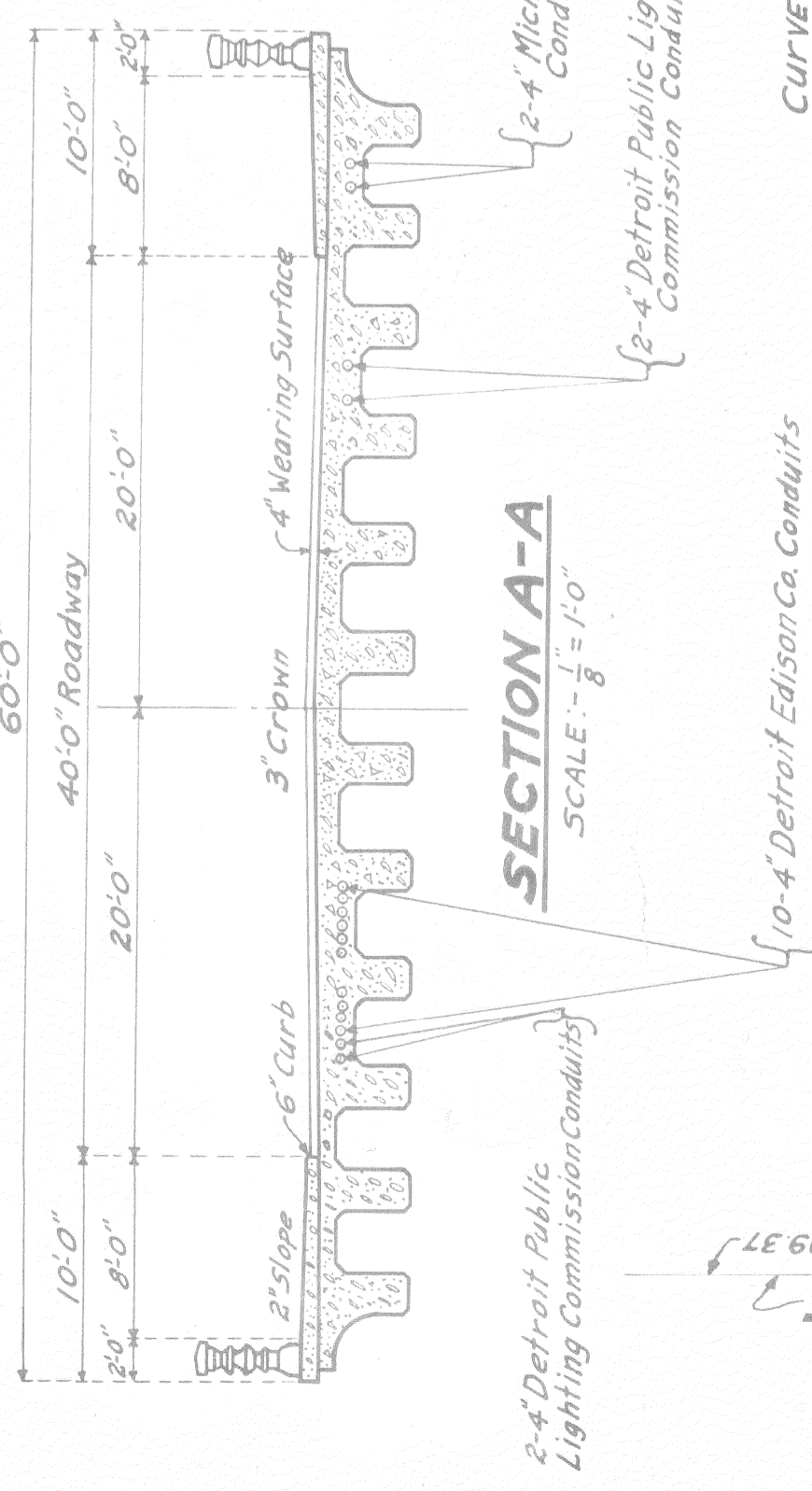
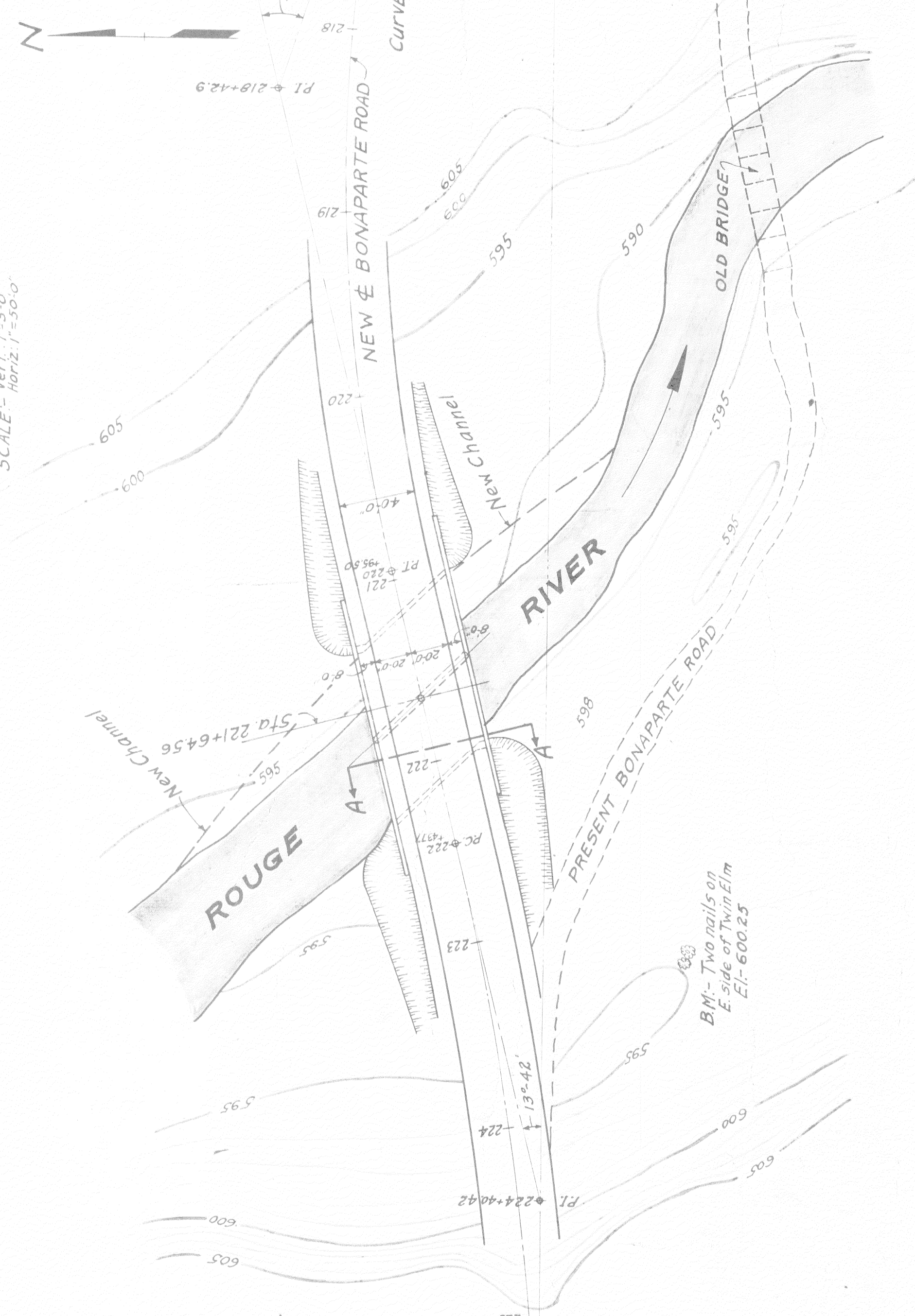


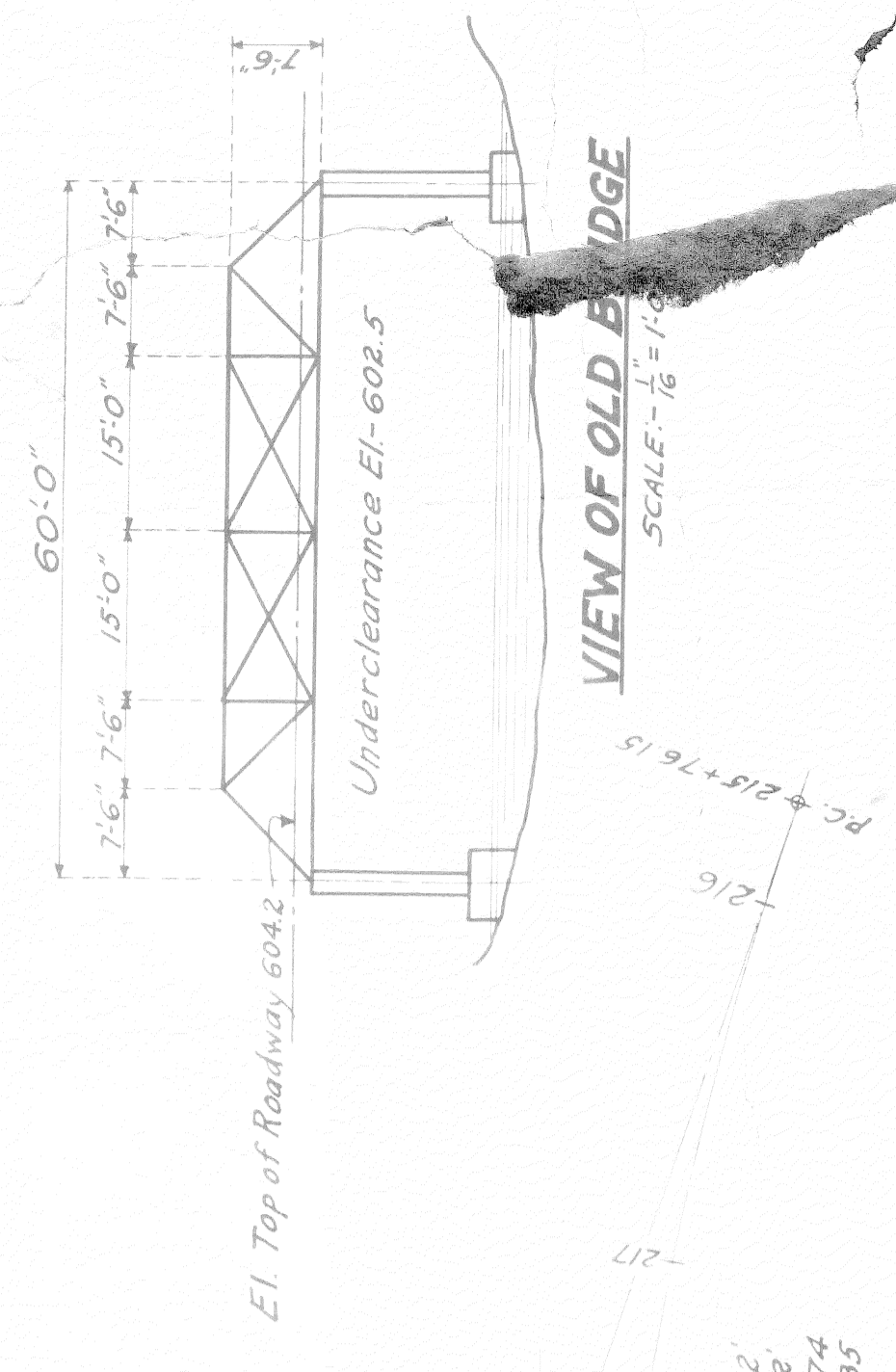
**PROFILE NEW BONAPARTE ROAD**  
SCALE: Vert. 1"=5'-0" Horiz. 1"=50'-0"



**SECTION A-A**  
SCALE: 1/8" = 1'-0"



**PLAN**  
SCALE: 1"=50'-0"



**VIEW OF OLD BRIDGE**  
SCALE: 1/16" = 1'-0"

NOTE: Elevations are based on Wayne County Datum

REVISIONS

BOARD OF  
WAYNE COUNTY ROAD COMMISSIONERS  
DETROIT, MICHIGAN

EDWARD N. HINES,  
CHAIRMAN

JOHN S. HAGGERTY,  
COMMISSIONER

WILLIAM F. BUTLER,  
COMMISSIONER

**LOCATION PLAN**  
**BONAPARTE ROAD—MILE: 4.2**  
**BR. # 820312 OVER ROUGE RIVER**

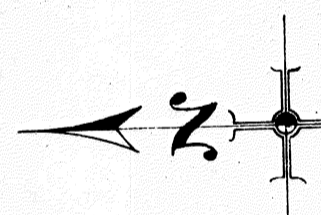
DESIGNED BY W.H.S.  
DATE 11-16-26

DRAWN BY S.L.  
SCALE AS SHOWN

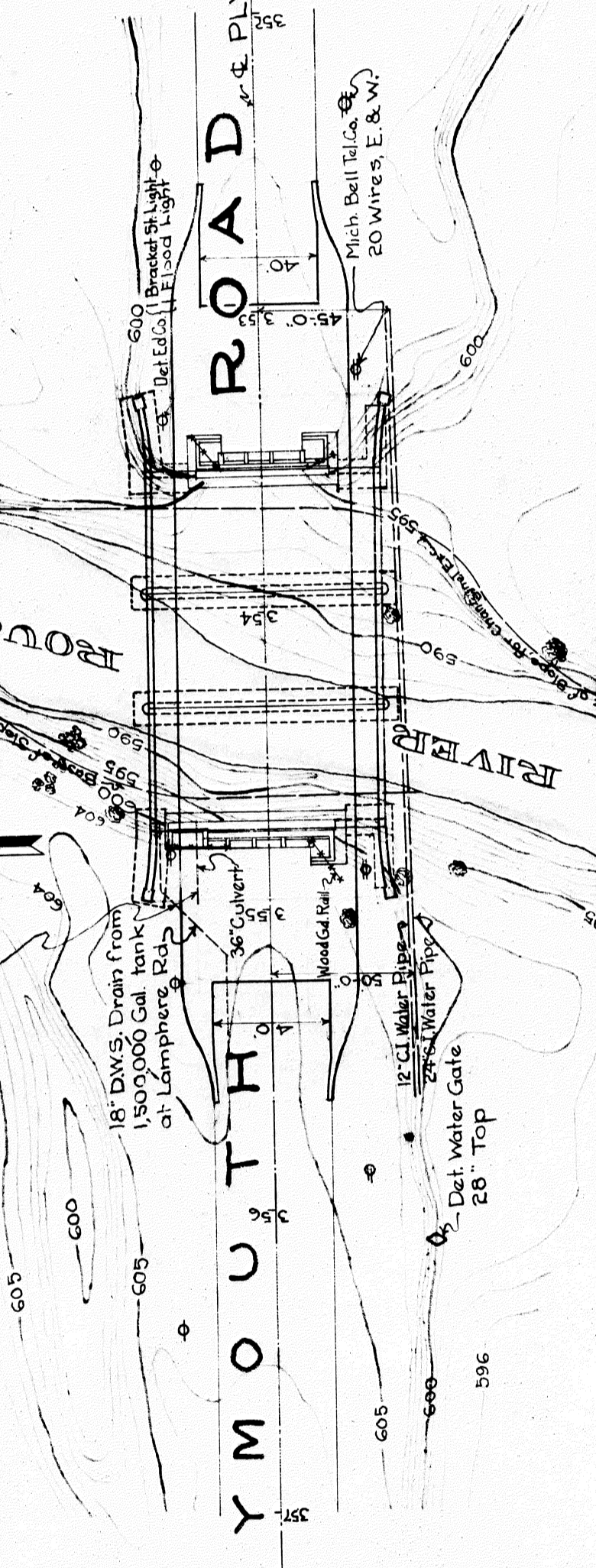
CHECKED BY E.H.C.  
DATE 11-16-26

APPROVED

SHEET NO.



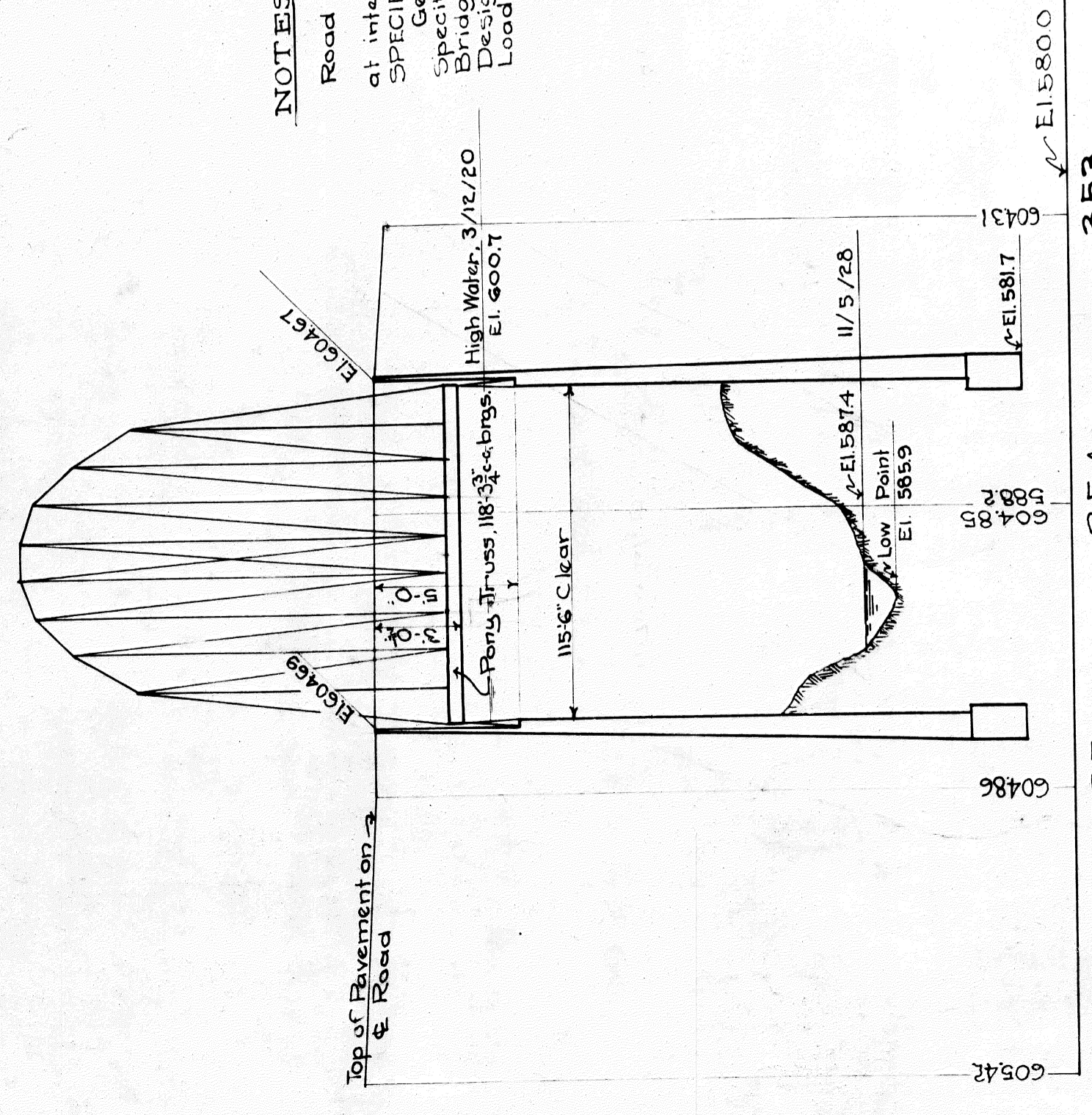
Note: If elevations and capacity permit, combine these two drains, using 36" culvert pipe thru old Abutment as Outlet.



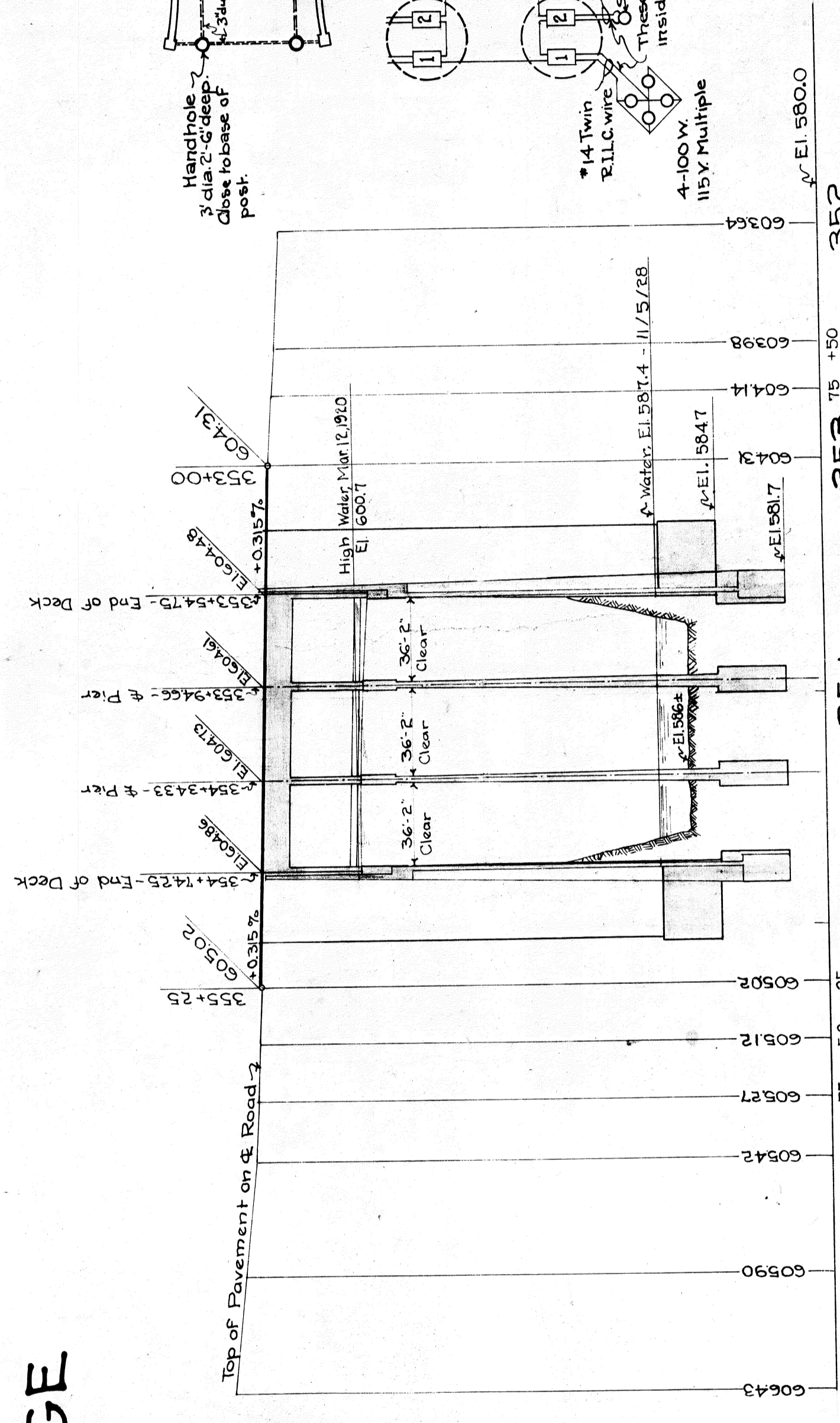
**NOTES:**  
 Elevations are based on Wayne County Road Datum is Iron set in pavement Sta. 364+145 at intersection of Plymouth Rd & Outer Drive. E.I. = 625.01  
**SPECIFICATIONS:**  
 General - Board of Wayne County Road Commissioners  
 Specifications of 82-22-6 Job # 352  
 Design Specifications - Joint Committee, 1924.  
 Loading:  
 Roadway: 24-ton trucks, 85% Impact  
 Sidewalks: 80 lbs per sq ft, no impact

**PLAN**  
 Scale 1" = 50'

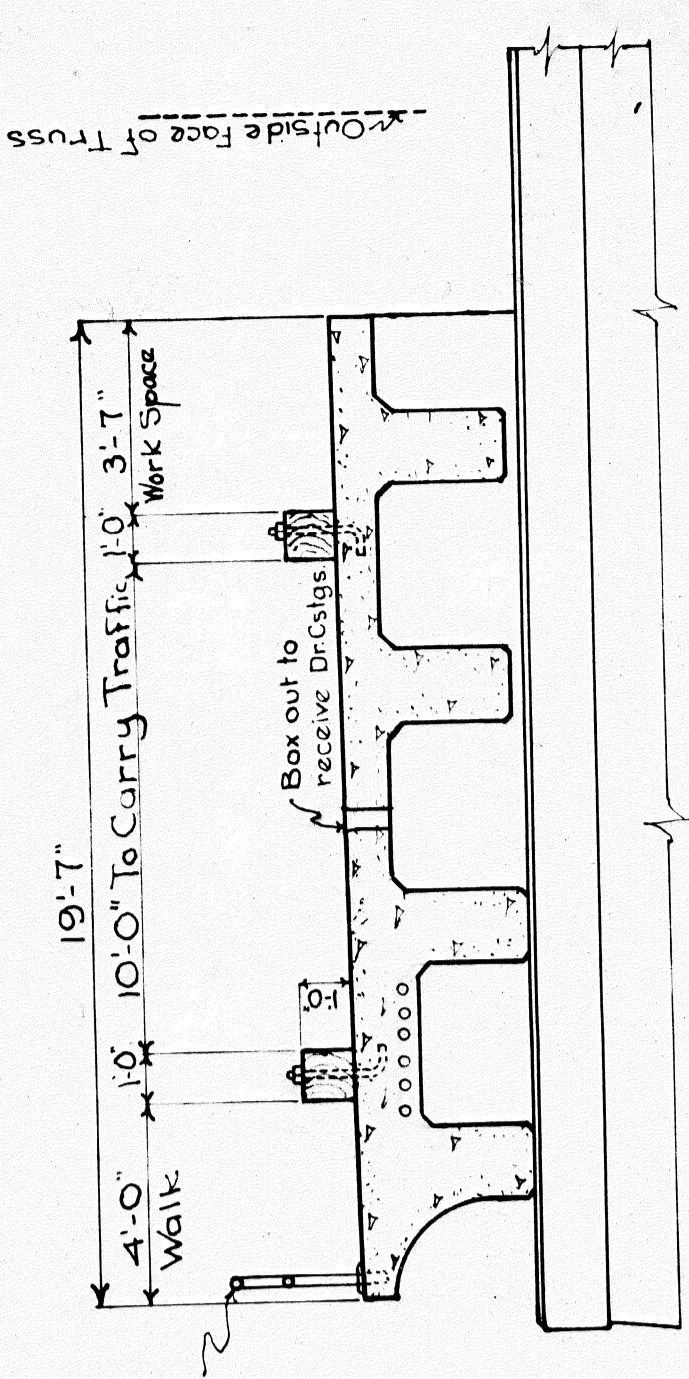
NOTE: New Work shall be located with respect to Old Abutments, as shown in Details. Stationings may have to be modified to meet this requirement.



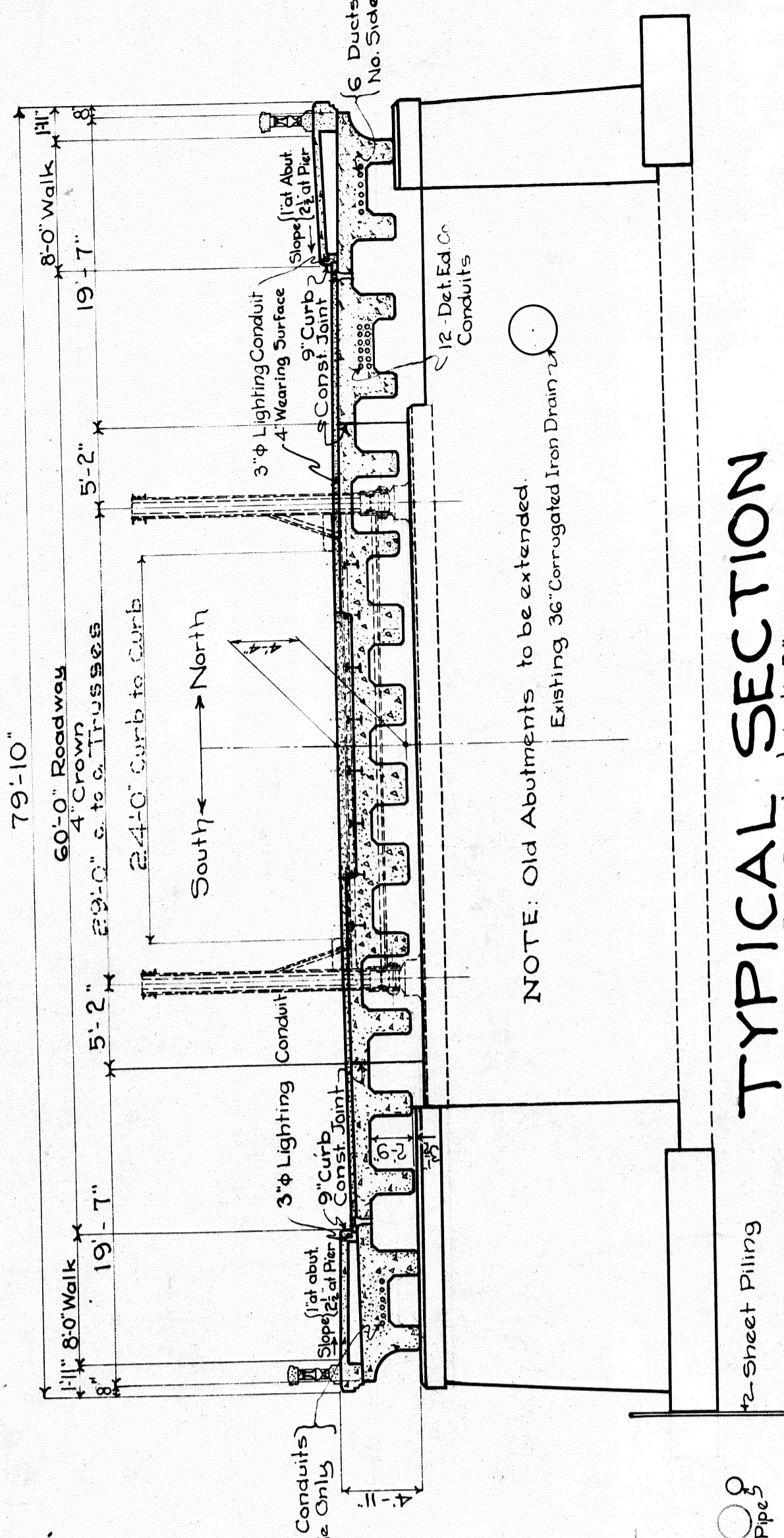
**PROFILE SHOWING OLD BRIDGE**  
 Scales { Horz. 1" = 50' / Vert. 1" = 5'



**PROFILE ON & SHOWING NEW BRIDGE**  
 Scales { Horz. 1" = 50' / Vert. 1" = 5'



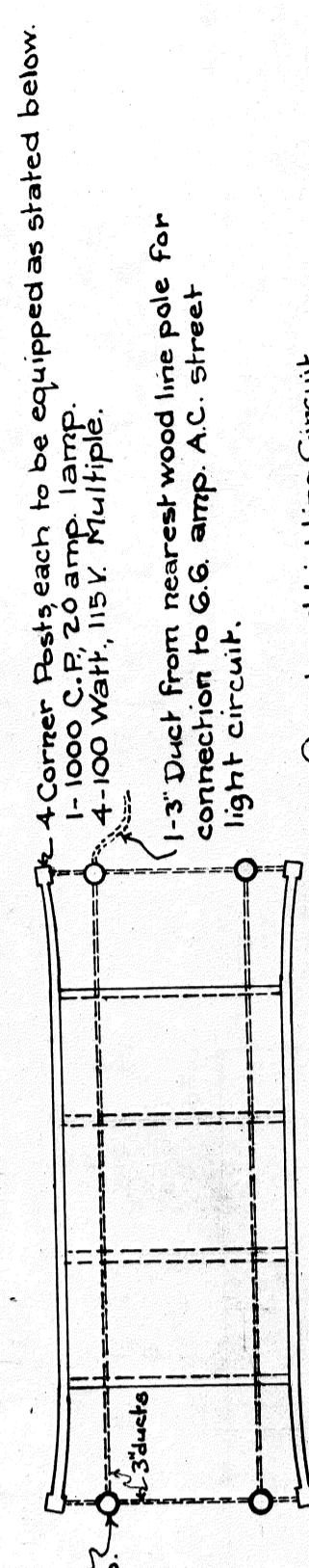
**OUTSIDE SECTION**  
 Showing Provision for Maintaining Traffic during Removal of Present Superstructure.  
 Scale 1/4" = 1'-0"



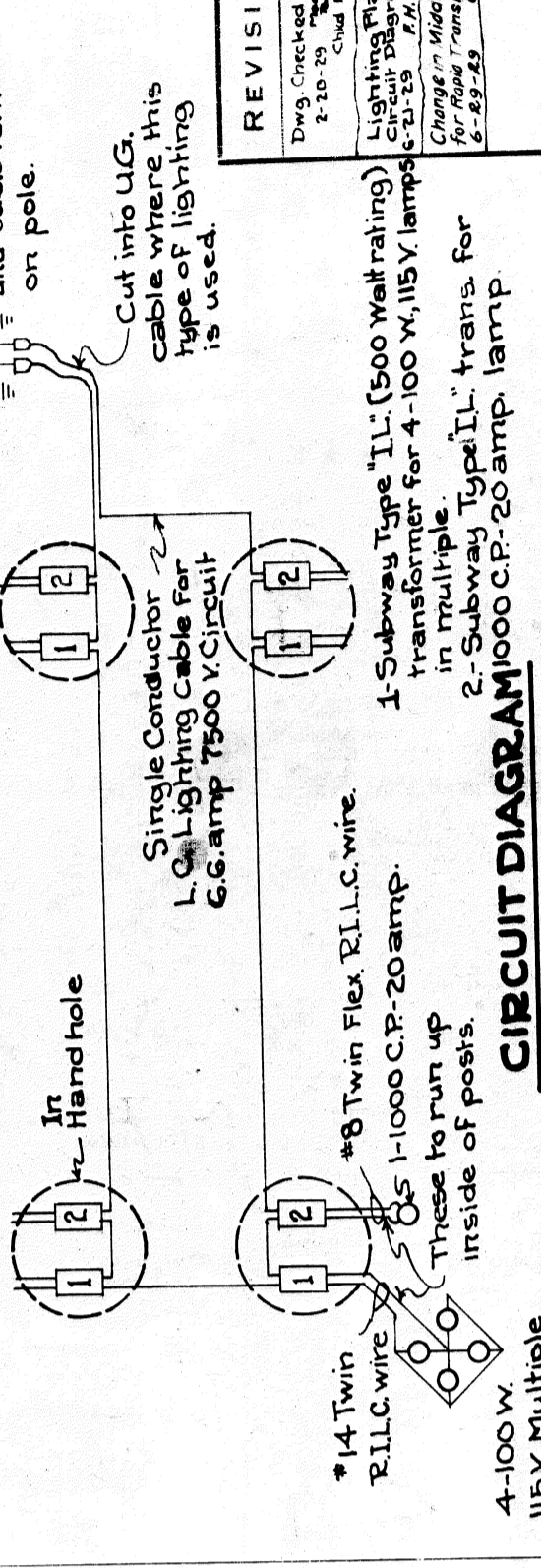
**TYPICAL SECTION**  
 Scale 1/8" = 1'-0"

NOTE: Old Abutments to be extended Existing 36" Corrugated Iron Drain.

**CONSTRUCTION NOTE:**  
 Method and Order of Procedure:  
 1. Build outside section of New Bridge, while traffic is maintained over Old Bridge.  
 2. Remove Superstructure of Old Bridge and build Middle Section, while traffic is being maintained over Outside Sections.



**LIGHTING PLAN**



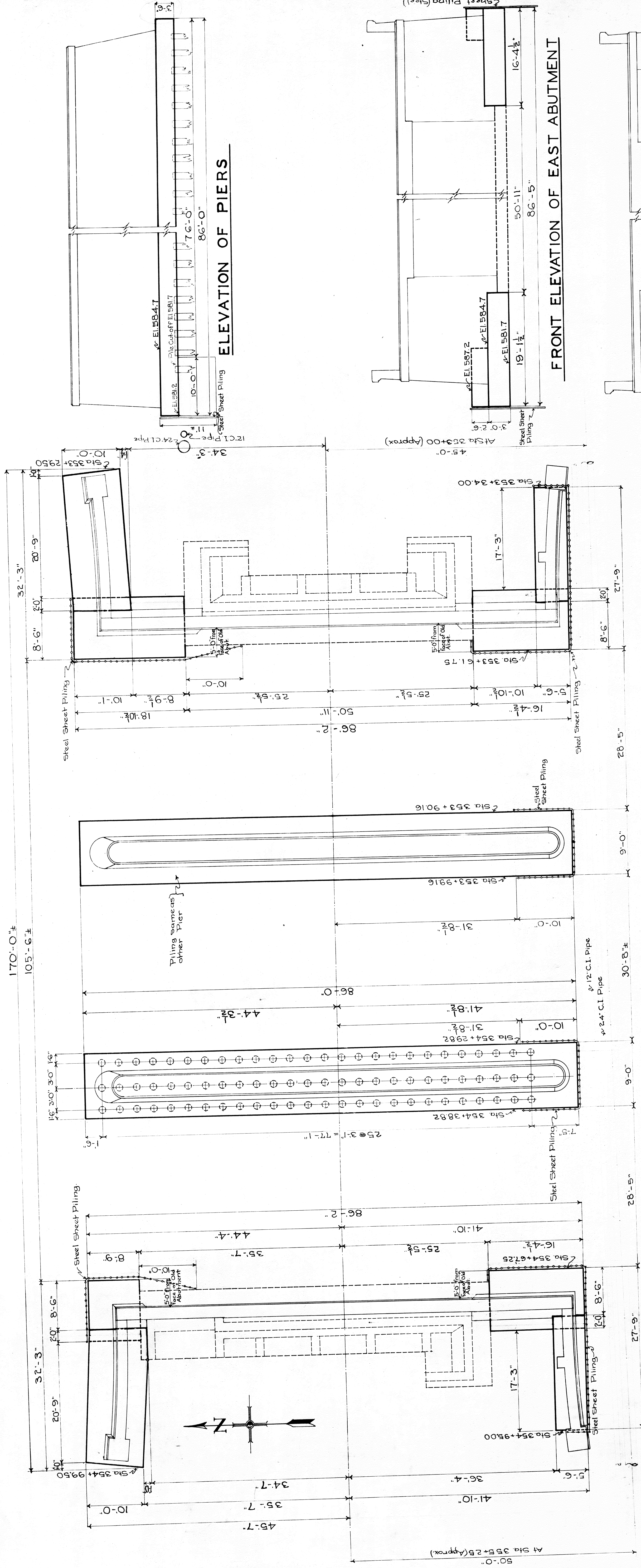
**CIRCUIT DIAGRAM**

Survey Notes in Field Book #112

**BOARD OF WAYNE COUNTY ROAD COMMISSIONERS**  
 DETROIT, MICHIGAN  
 WM. F. BUTLER, CHAIRMAN  
 JOHN S. HAGGERTY, COMMISSIONER  
 EDWARD N. HINES, COMMISSIONER

**LOCATION PLAN**  
 PLYMOUTH ROAD - MILE 6.7  
 BRIDGE B1 of 82-22-6 OVER ROUGE RIVER

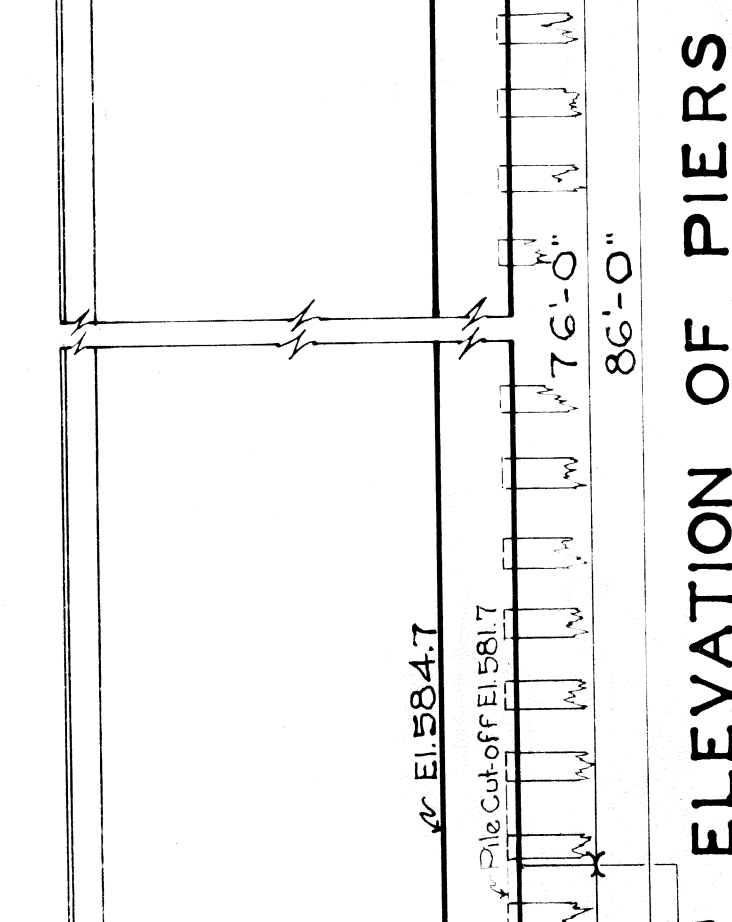
DESIGNED BY: PA.N. [Signature]  
 DRAWN BY: [Signature]  
 DATE: 12-28-28  
 APPROVED: [Signature]  
 TITLE: [Signature]  
 DATE: 1-2-29  
 JOB NO. 352  
 ISSUE NO. 4  
 FIELD CHIEF J.M.C.



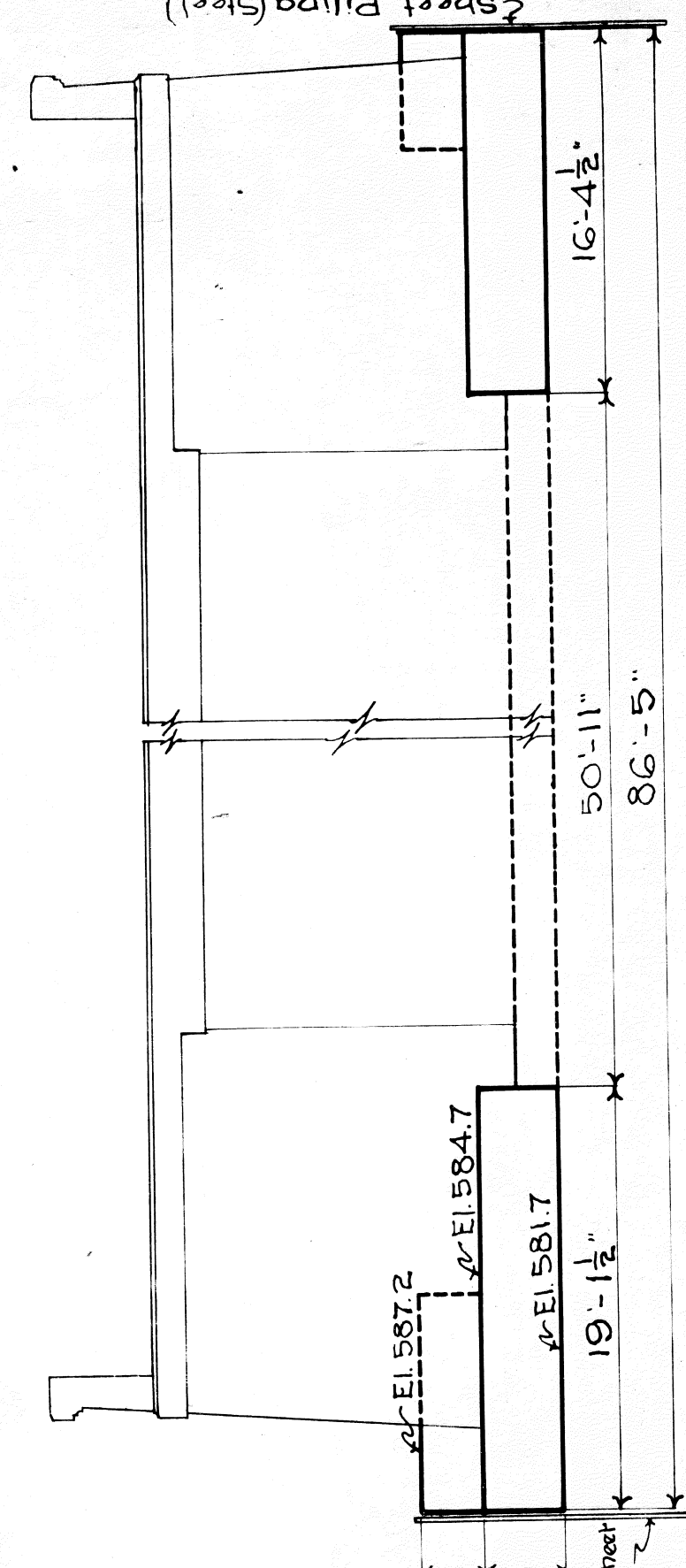
NOTE: Water Mains must be accurately located in the field before Sheet Piling is installed. Sheet Piling shown is for permanent use.

NOTE: New Abutments and Piers shall be located as shown with respect to old abutments. Stationings may have to be modified to meet this requirement.

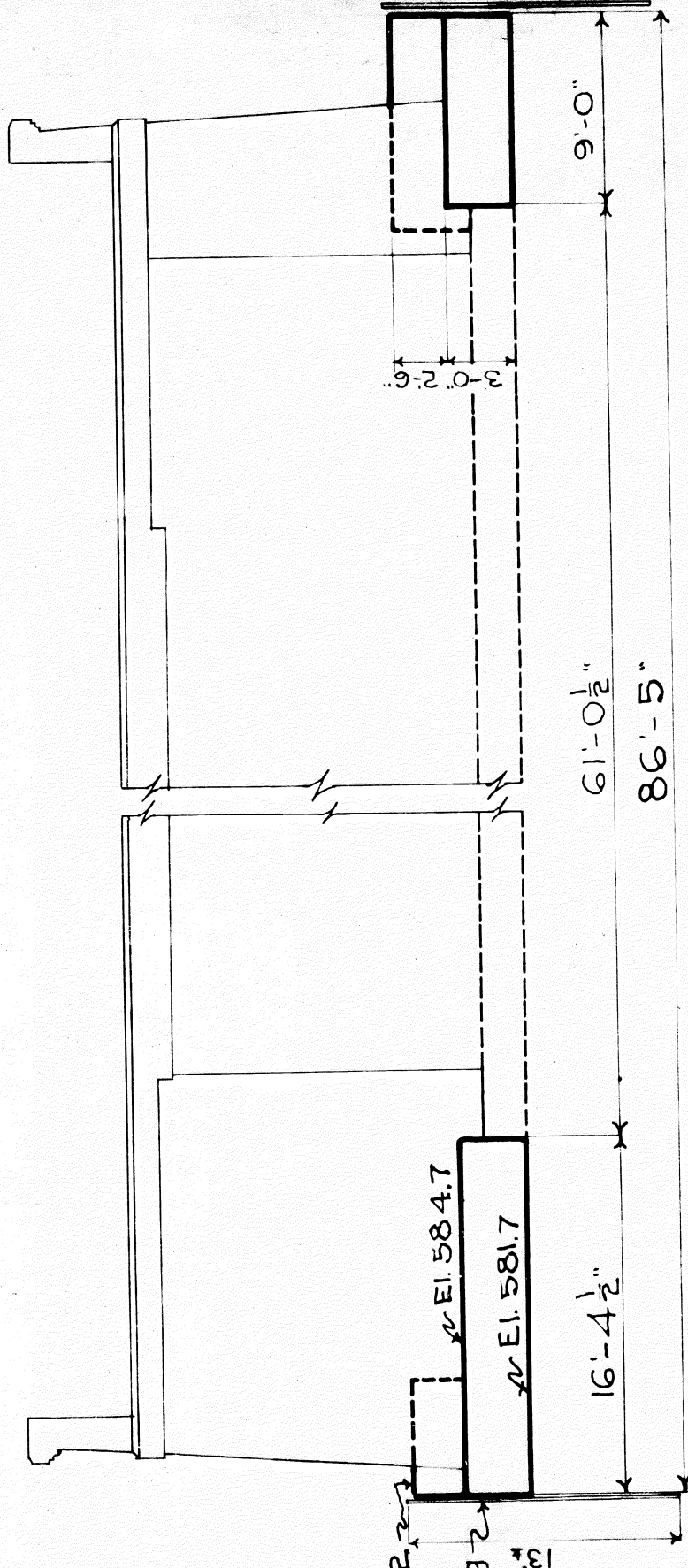
**PLAN**



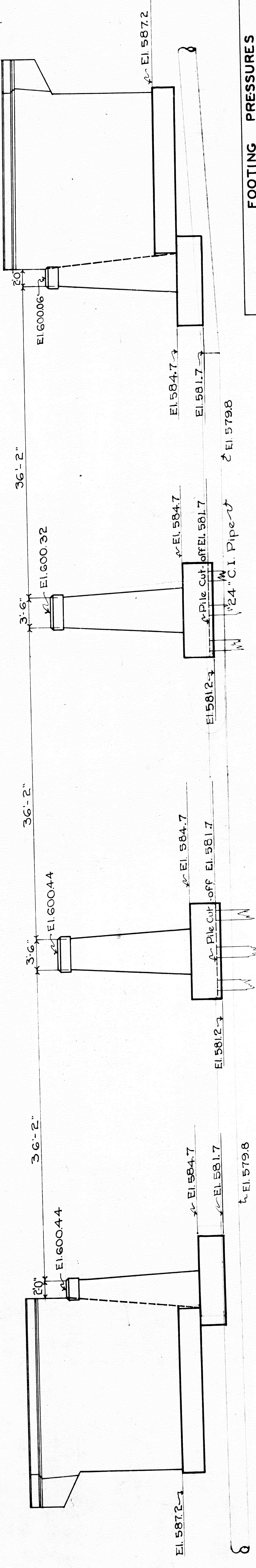
**ELEVATION OF PIERS**



**FRONT ELEVATION OF EAST ABUTMENT**



**FRONT ELEVATION OF WEST ABUTMENT**



**SOUTH ELEVATION**

	FOOTING PRESSURES		Average
	Toe	Heel	
Abutments	4430	1490	2960
North Wings	3400	0	1660
South "	2170	2170	2170
Piers			3530

Number of Piles:  
 2 Piers @ 78-156' x 25' = 3900 Lin. Ft.  
 Note: Piles shall be 25' long.

**REVISIONS**

Wayne County Road Commissioners  
 Detroit, Michigan  
 WM. F. BUTLER  
 CHAIRMAN

John S. Haggerty  
 Commissioner

Edward N. Hines  
 Commissioner

**FOOTING PLAN**  
 PLYMOUTH ROAD—MILE: 6.7  
 BRIDGE B-1 OF 82-22-6 OVER ROUGE RIVER

DESIGNED BY: J.V.C. & P.A.N. INC. P.A.N.  
 DATE: 1-8-29  
 SCALE: 1" = 1'-0"

APPROVED: [Signature]  
 REG. CIV. ENR.  
 SHEET NO. 5  
 3-21-29

MARK	NUMBER	SIZE	LENGTH	REMARKS
D-100	26	10'-0"	X-Wise, Bolt of Footing.	
D-83	6	8'-3"	L " " " " " " " "	Inside
D-160	5	16'-0"	" " " " " " " "	" " " " " " " "
FH-140	17	14'-0"	Dowels to back of Abut Shaft	
EB-90	19	9'-0"	Shear Dowels, See Detail.	
F-50	19	5'-0"	X-Wise, Bolters	
F-50	19	5'-0"	" " " " " " " "	Top
E-189	3	18'-9"	L " " " " " " " "	Bolters
E-189	3	18'-9"	" " " " " " " "	Top
FH-140	19	14'-0"	Dowels to back of wall.	
FB-59	19	5'-9"	Shear Dowels, See Detail.	
FH-70	6	7'-0"	Dowels to Tie Rod Plaster.	
D-96	23	9'-6"	X-Wise, Bolters	
E-70	24	7'-0"	" " " " " " " "	Top
E-226	5	22'-6"	L " " " " " " " "	Bolters
E-226	5	22'-6"	" " " " " " " "	Top
DH-140	30	14'-0"	Dowels to back of wall.	
EB-75	22	7'-5"	Shear Dowels, See Detail.	
F-96	11	8'-6"	Vert. Rear Face, Spliced to FH-140	
F-150	16	15'-0"	Front	
F-48	11	4'-8"	Horiz. Front Face - North	
F-166	11	16'-6"	" " " " " " " "	South
J-150	11	15'-0"	Rear	
EB-55	75	5'-5"	Dowels to Deck, See Detail.	
E-70	9	7'-0"	Wing Wall	
J-150	2	15'-0"	Vert. to Corners.	
F-106	10	10'-6"	Vert. Rear Face, Spliced to FB-140	
F-239	8	23'-9"	Horiz. " " " " " "	Upper
F-199	27	19'-9"	" " " " " " " "	Lower
F-239	3	23'-9"	Horiz. Front " " " " " "	Upper
FH-229	10	22'-9"	" " " " " " " "	Lower, Hkd in Abut.
E-70	9	7'-0"	Dowels to Abut Shaft.	
J-179	15	17'-9"	Vert. - Front Face.	
JB-29	10	2'-9"	Handrail Dowels, See Detail.	
JB-90	5	9'-6"	" " " " " " " "	" " " " " " " "
F-239	3	23'-9"	Horiz. - Front Face.	
J-179	16	17'-9"	Vert. - " " " " " "	" " " " " " " "
CRH-200	8	17'-9"	See Detail.	
D-86	172	1'-6"	X-Wise, Bolt of Footing	
D-213	10	21'-3"	L " " " " " " " "	" " " " " " " "
D-240	10	24'-0"	" " " " " " " "	" " " " " " " "
D-389	10	38'-9"	" " " " " " " "	" " " " " " " "
F-80	256	8'-0"	Dowels to stem.	
D-90	72	9'-0"	Shear Bars.	

CONCRETE	
In Footing	Above Footing
60.8 Cu Yds	111.4 Cu Yds
West Abutment	100.3 "
East "	199.6 "
Total Concrete This Sheet	261.4 "
198.0 "	509.0 "

REINFORCING STEEL	
Total Abutment	12,200 Lbs.
West Abutment	10,950 "
Total Steel, This Sheet	23,150 "
2" LIGHTING CONDUIT	16.5 Lin. Ft.

**QUANTITIES**

**REINFORCING STEEL**

12,200 Lbs.

10,950 "

23,150 "

2" LIGHTING CONDUIT

16.5 Lin. Ft.

**REVISIONS**

DATE: 2-1-29

BY: J.W.C.

REASON: AS SHOWN

DATE: 2-1-29

BY: J.W.C.

REASON: AS SHOWN

DATE: 2-1-29

BY: J.W.C.

REASON: AS SHOWN

DATE: 2-1-29

BY: J.W.C.

REASON: AS SHOWN

**WAYNE COUNTY ROAD COMMISSIONERS**

DETROIT, MICHIGAN

WM. F. BUTLER, CHAIRMAN

JOHN S. HAGGERTY, COMMISSIONER

EDWARD N. HINES, COMMISSIONER

**WEST ABUTMENT & PIERS**

PLYMOUTH ROAD - MILE: 6.7

BRIDGE B-1 OF 82-22-6 OVER ROUGE RIVER

DESIGNED BY: J.W.C.

DRAWN BY: P.A.N.

SCALE: AS SHOWN

DATE: 2-1-29

BY: J.W.C.

REASON: AS SHOWN

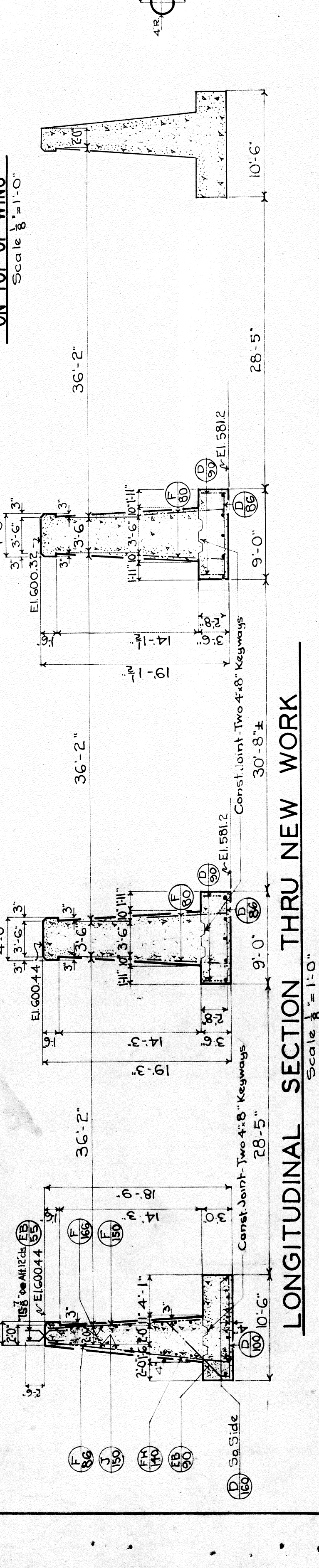
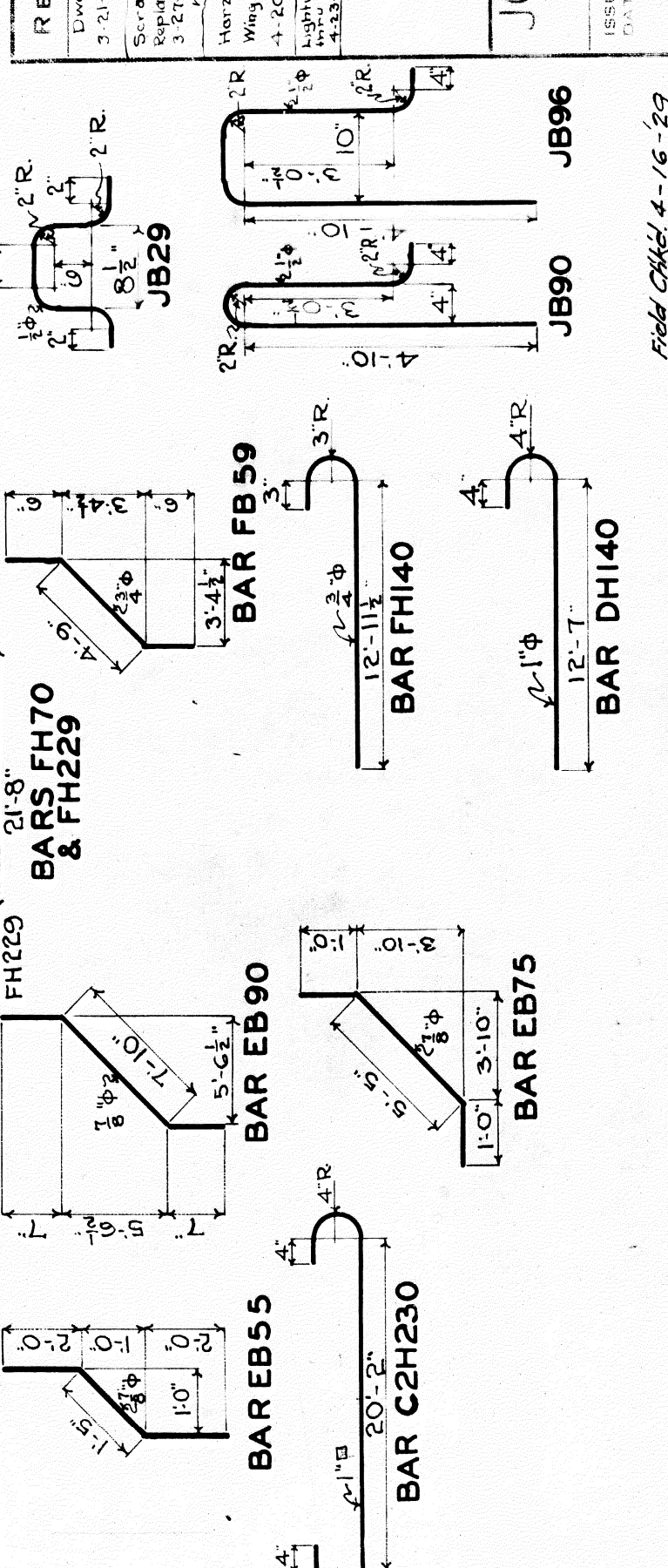
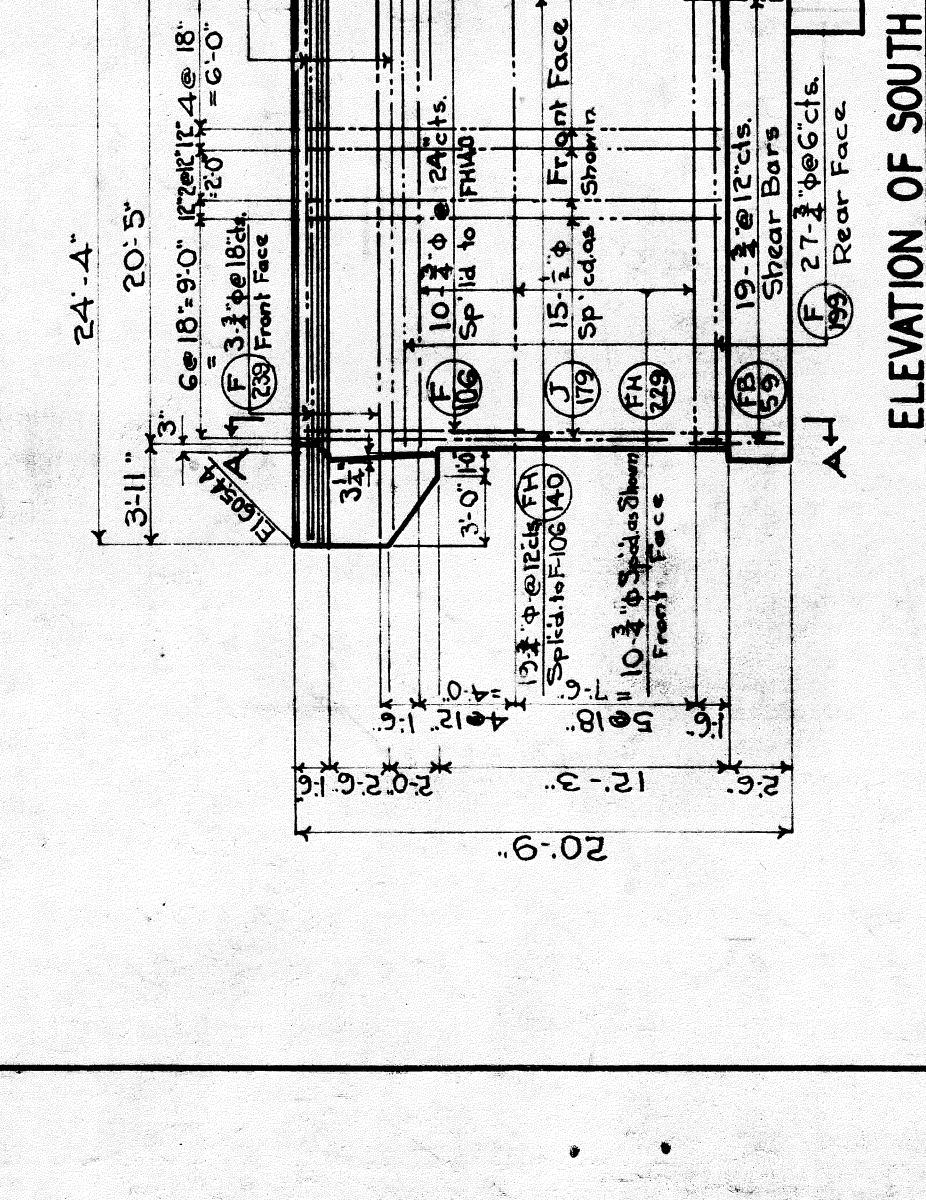
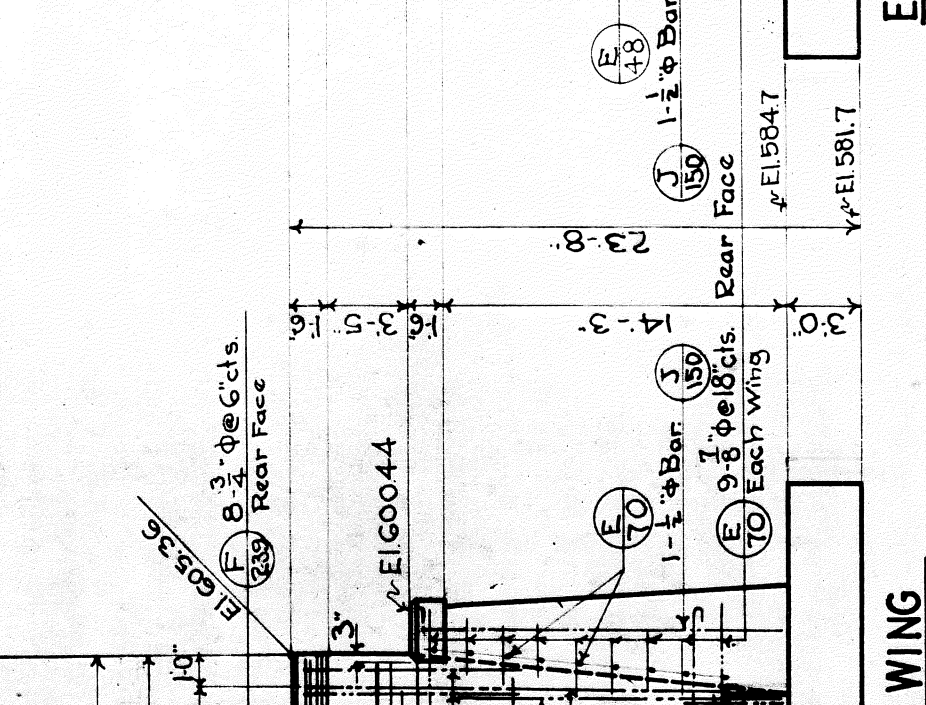
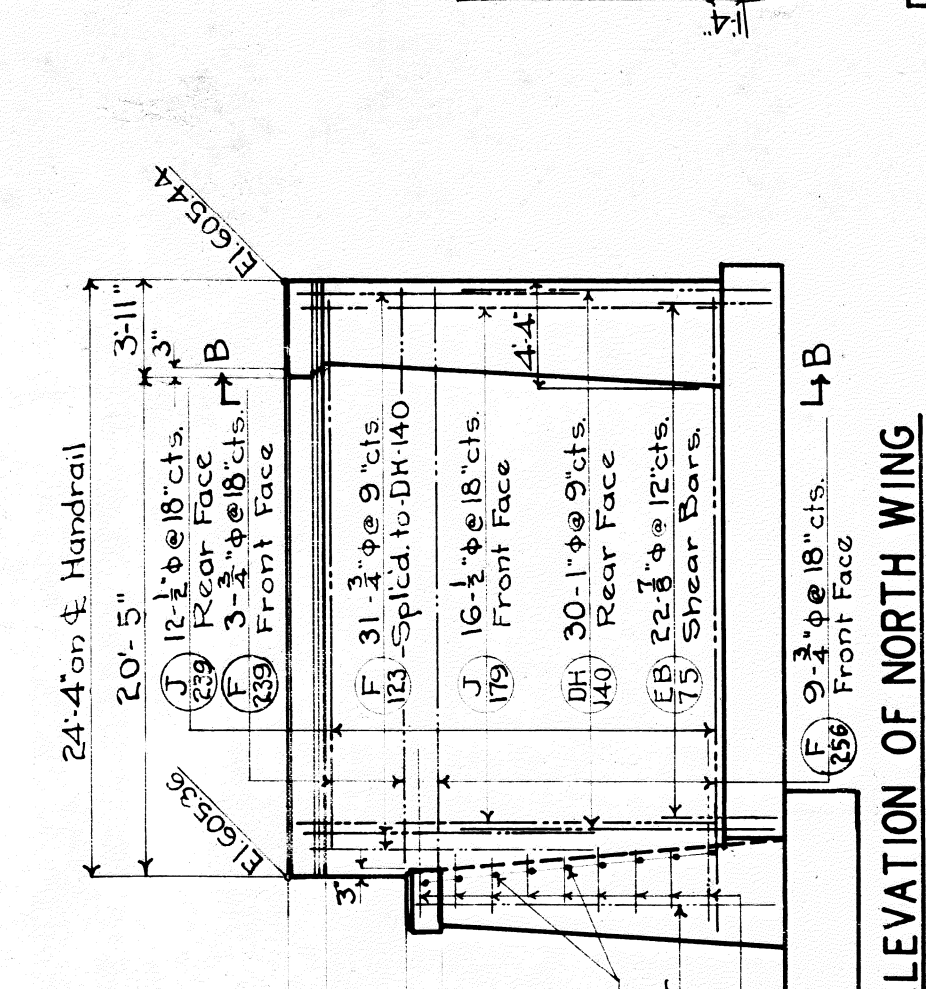
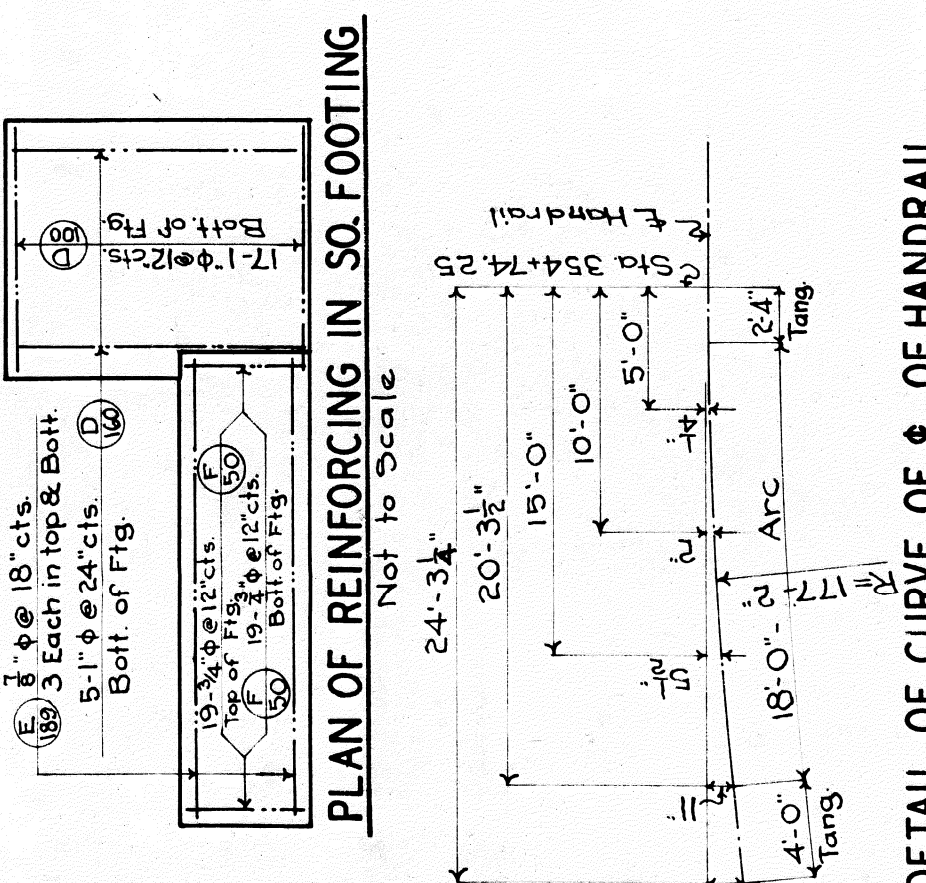
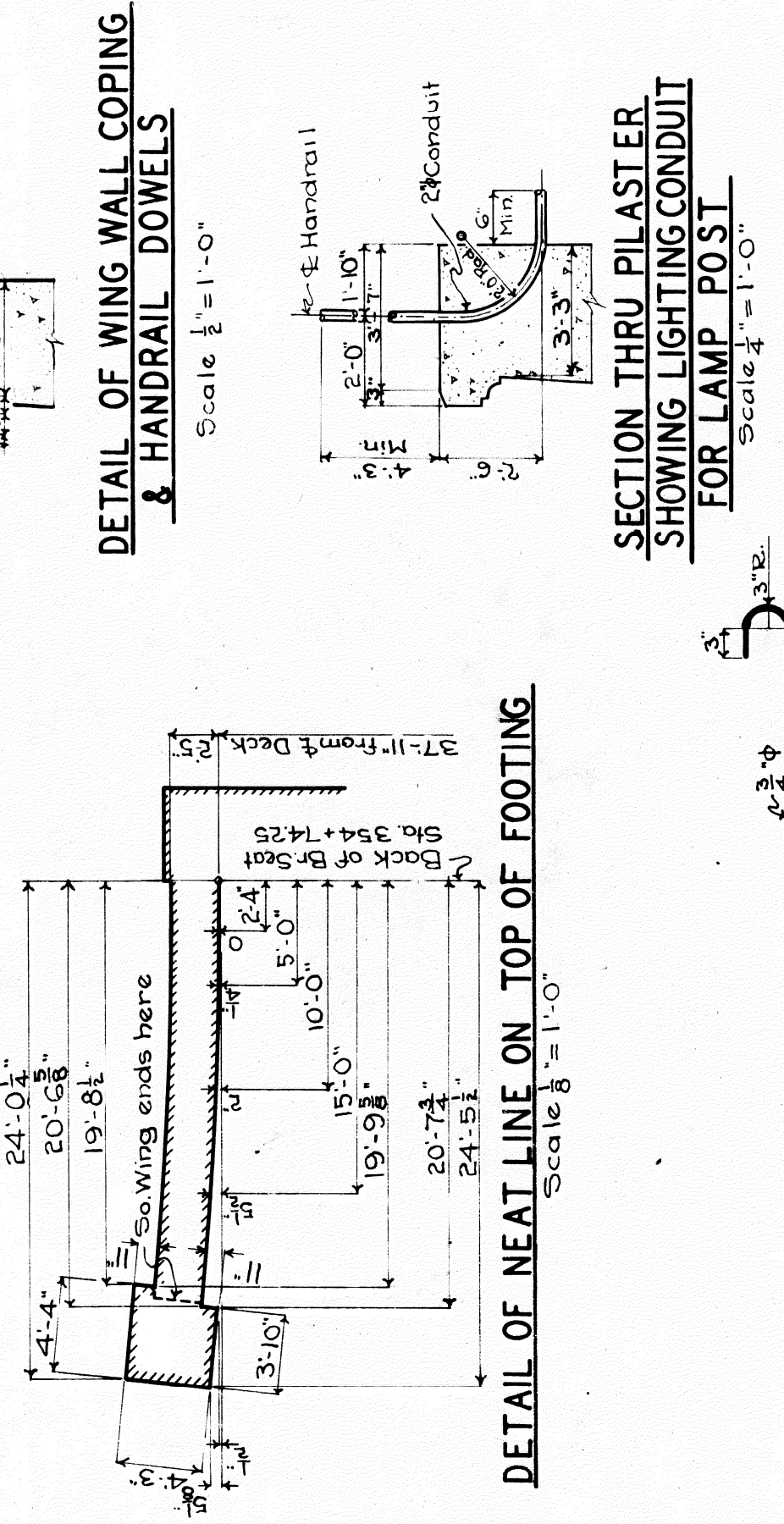
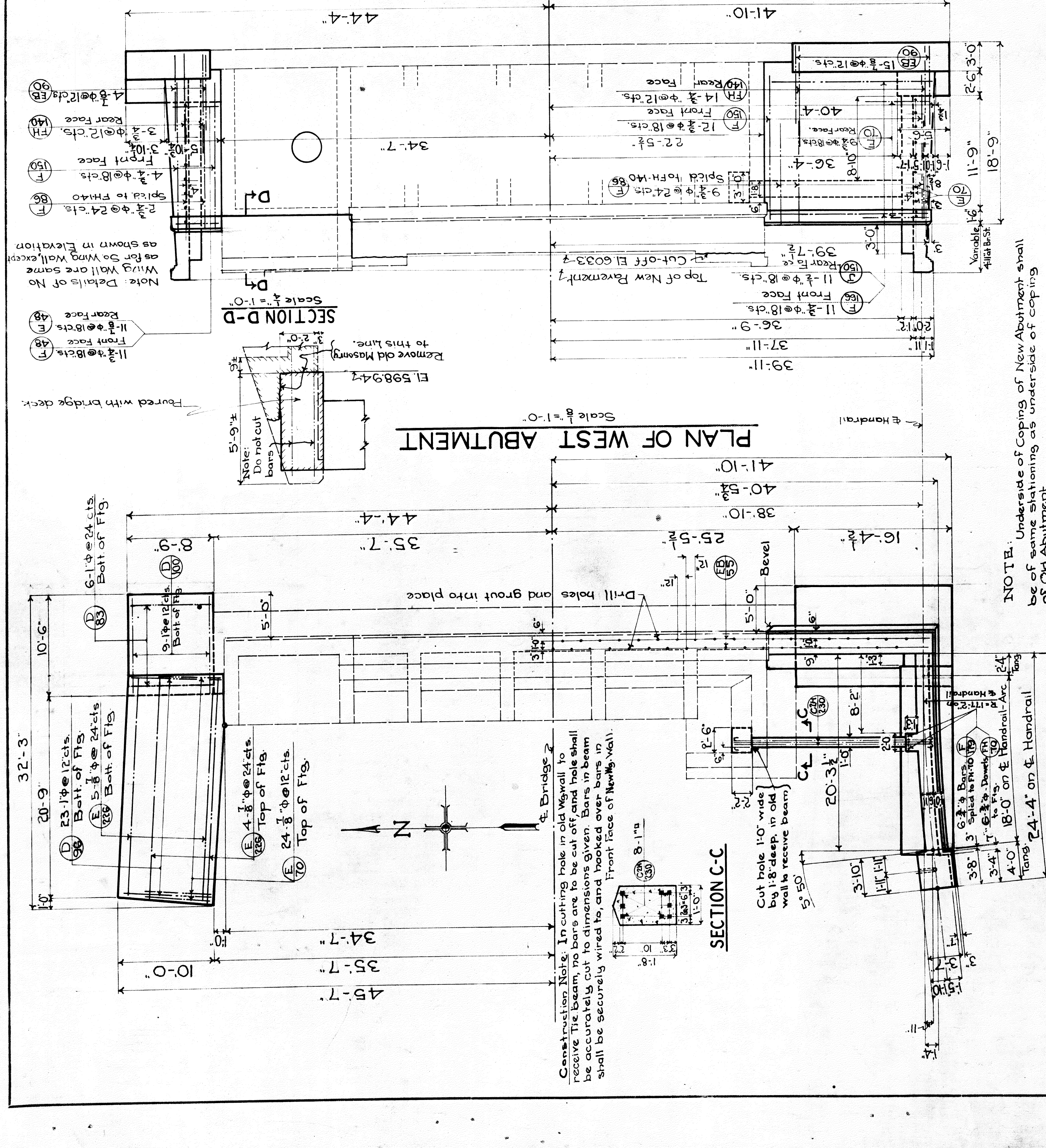
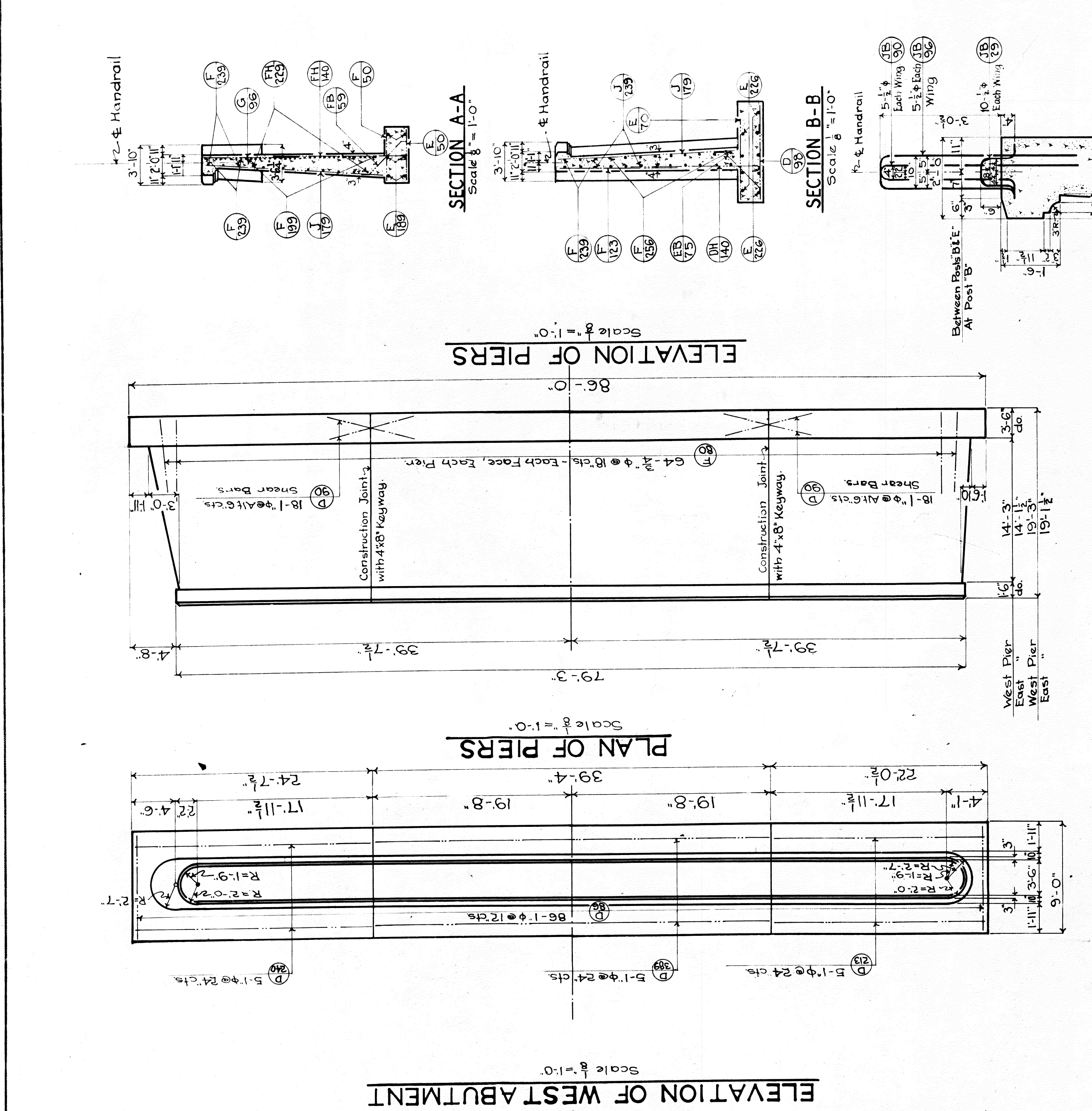
**JOB NO. 352**

REVISIONS

DATE: 2-1-29

BY: J.W.C.

REASON: AS SHOWN



MARK	NUMBER	SIZE	LENGTH	REMARKS
D-100	36	1" x 1"	10'-0"	X-Wise, Rail of Footing
D-166	5	18'-6"	L	No Side
D-160	5	16'-0"	L	No Side
FH-140	30	2" x 4"	14'-0"	Dowels to back of Abut Footing
EB-90	30	3" x 3"	9'-0"	Shear Dowels - See Detail
F-50	19	2" x 4"	5'-0"	X-Wise, Bottom
F-50	19	2" x 4"	5'-0"	Top
E-189	3	18'-9"	L	Bottom
E-189	3	18'-9"	L	Top
FH-40	19	2" x 4"	14'-0"	Dowels to back of Wall
FH-59	19	2" x 4"	14'-0"	Shear Dowels - See Detail
FH-70	6	7'-0"	L	Dowels to Tie Rod Pillars
D-96	23	1" x 1"	9'-6"	X-Wise, Bottom
E-70	24	7'-0"	L	Top
E-226	5	22'-6"	L	Bottom
E-226	4	22'-6"	L	Top
DH-40	30	1" x 4"	14'-0"	Dowels to back of Wall
EB-75	22	2" x 4"	7'-5"	Shear Dowels - See Detail
F-86	18	2" x 4"	8'-6"	Vert. Rr. Face - Spliced to F-106
F-150	24	2" x 4"	15'-0"	Front
F-166	22	2" x 4"	16'-6"	Horz.
J-150	22	1" x 4"	15'-0"	Rr.
EB-55	75	3" x 3"	5'-5"	Dowels to Deck - See Detail
E-70	18	7'-0"	L	Wing Wall
J-150	2	1" x 4"	15'-0"	Vert. At Ends
F-103	10	2" x 4"	10'-3"	Vert. Rear Face - Spliced to FB-140
F-239	8	2" x 4"	23'-9"	Horz.
F-199	27	19'-9"	L	Upper
F-239	3	23'-9"	L	Lower
FH-229	10	2" x 4"	22'-9"	Lower, Tied in Abut.
E-70	9	7'-0"	L	Dowels to Abutment Shear, Rear
J-179	15	1" x 4"	17'-9"	Vert. Front Face
JB-29	10	2" x 4"	2'-9"	Handrail Dowels - See Detail
JB-90	5	9'-0"	L	
JB-96	5	9'-6"	L	
F-256	9	2" x 4"	25'-6"	Horz. Front Face
C2H-230	8	1" x 4"	23'-0"	See Detail

CONCRETE	QUANTITIES
In East Abutment	Footing
	72.7 Cu.Yds
	Above Footing
	130.9 Cu.Yds
REINFORCING STEEL	
In East Abutment	13,660 Lbs.
2" x 4" LIGHTING CONDUIT	165 Lin. Ft.

BOARD OF  
WAYNE COUNTY ROAD COMMISSIONERS  
DETROIT, MICHIGAN  
WM. F. BUTLER  
CHAIRMAN  
JOHN S. HAGGERTY  
COMMISSIONER  
EDWARD N. HINES,  
COMMISSIONER

EAST ABUTMENT DETAILS  
PLYMOUTH ROAD—MILE: 6.7  
BRIDGE B-1 OF 82-22-6 OVER ROUGE RIVER

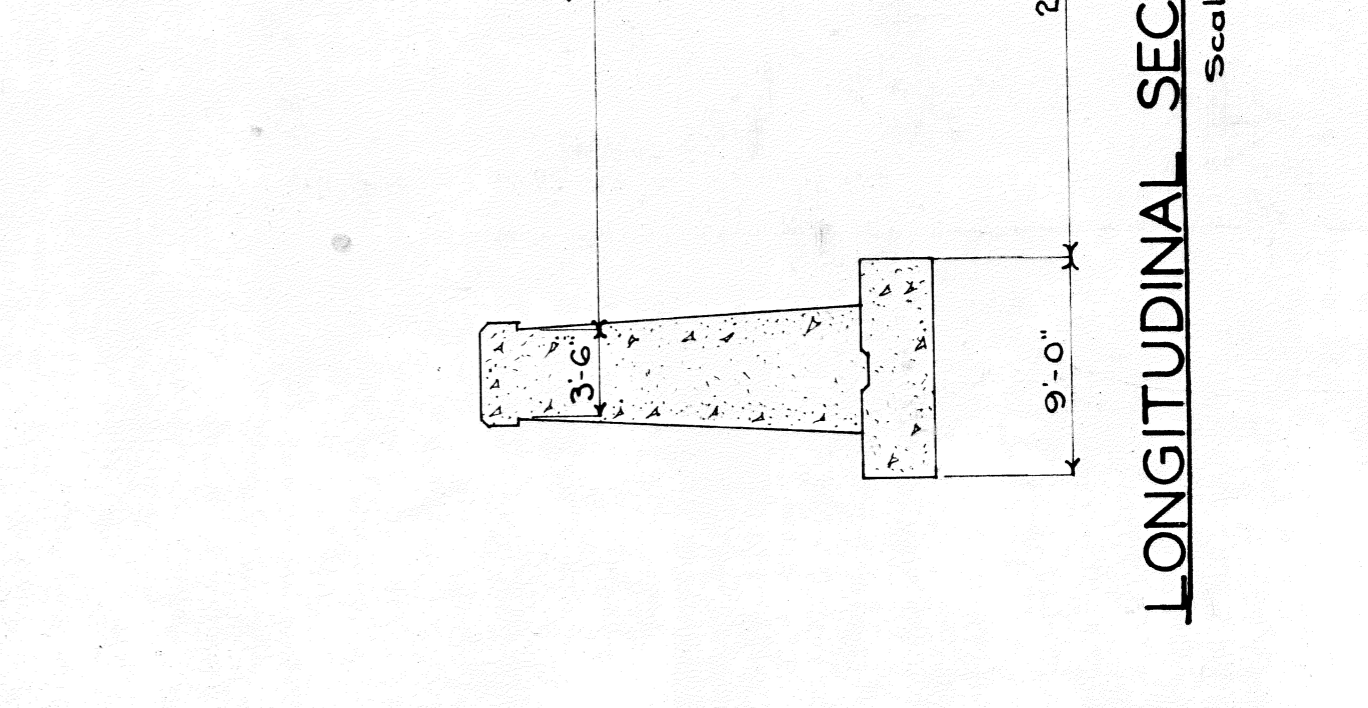
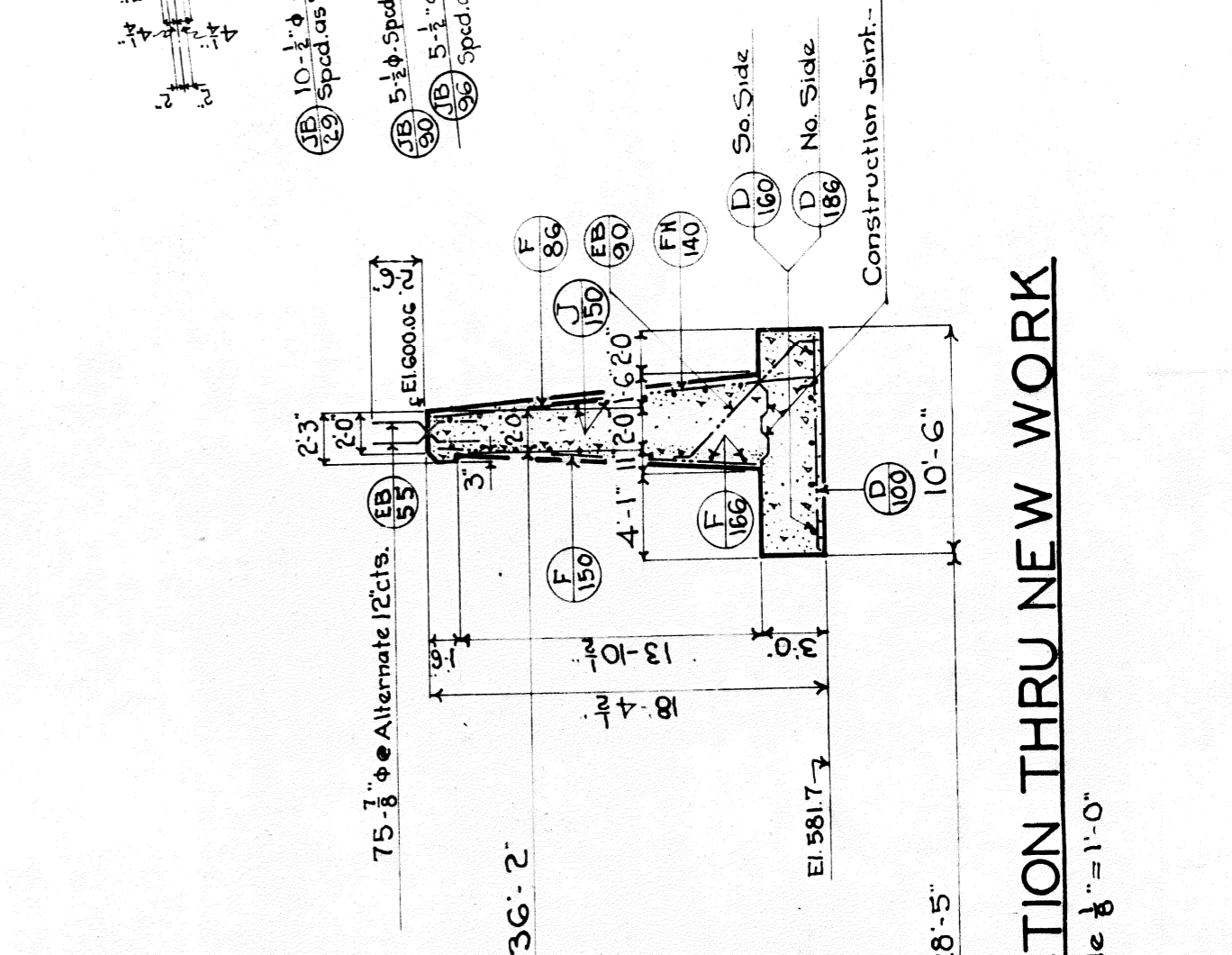
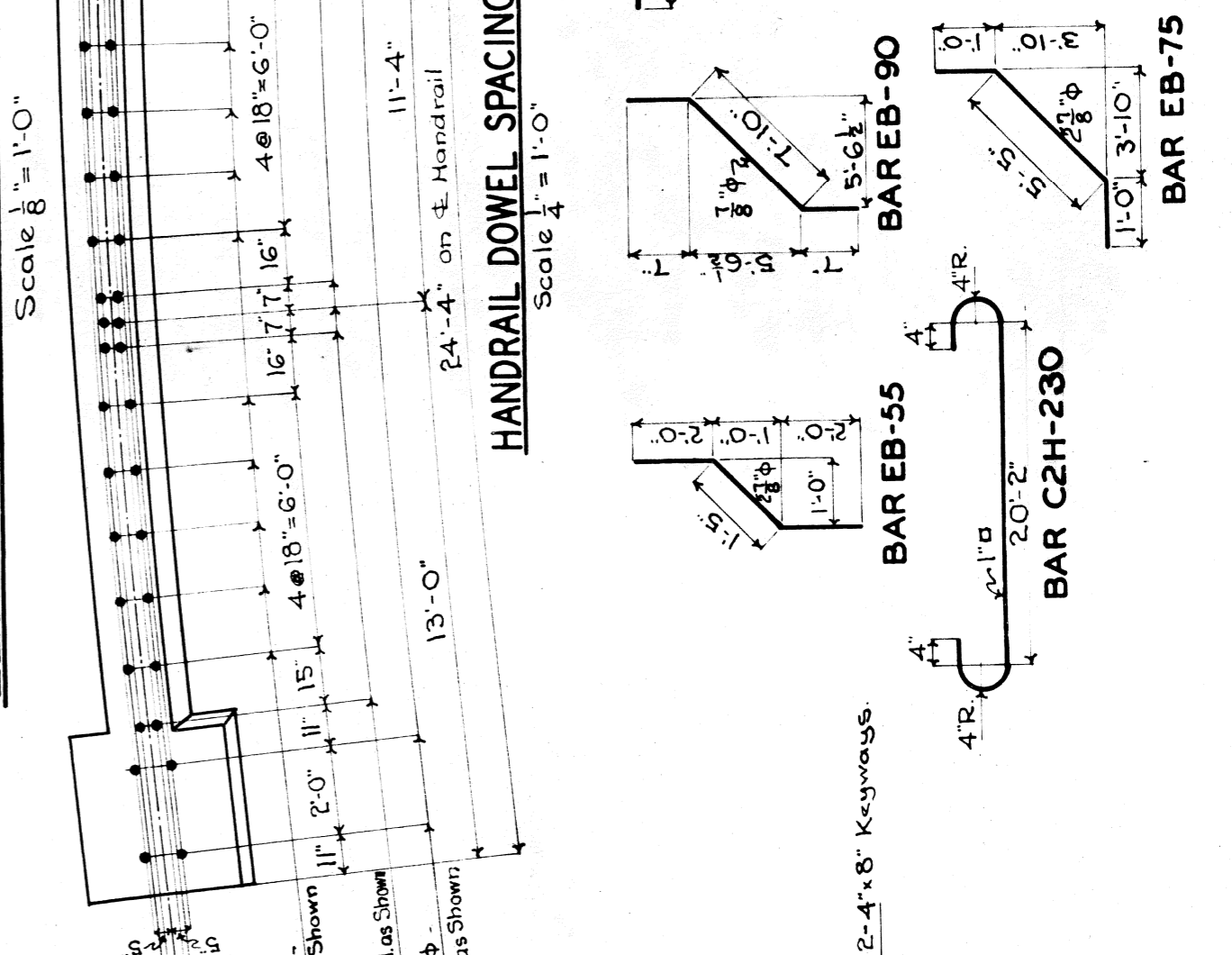
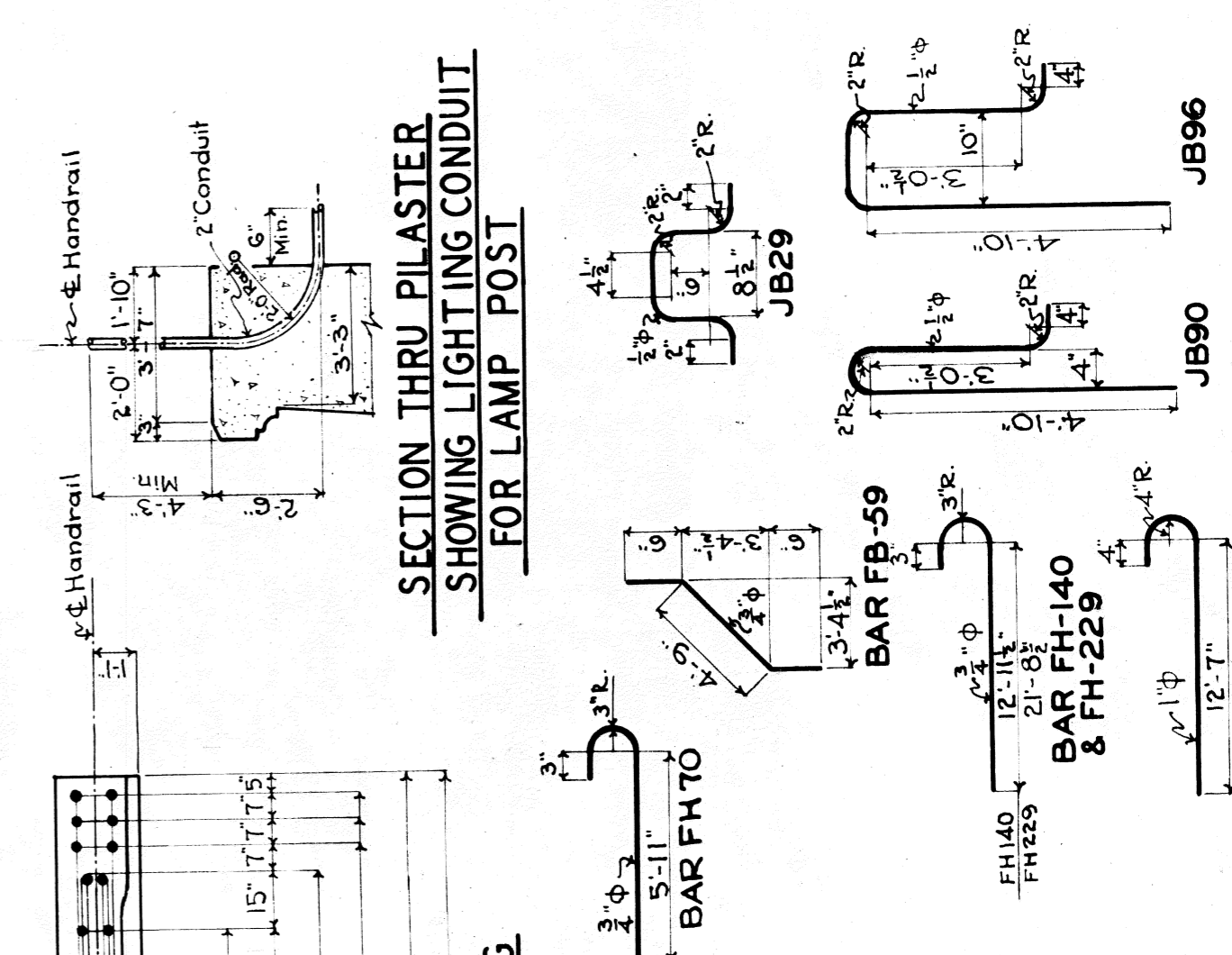
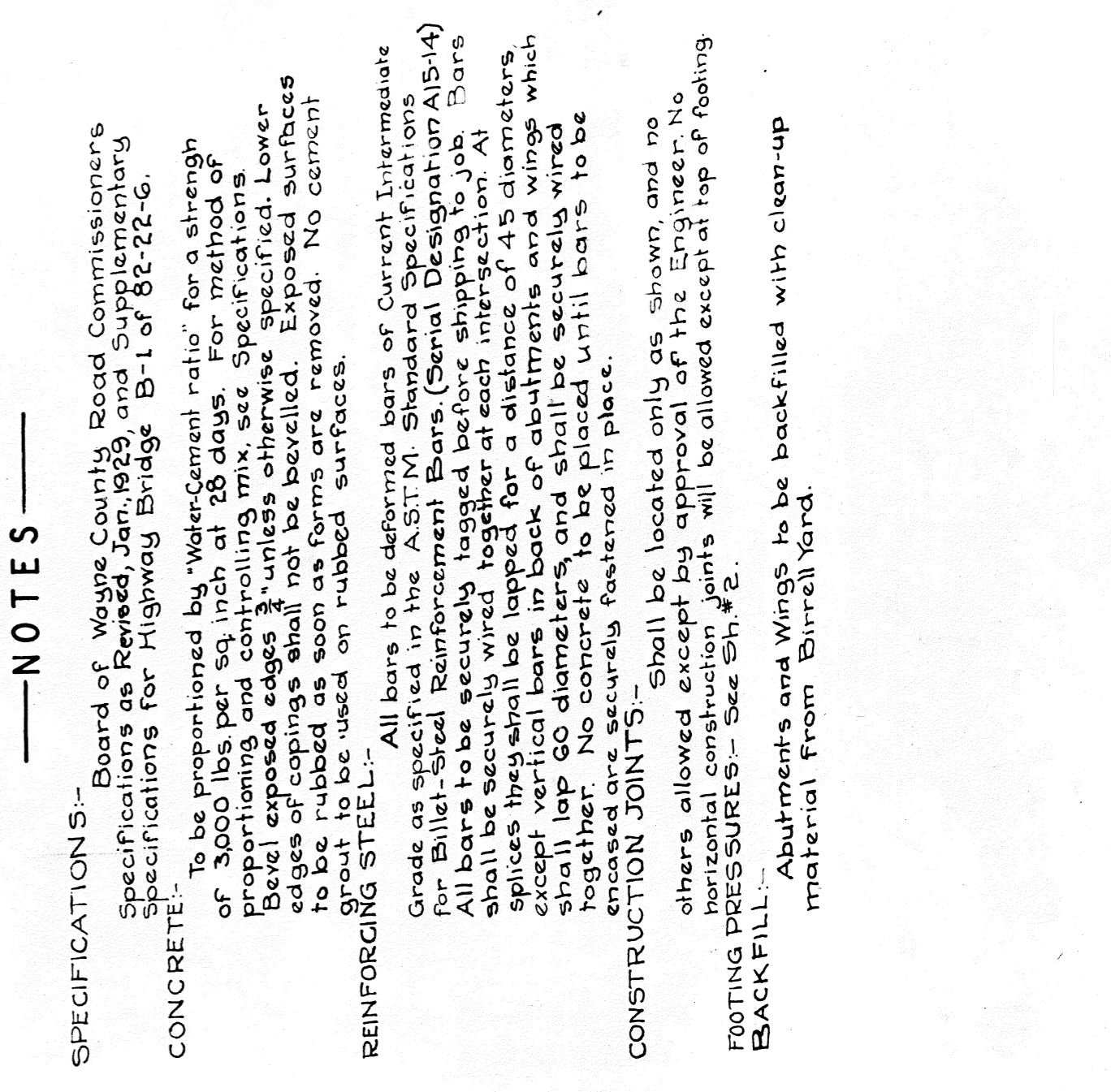
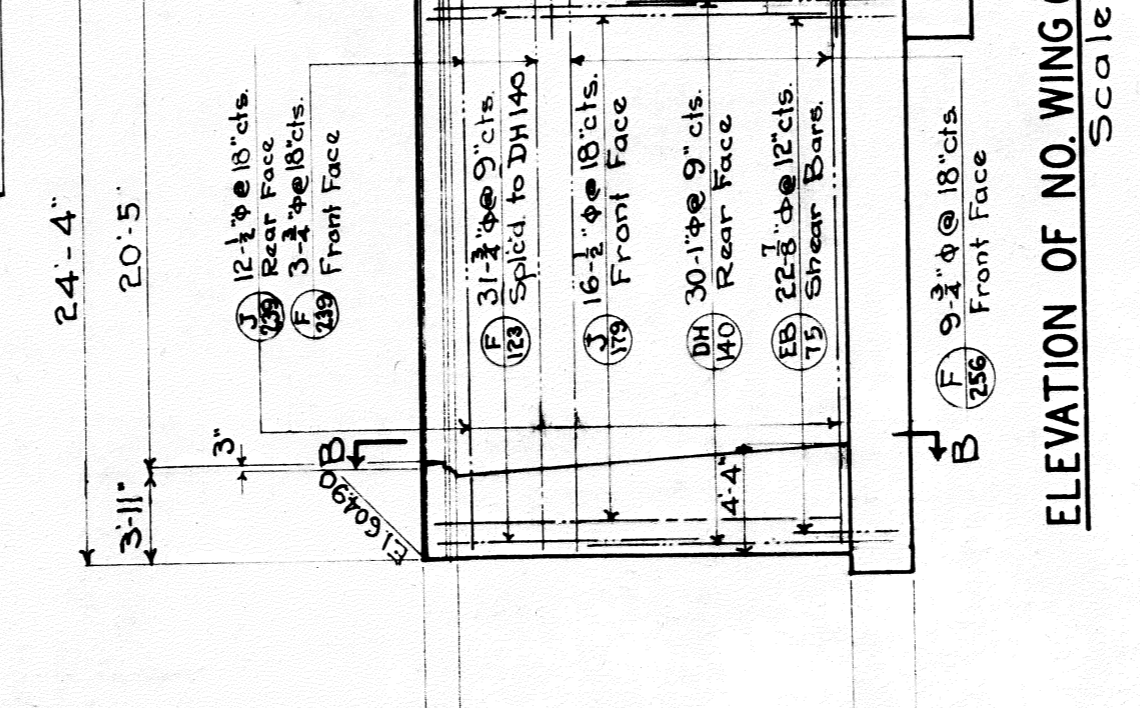
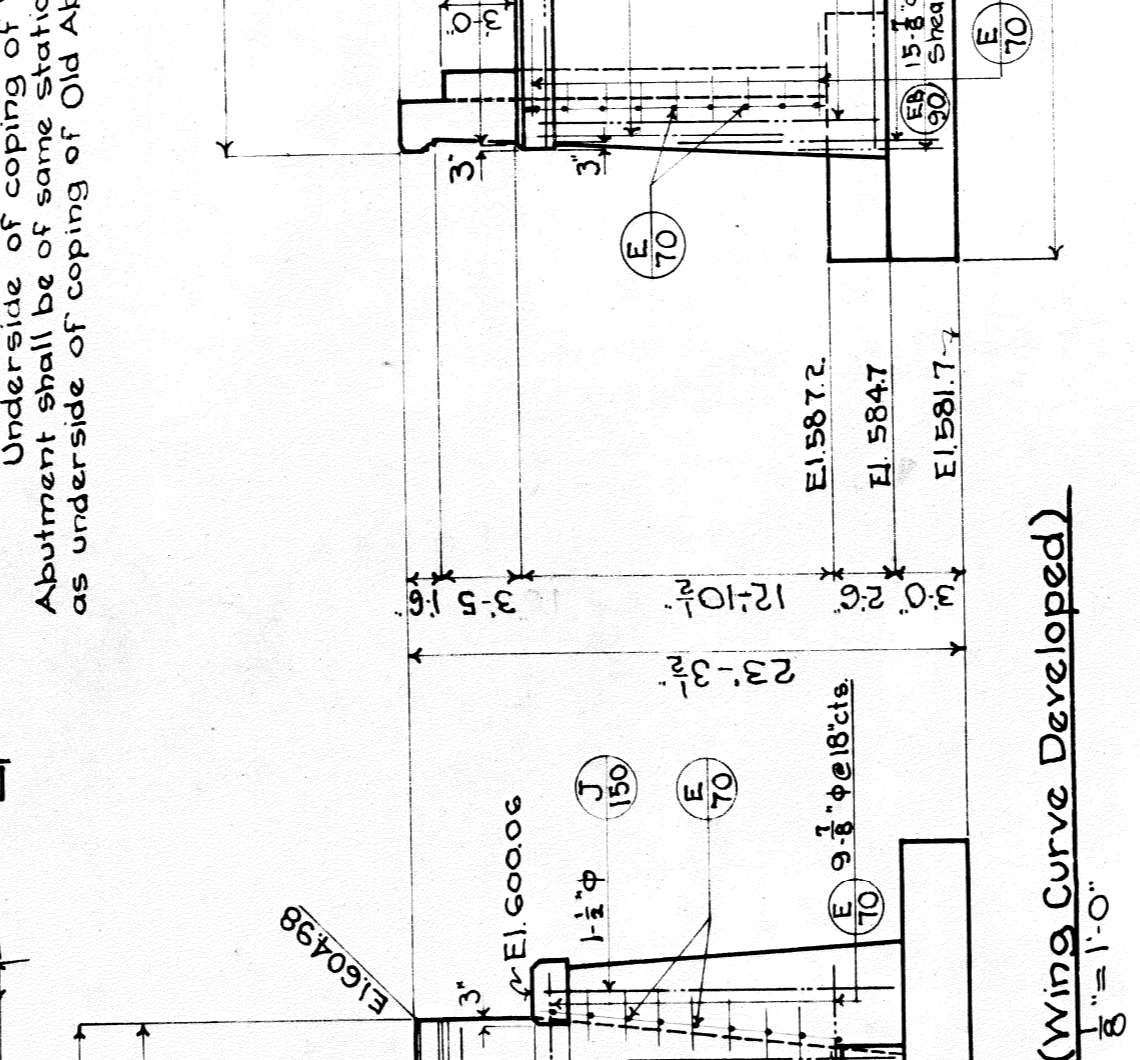
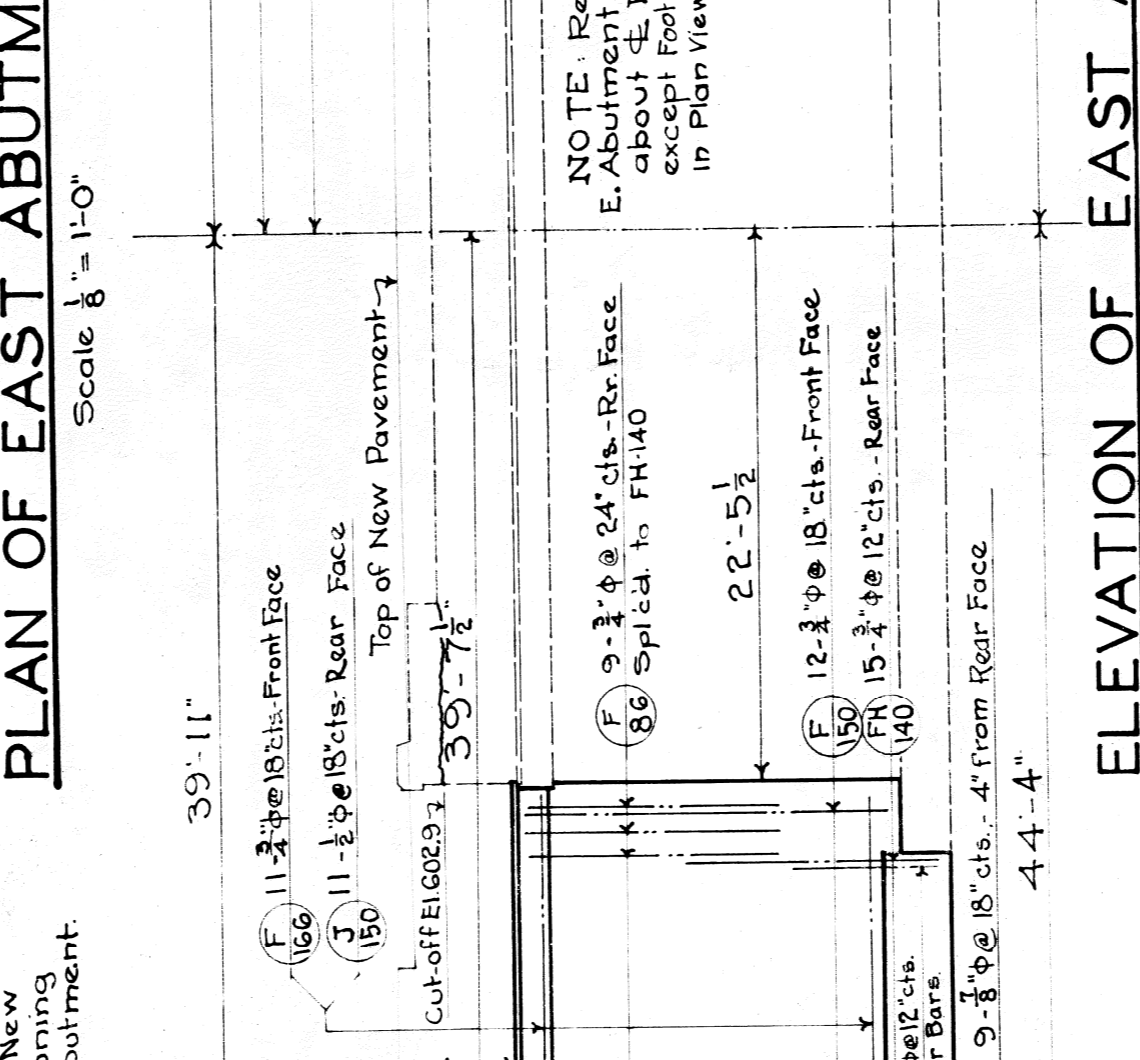
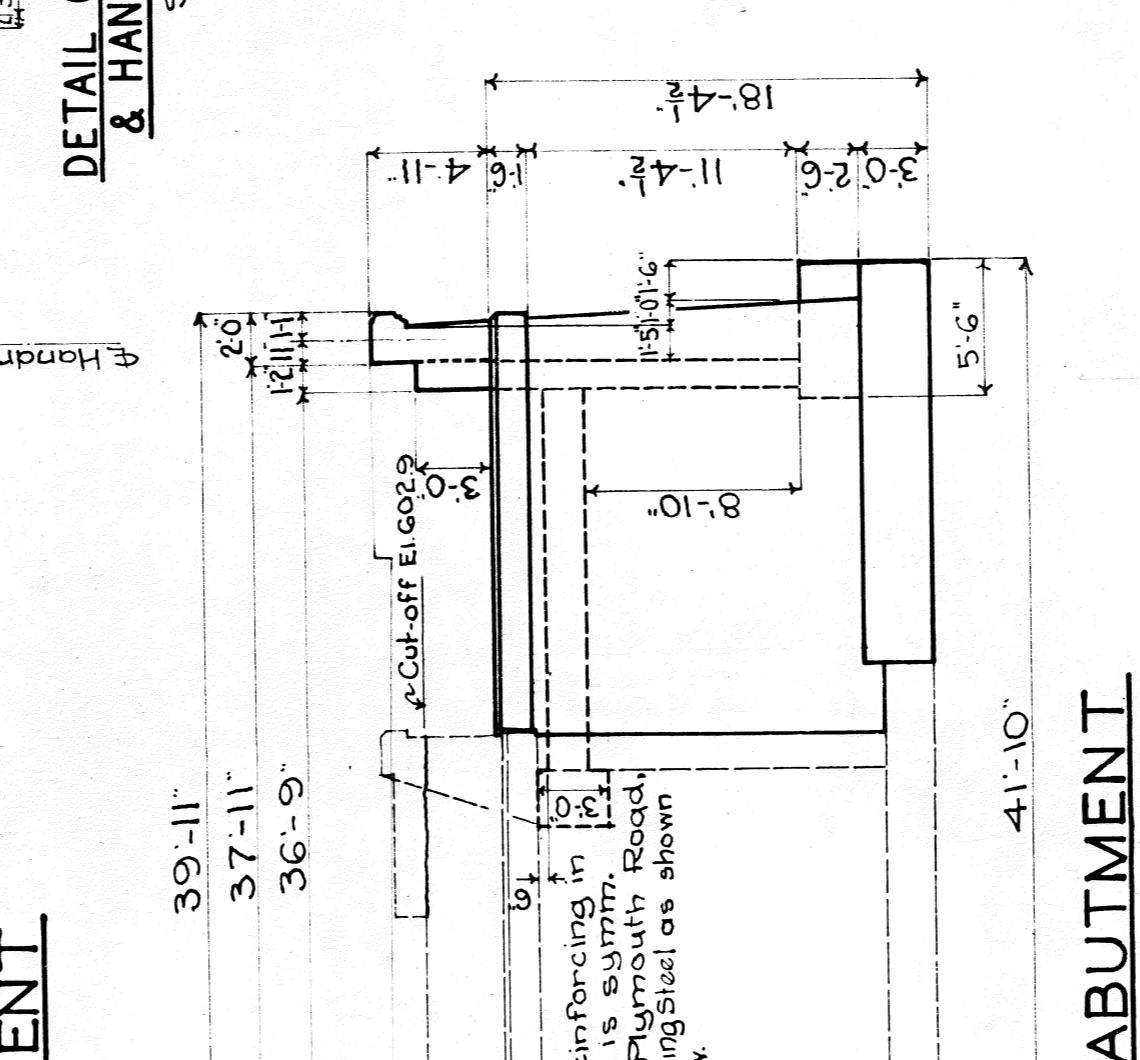
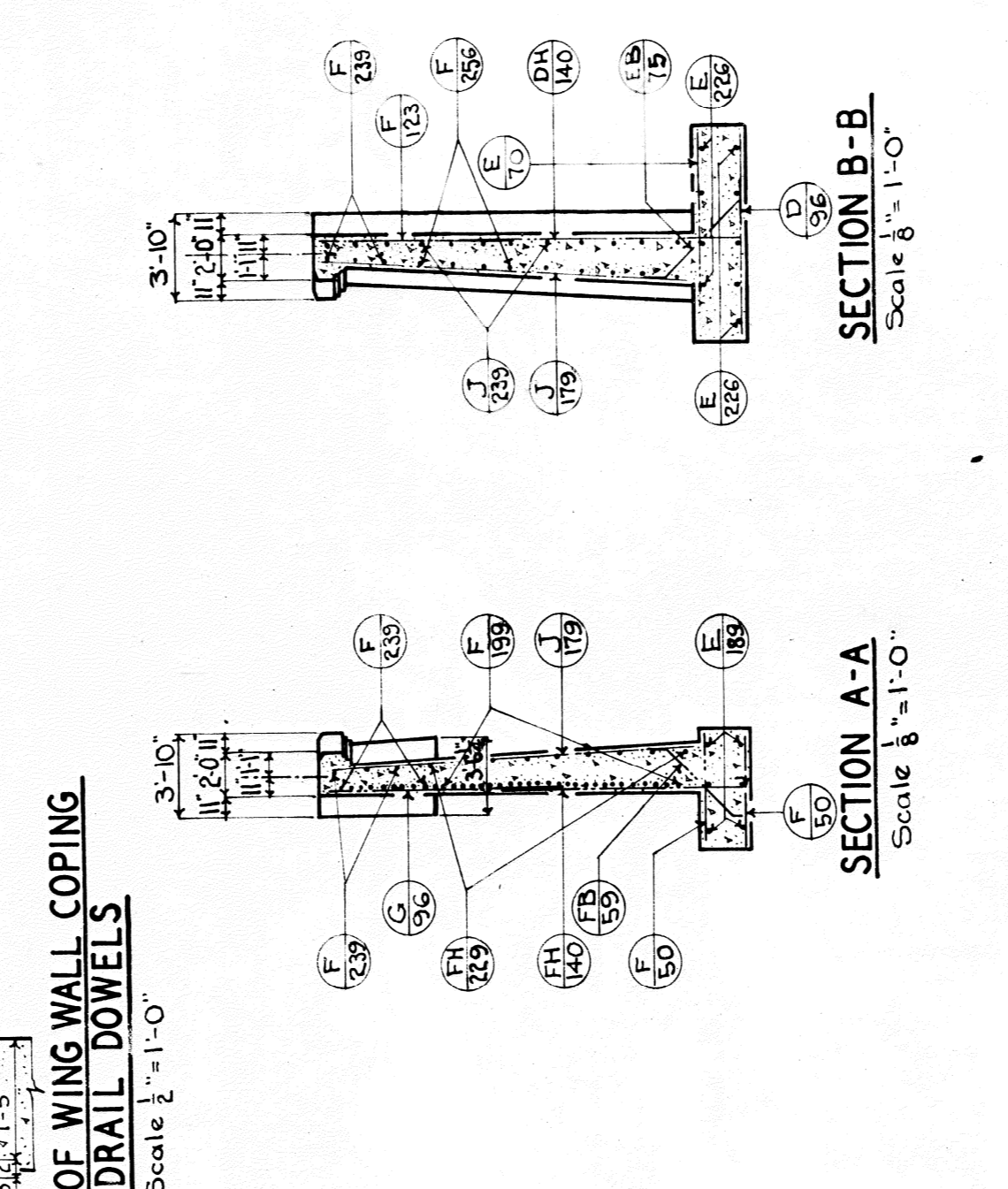
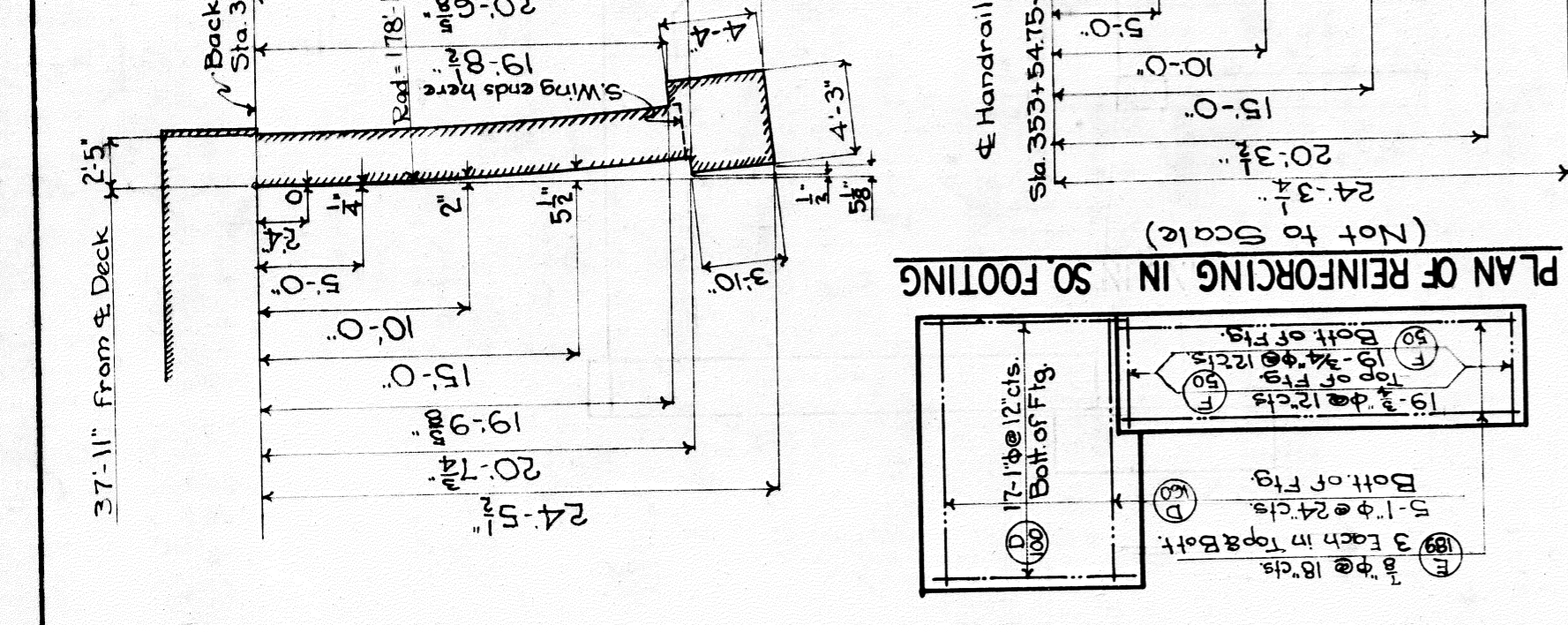
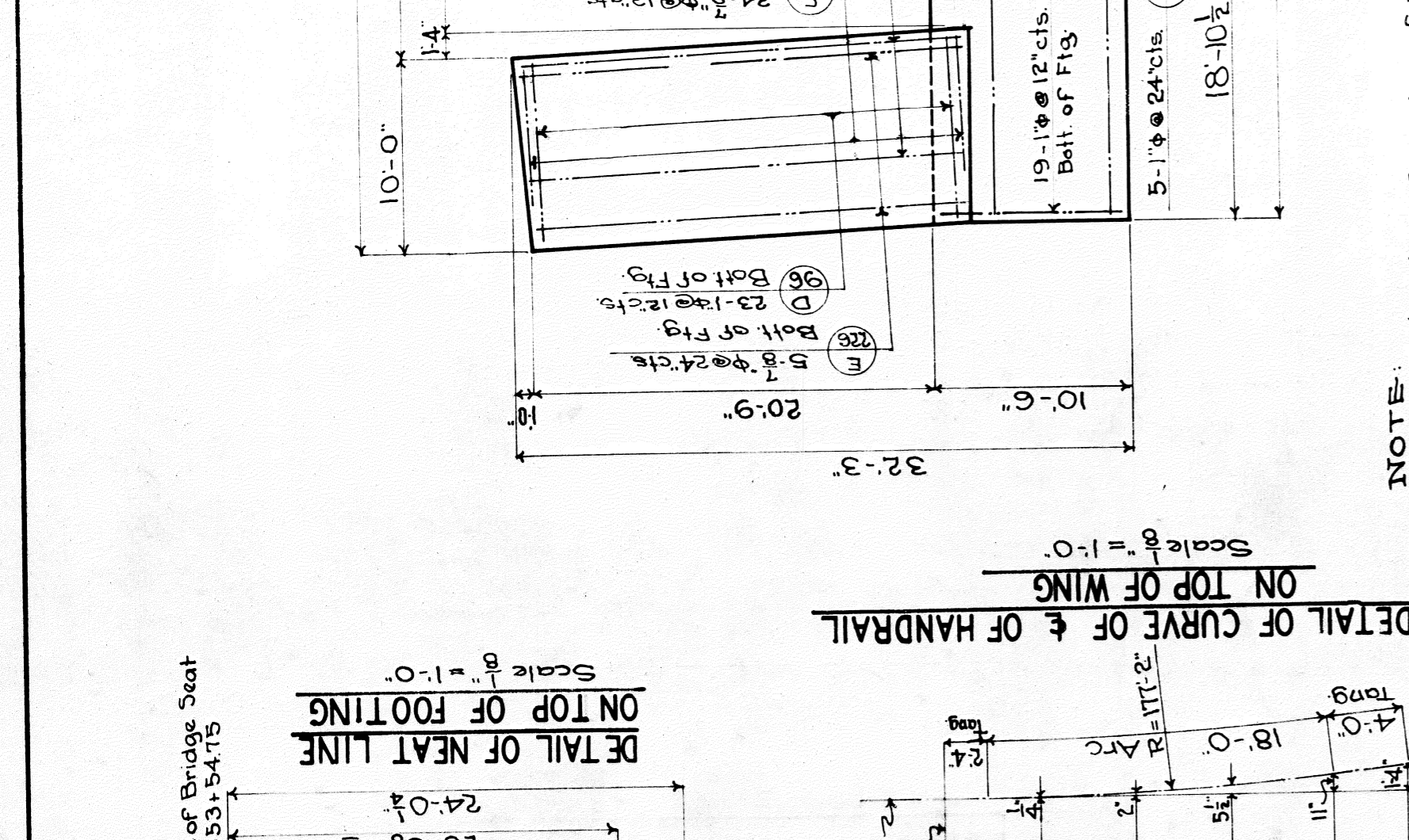
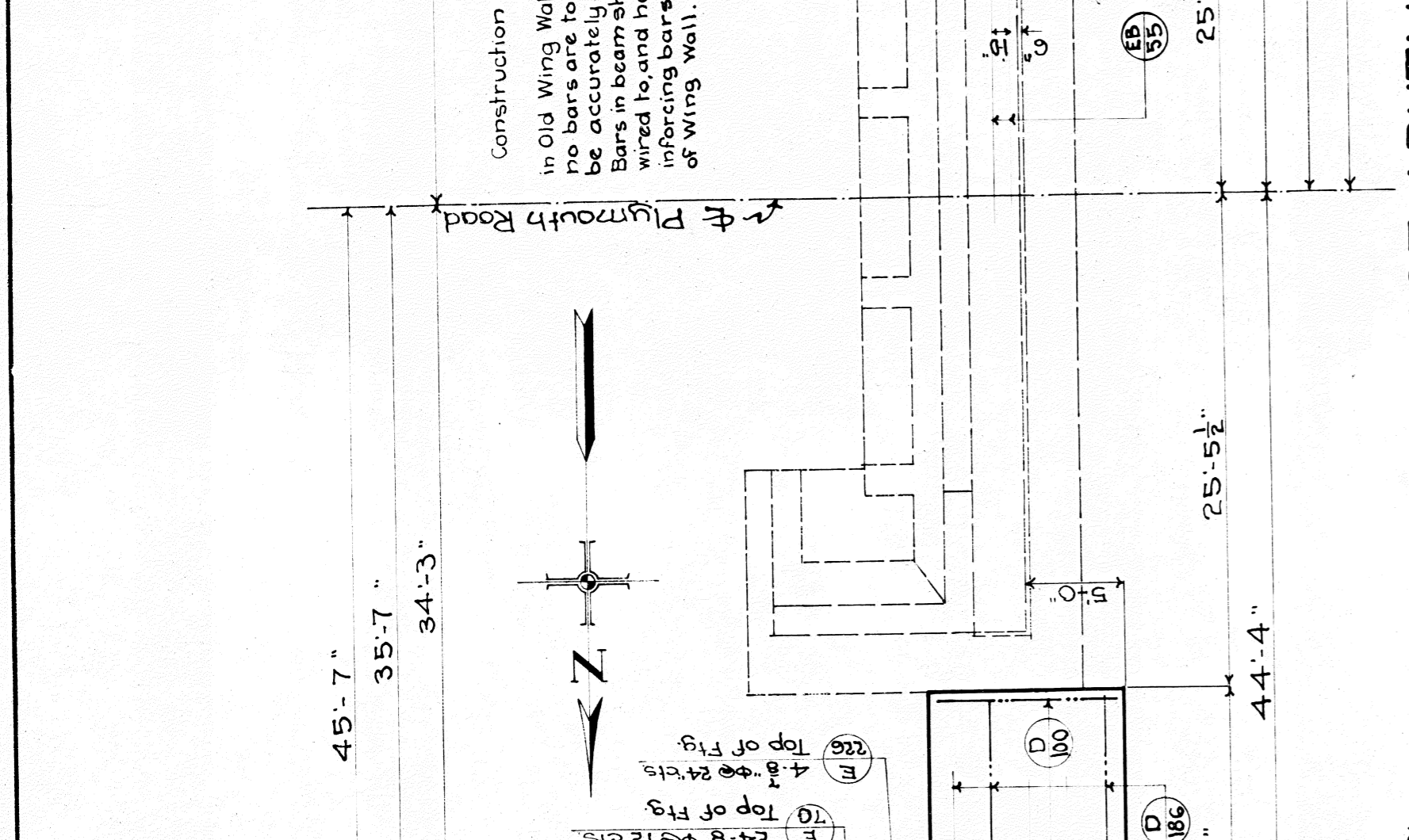
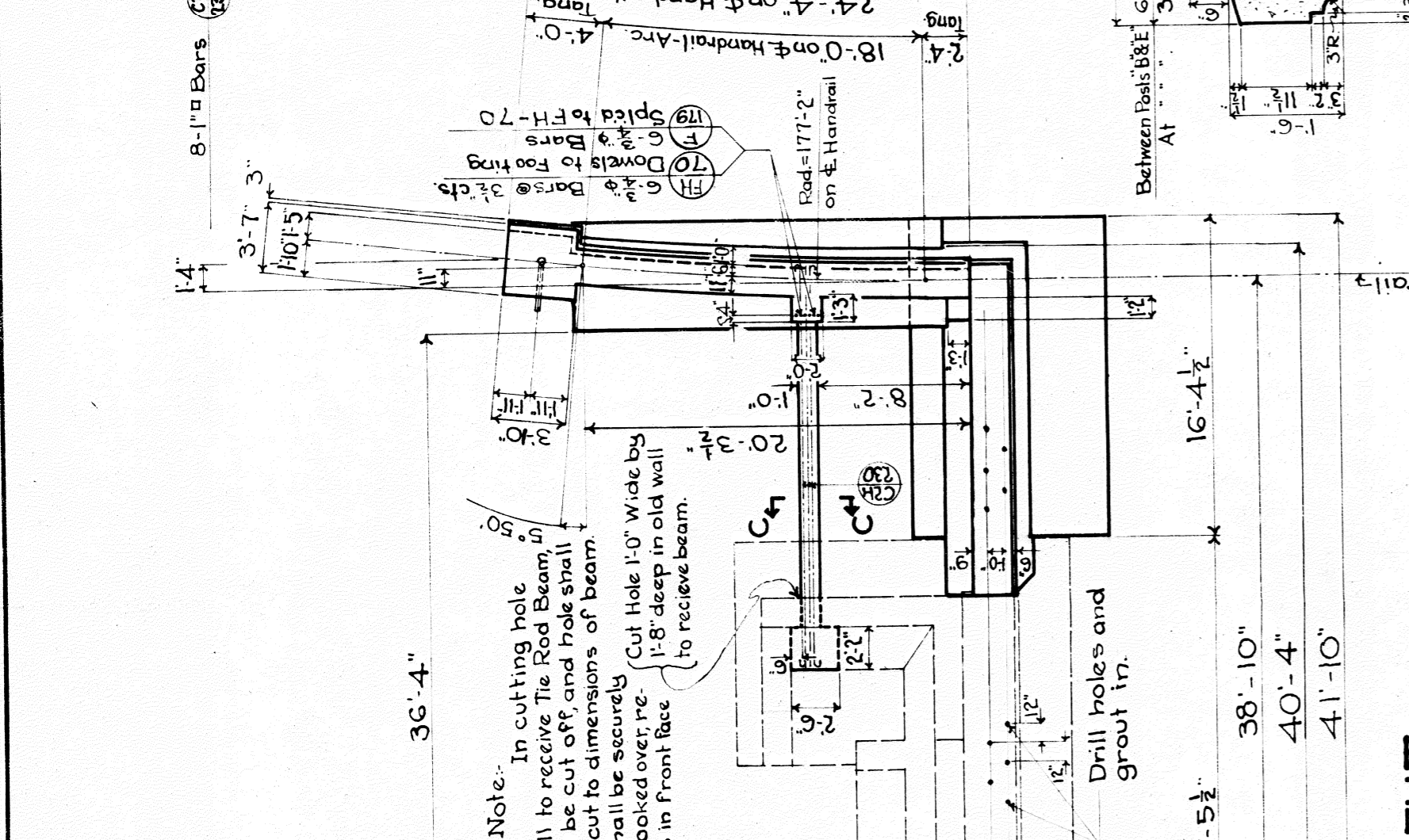
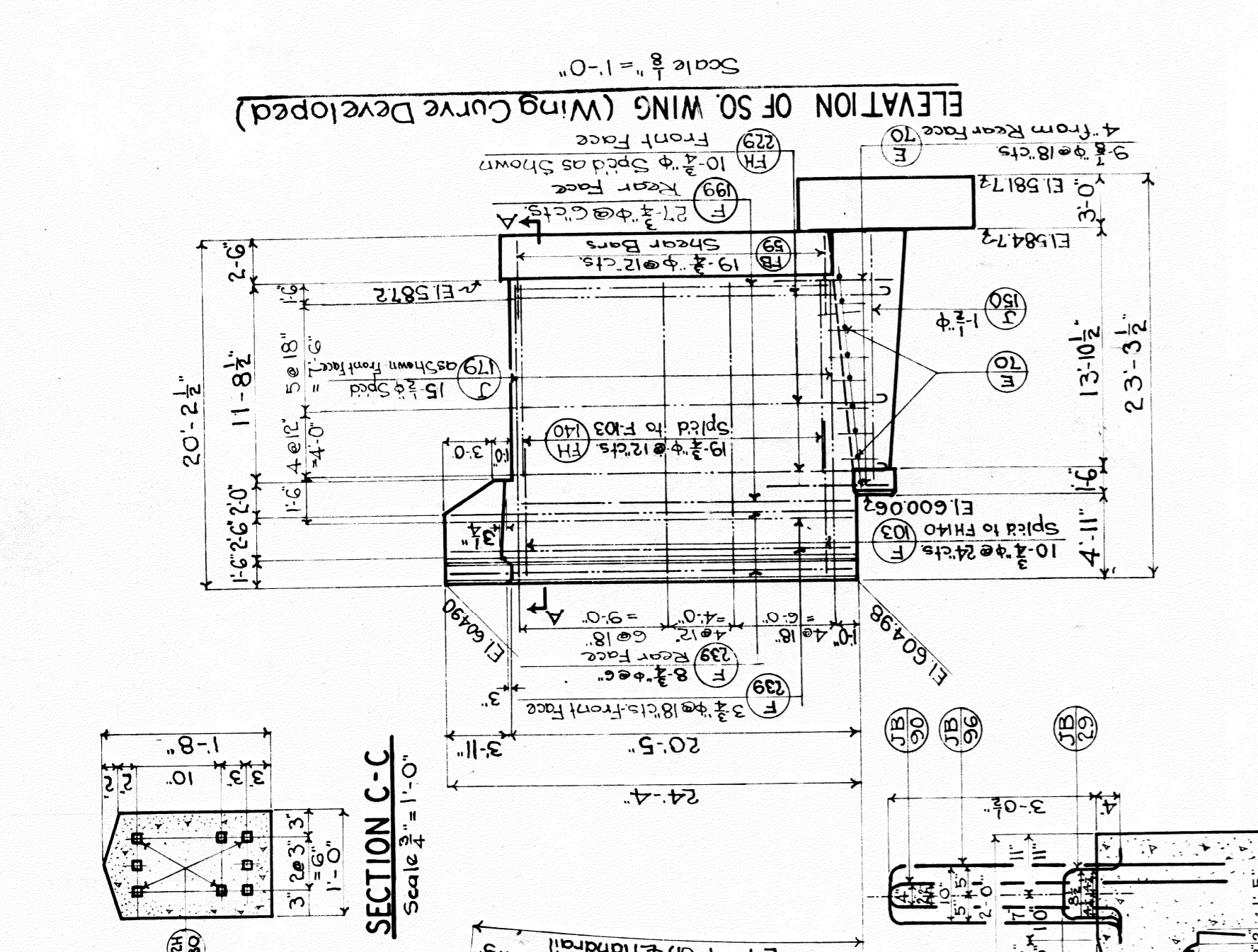
DESIGNED BY JWC & PAN DRAWN BY PAN  
DATE: 2-16-29  
SCALE: AS SHOWN  
APPROVED: *[Signature]*  
FIELD ENGINEER

JOB NO. 352  
ISSUE NO. 4  
DATE: 7-25-29

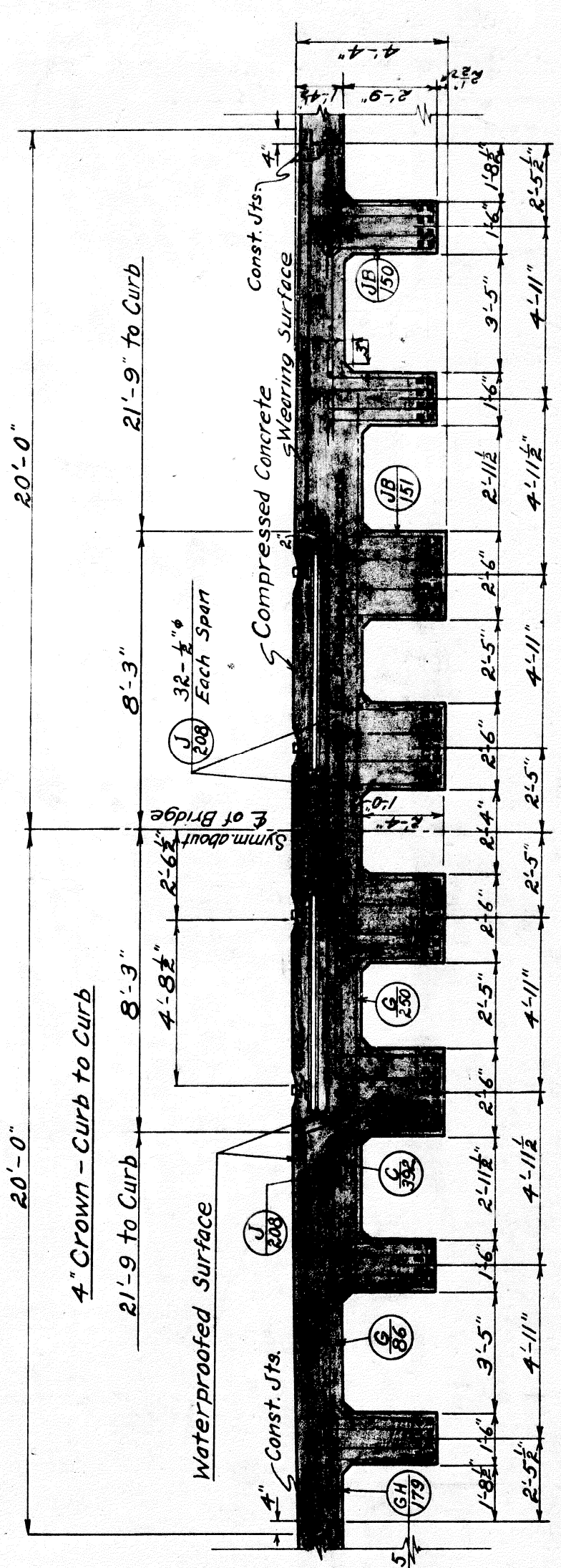
REVISIONS  
Drawn Checked, by  
2-21-29 J.W.C.  
Revised, by  
4-19-29 J.W.C.  
4-19-29 J.W.C.  
4-22-29 J.W.C.

FIELD CHD. JWC 1/16

LAB # 352-A

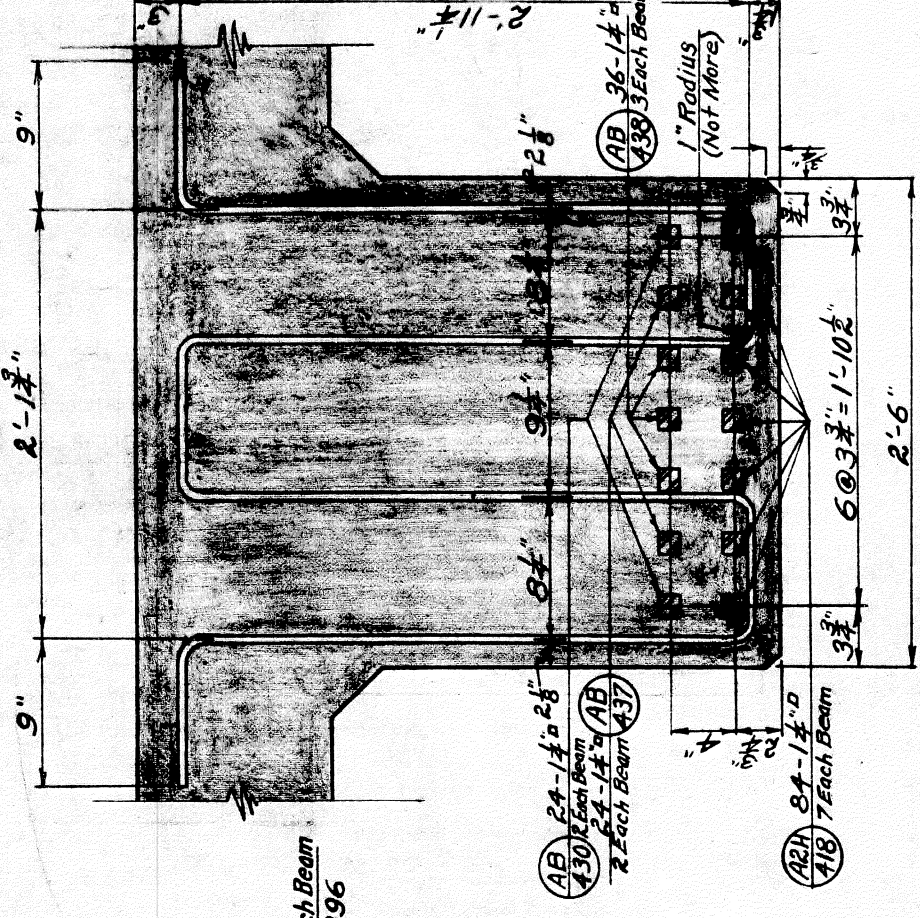


NOTES  
SPECIFICATIONS: Board of Wayne County Road Commissioners Specifications for Highway Bridges, B-1 of 82-22-6.  
CONCRETE: To be proportioned by "Water-Cement ratio" for a strength of 3000 lbs. per sq. inch at 28 days. For method of proportioning and controlling mix, see Specification, Lower level encasing shall not be bevelled. Exposed surfaces to be rubbed as soon as forms are removed. No cement grout to be used on rubbed surfaces.  
REINFORCING STEEL: All bars to be deformed bars of current Intermediate Grade as specified in the Standard Specifications for Bridge Reinforcement Bars (Serial Designation A15-14). All bars to be securely tagged before shipping to job. Bars shall be securely wired together at each intersection. All splices they shall be lapped for a distance of 45 diameters, except vertical bars in back of wall shall be securely wired together. No concrete to be placed until bars are encased and securely fastened in place.  
CONSTRUCTION JOINTS: Shall be located only as shown, and no others allowed except by approval of the Engineer. No footing construction joints will be allowed except at top of footing BACKFILL: Abutments and Wings to be backfilled with clean-up material from Birrell yard.

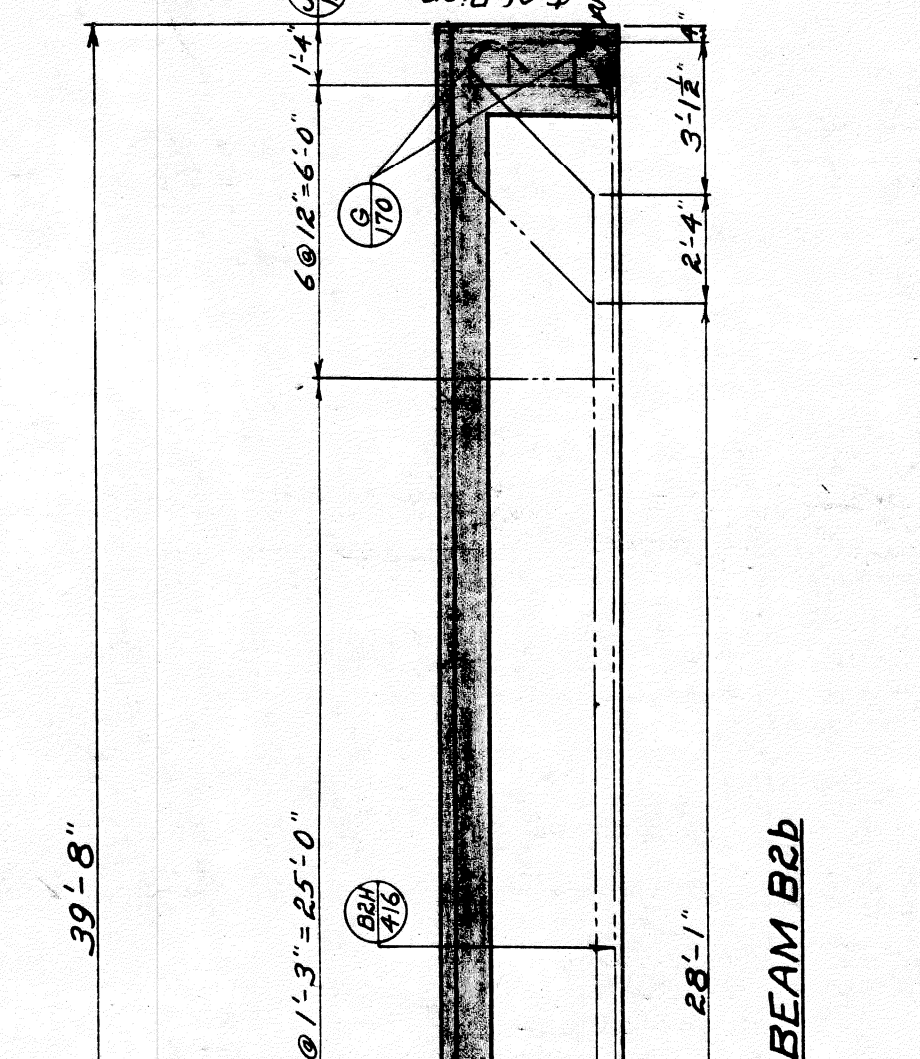


**SECTION**  
Scale: 1/2" = 1'-0"

Note -  
Trough for Track to be filled with concrete,  
temporarily Ties, Rails, and Ballast are future  
construction.



**JB150**  
Scale: 1/2" = 1'-0"



**JB151**  
Scale: 1/2" = 1'-0"

ITEM	QUANTITIES	AMT. UNIT	MARK SIZE	NO.	REMARKS
CONCRETE					
Beams & Slabs	406.1	Cu Yds	B4	41-8	L-Wise, Bottom-Heeled
Wearing Surfaces	309.4	Sq Yds	AB 430		" " " "
Rapid Transit Pave	72.4	Cu Yds	AB 437		" " " "
STEEL					
Reinforcing	93660	Lbs.	BB 430	24	43-0
Saddles - 4 Bar	96		BB 436		" " " "
Separators - 4 "	72		JB 151	540	15-1
Separators - 4 "	72		JB 150	396	15-0
			G 170	24	17-0
			C 392	126	39-2
			J 208	96	20-8
			J 208	57	20-8
			G 850	216	25-0
			G 86	432	81-5

For General Notes see Sheet 5

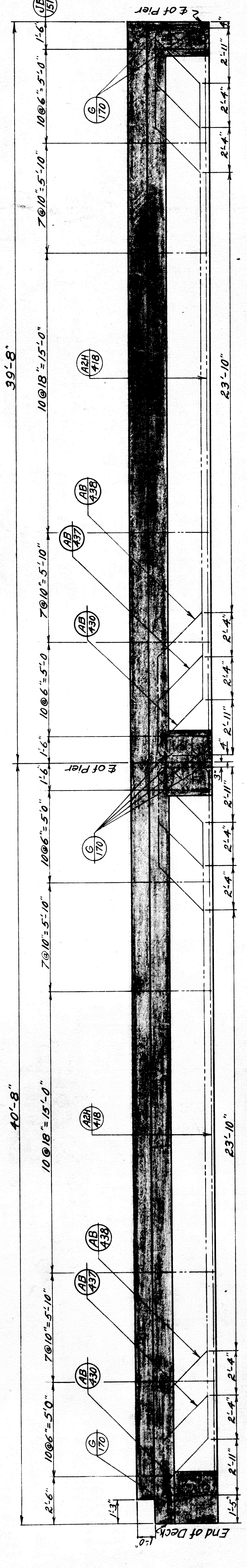
**BOARD OF WAYNE COUNTY ROAD COMMISSIONERS**  
 DETROIT, MICHIGAN  
 WM. F. BUTLER, CHAIRMAN  
 JOHN S. HAGERTY, COMMISSIONER  
 EDWARD N. HINES, COMMISSIONER

**SUPERSTRUCTURE-MIDDLE POUR**  
 PLYMOUTH ROAD-MILE: 6.7  
 BRIDGE B-1 of 82-22-6 OVER FOUZE RIVER

DESIGNED BY J.W.C. DRAWN BY G.J.P. CHECKED BY P.A.N.  
 DATE 6-3-29 SCALES AS SHOWN CONTRACTOR  
 APPROVED BY [Signature] REG. CIV. ENR. APPROVED BY [Signature] REG. CIV. ENR.  
 SHEET NO. 6

**REVISIONS**  
 Drawing Completed 6-17-29  
 Drawing Checked 6-17-29  
 Drawing Approved 6-17-29

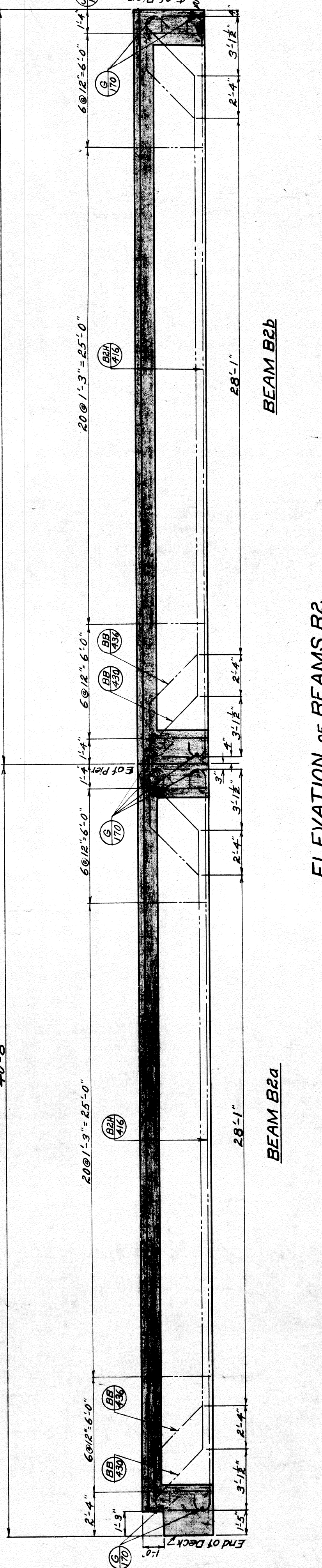
**JOB NO. 352**  
 ISSUE NO. 2  
 DATE 11-11-29



**ELEVATION of BEAMS B1**  
Scale: 1/4" = 1'-0"

BEAM B1a

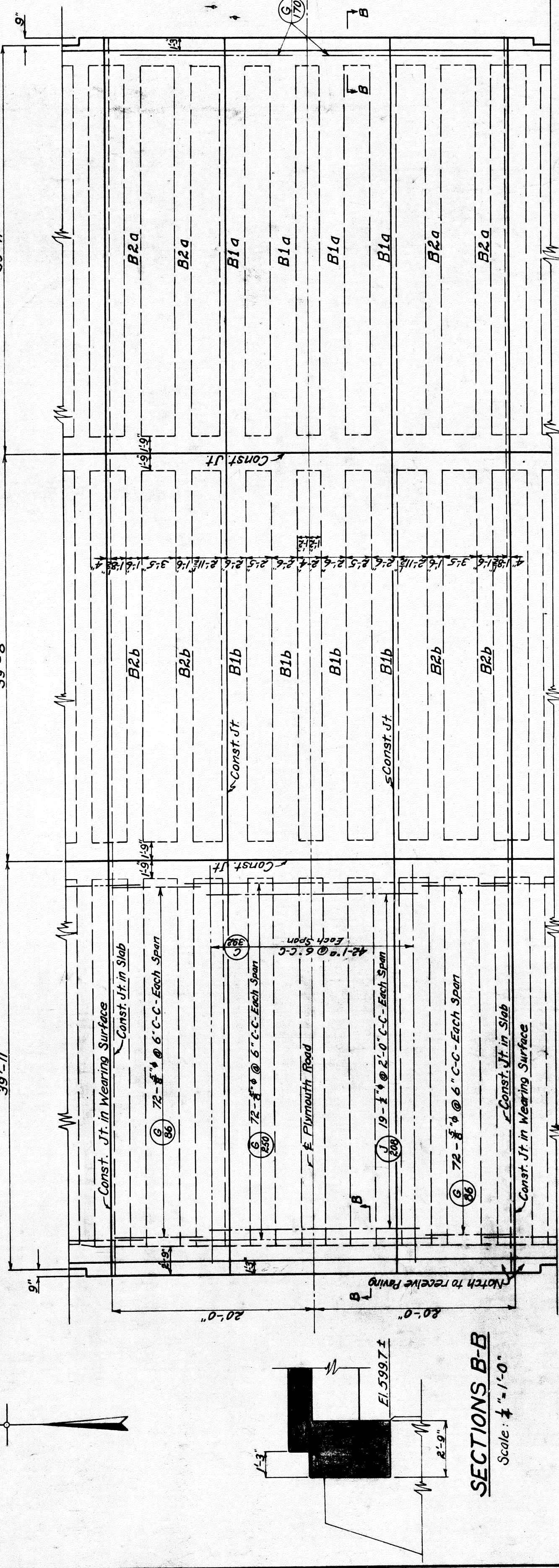
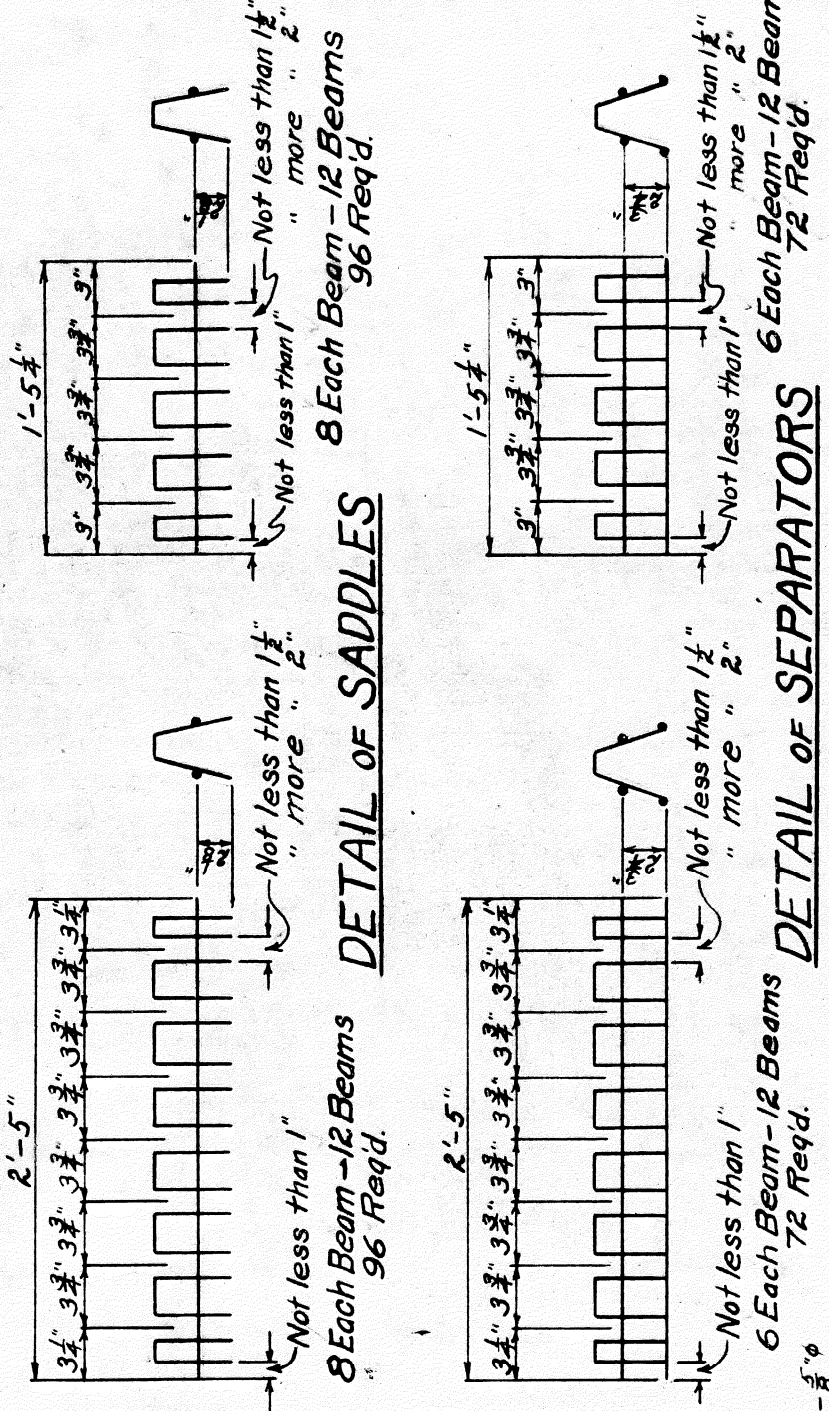
BEAM B1b



**ELEVATION of BEAMS B2**  
Scale: 1/4" = 1'-0"

BEAM B2a

BEAM B2b



**PLAN**  
Scale: 1/8" = 1'-0"

**SECTIONS B-B**  
Scale: 1/2" = 1'-0"

Field Chkd. 7/22/29 JMC