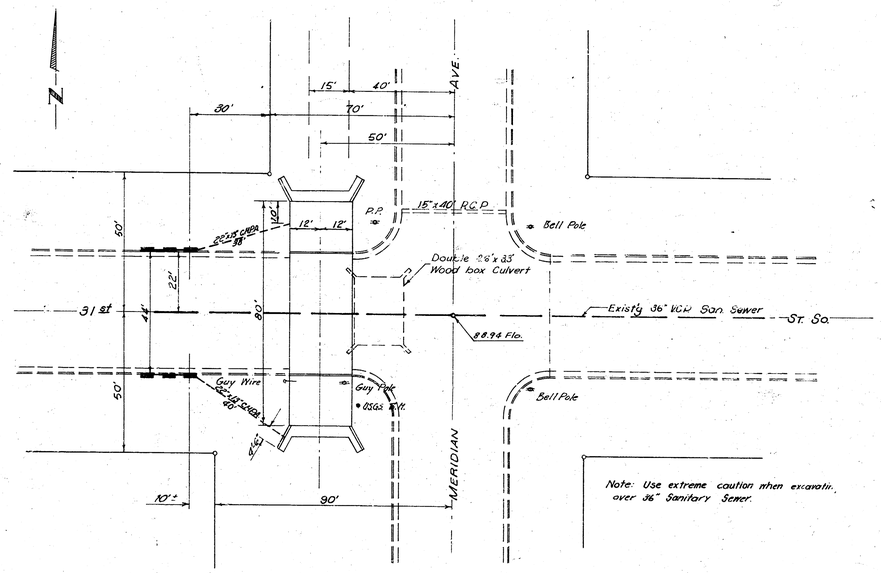
B.M. 97605. USGS. Std. bench on SW cor. Meridian & 31st St.

3 - 7' x 2' R.C.B.C.

MERIDIAN & 31ST. ST. SO.

PROJ. NO. C16-79



PLAN LAYOUT

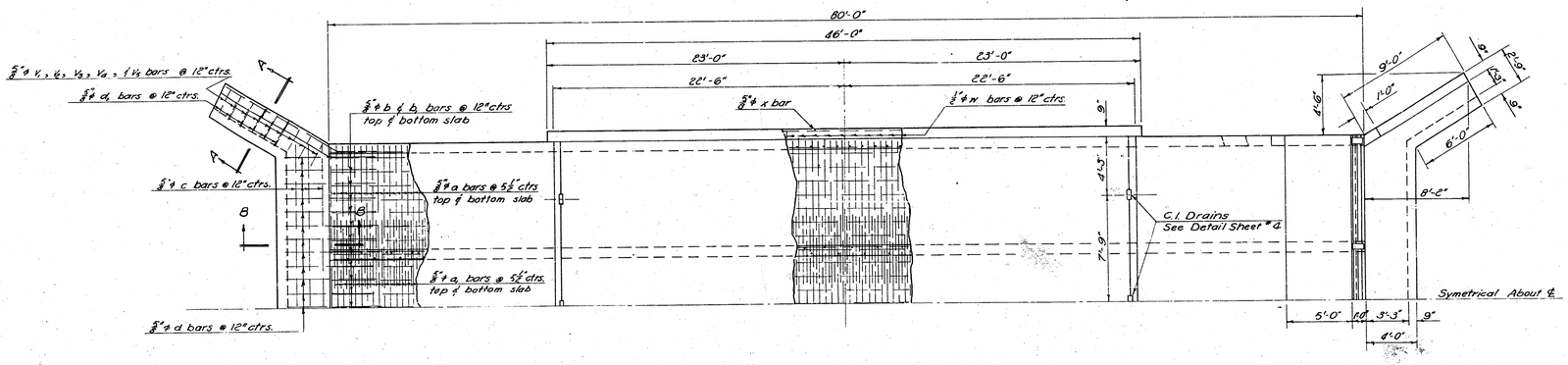
SCALE: 1" = 20'

JOHN H. EPPERSON LICENSED 531 KANSAS PROFESSIONAL ENGINEER

B. E. SMITH LICENSED 436 KANSAS PROFESSIONAL ENGINEER

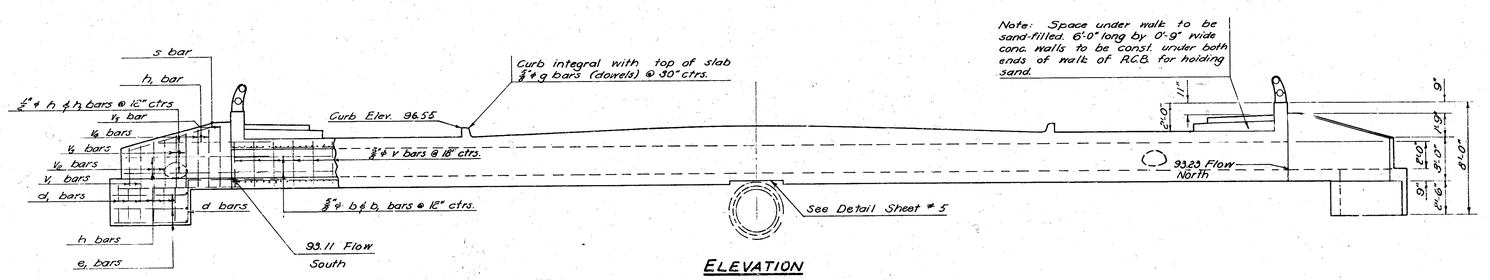
1/7

REINF. CONC. BOX CULVERT
MERIDIAN AVE.
SL 31st ST. SO. TO NL PAWNEE AVE.
CITY OF WICHITA, KANSAS
B. E. SMITH CITY ENGINEER
JULY 1959 PROJ. No. C16-79



PLAN

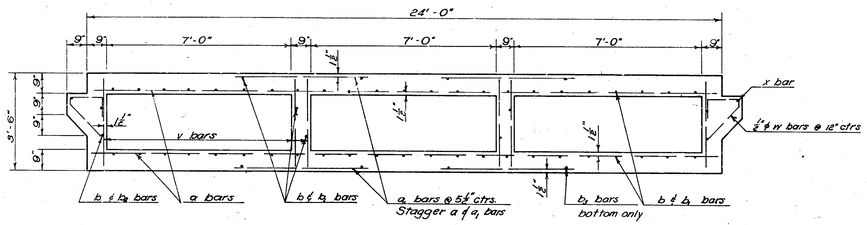
Scale: $\frac{1}{4}$"=1'-0"



ELEVATION

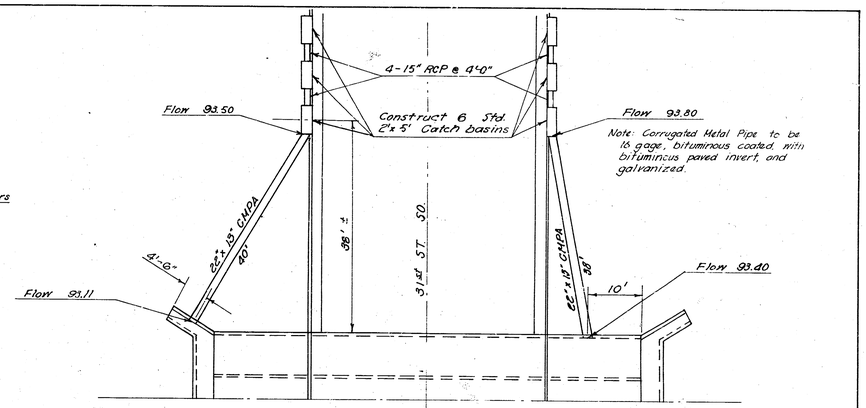
Scale: $\frac{1}{4}$"=1'-0"

2/7



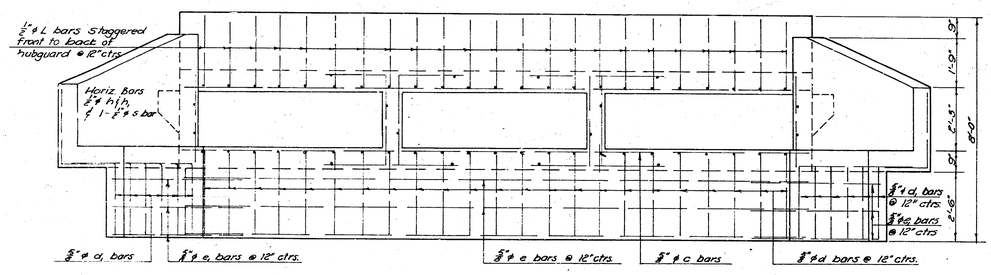
CROSS SECTION OF BOX

Scale: ½" = 1'-0"



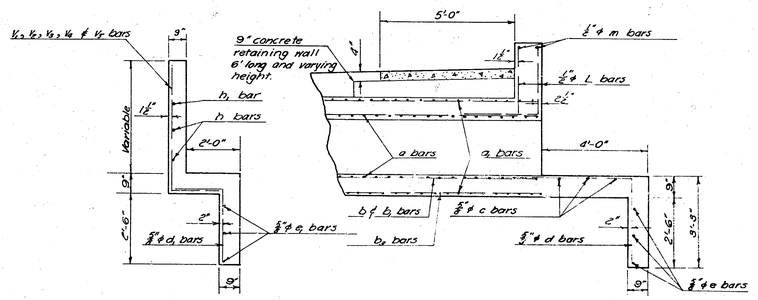
DRAINAGE DETAILS

Scale: 1" = 10'



END ELEVATION

Scale: ½" = 1'-0"



SECTION A-A

DIMENSIONS TYPICAL FOUR WINGWALLS

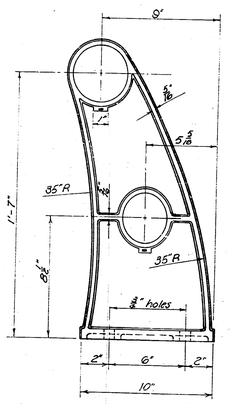
Scale: ½" = 1'-0"

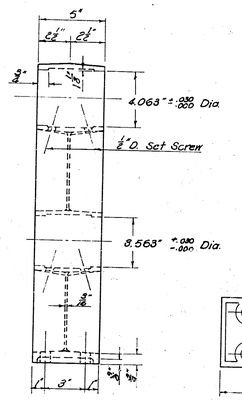
SECTION B-B

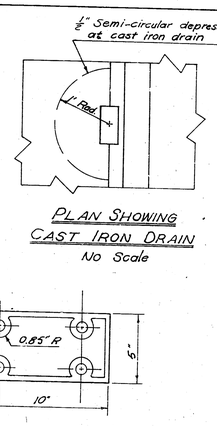
DIMENSIONS TYPICAL BOTH ENDS

Scale: ½" = 1'-0"

3/7

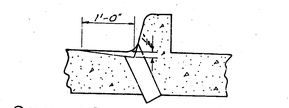






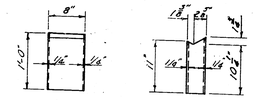
PLAN SHOWING CAST IRON DRAIN

No Scale



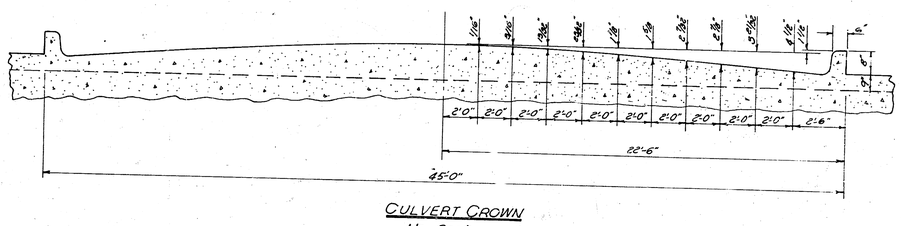
SECTION THRU CAST IRON DRAIN

No Scale



DETAIL OF CAST IRON DRAIN

Scale 1"=1'-0"

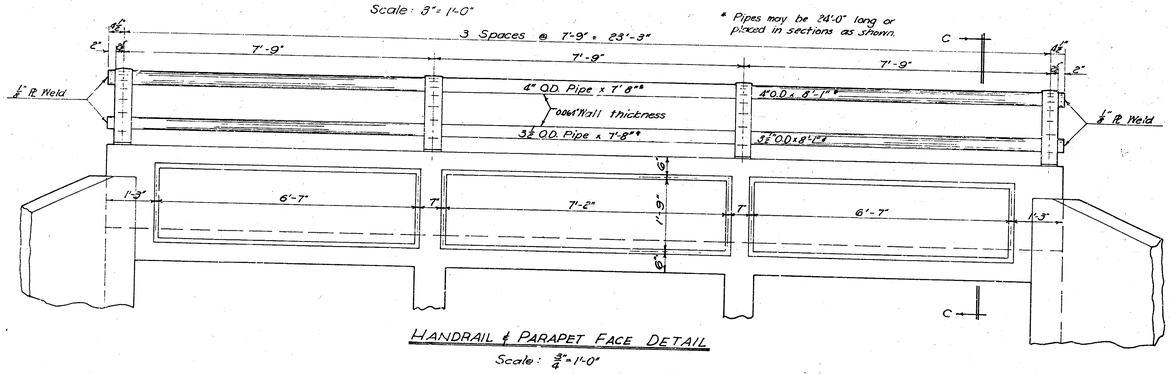


CULVERT CROWN

No Scale

HANDRAIL POST DETAIL

Scale: 3"=1'-0"



HANDRAIL & PARAPET FACE DETAIL

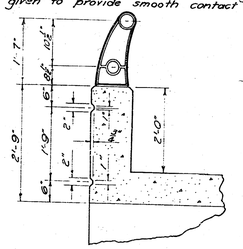
Scale: 3/4"=1'-0"

Notes: Unit price bid for Metal Handrail shall include installation of handrail anchor bolts and complete fabrication and erection of posts and railing, as shown.

All handrail anchor bolts and nuts shall either be galvanized or cadmium plated: steel. All other parts of rail shall be aluminum: tubing, Alloy 61S-T6, mill finish; cast posts, Alloy 214, sandblast finish. All aluminum shall have a protective coating prior to erection as shown in the Specifications.

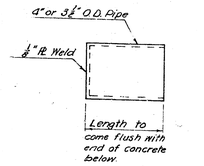
Aluminum surfaces in contact with concrete shall be painted with a heavy coat of bituminous paint, Inertal brand or equal.

The top surface of the parapet wall shall be given a troweled finish with special care given to provide smooth contact surfaces under posts.



SECTION C-C

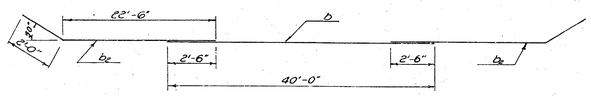
Scale: 3/4"=1'-0"

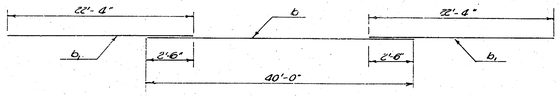


RAIL CAP DETAIL

No Scale

4/7

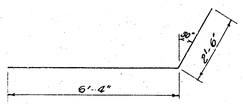




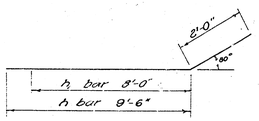
d bars

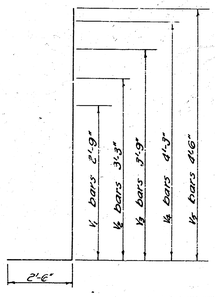
d1 bars

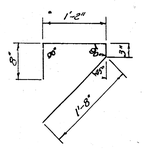
X bars



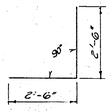
e, bars







W bar



L Bar

STEEL SCHEDULE

BAR	SIZE	NO.	LENGTH	SHAPE
a	⅝"	350	23'-7"	
a1	⅝"	682	5'-0"	
b	⅝"	58	40'-0"	
b1	⅝"	108	22'-4"	
b2	⅜"	6	24'-6"	
c	⅝"	6	24'-0"	
d	⅜"	46	9'-0"	
d1	⅜"	24	4'-3"	
e	⅝"	6	23'-0"	
e1	⅜"	12	8'-10"	
g	⅜"	20	11'-0"	
h	½"	8	11'-6"	
h1	½"	4	10'-0"	
L	½"	46	5'-0"	L
m	½"	4	23'-6"	
s	½"	4	8'-6"	
V	⅜"	324	3'-2"	
V1	⅜"	6	5'-3"	
V2	⅜"	8	5'-9"	
V3	⅜"	8	6'-3"	
V4	⅜"	6	6'-9"	
V5	⅜"	4	7'-0"	
W	½"	92	3'-9"	2
X	⅝"	4	24'-0"	
b4	⅝"	8	37'-8"	

BILL OF MATERIALS

ITEM	QUANTITY	UNITS
Class "A" AE Concrete	1650	Cu Yds.
Reinf. Steel	20550	Lbs
Aluminum Handrail	480	Lin Ft
General Excavation	455	Cu Yds.
Hand Excavation	5	Cu Yds.
Compacted Backfill	50	Cu Yds.
Integral Curb	48	Lin Ft.
4" Sidewalk	240	Sq Ft
Cast Iron Drains	6	Each
Remove Exist. Box	1	Each
22" x 13" CMPA	78	Lin. Ft.
5'x2 Std Catch Basin	6	Each
15" RCP	16	Lin Ft

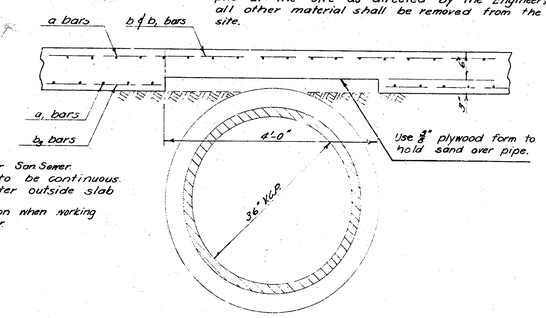
GENERAL NOTES:

General excavation is to be extended 2' each side of box & wingwalls.

All fill is to be sand stabilized. Backfill at sides of box to be mechanically tamped. Fill is to be carried to approx. original ground elev., but in no case above the top of culvert.

Bevel all exposed edges with a ¾" triangular molding unless otherwise indicated.

The Contractor shall salvage all reuseable material from existing timber structure and stockpile at the site as directed by the Engineer; all other material shall be removed from the site.



Note: Box out 4'-0" over San. Sewer. Steel in upper face to be continuous. Pour d' section after outside slab is complete.
Use extreme caution when working over existing 36" Sewer.

BAR BENDING DIAGRAMS

NO Scale

SECTION OVER SAN. SEWER

Scale: 1"= 1'-0"

5/7