

LATERAL 3, MAIN 9, S.S. 23

PROJECT NO.

468-76-245-81259-000-000-001

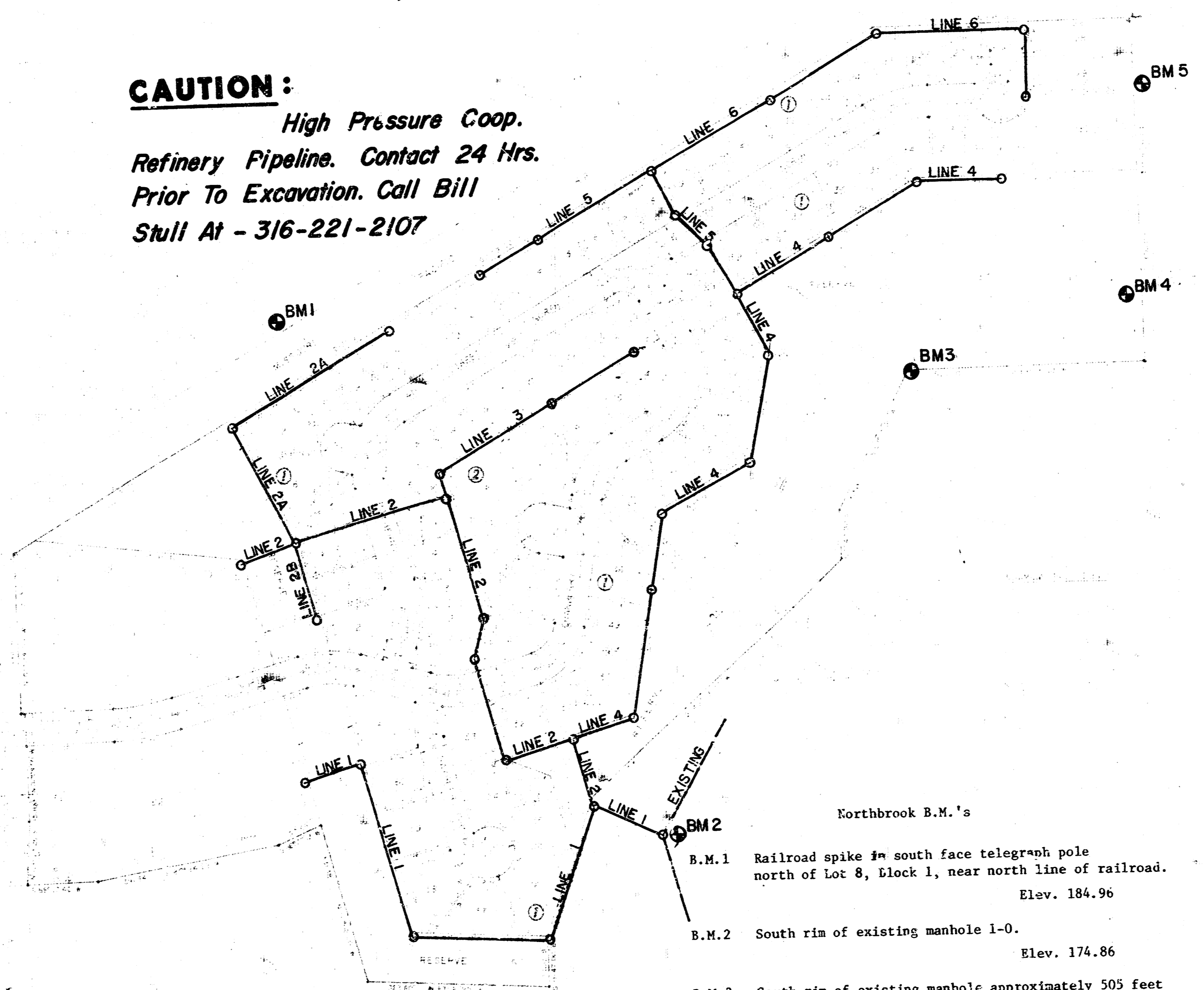
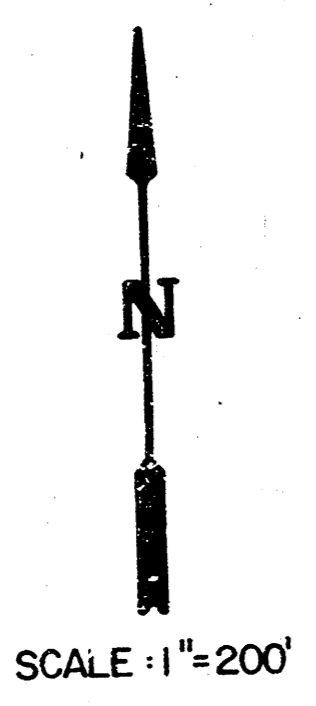
CITY OF WICHITA, KANSAS
R.W. BRUGGEMAN, CITY ENGINEER

APRIL, 1983

*As Built
S.S. 23
2/84*

CAUTION:

High Pressure Coop.
Refinery Pipeline. Contact 24 Hrs.
Prior To Excavation. Call Bill
Stull At - 316-221-2107



INDEX TO DRAWINGS

SHEET NO.	DESCRIPTION
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8	LINE 4
9	LINE 5
10	LINE 6
11	FINAL PLAT
12	MANHOLE DETAILS
13	RISER DETAIL

NOTES

- Risers and additional stubs shall be installed on this project to serve individual lots when ordered by the field engineer. Riser construction shall conform to the requirements as shown on standard riser detail sheet. Locations of the ends of the risers shall be marked by fastening green plastic colored tape to the end of the riser and brought to the ground surface as the excavation is backfilled such that the colored tape will be visible when the project is completed. All risers shall be constructed using S.D.R. 23.5 A.B.S. or P.V.C. pipe. Elevations of stubs and tops of risers shall be such that will facilitate connection of basement drains when these lots are developed.
- To expedite construction of the streets, the contractor shall install lines 2 and 5 first and shall clear all trench excavation from within street right-of-way as soon as possible.

3. LUMP SUM BID ITEM CLEARING RIGHT-OF-WAY SHALL INCLUDE ALL COSTS OF REMOVING OBSTRUCTION; CLEARING TREES, SHRUBS, VEGETATION, AND RUBBLE. CONTRACTOR SHALL OBTAIN THE FIELD ENGINEER'S APPROVAL PRIOR TO REMOVING ANY TREES.

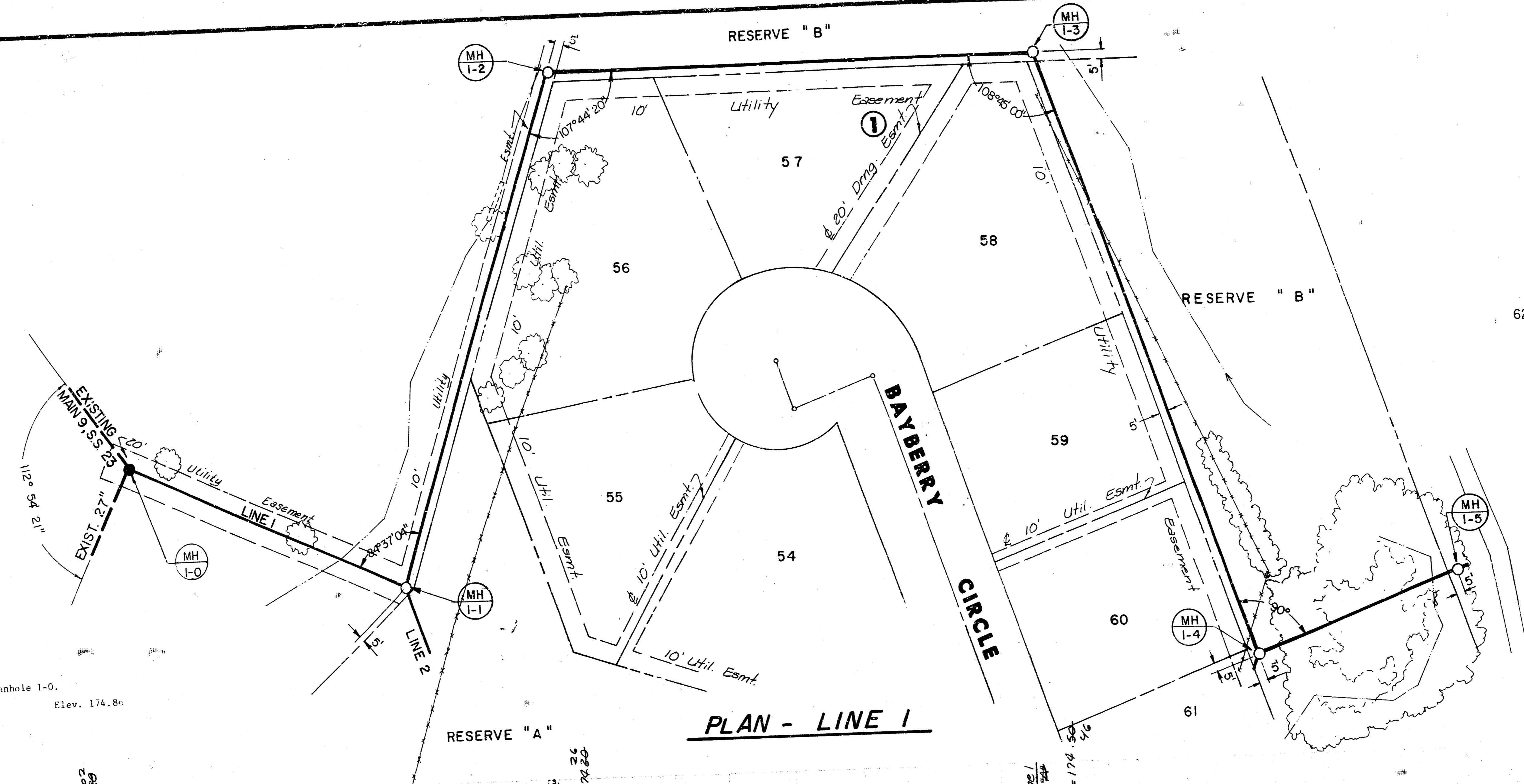
- Northbrook B.M.'s
- B.M.1 Railroad spike 1/4" south face telegraph pole north of Lot 8, Block 1, near north line of railroad. Elev. 184.96
 - B.M.2 South rim of existing manhole 1-0. Elev. 174.86
 - B.M.3 South rim of existing manhole approximately 505 feet west of the southeast corner of Northbrook. Elev. 177.59
 - B.M.4 Railroad spike in west face of KGSF "H" pole near the east line of Res. A., Northbrook. Elev. 179.24
 - B.M.5 Spike step in west face of KGSF "H" pole near the east line of Block 1, Northbrook. Elev. 179.80



NORTHBROOK
SANITARY SEWER
LATERALS

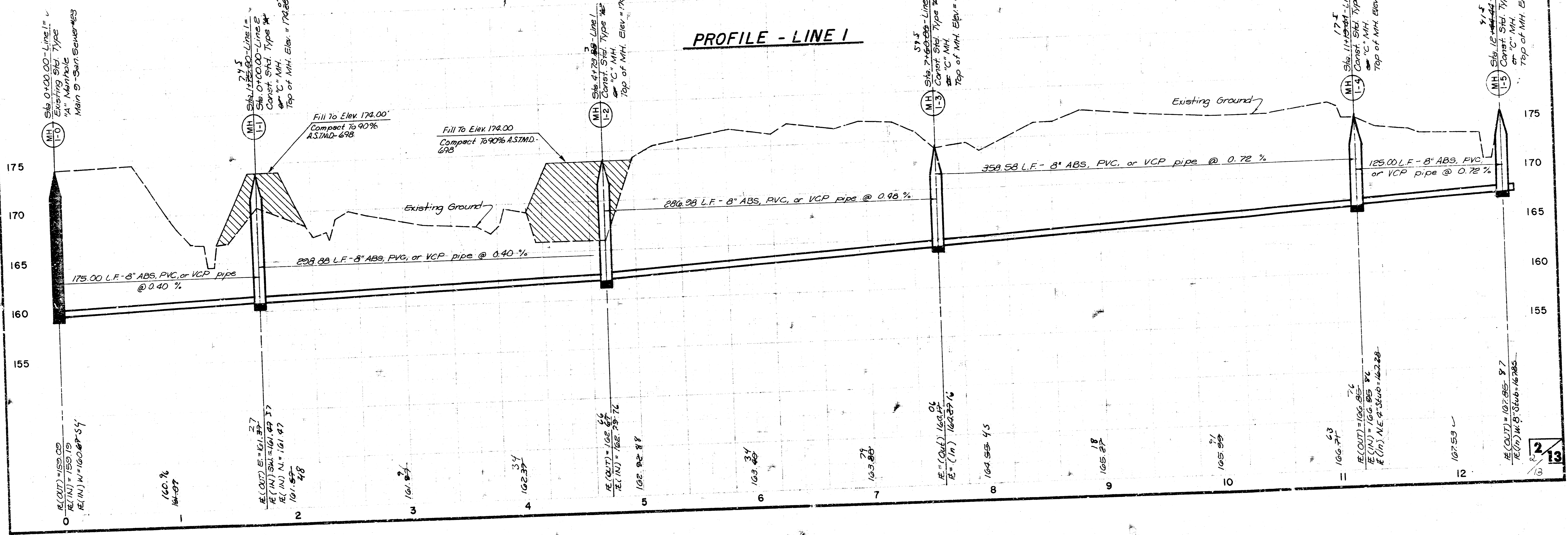
MID-KANSAS ENGINEERING CONSULTANTS PA
240 NORTH ROCK ROAD SUITE 130
WICHITA, KANSAS 67206

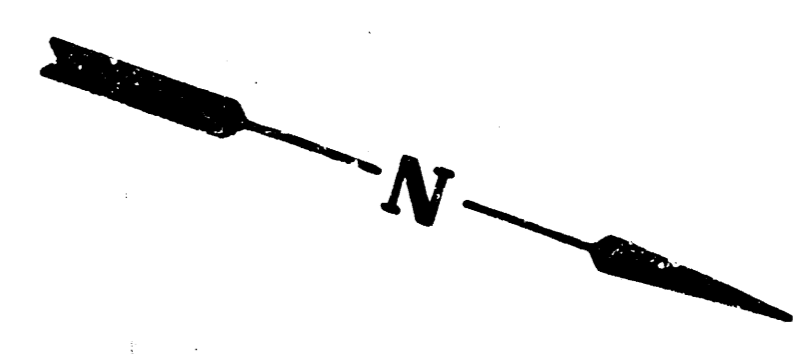
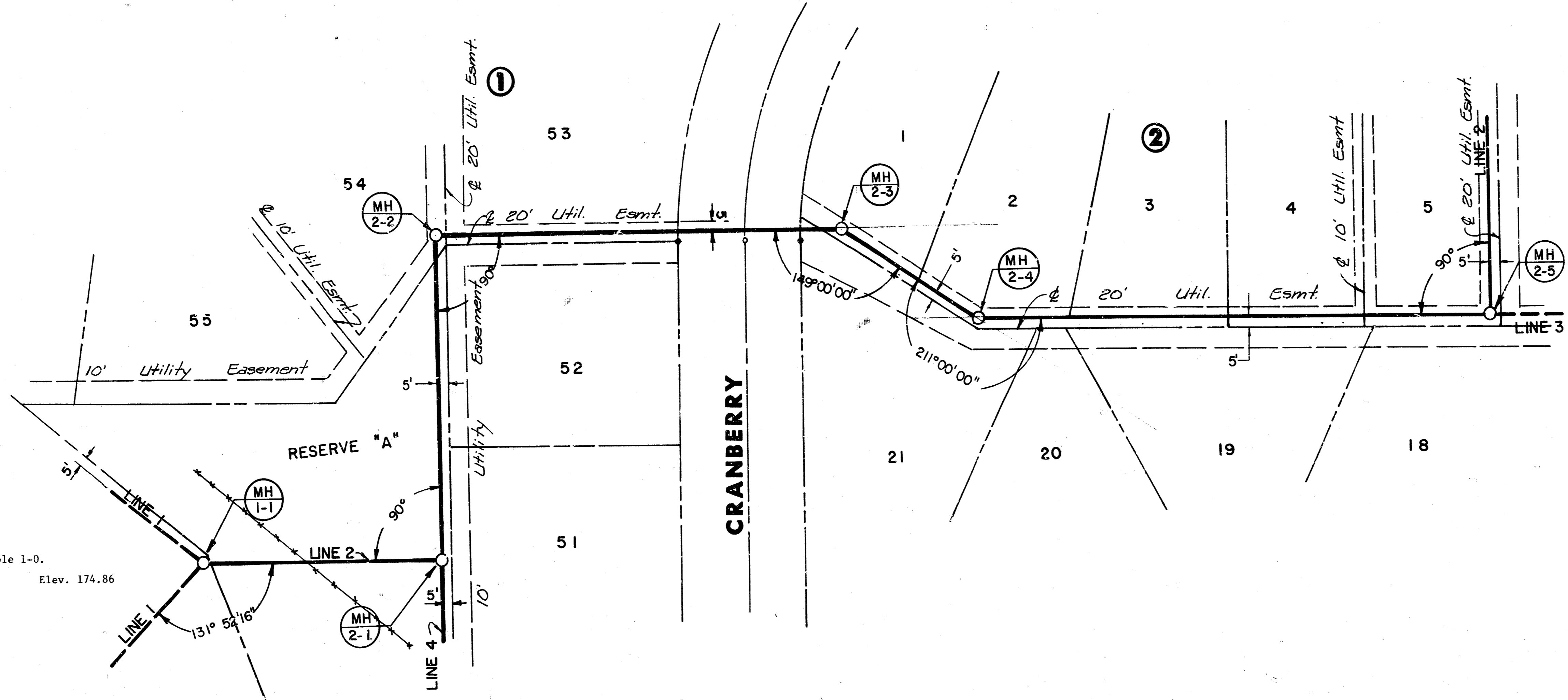
Scale:
 1" = 40' Horiz.
 1" = 5' Vert.



As Built
 SKL
 2-84

PLAN - LINE 1
PROFILE - LINE 1





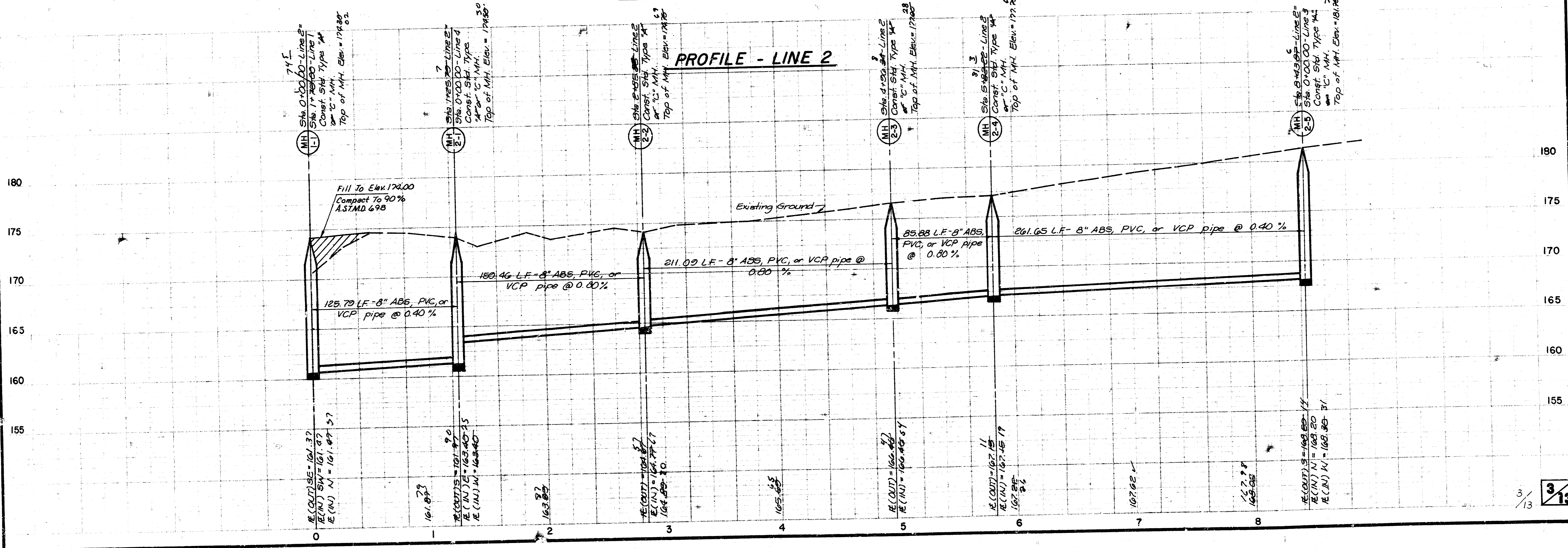
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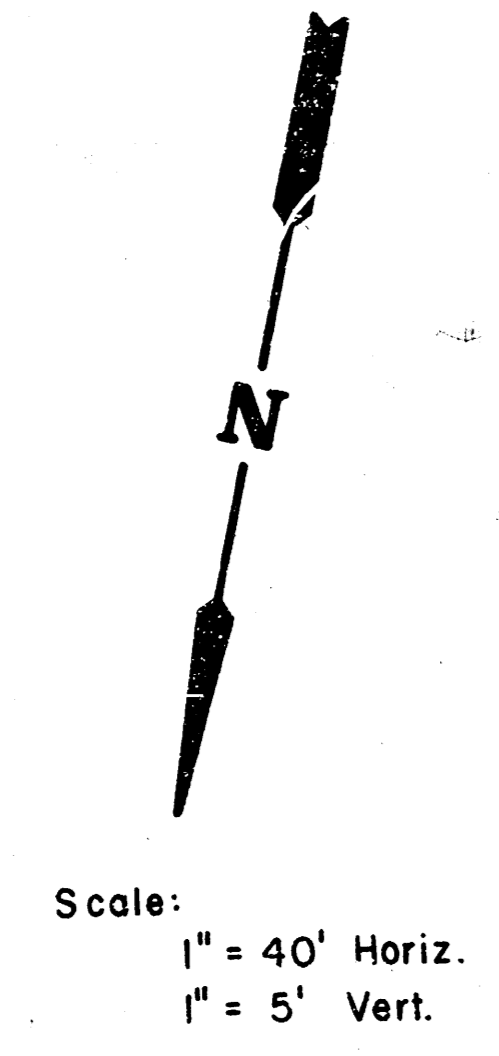
*As Built
 JLL
 2-8-84*

B.M. 2 South rim of existing manhole 1-0.
 Elev. 174.86

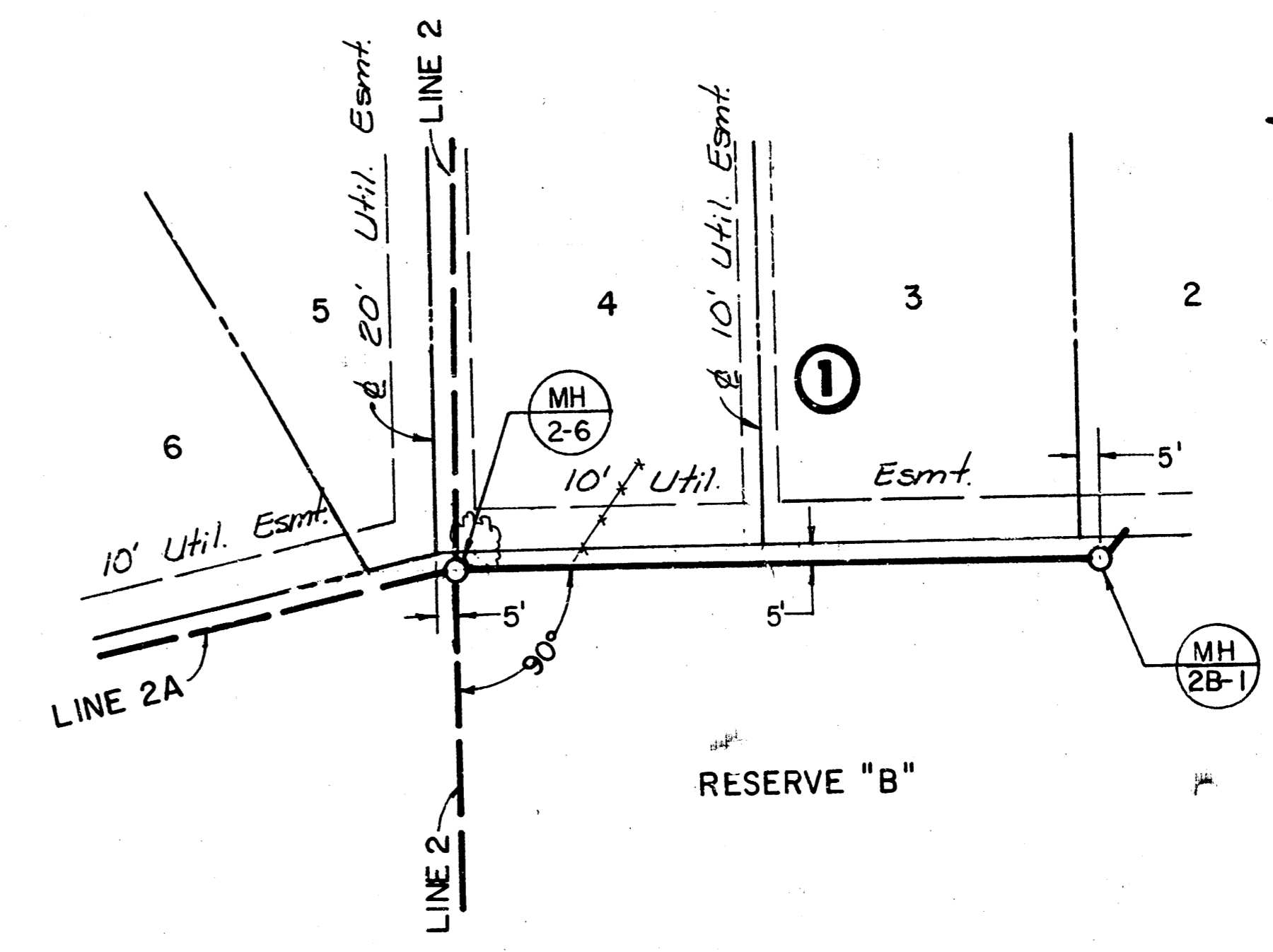
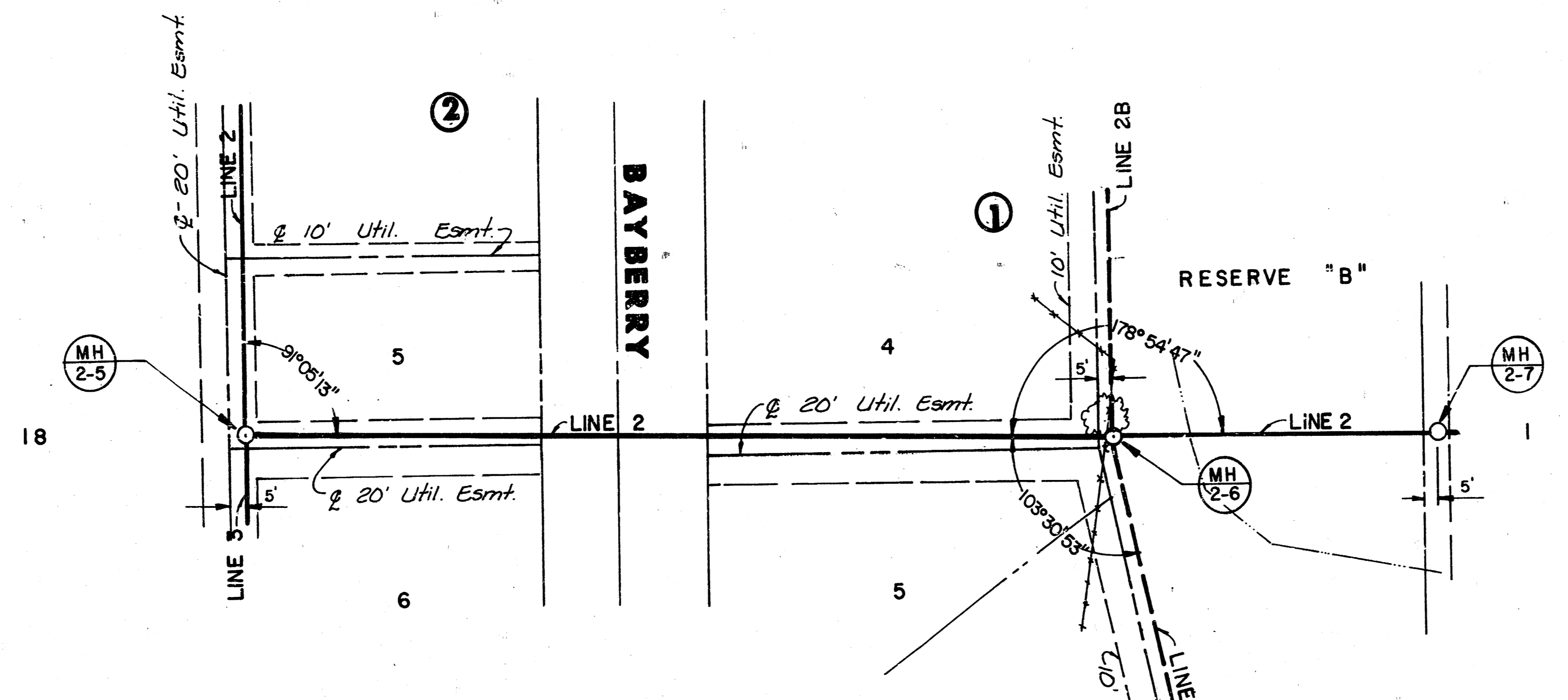
PLAN - LINE 2

PROFILE - LINE 2





⊙ R.M.1 Railroad spike in south face telegraph pole north of Lot 8, Block 1, near north line of railroad. Elev. 184.96



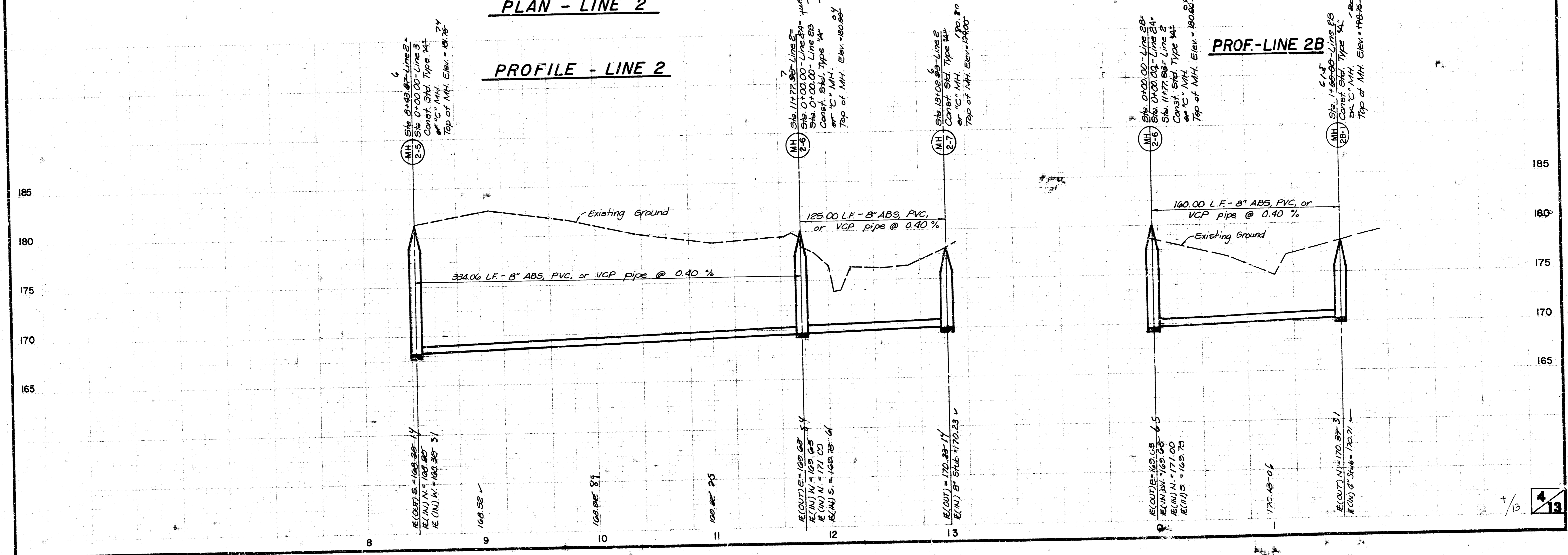
*As Built
 J.L.L.
 2-84*

PLAN - LINE 2

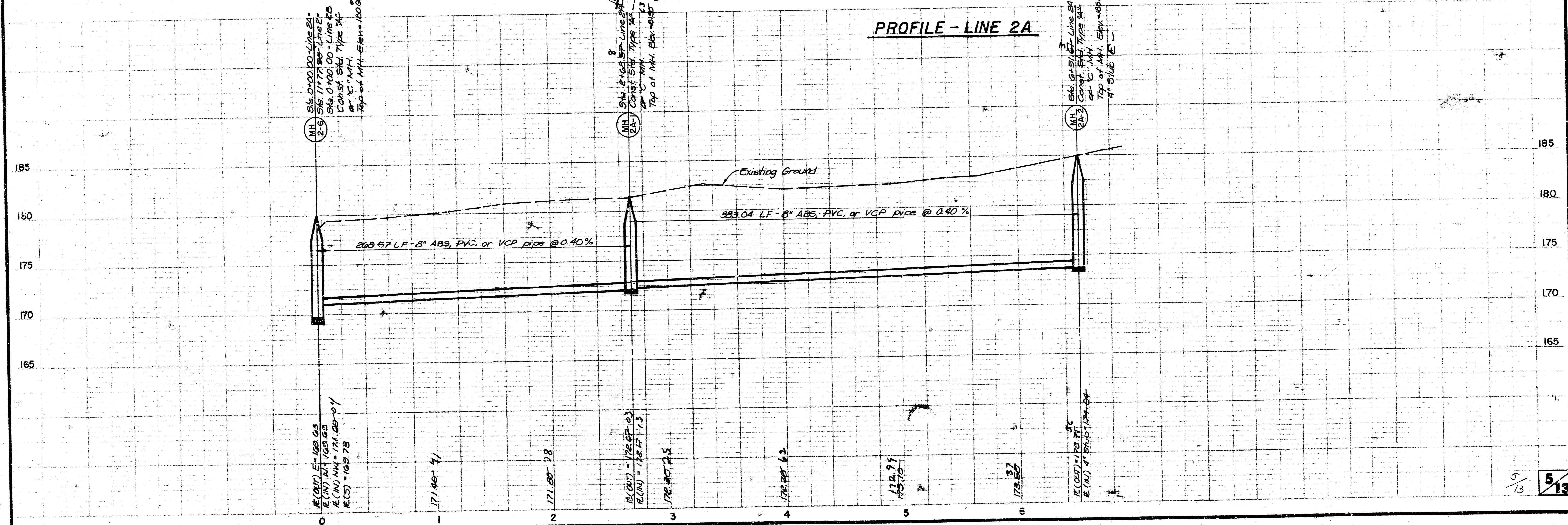
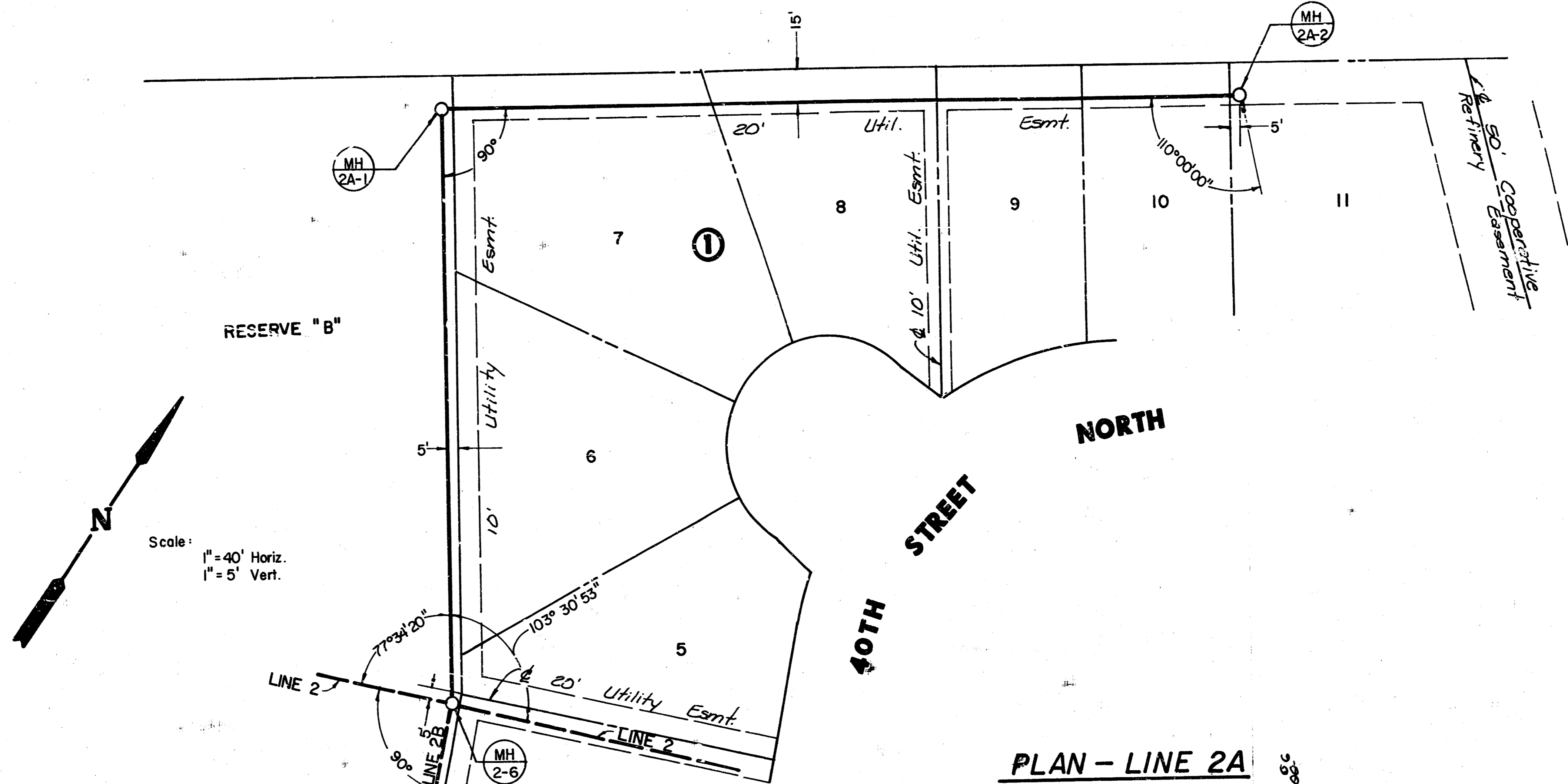
PROFILE - LINE 2

PLAN - LINE 2B

PROF - LINE 2B

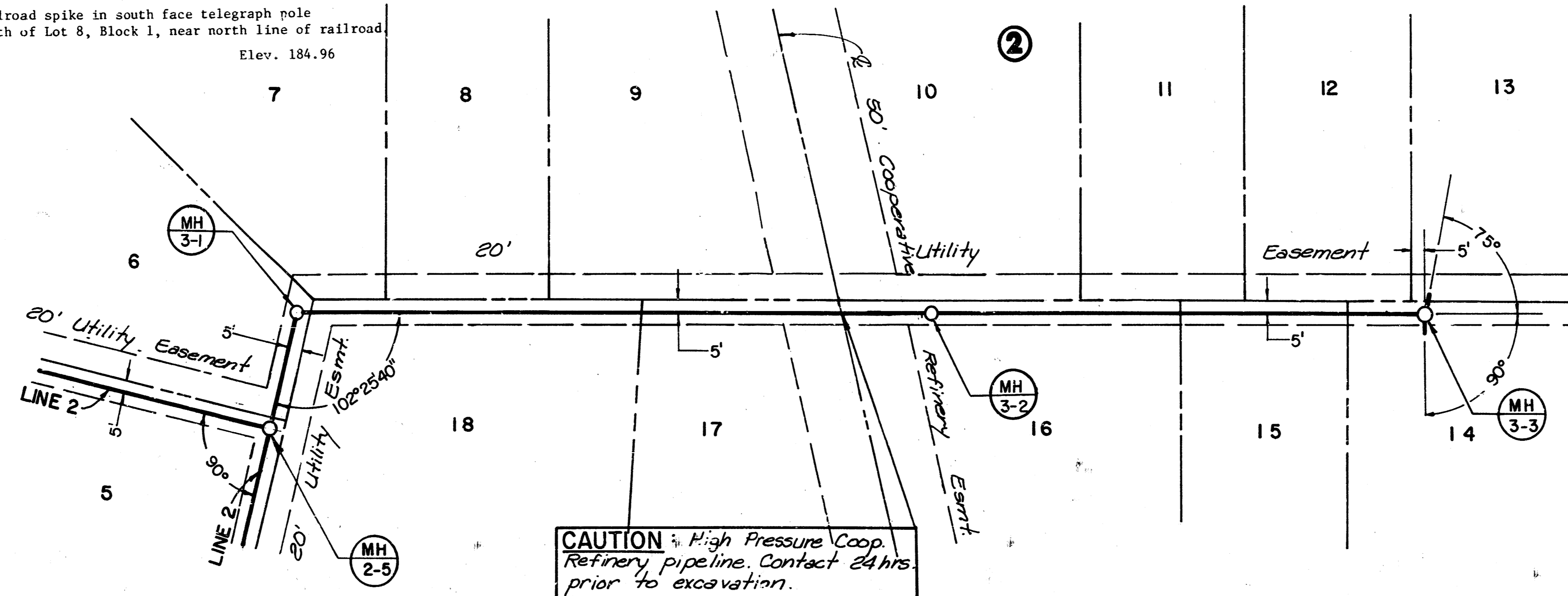


8.M.1 Railroad spike in south face telegraph pole north of Lot 8, Block 1, near north line of railroad. Elev. 184.96



Scale:
 1" = 40' Horiz.
 1" = 5' Vert.

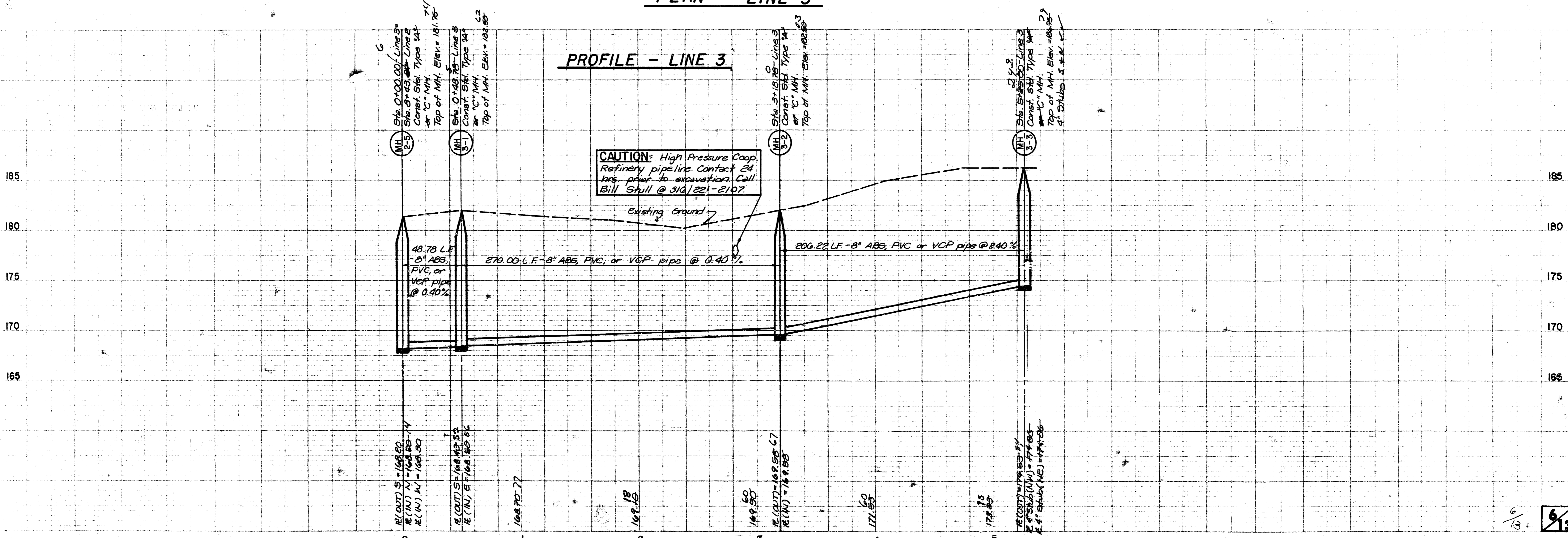
B.M.1 Railroad spike in south face telegraph pole north of Lot 8, Block 1, near north line of railroad Elev. 184.96



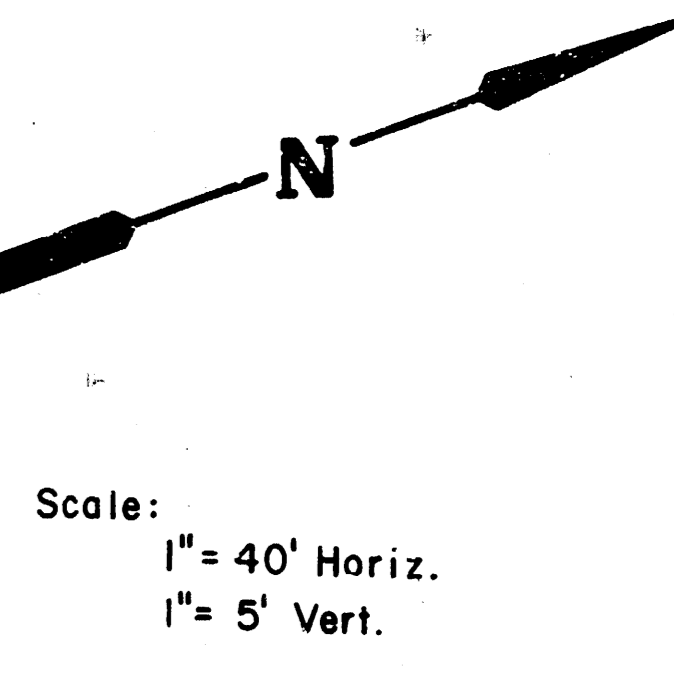
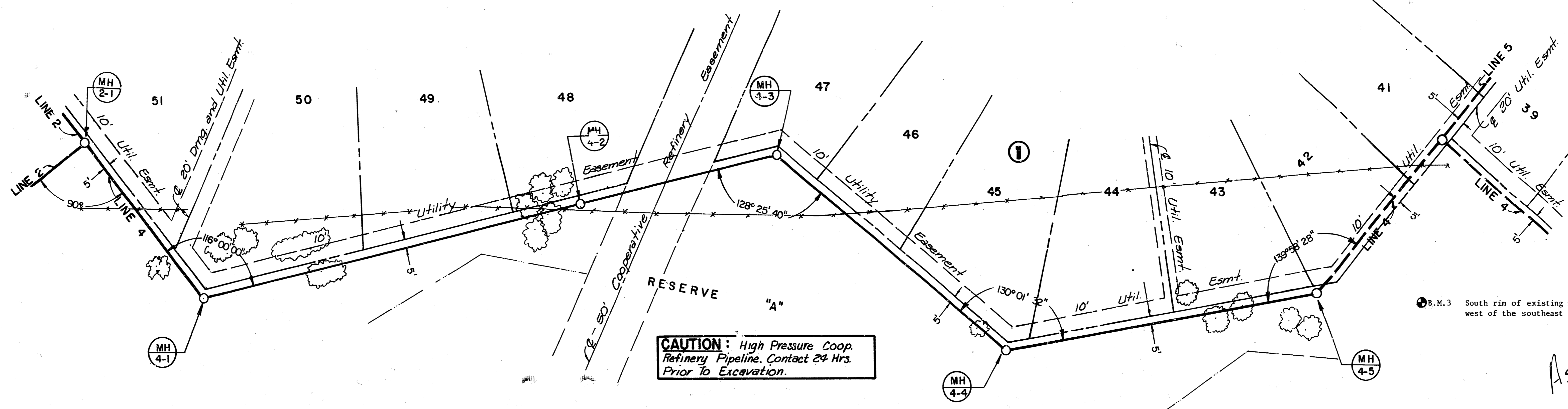
PLAN - LINE 3

As Built
 J.L.L.
 2-84

PROFILE - LINE 3



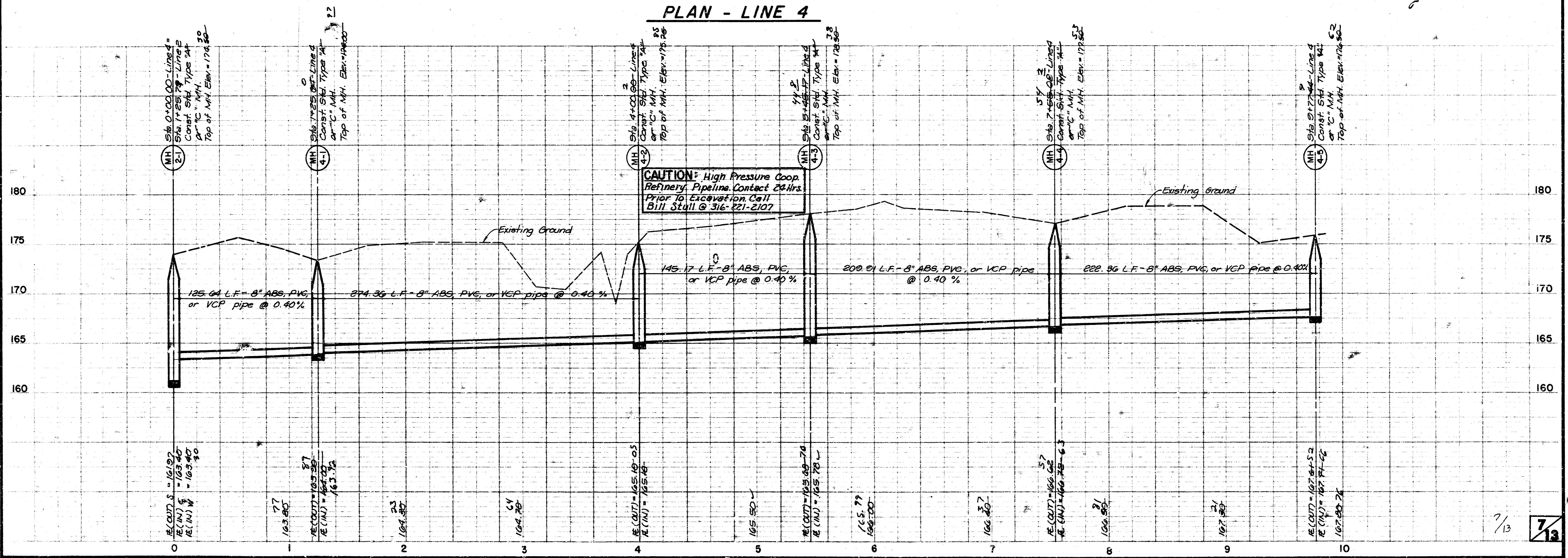
CAUTION: High Pressure Coop. Refinery pipeline. Contact 24 hrs prior to excavation. Call Bill Stull @ 312/221-2107.

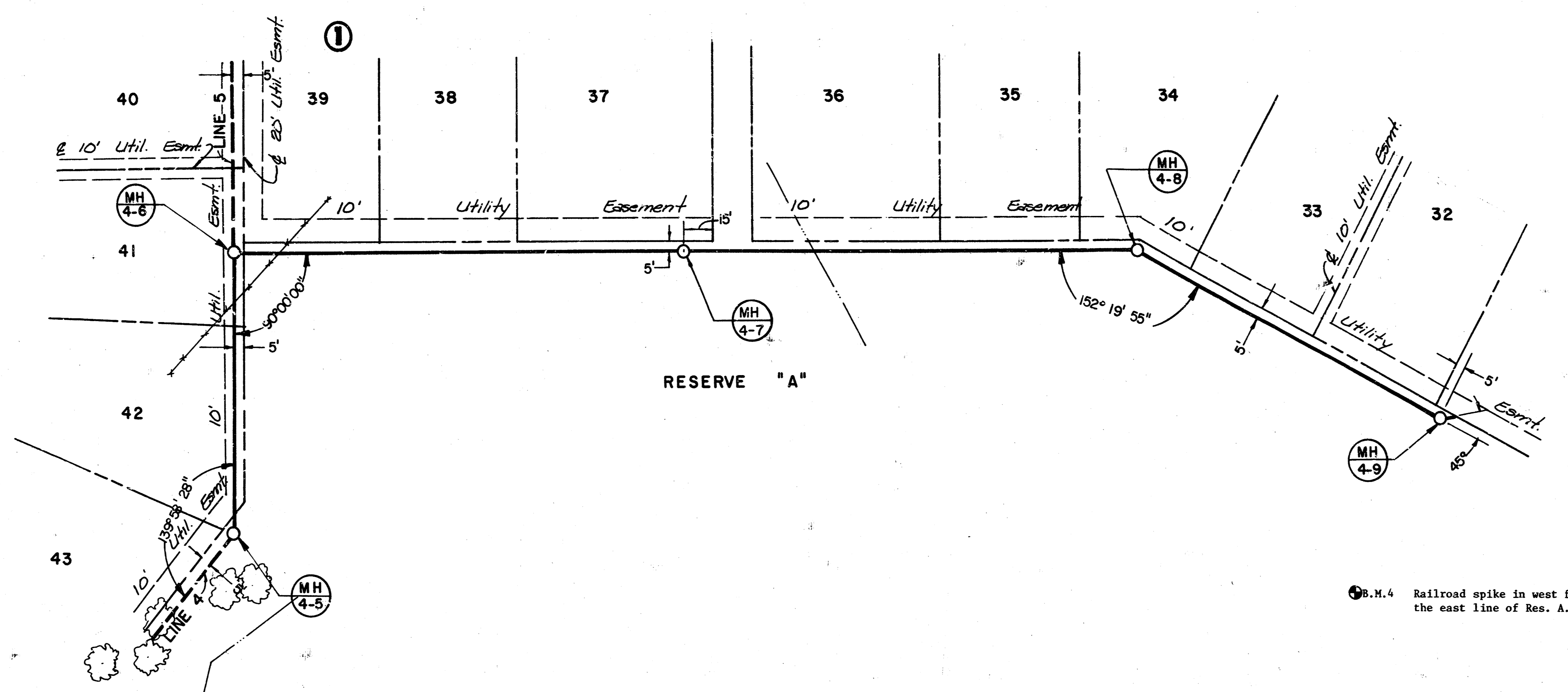


8.M.3 South rim of existing manhole approximately 505 feet west of the southeast corner of Northbrook.
 Elev. 177.59

As Built
 J.L.L.
 2-84

PLAN - LINE 4

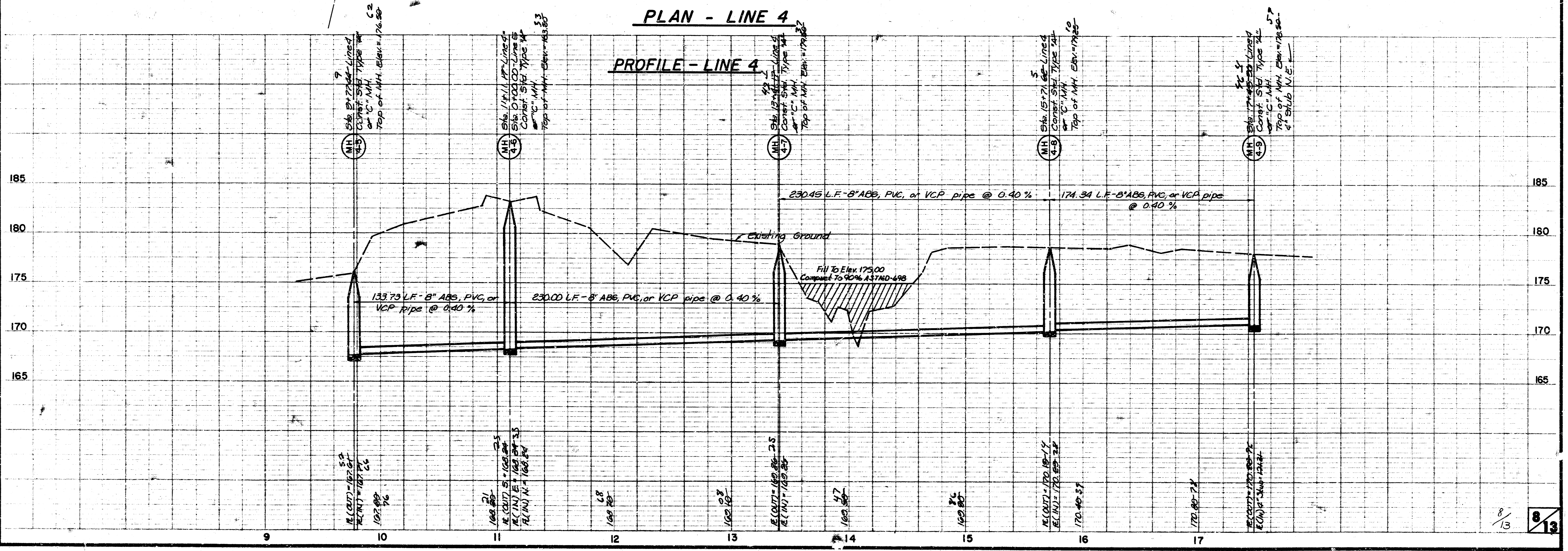




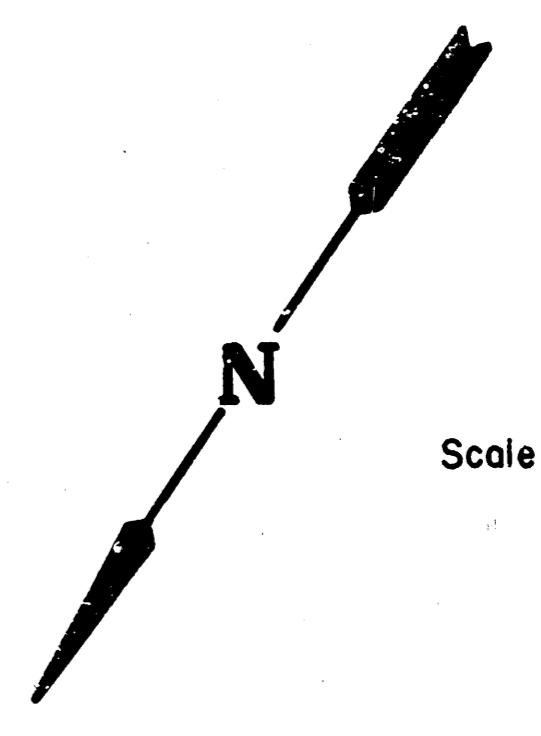
68.M.4 Railroad spike in west face of K&N "H" pole near the east line of Res. A., Northbrook.
 Elev. 179.24

PLAN - LINE 4

PROFILE - LINE 4

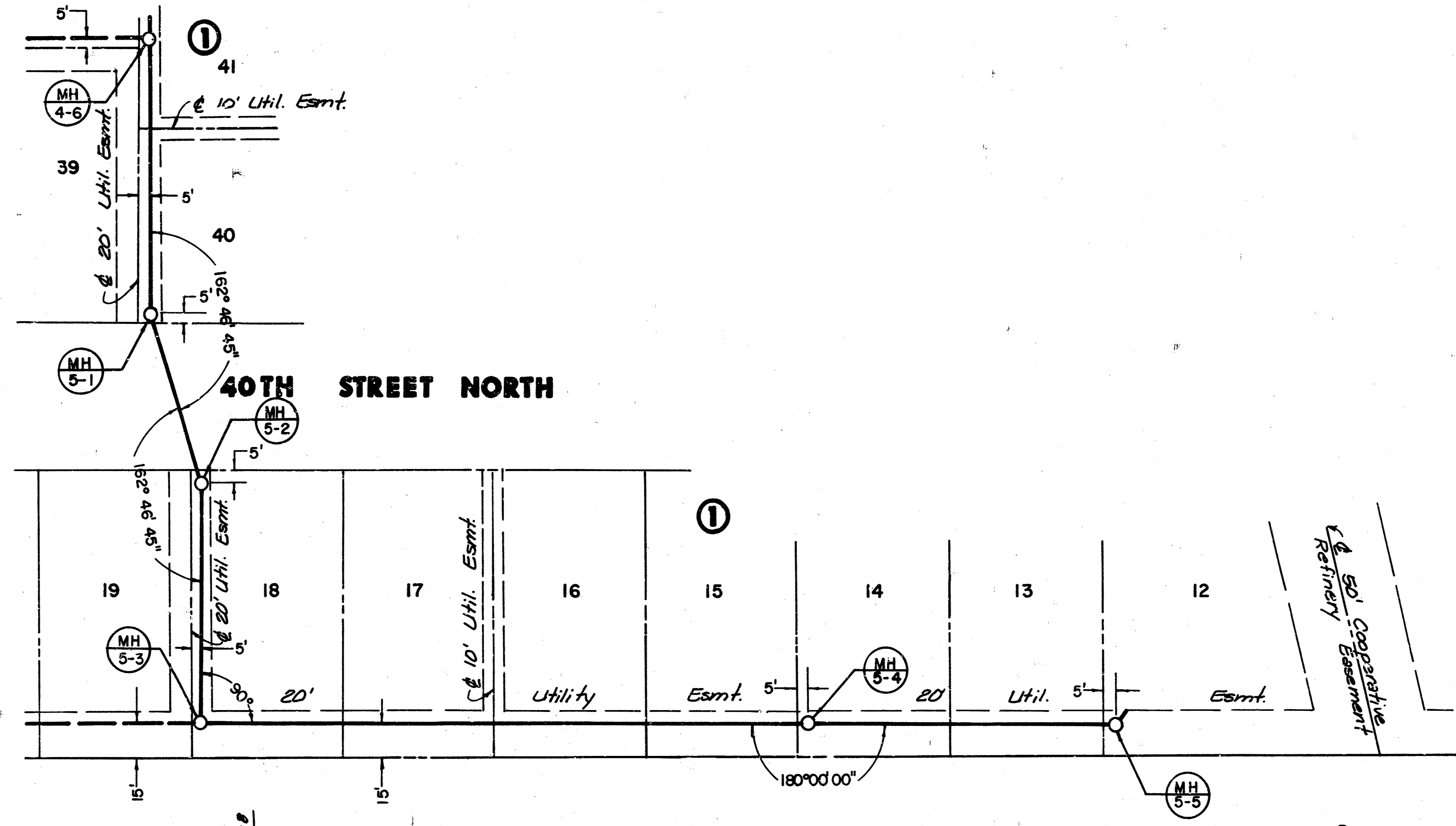


NORTHBROOK
 LATERAL 3, MAIN 9, S.S. 23
 468-76-245-81259-000-001



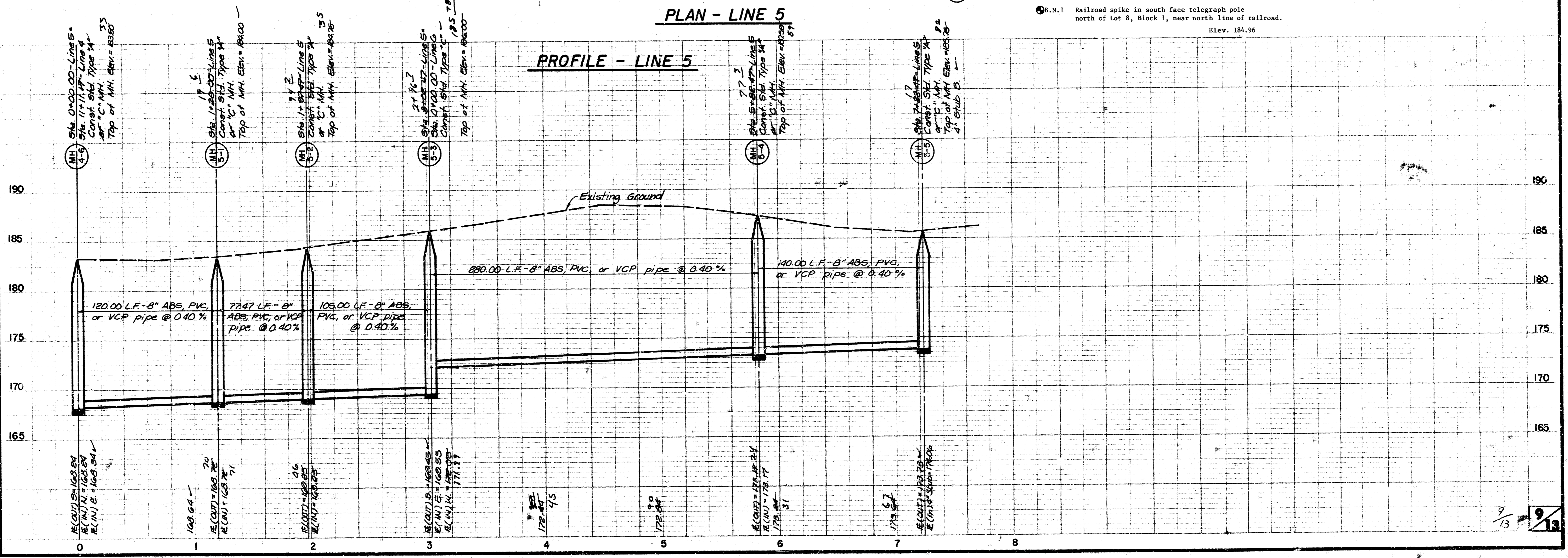
Scale:
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 1" = 5' Vert.

As R. o. i. t
 JLL
 2-84

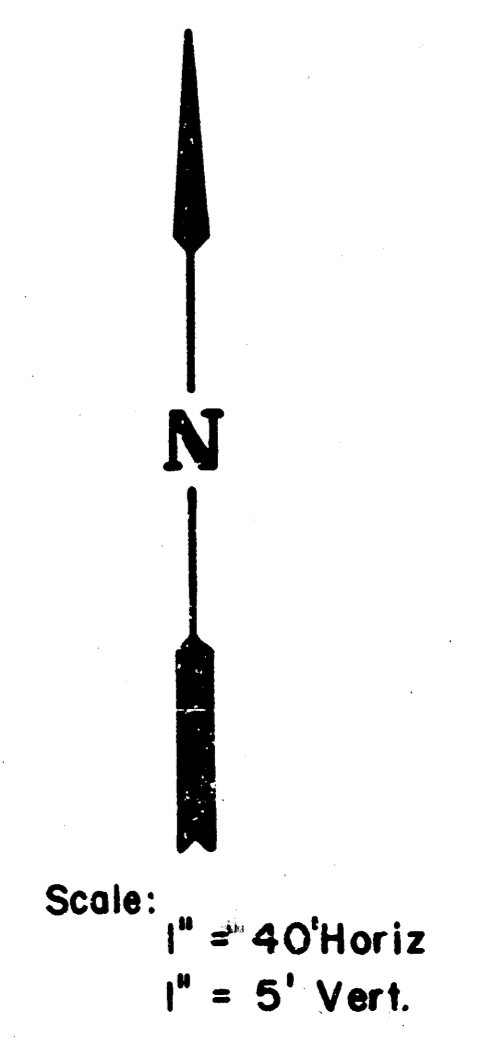
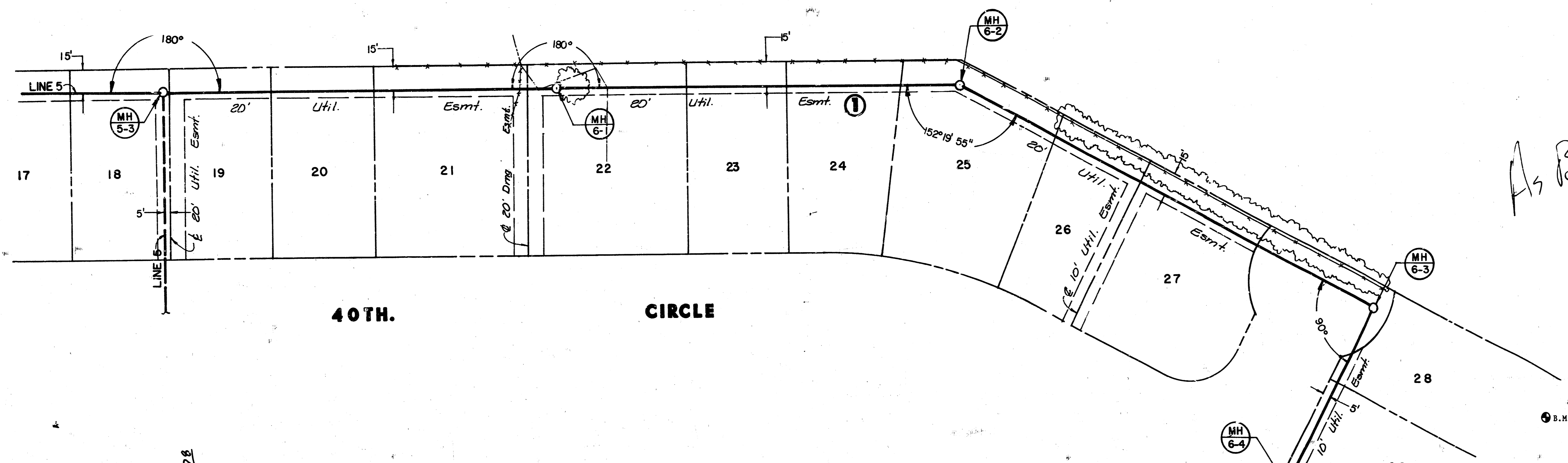


PLAN - LINE 5

⊙ B.M.1 Railroad spike in south face telegraph pole north of Lot 8, Block 1, near north line of railroad. Elev. 184.96

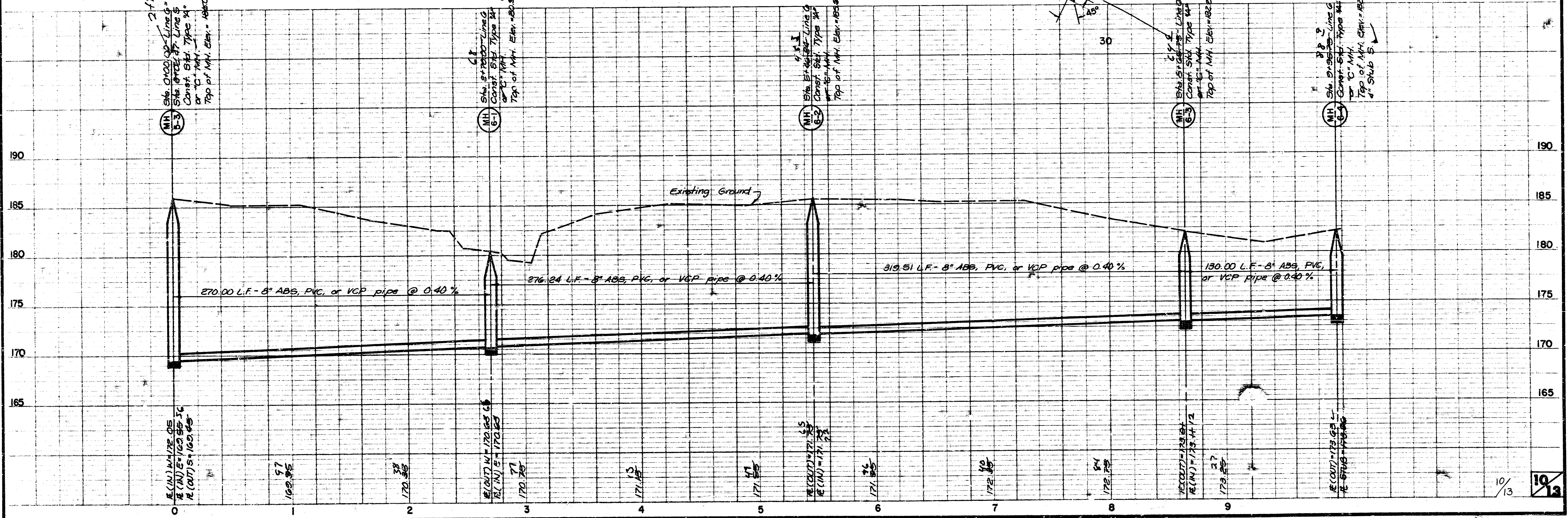


PROFILE - LINE 5



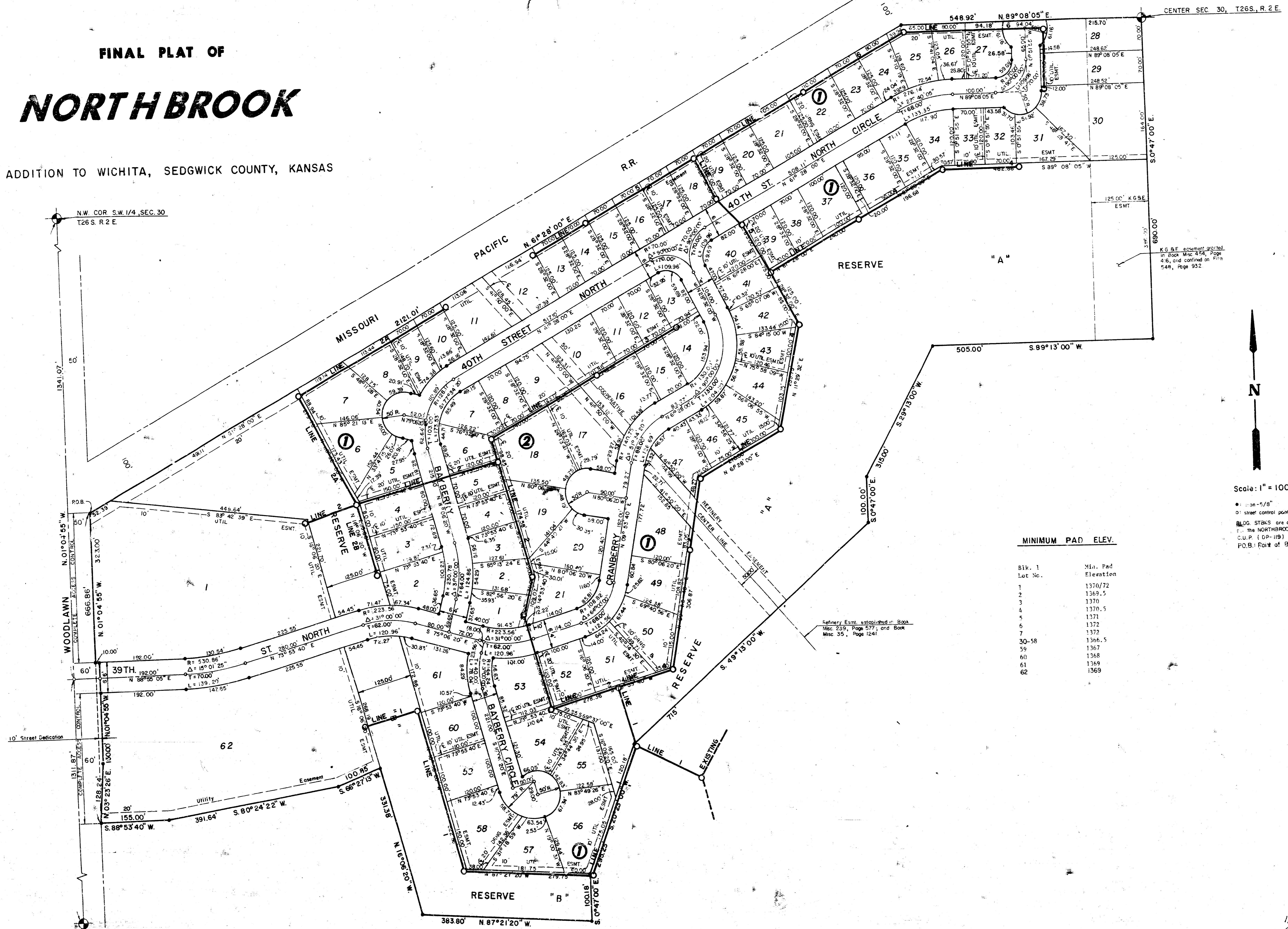
8.M.5 Spike step in west face of K&E "H" pole near the east line of Block 1, Northbrook. Elev. 179.80

PLAN - LINE 6

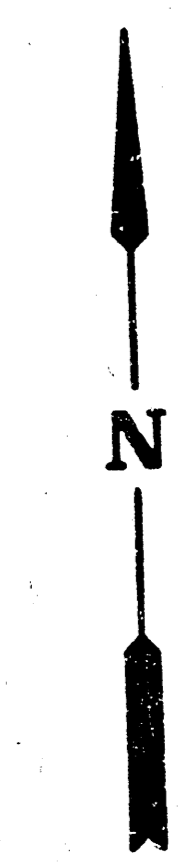


FINAL PLAT OF NORTHBROOK

AN ADDITION TO WICHITA, SEDGWICK COUNTY, KANSAS



K.G.S.F. equipment shown on this map was used on this map, 454, Page 46, and confirmed on File 548, Page 932



Scale: 1" = 100'
 • = 5/8"
 ○ = street control point
 B.M.G. STAKES are as shown on the NORTHBROOK C.U.P. (DP-119)
 P.O.B.: Point of Beginning

MINIMUM PAD ELEV.

Blk. 1 Lot No.	Min. Pad Elevation
1	1370.72
2	1369.5
3	1370
4	1370.5
5	1371
6	1372
7	1372
30-58	1366.5
59	1367
60	1368
61	1368
62	1369

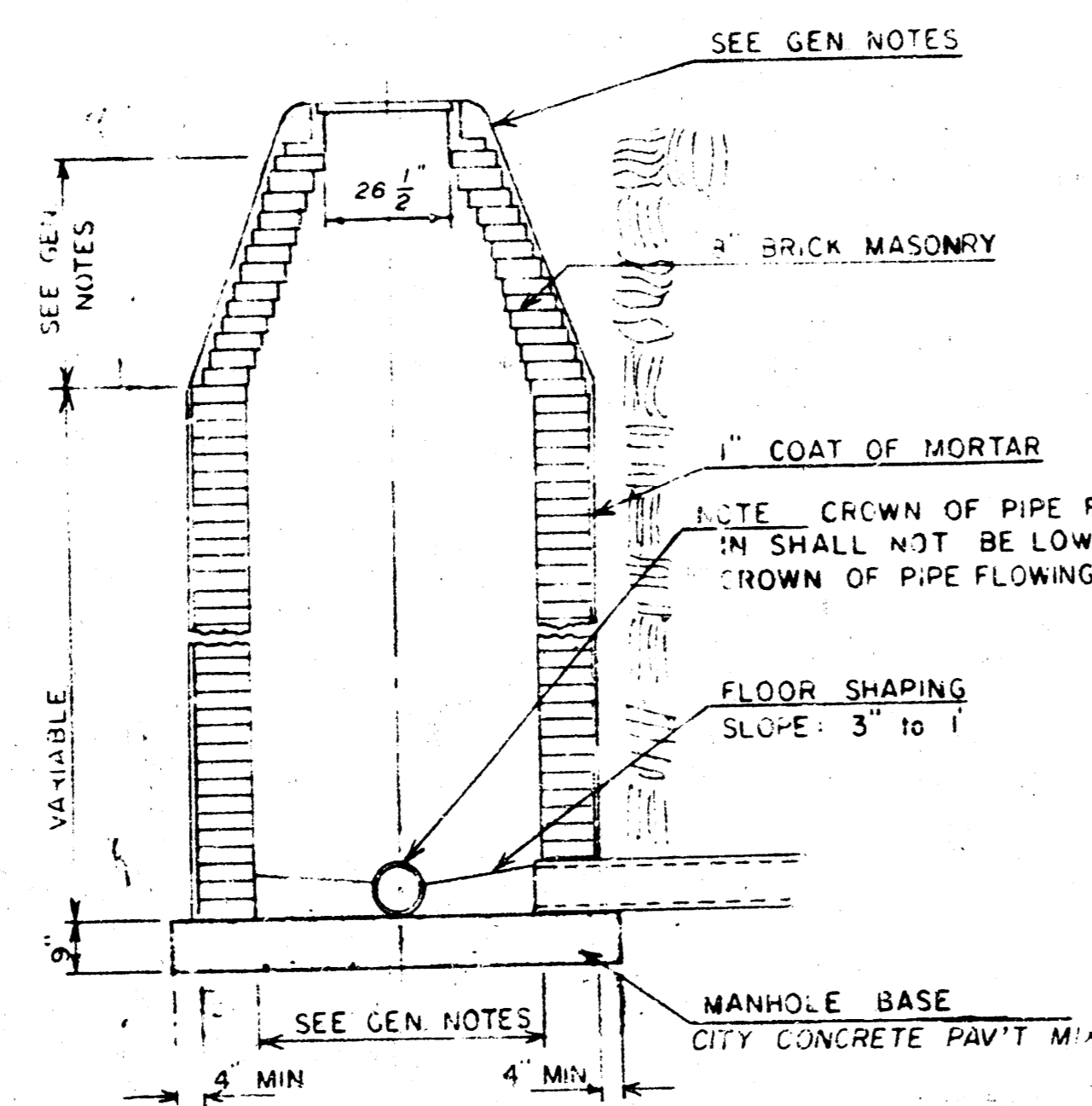
Refinery Easement established in Book Misc. 239, Page 577, and Book Misc. 35, Page 1241

SEWER APPURTENANCES DETAILS

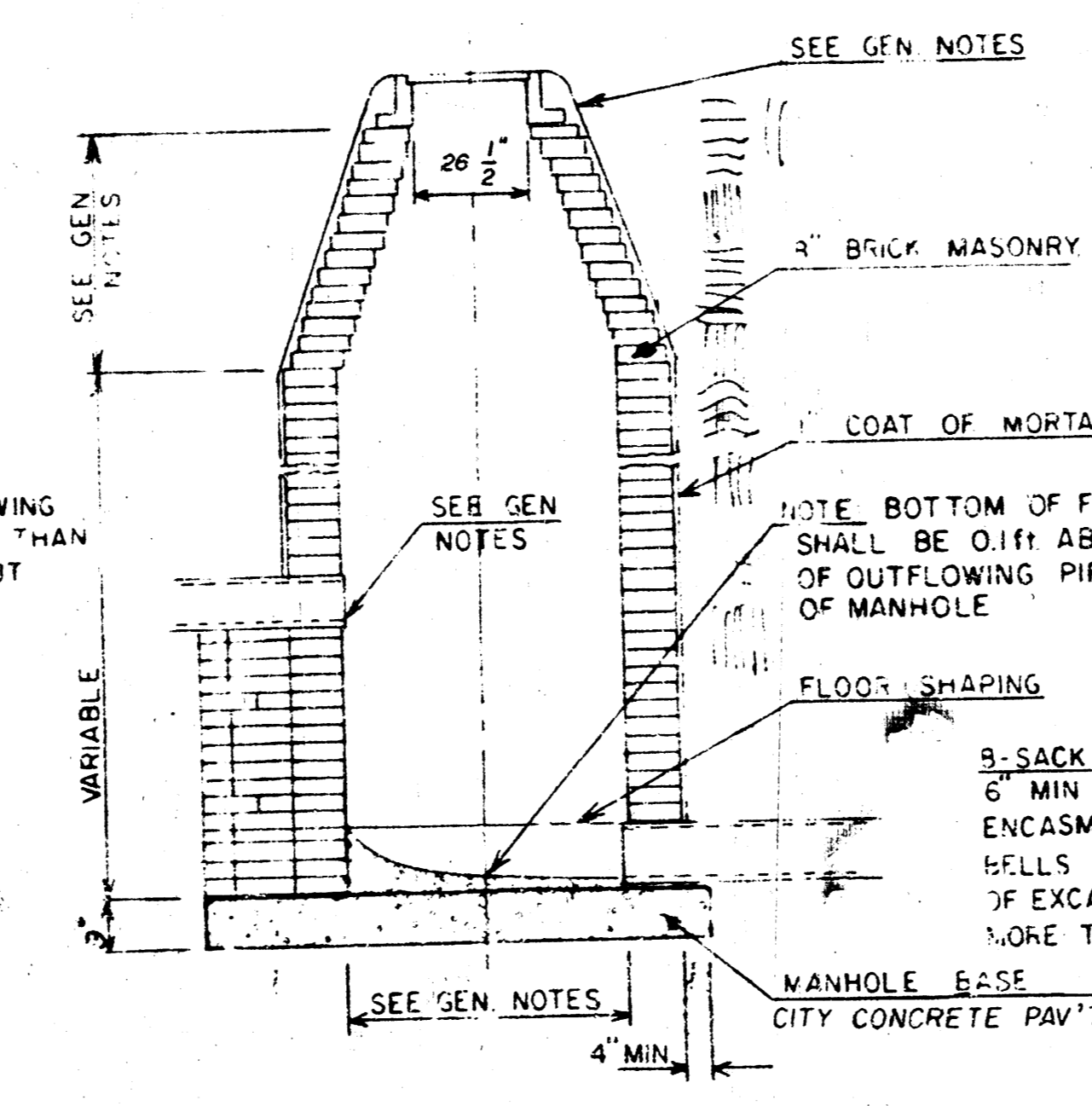
ADOPTED AS STANDARD DESIGN
BY

CITY of WICHITA, KANSAS

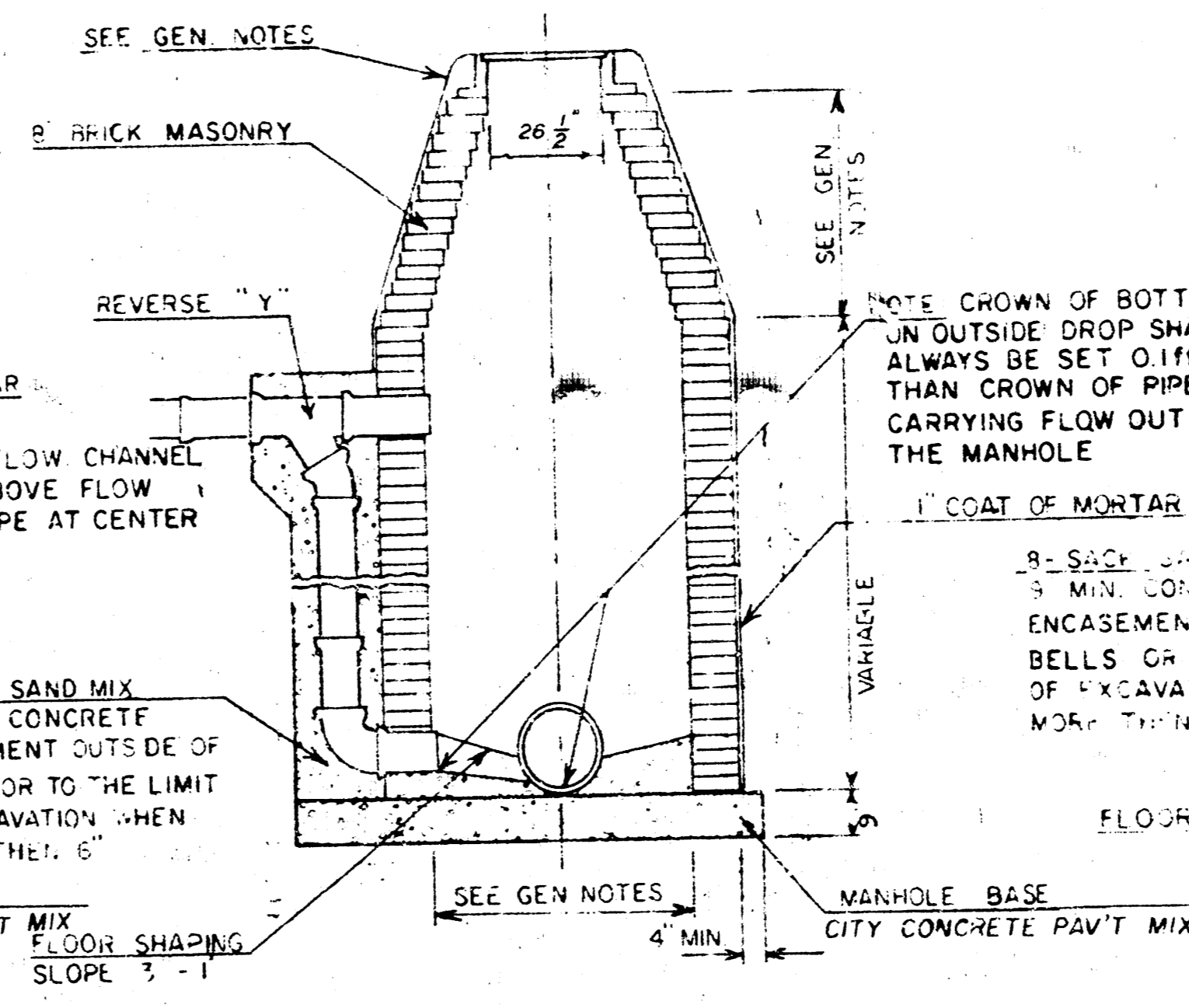
TYPE "A" MANHOLE



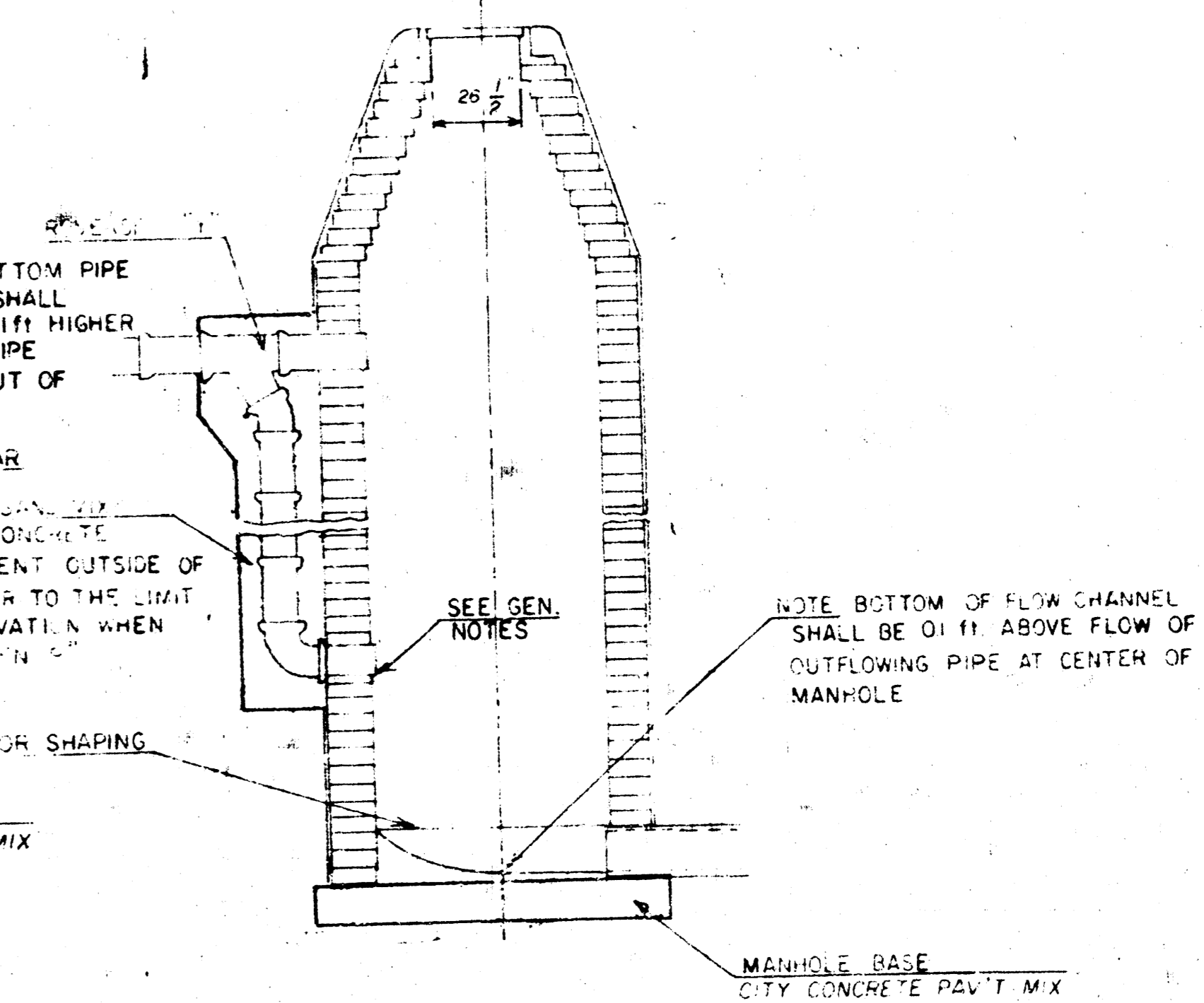
TYPE "A" INSIDE DROP MANHOLE



TYPE "A" OUTSIDE DROP MANHOLE



DETAIL OF OUTSIDE DROP
CONSTRUCTED ON EXISTING MANHOLE



1. MATERIAL USED IN MASONRY CONSTRUCTION SHALL CONFORM TO THE SPECIFICATIONS OF THE CITY STANDARD PAVING SPECIFICATIONS USING CITY STANDARD PAVEMENT SIX MILLIMETER GRANULAR SUBGRADE. SURFACE SHALL BE PLACED AROUND THE MANHOLE RING AS SHOWN ON THE DRAWING WITH SLOPE AND CORNER RADIUS AS SHOWN. TYPE "A" MANHOLES SHALL BE SET ON BEARS UP TO 24" IN DEPTH WHEN THE MANHOLE IS NOT LOCATED WITHIN PAVED STREET PAVEMENT. MANHOLES CONSTRUCTED UNDER PIPE SIZES AND SPACINGS SHALL HAVE AN INSIDE DIAMETER OF 4'. MANHOLES CONSTRUCTED UNDER PIPE SIZES AND SPACINGS SHALL HAVE AN INSIDE DIAMETER OF 4'. MANHOLES HAVING A DIAMETER OF 4' SHALL HAVE CORNERS OF 14" HEIGHT. COMPLETED MANHOLES SHALL BE WITHOUT LEAKS AND WATER TIGHT.
2. REINFORCING STEEL SHALL BE INSTALLED IN THE MANHOLE WALLS AND SHALL CONSIST OF #4'S PLACED IN 3" SPACES IN BOTH DIRECTIONS. THE MANHOLE BASE REINFORCEMENT SHALL BE PLACED 2" ABOVE THE BOTTOM OF THE MANHOLE BASE. ALL JOISTS FOR EXISTING AND INSTALLED REINFORCING STEEL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE MANHOLE.
3. OPENINGS SHALL BE CUT INTO THE MANHOLE WALL WHEN OUTSIDE DROPS ARE QUANTITYED ON EXISTING MANHOLES. SUCH OPENINGS SET INTO EXISTING MANHOLES SHALL BE AS SMALL AS PRACTICABLE TO FACILITATE INSTALLING AND REMOVING THE NEW PIPE IN PLACE. WASTEWATER SHALL BE USED WITH P.C.C. AND A 1:2:4 COMPOSITE PIPE. THE NEW PIPE SHALL BE GRADED INTO THE OPENING USING AN APPROVED WATERING WORKS FOR THE FULL MANHOLE WALL THICKNESS. THE EXTERIOR OF THE MANHOLE'S CONSTRUCTION SHALL BE GRADED WITH AN APPROVED METHOD OF GRADING SUCH THAT THE CONNECTION WILL BE WATER TIGHT. FLOOR OF MANHOLE SHALL BE RAISED TO FORM NEW FLOOR CHANNEL FOR THE NEW CONNECTION AS INDICATED BY THE DRAWING. THE VERTICAL DROP FROM THE LOWER PIPE OR SUCH OUTSIDE DROP CONNECTIONS SHALL NOT EXCEED 1" FOR INFLUENCING PIPES 12" OR SMALLER AND 2" FOR INFLUENCING PIPES SMALLER THAN 12". SUCH A 2" DROP OF THE LOWER PIPE SHALL NEVER BE SET BELOW THE CROWN OF ANY LARGER OUTFLOWING PIPE. THIS WORK, INCLUDING MODIFICATION OF MANHOLE FLOOR, SHALL BE PAID FOR AT THE UNIT PRICE BID FOR OUTSIDE DROP STACK CONSTRUCTION ON EXISTING MANHOLE.
4. THE FORMER OF ALL MANHOLES SHALL BE SET ON BEARS UP TO 24" IN DEPTH WHEN THE MANHOLE IS NOT LOCATED WITHIN PAVED STREET PAVEMENT. MANHOLES CONSTRUCTED UNDER PIPE SIZES AND SPACINGS SHALL HAVE AN INSIDE DIAMETER OF 4'. MANHOLES CONSTRUCTED UNDER PIPE SIZES AND SPACINGS SHALL HAVE AN INSIDE DIAMETER OF 4'. MANHOLES HAVING A DIAMETER OF 4' SHALL HAVE CORNERS OF 14" HEIGHT. COMPLETED MANHOLES SHALL BE WITHOUT LEAKS AND WATER TIGHT.
5. PIPES INSTALLED IN THE EXISTING MANHOLE SHALL BE GRADED INTO THE OPENING USING AN APPROVED WATERING WORKS FOR THE FULL MANHOLE WALL THICKNESS. THE EXTERIOR OF THE MANHOLE'S CONSTRUCTION SHALL BE GRADED WITH AN APPROVED METHOD OF GRADING SUCH THAT THE CONNECTION WILL BE WATER TIGHT. FLOOR OF MANHOLE SHALL BE RAISED TO FORM NEW FLOOR CHANNEL FOR THE NEW CONNECTION AS INDICATED BY THE DRAWING. THE VERTICAL DROP FROM THE LOWER PIPE OR SUCH OUTSIDE DROP CONNECTIONS SHALL NOT EXCEED 1" FOR INFLUENCING PIPES 12" OR SMALLER AND 2" FOR INFLUENCING PIPES SMALLER THAN 12". SUCH A 2" DROP OF THE LOWER PIPE SHALL NEVER BE SET BELOW THE CROWN OF ANY LARGER OUTFLOWING PIPE. THIS WORK, INCLUDING MODIFICATION OF MANHOLE FLOOR, SHALL BE PAID FOR AT THE UNIT PRICE BID FOR OUTSIDE DROP STACK CONSTRUCTION ON EXISTING MANHOLE.
6. MANHOLE COVER MANHOLES AND MANHOLE REAR WALLS SHALL CONFORM TO THE REQUIREMENTS AS INDICATED ON THE STANDARD SPECIFICATIONS AND AS SHOWN IN THE DRAWING OF THIS MANUAL.
7. THE VERTICAL DROP IN THE OUTSIDE DROP MANHOLE SHALL BE GRADED INTO THE OPENING USING AN APPROVED WATERING WORKS FOR THE FULL MANHOLE WALL THICKNESS. THE EXTERIOR OF THE MANHOLE'S CONSTRUCTION SHALL BE GRADED WITH AN APPROVED METHOD OF GRADING SUCH THAT THE CONNECTION WILL BE WATER TIGHT. FLOOR OF MANHOLE SHALL BE RAISED TO FORM NEW FLOOR CHANNEL FOR THE NEW CONNECTION AS INDICATED BY THE DRAWING. THE VERTICAL DROP FROM THE LOWER PIPE OR SUCH OUTSIDE DROP CONNECTIONS SHALL NOT EXCEED 1" FOR INFLUENCING PIPES 12" OR SMALLER AND 2" FOR INFLUENCING PIPES SMALLER THAN 12". SUCH A 2" DROP OF THE LOWER PIPE SHALL NEVER BE SET BELOW THE CROWN OF ANY LARGER OUTFLOWING PIPE. THIS WORK, INCLUDING MODIFICATION OF MANHOLE FLOOR, SHALL BE PAID FOR AT THE UNIT PRICE BID FOR OUTSIDE DROP STACK CONSTRUCTION ON EXISTING MANHOLE.
8. STANDARD MANHOLES 12" AND SMALLER SHALL BE PLACED ON TYPE "A" SHALL BE SET ON BEARS UP TO 24" IN DEPTH WHEN THE MANHOLE IS NOT LOCATED WITHIN PAVED STREET PAVEMENT. MANHOLES CONSTRUCTED UNDER PIPE SIZES AND SPACINGS SHALL HAVE AN INSIDE DIAMETER OF 4'. MANHOLES CONSTRUCTED UNDER PIPE SIZES AND SPACINGS SHALL HAVE AN INSIDE DIAMETER OF 4'. MANHOLES HAVING A DIAMETER OF 4' SHALL HAVE CORNERS OF 14" HEIGHT. COMPLETED MANHOLES SHALL BE WITHOUT LEAKS AND WATER TIGHT.

VERTICAL RISER DETAIL

ADOPTED AS STANDARD DESIGN
BY

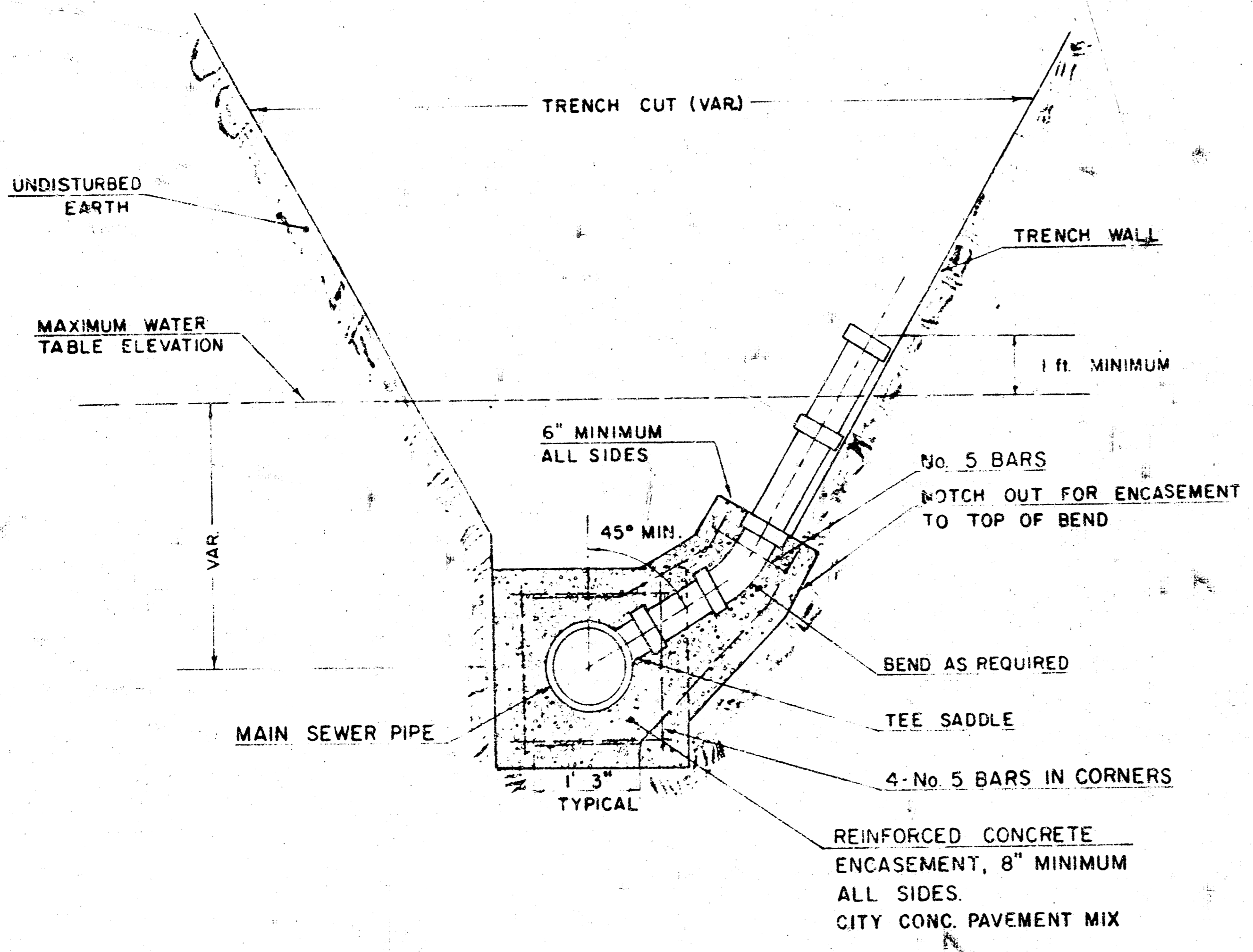
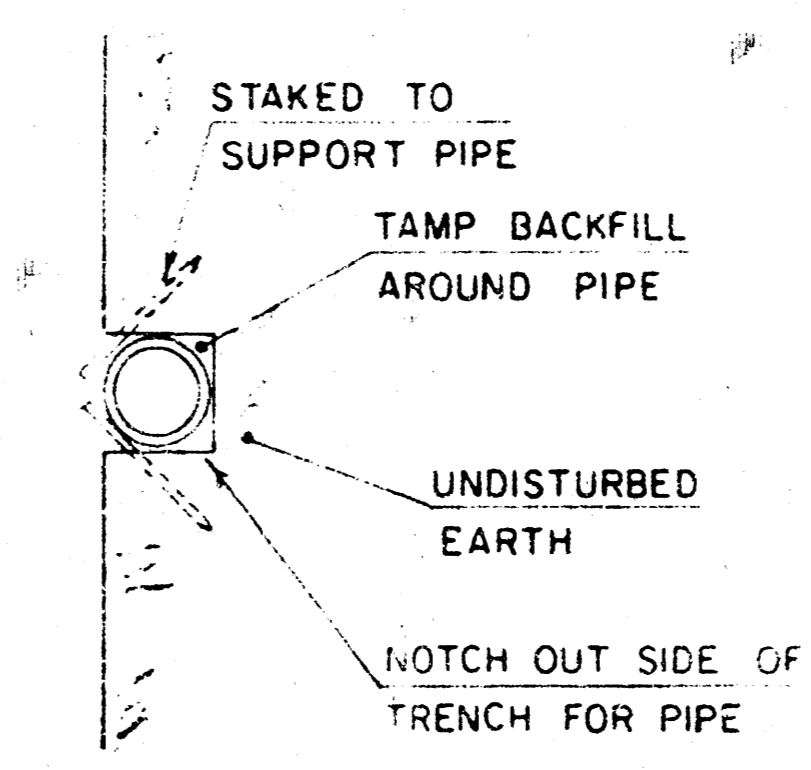
CITY OF WICHITA, KANSAS

GENERAL NOTES:

RISERS SHALL BE INSTALLED IN MANHOLES OR IN SPACES WHEN THE MAIN SEWER LINE IS BELOW THE WATER TABLE. RISERS SHALL ALSO BE INSTALLED TO SERVE ALL LOTS AND PARCELS IN THE MAIN SEWER LINE DEPTH IS SUCH THAT WOULD MAKE THE BUILDING SEWER LINE CONDUIT DIFFICULT TO INSTALLATION OF RISERS BECAUSE OF LIMITED ACCESS DEPTH SHALL BE AS APPROVED BY THE ENGINEER. THE LOCATION OF RISERS TO SERVE DEVELOPED PROPERTY SHALL BE APPROVED BY THE PROPERTY OWNER. PIPE STUBS SHALL BE INSTALLED IN MANHOLES WHERE LOCATIONS OF MANHOLES WILL PROVIDE SATISFACTORY SERVICE CONNECTIONS AS DETERMINED BY THE FIELD ENGINEER. THE VERTICAL DISTANCE BETWEEN THE FLOOR LINE OF THE MANHOLE PIPE STUB AND THE FLOW LINE OF THE MAIN SEWER LINE SHALL NOT EXCEED 1 FEET. MANHOLE PIPE STUBS SHALL NOT BE SET BELOW AN ELEVATION WHICH WILL PERMIT THE TOP OF THE INSIDE OF THE STUB TO MATCH THE TOP OF THE INSIDE OF THE MAIN SEWER PIPE. PIPE STUBS AND RISERS INSTALLED TO SERVE COMMERCIAL OR INDUSTRIAL PROPERTY SHALL BE 12 INCH PIPE STUBS AND RISERS INSTALLED TO SERVE RESIDENTIAL PROPERTY MAY BE EITHER 12 INCH OR 18 INCH DEPENDING UPON THE AVAILABLE GRADE AND THE SIZE OF THE LOT AS DETERMINED BY THE FIELD ENGINEER. ENCASUREMENT OF 4 INCH CLAY MAIN SEWER PIPE SHALL EXTEND TO THE FIRST JOINT IN THE MAIN SEWER CLAY PIPE ON EACH SIDE OF THE RISER. ENCASUREMENT OF 6 INCH A.B.S. COMPOSITE OR P.V.C. MAIN SEWER PIPE SHALL EXTEND A MINIMUM OF 4 FT. ON BOTH SIDES OF THE CENTERLINE OF THE RISER. FOUR INCH AND SIX INCH RISER PIPE SHALL BE ENCASED AT 8 CONCRETE TO THE TOP OF THE END AS INDICATED IN THE DRAWINGS. FOUR INCH AND SIX INCH CLAY PIPE USED FOR RISERS SHALL BE EXTRA STRENGTH PIPE CONFORMING TO THE REQUIREMENTS OF THE LATEST REVISION OF A.S.T.M. SPECIFICATION C754 FOR COMPRESSION ONLY AS SPECIFIED FOR CLAY PIPE IN THE STANDARD SPECIFICATIONS. FOR 4 INCH AND 6 INCH A.B.S. OR P.V.C. PIPE SHALL BE PIPE APPROVED FOR USE IN THE CITY BY THE CITY PLUMBING AND MECHANICAL INSPECTOR OR FOR THE CENTRAL INSPECTION DIVISION OF THE DEPARTMENT OF BUSINESS AND ECONOMIC DEVELOPMENT. LOCATIONS OF THE ENDS OF THE RISERS SHALL BE MARKED BY FASTENING GREEN COLORED PLASTIC TAPE TO THE END OF THE RISER WHICH SHALL BE EXTENDED TO THE GROUND SURFACE AS THE EXCAVATION IS BACKFILLED SUCH THAT THE COLORED TAPE WILL BE VISIBLE WHEN THE PROJECT IS COMPLETED. THE ENDS OF THE RISER PIPE AND MANHOLE STUBS SHALL BE CAPPED OR PLUGGED USING FITTINGS FURNISHED BY THE MANUFACTURER OF THE PIPE. CONTRACTORS ARE RESPONSIBLE FOR STAKING AND BACKFILLING RISER PIPE SHALL BE APPROVED BY THE ENGINEER.

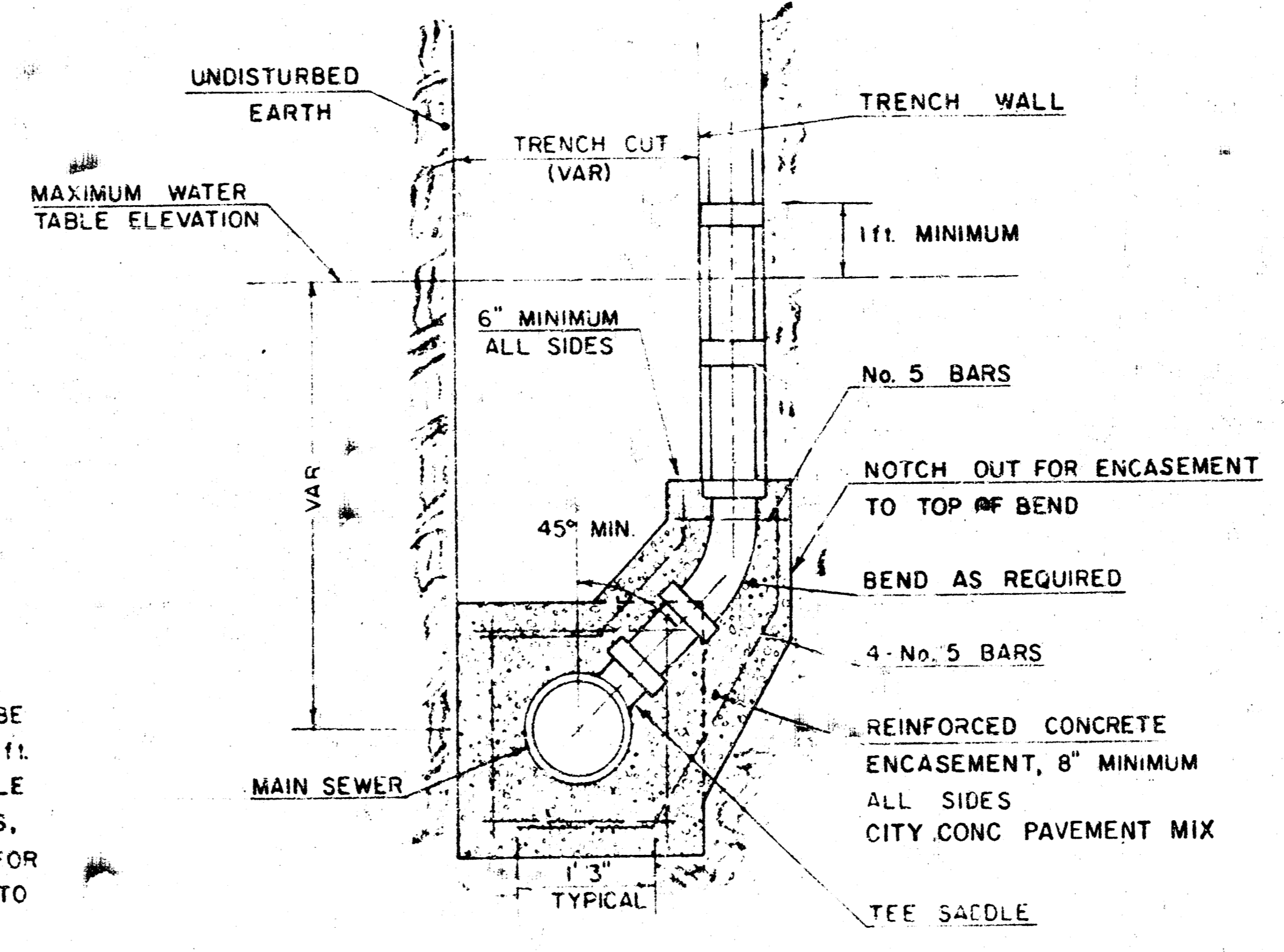
FURNISH AND INSTALL RISERS SHALL BE PAID FOR AT THE UNIT PRICES BID FOR PIPE, 4" PIPE AND REINFORCED CONCRETE ENCASEMENT FOR THE VARIOUS MAIN SEWER PIPE SIZES INDICATED. WHICH PRICE SHALL INCLUDE ALL COSTS FOR COMPLETION OF THIS ITEM INCLUDING MANHOLES, BENDS, CONCRETE REINFORCING STEEL, CAPS OR PLUGS, AND ALL OTHER NECESSARY MATERIALS OR WORK. CONCRETE ENCASEMENT OF THE RISER PIPE TO THE TOP OF THE END AS SHOWN BY THE DRAWINGS WILL NOT BE PAID FOR DIRECTLY AND THE COST FOR THIS WORK SHALL BE CONSIDERED AS SUBSIDIARY TO THE OTHER ITEMS OF WORK.

THE PROJECT INSPECTOR SHALL REPORT ON INSPECTION CARDS THE LOCATION OF ALL RISERS CONSTRUCTED AS MEASURED FROM THE NEAREST MANHOLE, THE DIRECTION OF SERVICE, THE PLACEMENT OF THE TOP OF THE RISER AND THE PIPE QUANTITIES INVOLVED. THE PROJECT INSPECTOR SHALL ALSO REPORT ON INSPECTION CARDS THE LOCATION, DIRECTION OF SERVICE, AND SIZE OF ALL STUBS INSTALLED IN MANHOLES.



TYPICAL RISER FOR SLOPING TRENCH WALLS

NOTE:
TOP OF 4" OR 6" RISER PIPE TO BE EXTENDED TO AN ELEVATION OF 1 FT. MINIMUM ABOVE THE WATER TABLE ELEVATION, WHEN WATER EXISTS, OR TO AN ELEVATION SUITABLE FOR PROVIDING SERVICE TO THE LOT TO BE SERVED AND THEN PLUGGED.



TYPICAL RISER FOR VERTICAL TRENCH WALLS