

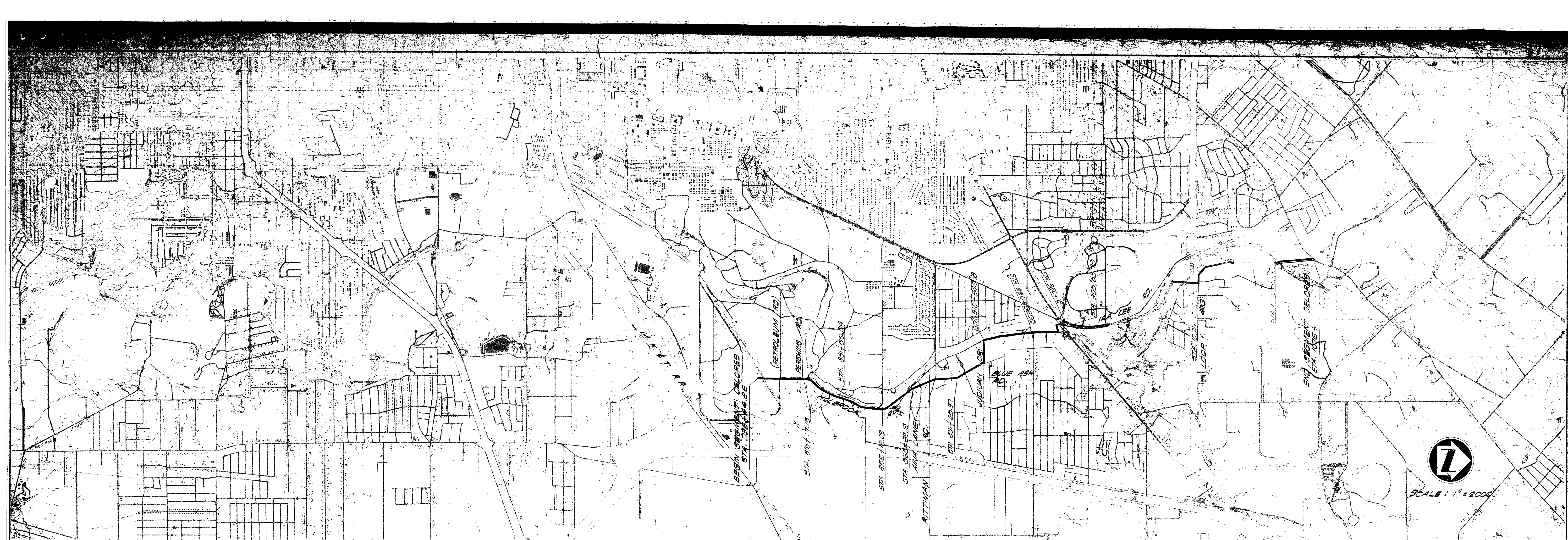
WPC TEX 432

CONSTRUCTION PLANS
FOR
SALADO CREEK OUTFALL SANITARY SEWER
SEGMENT DELORES
PHASE "B"
DEPARTMENT OF PUBLIC WORKS
CITY OF SAN ANTONIO, TEXAS

PREPARED BY
W. F. CASTELLA AND ASSOCIATES
CONSULTING CIVIL ENGINEERS



AS BUILT JUNE, 1974



ESTIMATED QUANTITIES

BID PROPOSAL ITEM	ITEM NO.	DESCRIPTION OF ITEM	UNIT	QUANTITY
101	1	CONCRETE COLLARS	EACH	0
102	1	15" R.C.P., 8'-10" DEEP, COMPRESSION JOINT	L.F.	17
103	1	42" REINFORCED CONCRETE PIPE, 0'-8" DEEP	L.F.	855.03
104	1	42" 8'-10" DEEP	L.F.	1048.52
105	1	42" 10'-12" DEEP	L.F.	1804.67
106	1	42" 12'-14" DEEP	L.F.	1708.78
107	1	42" EXTRA STRENGTH R.C.P., 14'-16" DEEP	L.F.	1232.08
108	1	42" 14'-18" DEEP	L.F.	520.77
109	1	42" 18'-20" DEEP	L.F.	1081.71
110	1	42" 20'-22" DEEP	L.F.	897.87
111	1	42" 22'-24" DEEP	L.F.	989.73
112	1	42" 24'-26" DEEP	L.F.	58.36
113	1	42" EXTRA STRENGTH R.C.P., 0'-8" DEEP	L.F.	330.00
114	1	8'-10" DEEP	L.F.	130.49
115	1	10'-12" DEEP	L.F.	182.43
116	2	MANHOLES, TYPE A, IN PLACE	EACH	2
117	2	MANHOLES, TYPE B, IN PLACE	EACH	5
118	2	MANHOLES, TYPE C, IN PLACE	EACH	3
119	2	SPECIAL INTERCEPT M.H., SR-1, STA. 955+83.79	LUMP SUM	1
120	2	INTERCEPT DROP M.H., I-1, STA. 949+15.89	LUMP SUM	1
121	2	INTERCEPT DROP M.H., I-2, STA. 934+12	LUMP SUM	1
122	2	INTERCEPT DROP M.H., I-3, STA. 1076+43.45	LUMP SUM	1
123	2	SIPHON MANHOLE BOX, IN PLACE	EACH	2
124	2	EXTRA MANHOLE DEPTH	V.F.	115.76
125	2	ADDITIONAL CLASS "A" CONCRETE	CU. YD.	
126	3	36" CONCRETE PRESSURE PIPE, C-302 GRA OR EQUAL	L.F.	400
127	4	CONCRETE ENCASEMENT	CU. YD.	610.40
128	5	HIGHWAY CROSSING, 42" C-302 REINFORCED CENTRIFUGAL CONCRETE PRESSURE PIPE	L.F.	302.2

ESTIMATED QUANTITIES

BID PROPOSAL ITEM	ITEM NO.	DESCRIPTION OF ITEM	UNIT	QUANTITY
132	11	WASHED GRAVEL SUBGRADE FILLER	CU. YD.	1170.00
133		6" DROP CONNECTION RISER	V.L.F.	15.76
134	1	42" EXTRA STRENGTH R.C.P., 12'-14" DEEP	L.F.	560.54

Siphon 45761

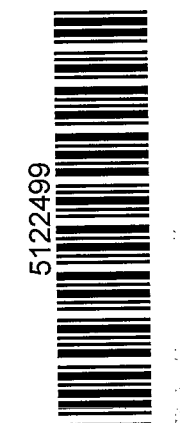
INDEX OF DRAWINGS

- 1 TITLE SHEET
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- ESTIMATED QUANTITIES
- INDEX OF DRAWINGS
- 3-11 PLAN & PROFILE SHEETS
- 12 MANHOLE DETAILS
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- 14 SIPHON BOX
- 15 ALTERNATE MANHOLE DETAILS
- 16 INTERCEPT MANHOLES
- 17 MISCELLANEOUS DETAILS
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- STANDARD SANITARY SEWER DETAILS

AS BUILT JUNE, 1974

CITY OF SAN ANTONIO DEPARTMENT OF PUBLIC WORKS SALADO OUTFALL SANITARY SEWER	
W. F. CASTELLA & ASSOCIATES CONSULTING ENGINEERS 1039 W. HILDBRAND SAN ANTONIO, TEXAS	DATE 3 20 74 JOB NO. SHEET

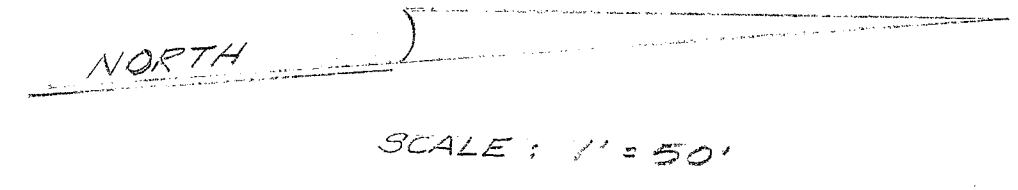
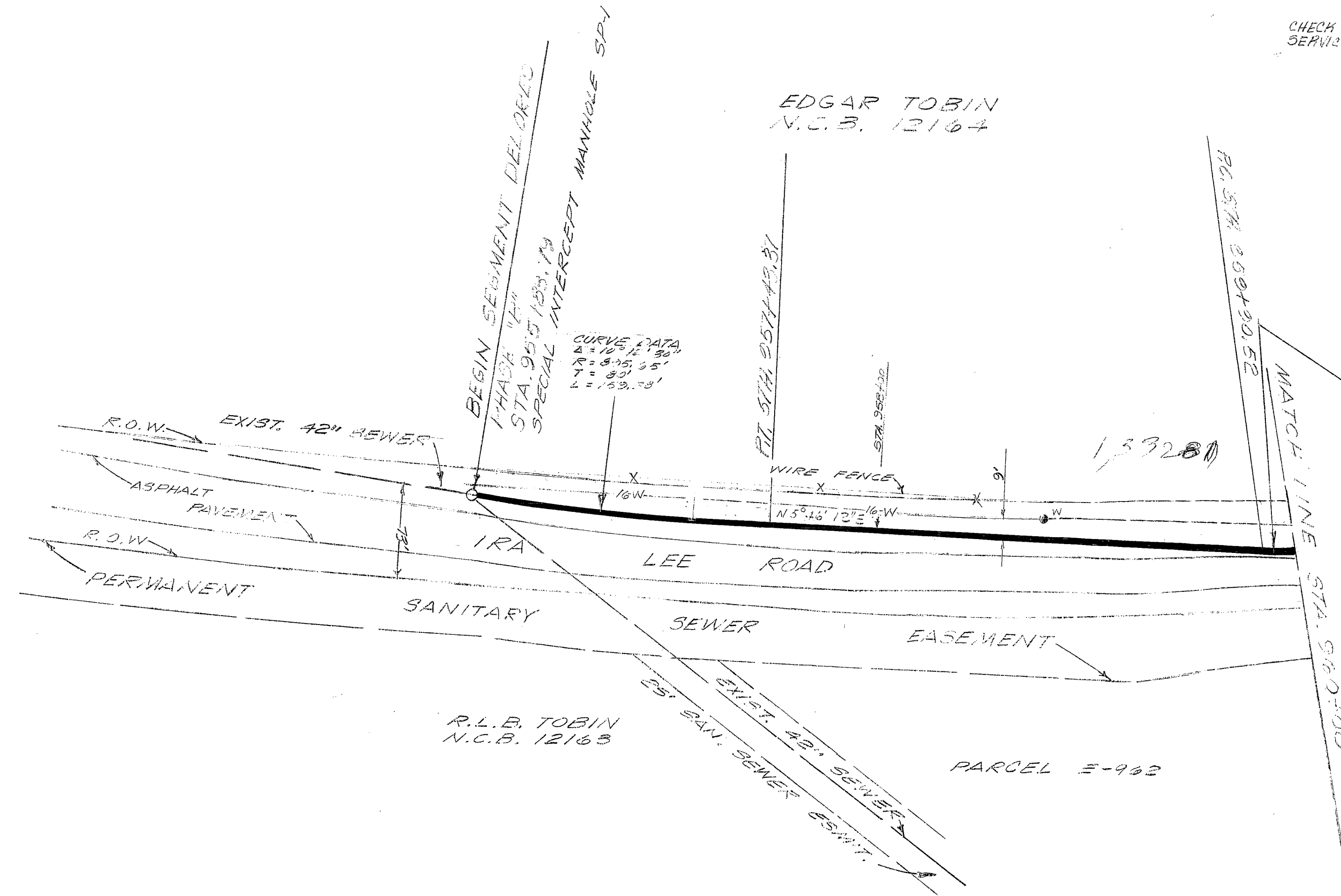
3569
28



Siphon 45761



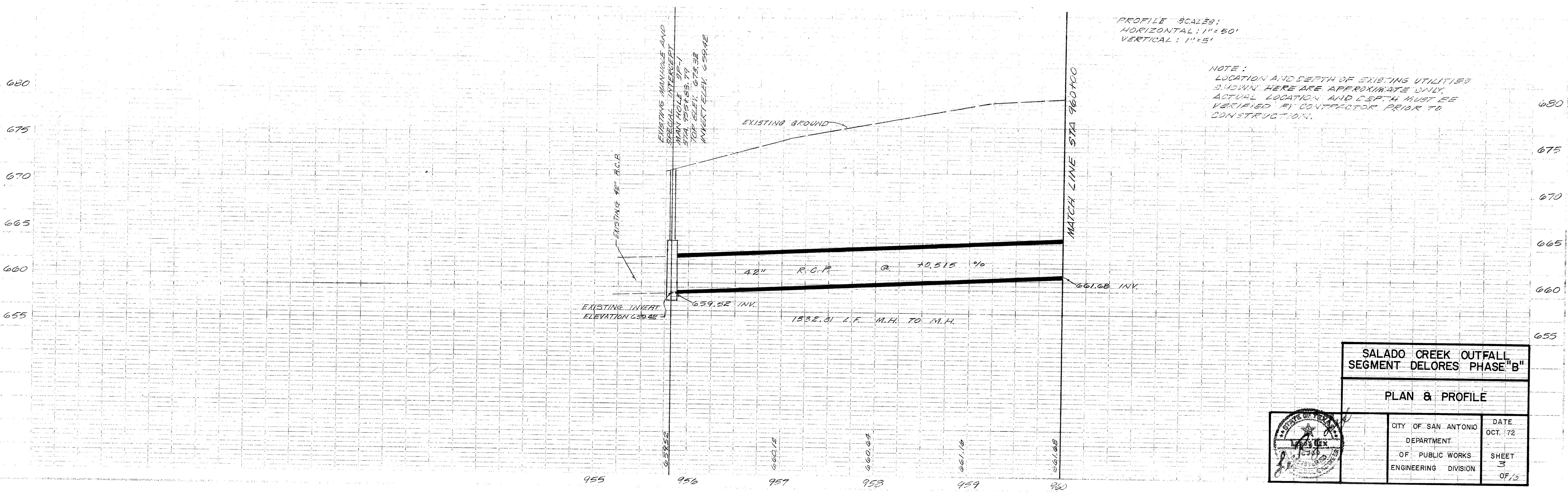
CHECK FOR PRIVATE COASTAL STATES GAS SERVICE TO TOBIN PROPERTY AND RESIDENCE.



NOTE:
PRESENT AVERAGE SEWER FLOW HAS BEEN MEASURED TO BE 7" DEEP (SEPTEMBER, 1970) OF AN AVERAGE OF 2.2 CUBIC FEET PER SECOND OF 1.4 MILLION GALLONS PER DAY.

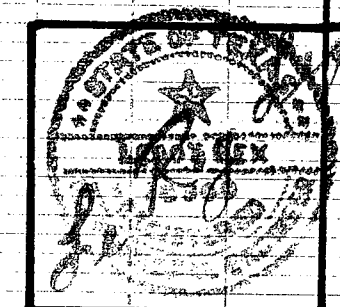
PROFILE SCALES:
HORIZONTAL: 1" = 50'
VERTICAL: 1" = 5'

NOTE:
LOCATION AND DEPTH OF EXISTING UTILITIES SHOWN HERE ARE APPROXIMATE ONLY. ACTUAL LOCATION AND DEPTH MUST BE VERIFIED BY CONTRACTOR PRIOR TO CONSTRUCTION.

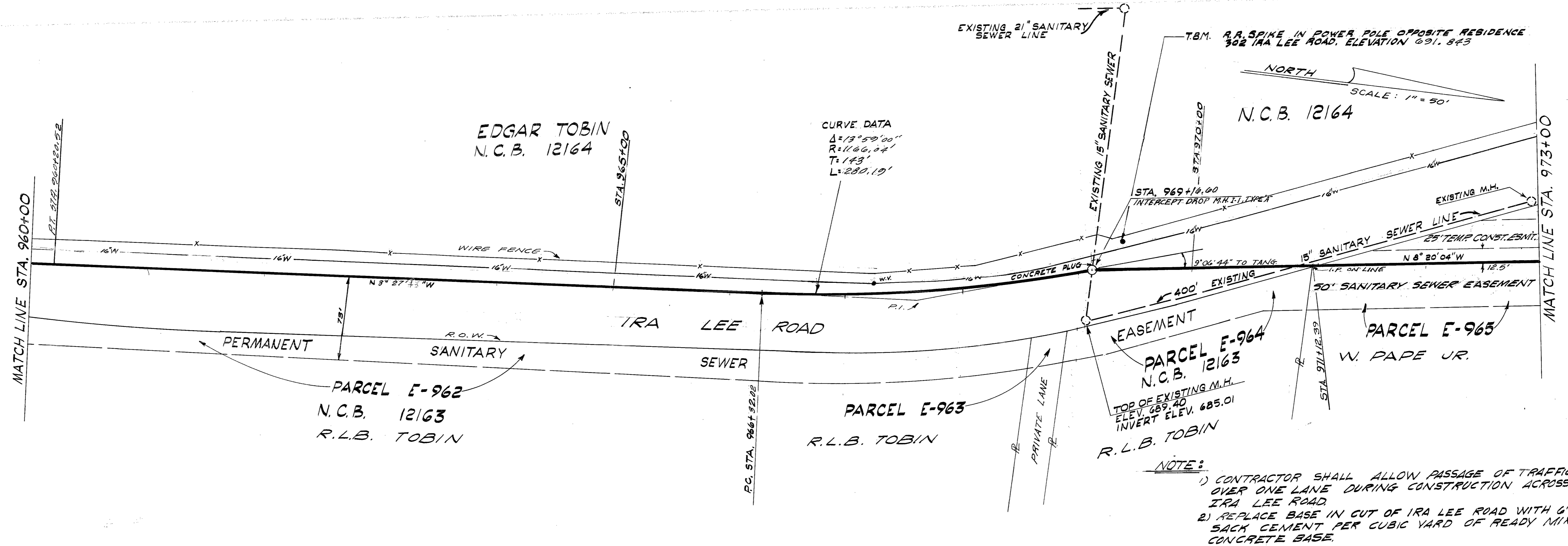


SALADO CREEK OUTFALL
SEGMENT DELORES PHASE "B"

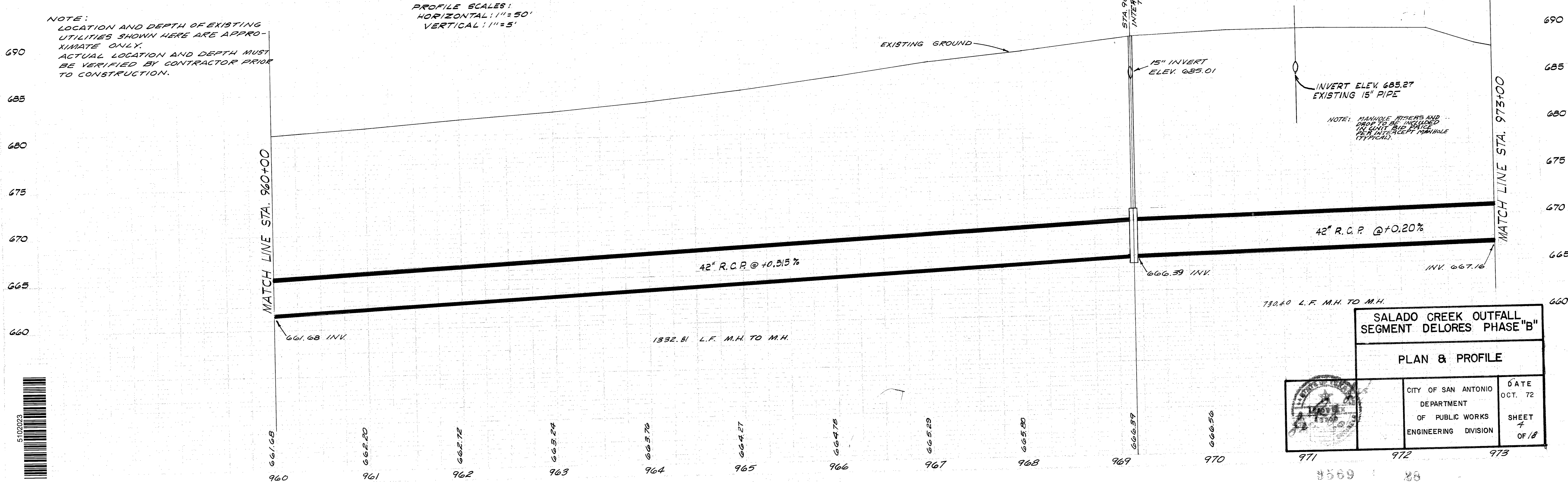
PLAN & PROFILE



CITY OF SAN ANTONIO	DATE
DEPARTMENT	OCT. 72
OF PUBLIC WORKS	SHEET
ENGINEERING DIVISION	3
	OF 3



- NOTE:**
- 1) CONTRACTOR SHALL ALLOW PASSAGE OF TRAFFIC OVER ONE LANE DURING CONSTRUCTION ACROSS IRA LEE ROAD.
 - 2) REPLACE BASE IN CUT OF IRA LEE ROAD WITH 6"-2 SACK CEMENT PER CUBIC YARD OF READY MIX CONCRETE BASE.

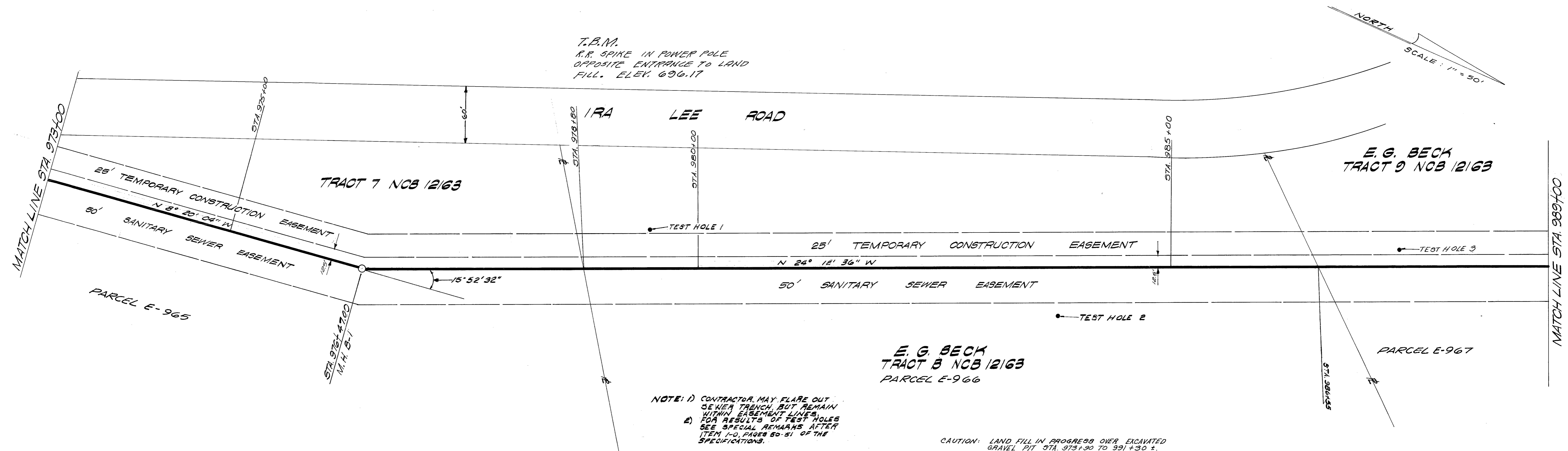


**SALADO CREEK OUTFALL
SEGMENT DELORES PHASE "B"**

PLAN & PROFILE

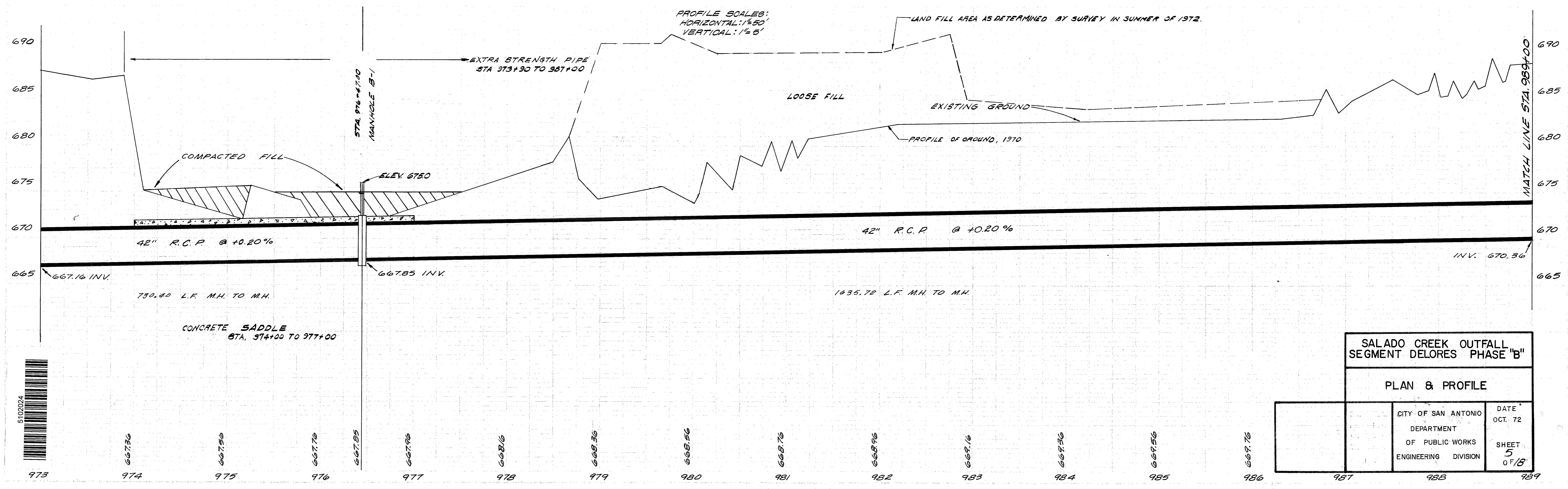
	CITY OF SAN ANTONIO	DATE
	DEPARTMENT OF PUBLIC WORKS	OCT. 72
ENGINEERING DIVISION	SHEET 7	OF 18





NOTE: 1) CONTRACTOR MAY FLARE OUT SEWER TRENCH BUT REMAIN WITHIN EASEMENT LINES.
 2) FOR RESULTS OF TEST HOLES SEE SPECIAL REMARKS AFTER ITEM 1-0, PAGES 50-51 OF THE SPECIFICATIONS.

CAUTION: LAND FILL IN PROGRESS OVER EXCAVATED GRAVEL PIT STA. 973+30 TO 991+30 ±.



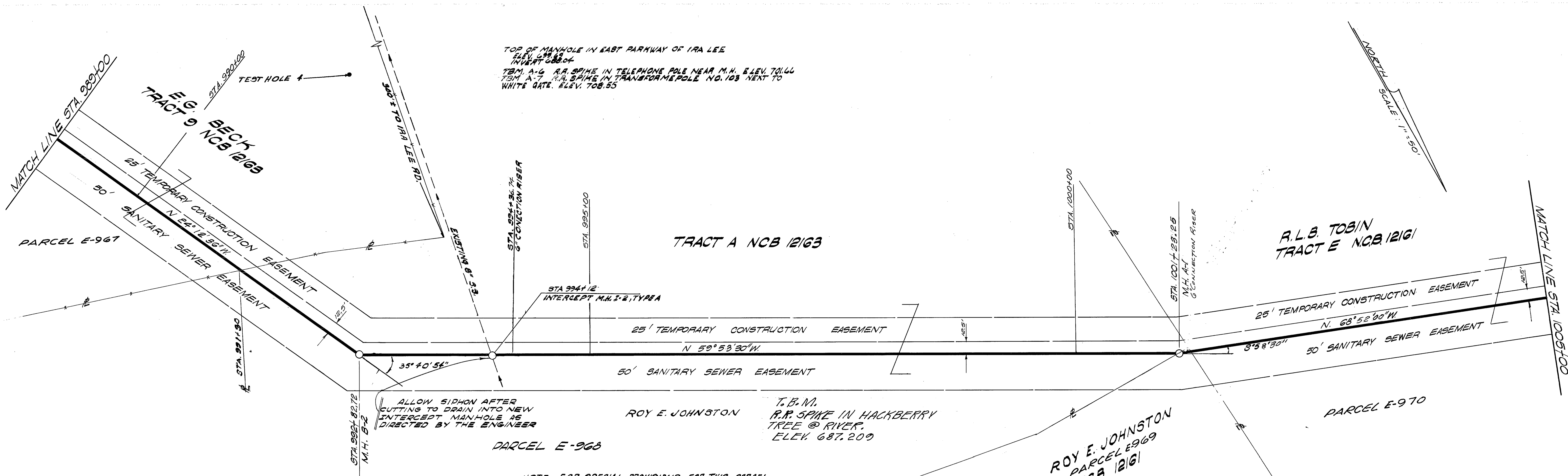
SALADO CREEK OUTFALL
 SEGMENT DELORES PHASE "B"

PLAN & PROFILE

CITY OF SAN ANTONIO	DATE
DEPARTMENT	OCT. 72
OF PUBLIC WORKS	SHEET
ENGINEERING DIVISION	5
	OF 18



Siphon 45761

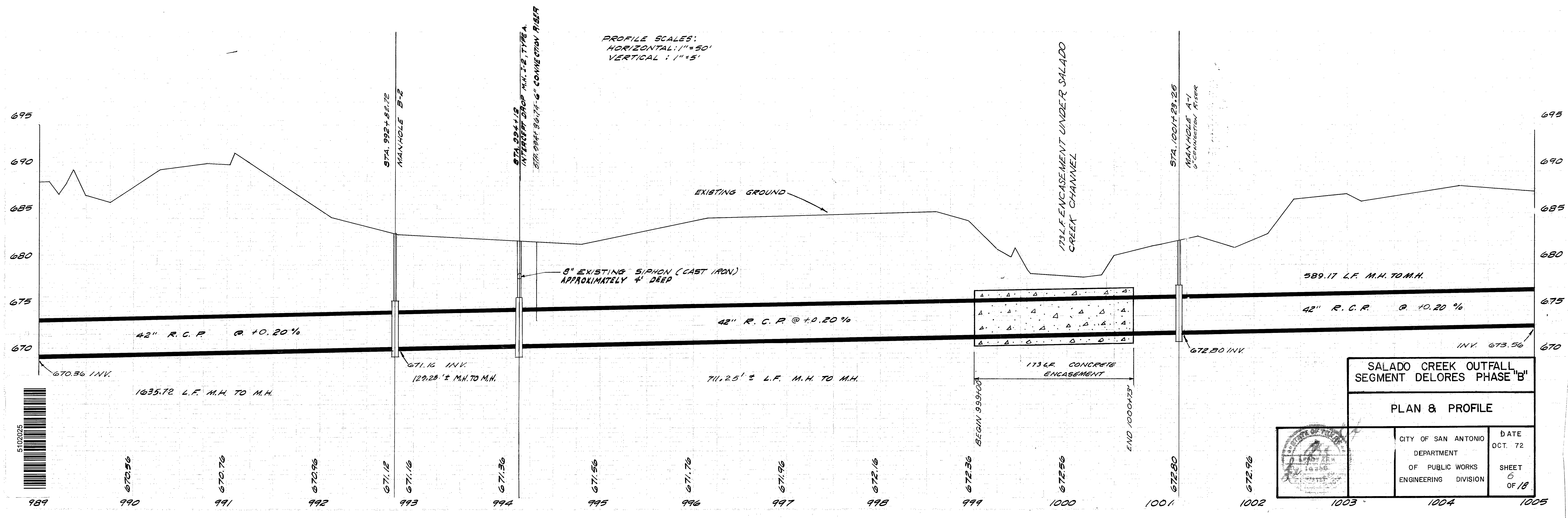


TOP OF MANHOLE IN EAST PARKWAY OF IRA LEE
 ELEV. 688.55
 INVERT 688.04
 TBM A-6 R.R. SPIKE IN TELEPHONE POLE NEAR M.H. ELEV. 701.46
 TBM A-7 R.R. SPIKE IN TRANSFORMER POLE NO. 103 NEXT TO
 WHITE GATE. ELEV. 708.55

ALLOW SIPHON AFTER
 CUTTING TO DRAIN INTO NEW
 INTERCEPT MANHOLE AS
 DIRECTED BY THE ENGINEER

NOTE: FOR SPECIAL PROVISIONS FOR THIS PARCEL
 SEE SPECIFICATIONS PAGE 32.

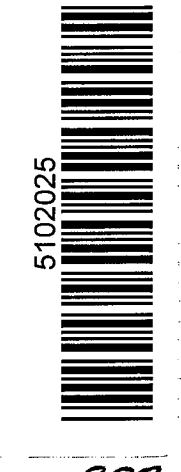
PROFILE SCALES:
 HORIZONTAL: 1" = 50'
 VERTICAL: 1" = 5'



SALADO CREEK OUTFALL
 SEGMENT DELORES PHASE "B"

PLAN & PROFILE

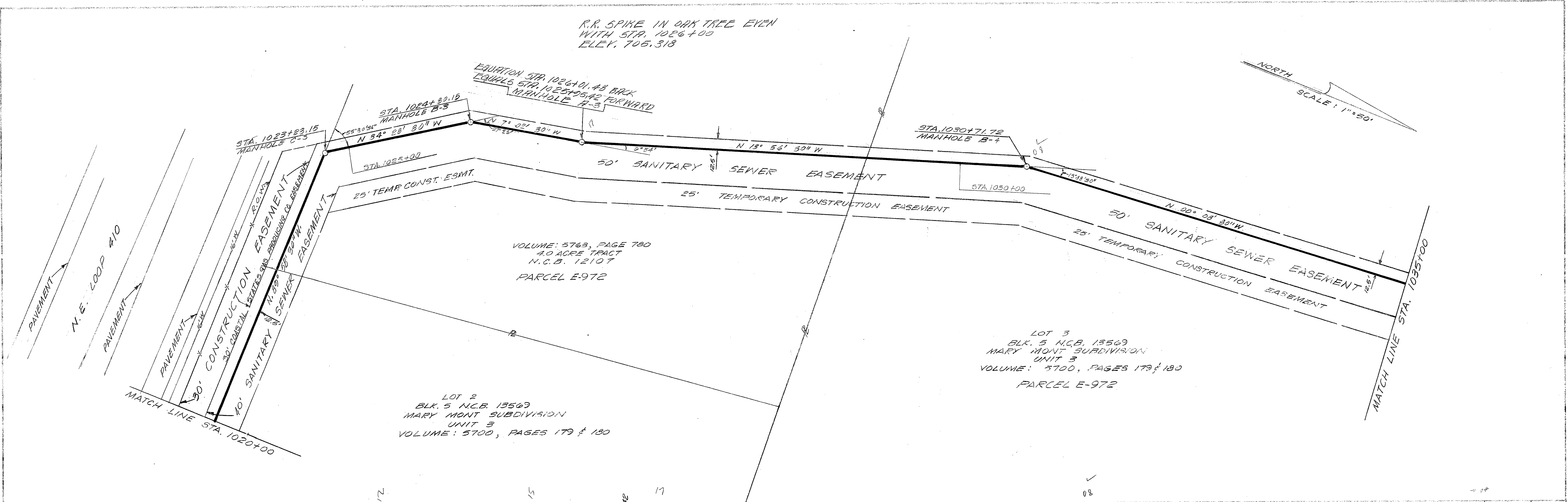
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	DEPARTMENT	OCT. 72
	OF PUBLIC WORKS	SHEET
ENGINEERING DIVISION	6	OF 18



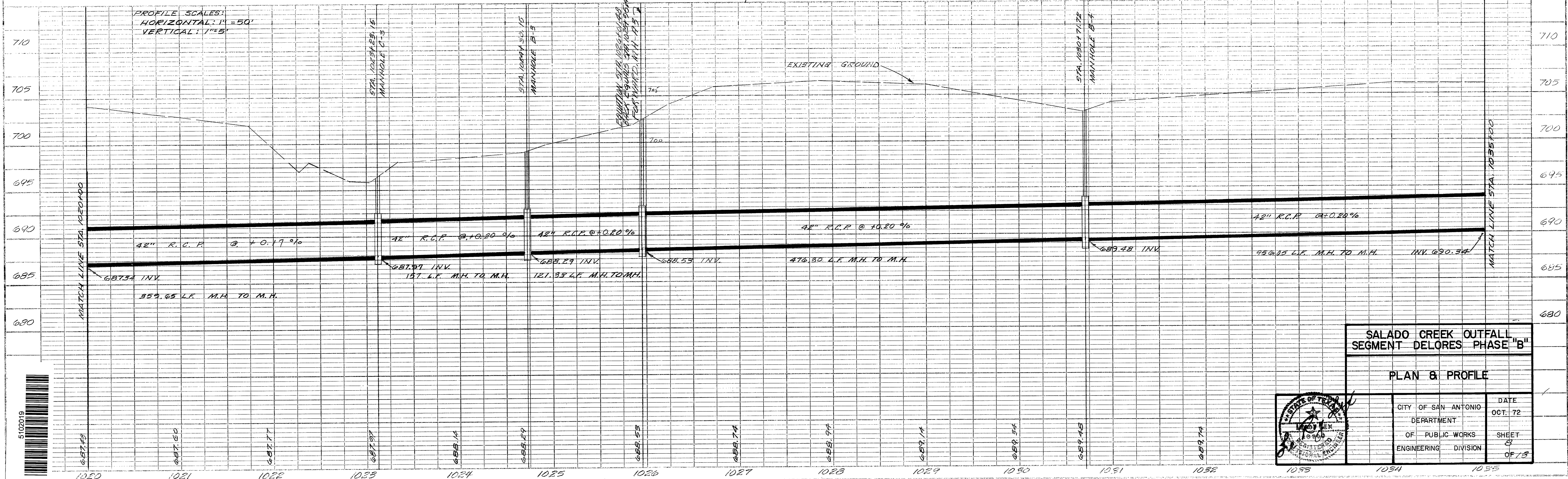
989 990 991 992 993 994 995 996 997 998 999 1000 1001 1002 1003 1004 1005

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PLAN	DATE
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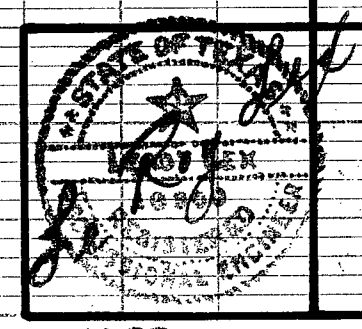


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DATE	



SALADO CREEK OUTFALL
SEGMENT DELORES PHASE "B"

PLAN & PROFILE



CITY OF SAN ANTONIO	DATE
DEPARTMENT	OCT. 72
OF PUBLIC WORKS	SHEET
ENGINEERING DIVISION	OF 73



5102020

BEN CARTER, ET UX
95.825 ACRE TRACT
N.C.B. 12107
VOLUME 5127 PAGE 192

NORTH
SCALE: 1"=50'

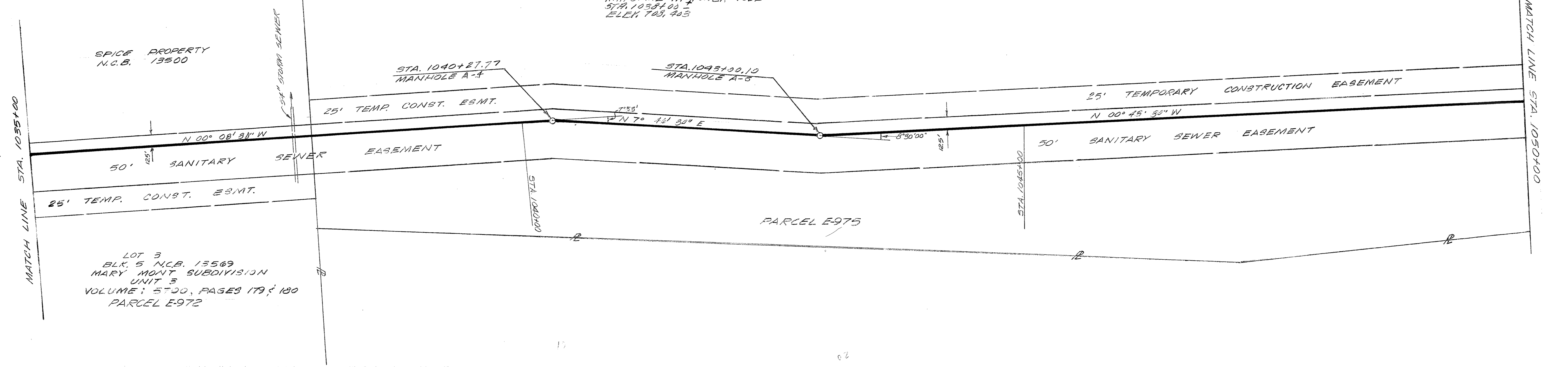
T.B.M.
R.I.S. SPINE IN POWER POLE
STA. 10331.03
ELEV 725.243

SPICE PROPERTY
N.C.B. 13500

LOT 3
BLK. 5 N.C.B. 13509
MARY MONT SUBDIVISION
UNIT 3
VOLUME 5700, PAGES 179 & 180
PARCEL E-972

STA. 1040+27.77
MANHOLE A-4

STA. 1043+30.10
MANHOLE A-5

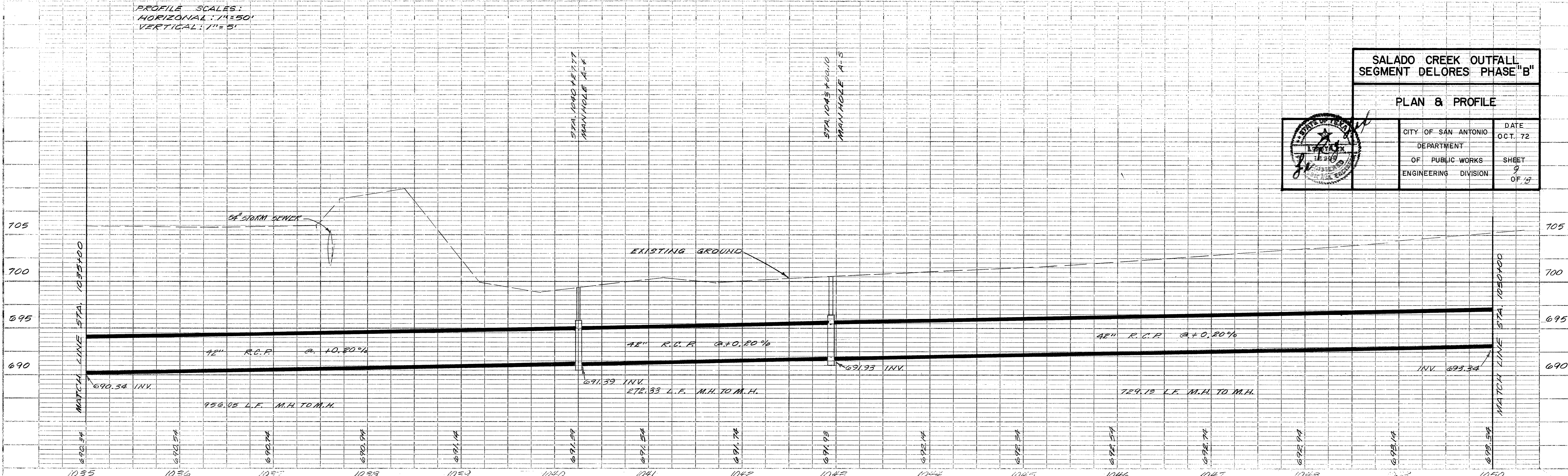
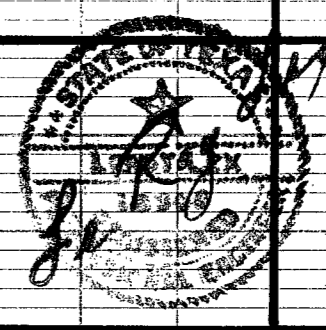


PROFILE SCALES:
HORIZONTAL: 1"=50'
VERTICAL: 1"=5'

**SALADO CREEK OUTFALL
SEGMENT DELORES PHASE "B"**

PLAN & PROFILE

CITY OF SAN ANTONIO DEPARTMENT OF PUBLIC WORKS ENGINEERING DIVISION	DATE OCT. 72 SHEET 9 OF 13
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CHECKED: [Signature]

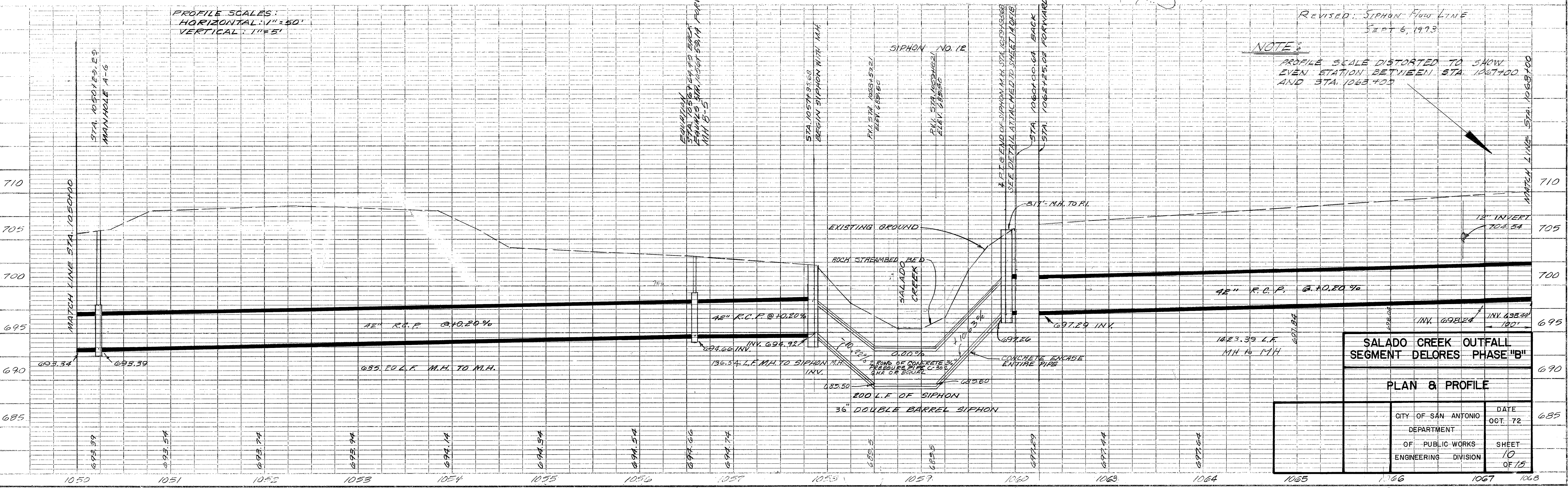
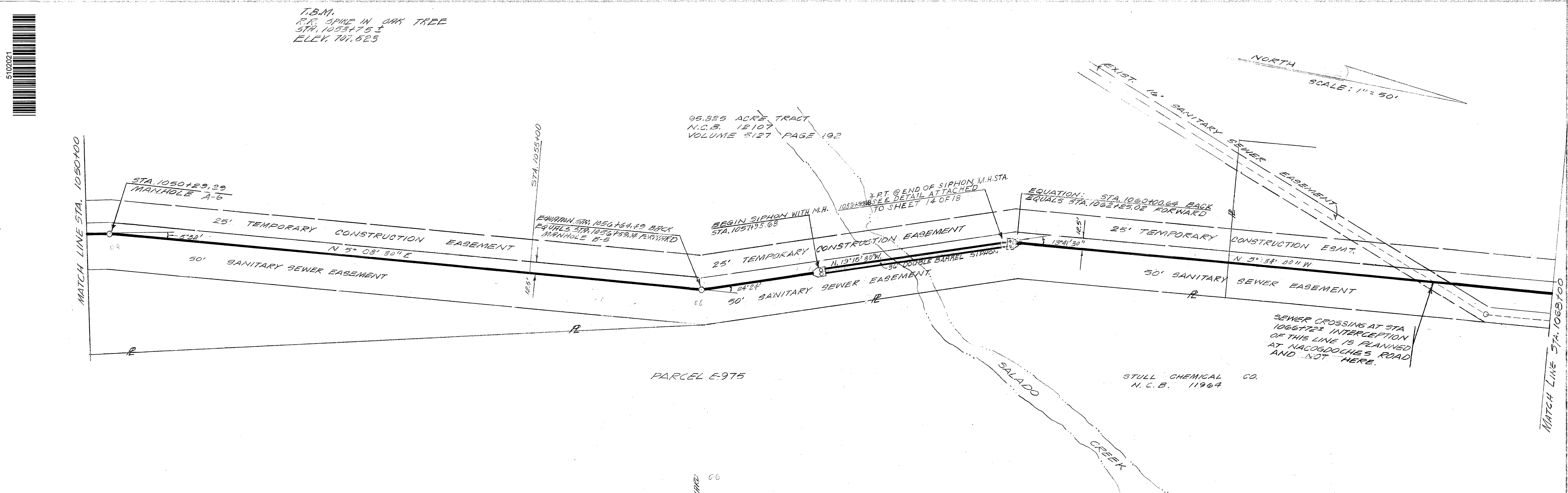
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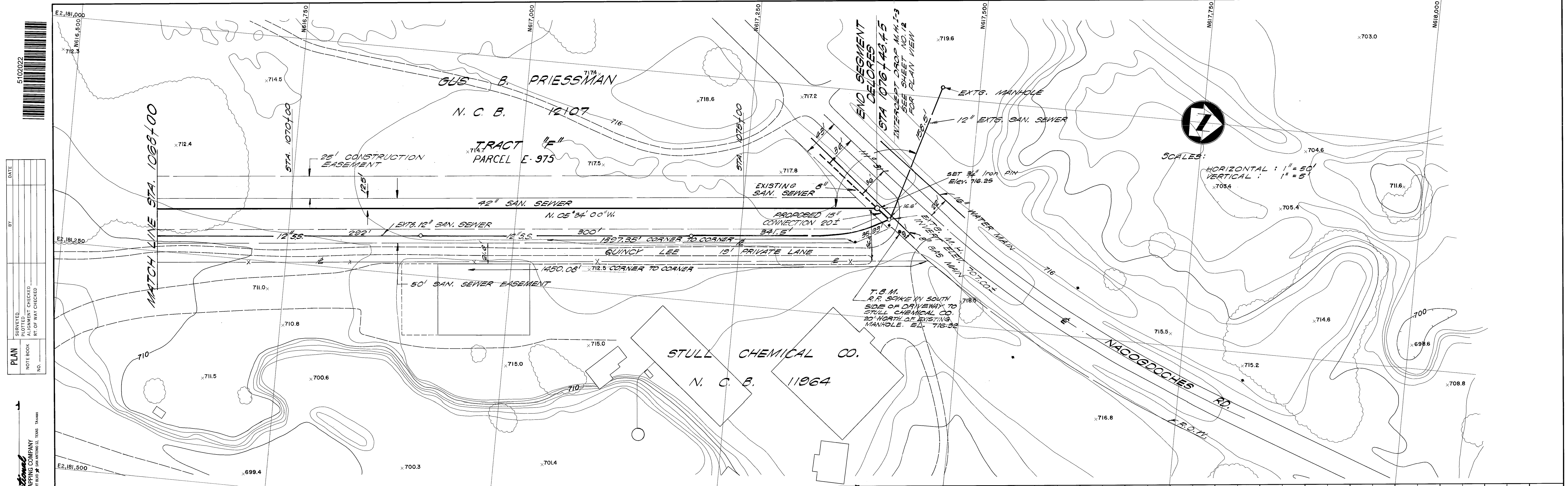
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 BY: _____
 CHECKED: _____
 IN CHARGE: _____
 NOTE BOOK: _____
 NO. _____
 REVISIONS: _____

PROFILE
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 IN CHARGE: _____
 NOTE BOOK: _____
 NO. _____
 REVISIONS: _____

Siphon 45761

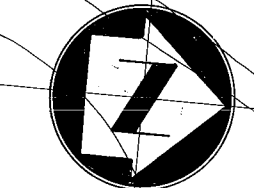
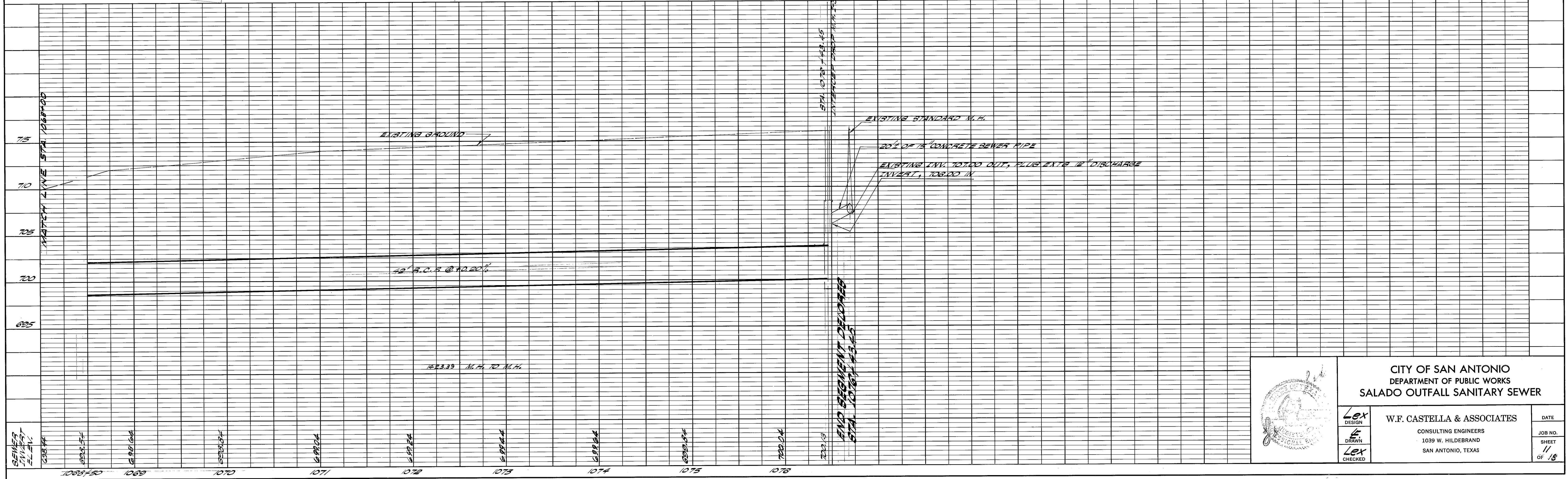


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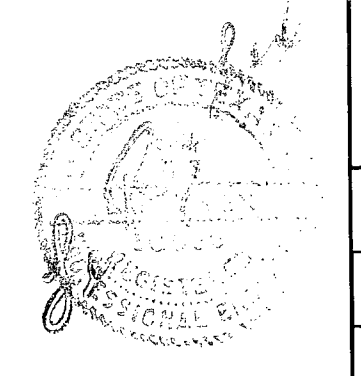
BY _____
 DATE _____

International
 AERIAL MAPPING COMPANY
 127 Westwood Blvd., Suite 100, Los Angeles, CA 90024

PROFILE
 SURVEYED, PLOTTED, CHECKED, STRUCTURE NOTATIONS CHECK
 NOTE BOOK NO. _____
 DATE _____



SCALES:
 HORIZONTAL: 1" = 50'
 VERTICAL: 1" = 5'

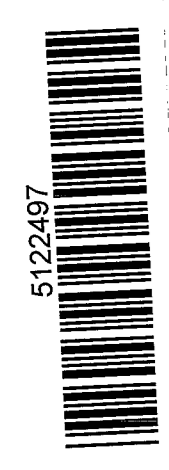


CITY OF SAN ANTONIO
 DEPARTMENT OF PUBLIC WORKS
 SALADO OUTFALL SANITARY SEWER

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 W.F. CASTELLA & ASSOCIATES
 CONSULTING ENGINEERS
 1039 W. HILDEBRAND
 SAN ANTONIO, TEXAS

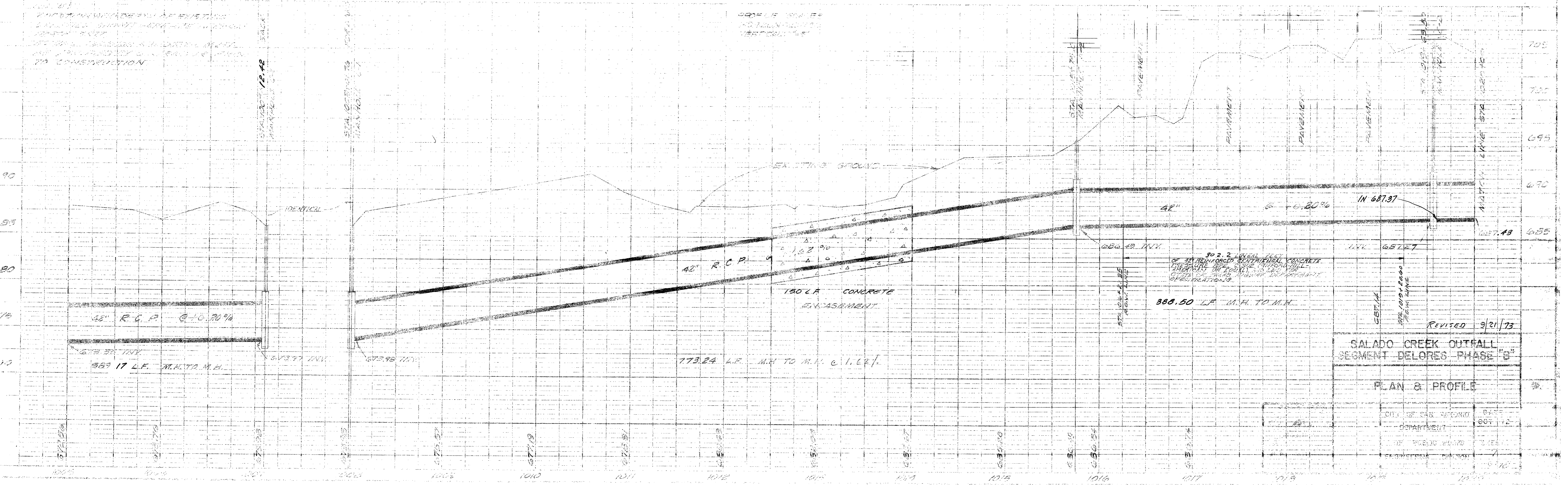
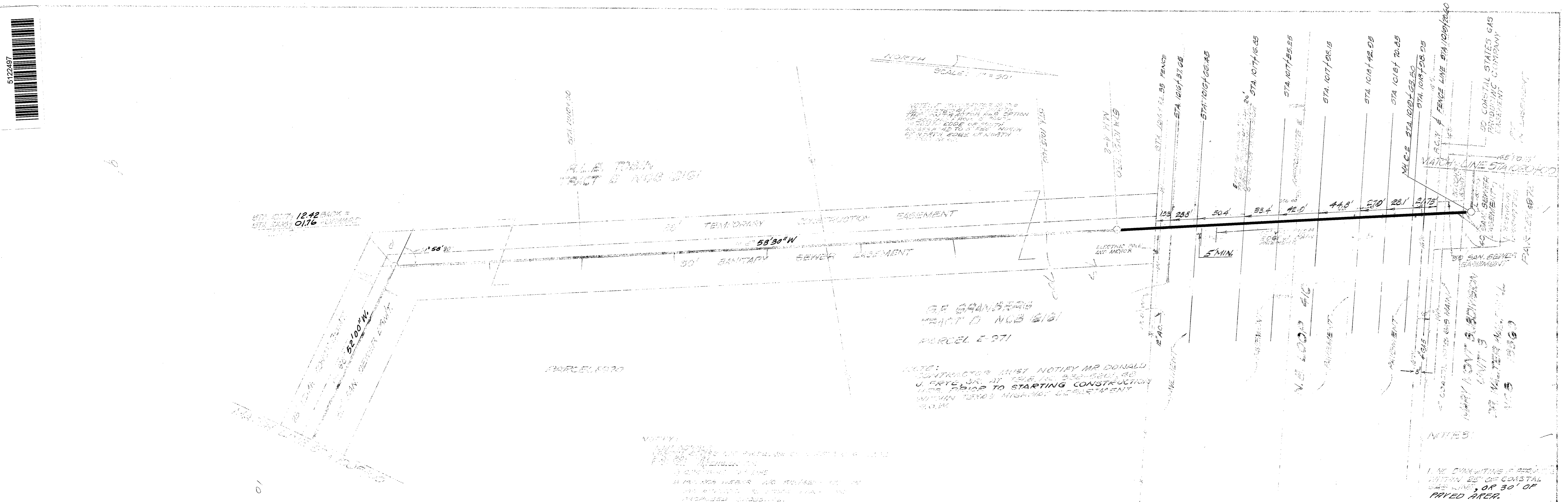
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 JOB NO. _____
 SHEET 11
 OF 18

Siphon 45761



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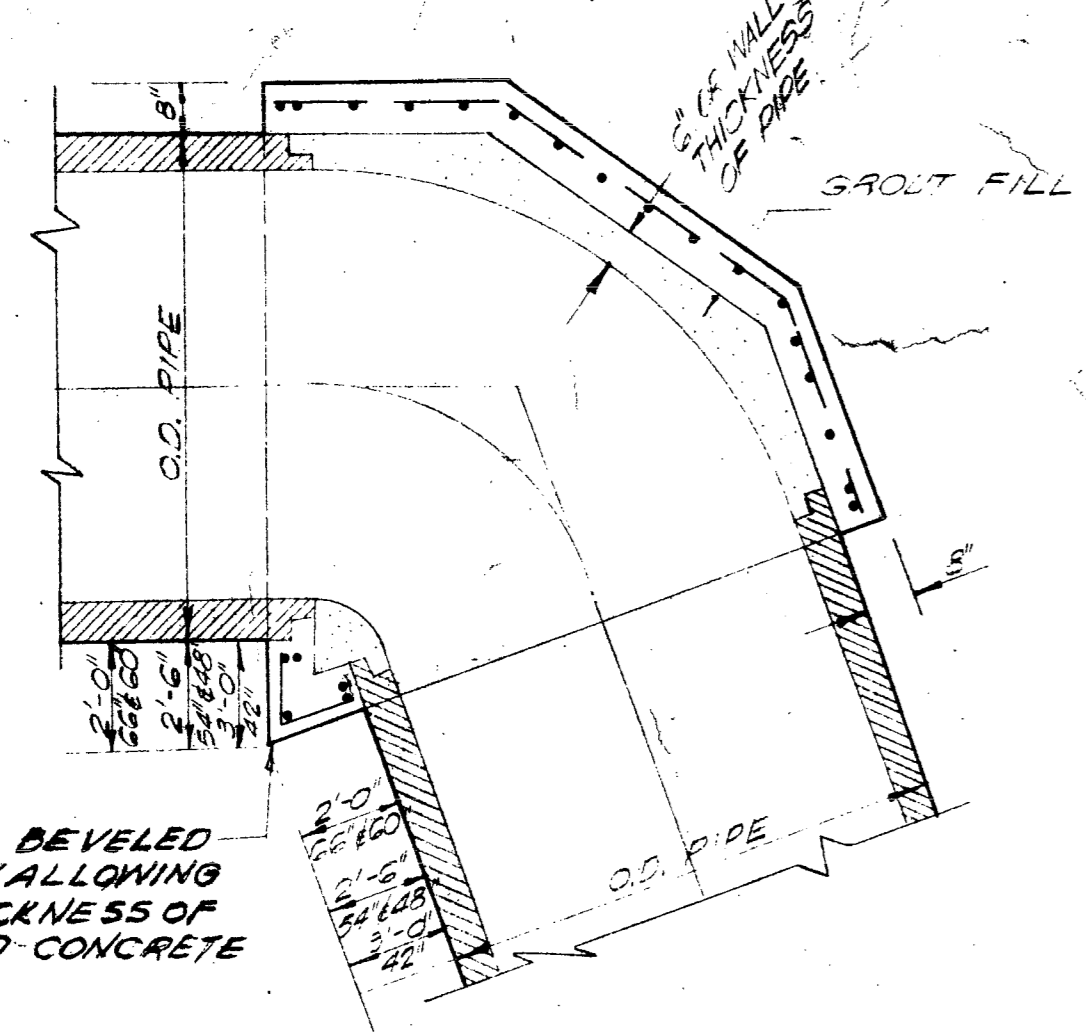
REVISED 9/21/73
 SALADO CREEK OUTFALL
 SEGMENT DELORES PHASE "B"
 PLAN & PROFILE

CITY OF SAN ANTONIO	DATE
DEPARTMENT	667-12
BY	
ENGINEER	

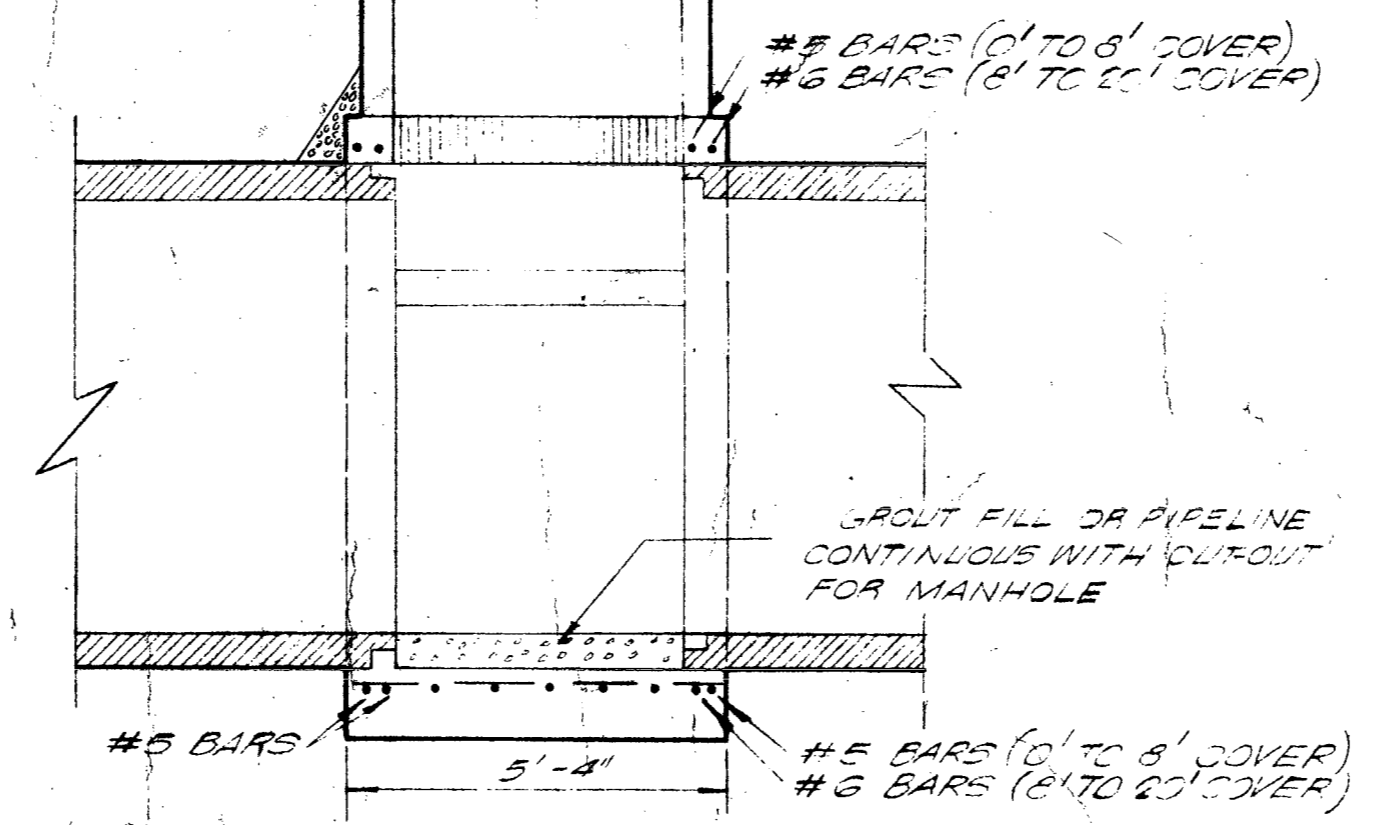
5122182

CORNER MAY BE DEVELOPED FOR 48" THRU 54" ALLOWING A MINIMUM THICKNESS OF 12" OF REINFORCED CONCRETE

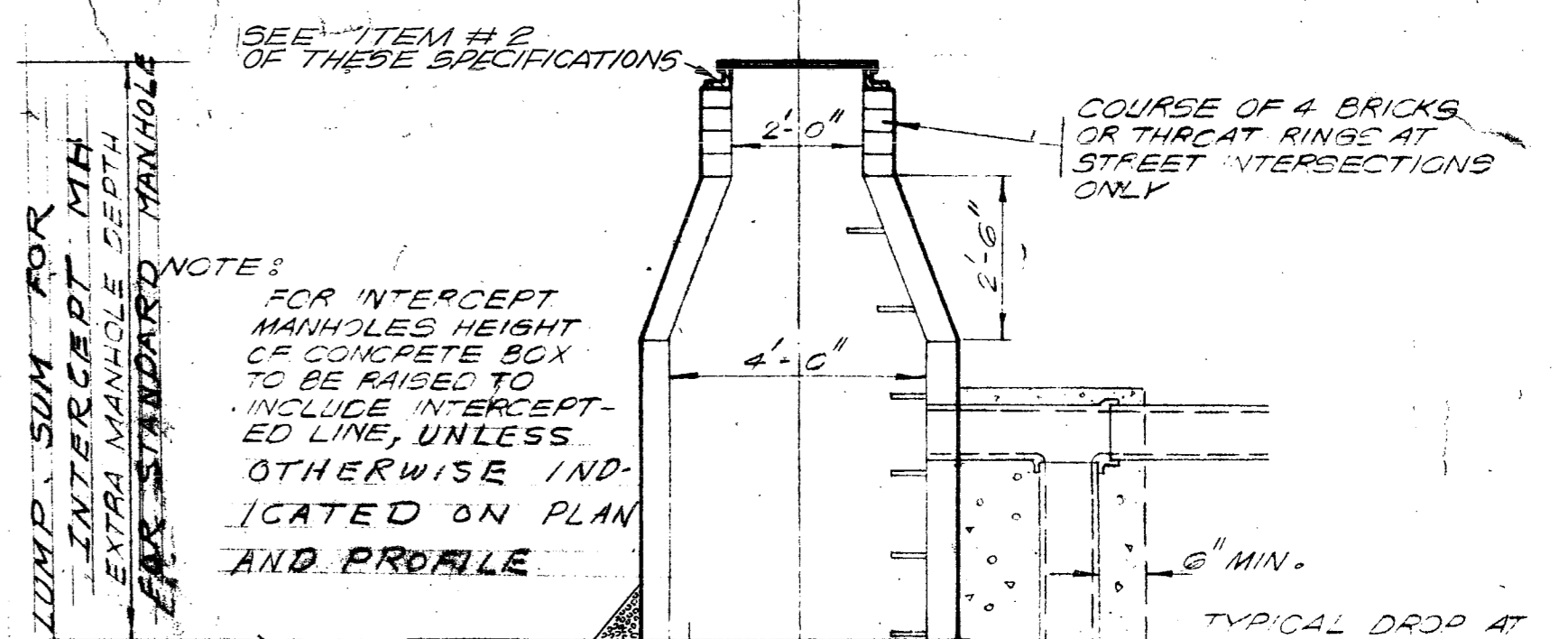
LONGITUDINAL HORIZONTAL SECTION @ HORIZONTAL DIAMETER OF PIPE



MANHOLE STEPS AS SHOWN IN TRANSVERSE SECTION



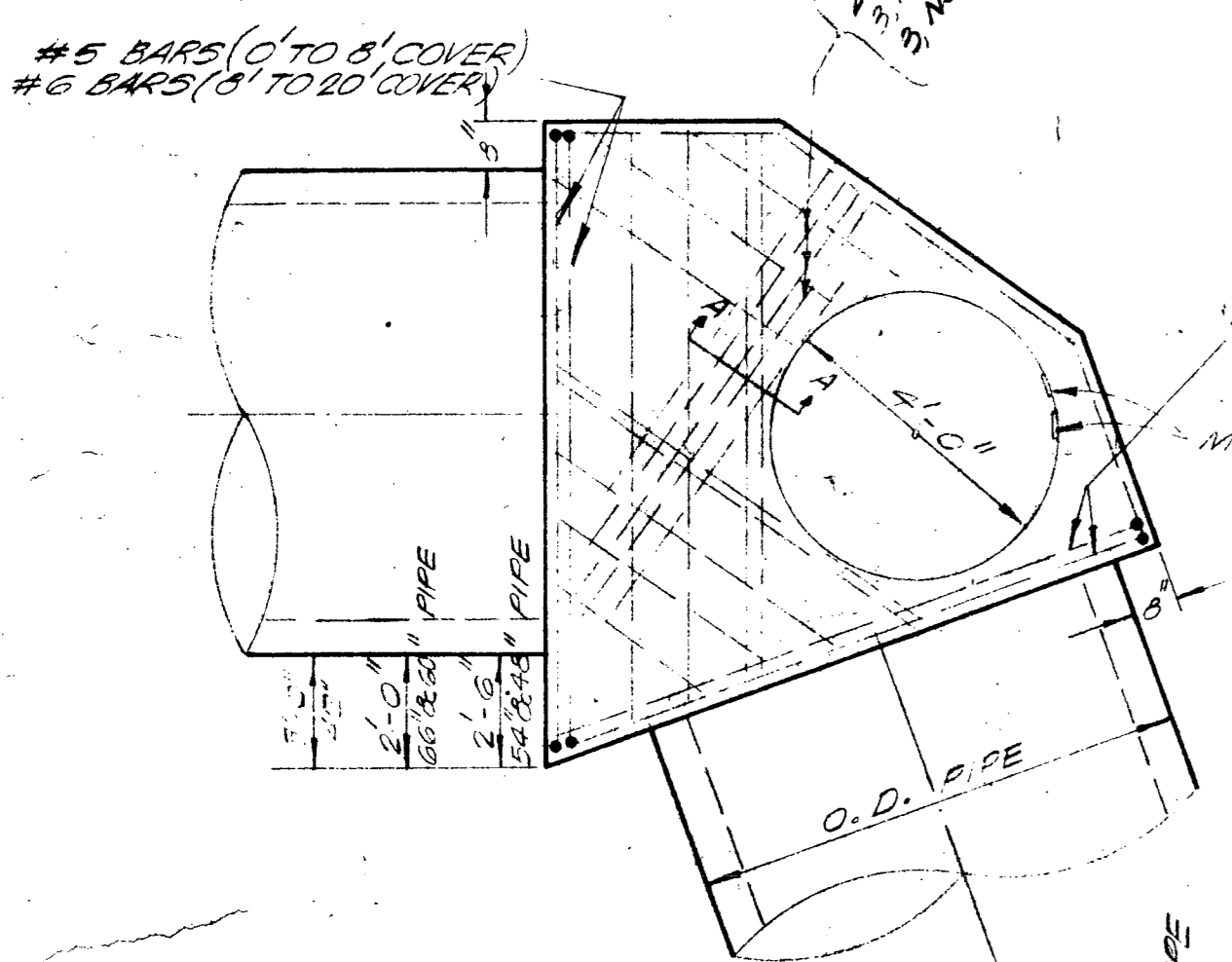
LONGITUDINAL VERTICAL SECTION



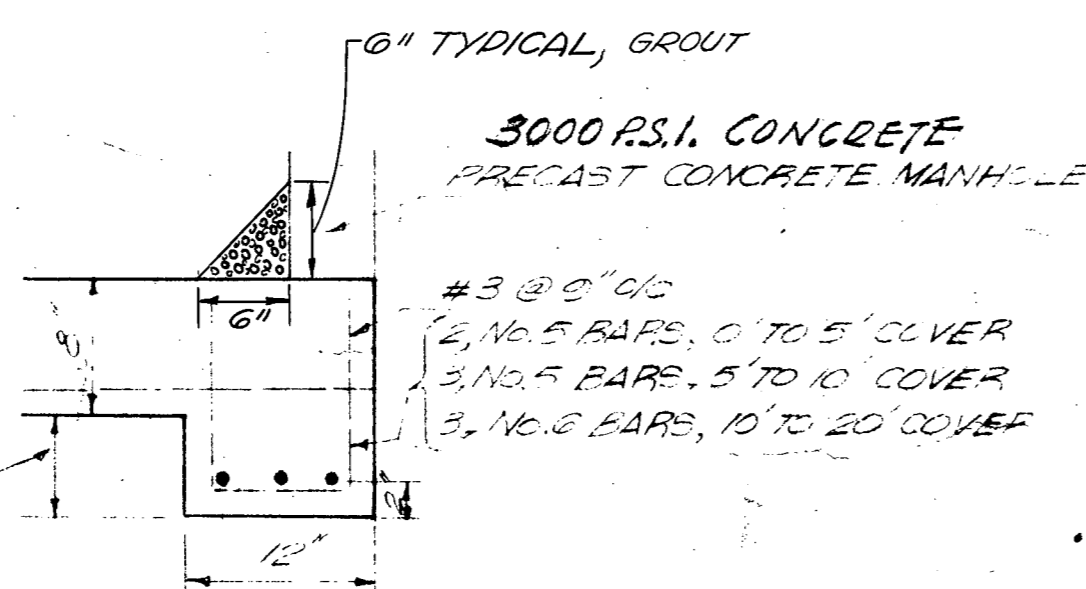
TRANSVERSE SECTION

NOTE: IF HEIGHT OF BOX IS RAISED, PLACE VERTICAL REINFORCEMENT 2" FROM INSIDE FACE. SEE PROFILE IF THIS IS TO BE DONE.

STA. 969+15.89, MH I-1
STA. 994+12.00, MH I-2
STA. 1076+45.89, MH I-3

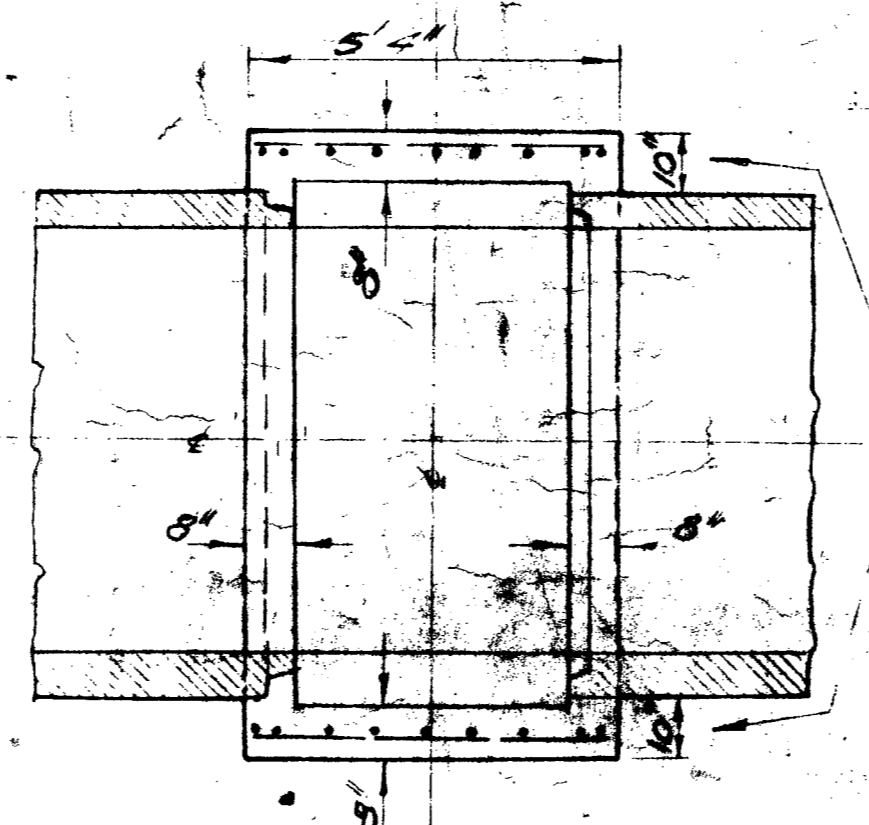


PLAN - TOP



SECTION 4-A

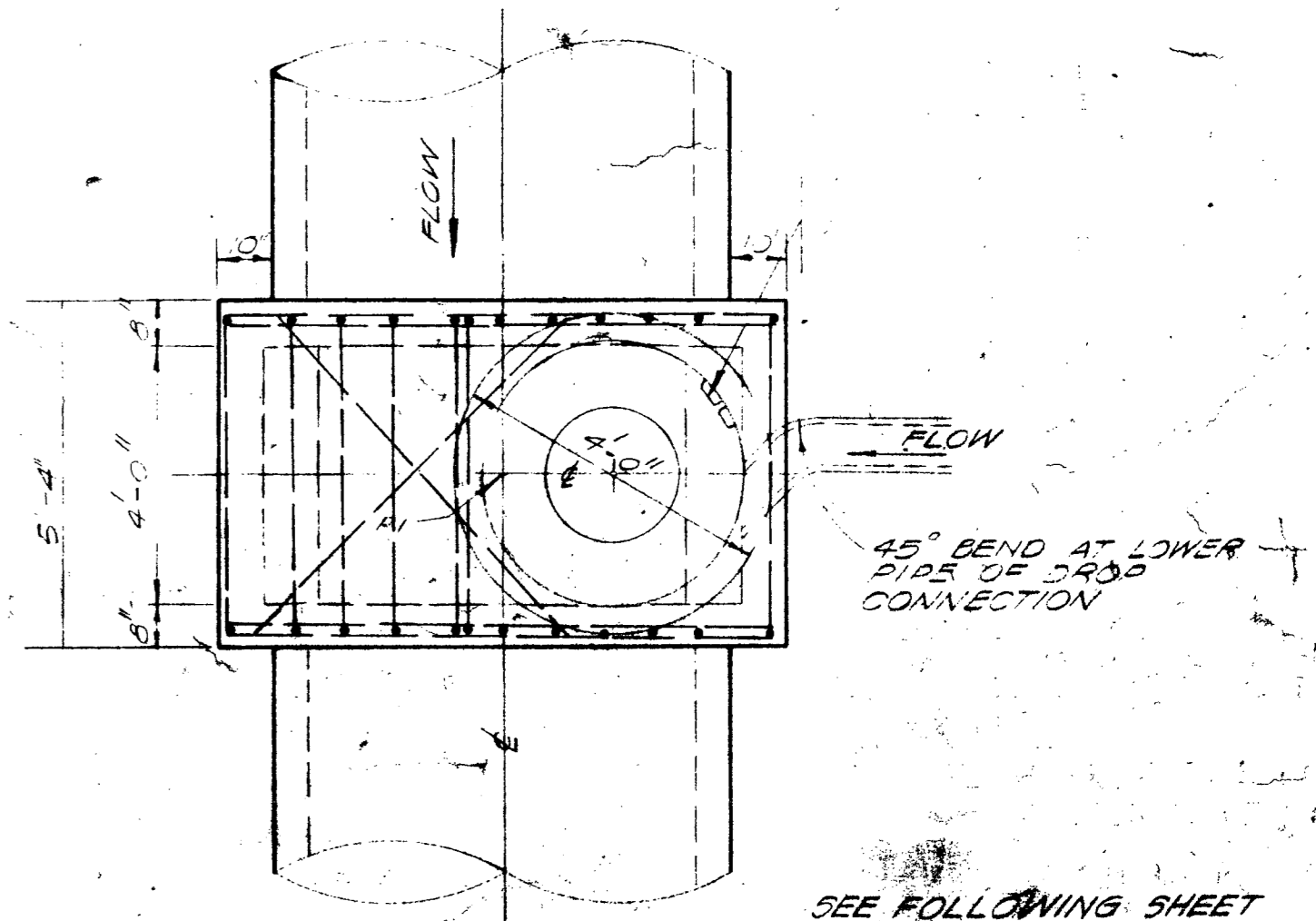
NOTE: SEE FOLLOWING SHEET FOR SCHEDULE OF REINFORCEMENT



LONGITUDINAL HORIZONTAL SECTION @ HORIZONTAL DIAMETER OF PIPE

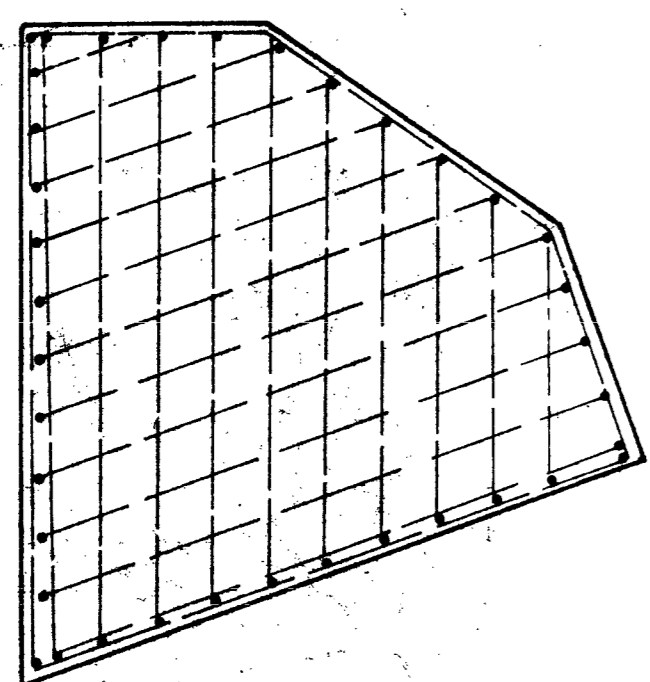
TYPE "A" MANHOLE FOR DEFLECTIONS OF 0" TO 10"

MANHOLE STEPS USE ITEM 404.2 (6) STANDARD SPECIFICATIONS OF CITY OF SAN ANTONIO



PLAN - TOP

SEE FOLLOWING SHEET FOR SCHEDULE OF REINFORCEMENT



PLAN - FLOOR

TYPE "C" MANHOLE FOR DEFLECTIONS OF 50" TO 90"

NOTE: TRANSVERSE SECTION AND LONGITUDINAL VERTICAL SECTION SIMILAR TO TYPE B MANHOLE

Siphon 45761

6. Manhole Steps: Manhole steps are to be provided in all manholes exceeding ten (10) feet in depth measured from invert to top of rim and in any other locations designated on the plans. Unless otherwise shown on the plans steps are to be spaced fifteen inches apart vertically with alternate steps offset twelve inches horizontally. Steps shall be corrosion proof steps equal to LOW Perma-step 100-1 as manufactured by Utility Products Incorporated, San Antonio, Texas. Steps shall be installed as directed in preformed or drilled holes and after installation they shall be completely filled with non-shrink grout equal to Emoco grout, mixed and applied in accordance with manufacturer's recommendation. Where manholes exceed 15 feet a yellow Perma-step shall be used. No additional compensation will be paid for installation of manhole steps.

Manhole steps may be cast into manhole concrete rings at the manufacturing plant when the concrete is still green - sealed, mortared and grouted and subject to inspection and approval or rejection at the plant before delivery to the job site. Should damage be done to the manhole steps either in transit or assembly they shall be reinstalled according to directions in the preceding paragraph.

MANHOLE DETAILS

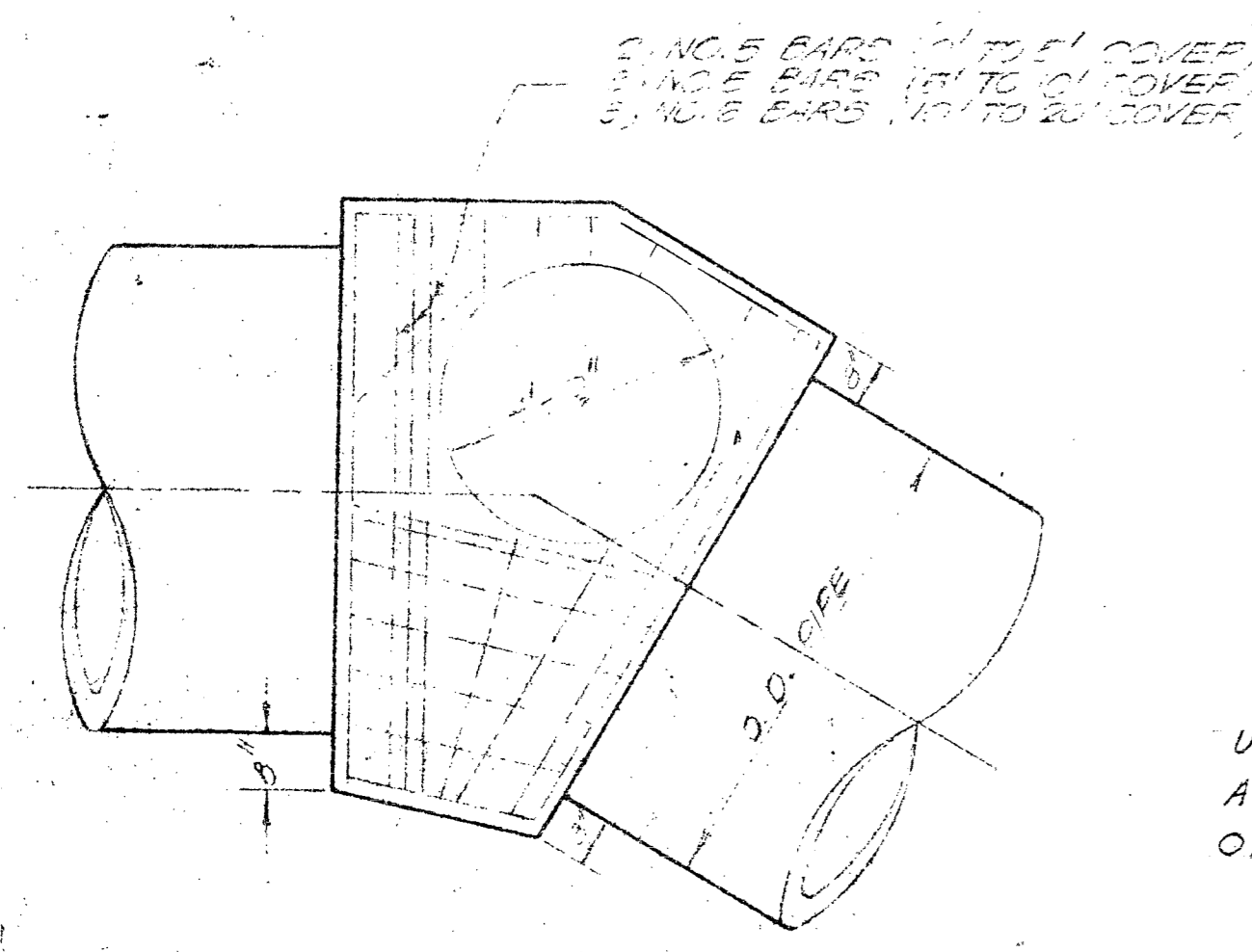
CITY OF SAN ANTONIO
DEPARTMENT OF PUBLIC WORKS
SALADO OUTFALL SANITARY SEWER

W. E. CASTELLA & ASSOCIATES
CONSULTING ENGINEERS
1039 W. HILDEBRAND
SAN ANTONIO, TEXAS

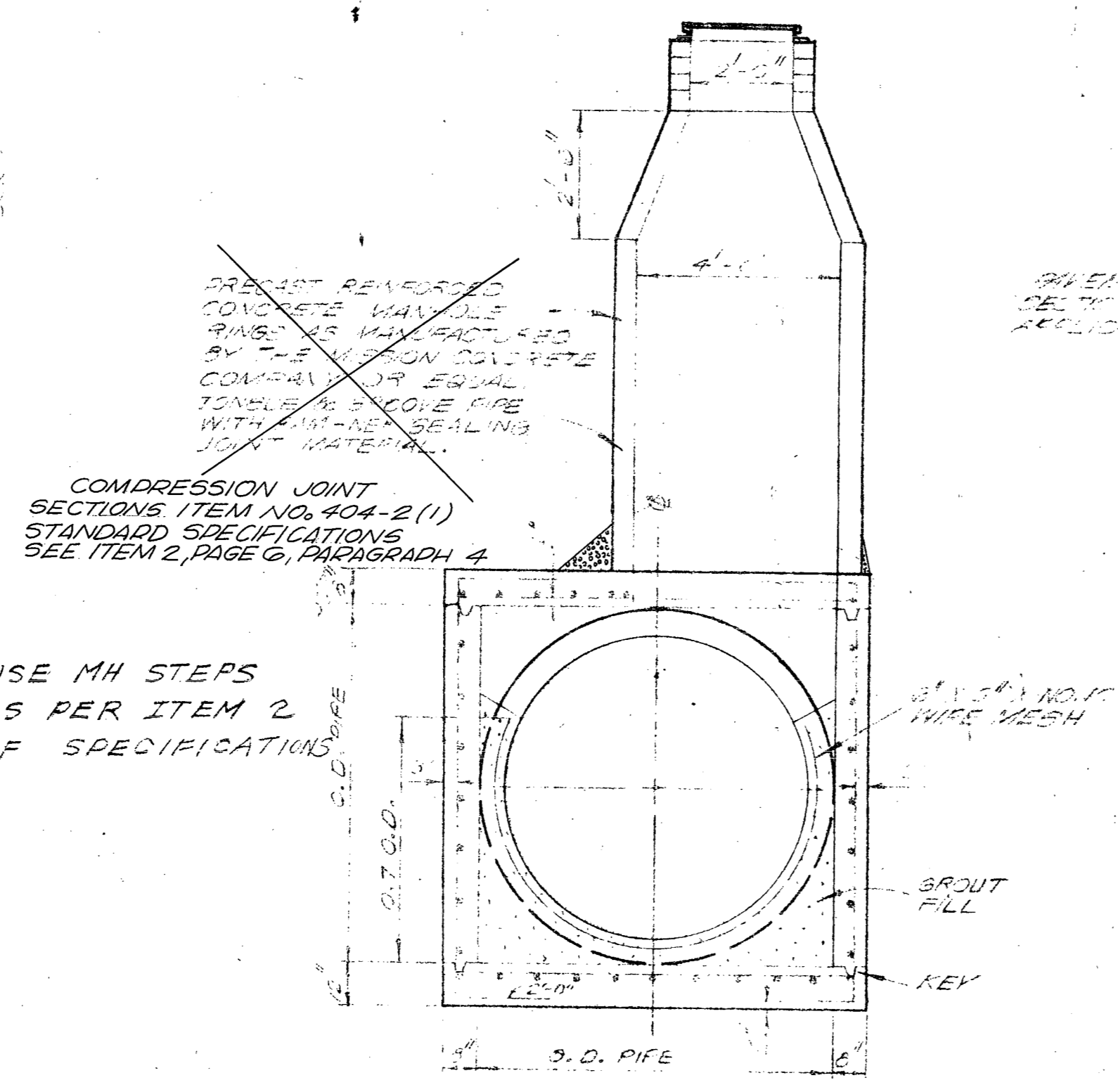
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DATE: 11-22-72
JOB NO.: [Blank]
SHEET: 12
OF: 12

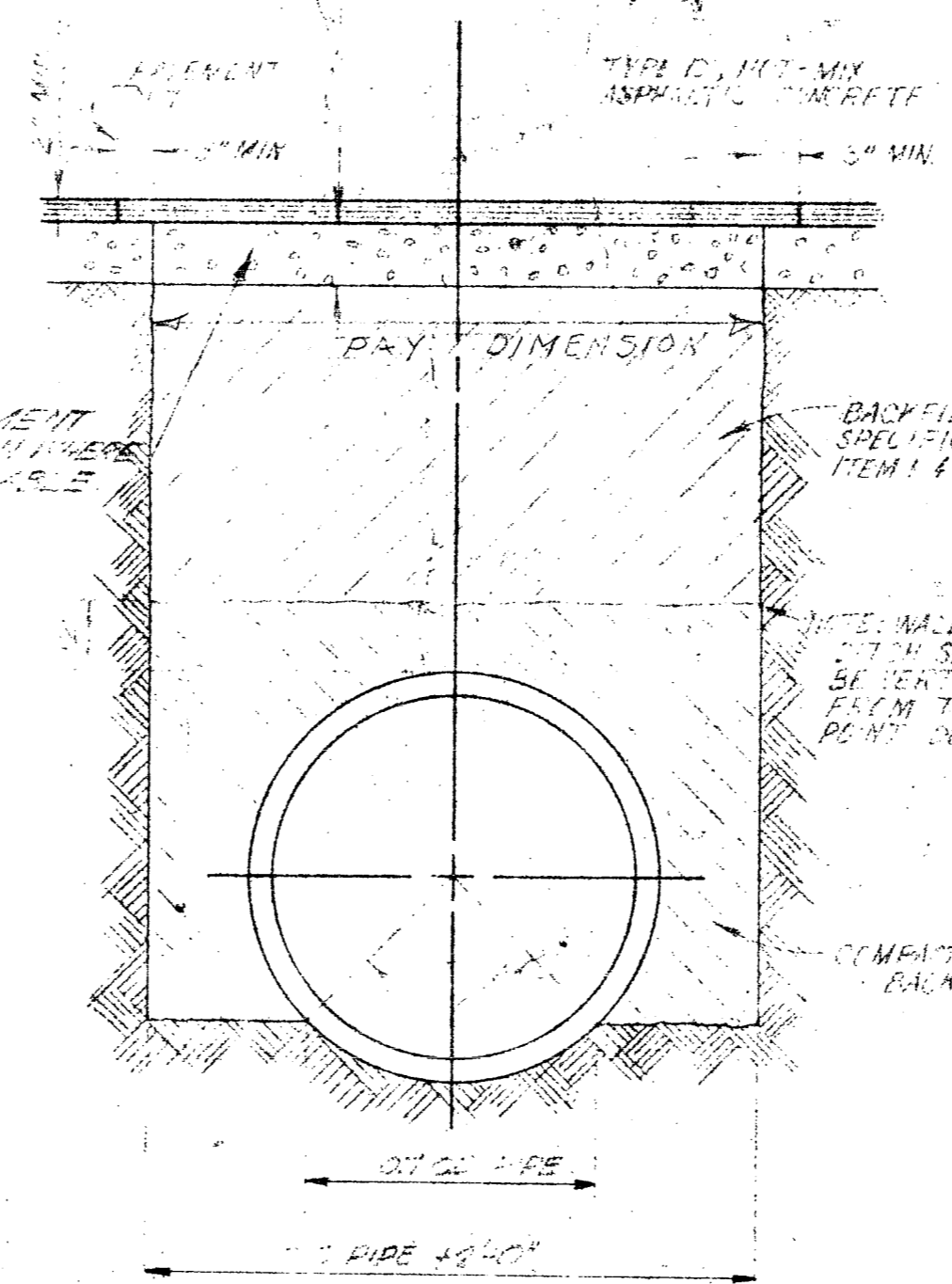
Siphon 45761



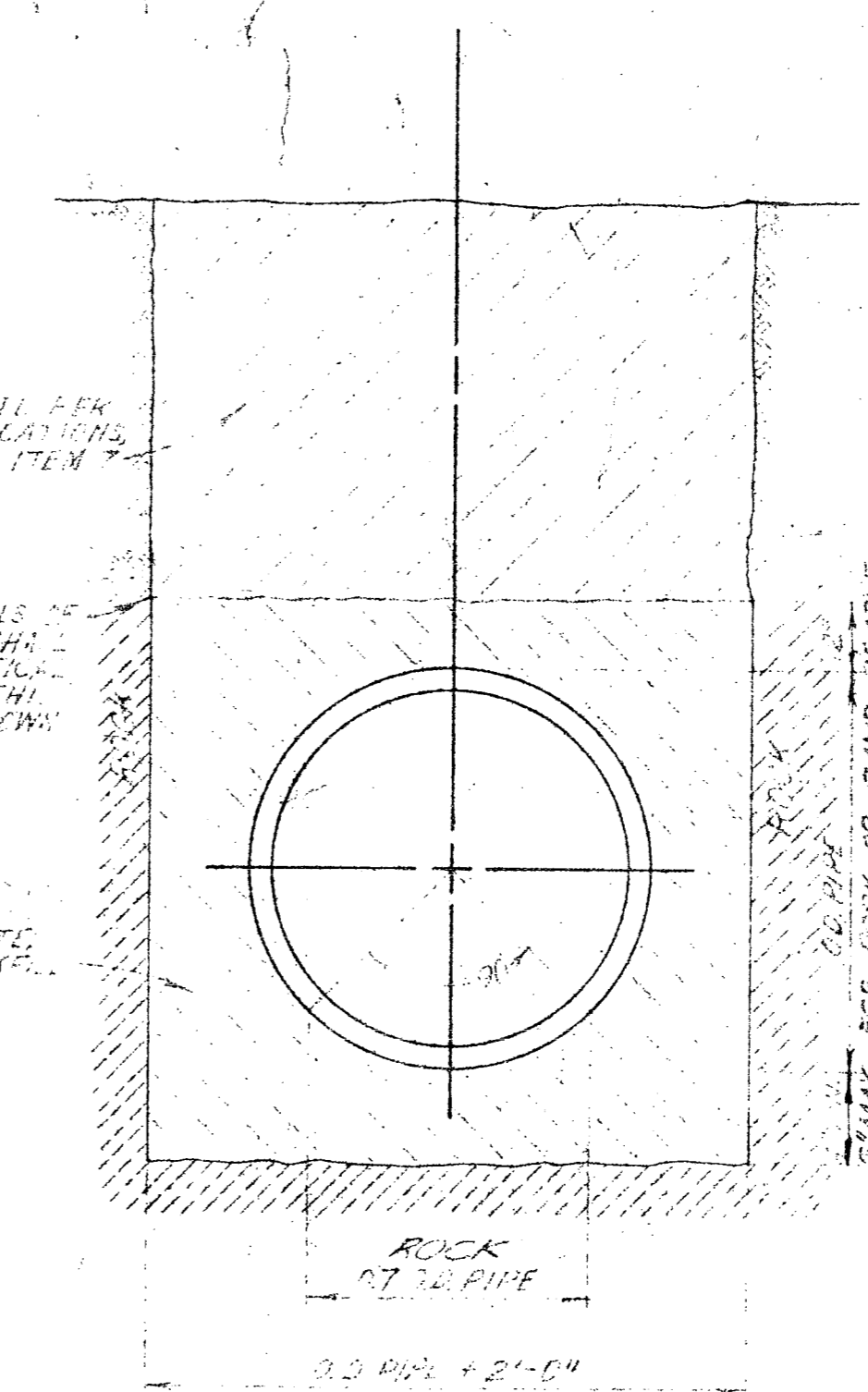
PLAN-TOP



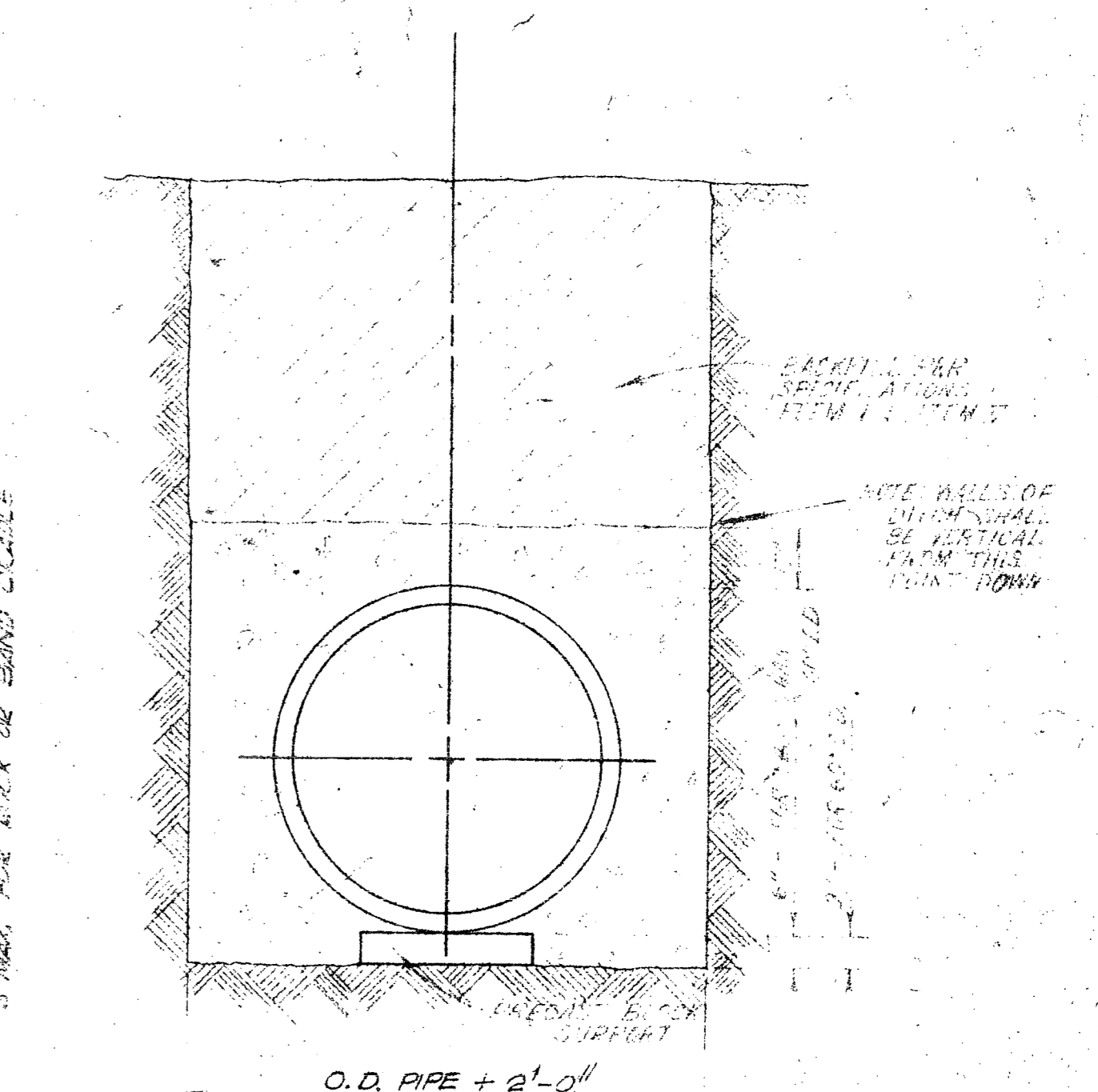
TRANSVERSE SECTION TYPE "B" MANHOLE



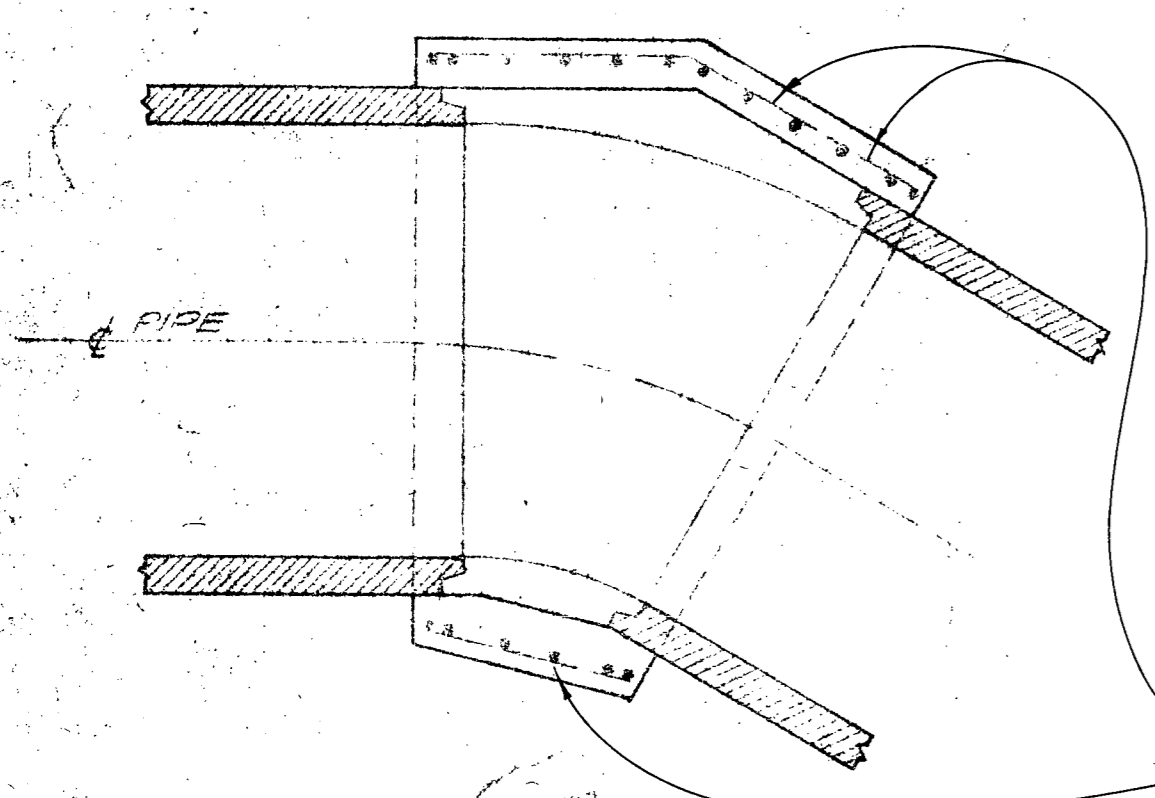
COMMON EXCAVATION



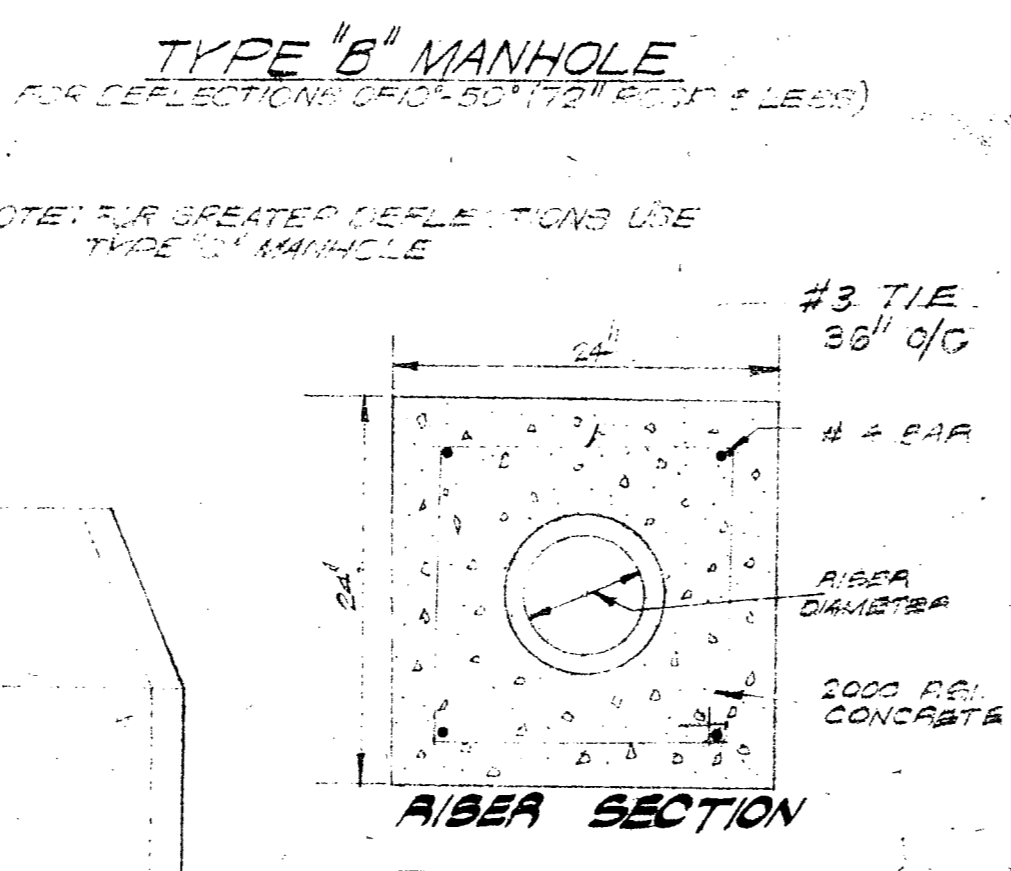
ROCK EXCAVATION



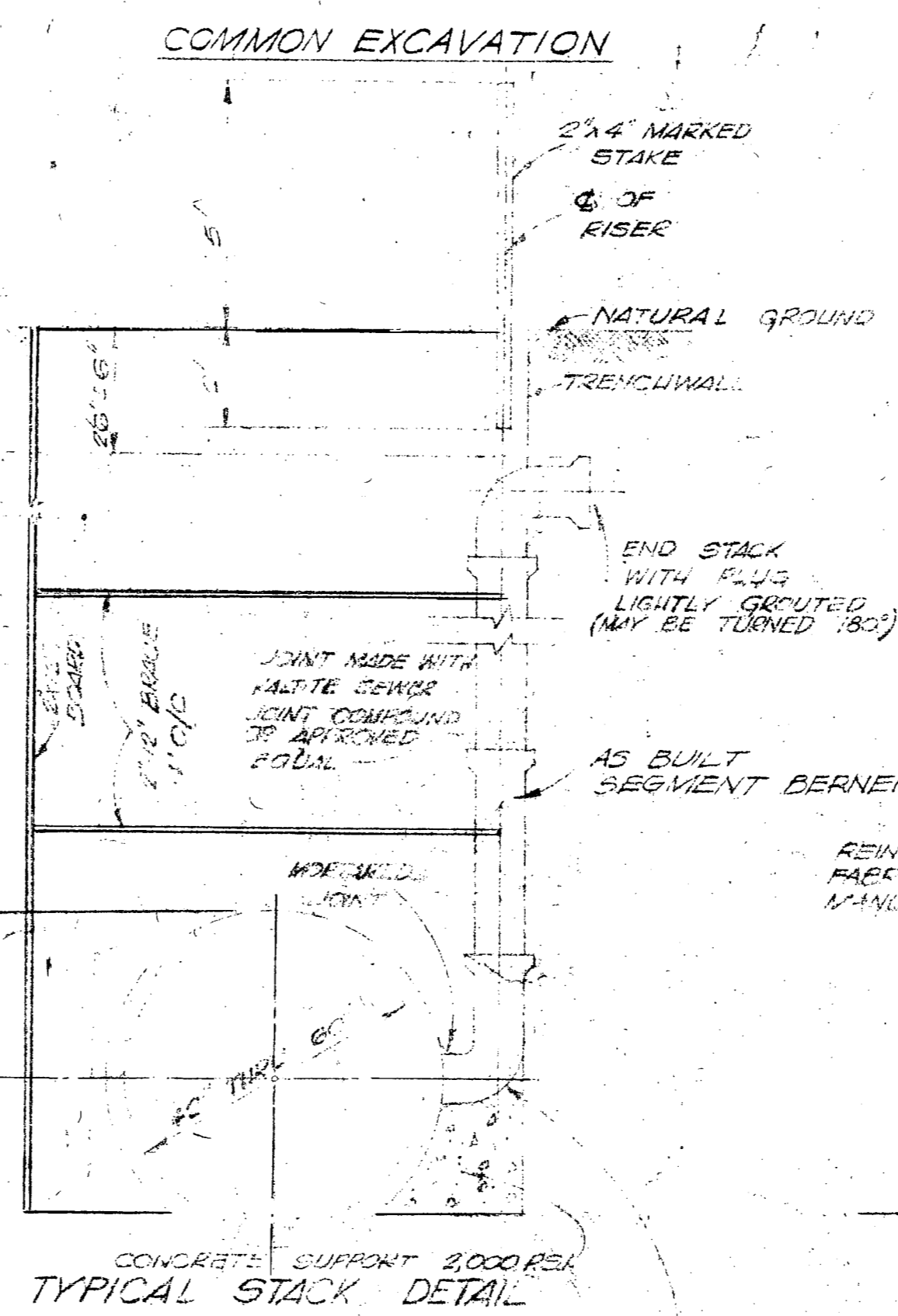
CONCRETE ENDMENT



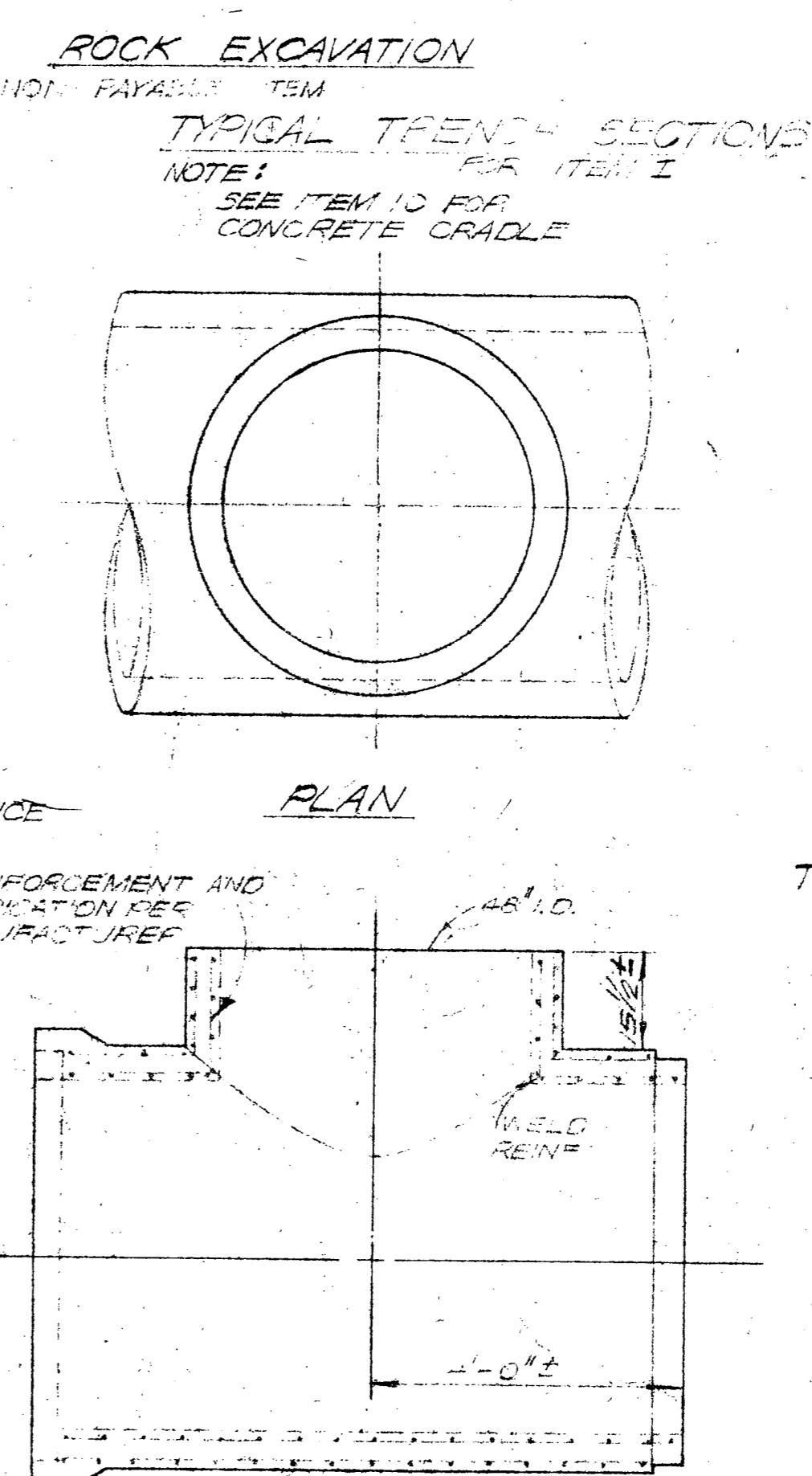
LONGITUDINAL HORIZONTAL SECTION



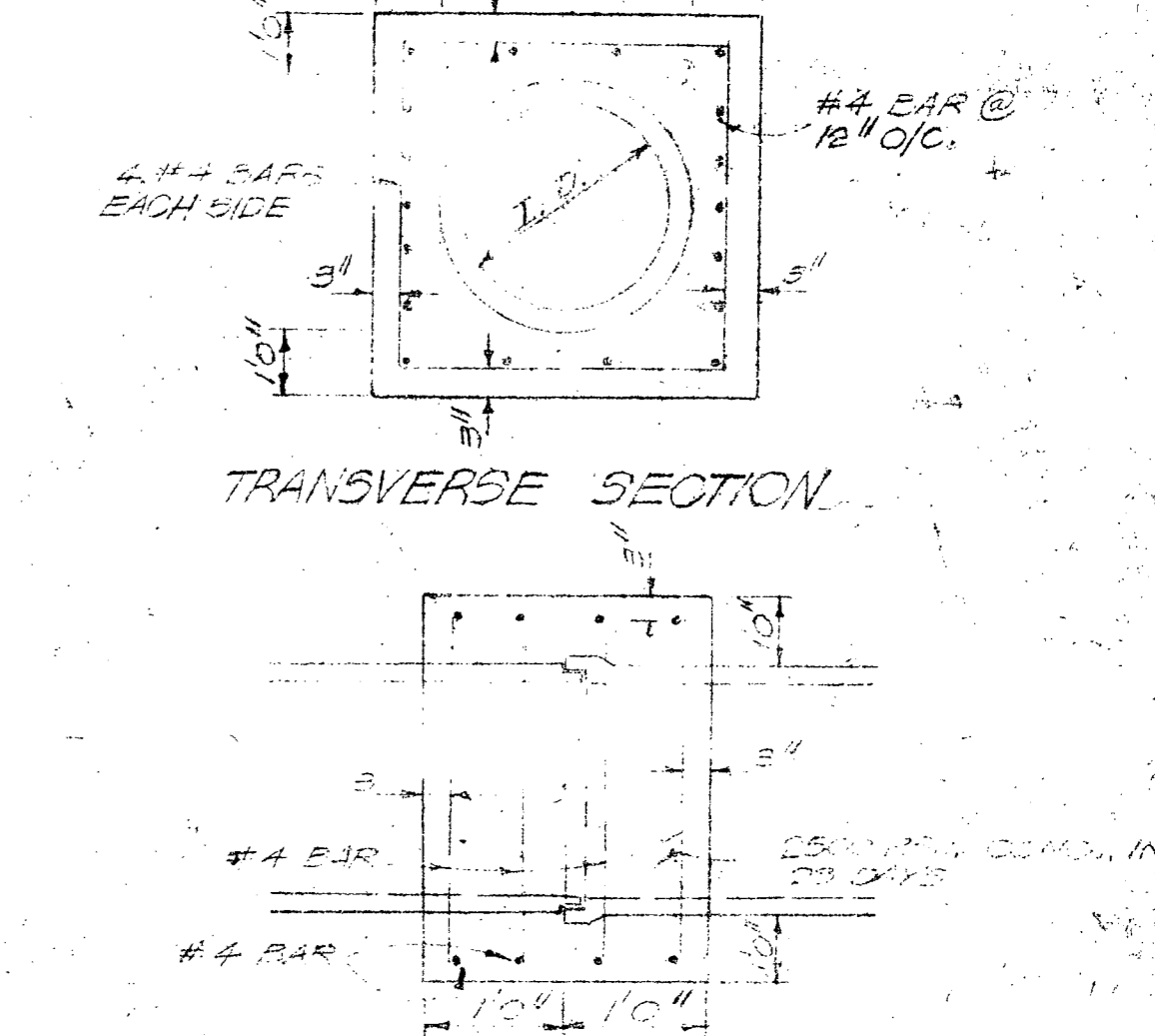
A/B SECTION



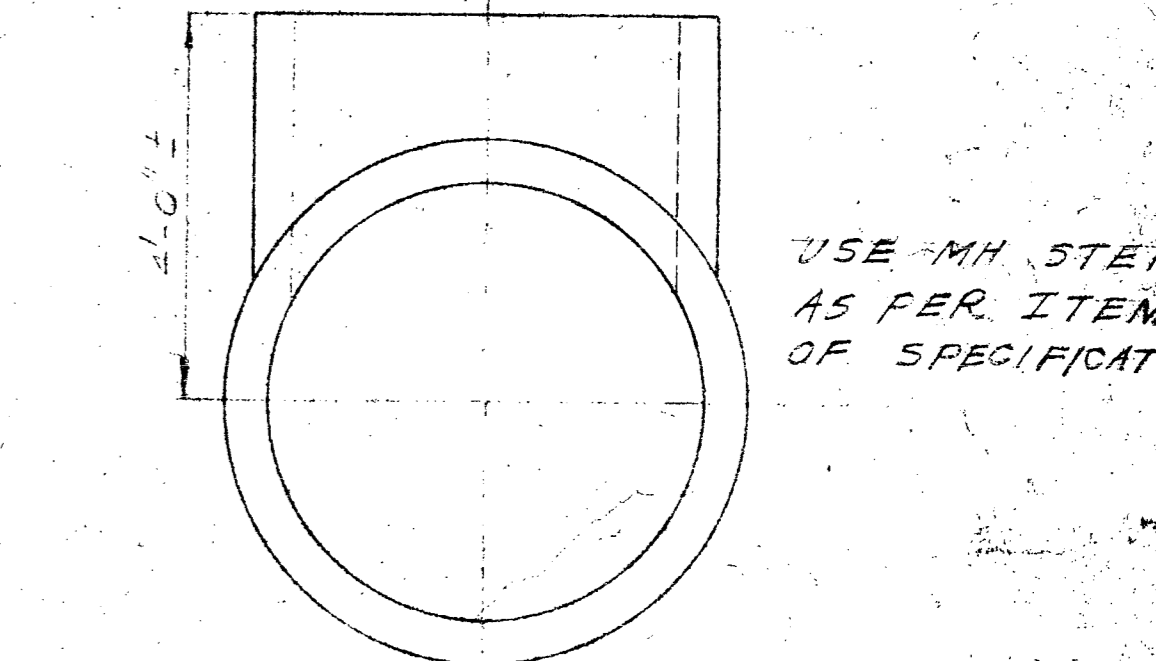
TYPICAL STACK DETAIL



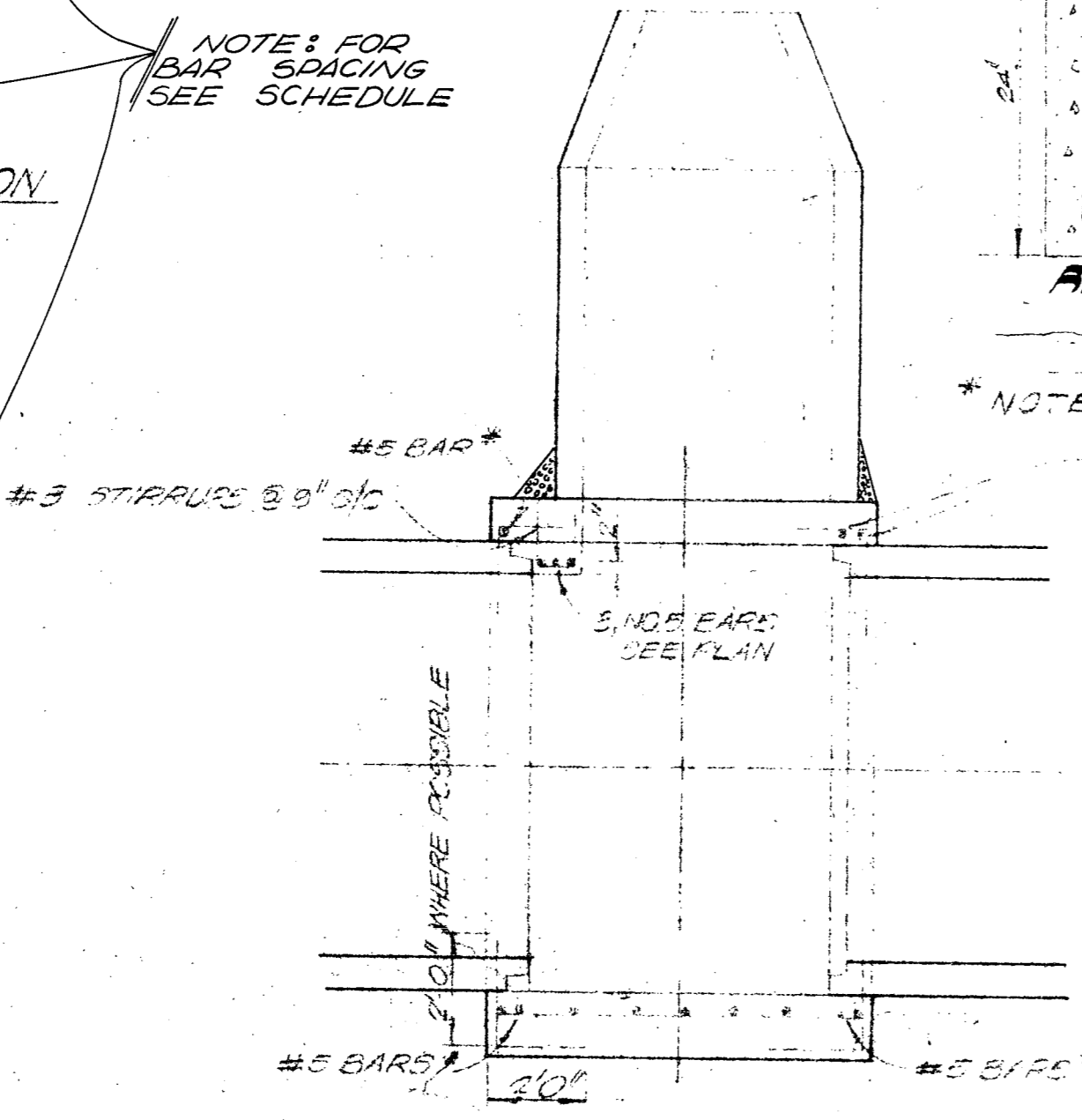
ELEVATION



TYPICAL CONCRETE COLLAR LONGITUDINAL SECTION



SECTION



LONGITUDINAL VERTICAL SECTION

PLAN - FLOOR

REINFORCEMENT SCHEDULE

TYPE	COVER	LONGITUDINAL	TRANSVERSE	VERTICAL	HORIZONTAL
TYPE "A" 6" MANHOLE	0'-10" COVER	#4 @ 9"	#4 @ 9"	#5 @ 9"	#5 @ 9"
	0'-12" COVER	#4 @ 9"	#4 @ 9"	#5 @ 9"	#5 @ 9"
	10'-20" COVER	#4 @ 9"	#4 @ 9"	#5 @ 9"	#5 @ 9"
TYPE "B" 6" MANHOLE	0'-10" COVER	#4 @ 9"	#4 @ 9"	#5 @ 9"	#5 @ 9"
	0'-12" COVER	#4 @ 9"	#4 @ 9"	#5 @ 9"	#5 @ 9"
	10'-20" COVER	#4 @ 9"	#4 @ 9"	#5 @ 9"	#5 @ 9"

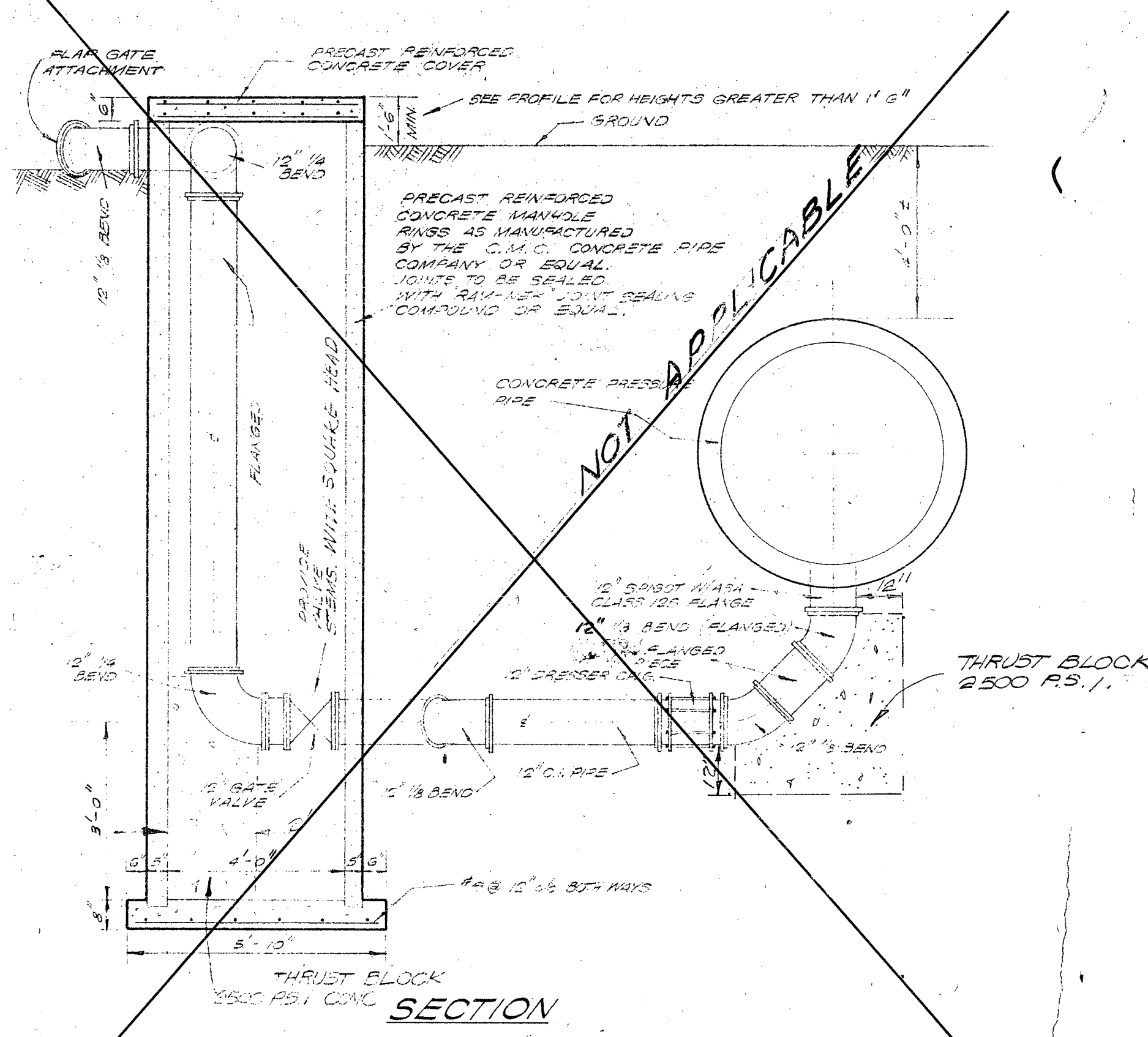
NOTE: CONTRACTOR HAS OPTION OF USING 12" DIAMETER PIPE FOR "RISER" TO WITHIN 6' OF SURFACE THEN TAPER TO 6" OR 8"

City of San Antonio
 Department of Public Works
 Salado Outfall Sanitary Sewer

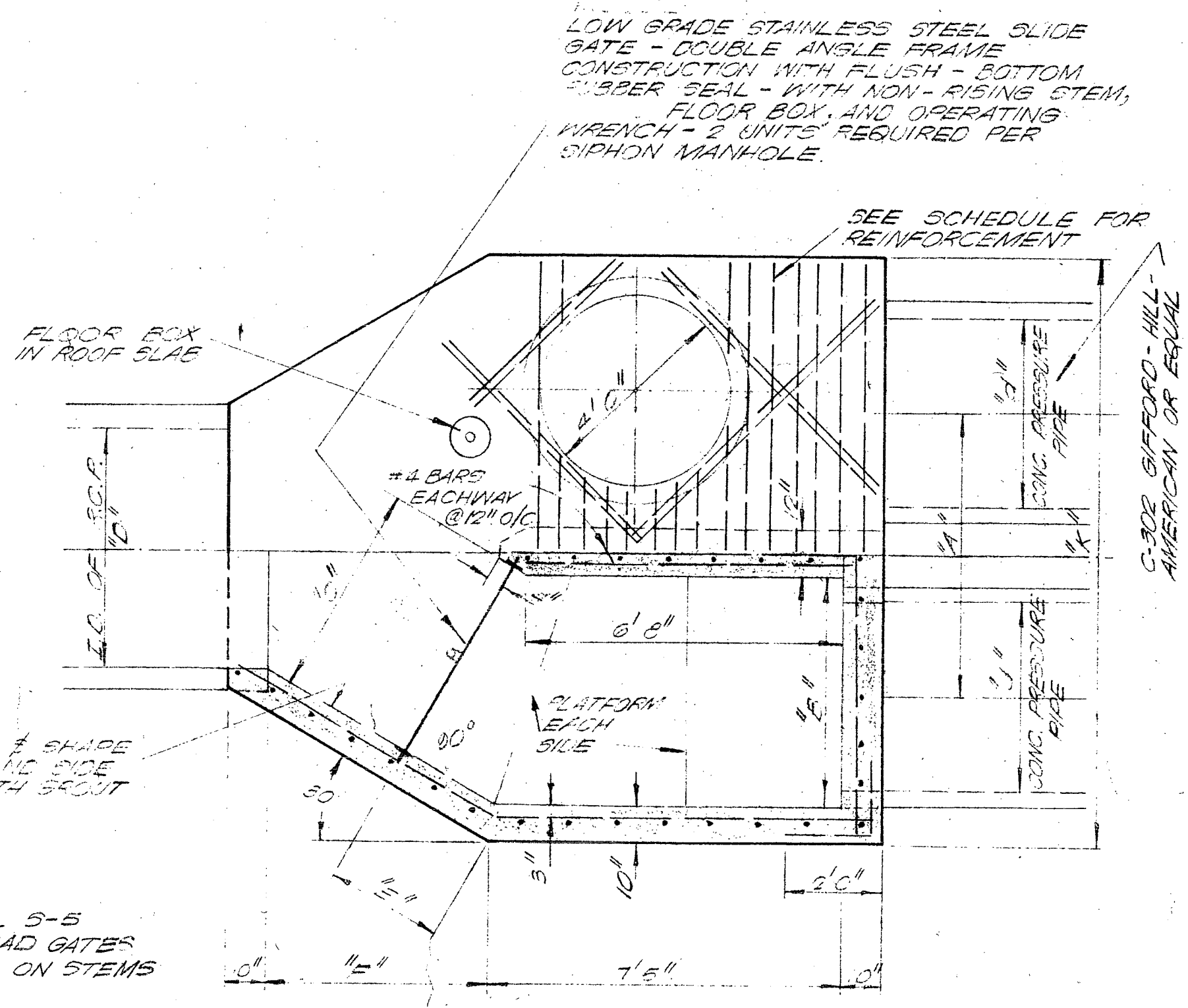
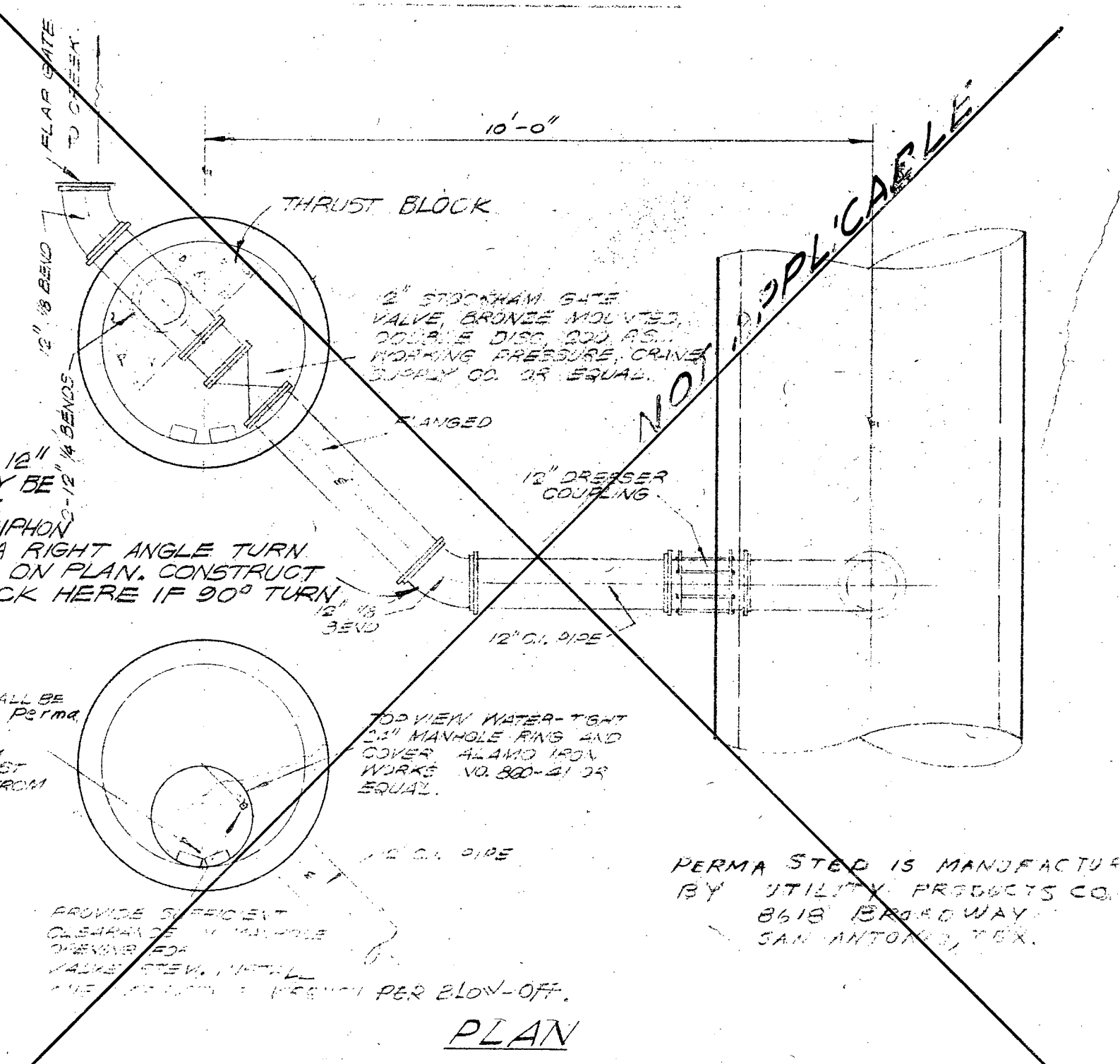
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 1829 W. HILDEBRAND
 SAN ANTONIO, TEXAS

3569 SP 27

Siphon 45761



NOTE: ALL PIPE AND FITTINGS TO HAVE FLANGED JOINTS.



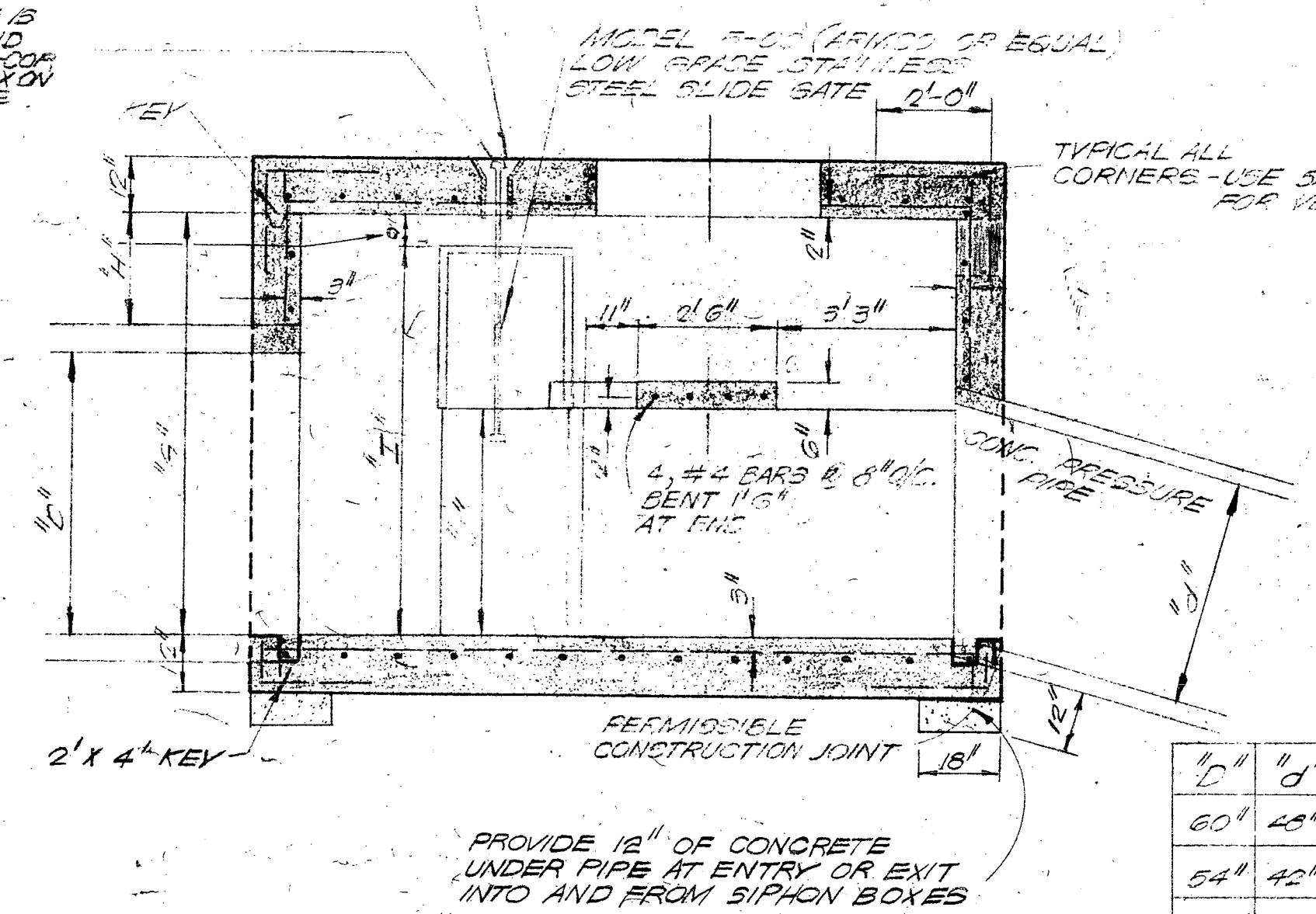
USE HYDRAFLO MODEL S-5 DOUBLE ANGLE HEAD GATES WITH SQUARE HEAD ON STEMS

NOTE:

WHERE GROUND SURFACE IS ABOVE FINISH FLOOR SLAB TO BE SET IN 1" THICK 2" x 4" KEY CONCRETE SLAB FLUSH WITH NATURAL GROUND

NOTE:

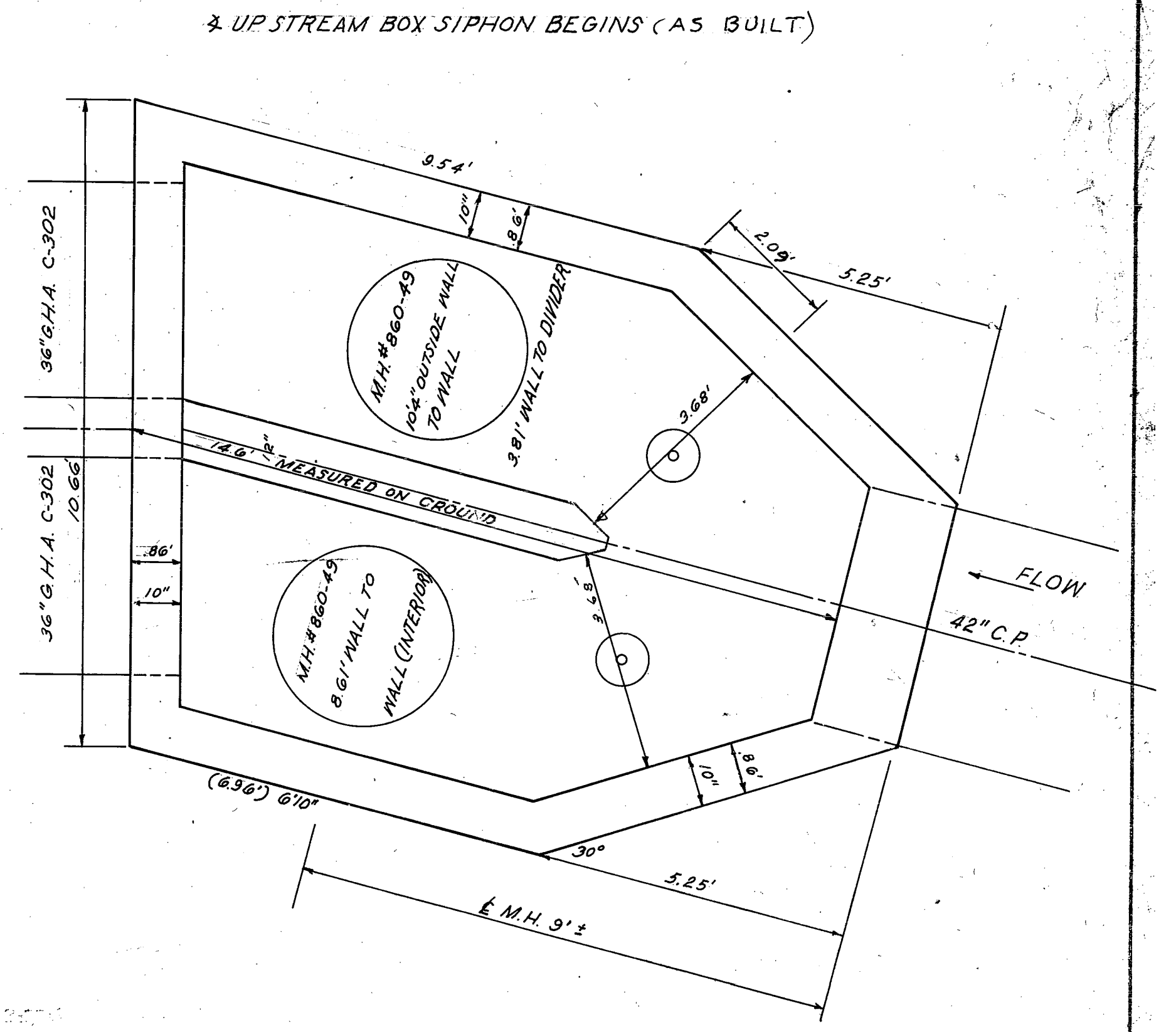
WHERE GROUND SURFACE IS ABOVE ROOF SLAB EXTEND GATE STEMS THROUGH ROOF COVERING TO FLOOR BOX ON TOP OF GROUND SURFACE



SIPHON BOX DETAILS

SCALE: 3/8" = 1'-0"

STANDARD PRECAST CONCRETE MANHOLE TO SURFACE WHERE SHOWN ON THE PROFILE. SUBSTITUTE ALUMINUM IRON WICKS NO. 800-40 IN STRUCTURES WHERE MANHOLE RISER IS NOT USED. MANHOLE RISERS PAYABLE AS EXTRA MANHOLE DEPTH.



REINFORCEMENT SCHEDULE

	0'-5" COVER	5'-10" COVER	10'-15" COVER
FLOOR: LONGITUDINAL	#5 @ 12"	#5 @ 12"	#5 @ 12"
FLOOR: TRANSVERSE	#5 @ 12"	#5 @ 12"	#5 @ 12"
SIDEWALLS: VERTICAL	#5 @ 12"	#5 @ 12"	#5 @ 12"
SIDEWALLS: HORIZONTAL	#5 @ 12"	#5 @ 12"	#5 @ 12"
TOP: LONGITUDINAL	#5 @ 12"	#5 @ 12"	#5 @ 12"
TOP: TRANSVERSE	#5 @ 12"	#5 @ 12"	#5 @ 12"

SIPHON BOX DIMENSIONS

ID	D	A	B	C	E	F	G	H	I	J	K	GATE SIZE	LOCATION
60"	48"	5'10"	4'10"	2'5"	2'5"	4'5"	6'0"	3'3"	0'0"	2'0"	2'0"	4'2 1/2" x 4'0"	SIPHON NO. 1, 2 AND 3
54"	42"	5'4"	4'4"	2'5"	2'5"	4'5"	6'0"	3'3"	0'0"	2'0"	2'0"	4'0 1/2" x 3'6"	SIPHON NO. 4 (INTAKE M.H.) NO. 5
48"	42"	5'4"	4'4"	2'5"	2'5"	4'5"	6'0"	3'3"	0'0"	2'0"	2'0"	4'0 1/2" x 3'6"	SIPHON NO. 4 (DISCHARGE M.H.)
48"	50"	6'2"	4'1/2"	3'10"	2'2"	4'5"	7'5"	2'10"	5'6"	3'5"	0'11"	3'10" x 3'3"	SIPHON NO. 9 & SIPHON NO. 11
48"	33"	5'2"	4'1/2"	---	---	---	---	---	---	---	---	2'1 1/2" x 3'3"	SIPHON NO. 10 (DISCHARGE M.H.)
42"	36"	4'11"	3'10"	2'0"	2'0"	4'5"	6'0"	3'3"	0'0"	2'0"	2'0"	3'7" x 3'0"	SIPHON NO. 12
48"	39"	5'2"	4'1/2"	3'10"	2'2"	4'5"	7'0"	2'7"	6'2"	3'3"	0'11"	3'10" x 3'3"	SIPHON NO. 10 ONLY

NOTES:
GATE SIZE FOR SIPHON NO. 3 (DISCHARGE M.H.) WILL BE 4'1 1/2" x 3'3"
GATE SIZE DIMENSIONS ARE CLEAR OPENING DIMENSIONS

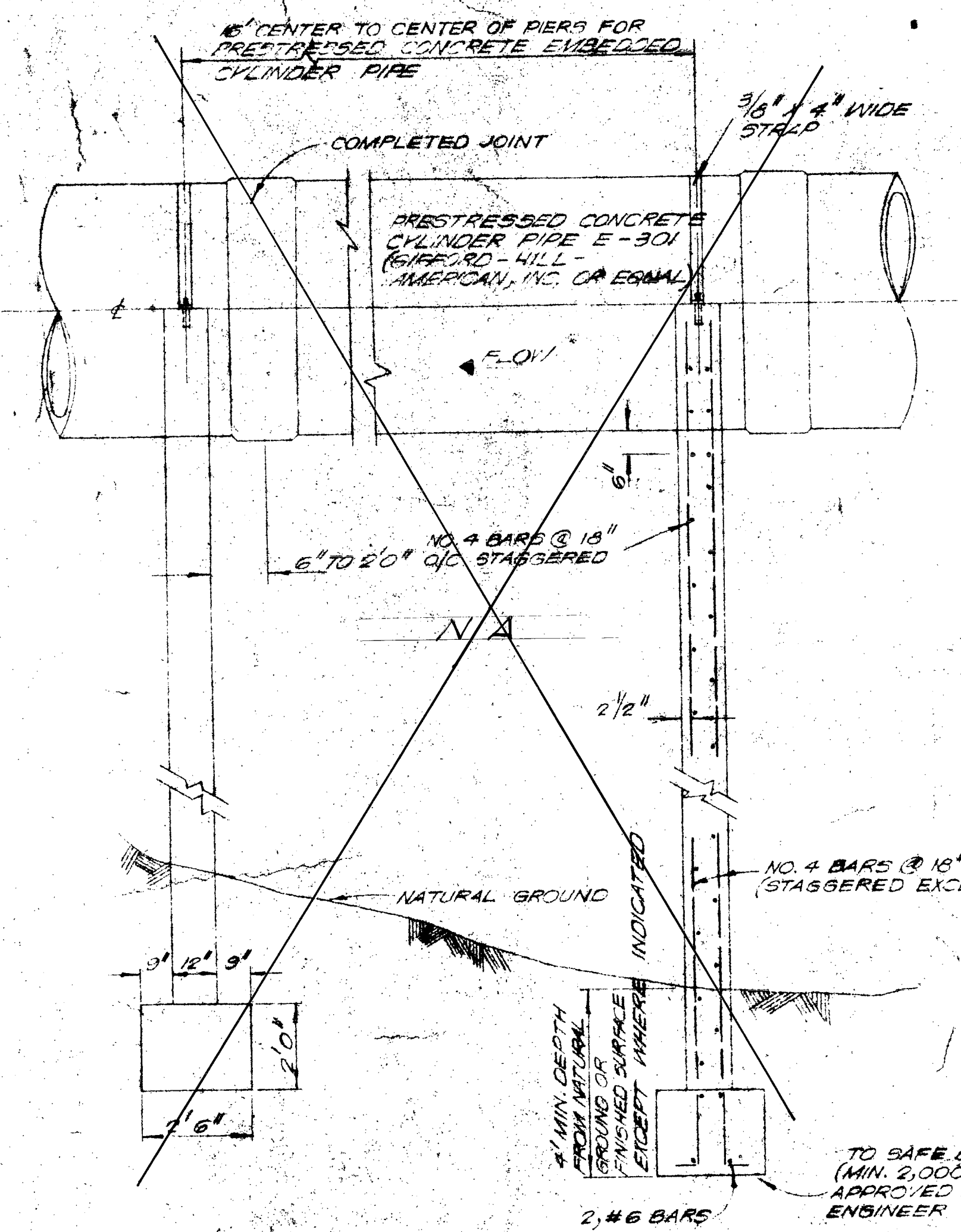
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DEPARTMENT OF PUBLIC WORKS
SALADO OUTFALL SANITARY SEWER

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1039 W. HILDEBRAND
SAN ANTONIO, TEXAS

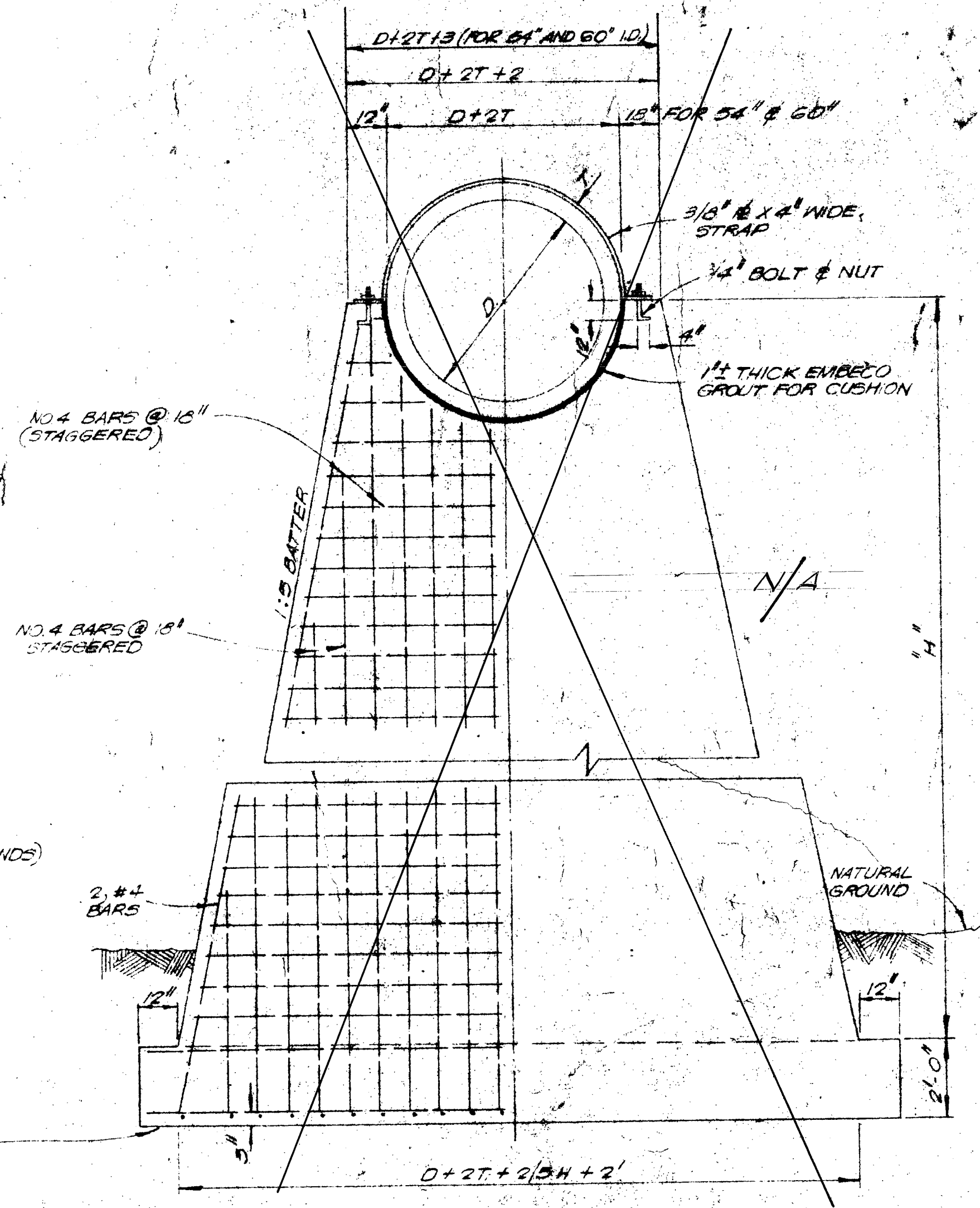
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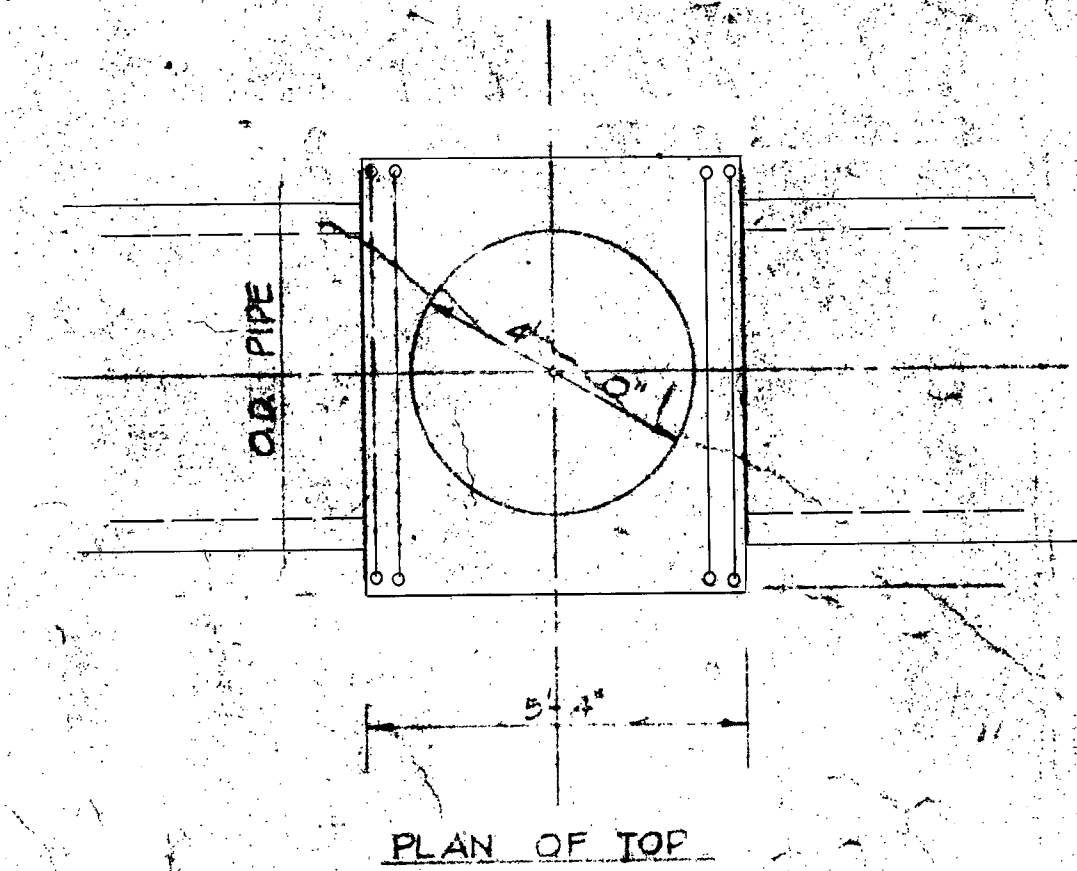
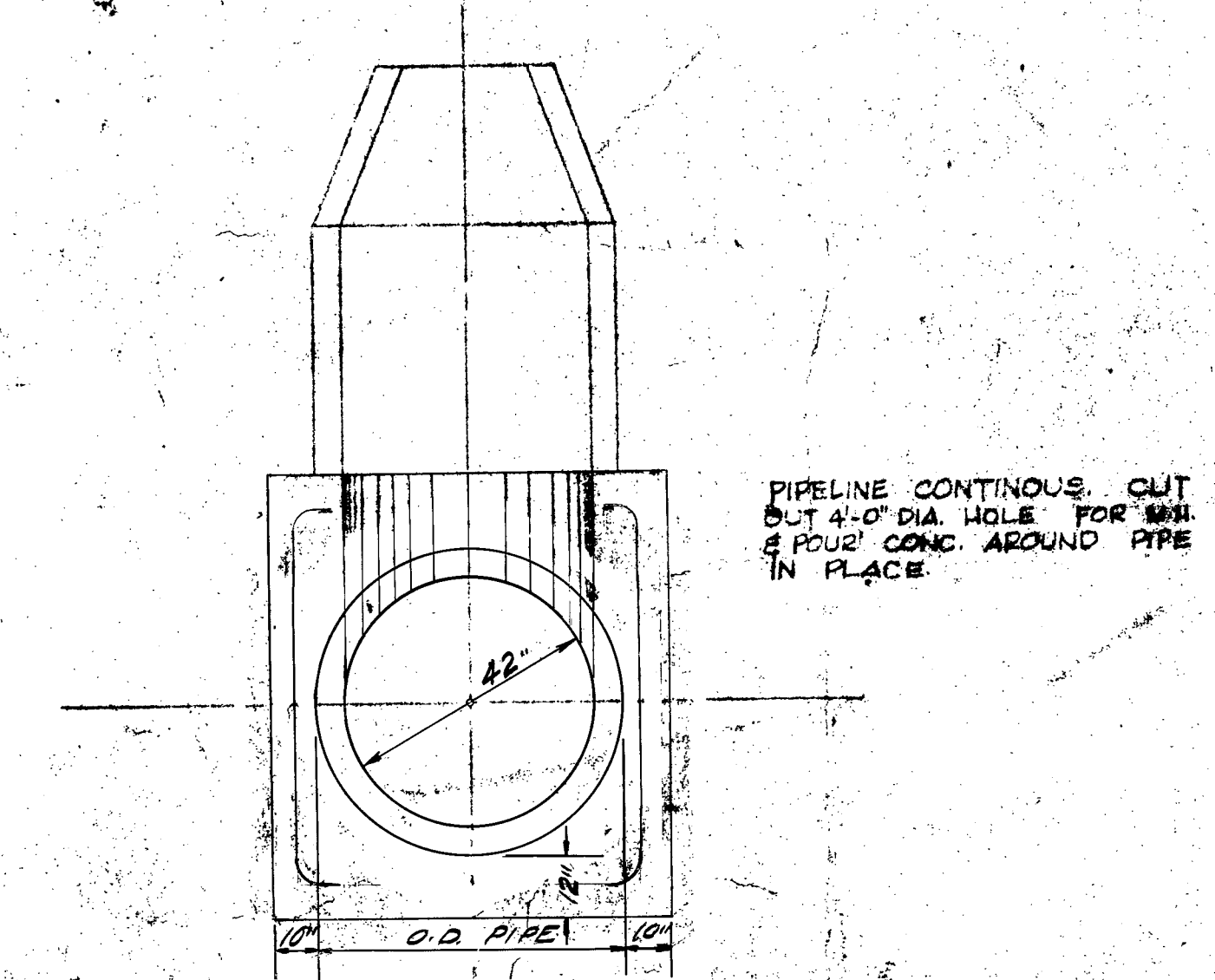
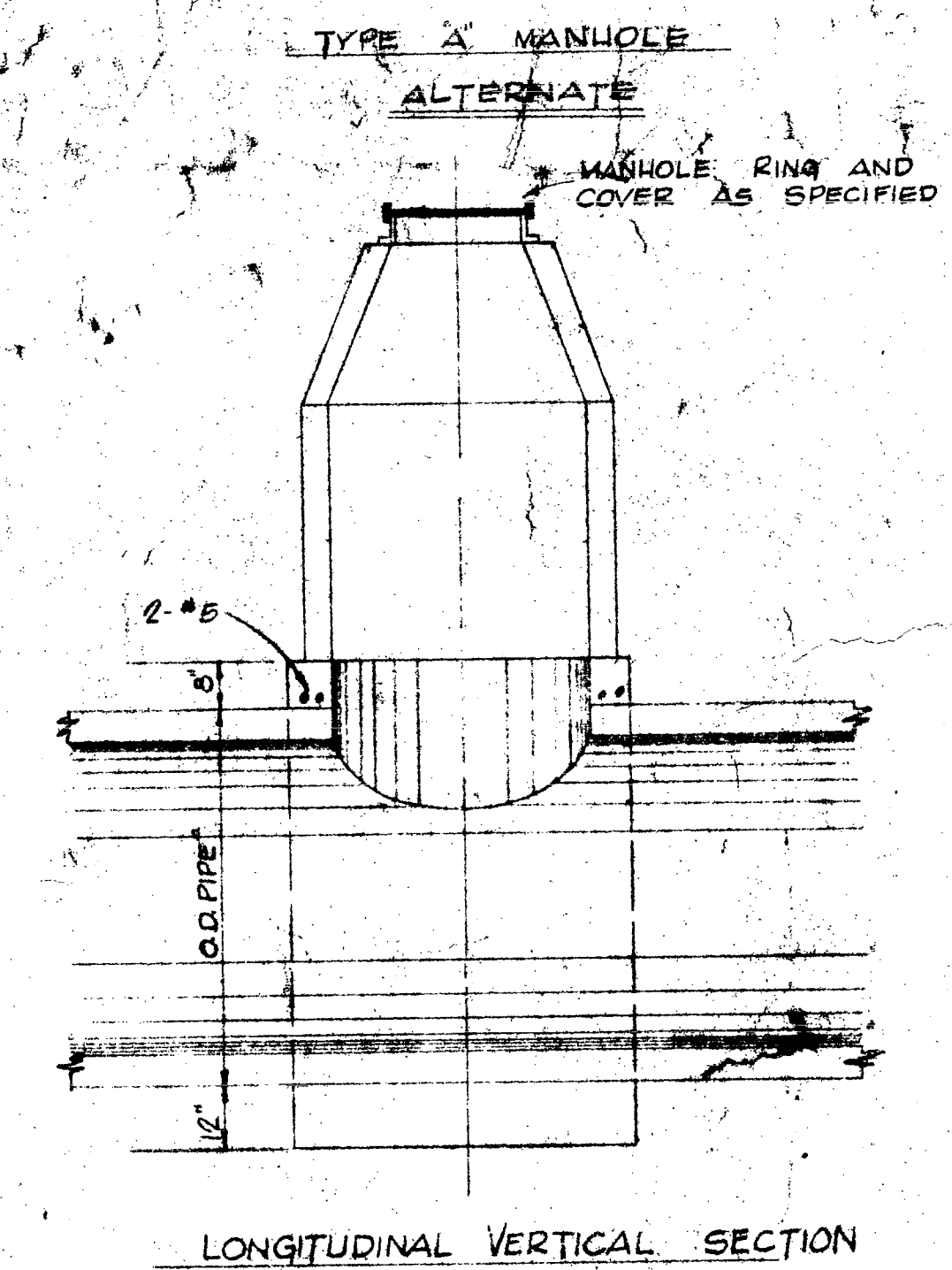
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ELEVATION



END ELEVATION



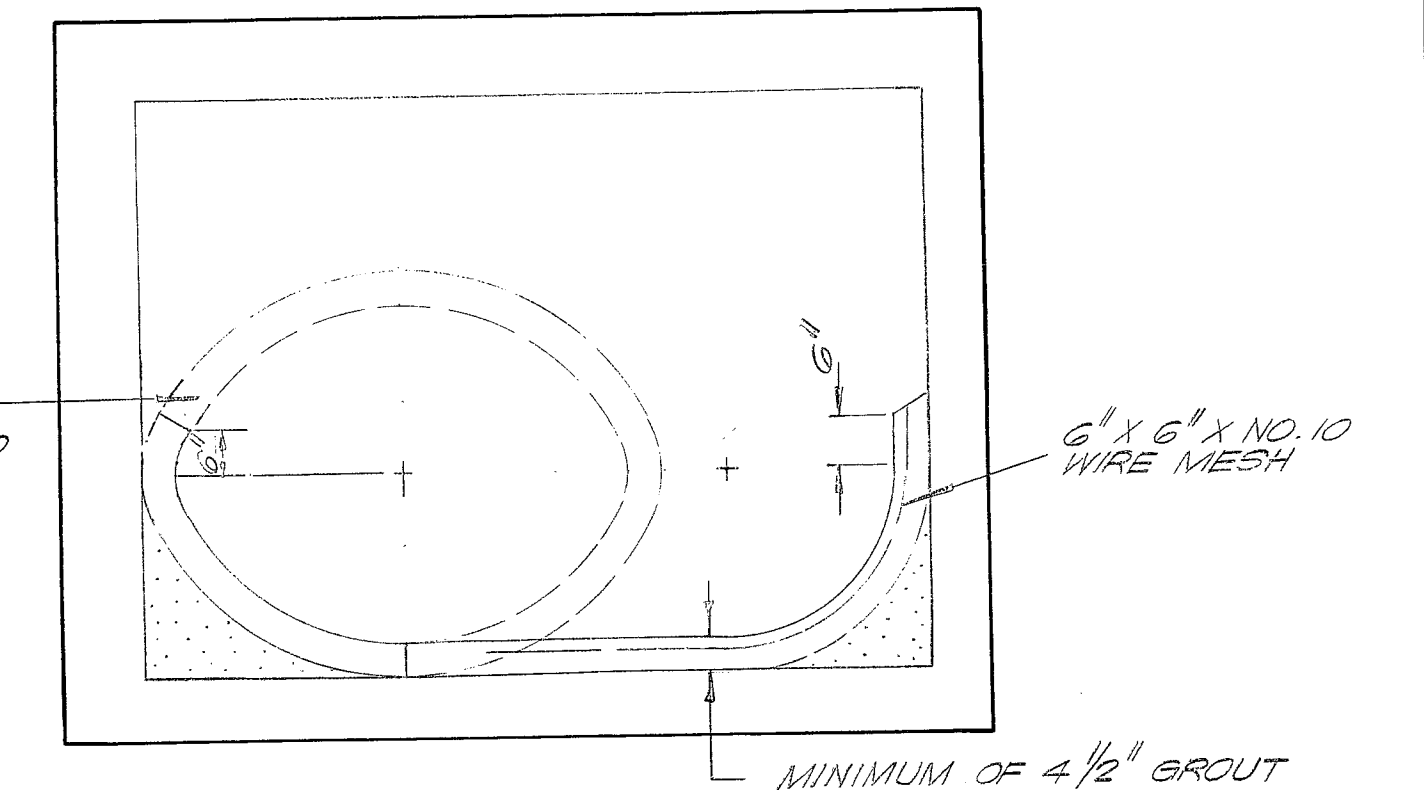
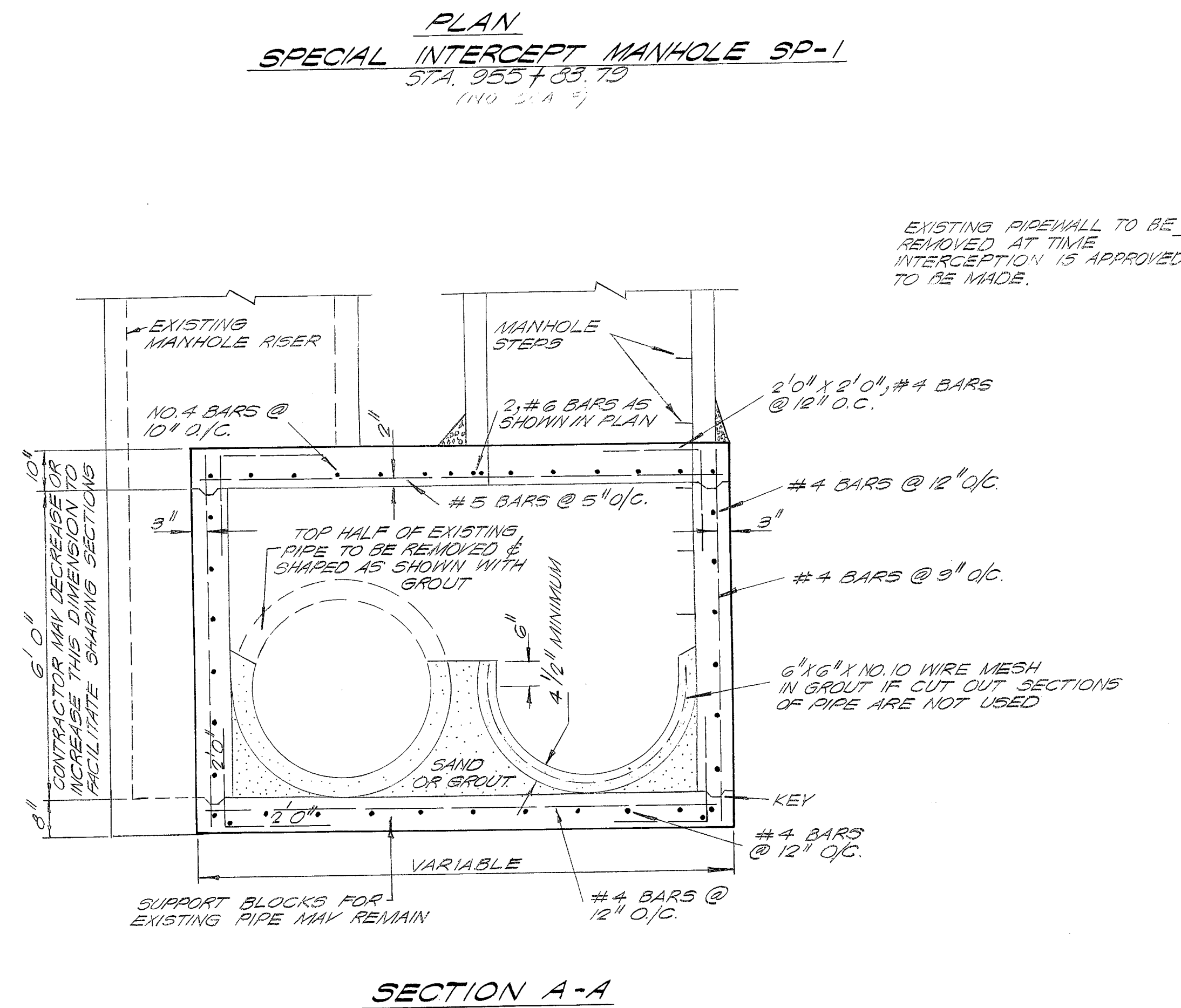
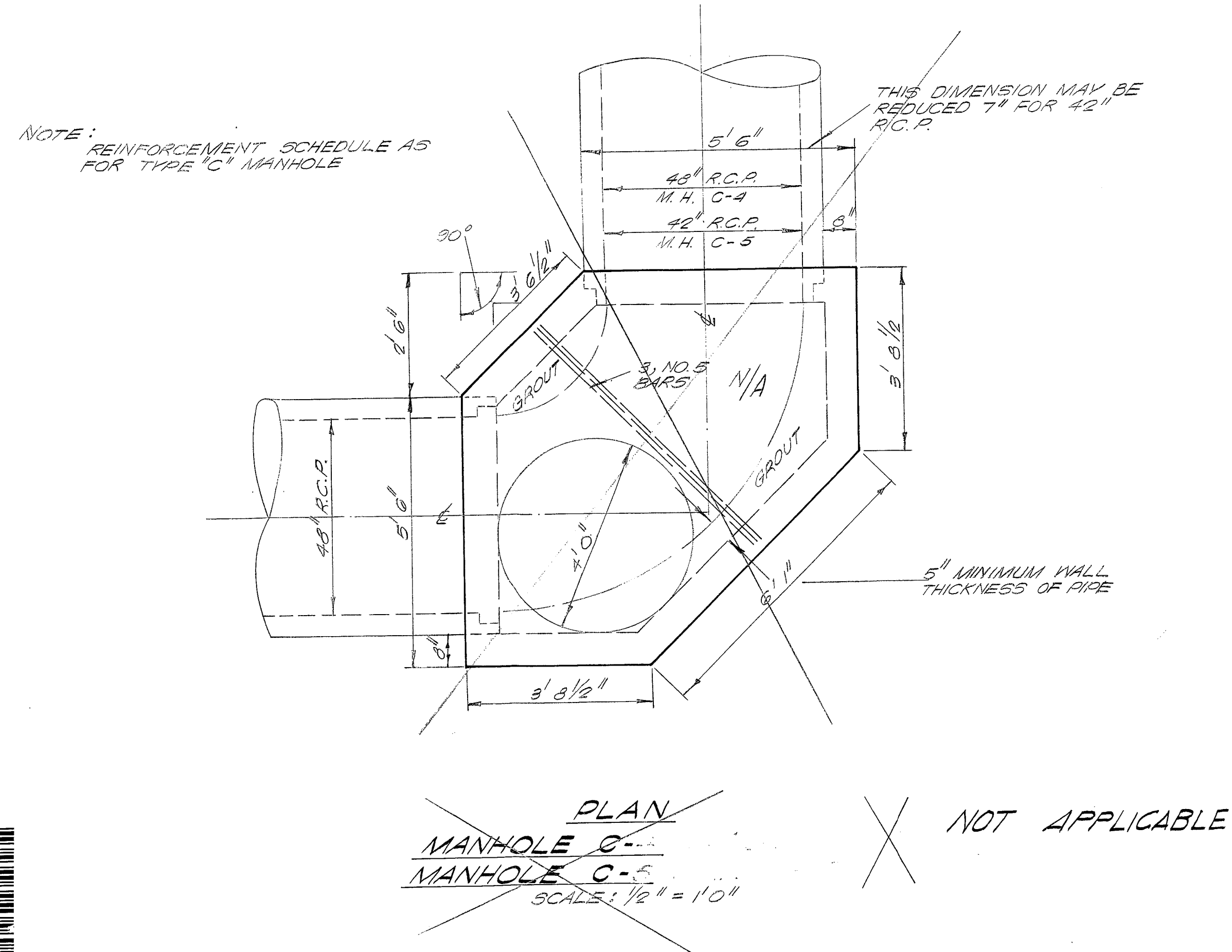
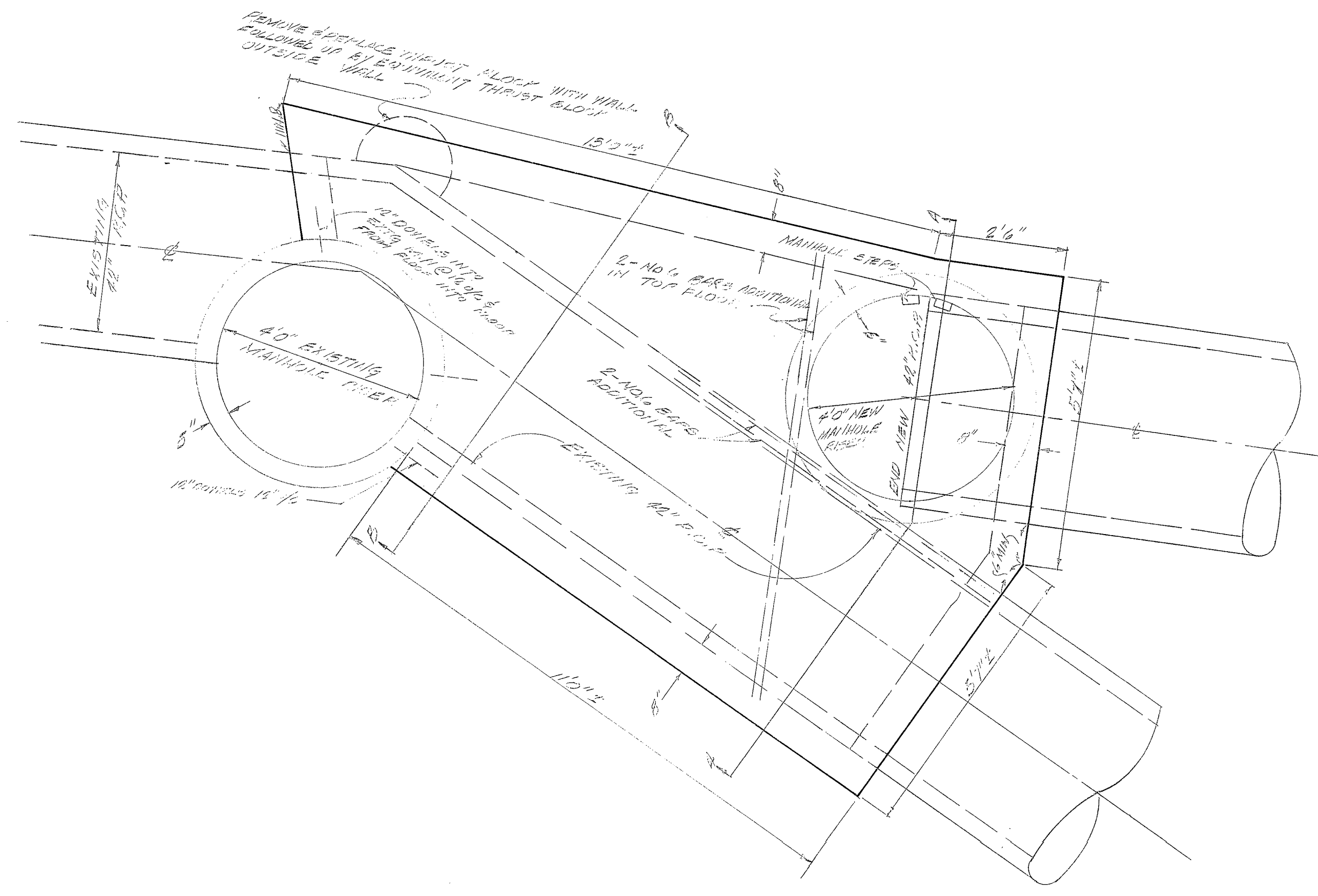
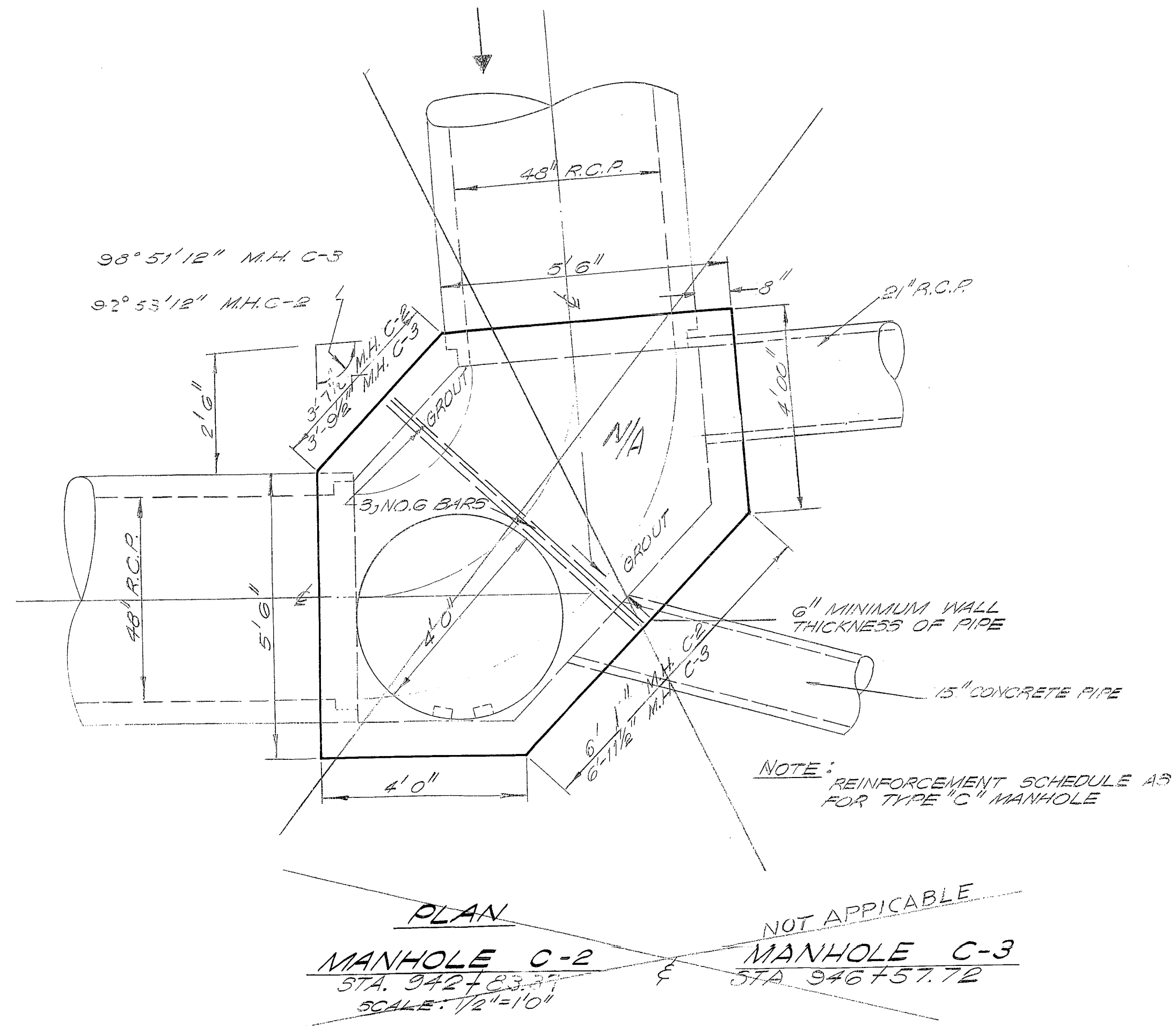
ALTERNATE LINE MANHOLE
42" I.D. PIPE
SCALE: 3/8" = 1'-0"

Siphon 45761

Spec. 6

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DESIGN	DATE	W. F. CASTELLA & ASSOCIATES CONSULTING ENGINEERS 1039 W. MILBURN SAN ANTONIO, TEXAS	JOB NO. 155 OF 18
DRAWN			
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REVISED DIMENSIONS & ANGLE OF ENTRY 11/10/73

CITY OF SAN ANTONIO
DEPARTMENT OF PUBLIC WORKS
SALADO OUTFALL SANITARY SEWER

W. F. CASTELLA & ASSOCIATES
CONSULTING ENGINEERS
1039 W. HILDEBRAND
SAN ANTONIO, TEXAS

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