

Sta. 12100.0 Const. Reinf. Conc. M.M. See Detail Sheet No. 12. Intercept existing 42" San. Sewer.

Sta. 17181.4 Const. Sta. manhole.

Sta. 24100.0 Continued on Sheet No. 1.

NOTE: 27" V.C.P. inside of 42" R.C.P. San. Sewer.

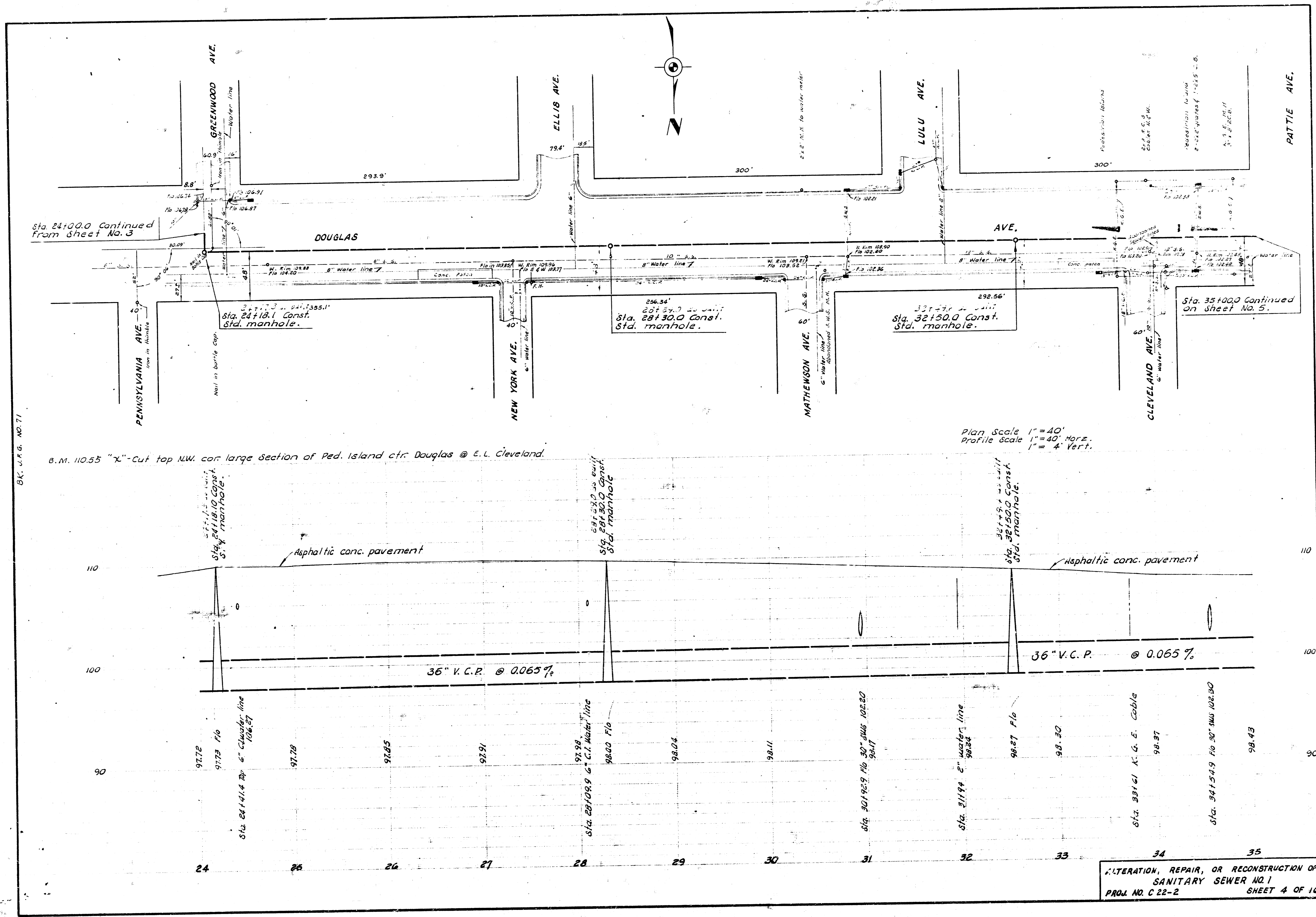
NOTE: See paving plan on sheet No. 16.

Sta. 22128.0 Construct Sta. manhole. Intercept existing 21" Sanitary Sewer.

B.M. "X" cut top M. curb English @ W.L. Hydraulic 107.88
 B.M. 109.29 N. Rim of Water Meter Ring in N. walk Douglas & ctr. Greenwood. Bk. of N. cb.
 B.M. 109.70 "X" cut top conc. footing on N. Side Douglas in front of Bldg's. #1118 & 1120.

Plan Scale 1" = 40'
 Profile Scale 1" = 40' horz.
 1" = 4' Vert.

ALTERATION, REPAIR, OR RECONSTRUCTION OF
 SANITARY SEWER NO. 1
 PROJ. NO. C 22-2 SHEET 3 OF 16



Sta. 24+00.0 Continued from sheet No. 3

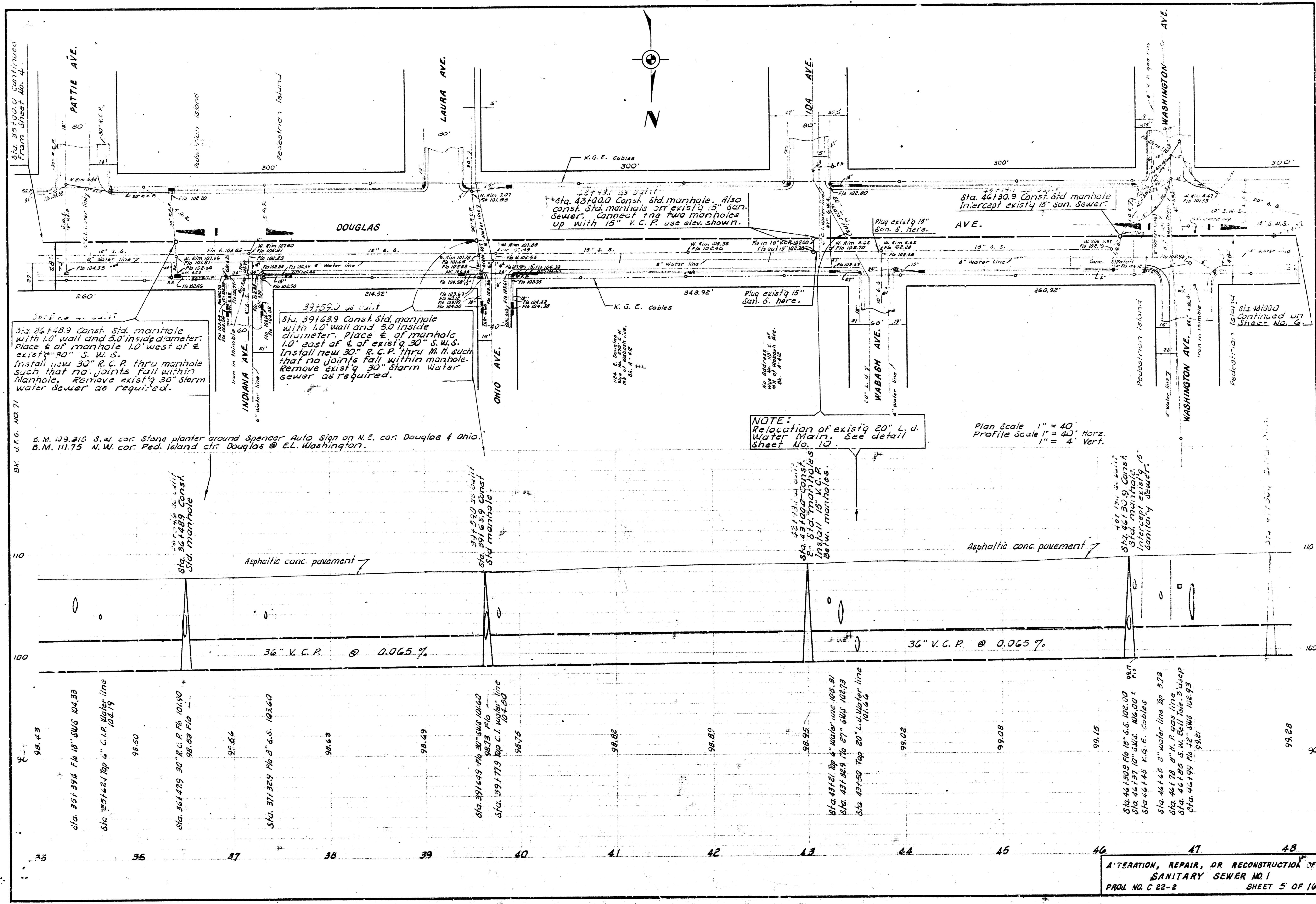
Sta. 35+00.0 Continued on sheet No. 5.

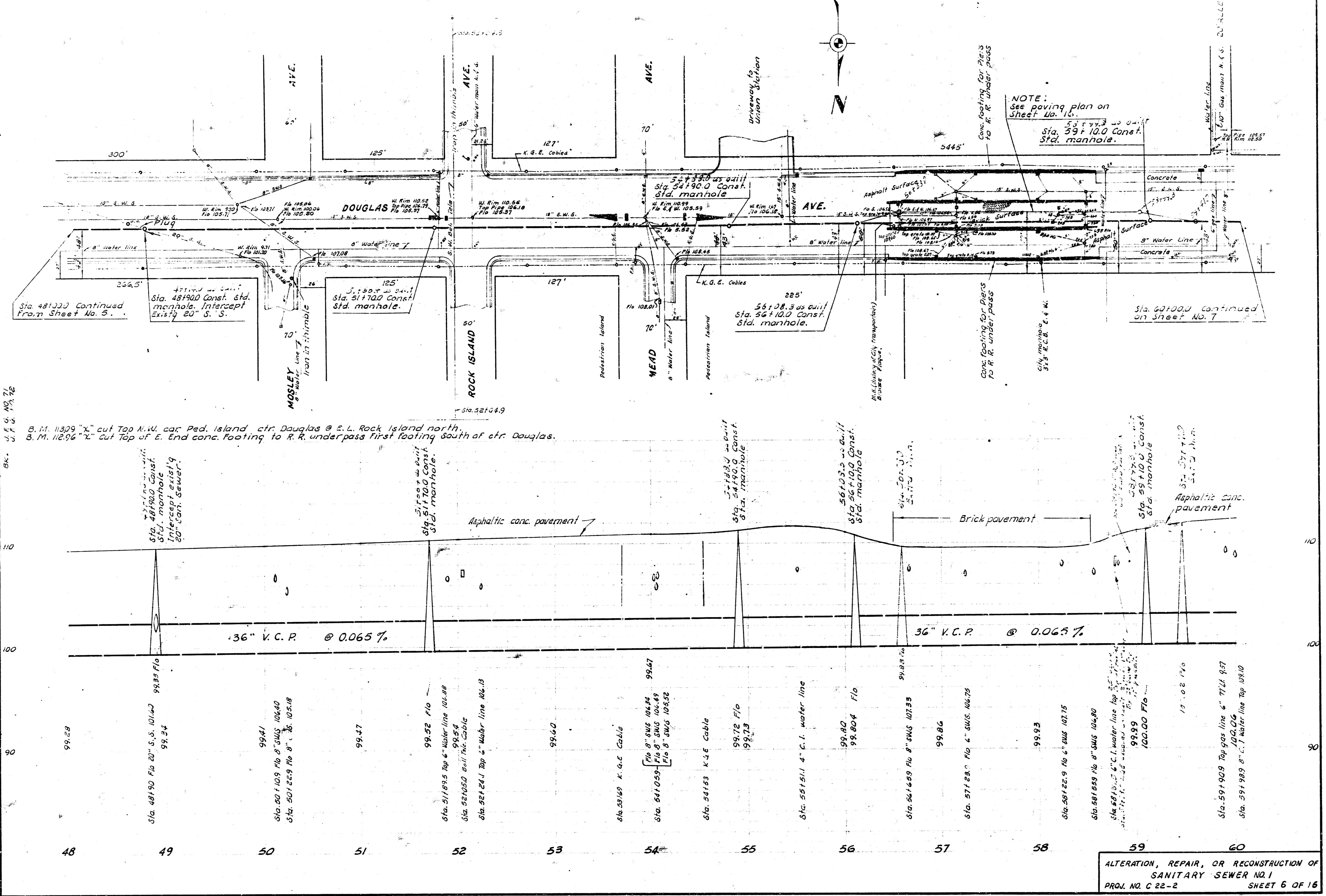
B.M. 110.55 "x" - Cut top NW. cor. large section of Ped. Island ctr. Douglas @ E.L. Cleveland.

Plan Scale 1" = 40'
 Profile Scale 1" = 40' Horiz.
 1" = 4' Vert.

ALTERATION, REPAIR, OR RECONSTRUCTION OF
 SANITARY SEWER NO. 1
 PROJ. NO. C 22-2 SHEET 4 OF 16

B.K. U.S.G. NO. 71





- 3420 1" gal pipe
- 3421 1" gal pipe
- 3422 1" gal pipe
- 3423 1" gal pipe
- 3424 1" gal pipe
- 3425 1" gal pipe
- 3426 1" gal pipe
- 3427 1" gal pipe
- 3428 1" gal pipe
- 3429 1" gal pipe
- 3430 1" gal pipe
- 3431 1" gal pipe
- 3432 1" gal pipe
- 3433 1" gal pipe
- 3434 1" gal pipe
- 3435 1" gal pipe
- 3436 1" gal pipe
- 3437 1" gal pipe
- 3438 1" gal pipe
- 3439 1" gal pipe
- 3440 1" gal pipe



WICHITA Box 696 WH 3-4246
HERRY Phone BR 6-4581
 RUSSELL HU 3-2549

- INTERNATIONAL - HOUGH - GALION - LINK-BELT - LE ROI - TRANSPORT TRAILERS
- 62478 KGE encased conduit
- 2" water 10" deep Top 2" below pavement
- 55482 6" CI water line
- Top 2" below pavement
- 55482 1" H2O lead
- 2" below pave
- 62478 KGE encased 2'x2'
- Top 4" below pave - wind duct
- on top 3" below pave
- 62478 6" CI H2O
- 4" below pave
- 62455 1 1/2" gal H2O pipe dead
- 4" below pave

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- INTERNATIONAL - HOUGH - GALION - LINK-BELT - LE ROI - TRANSPORT TRAILERS
- 73449 Encased Bell 1/2" Conduit
- Top 2" below pave
- Bottom 3" "
- 73450 Encased KGE Conduit
- Top 4" below pave
- Bottom 6" "
- 73452 2" CI H2O
- 4" below pave
- 73452 1" gal H2O
- 5" below pave
- 73452 1" gal H2O
- 5" below pave
- 73452 1" gal H2O
- 5" below pave

RUSSELL HU 3-2549
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 RUSSELL HU 3-2549

- INTERNATIONAL - HOUGH - GALION - LINK-BELT - LE ROI - TRANSPORT TRAILERS
- 62458 2" KGE conduit
- 1 1/2" below pave
- 62430 10" deep CB lead Diagonal
- NE to SW
- Top 2" below pave
- 62433 1 1/2" gal pipe (dead)
- 3" below pave
- 62432 1" lead H2O
- 4" below pave
- 62431 5" VCP CB lead
- 5" below pave
- 62438 2" gal H2O Dead
- 4" below pave

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- INTERNATIONAL - HOUGH - GALION - LINK-BELT - LE ROI - TRANSPORT TRAILERS
- 73453 2 - 1 1/2" pipes (dead)
- 1 1/2" below pave
- 73454 3/4" lead H2O (dead)
- 2" below pave
- 73455 1" Copper H2O
- 5" below pave
- 76451 2" CI H2O
- 2-1" lead H2O
- 5" below pave
- 76451 2" CI H2O
- 5" below pave
- 76451 2" CI H2O
- 5" below pave

RUSSELL HU 3-2549
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 RUSSELL HU 3-2549

- INTERNATIONAL - HOUGH - GALION - LINK-BELT - LE ROI - TRANSPORT TRAILERS
- 64492 1" gal H2O
- 4" below pave
- 64446 3/4" Copper H2O
- 6" below pave
- 64444 1" Copper H2O
- 10" below pave
- 64492 1" lead H2O
- 8" below pave
- 64497 1" lead H2O
- 8" below pave
- 64461 6" CI H2O
- 3" below pave
- 65447 2 1/2" x 2 1/2" KGE encased with 5" x 5"
- wooden conduit on top
- 5" below pave

Box 696 WH 3-4246
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- INTERNATIONAL - HOUGH - GALION - LINK-BELT - LE ROI - TRANSPORT TRAILERS
- 77448 6" CI H2O
- 7" below pave
- 77452 Encased Bell 7/8"
- Top 3" below pave
- Bottom 5" "
- 77467 10" VCP SW3 lead
- 5" below pave
- 77471 2" KGE conduit
- 12" below pave
- 77459 1 1/2" gal H2O
- 5" below pave

RUSSELL HU 3-2549
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 RUSSELL HU 3-2549

- INTERNATIONAL - HOUGH - GALION - LINK-BELT - LE ROI - TRANSPORT TRAILERS
- 65442 4" CI H2O
- 4" below pave
- 66420 15" VCP CB lead
- 4" below pave
- 66423 6" CI H2O
- 3" below pave
- 66424 KGE 6" x 6" encased
- 1" below pave
- 66435 2" KGE conduit
- 1" below pave
- 67438 3/4" H2O Copper
- 7" below pave
- 67435 1" lead H2O
- 3" below pave

Box 696 WH 3-4246
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- INTERNATIONAL - HOUGH - GALION - LINK-BELT - LE ROI - TRANSPORT TRAILERS
- 180412 3/4" lead (dead)
- 2" below pave
- 180112 1 1/2" gal dead
- 3" below pave
- 80461 1" gal dead
- 3" below pave
- 80477 1 1/2" dead conduit
- 0" below pave

WICHITA Box 696 WH 3-4246
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- INTERNATIONAL - HOUGH - GALION - LINK-BELT - LE ROI - TRANSPORT TRAILERS
- 67442 1" lead H2O
- 3" below pave
- 67447 3/4" Copper H2O
- 3" below pave
- 67436 3/4" lead H2O
- 5" below pave
- 67440 3/4" lead H2O (dead)
- 4" below pave
- 67443 3/4" lead H2O (dead)
- 3" below pave
- 67449 6" CI H2O
- 2" below pave
- 67466 1 1/2" gal H2O (dead)
- 3" below pave
- 67400 1 1/2" lead H2O (dead)
- 3" below pave

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- INTERNATIONAL - HOUGH - GALION - LINK-BELT - LE ROI - TRANSPORT TRAILERS
- 180412 3/4" lead (dead)
- 2" below pave
- 180112 1 1/2" gal dead
- 3" below pave
- 80461 1" gal dead
- 3" below pave
- 80477 1 1/2" dead conduit
- 0" below pave

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- INTERNATIONAL - HOUGH - GALION - LINK-BELT - LE ROI - TRANSPORT TRAILERS
- 67404 3/4" gal H2O dead
- 3" below pave
- 67459 2 1/2" VCP SW3
- 2" below pave
- 67478 2" CI H2O
- 4" below pave
- 70402 6" CI H2O
- 9" below pave
- 70407 1 1/2" x 2 1/2" KGE conduit encased
- 5" below pave
- 6" x 10" wood KGE conduit
- 3" below pave
- 70422 10" VCP SW3 lead
- 3" below pave

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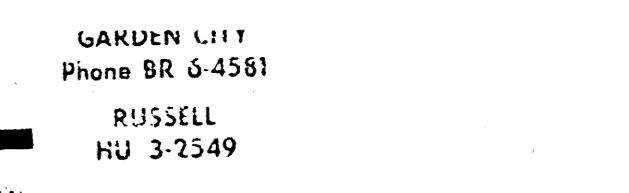
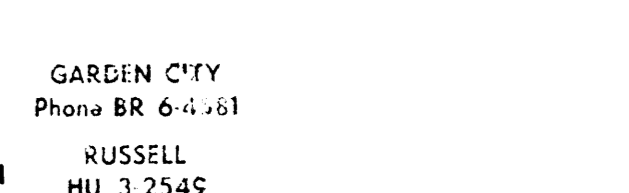
- INTERNATIONAL - HOUGH - GALION - LINK-BELT - LE ROI - TRANSPORT TRAILERS
- 182426 3/4" gal (dead)
- 2" below pave
- 82429 3/4" gal (dead)
- 4" below pave
- 82430 1" gal (dead)
- 2" below pave
- 82431 1" gal (dead)
- 2" below pave
- 82432 3/4" lead (dead)
- 1 1/2" below pave
- 82433 3/4" lead (dead)
- 1 1/2" below pave

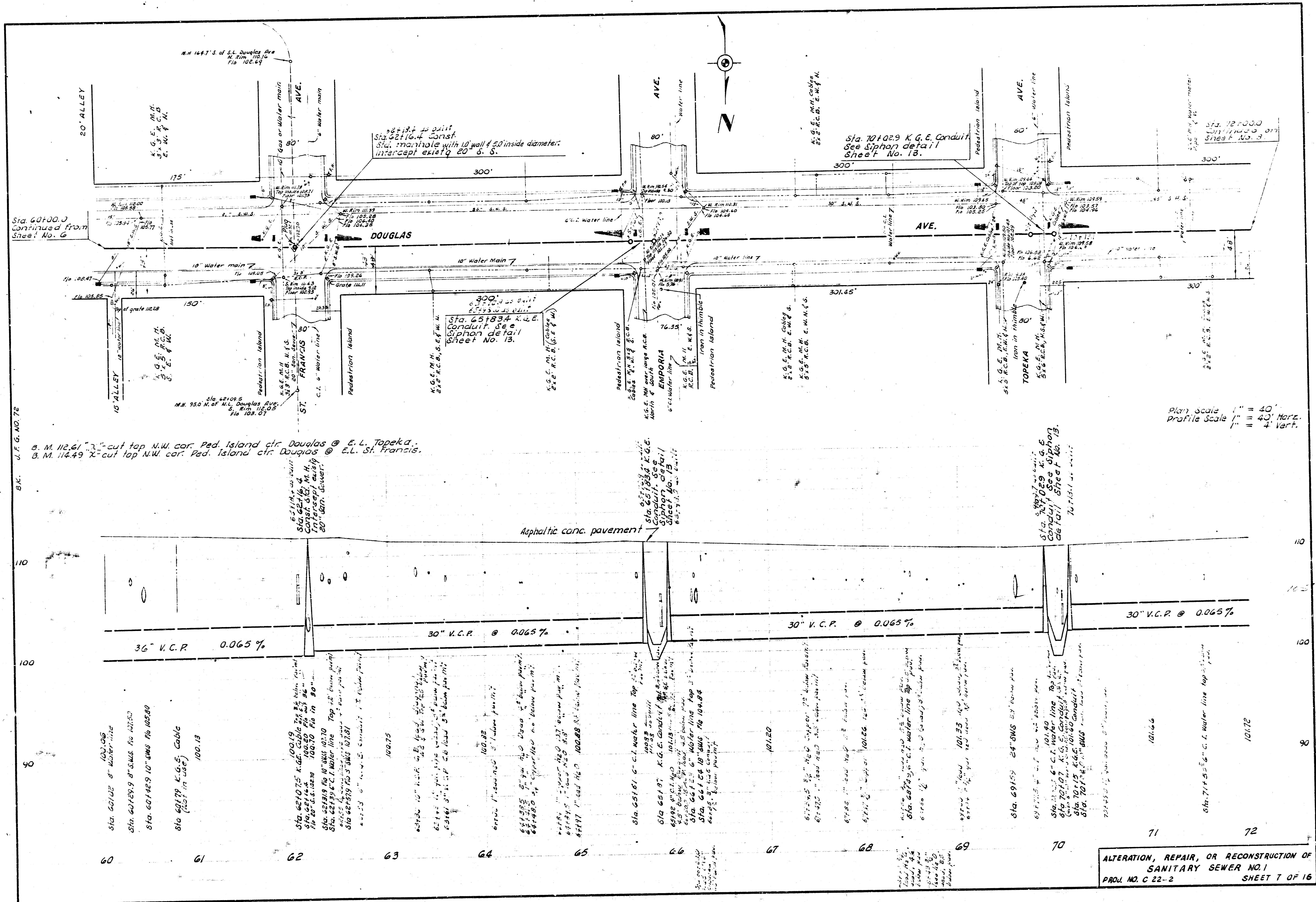
WICHITA Box 696 WH 3-4246
HERRY Phone BR 6-4581
 RUSSELL HU 3-2549

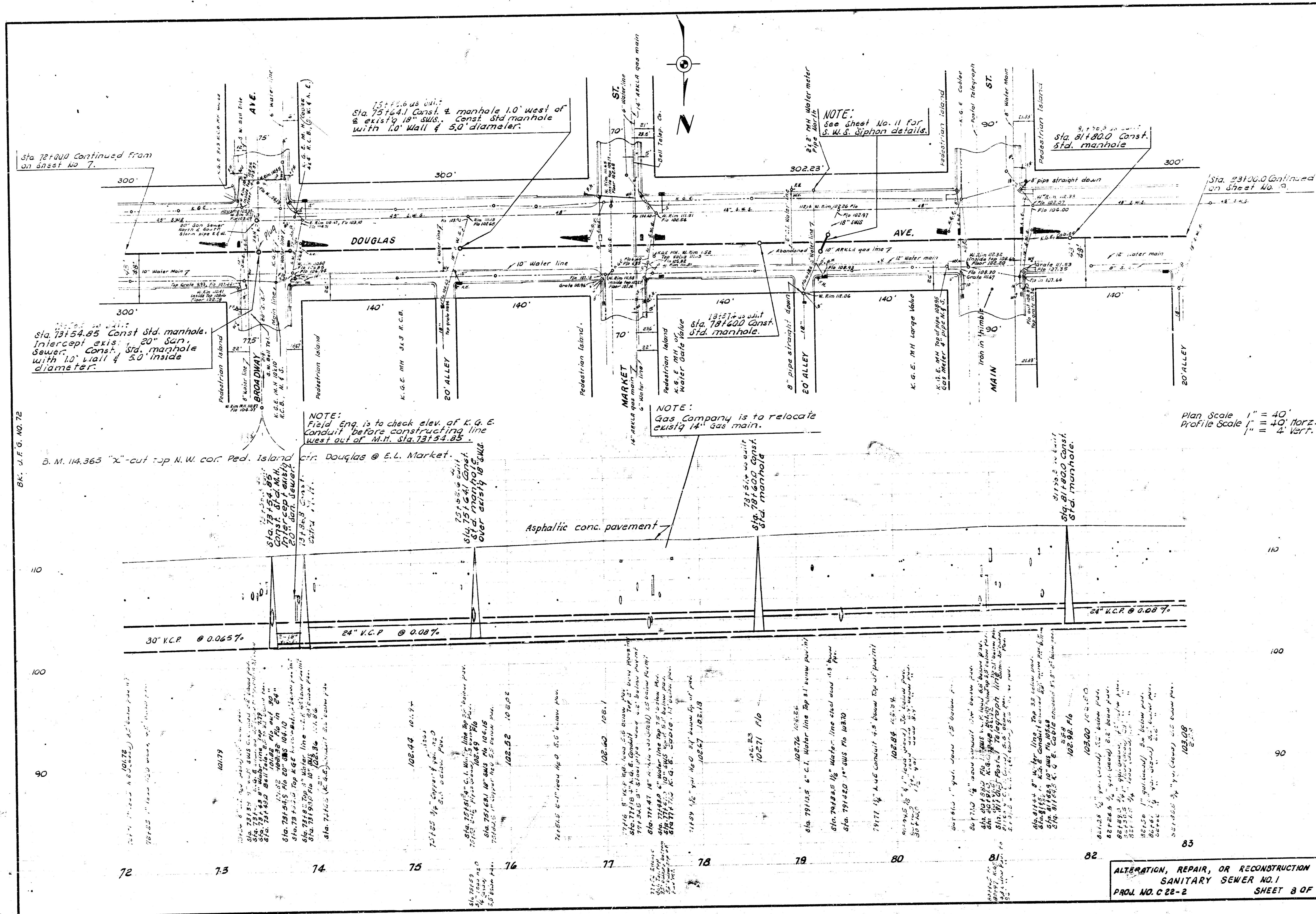
- INTERNATIONAL - HOUGH - GALION - LINK-BELT - LE ROI - TRANSPORT TRAILERS
- 70442 1 1/2" gal dead
- 3" below pave
- 71455 6" CI H2O
- 3" below pave
- 72401 1" lead H2O (dead)
- 4" below pave
- 72425 1" lead H2O (dead)
- 2" below pave
- 73424 6" CI H2O (dead)
- 3" below pave
- 73425 8" VCP CB lead
- 5" below pave
- 73443 Encased KGE Conduit
- Top 2" below pave
- Bottom 3" "

WICHITA Box 696 WH 3-4246
HERRY Phone BR 6-4581
 RUSSELL HU 3-2549

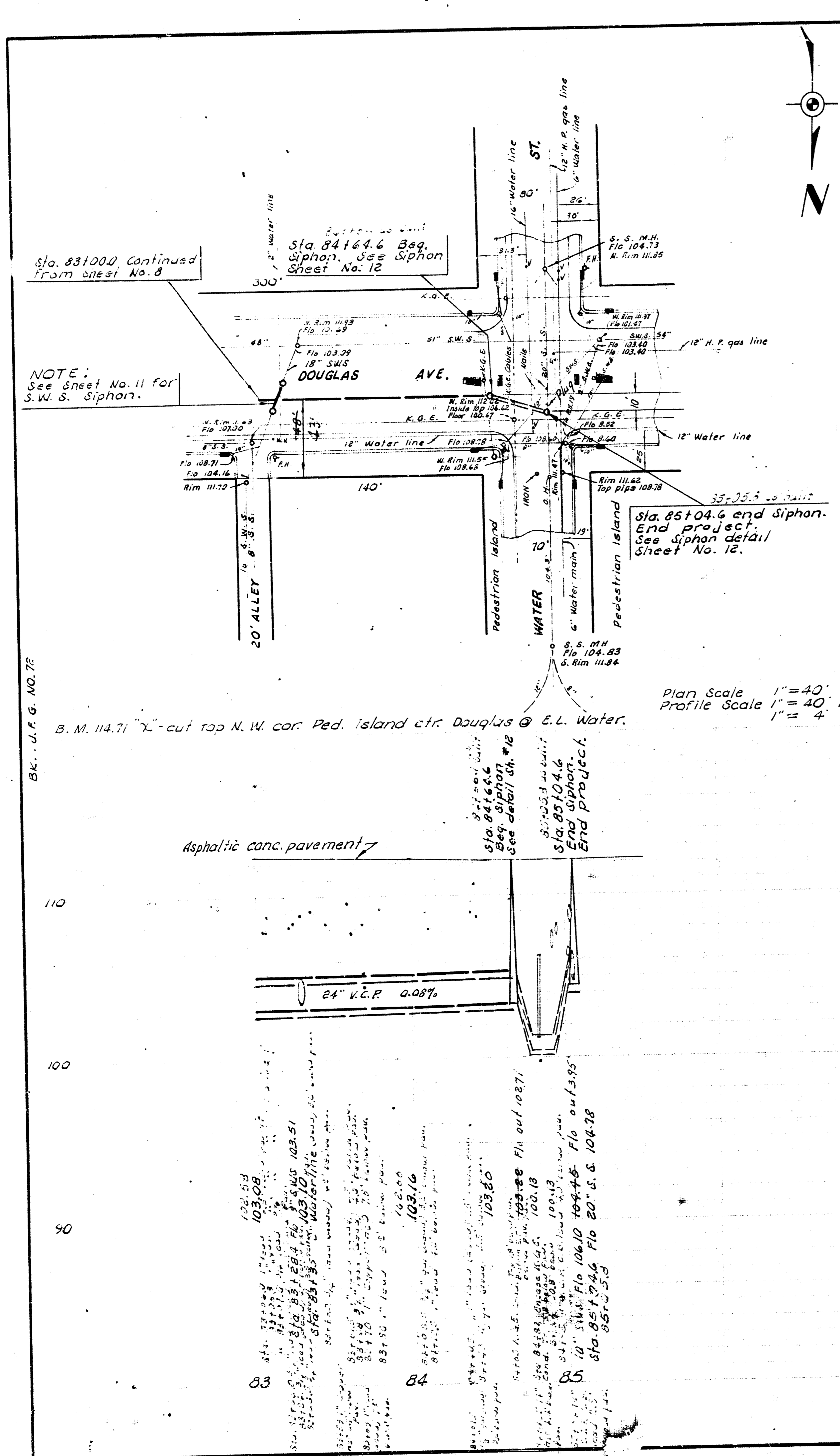
- INTERNATIONAL - HOUGH - GALION - LINK-BELT - LE ROI - TRANSPORT TRAILERS
- 83406 1" lead (dead)
- 4" below pave
- 83406 1" gal
- 4" below pave
- 83407 3/4" lead
- 3" below pave
- 83422 3/4" lead (dead)
- 4" below pave
- 83423 3/4" lead (dead)
- 4" below pave







ALTERATION, REPAIR, OR RECONSTRUCTION OF
 SANITARY SEWER NO. 1
 PROJ. NO. C 22-2
 SHEET 8 OF 18



MANHOLE SCHEDULE							
Station	Type	Shape	Dia.	Wall Thickness	Floor thickness	Approx. depth	Notes
8100.0	R.C.	12"	12"	12"	17"		Detail Sheet # 15
2133.0	R.C.	12"	12"	12"	13"		Detail Sheet # 15, Set M.H. 12" W. of & 36"
6132.0	Brick	12"	5'	12"	9"	10.5'	
10130.0	Brick	12"	5'	12"	9"	12"	
14120.0	R.C.	12"	12"	12"	12.5'		Detail sheet # 12
17181.4	Brick	12"	5'	12"	9"	13"	Set e. M.H. 6" E. of e. of Sewer.
22128.0	Brick	12"	5'	12"	9"	13"	
24118.1	Brick	12"	5'	12"	9"	12"	Set e. M.H. 6" S. E. of e. of Sewer.
28130.0	Brick	12"	5'	12"	9"	12"	
32150.0	Brick	12"	5'	12"	9"	11.5'	
36148.9	Brick	12"	5'	12"	9"	9'	Set e. M.H. 12" E. of W. of & 30" R.C.P.
39163.9	Brick	12"	5'	12"	9"	9'	Set e. M.H. 12" E. of W. of & 30" R.C.P.
43100.0	Brick	12"	5'	12"	9"	9.5'	
43100.0	Brick	12"	4'	8"	6"	6.5'	M.H. on existg 15" San. Sewer.
46130.9	Brick	12"	5'	12"	9"	10'	
48190.0	Brick	12"	5'	12"	9"	10'	
51170.0	Brick	12"	5'	12"	9"	10.5'	Set e. M.H. 7.5" W. of e. of 20" & 6" R.C.P.
54190.0	Brick	12"	5'	12"	9"	11.5'	
56110.0	Brick	12"	5'	12"	9"	11'	

MANHOLE SCHEDULE							
Station	Type	Shape	Dia.	Wall Thickness	Floor Thickness	Approx. depth	Notes
57120.0	Brick	12"	4'	8"	6"	3"	S.W.S. M.H. use wide ring
58120.0	Brick	12"	4'	8"	6"	3"	S.W.S. M.H. use wide ring
59110.0	Brick	12"	5'	12"	9"	11"	
62116.4	Brick	12"	5'	12"	9"	12"	
65183.4	Brick	12"	5'	12"	9"	10"	Detail Sheet # 13
65183.4	Brick	12"	5'	12"	9"	10"	Detail Sheet # 13
70102.9	Brick	12"	5'	12"	9"	8.5'	Detail Sheet # 13
70102.9	Brick	12"	5'	12"	9"	8.5'	Detail Sheet # 13
73154.85	Brick	12"	5'	12"	9"	9"	
75164.1	Brick	12"	5'	12"	9"	9"	Set e. of M.H. 14" E. or W. of e. 10" S.W.S.
78160.0	Brick	12"	5'	12"	9"	9"	
79142.0	Brick	12"	4'	8"	6"	8.5'	S.W.S. M.H. Detail Sheet # 11
79142.0	Brick	12"	4'	8"	6"	9"	S.W.S. M.H. Detail Sheet # 11
79142.0	Brick	12"	4'	8"	6"	9"	S.W.S. M.H. Detail Sheet # 11
81180.0	Brick	12"	5'	12"	9"	9.5'	
83124.4	Brick	12"	4'	8"	6"	9"	S.W.S. M.H. Detail Sheet # 11
83124.4	Brick	12"	4'	8"	6"	9.5'	S.W.S. M.H. Detail Sheet # 11
84164.6	Brick	12"	5'	12"	9"	9"	Detail Sheet # 12
85104.6	Brick	12"	5'	12"	9"	9"	Detail Sheet # 12

NOTES: General

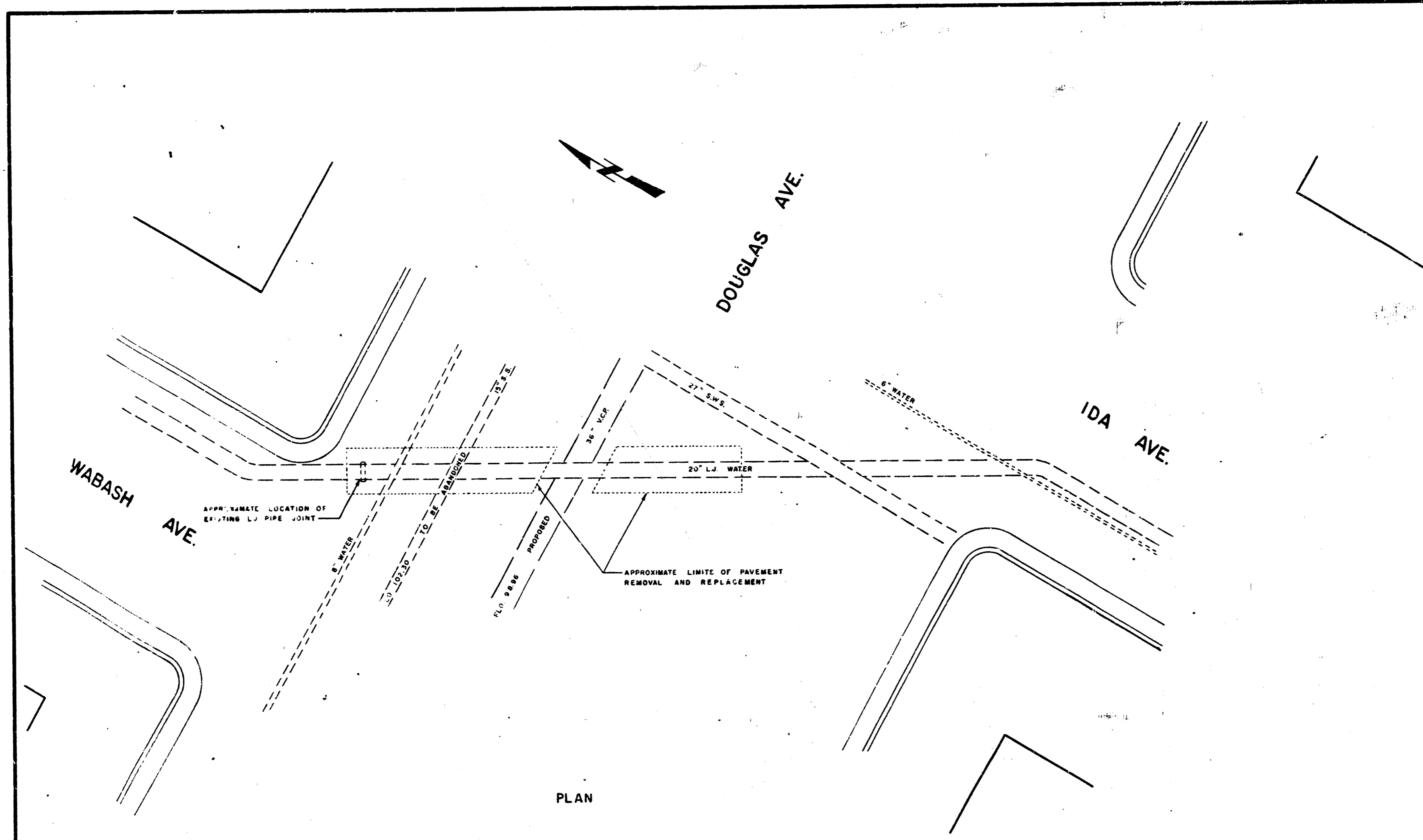
Minimum Trench Widths
 36" Sewer - 6'
 30" Sewer - 5.5'
 24" Sewer - 4'

Sta. 8100 to 8135 tamp back fill to soil density or greater.
 Sta. 8135 to 84104.6 sand backfill, flush & operate.

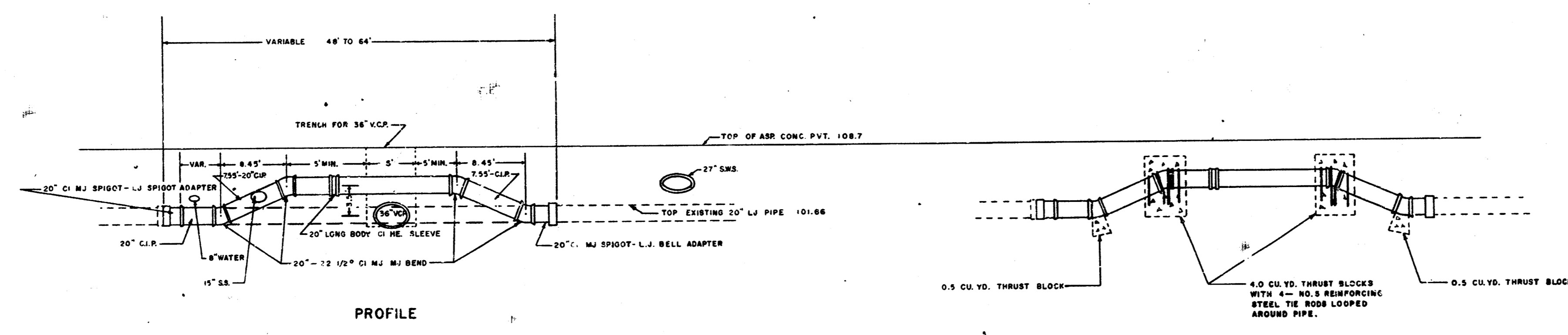
Paving from Sta. 8100.0 to 14150.0 & from 17160.0 to 24150.0 shall be replaced as per page 12 in the specifications. Paving from 14190.0 to 17160.0 & from 24150.0 to 28155 shall be replaced as shown on detail sheet # 16. Above mentioned paving shall be paid for at the price bid per sq. yd. for paving. The price bid shall include reinforcement, driving surface, joints, etc. as required by the specifications & detail drawings. All other paving shall be replaced as directed by the engineer, using a back conc. paving mix, reinforcement and a c. driving surface and shall be bid by the cu. yd. pound, and ton respectively.

Where it is required to install new pipe or encase or leave supports in the ditch or place where the sewer passes under existing sewers, the City will pay for account for the material left in the ditch. The amount paid shall be the cost of the material only at locations where the sewer passed under or thru existing sewers and the plan calls for new lines, these shall be paid for as bid. The cost of removing sewers to be replaced shall be considered included in the bid of the new line.

Cast Iron Siphons includes CAST IRON PIPE & REINFORCED ENCASEMENT in place but not manholes.

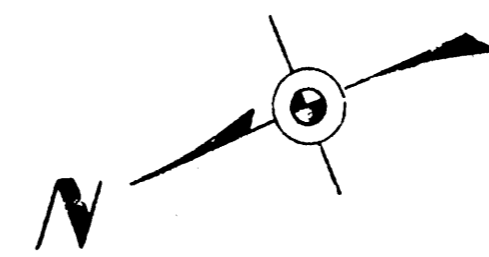
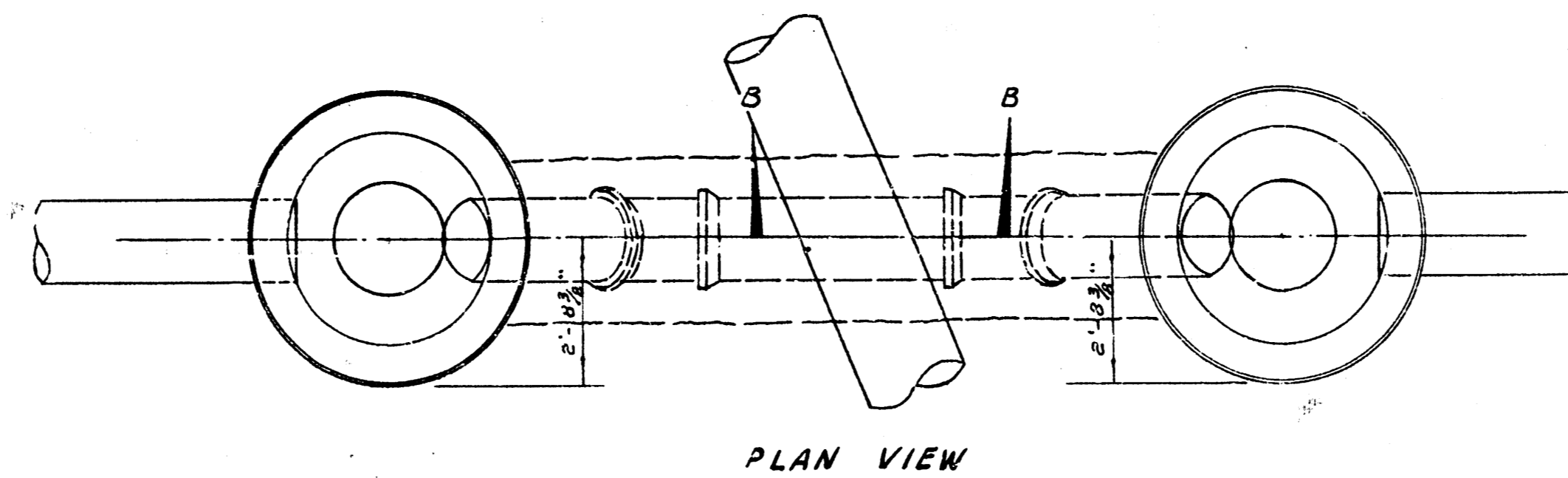
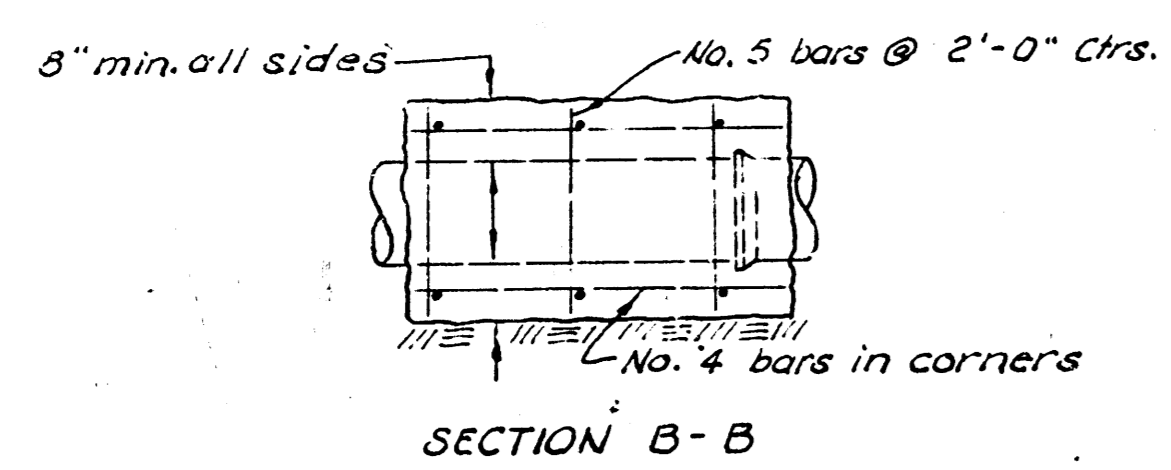
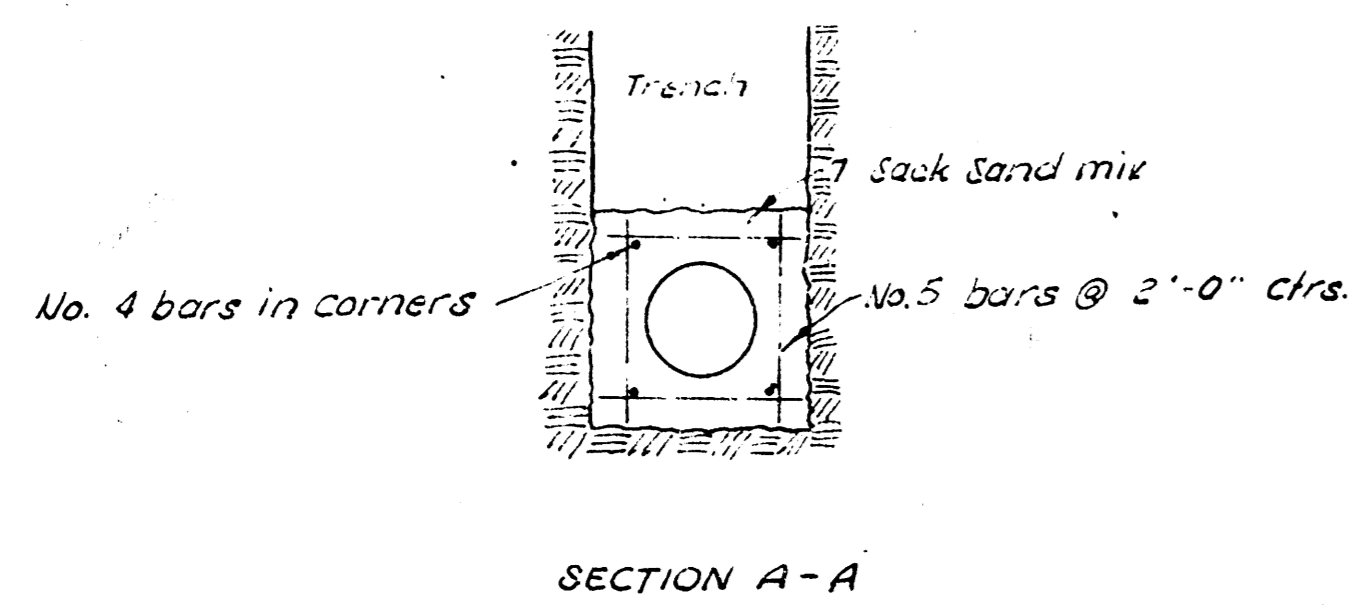


- General Notes to the Contractor*
1. All pipe, fittings, adapters and joint materials except lead, required for relocation of 20" Lock Joint water main will be furnished by the Water Department at its pipe storage yard 225 West Central, Wichita, Kansas.
 2. The contractor shall furnish all other materials, such as sand for sand encasement and tie rods for thrust blocks, polyethylene film for wrapping cast iron pipe, the resin and fittings, and paving materials for replacement of pavement, and all equipment, tools, labor and incidentals necessary to complete the work as herein specified and shown on the detailed plans on this sheet and shall be paid according to the contract lump sum bid for "Relocation of 20" Lock joint water main" as listed in the proposal.
 3. Prior to placing cast iron pipe and fittings in the trench, the contractor shall strip paint all surface coating which has been damaged or removed with Rocket Back Mastic #612 or approved equal.
 4. All cast iron pipe and fittings shall be encased in sand free of clay particles. Minimum thickness shall be no less than six (6) inches on all sides.
 5. Prior to sand encasement, all cast iron pipe and fittings shall be securely wrapped with 8 mil. thickness polyethylene film. The polyethylene shall be of virgin polyethylene and as produced from Du Pont Althar resin or equal. The film overlaps shall be six (6) inch minimum and held in place by means of two (2) inch wide plastic backed adhesive tape. The tape shall be polyken No 900 (Polyethylene), Scotchrap No 50 (Polyvinyl) or equal.
 6. At all times when work is not in progress, all open ends of pipe and fittings shall be securely closed with metal plugs or caps, furnished by the Water Department, so that no trench water, earth, animal or other substances will enter the pipe or fittings.
 7. Concrete for thrust blocks shall have an ultimate compressive strength of not less than 3500 pounds per square inch at 28 days and shall contain not less than 6 sacks of Portland high early strength cement per cubic yard.
 8. All pavement shall be removed and replaced to the satisfaction of the Public Works Department.
 9. All backfill in any excavated area 6' below the relocated water line shall be compacted to a density equal to or greater than that of the undisturbed surrounding soil. The sand encasement around the pipe shall be compacted up to the spring line of the pipe. The remaining backfill above the sand encasement shall be as specified by the City of Wichita for Sanitary Sewer Construction under pavement.
 10. The contractor shall keep the Water Department informed, a reasonable time in advance, of the time he will commence work. The Water Department thru its employees will make the shut down of the main. This main is an important line supplying the distributor system and due to the season of the year it is imperative that shut down time be held to a minimum, with a maximum limit of 7 calendar days.
 11. This water main relocation will be installed under the supervision and inspection of the Water Department.
 12. In order to properly plug 20" Lock Joint as set forth in Note No 6, any and all removals shall be in full lengths of pipe.

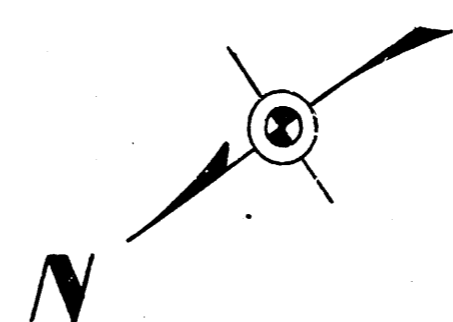
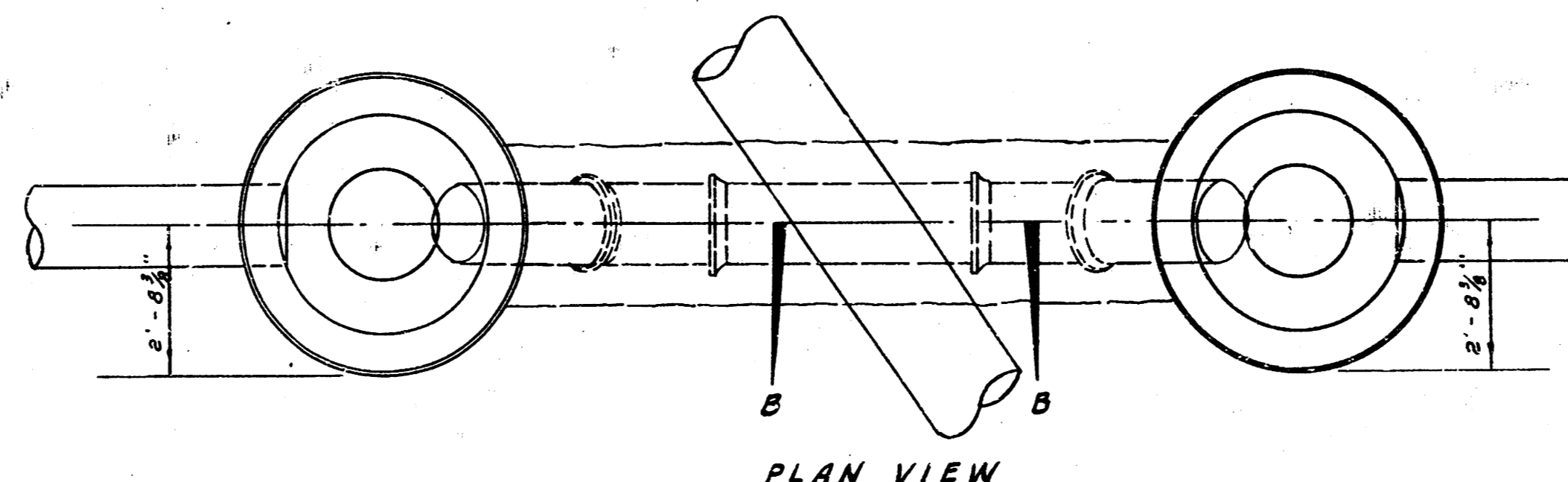
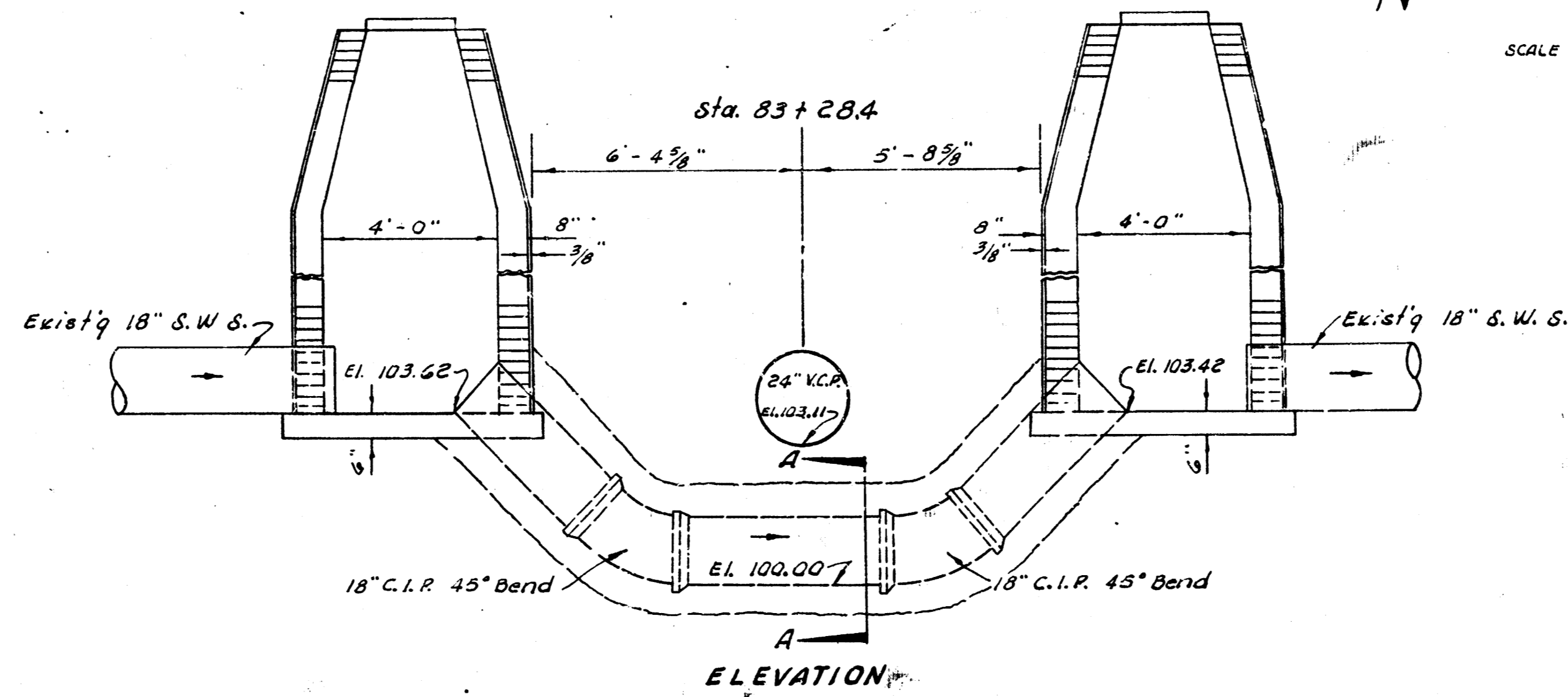


RELOCATE 20" LOCK JOINT WATER MAIN - IDA & WABASH AT DOUGLAS
SCALE: 1"=10'

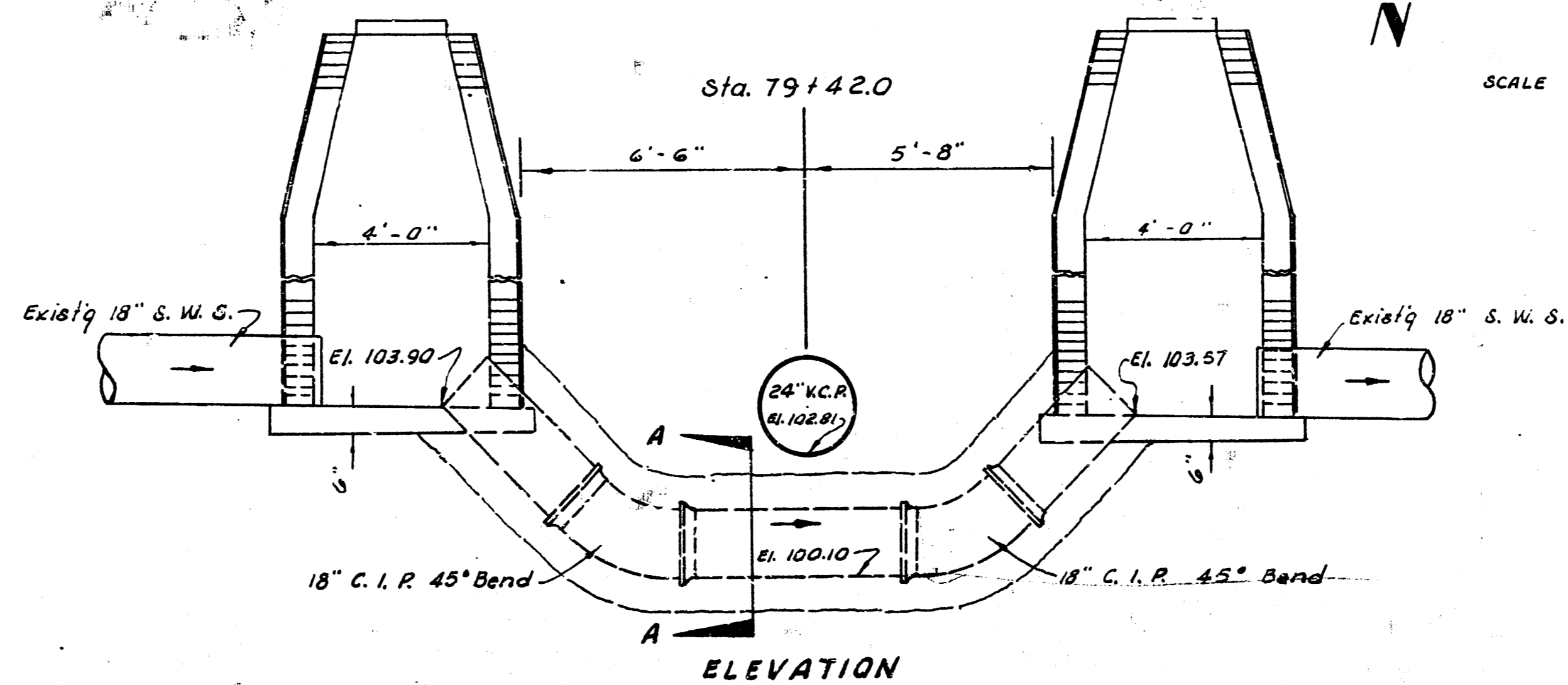
CONCRETE THRUST BLOCKS



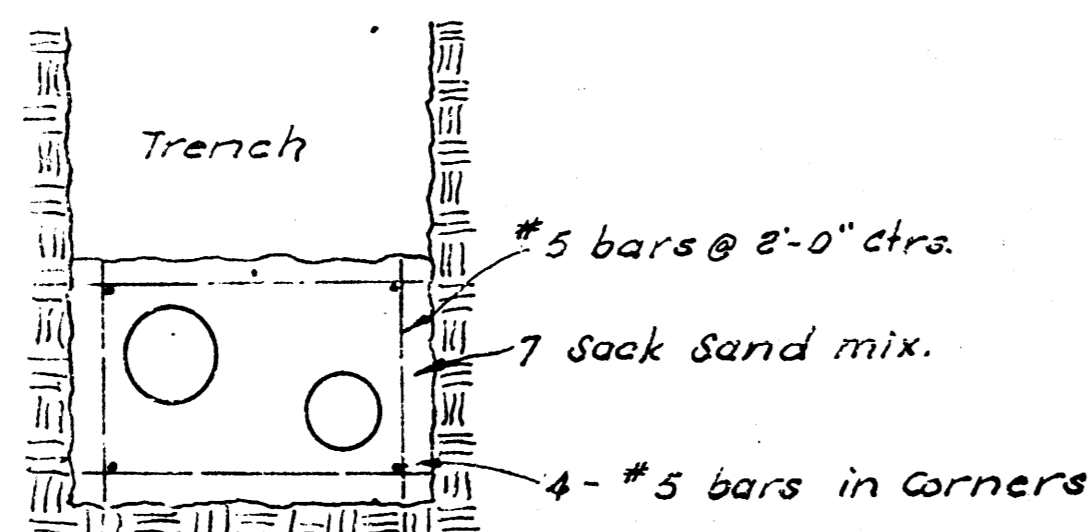
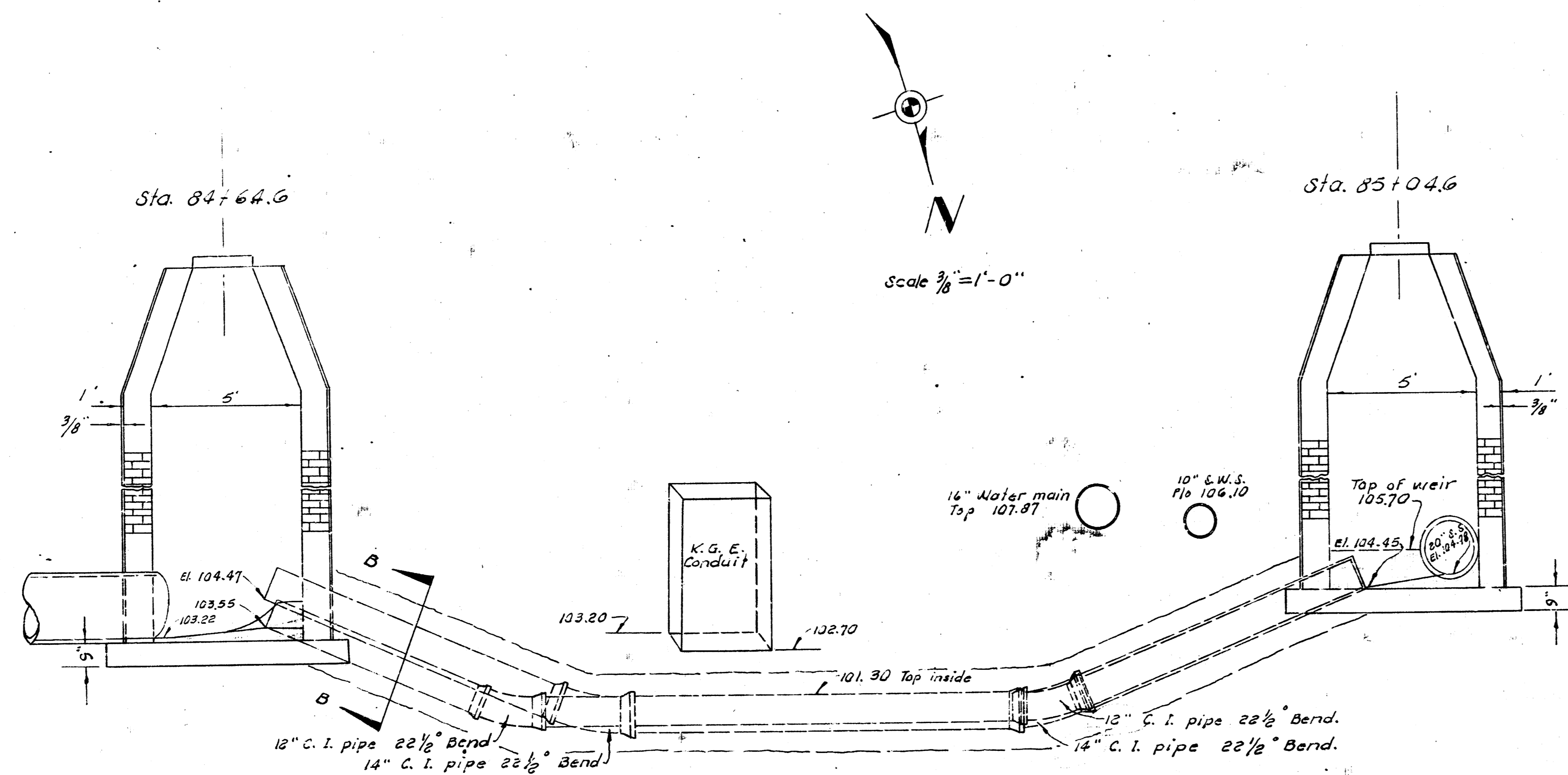
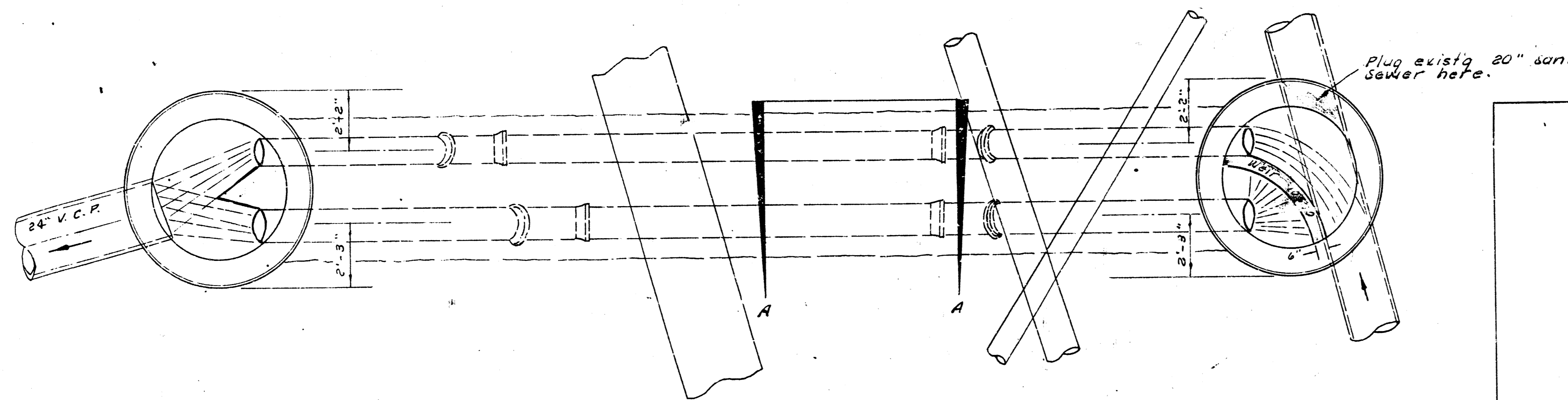
SCALE 3/8" = 1'-0"



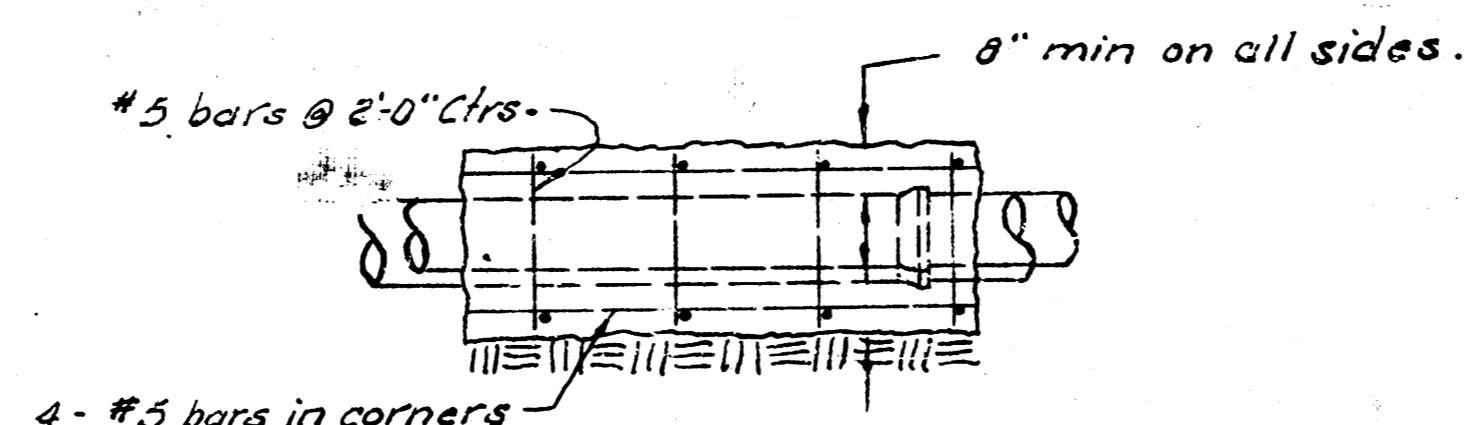
SCALE 3/8" = 1'-0"



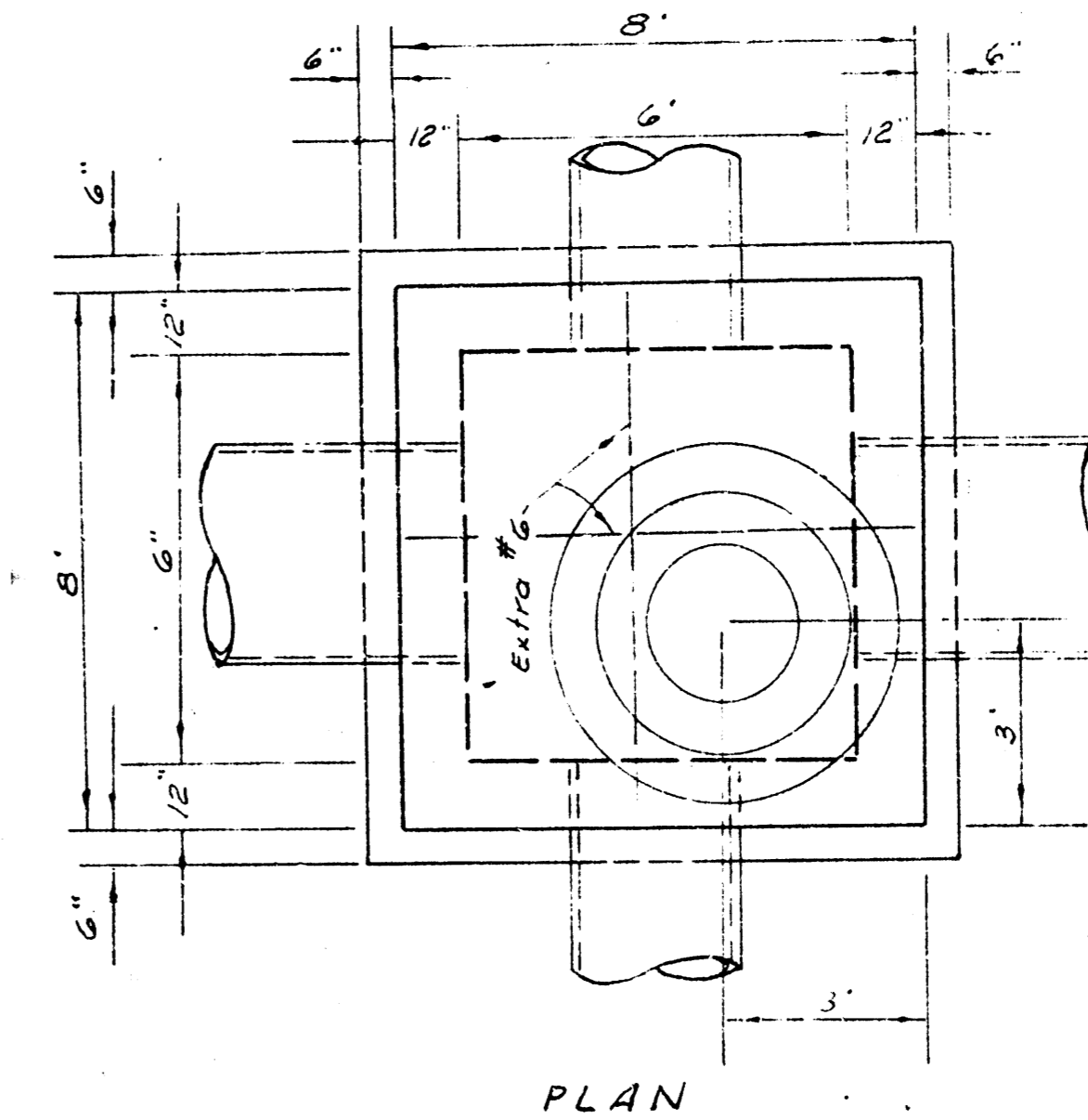
ALTERATION, REPAIR, OR RECONSTRUCTION OF
SANITARY SEWER NO. 1
PROJ. NO. C 22-2 SHEET 11 OF 16



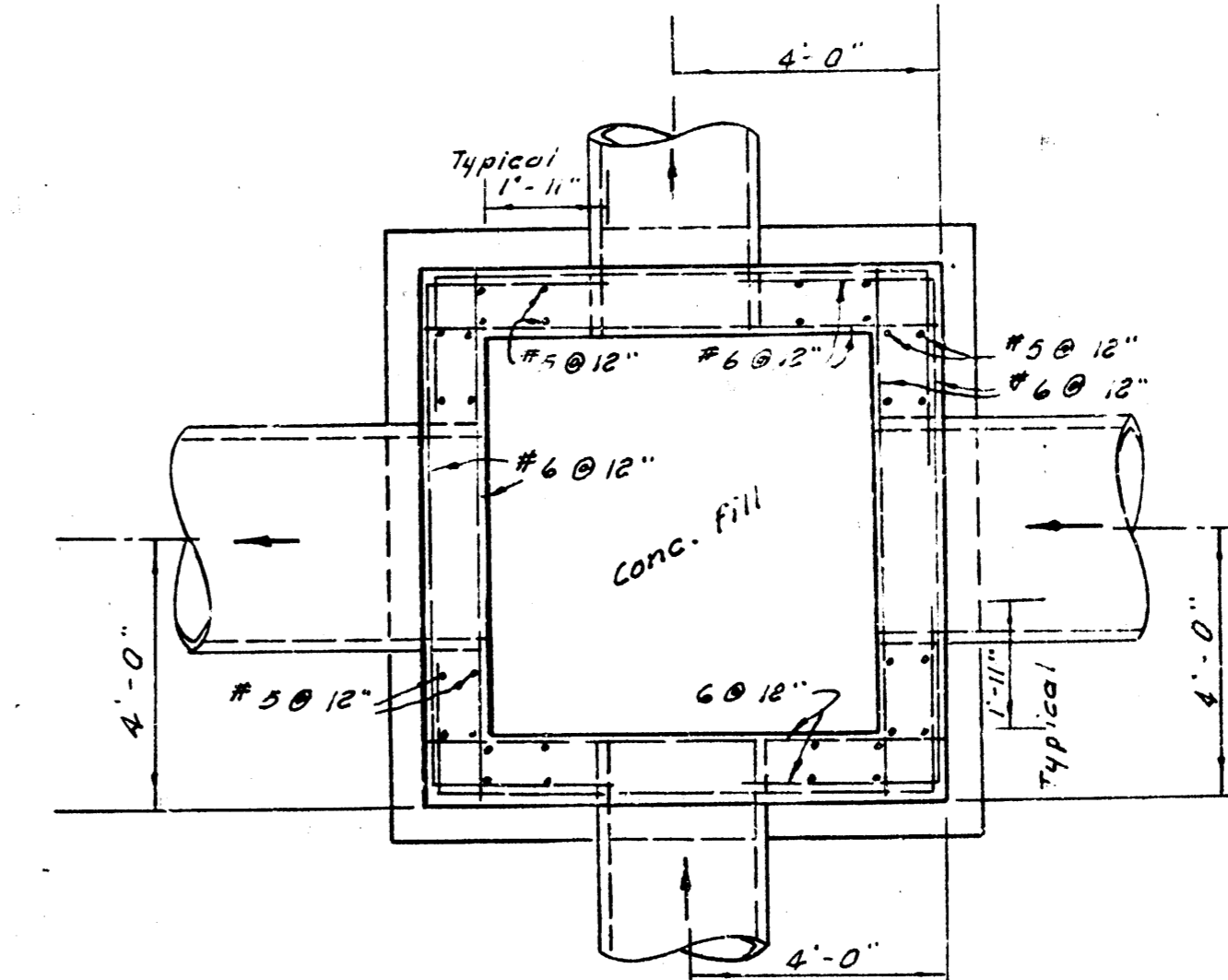
SECTION B-B



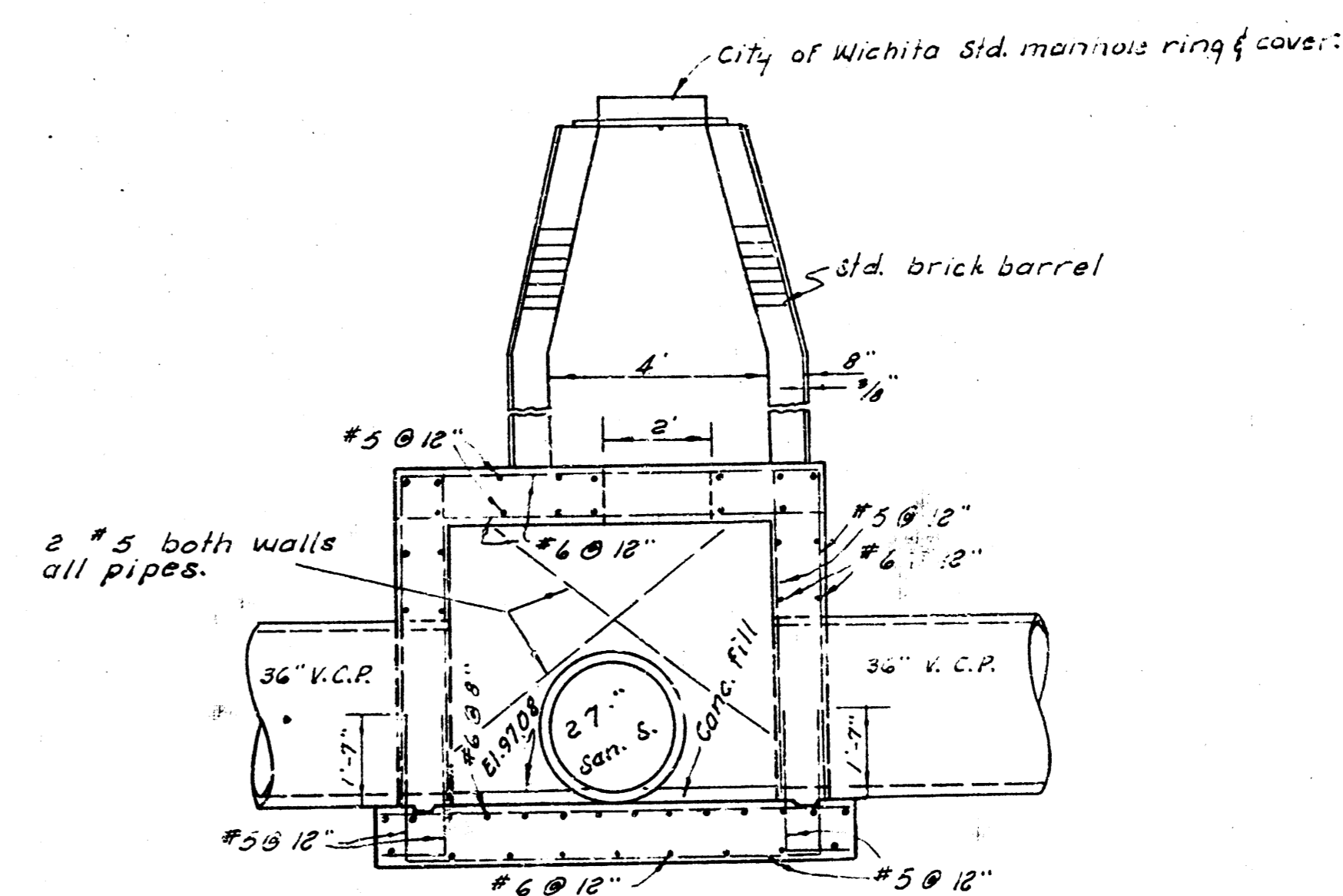
SECTION A-A



PLAN



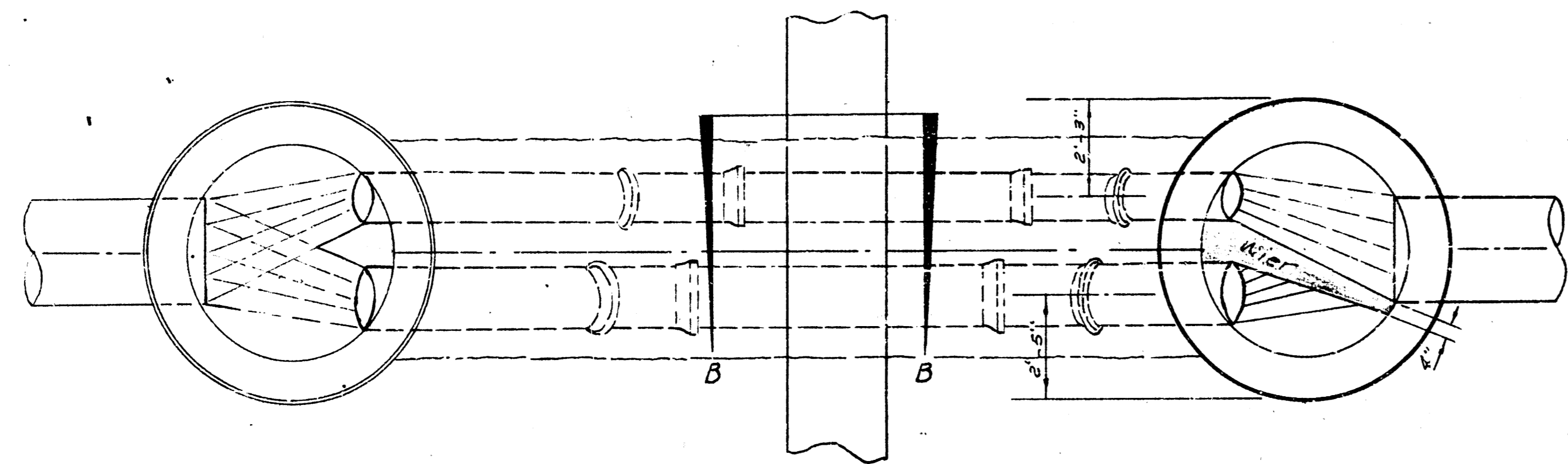
SECTIONAL PLAN



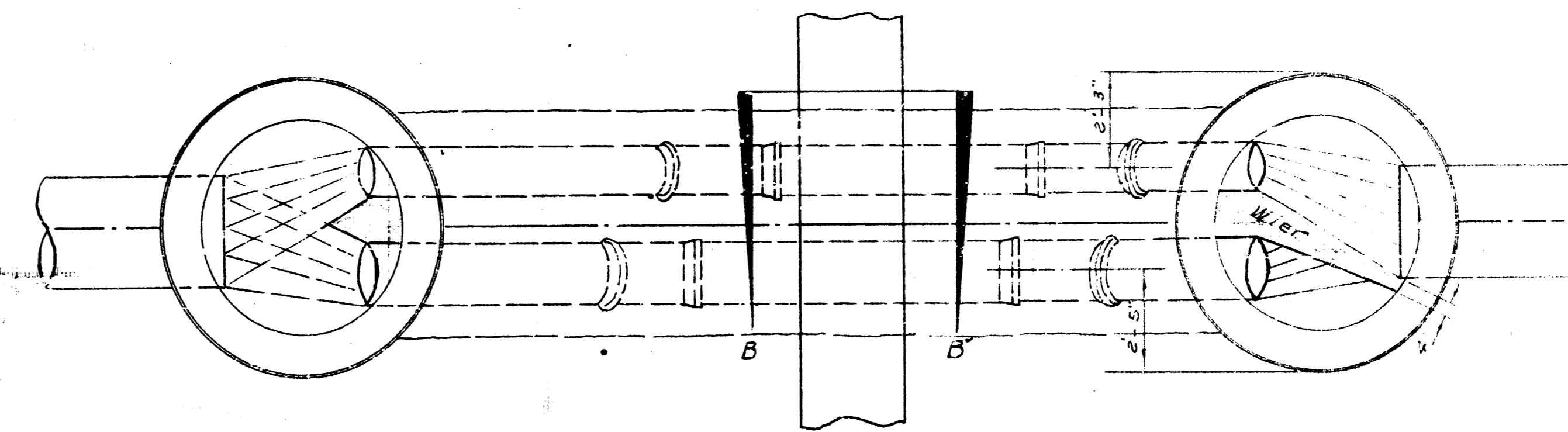
SECTION I

REINF. CONC. MANHOLE
STA. 14+20.0

ALTERATION, REPAIR, OR RECONSTRUCTION OF
SANITARY SEWER NO. 1
PROJ. NO. C 22-2 SHEET 12 OF 16



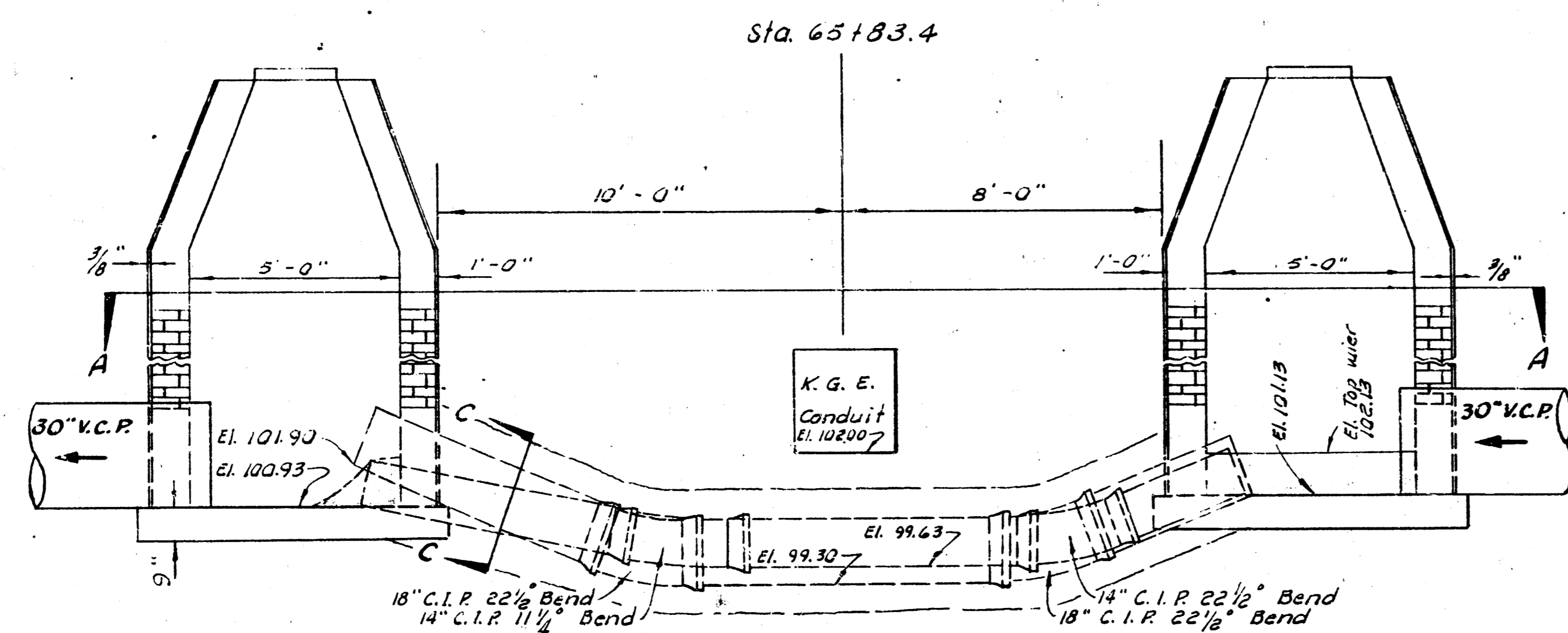
SECTIONAL PLAN VIEW A-A



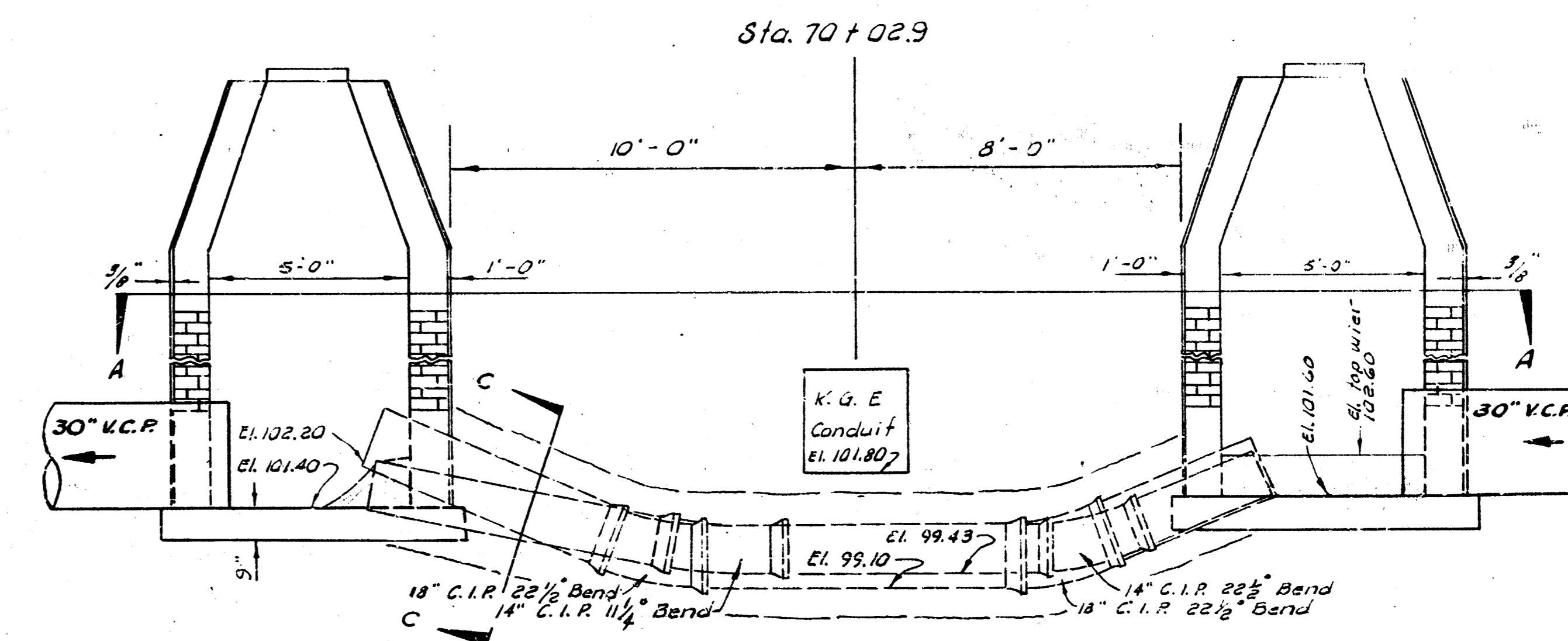
SECTIONAL PLAN VIEW A-A



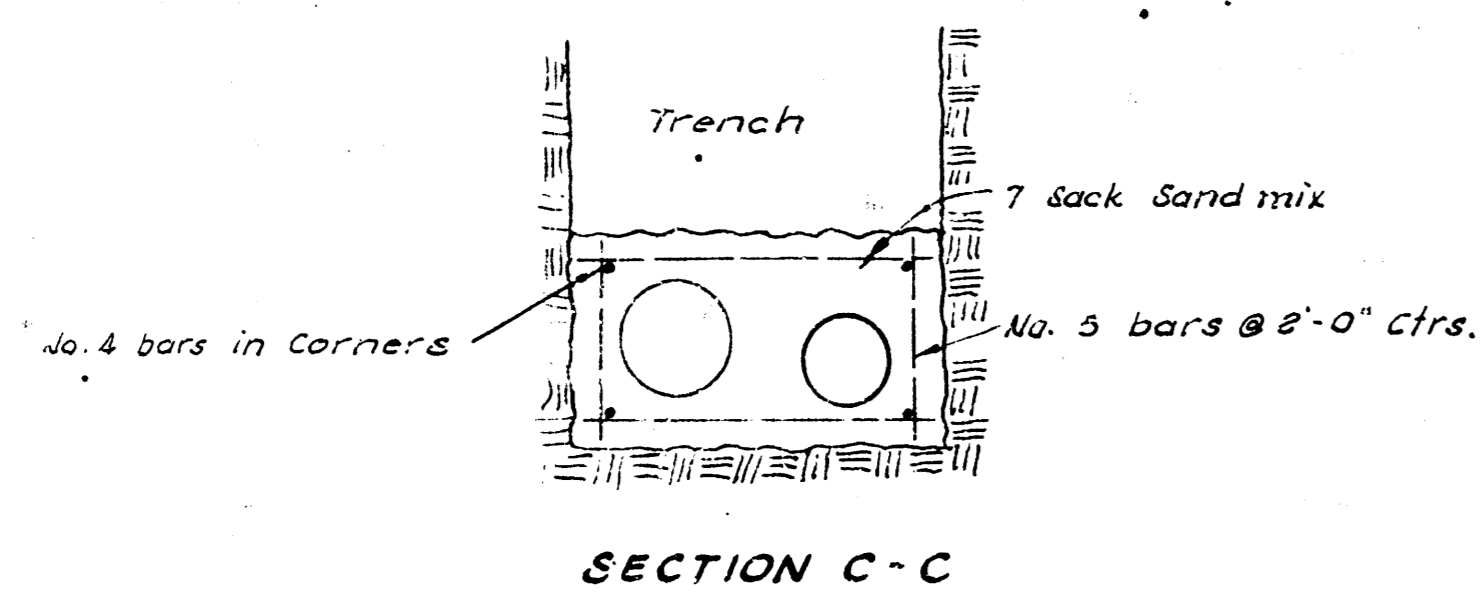
Scale 3/8" = 1'-0"



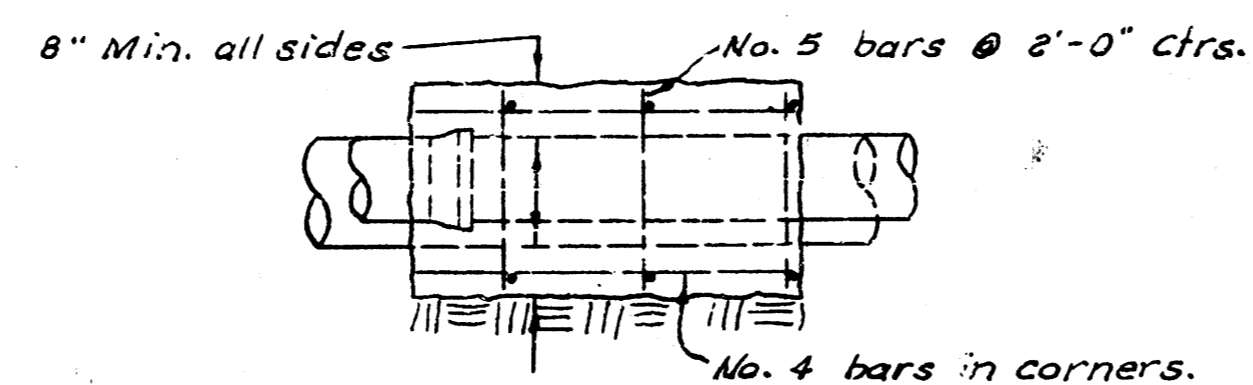
ELEVATION



ELEVATION

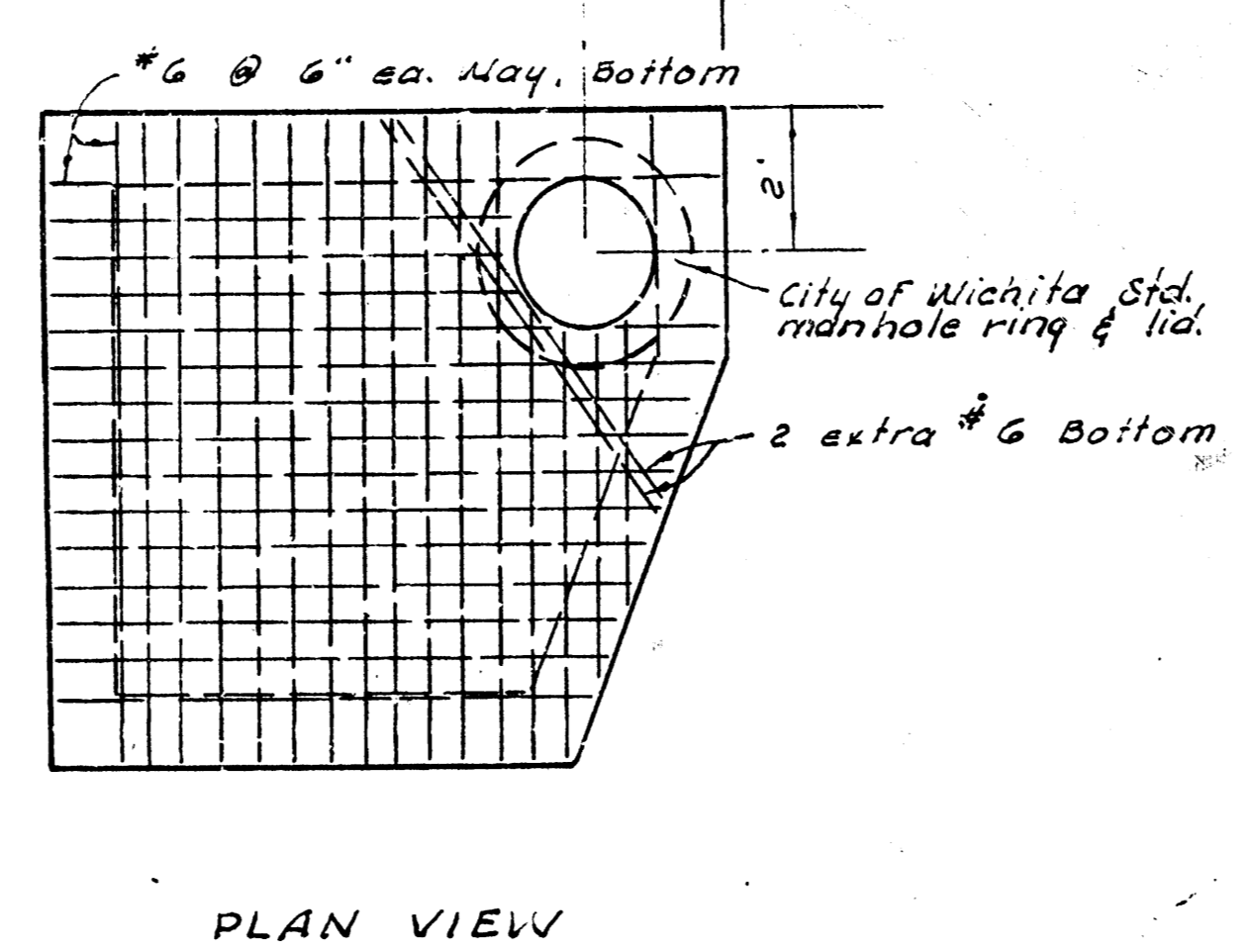
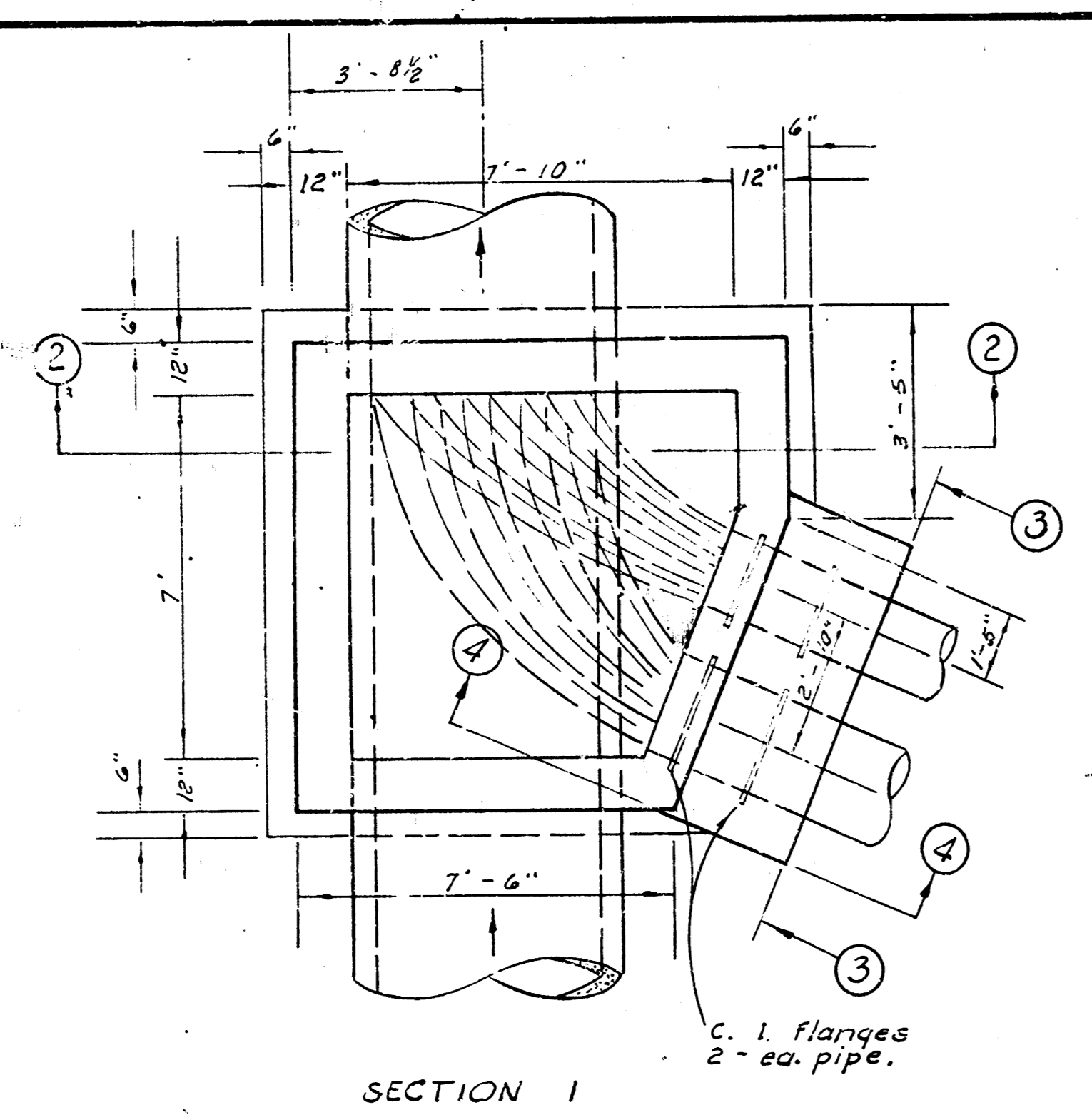


SECTION C-C

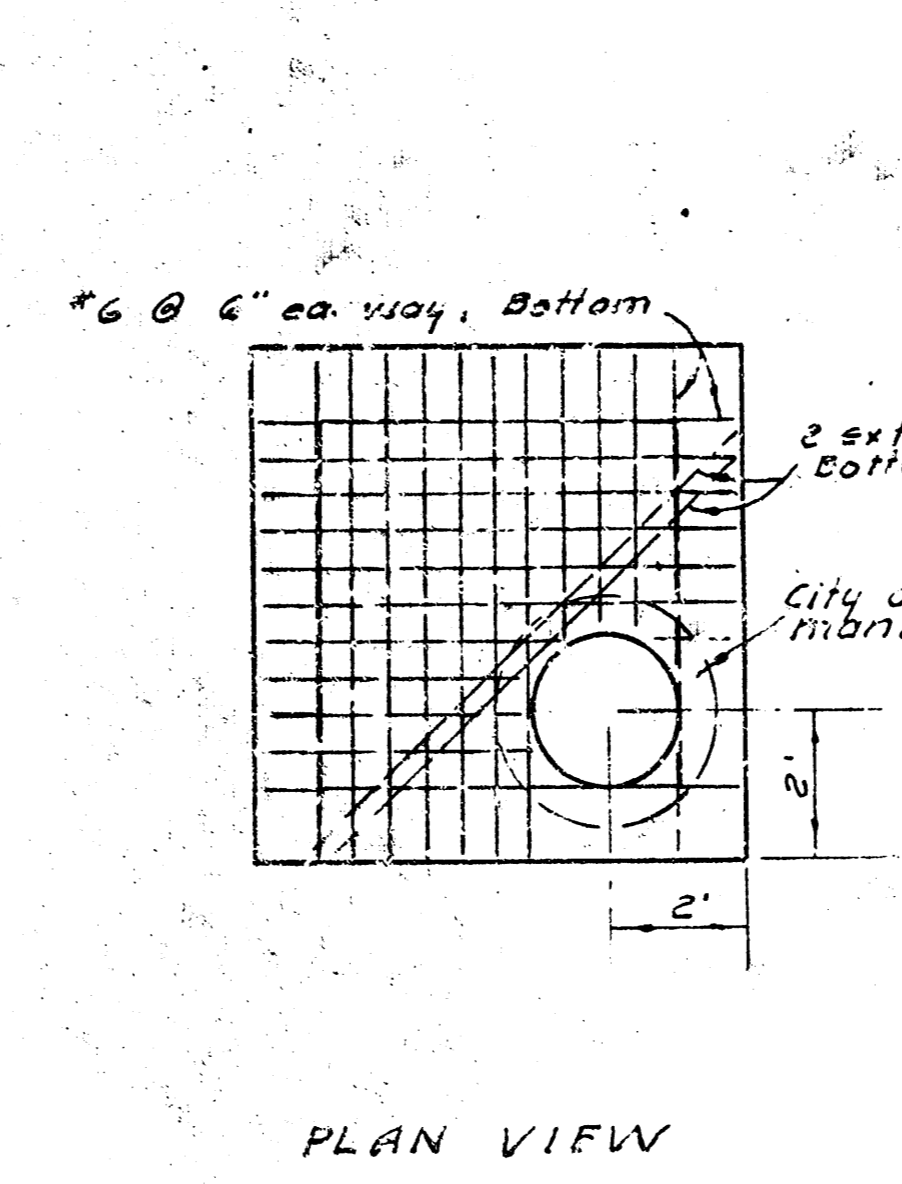


SECTION B-B

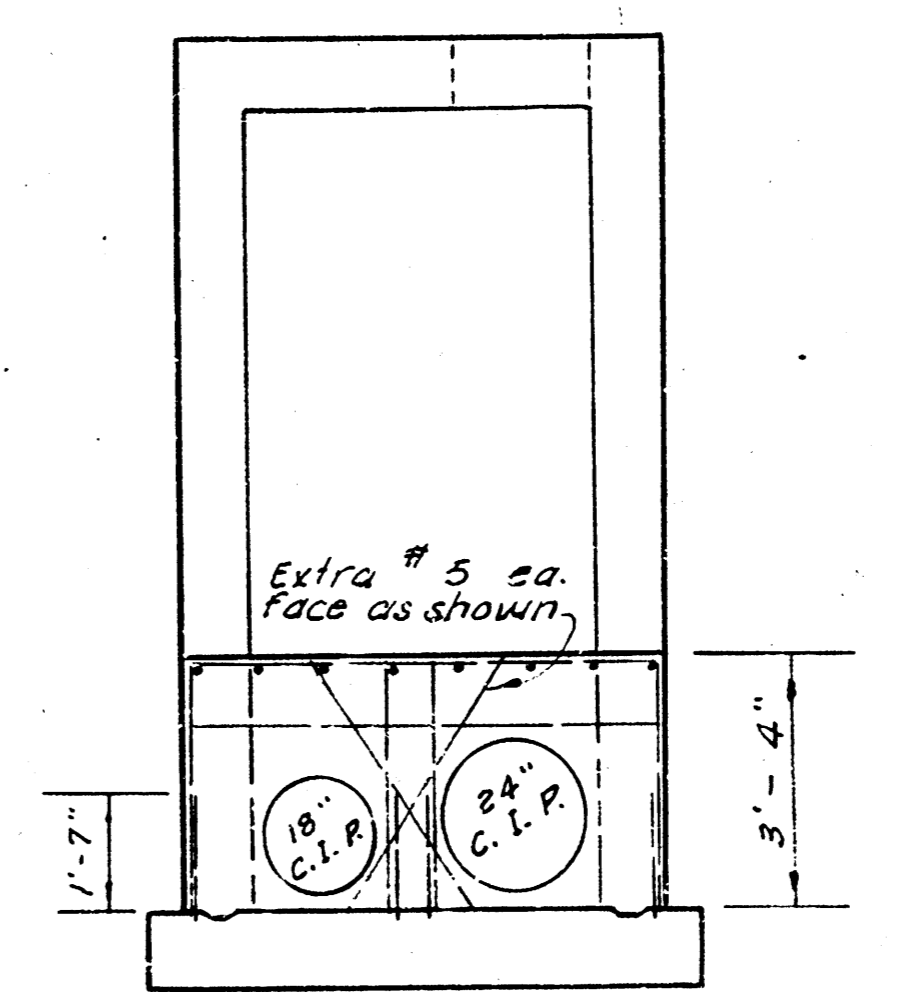
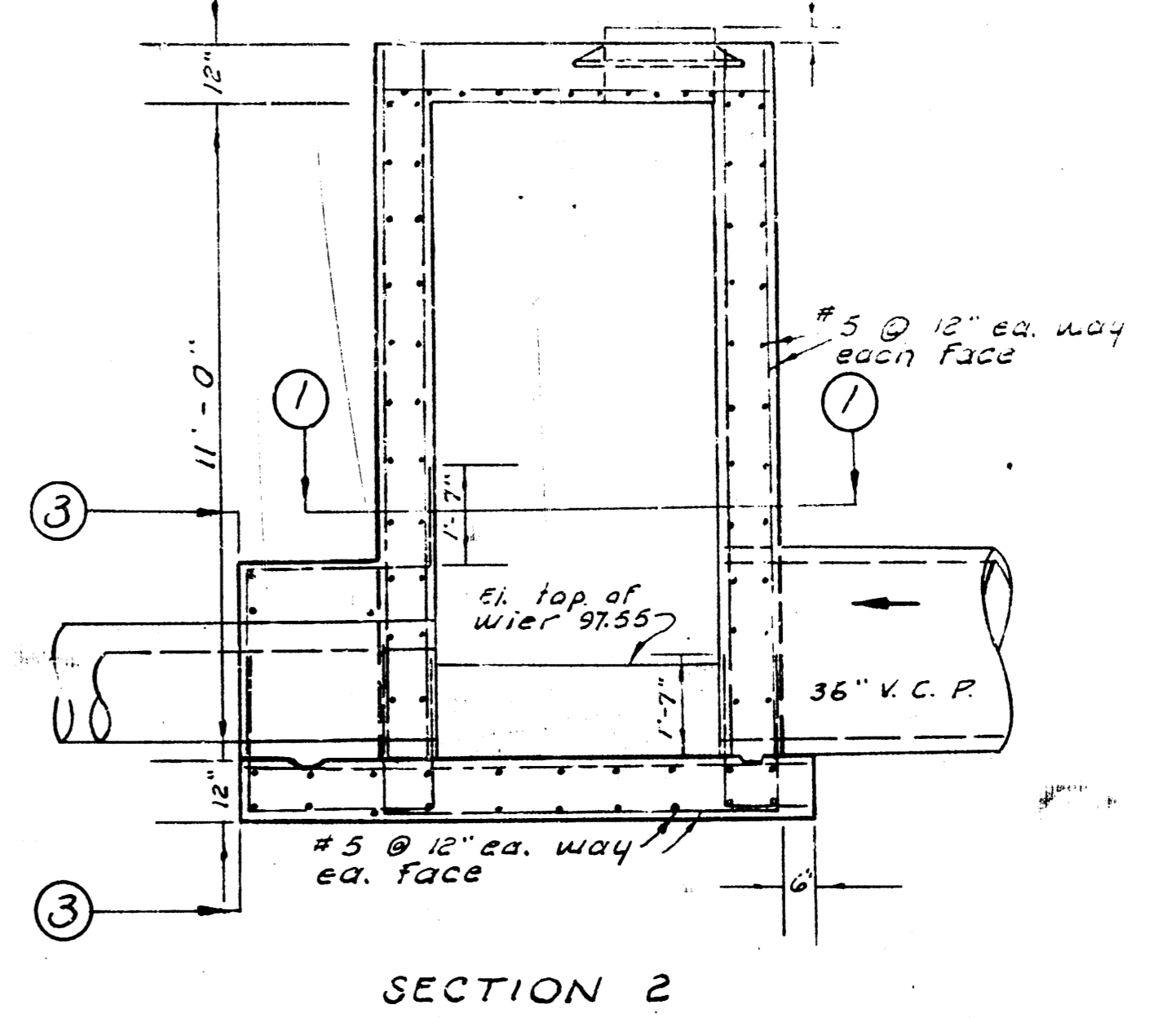
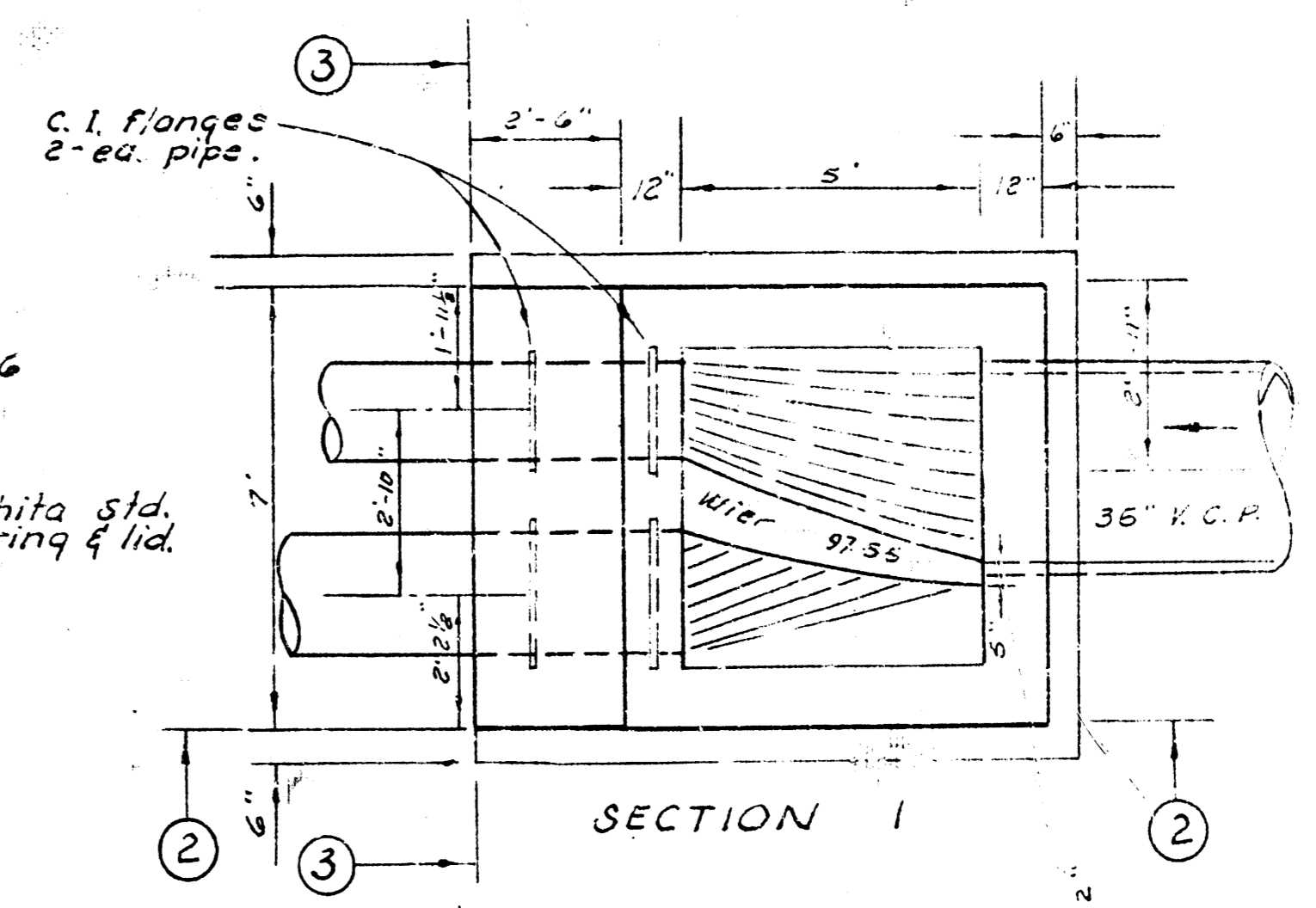
ALTERATION, REPAIR, OR RECONSTRUCTION OF
SANITARY SEWER NO. 1
PROJECT C 22-2 SHEET 13 OF 16



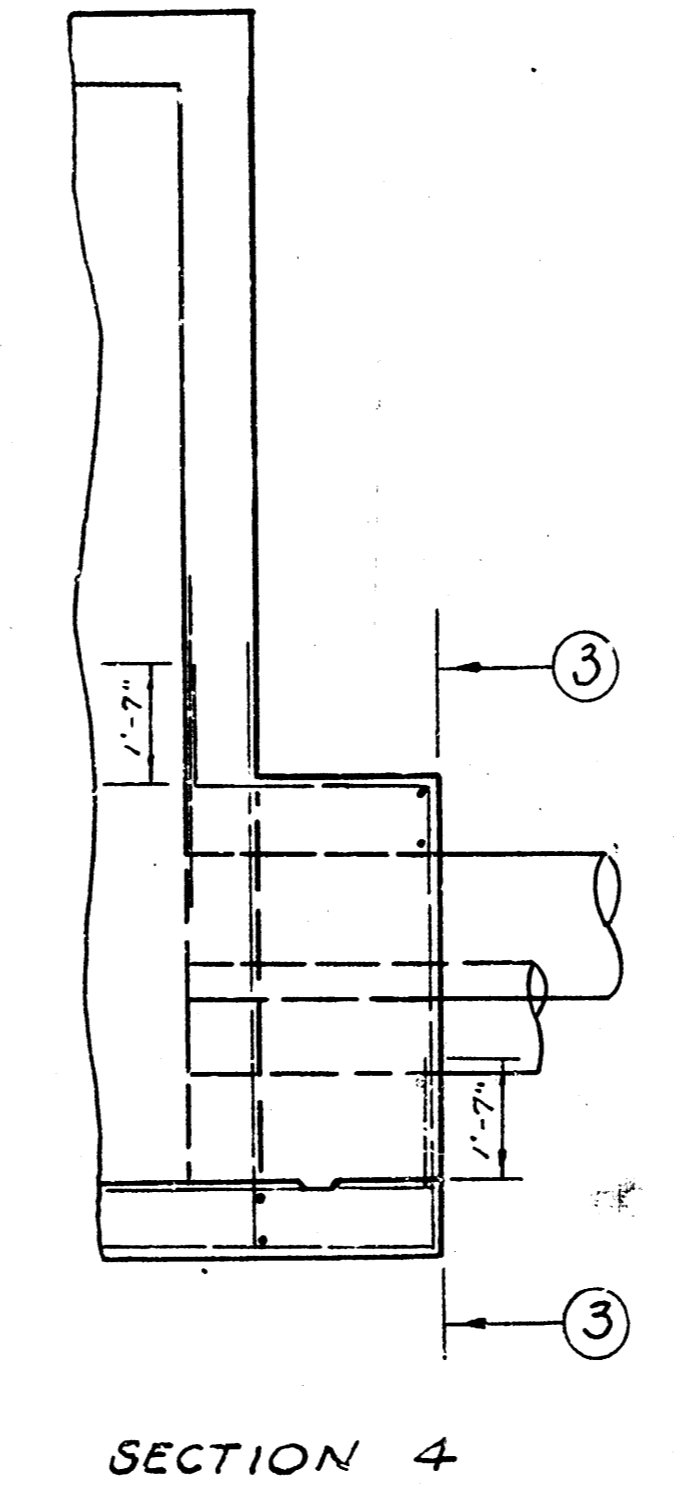
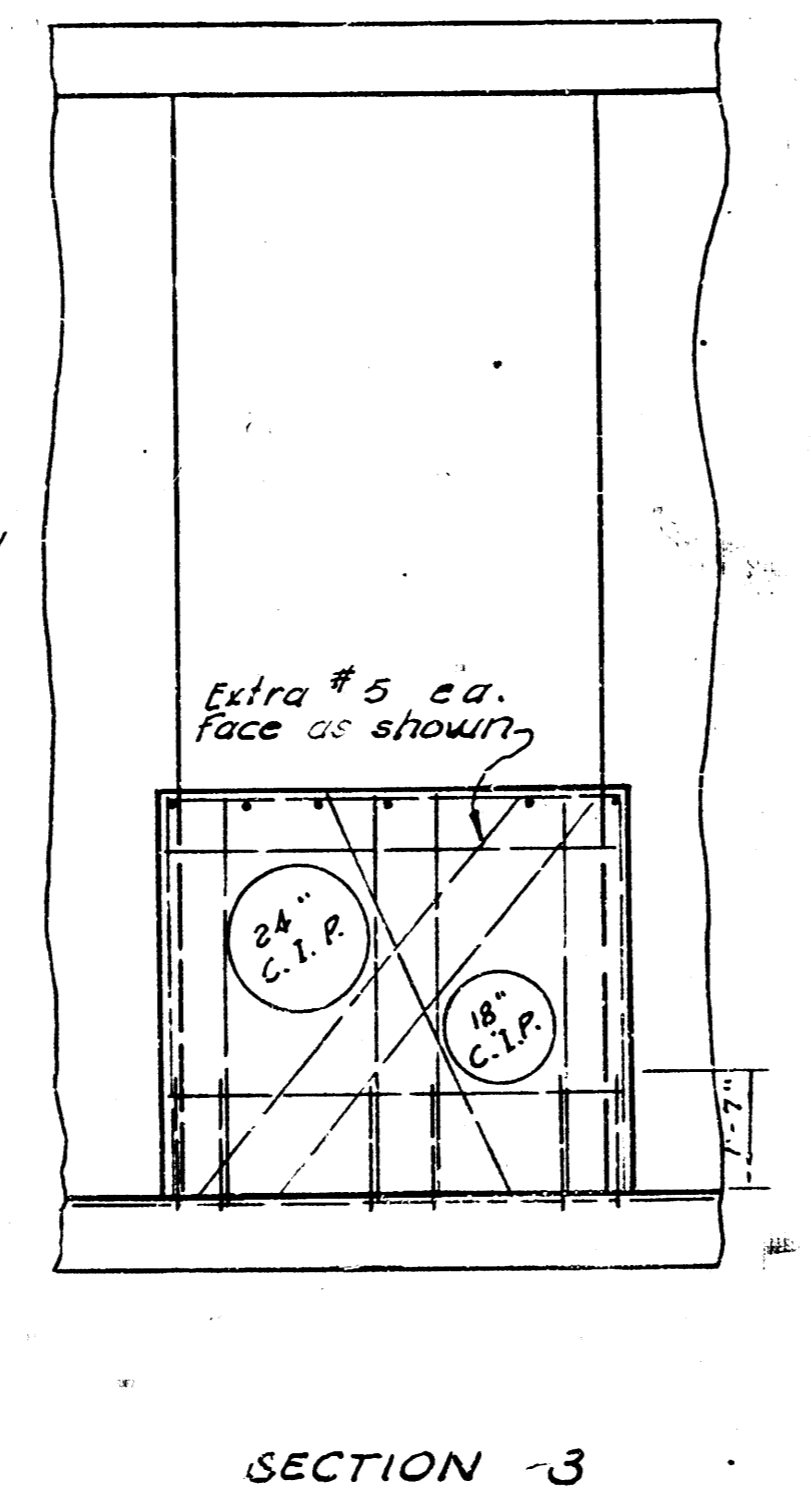
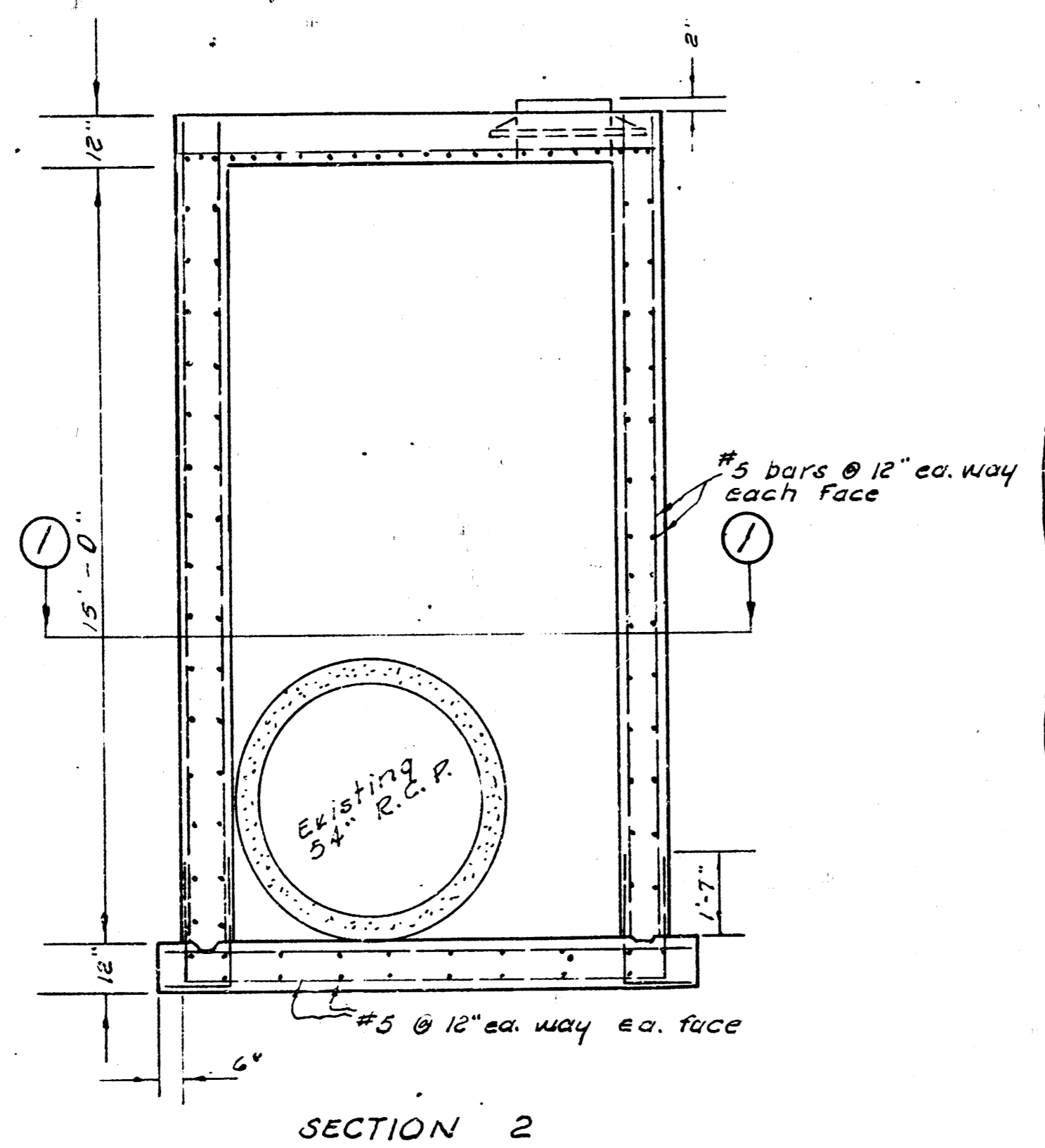
Scale $\frac{3}{8}" = 1'-0"$



Scale $\frac{3}{8}" = 1'-0"$



REINF. CONC. MANHOLE
Sta. 2135.0



REINF. CONC. MANHOLE
Sta. 0100.0

