

MICHIGAN STATE HIGHWAY DEPARTMENT
CHARLES M. ZIEGLER
STATE HIGHWAY COMMISSIONER
FRONTENAC AVE. CROSSING THE EDEL FORD EXPRESSWAY IN DETROIT
GENERAL PLAN OF STRUCTURE

HAZELET & ERDAL CONSULTING ENGINEERS FILE NO. 755

APPROVED: [Signature] 8-9-54
APPROVED: [Signature] 8-1-54
APPROVED: [Signature]

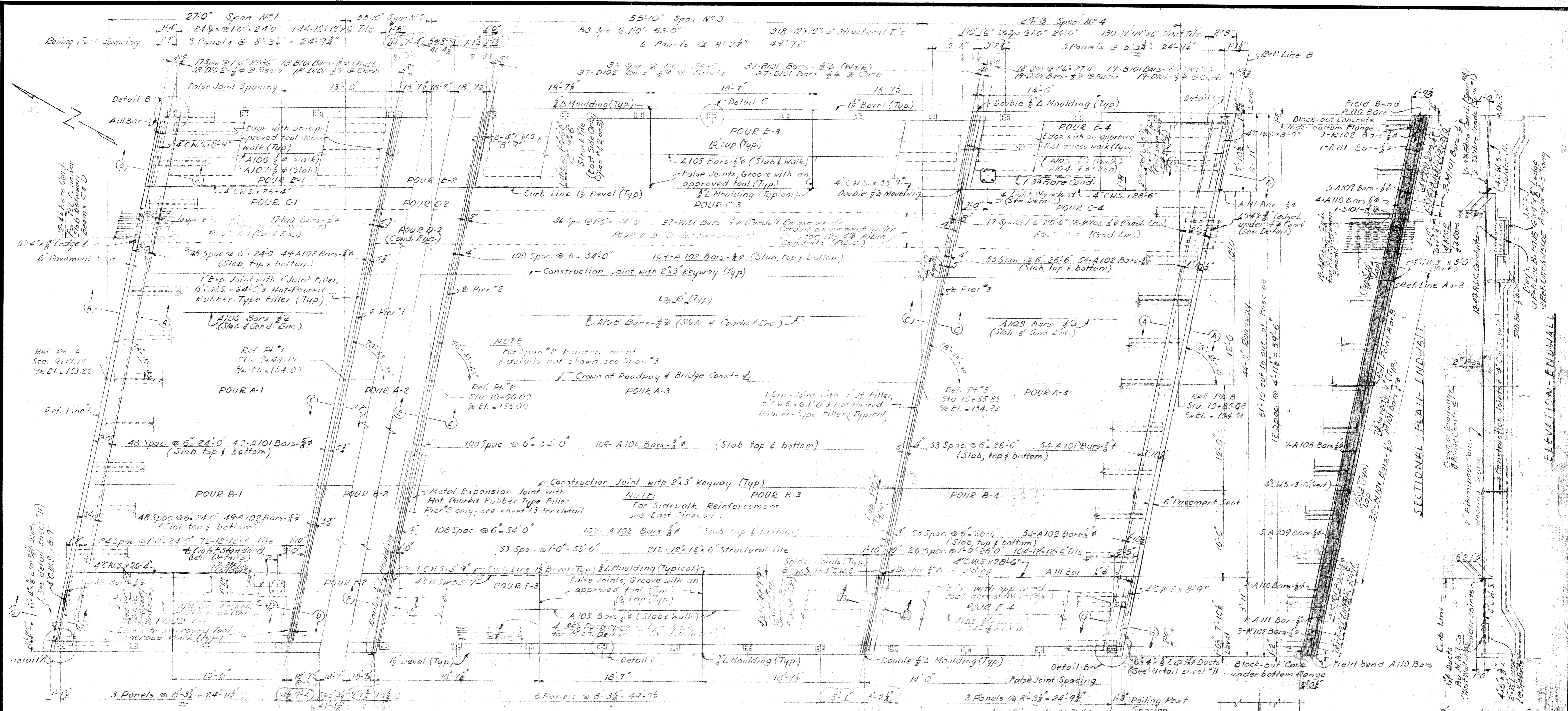
NO.	DESCRIPTION	DATE	BY

REVISIONS

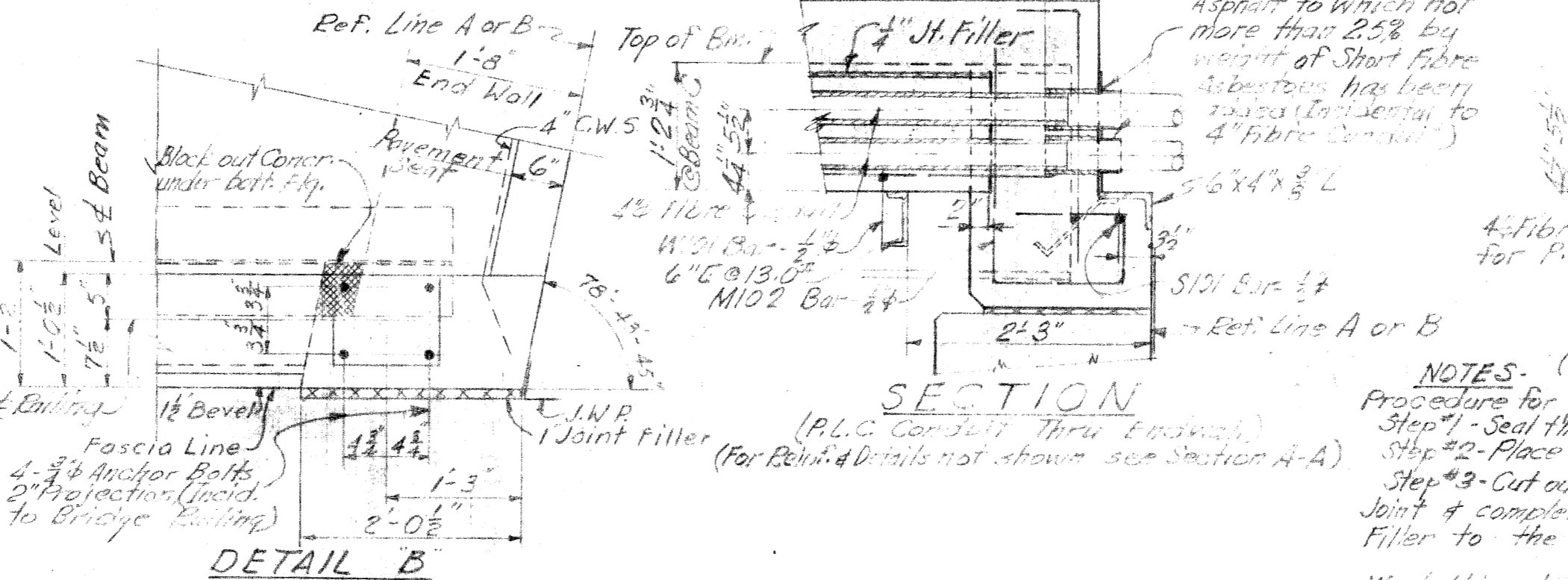
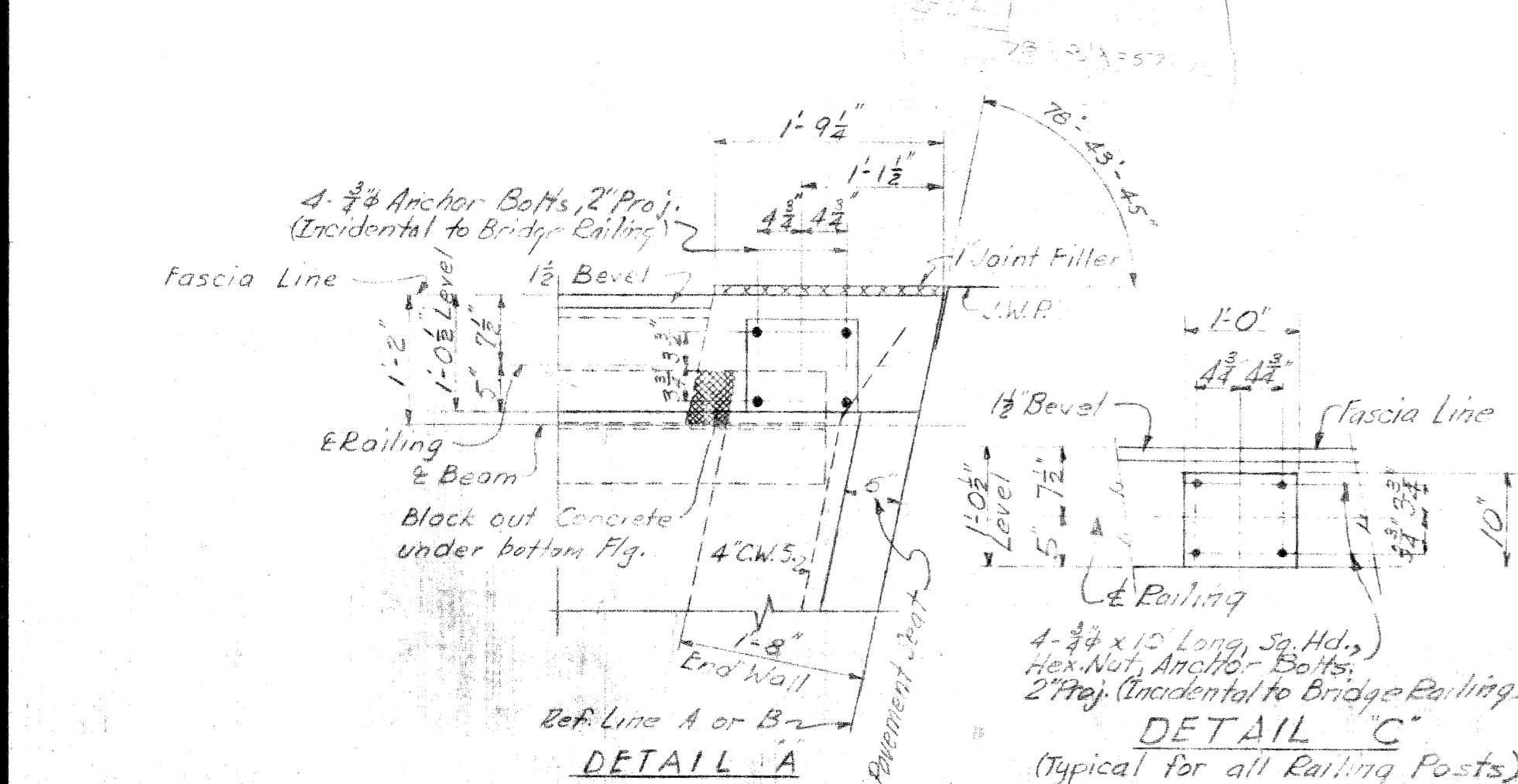
CHIEF BRIDGE DRAFTSMAN
ENGINEER OF BRIDGE DESIGN
BRIDGE ENGINEER

FORNAN BOSS
DRAWN BY
CHECKED BY
1 SHEET OF 5

B63 OF 82-22-10



PLAN



SECTION

ELEVATION

MOULDING DETAILS

DETAIL B

DETAIL C

GENERAL NOTES

For Sections A-A to G-G (incl.), Slab thickness Dimensions, & Light Standard Details see Sheet No. 11.
For Railing & Metal Exp. Joint Details see Sheet No. 12 & 13.
For Bevel, Moulding, Bar Chair, & Railing Details not shown here on see M.S.A.D. Drawings R4 & R5.
C.W.S. means Copper Waterstop. J.W.P. denotes Joint Waterproofing.

NOTES

For Reinforcement Details not shown see Sec. E-E or C-C.
Procedure for placing Hot-Poured Rubber-Type Filler in Joints:
Step #1 - Seal the Joint in the Concrete Slab only.
Step #2 - Place the Bit Comp. Wearing Course across the Joint.
Step #3 - Cut out the Bit Comp. Wearing Course over the Joint & complete the placing of Hot-Poured Rubber-Type Filler to the Top of the Roadway Surface.
Work this sheet with Sheet Nos. 11, 12, & 13.

REVISIONS

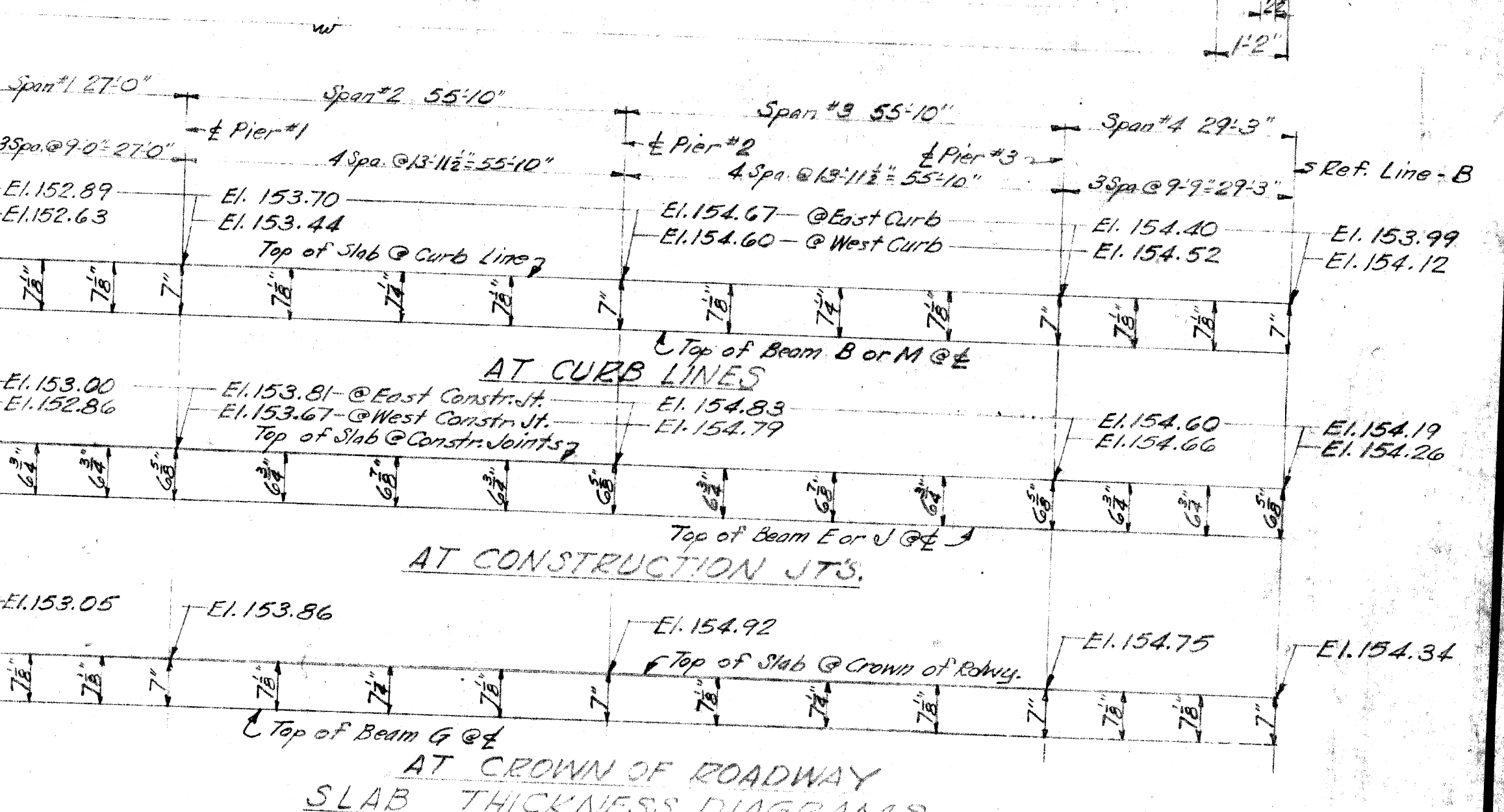
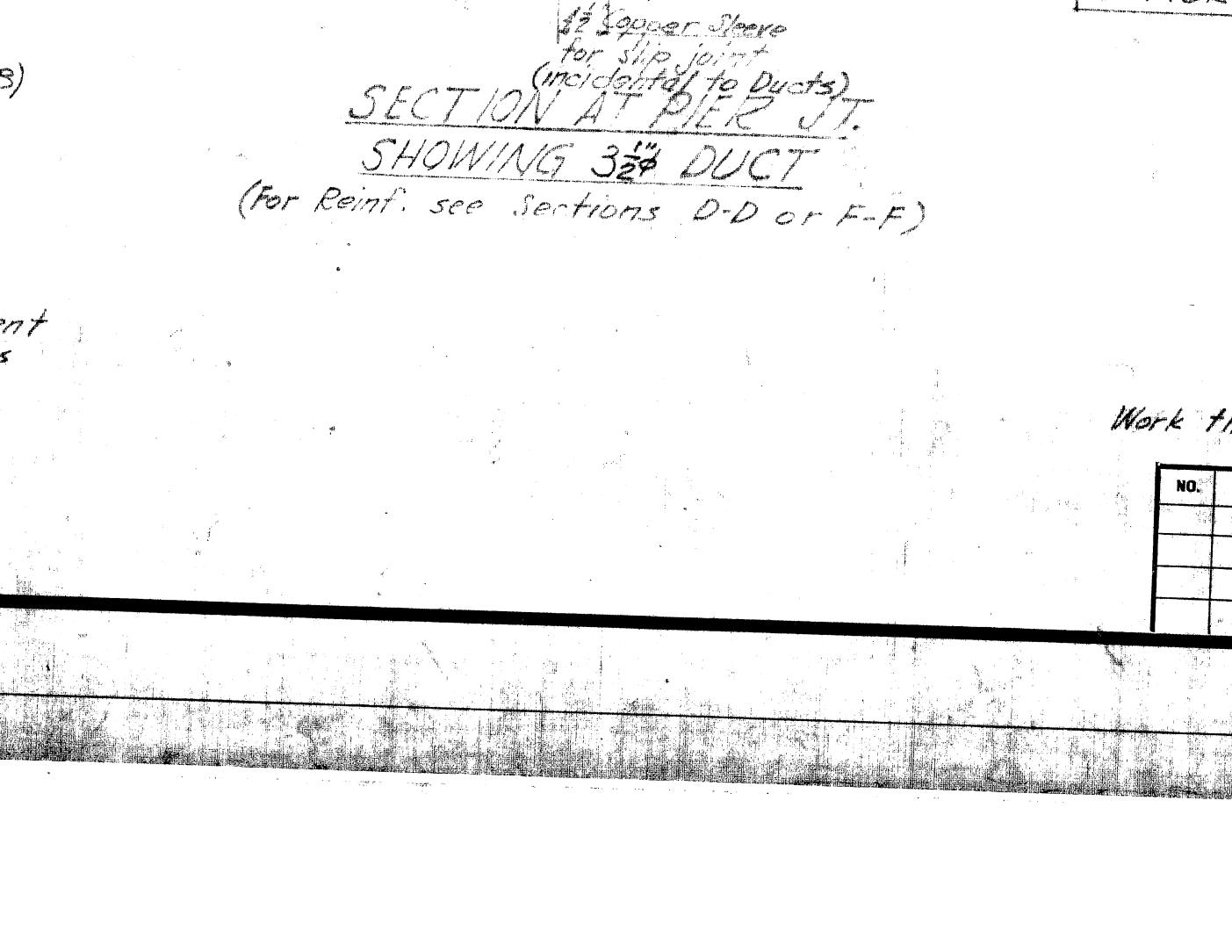
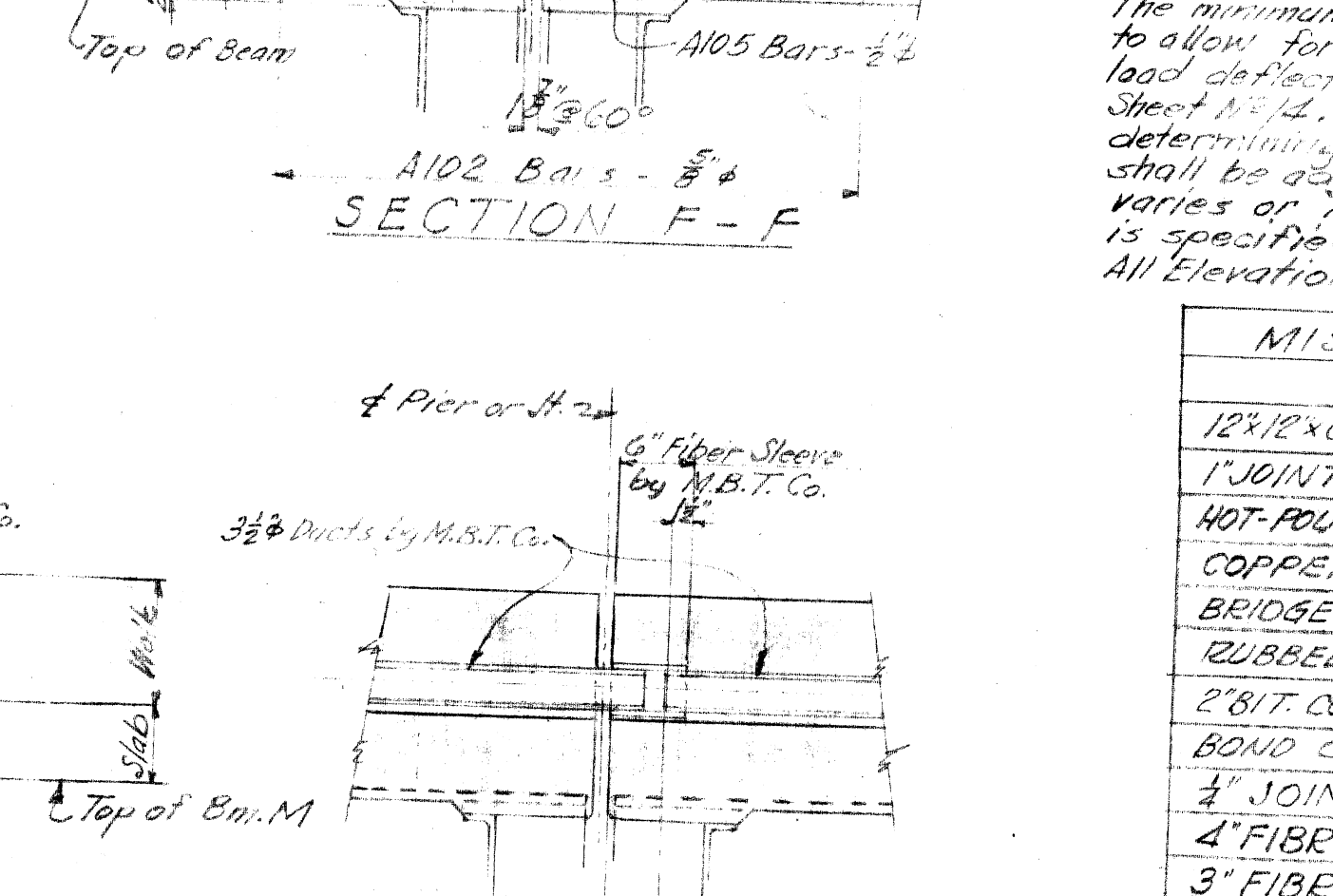
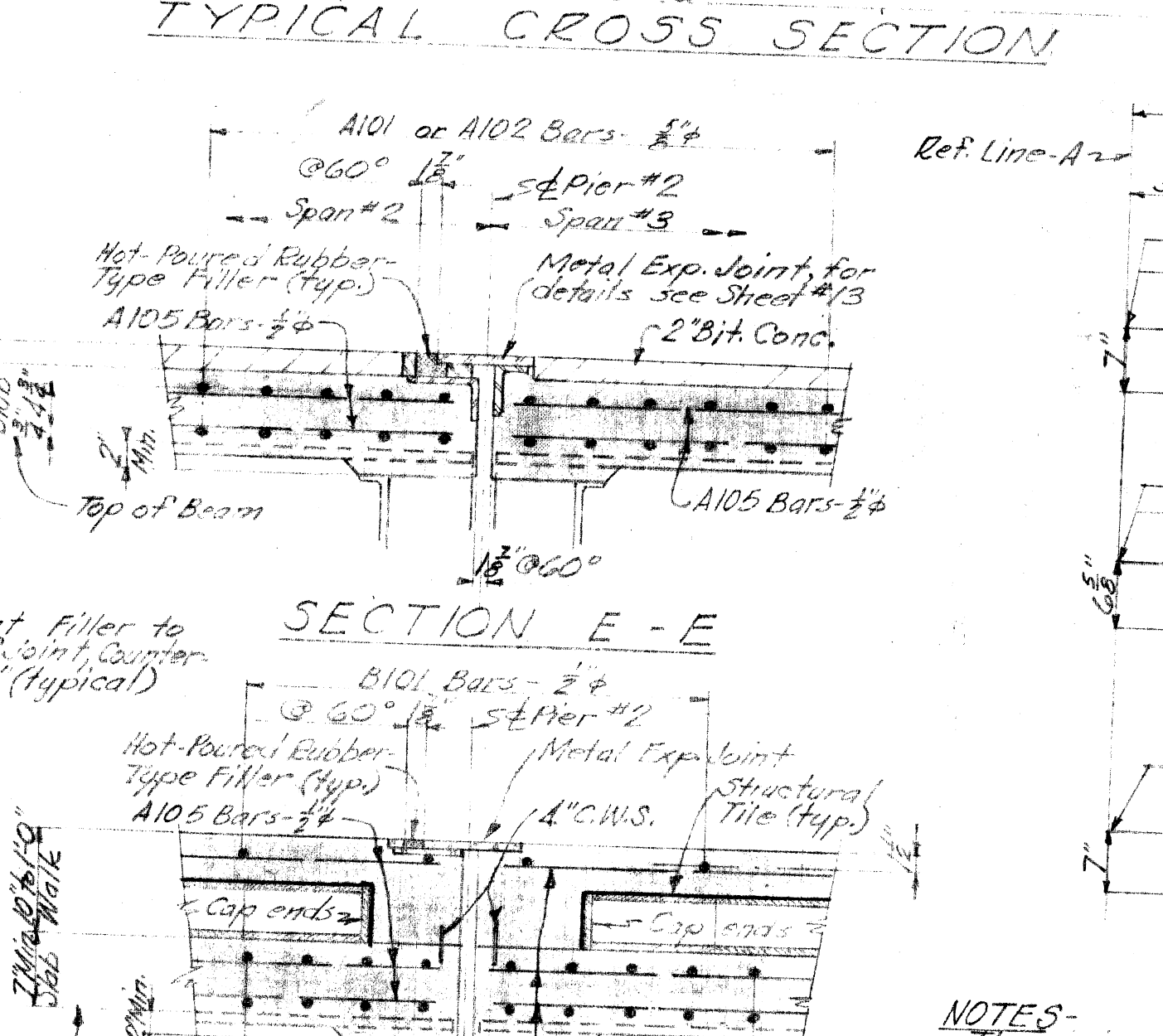
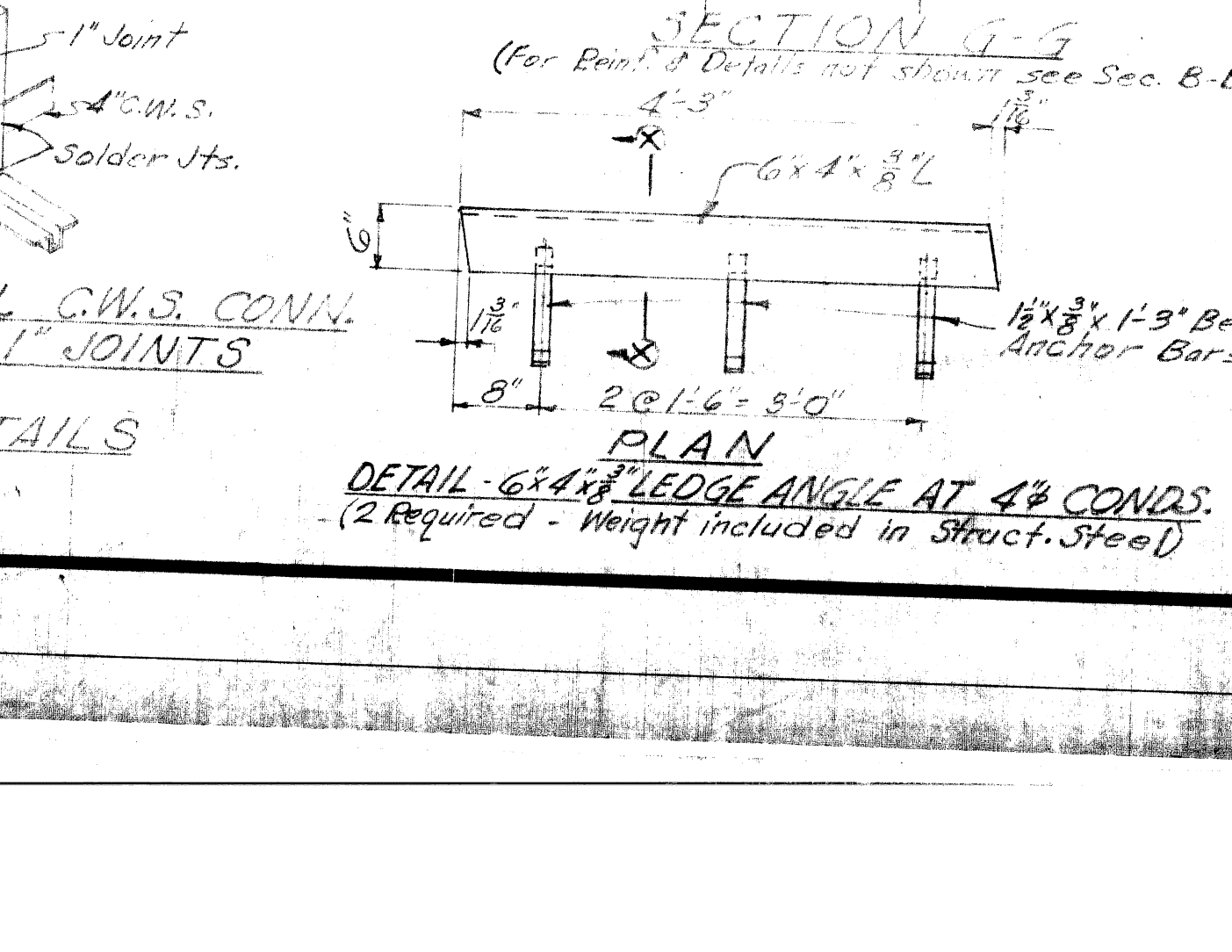
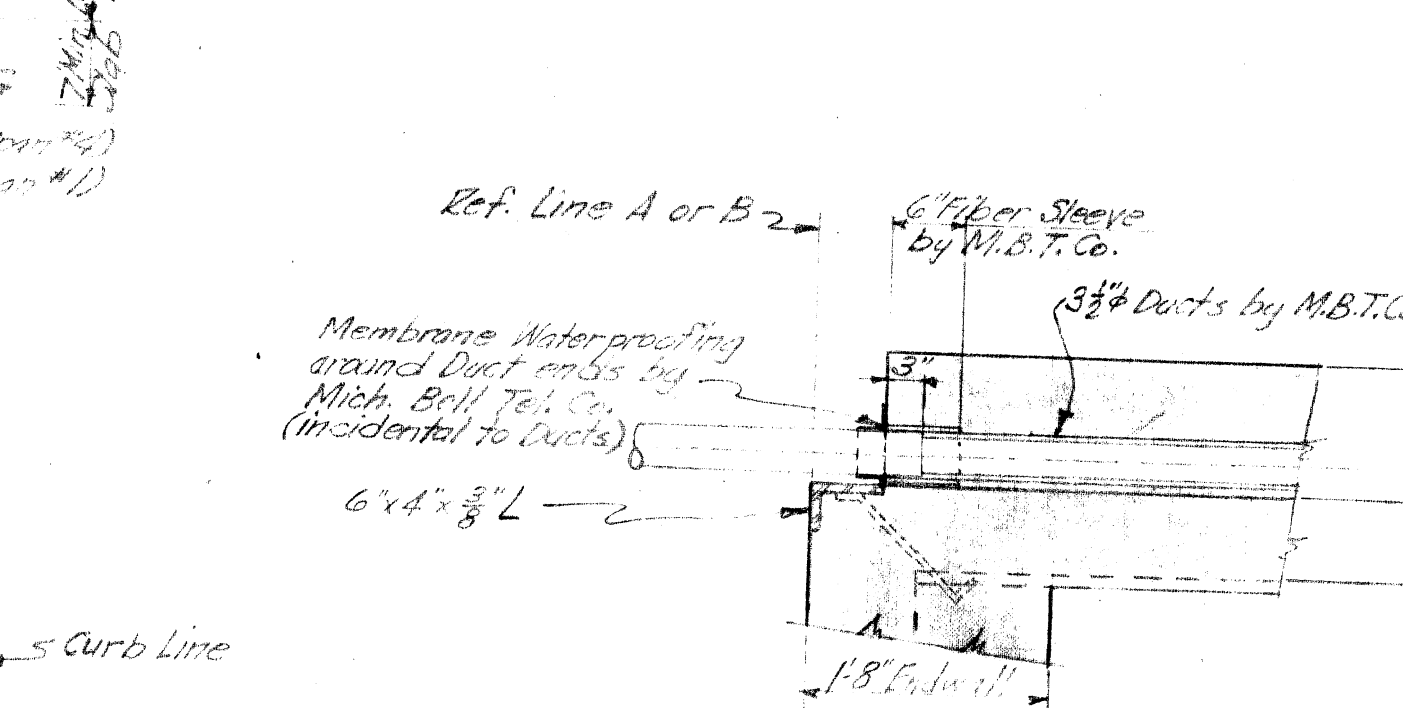
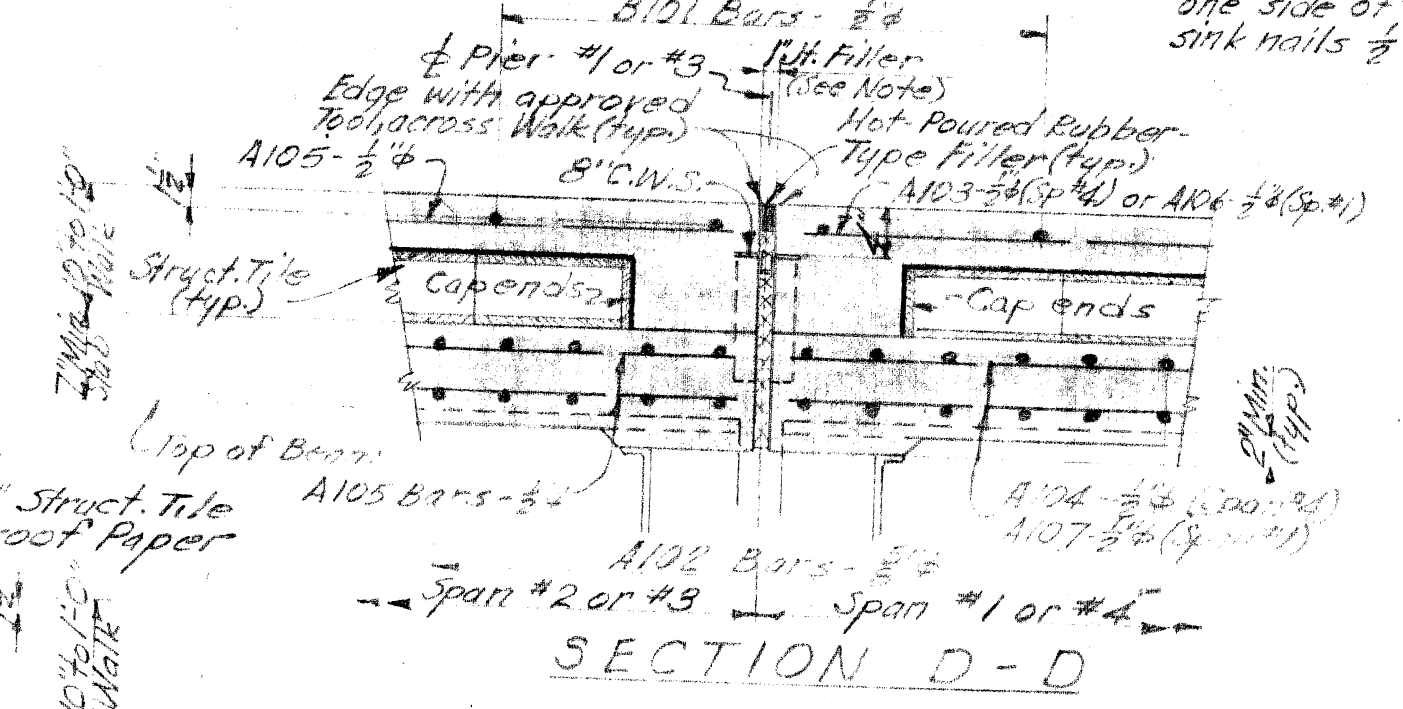
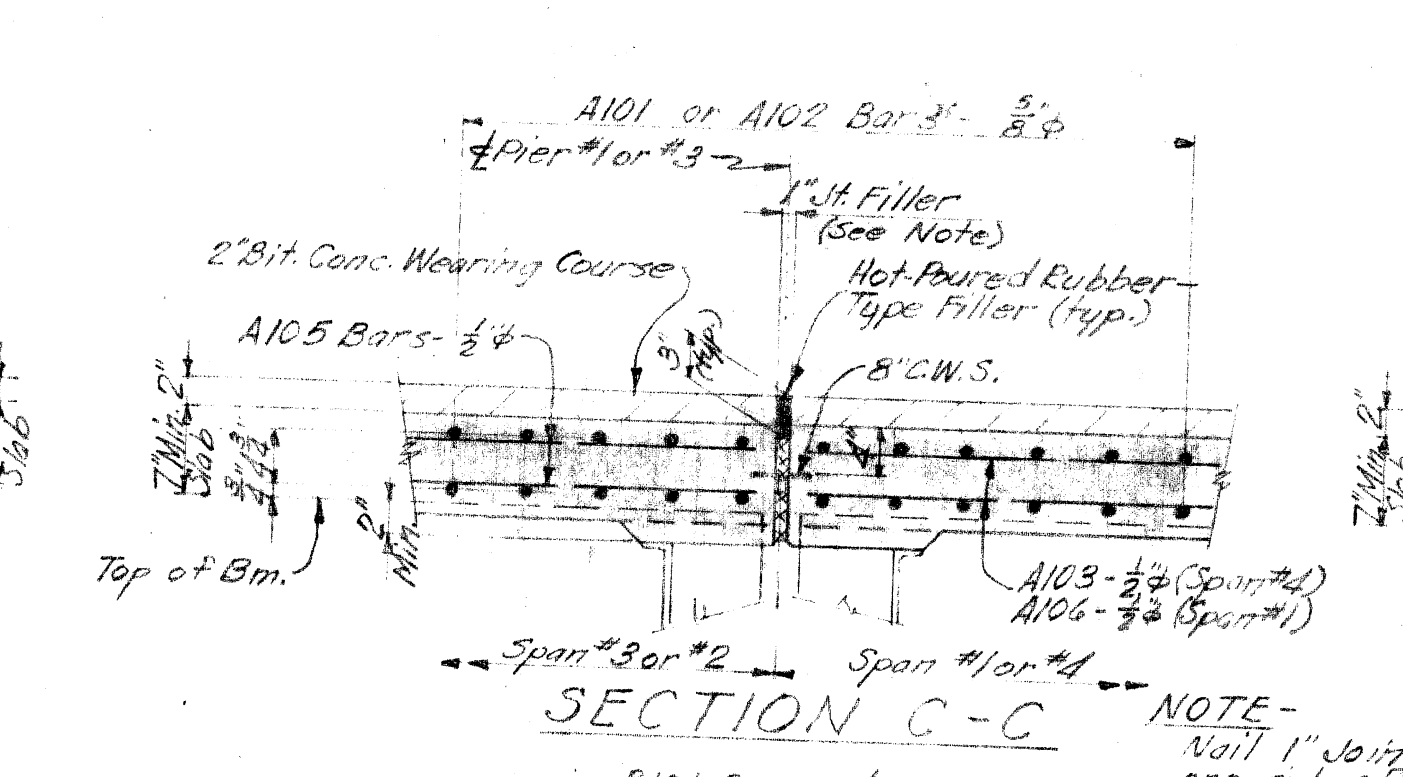
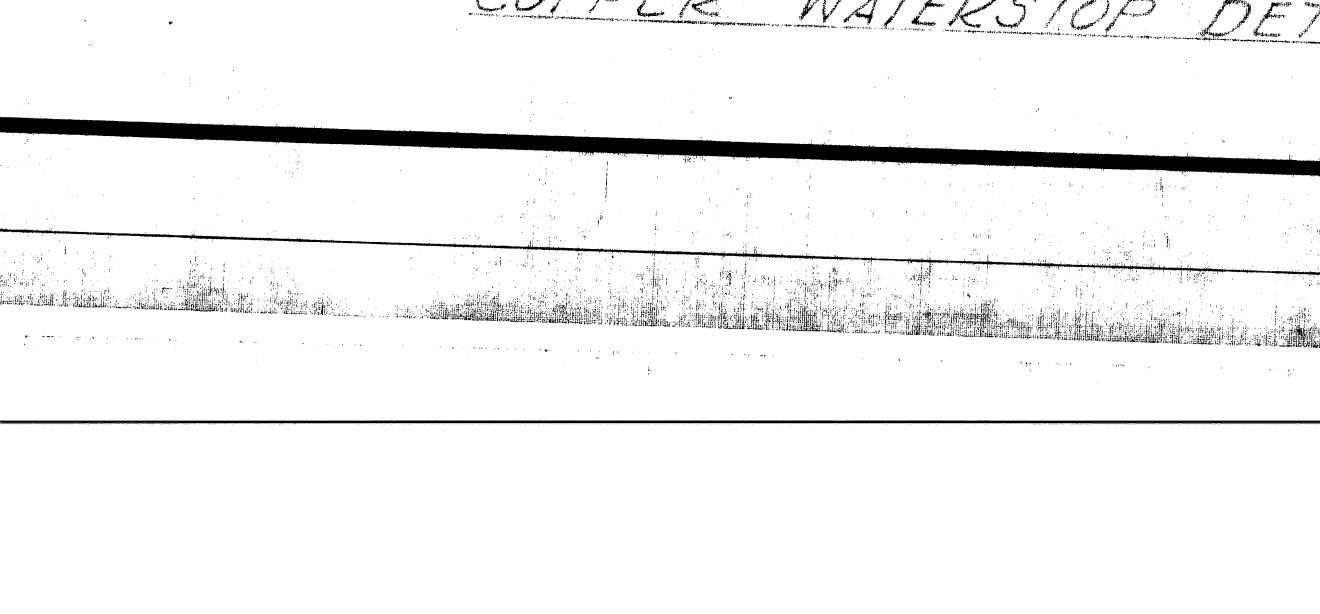
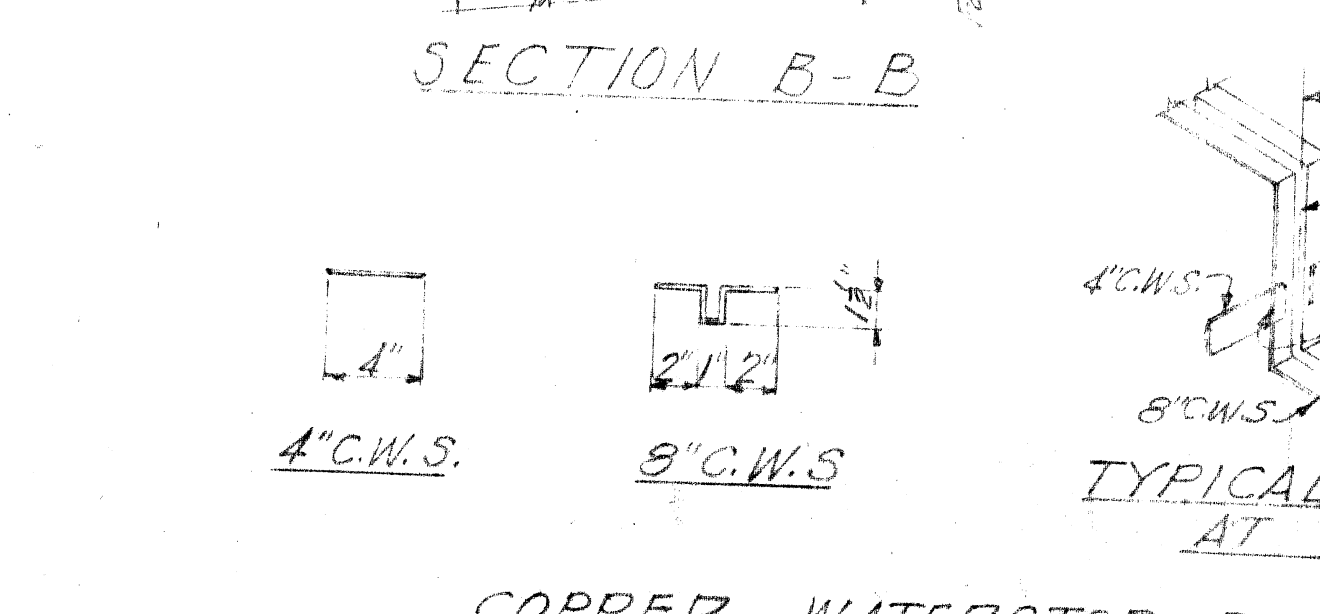
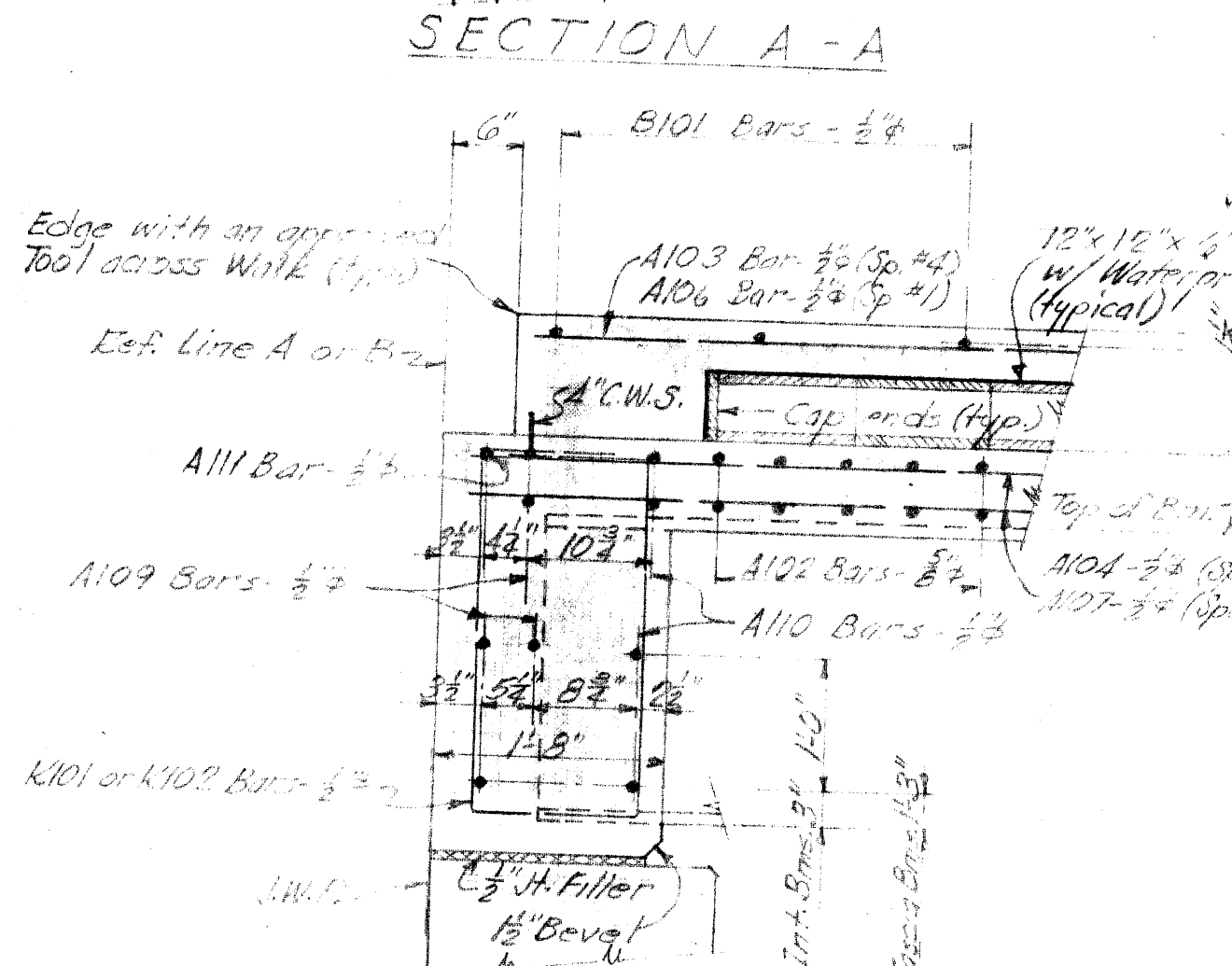
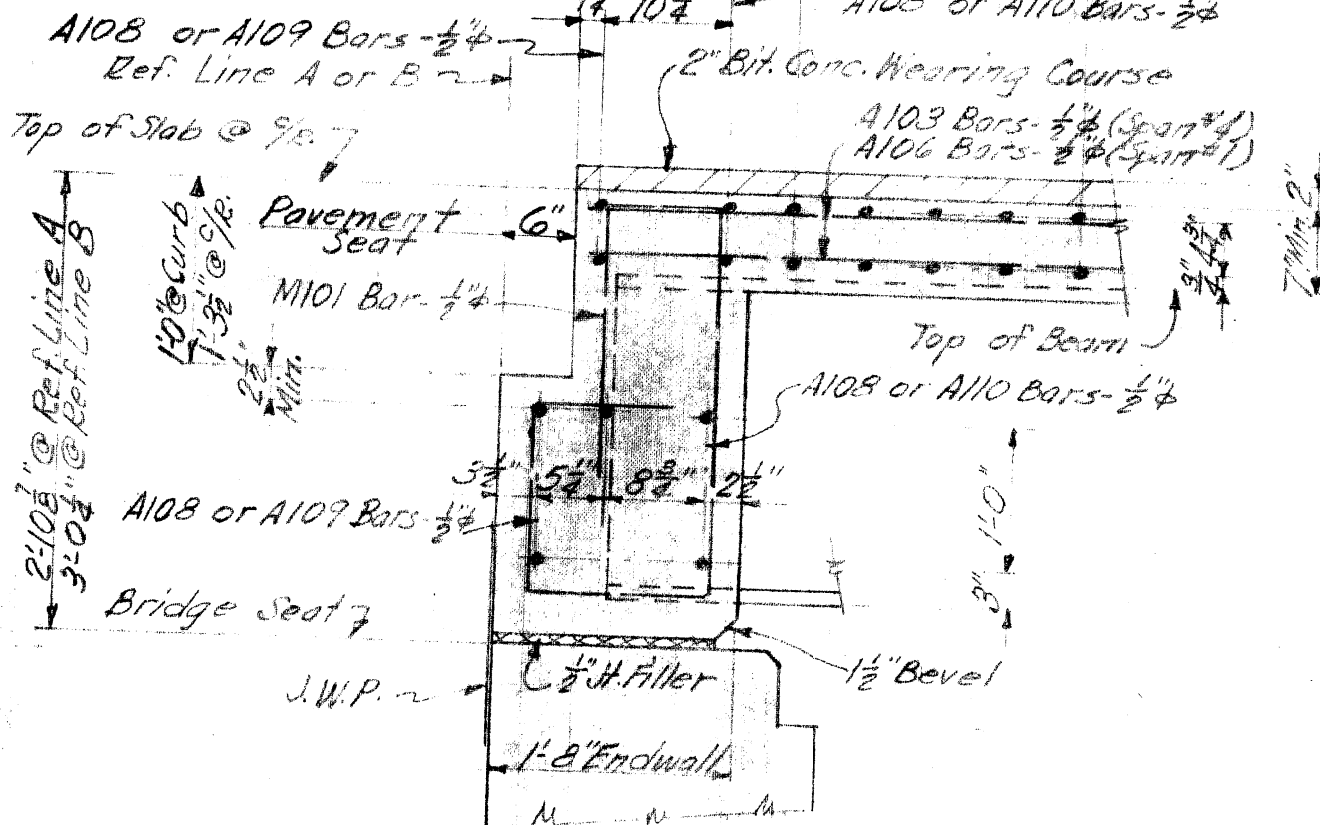
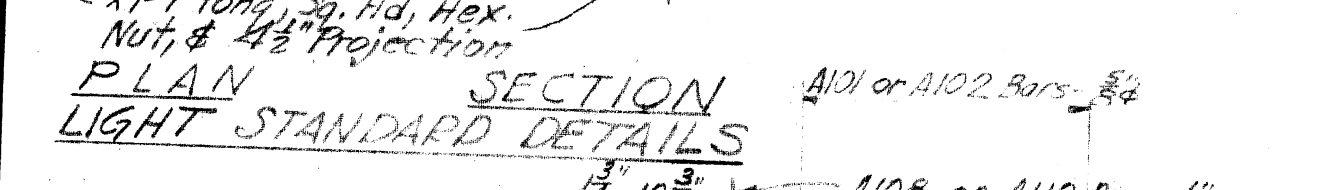
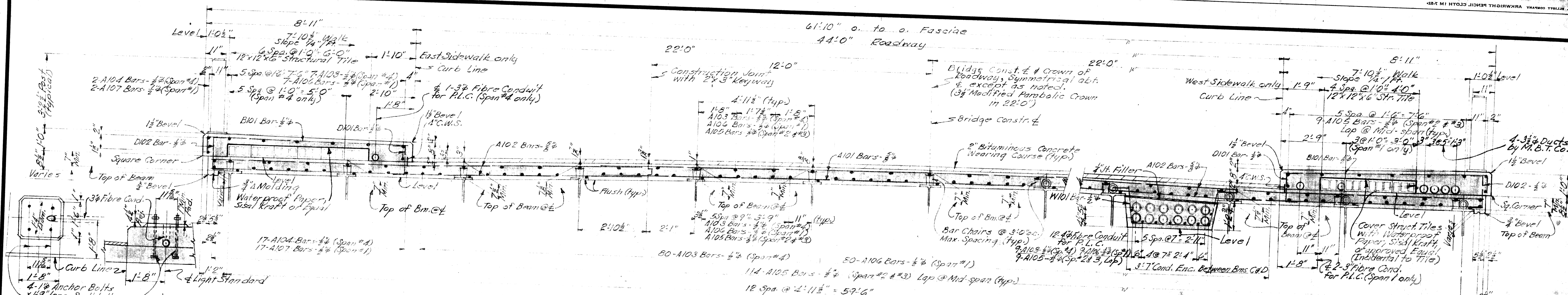
NO.	DESCRIPTION	DATE	BY

MICHIGAN STATE HIGHWAY DEPARTMENT
CHARLES M. ZIEGLER
 STATE HIGHWAY COMMISSIONER
 FRONTENAC AVE. CROSSING THE EDSSEL FORD EXPRESSWAY IN DETROIT
SUPERSTRUCTURE DETAILS

HAZELT & ERDAL - CONSULTING ENGINEERS FILE # 755

APPROVED	<i>M. C. Jones</i>	8-25-54
TRACED BY	CHIEF BRIDGE DRAFTSMAN	8-25-54
APPROVED	<i>R. E. Erdal</i>	8-25-54
CHECKED BY	ENGINEER OF BRIDGE DESIGN	8-25-54
APPROVED	BRIDGE ENGINEER	

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NOTES:
 The minimum slab thickness is 7" and is increased to allow for transverse crown, vertical curve, dead load deflection, & pre-camber. For camber see Sheet No. 14. Particular care shall be taken in determining header elevations. Slab thickness shall be adjusted as required if actual camber varies or if camber exists where no camber is specified.
 All Elevations are to top of Concrete Slab.

MISCELLANEOUS QUANTITIES		GRADE A (G.B) CONCRETE QUANTITIES			
ITEMS	UNIT AMOUNT	POUR LOCATION	CU.YDS.	POUR LOCATION	CU.YDS.
12"x12"x6" STRUCTURAL TILE	EACH 1510	A1 SLAB	19.0	D1 COND. ENGMT	9.2
1" JOINT FILLER	SQ. FT. 131	A3	32.9	D2	6.6
HOT-POURED RUBBER-TYPE FILLER	UN. FT. 194	A4	32.9	D3	6.6
COPPER	LBS. 223	B1	20.4	D4 COND. ENGMT	3.5
BRIDGE PAINTING	UN. FT. 532.3	B2	15.3	E1 SIDEWALK	5.5
RUBBED SURFACE FINISH	SQ. FT. 799	B3	25.9	E2	11.2
2" BIT. CONC. WEARING COURSE	TONS 90	B4	25.9	E3	11.2
BOND COAT A2-E	GALS. 12.3	C1	16.5	E4	6.4
1" JOINT FILLER	SQ. FT. 670	C2	15.3	F1	6.5
4" FIBRE CONDUIT (P.L.C.)	LIN. FT. 2,004	C3	25.9	F2	12.4
3" FIBRE CONDUIT (P.L.C.)	LIN. FT. 72	C4	25.9	F3	12.4
			16.3	F4 SIDEWALK	6.5
		Total Superstructure Grade A (G.B) Concrete 364.2 Cu. Yds.			
The above Pour designations do not denote the pour sequence.					

Work this sheet with Sheet No. 10, 12, & 15

MICHIGAN STATE HIGHWAY DEPARTMENT
 CHARLES M. ZIEGLER
 STATE HIGHWAY COMMISSIONER
 FRONTENAC AVE. CROSSING THE EDSSEL FORD EXPRESSWAY IN DETROIT

SUPERSTRUCTURE DETAILS

HAZELET & ERDAL - CONSULTING ENGINEERS FILE N 8755

APPROVED: *M.S. Jones* 8-7-54
 CHIEF BRIDGE DRAFTSMAN

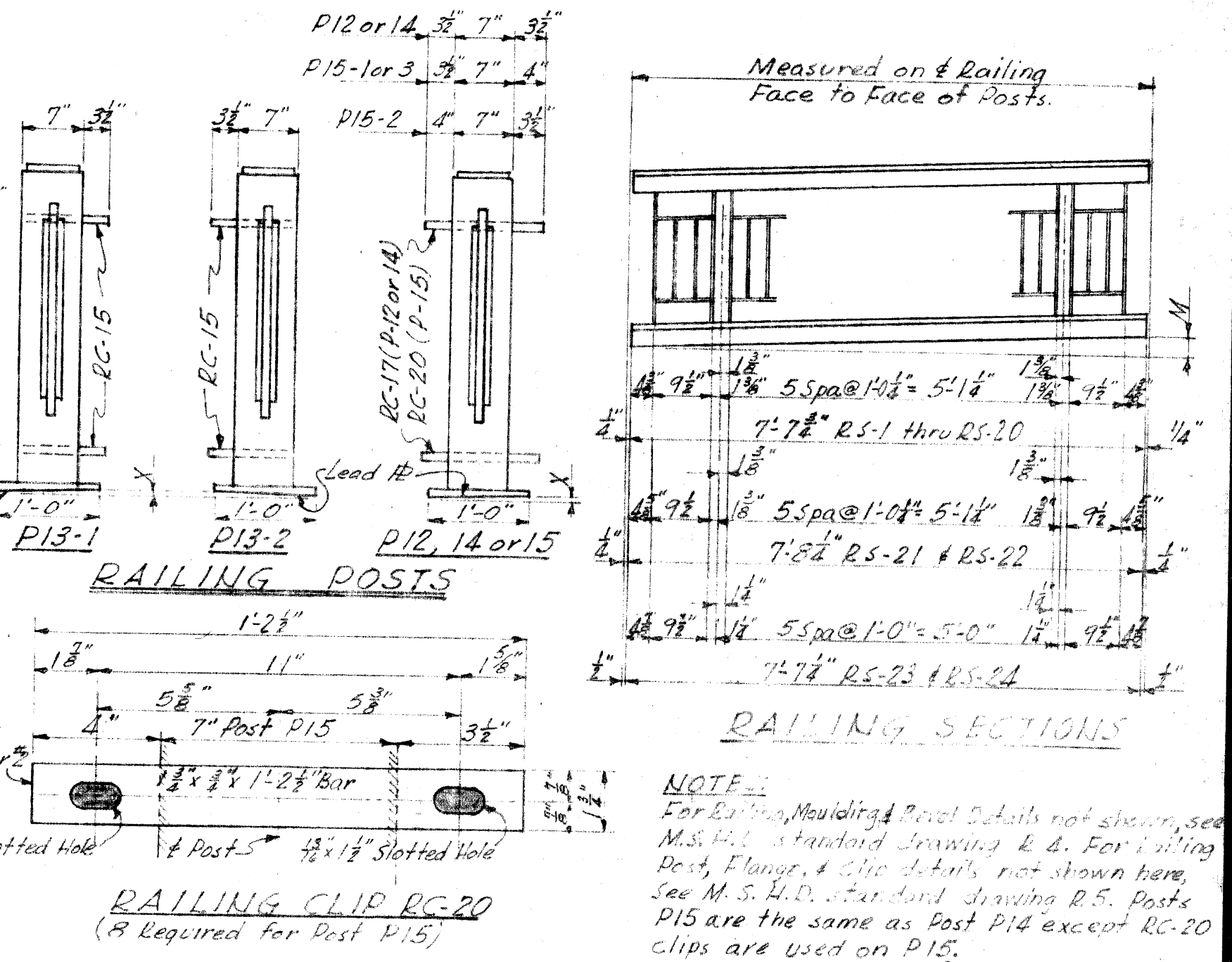
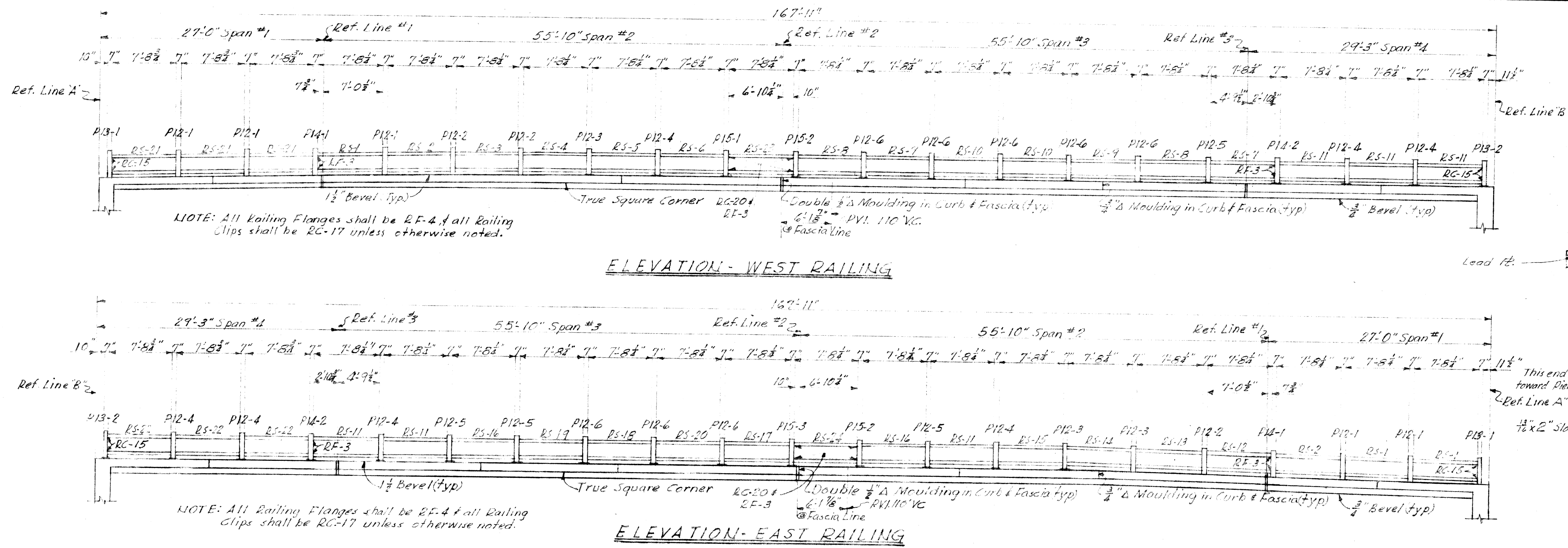
APPROVED: *E.S. Elmore* 8-9-54
 ENGINEER OF BRIDGE DESIGN

APPROVED: _____
 BRIDGE ENGINEER

NO. _____ DESCRIPTION _____ DATE _____ BY _____

SQUAD BOSS: *W.P.* 6-18-54
 DRAWN BY: *BEK* 8-9-54
 TRACED BY: _____
 CHECKED BY: *W.H.S.* 9-11-54
 SHEET 11 OF 17

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BILL OF RAILING MATERIAL							
MARK	QTY REQ	M	DESCRIPTION	MARK	QTY REQ	X	DESCRIPTION
RS-1	5	2 1/2"	RAILING SECTION	RC-15	8		RAILING CLIP
RS-2	2	2 3/8"	"	RC-17	68		"
RS-3	1	2 1/2"	"	RC-20	8		"
RS-4	1	2"	"				"
RS-5	1	1 3/8"	"	P12-1	5	3/8"	RAILING POST
RS-6	1	1 1/2"	"	P12-2	3	3/16"	"
RS-7	1	1 1/8"	"	P12-3	3	1/4"	"
RS-8	2	5/8"	"	P12-4	7	5/16"	"
RS-9	2	1/2"	"	P12-5	4	1/8"	"
RS-10	2	1/2"	"	P12-6	3	0"	"
RS-11	6	1 1/4"	"				"
RS-12	1	2 1/2"	"	P13-1	2	5/8"	"
RS-13	1	2 1/8"	"	P13-2	2	3/16"	"
RS-14	1	1 1/2"	"	P14-1	2	3/8"	"
RS-15	1	1 1/2"	"	P14-2	2	3/16"	"
RS-16	2	1/2"	"	P15-1	1	3/16"	"
RS-17	1	3/8"	"	P15-2	2	1/8"	"
RS-18	1	1/2"	"	P15-3	1	0"	"
RS-19	1	5/8"	"				"
RS-20	1	0"	"	BOLTS	160		3/4" x 2 1/2" Hex. Hd. Bolts
RS-21	3	2 3/16"	"	WASHERS	160		3/4" Lockwashers
RS-22	3	1 1/4"	"	ANCHOR BOLTS	168		3/4" x 10" Bolts, Sq. Hd. Hex Nut, Proj. 2"
RS-23	7	1 1/2"	"				"
RS-24	7	3/8"	"				"
RF-3	16		RAILING FLANGE	Lead Pts	4.2		Lead Pts or 1/2" Fabrika AH
RF-4	114		"				** Approximate Total Railing Weight = 21,976#

* Railing sections need not be beveled when slope is less than 1/4" per foot or the maximum ordinate (m) is less than 1/2" total.
 ** Not included in structural steel weight.

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RAILING DETAILS

HAZELET & ERDAL - CONSULTING ENGINEERS FILE # 755

APPROVED	<i>N.C. Long</i>	8-7-57	CHIEF BRIDGE DRAFTSMAN
APPROVED	<i>[Signature]</i>	8-7-57	ENGINEER OF BRIDGE DESIGN
APPROVED			BRIDGE ENGINEER

SQUAD BOSS	
DRAWN BY	J.R.K. 7-1-57
TRACED BY	
CHECKED BY	N.C.A. 8-11-57
SHEET	12 OF 51

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REVISIONS			
NO.	DESCRIPTION	DATE	BY