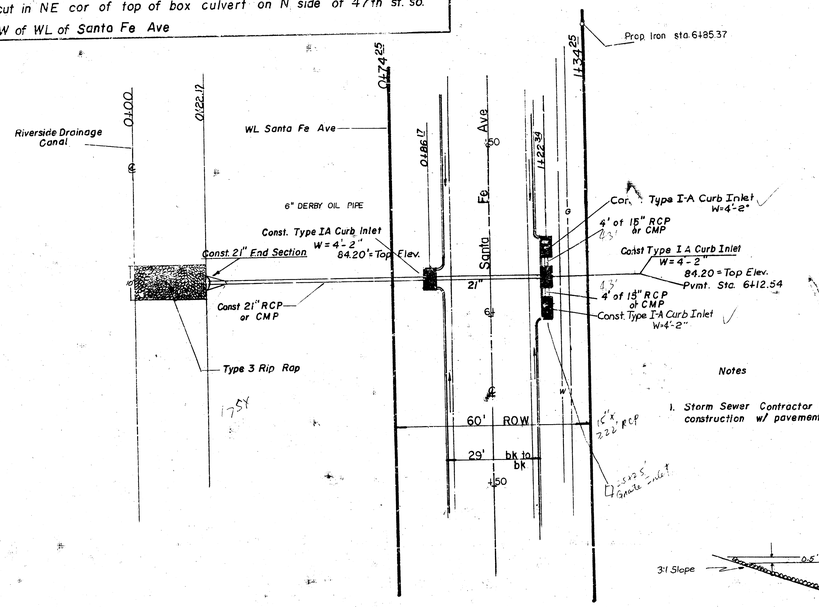
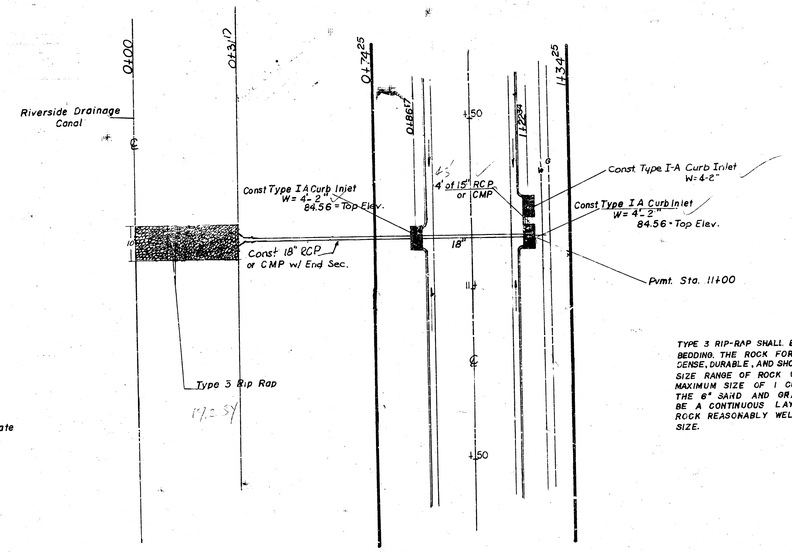
BM 86.84 Broadway and 47th st. so., City Std. 28'E and 28.3'N of sec cor.
BM 84.68 Prop. Iron at NW cor. lot 1 of Brookings By Pass Second Addn.
BM 84.12 Box cut in NE cor of top of box culvert on N side of 47th st. so. ±50' W of WL of Santa Fe Ave



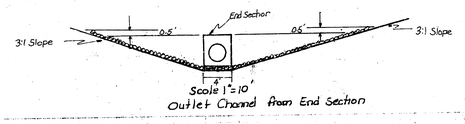


Scale
Plan: 1"=20'
Profile: 1"=5' Vert.
1"=20' Horiz.

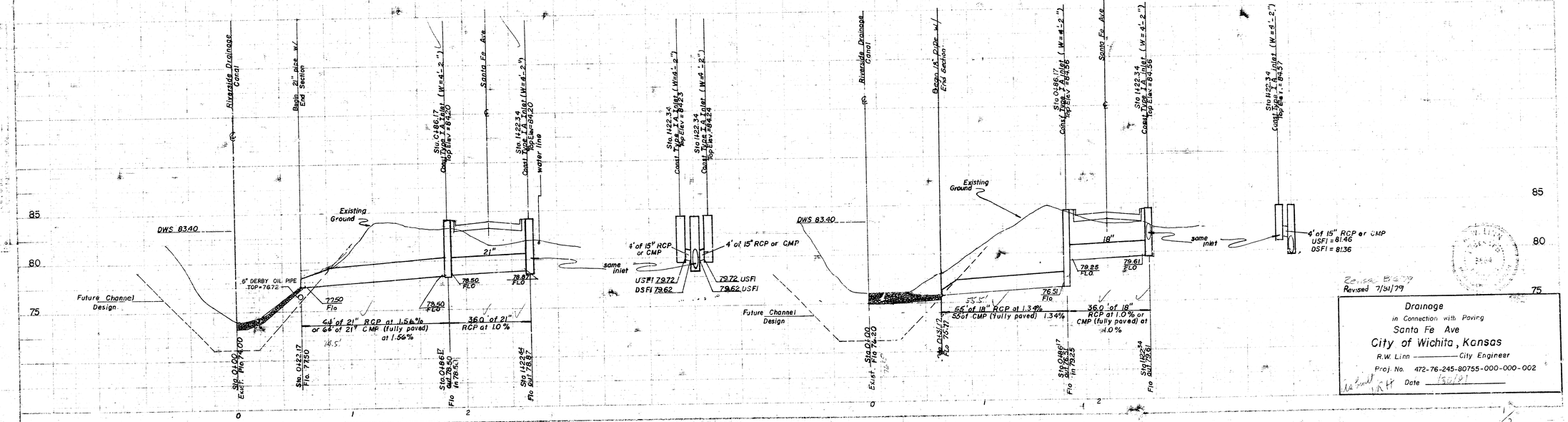
TYPE 3 RIP-RAP SHALL BE 12" RIP-RAP ON 6" SAND AND GRAVEL BEDDING. THE ROCK FOR RIP-RAP AND GRAVEL SHALL BE HARD, DENSE, DURABLE, AND SHOULD BE REASONABLY WELL GRADED. THE SIZE RANGE OF ROCK USED FOR 12" RIP-RAP SHALL HAVE A MAXIMUM SIZE OF 1 CUBIC FT. AND A MINIMUM SIZE OF 1½". THE 6" SAND AND GRAVEL BEDDING FOR RIP-RAP SHOULD BE A CONTINUOUS LAYER OF SAND OR GRAVEL AND CRUSHED ROCK REASONABLY WELL GRADED TO A MAXIMUM OF 1½" IN SIZE.

Notes

1. Storm Sewer Contractor to co-ordinate construction w/ pavement contractor.

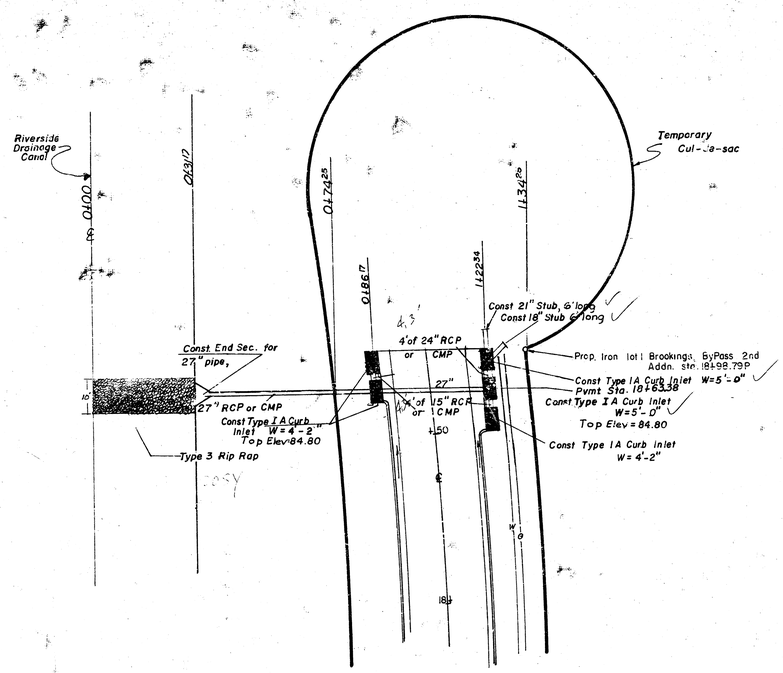


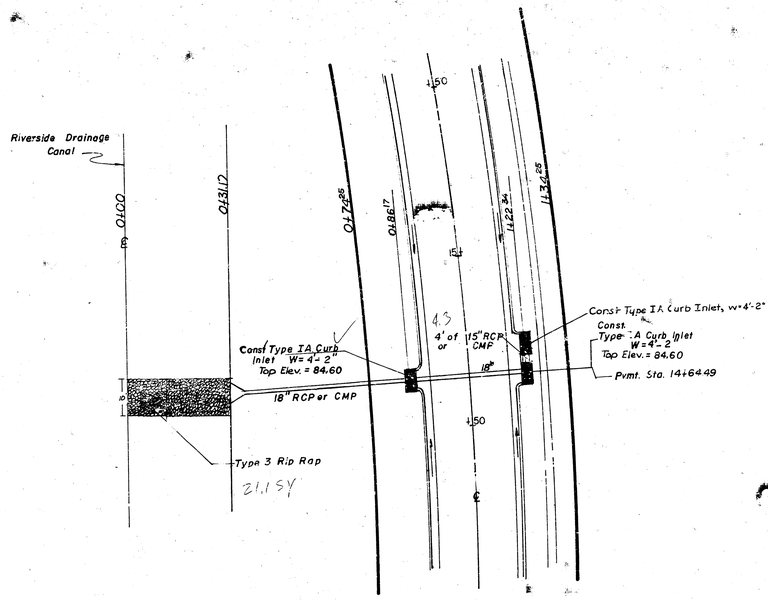
Scale 1"=10'
Outlet Channel from End Section



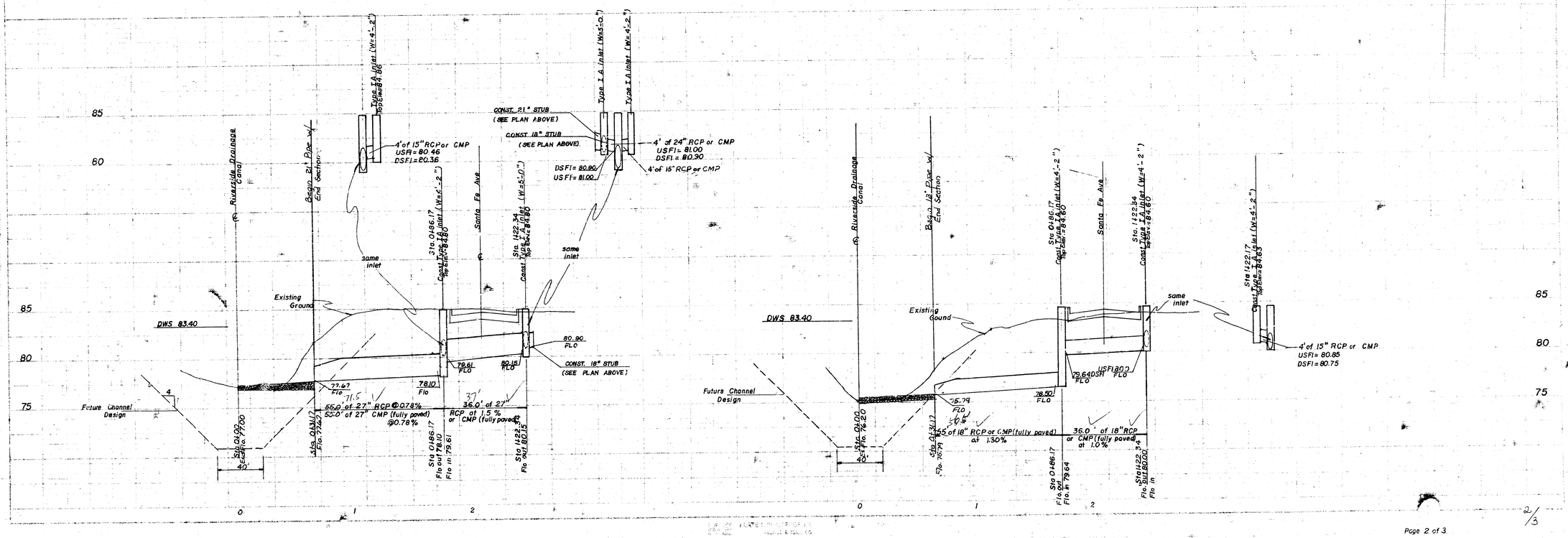
Revised 7/31/79

Drainage
in Connection with Paving
Santa Fe Ave
City of Wichita, Kansas
R.W. Linn ——— City Engineer
Proj. No. 472-76-245-80755-000-000-002
Date 1/30/81

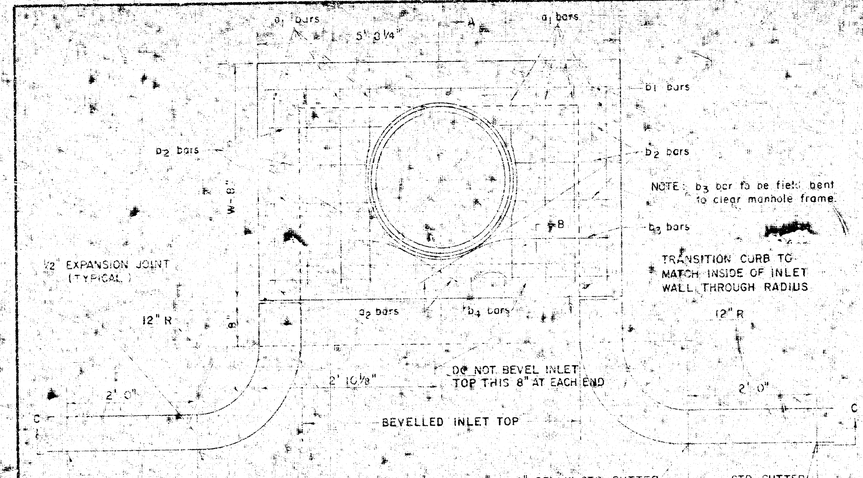

Riverside Drainage Canal
Temporary Cul-de-sac
Const 21" Stub, 6' long
Const 18" Stub 6' long
Const End Sec. for 27" pipe,
4' of 24" RCP or CMP
27"
Prop. Iron lot I Brookings ByPass 2nd Addn. Sta. 18+98.79P
Const Type 1A Curb Inlet W=5'-0"
Pvmt. Sta. 18+63.38
27" RCP or CMP
Const Type 1A Curb Inlet W=4-2" Top Elev=84.80
4' of 15" RCP or CMP
Const Type 1A Curb Inlet W=5'-0" Top Elev=84.80
Const Type 1A Curb Inlet W=4'-2"
Type 3 Rip Rap
10 SY
+1.50
18"
Sta 0+13.12
Sta 0+74.25
Sta 0+86.17
Sta 1+22.34
Sta 1+34.70

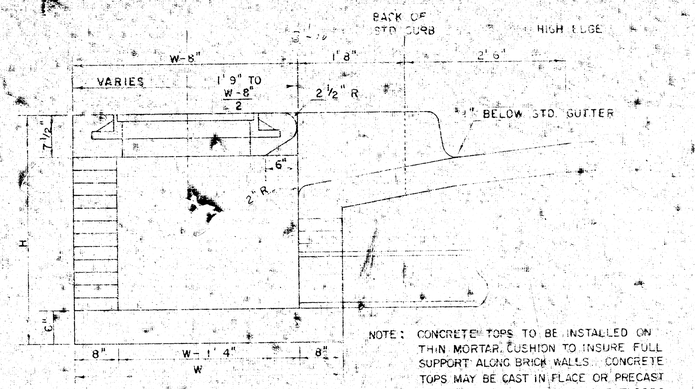

Riverside Drainage Canal
Const Type 1A Curb Inlet, W=4'-2"
Const Type 1A Curb Inlet W=4'-2" Top Elev.=84.60
4' of 15" RCP or CMP
Const Type 1A Curb Inlet W=4'-2" Top Elev.=84.60
Pvmt. Sta. 14+64.49
18" RCP or CMP
Type 3 Rip Rap
21.1 SY
+1.50
18"
Sta 0+13.12
Sta 0+72.85
Sta 0+86.17
Sta 1+22.34
Sta 1+34.25


N


Type 1A inlet (W=4'-2")
Top Elev=84.86
4' of 15" RCP or CMP
USFI= 80.46
DSFI=80.36
CONST. 21" STUB
(SEE PLAN ABOVE)
CONST 18" STUB
(SEE PLAN ABOVE)
Type 1 A inlet (W=5'-0")
Type 1A inlet (W=4'-2")
4' of 24" RCP or CMP
USFI= 81.00
DSFI= 80.90
DSFI= 80.90
USFI= 81.00
4' of 15" RCP or CMP
Riverside Drainage Canal
Begin 21" Pipe w/ End Section
Sta 0+13.12
Sta 0+86.17
Const Type 1A inlet (W=4'-2")
Top Elev=84.80
Santa Fe Ave
Sta 1+22.34
Const Type 1A inlet (W=5'-0")
Top Elev=84.80
same inlet
same inlet
Existing Ground
DWS 83.40
80.90 FLO
79.61 FLO
80.15 FLO
CONST. 18" STUB
(SEE PLAN ABOVE)
4
Future Channel Design
77.67 Flo
78.10 Flo
71.5'
37'
66.0' of 27" RCP @ 0.78%
53.0' of 27" CMP (fully paved) @0.78%
36.0' of 27" RCP at 1.5% or CMP (fully paved)
Sta 0+13.12
Flo. in 77.67
Sta 0+00
Elev=77.00
40'
Sta 0+86.17
Flo out 78.10
Flo in 79.61
Sta 1+22.34
Flo out 80.15
85
80
75
60
0
1
2

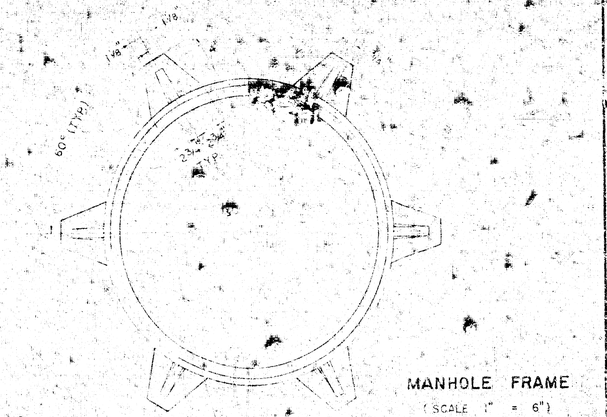
Riverside Drainage Canal
Begin 18" Pipe w/ End Section
Sta 0+86.17
Const Type 1A inlet (W=4'-2")
Top Elev=84.60
Santa Fe Ave
Sta 1+22.34
Const Type 1A inlet (W=4'-2")
Top Elev=84.60
Sta 1+22.17
Const Type 1A inlet (W=4'-2")
Top Elev=84.63
same inlet
Existing Ground
DWS 83.40
79.64DSH FLO
USFI 80.0
4' of 15" RCP or CMP
USFI= 80.85
DSFI= 80.75
Future Channel Design
78.50 FLO
75.79 FLO
Sta 0+00
Flo. in 76.20
Sta 0+13.12
Flo. in 76.79
55.0' of 18" RCP or CMP (fully paved) at 1.30%
36.0' of 18" RCP or CMP (fully paved) at 1.0%
Sta 0+86.17
Flo out 79.64
Flo. in 79.64
Sta 1+22.34
Flo. out 80.00
Flo in
85
80
75
0
1
2



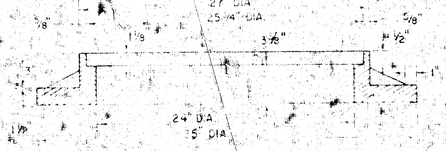


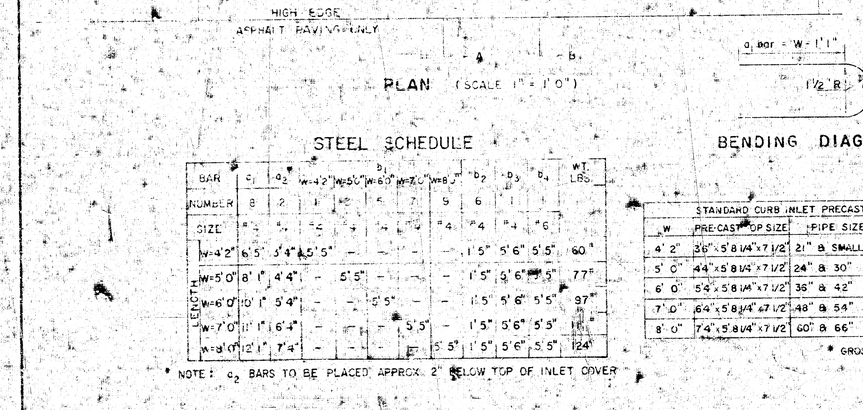
SECTION A-A
(SCALE 1" = 1'0")

NOTE: CONCRETE TOPS TO BE INSTALLED ON THIN MORTAR CUSHION TO INSURE FULL SUPPORT ALONG BRICK WALLS. CONCRETE TOPS MAY BE CAST IN PLACE OR PRECAST CONCRETE. FOR INLET TOPS AND FLOORS SHALL BE 6 SACK PAVING MIX.



MANHOLE FRAME
(SCALE 1" = 6")
WEIGHT = 180 LBS.





BENDING DIAGRAM

STEEL SCHEDULE

BAR	a_1	a_2	b_1	b_2	b_3	b_4	WT. LBS.
NUMBER	8	2	1	2	5	6	
SIZE	#	#	#	#	#	#	
W=4'2"	6'5"	3'4"	5'5"	–	–	1'5" 5'6" 5'5"	60 #
W=5'0"	8'1"	4'4"	5'5"	–	–	1'5" 5'6" 5'5"	77 #
W=6'0"	10'1"	5'4"	–	5'5"	–	1'5" 5'6" 5'5"	97 #
W=7'0"	11'1"	6'4"	–	–	5'5"	1'5" 5'6" 5'5"	111 #
W=8'0"	12'1"	7'4"	–	–	5'5"	1'5" 5'6" 5'5"	124 #

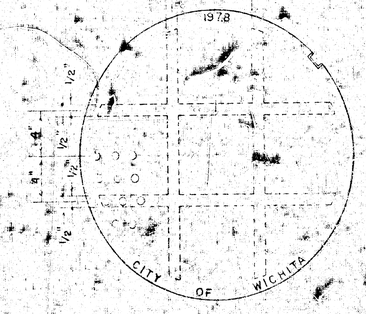
LENGTH

* NOTE: a_2 BARS TO BE PLACED APPROX. 2" BELOW TOP OF INLET COVER

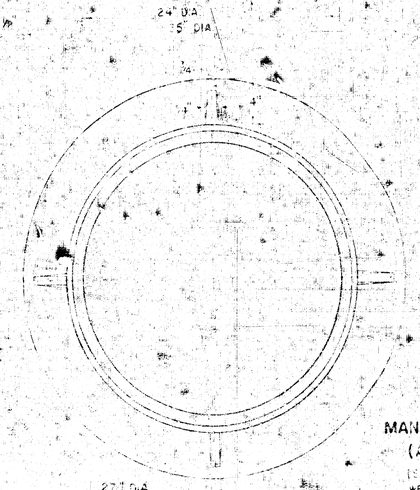
STANDARD CURB INLET PRECAST TOPS

W	PRE-CAST TOP SIZE	PIPE SIZE	CU.YD. CONC
4' 2"	36" x 5' 8 1/4" x 7 1/2"	21" & SMALLER	0.46 *
5' 0"	44" x 5' 8 1/4" x 7 1/2"	24" & 30"	0.57 *
6' 0"	54" x 5' 8 1/4" x 7 1/2"	36" & 42"	0.71 *
7' 0"	64" x 5' 8 1/4" x 7 1/2"	48" & 54"	0.84 *
8' 0"	74" x 5' 8 1/4" x 7 1/2"	60" & 66"	0.97 *

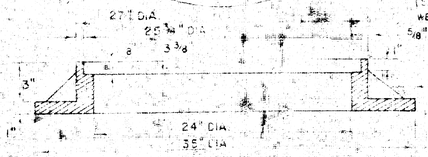
* GROSS VOLUME

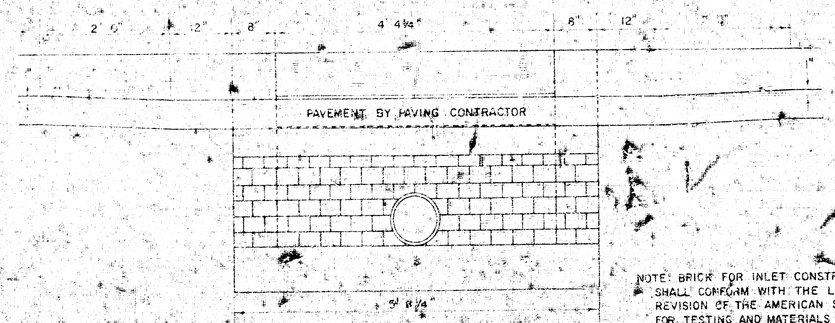


MANHOLE COVER
(SCALE 1" = 6")
WEIGHT = 170 LBS.



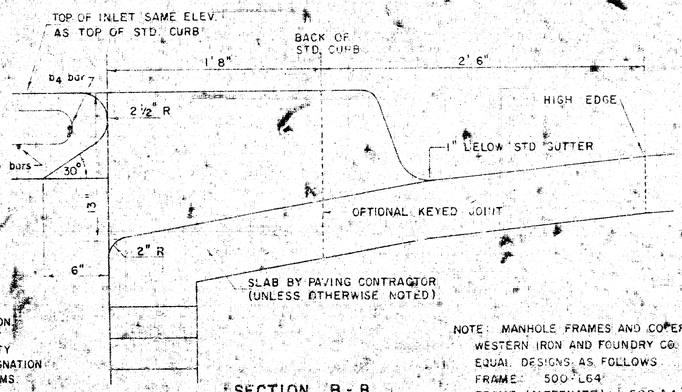
MANHOLE FRAME (ALTERNATE)
(SCALE 1" = 6")
WEIGHT = 180 LBS.





SECTION C-C
(SCALE 1" = 1'0")

NOTE: BRICK FOR INLET CONSTRUCTION SHALL CONFORM WITH THE LATEST REVISION OF THE AMERICAN SOCIETY FOR TESTING AND MATERIALS DESIGNATION C-32 FOR MANHOLE BRICK GRADE MS.



SECTION B-B
(SCALE 1" = 6")

NOTE: MANHOLE FRAMES AND COVER ARE WESTERN IRON AND FOUNDRY CO. INC. OR EQUAL. DESIGNS AS FOLLOWS
FRAME: 500 L64
FRAME (ALTERNATE): 509 A4
COVER: 222 S4 "NOBBY"

DETAIL STANDARD TYPE 1A CURB INLET

CITY OF WICHITA, KANSAS

R. W. LINN – CITY ENGINEER

OCTOBER 1978

3/3

14 10 1 7