

PINEWOOD ESTATES

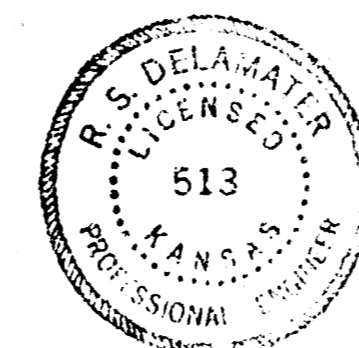
SANITARY SEWER EXTENSIONS

LATERAL 46, MAIN I, SOUTHWEST INTERCEPTOR

TAMARAC DEVELOPMENT CO., INC.
WICHITA, KANSAS

PROJ. # 468-76-245-80468-000-000-001

DELAWARE, FREUND & SCHERER, P.A.
ENGINEERS & ARCHITECTS, WICHITA, KANSAS

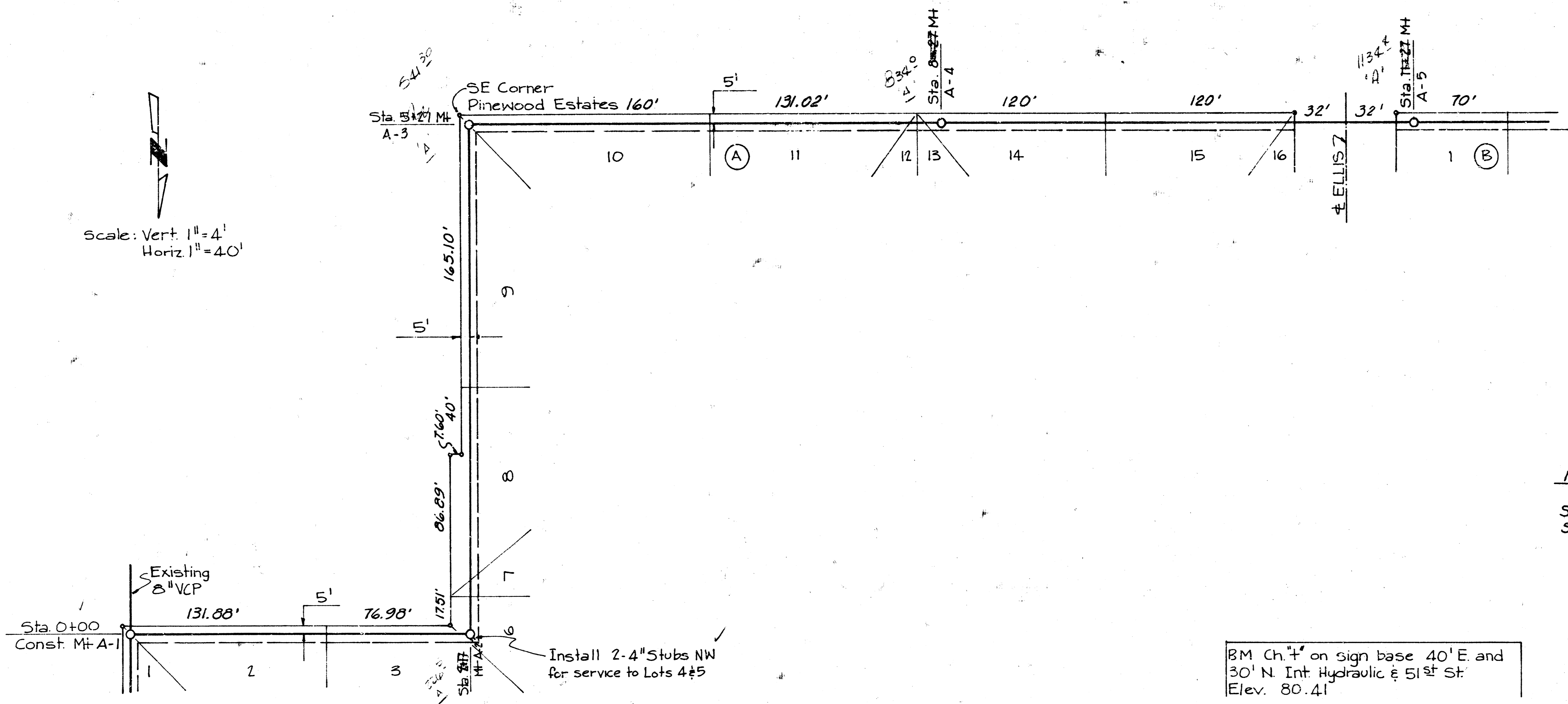


NOTE: RISERS AND ADDITIONAL STUBS IN MANHOLES SHALL BE INSTALLED IN THIS PROJECT TO SERVE LOTS WHERE THE DEPTH OF THE 8" SEWER IS GREATER THAN 10', WHERE THE SOIL IS IN ROCK, OR WHERE THE SOIL IS IN GROUND WATER. RISER CONSTRUCTION SHALL CONFORM TO THE REQUIREMENTS OF THE SHADING TRENCH AS SHOWN ON STANDARD RISER DETAIL SHEET. LOCATIONS OF THE ENDS OF THE RISERS SHALL BE MARKED BY FASTENING GREEN PLASTIC COLORED TAPE TO THE ENDS OF THE RISER AND GRIDDLE TO THE GRADE 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 A.R.S. SCHEDULE 40 PIPE.

INDEX of SHEETS
1. Title Sheet
2-6 Plan-Profile Sheets
7-8 Standard Details

SHEET NO.	TOTAL SHEETS
2	3

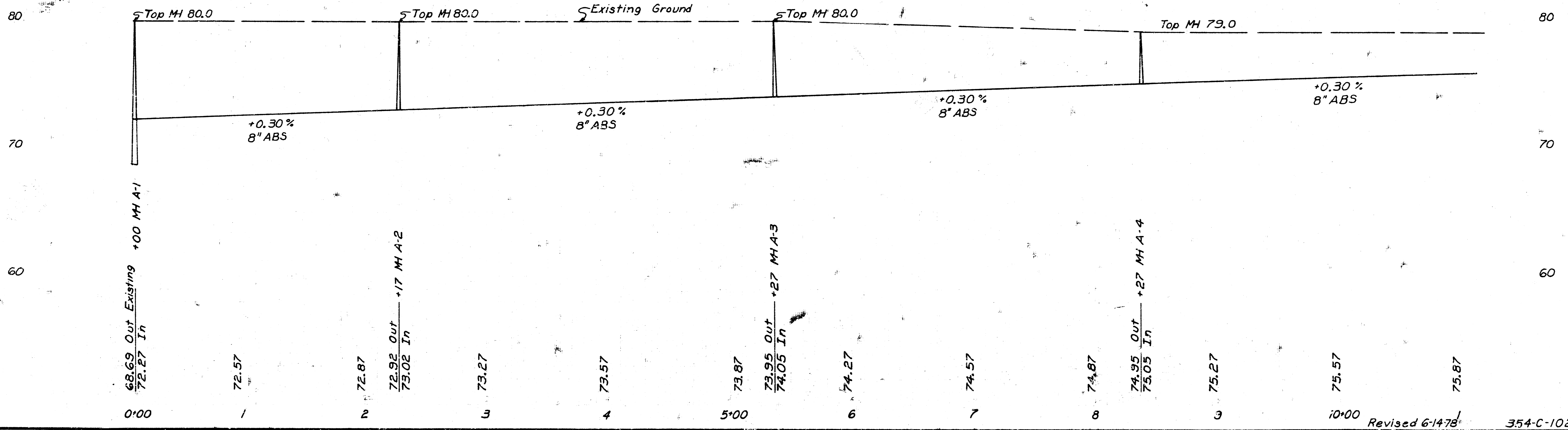
Scale: Vert. 1" = 4'
 Horiz. 1" = 40'

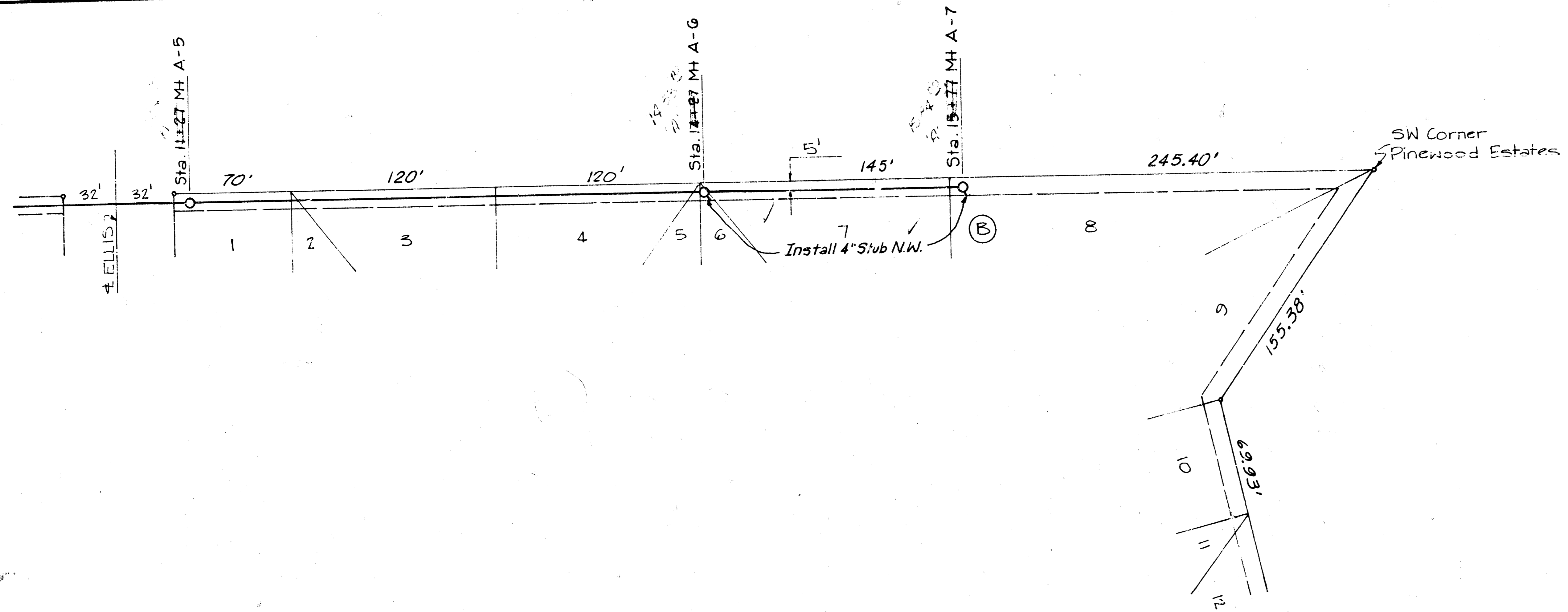


Note:
 Manholes to be constructed shall be Type 'A' Standard or Type 'A' Drop as required. See Sh. 7 Sewer Appurtenances for details.

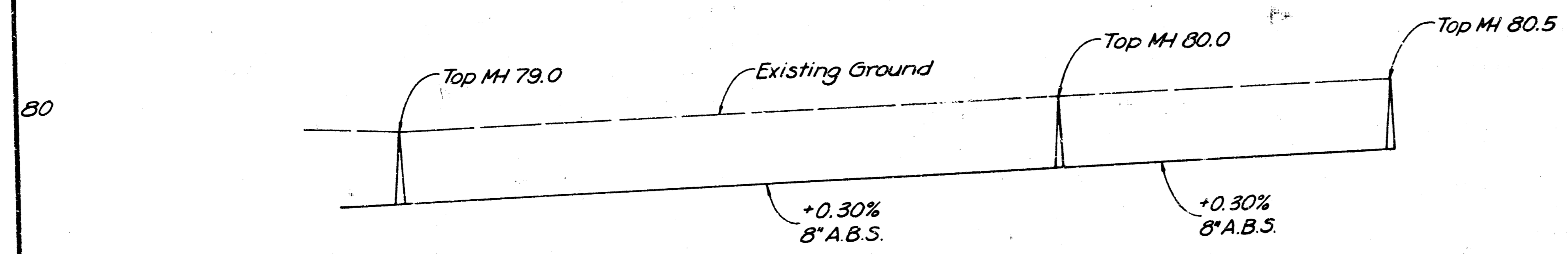
BM Ch. + on sign base 40' E. and 30' N. Int. Hydraulic & 51" dia. St. Elev. 80.41'

LINE 'A'

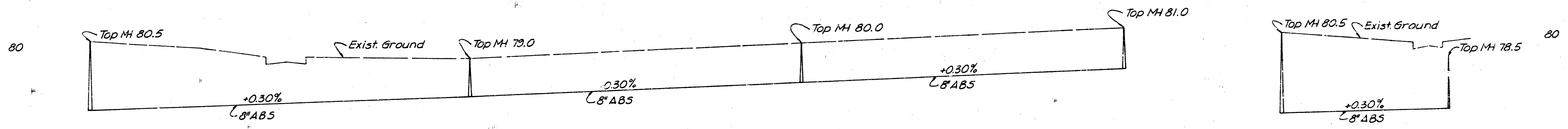
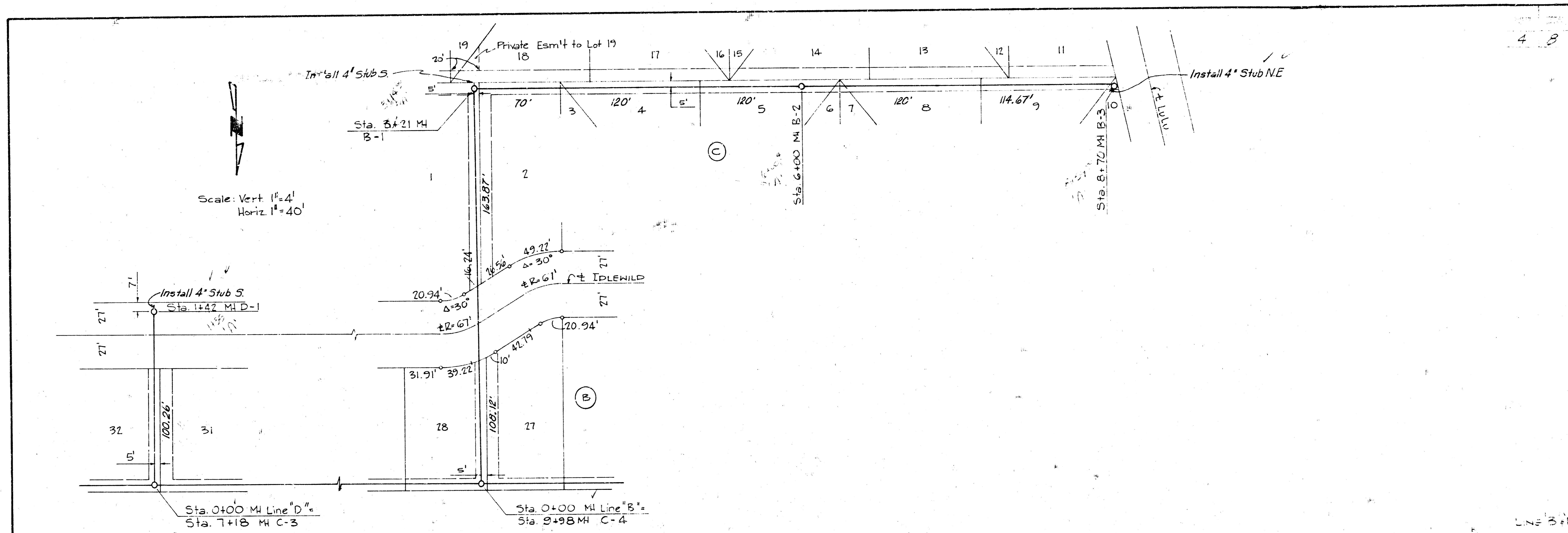




Scale: Vert. 1" = 4'
 Horiz. 1" = 40'

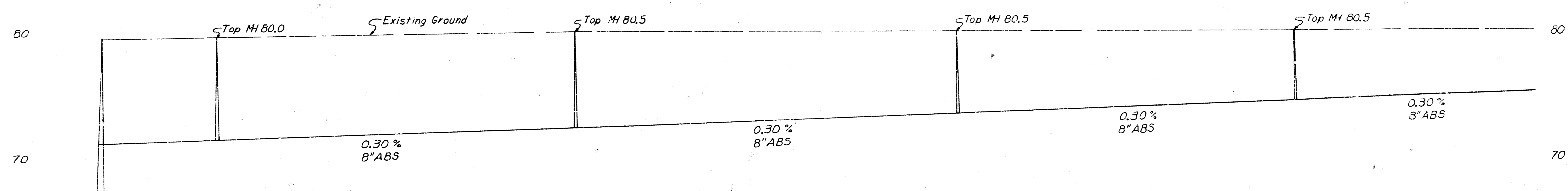
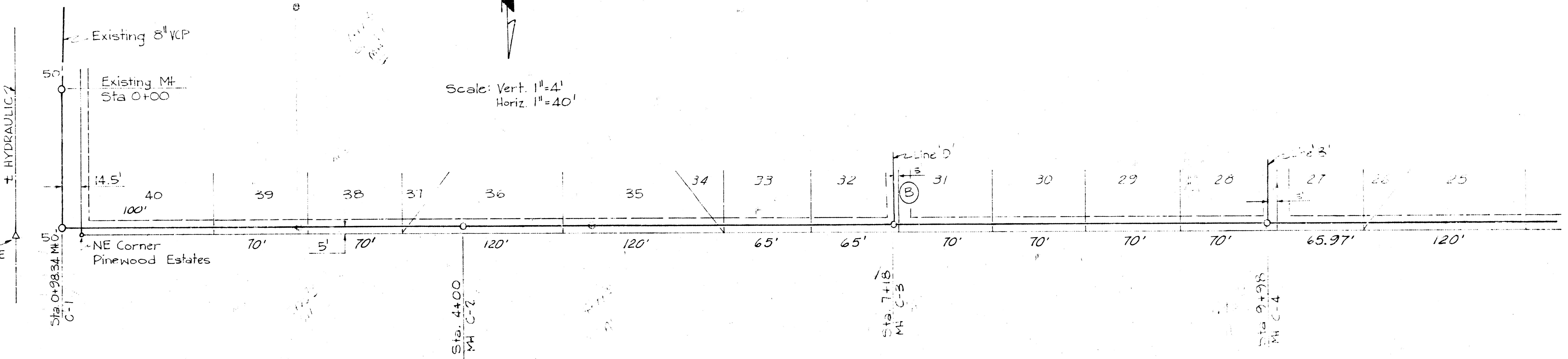


Station	Top of Sewer	Bottom of Sewer
1+00	75.87	75.95 Out / 76.05 In
2+00	76.87	
3+00	76.57	
4+00	76.87	76.95 Out / 77.05 In
5+00	77.27	
6+00	77.50	77.50 Out



75.01 In +00 MH C-4
 75.31
 75.61
 75.91
 75.97 Out +21 MH B-1
 76.07 In
 76.31
 76.61
 76.91 Out +00 MH B-2
 77.01 In
 77.31
 77.61
 77.82 +70 MH B-3
 78.07 In +00 MH C-3
 78.37
 78.40 Out MH D-1

NE Cor SE 1/4
Sec. 21, T28S, R1E



59 Out
62 In
+00 MH Existing

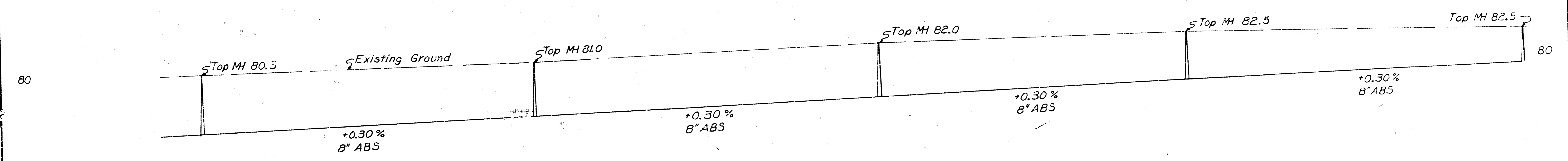
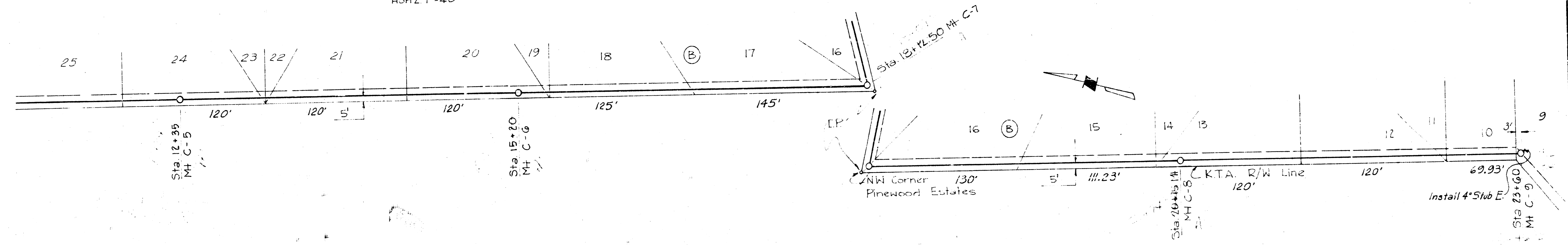
2 Out
62 In
+98.34 MH C-1

92 Out
62 In
+00 MH C-2

97 Out
62 In
+18 MH C-3

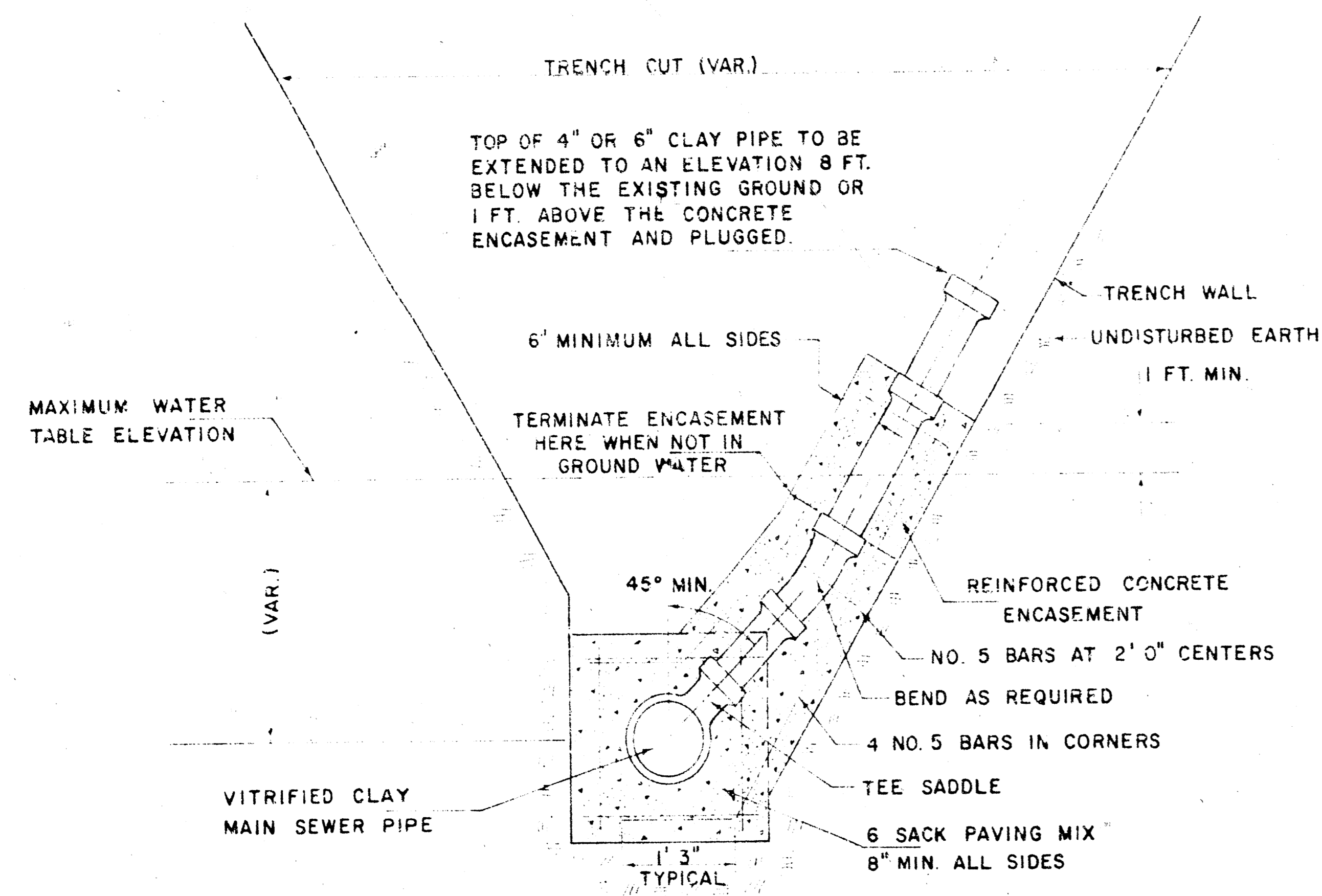
91 Out
62 In
+98 MH C-4

Scale: Vert. 1"=4'
Horiz. 1"=40'



75.62	75.72 Out 75.82 In	+35 MH C-5	76.02	76.32	76.62	76.68 Out 76.78 In	+20 MH C-6	77.02	77.32	77.62	77.66 Out 77.76 In	+12.50 MH C-7	78.02	78.32	20-00	78.54 Out 78.64 In	+75 MH C-8	78.72	79.02	79.32	79.50	+60 MH C-9
-------	-----------------------	------------	-------	-------	-------	-----------------------	------------	-------	-------	-------	-----------------------	---------------	-------	-------	-------	-----------------------	------------	-------	-------	-------	-------	------------

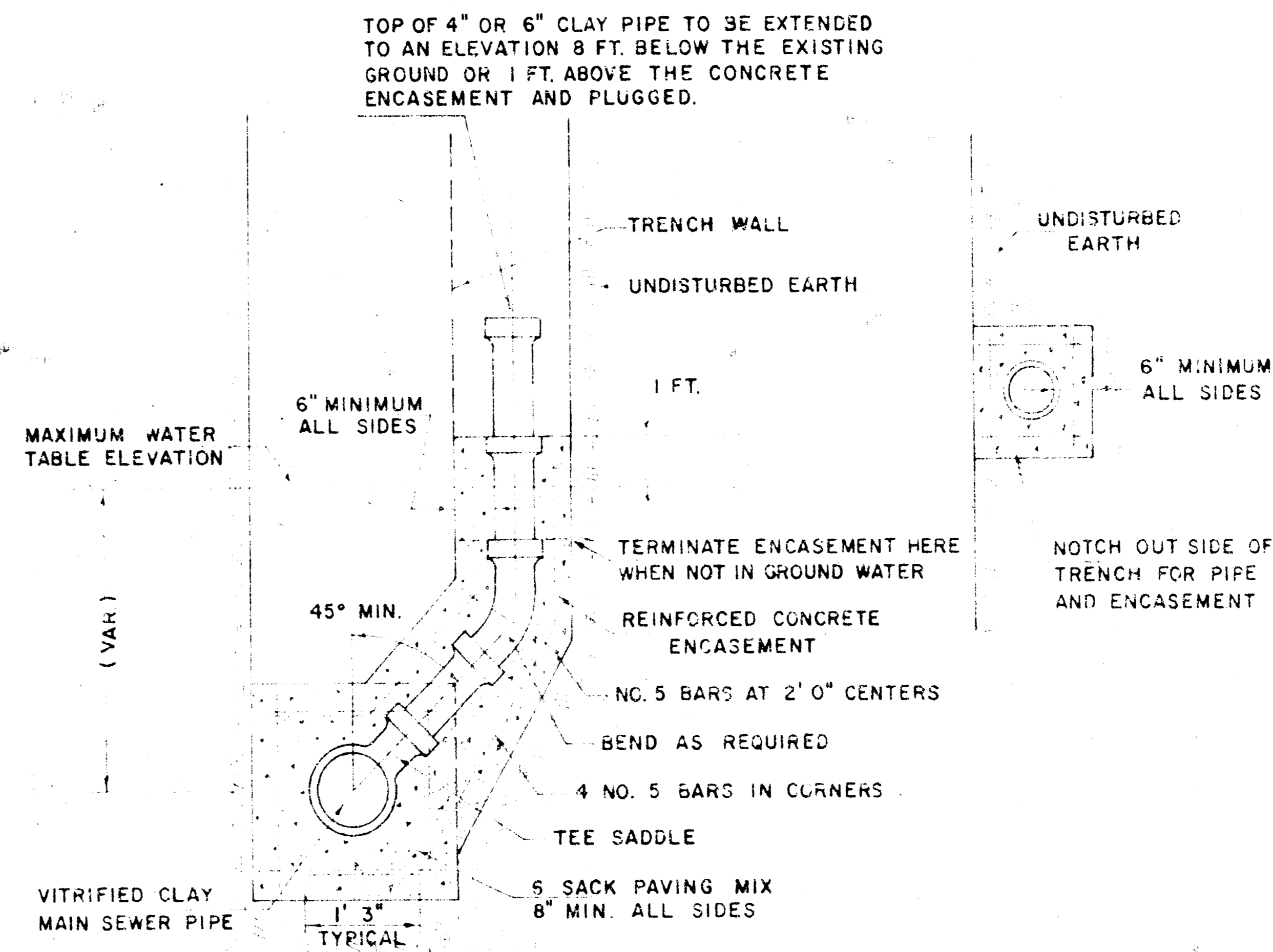
6 only per
14-1
pl. 4



DETAIL FOR VERTICAL RISER
VITRIFIED CLAY PIPE
SLOPING TRENCH WALLS
(TYPICAL LEFT OR RIGHT)

GENERAL NOTES (CLAY PIPE RISER)

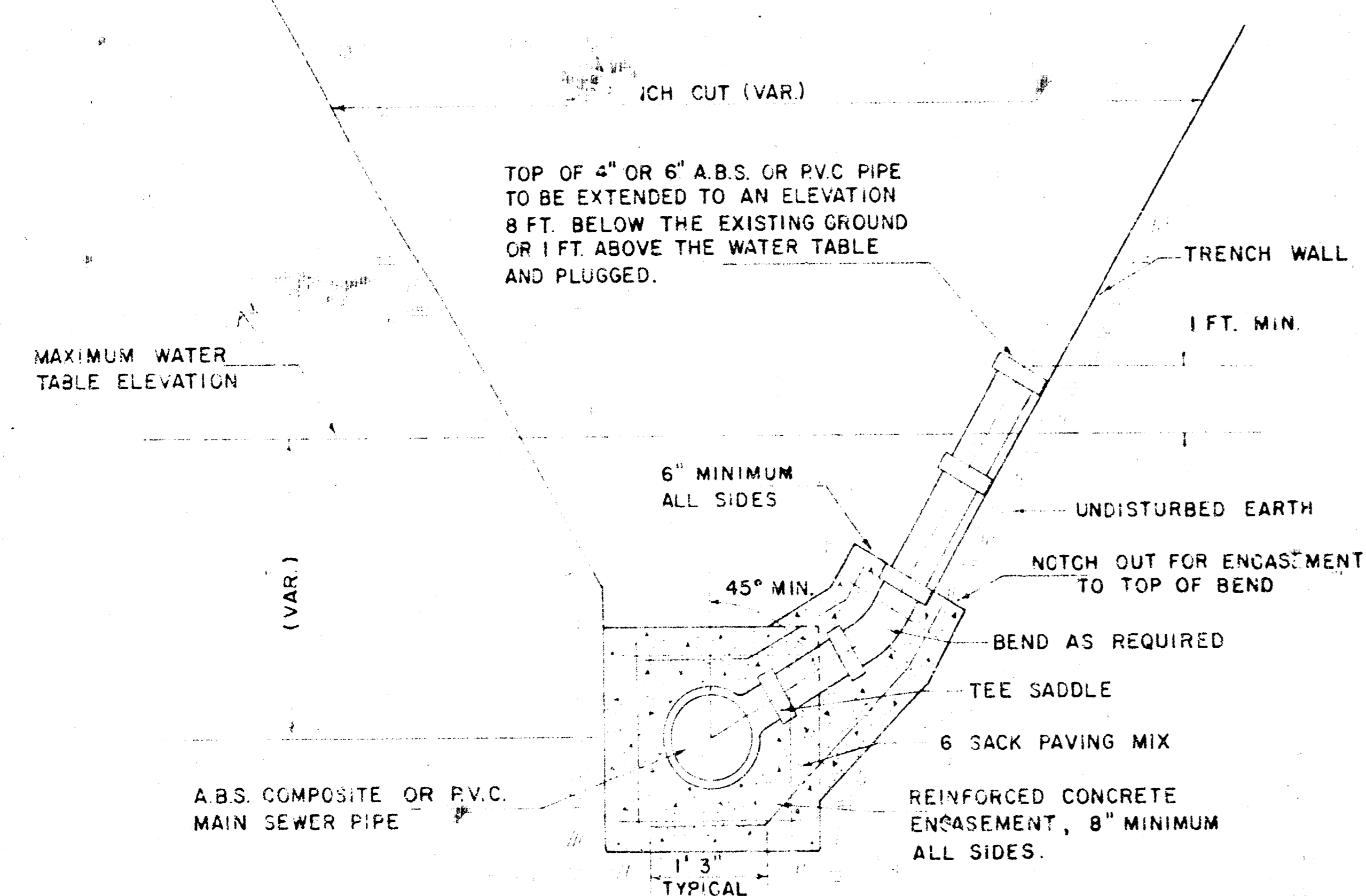
RISERS SHALL BE INSTALLED TO SERVE ALL PROPERTY WHICH IS PRESENTLY DEVELOPED WHEN THE MAIN SEWER LINE IS IN GROUND WATER OR WHEN THE MAIN SEWER LINE IS DEEPER THAN 8 FEET. RISERS SHALL BE INSTALLED TO SERVE UNDEVELOPED PROPERTY ONLY WHEN THE MAIN SEWER IS IN GROUND WATER. SIX INCH RISERS SHALL BE INSTALLED TO SERVE COMMERCIAL OR INDUSTRIAL PROPERTY AND FOUR INCH RISERS SHALL BE INSTALLED TO SERVE RESIDENTIAL PROPERTY. LOCATION OF RISERS TO SERVE DEVELOPED PROPERTY SHALL BE APPROVED BY THE PROPERTY OWNER. STUBS SHALL BE INSTALLED IN MANHOLES WHERE LOCATIONS OF MANHOLES WILL PROVIDE SATISFACTORY SERVICE CONNECTIONS AS DETERMINED BY THE FIELD ENGINEER OR AS SHOWN BY THE PLANS. ENCASUREMENT OF VITRIFIED CLAY MAIN SEWER PIPE SHALL EXTEND TO THE FIRST JOINT IN THE MAIN SEWER PIPE ON EACH SIDE OF THE RISER INSTALLATION. ENCASUREMENT OF 4\"/>



DETAIL FOR VERTICAL RISER
VITRIFIED CLAY PIPE
VERTICAL TRENCH WALLS
(TYPICAL LEFT OR RIGHT)

GENERAL NOTES (CLAY PIPE RISER CONTINUED)

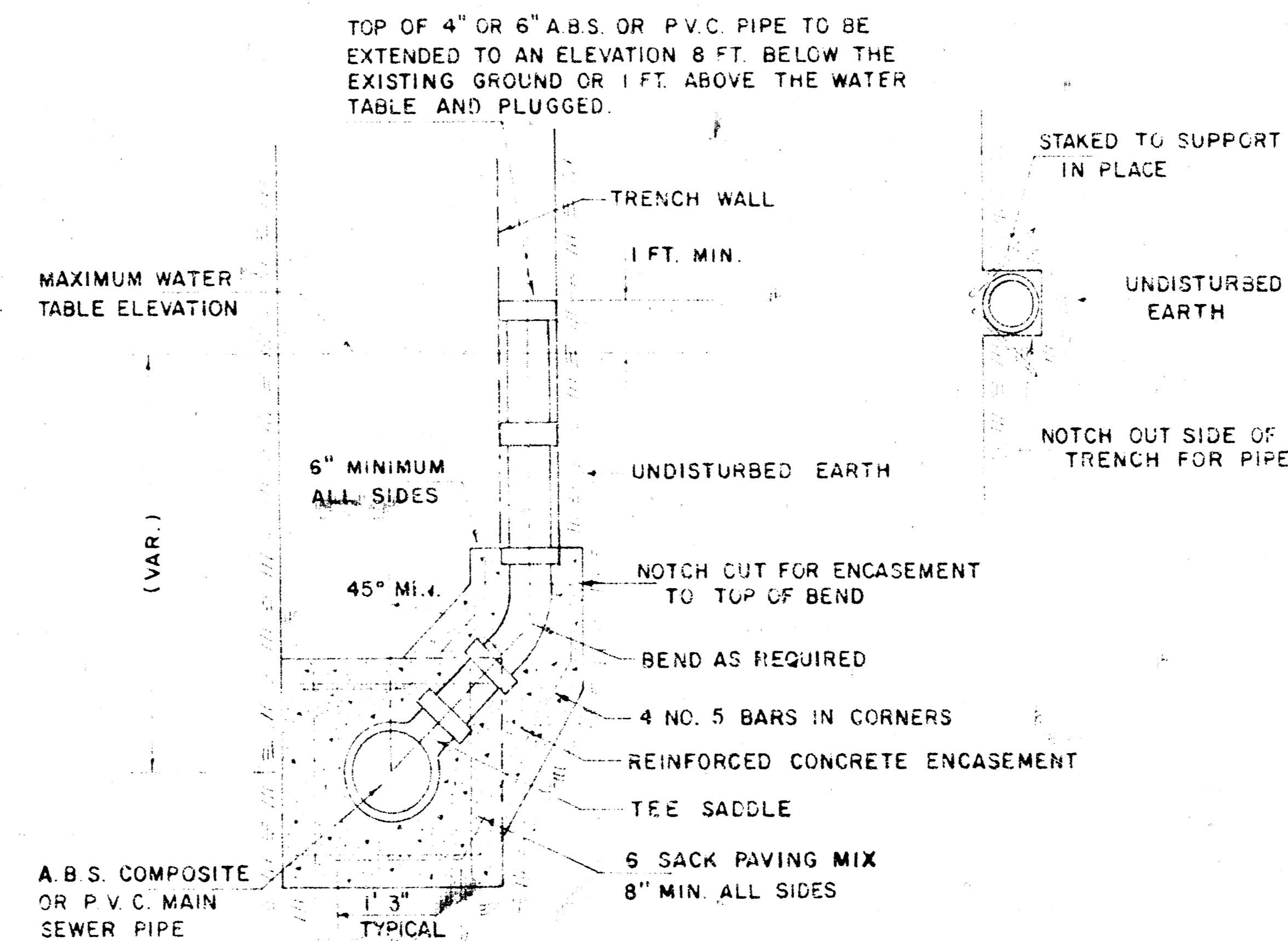
FURNISHING AND INSTALLING RISERS SHALL BE PAID FOR AT THE UNIT PRICES BID FOR 4\"/>



DETAIL FOR VERTICAL RISER
A.B.S. COMPOSITE OR P.V.C. PIPE
SLOPING TRENCH WALLS
(TYPICAL LEFT OR RIGHT)

GENERAL NOTES (A.B.S. COMPOSITE OR P.V.C. PIPE RISER)

RISERS SHALL BE INSTALLED TO SERVE ALL PROPERTY WHICH IS PRESENTLY DEVELOPED WHEN THE MAIN SEWER LINE IS IN GROUND WATER OR WHEN THE MAIN SEWER LINE IS DEEPER THAN 8 FEET. RISERS SHALL BE INSTALLED TO SERVE UNDEVELOPED PROPERTY ONLY WHEN THE MAIN SEWER IS IN GROUND WATER. SIX INCH RISERS SHALL BE INSTALLED TO SERVE COMMERCIAL OR INDUSTRIAL PROPERTY AND FOUR INCH RISERS SHALL BE INSTALLED TO SERVE RESIDENTIAL PROPERTY. LOCATION OF RISERS TO SERVE DEVELOPED PROPERTY SHALL BE APPROVED BY THE PROPERTY OWNER. STUBS SHALL BE INSTALLED IN MANHOLES WHERE LOCATIONS OF MANHOLES WILL PROVIDE SATISFACTORY SERVICE CONNECTIONS AS DETERMINED BY THE FIELD ENGINEER OR AS SHOWN BY THE PLANS. ENCASUREMENT OF A.B.S. COMPOSITE OR P.V.C. MAIN SEWER PIPE SHALL EXTEND A MINIMUM OF 3 FEET ON BOTH SIDES OF THE CENTERLINE OF THE RISER. FOUR INCH OR SIX INCH RISER PIPE SHALL BE ENCASED TO THE TOP OF THE BEND AS INDICATED IN THE DRAWINGS. FURNISHING AND INSTALLING RISERS SHALL BE PAID FOR AT THE UNIT PRICES BID FOR 4\"/>



DETAIL FOR VERTICAL RISER
A.B.S. COMPOSITE OR P.V.C. PIPE
VERTICAL TRENCH WALLS
(TYPICAL LEFT OR RIGHT)

GENERAL NOTES (A.B.S. COMPOSITE OR P.V.C. PIPE RISER CONTINUED)

CONCRETE ENCASUREMENT OF A.B.S. OR P.V.C. RISER PIPE TO THE TOP OF THE BEND AS SHOWN BY THE DRAWING 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 KEEP A RECORD OF THE STATION OF RISERS INSTALLED, THE DIRECTION OF SERVICE, THE ELEVATION OF THE TOP OF THE RISER, AND THE PAY QUANTITIES INVOLVED. CONTRACTOR'S METHOD FOR SUPPORTING AND BACKFILLING RISER PIPE SHALL BE APPROVED BY THE ENGINEER. THE ENDS OF RISER PIPE SHALL BE CAPPED OR PLUGGED USING FITTINGS FURNISHED BY THE MANUFACTURER OF THE RISER PIPE.

VERTICAL RISER DETAIL
ADOPTED AS STANDARD DESIGN
BY
ENGINEERING DIVISION
CITY OF WICHITA, KANSAS
R. W. LINN CITY ENGINEER
1977

SHEET NO.	TOTAL SHEETS
8	8

STANDARD MANHOLE TYPE "A"

STANDARD MANHOLE TYPE "B"

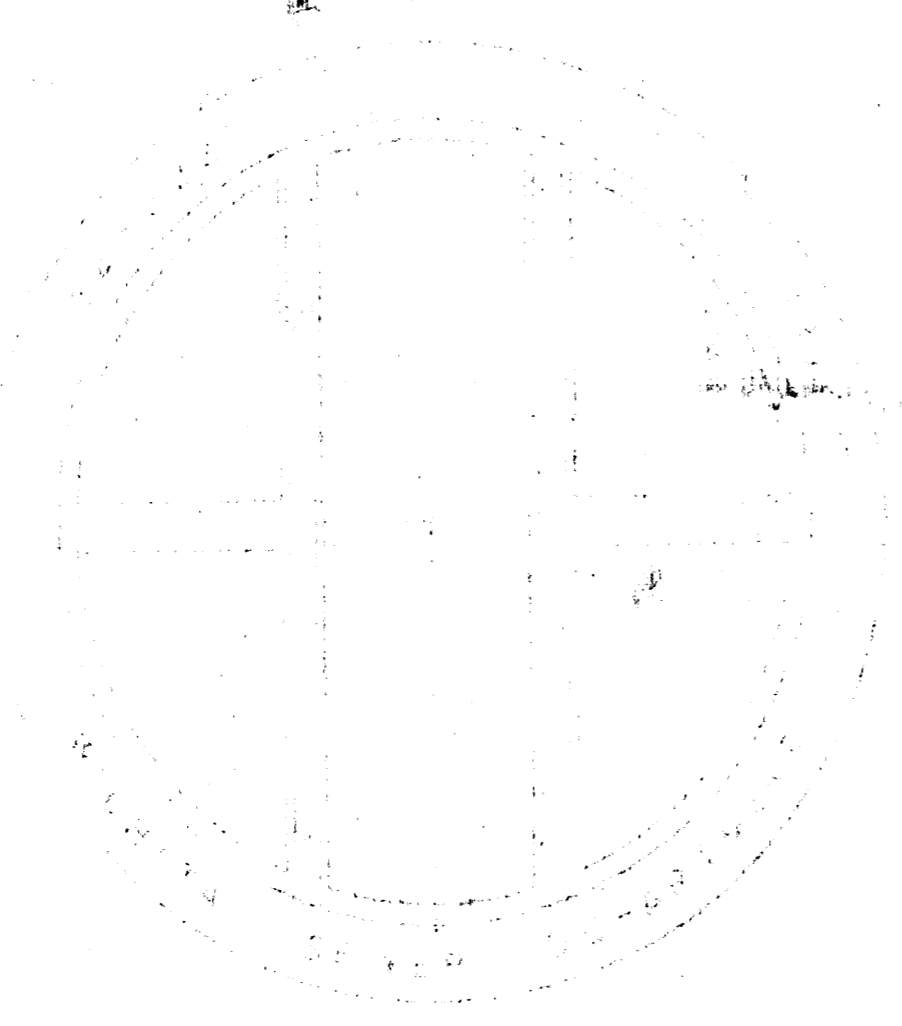
DROP MANHOLE TYPE "A"

DROP MANHOLE TYPE "B"

OUTSIDE DROP MANHOLE TYPE "A"

OUTSIDE DROP MANHOLE TYPE "B"

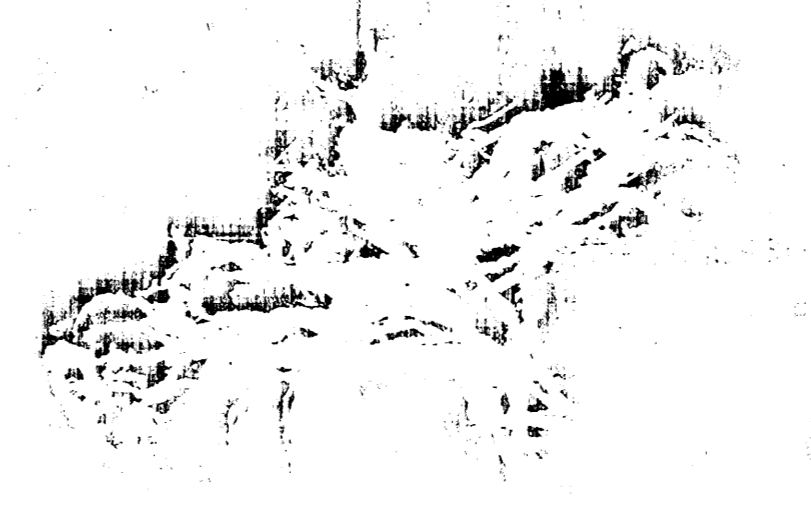
THIS DRAWING SHALL BE USED IN THE FIELD IN PLACE OF ANY OTHER DRAWING WHICH MAY BE USED FOR THE DESIGN OF MANHOLES AND SHALL BE THE BASIS FOR THE MANHOLE.



MANHOLE COVER



MANHOLE RING



DETAIL OF CONCRETE GRABLE

GENERAL NOTES

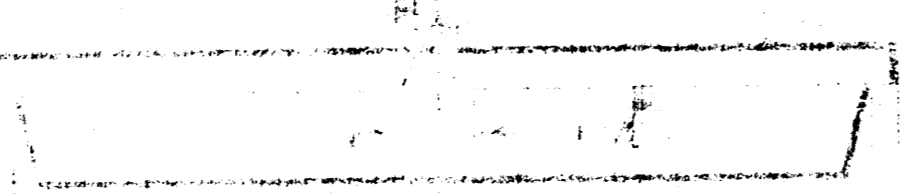
1. ALL MANHOLES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR SEWERAGE AND SANITATION WORK, LATEST EDITION, AS ADOPTED BY THE BOARD OF SUPERVISORS OF THE COUNTY OF LOS ANGELES, CALIFORNIA.

2. THE MANHOLE SHALL BE CONSTRUCTED OF REINFORCED CONCRETE AND SHALL BE SET ON A FOUNDATION OF CONCRETE.

3. THE MANHOLE SHALL BE SET AT THE PROPOSED FINISHED GRADE OF THE SEWER PIPE.

4. THE MANHOLE SHALL BE SET AT THE PROPOSED FINISHED GRADE OF THE SEWER PIPE.

MANHOLE COVER



MANHOLE RING

SEE TOP VIEW FOR POSITION OF COVER AND THE ONE IN WHICH THE SEAT OF THE COVER IS MADE.

DIAGRAM BEARING SECTION

SEWER APPURTENANCES
 ADOPTED AS STANDARD DESIGN
 BY
 ENGINEERING DIVISION
 CITY OF LOS ANGELES, CALIFORNIA
 354-0107