

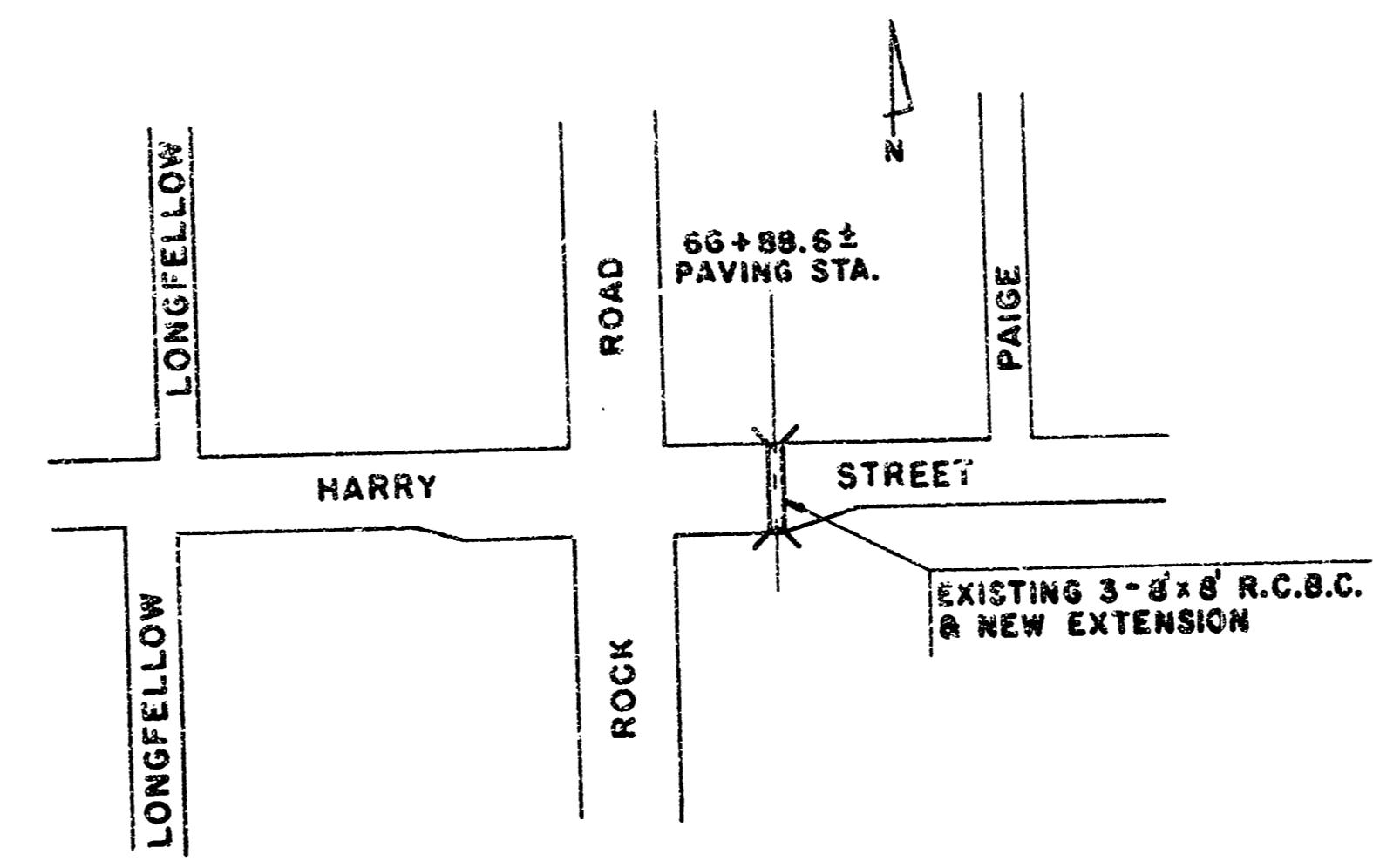
3-8'x8' R.C.B.C. EXTENSION
IN CONNECTION WITH PAVING HARRY STREET
FROM E.L. FABRIQUE TO E.L. EASTMOOR

CITY OF WICHITA, KANSAS

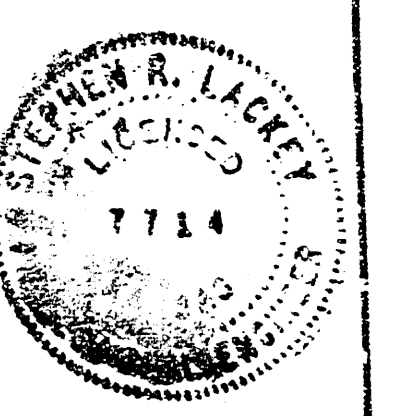
D.S. SELLERS ACTING CITY ENGINEER

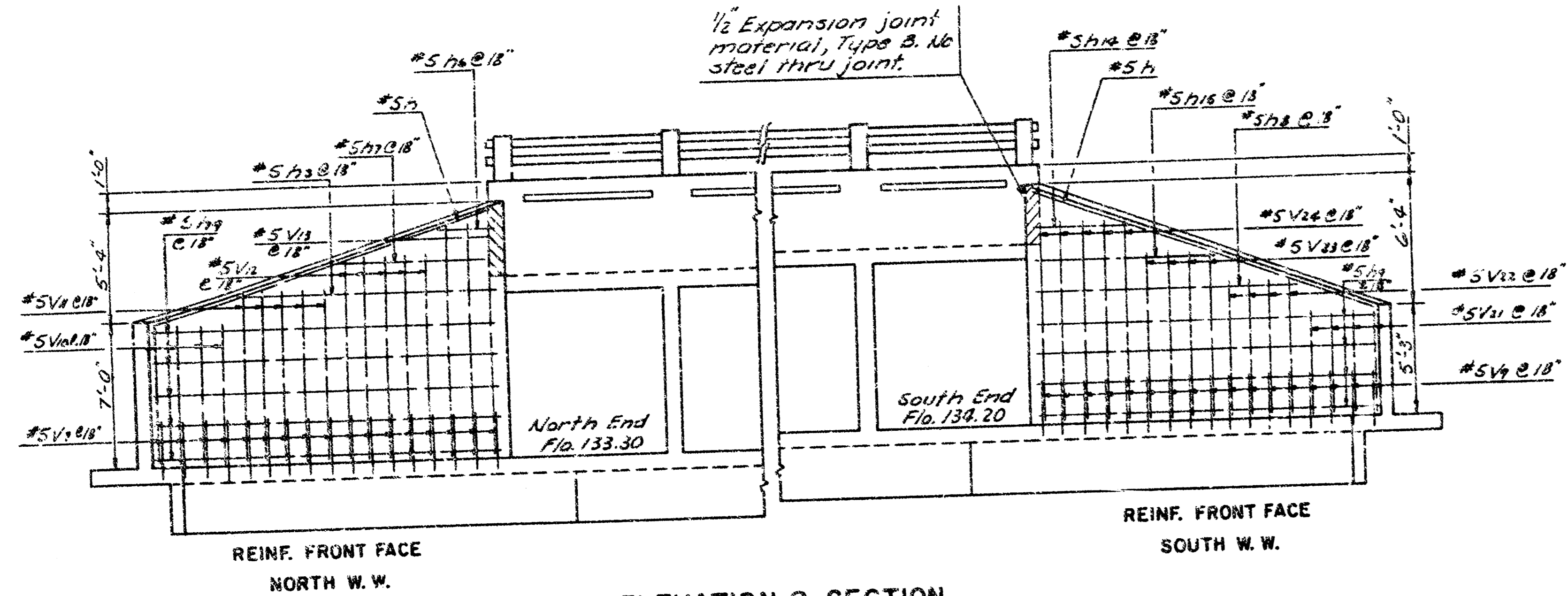
DATE:

PROJ. NO. 472 76 245 80641 000 000 001

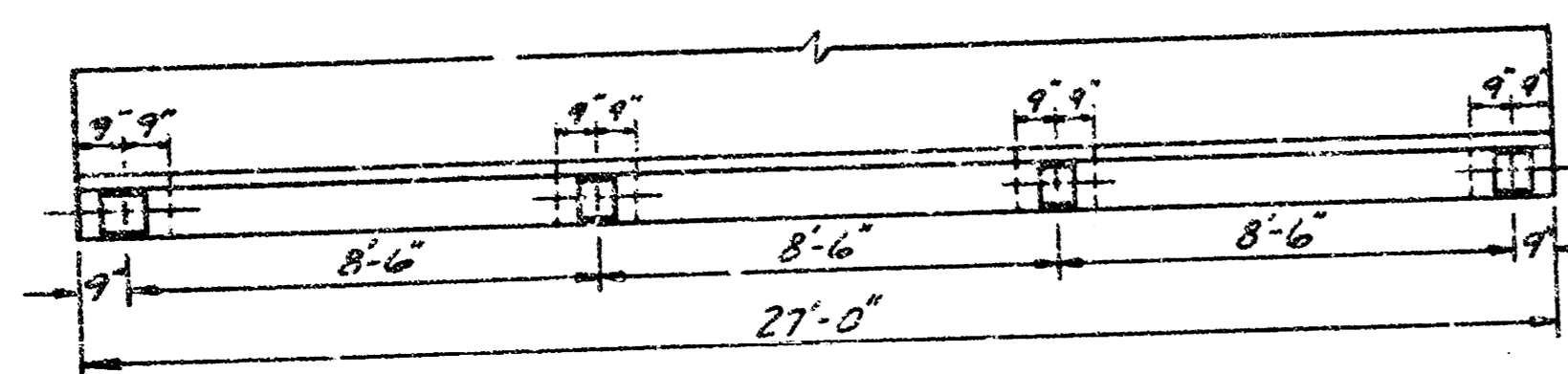


LOCATION MAP

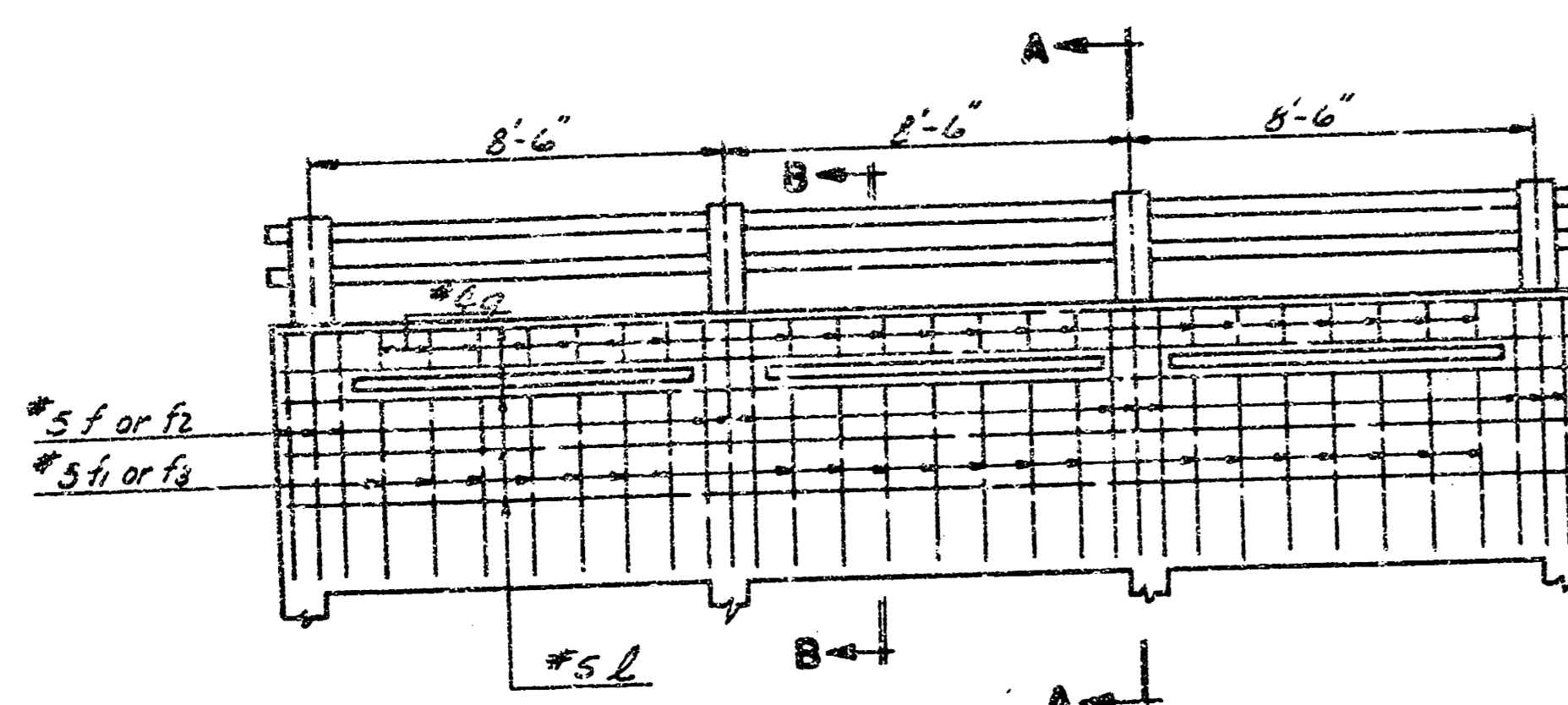




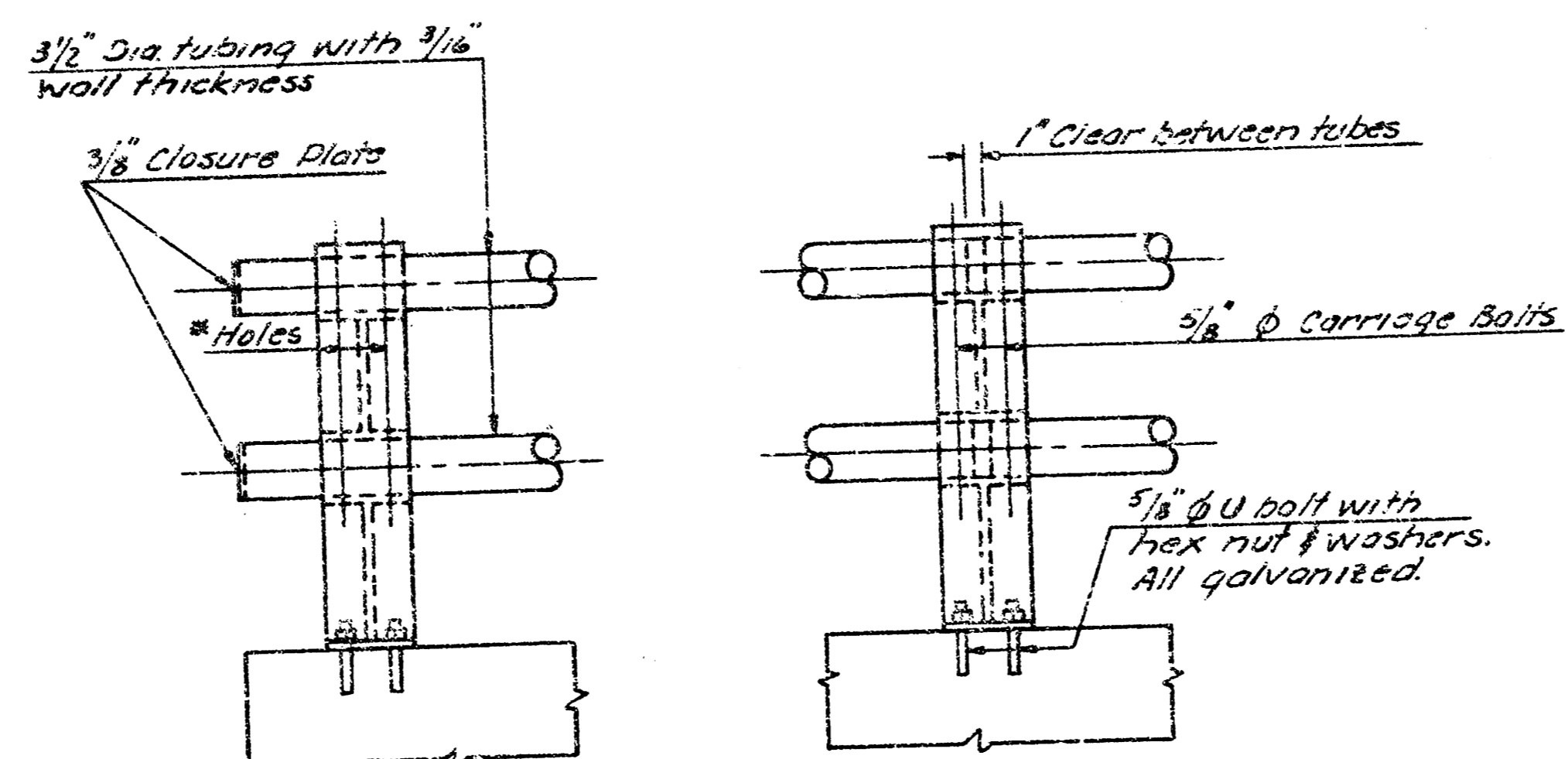
ELEVATION & SECTION
SCALE: 3/16" = 1' 0"



PLAN-RAILING
SCALE: 1/4" = 1' 0"



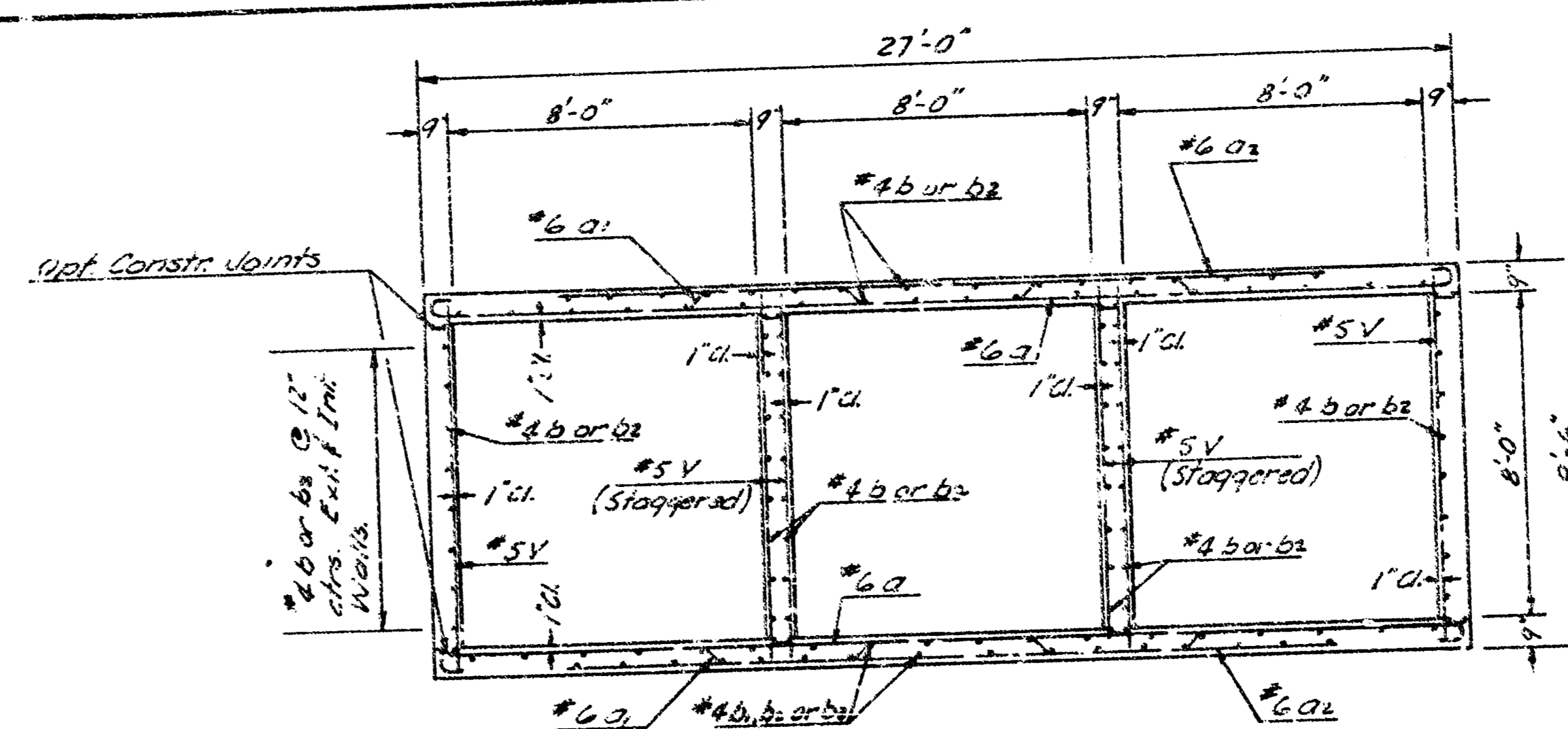
SECTION-RAILING
SCALE: 1/4" = 1' 0"



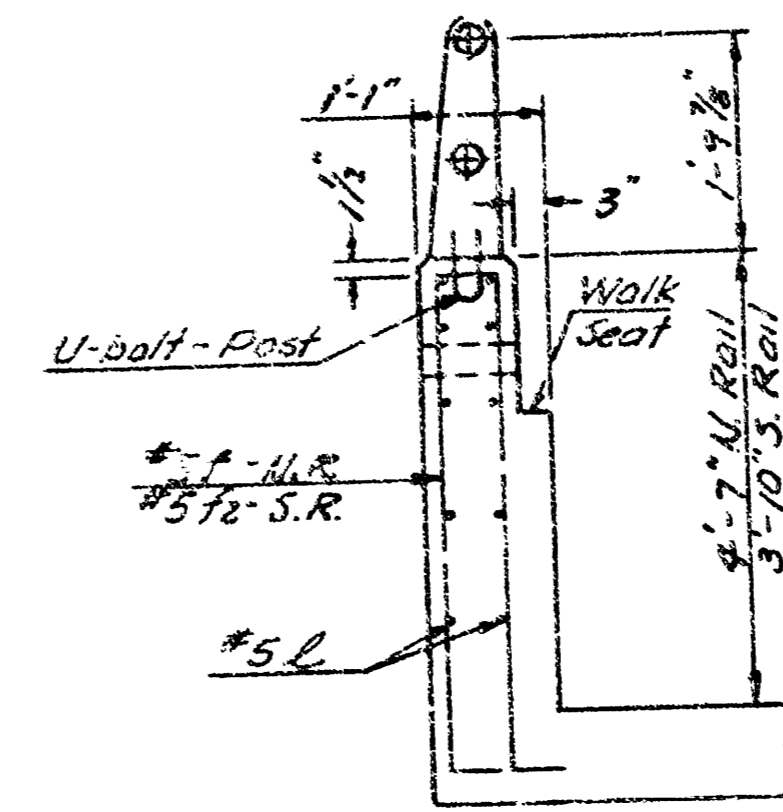
DETAIL-ALUMINUM RAILING
NO SCALE

* Notes: 1/16" square holes in post under head and 1/16" round holes under nuts for 3/8" ϕ x 5/16" carriage bolts with hex nuts.

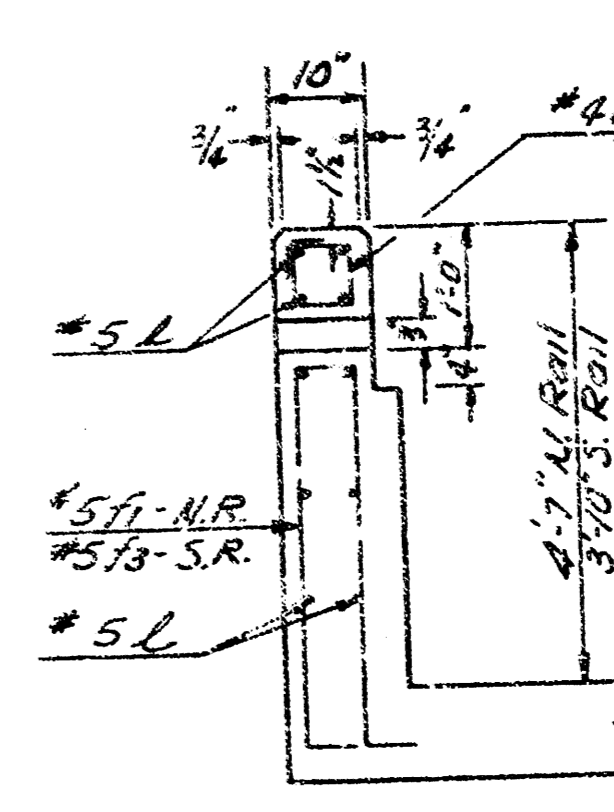
NOTE: Aluminum Handrail
Aluminum posts shall be Reynolds Aluminum Highway Products Bridge Railing System #2R19A or equal.
Top & bottom rails shall be 3 1/2" O.D. x 1/4" wall tube of 6063-T6 Aluminum.
Aluminum shims between concrete and post base may be used. The space below posts shall be thoroughly caulked with Alumilastic compound or other approved material.



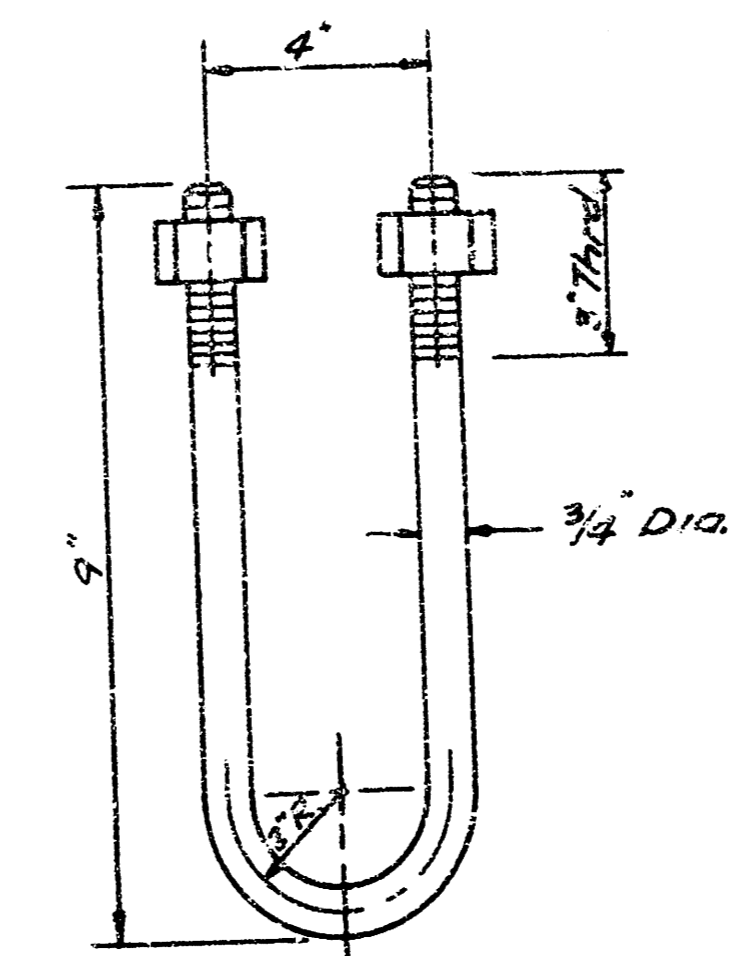
BOX SECTION
SCALE: 1/4" = 1' 0"



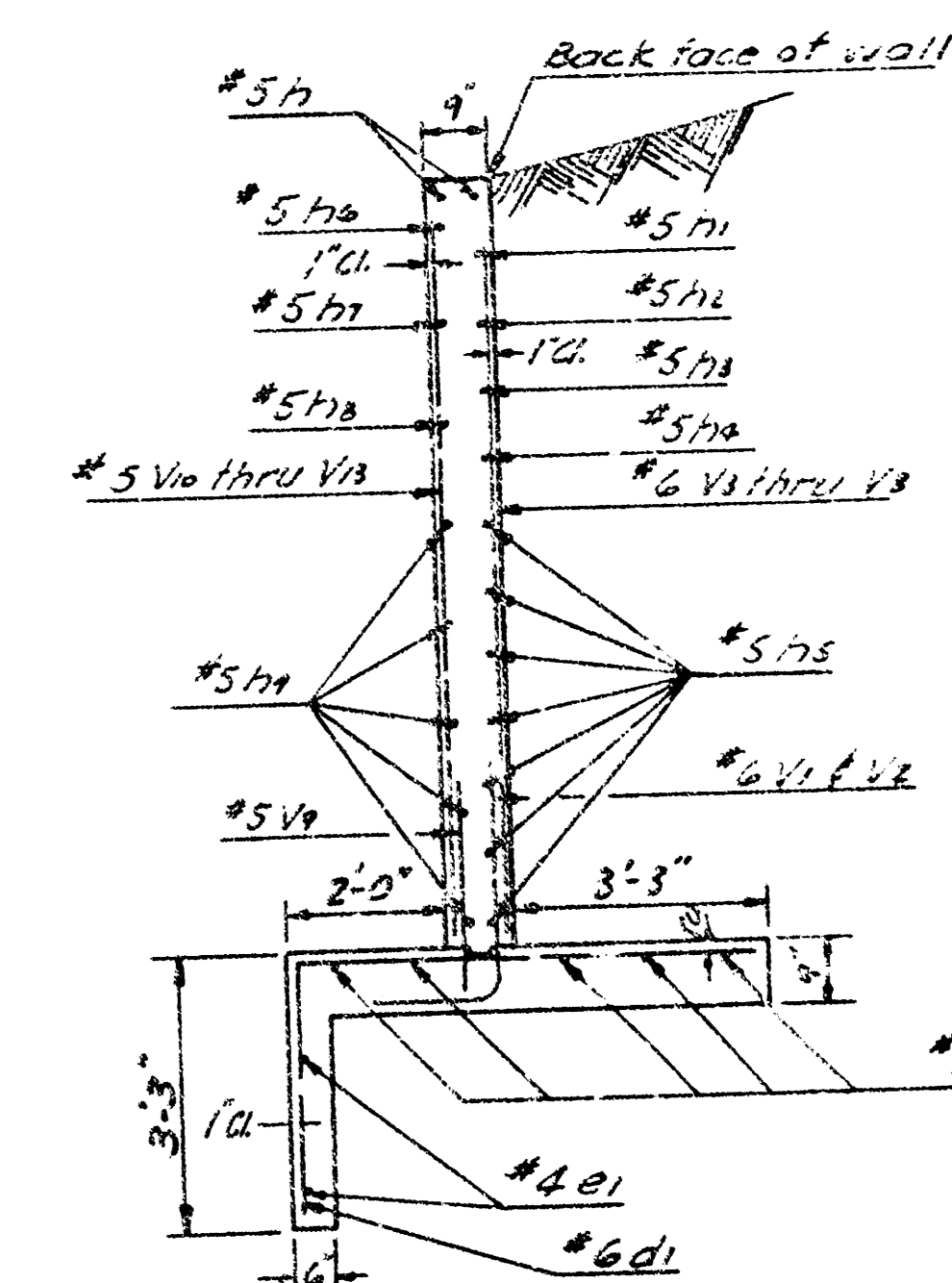
SECTION A-A
NO SCALE



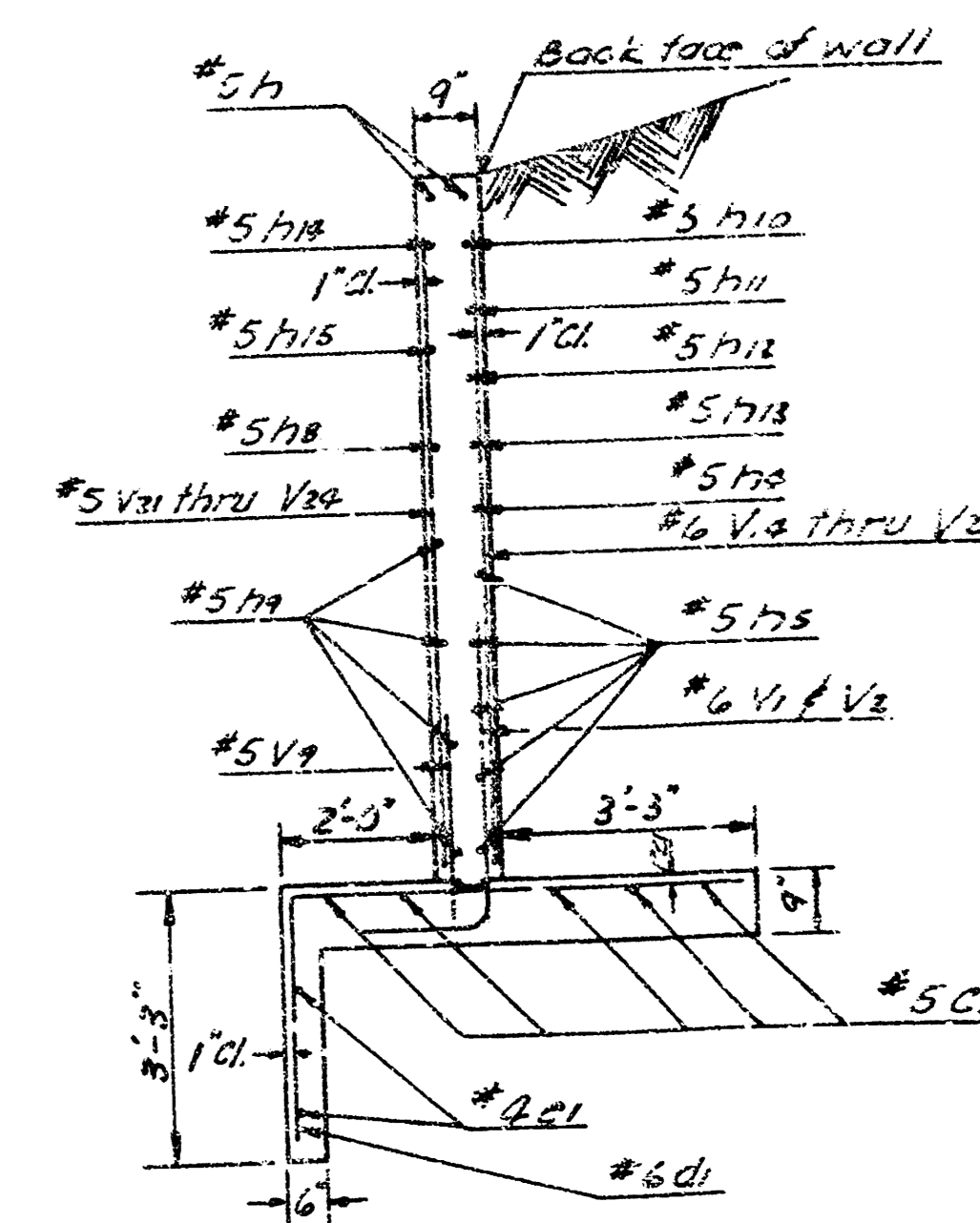
SECTION B-B
NO SCALE



GALVANIZED U BOLT
NO SCALE



SECTION NORTH WINGWALL
NO SCALE

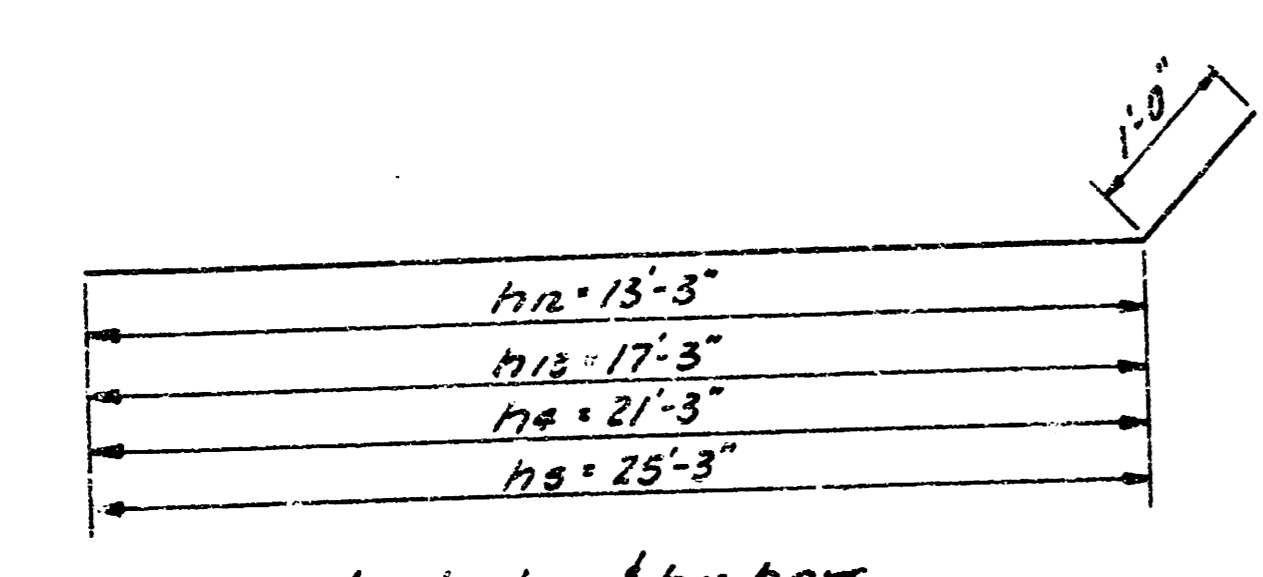
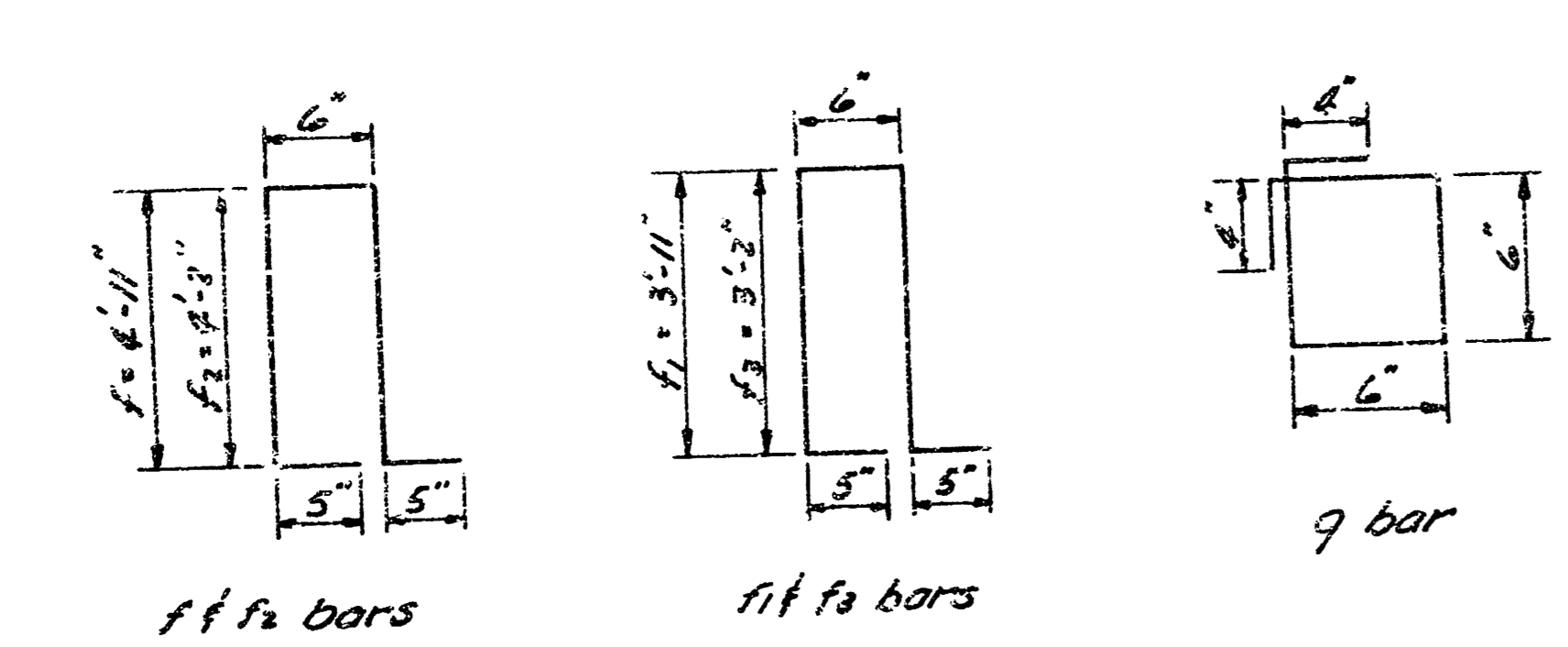
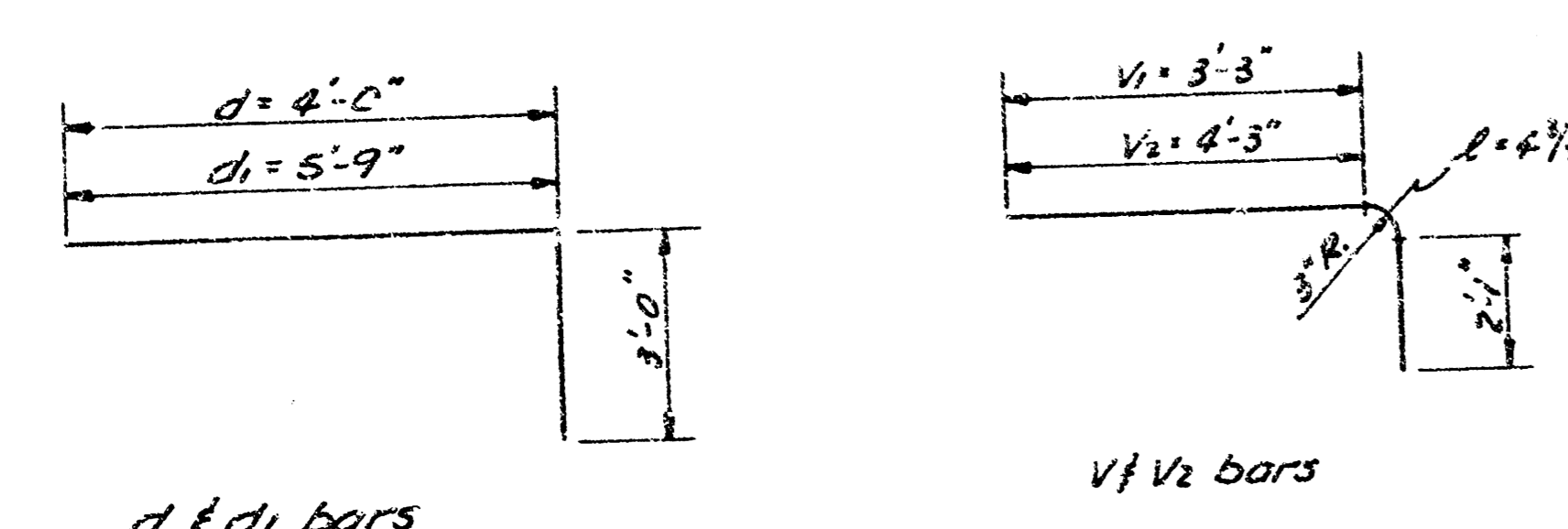
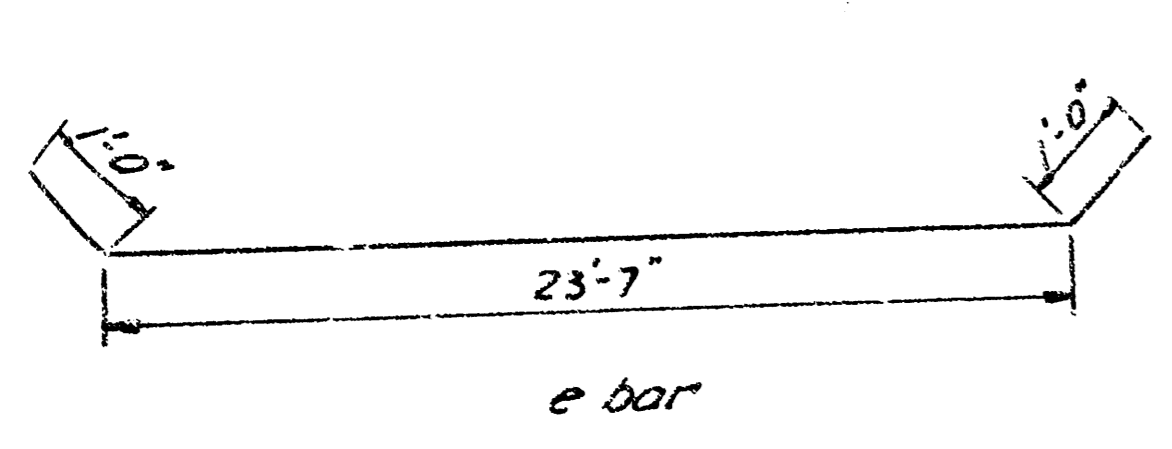
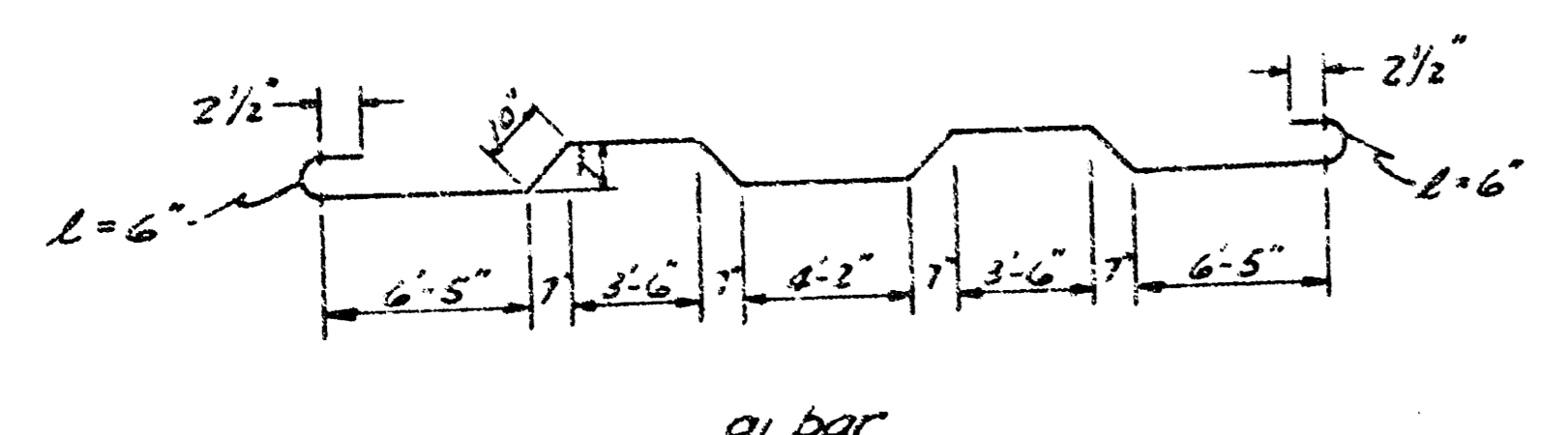
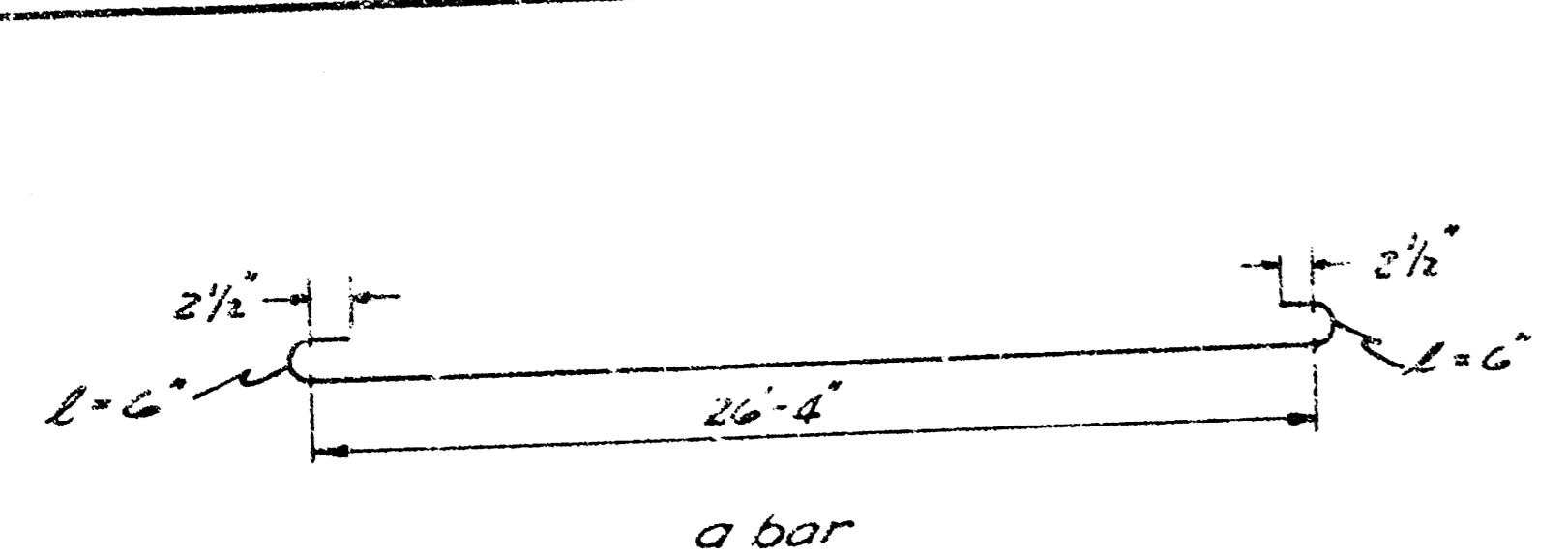


SECTION SOUTH WINGWALL
NO SCALE

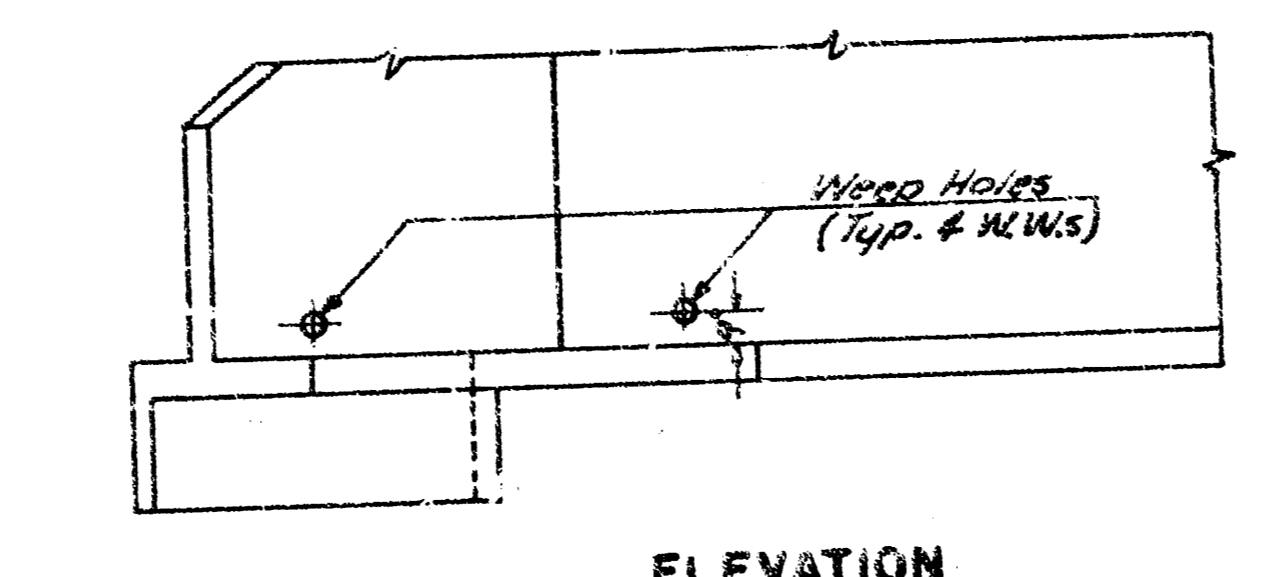
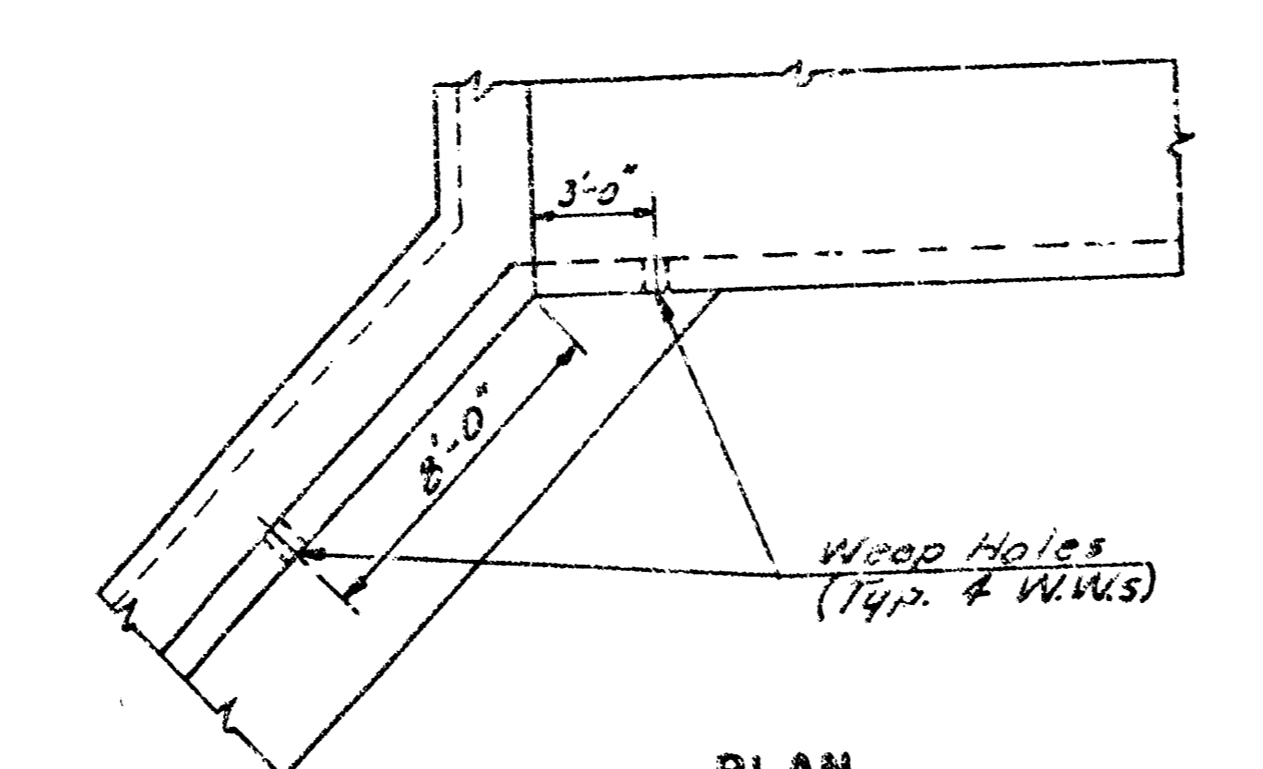
3'-8"x8' R.C.B.C. EXTENSION
IN CONNECTION WITH PAVING
HARRY STREET FROM
E.L. FABRIQUE TO E.L. EASTMOOR

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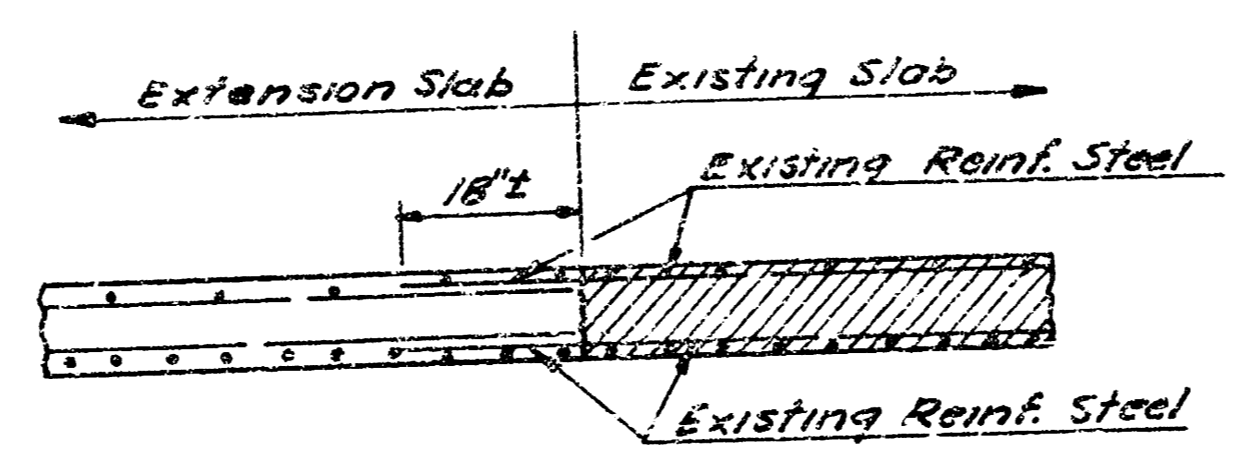
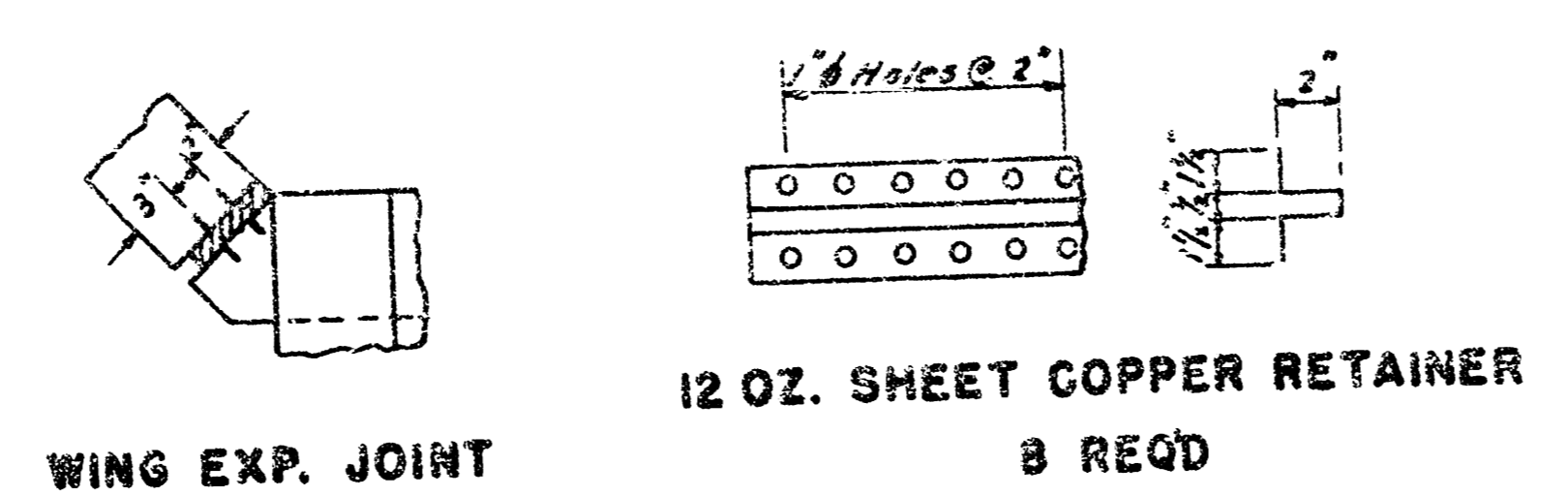
3/6



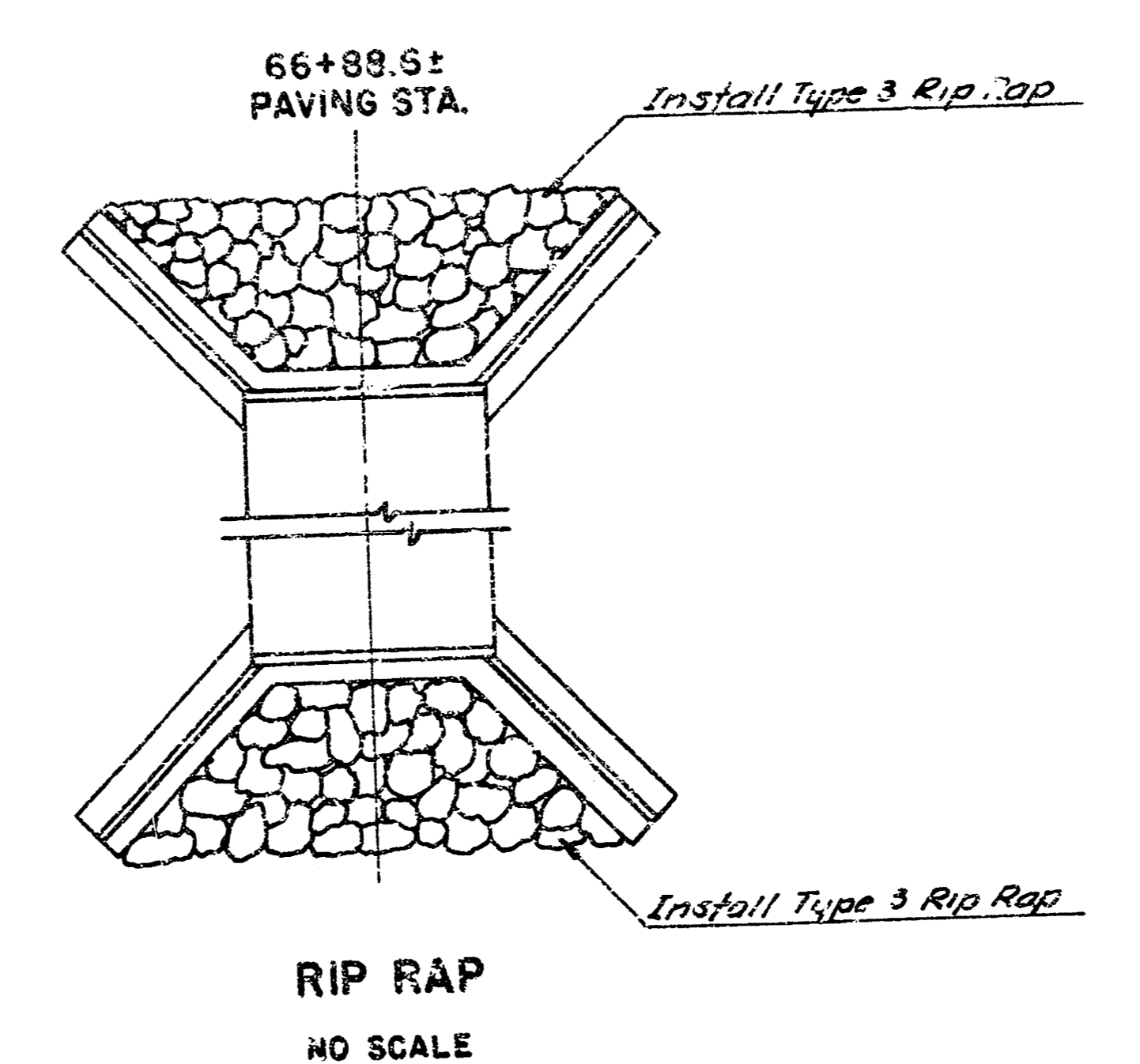
BENDING DIAGRAMS
NO SCALE



WEEPHOLE LOCATIONS
NO SCALE



TYPICAL EXTENSION SECTION
NO SCALE



BILL OF MATERIALS		
ITEMS	QUANTITY	UNIT
Class A-AE Concrete	283.7	C.Y.
Reinforcing Steel	40857.3	Lbs.
Hand Excavation	20.2	C.Y.
Aluminum Handrail	54.0	L.F.
Portion of Exist. R.C.B.C. Removed		
Class A Concrete Seal Course	27.7	C.Y.
Excavation	502.3	C.Y.
Compacted Fill	203.4	C.Y.
Rip Rap	157.7	S.Y.

Lump Sum Bid

Bid Items

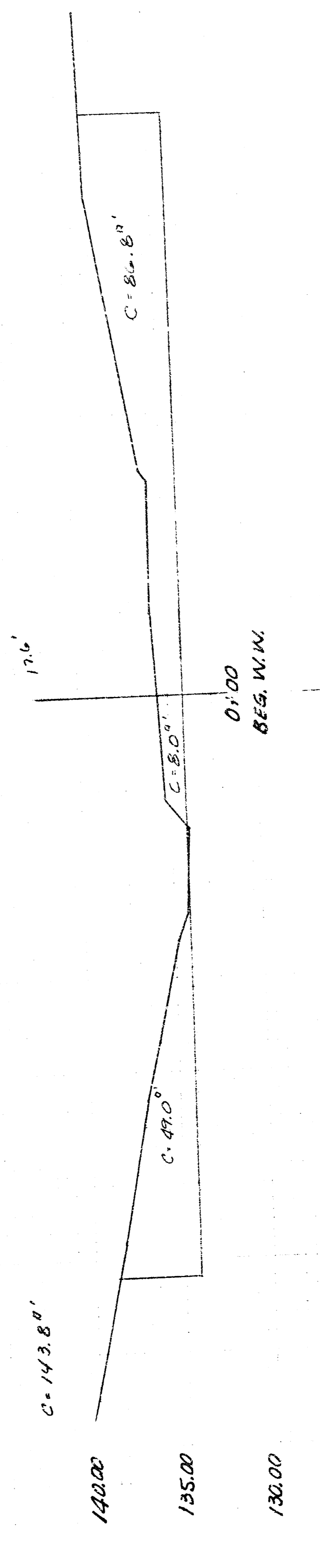
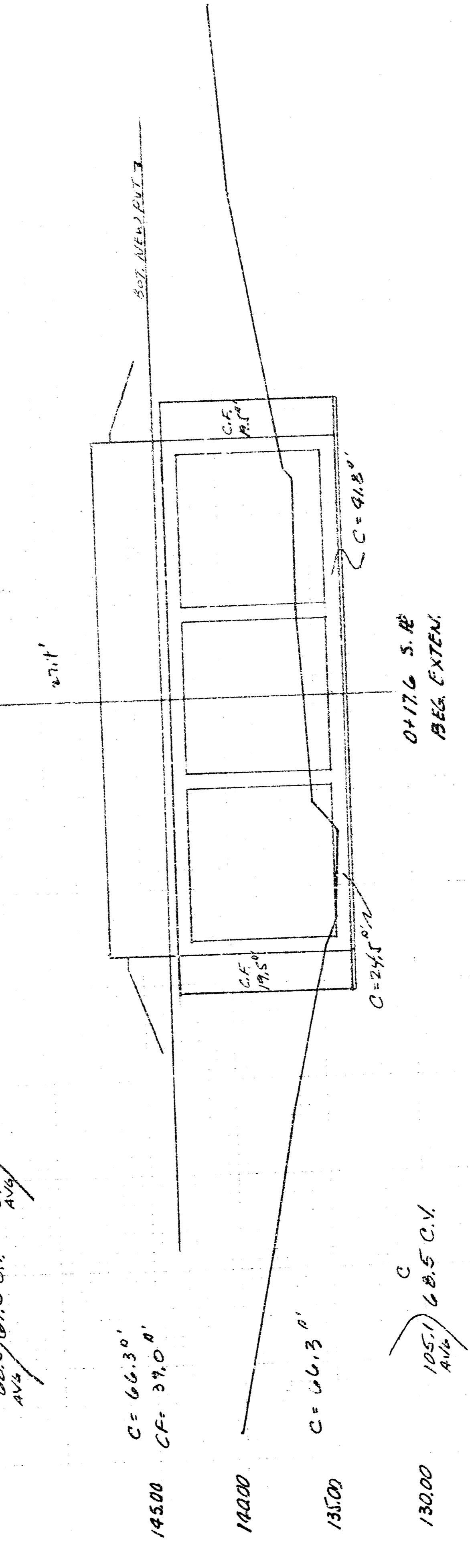
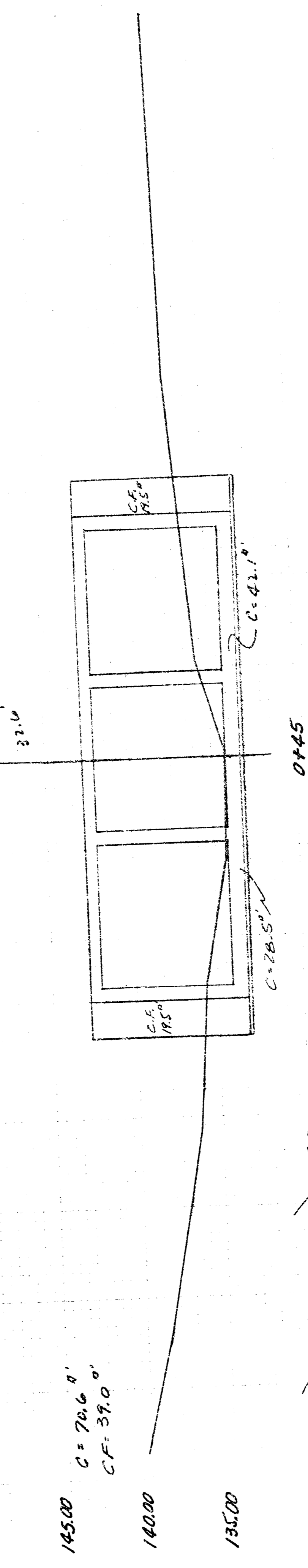
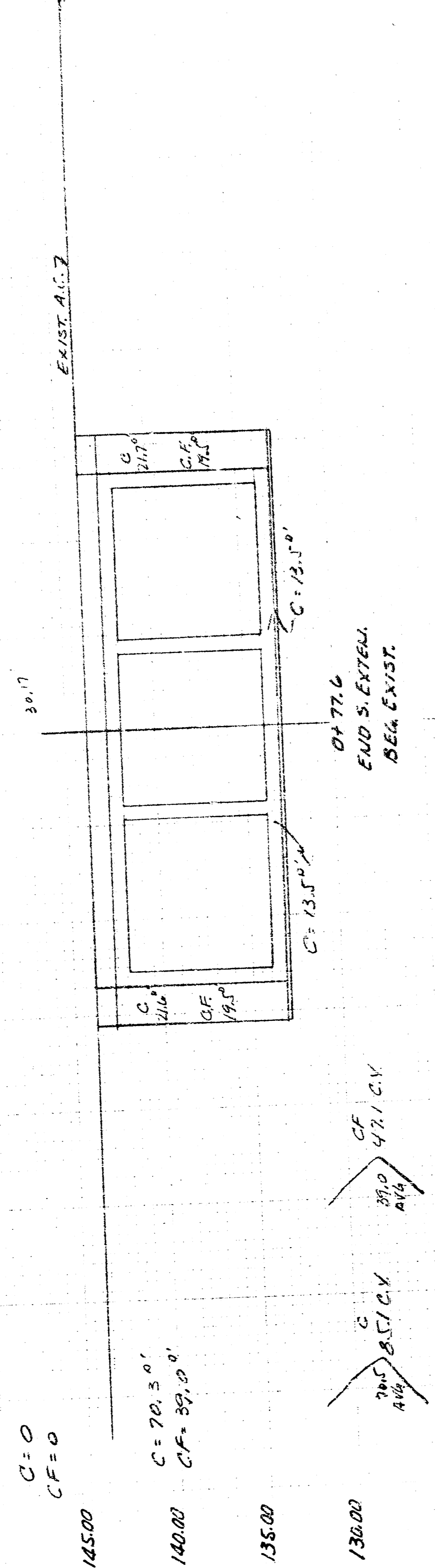
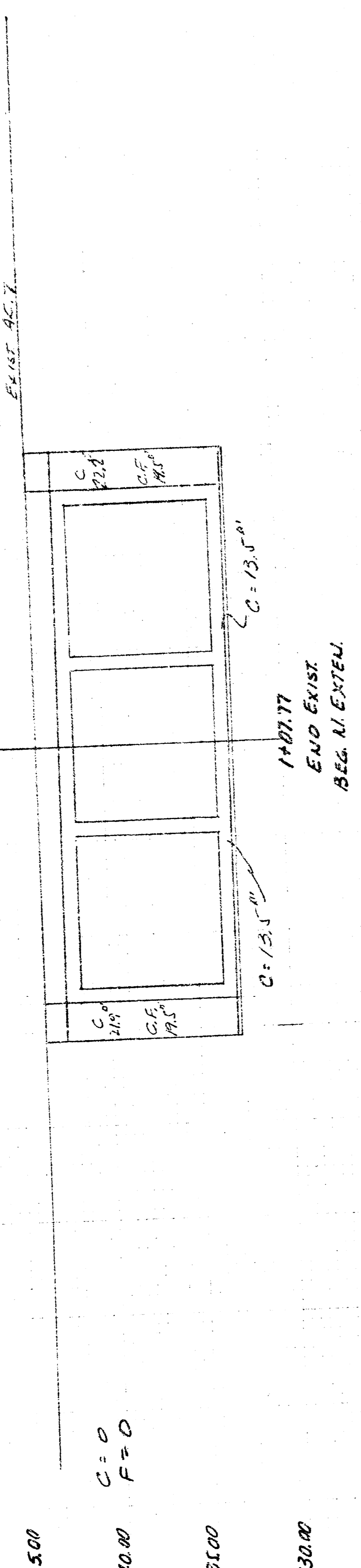
- GENERAL NOTES
- CLASS A-AE - CONCRETE SHALL BE USED THROUGHOUT ON THE STRUCTURE. THE REINFORCING STEEL SHALL CONFORM TO A.S.T.M. SPECIFICATIONS.
 - SAFETYWORK - ALL EARTHWORK SHALL BE CONSIDERED AS "COMMON EXCAVATION" EXCEPT FOR THE TOWHALL. TOWHALL EXCAVATION SHALL BE INCLUDED IN "LUMP SUM BID".
 - BACKFILL - ALL BACKFILL AND EXCAVATION TO EXTEND TO (2') BEYOND SIDES OF BOX AND WING-WALLS.
 - BEVEL - ALL EXPOSED EDGES OF CONCRETE WITH 3/4" TRIANGULAR MOUNDING.
 - WEEPHOLES - COURSE AGGREGATE SHALL BE DEPOSITED BEHIND EACH WEEPHOLE TO OCCUPY A SPACE EXTENDING (18") IN ALL DIRECTIONS ABOVE WEEPHOLE FLOW LINE. 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 "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 UPON IT WITHOUT DAMAGE.
 - BEDDING OF CONCRETE - THE CONCRETE SHALL BE BID AS A "LUMP SUM BID" WHICH SHALL INCLUDE THE FOLLOWING ITEMS: CLASS A-AE CONCRETE, REINFORCING STEEL, HAND EXCAVATION, ALUMINUM HANDRAIL, AND PORTION OF EXISTING R.C.B.C. REMOVED. ALL OTHER ITEMS SHALL BE INCLUDED AS BID ITEMS.
 - THE QUANTITIES SHOWN IN THE "BILL OF MATERIALS OR ITEMS" WHICH ARE INCLUDED IN THE "LUMP SUM BID" OF THE CONTRACT ARE FOR "INFORMATION PURPOSES ONLY". THE CONTRACTOR MUST SATISFY HIMSELF AS TO THE "QUANTITIES" AND THE ENGINEER ASSUMES NO RESPONSIBILITIES FOR THEIR ACCURACY. THE CONTRACTOR WILL HAVE THE FULL RESPONSIBILITY FOR PROVIDING ALL MATERIALS ON THE DETAILED PLANS NECESSARY TO COMPLETE THE PROJECT.
 - THROUGH TRAFFIC TO BE MAINTAINED DURING CONSTRUCTION AT ALL TIMES.

BAR SCHEDULE					
BAR	SIZE	LENGTH	NO.	SHAPE	WEIGHT
a	#6	27'-9"	182		754.56
a1	#6	28'-9"	182		789.12
a2	#6	20'-0"	182		546.73
b	#4	38'-6"	34		1889.77
b1	#4	37'-0"	34		715.14
b2	#4	37'-0"	198		4105.18
b3	#4	29'-0"	34		454.65
c	#5	37'-0"	4		133.10
c1	#5	29'-0"	20		604.98
d	#5	7'-0"	36		337.35
d1	#6	8'-9"	100		1311.15
e	#4	25'-7"	4		68.35
e1	#5	28'-8"	8		205.35
f	#5	11'-2"	12	CL	139.80
f1	#5	9'-2"	21	CL	200.85
f2	#5	9'-8"	12	CL	121.05
f3	#5	7'-8"	21	CL	148.00
d	#5	2'-8"	42	CL	78.41
d	#5	25'-0"	8		208.00
f4	#5	5'-2"	2		11.29
f5	#5	10'-6"	2		21.90
f6	#5	15'-6"	2		37.35
f7	#5	22'-3"	4		77.33
f8	#5	24'-3"	24		657.99
f9	#5	3'-5"	2		7.15
f10	#5	10'-11"	2		22.78
f11	#5	18'-5"	4		70.55
f12	#5	24'-5"	18		484.66
f13	#5	6'-6"	2		13.56
f14	#5	9'-6"	2		19.31
f15	#5	14'-3"	2		29.25
f16	#5	18'-3"	2		38.77
f17	#5	6'-5"	2		12.91
f18	#5	12'-5"	2		25.79
e	#5	26'-0"	20		41.72
s	#5	5'-0"	8		36.66
v	#5	9'-3"	380		2626.5
v1	#6	5'-8 1/2"	100		421.34
v2	#6	6'-8 1/2"	40		171.5
v3	#6	5'-7"	8		39.53
v4	#6	6'-7"	4		173.35
v5	#6	7'-7"	10		173.87
v6	#6	8'-7"	10		183.99
v7	#6	9'-7"	10		127.13
v8	#6	10'-7"	8		212.77
v9	#5	3'-0"	8		50.06
v10	#5	6'-0"	10		85.21
v11	#5	8'-0"	10		100.26
v12	#5	9'-8"	4		69.34
v13	#5	11'-11"	4		72.53
v14	#6	3'-9"	4		57.08
v15	#6	4'-9"	4		39.53
v16	#6	5'-9"	4		101.99
v17	#6	7'-9"	4		69.84
v18	#6	8'-9"	8		105.16
v19	#6	9'-9"	10		146.45
v20	#5	5'-0"	8		41.72
v21	#5	6'-6"	8		56.24
v22	#5	8'-0"	8		66.75
v23	#5	9'-6"	10		99.09

3-8x8' R.C.B.C. EXTENSION
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PROJ. NO. 472 76 245 80641 000 000 001 1/6

$C = 94.5'$
 $CF = 37.0'$
 $34.83'$
 $C = 71.1'$
 $CF = 27.0'$

$C = 106.8$
 $CF = 50.3$



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 $CF = 50.3$

$C = 71.1$
 $CF = 27.0$

$C = 13.5$
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 $CF = 13.5$

40	35	30	25	20	15	10	5	0	5	10	15	20	25	30	35	40
EARTHWORK SUMMARY SHEETS																
EXCAV. HAND EXCAV. C.F. 137.0 C.Y.																
BACKFILL HAND EXCAV. C.F. 105.4 C.Y.																
TOTAL EXCAV. 20.2 C.Y.																
TOTAL BACKFILL 20.2 C.Y.																

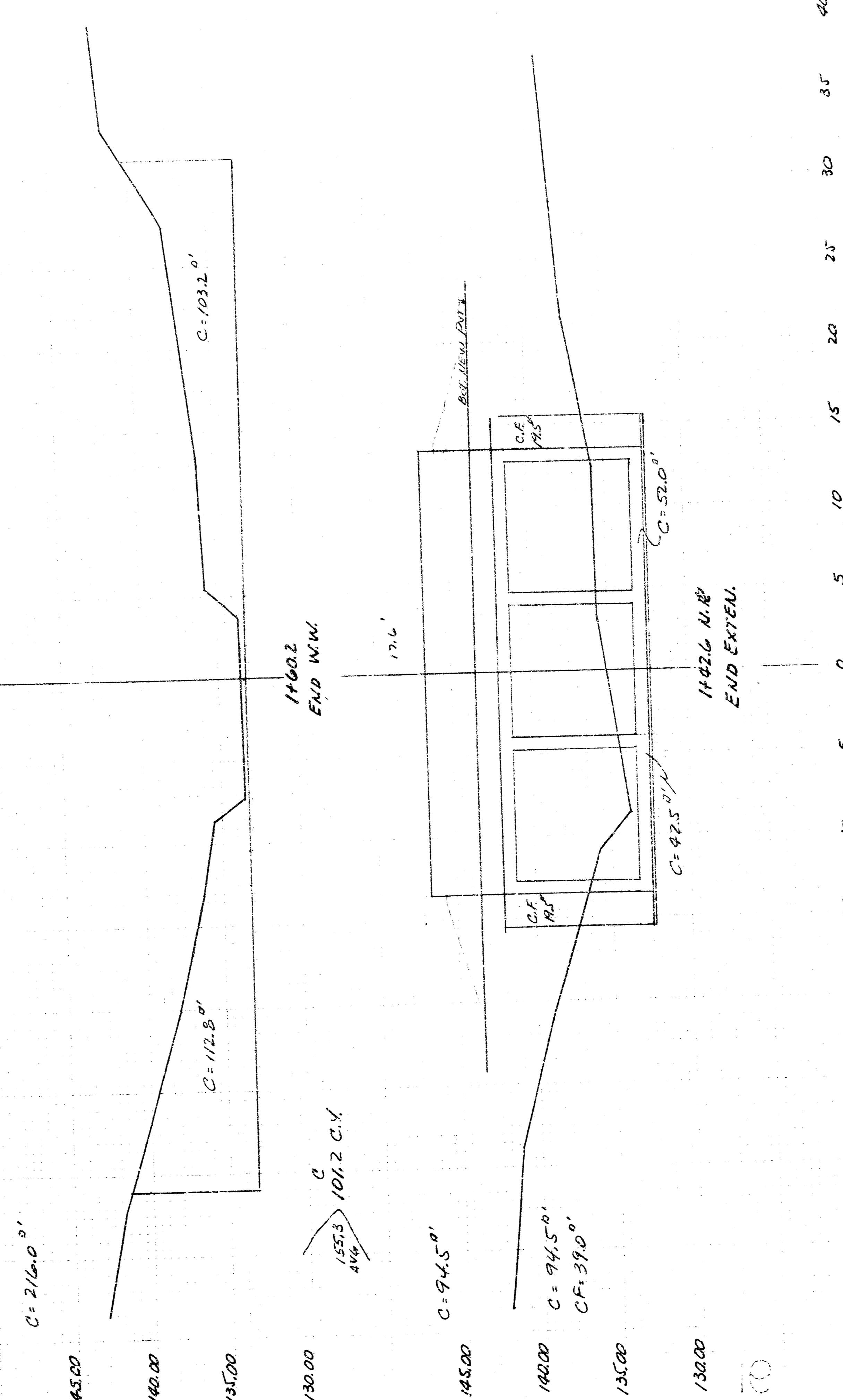
3-8'x8' R.C.B.C. EXTENSION
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 HARRY STREET FROM
 E.L. FABRIQUE TO E.L. EASTMOOR
 PROJ. NO. 472 76 245 80641 000 000 CCI

5/6

5/6

EARTHWORK TO W.W.
 BASE = $2(60 \times 75 + 2477) = 222.8 = 8.3 \text{ C.Y. (C)}$
 EXCAV. BACK FACE W.W. = $3.15 \left(\frac{4.5 \times 24.75}{2} \right) = 305.7 = 11.3 \text{ C.Y. (C)}$
 " " " " = $3.15 \left(\frac{4.5 \times 24.75}{2} \right) = 246.3 = 8.9 \text{ C.Y. (C)}$
 HAND EXCAV. TOE WALL = $(72.59)(2.5)(1.5) = 272.2 = 10.1 \text{ C.Y. (C)}$
 CORNER FILL = $2 \left[(1.0) \left(\frac{5.15 \times 1.58}{2} \right) (4.75) \right] = 833.58 = 30.9 \text{ C.Y. (C.F.)}$

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145.00
 140.00
 135.00
 130.00
 145.00
 140.00
 135.00
 130.00
 0
 5
 10
 15
 20
 25
 30
 35
 40

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EARTHWORK THIS SHEET
 EXCAV. HAND EXCAV. 20.2 C.Y.
 C.F. 66.4 C.Y.

6/6

6/6