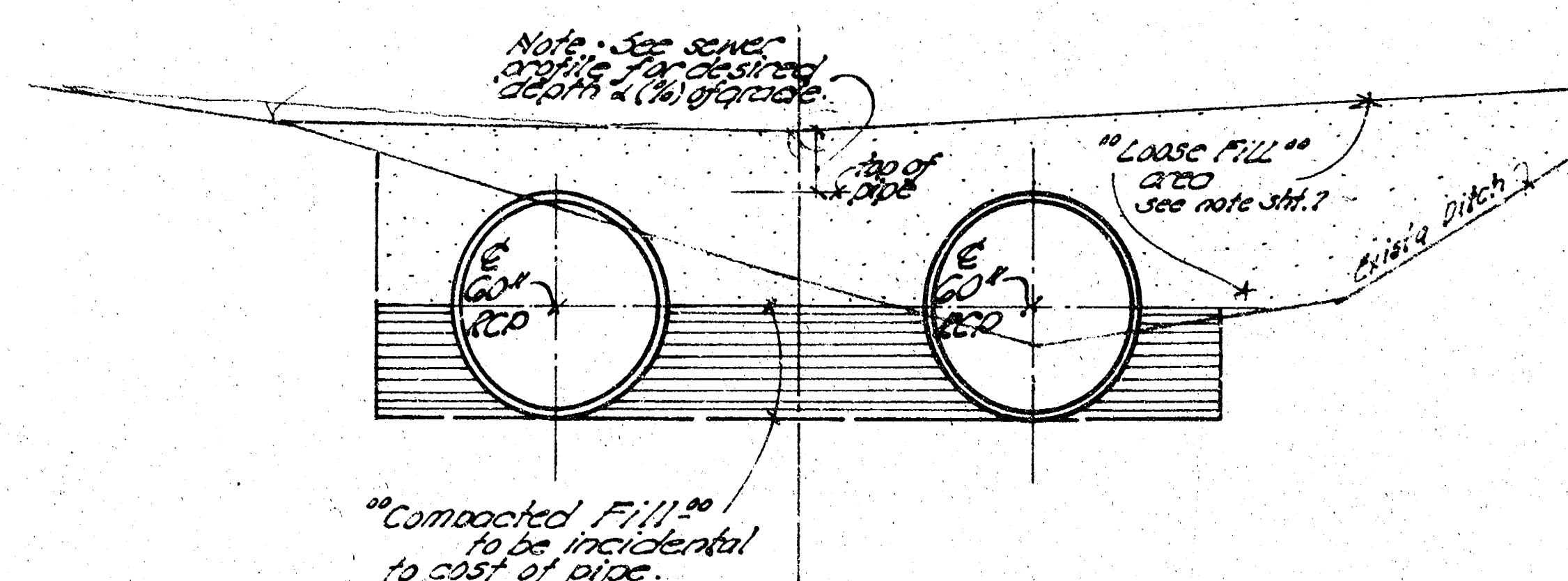
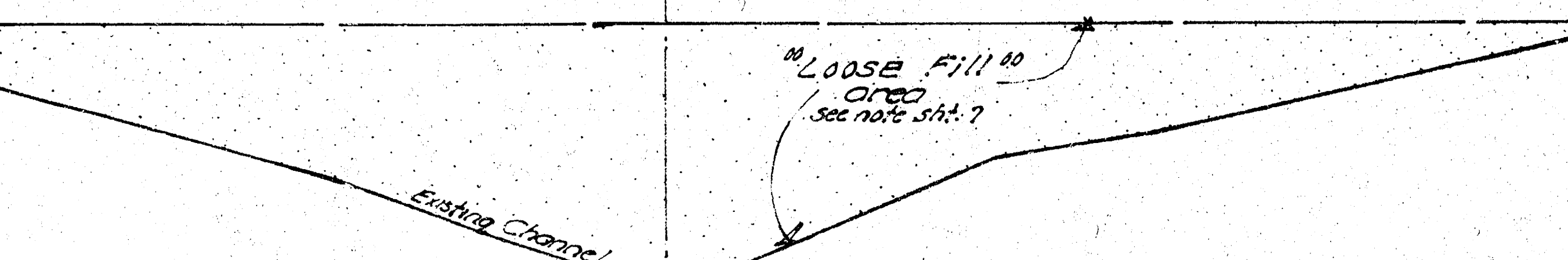


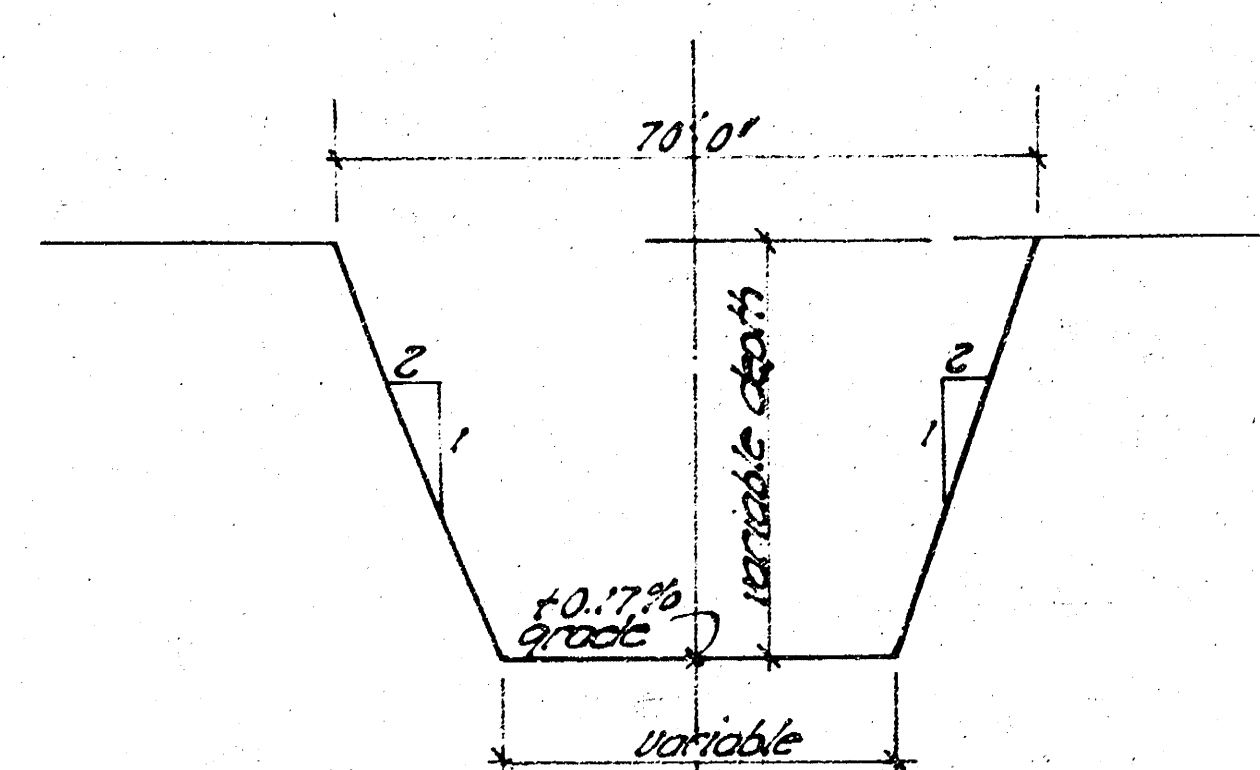
Survey 2/28/29
 City of Wichita
 Engineer's Office



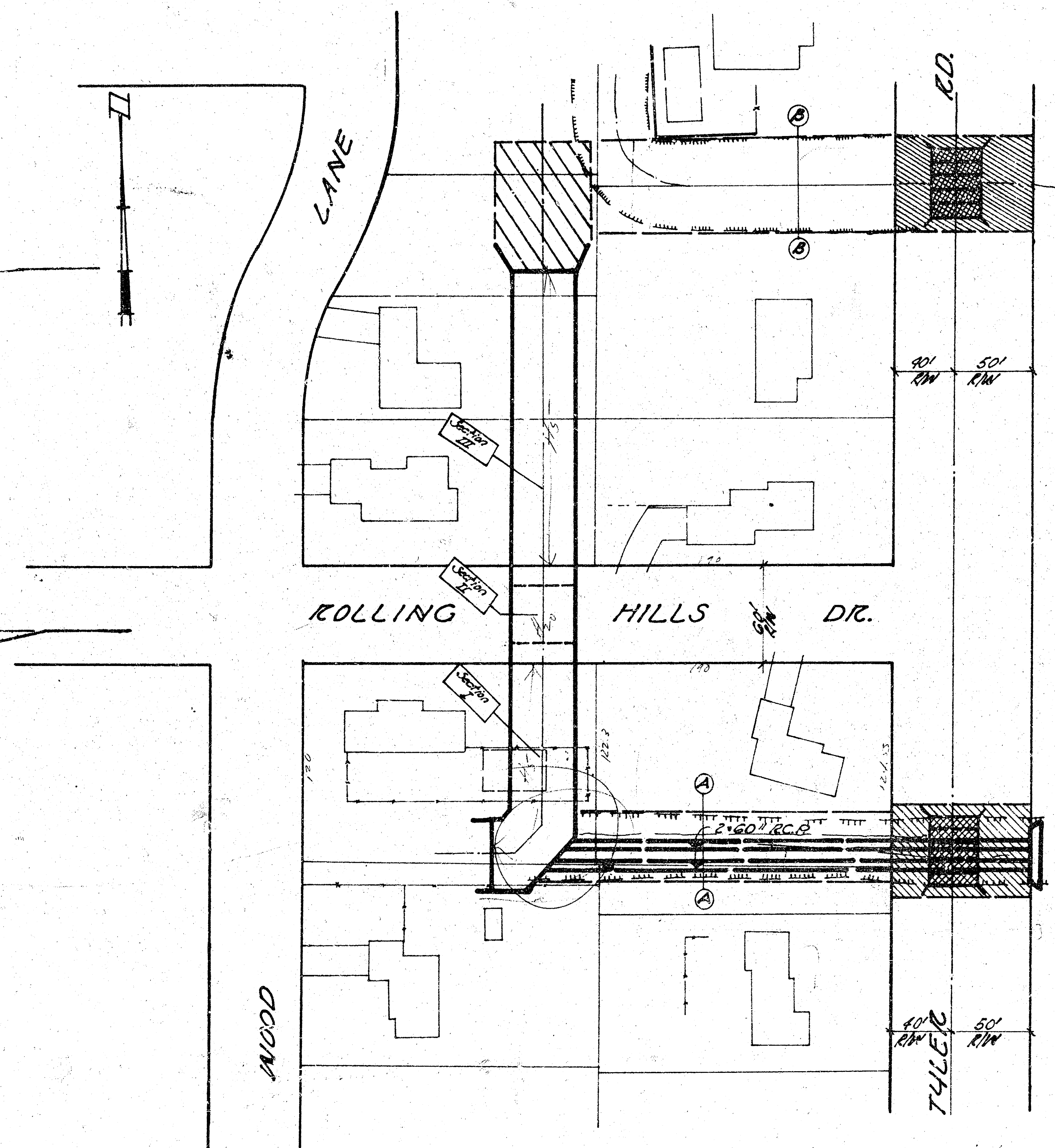
SECTION A-A



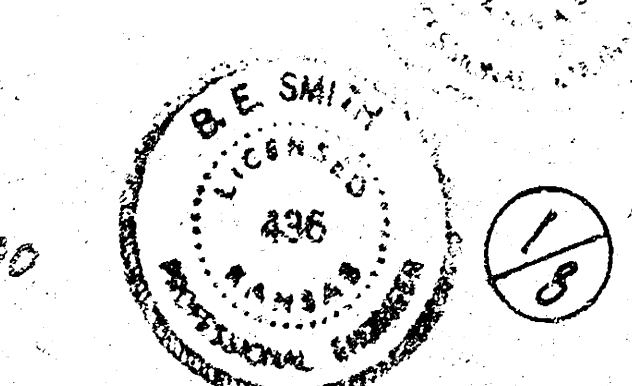
SECTION B-B



TYPICAL DETAIL OF NEW CHANNEL NO. OF RC.B.C.

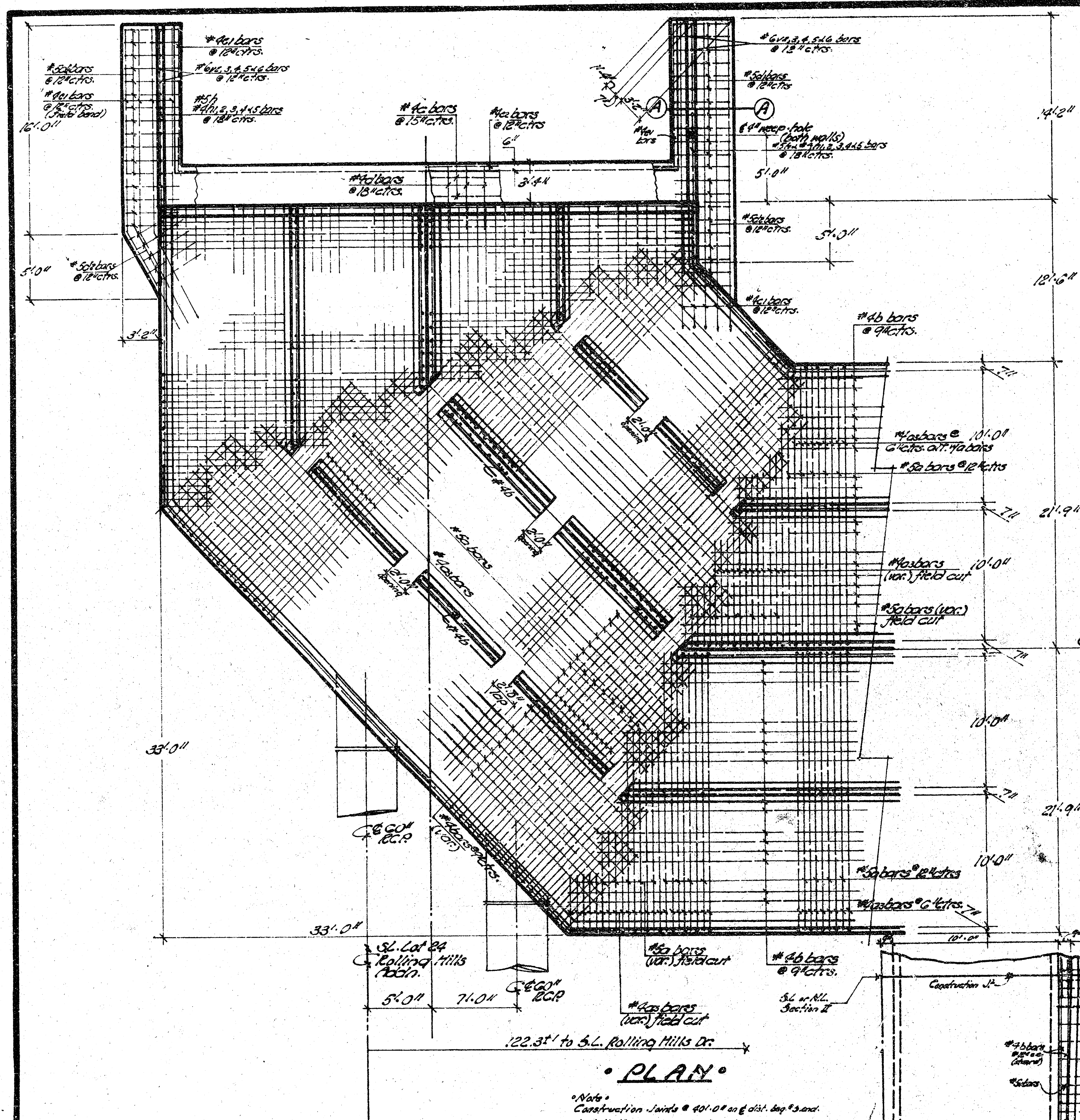


OFFICE PLAN

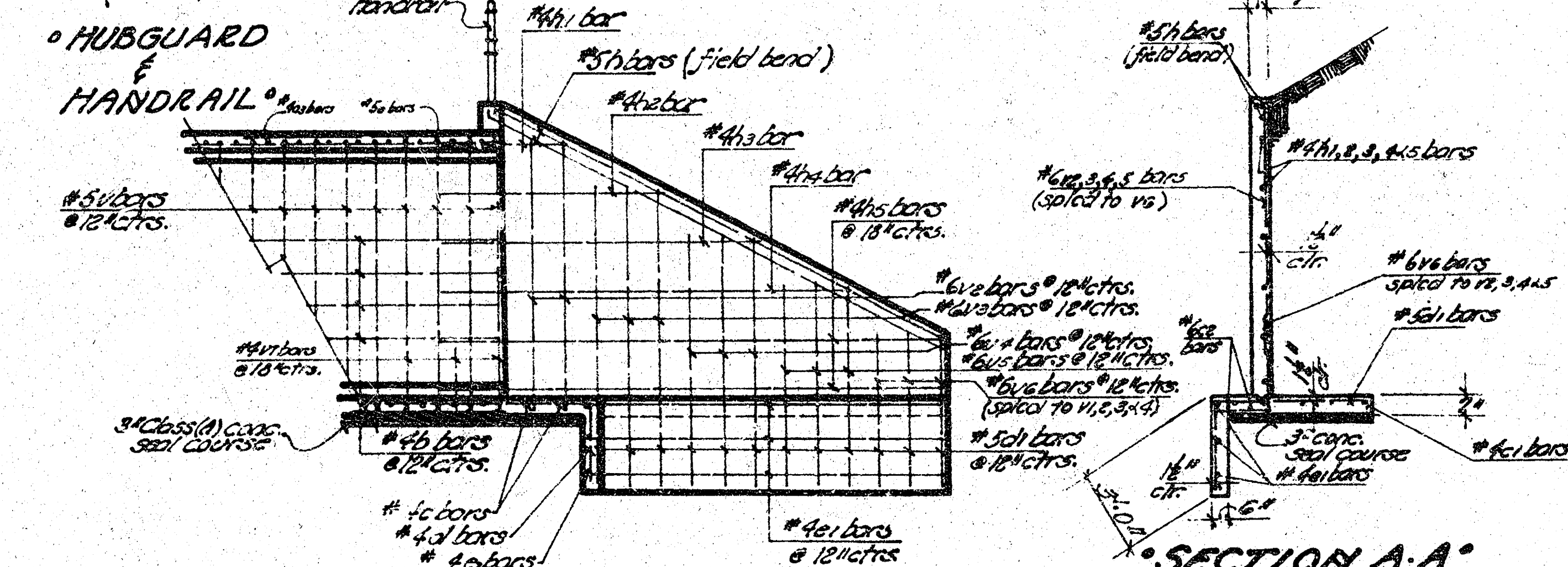
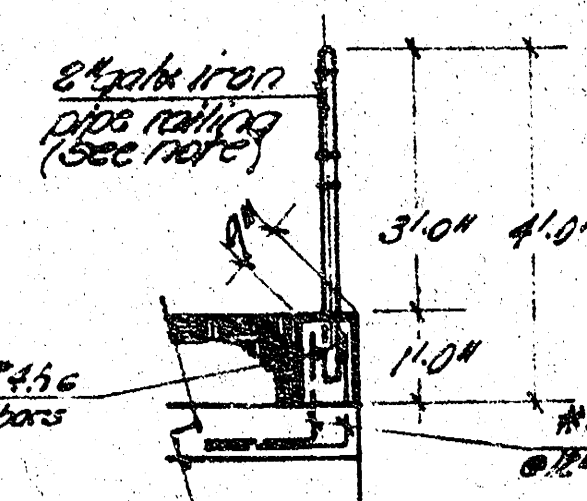
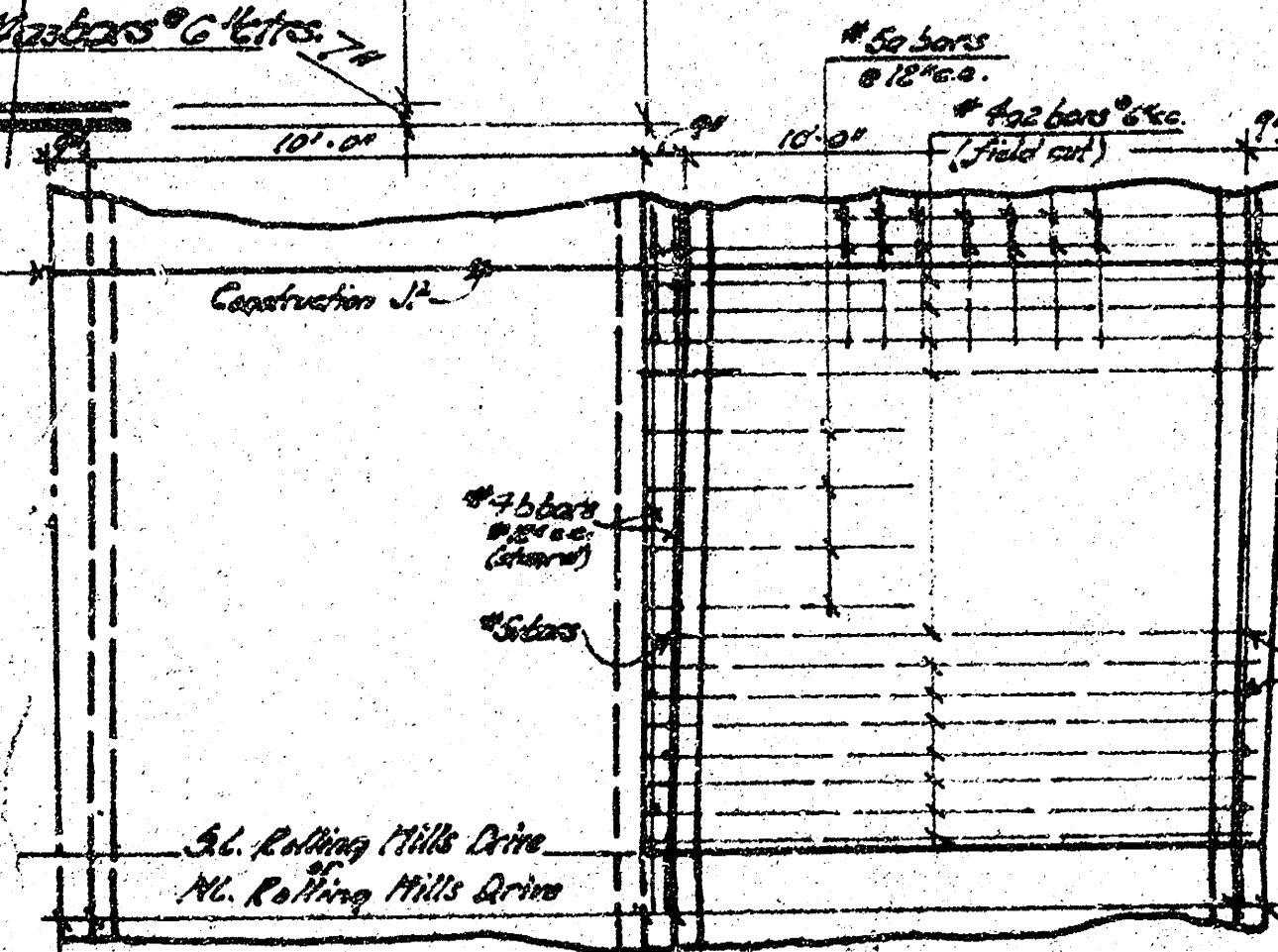


LOCATION MAP
 4-10x8' Reinforced
 4-10x8' Reinforced
 Concrete Box Culverts - in connection with
 TYLER RD. paving - S.W. Maple Street
 to (700') N. of N.E. Central Avenue.
 City of Wichita, Kansas
 B.E. Smith City Engineer
 Date: Proj. No. C17-11

1/25/29 - Engr.
 1/25/29 - Engr.

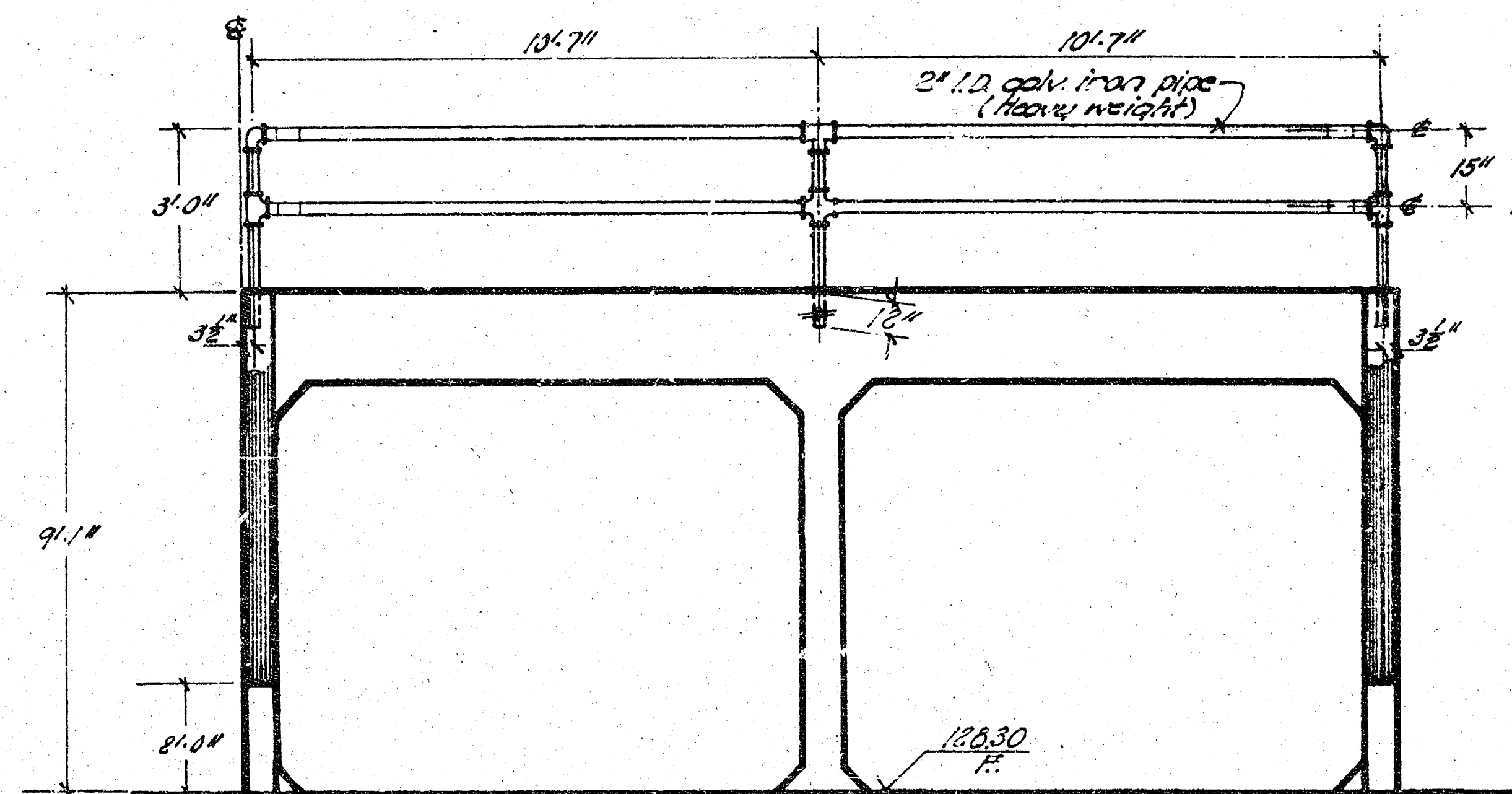


Note:
 Construction Joints @ 40'-0" on @ dist. by 3 and
 1/2" install 6" rebar @ 36" cts.
 by 3' 6" of N. end Culvert.



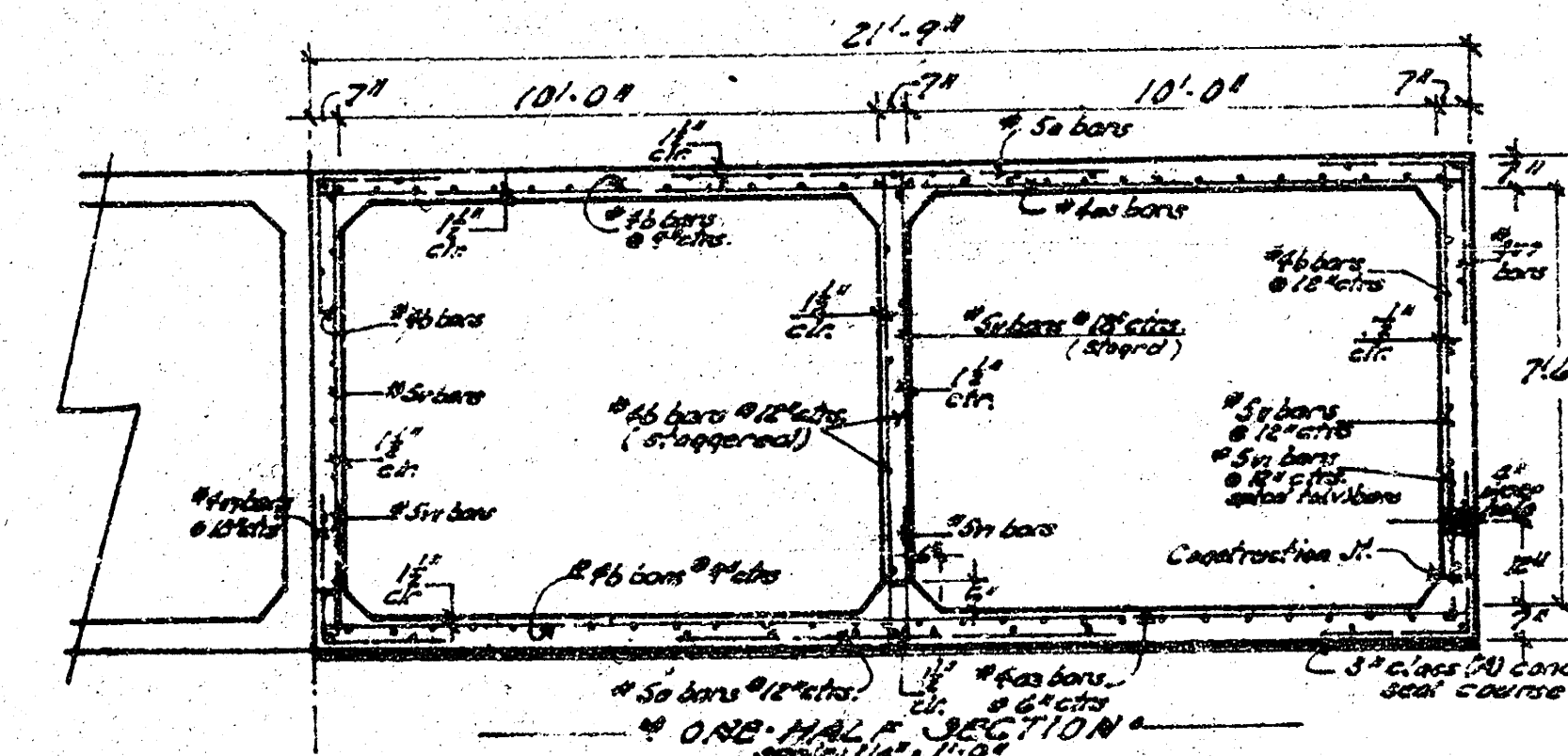
Note:
 Construction Joints @ 40'-0" on @ dist. by 3 and
 1/2" install 6" rebar @ 36" cts.
 by 3' 6" of N. end Culvert.

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 Construction Joints @ 40'-0" on @ dist. by 3 and
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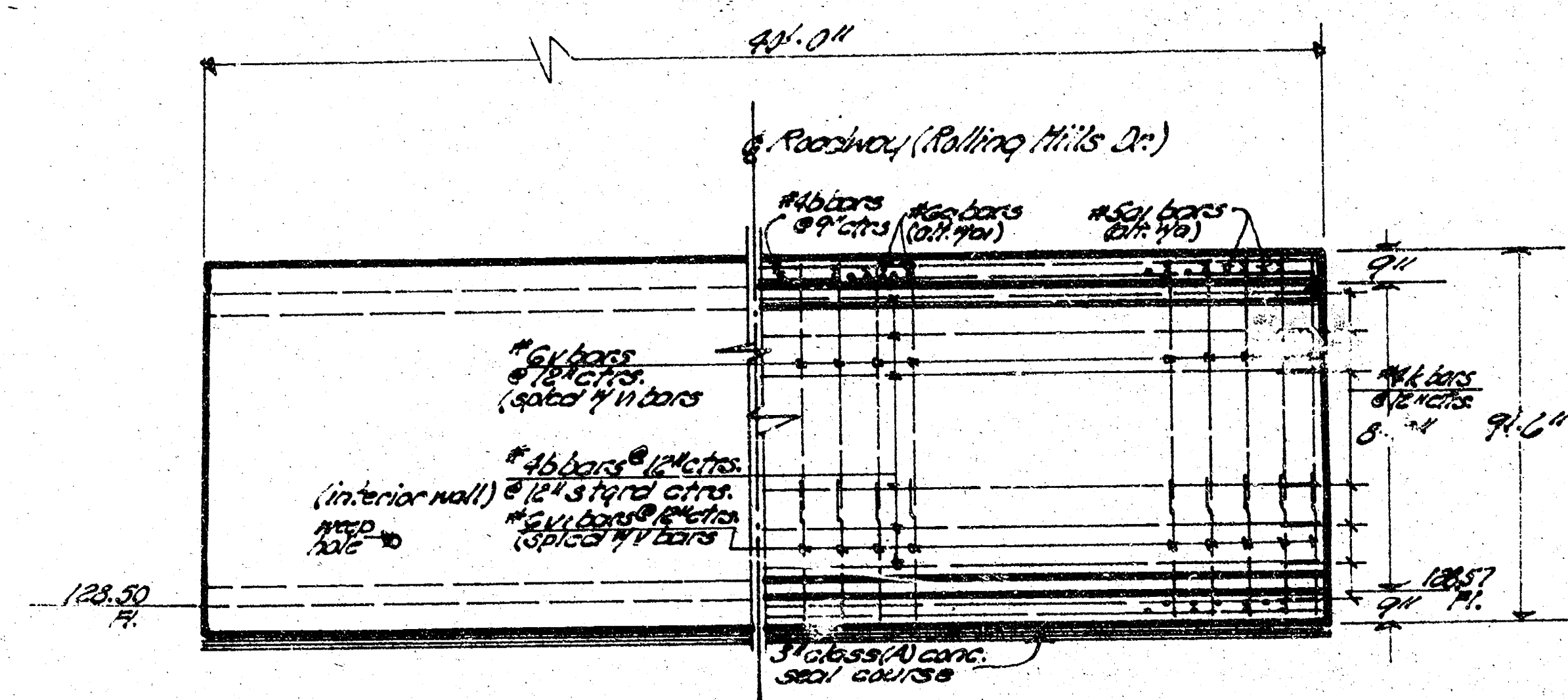


Note:
 Handrail to be shop assembled and placed on project just prior to installation. Place handrail in sight concrete the reqd depth.

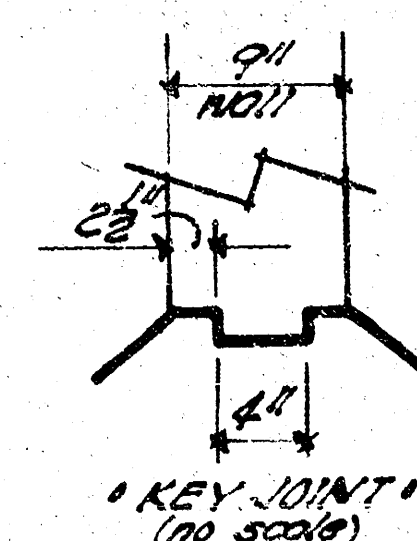
Note:
 Construction Joints @ 40'-0" on @ dist. by 3 and
 1/2" install 6" rebar @ 36" cts.
 by 3' 6" of N. end Culvert.



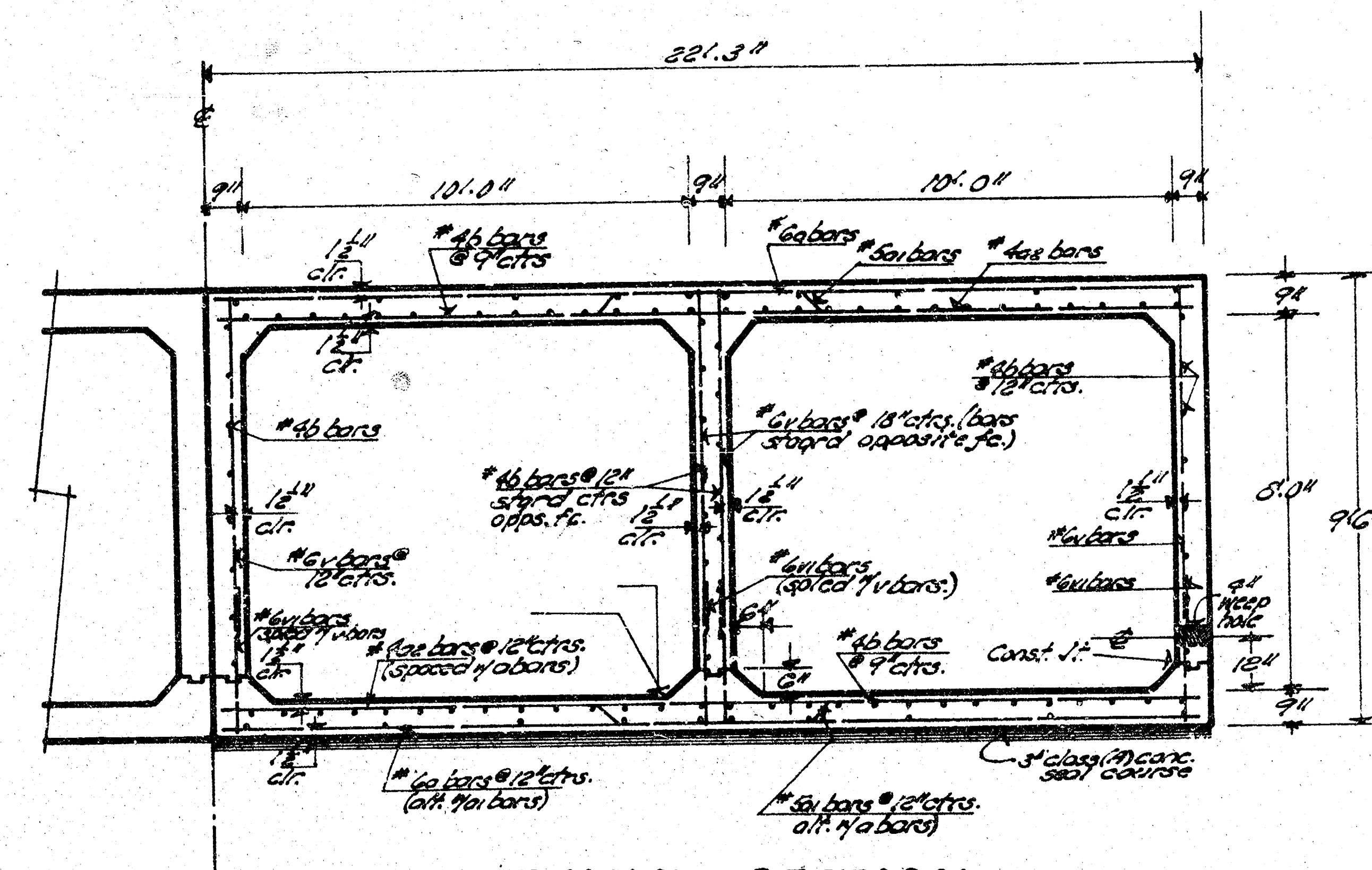
Note:
 All exposed rebar to be galvanized. Rebar to be installed in concrete the reqd depth.



ELEVATION

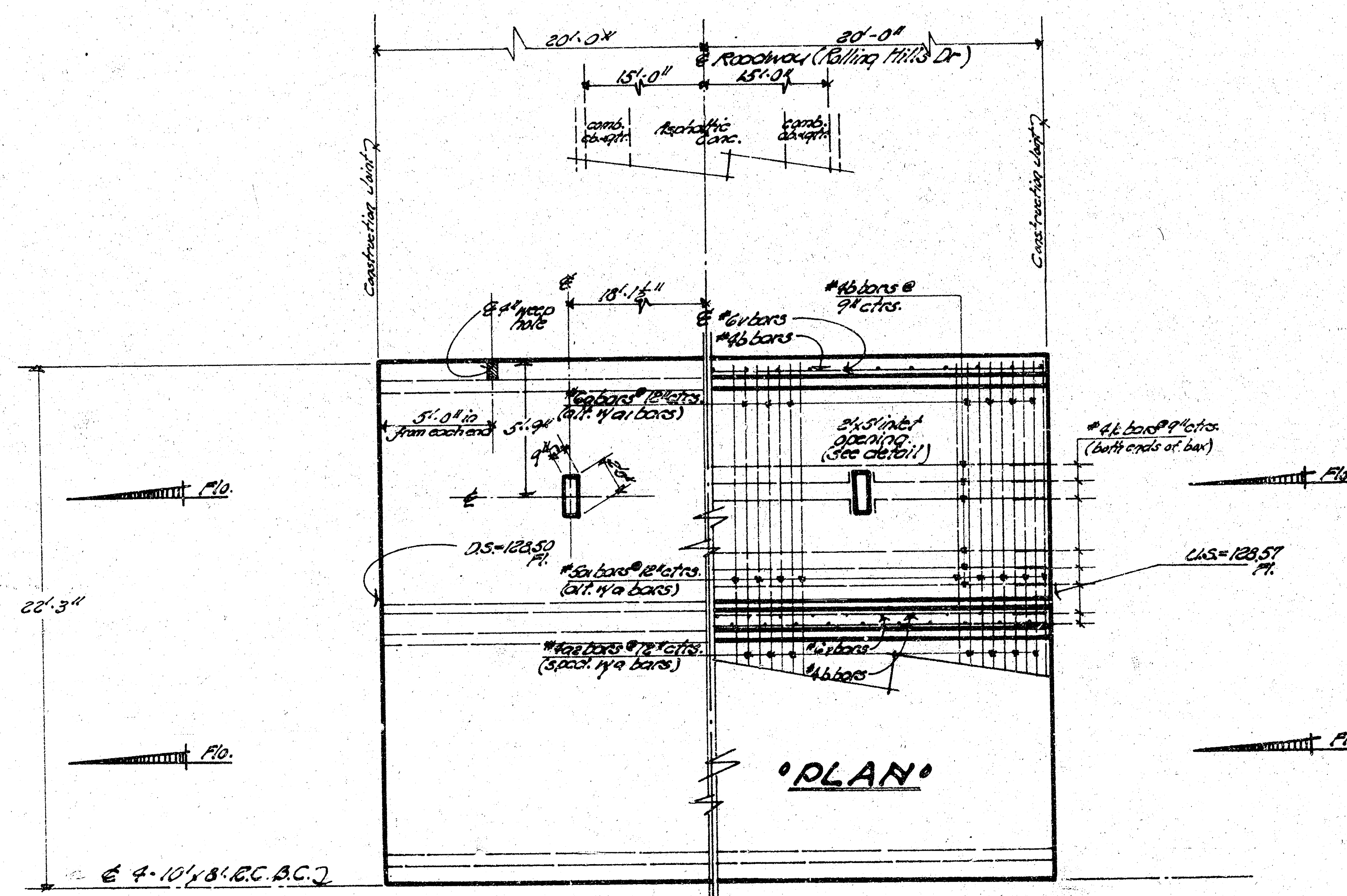


KEY JOINT (no scale)

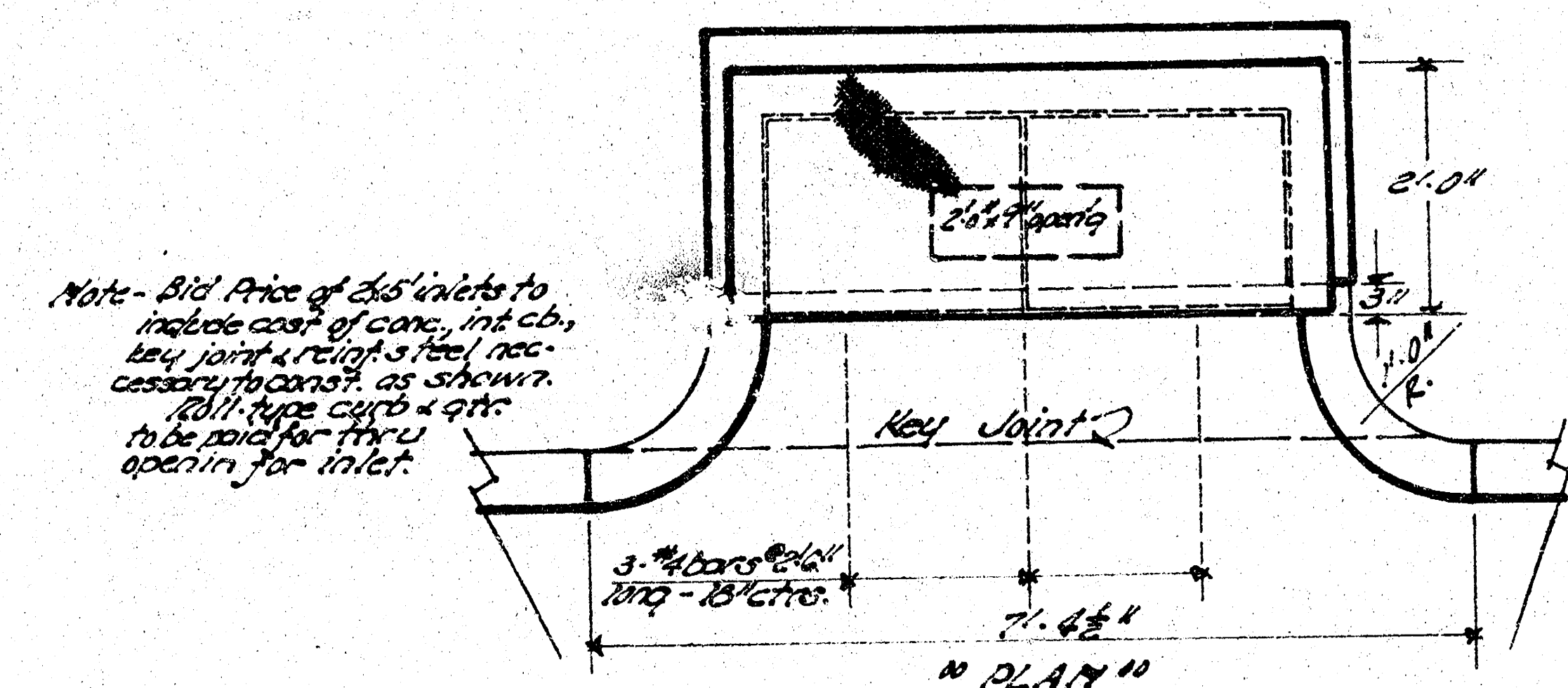


ONE-HALF SECTION

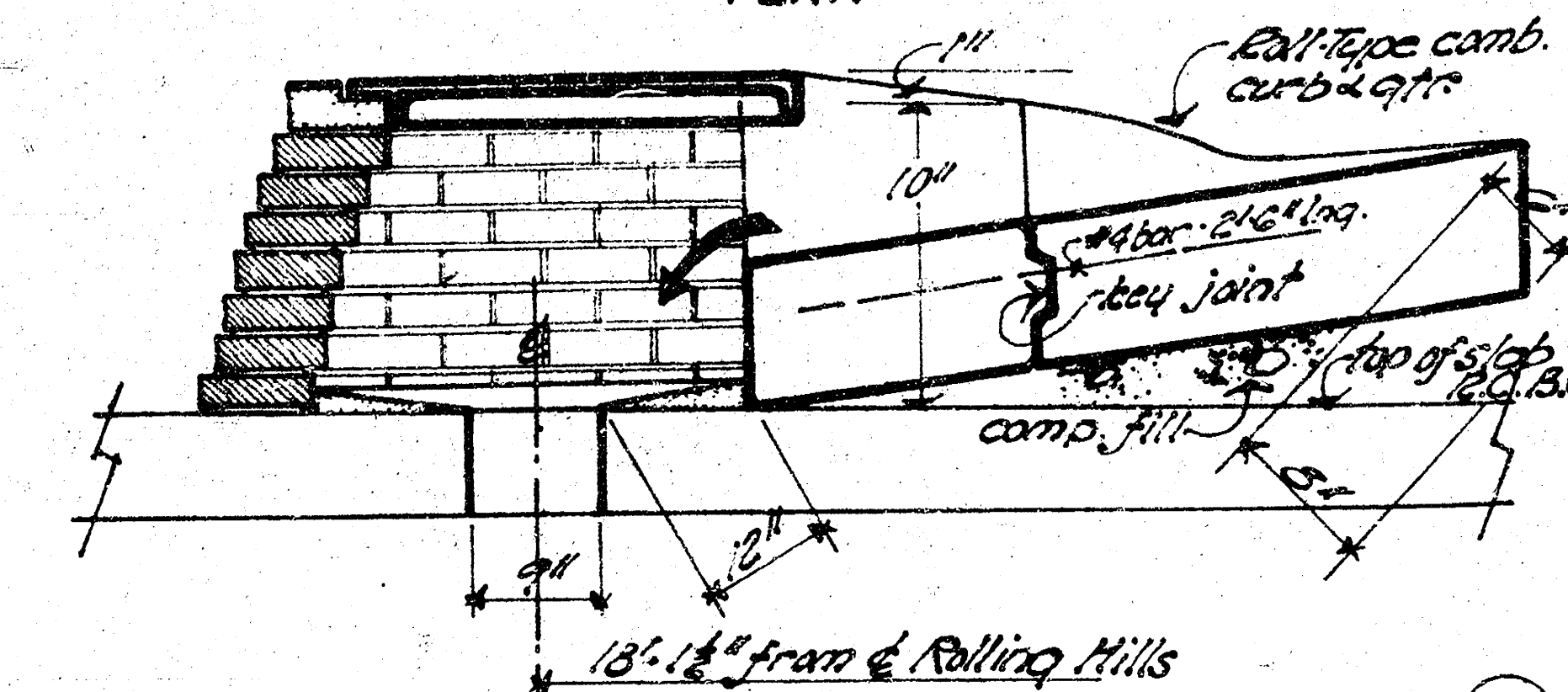
Scale: 1/2" = 1'-0" Note: Bore all exposed edges 1/4" triangular mitering unless otherwise noted.



PLAN

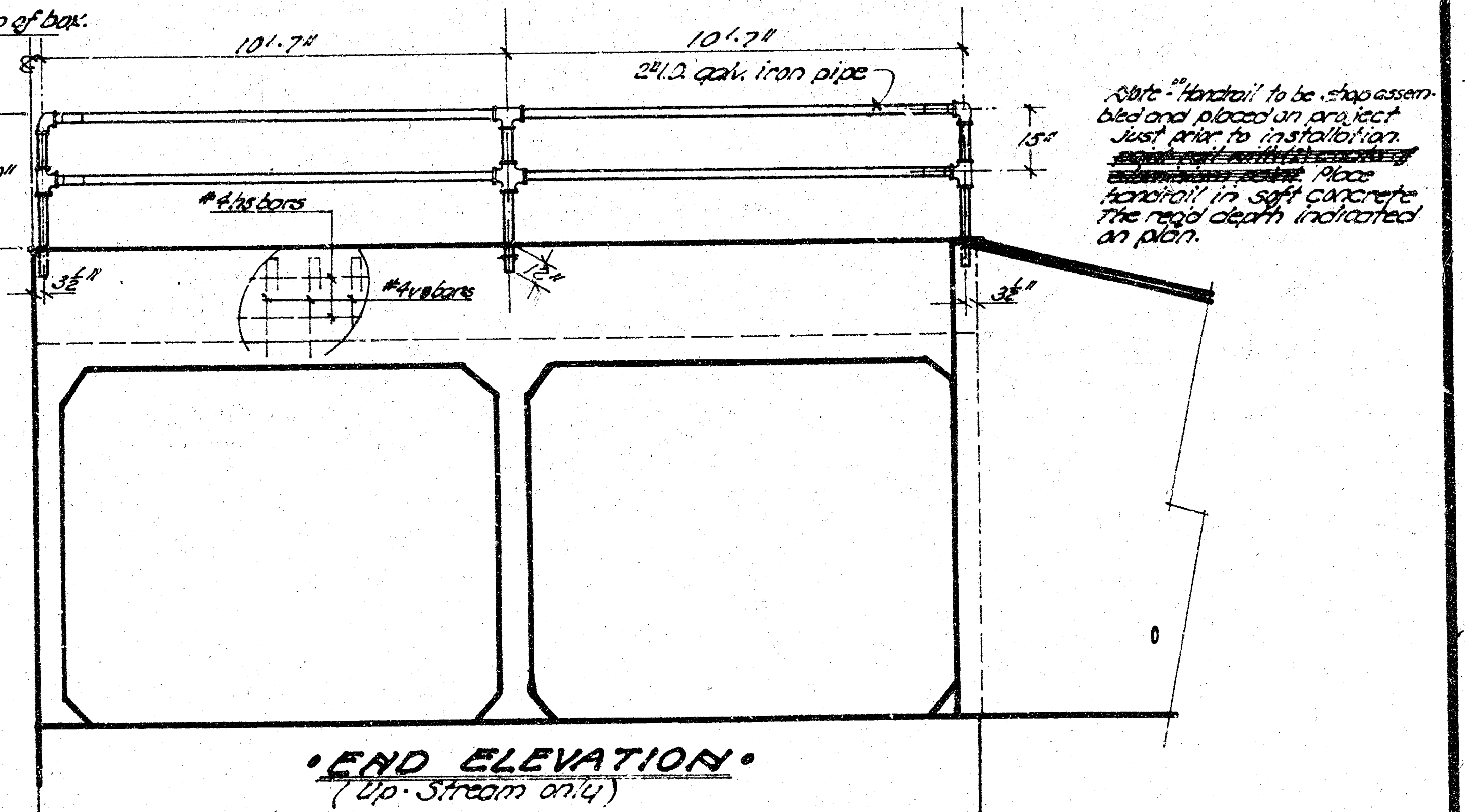
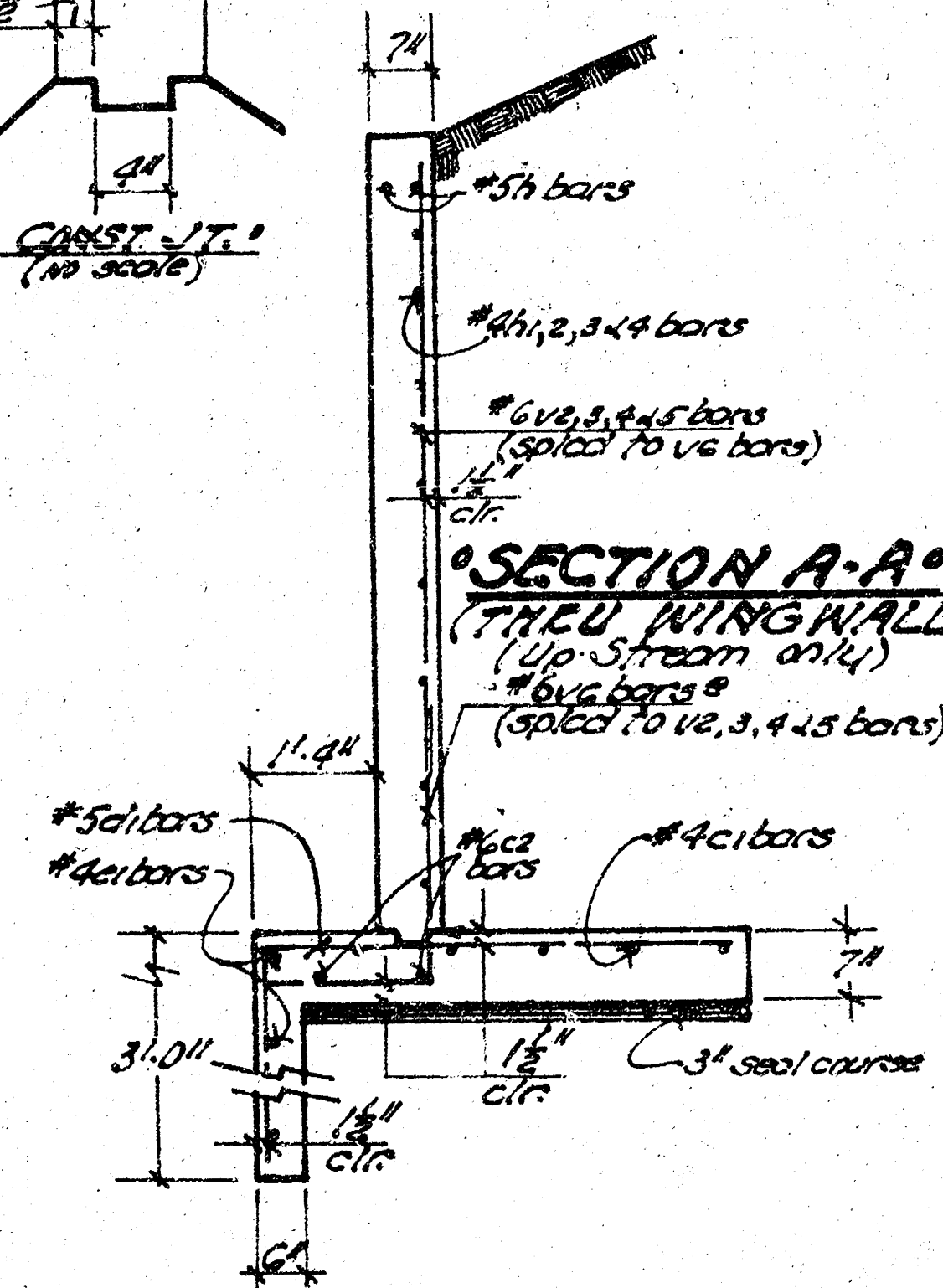
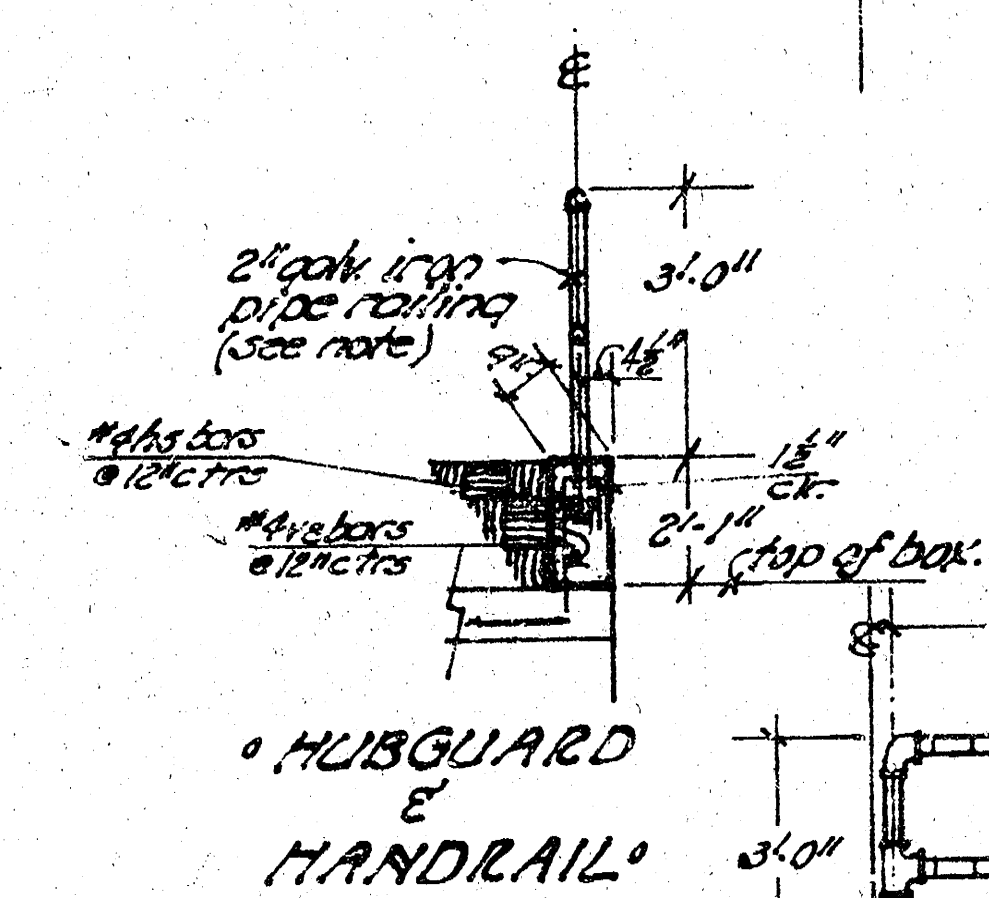
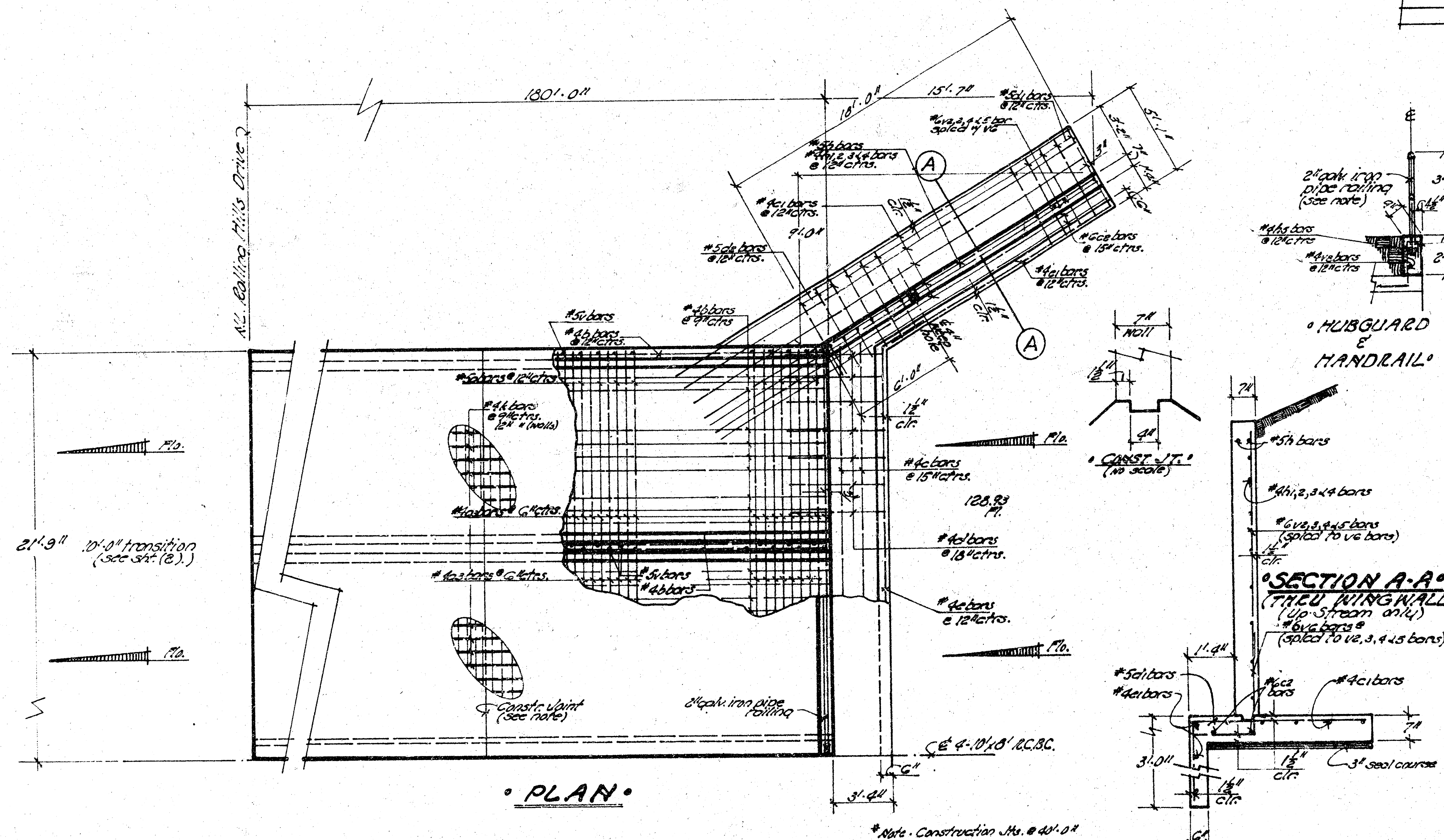
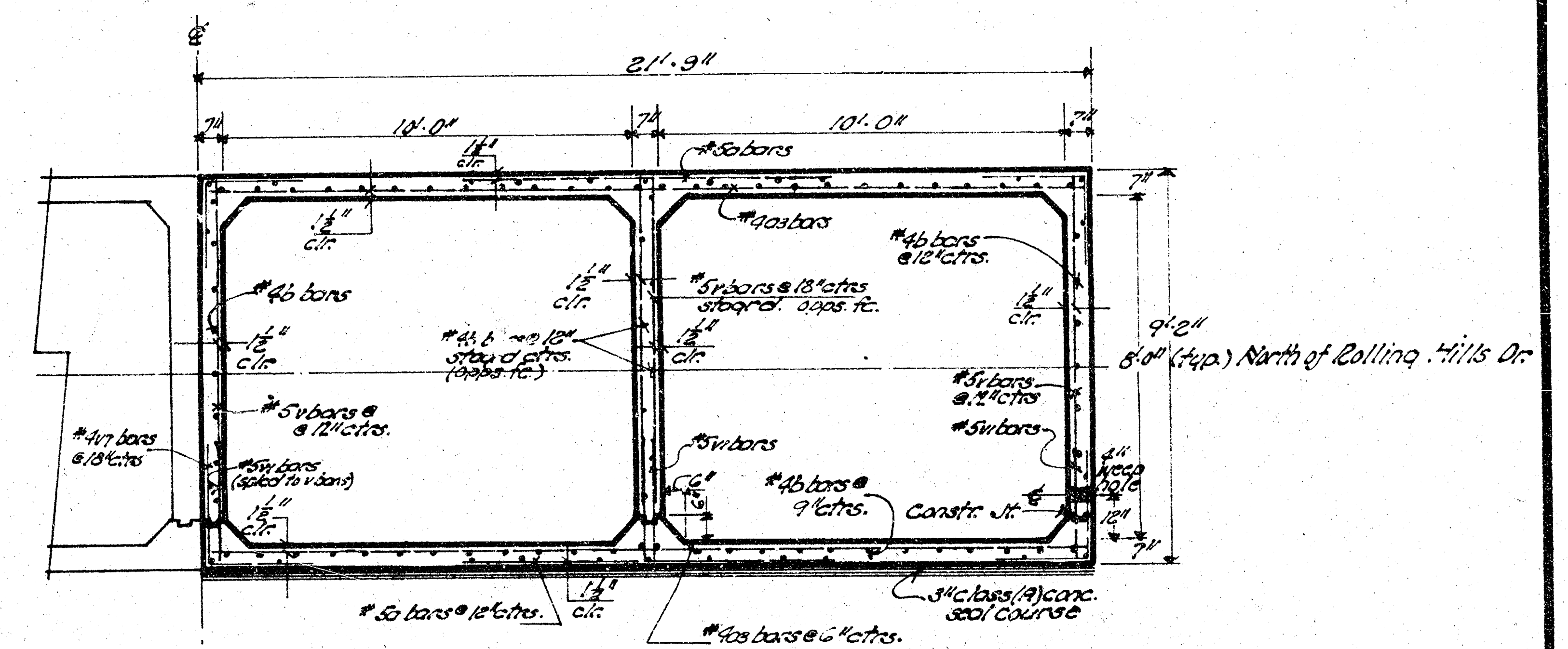
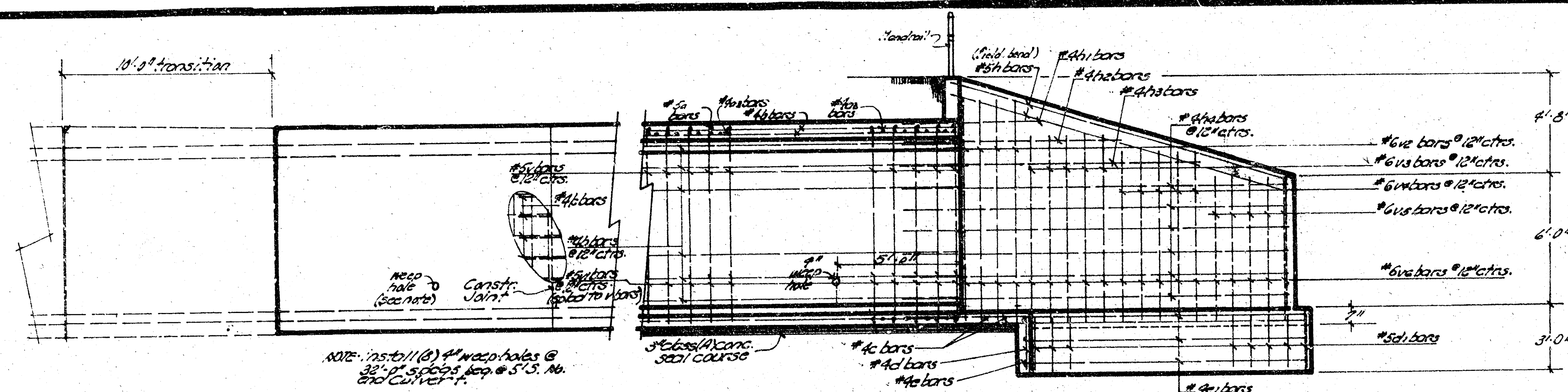


Note: Bid Price of this inlet to include cost of concrete, including key joint and 1/4" triangular mitering unless otherwise noted. Roll-type curb & gutter to be paid for by user opening for inlet.



INLET DETAIL FOR ROLL-TYPE CURB & GUTTER

"REFINE CONC. CULVERT" SECTION (II)



"REINF. CONC. CULVERT"
SECTION (III)

RAIR SCHEDULE

BAR SCHEDULE							
Bar	Size	Length	No.	Location	Shape	Spacing	Weight
a	#5	10'-0"	480	box		12"	5206.400
ab	#4	21'-6"	960	"		12"	12707.560
b	#4	39'-9"	648	box		12"	17047.066
c	#4	21'-6"	4	apron		15"	57.448
c1	#4	24'-0"	10	wingwall		12"	164.320
d	#4	7'-5"	28	"		18"	138.722
d1	#4	7'-5"	24	"		18"	126.634
d2	#5	4'-10"	18	"		12"	94.940
d3	#4	21'-9"	6	apron		12"	82.174
e1	#4	10'-7"	6	wingwall		12"	82.418
f	#5	17'-9"	4	"		6"	74.033
f1	#4	4'-0"	2	"		-	5.344
f2	#4	7'-0"	2	"		-	7.352
f3	#4	10'-0"	2	"		-	13.360
g	#4	13'-0"	2	"		-	17.368
h5	#4	16'-0"	4	"		18"	48.752
h6	#4	21'-6"	4	two guard		-	57.448
i	#4	3'-0"	648	box		9" x 12"	1286.568
j	#5	7'-2"	798	"		9" x 18"	5764.945
k	#5	3'-0"	798	"		9" x 18"	2494.945
l2	#3	7'-6"	4	wingwall		12"	55.060
l3	#6	6'-3"	6	"		12"	56.355
l4	#6	4'-6"	6	"		12"	40.554
l5	#6	3'-0"	6	"		12"	27.036
l6	#6	4'-0"	28	"		12"	163.224
l9	#4	3'-2"	44	two guard		12"	73.070
Sub Total =							47001.133

BAR SCHEDULE

Bar	Size	Length	No.	Location	Shape	spacing	Weight
a	#6	22'-0"	160	box	—	12"	5287.080
a1	#5	22'-4"	156	"	—	12"	3633.807
a2	#4	22'-0"	160	"	—	12"	2337.320
b	#4	33'-9"	214	"	—	9"x12"	3262.342
v	#6	7'-0"	266	"	—	12"x16"	3127.634
11	#6	3'-0"	266	"	—	12"x16"	1178.576
k	#4	3'-0"	428	"	—	9"x12"	657.712
						Sub-Total =	22440.511
"TRANSITION SECTION"							
a	#5	18'-0"	240	box	—	12"	2593.200
a2	#4	10'-0"	480	box	—	6"	7054.080
b	#4	24'-9"	428	"	—	9"x12"	2505.644
v	#5	7'-0"	404	"	—	12"x18"	3230.532
11	#5	3'-0"	404	"	—	12"x18"	1264.116
17	#4	5'-0"	656	"	—	13"	2191.040
						Sub-Total =	24748.612

BAR SCHEDULE

BAR SCHEDULE							
Bar	Size	Length	No.	Location	Shape	Spacing	Weight
A	#5	10'-0"	640	Box		12"	6675.20
B3	#4	21'-0"	1280	"		6"	13082.36
D	#4	39'-0"	856	"		9'-4 1/2"	22728.36
C	#4	21'-0"	4	Apcon		15"	57.44
C1	#4	26'-0"	10	Wingwall		12"	173.68
C2	#6	26'-0"	4	"		15"	156.205
D	#5	7'-5"	36	Apcon		18"	130.722
C1	#5	7'-5"	36	Wingwall		12"	278.948
C2	#5	44'-0"	6	"		12"	302.4
C3	#4	10'-0"	6	Apcon		12"	97.188
C4	#4	18'-0"	6	Wingwall		12"	60.120
D	#5	23'-3"	4	"		6"	84.48
H1	#4	7'-0"	2	"		-	9.39
H2	#4	11'-0"	2	"		-	14.64
H3	#4	15'-0"	2	"		-	20.04
H4	#4	20'-0"	12	"		12"	168.32
H5	#4	21'-0"	6	Subguard		12"	86.178
K	#4	3'-0"	856	Box		9'-4 1/2"	1715.68
V	#5	7'-8"	1064	"		12'-4 1/8"	3568.19
W	#5	3'-0"	1064	"		"	3329.28
X	#6	9'-4"	8	Wingwall		12"	116.74
Y	#6	71'-0"	10	"		"	141.40
Z	#6	7'-0"	10	"		"	105.74
12	#6	51'-8"	8	"		"	68.08
16	#6	41'-0"	36	"		12"	216.28
17	#4	50'-0"	856	Box		18"	2882.36
18	#4	51'-1"	44	Subguard		12"	179.44
Sub Total							66324.74

ITEM

BILL OF MATERIALS		
ITEM	QUANTITY	UNIT
Class A-A5 Concrete	1200.00	C.Y.
Reinforcing Steel	1602.00	LBS.
Hand Excavation	C.18	C.Y.
Hand Fill	1,446.00	C.Y.
Reinf. Conc. Headwall @ 60" RC.P	1	ea.
" " Inlets (60")	2	ea.
2x2 concrete inlet	2	ea.
60" RC.P	210	LF
24" "	4	"
Roll-Top Camb. c.c. & qtr.	145	"
Asphalt	74.74	Tons
Common Excavation	886.7	C.Y.
Compacted Fill	1215.2	C.Y.
2x6" brick inlets	2	ea.
Camb. c.c. & qtr. rem.	145	"
Existing Culverts Rem.	2	"
Class (A) Concrete	1628.0	C.Y.
Clearing (2.0 ft)		ump. ym
Loose Fill (existing channels)	3340	C.Y.

00 GENERAL NOTES 00

• CLASS A-AE Concrete shall be used throughout this Project. All reinforcing steel shall conform to A.S.T.M. Specifications.

° EARTHWORK ° all earthwork shall be considered as "Common Excavation" except for the toe wall.
Toe wall EXCAVATION shall be included in the "LUMP SUM BID."

The wall excavation shall be included in the "Lump Sum Bid." "Backfill" shall be compacted to the bottom of new pavement grade where necessary to top of box in all other areas. All backfill excavation to extend (2') beyond sides of walls & manholes.

• WEEP HOLES - Coarse aggregate shall be deposited behind each "weep hole" to occupy a space extending (15') in all directions above weep-hole flowline. This work shall not be paid for directly but shall be considered a part of the excavation work.

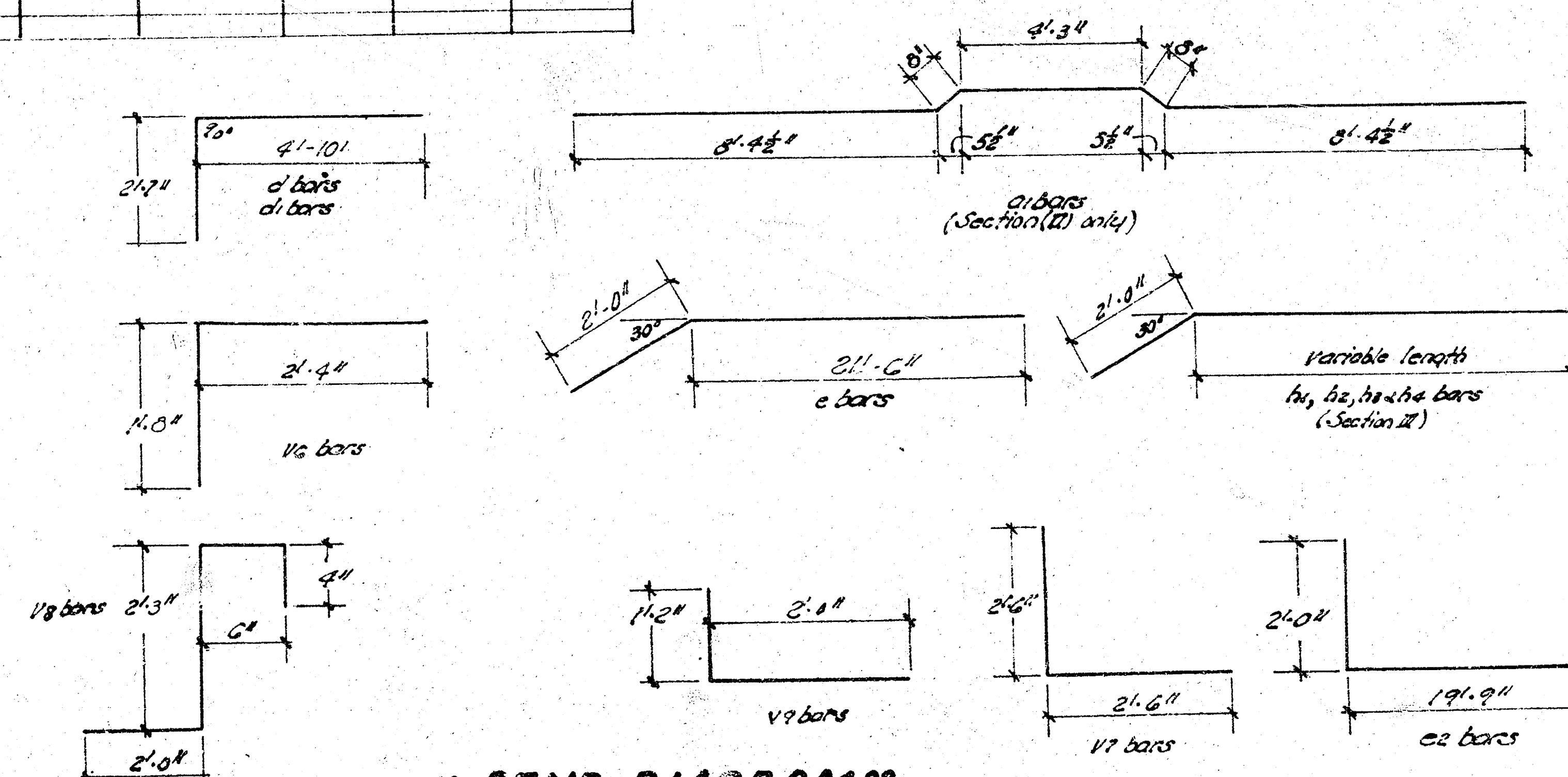
SEAL COURSE - A seal course consisting of (3rd) class (A) concrete shall be constructed only where specified on the plans or by the Engineer. No reinforcing shall be placed until the seal course has gained sufficient strength to permit working on it without injury.

"BIDDING OF CURBERT". The Curbert shall be bid as a "Lump Sum Bid" except for the following items:
conc.(rent) floorwall for wall, rent conc.inlets, dist.grate, 5'x6'x4" RIR, rail type conc.curb, tons asphalt, common
roommate fill, dist.galv.conc.curb, r.n., structures, man, class (A) conc. clearing R.O.H., loose fill.

conc. (point) headwall for culverts, (point) conc. inlets, culverts, to extend from, (point) excavation, compacted fill, d/s inlets, conc. d/s q/c: rem. structures rem., class (A) conc. clearing, R.O.N., loose fill. The quantities shown in the "Bill of Materials" or items which are included in the "Lump Sum Bid" of the contract are for "Information Only." The Contractor must satisfy himself to the "Quantities" and the Engineer assumes no responsibility for their accuracy. The contractor will have the full responsibility for providing all materials shown on the detailed sheets of the plans necessary to complete this project.

* Backfilling & grading over new culvert to be incidental to the project. The top 10 ft of top soil to be substituted in for top 10 ft indicated on plans.

* Clearing of Right of Way - this item to include any removal necessary to complete this project with the exception of "Culvert Rem" or "Foyer Road" which will be a bid item.



.. BEND DIAGRAM ..