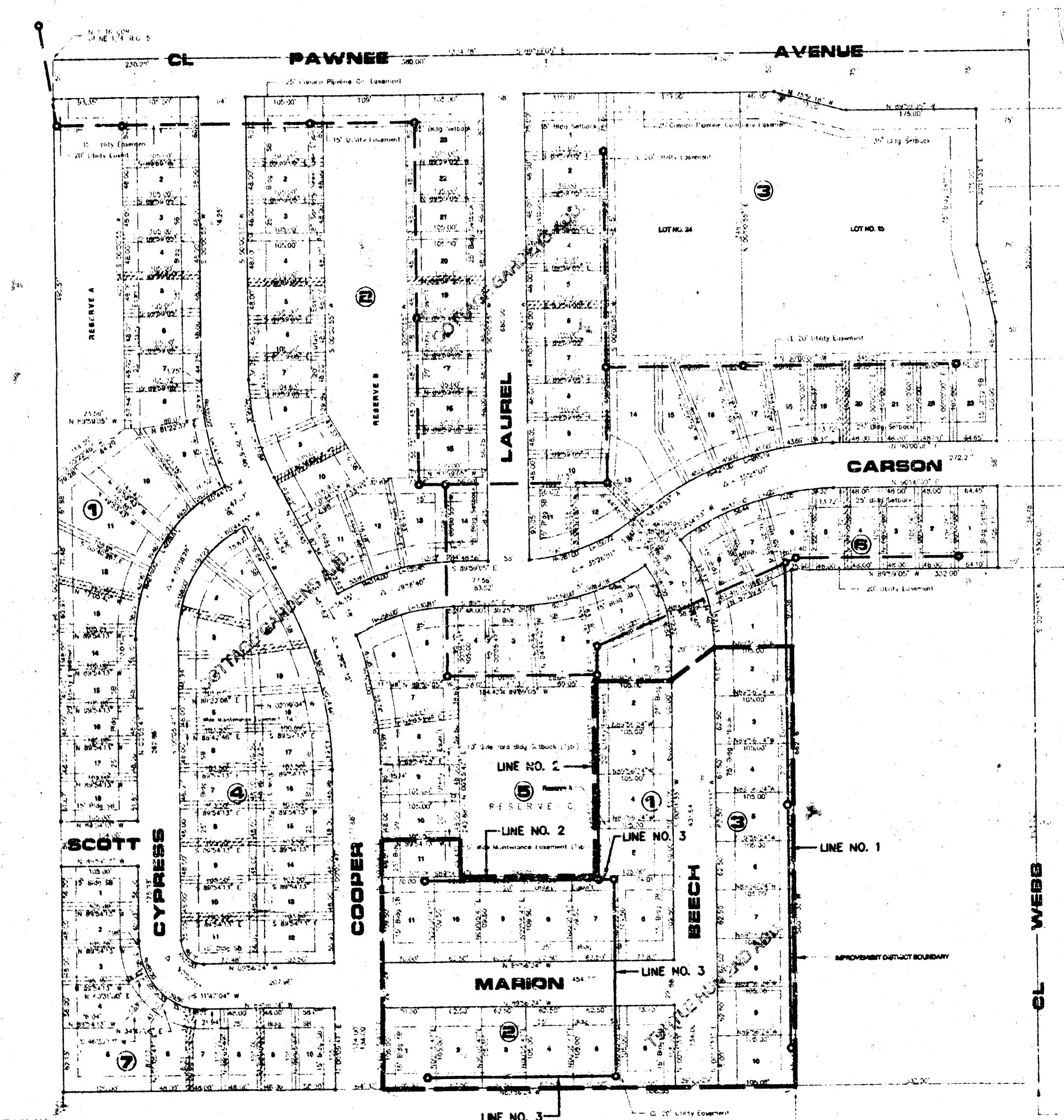
PROJECT NO. 468-82330

INDEX CODE 741926

GENERAL NOTES:

- Existing utility lines 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.
- Rubble from the removal of miscellaneous structured and excess excavation which is to be wasted shall be the 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. of Engineers permitting regulations. Any material buried or stockpiled beyond approved construction limits would require additional archaeological investigations unless buried in a previously approved borrow location.
- 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 the work.
- 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 or a licensed professional engineer in accordance with state laws.
- 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 the proposed new construction shall be saved and protected from damage.
- Contractor shall vacuum test all manholes according to the City of Wichita standard specifications.
- All disturbed areas are to be seeded with temporary seeding (Ryegrass applied at the rate of 200 lbs./acre).



INDEX

TITLE SHEET	SHEET 1
LINE NO. 1	SHEET 2
LINE NO. 2	SHEET 3
LINE NO. 3	SHEET 4
STD. MANHOLE TYPE "P"	SHEET 5
STD. MANHOLE TYPE "O"	SHEET 6
TURTLE RUN 2ND ADDITION PLAT	SHEET 7
LOT GRADING PLAN	SHEET 7a

BENCH MARKS

(City of Wichita Datum)

- City of Wichita Std. BM disc at Webb & Pawnee. 53' S. & 47' W. of centerline of both. Elev. 205.678
- Square on headwall (SE Corner South Headwall). 5' x 5' RCB under Pawnee approximately 1300' W of NE Corner Sec. 5-28S-2E. Elev. 186.94
- 40d nail in service pole approximately 1330' S and 150' W of NE Corner Sec. 5-28S-2E. Elev. 204.69

Booked 11/4/94
JKB
From As. Builts

AS BUILTS
JKB
11-4-94



7-26-94

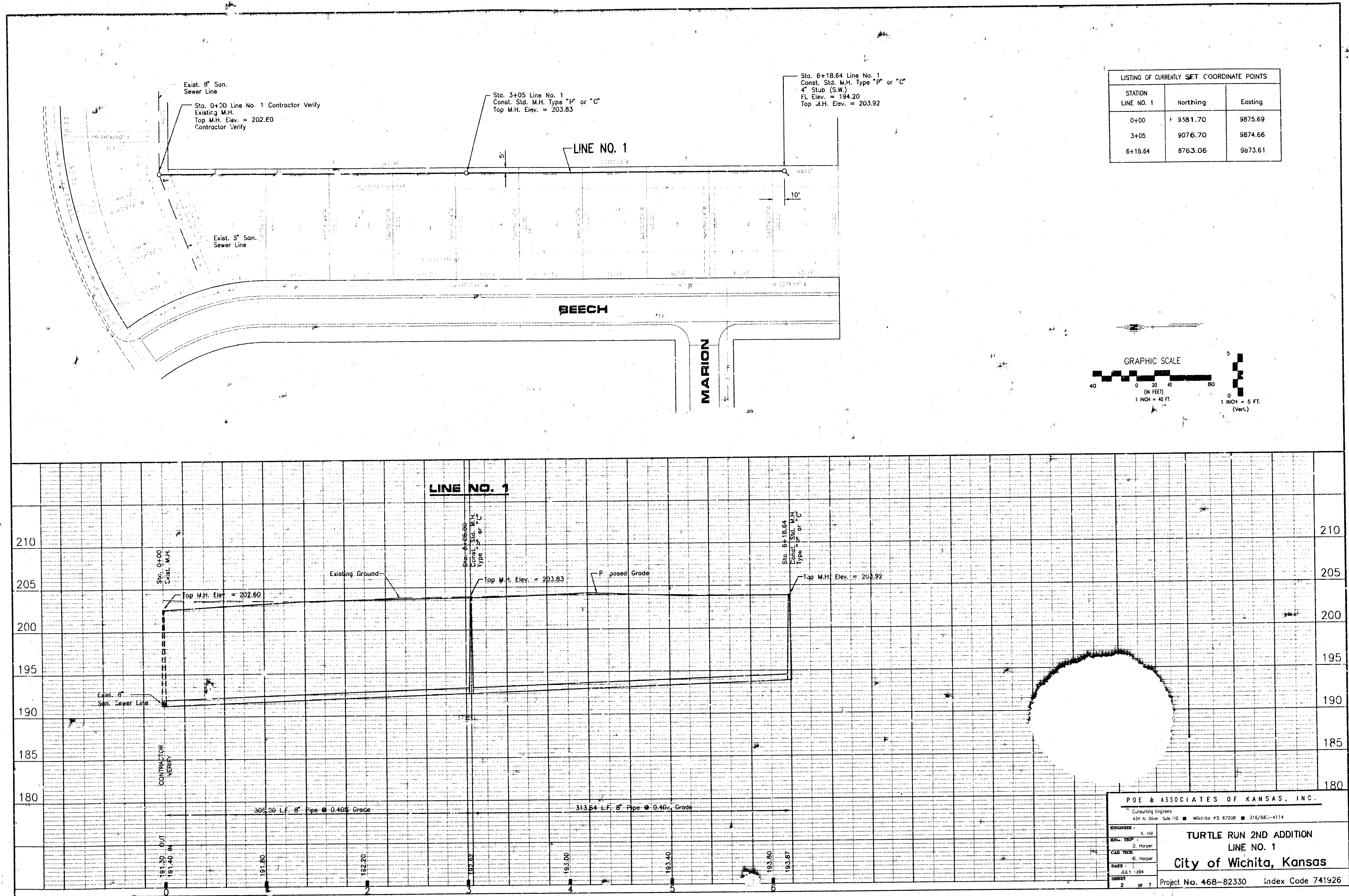
JULY 1994

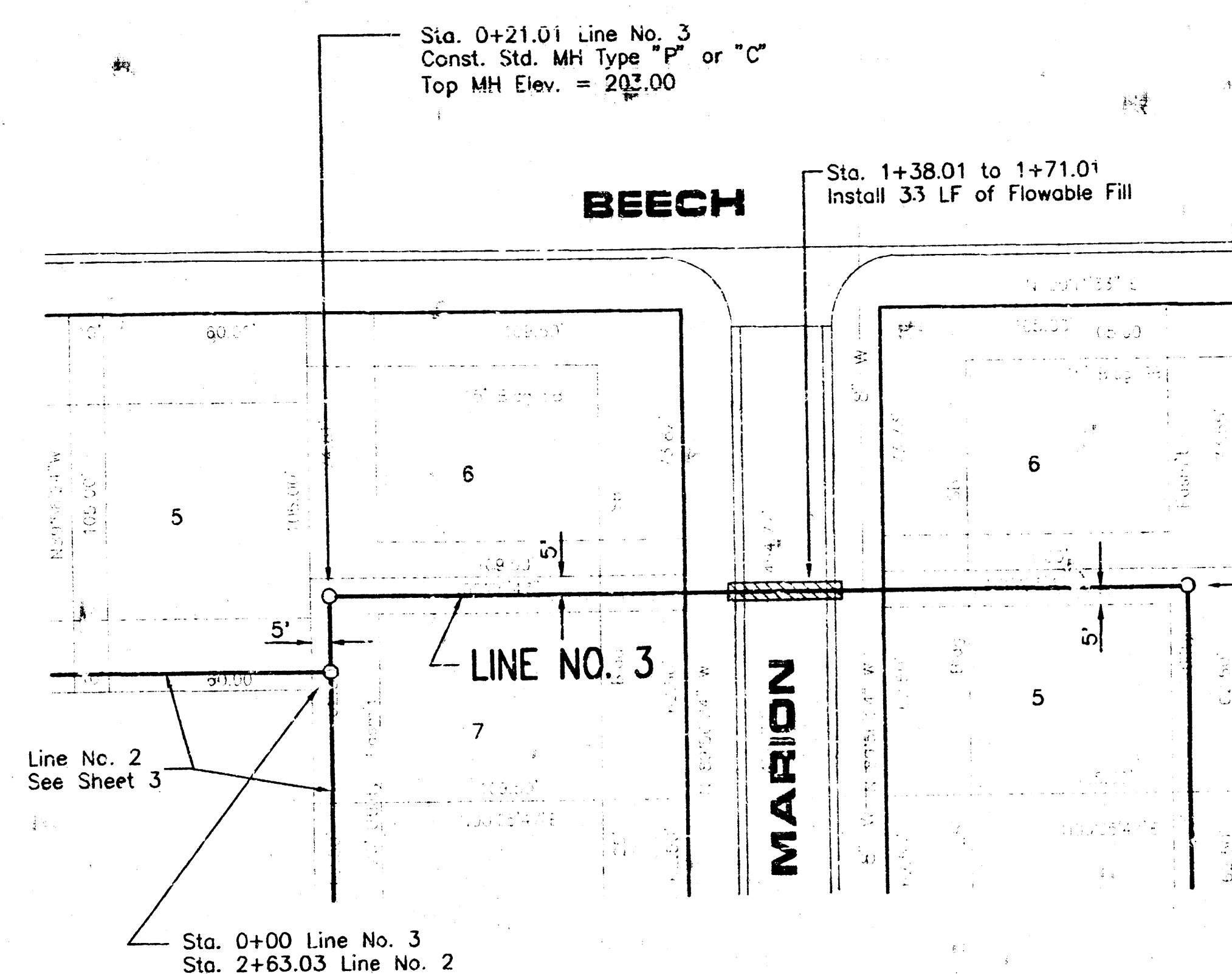
PLANS PREPARED
BY

POE & ASSOCIATES OF KANSAS, INC.

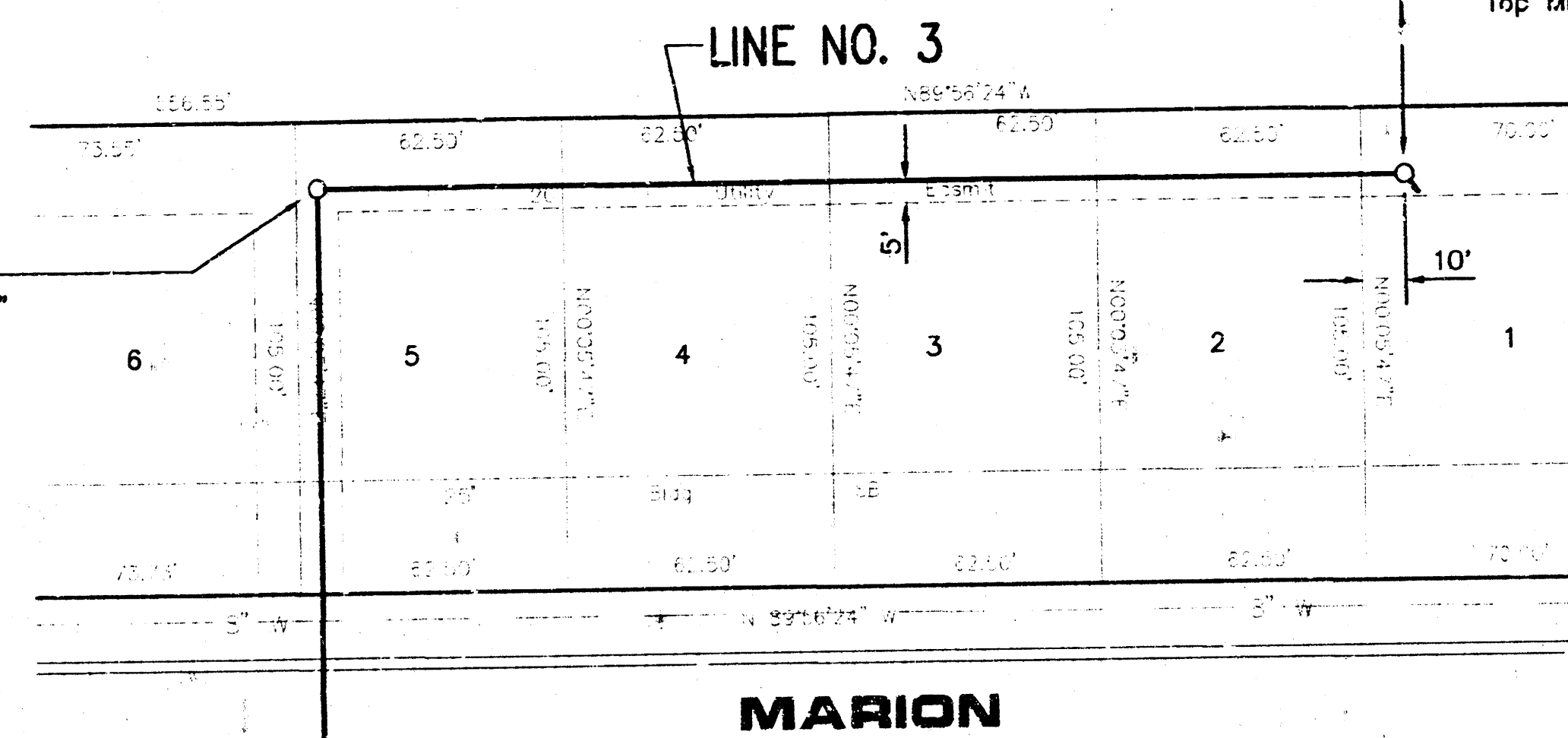
Consulting Engineers
434 N. Overland Ave. Suite 110 Wichita KS 67208 316/685-4114

SHEET 1 OF 7



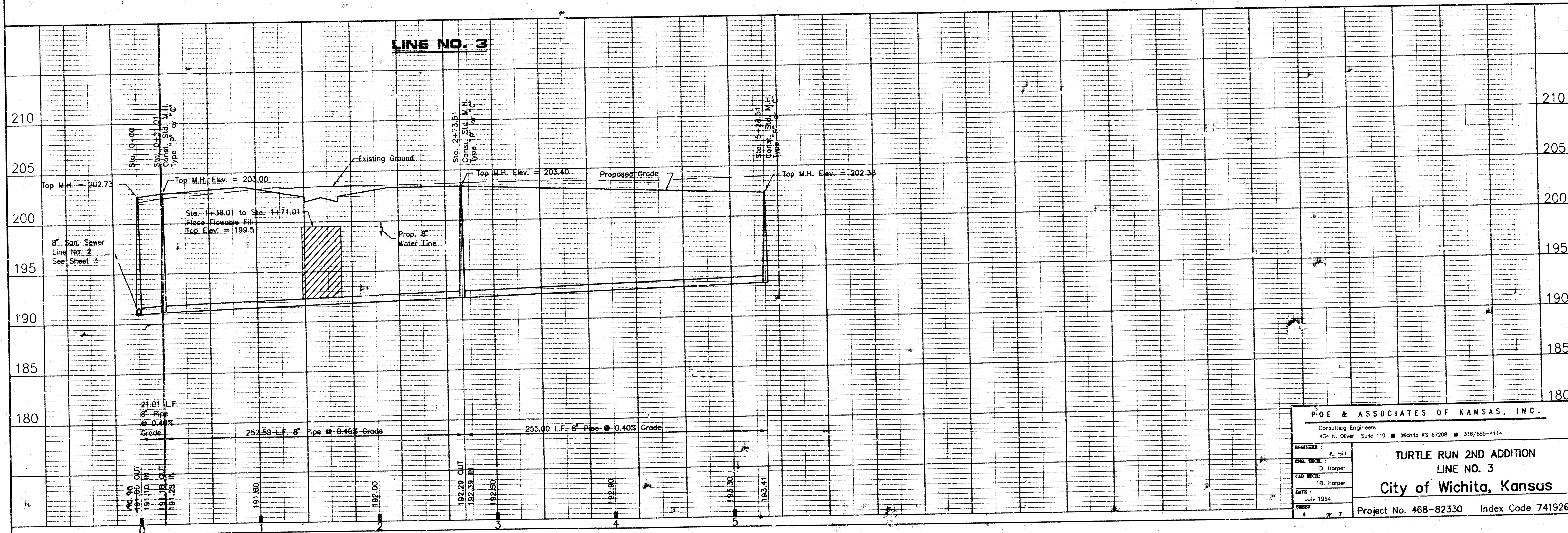
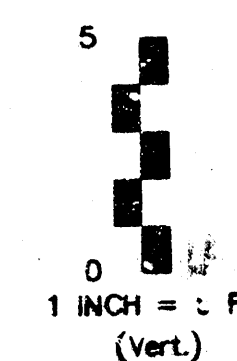
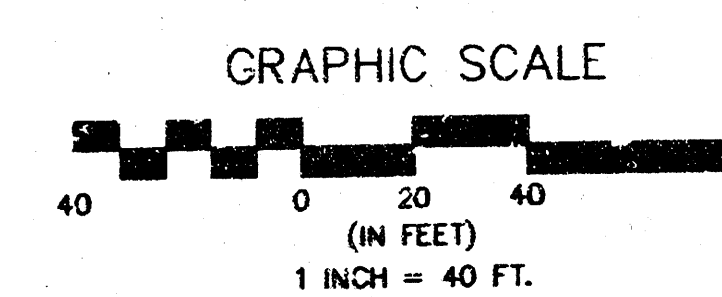


Sta. 2+73.51 Line No. 3
Const. Std. MH Type "P" or "C"
Top MH Elev. = 203.40



Sta. 5+28.51 Line No. 3
Const. Std. MH Type "P" or "C"
4" Stub (N.W.)
FL = 193.74
Top MH Elev. = 202.38

LISTING OF CURRENTLY SET COORDINATE POINTS		
STATION LINE NO. 3	Northing	Easting
0+00	8975.83	9321.32
0+21.01	8975.80	9642.33
2+73.51	8723.30	9641.90
5+28.51	8723.57	9386.90



POE & ASSOCIATES OF KANSAS, INC.
Consulting Engineers
434 N. Oliver Suite 110 ■ Wichita KS 67208 ■ 316/685-4114

ENGINEER: K. Hill
ENG. TECH.: D. Harper
CAD TECH.: D. Harper
DATE: July 1994
SHEET: 4 OF 7

**TURTLE RUN 2ND ADDITION
LINE NO. 3
City of Wichita, Kansas**

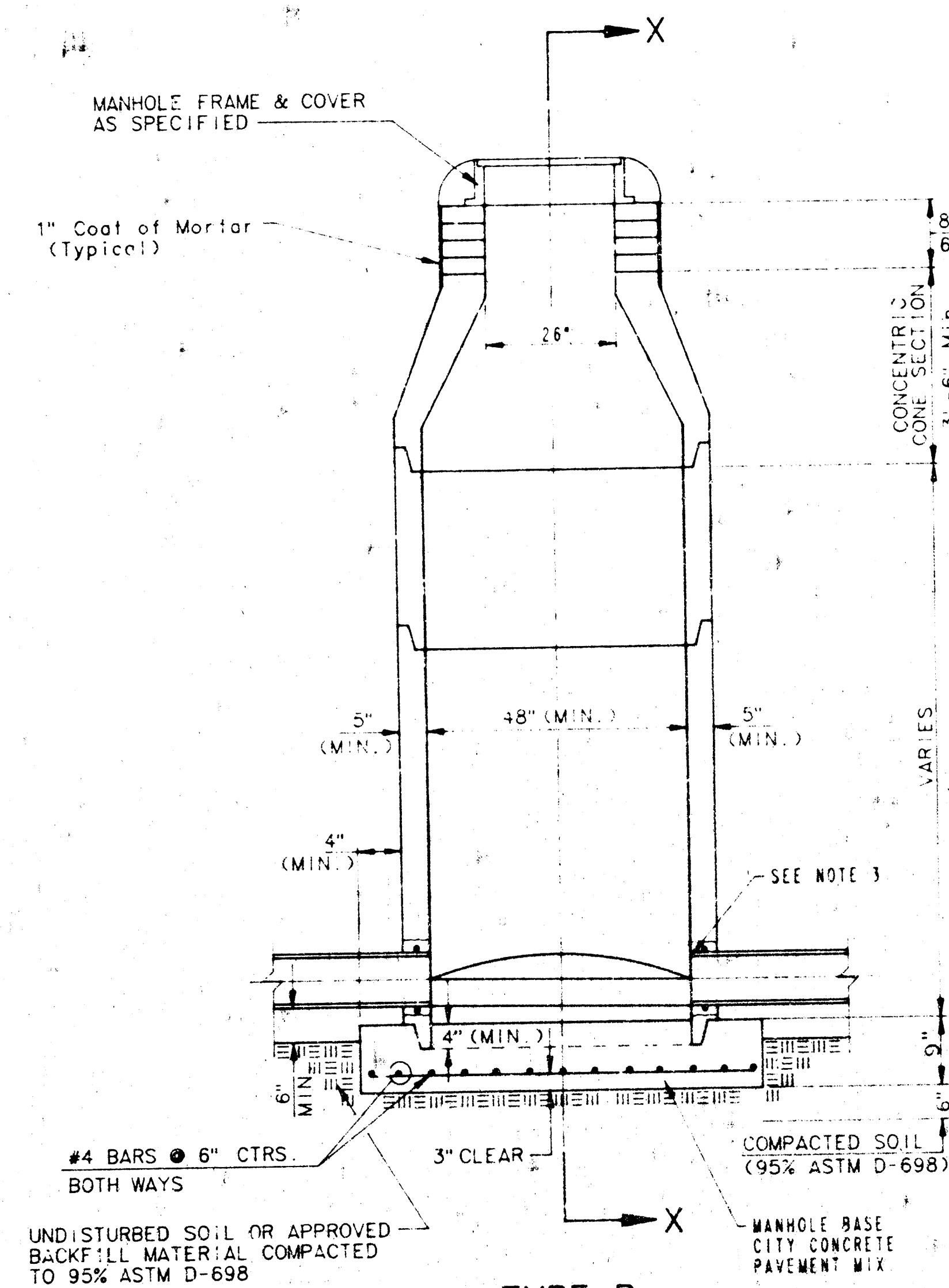
Project No. 468-82330 Index Code 741926

SEWER APPURTENANCES DETAILS

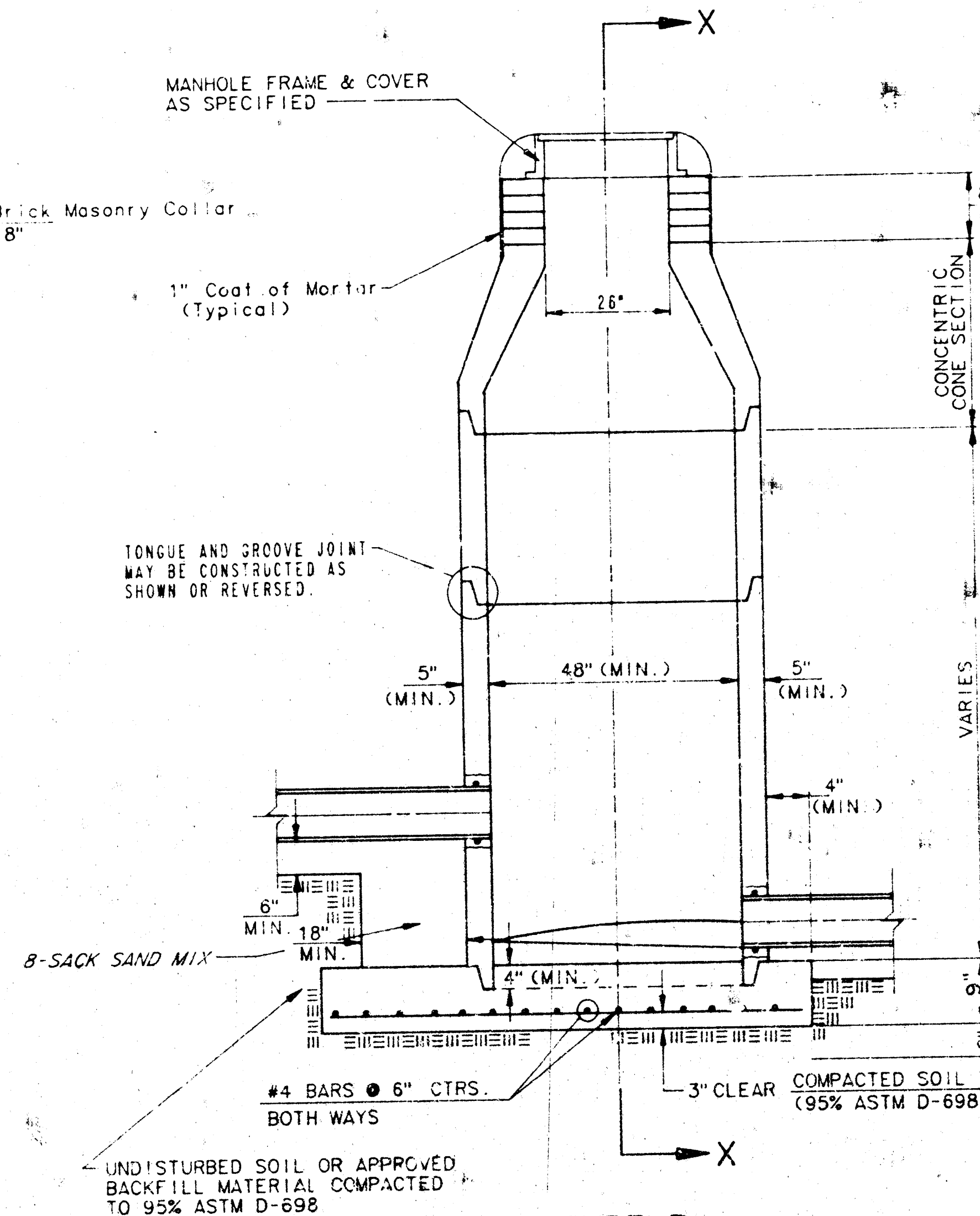
ADOPTED AS STANDARD DESIGN

BY

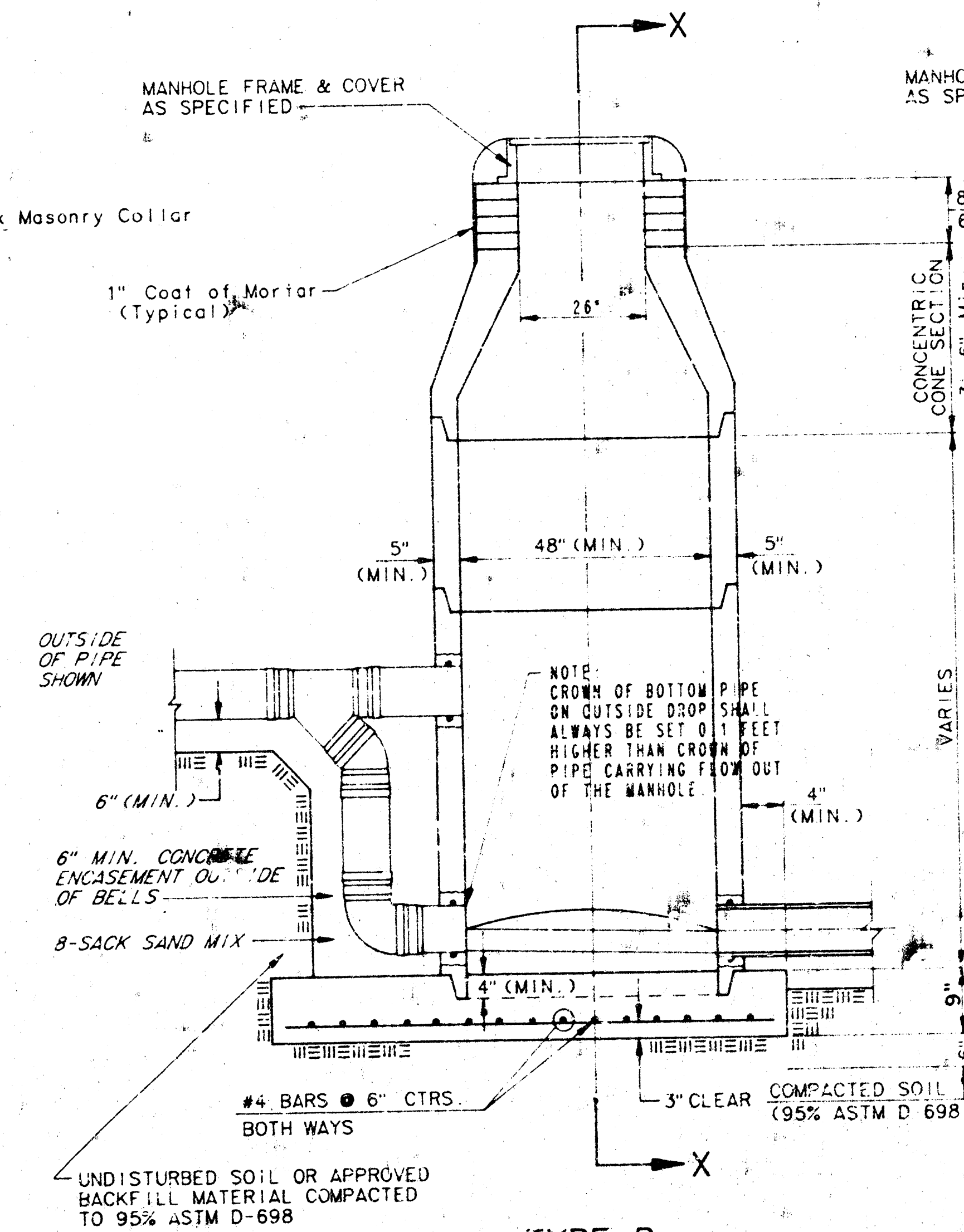
CITY OF WICHITA



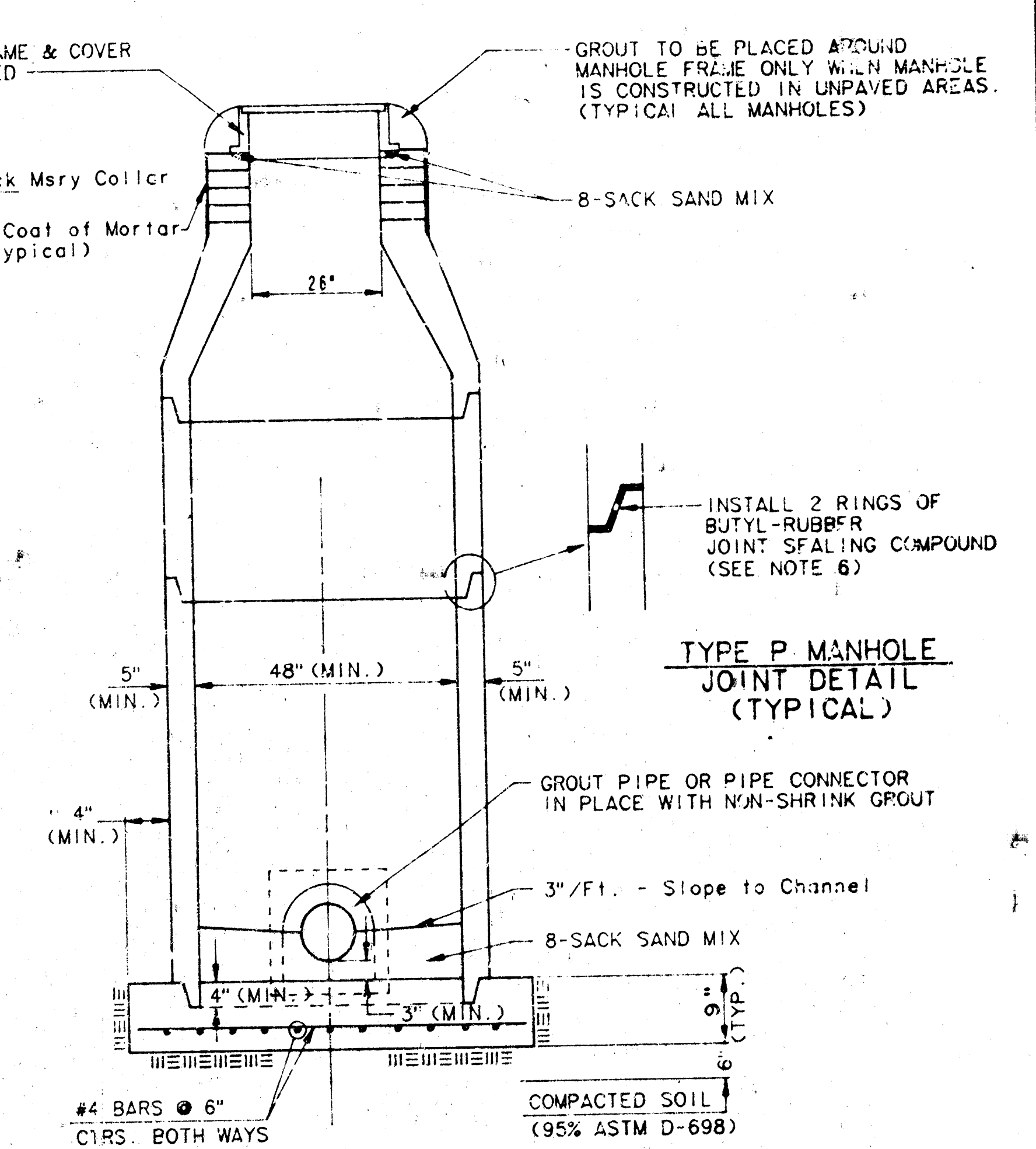
TYPE P
STANDARD MANHOLE



TYPE P
INSIDE DROP MANHOLE



TYPE P
OUTSIDE DROP MANHOLE



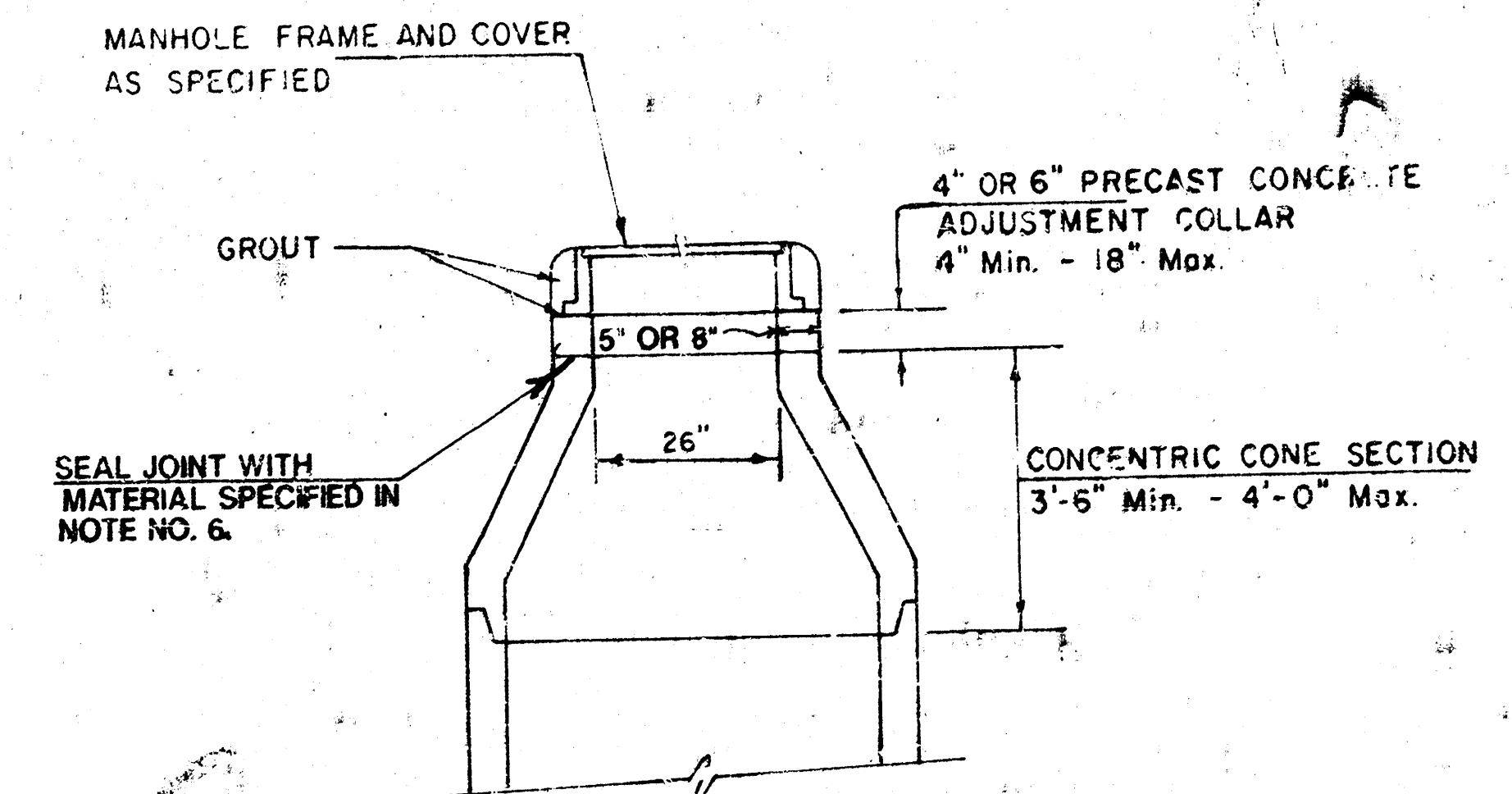
SECTION X
(TYPICAL)

GENERAL NOTES

1. ALL PRECAST CONCRETE MANHOLE SLOTS AND JOINTS SHALL BE SET TO THE LATEST REVISION OF A.S.T.M. C-493 AND SHALL BE SET TO THE LATEST REVISION OF A.S.T.M. C-493.
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 GROUDED IN PLACE WITH NON-SHRINK GROUT. THE SEWER PIPE SHALL BE SUPPORTED WITH CONCRETE ENCASUREMENT 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 WATER GAS SHALL BE COATED WITH 2 COATS OF WEC SL-66 HT-1 D EPOXYLINE, DRY-THICKNESS OF 8 MILS (MIN.).
5. EXTERIOR MANHOLE WALLS SHALL BE COATED WITH 1 COAT OF MOBILARMA 633 BITUMINUS 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 PAVING CONSTRUCTION AS SPECIFIED IN THE CITY STANDARD PAVING SPECIFICATIONS USING CITY CONCRETE PAVEMENT MIX WITHOUT AIR ENTRAINING ADJUSTURE. MORTAR SHALL BE PLACED AROUND THE MANHOLE 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 8" 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 GROUDED 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 GROUDED INTO THE OPENING USING AN APPROVED NONSHRINK GROUT FOR THE FULL MANHOLE WALL THICKNESS. THE APPROVED BITUMINUS COATING SHALL BE SEaled WITH AN EXTERIOR. THE COMPLETED CONNECTION SHALL BE SEALED WITH AN EXTERIOR. THE COMPLETED CONNECTION SHALL BE SEALED WITH AN EXTERIOR. THE COMPLETED CONNECTION SHALL BE SEALED WITH AN EXTERIOR.
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 1/8" 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 IN 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 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.

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 FREE FALL DROP INSIDE MANHOLES SHALL NOT EXCEED 2'. 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.



ALTERNATE CONSTRUCTION
IN UNPAVED AREAS

Sht. 5 of 7
REVISED NOV. 1993
NOTE NO. 16 REVISED JAN. 1991
Revised 3-21-89
Revised 8-10-88
Revised June 12, 1985

TURTLE RUN 2ND ADDITION
PROJECT NO. 468-82330 Index Code 741923

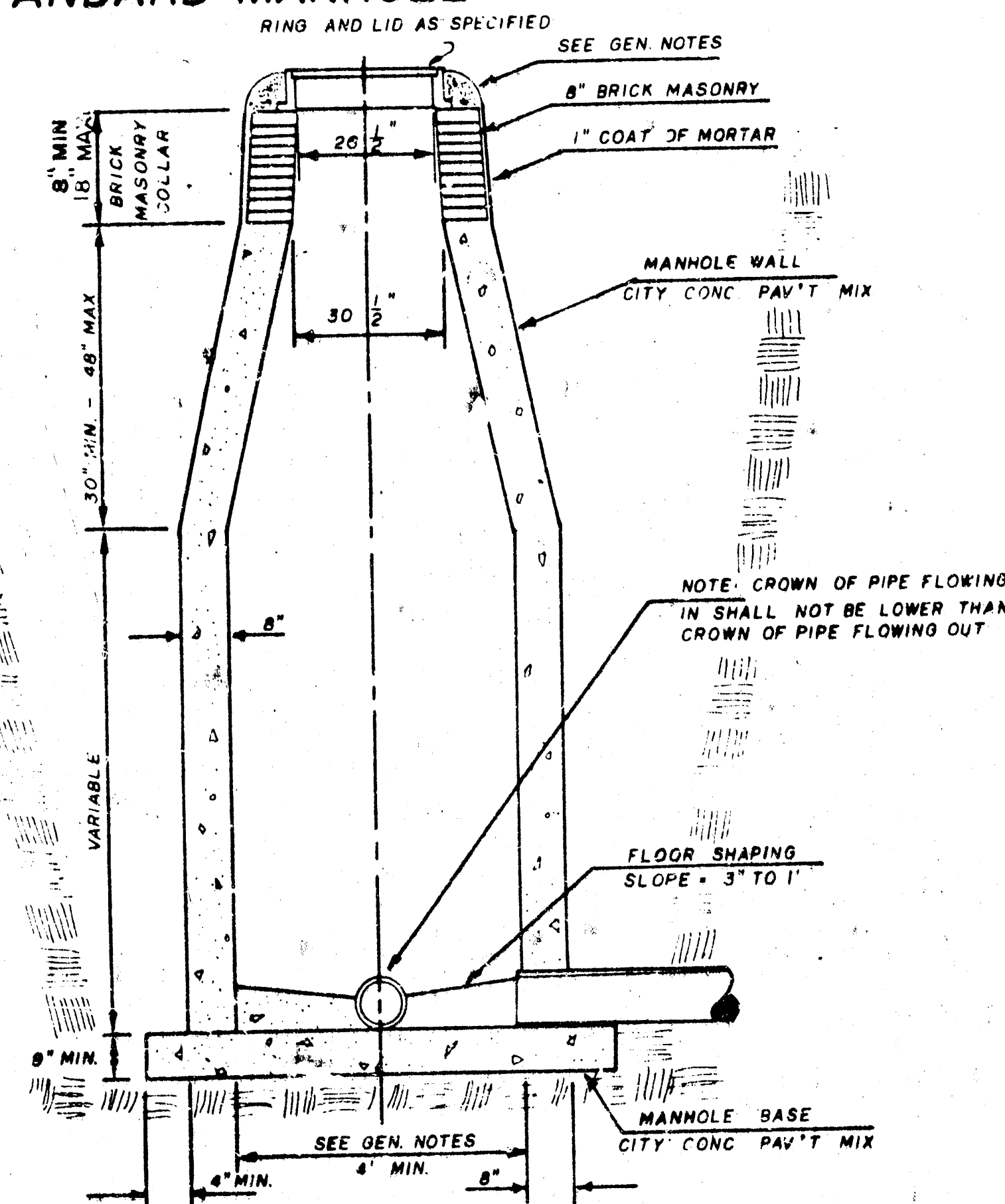
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SEWER APPURTENANCES DETAILS

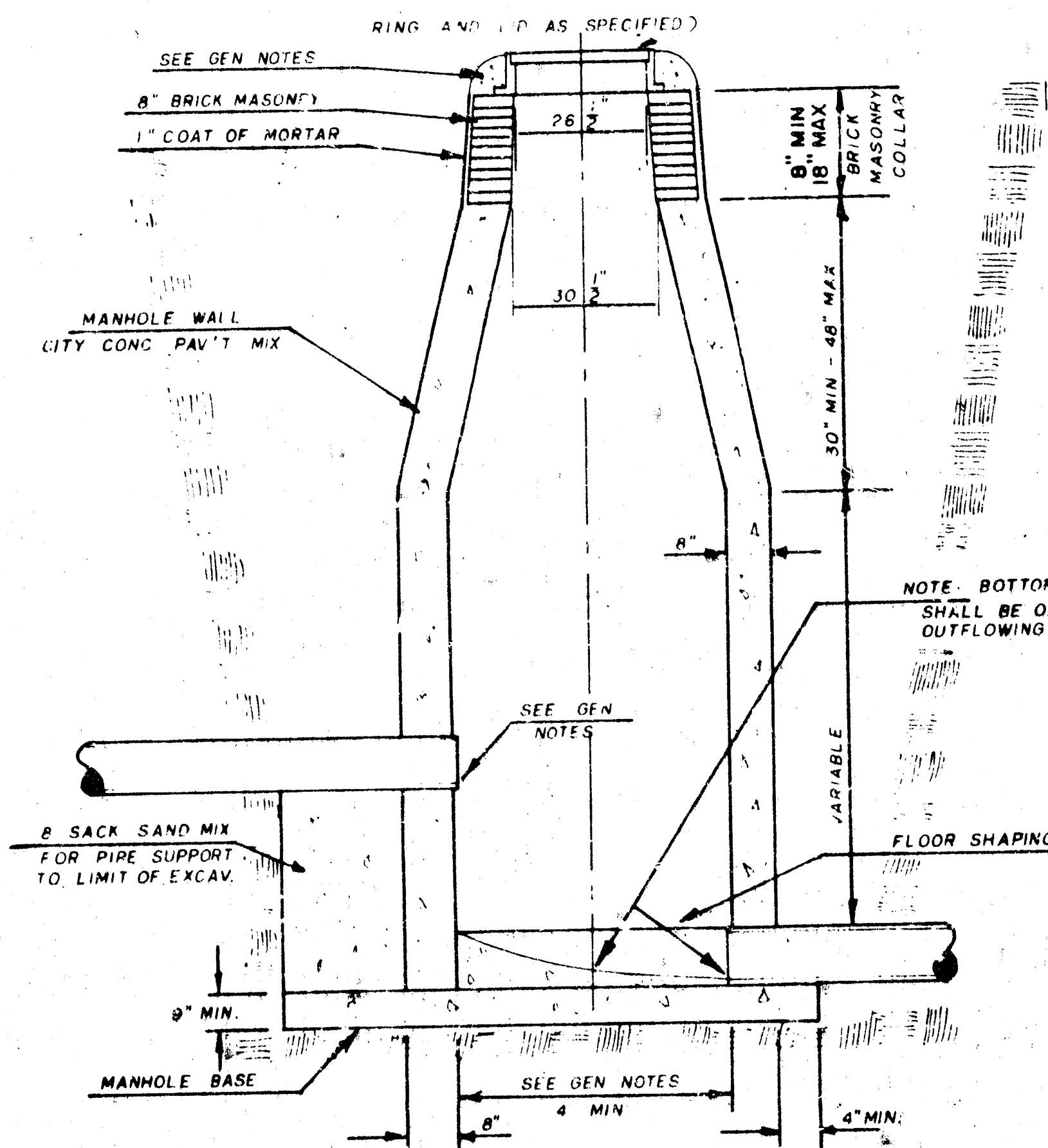
ADOPTED AS STANDARD DESIGN
BY

City of Wichita, Kansas

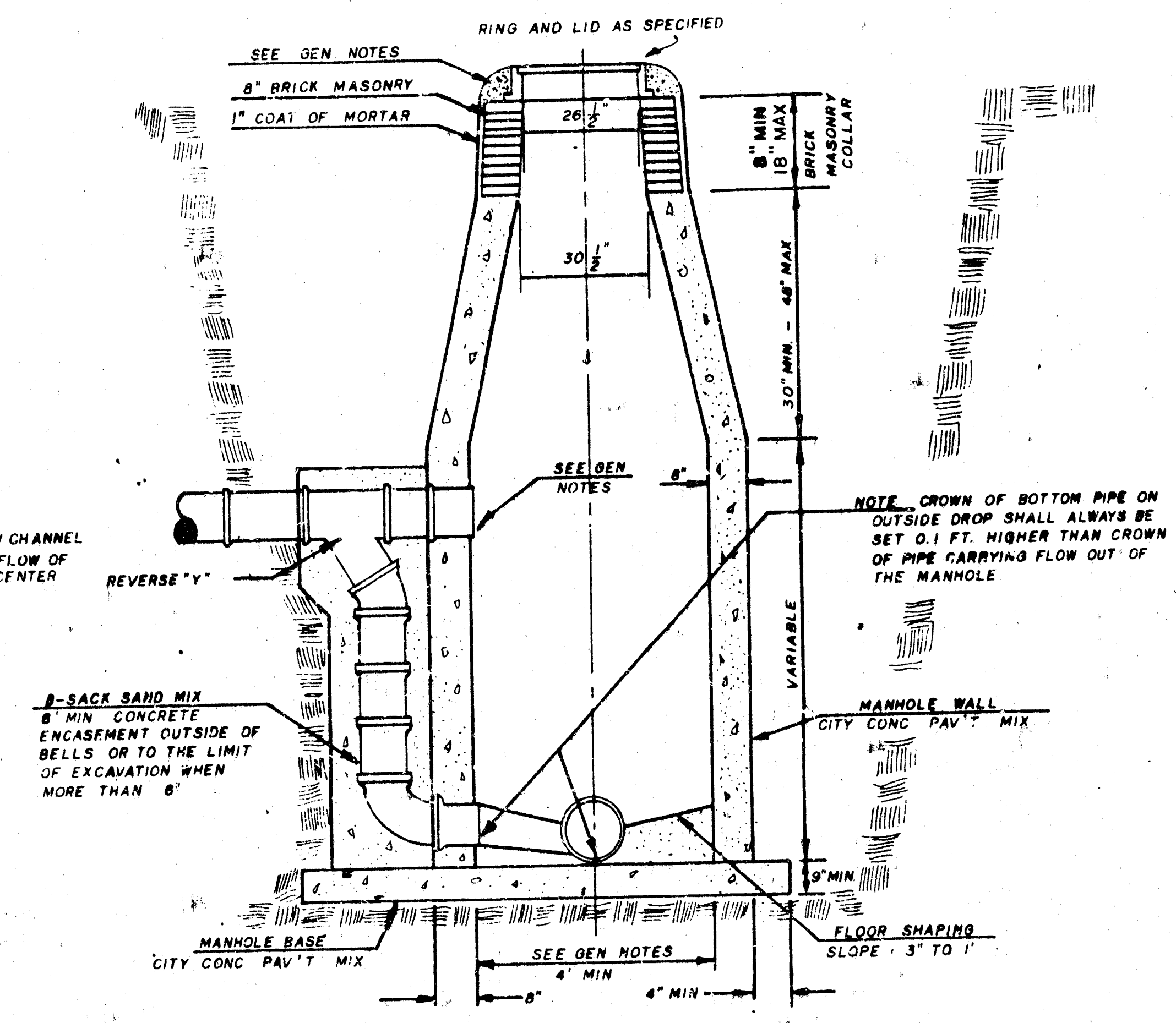
STANDARD MANHOLE TYPE "C"



INSIDE DROP MANHOLE TYPE "C"



OUTSIDE DROP MANHOLE TYPE "C"

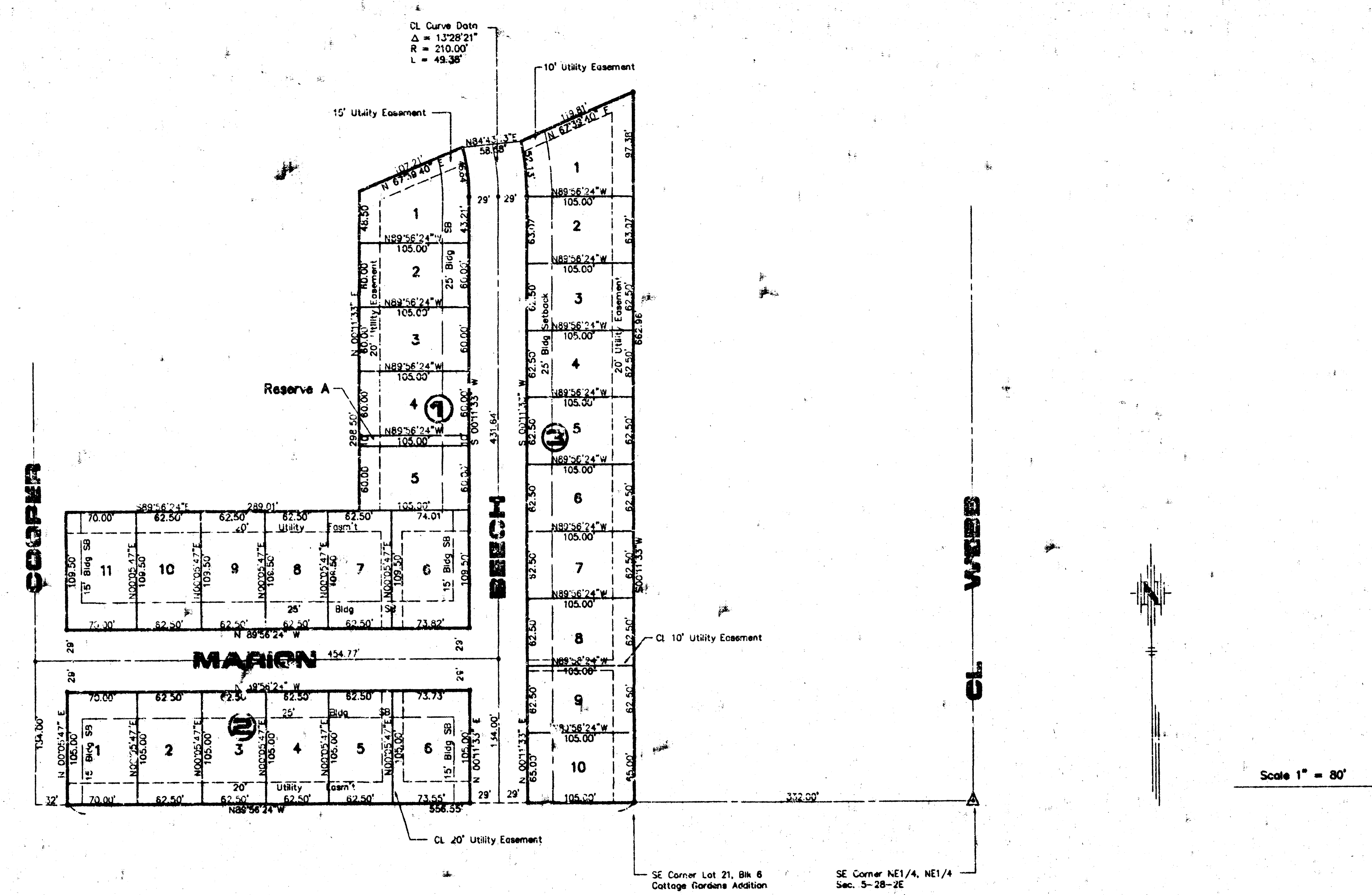


GENERAL NOTES

1. 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 PAVING CONSTRUCTION AS SPECIFIED IN THE CITY STANDARD 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.
2. 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.
3. 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.
4. 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 MANHOLE 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.
5. PIPES INSTALLED WITHIN THE EXCAVATION MADE FOR THE MANHOLE SHALL BE CRAIDED WITH CONCRETE TO THE LIMITS OF THE MANHOLE EXCAVATION. WHEN CLAY PIPE IS USED, THE CRAIDLE SHALL EXTEND TO THE FIRST JOINT OUTSIDE THE MANHOLE. THE CRAIDLE SHALL BE TERMINATED AT THE CLAY PIPE JOINT IN A MANNER WHICH WILL MAINTAIN THE FLEXIBILITY OF THE JOINT. COST OF CRAIDLE WITHIN MANHOLE EXCAVATION OR TO CLAY PIPE JOINTS ADJACENT TO MANHOLE SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE MANHOLE.
6. 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 DRAWINGS.
7. THE VERTICAL FREE FALL DROP INSIDE MANHOLES SHALL NOT EXCEED 2'. THE CROWNS OF INFLOWING PIPES SHALL NEVER BE SET LOWER THAN THE CROWN OF THE OUTFLOWING PIPE.

Sheet 6 of 7
TURTLE RUN 2ND ADDITION
PROJECT NO. 468-82330
INDEX CODE: 741926
NOTE NO. 7 REVISED JAN 1991

PC 38-4



This plot approved and all dedications shown hereon accepted by the City Council of the City of Wichita, Kansas, this 15th day of June, 1993.



Elma Broudford
Elma Broudford, Mayor
Pat Burnett
Pat Burnett, Deputy City Clerk

Entered on transfer record this 4th day of July, 1993.

#1304631

This is to certify that this instrument was filed for record in the Register of Deeds Office at 1:00 P.M. on the 14th day of JULY, 1993.

Pat Kettler
Pat Kettler, Register of Deeds
Ed Reas
Ed Reas, Chief Deputy

KNOW ALL MEN BY THESE PRESENTS:

That we Rose Hill State Bank holders of a mortgage on the property described in the Surveyor's Certificate, do hereby consent to the plot of Turtle Run 2nd Addition.

Rose Hill State Bank
R.D. Moody
R. D. Moody, President



STATE OF KANSAS, COUNTY OF SEDGWICK: ss.

This instrument was acknowledged before me on this 13 day of May, 1993 for Rose Hill State Bank by R.D. Moody, President.

My appointment Expires: 9/16/99

Emily C. Baker
Emily C. Baker, Notary Public

STATE OF KANSAS, COUNTY OF SEDGWICK: ss.

I, Kenny E. Hill, being a duly licensed Land Surveyor in said County and State, do hereby certify that I have been in responsible charge of surveying and platting "TURTLE RUN 2ND ADDITION" to Wichita, Kansas, being described as follows:

A replat of Lots 12 through 25, Block 5, Lots 9 through 21, Block 6 and Lots 1 through 8, Cottage Gardens Addition to Wichita, Kansas located in the Northeast Quarter of Section 5, Township 28 South, Range 2 East of the 6th P.M. Sedgwick County, Kansas, more particularly described as follows:

Commencing at the Southeast corner of the Northeast Quarter of the Northeast Quarter of Section 5, Township 28 South, Range 2 East of the 6th P.M., Sedgwick County, Kansas; thence 189° 56' 24" W for a distance of 332.00 feet to the Southeast corner of Lot 21, Block 6, Cottage Gardens Addition to Wichita, Kansas being the point of beginning; thence N89° 56' 24" W for a distance of 556.55 feet; thence N00° 05' 47" E for a distance of 272.50 feet; thence S89° 56' 24" E for a distance of 289.01 feet; thence N00° 11' 33" E for a distance of 298.50 feet; thence N67° 39' 40" E for a distance of 107.21 feet; thence N84° 43' 13" E for a distance of 58.58 feet; thence N67° 39' 40" E for a distance of 119.81 feet; thence S00° 11' 33" N for a distance of 662.96 feet to the point of beginning.

The accompanying plat is a true and correct exhibit of property surveyed.

Dated this 6th day of MAY, 1993.

Kenny E. Hill
Kenny E. Hill, L.S.

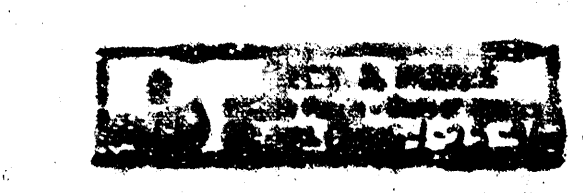
KNOW ALL MEN BY THESE PRESENTS:

That we, the undersigned, have caused the land described in the Surveyor's Certificate to be platted into lots, blocks, streets and a reserve. The streets are hereby dedicated to and for the use of the public. Easements are hereby granted as indicated for the construction and maintenance of drainage and utilities. Reserve A is for common open area and for the construction and maintenance of drainage and utilities. The Reserve is to be owned and maintained by a property owners association consisting of all of the owners of property in this addition and the original addition of Cottage Gardens. Easements and other public reservations are hereby vacated to conform to those shown on this plat by virtue of KSA 12-512(c), as amended.

Pownee Development, Inc.
Devoe Treadwell
Devoe Treadwell, President
Thea Treadwell
Thea Treadwell, Secretary

STATE OF KANSAS, COUNTY OF SEDGWICK: ss.

This instrument was acknowledged before me on this 10th day of May, 1993, for Pownee Development, Inc. by Devoe Treadwell, President and Thea Treadwell, Secretary.

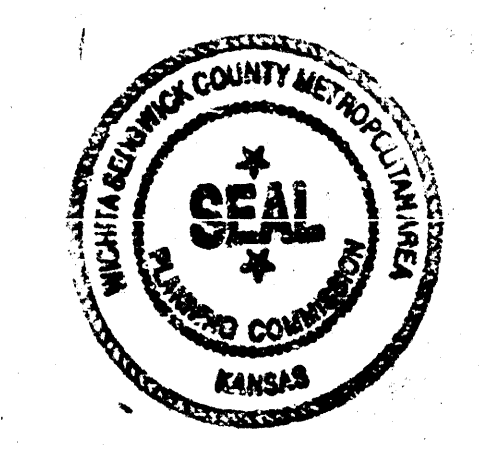


Barbara R. Brown
Barbara R. Brown, Notary Public

My Appointment Expires: 4-25-96

This plot of TURTLE RUN 2ND ADDITION to Wichita, Kansas has been submitted to and approved by this WICHITA-SEDGWICK COUNTY METROPOLITAN AREA PLANNING COMMISSION, Wichita, Kansas.

Dated this 3th day of April, 1993.



WICHITA SEDGWICK COUNTY METROPOLITAN AREA PLANNING COMMISSION
Lorenza Backenridge J. Angerman
Lorenza Backenridge J. Angerman, Chairman
Marvin S. Krout
Marvin S. Krout, Secretary

TURTLE RUN 2ND ADDITION

TO WICHITA - SEDGWICK COUNTY, KANSAS

PROJECT NO. 468-82330
INDEX CODE 741926

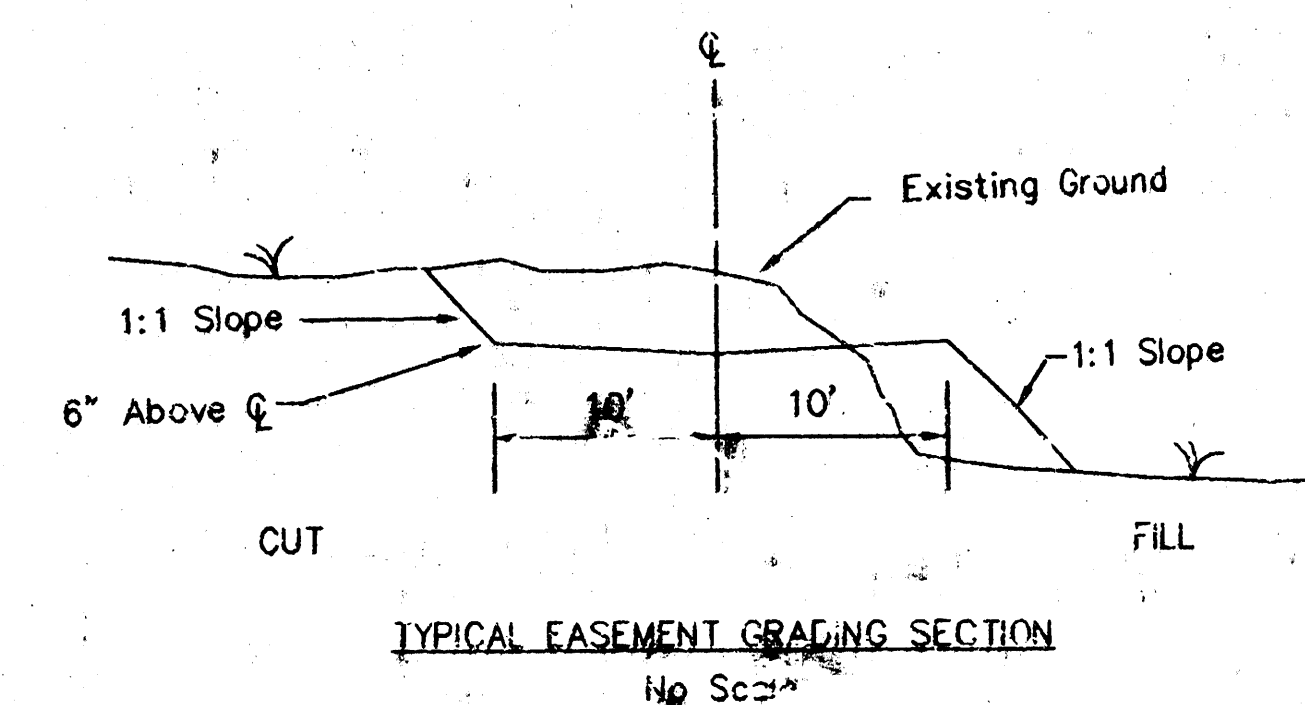
Sh. 7 of 7

PC 38-4
PC 38-4

K:\MAPS\CD\1477\GRADE Thu Jul 28 14:17:01 1994 Bill Fox POC & ASSOC.



N.E. Corner Section 5,
Township 28 South, Range 2 East



GENERAL NOTES

1. Sewer contractor to grade all cross-hatched easements.
2. Grading shall not extend into unplatted property.

REVISED 5-7-93
REVISED 1-12-95
DEC. 7, 1992

P.O.E. & ASSOCIATES OF KANSAS, INC.	
Consulting Engineers 434 N. Olive St. Wichita, KS 67208 (316) 865-4114	
ENGINEER K. Hill	LOT GRADING PLAN Turtle Run 2nd Addition CITY OF WICHITA, KANSAS Project No. 468-82330 Index Code 741926
DATE 8/1/94	
BY S. Schmitt	
7/2/94	

18-15-1-1