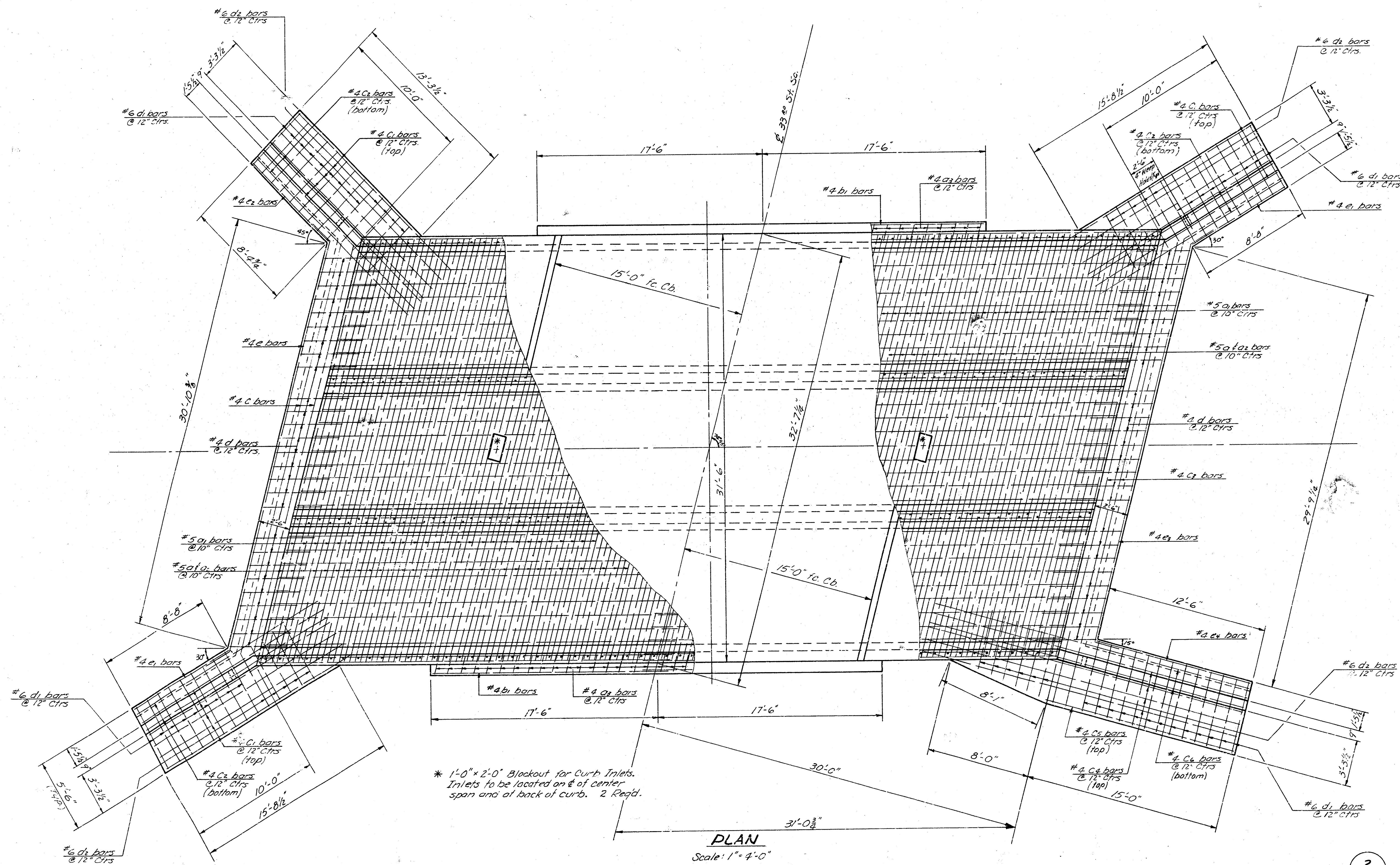


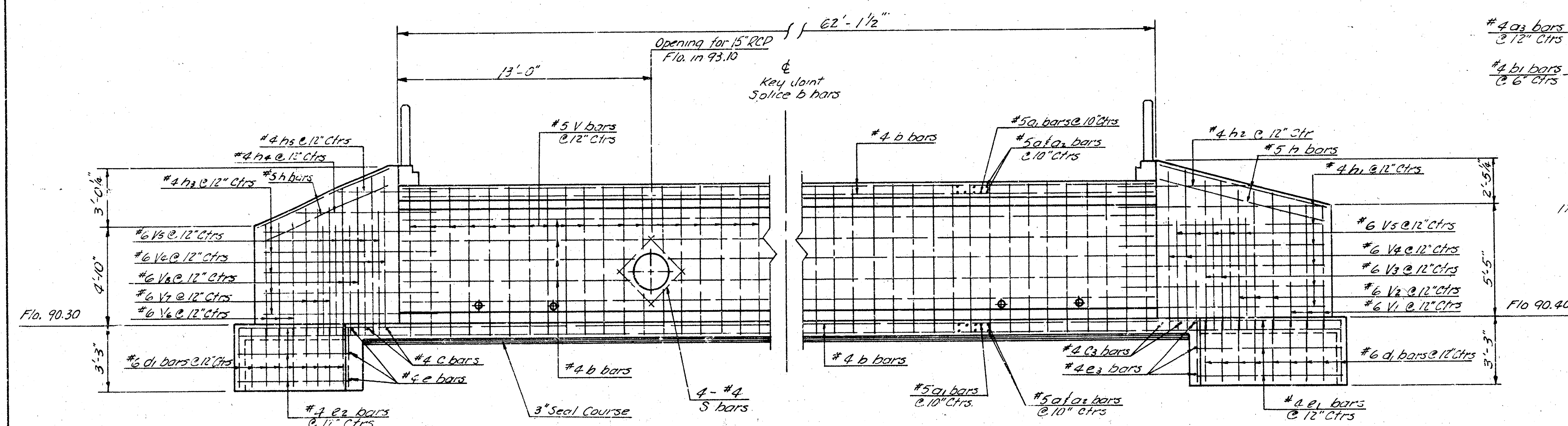


Reinforcement spacing - Measure perpendicular to E. & W. ends of culvert.
Reinforcement spacing - Measure perpendicular to E. & W. walls of culvert.

2
6

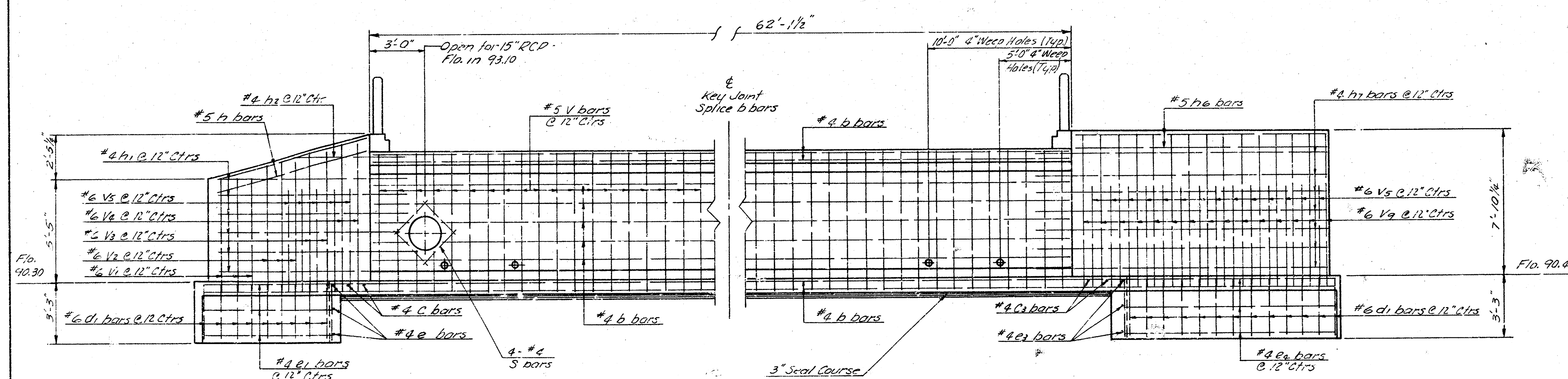
3-9.5' x 6.0' R.C.B.C.
SHERIDAN AVE. & 33RD ST. SO.
DACS 574130

21
15



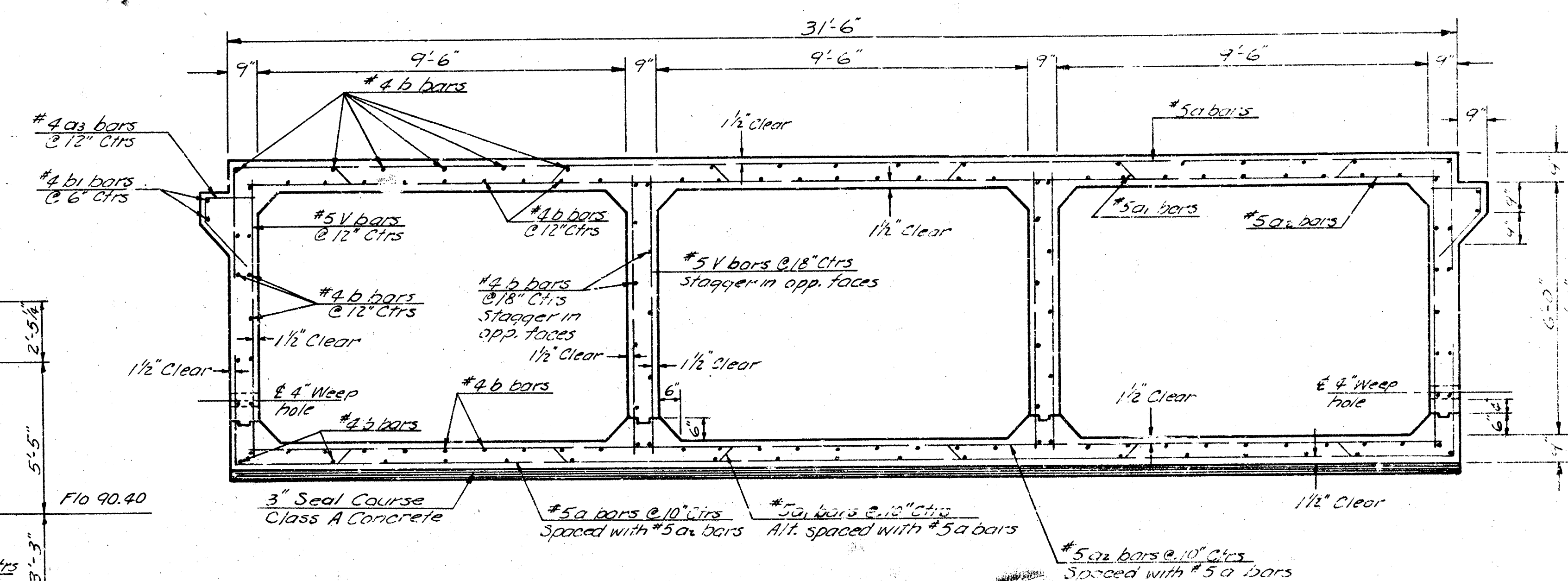
SECTION OF WEST WALL

Scale: 1" = 4'-0"



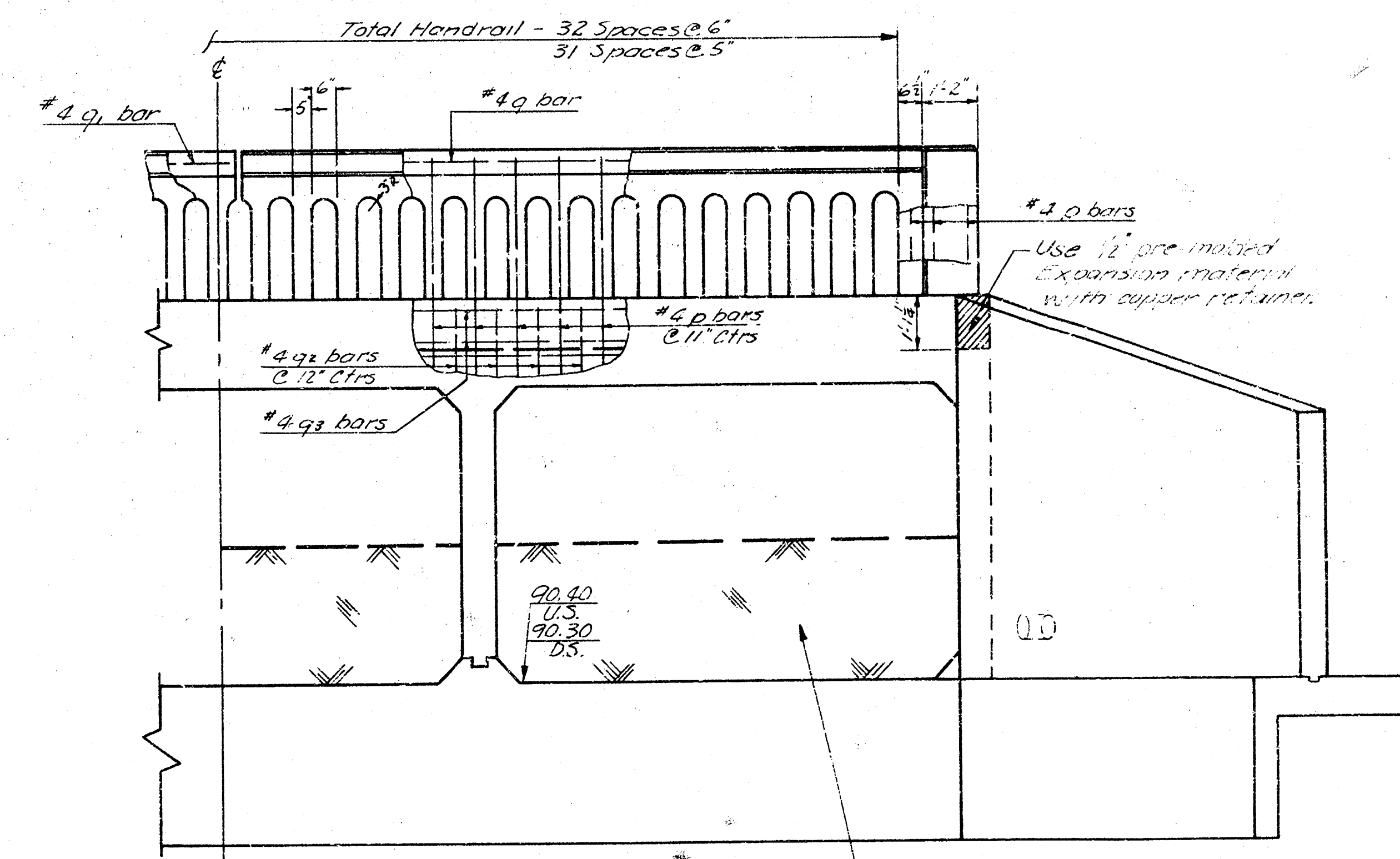
SECTION OF EAST WALL

Scale: 1" = 4'-0"



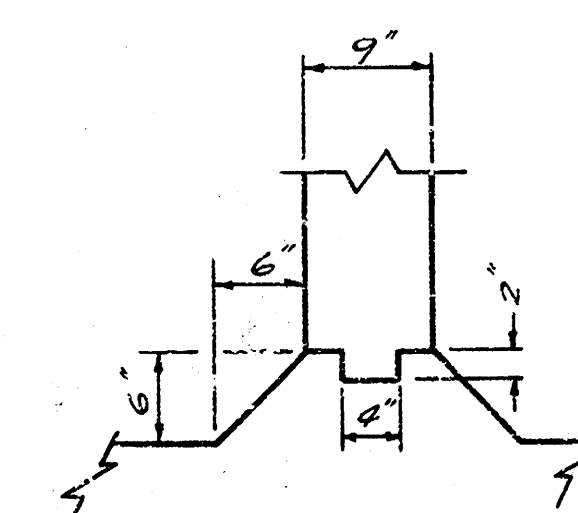
CROSS SECTION OF BOX

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



HALF END SECTION

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



CONSTRUCTION JOINT DETAIL

No Scale

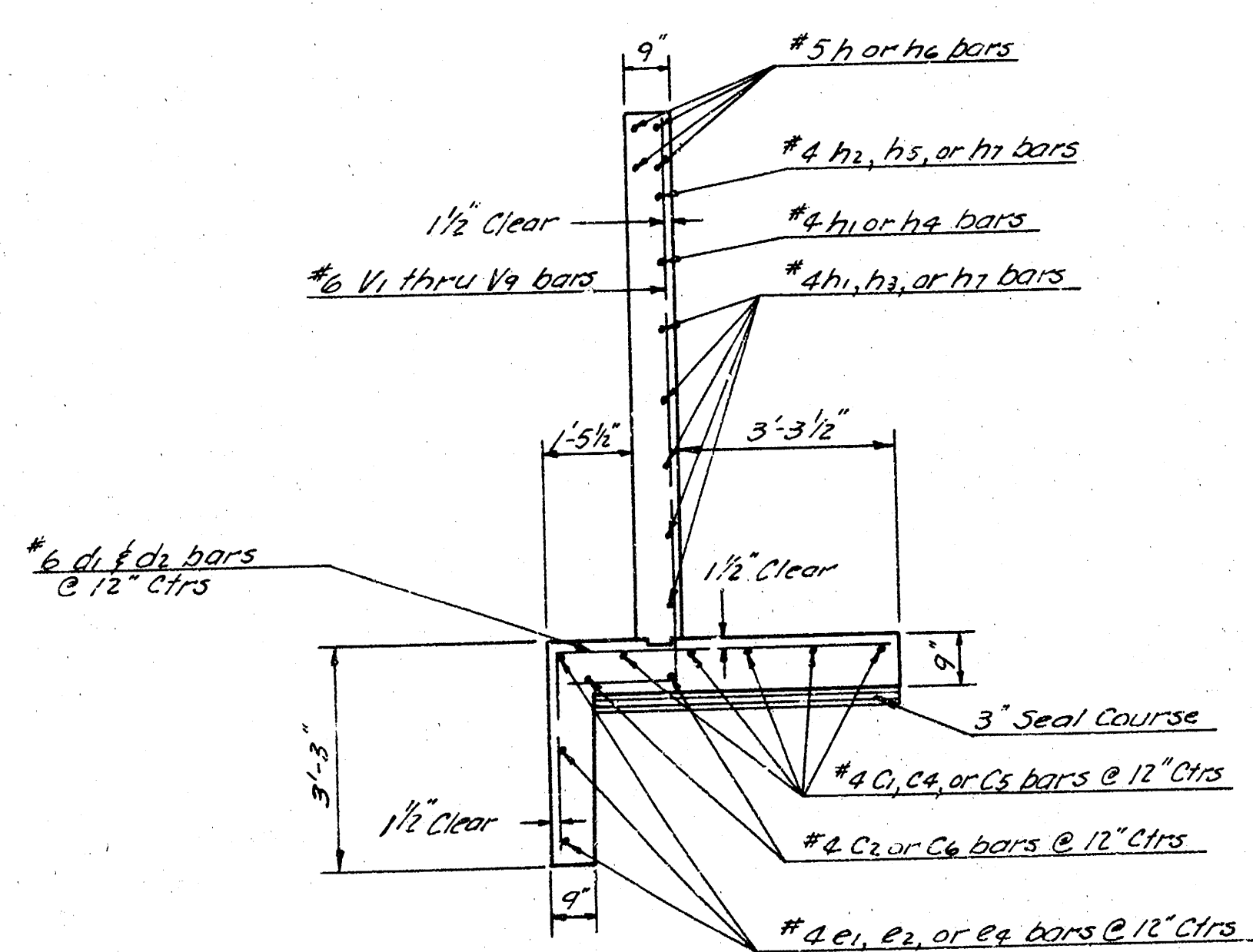
12 OZ. SHEET COPPER RETAINER

No Scale

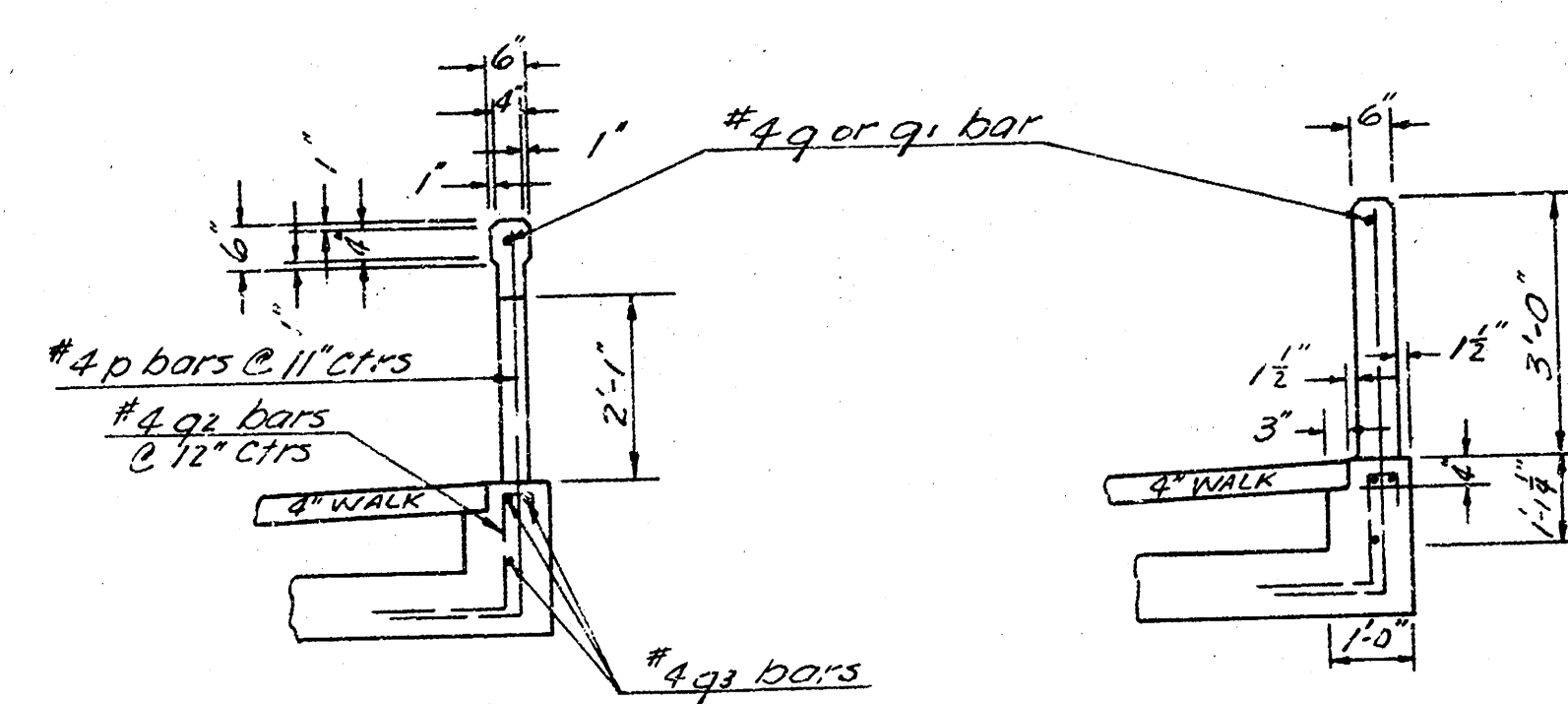
3
6

3'-9.5" x 6'-0" R.C.B.C.
SHERIDAN AVE. & 33RD ST. SO.
DAKS 574130

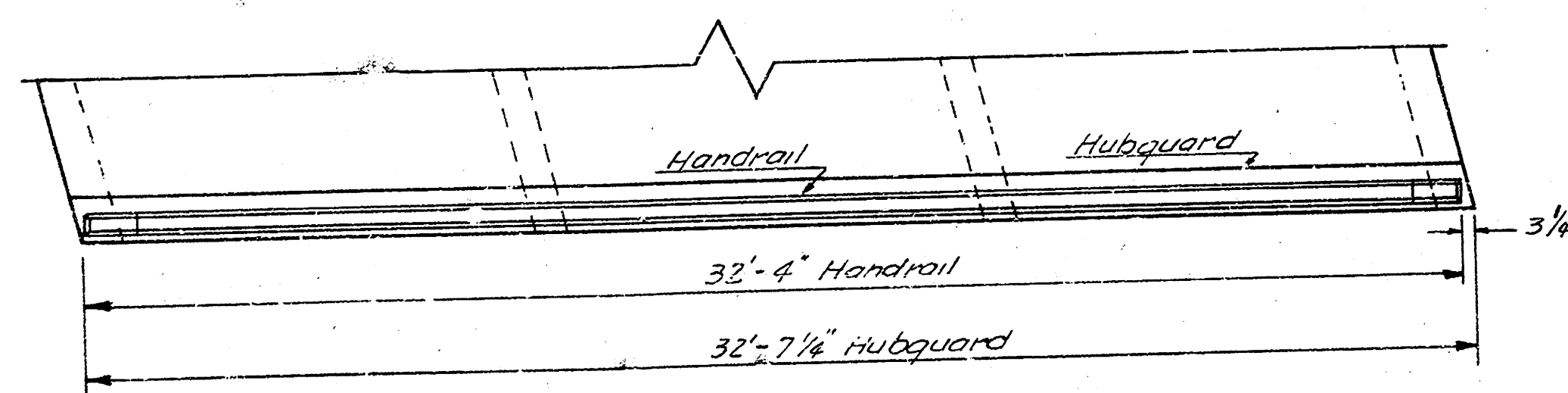
3/15



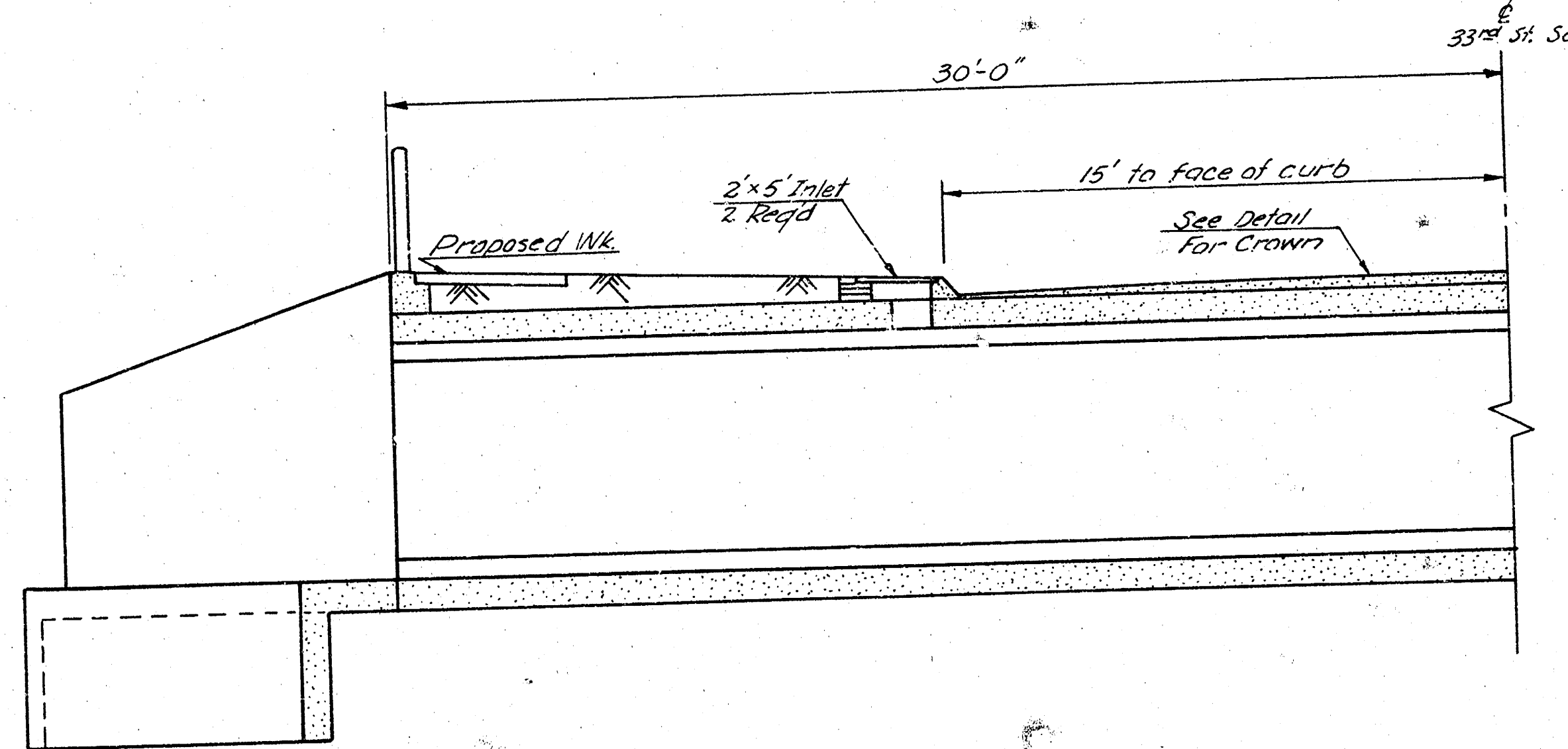
SECTION THRU WING WALL
Scale: $\frac{3}{8}$ " = 1'-0"



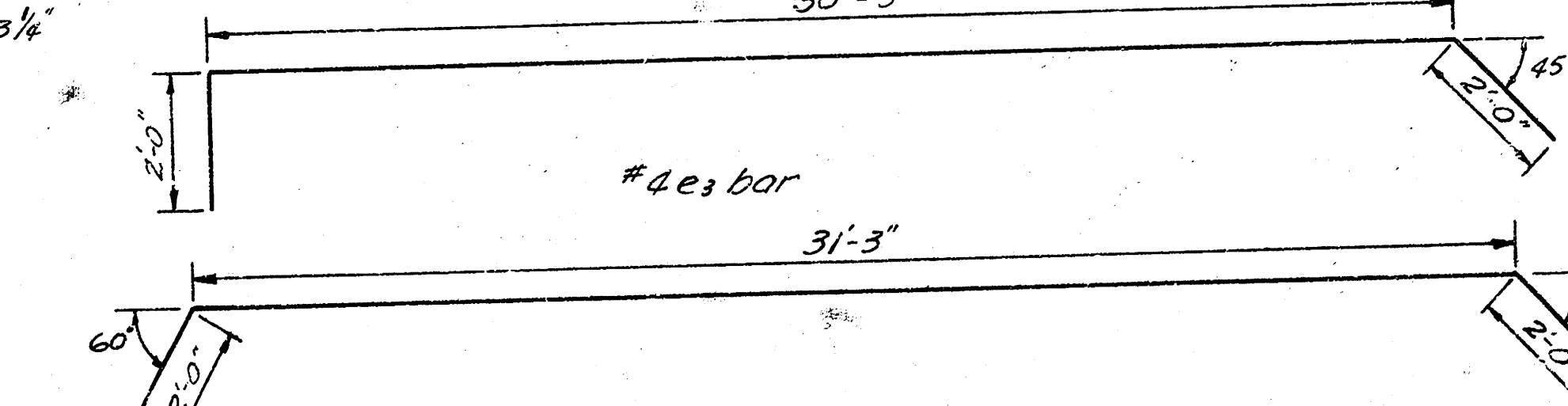
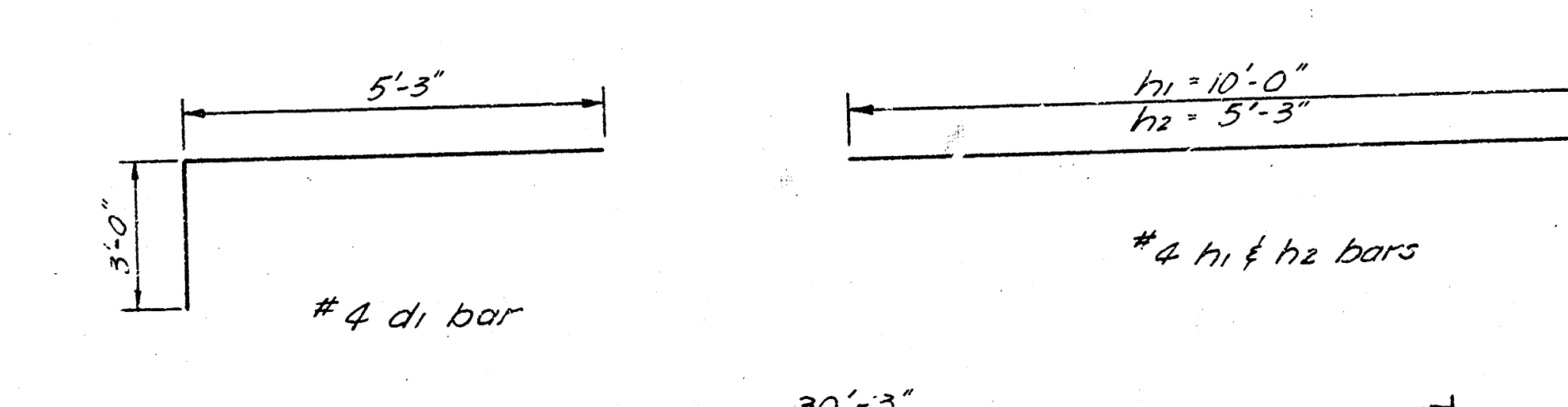
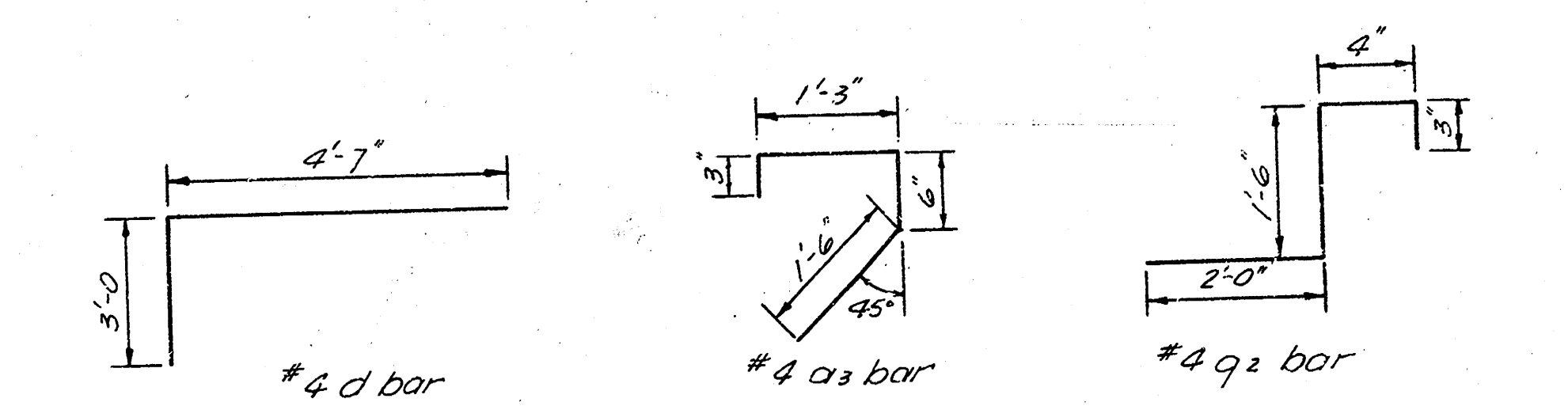
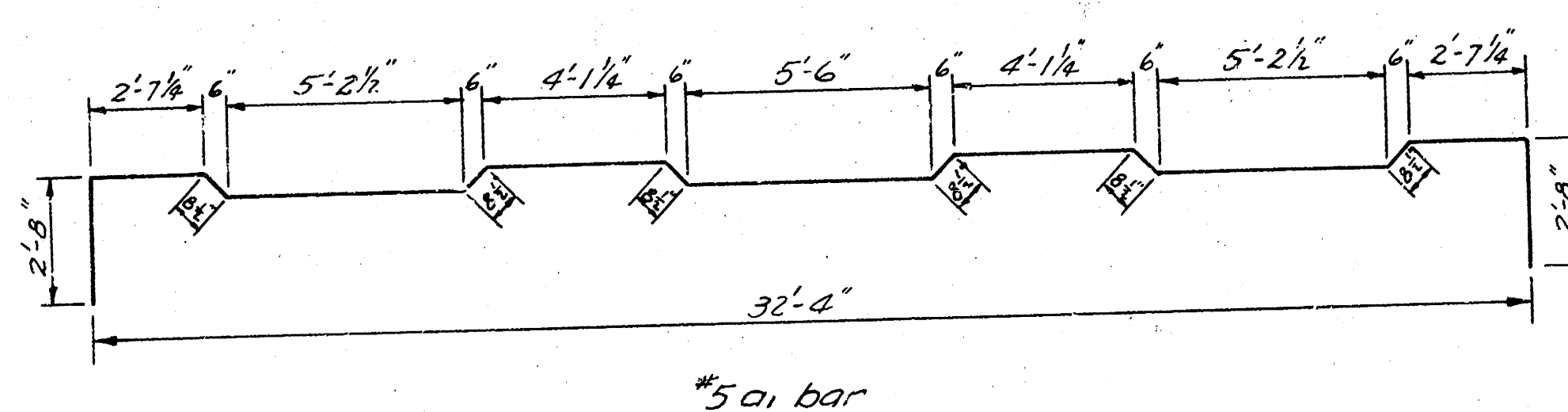
HANDRAIL DETAIL
Scale: $\frac{3}{8}$ " = 1'-0"



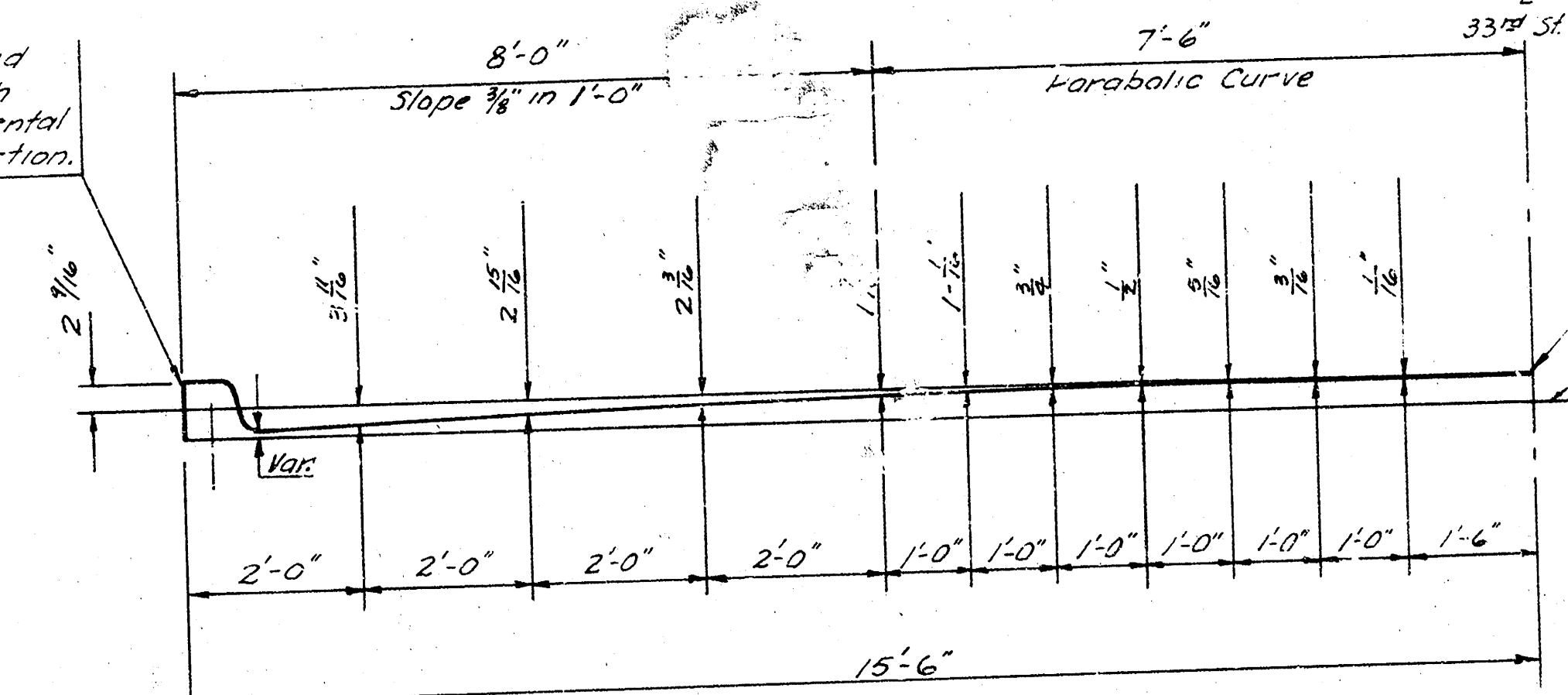
HANDRAIL LOCATION
Scale: 1" = 4'-0"



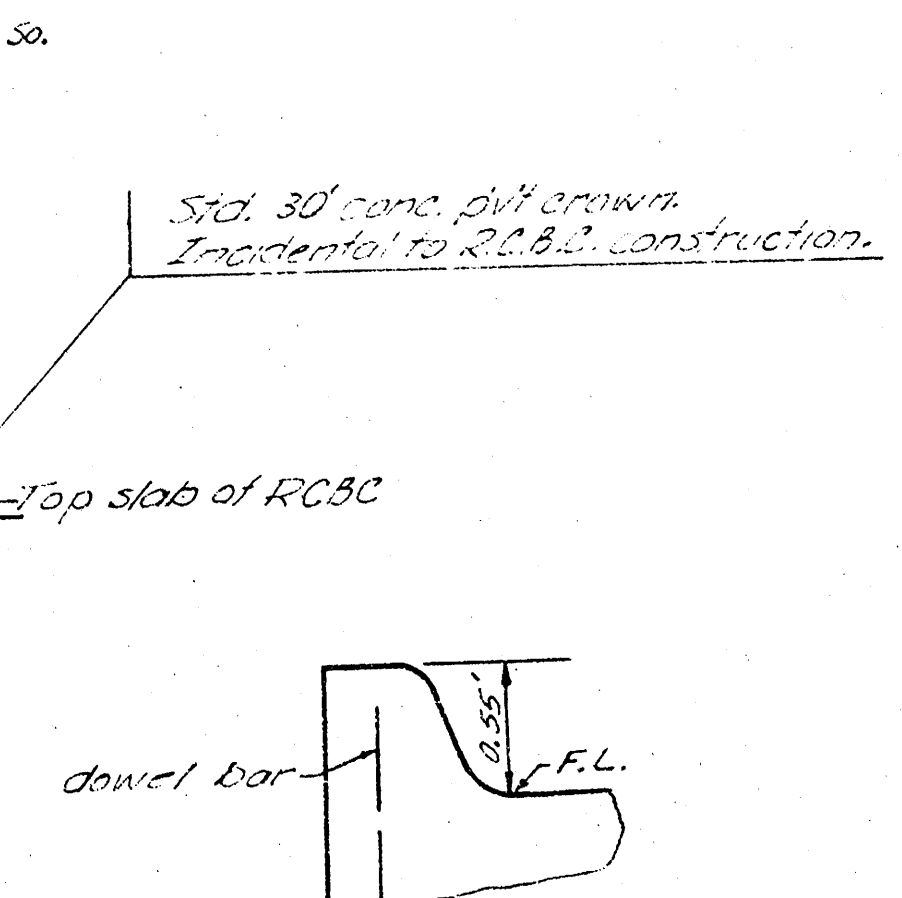
CROSS SECTION-BOX & PVT
Scale: 1" = 4'-0"



Construct standard
integral curb with
dowel steel incidental
to R.C.C. construction.



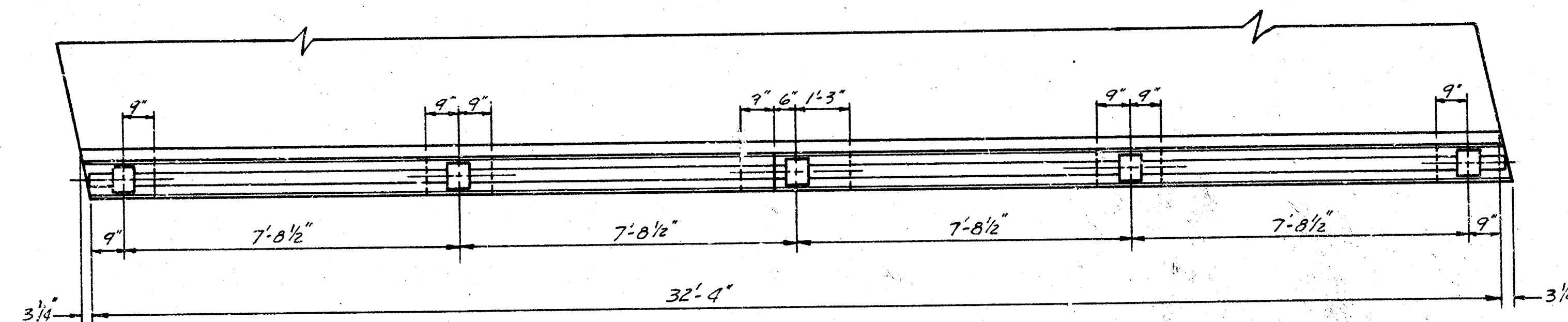
30'-0" PAVEMENT CROWN
Scale: 1" = 2'-0"



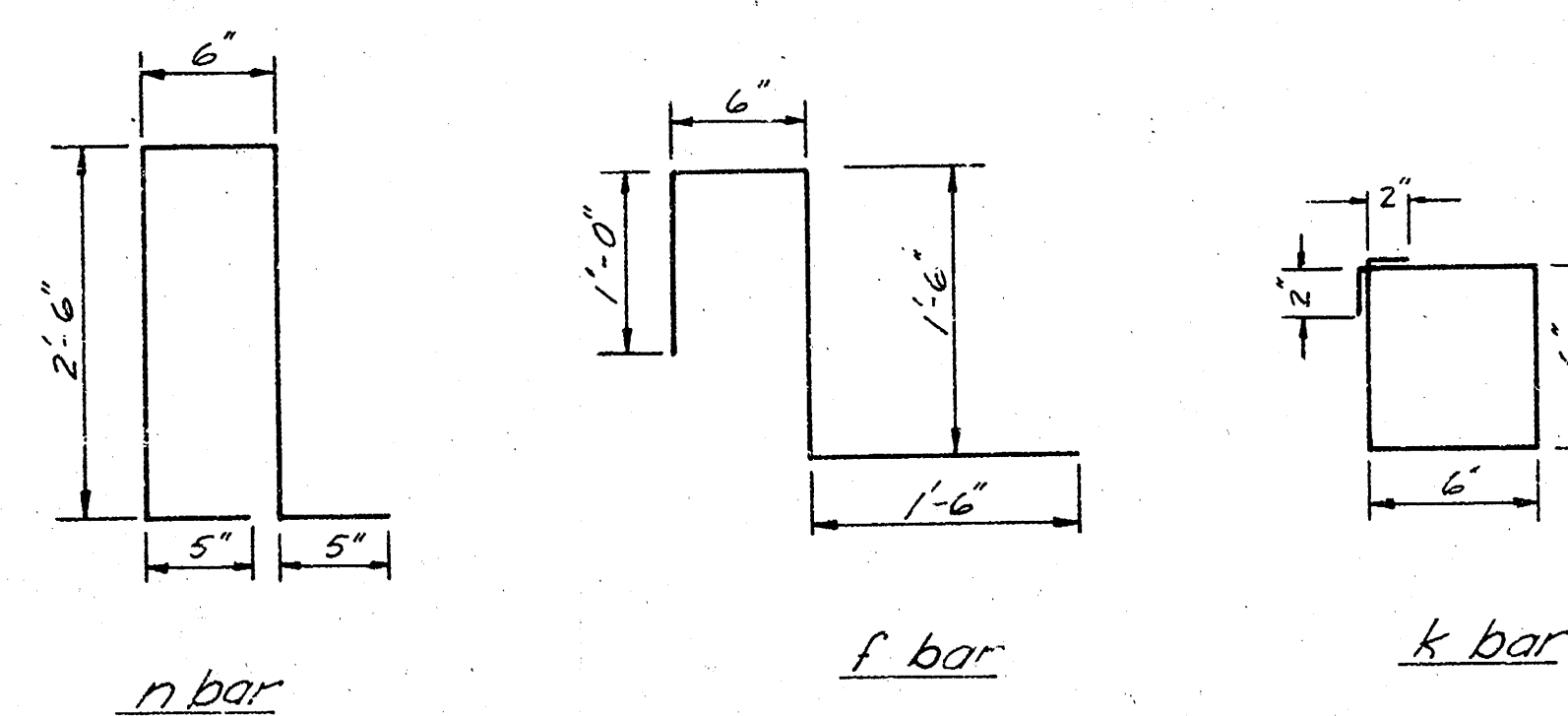
CURB DETAIL

BAR SCHEDULE						
BAR	S/ZE	LENGTH	NO.	LOCATION	SHAPE	WEIGHT
A	#5	32'-4"	144	BOX		2855.71
A1	#5	32'-4"	144	BOX		2855.71
A2	#5	32'-4"	144	BOX		2855.71
B	#4	3'-6"	68	PVT. SEAT		158.93
B1	#4	3'-6"	68	BOX		158.93
C	#4	18'-5"	8	PVT. SEAT		41.75
C1	#4	3'-3"	2	So. APPROX		125.33
C2	#4	16'-6"	15	WING WALL-SE, SW		46.73
C3	#4	16'-6"	6	WING WALL-SE, SW		46.76
C4	#4	35'-0"	2	So. APPROX		46.80
C5	#4	25'-0"	4	WING WALL-SE, SW		10.32
C6	#4	15'-0"	1	WING WALL-SE, SW		33.20
C7	#4	25'-0"	2	WING WALL-SE, SW		273.22
C8	#4	7'-7"	54	So. APPROX		455.61
C9	#4	8'-3"	40	ALL WING WALLS		195.18
C10	#4	4'-6"	20	So. APPROX		70.25
C11	#4	35'-3"	3	WING WALL-SE, SW		34.75
C12	#4	8'-8"	16	WING WALL-SE, SW		16.87
C13	#4	8'-5"	3	So. APPROX		68.64
C14	#4	34'-3"	3	WING WALL-SE, SW		25.05
C15	#4	12'-6"	2	HANDRAIL		19.37
C16	#4	18'-5"	2	HANDRAIL		20.48
C17	#4	15'-4"	2	HANDRAIL		16.26
C18	#4	4'-2"	65	HUBGUARD		12.24
C19	#4	32'-3"	4	HUBGUARD		123.16
C20	#4	10'-0"	12	WING WALL-SE, SW		56.17
C21	#4	12'-0"	12	WING WALL-SE, SW		1.67
C22	#4	7'-3"	2	WING WALL-SE, SW		20.08
C23	#4	12'-0"	5	WING WALL-SE, SW		6.18
C24	#4	9'-3"	1	WING WALL-SE, SW		3.86
C25	#4	5'-9"	1	WING WALL-SE, SW		39.81
C26	#4	10'-9"	4	WING WALL-SE, SW		79.29
C27	#4	17'-0"	7	WING WALL-SE, SW		321.31
C28	#4	14'-6"	78	HANDRAIL		16.32
C29	#4	3'-0"	18	PIPE ENTRANCES		2131.89
C30	#4	7'-0"	292	BOX		71.37
C31	#4	7'-11"	6	WING WALL-SE, SW		78.32
C32	#4	8'-8"	6	WING WALL-SE, SW		56.05
C33	#4	9'-8"	6	WING WALL-SE, SW		87.87
C34	#4	9'-0"	6	WING WALL-SE, SW		324.67
C35	#4	7'-6"	29	ALL WING WALLS		37.17
C36	#4	7'-0"	3	WING WALL-SE, SW		27.55
C37	#4	8'-3"	2	WING WALL-SE, SW		280.93
C38	#4	9'-2"	15	WING WALL-SE, SW		
C39	#4	10'-3"	2	WING WALL-SE, SW		

BENDING DIAGRAMS No Scale



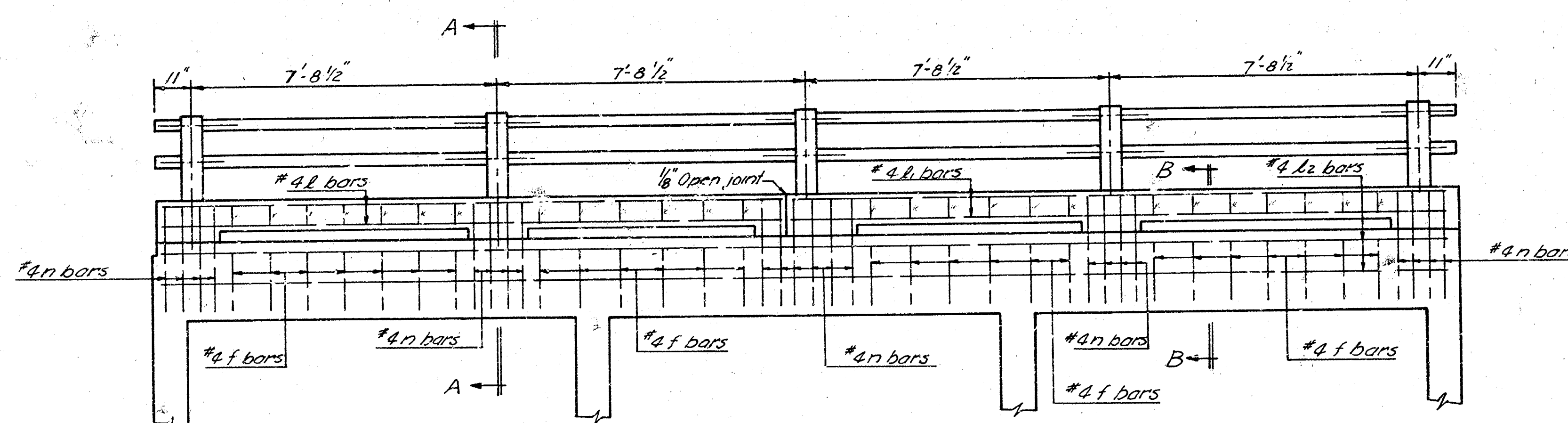
PLAN OF RAILING
3/8" = 1'-0"



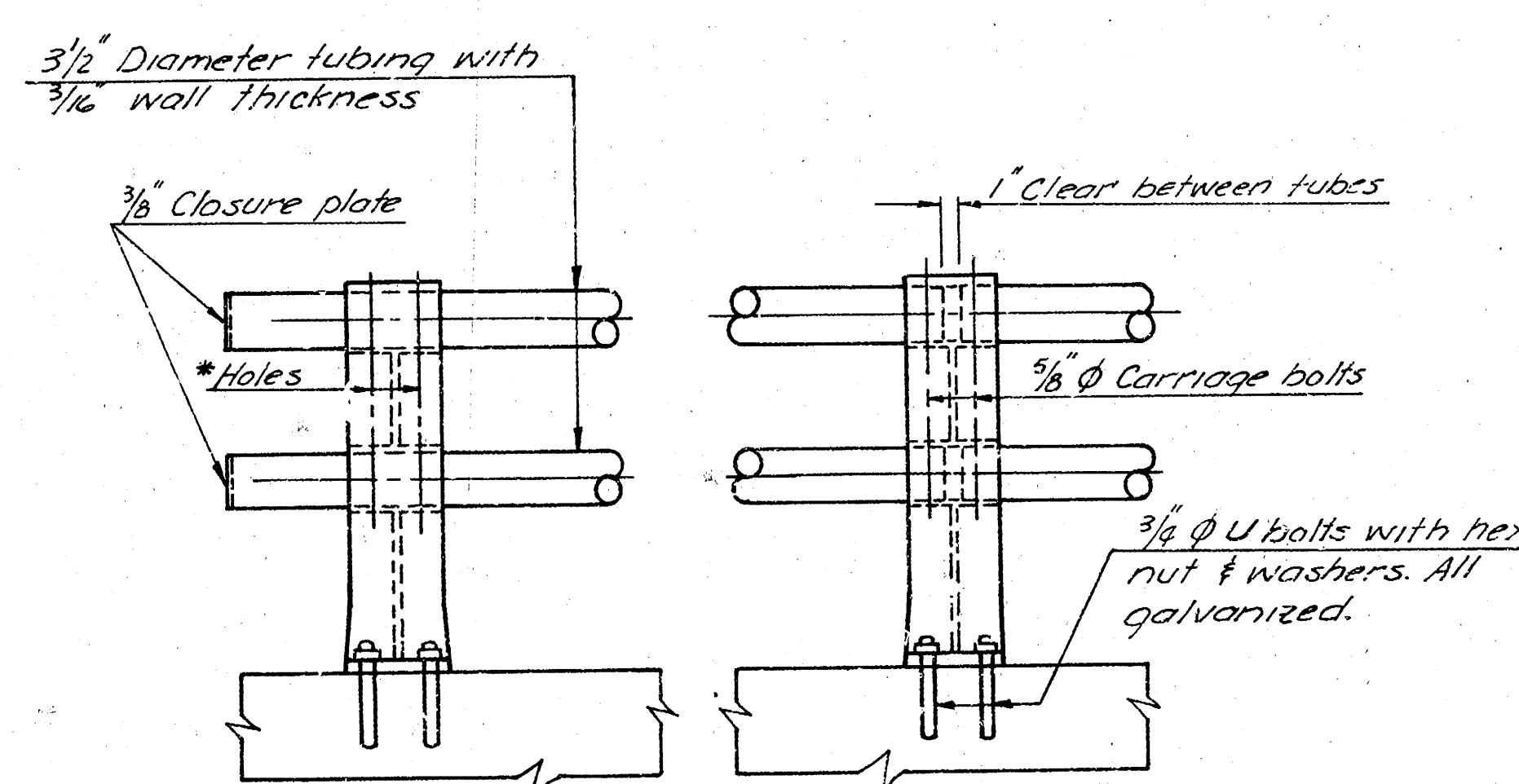
BENDING DIAGRAMS
No Scale

BAR SCHEDULE					
BAR	SIZE	LENGTH	NO.	SHAPE	WEIGHT
* L	#4	15'-5"	8		82.40
* L ₁	#4	16'-5"	8		87.75
* L ₂	#4	32'-1"	8		171.04
* n	#4	6'-4"	44		186.05
* f	#4	4'-6"	52		156.31
* k	#4	2'-4"	52		80.93

* These bars replace the p, g₁, g₂, & g₃ bars used for the concrete handrail & mudguard.

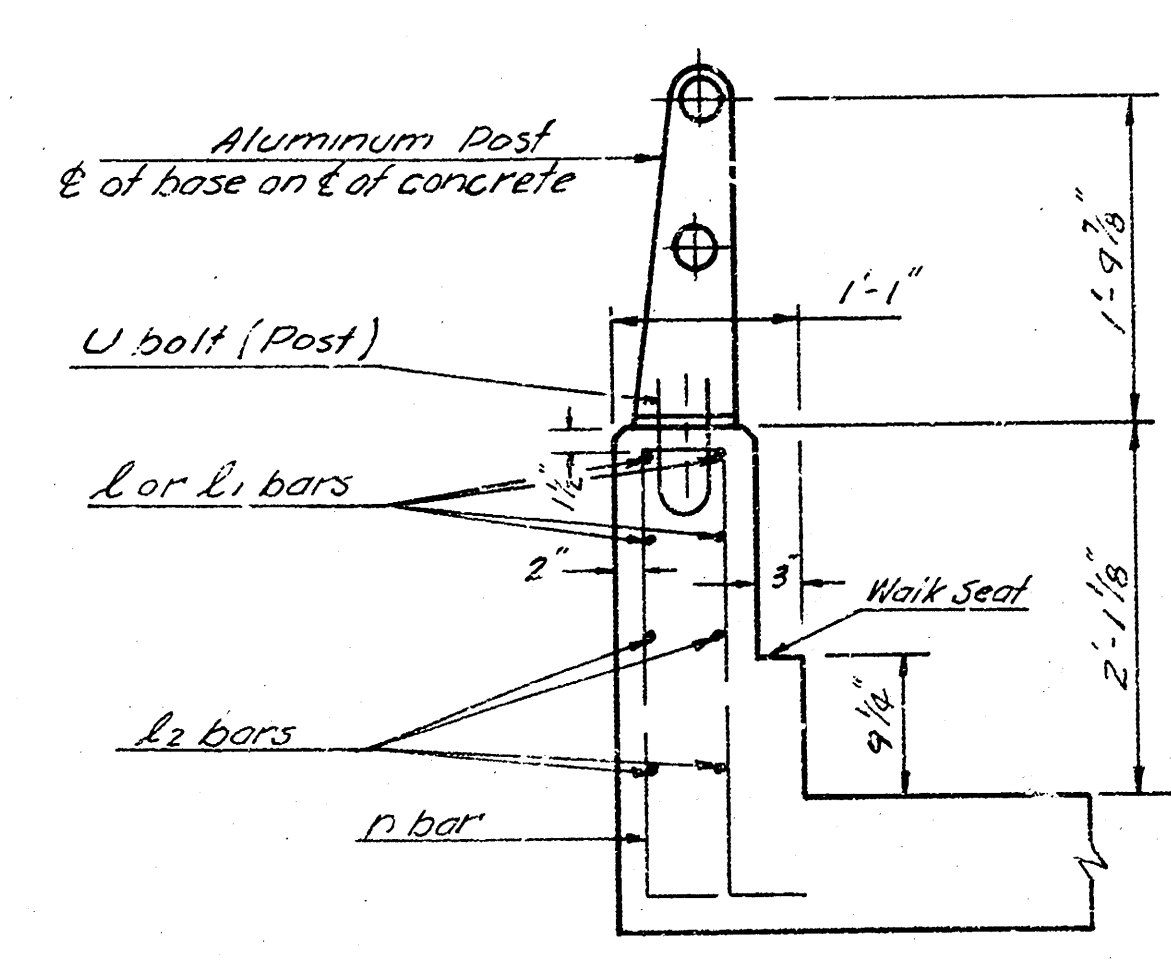


END SECTION OF RAILING
3/8" = 1'-0"

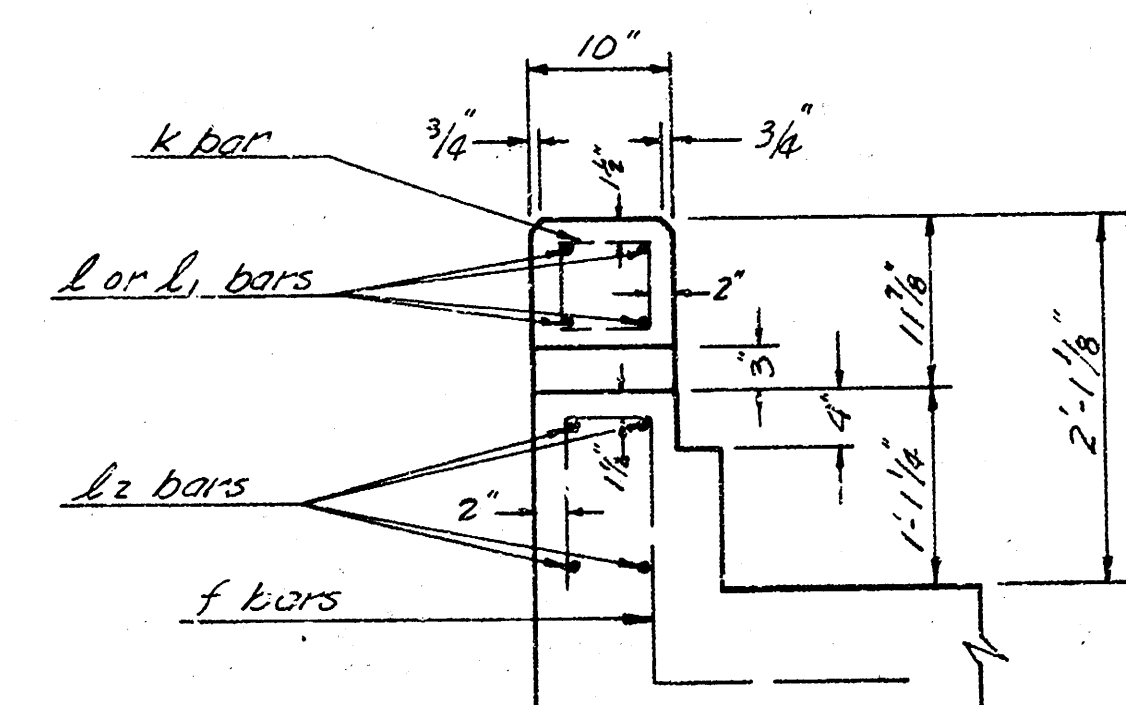


Holes: 1 1/8" square holes in post under head and 1 1/8" round holes under nuts for 3/8" ϕ $\times$ 5 1/2" carriage bolts with hex nuts.

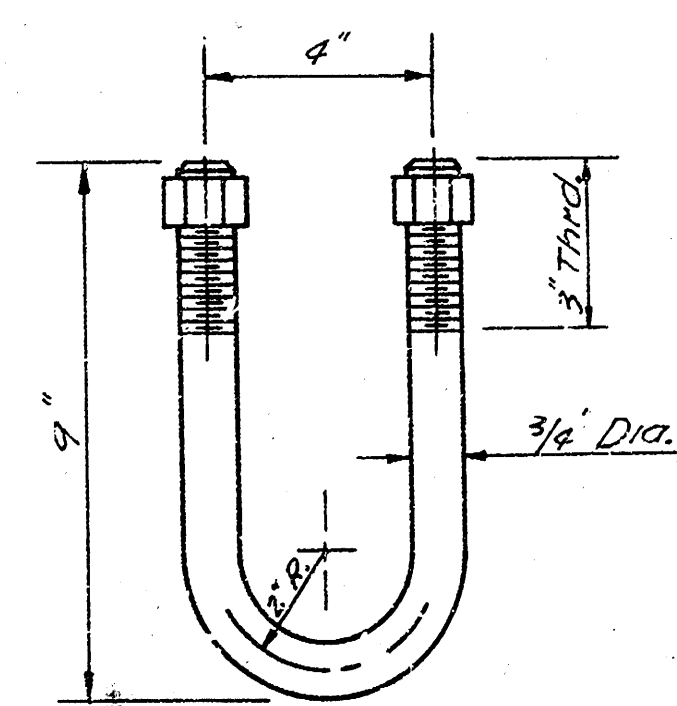
RAIL & POST CONNECTIONS
No Scale



SECTION A-A
3/8" = 1'-0"



SECTION B-B
3/8" = 1'-0"



GALVANIZED U-BOLT DETAIL
No Scale

Notes: Aluminum Handrail.
Aluminum posts shall be Reynolds Aluminum Highway Products Bridge Railing System No. 2R19A or equal.
Top & bottom rails shall be 3 1/8" O.D. $\times$ 3/16" wall tube of 6063-T6 Aluminum.
Aluminum shims between concrete and post base may be used. The space below posts shall be thoroughly caulked with Aluminastic compound or other approved material.

NOTE: Substitution of the aluminum handrail for the concrete handrail, and the changes in dimensions and quantities as a result of the substitution, shall be considered a part of the original lump-sum bid price for the culvert, and no additional cost shall be added for the material substitution or quantity changes.

REVISED HANDRAIL 10-31-75
3'-9.5" $\times$ 6.0" R.C.B.C.
SHERIDAN AVE. & 33RD ST. SO.
DAKS 574130