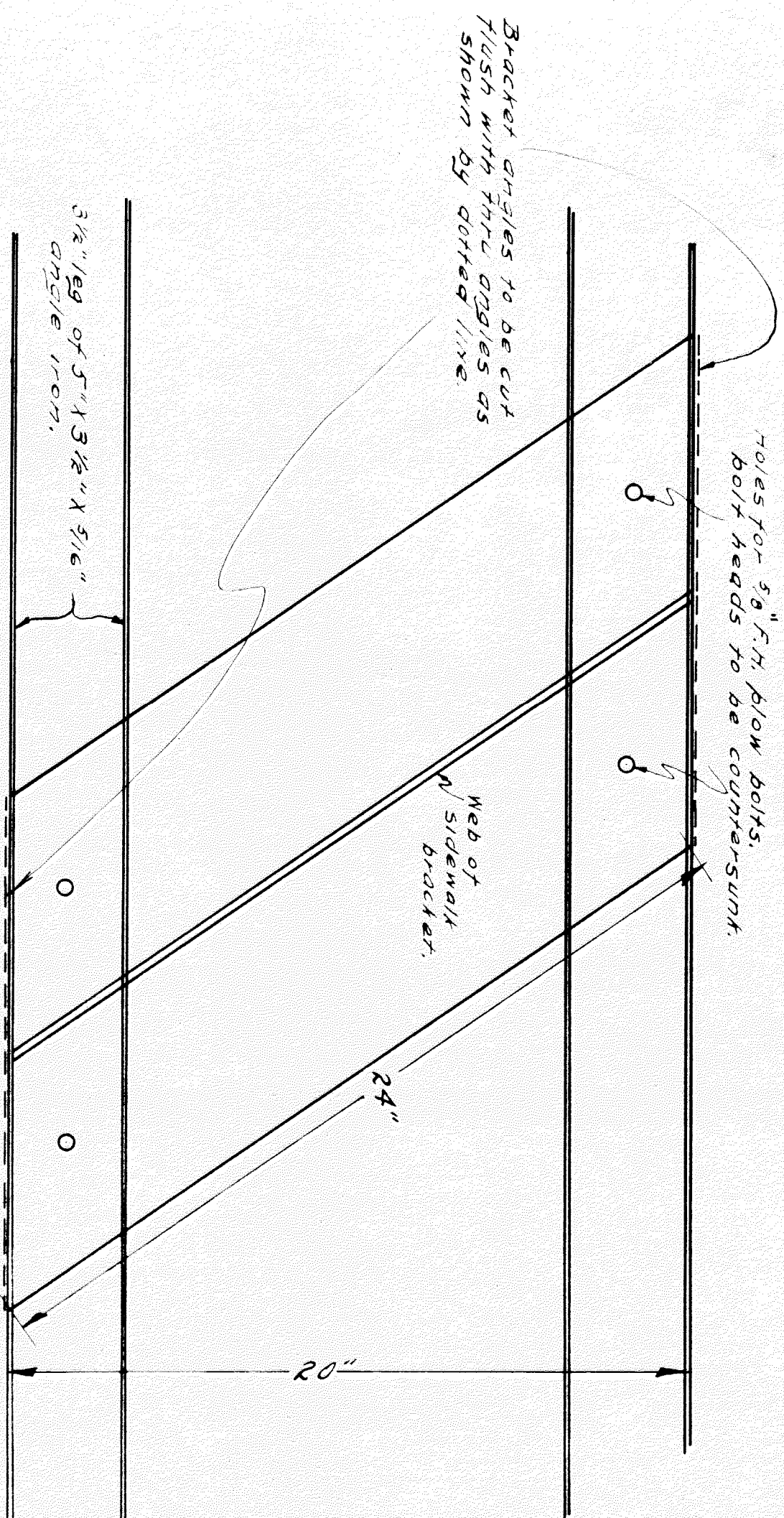
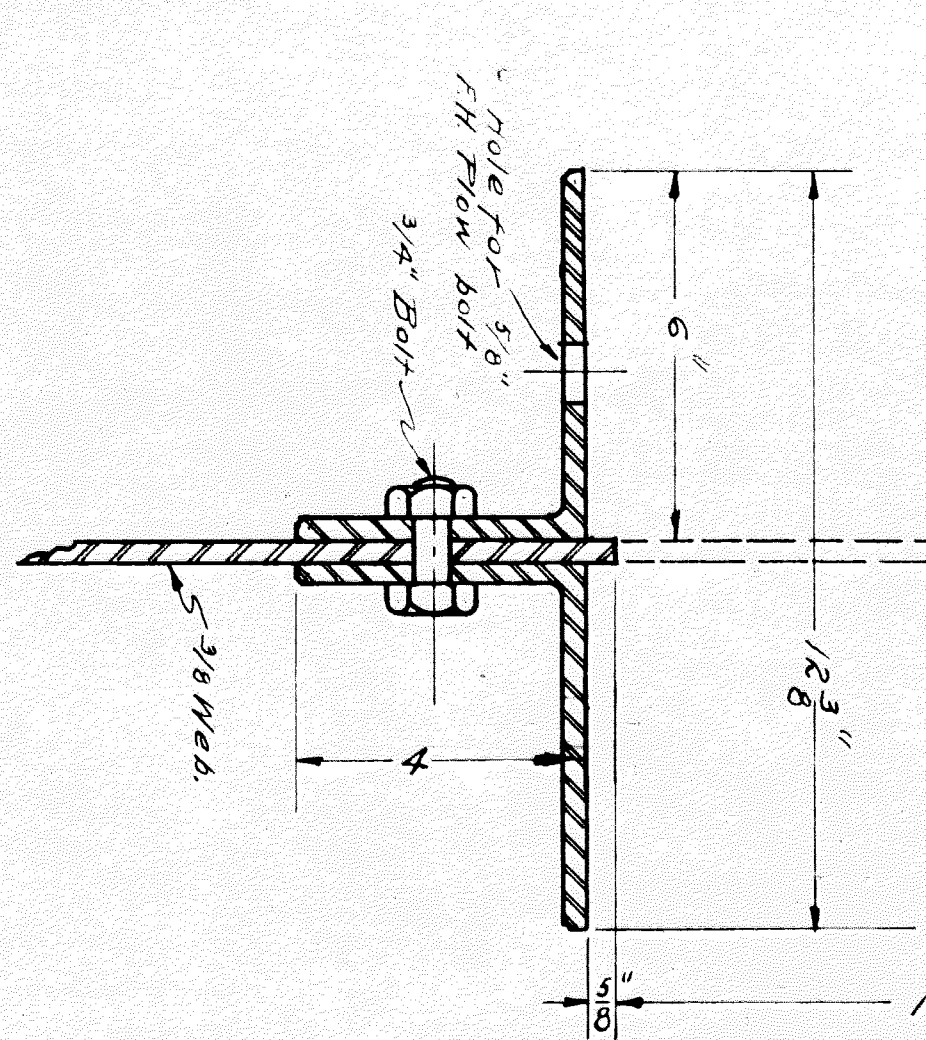
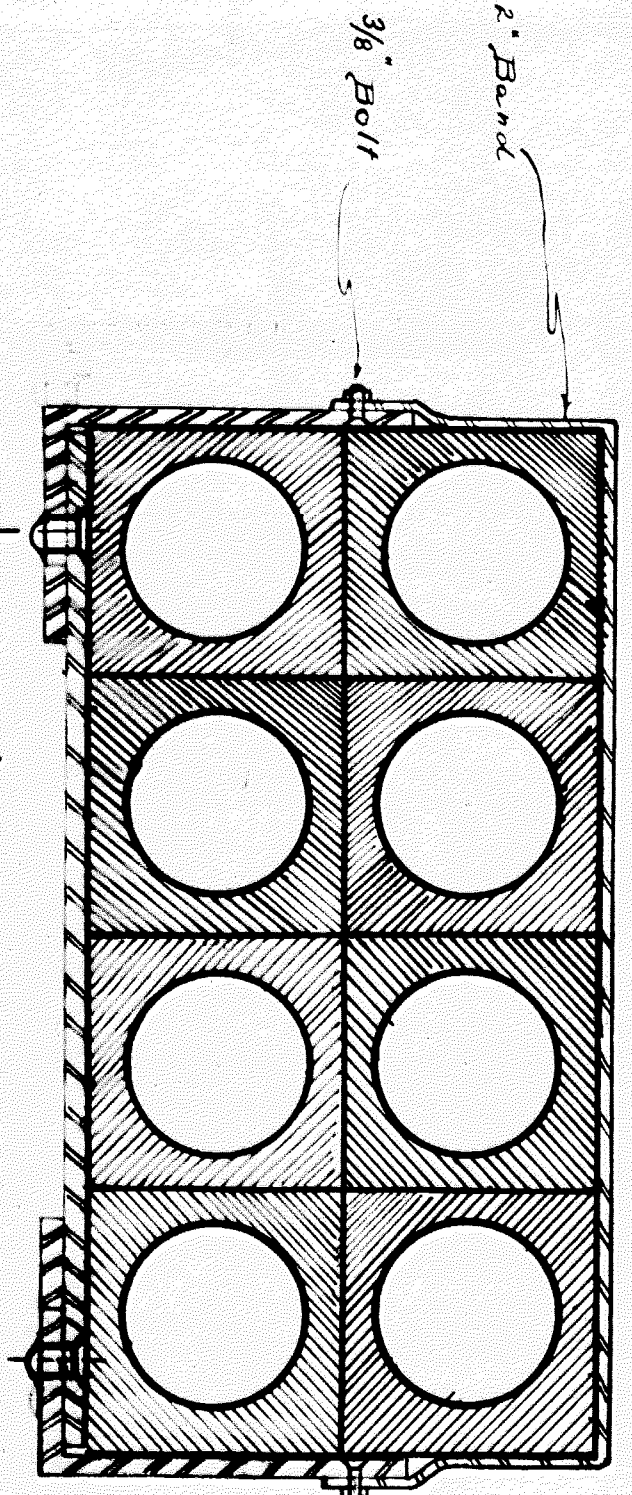
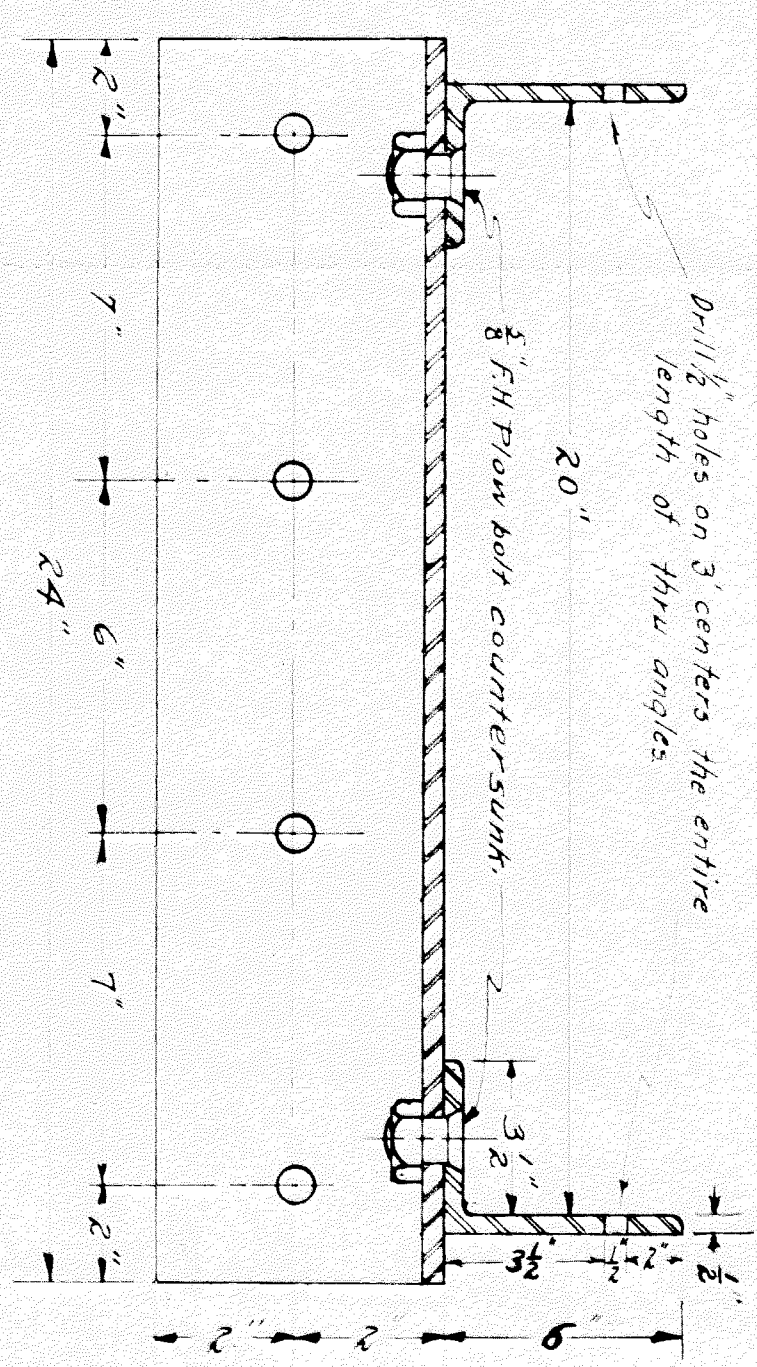
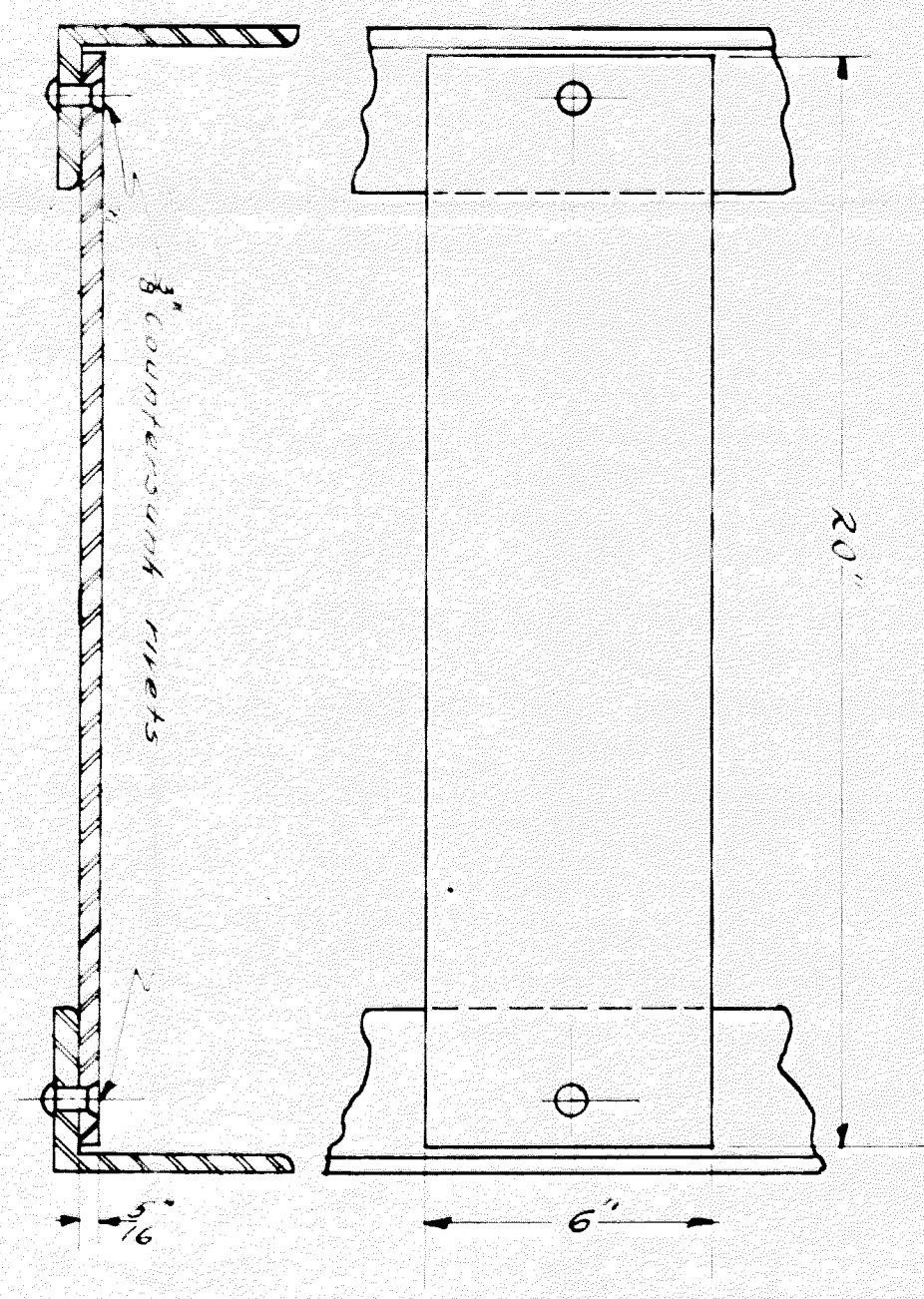


VIEW OF SIDEWALK BRACKET.

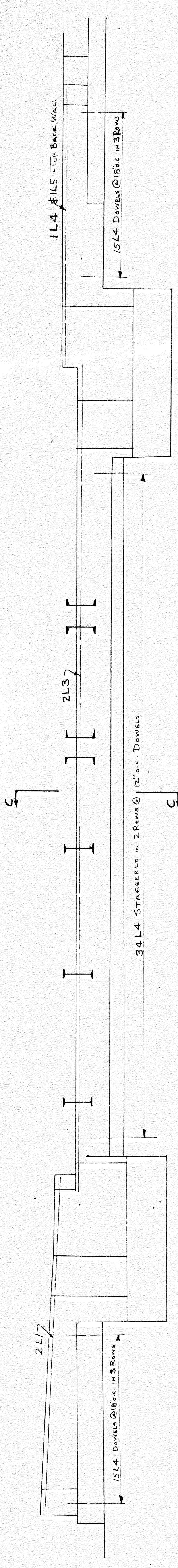


SKETCH "D"

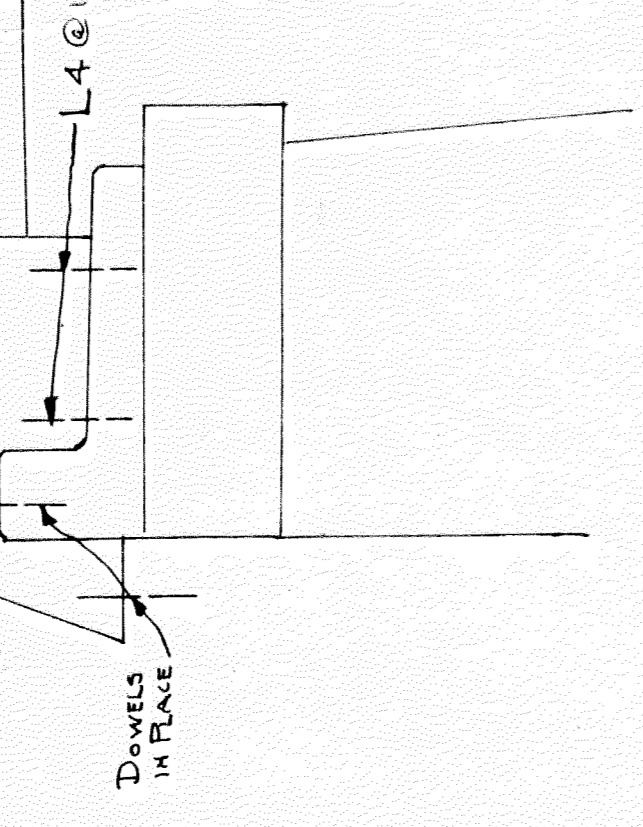


Approved: *C. C. Lusk*
Bridge Engineer - M.C.R.K.

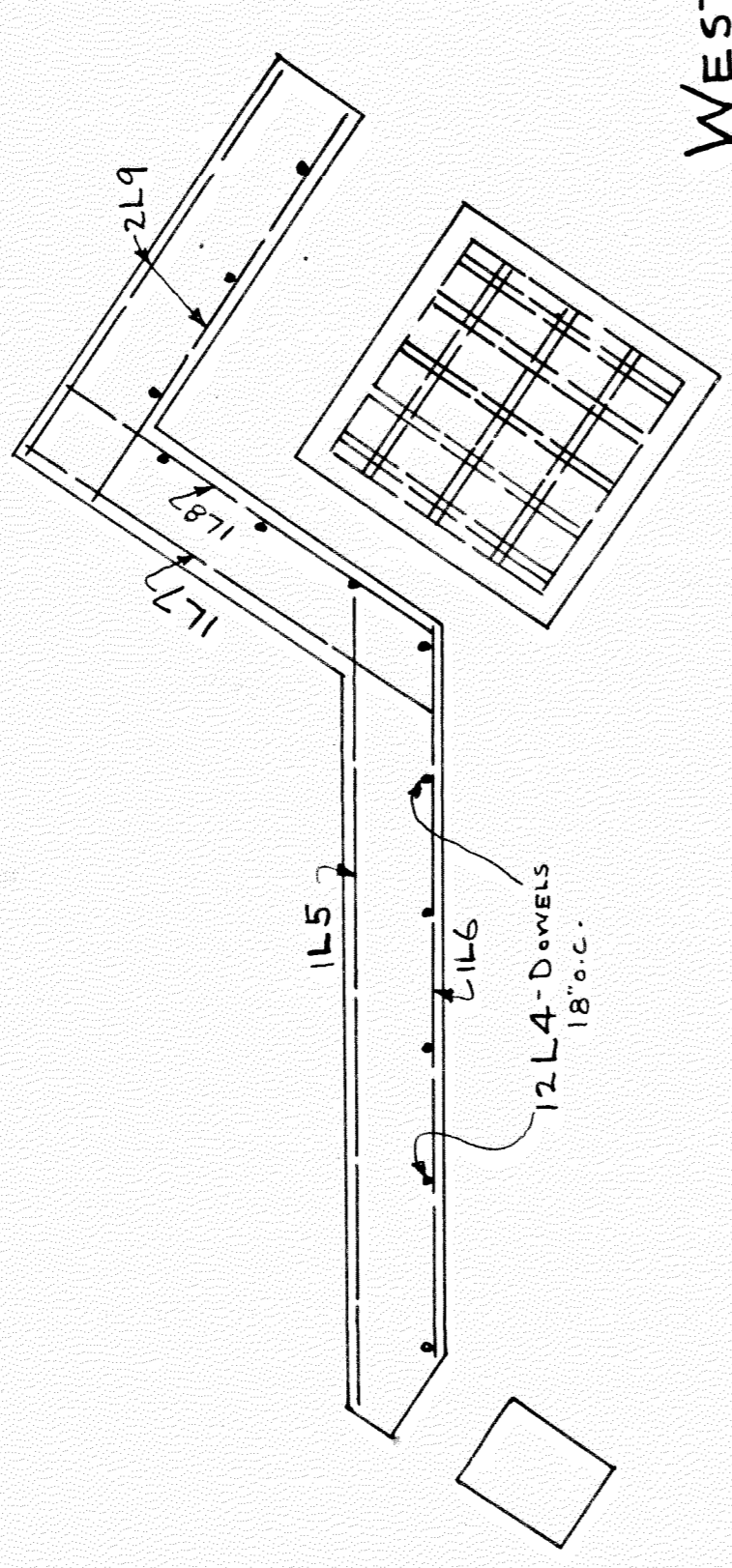
W.O.E. - 9155
DETROIT - WEST
IRON WORK FOR SUPPORTING
CREOSOTED WOOD CONDUIT ON
HOWARD ST. BRIDGE.
MICHIGAN STATE TELEPHONE CO
2317 ENGINEERING DEPT. DETROIT, MICH.



EAST ABUTMENT-- ELEVATION OF TOP BACK WALL
SHOWING POSITION OF REINFORCING STEEL--SEE ENGR'S SHEET #1 FOR DETAILS.

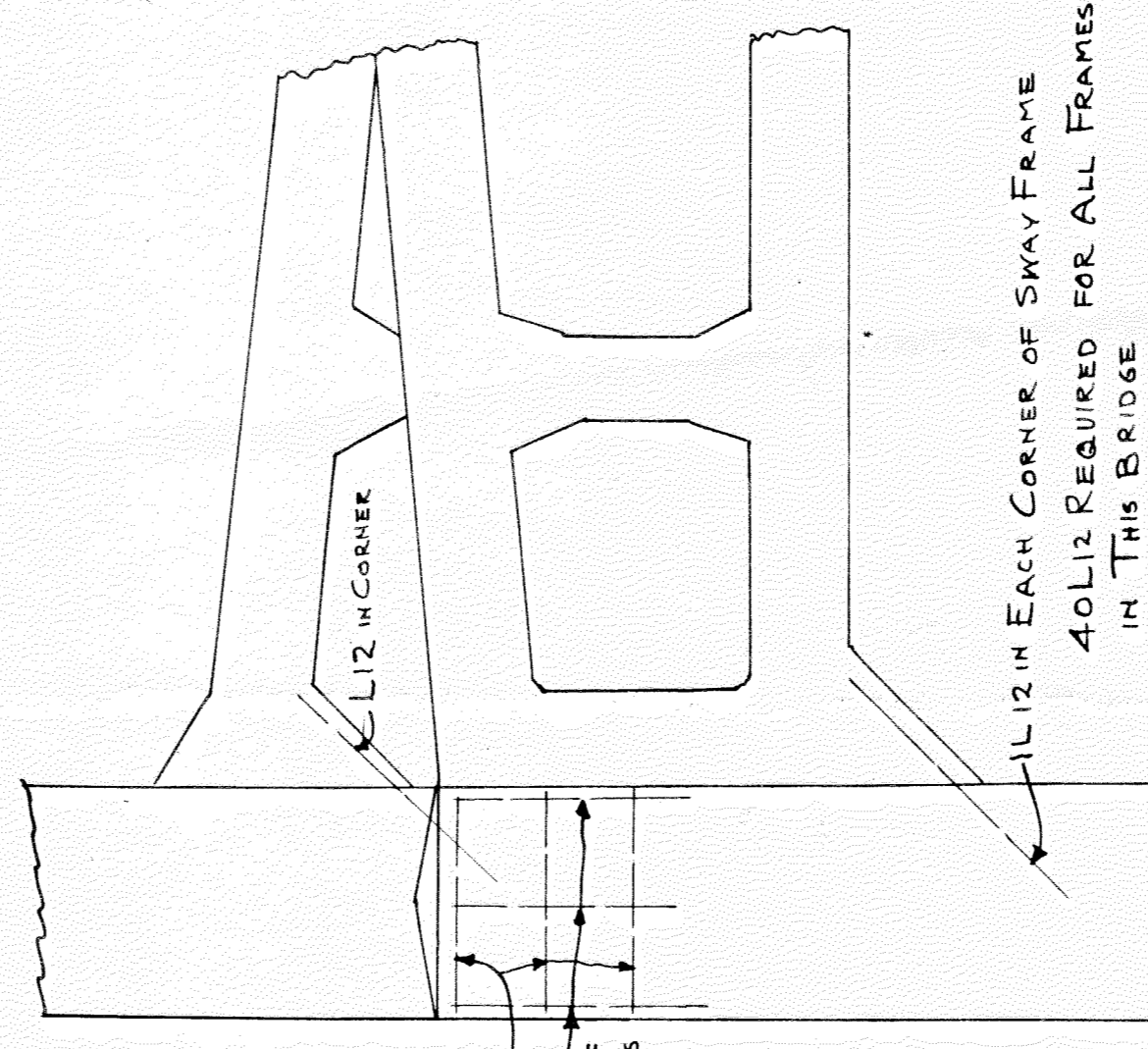


SECTION - CC
SHOWING POSITION OF DOWELS AND 2 3/4" IN TOP BACK WALL

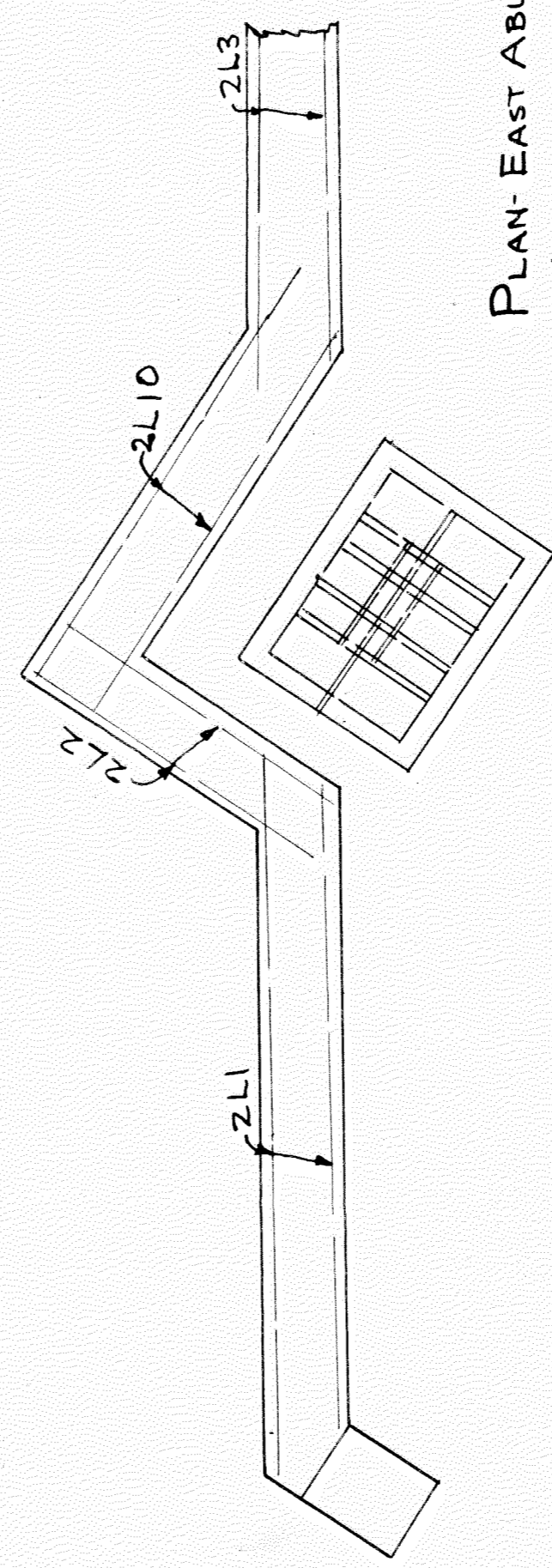


WEST ABUTMENT

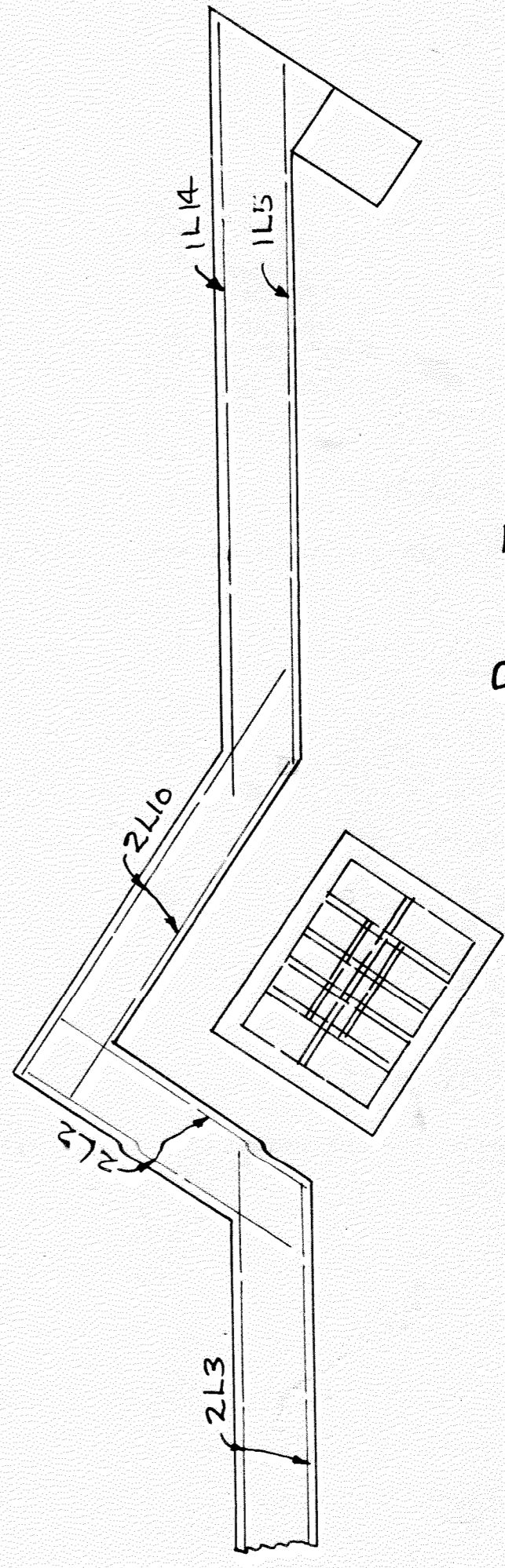
PLAN OF BACK WALLS AT SIDE WALKS--SHOWING POSITION OF REINFORCING STEEL IN TOP CORNERS. SEE ENGR'S SHEET #2 FOR DETAILS.



END VIEW OF BRIDGE TRUSS
FOUR LIKE THIS
SEE ENGR'S SHEET #4 FOR DETAILS



PLAN - EAST ABUTMENT NORTH-PIER showing POSITION OF BARS IN TOP BACK WALL



PLAN - EAST ABUTMENT SOUTH-PIER - SHOWING LOCATION OF BARS IN TOP BACK WALL

BAR LIST - ALL BARS SQUARE UNLESS OTHERWISE NOTED

PIECE NO.	SIZE	LENGTH	SHAPE
1	2 3/4	8-0	—
2	3/4	4-0	—
3	2 3/4	29-0	—
4	7/8	1-0	—
5	1 3/4	9-0	—
6	2	7-6	—
7	1	5-0	—
8	2	4-6	—
9	2 3/4	4-0	—
10	5	6-0	—
11	6 3/4	2-3	—
12	8 3/4	3-0	—
13	12 3/8	7-6	—
14	1 3/4	11-0	—
15			

REVISIONS

DATE	LOCATION	CHARACTER	BY
8-9-21		AS PER ENGR'S CORR.	W.C.

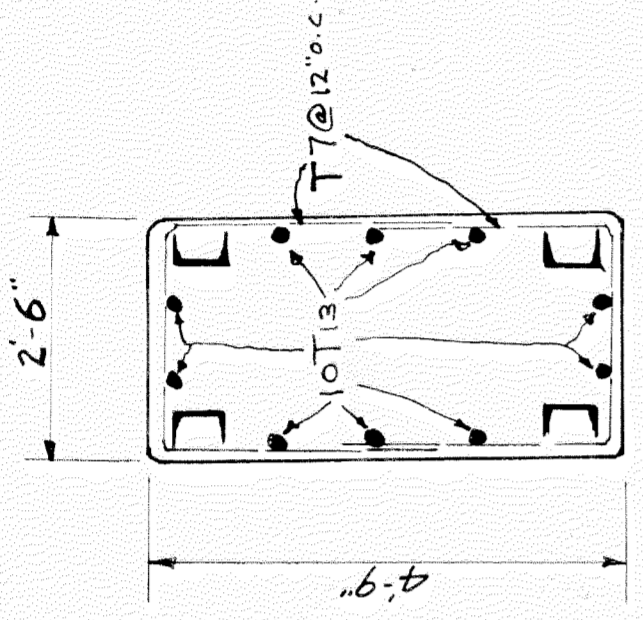
GABRIEL STEEL CO.
DETROIT, MICHIGAN

STRUCTURE HOWARD ST. BRIDGE
LOCATION M.C.R.R. & HOWARD
TITLE ABUTMENTS - END VIEW OF TRUSS
CONTRACTOR F.H. DAVIS & CO.
ARCHITECT CITY OF DETROIT - GRADE SEVEN
DRAWN BY W.C.
CHECKED BY
DATE 8-5-21 SHEET NO.

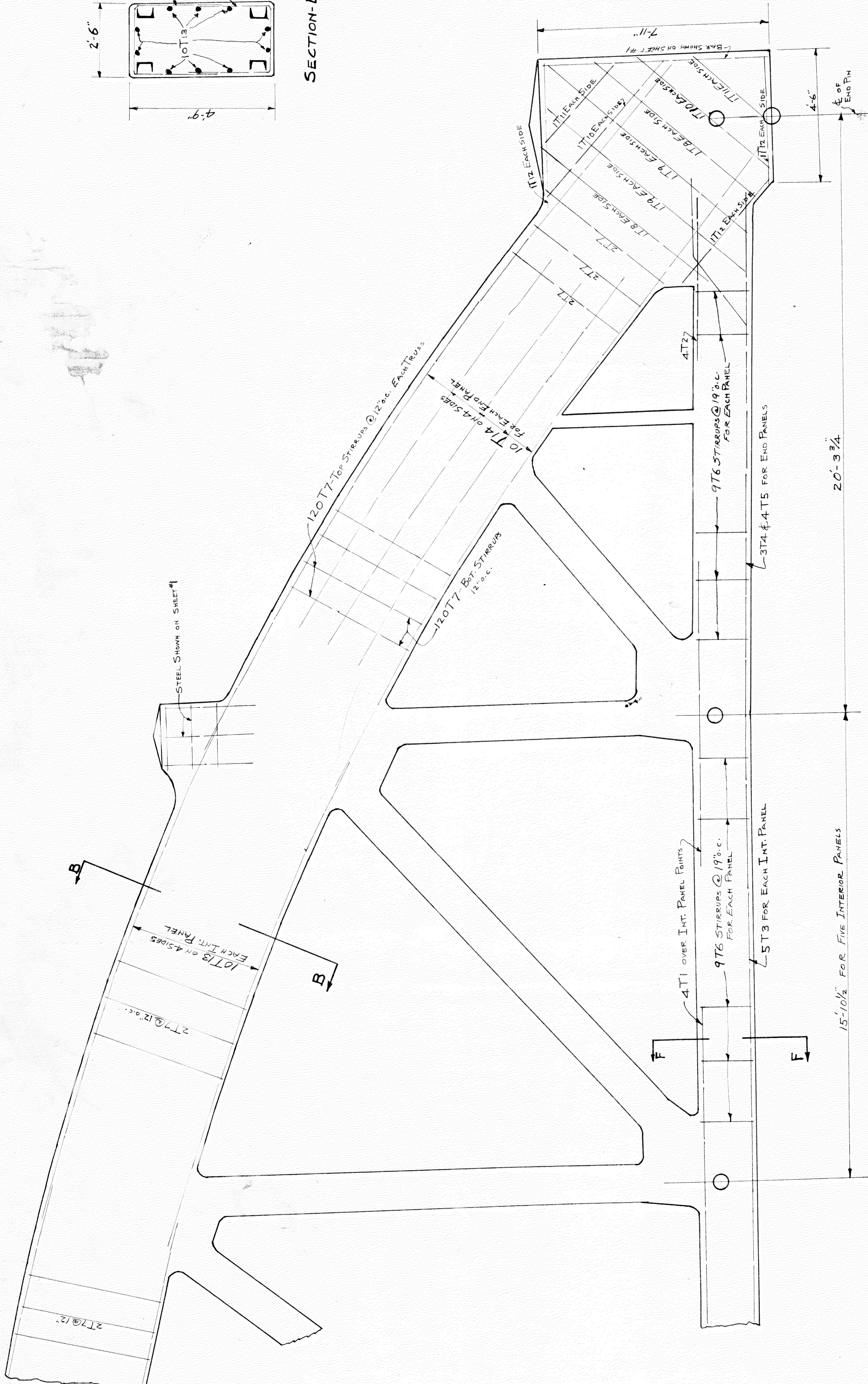
ALL BARS SQUARE UNLESS OTHERWISE NOTED

BAR LIST

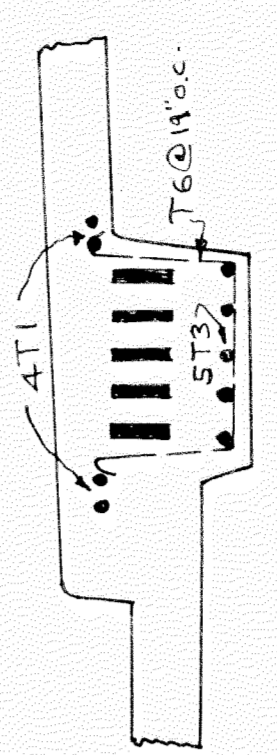
PIECES	SIZE	LENGTH	SHAPE	MARK
48	1φ	10'-0"	—	T1
16	1φ	4'-0"	—	2
50	1φ	17'-3"	—	3
12	1φ	19'-0"	—	4
16	1φ	20'-0"	—	5
126 1/2	3/8φ	5'-6"	—	6
480 3/8φ	3/8φ	7'-7"	—	7
16	1φ	7'-0"	—	8
16	1φ	9'-0"	—	9
16	1φ	6'-0"	—	10
16	1φ	3'-6"	—	11
24	3/8φ	4'-6"	—	12
100 3/8φ	3/8φ	19'-6"	—	13
40 3/8φ	3/8φ	27'-3"	—	14
				15
				16
				17
				18
				19
				20



SECTION-BB



PART SIDE VIEW OF TRUSS
 No STRUCTURAL STEEL WORK SHOWN... SEE
 ENGR'S SHEET #4 FOR DETAILS.



SECTION-FF

REVISIONS		DATE	LOCATION	CHARACTER	BY
		8-7-21		AS PER ENGRS. CORR.	M.C.

GABRIEL STEEL CO. DETROIT, MICHIGAN	
STRUCTURE	HOWARD ST. BRIDGE
LOCATION	M.C. R.R. & HOWARD
TITLE	TRUSS
CONTRACTOR	F. H. DAVIS
ARCHITECT	CITY OF DETROIT - GRADE SEPARATION
DRAWN BY	M.C.
CHECKED BY	
DATE	8-6-21

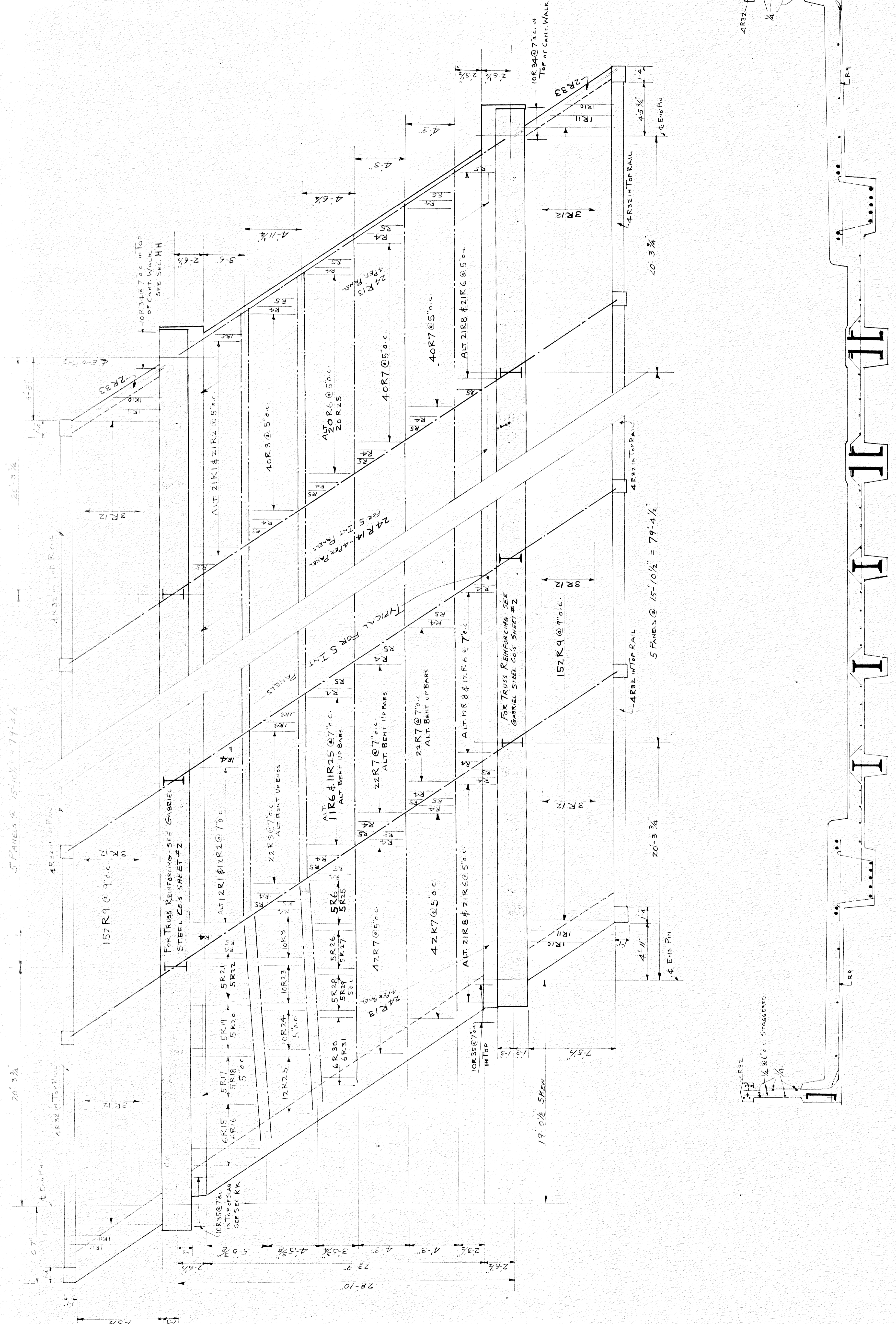
ALL BARS SQUARE UNLESS OTHERWISE NOTED

BAR LIST

PIECES	SIZE	LENGTH	SHAPE	MARK
81	5/8"	6'-0"		R1
81	5/8"	6'-0"		2
160	5/8"	5'-0"		3
74	3/4"	4'-9"		4
58	3/4"	3'-6"		5
183	3/4"	6'-0"		6
384	3/4"	5'-9"		7
102	3/4"	5'-0"		8
304	1/2"	11'-5"		9
4	1/2"	8'-0"		10
4	1/2"	8'-0"		11
18	1/2"	4'-0"		12
48	3/8"	21'-0"		13
120	3/8"	16'-6"		14
5	5/8"	7'-6"		15
5	5/8"	7'-6"		16
5	5/8"	7'-2"		17
5	5/8"	7'-0"		18
5	5/8"	6'-9"		19
5	5/8"	6'-7"		20
5	5/8"	6'-4"		21
5	5/8"	6'-3"		22
10	1/0"	4'-10"		23
10	1/0"	4'-8"		24
92	1/2"	4'-6"		25
5	5/8"	5'-9"		26
5	5/8"	5'-9"		27
5	5/8"	4'-3"		28
5	5/8"	5'-6"		29
5	5/8"	4'-0"		30
6	5/8"	3'-7"		31
24	3/8"	4'-0"		32
4	3/4"	10'-0"		33
20	1/4"	3'-0"		34
20	5/8"	3'-0"		35
35	5/8"	3'-0"		36
36	5/8"	3'-0"		37
37	5/8"	3'-0"		38

FOR RAILINGS - SEE DETAIL

NOTE:
CONTRACTOR WILL USE THIS PLAN IN CONJUNCTION WITH ENGRS. PLANS.
WIRE MESH & STRUCTURAL STEEL NOT FURNISHED BY GABRIEL STEEL CO.



TYPICAL CROSS-SECTION THRU ROADWAY
SEE ENGRS. SHEET #3 FOR DETAILS

REVISIONS		DATE	LOCATION	CHARACTER

GABRIEL STEEL CO. DETROIT, MICHIGAN	
BY	STRUCTURE HOWARD ST. BRIDGE
LOCATION	HOWARD & M.C. R.R.
TITLE	ROADWAY
CONTRACTOR	F.H. DAVIS
ARCHITECT	CITY OF DETROIT - GRADE DEPARTMENT
DRAWN BY	M.C.L.
CHECKED BY	
DATE	8-8-21

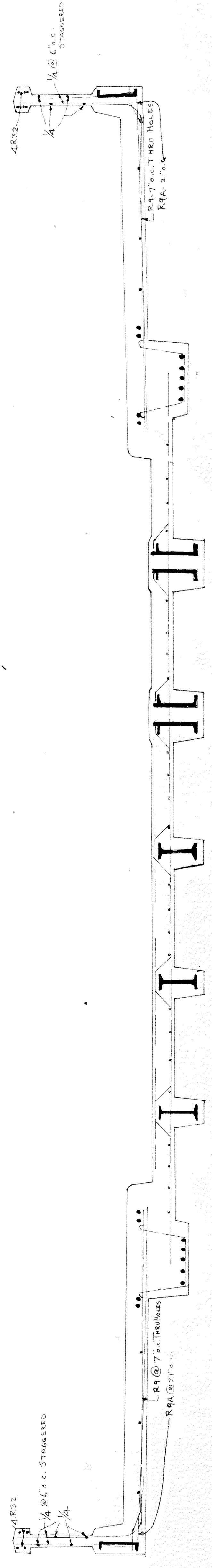
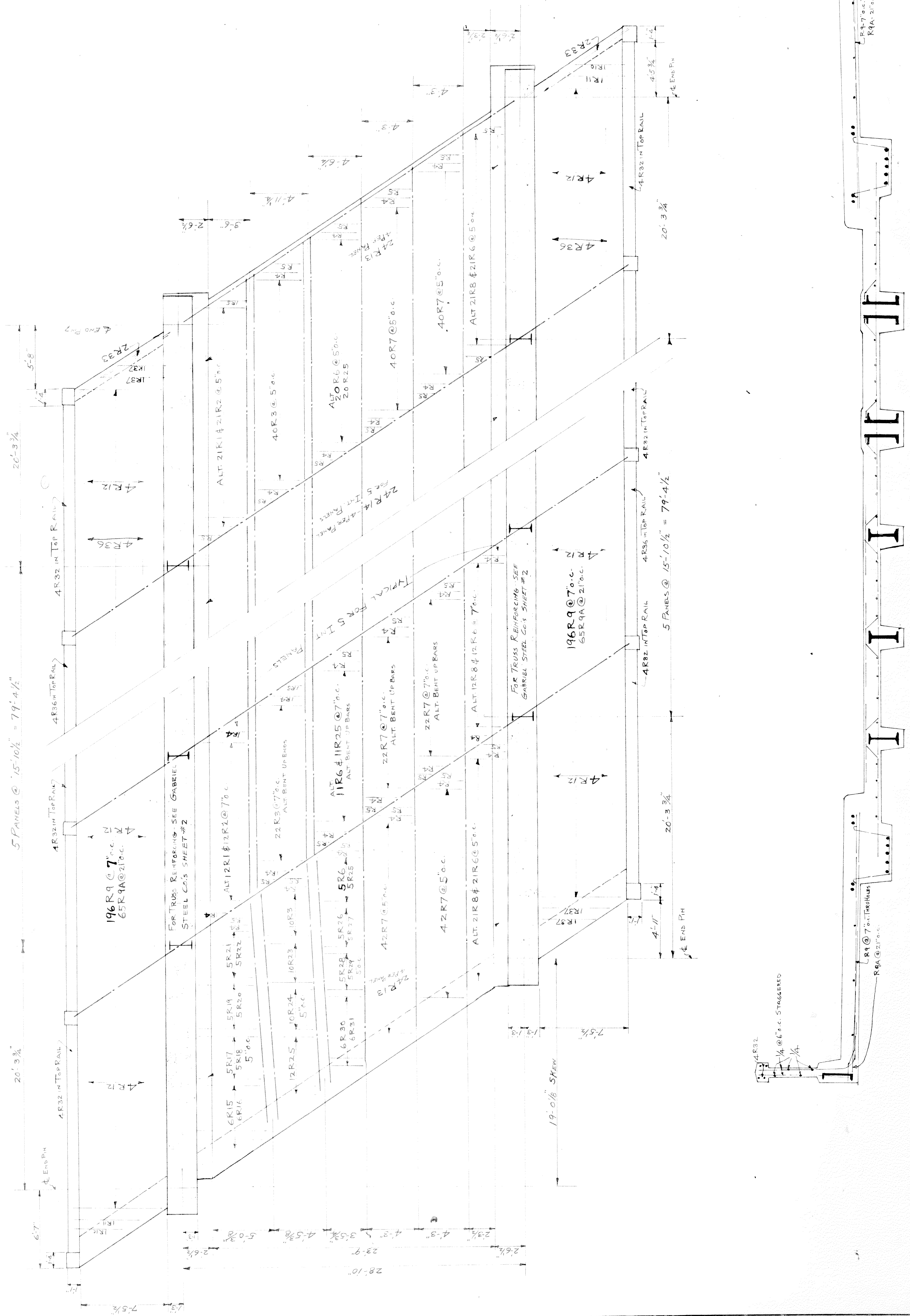
ALL BARS SQUARE UNLESS OTHERWISE NOTED

BAR LIST

PIECES	SIZE	LENGTH	SHAPE	MARK
81	5/8"	6'-0"	—	R1
81	5/8"	6'-0"	—	2
160	5/8"	5'-0"	—	3
74	1"	4'-9"	—	4
58	1"	3'-6"	—	5
183	1"	6'-0"	—	6
384	3/4"	5'-9"	—	7
102	5/8"	5'-0"	—	8
392	3/8"	11'-5"	—	9
2	3/8"	9'-5"	—	10
2	3/8"	8'-0"	—	11
24	3/8"	4'-0"	—	12
48	3/8"	2'-0"	—	13
120	3/8"	16'-6"	—	14
5	5/8"	7'-6"	—	15
5	5/8"	7'-6"	—	16
5	5/8"	7'-2"	—	17
5	5/8"	7'-0"	—	18
5	5/8"	6'-9"	—	19
5	5/8"	6'-4"	—	20
5	5/8"	6'-4"	—	21
5	5/8"	6'-3"	—	22
10	1"	4'-0"	—	23
10	1"	4'-8"	—	24
92	1"	4'-6"	—	25
5	1"	5'-1"	—	26
5	1"	4'-3"	—	27
5	1"	5'-6"	—	28
5	1"	4'-0"	—	29
6	5/8"	5'-2"	—	30
24	3/8"	3'-7"	—	31
4	3/8"	4'-0"	—	32
4	3/8"	10'-0"	—	33
16	3/8"	5'-0"	—	36
4	3/8"	8'-9"	—	37
130	3/8"	11'-0"	—	R9A

FOR RAILINGS - SEE DETAIL R9A

NOTE:
CONTRACTOR WILL USE THIS PLAN IN CONSTRUCTION WITH ENGRS. PLANS.
WIRE MESH & STRUCTURAL STEEL NOT FURNISHED BY GABRIEL STEEL CO.

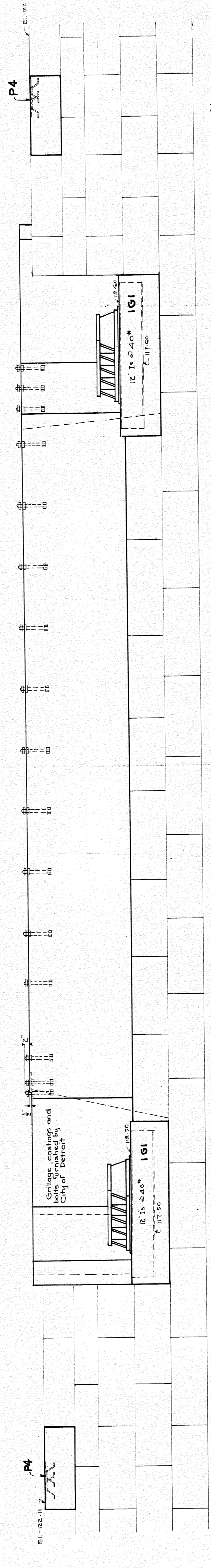
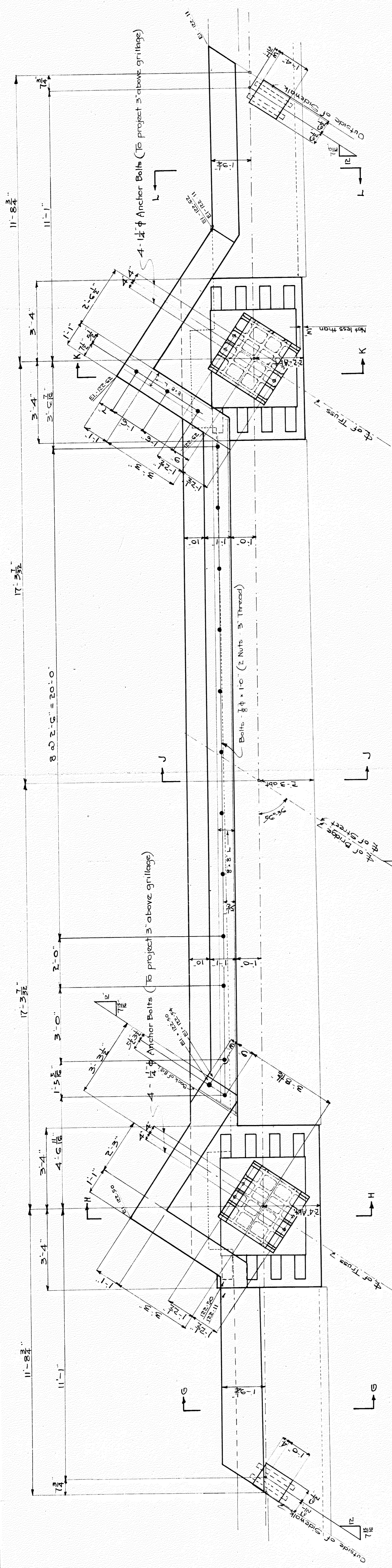


TYPICAL CROSS-SECTION THRU ROADWAY
SEE ENGRS. SHEET #3 FOR DETAILS

REVISIONS		BY	CHARACTER
DATE	LOCATION	STRUCTURE	HOWARD ST. BRIDGE
8/7/21		LOCATION	HOWARD & M.C.R.R.
		TITLE	ROADWAY
		CONTRACTOR	F.H. DAVIS
		ARCHITECT	CITY OF DETROIT - GRADE DEPARTMENT
		DRAWN BY	W.C.
		CHECKED BY	
		DATE	8-8-21

GABRIEL STEEL CO.
DETROIT, MICHIGAN

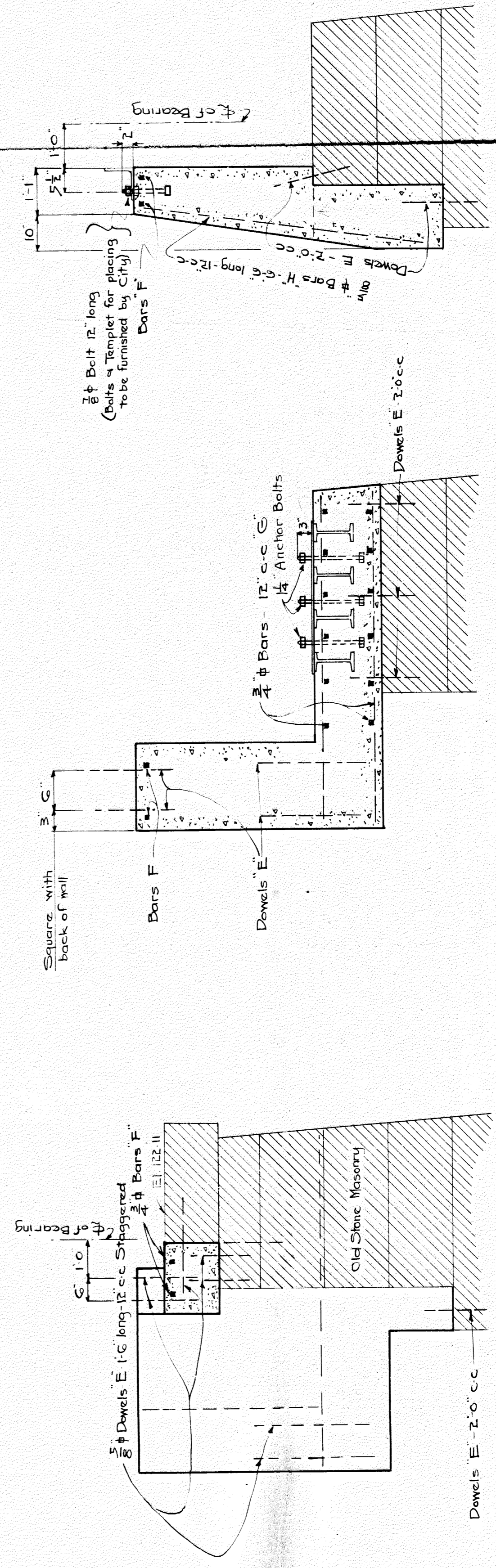
JOB NO. 9476
SHEET NO. 8



NOTES
 Concrete - 20 c.y. (approx)
 Reinforcing 1140*

Concrete to be composed of 1 part cement, 2 parts sand and 3 parts stone. Exposed corners to be beveled $\frac{3}{4}$ ".
 Reinforcing bars to be securely wired together at each intersection. At splices the shall lap for a length of 24 diameters and shall be securely wrapped with iron wire.

NO	SIZE	LENGTH	MARK
1	3"	1'-6"	E
4	3"	8'-0"	F
4	3"	7'-0"	F
4	3"	5'-0"	F
2	12"	28'-0"	F
32	3"	6'-0"	G
20	3"	4'-0"	*
4	3"	3'-0"	*



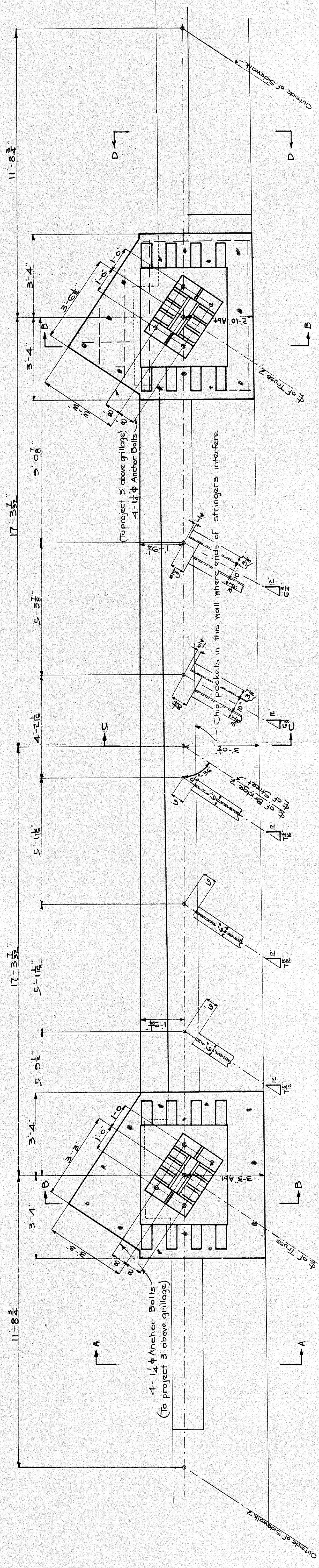
SEC. GG - As Shown
 SEC. LL - Opposite Hand

SEC. HH
 SEC. KK

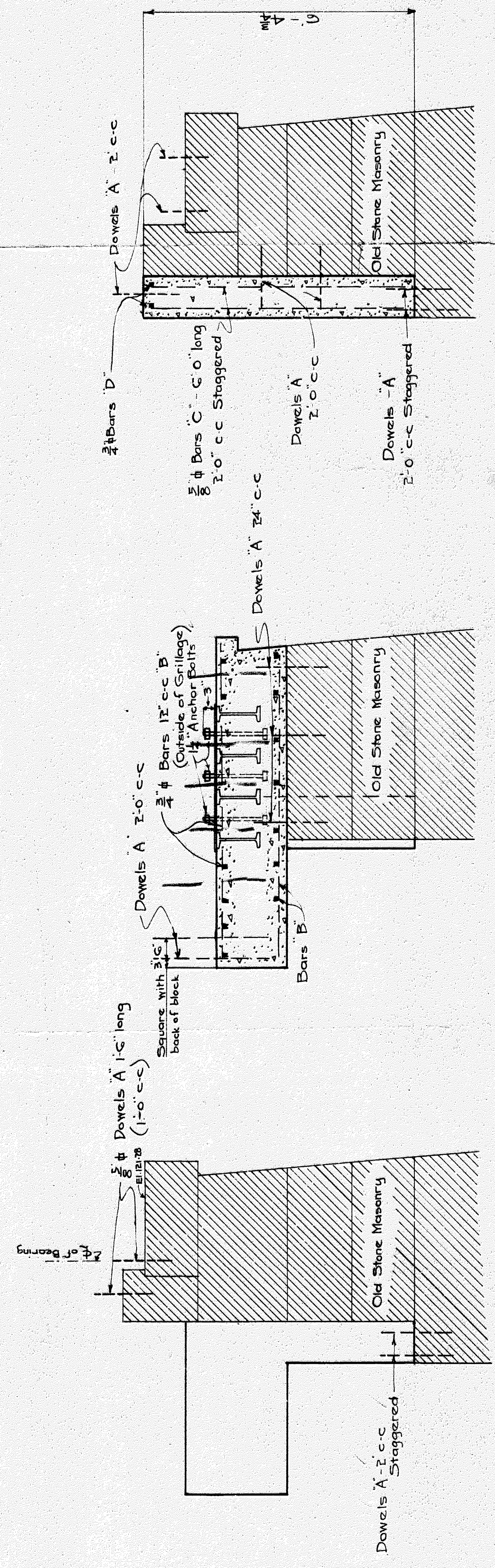
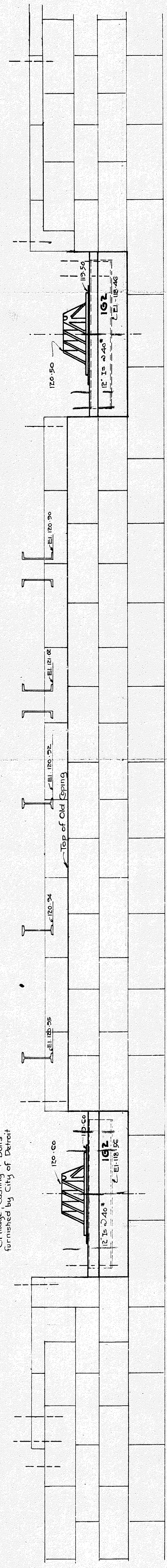
SEC. JJ

M.C.R.R. - MAIN LINE DIV.
BRIDGE-0-82 HOWARD ST
CHANGES IN WEST ABUTMENT
 (EXPANSION END)

SCALE: 1 FOOT
 DRAWN BY J.C.M. Mar. 15, 1921
 CHECKED BY W.H. F. 27 1921
 TRACED BY
 REVISED J.C.M. 5-13-21 (W.H.F.)
 APPROVED
 BRIDGE ENGINEER SHEET C OF



Grillage Casting & Bolts furnished by City of Detroit



SEC-AA - As Shown
SEC-BB - Opposite Hand

NOTES

Concrete - 14 cu. (approx.)
Reinforcing - 1125#
Concrete to be composed of 1 part cement 2 parts sand and 3 parts stone. Exposed corners to be beveled 3/4\"/>
Reinforcing bars to be securely wired together at each intersection. At splices they shall lap for a length of 24 diameters and shall be securely wrapped with iron wire.

BILL OF BARS		
NO	SIZE	LENGTH MARK LOCATION
180	3/8"	1'-0" A
202	1/2"	6'-0" B
172	1/2"	4'-0" -
4	1"	2'-0" -
4	1"	7'-0" -
15	3/8"	6'-0" C
2	3/8"	21'-5" D

*Provide dowels where shown
Connections made as per
Conventions J. L. B. 5-19-21
suggestions*