

CITY OF WICHITA, KANSAS

STORM WATER SEWER NO. 173

PROJECT NO. 468-76-245-80884-000-000-001

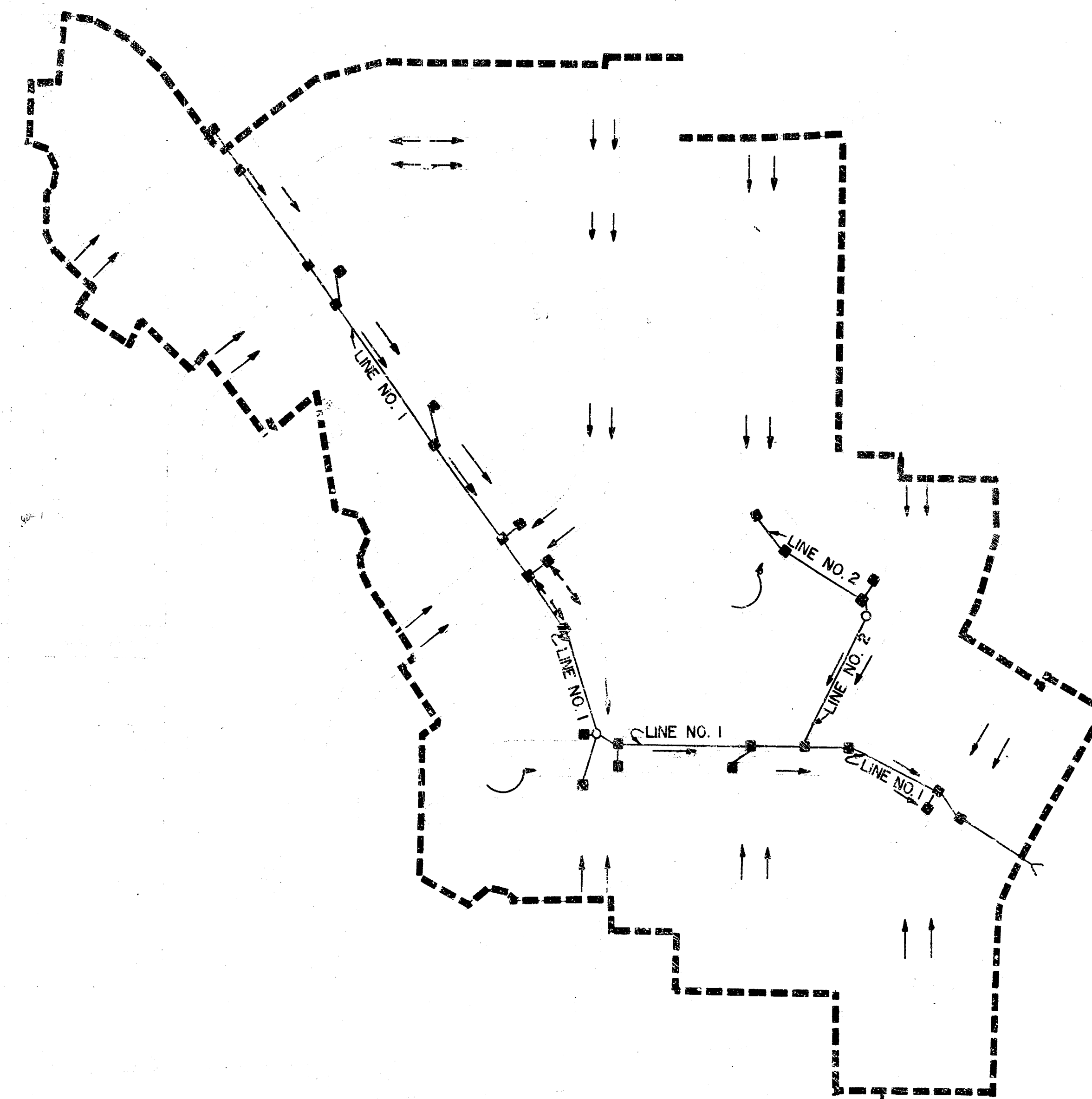
SCALE 1"=200'

BENCH MARKS

- BM-City Brass Cap 25' N. & 30' E. of S. 1/4 Cor.
Sec. 7, T. 27S, R. 1W Elev.=157.99
- BM-RR Spike in N. Side Hedge Tree 20' S. P.T.
Hedge rows S.E. Near Center SW 1/4 Elev.=160.08
- BM-RR Spike W. Side 16" Hedge Tree in Hedge row
1300'± E. of W. 1/4 Cor. Elev.=163.29
- BM-RR Spike E. Side Hedge Tree in E-W Hedge row
60'± E. of W. 1/4 Cor. Elev.=166.66
- BM-RR Spike NE Side 10" Dia Elm W. Side 119th
1300'± N. of SW Cor. Sec. 7 Elev.=169.675
- BM-City Brass Cap @ NE Cor. Int. 119th St. and
13th St. Elev.=162.545
- BM-RR Spike in 1st HLP W. of Jaax Prop.
Elev.=158.76
- BM-RR Spike W. Side Hedge Tree 5'± E. of NE
Cor. Blk. 3 Echo Hills Elev.=154.595

LEGEND

- BENEFIT DISTRICT BOUNDARY
- DRAINAGE FLOW DIRECTION
- PROPOSED INLET
- PROPOSED MANHOLE



STORM WATER SEWER NO. 173
BENEFIT DISTRICT

MAY, 1980

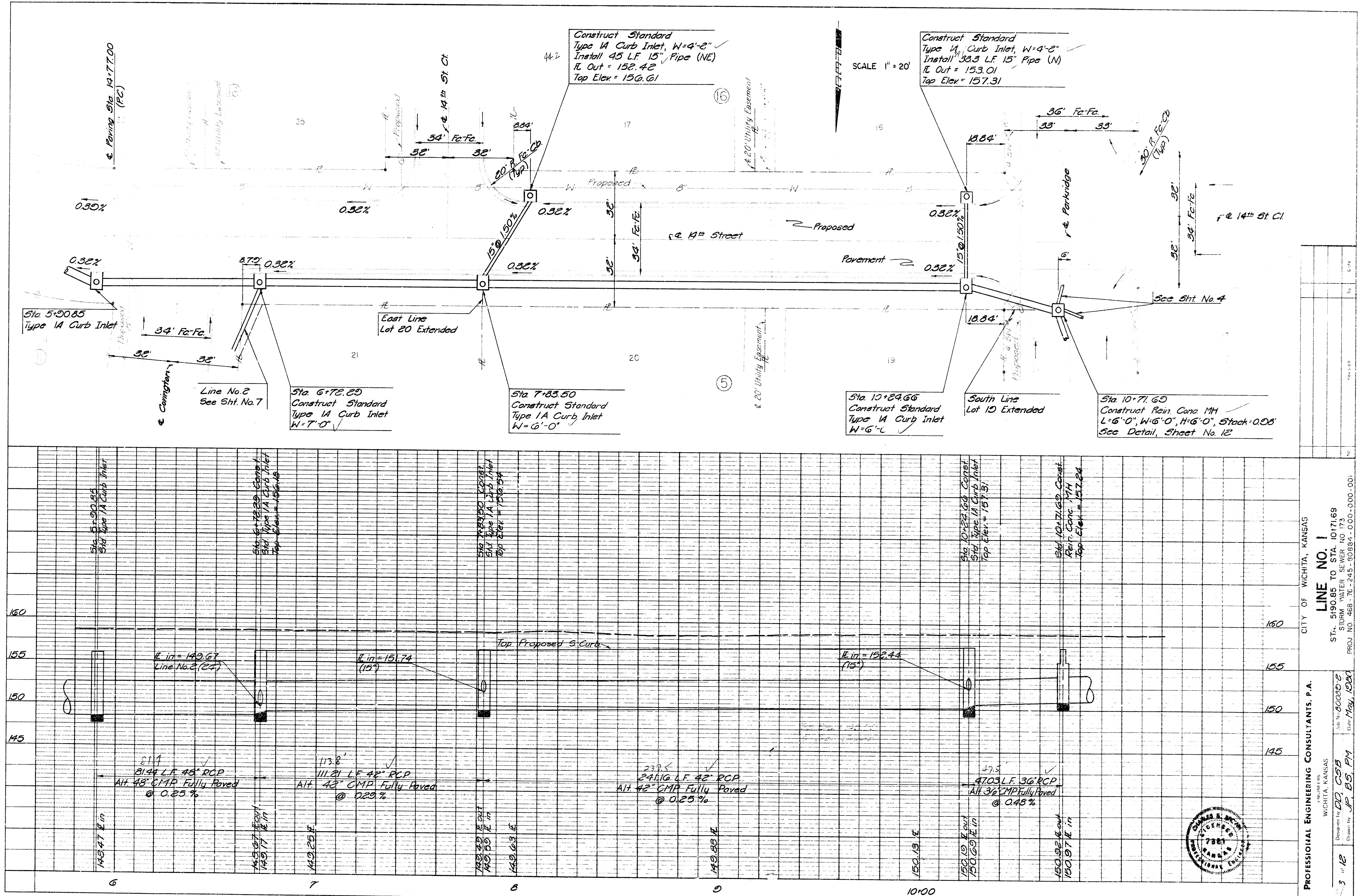
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1. TITLE SHEET
- 2-6. PLAN-PROFILE LINE NO. 1
- 7-8. PLAN-PROFILE LINE NO. 2
9. DETAIL CONCRETE HEADWALL
10. DETAIL STANDARD TYPE 1A CURB INLET
11. DETAIL PRECAST TYPE 1A CURB INLET
12. DETAIL REINFORCED CONCRETE MANHOLE

GENERAL NOTES

1. CONTRACTOR SHALL COORDINATE WORK WITH PAVING AND SANITARY CONTRACTORS, AND CONTACT RELEVANT UTILITY COMPANIES AND OTHER AGENCIES INVOLVED WITH THIS PROJECT SITE DEVELOPMENT.
2. FIELD ENGINEER SHALL TAKE TIES TO ALL IRONS AND THIMBLES IN THE PROJECT AREA BEFORE CONSTRUCTION BEGINS. FIELD ENGINEER SHALL REPLACE ALL SUCH IRONS AND THIMBLES DISTURBED DURING CONSTRUCTION.
3. THE TOPS OF INLETS AND MANHOLES AS NOTED ON THE PLANS MAY VARY SO AS TO MEET PROPOSED TOP OF CURB ELEVATIONS OR PAVEMENT ELEVATIONS. THE FIELD ENGINEER SHALL LOCATE INLETS AND MANHOLES WITH REFERENCE TO PROPOSED PAVING PLANS OF THE PERTINENT STREETS.
4. ALL METAL PIPES SHALL BE HELICALLY CORRUGATED PIPE, AND SHALL BE SMOOTH FLOW PIPES FOR SIZES 24" DIAMETER OR LARGER. ALL CONNECTIONS FOR THESE PIPES SHALL BE CONSTRUCTED USING HUGGER TYPE COUPLER OR EQUAL.
5. ALL CONCRETE SHALL BE "6-SACK CONCRETE" UNLESS OTHERWISE NOTED.
6. EARTHWORK FOR CHANNEL DOWNSTREAM FROM HEADWALL SHALL BE PAID FOR AS "EXCAVATION".
7. THE RIPRAP FOR THIS PROJECT SHALL BE TYPE 3. THE TYPE 3 RIPRAP SHALL BE 12" RIPRAP ON 6" SAND AND GRAVEL BEDDING. THE ROCK FOR RIPRAP AND GRAVEL PROTECTION SHALL BE HARD, DENSE, DURABLE, AND SHALL BE REASONABLY WELL GRADED. THE SIZE RANGE OF ROCK USED SHALL BE A MAXIMUM OF ONE CUBIC FOOT AND A MINIMUM OF 1 1/2". THE 6 INCH SAND AND GRAVEL BEDDING FOR RIPRAP SHALL BE A CONTINUOUS LAYER OF SAND AND GRAVEL OR SAND AND CRUSHED ROCK, REASONABLY WELL GRADED TO A MAXIMUM OF 1 1/2 INCHES IN SIZE.
8. CONTRACTOR SHALL AVOID UNCOVERING EXISTING WATERLINES UNLESS ABSOLUTELY NECESSARY. UNCOVERING SHALL BE DONE ONLY IN THE PRESENCE OF A WATER DEPT. ENGINEER.
9. FOR TYPE 1A CURB INLETS CONTRACTOR SHALL HAVE THE OPTION TO INSTALL PRE-CAST INLETS IN LIEU OF BRICK CONSTRUCTION FOR TYPE 1A CURB INLETS.
10. EXCESS TRENCH MATERIAL SHALL BE WASTED AS DIRECTED BY CITY ENGINEER. THIS WORK SHALL BE CONSIDERED SUBSIDIARY TO THE PROJECT.

 	No.	Revision	By	Date
	CITY OF WICHITA, KANSAS			
	TITLE SHEET			
	PHASE 1 STORM WATER SEWER NO. 173 PROJ. NO. 468-76-245-80884-000-000-001			
ENGINEERS PROFESSIONAL ENGINEERING CONSULTANTS, P.A. WICHITA, KANSAS				
Designed by C.S.B.		Job No. 80050-2		Sh. 1
Drawn by G.H.		Date May 7, 1980		



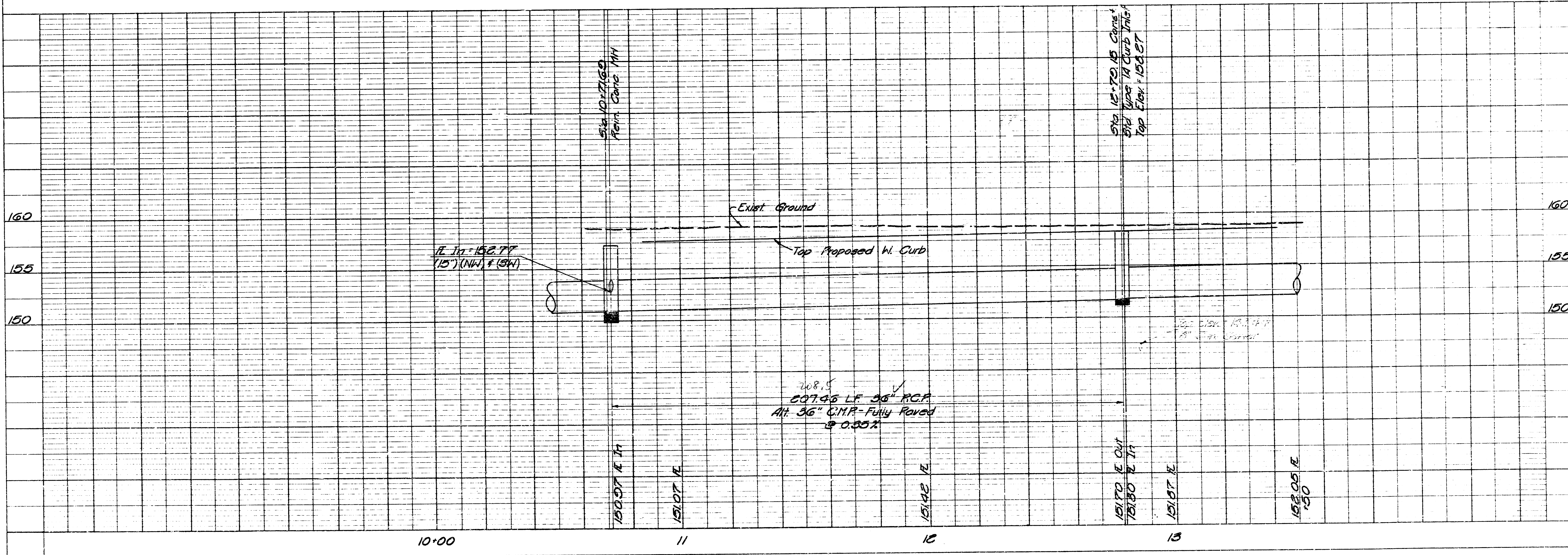
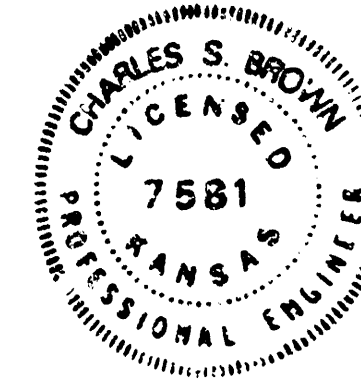
Construct Standard
Type 1A Curb Inlet, W=4'-2"
Install 83.5 L.F. 15" Pipe (NE)
R. Out = 153.80
Top Elev = 157.57

Construct Standard
Type 1A Curb Inlet, W=4'-2"
Install 83.5 L.F. 15" Pipe (SE)
R. Out = 153.15
Top Elev = 157.50

Street Curve Data
 $\Delta = 37^\circ 40' 00''$
 $D = 2^\circ 50' 05''$
 $R = 383.00'$
 $L = 251.70'$
 $T = 130.65'$

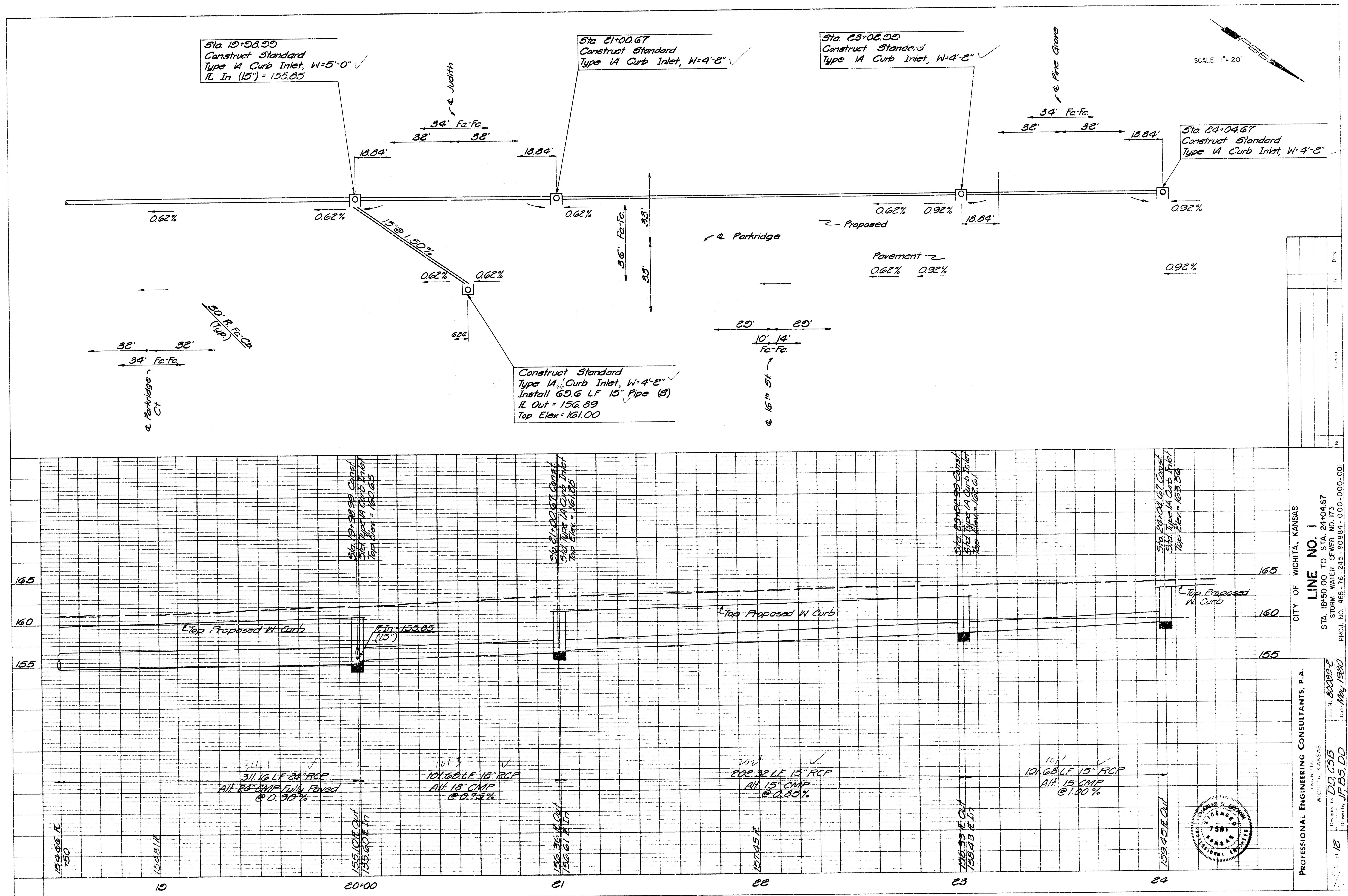
Sta. 12+70.15
Construct Standard
Type 1A Curb Inlet, W=6'-0"

SCALE 1" = 20'

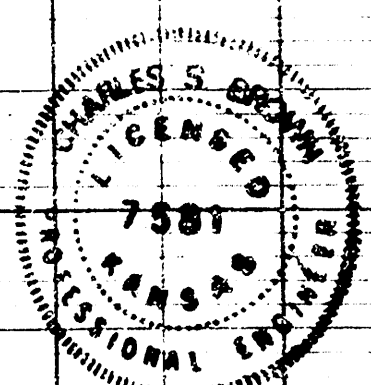


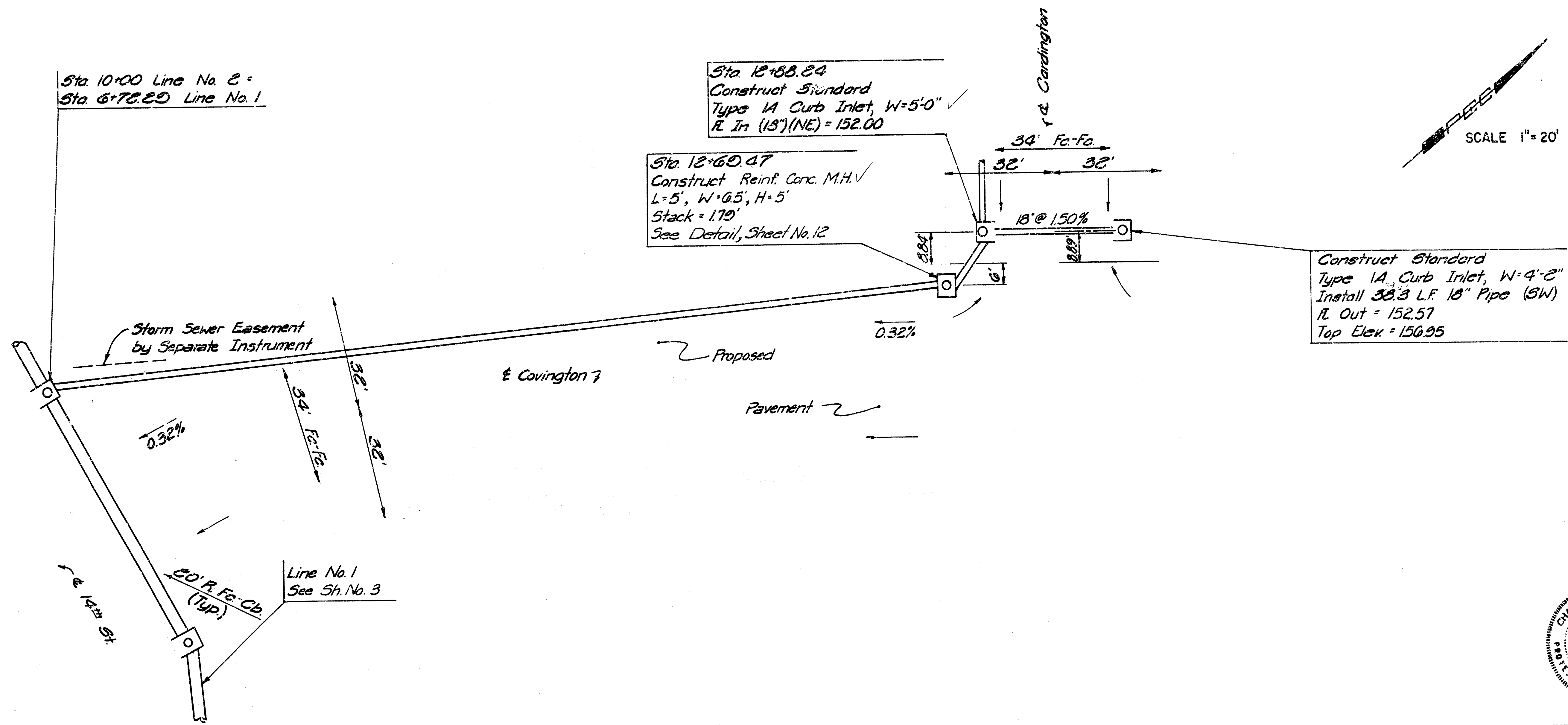
CITY OF WICHITA, KANSAS
LINE NO. 1
STA. 10+71.69 TO STA. 13+50.00
STORM WATER SEWER NO. 173
PROJ. NO. 488-76-245-80884-000-000-001

PROFESSIONAL ENGINEERING CONSULTANTS, P.A.
WICHITA, KANSAS
Lic. No. 00089-E
Designed by D.C. C.S.B.
Drawn by J.F.B.
Date May 1980

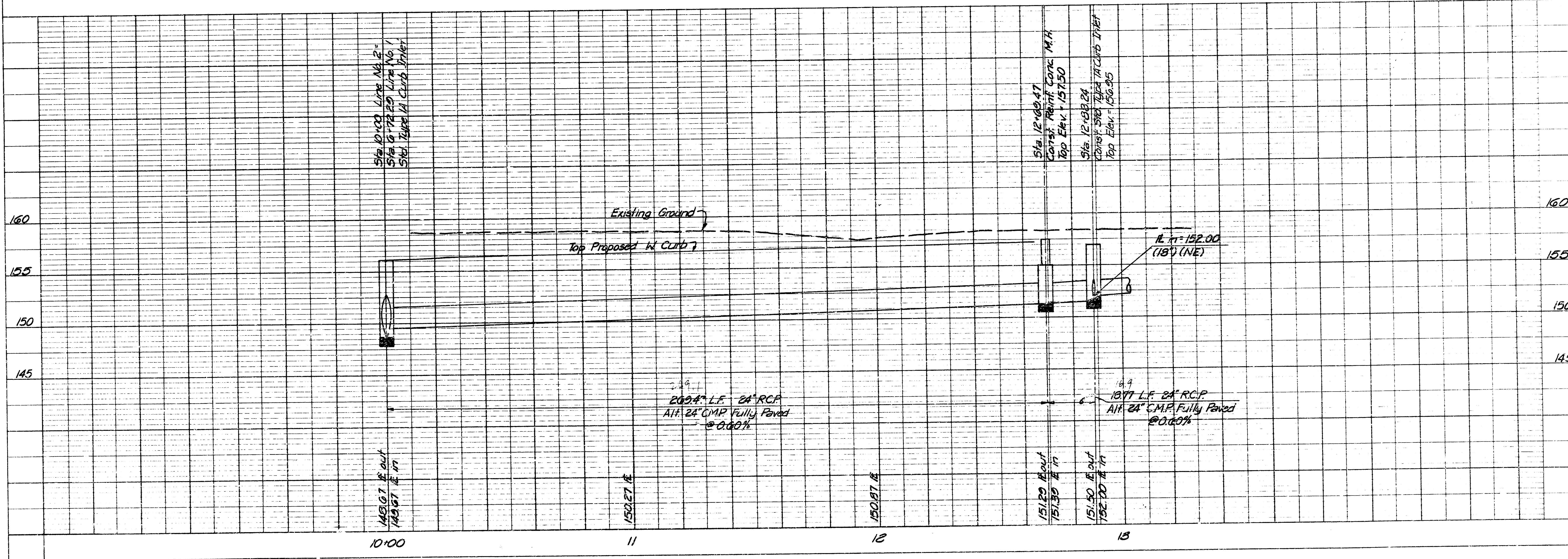
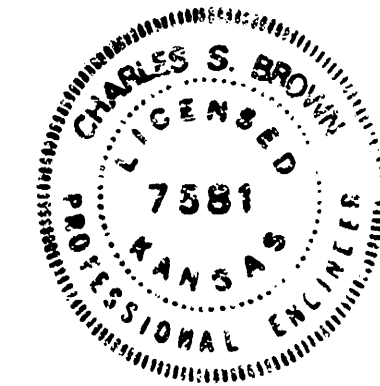


CITY OF WICHITA, KANSAS	
LINE NO. 1	
STA. 19+50.00 TO STA. 24+04.67	
STORM WATER SINKER NO. 173	
PROJ. NO. 468-76-245-80884-000-000-001	
Professional Engineer	City Engineer
Drawn by DD GSB	Checked by JP BS, DD
Date: May 1980	





SCALE 1" = 20'



CITY OF WICHITA, KANSAS

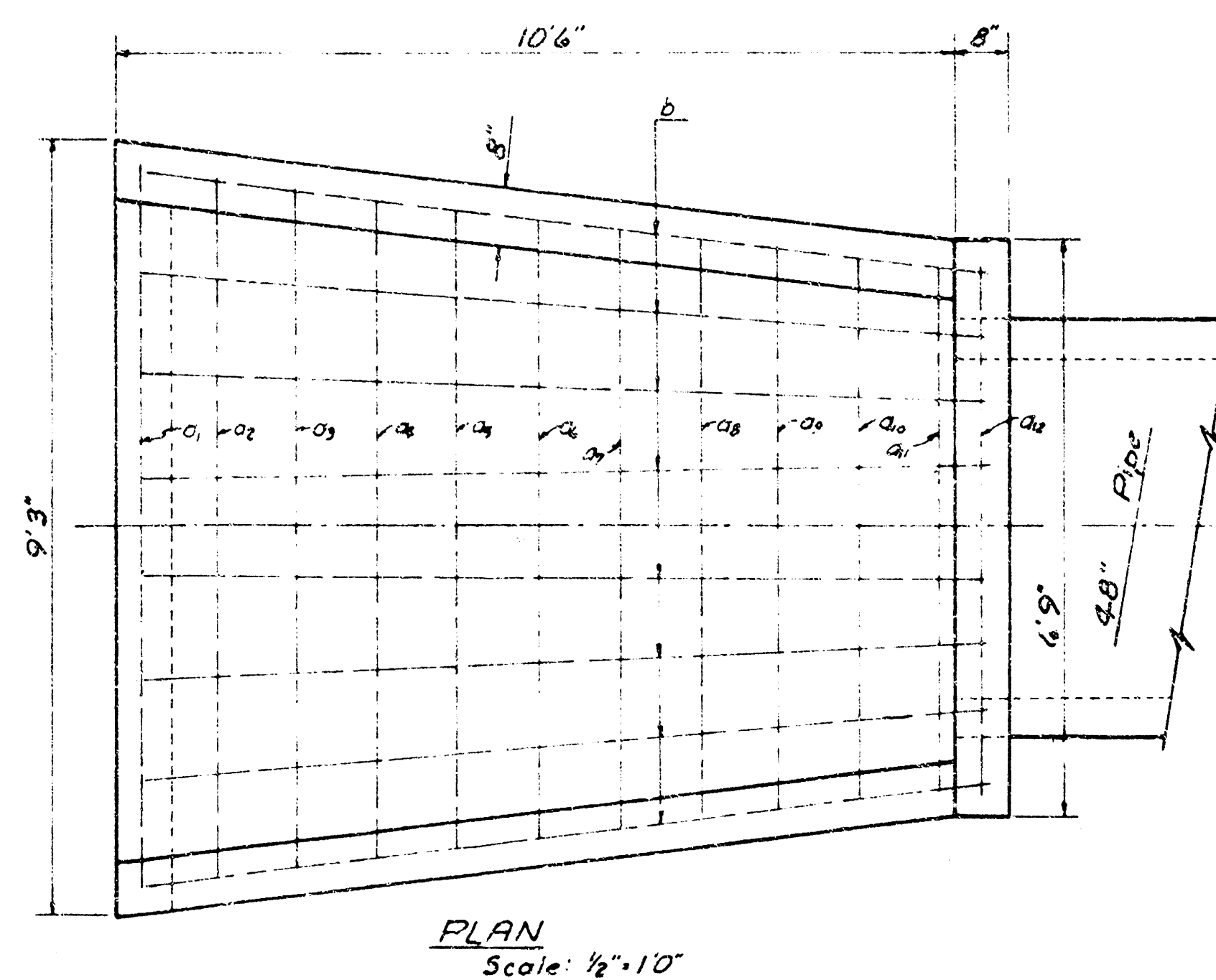
LINE NO. 2

STA 10+00.00 TO STA 12+88.24
STORM WATER SEWER 18" DIA.
PROJ. NO. 468-76-245-80384-000-000-001

PROFESSIONAL ENGINEERING CONSULTANTS, P.A.
WICHITA, KANSAS

Drawn by: **JP, BS, TEB**
Date: **May 1980**

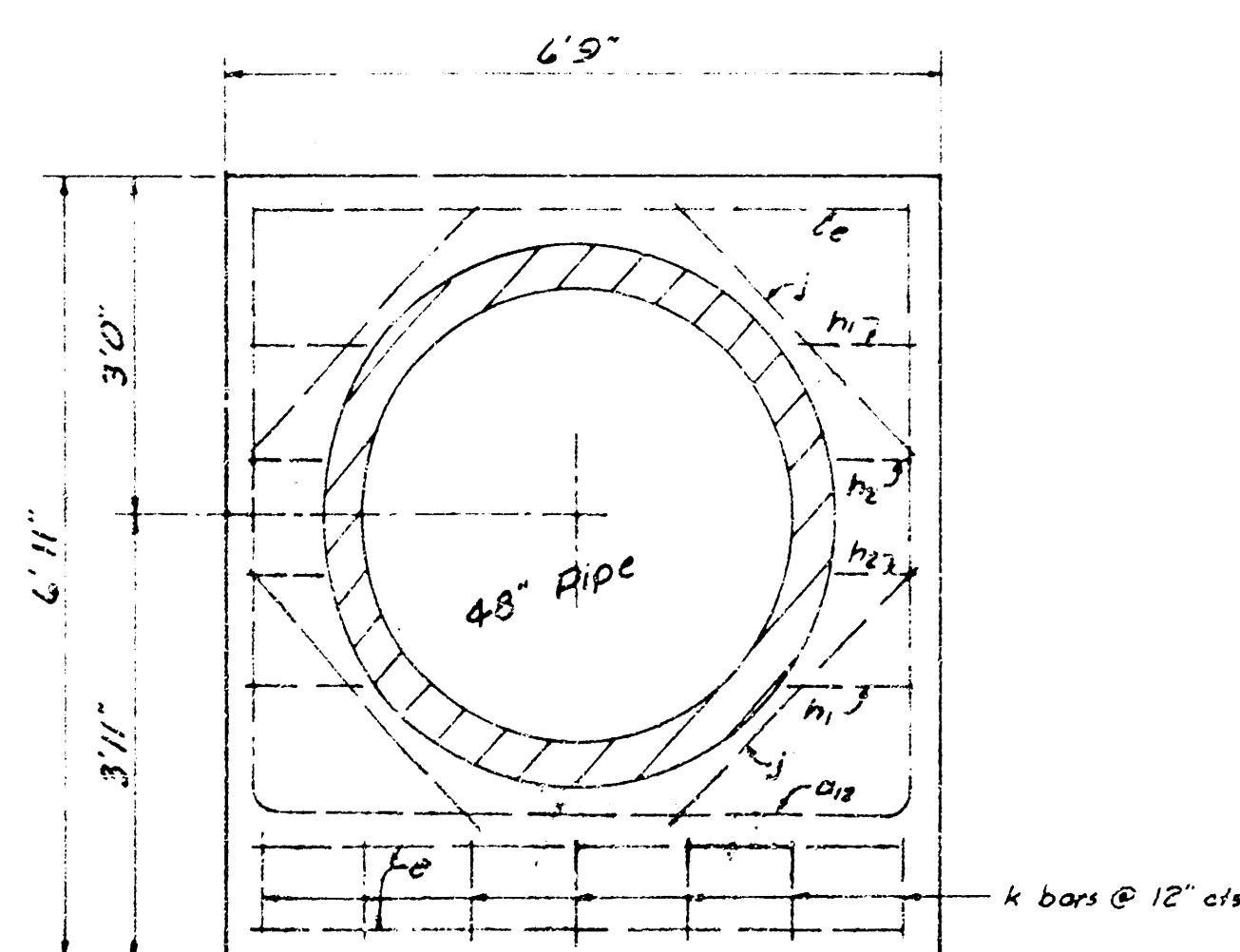
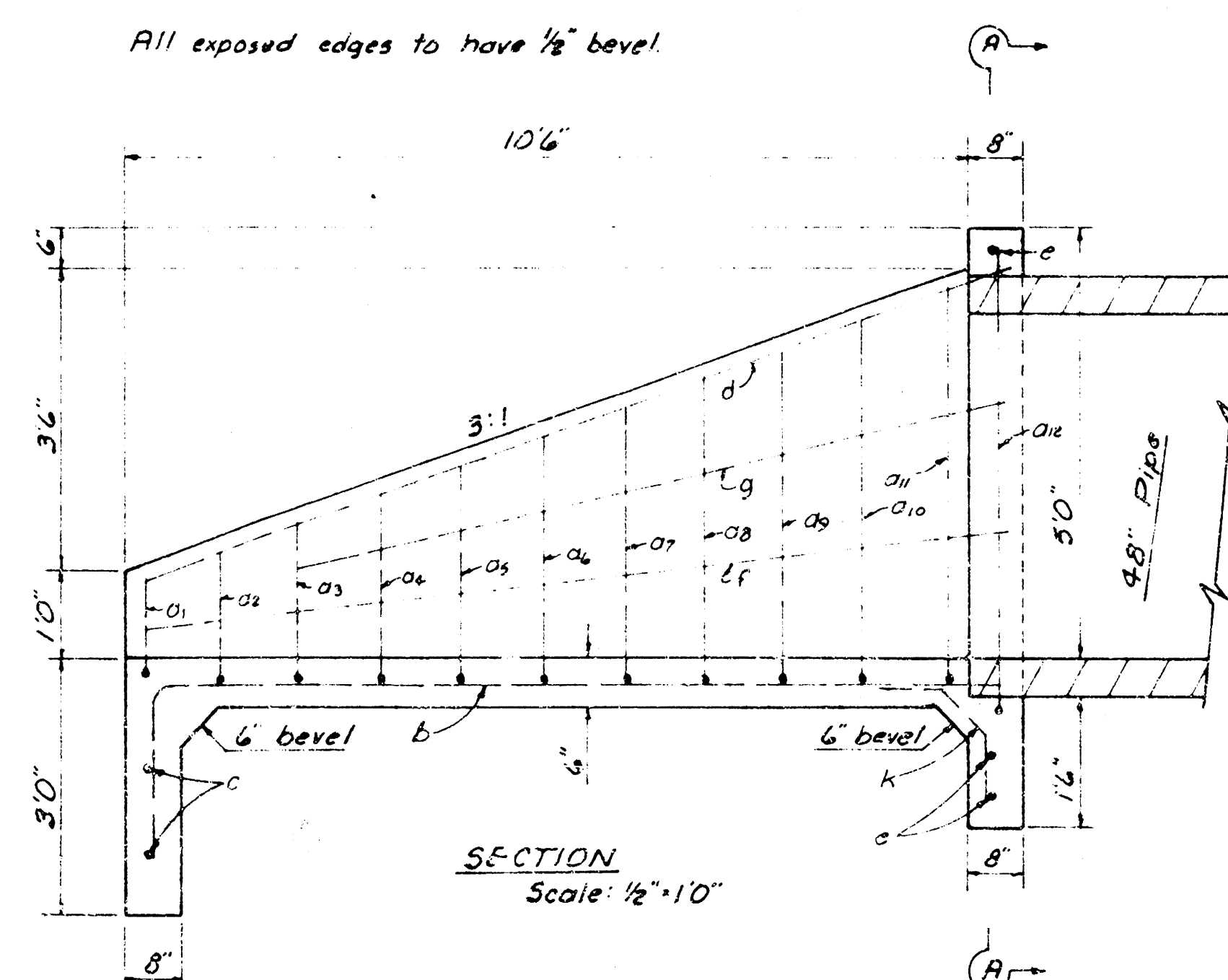
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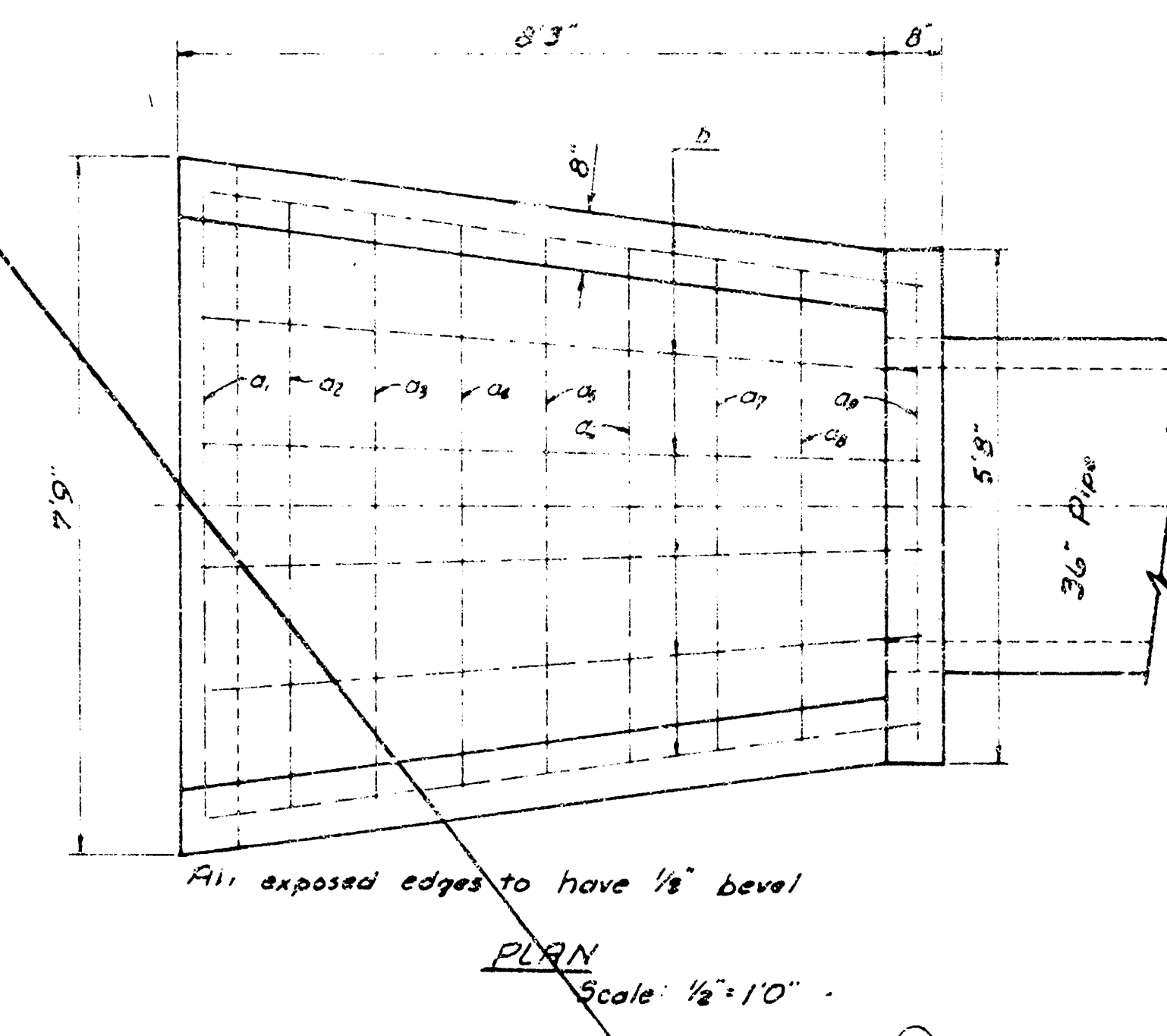
BAR	NUMBER	LENGTH	SHAPE	WEIGHT
a ₁	1	10'10"		7.24
a ₂	1	11'3"		7.52
a ₃	1	11'8"		7.70
a ₄	1	12'1"		8.07
a ₅	1	12'6"		8.35
a ₆	1	13'0"		8.64
a ₇	1	13'5"		8.94
a ₈	1	13'10"		9.24
a ₉	1	14'3"		9.52
a ₁₀	1	14'8"		9.80
a ₁₁	1	15'2"		10.13
a ₁₂	1	16'10"		11.24
b	8	12'7"		27.23
c	2	8'6"		11.36
d	2	11'6"		15.36
e	3	6'5"		12.91
f	2	10'9"		14.36
g	2	5'0"		12.02
h ₁	4	1'2"		3.12
h ₂	4	8"		1.78
j	4	3'3"		8.68
k	7	2'6"		11.69
Rebars (lbs)				245.07
Concrete (C.Y.)				4.75

All rebars to be #4

All exposed edges to have 1/8" bevel



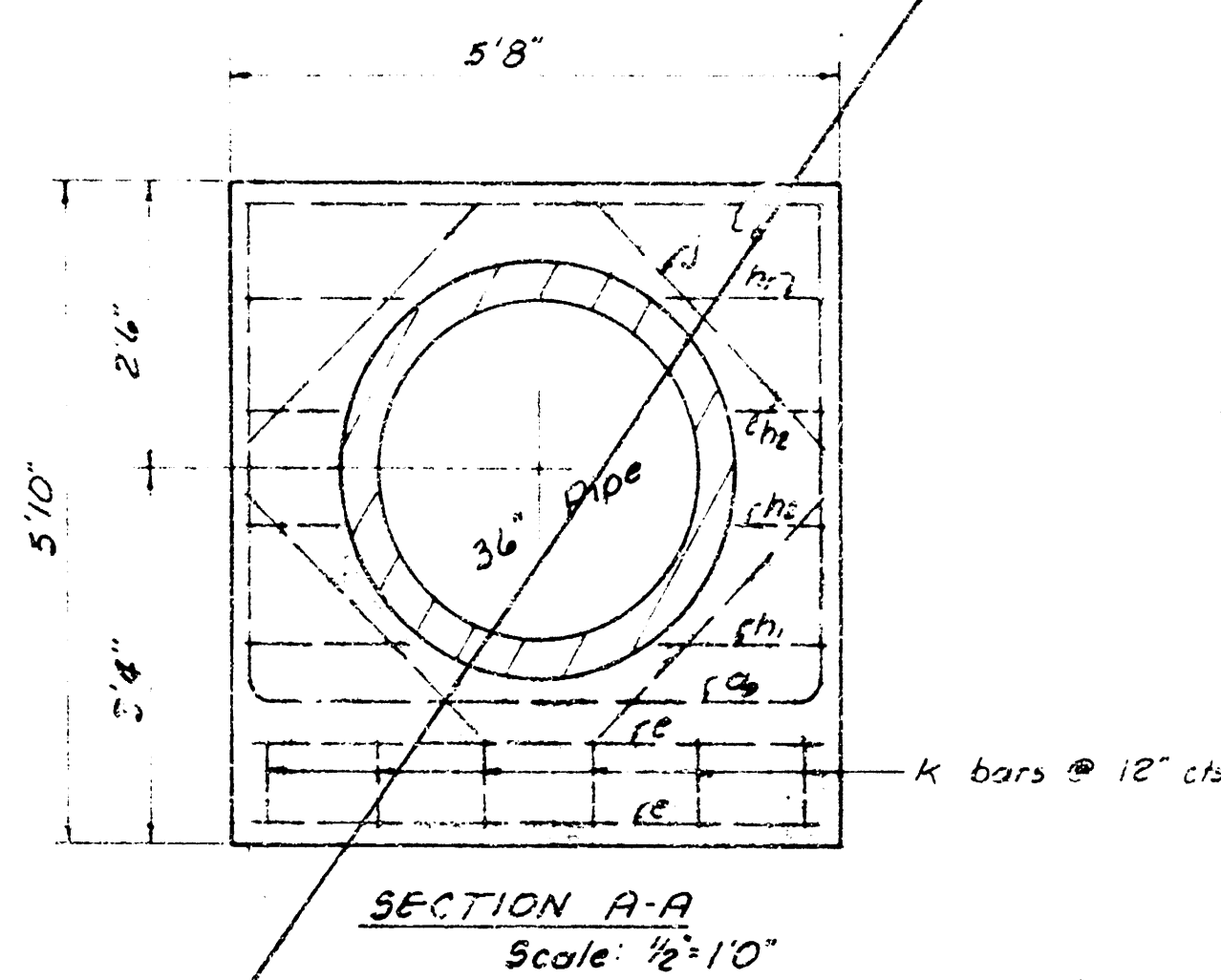
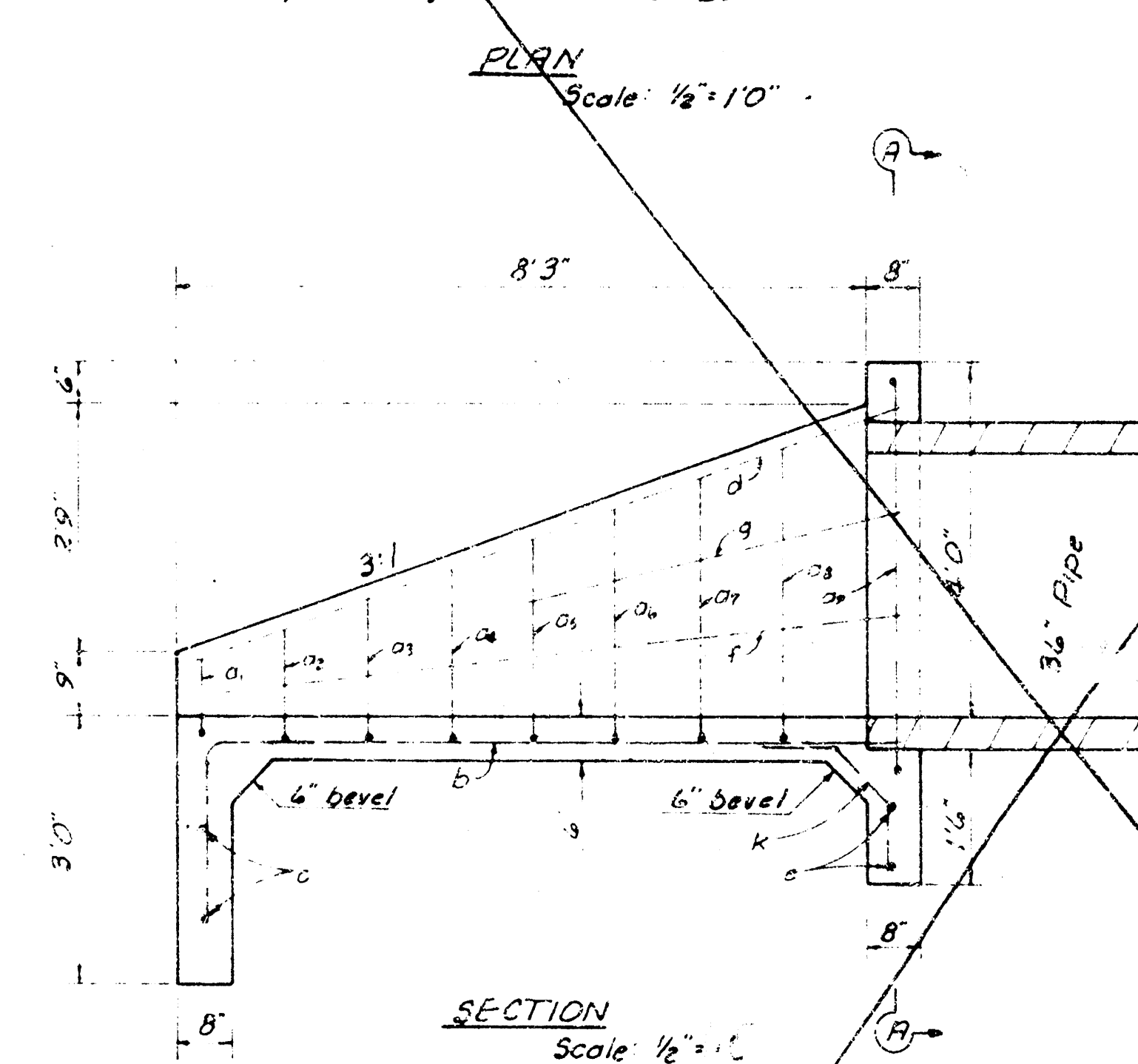
HEADWALL FOR 48" PIPE



BAR	NUMBER	LENGTH	SHAPE	WEIGHT
a ₁	1	8'7"		5.73
a ₂	1	9'0"		6.01
a ₃	1	9'7"		6.40
a ₄	1	10'0"		6.68
a ₅	1	10'5"		6.96
a ₆	1	10'10"		7.24
a ₇	1	11'3"		7.52
a ₈	1	11'8"		7.70
a ₉	1	12'1"		8.07
a ₁₀	1	12'6"		8.35
a ₁₁	1	13'0"		8.64
a ₁₂	1	13'5"		8.94
b	6	10'4"		27.35
c	2	7'0"		12.02
d	2	9'0"		10.69
e	3	5'4"		11.24
f	2	8'5"		12.91
g	2	5'7"		14.36
h ₁	4	1'6"		3.12
h ₂	4	10"		1.78
j	4	3'0"		8.68
k	6	2'6"		11.69
Total Rebars, lbs				178.51
Concrete (C.Y.)				3.20

All rebars to be #4

All exposed edges to have 1/8" bevel



HEADWALL FOR 36" PIPE

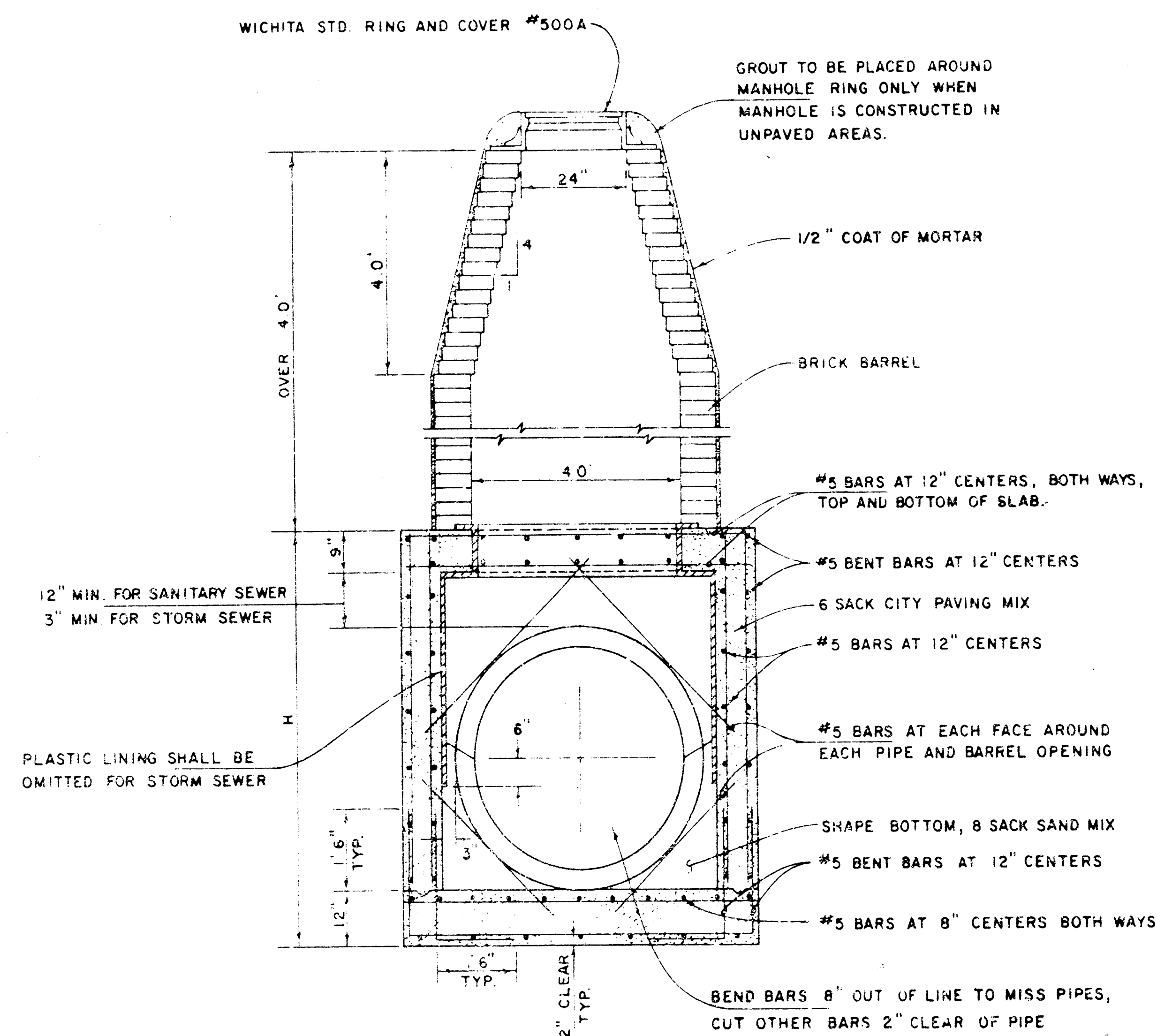
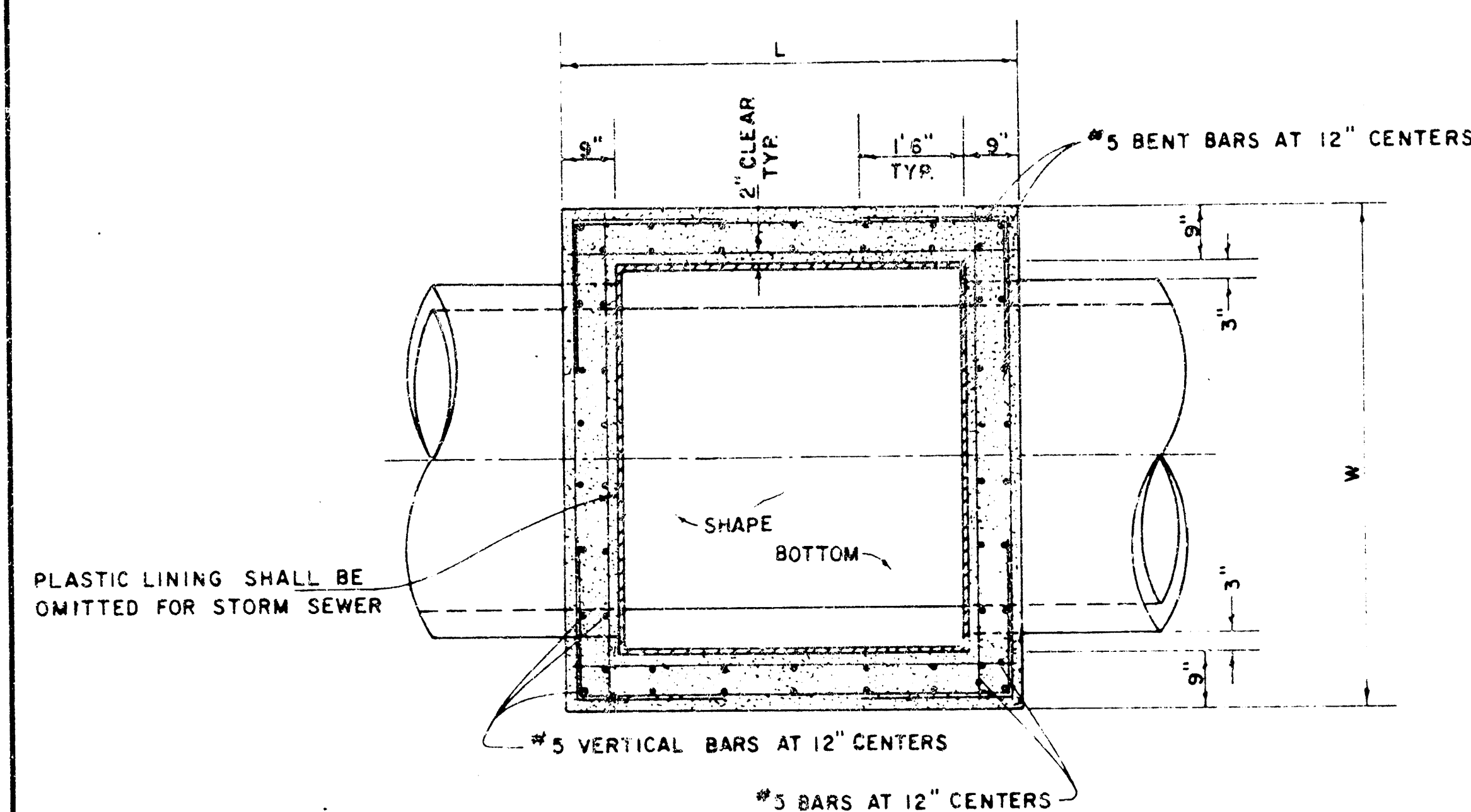
DETAIL CONCRETE HEADWALL

CITY OF WICHITA, KANSAS

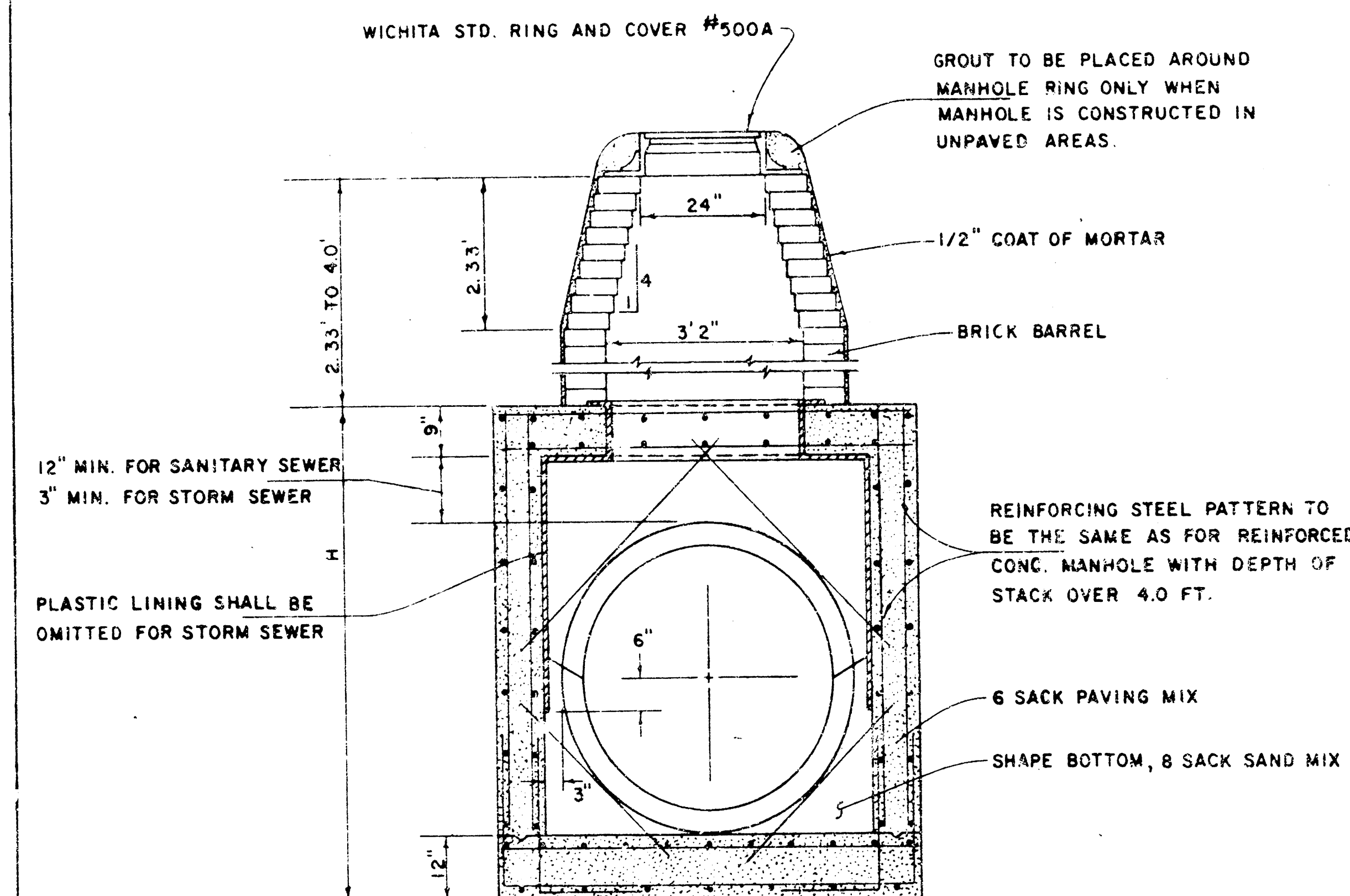
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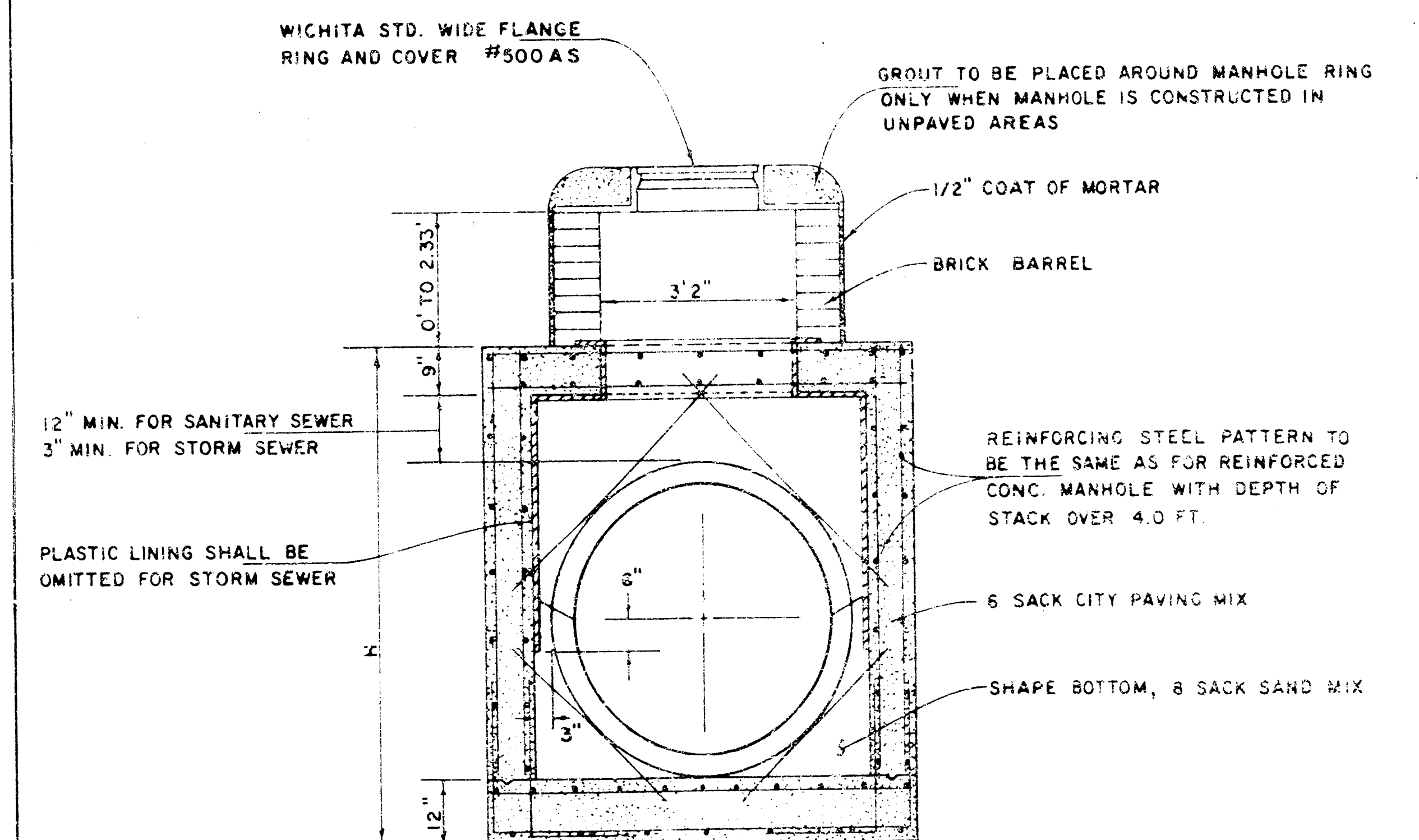
Sheet No 2 of 2



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'



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

STANDARD DETAILS
REINFORCED CONCRETE MANHOLES
CITY OF WICHITA
DEAN S. SELLERS - CITY ENGINEER
APRIL 1978