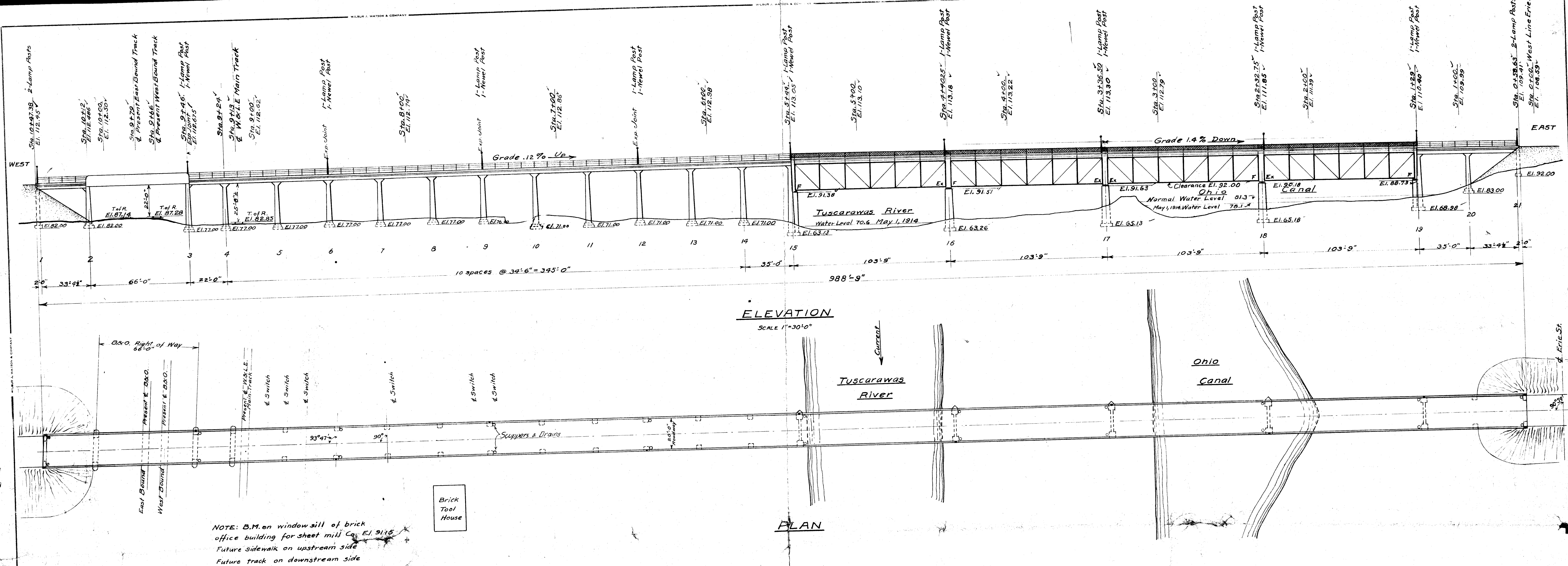




—APPROVED—

COUNTY COMMISSIONERS: *W. D. Crow*

COUNTY ENGINEER: *W. F. Bender*

MASSILLON PRESIDENT: *John J. Donnan*

CITY COUNCIL CLERK: *John J. Donnan*

B&O. RAILROAD: _____

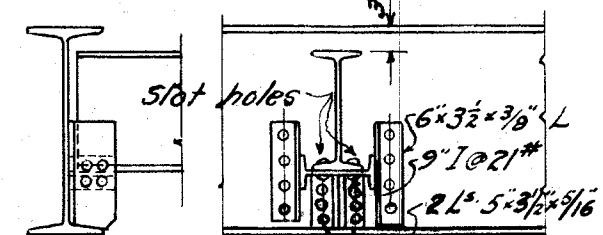
W&L.E. RAILROAD: _____

SUPT. PUBLIC WORKS OF OHIO: _____

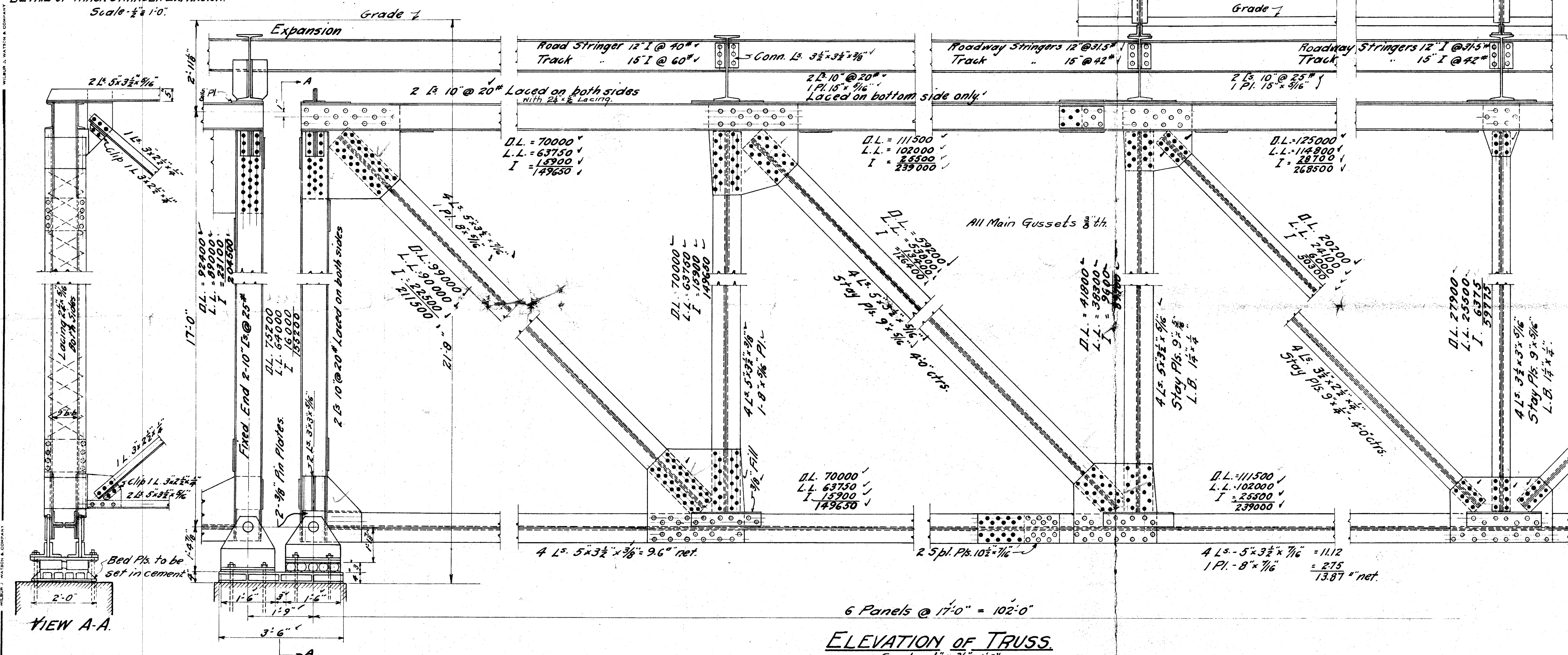
M-134

COLUMBIA HEIGHTS BRIDGE
OVER
TUSCARAWAS RIVER & OHIO CANAL
AND
B&O. AND W&L.E. RAILROADS
MASSILLON
STARK COUNTY, OHIO.

GENERAL PLAN AND ELEVATION
W.L. BENDER COUNTY ENGINEER
H.M. YOST CITY ENGINEER
WILBUR J. WATSON & CO. CONSULTING ENGINEERS
CLEVELAND, OHIO.
SCALE 1"=30'-0" JUNE 12 1914



DETAIL OF TRACK STRINGER EXPANSION.
Scale - $\frac{1}{2}$ " = 1'-0".



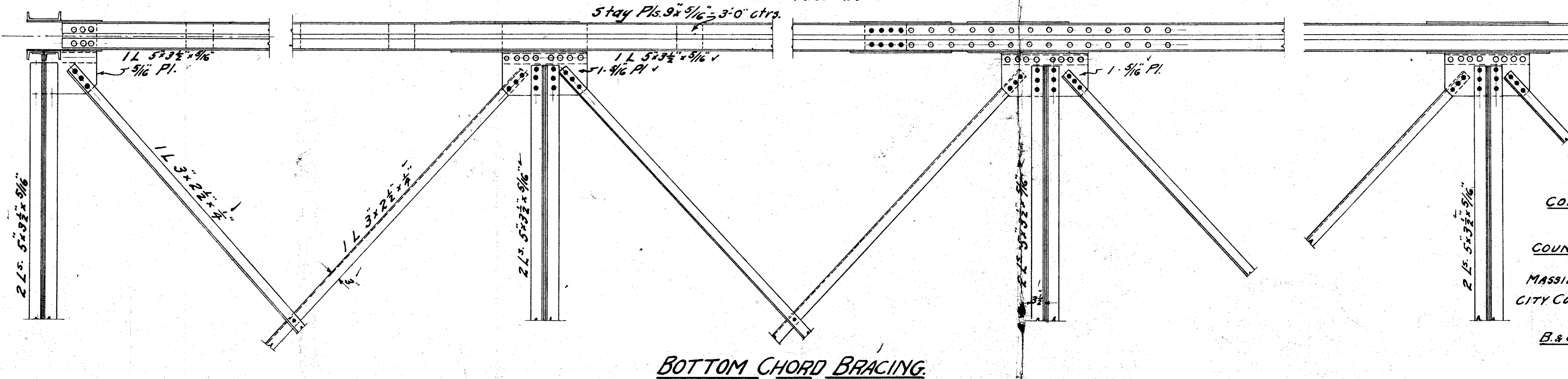
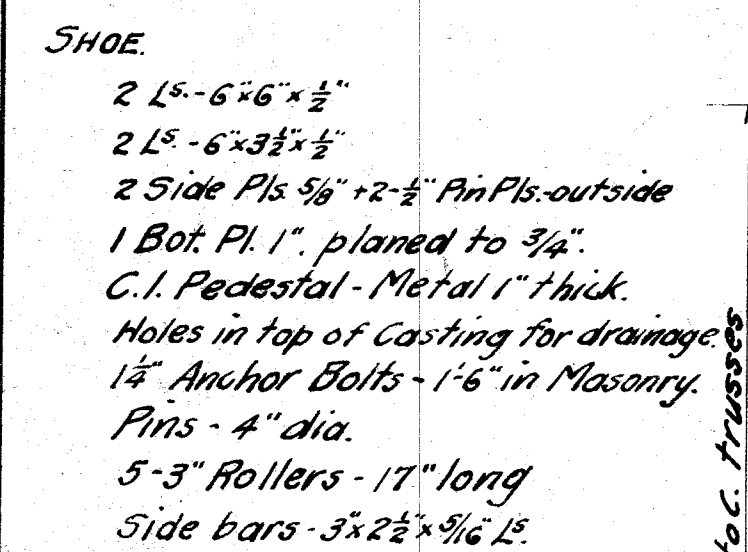
6 Panels @ 17'-0" = 102'-0"

ELEVATION OF TRUSS.

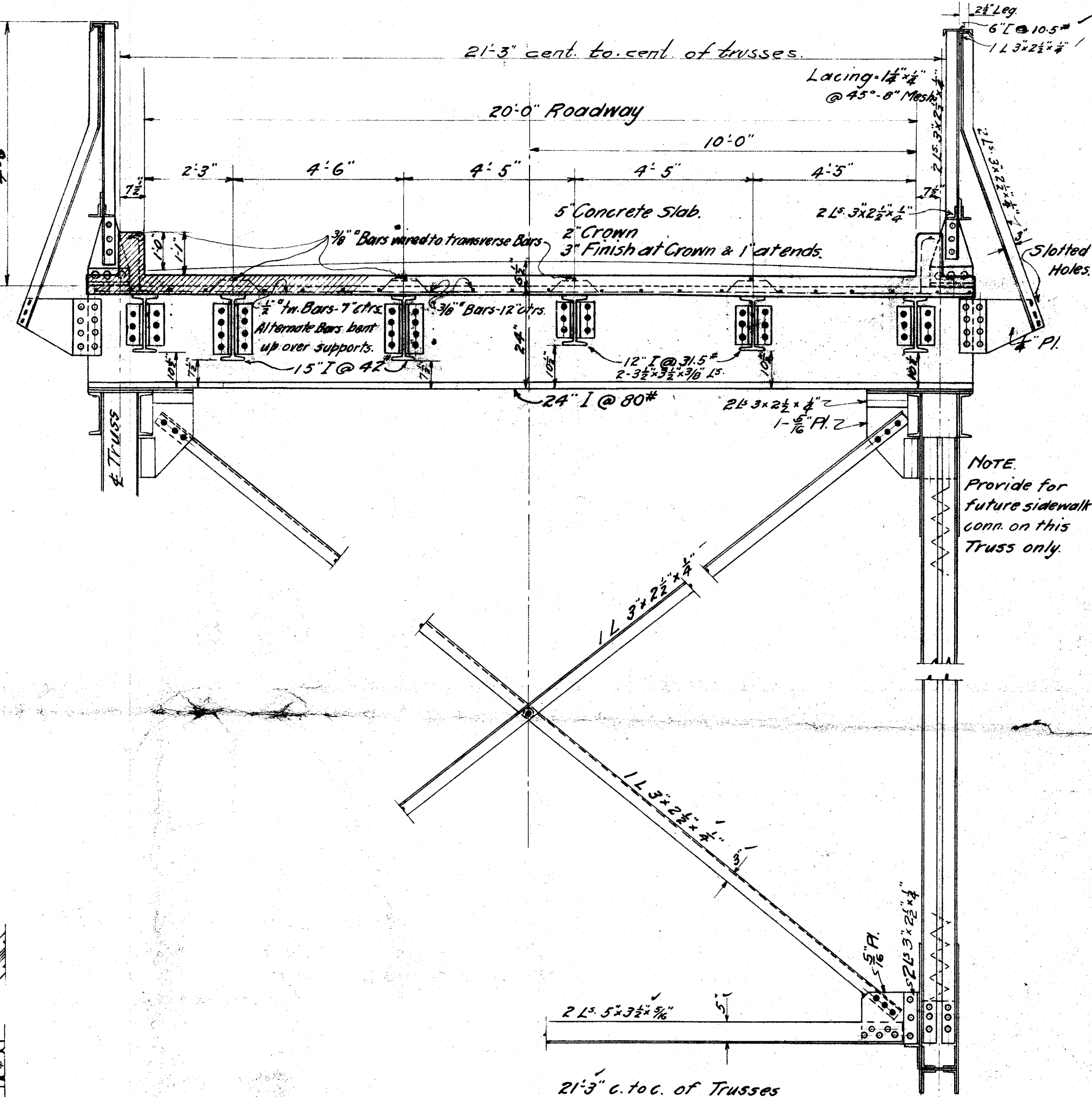
Scale $\frac{1}{2}"$ & $\frac{3}{8}" = 1'-0"$

Camber Truss 2"

6-3-0" ctrs.

[illegible]

BOTTOM CHORD BRACING.



CROSS-SECTION.

Scales: $\frac{3}{8}"$ & $\frac{1}{2}" = 1'-0"$

DEAD LOAD. Steel 1200
 Conc. Fl. & Paving } = 3300* per lin. ft. of Span.
 including Future Sidw. 2100

LIVE LOAD. Floor. 24 TONS on Car Track

15 Ton Truck

100# per Sq. ft.

Trusses: 1800* per lin. ft. of Car Track.
100* per sq. ft. of Floor. } = 1500*/Lin. Ft. of Track

Specification - Design and Workmanship - G.C. Schneider 1901.

PAINT. Shop - 1 Coat } See Specifications.
Field - 2 Coats }

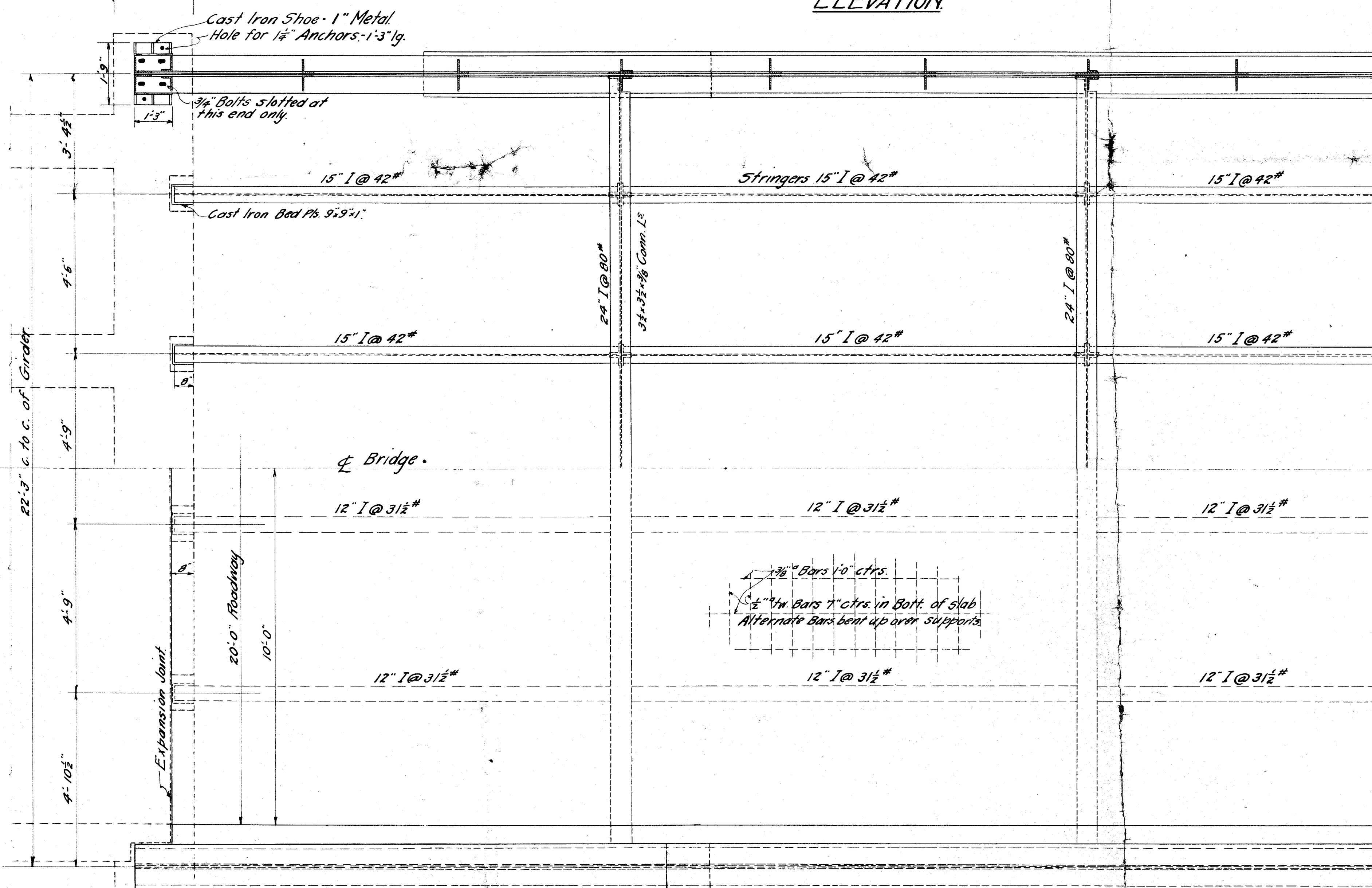
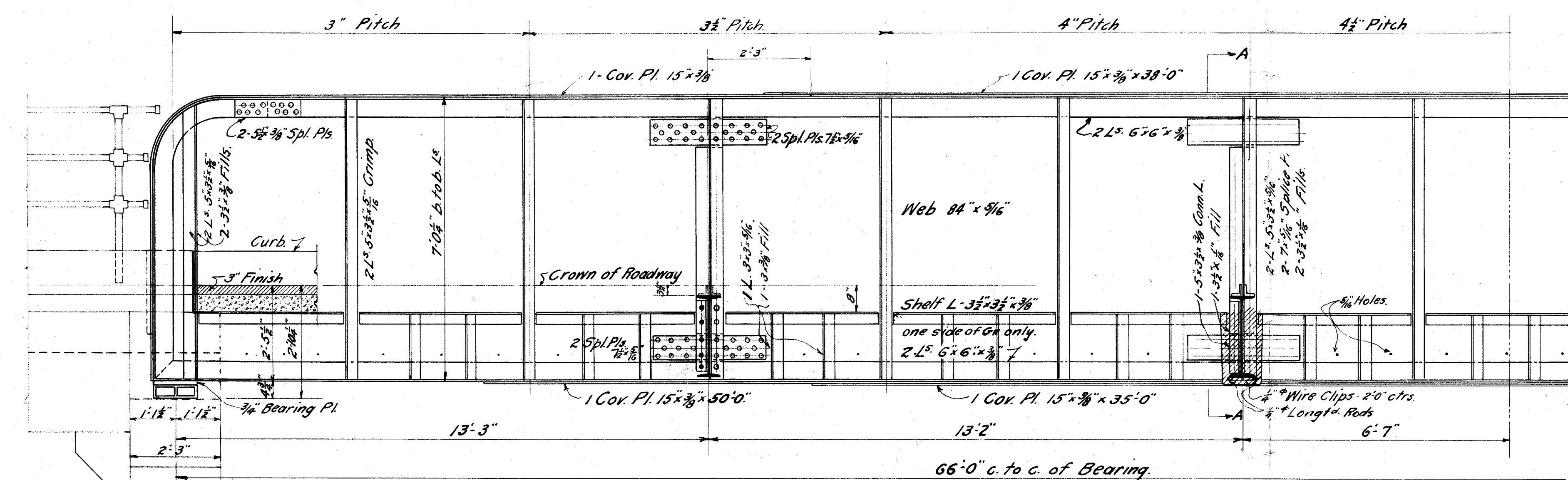
COLUMBIA HEIGHTS BRIDGE.
MASSILLON, OHIO.

GENERAL DETAILS

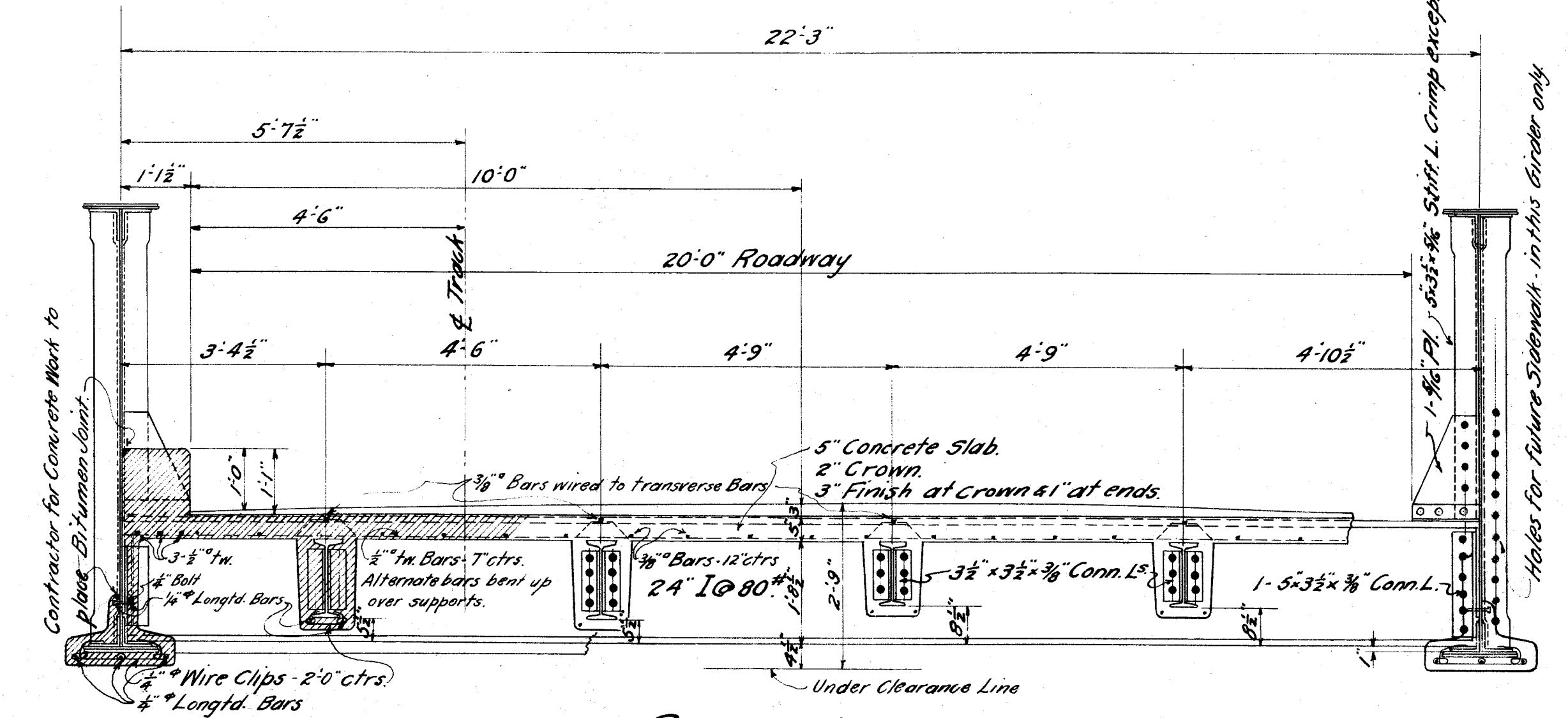
W. L. BENDER, COUNTY SURVEYOR.
WILBUR J. WATSON & CO. BRIDGE ENGINEERS.
CLEVELAND, O.

Scale $\frac{3}{8}" & \frac{1}{2}" = 1'-0"$ July 3, 1914

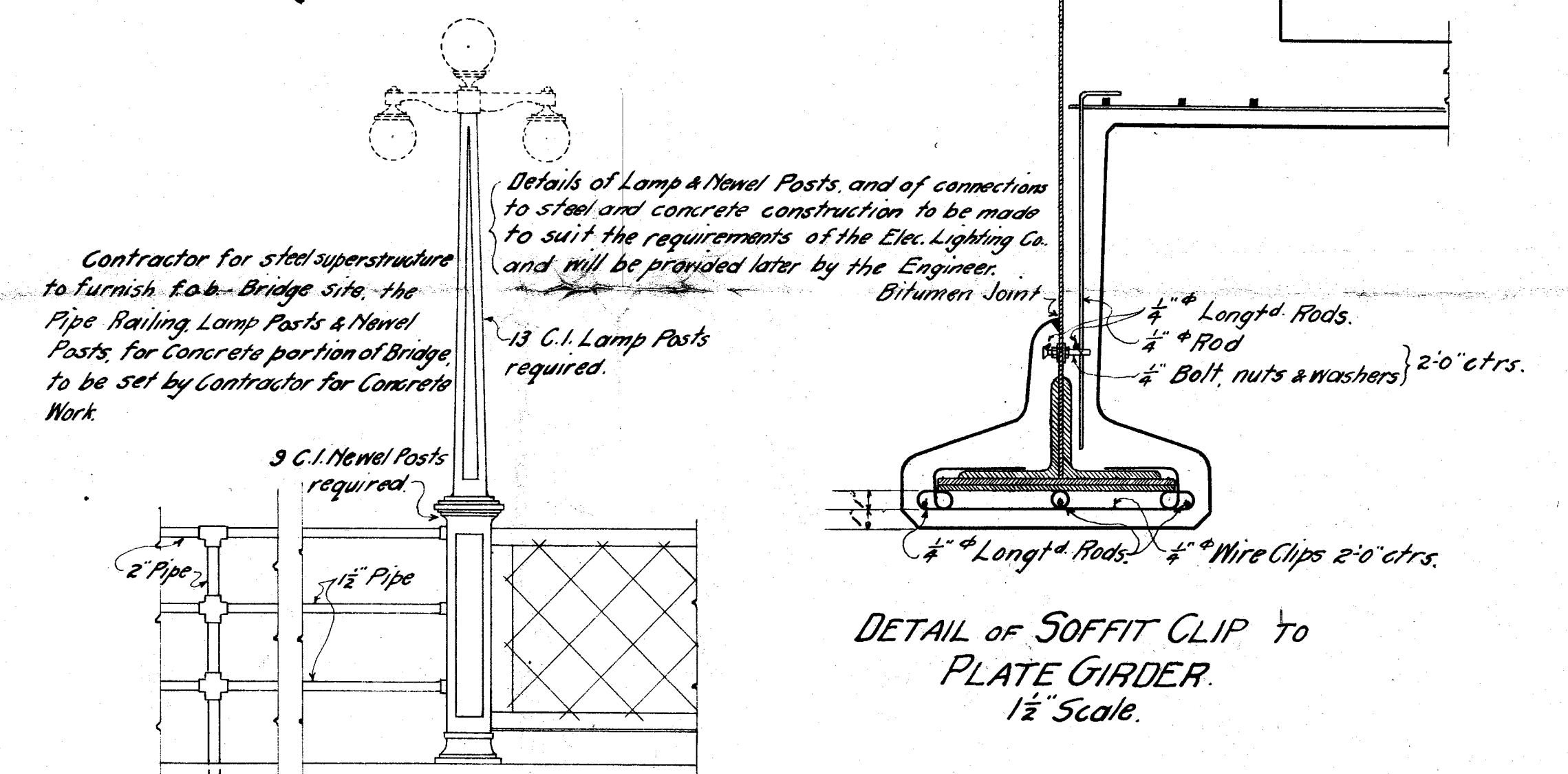
Drawn by *H.F.H.* Traced by *H.L.P.* Checked by *W.P.*



NOTE: Ends of Girder Spans are skewed 1'-6" -
Make end panel of one girder 1'-6" longer than
end panel of other girder. (See Sheet No. 6)



SECTION A-A.



NOTE. Wire Clips, rods & bolts and reinforcing rods for floors/slab to be furnished and placed by Contractor for Substructure and Concrete Work.

DEAD LOAD. Steel. 900*
Floor. 3700* including future sidewalk.
 $4600 \div 2 = 2300$.

LIVE LOAD. Floor. 24 Tons on Car Track
15 Ton Truck
100* per sq. ft.
Trusses. 1800* per lin. ft. of Car Track.
100* per sq. ft. of floor.

Specifications for design & workmanship—C.C. Schneiders, 1901, except as noted.

APPROVED.

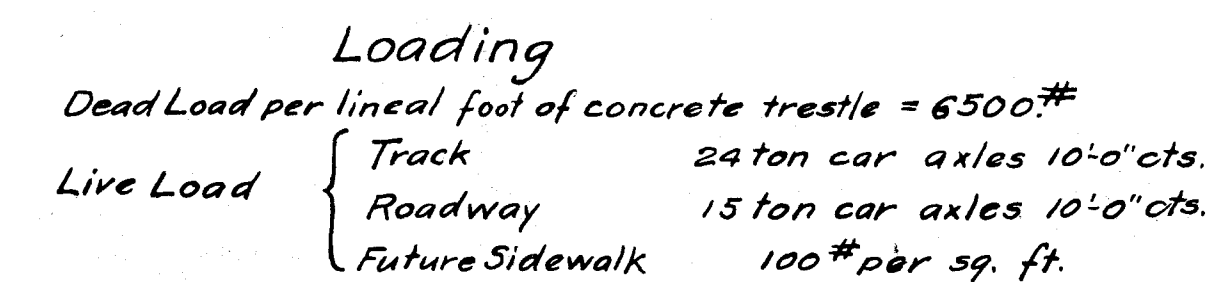
COUNTY COMMISSIONERS	W. H. Starnes
	W. H. Starnes
	W. H. Starnes
COUNTY ENGINEER	W. H. Starnes
MASSILLON { PRESIDENT	W. H. Starnes
CITY COUNCIL { CLERK	W. H. Starnes
B. & O. RAILROAD	
W. & L. E. RAIL ROAD	
SUPT. PUBLIC WORKS OF OHIO.	

COLUMBIA HEIGHTS BRIDGE
OVER
TUSCARAWAS RIVER & OHIO CANAL
AND
B.&O. AND W.&L.E. RAILROADS
MASSILLON,
STARK COUNTY, OHIO.

PLATE GIRDER SPAN.

W.E. BENDER - COUNTY ENGINEER.
H.M. YOST - CITY ENGINEER.

WILBUR J. WATSON & CO. - CONSULTING ENGINEERS.
CLEVELAND, OHIO.



SECTION

TRESTLE

17'-3"

2'-0"

3'-3"

2'-0"

10-1" #1w

1/2" Stirrups 18" cts.

17'-3"

2'-3"

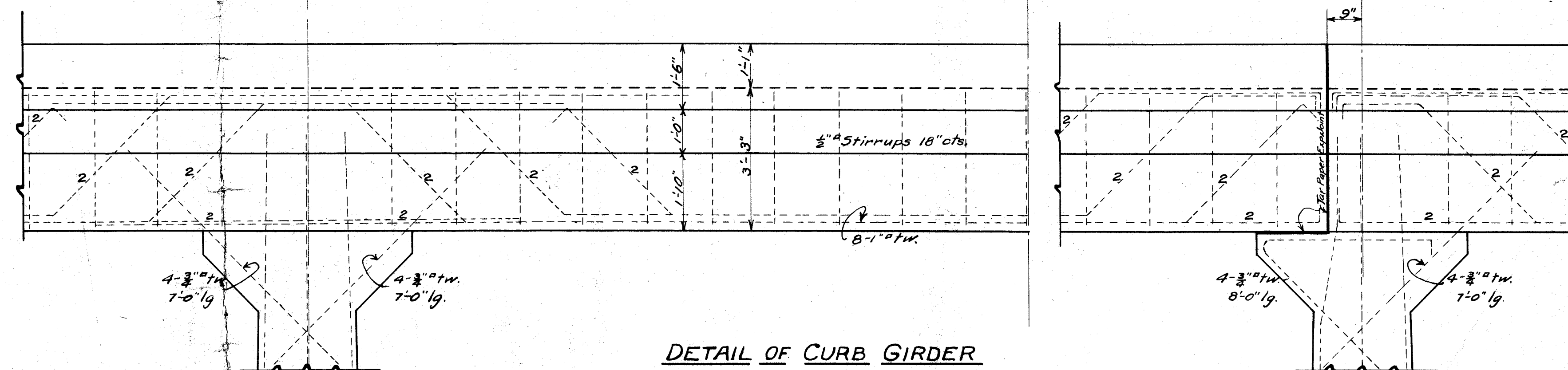
1'-6"

Tar Paper Exp. Joint

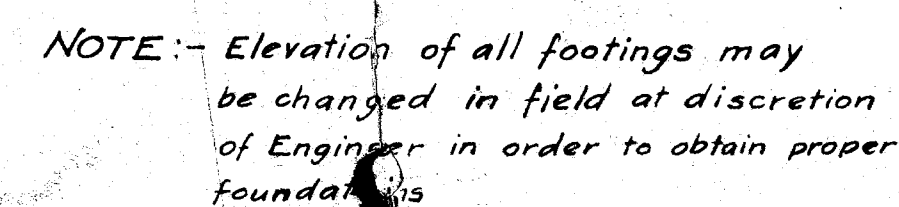
1" #1w 14'-0" lg.

DETAIL OF STRINGER

DETAIL OF STRINGER



DETAIL OF CURB GIRDER



DETAIL OF COLUMN

Job No. 685 Sheet 4 of 6

APPROVED

<u>COUNTY</u>	{	<i>W. H. ...</i>
<u>COMMISSIONERS</u>		<i>W. H. ...</i>
<u>COUNTY ENGINEER</u>	{	<i>W. H. ...</i>
<u>MASSILLON CITY COUNCIL</u>	{	<i>W. H. ...</i>
<u>B. & O. RAILROAD</u>	{	<i>W. H. ...</i>
<u>W. & L. E. RAILROAD</u>		<i>W. H. ...</i>

COLUMBIA HEIGHTS BRIDGE
OVER
TUSCARAWAS RIVER & OHIO CANAL
AND
B.&O. AND W.&L.E. RAILROADS
MASSILLON
STARK COUNTY, OHIO.

DETAILS OF CONCRETE TRESTLE
W.L. BENDER COUNTY ENGINEER
H.M. YOST CITY ENGINEER
WILBUR J. WATSON & Co. CONSULTING ENGINEERS
CLEVELAND, OHIO.

SCALE $\frac{1}{2}" = 1'-0"$ 171134 JUNE 12 1914 51

Pier No 16 El. 91.51
 " " 17 " 91.63
 " " 18 " 90.18

Pier No 16 El. 63.26
 " " 17 " 65.13
 " " 18 " 65.18

SECTION A-A

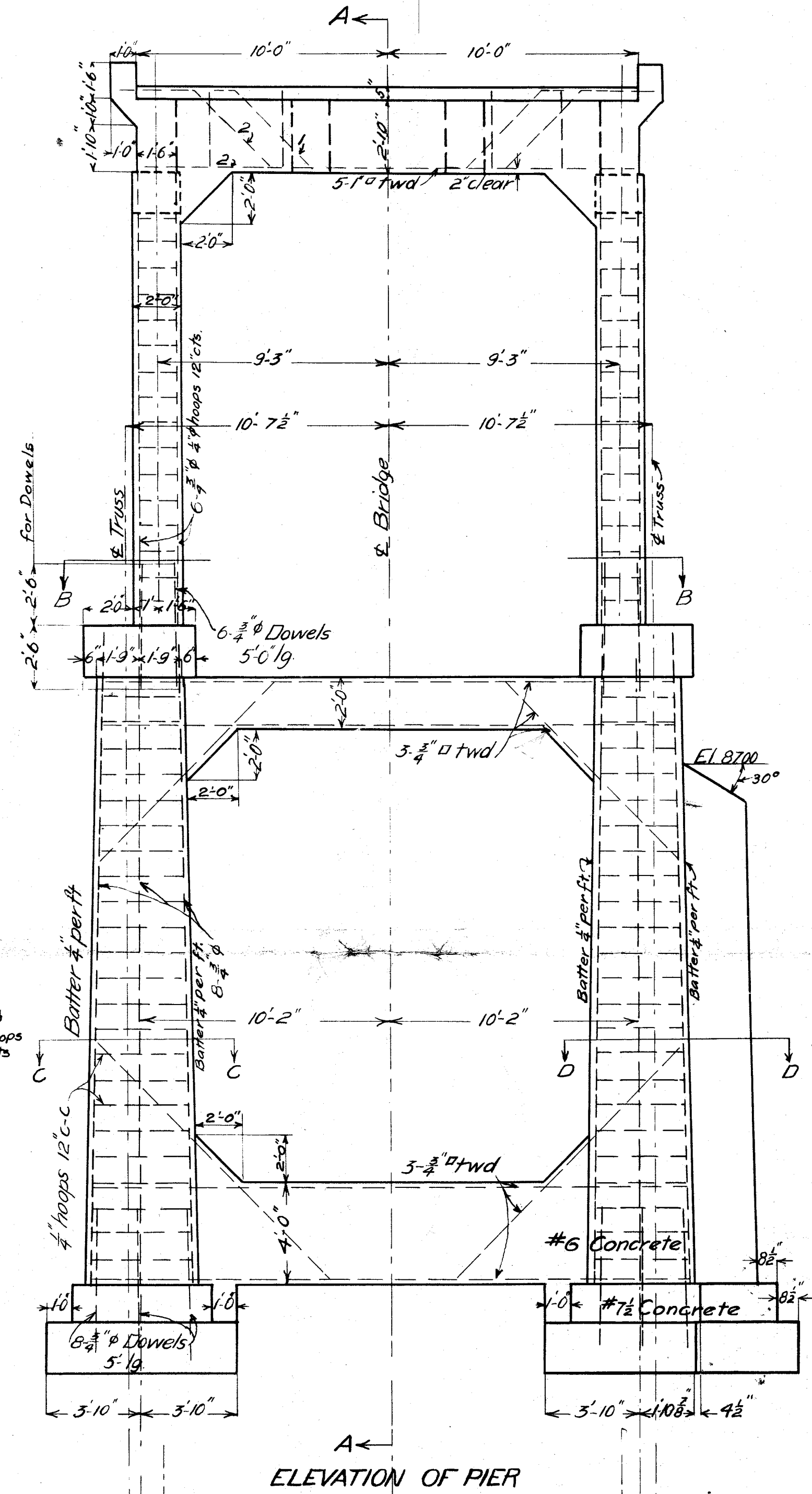
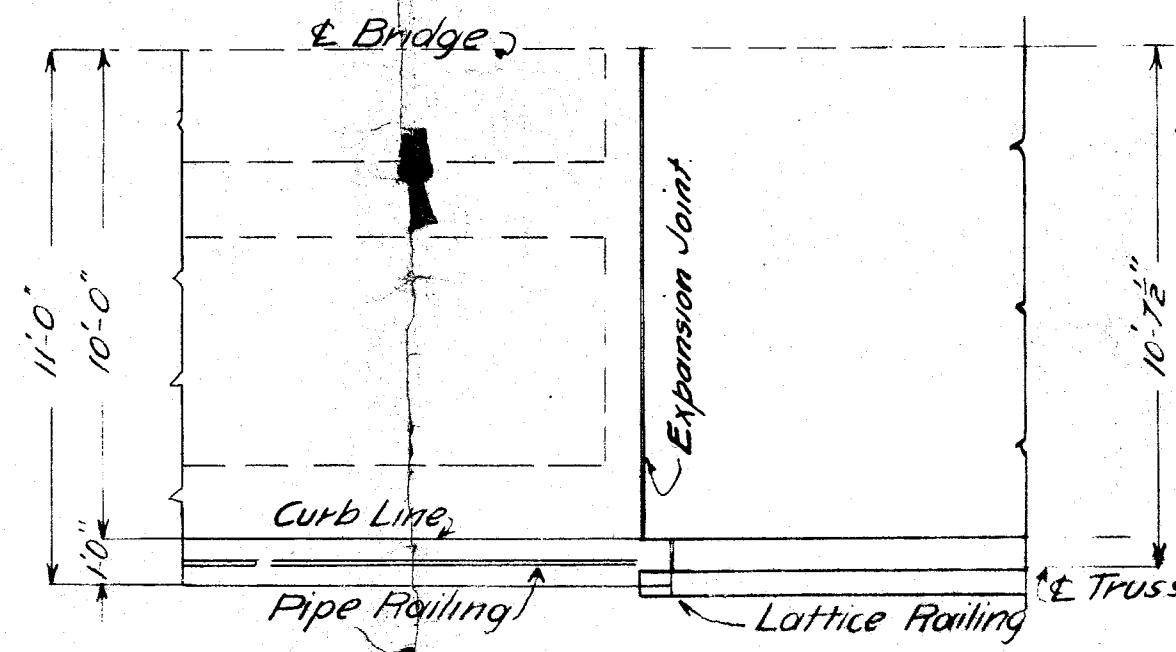
SECTION-PLAN B-B

No. 15 El. 91.38
 No. 19 El. 88.73

No. 15 28'-3"
 No. 19 28'-3"
 No. 16 22'-9"
 No. 19 14'-3"

No. 15 El. 63.13
 No. 19 El. 68.98

SECTION A-A



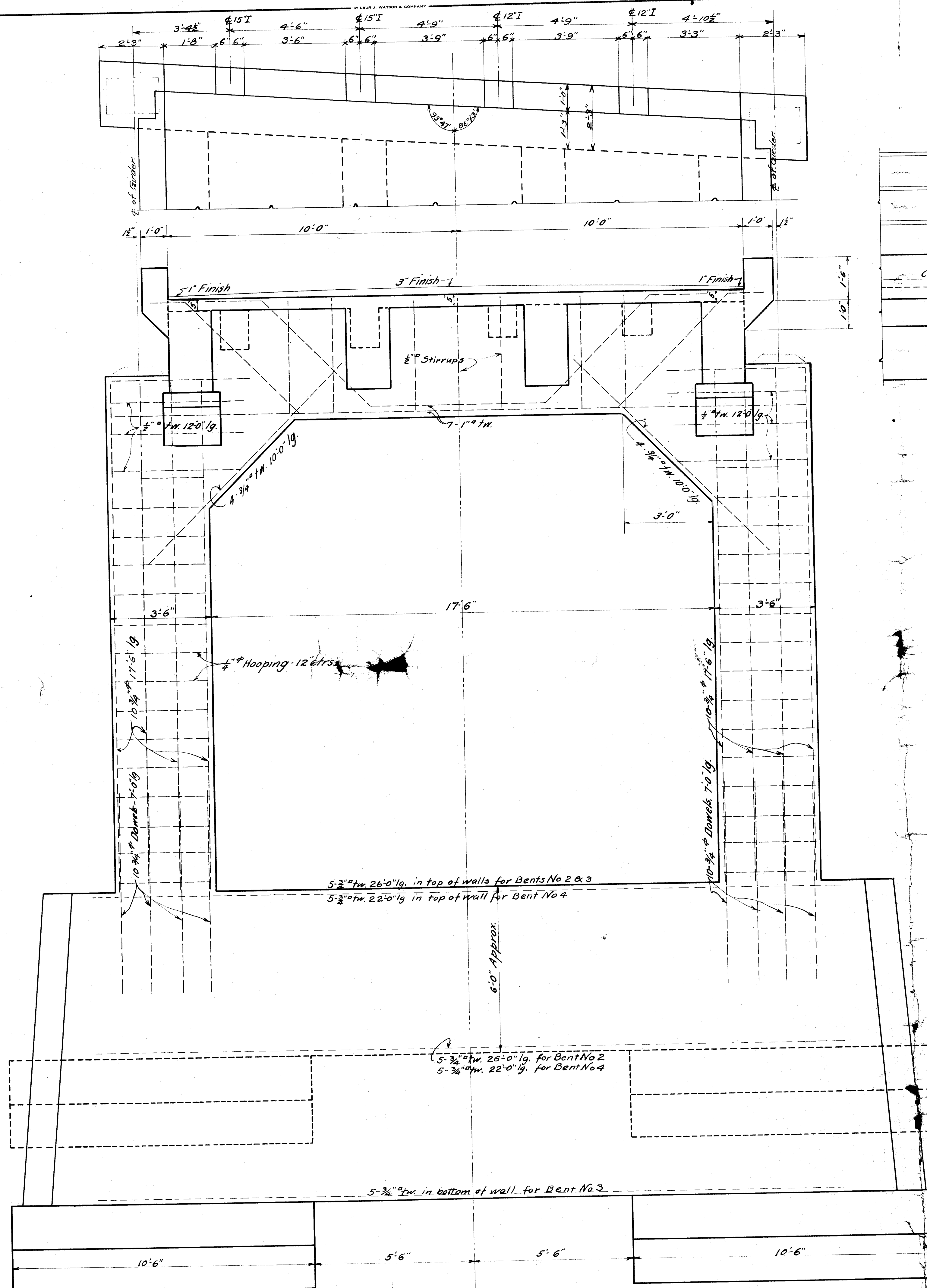
ELEVATION OF PIER

SECTION-PLAN B-B

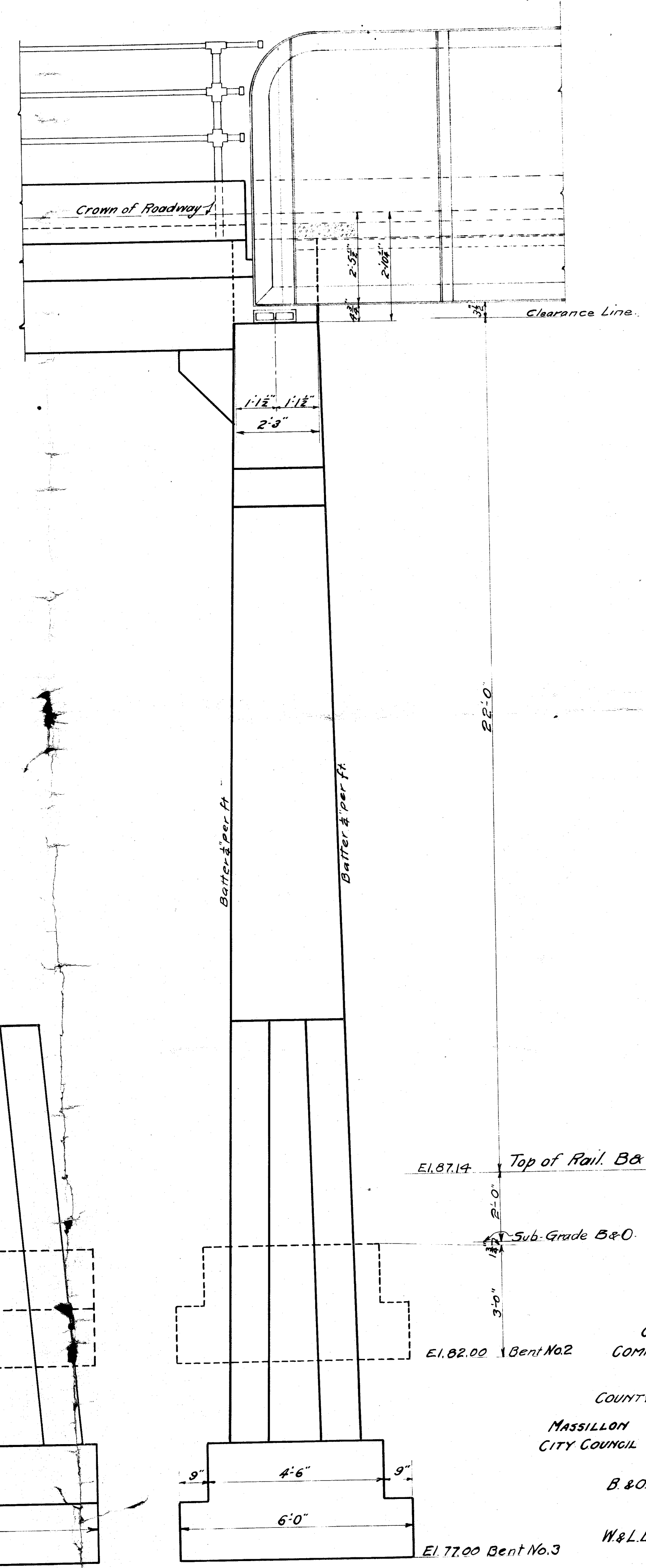
APPROVED
 COUNTY COMMISSIONERS
 COUNTY ENGINEER
 MASSILLON PRESIDENT
 CITY COUNCIL CLERK
 B.&O. RAILROAD
 W.&L.E. RAILROAD

COLUMBIA HEIGHTS BRIDGE
 OVER
 TUSCARAWAS RIVER & OHIO CANAL
 AND
 B.&O. AND W.&L.E. RAILROADS
 MASSILLON
 STARK COUNTY, OHIO
 DETAILS OF PIERS
 W.E. BENDER COUNTY ENGINEER
 H.M. YOST CITY ENGINEER
 WILBUR J. WATSON & CO. CONSULTING ENGINEERS
 CLEVELAND, OHIO

SCALE 1/4" = 1'-0" JULY 17, 1914



SECTION AT BENTS No. 2 & 3



SIDE ELEVATION BENTS No. 2 & 3

El. 87.14 Top of Rail. B.&O.
 El. 82.00 Bent No. 2
 El. 77.00 Bent No. 3
 Sub. Grade B.&O.

APPROVED
 COUNTY COMMISSIONERS.
 COUNTY ENGINEER.
 MASSILLON CITY COUNCIL.
 B. & O. RAILROAD.
 W. & L. E. RAILROAD.
 SUPT. PUBLIC WORKS OF OHIO.

COLUMBIA HEIGHTS BRIDGE
 OVER
 TUSCARAWAS RIVER & OHIO CANAL
 AND
 B. & O. AND W. & L. E. RAILROADS.
 MASSILLON, OHIO.
 DETAILS OF BENTS Nos 2, 3 & 4.
 W. E. BENDER - COUNTY ENGINEER.
 H. M. YOST - CITY ENGINEER.
 WILBUR J. WATSON & CO. - CONSULTING ENGINEERS.
 CLEVELAND, OHIO.
 SCALE - 1/4" = 1'-0".
 JULY 30, 1914.