

# S.W.S. 245

## STORM SEWER IMPROVEMENTS AT CENTRAL AND WOODLAWN

PROJECT NO.

458-76-245-81242-000-000-001

### General Notes

- Contractor is to contact the utility companies for field location and any relocation of existing lines.
- At least one lane of traffic is to be maintained in each direction on Central Ave. during the construction period.
- Standard Type I inlets are to be constructed on Central Ave. Standard Type I-A inlets are to be constructed on Woodlawn Ave.
- The contractor shall be responsible for preserving property irons. The contractor shall be required to re-establish any property irons which are destroyed or damaged by his construction operations. Such irons shall re-established by a licensed land surveyor or a professional engineer in accordance with state laws.
- A City Standard Benchmark at the northwest corner of Central and Woodlawn will need to be re-established. The City of Wichita shall be responsible for the relocation.
- The contractor will be required to work 6-10 hour days a week on this project.
- During the construction period of the project, no more than one driveway shall be closed to traffic at any time. Once a driveway is closed, the contractor is encouraged to install the sewer and replace the temporary asphalt as expeditiously as possible in order to open the drive to traffic again.
- Any driveway removed is to be replaced with a 6" temporary asphalt material. Concrete sidewalk removed is to be replaced only where indicated so on the plans.
- Any pavement removed is to be replaced with 8" reinforced concrete pavement unless noted otherwise on the plans. Reinforcement shall be with wire mesh (6x12 - w6/w4) woven wire fabric. Key joint and No. 4 tie bars shall be constructed at the outer edge along the new pavement sections on the north side of Central. All steel reinforcing shall be considered as incidental to the 8" Concrete Pavement bid item. The new pavement construction shall replace the removed pavement at the same width, location, and elevation, except that temporary asphalt curbing shall be constructed along the north side of Central. Monolithic concrete curbing shall be constructed along the south side of Central. All curbing (temporary asphalt and monolithic) shall be incidental to the 8" Concrete Pavement bid item.
- The new concrete pavement joints shall match the existing joints in the existing concrete pavement on Central. Existing steel bars extending from the existing pavement at the removal lines are to be utilized to connect the new pavement construction to the old pavement wherever possible. Care should be used when removing the concrete in order to leave as many tie bars in place as possible.
- Saw joints shall be cut at all removal limits necessary for driveway and street. The Engineer shall determine the amounts of removal and location of saw joints. Saw joints shall be considered as incidental to the removal items.
- Inlet openings which are not adjacent to existing pavement are to be temporarily bricked shut. Cost of this shall be considered as incidental to the inlets. The pavement contractor will remove the brick and adjust the inlets.
- Pre-cast inlet tops are to be coated with linseed oil on all surfaces prior to placement on the inlets. Concrete is to be air-entrained.
- Type 3 Rip-Rap is to be installed at the outfall structure in Dry Creek and shall have a 2 foot toe wall on all sides. An acceptable alternate to Type 3 Rip-Rap is the 8" Filter Point Revetment Mat. The contractor is to notify the Engineer of any alternate usage.

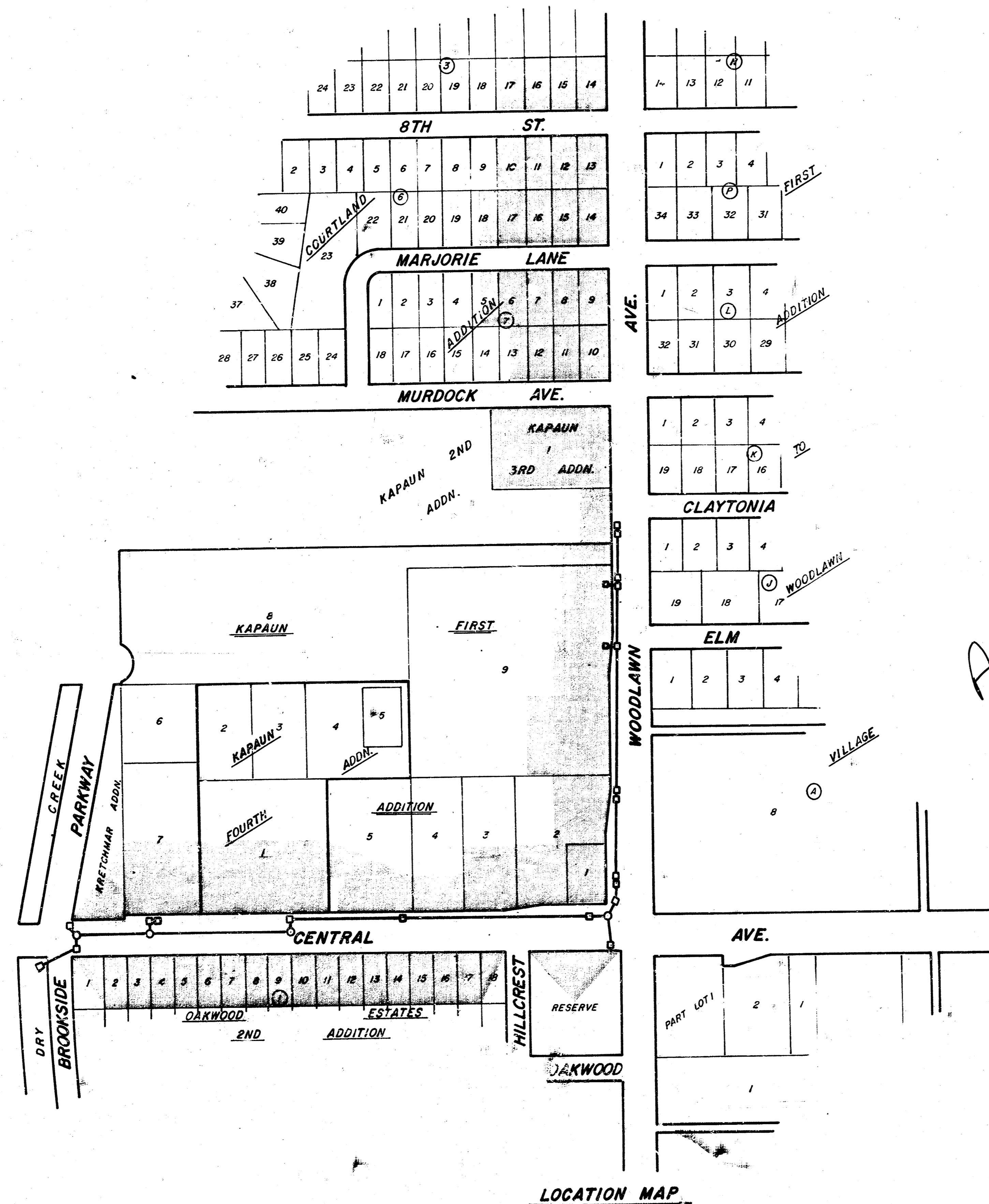
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1	Title Sheet
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7	Headwall Detail
8	Manhole Dimension
9	Manhole Detail
10	Type 1 Inlet Detail
11	Type 1A Inlet Detail
12	Drop Inlet Detail



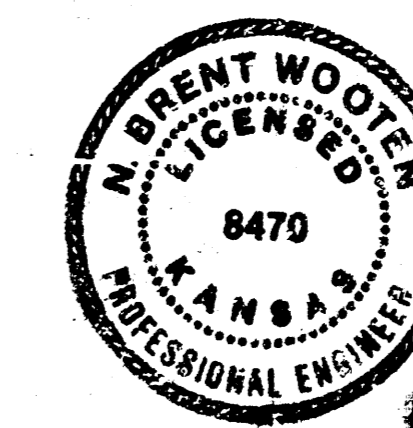
### Symbols

	Indicates Water Line
	Indicates SW Bell UG Line
	Indicates Gas Service Line
	Indicates KGE UG Line
	Indicates Saw Cut Joint
	Indicates Removal of Pavement, Driveway, or Sidewalk.
	Indicates Tree Removal.



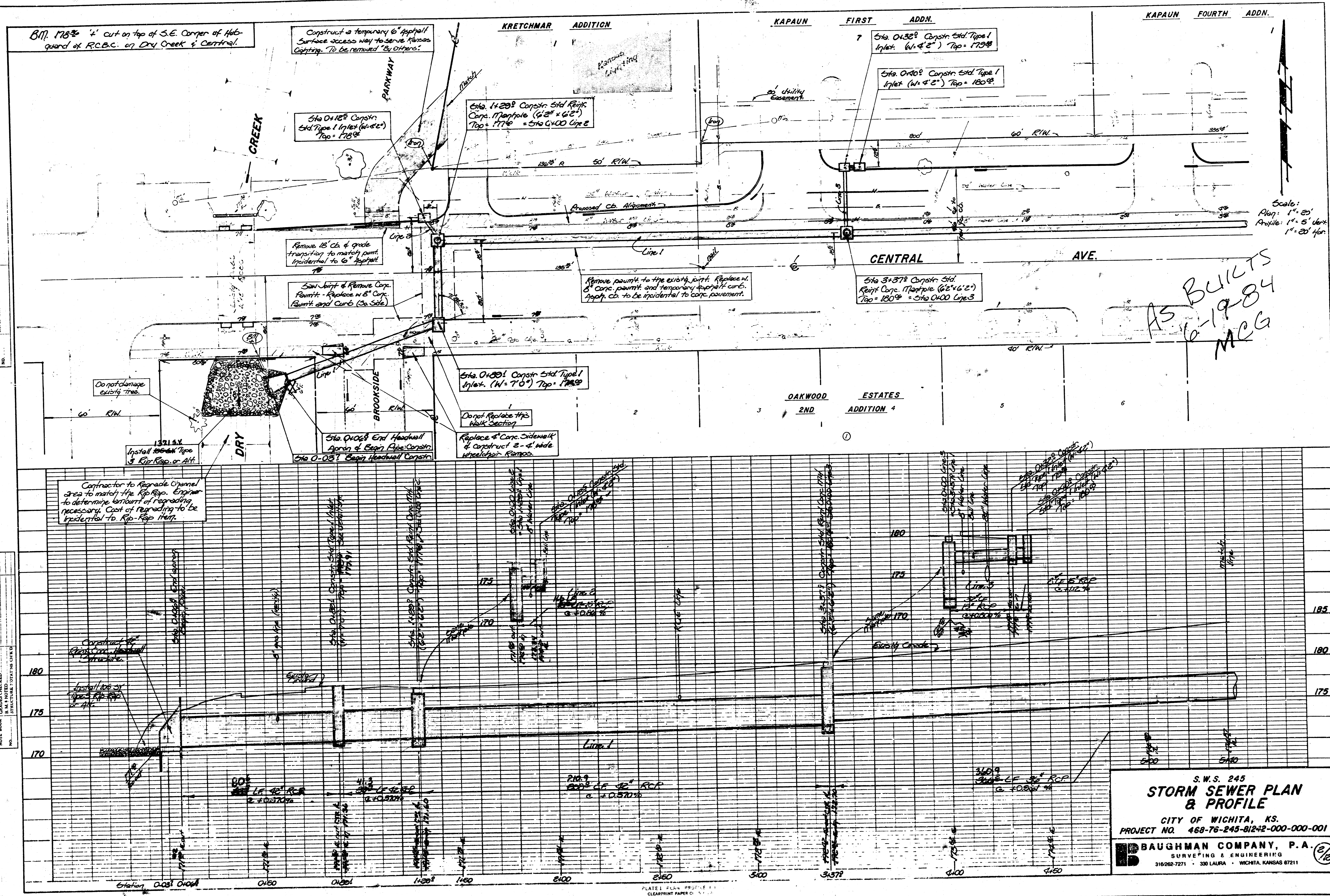
CITY OF WICHITA, KS.

M. E. Lindebak City Engineer



BAUGHMAN COMPANY, P.A.  
SURVEYING & ENGINEERING  
316/263-7271 • 330 LAURA • WICHITA, KANSAS 67211

1/2 1/2



B.M. 175.3' cut on top of S.E. Corner of Hub-guard of R.C.B.C. on Dry Creek & Central.

Construct a temporary 6\"/>

Sta. 0+125 Constr. Std. Type I Inlet (W=4'2\"/>

Sta. 1+200 Constr. Std. Reinfr. Corp. Manhole (6'2\"/>

Sta. 0+380 Constr. Std. Type I Inlet (W=4'2\"/>

Sta. 0+400 Constr. Std. Type I Inlet (W=4'2\"/>

Sta. 3+378 Constr. Std. Reinfr. Corp. Manhole (6'2\"/>

Sta. 0+000 Constr. Std. Type I Inlet (W=7'0\"/>

Sta. 0+000 End Headwall Apron of Basin Pipe Constr. Sta. 0+000 Basin Headwall Constr.

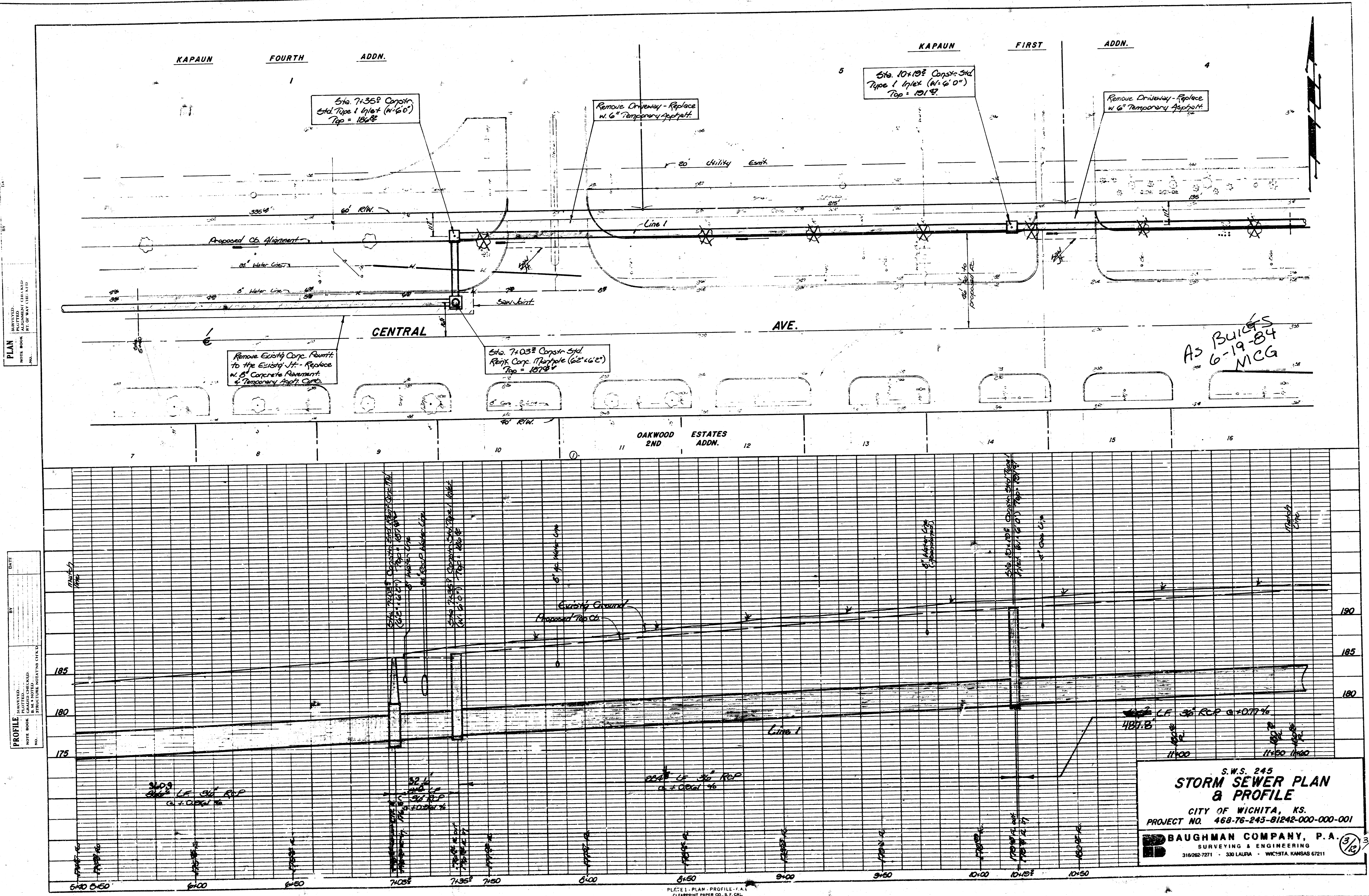
Contractor to Regrade Channel area to match the Rip-Rap. Engineer to determine amount of regrading necessary. Cost of regrading to be incidental to Rip-Rap item.

AS BUILTS  
6-19-84  
MCG

PLAN  
SURVEYED  
ALIGNED  
CHECKED  
DATE  
BY

PROFILE  
CHECKED  
DATE  
BY

S.W.S. 245  
**STORM SEWER PLAN & PROFILE**  
 CITY OF WICHITA, KS.  
 PROJECT NO. 468-76-245-812+2-000-000-001  
**BAUGHMAN COMPANY, P.A.**  
 SURVEYING & ENGINEERING  
 316262-7271 • 330 LAURA • WICHITA, KANSAS 67211



PLAN  
 SURVEYED BY  
 PLOTTED BY  
 CHECKED BY  
 DATE

PROFILE  
 SURVEYED BY  
 PLOTTED BY  
 CHECKED BY  
 DATE

Sta. 7+35.8 Constr. Std. Type 1 Inlet (14" x 60") Top = 186.82

Remove Driveway - Replace w. 6" Temporary Asphalt

Sta. 10+19.8 Constr. Std. Type 1 Inlet (14" x 60") Top = 191.19

Remove Driveway - Replace w. 6" Temporary Asphalt

Remove Exst. Conc. Pavmt. to the Exst. Jt. - Replace w. 8" Concrete Pavement & Temporary Asphalt Curb

Sta. 7+03.8 Constr. Std. Rein. Conc. Manhole (62" x 62") Top = 187.84

As BUILT 6-19-84 MCG

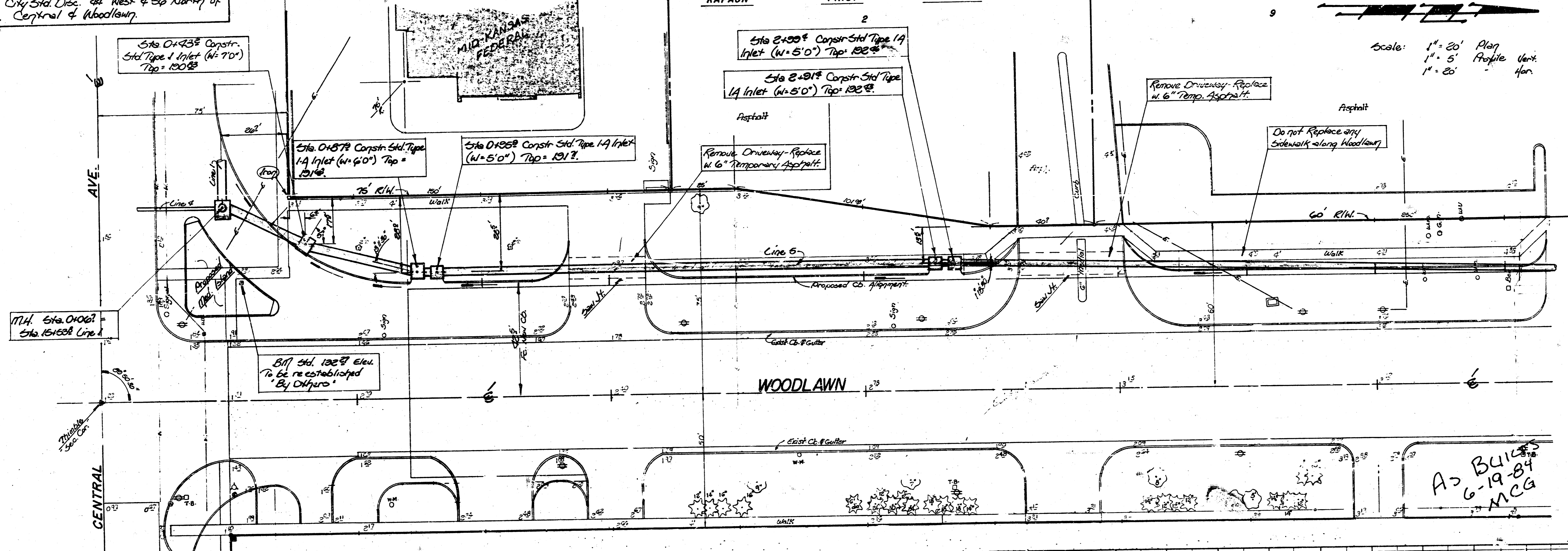
S.W.S. 245  
**STORM SEWER PLAN & PROFILE**  
 CITY OF WICHITA, KS.  
 PROJECT NO. 468-76-245-81242-000-000-001  
 BAUGHMAN COMPANY, P.A.  
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B.M. 1002 City Std. Dec. 44' West of Sp. North of  
 Central & Woodlawn

KAPAUN FIRST ADDITION

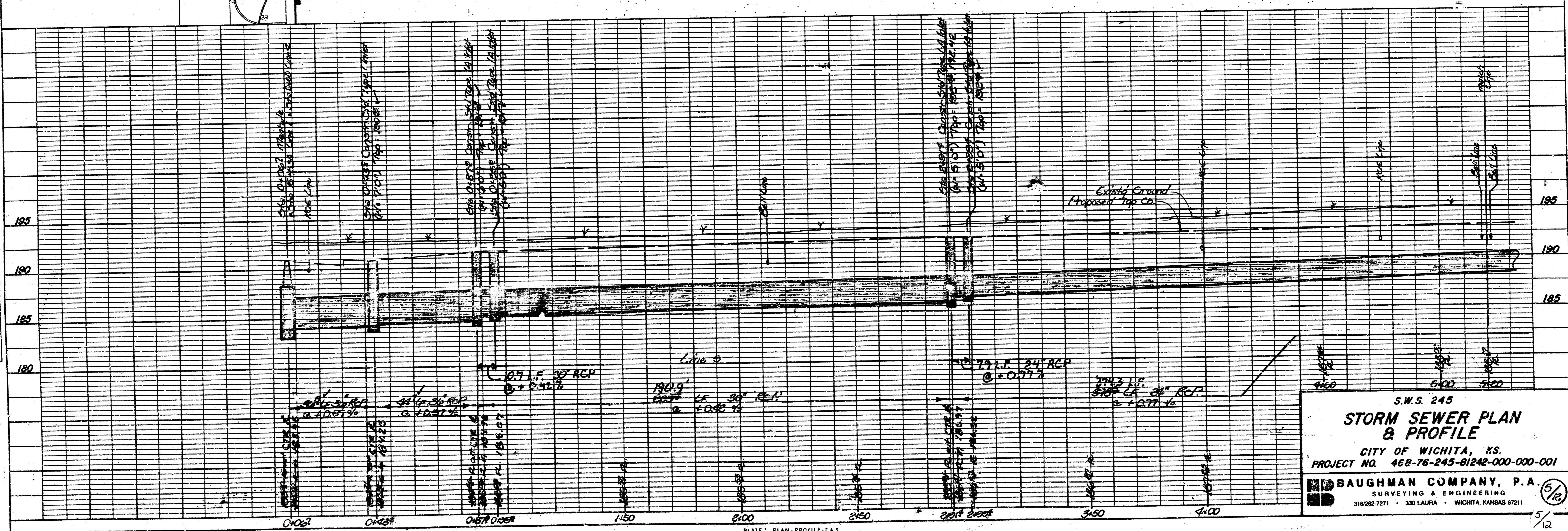
Scale: 1" = 20' Plan  
 1" = 5' Profile Vert.  
 1" = 20' Hor.



A-3 BUILT  
 6-19-84  
 MCG

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 PLOTTED  
 NOTE BOOK  
 ALIGNMENT SHEET NO.  
 STRUCTURE NOTATION SHEET NO.

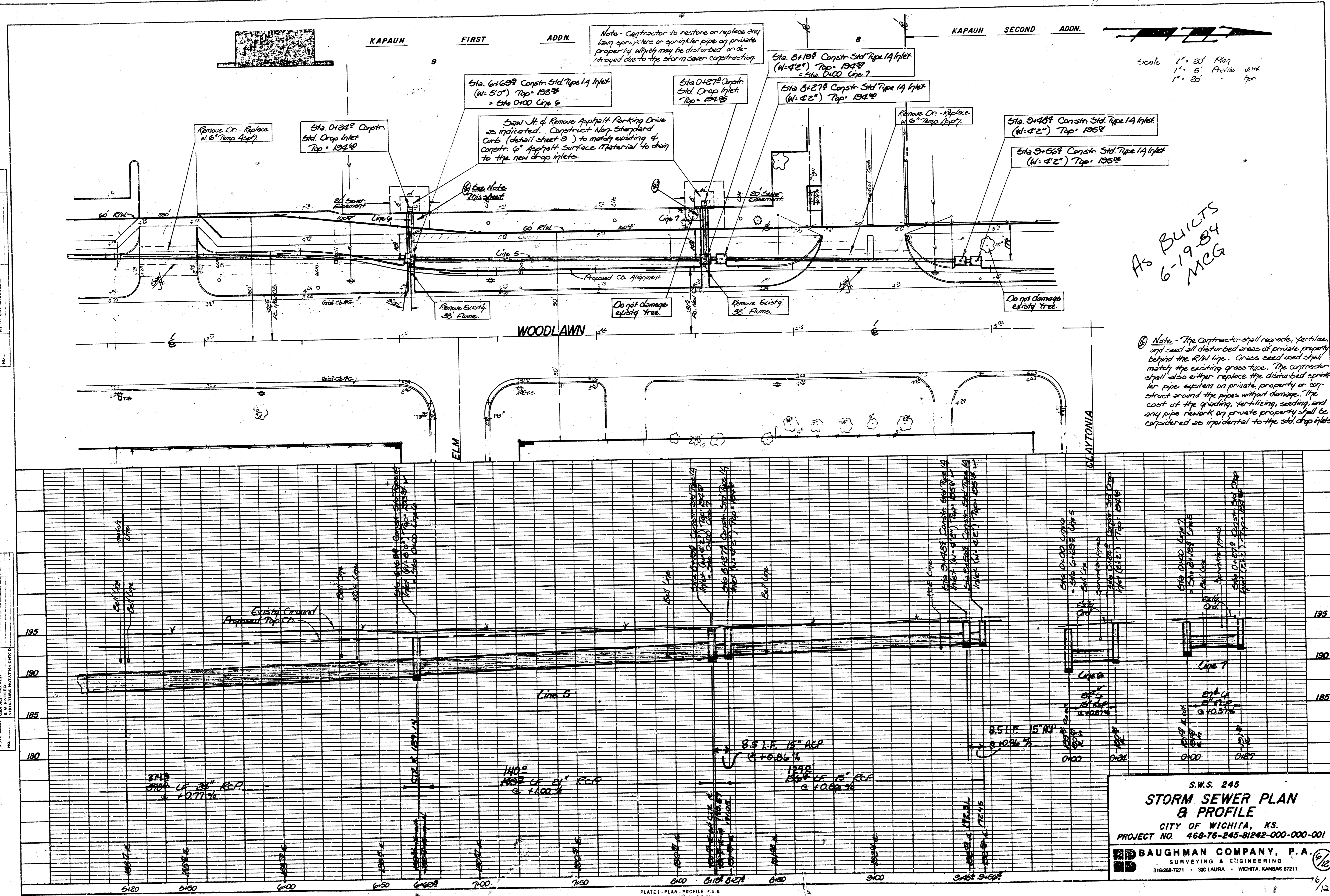
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 SURVEYED  
 PLOTTED  
 NOTE BOOK  
 M.A.P. FORM NO. 1  
 STRUCTURE NOTATION SHEET NO.



S.W.S. 245  
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PLAN  
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 BY: \_\_\_\_\_  
 CHECKED: \_\_\_\_\_  
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PROFILE  
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 BY: \_\_\_\_\_  
 CHECKED: \_\_\_\_\_  
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 TITLE: \_\_\_\_\_  
 SHEET NO. \_\_\_\_\_



Note - Contractor to restore or replace any lawn sprinklers or sprinkler pipe on private property which may be disturbed or destroyed due to the storm sewer construction.

Sta. 6+69.8 Constr. Std. Type 1A Inlet (W=5'0") Top= 193.58' = Sta. 0+00 Line 6

Sta. 0+27.8 Constr. Std. Drop Inlet Top= 194.95'

Sta. 8+19.8 Constr. Std. Type 1A Inlet (W=4'2") Top= 194.57' = Sta. 0+00 Line 7

Sta. 8+27.8 Constr. Std. Type 1A Inlet (W=4'2") Top= 194.40'

Remove Or - Replace w/ 6" Ramp Asphalt?

Sta. 9+48.8 Constr. Std. Type 1A Inlet (W=4'2") Top= 195.58'

Sta. 9+56.8 Constr. Std. Type 1A Inlet (W=4'2") Top= 195.58'

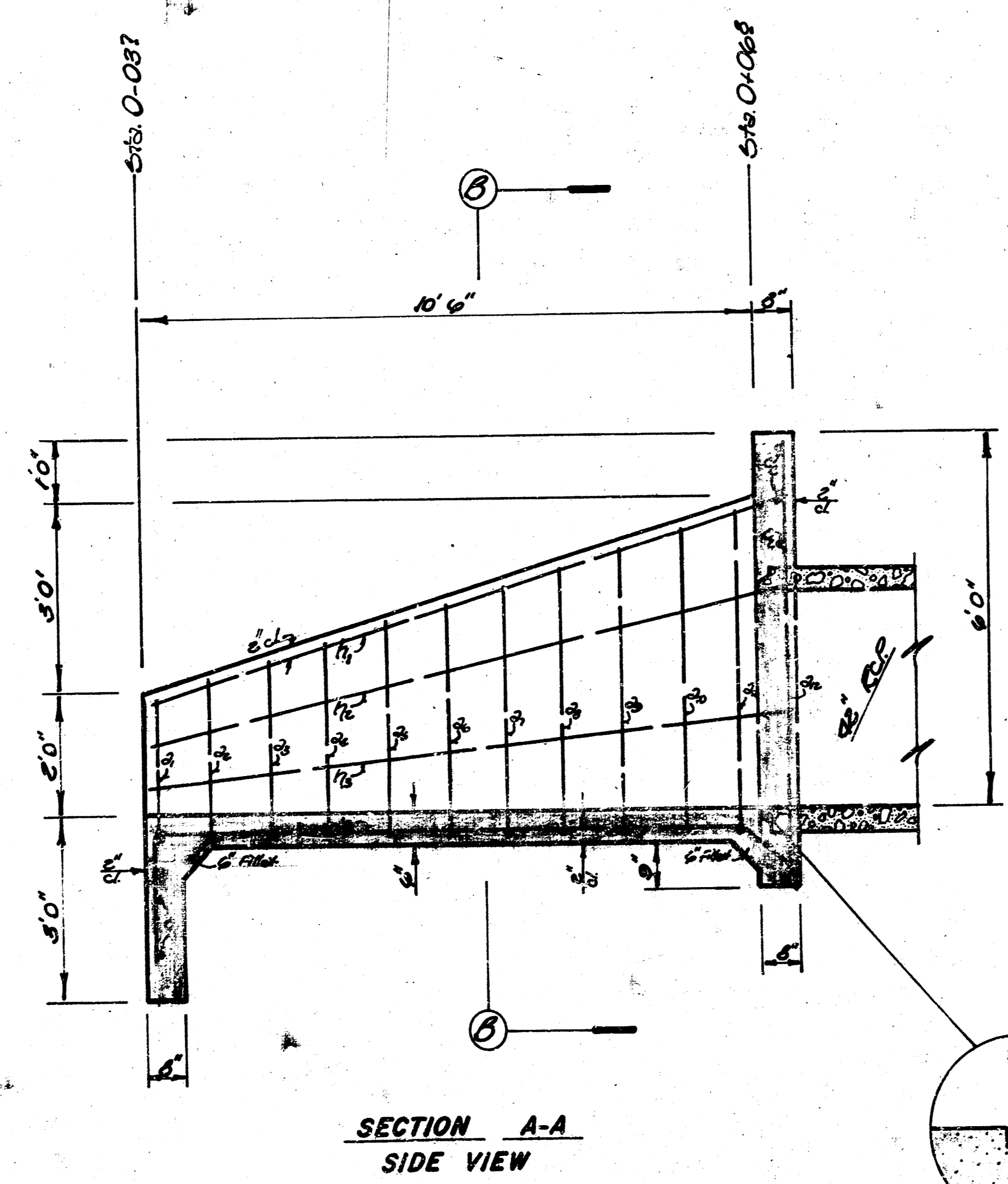
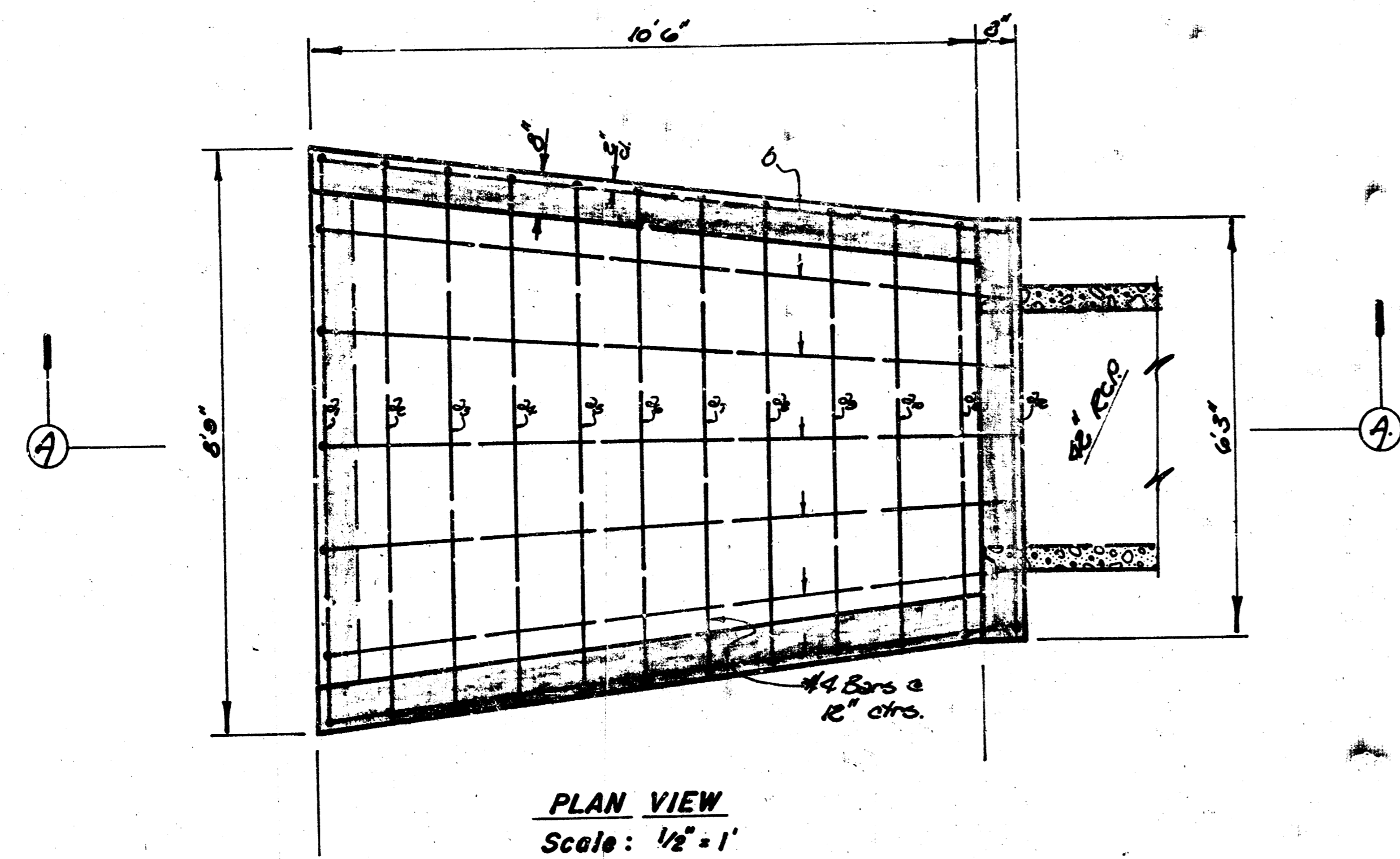
Scale 1" = 20' Plan  
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 1" = 20' Vert.

As BUILT  
 6-19-84  
 MCG

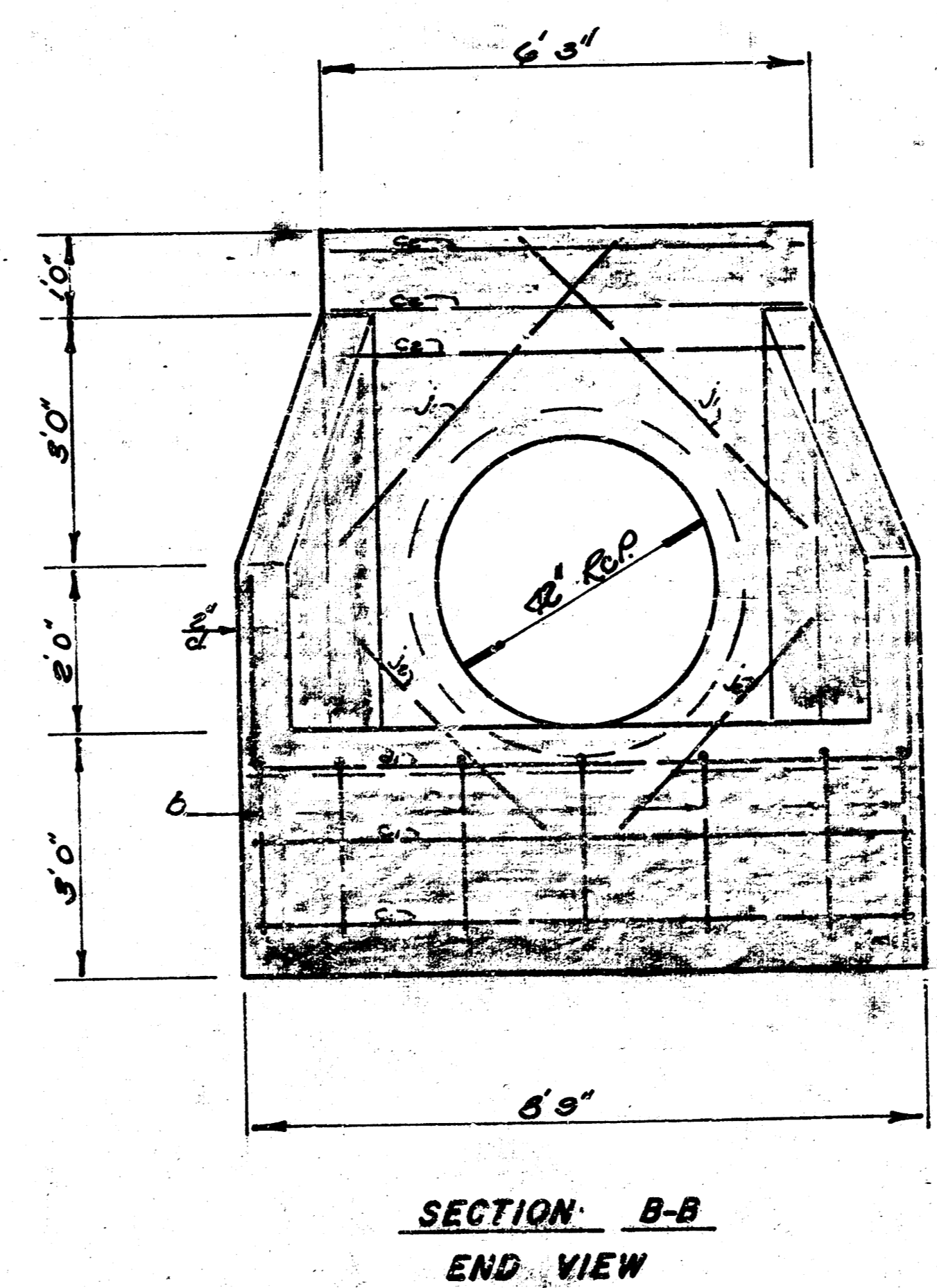
Note - The Contractor shall regrade, fertilize, and seed all disturbed areas of private property behind the R/W line. Grass seed used shall match the existing grass type. The contractor shall also either replace the disturbed sprinkler pipe system on private property or construct around the pipes without damage. The cost of the grading, fertilizing, seeding, and any pipe rework on private property shall be considered as incidental to the std. drop inlets.

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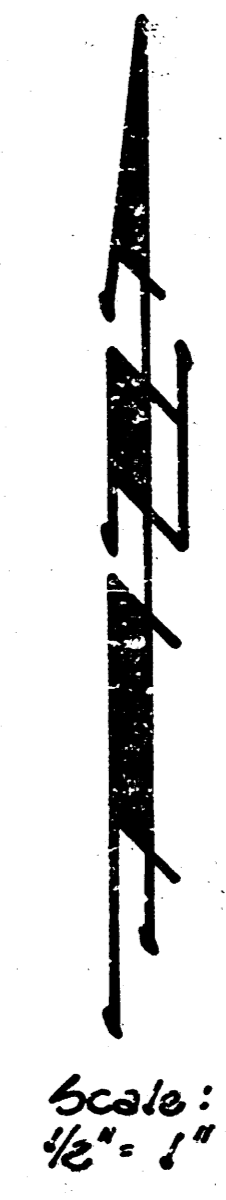
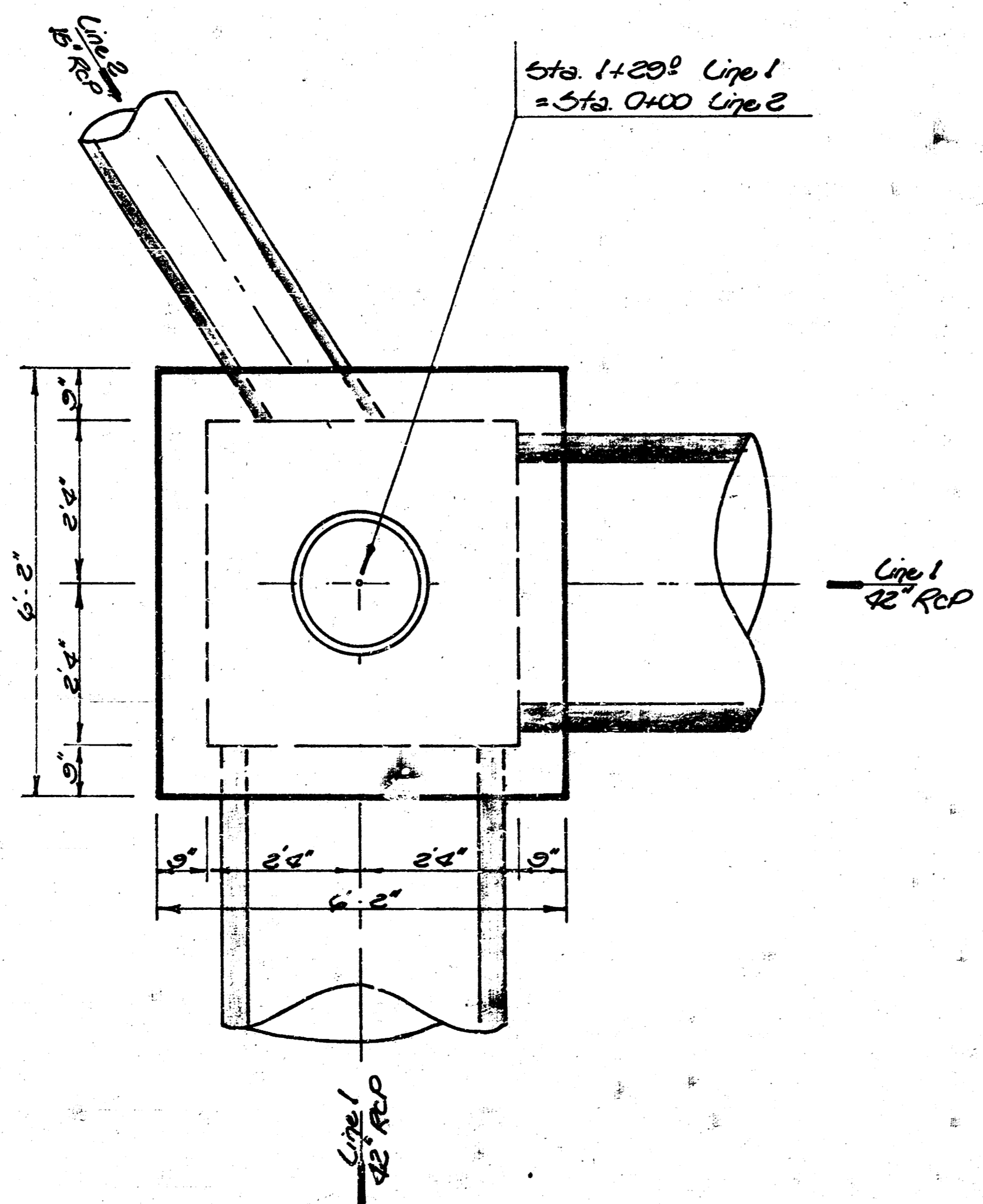
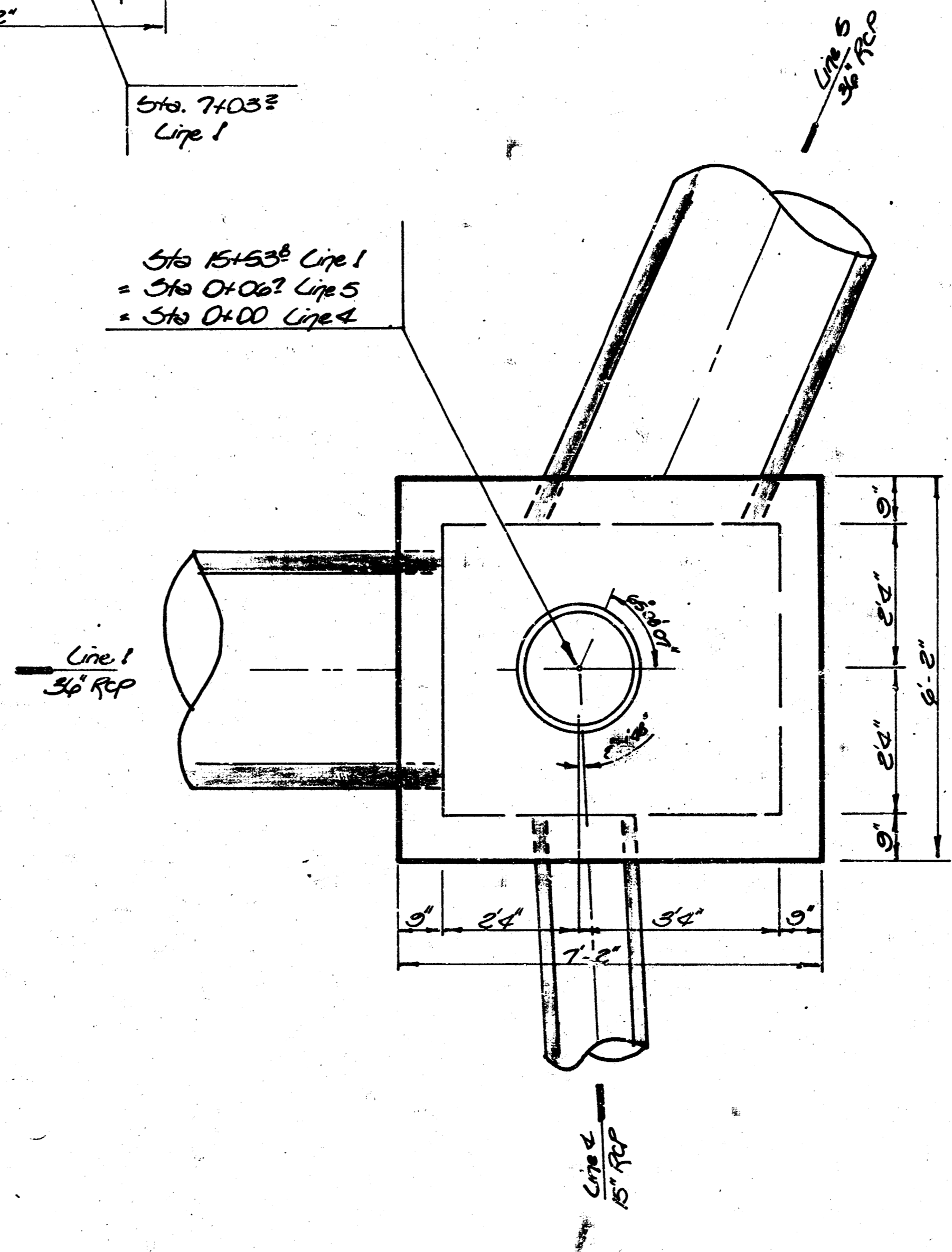
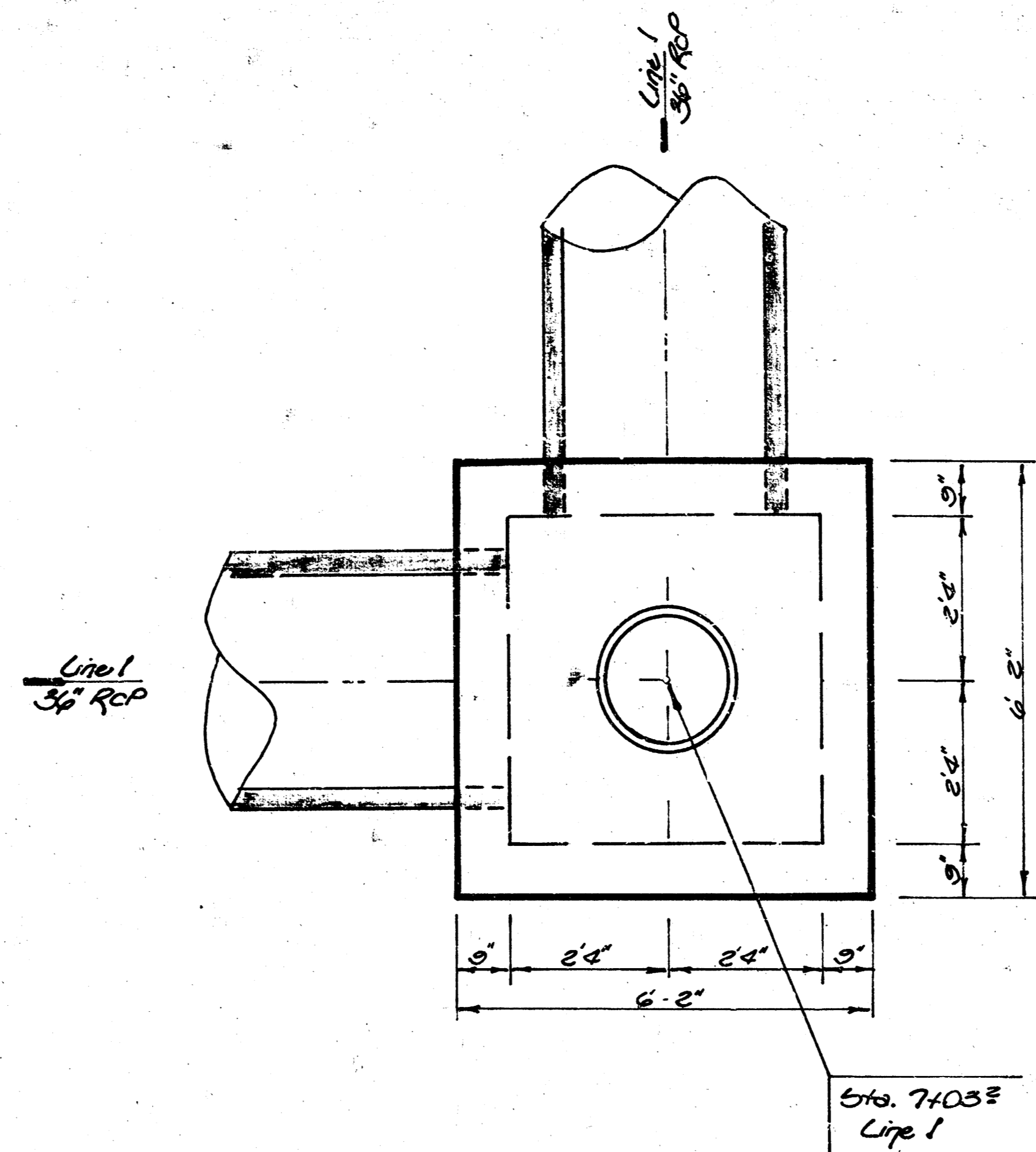
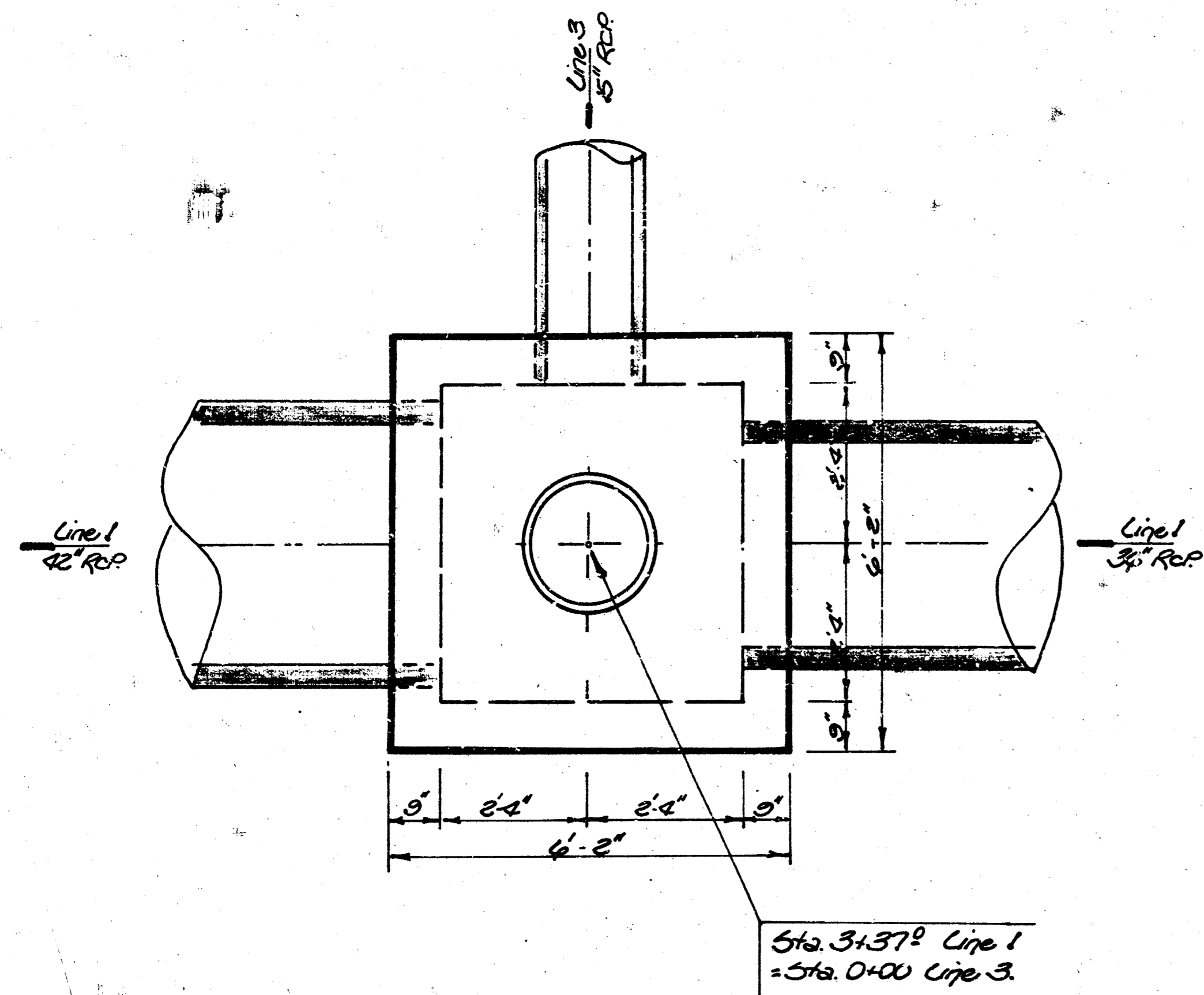


Note: All grooves in mortar & level.



LISTING OF BARS, DIMENSIONS, & QUANTITIES

Bar	Number	Length	Weight	Bar	Number	Length	Weight
a	1	12'3"	3.22	b	7	5'2"	6.57
a	1	13'2"	3.80	c	2	5'11"	7.90
a	1	13'5"	3.96	c	3	8'5"	16.87
a	1	13'10"	4.24	d	2	11'4"	15.14
a	1	14'1"	4.41	d	2	11'2"	14.92
a	1	14'6"	4.68	e	2	10'11"	14.68
a	1	14'9"	4.85	f	2	5'0"	6.68
a	1	15'2"	5.13	g	2	3'6"	4.48
a	1	15'6"	5.35				
a	1	15'9"	5.52				
a	1	16'2"	5.80				
a	1	16'5"	6.07				
a	1	16'9"	6.35				
a	1	17'3"	6.63				
a	1	17'7"	6.91				
a	1	18'1"	7.19				
a	1	18'5"	7.47				
a	1	18'9"	7.75				
a	1	19'3"	8.03				
a	1	19'7"	8.31				
a	1	20'1"	8.59				
a	1	20'5"	8.87				
a	1	20'9"	9.15				
a	1	21'3"	9.43				
a	1	21'7"	9.71				
a	1	22'1"	9.99				
a	1	22'5"	10.27				
a	1	22'9"	10.55				
a	1	23'3"	10.83				
a	1	23'7"	11.11				
a	1	24'1"	11.39				
a	1	24'5"	11.67				
a	1	24'9"	11.95				
a	1	25'3"	12.23				
a	1	25'7"	12.51				
a	1	25'11"	12.79				
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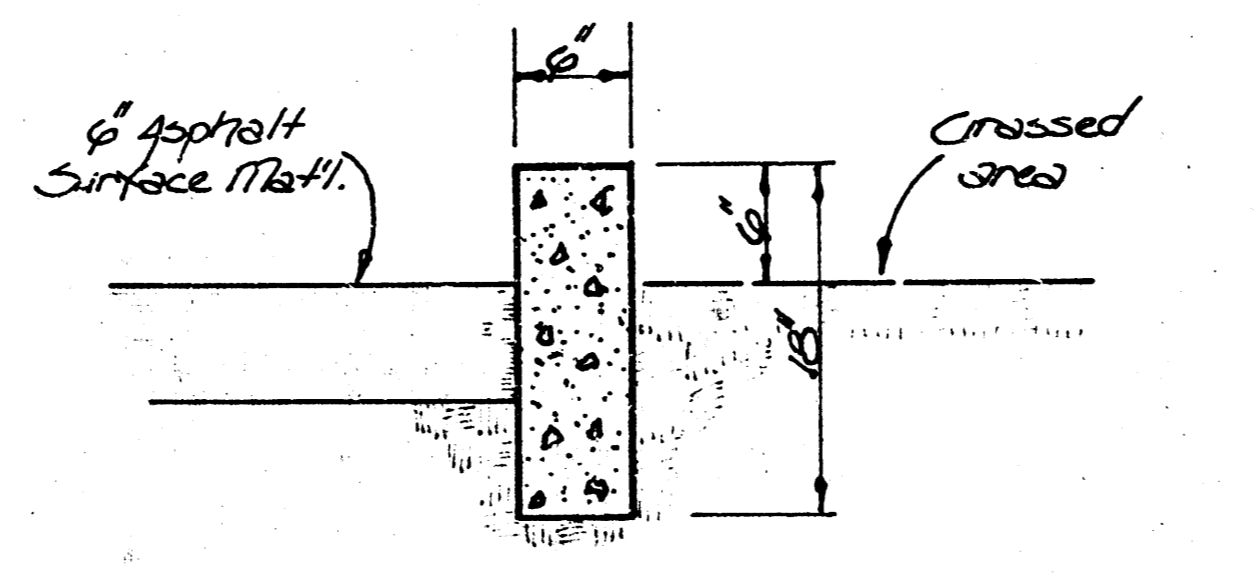
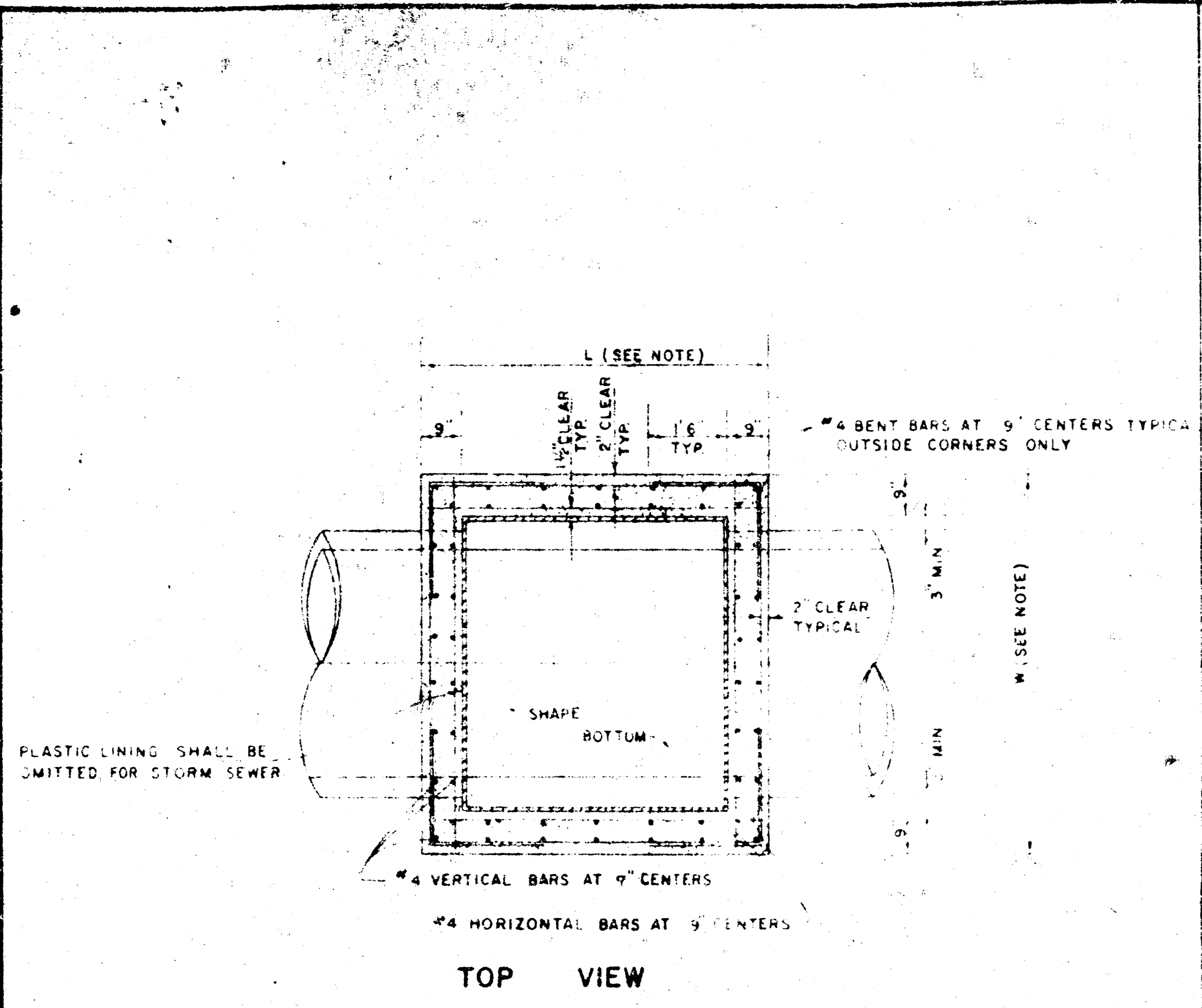


**Note:**

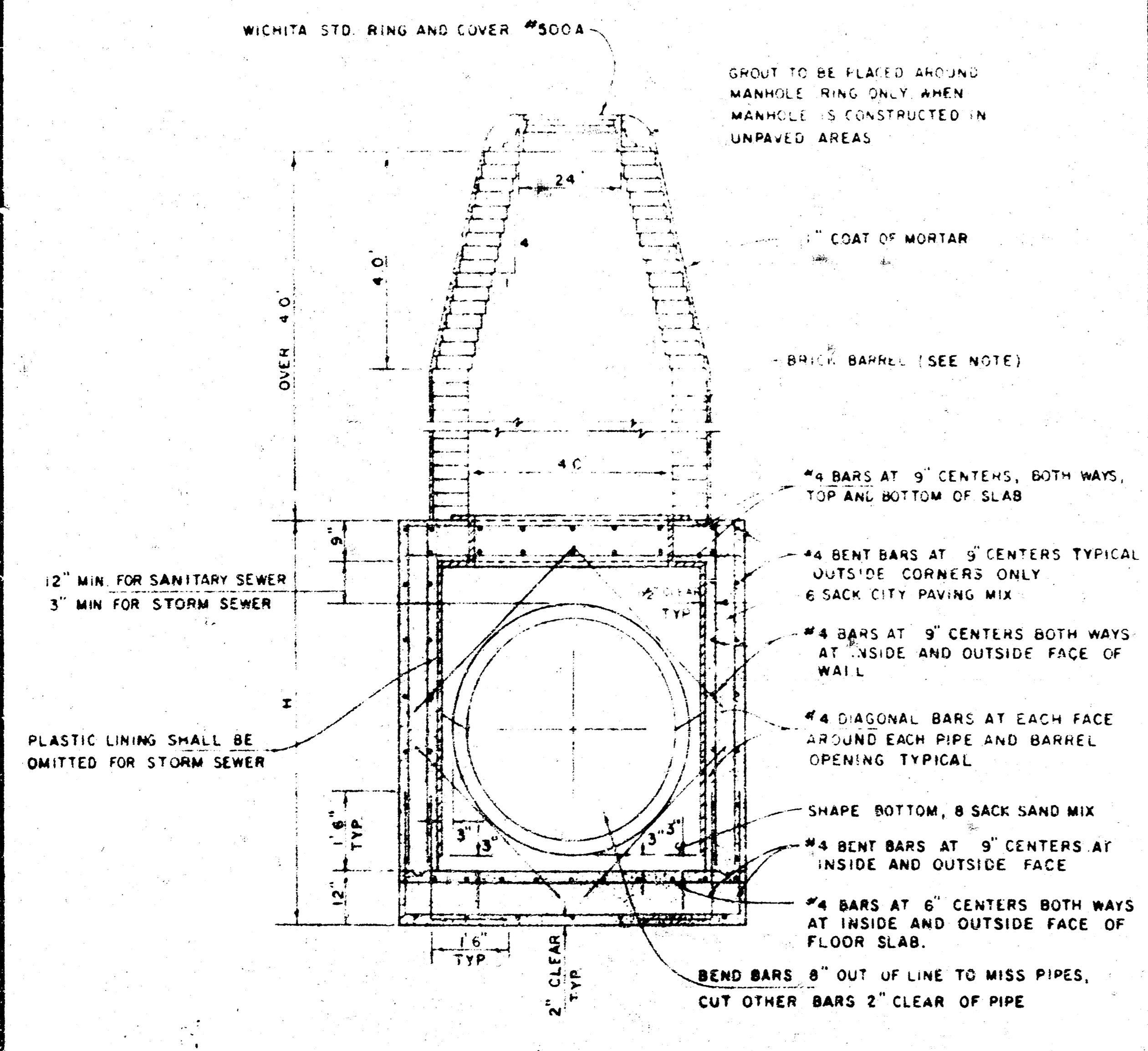
All Manholes are to be Standard Reinforced Concrete Manholes. See Detail on Sheet 9.  
 Concrete to be used in Manhole Construction shall be 6- sack Raising Mix.  
 The floors of the Manholes shall be sloped and smooth.

S.W.S. 245  
**MANHOLE ALIGNMENT  
 & DIMENSION DETAIL**  
 CITY OF WICHITA, KS.  
 PROJECT NO. 458-76-245-91242-000-001

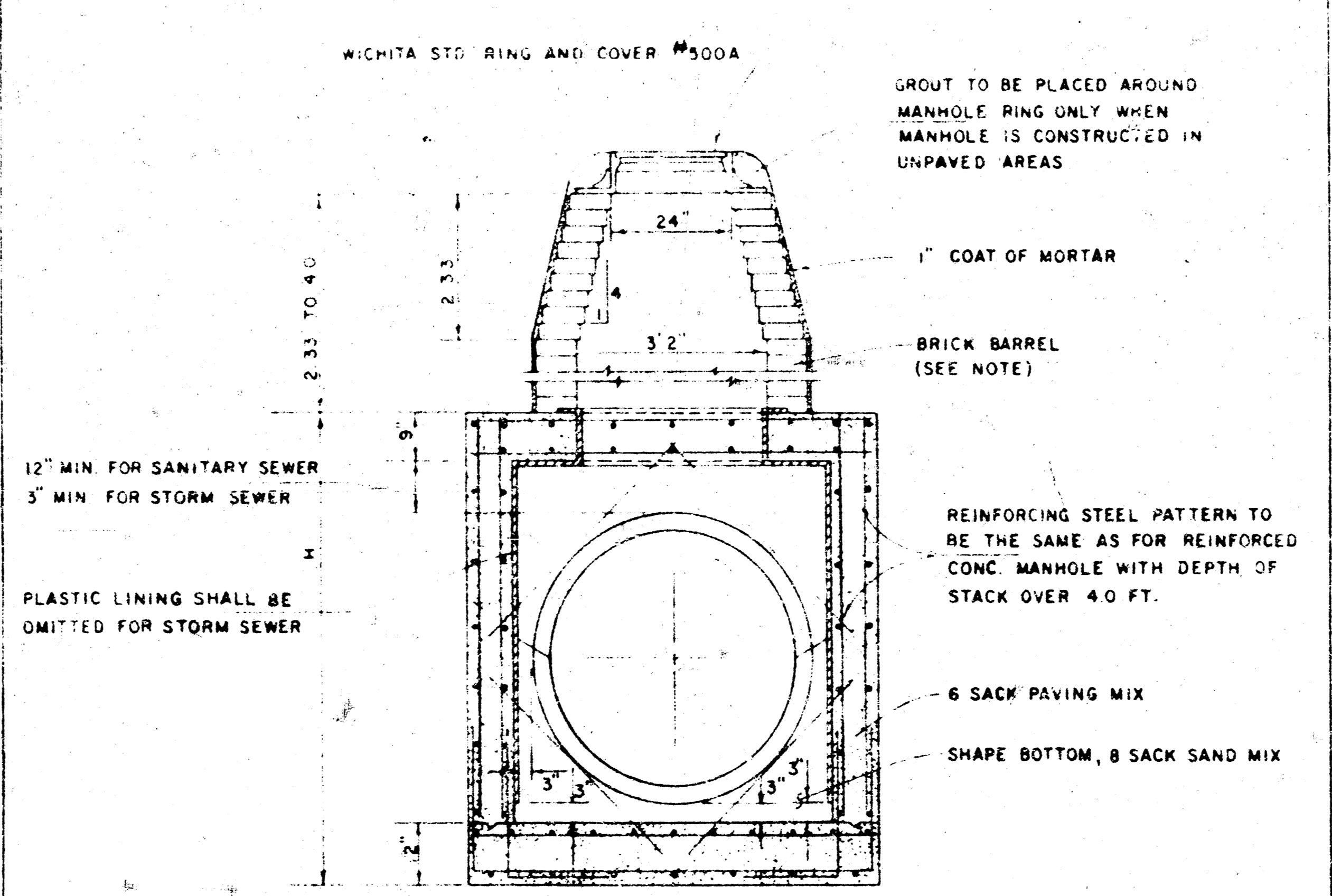
**BAUGHMAN COMPANY, P.A.**  
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 316/282-7271 • 230 LAJARA • WICHITA, KANSAS 67211



NON-STANDARD CONCRETE CURB SECTION

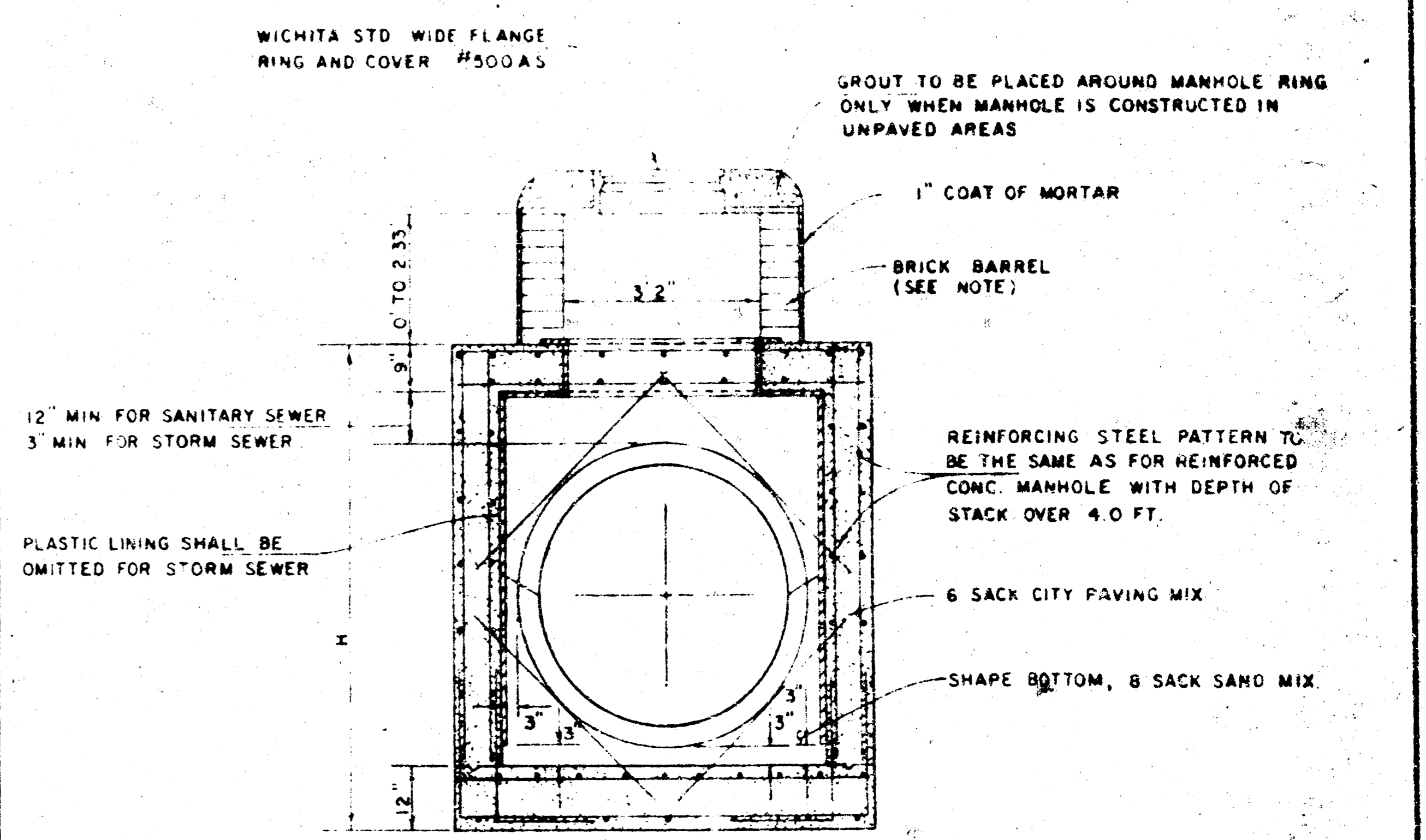


REINFORCED CONCRETE MANHOLE  
DEPTH OF STACK: OVER 4.0'  
SCALE 1" = 2'



REINFORCED CONCRETE MANHOLE  
DEPTH OF STACK: 2.33' TO 4.0'  
SCALE 1" = 2'

NOTE  
BRICK BARRELS LESS THEN 16' DEEP SHALL HAVE 8" WALLS EXCEPT WHEN LOCATED WITHIN PUBLIC STREET OR ALLEY PAVEMENT THEN THE WALL SHALL BE 12" BRICK BARRELS MORE THEN 16' DEEP SHALL HAVE 12" WALLS. THE "L" AND "W" DIMENSIONS SHALL BE A MINIMUM OF 5'6" FOR BRICK BARRELS WITH 8" WALLS AND 6'2" FOR BRICK BARRELS WITH 12" WALLS.



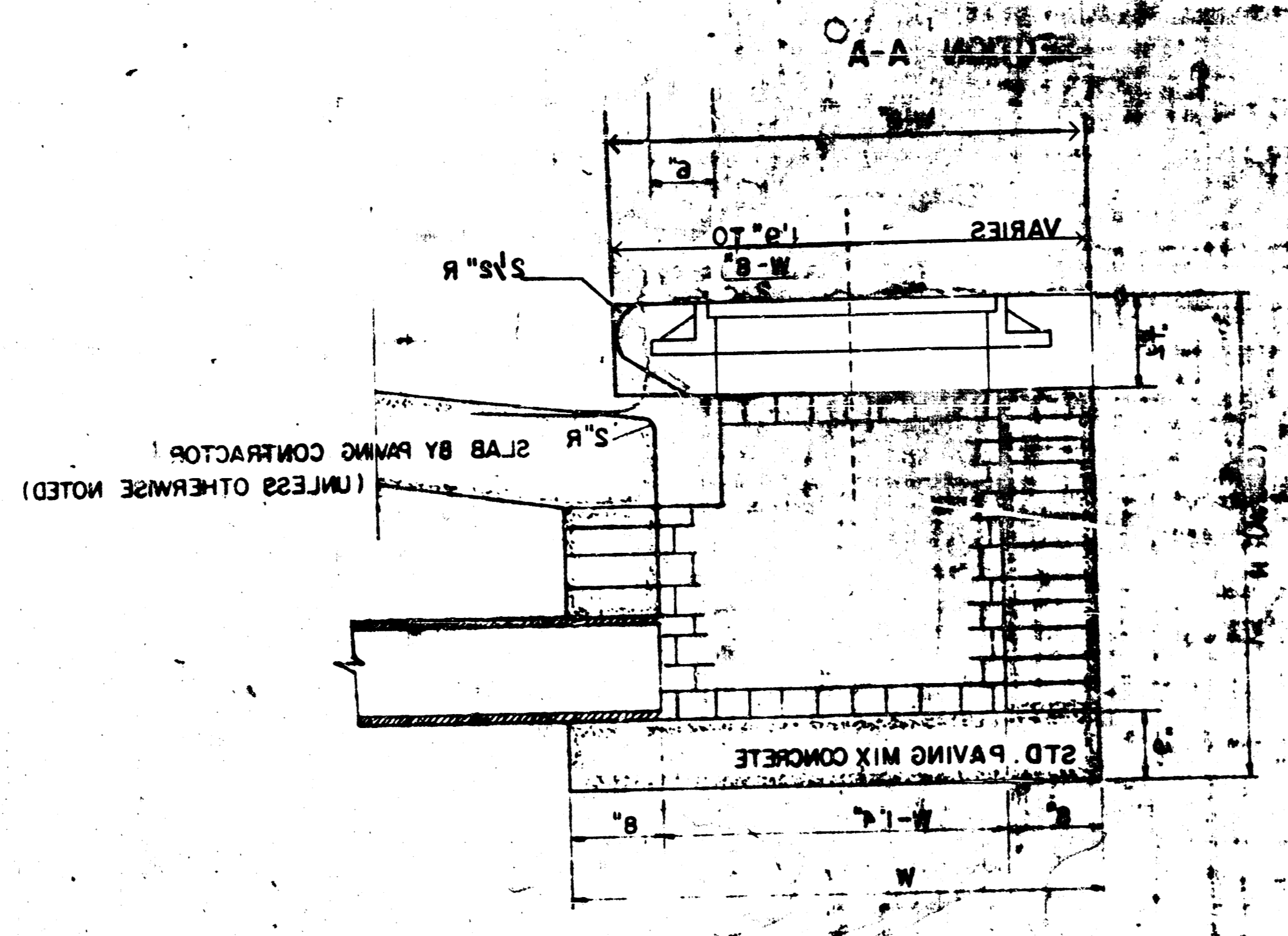
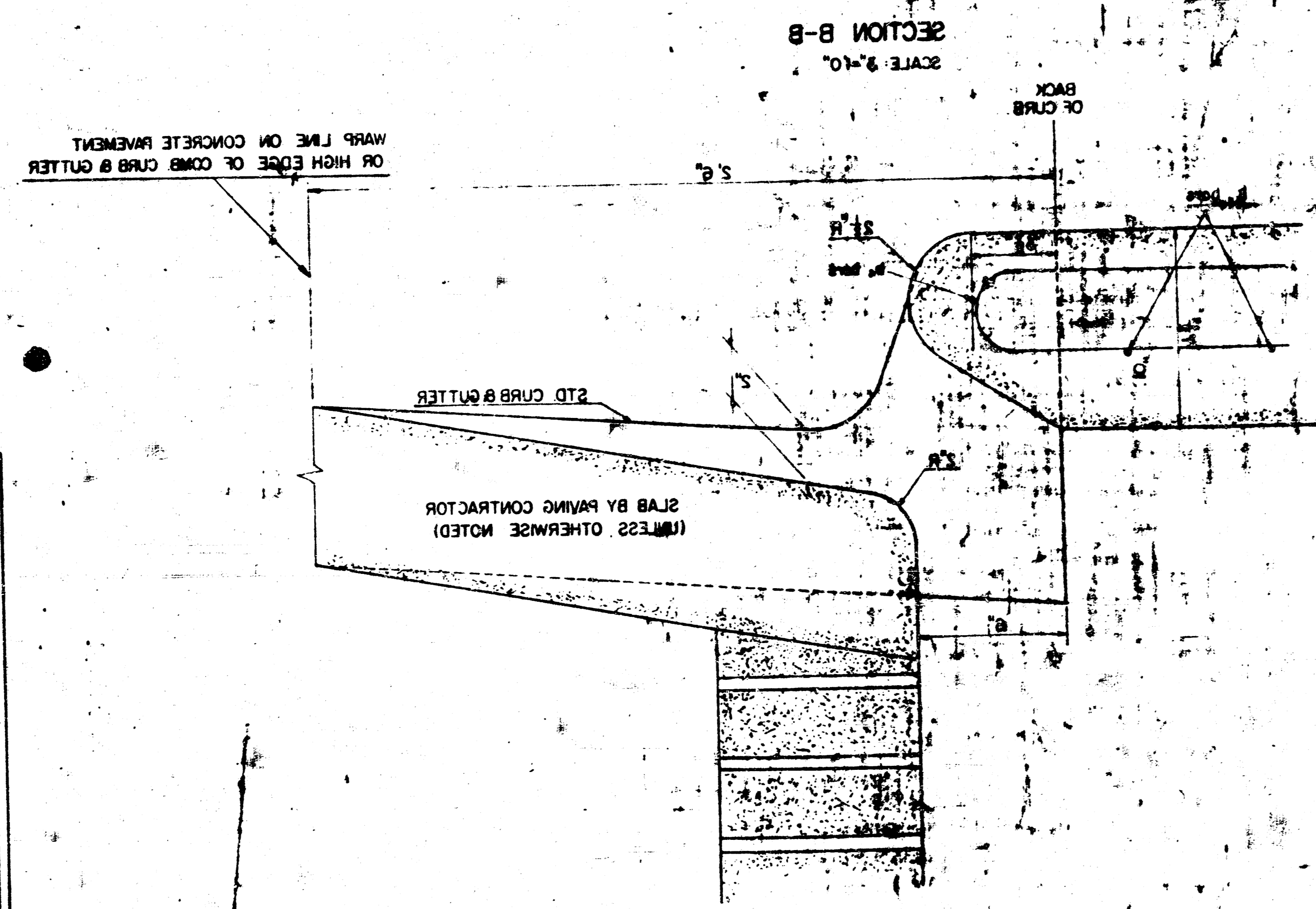
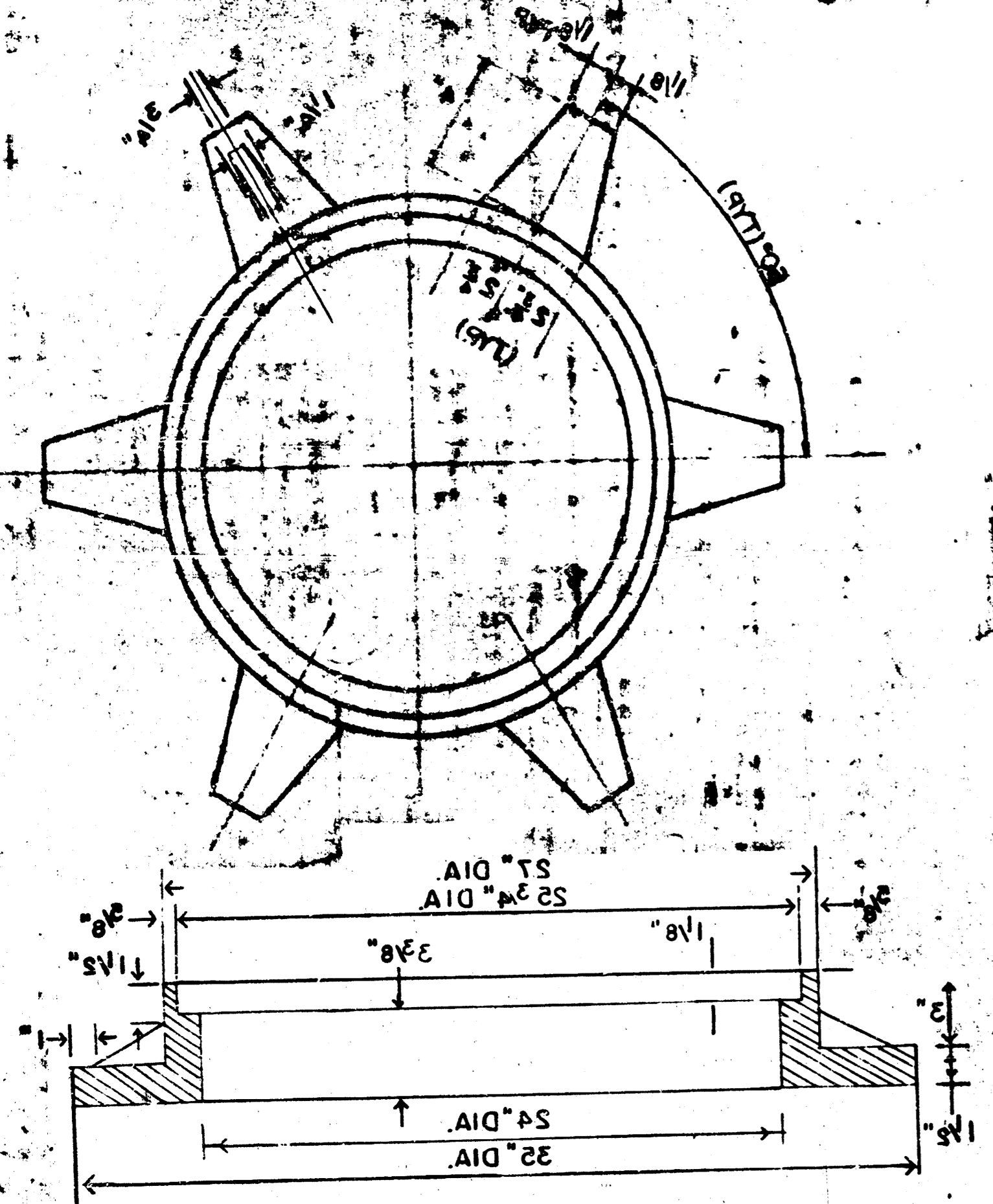
REINFORCED CONCRETE MANHOLE  
DEPTH OF STACK: 0' TO 2.33'  
SCALE 1" = 2'

STANDARD DETAILS  
REINFORCED CONCRETE MANHOLES

FEBRUARY, 1925  
CITY OF WICHITA, KANSAS  
STANDARD CURB INLET-TYPE I  
DETAIL

HAVE FULL HEIGHT STANDARD CURBS  
 CONCRETE BASE AND/OR WHEN PAVEMENTS  
 ARE ASPHALT PAVEMENT WITH  
 THIS TYPE INLET TO BE USED WHEN

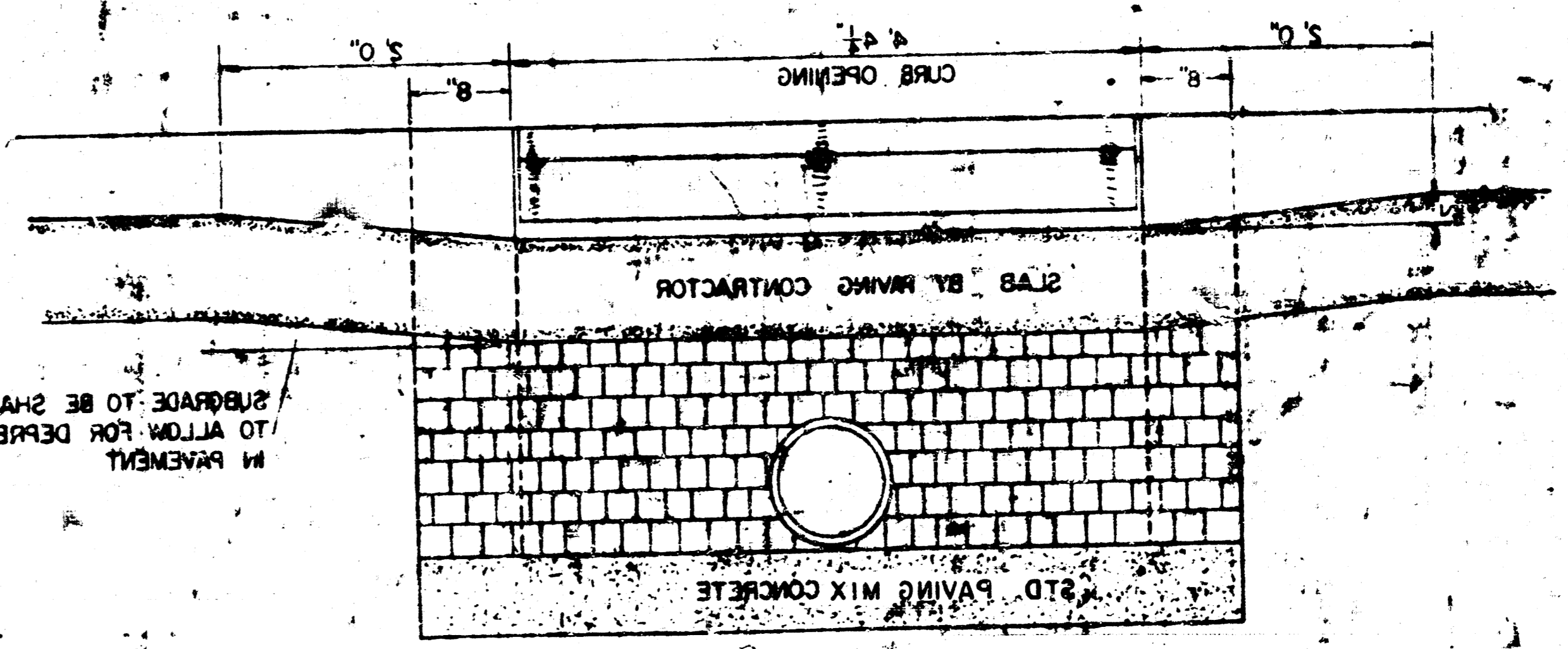
SHEET FOR MANHOLE COVER  
 SEE SEWER APPURTENANCES DETAIL



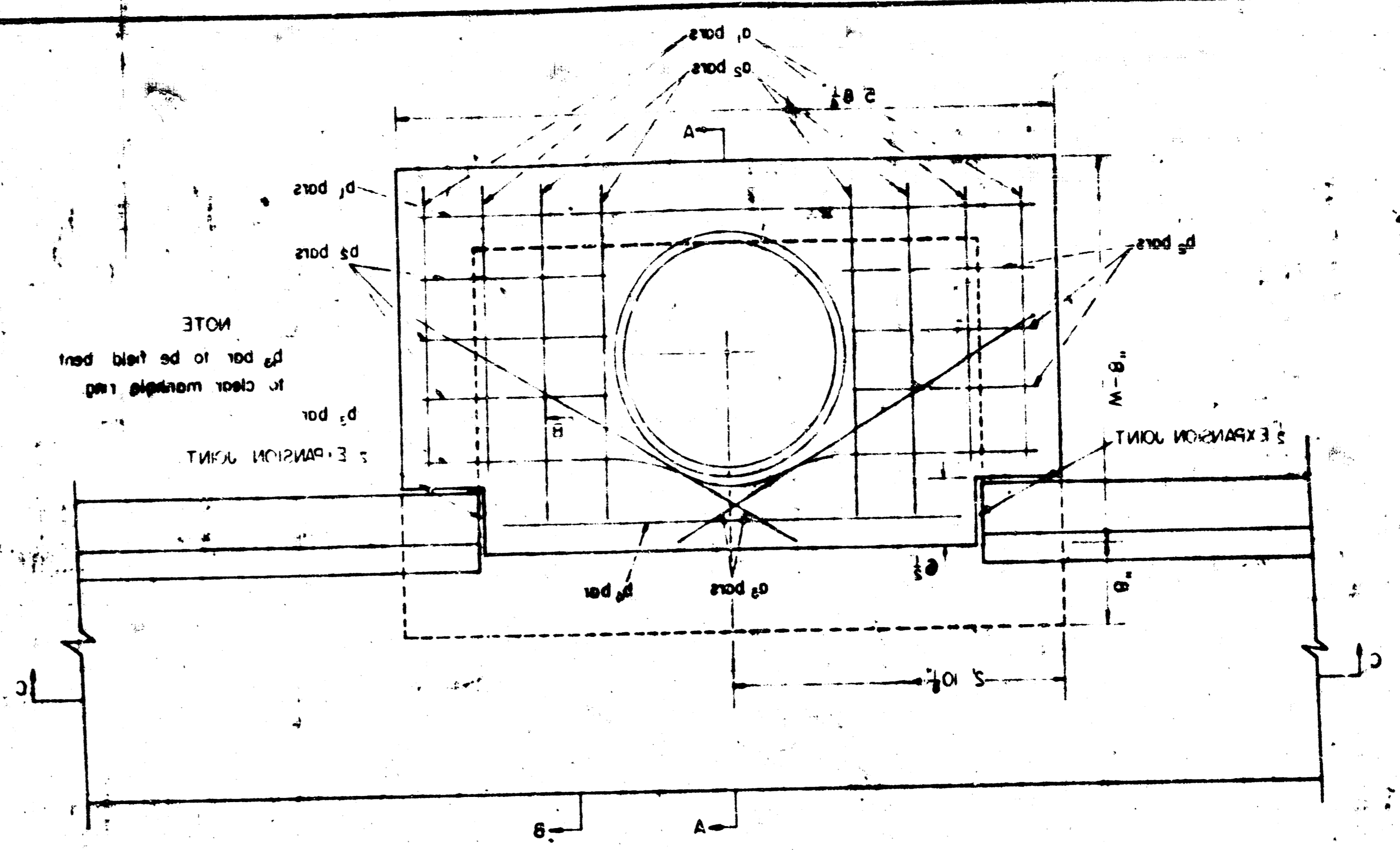
W	SIZE	PRE SIZE	LD CONC
4.5	3/8" x 1/2"	3/8" x 1/2"	0.48
8.0	1/2" x 3/4"	3/8" x 3/4"	0.27
6.0	3/4" x 1"	3/4" x 1"	0.21

FLOOR SHALL BE STD PAVING MIX  
 OR PRECAST CONCRETE FOR INLET TOPS AND  
 WALLS CONCRETE TOPS MAY BE CAST IN PLACE  
 CURB TO INSURE FULL SUPPORT ALONG BRICK  
 CONCRETE TOPS TO BE INSTALLED ON THIN MORTAR  
 GROSS VOLUME

BRICK FOR INLET CONSTRUCTION SHALL  
 CONFORM WITH THE LATEST REVISION OF  
 THE AMERICAN SOCIETY FOR TESTING AND  
 MATERIALS DESIGNATION C-2 FOR MANHOLE  
 BRICK GRADE M2



SHARP CURB AND/OR GUTTER AT INLET  
 OPENING WITH SMOOTH CURVES  
 REIN STEEL TO BE PLACED ON CURB

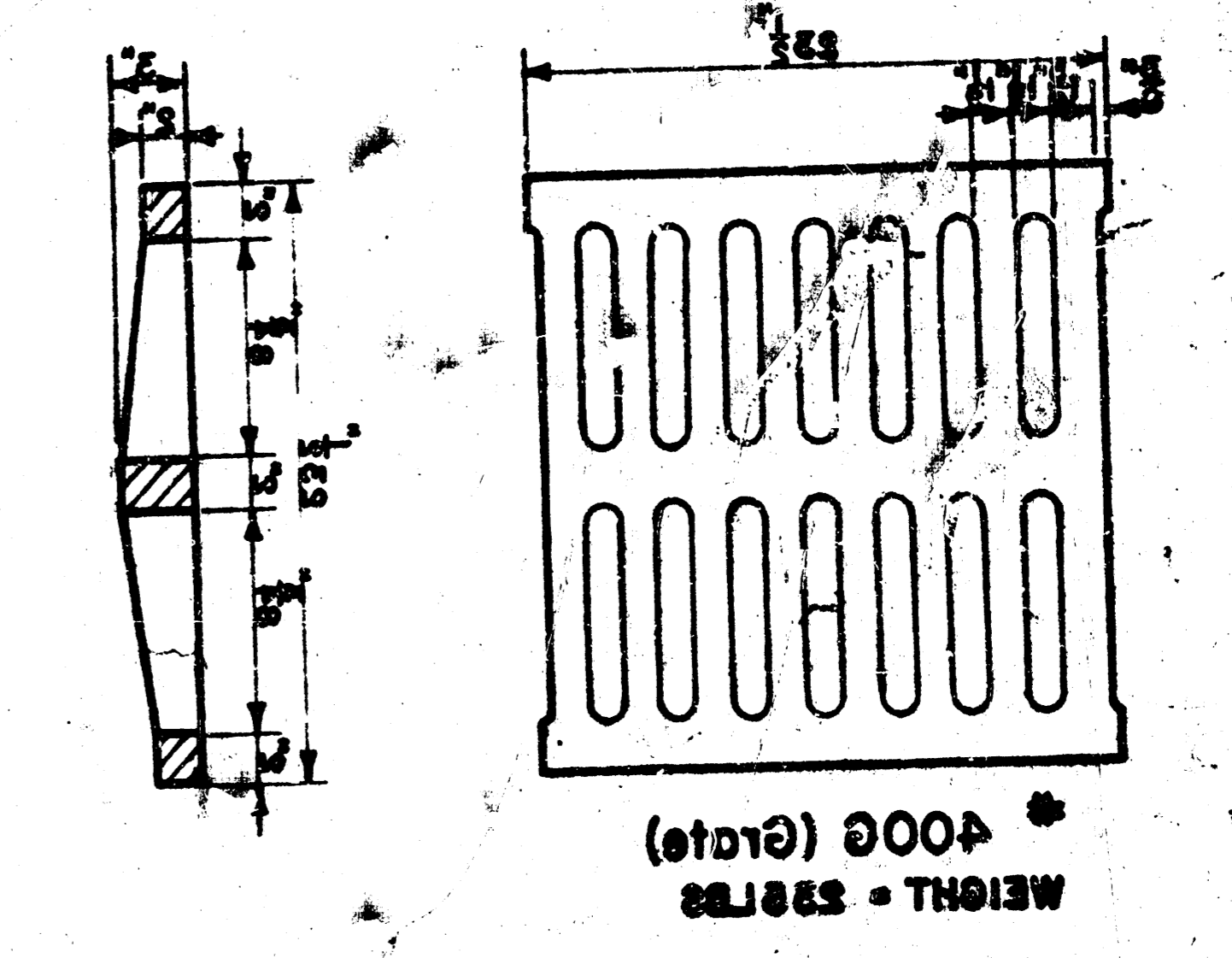
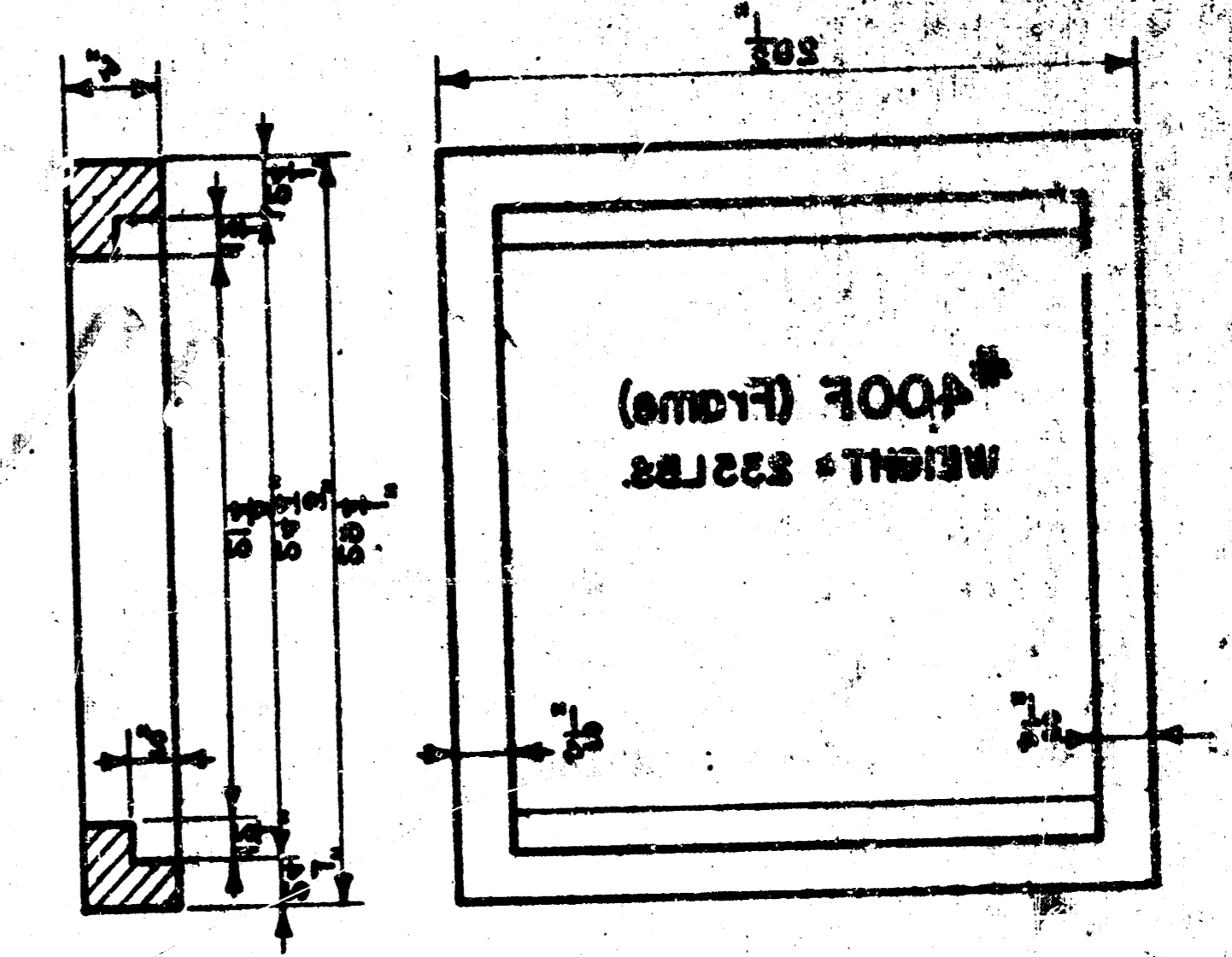
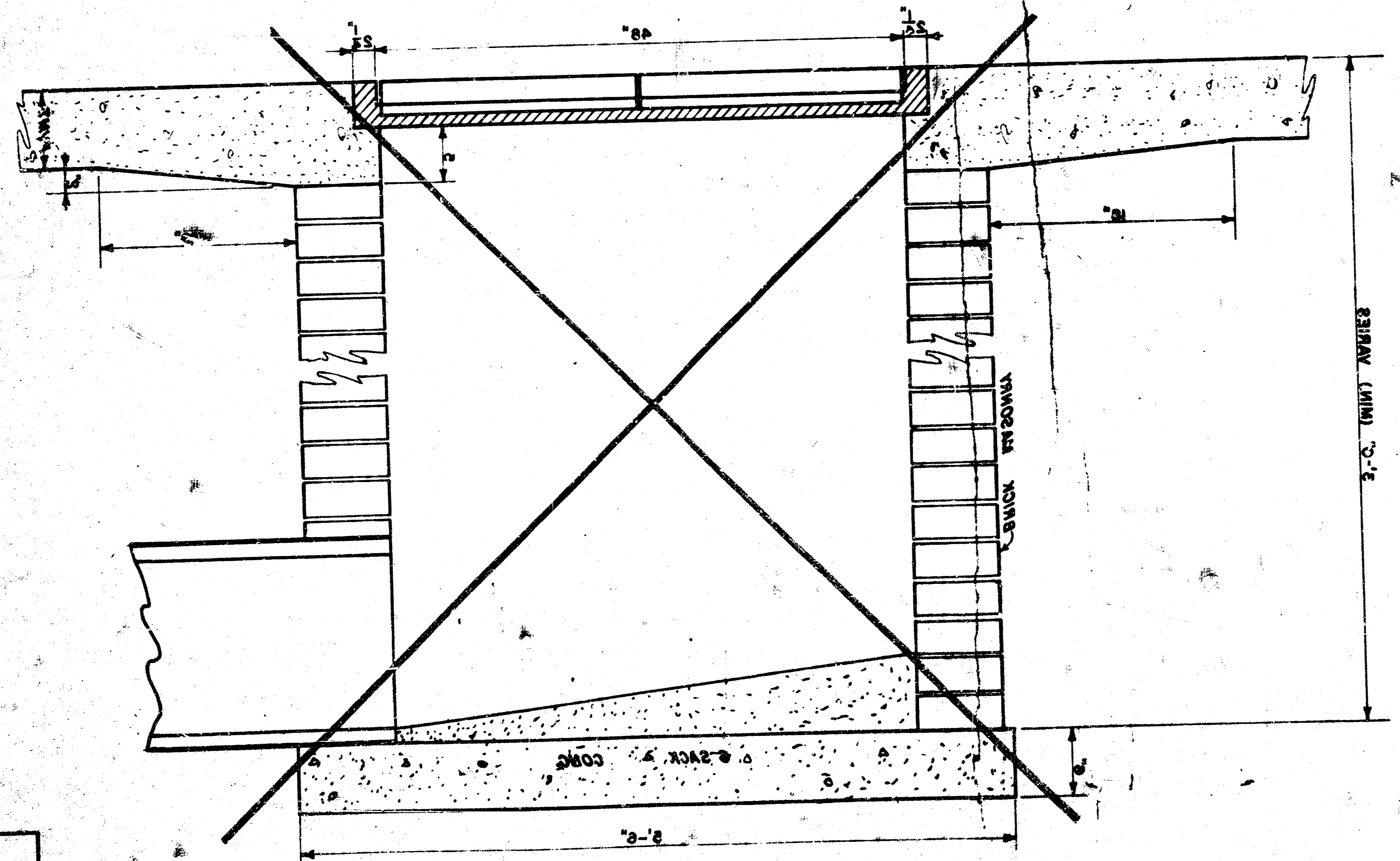
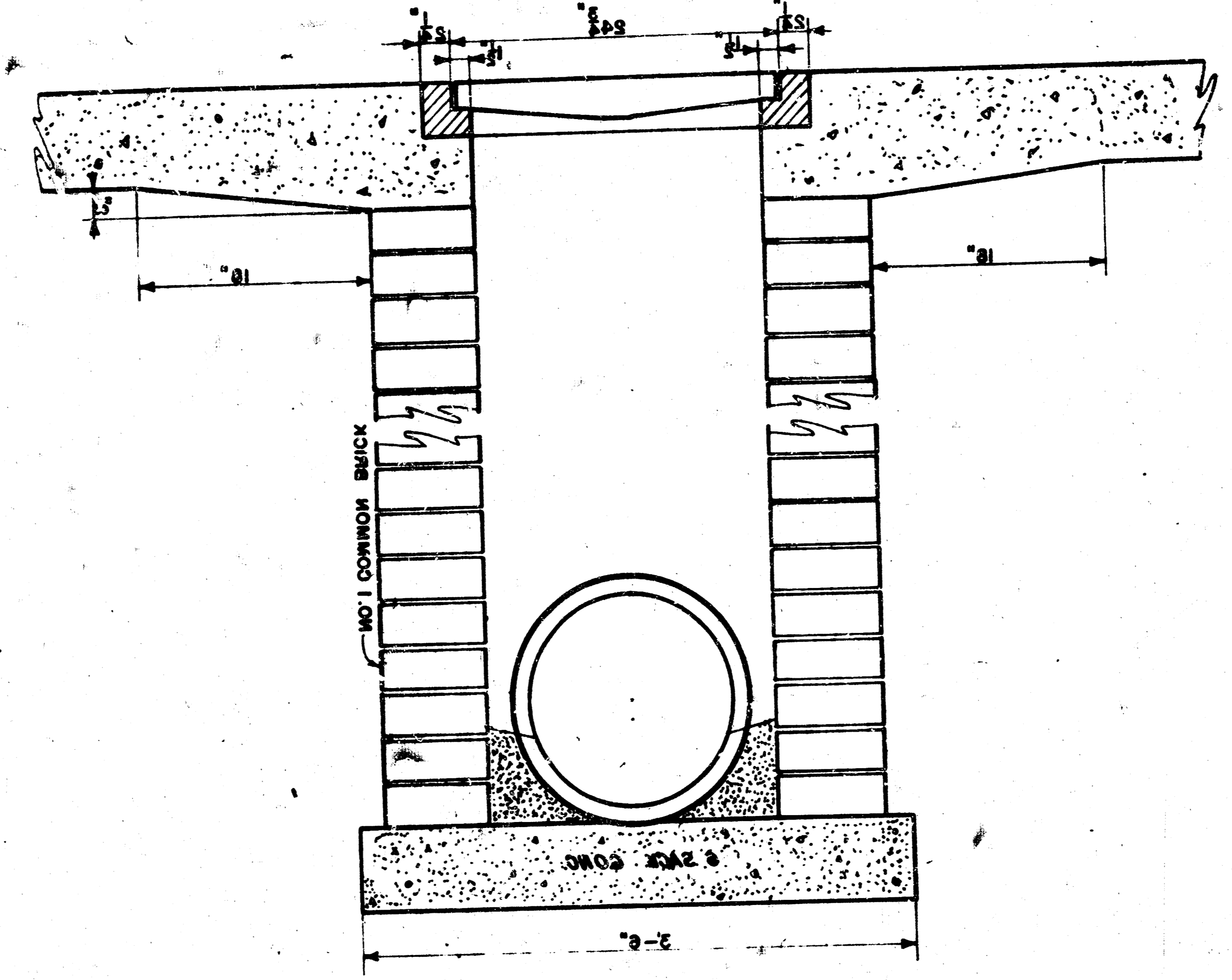
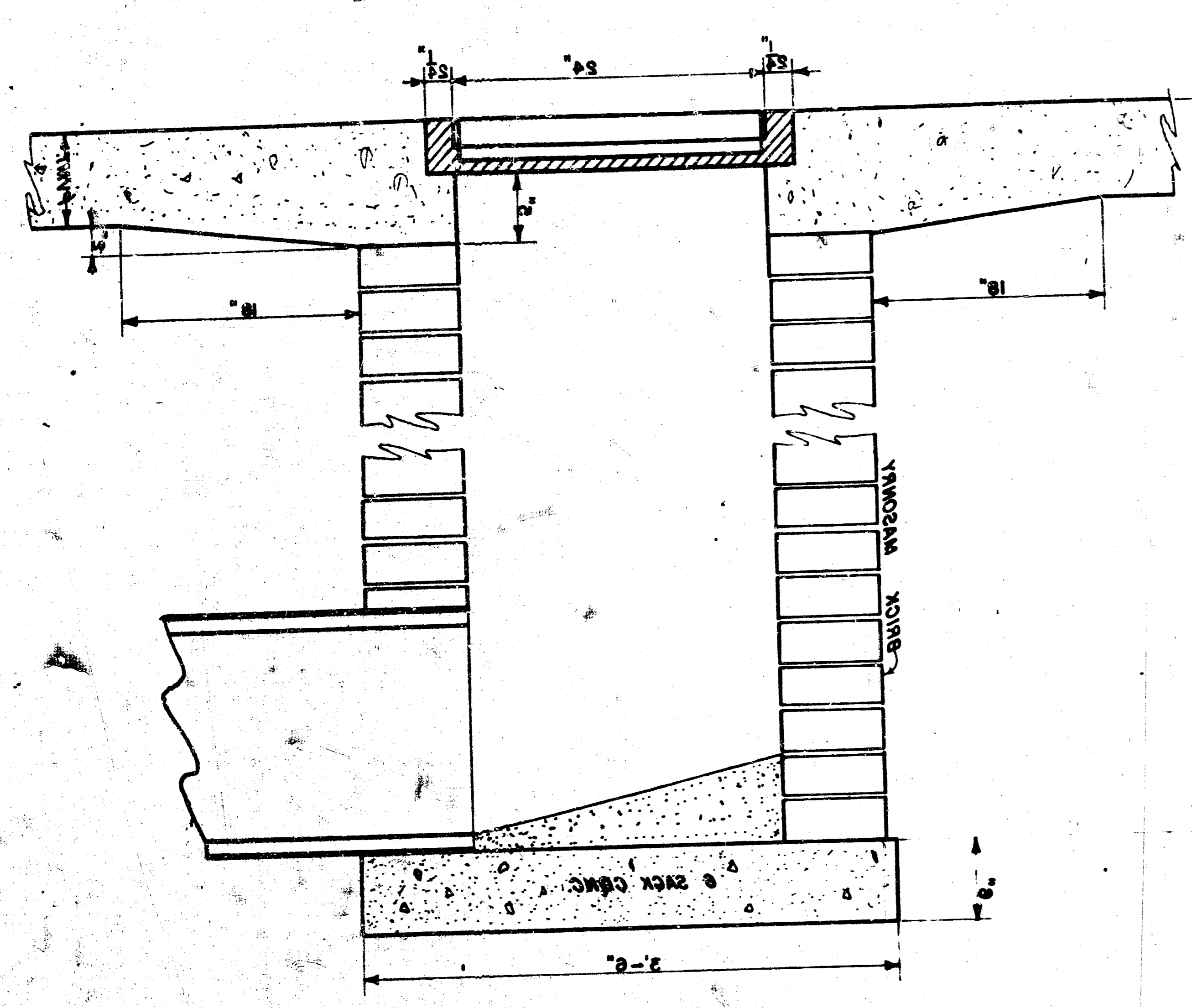


BAR	SIZE	NUMBER	W-L	H-TOTAL
1	3/8"	4	17.25	4.0
2	3/8"	4	17.25	4.0
3	3/8"	4	17.25	4.0
4	3/8"	4	17.25	4.0
5	3/8"	4	17.25	4.0
6	3/8"	4	17.25	4.0
7	3/8"	4	17.25	4.0
8	3/8"	4	17.25	4.0
9	3/8"	4	17.25	4.0
10	3/8"	4	17.25	4.0

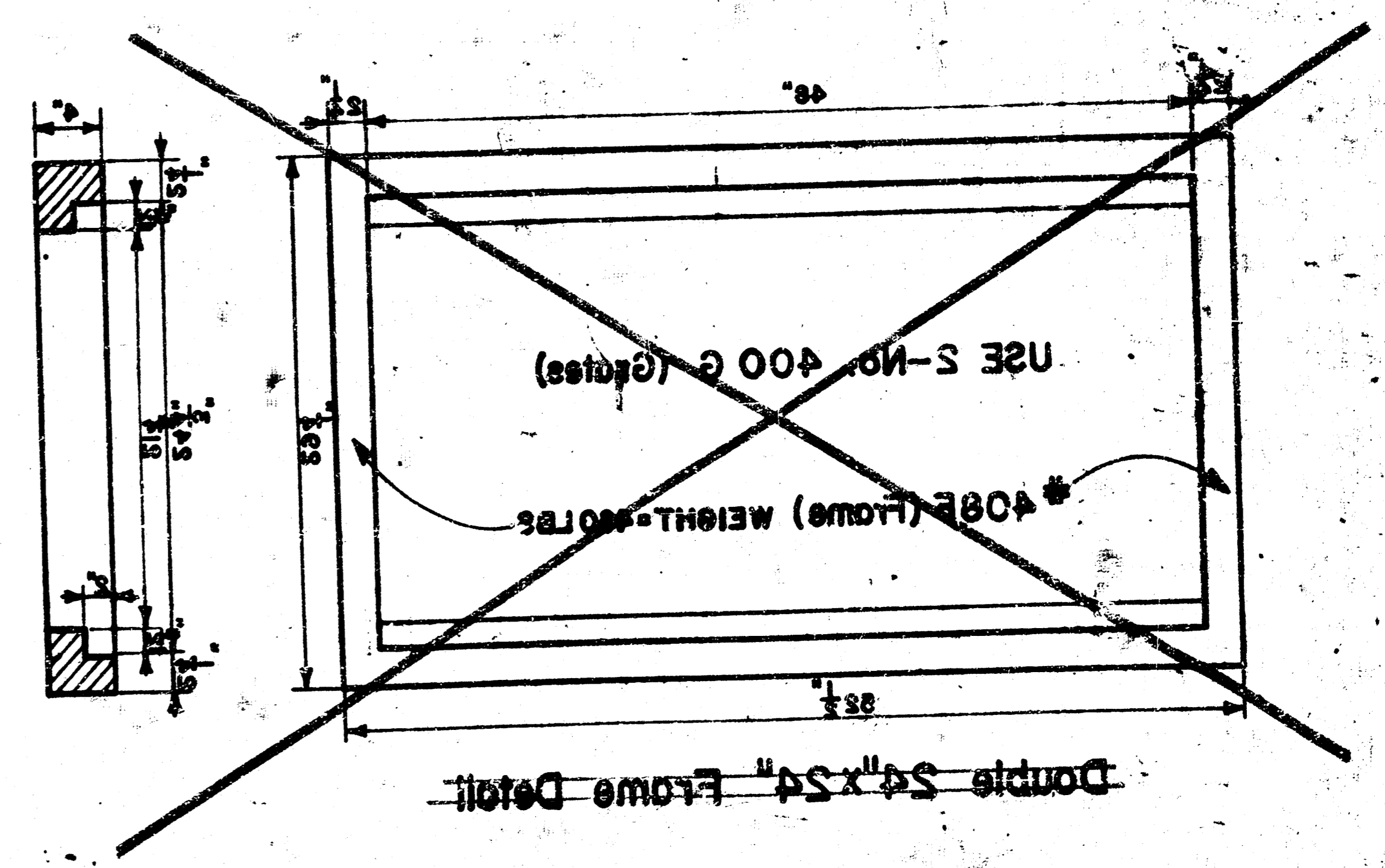
NOTE: #3 BARS TO BE PLACED APPROXIMATELY 3" BELOW TOP  
 OF INLET COVER



**DROP INLET  
STANDARD DETAILS**



**4" x 24" Frame & Grate Detail**



**Double 24" x 24" Frame Detail**