

LAT 220 W.I.

TO SERVE LOTS 1-17 BLK. 14, AND LOTS 1-16 BLK. 15,
WESTWOOD HEIGHTS SECOND ADDITION

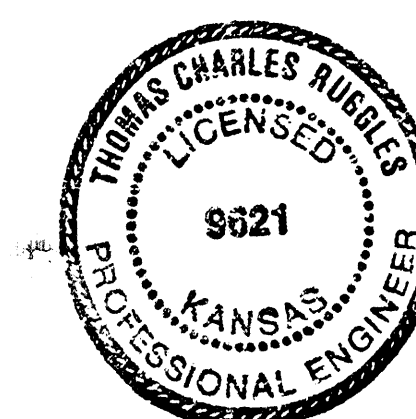
PROJECT NO.

468-76-245-81560-000-000-001

CITY OF WICHITA, KS.
MICHAEL E. LINDEBAK CITY ENGINEER

GENERAL NOTES

1. The Contractor shall be responsible for preserving property irons. The Contractor will be required to re-establish any property irons which are disturbed by his construction operations. Such irons shall be re-established by a licensed land surveyor or a professional engineer in accordance with state laws.
2. Underground utility lines are to be adjusted by the utility companies prior to or during construction. The Contractor shall contact the following companies to make arrangements for such work:
K.G.&E. 261-6285
Southwestern Bell 268-2245



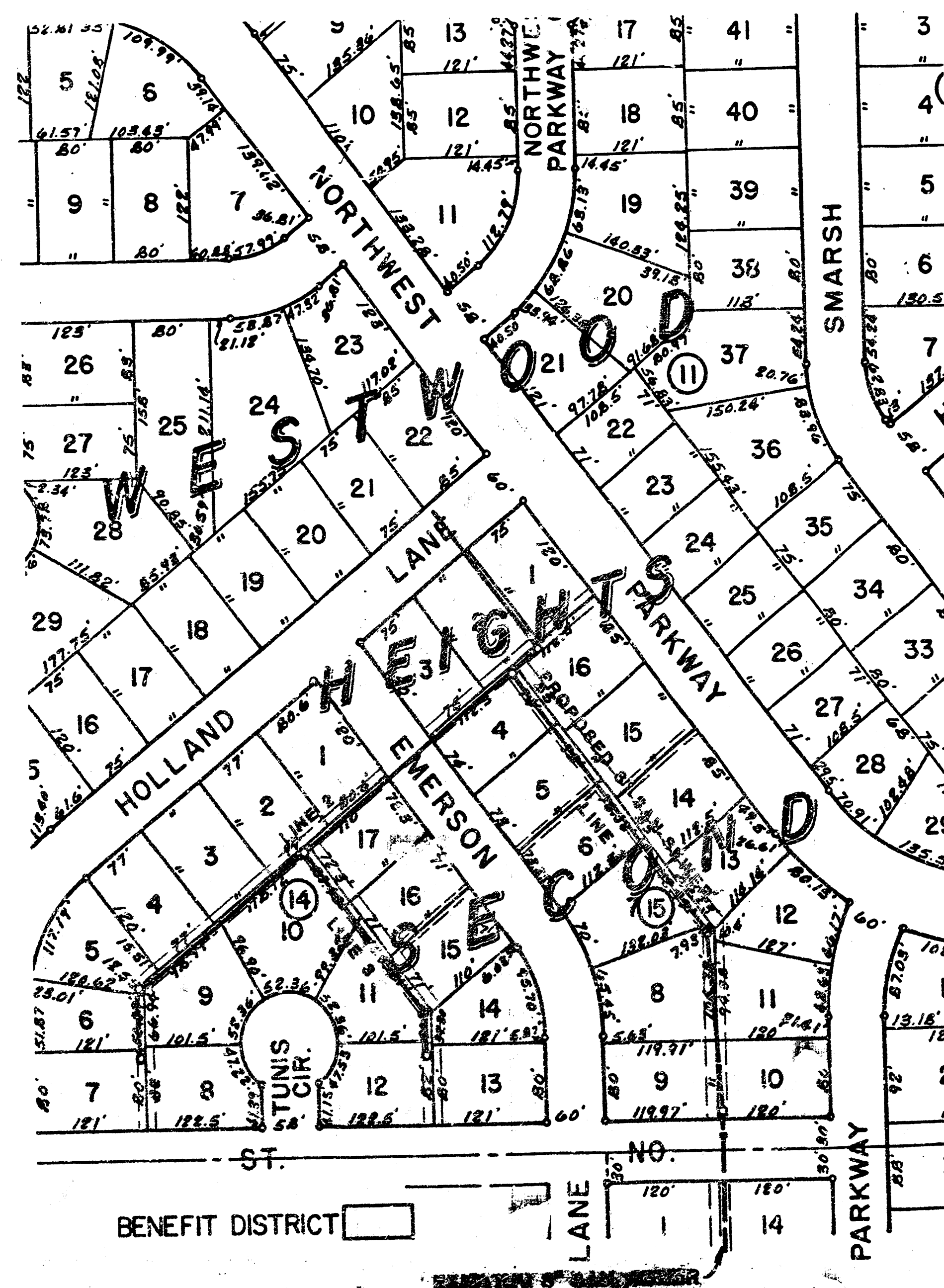
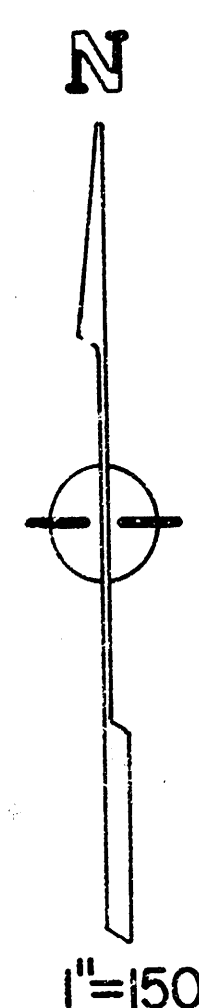
BAUGHMAN COMPANY, P.A.
SURVEYING & ENGINEERING
316 202-7271 • 330 LAURA • WICHITA, KANSAS 67211

AUGUST 6, 1986

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INDEX

1. TITLE & BENEFIT DISTRICT
- 2-4. PLAN & PROFILE
5. TYPE "P" MANHOLE DETAIL



AS BUILT
RPL
12-86

NUMBER CD
SURVEY EA-18
CHECKED JEL DATE 8-6-86

BENCH MARK Ridge 20 & 17th St North
(corner) City of St. Paul
N. & 17th St. of 1/4 section
corner
ELEVATION 142.81 City Datum

+24.2
STA 6128.5 LINE 1 - STA 6160
LINE 2; CONSTRUCT TYPE 'P'
OR TYPE 'X' MANHOLE
TOP 156.49

STATION 2488.8
NOTE CONTRACTOR TO EXPOSE & VERIFY
EXISTING LOCATION & ELEVATION PRIOR
TO CONSTRUCTION

16" E BOX TO BE
TEMPORARILY RE-COATED
BY OTHERS

STA 6112.1; CONSTRUCT
TYPE 'P' OR TYPE 'X' MAN-
HOLE, TOP 156.20

STA 4100.0; CONSTRUCT
TYPE 'P' OR TYPE 'X' MAN-
HOLE, TOP 156.21 STUB

+61.2
STA 6146.8; CONSTRUCT
TYPE 'P' OR TYPE 'X' MANHOLE
TOP 156.69, 4" STUB N.E.

SCALE
PLAN 1"=40'
PROFILE 1"=5'

- Bench Marks
- 1) Cut 2 feet east of existing end of return on the
northern side of Northwest Parkway, located near the
west end of lot 29, block 11, Westwood Heights 2nd Addition.
Elevation = 154.82 City Datum.
 - 2) Cut 5.5 feet west of end of existing curb (east of
existing curb inlet) on the south side of 17th Street
North, located near the N.E. corner of Westlink 10th
Addition. Elevation = 157.98 City Datum.

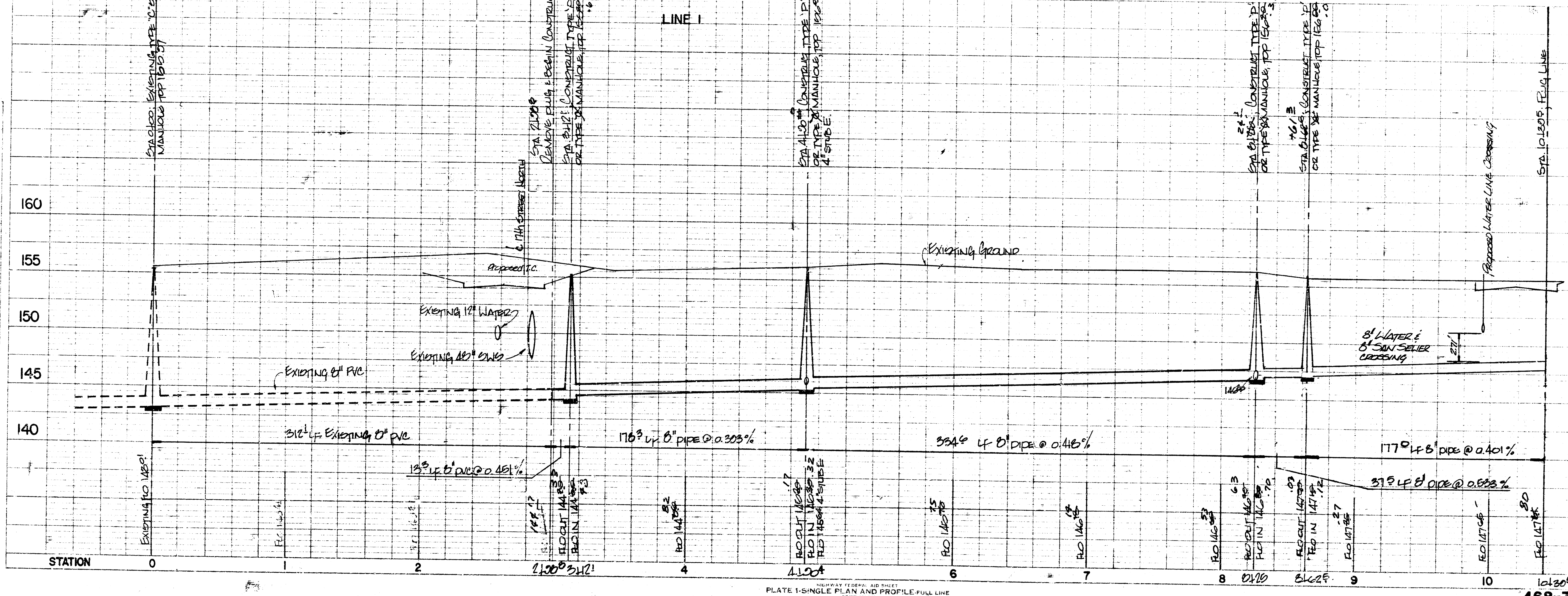
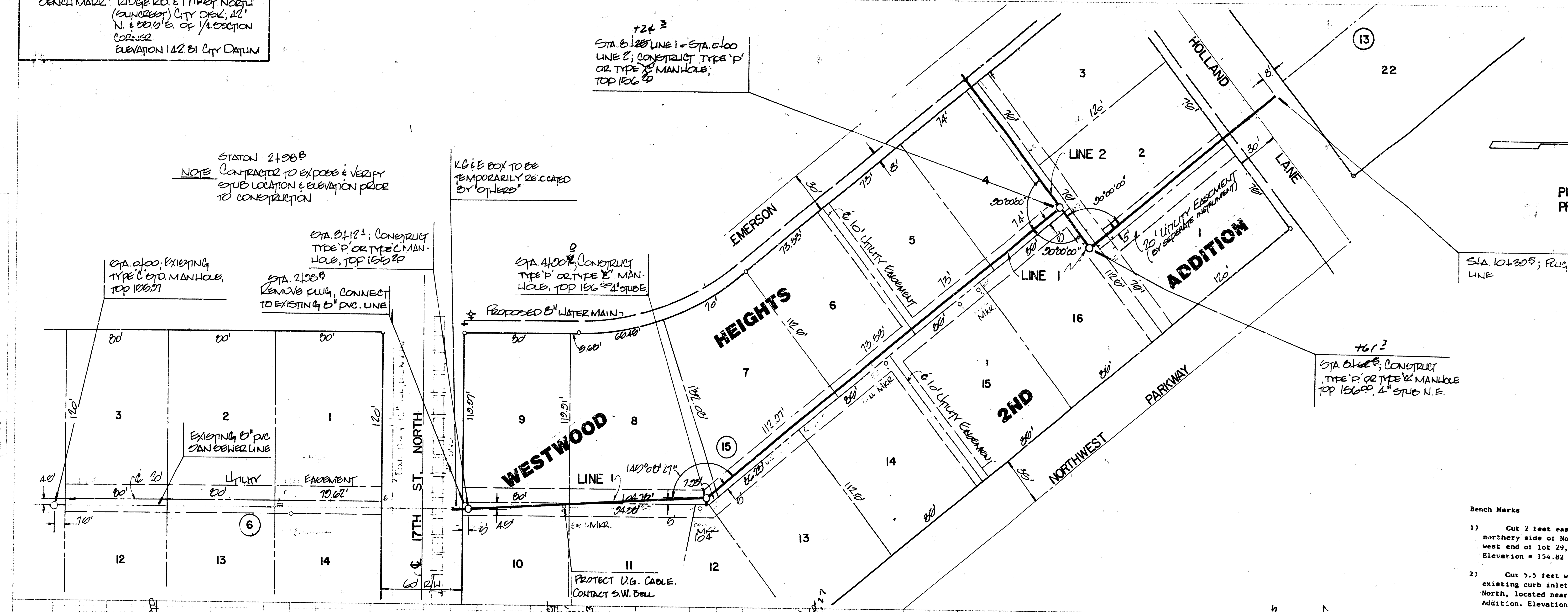


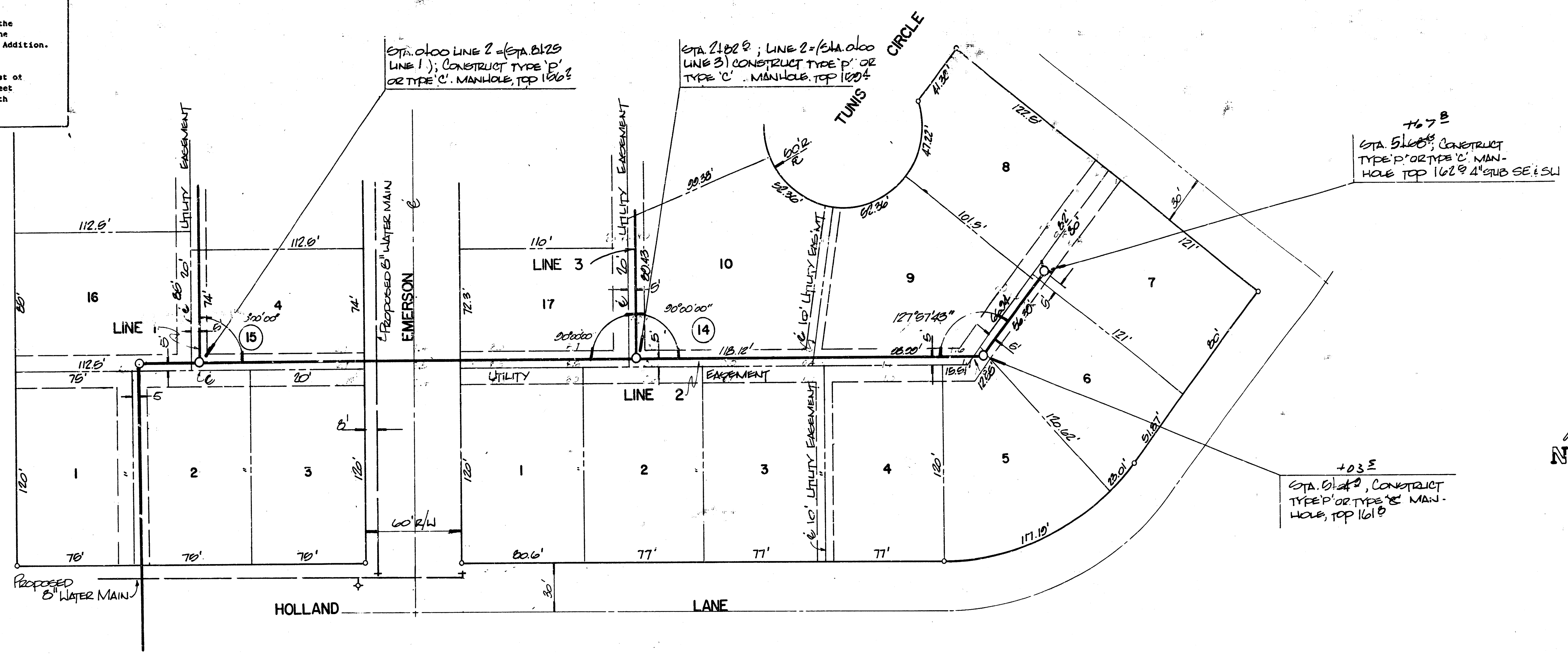
PLATE 1-SINGLE PLAN AND PROFILE-FULL LINE
PRINTED IN U.S.A.

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Bench Marks

- 1) Cut 2 feet east of existing end of return on the northern side of Northwest Parkway, located near the west end of lot 24, block 11, Westwood Heights 2nd Addition. Elevation = 154.82 City Datum.
- 2) Cut 5.5 feet west of end of existing curb (east of existing curb inlet) on the South side of 17th Street North, located near the N.E. Corner of Westlink 16th Addition. Elevation = 157.98 City Datum.



SCALE
PLAN 1"=40'
PROFILE 1"=5'

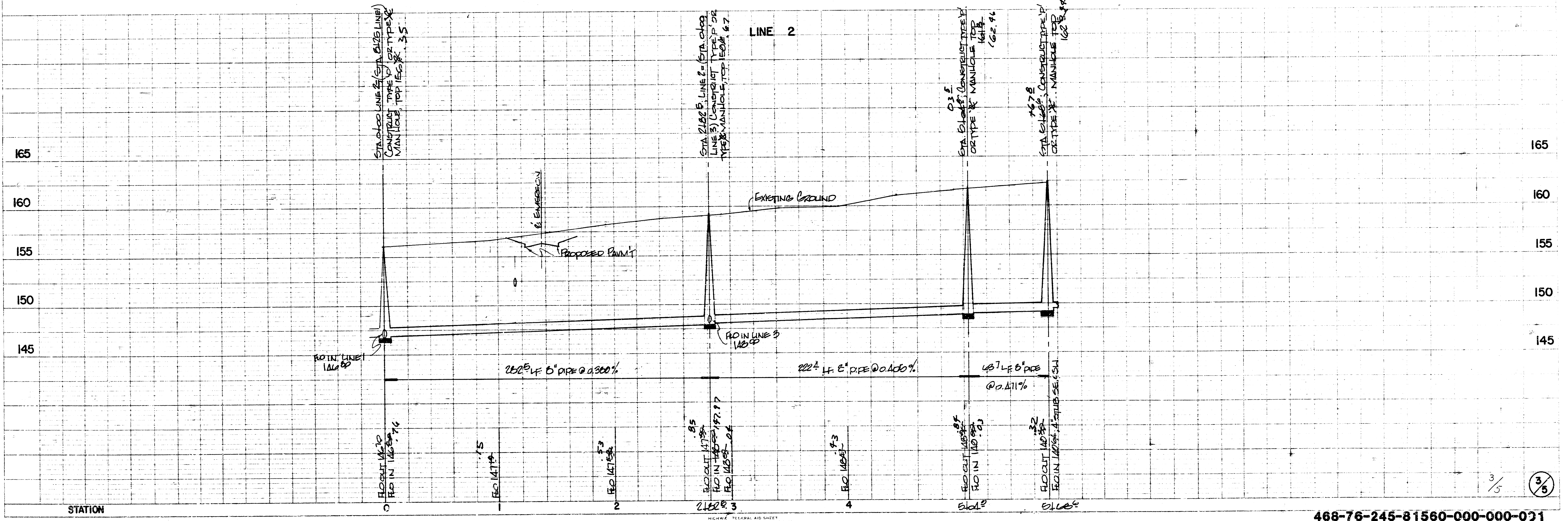


PLATE 1 - SINGLE PLAN AND PROFILE - FULL LINE

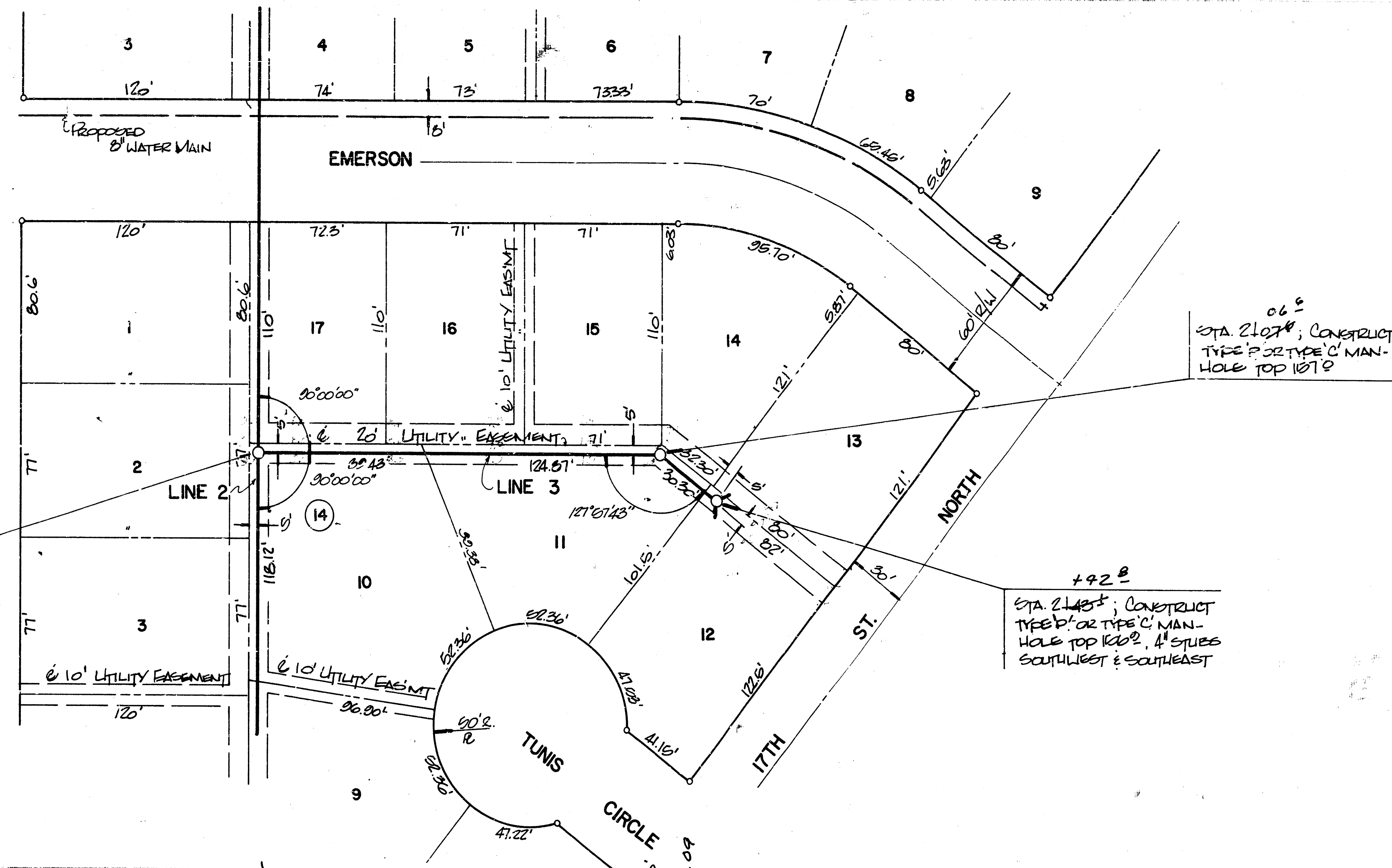
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- Bench Marks**
- 1) Cut 2 feet east of existing end of return on the northern side of Northwest Parkway, located near the west end of lot 29, block 11, Westwood Heights 2nd Addition. Elevation = 154.82 City Datum.
 - 2) Cut 5.5 feet west of end of existing curb (east of existing curb inlet) on the South side of 17th Street North, located near the N.E. Corner of Westlark 6th Addition. Elevation = 157.98 City Datum.

PLATE 1
SINGLE PLAN AND PROFILE
FULL LINE
DATE: 10/10/58
BY: J. W. JONES
CHECKED: J. W. JONES
APPROVED: J. W. JONES

STA. 0+00 LINE 3 = STA. 2+82.6
LINE 2: CONSTRUCT TYPE 'D' OR TYPE 'C' MANHOLE TOP 150.4



+42.8
STA. 2+148.7, CONSTRUCT TYPE 'D' OR TYPE 'C' MANHOLE TOP 150.4, 4' SQUARE SOUTHWEST & SOUTHEAST

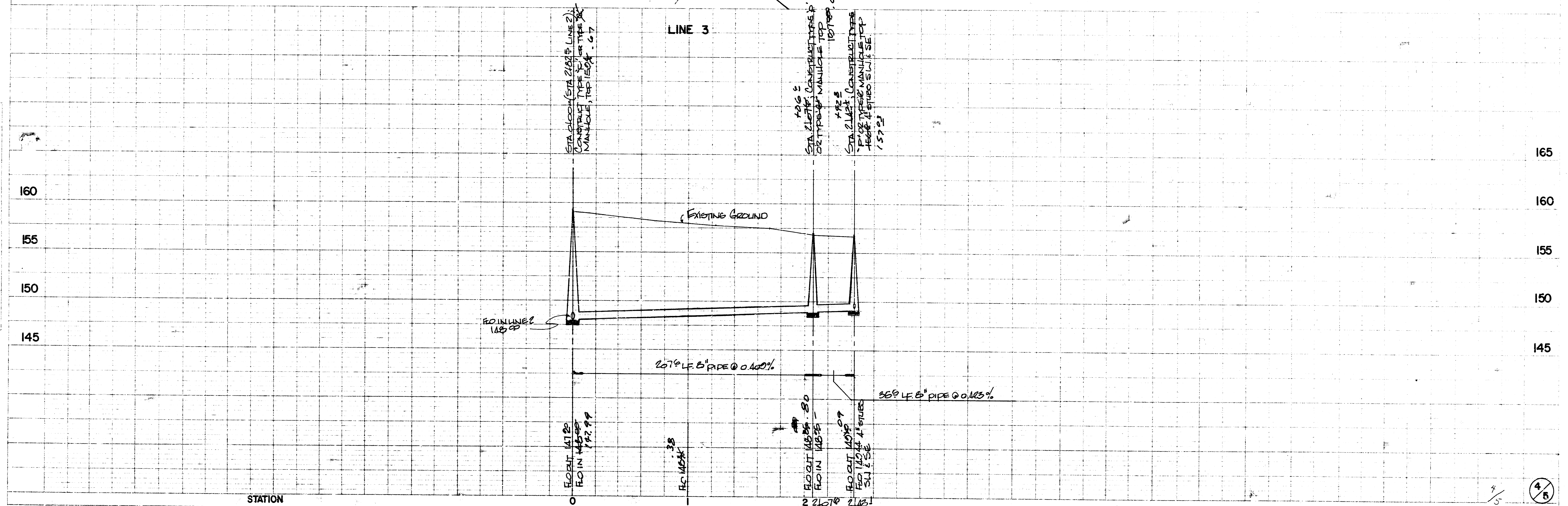


PLATE 1-SINGLE PLAN AND PROFILE-FULL LINE
PRINTED BY S.D.A.

468-76-245-81560-000-000-001

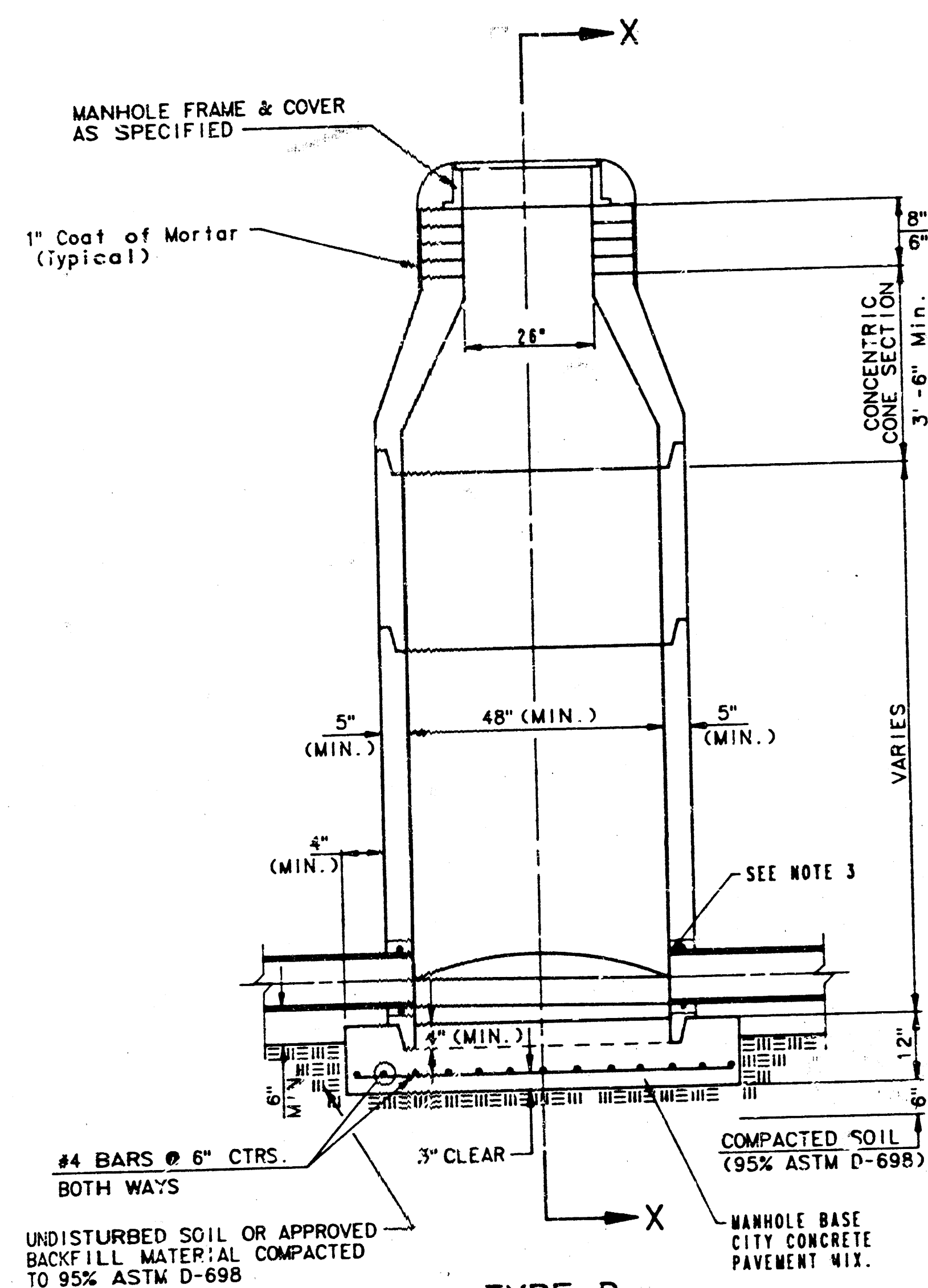
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SEWER APPURTENANCES DETAILS

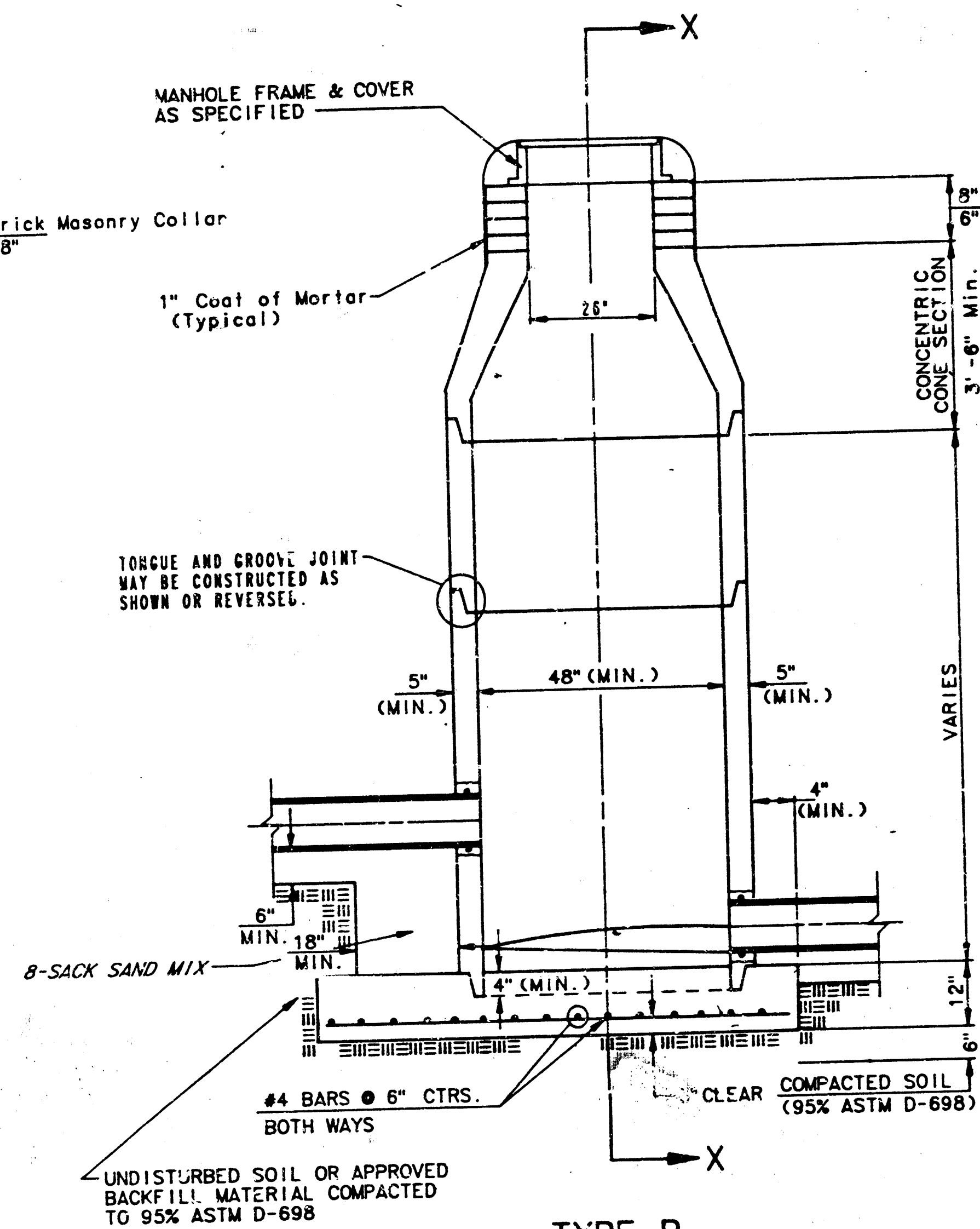
ADOPTED AS STANDARD DESIGN

BY

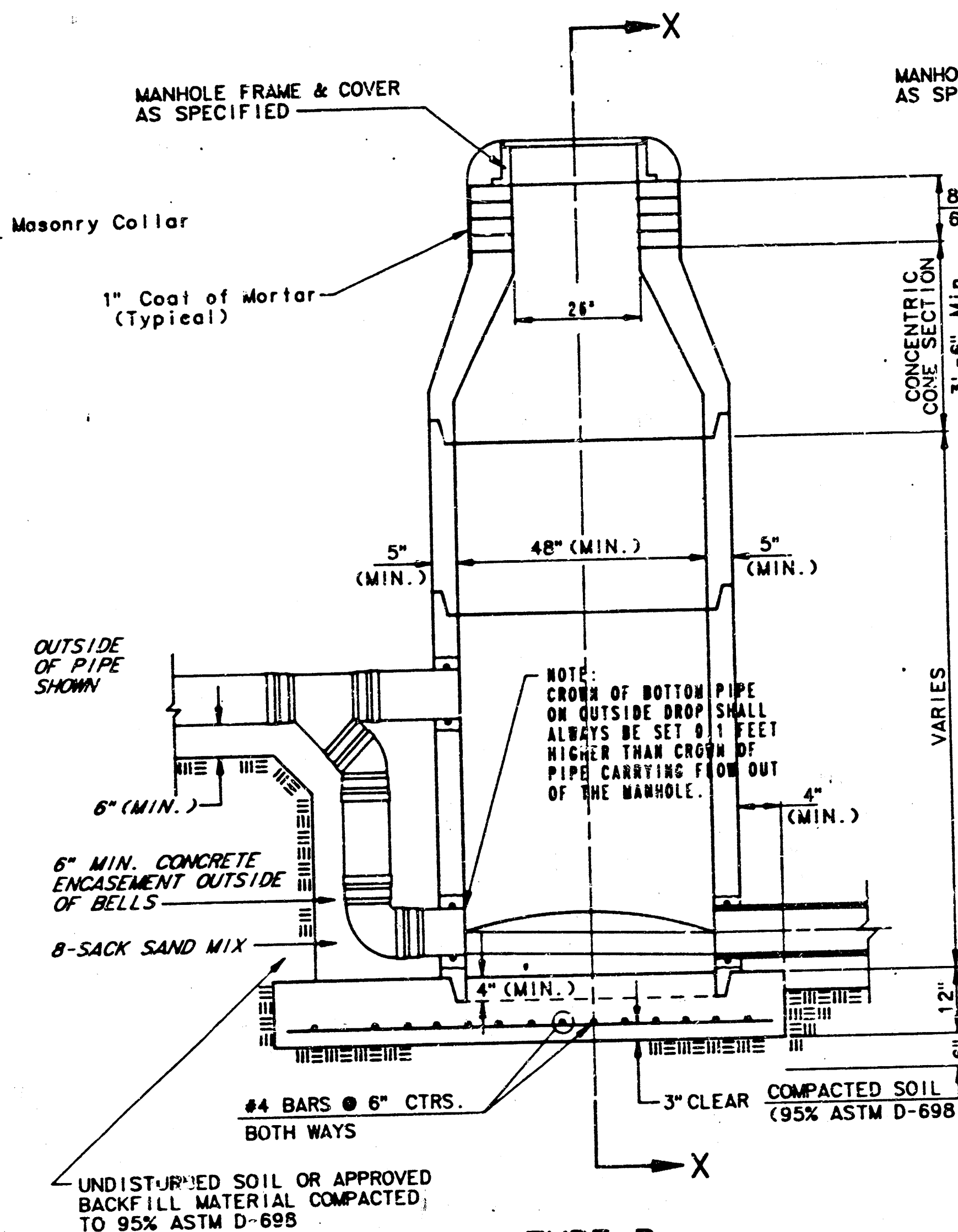
CITY OF WICHITA



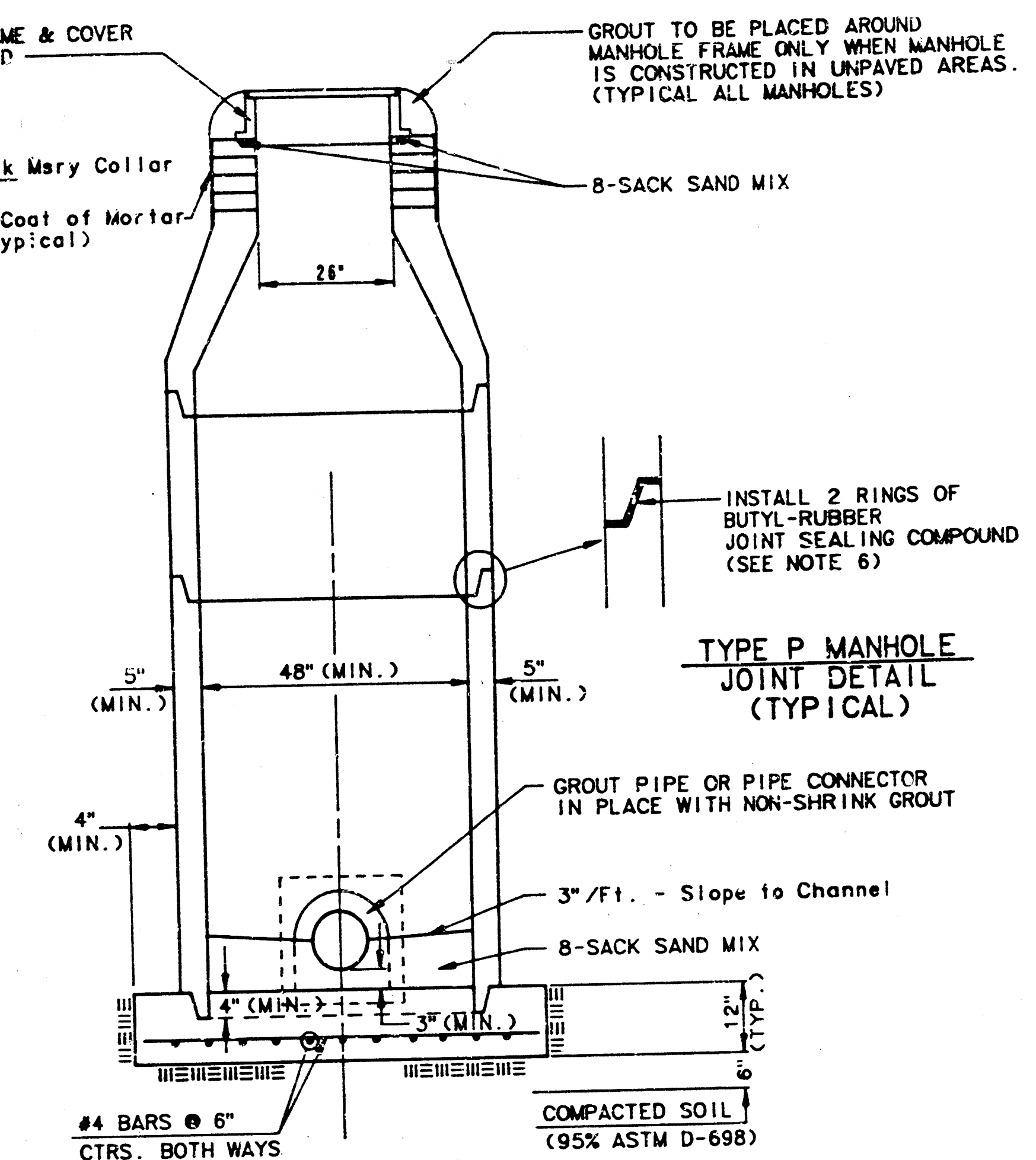
TYPE P
STANDARD MANHOLE



TYPE P
INSIDE DROP MANHOLE



TYPE P
OUTSIDE DROP MANHOLE



SECTION X
(TYPICAL)

GENERAL NOTES

PRECAST MANHOLE NOTES

1. ALL PRECAST CONCRETE MANHOLE SECTIONS SHALL CONFORM TO THE LATEST REVISION 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 TRENEC SERIES 66 HI-BUILD EPOXYLINE, 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 PAVING 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 RINGS 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 CONSTRUCTION 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 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.
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 INSIDE THE MANHOLE. THE CRADLE SHALL BE TERMINATED AT THE FULL JOINT. IN A MANNER WHICH WILL MAINTAIN THE FULL RIGIDITY 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 4" 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 COKE. 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.

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Revised: June 12, 1986

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