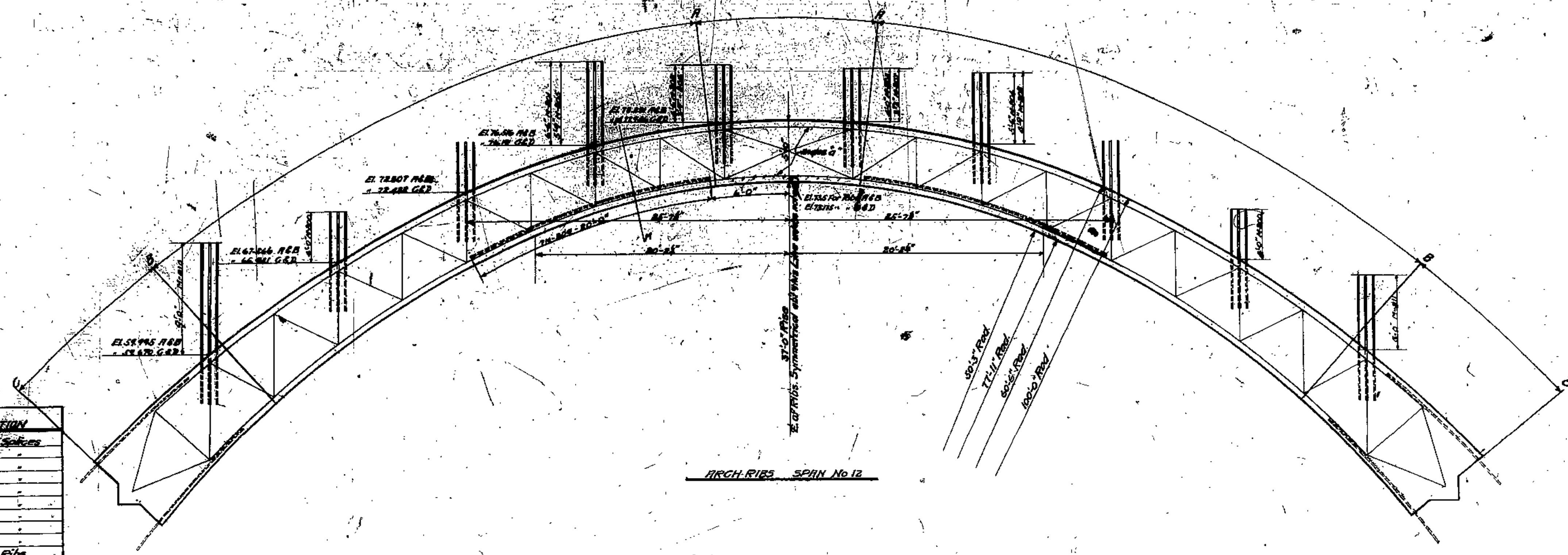
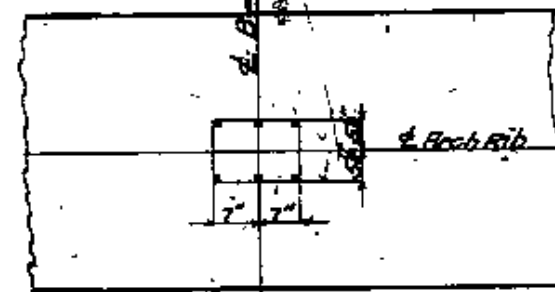


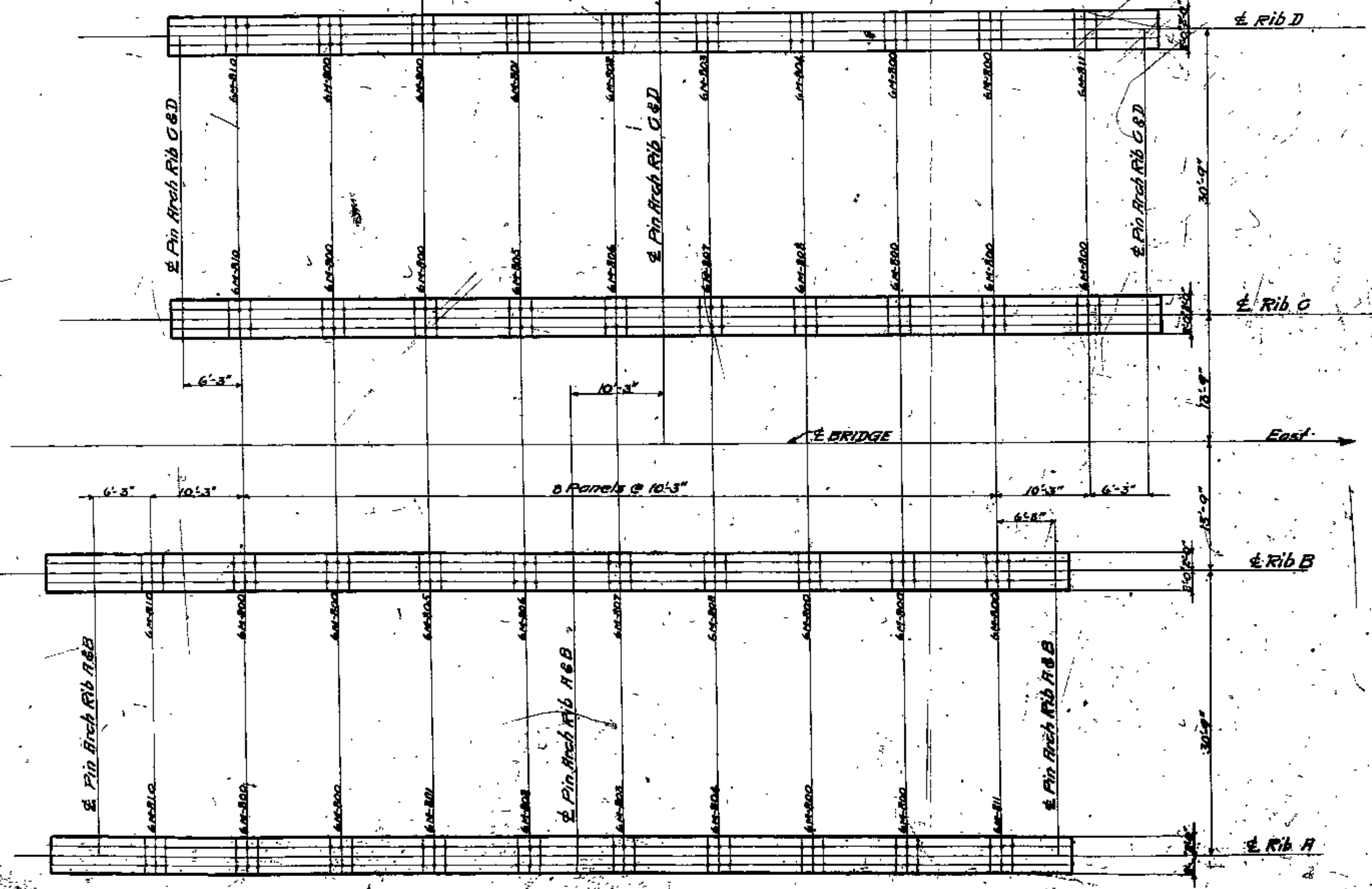
All - Rivets of Dam. Except in 3-25" which are of Dam.  
 All steel work must be absolutely free from all oil, grease  
 and paint.

PIRICK	No. of RIBS	SIZE	LENGTH	BEND	LOCATION
800	1/2"	1 1/2"	8'-0"	0	Column Splices
801	1/2"	10'-0"			
802	1/2"	8'-0"			
803	1/2"	7'-6"			
804	1/2"	9'-0"			
805	1/2"	9'-0"			
806	1/2"	7'-0"			
807	1/2"	7'-0"			
808	1/2"	8'-0"			
809	1/2"	10'-0"			Arch Ribs
810	1/2"	13'-0"			Column Splices
811	1/2"	16'-0"			

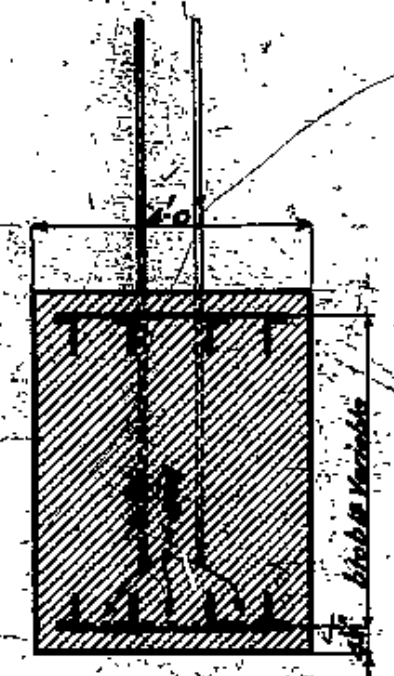


ARCH RIBS SPAN No. 12

- METHOD OF CONSTRUCTION**
1. Erect all the steel work except the angles marked 'G', closing the arch ribs at the crown.
  2. Pour concrete in arch ribs between the points A and B, keeping the load symmetrical.
  3. Pour concrete between points B and C.
  4. Erect angles 'G'.
  5. Pour concrete between points C and D.
  6. Allow a sufficient time for concrete in arch ribs to set. Then pour concrete in lower deck beams, slab and railing, after which pour concrete in hangers.



PLAN OF ARCH RIBS

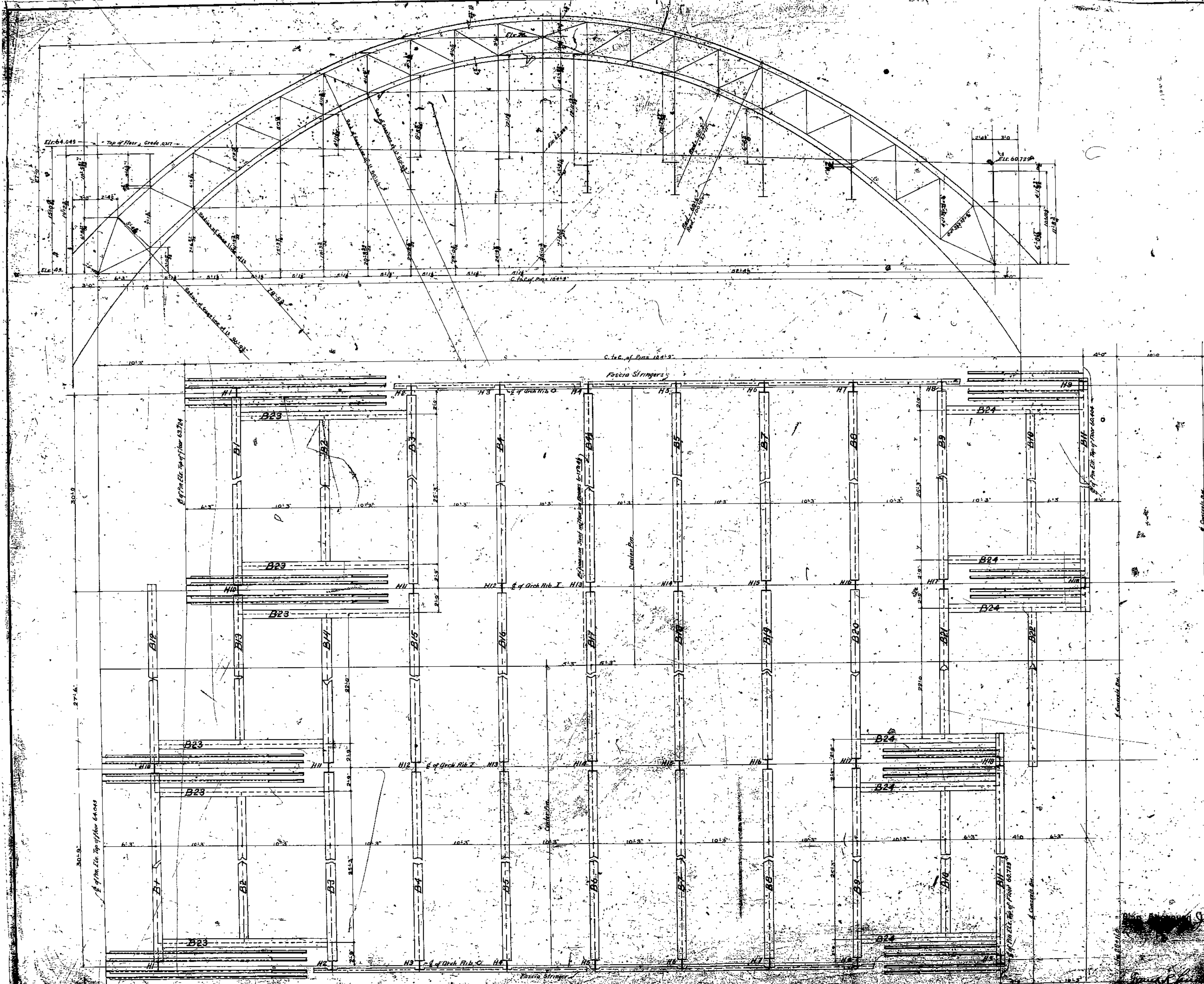


SECTION N-N

*Wm. J. Gumpel*  
 CIVIL ENGINEER  
 60-600  
 60-ENGINEER  
 IN CHARGE

**COUNTY OF CUYAHOGA**

DETROIT-SUPERIOR BRIDGE  
 CLEVELAND, OHIO  
 Details of Arch Ribs for Span No. 12  
 Date: 10/16/1905  
 Revision: 2-7-12

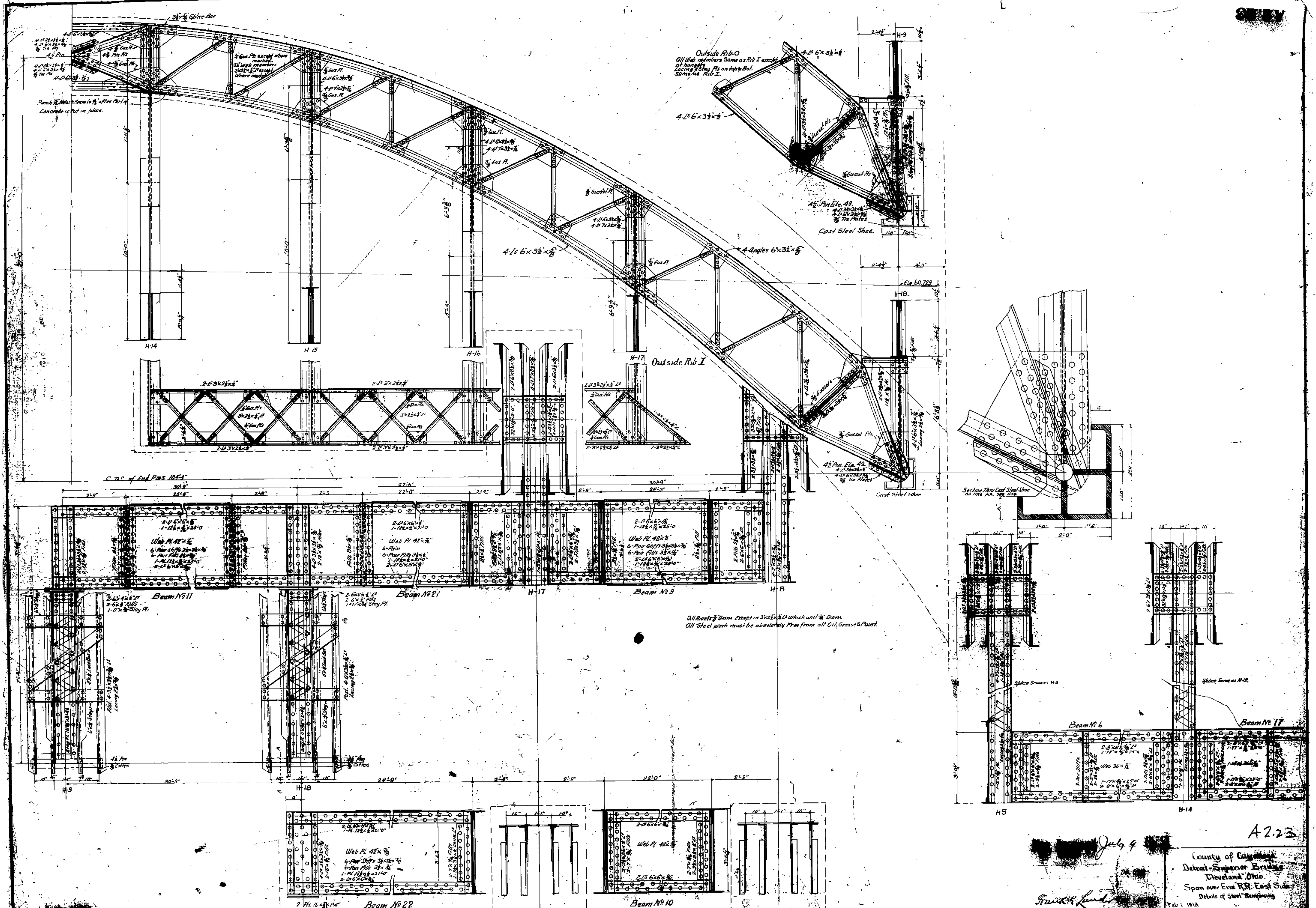


- Sizes of Material**
- Hanger H-1 4-B 7x3 1/2 4-B 3x3 1/2 Diaph. 32x3 x 3'0"
  - " H-2 8 4-B 7x3 1/2 4-B 3x3 1/2 Diaph. 32x3 x 2'0"
  - " H-3 4-B 7x3 1/2 4-B 3x3 1/2 Diaph. 32x3 x 3'0"
  - " H-4 4-B 7x3 1/2 4-B 3x3 1/2 Diaph. 32x3 x 3'0"
  - " H-5 4-B 7x3 1/2 4-B 3x3 1/2 Diaph. 32x3 x 3'0"
  - " H-6 4-B 7x3 1/2 4-B 3x3 1/2 Diaph. 32x3 x 3'0"
  - " H-7 4-B 7x3 1/2 4-B 3x3 1/2 Diaph. 32x3 x 3'0"
  - " H-8 4-B 7x3 1/2 4-B 3x3 1/2 Diaph. 32x3 x 3'0"
  - " H-9 4-B 7x3 1/2 4-B 3x3 1/2 Diaph. 32x3 x 3'0"
  - Beam B-1 2-B 11 4-B 12 1/2 4-B 12 1/2 2-P 12 1/2 x 25'0"
  - B-2 6 10 1- 42x 4-B 6x6 2- 12x 25'0"
  - B-3 5 7 8 1- 42x 4-B 6x6 2- 12x 25'0"
  - B-4 5 7 8 1- 42x 4-B 6x6 2- 12x 25'0"
  - B-5 6 11 1- 36x 4-B 6x6 2- 17x 25'0"
  - B-6 12 20 1- 42x 4-B 6x6 2- 12x 25'0"
  - B-7 13 14 21 1- 42x 4-B 6x6 2- 12x 25'0"
  - B-8 16 18 1- 42x 4-B 6x6 2- 12x 25'0"
  - B-9 17 1- 36x 4-B 6x6 2- 17x 25'0"
  - B-10 23 24 1- 42x 4-B 6x6 2- 12x 25'0"

Fascia Stringer 4-B 5 1/2 x 4 Double Lacing 3x2 1/2 x 4  
 Arch Rib O. 8-10 6x3 1/2 web members 3x2 1/2 x 4  
 Arch Rib I. 8-6 3 1/2 x 4  
 Field rivet angles connecting ribs at center after concrete is put in place on part of ribs.  
 All parts of the work must be kept absolutely free from oil, grease & paint.

County of Cuyahoga  
 Detroit-Superior Bridge  
 Cleveland, Ohio  
 Span over Erie RR East Side  
 Gen. Plan of Steel Framework  
 Feb. 11, 1913  
 Revised

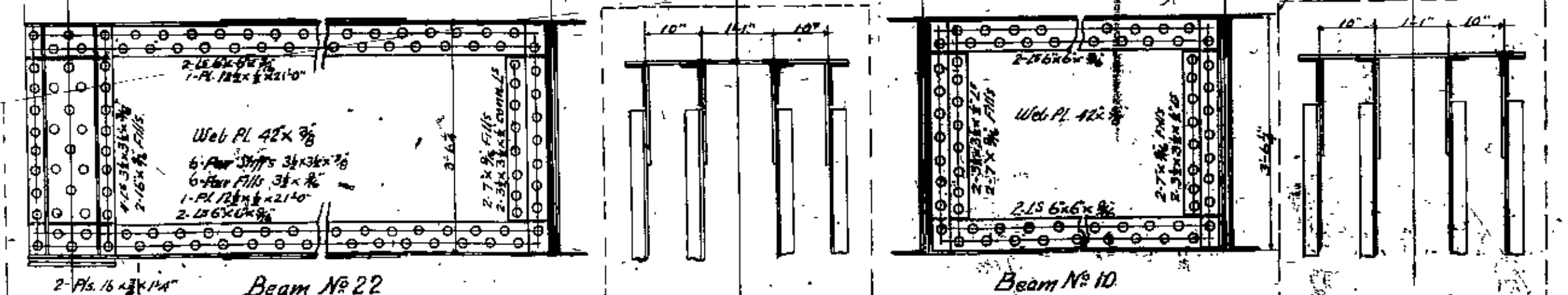
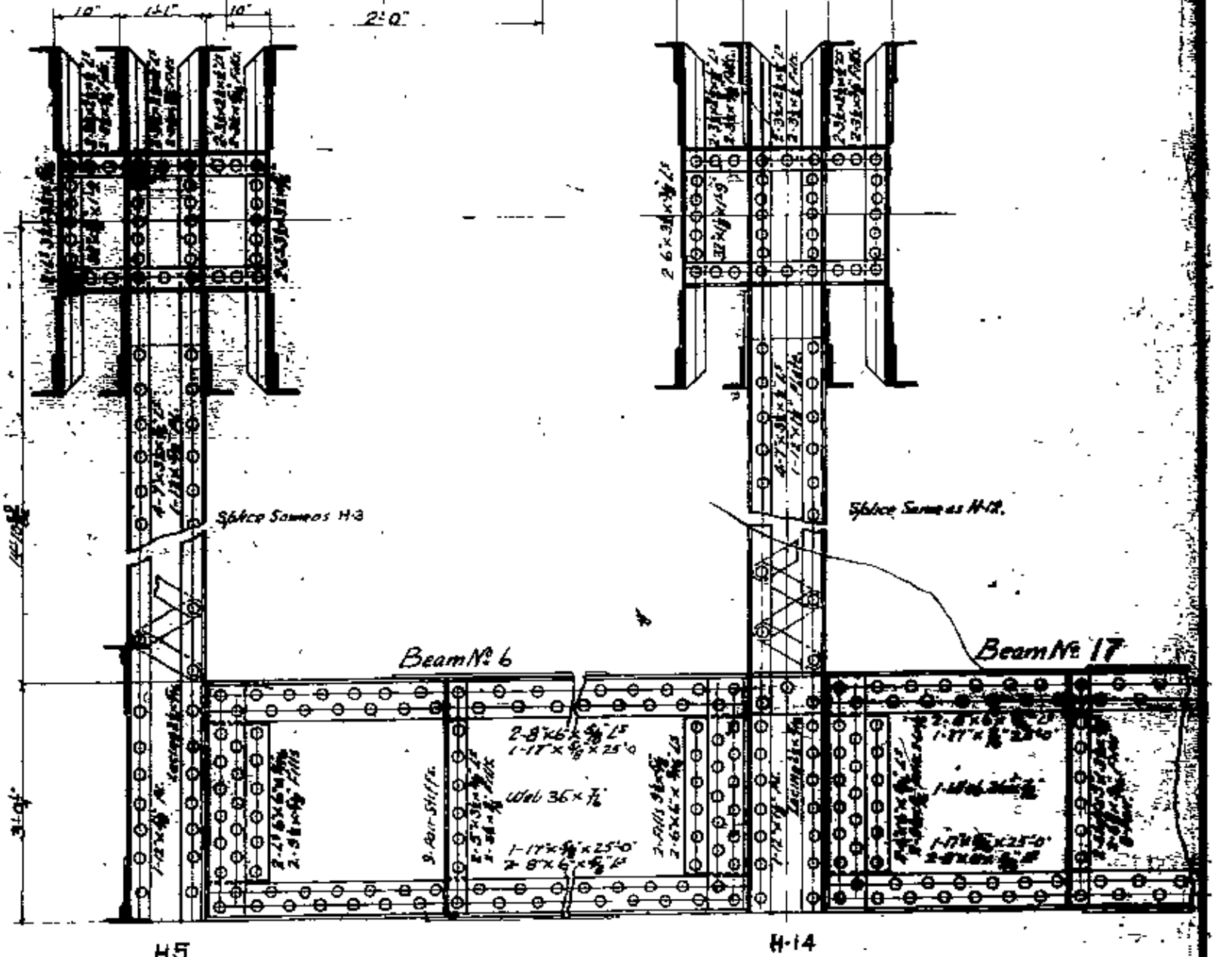
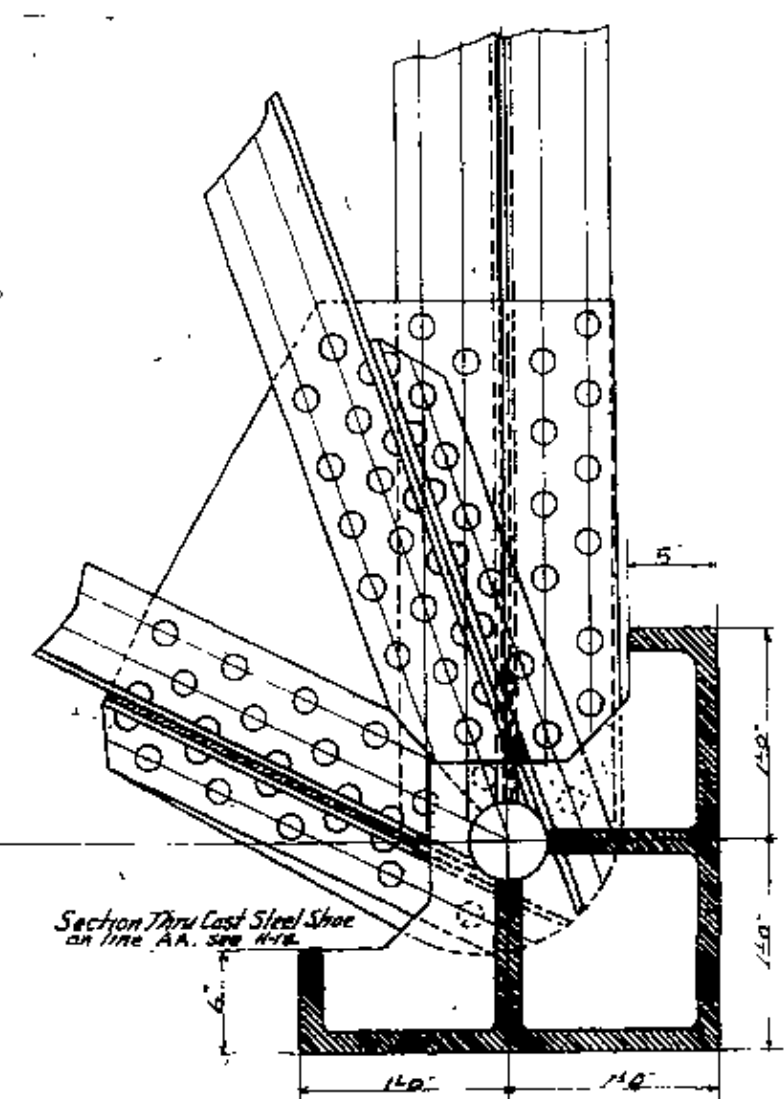




Outside Rib-O  
 All Web members same as Rib-I except  
 at Angles  
 Lacing Lacing Pl. on top & bot.  
 same as Rib-I.

Outside Rib-I

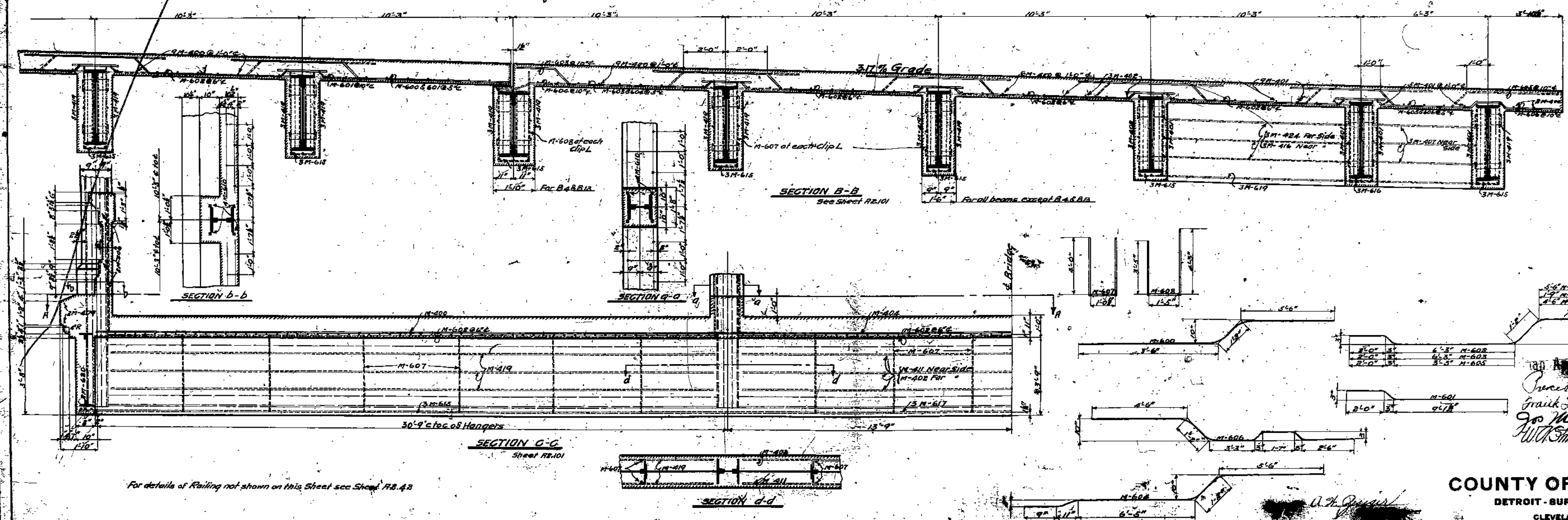
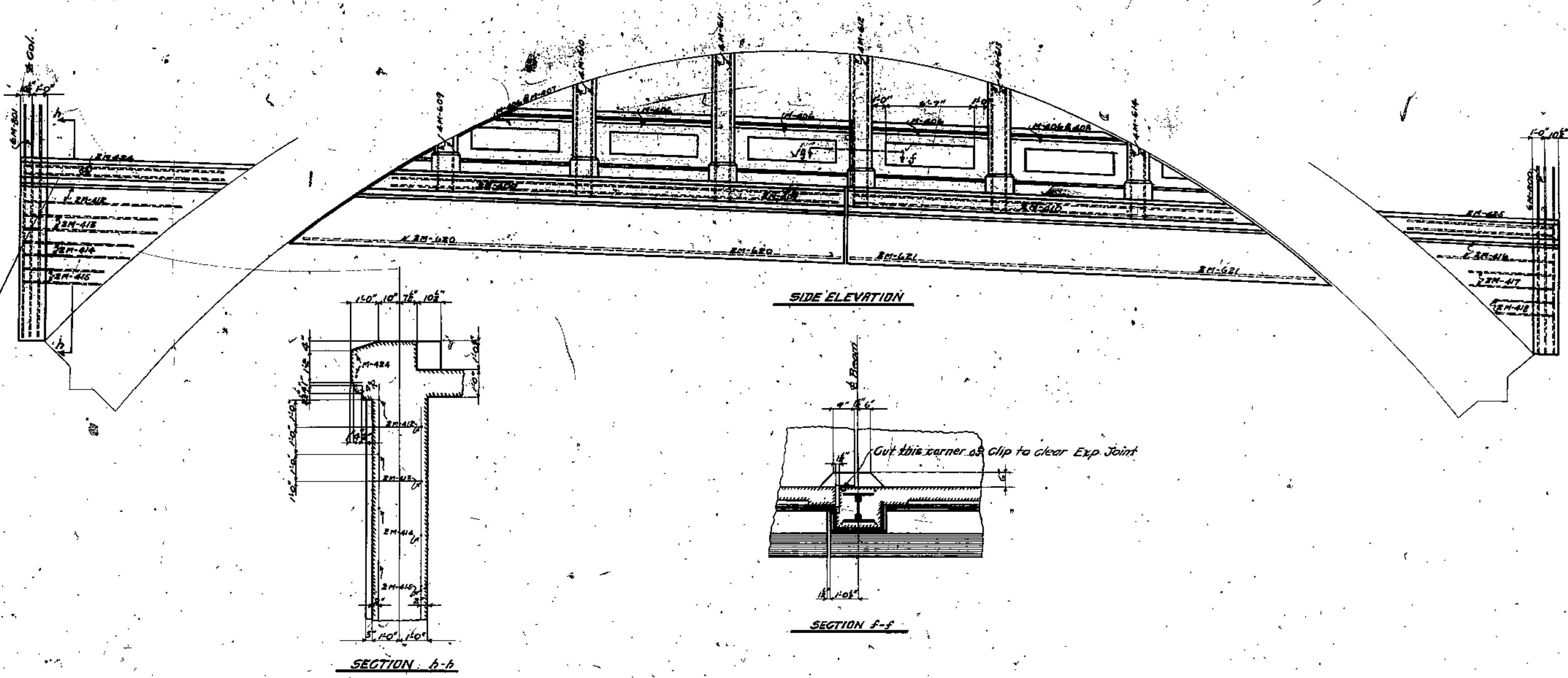
All Rivets Dam. Except in 3x3 1/2 x 1/2 which will be Dam.  
 All Steel work must be absolutely Free from all Oil, Grease & Paint.



July 4  
 Frank & Lewis

A2.23  
 County of Cuyahoga  
 Detroit-Superior Bridge  
 Cleveland, Ohio  
 Span over Erie R.R. East Side  
 Details of Steel Framing  
 Feb 1 1913  
 Revised

MARK	NO. OF PYS	SIZE	LENGTH	BEND	LOCATION
R20	18	1 1/2"	16'-0"	0	Column Spl.
R21	24	"	18'-0"	"	"
R22	24	"	14'-2"	2x45deg	Slab
R23	24	"	11'-6"	"	"
R24	24	"	15'-3"	"	"
R25	24	"	11'-6"	"	"
R26	24	"	14'-9"	"	"
R27	24	"	11'-3"	"	"
R28	24	"	13'-8"	"	"
R29	24	"	9'-2"	"	Beam Sills, N.B.S. etc. B.A.B.
R30	24	"	9'-2"	"	"
R31	16	"	3'-6"	0	Hanger Bars
R32	16	"	3'-6"	0	"
R33	16	"	11'-0"	0	"
R34	16	"	11'-0"	0	"
R35	16	"	9'-6"	0	"
R36	16	"	9'-6"	0	"
R37	16	"	3'-0"	0	B1-5-8-5
R38	16	"	3'-0"	0	B2-9-10-15-16
R39	16	"	30'-0"	0	B3-11-12-13-14
R40	16	"	21'-6"	0	B4
R41	16	"	17'-6"	0	B5
R42	4	"	20'-6"	0	Fascia Beams
R43	4	"	17'-6"	0	"
R44	4	"	23'-0"	0	"
R45	4	"	15'-6"	0	"
R46	124	2 1/2"	32'-0"	0	Slab
R47	124	"	24'-0"	0	B1-2-3
R48	40	"	24'-0"	0	B2-11-12-13
R49	43	"	30'-6"	0	Slab, coping B2-10-15
R50	48	"	31'-0"	0	"
R51	340	"	1'-6"	0	Railing & Curb Spl.
R52	60	"	8'-9"	0	Railing
R53	22	"	9'-0"	0	"
R54	10	"	7'-9"	0	Coping
R55	8	"	18'-0"	0	"
R56	2	"	29'-0"	0	"
R57	25	"	12'-0"	0	B3-9-10-11-12-13
R58	4	"	10'-0"	0	Special Walls
R59	4	"	8'-0"	0	"
R60	4	"	6'-0"	0	"
R61	58	"	9'-0"	0	"
R62	4	"	7'-0"	0	"
R63	4	"	4'-9"	0	"
R64	78	"	28'-3"	0	B1-3-4
R65	3	"	25'-6"	0	B2
R66	3	"	24'-9"	0	B3
R67	25	"	22'-0"	0	B4
R68	12	"	15'-0"	0	B5
R69	12	"	15'-0"	0	B7 & Coping
R70	2	"	11'-0"	0	"



For details of Railing not shown on this Sheet see Sheet R8.4B

Prepared by  
Frank J. Williams  
Geo. Messing  
Wick Street

**COUNTY OF CUYAHOGA**  
DETROIT-SUPERIOR BRIDGE  
CLEVELAND, OHIO  
Details of Lower Deck for Span No. 12  
Date Aug. 11, 1915 Scale 5/8" = 1'-0"