

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS AND BUILDINGS
DIVISION OF HIGHWAYS

PLANS FOR PROPOSED
FEDERAL AID HIGHWAY
F. A. I. ROUTE 70 SECTION 82-3HVF&E-1
PROJECT I-IG-70-1(81)0
POPLAR STREET BRIDGE APPROACHES
ST. CLAIR COUNTY
C-98-032-65

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F. A. I. - 70	82-3HVF&E-1	ST. CLAIR	247	1
FED. ROAD DIV. NO. 4	ILLINOIS	PROJECT	I-IG-70-1(78)0	

P-98-087-00

DESCRIPTION OF PROJECT:

SECTION 82-3HVF & E-1 INCLUDES THE FURNISHING, FABRICATING AND ERECTING OF THE STRUCTURAL STEEL FOR THE FOLLOWING:

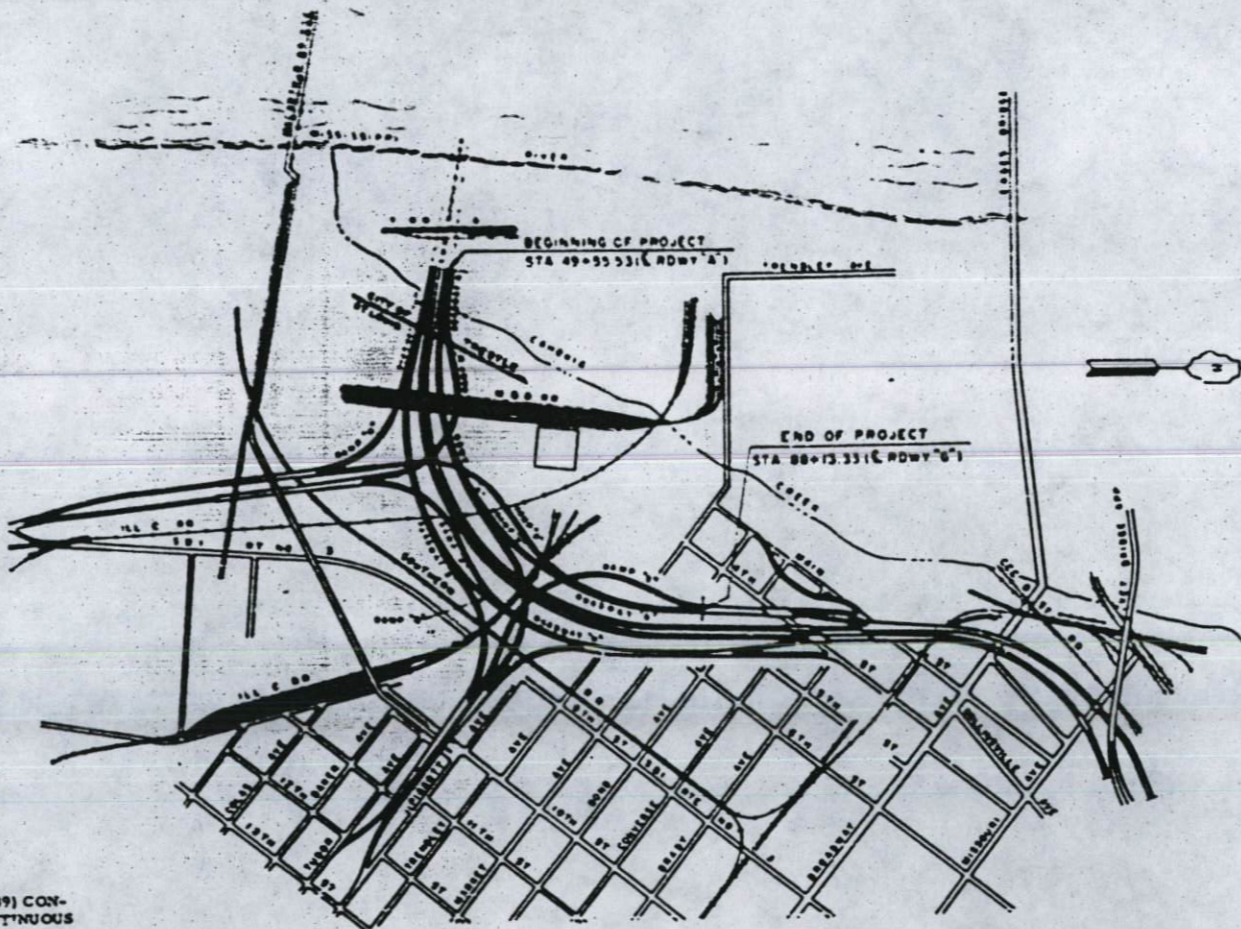
ROADWAY A	TWO 4-SPAN CONTINUOUS UNITS SPANS: 1 EACH @ 83'-5 5/8, 106'-106'-83'; 87'-110'-110'-87'
	FIVE 3-SPAN CONTINUOUS UNITS SPANS: 2 @ 97'-124'-97' 1 EACH @ 75'-96'-75' 95'-122'-95' 89'-114'-89'
	ONE SIMPLE SPAN - 80'
ROADWAY D	TWO 4-SPAN CONTINUOUS UNIT SPANS: 1 @ 90'-7 9/16, 115'-115'-90' 1 @ 100'-128'-128'-100'
	ONE 5-SPAN CONTINUOUS UNIT SPANS: 107'-137'-137'-137'-107'
	FIVE 3-SPAN CONTINUOUS UNITS SPANS: 2 @ 83'-108'-85' 2 @ 81'-105'-81' 1 @ 90'-115'-90'
	ONE 2-SPAN CONTINUOUS UNIT SPANS: 89'-6, 89'-6
	TWO SIMPLE SPANS SPANS 1 @ 74' 1 @ 78'
ROADWAY G	TWO 4-SPAN CONTINUOUS UNITS SPANS: 1 @ 88'-113'-113'-88' 1 @ 87'-110'-110'-87'
	ONE 3-SPAN CONTINUOUS UNIT SPAN: 90'-116'-90'
	ONE 2-SPAN CONTINUOUS UNIT SPAN: 76'-76'
ROADWAY H	ONE 3-SPAN CONTINUOUS UNIT SPAN: 97'-124'-97'
	ONE SIMPLE SPAN - 88'
RAMP M	THREE 3-SPAN CONTINUOUS UNITS SPANS: 1 @ 90'-115'-90' 1 @ 105'-134'-105' 1 @ 90'-115'-85-10 11/16
RAMP N	ONE 4-SPAN CONTINUOUS UNIT SPAN: 90'-115'-115'-90'
	ONE SIMPLE SPAN - 73-3 5/16
RAMP O	FOUR 3-SPAN CONTINUOUS UNIT SPANS: 1 @ 97'-5 3/4, 130'-101' 1 @ 90'-115'-90' 1 @ 95'-121'-95' 1 @ 94'-120'-94'
	ONE SIMPLE SPAN - 65'
RAMP P	ONE 4-SPAN CONTINUOUS UNIT SPAN: 94'-121'-121'-94'
	TWO 3-SPAN CONTINUOUS UNIT SPANS: 1 @ 81'-115'-81' 1 @ 96'-122'-96'
	TWO SIMPLE SPANS SPANS 1 @ 88' 1 @ 49'

RAMP Q	ONE 3-SPAN CONTINUOUS UNIT SPAN: 75-2 7/8, 90'-76'
RAMP R	TWO 3-SPAN CONTINUOUS UNITS SPANS 1 @ 104-4 5/16, 134'-106' 1 @ 101'-130'-101'
RAMP S	ONE 4-SPAN CONTINUOUS UNIT SPAN: 85'-100'-100'-85'
	THREE 3-SPAN CONTINUOUS UNIT SPANS: 1 @ 73-2 7/8, 95'-74' 1 @ 69'-97'-69' 1 @ 88'-113'-88'

THE POPLAR STREET BRIDGE APPROACHES FOR THIS SECTION CARRY THE FOLLOWING:

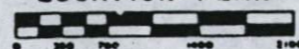
- ROADWAY A OVER THE TRACKS OF THE TERMINAL R. R. ASSOCIATION, GULF, MOBILE AND OHIO, AND ILLINOIS CENTRAL RAILROADS AND RAMP Q;
- ROADWAY D OVER THE TRACKS OF THE TERMINAL R. R. ASSOCIATION, GULF, MOBILE AND OHIO, ILLINOIS CENTRAL AND SOUTHERN RAILROADS, RAMP O AND ILLINOIS ROUTE 31;
- ROADWAY G OVER TRENDLEY AND PIGGOTT AVENUES;
- ROADWAY H OVER THE ILLINOIS CENTRAL RAILROAD;
- RAMP M OVER ROADWAY A AND THE TRACKS OF THE TERMINAL R. R. ASSOCIATION AND THE GULF, MOBILE AND OHIO RAILROADS;
- RAMP N OVER THE TRACKS OF THE TERMINAL R. R. ASSOCIATION AND GULF, MOBILE AND OHIO RAILROADS;
- RAMP O OVER THE ILLINOIS CENTRAL RAILROAD;
- RAMP P OVER ROADWAY D, FUTURE ACCESS ROADS AND THE ILLINOIS CENTRAL RAILROAD;
- RAMP Q OVER THE ILLINOIS CENTRAL RAILROAD;
- RAMP R OVER THE ILLINOIS CENTRAL RAILROAD AND A FUTURE ACCESS ROAD;
- RAMP S OVER TRENDLEY AVENUE AND ROADWAY H.

THE SPANS DESCRIBED ABOVE INCLUDE THIRTY-NINE (39) CONTINUOUS UNITS AND EIGHT (8) SIMPLE SPANS. THE CONTINUOUS UNITS INCLUDE THIRTY-SIX (36) FULLY OR PARTIALLY CURVED AND THREE NON-CURVED WELDED PLATE GIRDERS WITH ROLLED AND WELDED PLATE FLOORBEAMS AND ROLLED STRINGERS. THE SIMPLE SPANS ARE ALL COMPOSITE WF.



CITY OF EAST ST. LOUIS

LOCATION PLAN



LENGTH OF PROJECT
4261.16 FT. = .807 MILES



LOCATION OF SECTION INDICATED THIS:

APPROVED

[Signature]

STATE OF ILLINOIS DEPARTMENT OF PUBLIC WORKS AND BUILDINGS DIVISION OF HIGHWAYS
11-30-66 R. A. & S. K. Kunt
12-20-66 D. W. Van Oudenalle
12-20-66 W. E. Baumann
12-20-66 D. W. Van Oudenalle
12-20-66 D. W. Van Oudenalle

NOTE:
FOR INDEX OF SHEETS AND
SUMMARY OF QUANTITIES
SEE SHEET NO. 2

8-64

DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS
APPROVED
DIVISION ENGINEER DATE

H. W. LOCHNER, INC.
ENGINEERS
CHICAGO, ILLINOIS

2257
[Signature]
Aug. 27, 1965

Contract No. 24962

082-0254

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 70	82-3HVF&E-1	ST. CLAIR	247	2
FED. ROAD DIV. NO. 4	ILLINOIS	PROJECT		

INDEX OF SHEETS
SECTION 82-3 HVF & E-1

SHEET NO.	TITLE
1	TITLE SHEET
2	INDEX OF SHEETS, SUMMARY OF QUANTITIES, GENERAL NOTES
3 AND 4	PLAN OF EXISTING CONDITIONS AND UTILITIES
5 THRU 9	RIGHT OF WAY PLANS (FOR INFORMATION ONLY)
10	LIST OF BENCH MARKS, TIES TO TRAVERSE LINE AND GENERAL PLAN OF TRAVERSE LINE
11 THRU 15	ALIGNMENT PLANS
16 THRU 18	LIST OF COORDINATE POINTS AND DESCRIPTIONS
19	KEY PLAN, GENERAL NOTES AND BILL OF MATERIAL
20 THRU 24	GENERAL PLANS
25 THRU 43	PLAN AND ELEVATION
44 THRU 52	GEOMETRIC LAYOUTS
53 THRU 234	FRAMING PLANS AND STEEL DETAILS
235 THRU 245	STRESS TABLES
246	BEARING ELEVATIONS
247	STANDARDS 1686-3 AND 2176-1 STANDARD 2110

SUMMARY OF QUANTITIES
SECTION 82-3HVF&E-1

CODE NO.	ITEM	UNIT	TOTAL QUANTITY
20398	ENGINEER'S FIELD OFFICE TYPE "A"	EACH	1
20685	RAILROAD PROTECTIVE SERVICES	L. SUM	1
054001	FURNISHING AND ERECTING STRUCTURAL STEEL	POUND	17,674,325
20023	BRIDGE SEAT SEALANT	L. SUM	1

GENERAL NOTES

THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION ADOPTED JANUARY 2, 1959, THE SUPPLEMENTAL SPECIFICATIONS FOR HIGHWAY CONSTRUCTION EFFECTIVE MARCH 1, 1963 AND THE SUPPLEMENTAL SPECIFICATIONS EFFECTIVE JANUARY 3, 1966.

ALL ELEVATIONS REFER TO U.S.G.S. MEAN SEA LEVEL DATUM.

THE PROFILE GRADE LINE REFERS TO THE GRADE ELEVATION AT THE POINT SHOWN ON THE TYPICAL SECTIONS AND PLANS.

POSITIVE PROFILE GRADES ARE IN THE DIRECTION OF TRAFFIC AND HIGHER ELEVATIONS.

NEGATIVE PROFILE GRADES ARE IN THE DIRECTION OF TRAFFIC AND LOWER ELEVATIONS.

THE FOLLOWING UTILITY COMPANIES HAVE FACILITIES WITHIN THE LIMITS OF CONSTRUCTION WHICH MAY REQUIRE ADJUSTMENTS:

- EAST ST. LOUIS AND INTERURBAN WATER COMPANY
- ILLINOIS POWER COMPANY
- SOUTHWESTERN BELL TELEPHONE COMPANY
- UNION ELECTRIC COMPANY
- WESTERN UNION TELEGRAPH COMPANY

Weight of flange shear connectors is not included in quantity of structural steel
Cost of furnishing and placing flange shear connectors is included in section 82-3HVF-1

1% PORTION • 12.1%
1 PORTION • 57.9%

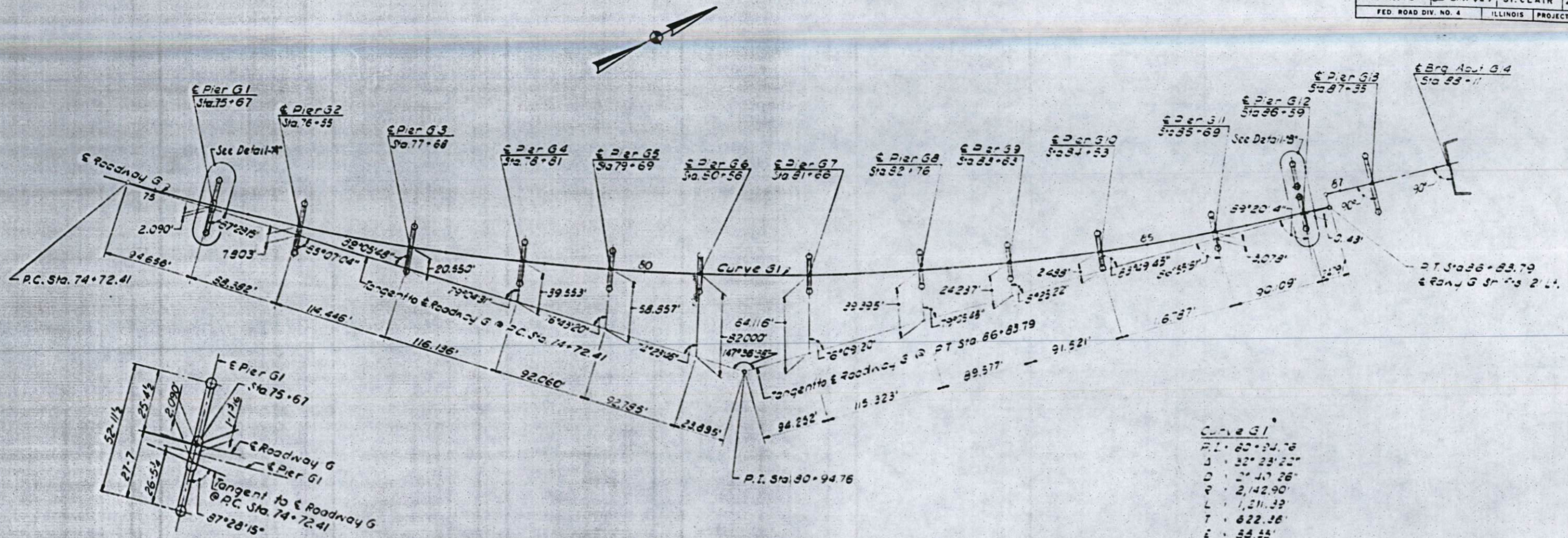
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BLDGS.
DIVISION OF HIGHWAYS

INDEX OF SHEETS
SUMMARY OF QUANTITIES
GENERAL NOTES

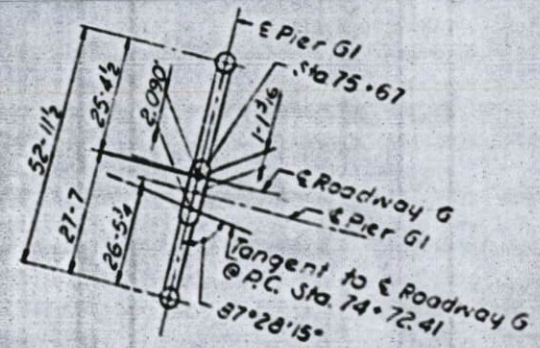
F.A.I. RT. 70 ST. CLAIR CO. SECTION 82-3HVF&E-1
H. W. LOCHNER, INC.
ENGINEERS
CHICAGO, ILLINOIS

SHEET
OF

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F. A. I. 70	82-3MVB-1	ST. CLAIR	247	48
FED. ROAD DIV. NO. 4	ILLINOIS	PROJECT		



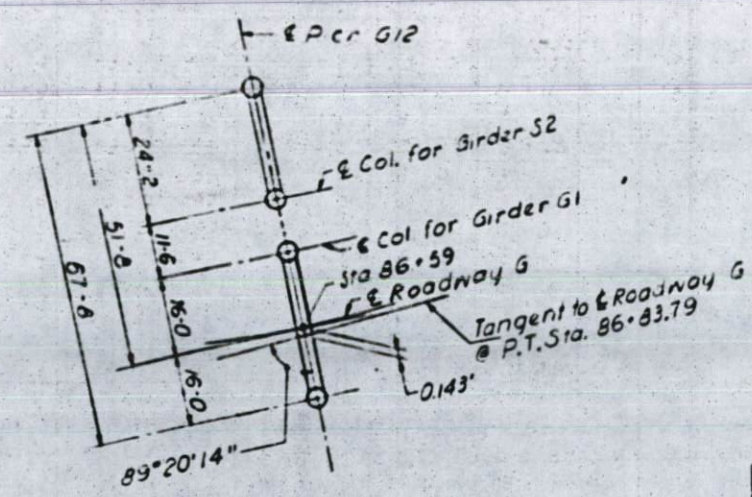
Curve G1
 P.I. 80+94.76
 Δ = 32° 23' 22"
 D = 217.26'
 R = 2,142.90'
 L = 1,311.32'
 T = 822.36'
 E = 53.55'



DETAIL - 'A'

TABLE OF COORDINATES

Pier No.	E Roadway G		Azimuth	Right Col Offset	Left Col Offset	
	Sta.	N. Coordinate				E. Coordinate
G 1	75+67	3792.528	33203.621	130° 59' 21"	27-7	25-4 1/2
G 2	76+55	3860.113	33259.962	128° 38' 10"	26-4 1/2	23-2 3/4
G 3	77+68	3950.204	33328.197	125° 26' 54"	23-10	20-10
G 4	78+81	10043.759	33391.503	122° 35' 37"	20-9	18-11
G 5	79+69	10118.853	33427.376	120° 14' 26"	18-10	17-9
G 6	80+56	10194.392	33479.655	117° 54' 52"	17-5 1/2	16-10 1/2
G 7	81+66	10293.362	33529.635	114° 55' 24"	16-4	15-3
G 8	82+76	10394.226	33572.497	112° 01' 56"	16-0	15-0
G 9	83+63	10475.513	33603.487	109° 42' 22"	16-0	16-0
G 10	84+53	10560.554	33632.047	107° 17' 59"	16-0	16-0
G 11	85+69	10672.496	33665.528	104° 11' 53"	16-0	16-0
G 12	86+59	10762.174	33693.764	101° 47' 30"	16-0	51-8
G 13	87+35	10837.033	33686.800	101° 07' 44"	28-0	29-11
Brig Abut G 4	88+11	10911.604	33701.469	101° 07' 44"	29-0	22-9 1/2



DETAIL - 'B'

DESIGNED BY R.M.R.
 DRAWN BY I.M.
 CHECKED BY S.G.B.
 APPROVED BY K.A.

STATE OF ILLINOIS
 DEPARTMENT OF PUBLIC WORKS & BLDGS.
 DIVISION OF HIGHWAYS
GEOMETRIC LAYOUT
 PIERS G1 THRU G14
 POPLAR STREET BRIDGE APPROACHES
 ROADWAY "G"

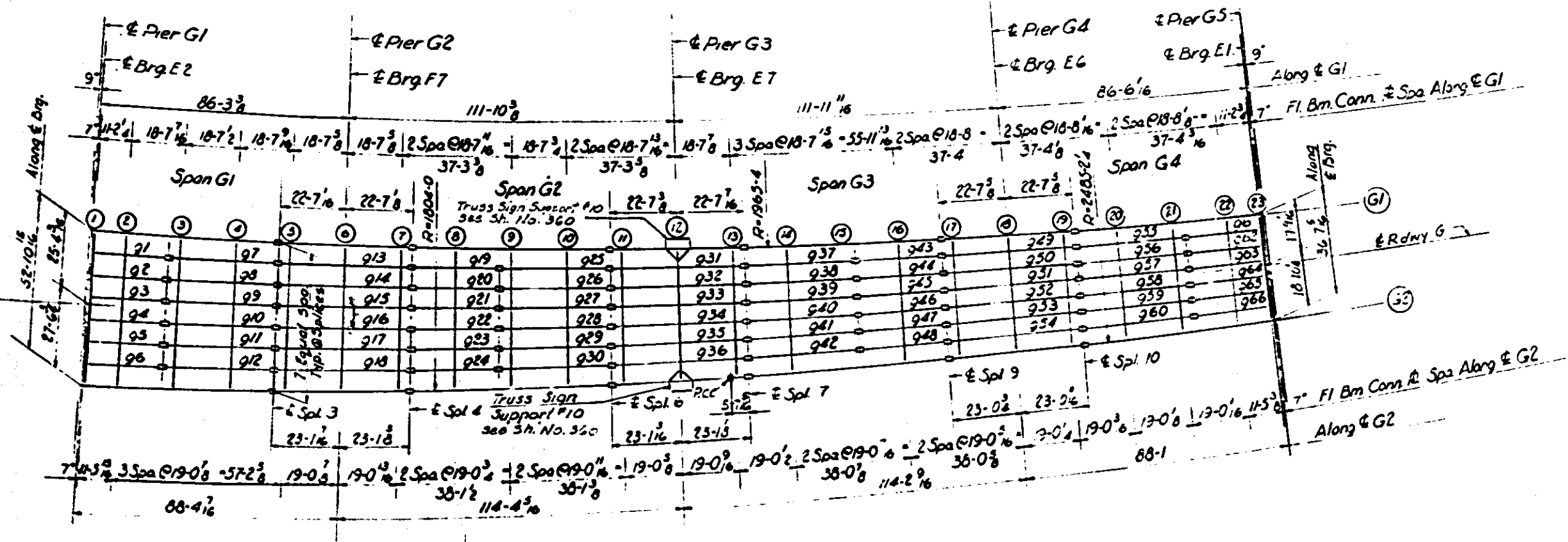
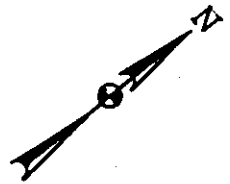
SECTIONS 82-3MVB-1
 82-3MVB-E-1
 82-3MVB-1

F.A.I.R.T. 70 ST. CLAIR CO.

H. W. LOCHNER, INC.
 ENGINEERS
 CHICAGO, ILLINOIS

SHEET
 30 of 52

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 70	B2-3MVFBE	ST. CLAIR	247	-
FED. ROAD DIV. NO. 4	ILLINOIS PROJECT			



ELEVATION TOP OF GIRDER JOBS

	GR. G1	GR. G2	DIFF.
CL. BRL.	457.813	467.046	4.233
FLOOR BEAM 1	457.812	467.043	4.231
FLOOR BEAM 2	457.778	461.978	4.197
FLOOR BEAM 3	457.721	461.863	4.142
FLOOR BEAM 4	457.648	461.790	4.088
SPLICE 3	457.621	461.861	4.040
FLOOR BEAM 5	457.608	461.630	4.021
FLOOR BEAM 6	457.548	461.515	3.968
FLOOR BEAM 7	457.488	461.360	3.872
SPLICE 4	457.477	461.360	3.883
FLOOR BEAM 8	457.478	461.768	3.940
FLOOR BEAM 9	457.383	461.130	3.744
FLOOR BEAM 10	457.303	461.010	3.707
SPLICE 6	457.254	460.908	3.658
FLOOR BEAM 11	457.240	460.810	3.640
FLOOR BEAM 12	457.174	460.743	3.569
FLOOR BEAM 13	457.108	460.608	3.487
SPLICE 7	457.085	460.577	3.492
FLOOR BEAM 14	457.041	460.470	3.429
FLOOR BEAM 15	456.972	460.395	3.363
FLOOR BEAM 16	456.902	460.190	3.286
SPLICE 8	456.848	460.097	3.243
FLOOR BEAM 17	456.874	460.053	3.221
FLOOR BEAM 18	456.768	459.934	3.172
FLOOR BEAM 19	456.690	459.904	3.114
SPLICE 10	456.673	459.776	3.103
FLOOR BEAM 20	456.616	459.677	3.061
FLOOR BEAM 21	456.541	459.592	3.011
FLOOR BEAM 22	456.466	459.427	2.961
FLOOR BEAM 23	456.421	459.351	2.930
CL. BRL.	456.418	459.347	2.929

PLAN
Spans G1 Thru G4

Note:
Dimensions locating Floor Beams are given to the Floor Beam Conn. Plate, see Sketch Sheet No. B3

BILL OF MATERIAL

# Structural Steel	Lbs. 636,220
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*Weight of Bearing Assemblies with Lead Plates and Anchor Bolts are included as Structural Steel Est. Wt. 13,150 Lbs.

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BLDGS.
DIVISION OF HIGHWAYS
FRAMING PLAN
SPANS G1 THRU G4
POPLAR STREET BRIDGE APPROACHES
ROADWAY "G"

F.A.I. RT. 70 ST. CLAIR CO. SECTION B2-3MVFBE-

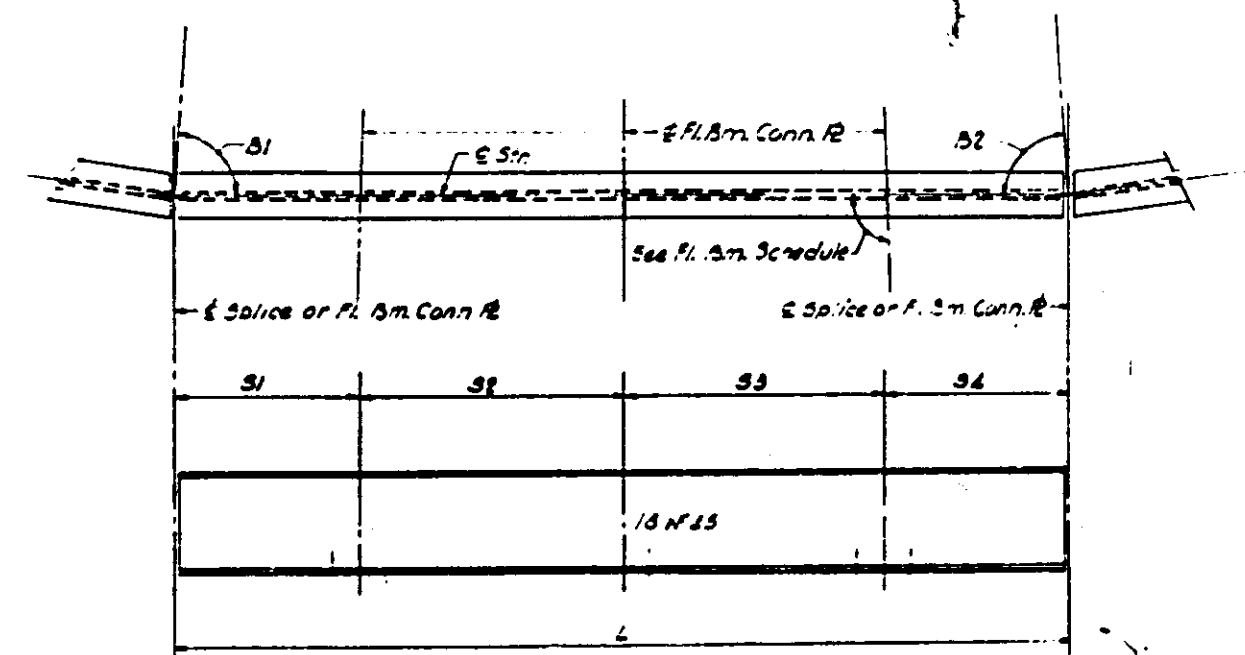
N. W. LOCHNER, INC.
ENGINEERS
CHICAGO, ILLINOIS

SHEET
247-326

DESIGNED BY R.M.R.
DRAWN BY J.K.
CHECKED BY J.T.
APPROVED BY S.J.

STRINGER DIMENSIONS

STR	L	S1	S2	S3	S4	S1	S2	STR	L	S1	S2	S3	S4	S1	S2
1	25 11 3/8		11 2 3/4		14 8 5/8	90.48.10	90.27.43	34	45 9 3/16	4 1/8	18 10 1/2	18 10 1/2	4 1/8	90.25.57	90.20.48
2	26 1 1/2		11 3 1/4		14 9 3/16	90.20.02	90.45.31	35	45 10 7/8	4 1/4	18 11 3/16	18 11 1/8	4 1/4	90.32.57	90.12.47
3	26 1 5/8		11 3 13/16		14 9 13/16	90.12.02	90.03.51	36	46 9/16	4 7/16	18 11 15/16	18 11 13/16	4 3/8	90.10.05	90.38.38
4	26 2 3/4		11 4 3/16		14 10 7/16	90.24.10	90.21.43	37	47 5 1/16	14 8 13/16	18 9 9/16		3 11 11/16	90.07.29	90.22.05
5	26 3 15/16		11 4 7/8		14 11 1/16	90.26.05	90.28.27	38	47 6 5/16	14 9 5/16	18 9 3/16		3 11 13/16	90.44.46	90.14.49
6	26 5 1/16		11 5 7/16		14 11 5/8	90.18.09	90.57.04	39	47 7 5/8	14 9 7/8	18 9 13/16		3 11 15/16	90.22.10	90.37.25
7	27 4 1/8	3 11 5/8	10 8 1/4		14 8 11/16	90.26.11	90.23.24	40	47 8 13/16	14 10 3/8	18 10 7/16		4 1/16	90.28.42	90.28.53
8	27 6	3 11 3/4	10 9		14 9 1/4	90.17.08	90.42.26	41	47 10 1/4	14 10 15/16	18 11 1/8		4 1/4	90.37.21	90.22.13
9	27 7 9/16	3 11 15/16	10 9 3/4		14 9 13/16	90.28.13	90.01.21	42	47 11 9/16	14 11 7/16	18 11 3/4		4 3/8	90.15.09	90.44.26
10	27 9 1/16	4 1/8	10 10 1/2		14 10 7/16	90.28.25	90.25.09	43	48 9 3/4	14 9 7/8			14 8 7/8	90.11.13	90.01.12
11	27 10 5/8	4 1/4	10 11 5/16		14 11	90.20.47	90.28.48	44	48 9 11/16	14 9 3/8			14 9 3/8	90.20.08	90.22.17
12	28 3/16	4 7/16	10 1/16		14 11 5/8	90.02.15	90.57.29	45	48 7 11/16	14 9 7/8			14 9 13/16	90.23.09	90.43.15
13	45 3 15/16	3 11 5/8	10 8 3/16	10 8 3/8	3 11 11/16	90.23.17	90.23.29	46	48 9 11/16	14 10 3/8			14 10 5/16	90.02.18	90.04.07
14	45 5 11/16	3 11 13/16	10 9 1/16	10 9 1/8	3 11 13/16	90.03.04	90.43.40	47	48 9 11/16	14 10 7/8			14 10 13/16	90.47.33	90.24.51
15	45 7 1/2	3 11 15/16	10 9 3/4	10 9 13/16	3 11 15/16	90.42.28	90.01.48	48	48 10 11/16	14 11 3/8			14 11 3/16	90.26.26	90.45.29
16	45 8 5/16	4 1/8	10 10 1/16	8 10 5/16	4 1/8	25.23.00	90.23.46	49	48 6 5/8	3 11 11/16	10 8 9/16	10 8 5/8	3 11 11/16	90.25.21	90.51.23
17	46 11 1/8	4 5/16	10 11 5/16	10 11 1/4	4 1/4	90.08.09	90.43.38	50	48 6 1/16	3 11 13/16	10 9 3/16	10 9 3/16	3 11 13/16	90.28.08	90.16.38
18	46 15/16	4 7/16	10 1/16	10	4 7/16	90.43.27	90.02.18	51	48 7 1/2	3 11 15/16	10 9 13/16	10 9 13/16	3 11 15/16	90.16.57	90.29.47
19	48 5 7/16	14 8 11/16			14 8 3/4	90.20.18	90.42.07	52	48 8 15/16	4 1/8	18 10 7/16	18 10 3/8	4 1/16	90.57.28	90.46.30
20	48 6 5/16	14 9 1/4			14 9 5/16	90.08.29	90.09.25	53	48 10 7/16	4 1/4	18 11	18 11	4 3/16	90.28.28	90.07.47
21	48 7 11/16	14 9 3/8			14 9 7/8	90.47.40	90.24.29	54	48 11 13/16	4 3/8	18 11 11/16	18 11 9/16	4 5/16	90.24.07	90.26.37
22	48 8 13/16	14 10 3/16			14 10 7/16	90.28.48	90.46.38	55	47 5 9/16	14 8 15/16	18 8 9/8		3 11 3/4	90.28.24	90.04.16
23	48 10	14 11			14 11	90.08.22	90.06.28	56	47 8 7/16	14 9 3/8	18 9 3/16		3 11 13/16	90.41.12	90.18.23
24	48 11 2/16	14 11 5/8			14 11 9/16	90.08.05	90.27.19	57	47 7 9/16	14 9 13/16	18 9 13/16		3 11 15/16	90.24.04	90.25.30
25	47 4 7/8	3 11 11/16	10 8 7/16		14 8 13/16	90.18.28	90.40.24	58	47 8 3/4	14 10 5/16	18 10 3/8		4 1/16	90.07.42	90.28.22
26	47 6 1/4	3 11 13/16	10 9 1/8		14 9 5/16	90.26.22	90.05.12	59	47 9 7/8	14 10 3/4	18 10 15/16		4 3/16	90.20.08	90.09.23
27	47 7 5/8	3 11 15/16	10 9 13/16		14 9 7/8	90.24.15	90.25.19	60	47 11 1/16	14 11 1/4	18 11 1/2		4 5/16	90.25.13	90.26.21
28	47 9 1/16	4 1/8	10 10 1/2		14 10 3/8	90.12.14	90.47.19	61	48 1/16	14 8 15/16	11 3 1/8			90.05.40	90.16.50
29	47 10 1/2	4 1/4	10 11 1/4		14 10 15/16	90.28.25	90.08.10	62	48 7/8	14 9 3/8	11 3 1/2			90.46.23	90.26.39
30	47 11 15/16	4 3/16	10		14 11 1/2	90.26.48	90.28.22	63	48 1 11/16	14 9 13/16	11 3 13/16			90.25.48	90.42.05
31	48 4 9/16	3 11 11/16	10 8 7/16	10 8 1/2	3 11 11/16	90.08.44	90.41.80	64	48 2 1/2	14 10 1/4	11 4 3/16			90.18.18	90.57.35
32	48 5 15/16	3 11 13/16	10 9 1/8	10 9 1/8	3 11 13/16	90.42.80	90.04.24	65	48 3 5/16	14 10 3/4	11 4 9/16			90.02.23	90.12.39
33	49 7 9/16	3 11 15/16	10 9 13/16	10 9 13/16	3 11 15/16	90.18.04	90.27.60	66	48 4 3/16	14 11 3/16	11 4 13/16			90.47.33	90.28.20



TYPICAL STRINGER

Notes:
 Length L of Stringer is correct as given in the Table, except the increment lengths are given to the nearest 1/16".
 All dimensions are in the Horizontal Plane.

DESIGNED BY: R.V.S.
 DRAWN BY: J.K.
 CHECKED BY: A.T.
 APPROVED BY: K.A.

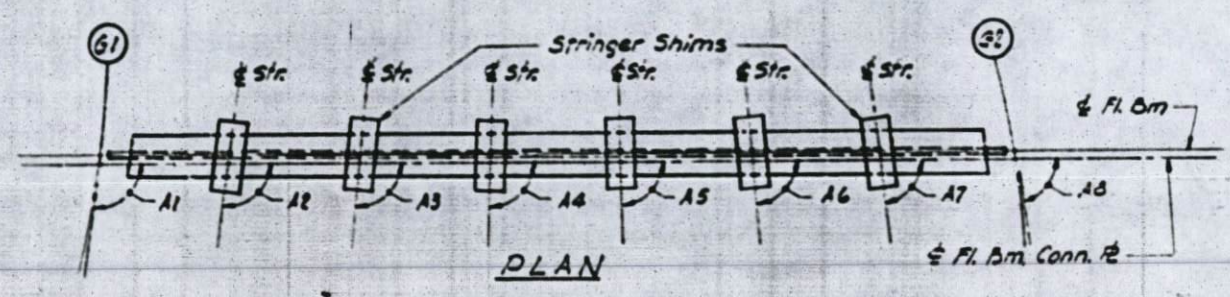
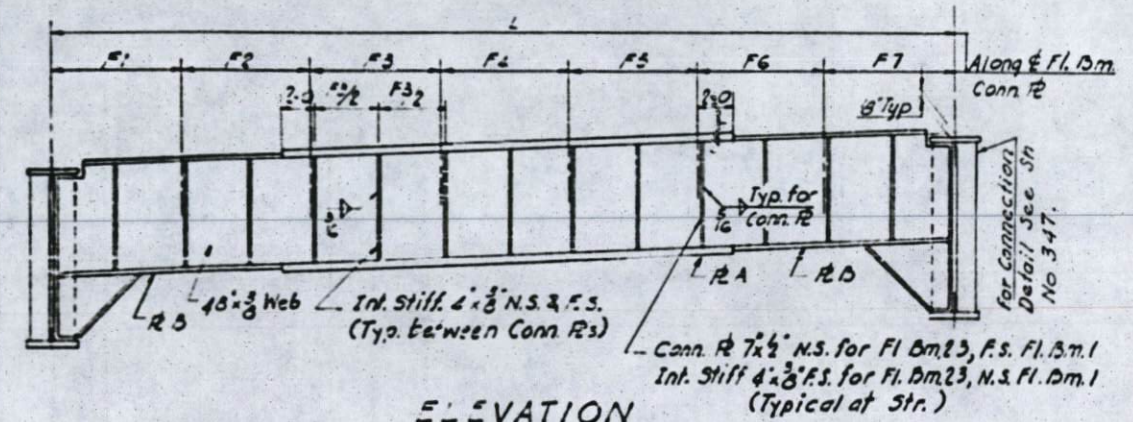
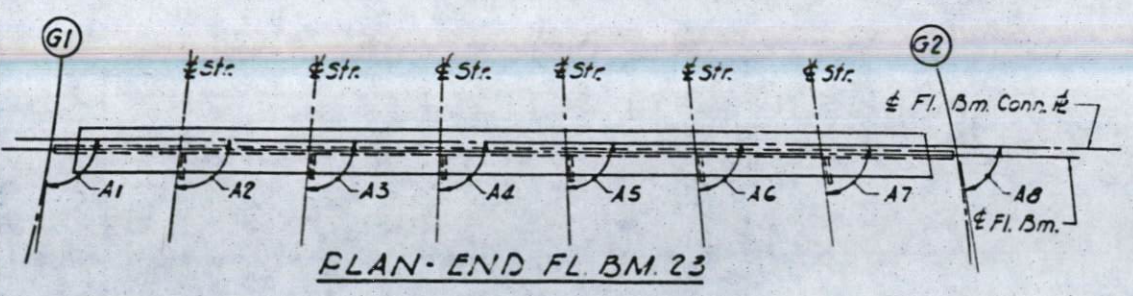
STATE OF ILLINOIS
 DEPARTMENT OF PUBLIC WORKS & BLDGS.
 DIVISION OF HIGHWAYS
 STRINGER SCHEDULE
 SPANS G1 THRU G4
 POPLAR STREET BRIDGE APPROACHES
 ROADWAY "G"
 F.A.I. RT. 70 ST. CLAIR CO. SECTION B2-3MVF B E-1
 H. W. LOCHNER, INC.
 ENGINEERS
 CHICAGO, ILLINOIS

SHEET 248 of 256

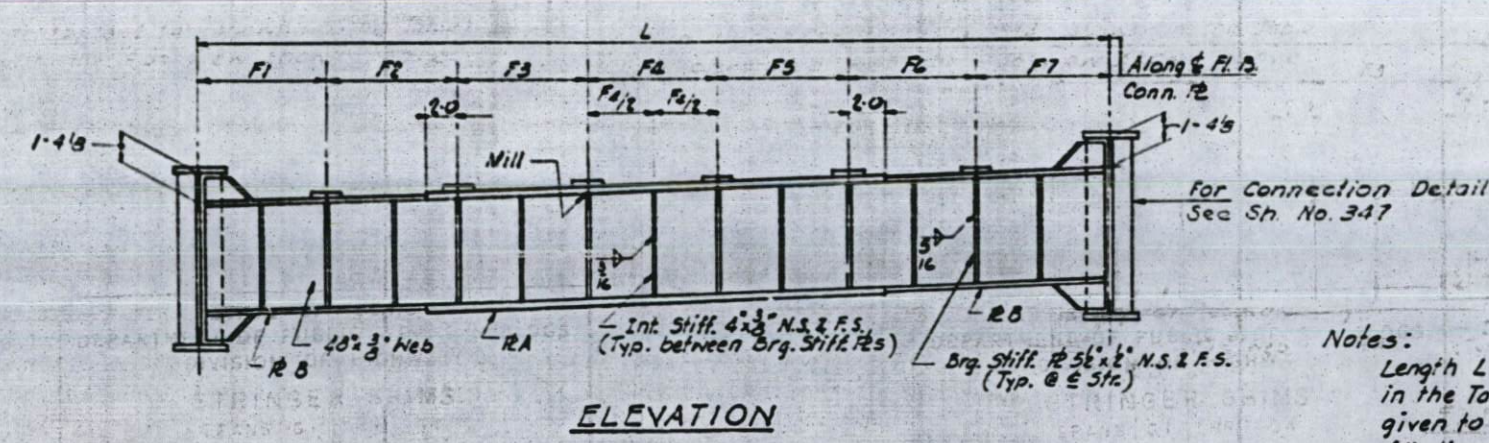
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. - 70	82-3HVF B E-1	ST. CLAIR	247	22
FED. ROAD DIV. NO. 4	ILLINOIS	PROJECT		

FLOOR BEAM DIMENSIONS

FL. BM.	L	F1	F2	F3	F4	F5	F6	F7	A1	A2	A3	A4	A5	A6	A7	A8	PLATE A T & S	PLATE B T & S
1	52 10 11/16	7 6 11/16	7 6 11/16	7 6 11/16	7 6 11/16	7 6 11/16	7 6 11/16	7 6 11/16	91.29.02	90.48.10	90.30.02	90.12.02	89.54.10	89.36.26	89.18.49	89.26.36	12x12	12x12
2	52 5 13/16	7 5 7/16	7 5 15/16	7 5 15/16	7 5 15/16	7 5 15/16	7 5 15/16	7 6 9/16	91.29.47	91.08.29	90.50.21	90.32.21	90.14.29	89.56.45	89.39.08	89.25.01	12x12	12x14
3	51 9 9/16	7 4 3/8	7 4 13/16	7 4 13/16	7 4 13/16	7 4 13/16	7 4 13/16	7 5 1/4	91.27.26	90.42.36	90.23.33	90.04.38	89.45.51	89.27.12	89.08.40	89.18.53	12x12	12x14
4	51 1	7 2 9/16	7 3 9/16	7 3 9/16	7 3 9/16	7 3 9/16	7 3 9/16	7 4 11/16	91.25.04	91.12.49	90.53.46	90.34.51	90.16.04	89.57.25	89.38.53	89.12.45	12x12	12x14
5	50 4 3/16	7 1 13/16	7 2 5/16	7 2 5/16	7 2 5/16	7 2 5/16	7 2 5/16	7 2 7/8	91.22.41	90.29.44	90.09.29	89.49.23	89.29.25	89.09.34	88.49.52	89.06.37	12x12	12x14
6	49 7 1/8	6 11 7/16	7 1	7 1	7 1	7 1	7 1	7 2 3/4	91.20.19	90.58.56	90.38.42	90.19.36	89.58.38	89.39.47	89.20.05	89.50.17	12x12	12x14
7	48 9 13/16	6 11 3/16	6 11 11/16	6 11 11/16	6 11 11/16	6 11 11/16	6 11 11/16	7 1/4	91.17.56	91.30.08	91.08.55	90.48.48	90.29.50	90.10.00	89.50.17	88.54.22	12x12	12x14
8	48 1/4	6 9 5/8	6 10 5/16	6 10 5/16	6 10 5/16	6 10 5/16	6 10 5/16	6 11 1/16	91.15.32	90.54.05	90.32.47	90.11.36	89.50.34	89.29.40	89.08.54	88.48.15	12x12	12x14
9	47 2 7/16	6 8 1/2	6 8 15/16	6 8 15/16	6 8 15/16	6 8 15/16	6 8 15/16	6 9 3/8	91.13.08	90.25.03	90.02.47	89.40.40	89.18.41	88.56.50	88.35.07	88.42.08	12x12	12x14
10	46 4 3/8	6 6 7/16	6 7 7/16	6 7 7/16	6 7 7/16	6 7 7/16	6 7 7/16	6 8 5/8	91.10.44	90.55.16	90.33.00	90.10.53	89.48.54	89.27.03	89.05.20	88.36.02	12x12	12x14
11	45 6 1/16	6 5 1/2	6 6	6 6	6 6	6 6	6 6	6 8 9/16	91.08.20	90.12.08	89.48.45	89.25.29	89.02.22	88.39.22	88.16.32	88.29.56	12x12	12x14
12	44 7 1/2	6 2 15/16	6 4 1/2	6 4 1/2	6 4 1/2	6 4 1/2	6 4 1/2	6 6 1/4	91.05.55	90.42.22	90.18.58	89.55.42	89.32.34	89.09.35	88.46.44	88.23.51	12x12	12x14
13	43 8 11/16	6 2 7/16	6 2 15/16	6 2 15/16	6 2 15/16	6 2 15/16	6 2 15/16	6 3 1/2	91.03.30	91.12.35	90.49.11	90.25.35	90.02.47	89.39.48	89.16.57	89.18.35	12x12	12x14
14	42 10	6 7/16	6 1 7/16	6 1 7/16	6 1 7/16	6 1 7/16	6 1 7/16	6 2 5/16	91.01.04	90.31.17	90.08.33	89.45.58	89.23.29	89.01.08	88.38.56	88.22.27	12x12	12x14
15	41 11 3/4	5 11 9/16	6	6	6	6	6	6 5/16	90.58.39	91.01.30	90.38.46	90.16.10	89.53.42	89.31.22	89.09.08	88.26.20	12x12	12x14
16	41 1 15/16	5 9 15/16	5 10 9/16	5 10 9/16	5 10 9/16	5 10 9/16	5 10 9/16	5 11 1/8	90.56.13	90.35.01	90.13.55	89.52.57	89.32.06	89.11.21	88.50.44	88.30.13	12x12	12x14
17	40 4 1/2	5 8 3/4	5 9 1/4	5 9 1/4	5 9 1/4	5 9 1/4	5 9 1/4	5 9 5/8	90.53.47	90.01.46	89.42.31	89.23.22	89.04.20	88.45.23	88.26.32	88.34.06	12x12	12x14
18	39 7 1/2	5 6 7/16	5 8	5 8	5 8	5 8	5 8	5 9 1/4	90.51.20	90.31.58	90.12.44	89.53.35	89.34.32	89.15.36	88.56.45	88.36.01	12x12	12x14
19	38 10 15/16	5 6 1/4	5 6 3/4	5 6 3/4	5 6 3/4	5 6 3/4	5 6 3/4	5 7 1/8	90.48.53	91.02.12	90.42.57	90.23.48	90.04.45	89.45.48	89.26.58	88.41.55	12x12	12x14
20	38 2 13/16	5 4 9/16	5 5 9/16	5 5 9/16	5 5 9/16	5 5 9/16	5 5 9/16	5 6 2/8	90.48.27	90.22.12	90.05.00	89.47.52	89.30.50	89.13.53	88.57.01	88.45.49	12x12	12x14
21	37 7 1/16	5 4 1/16	5 4 7/16	5 4 7/16	5 4 7/16	5 4 7/16	5 4 7/16	5 4 3/4	90.43.59	90.52.25	90.35.12	90.18.05	90.01.03	89.44.06	89.27.14	88.49.44	12x12	12x14
22	36 11 3/4	5 2 7/8	5 3 3/8	5 3 3/8	5 3 3/8	5 3 3/8	5 3 3/8	5 3 13/16	90.41.32	90.28.50	90.13.11	89.57.36	89.42.06	89.26.41	89.11.21	88.53.40	12x12	12x14
23	36 7 1/2	5 2 13/16	5 2 13/16	5 2 13/16	5 2 13/16	5 2 13/16	5 2 13/16	5 2 13/16	90.42.13	90.49.10	90.33.30	90.17.55	90.02.25	89.47.01	89.31.40	88.58.09	12x12	12x14



END FLOOR BEAM 1 AND 23



INTERIOR FLOOR BEAM 2 THRU 22

Notes:
 Length L of Floor Beam is Correct as given in the Table, except the increment lengths are given to the nearest 1/16".
 All dimensions are in the horizontal plane.
 For Intermediate Stiffener, Bearing Stiffener and Connection Plate Details see Sheet No. 348.

DESIGNED BY R.M.R.
 DRAWN BY J.K.
 CHECKED BY J.T.
 APPROVED BY K.S.

STATE OF ILLINOIS
 DEPARTMENT OF PUBLIC WORKS & BLDGS.
 DIVISION OF HIGHWAYS
 FLOOR BEAM SCHEDULE
 SPANS G1 THRU G4
 POPLAR STREET BRIDGE APPROACHES
 ROADWAY "G"
 F.A.I. RT. 70 ST. CLAIR CO. SECTION 82-3HVF B E-1
 H. W. LOCHNER, INC.
 ENGINEERS
 CHICAGO, ILLINOIS

SHEET
 250 of 526

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. - 70	82-3HVFBE-1	ST. CLAIR	247	12
FED. ROAD DIV. NO. 4		ILLINOIS	PROJECT	

FLOOR BEAM 2 THRU 4	T1	T2	T3	T4
STR. 1 THRU 12	1 1/16	1/2	1	7/16

FLOOR BEAM 5 THRU 7	T1	T2	T3	T4
STR. 13 THRU 18	1 1/16	1/2	1	7/16

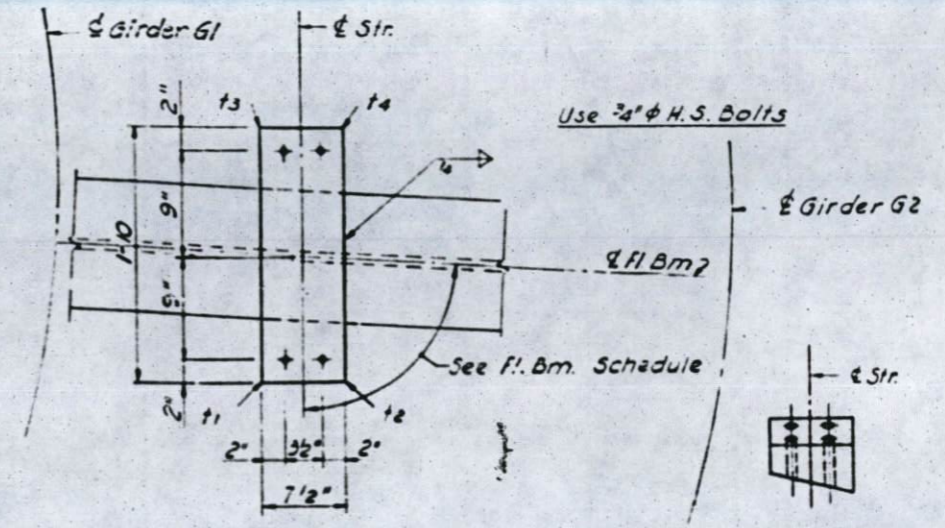
FLOOR BEAM 8 THRU 10	T1	T2	T3	T4
STR. 19 THRU 30	1 1/16	1/2	1	7/16

FLOOR BEAM 11 THRU 13	T1	T2	T3	T4
STR. 31 THRU 35	1 1/8	1/2	1	3/4

FLOOR BEAM 14 THRU 15	T1	T2	T3	T4
STR. 37 THRU 40	1 1/8	1/2	1	3/8

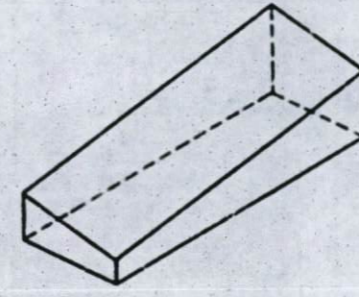
FLOOR BEAM 17 THRU 18	T1	T2	T3	T4
STR. 49 THRU 54	1 1/8	1/2	1	3/8

FLOOR BEAM 20 THRU 22	T1	T2	T3	T4
STR. 55 THRU 56	1 1/8	1/2	1	3/8

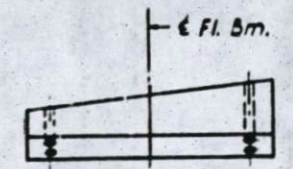


PLAN

END VIEW



ISOMETRIC VIEW



SIDE VIEW

SHIM DETAIL

Shim thickness t_1 , t_2 , t_3 & t_4 shown in the Table are orientated with the Plan View shown above.

DESIGNED BY R.M.R.
 DRAWN BY J.C.
 CHECKED BY J.T.
 APPROVED BY K.A.

DESIGNED BY H.W. LOCHNER
 DRAWN BY H.W. LOCHNER
 CHECKED BY H.W. LOCHNER
 APPROVED BY H.W. LOCHNER

STATE OF ILLINOIS
 DEPARTMENT OF PUBLIC WORKS & BLDGS.
 DIVISION OF HIGHWAYS

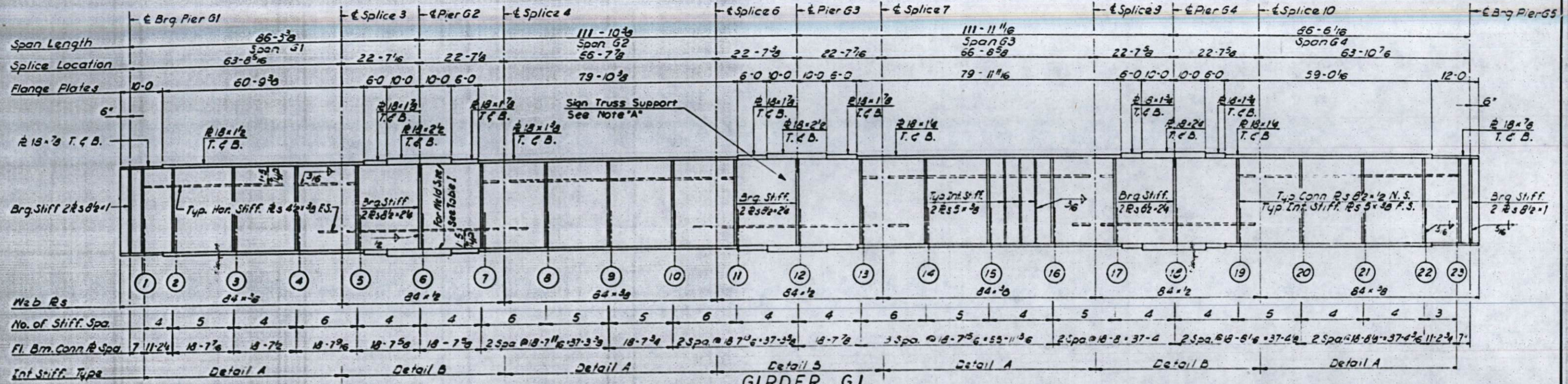
STRINGER SHIMS
 SPANS G1 THRU G4
 POPLAR STREET BRIDGE APPROACHES
 ROADWAY "G"

F.A.I. RT. 70 ST. CLAIR CO. SECTION 82-3HVFBE-1

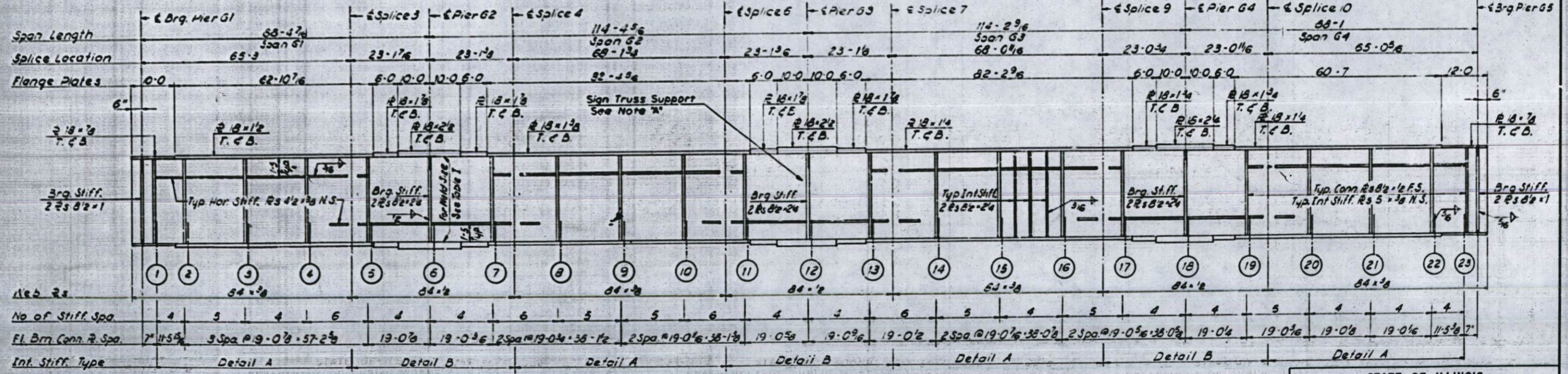
H. W. LOCHNER, INC.
 ENGINEERS
 CHICAGO, ILLINOIS

SHEET
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ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI. 70	82-3HV & E-1	ST. CLAIR	247	122
FED. ROAD DIV. NO. 4	ILLINOIS	PROJECT		



GIRDER G1
SPANS G1 THRU G4



GIRDER G2
SPANS G1 THRU G4

NOTES:

All longitudinal dimensions shown are given along C of Web. See Sheet No. 248.
 All Bearing Stiffeners and Connection Plates to be vertical.
 For Splice, Stiffener and Connection plate Details and Table I see Sheet Nos. 348, 349 & 350.
 For Truss Sign Support see Sheet No. 360.
NOTE 'A'
 Intermediate Stiffeners should be moved if necessary to clear Sign Truss Support Connection Plate

STATE OF ILLINOIS
 DEPARTMENT OF PUBLIC WORKS & BLDGS.
 DIVISION OF HIGHWAYS

GIRDERS G1 AND G2
 SPANS G1 THRU G4
 POPLAR STREET BRIDGE APPROACHES
 ROADWAY "G"

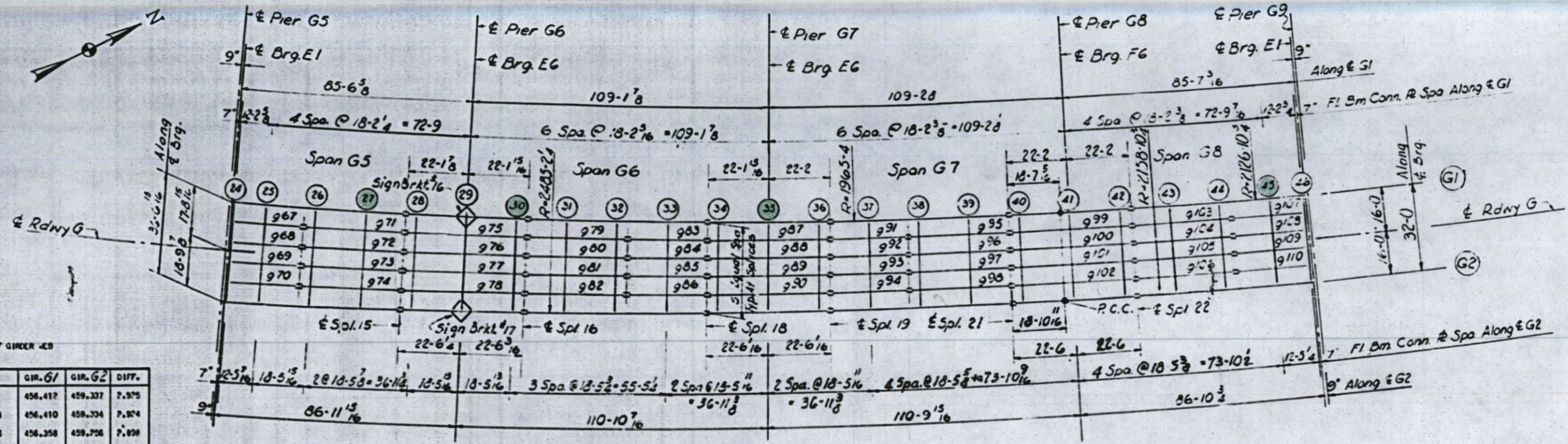
FAI. RT. 70 ST. CLAIR CO. SECTION 82-3HV & E-1

H. W. LOCHNER, INC.
 ENGINEERS
 CHICAGO, ILLINOIS

SHEET
 252 of 256

DESIGNED BY: R.M.R.
 DRAWN BY: J.M.M.
 CHECKED BY: A.T.
 APPROVED BY: K.A.

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
70	B2-3HV	ST. CLAIR	247	23
FED. ROAD DIV. NO. 4		ILLINOIS	PROJECT	



PLAN
Spans G5 Thru G8

ELEVATION TOP OF GIRDER - E8

	GIR. G1	GIR. G2	DIFF.
CL. ENG.	456.417	459.337	2.920
FLOOR BEAM 74	456.410	459.334	2.924
FLOOR BEAM 75	456.358	459.206	2.848
FLOOR BEAM 76	456.782	459.139	2.357
FLOOR BEAM 77	456.705	459.073	2.368
SPLICE 15	456.145	458.833	2.688
FLOOR BEAM 78	456.179	458.908	2.729
FLOOR BEAM 79	456.048	458.797	2.749
FLOOR BEAM 30	455.969	458.686	2.717
SPLICE 18	455.921	458.662	2.741
FLOOR BEAM 31	455.887	458.573	2.686
FLOOR BEAM 32	455.804	458.472	2.668
FLOOR BEAM 33	455.721	458.306	2.585
SPLICE 16	455.657	458.283	2.626
FLOOR BEAM 34	455.638	458.261	2.623
FLOOR BEAM 35	455.592	458.159	2.567
FLOOR BEAM 36	455.467	458.058	2.591
SPLICE 19	455.448	458.036	2.588
FLOOR BEAM 37	455.378	457.961	2.583
FLOOR BEAM 38	455.290	457.864	2.574
FLOOR BEAM 39	455.201	457.768	2.567
SPLICE 21	455.131	457.693	2.562
FLOOR BEAM 40	455.111	457.673	2.562
FLOOR BEAM 41	455.020	457.581	2.561
FLOOR BEAM 42	454.929	457.489	2.560
SPLICE 22	454.909	457.469	2.560
FLOOR BEAM 43	454.837	457.397	2.560
FLOOR BEAM 44	454.745	457.305	2.560
FLOOR BEAM 45	454.654	457.214	2.560
FLOOR BEAM 46	454.562	457.152	2.560
CL. ENG.	454.589	457.149	2.560

Note:
Dimensions locating Floor Beams are given to the Floor Beam Conn. Plate, see Sketch Sheet No. 133
For Sign Bracket Detail see Sheet No. 340

BILL OF MATERIAL		
*Structural Steel	Lbs.	509,590

*Weight of Bearing Assemblies with Lead Plates and Anchor Bolts are Included as Structural Steel Est. Wt. 10,970 Lbs.

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BLDGS.
DIVISION OF HIGHWAYS
FRAMING PLAN
SPANS G5 THRU G8
POPLAR STREET BRIDGE APPROACHES
ROADWAY "G"

F.A.I. RT.70 ST. CLAIR CO. SECTION B2-3HV F&E

H. W. LOCHNER, INC.
ENGINEERS
CHICAGO, ILLINOIS

SHEET
233 of 246

DESIGNED BY: R.M.R.
DRAWN BY: JK
CHECKED BY: [Signature]
APPROVED BY: [Signature]

DESIGNED BY: JK
CHECKED BY: [Signature]

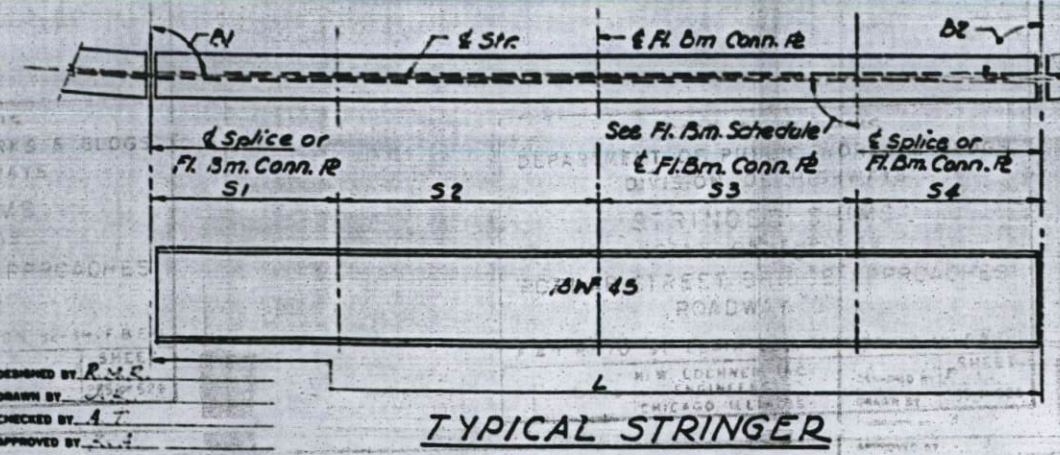
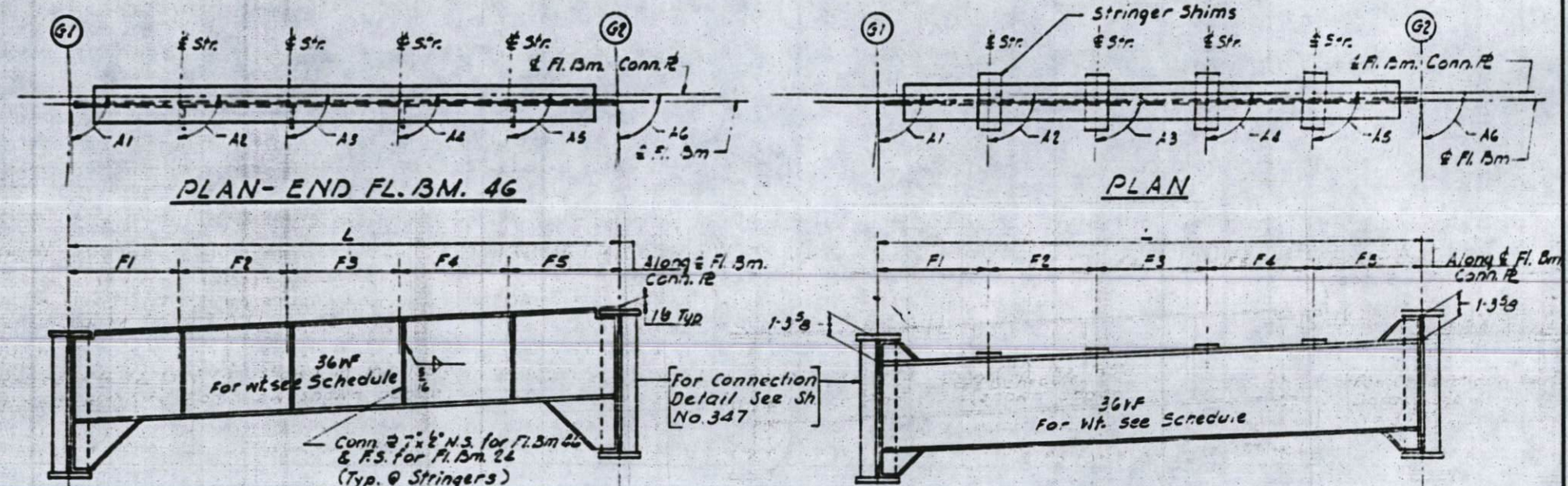
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. - 70	82-3HVFB E-1	ST. CLAIR	297	124
FED. ROAD DIV. NO. 4	ILLINOIS	PROJECT		

STRINGER DIMENSIONS

STR	L	S1	S2	S3	S4	R1	R2
67	26 6 3/8		12 3 3/16		14 3 3/16	89.54.26	89.26.39
68	26 7 1/2		12 3 3/4		14 3 3/4	89.34.34	89.40.31
69	26 8 5/8		12 4 5/16		14 4 5/16	89.14.51	90.00.14
70	26 9 13/16		12 4 7/8		14 4 15/16	88.55.17	90.19.48
71	26 5 7/8	3 11 3/4	18 2 15/16		14 3 3/16	89.46.37	89.14.34
72	26 7 3/8	3 11 15/16	18 3 11/16		14 3 3/4	89.28.56	89.32.15
73	26 8 13/16	4 1/8	18 4 7/16		14 4 5/16	89.11.21	89.49.49
74	26 10 1/4	4 1/4	18 5 1/8		14 4 7/8	88.53.54	90.07.16
75	44 5 1/2	3 11 3/4	18 2 15/16	18 3	3 11 3/4	89.37.10	89.16.40
76	44 7 3/16	3 11 15/16	18 3 11/16	18 3 11/16	3 11 15/16	89.22.47	89.25.34
77	44 8 15/16	4 1/16	18 4 3/8	18 4 3/8	4 1/16	89.07.59	89.40.22
78	44 10 11/16	4 1/4	18 5 1/8	18 5 1/8	4 1/4	88.53.17	89.05.04
79	26 5 15/16	14 3 3/16	18 3		3 11 13/16	89.11.34	89.19.27
80	26 7 3/8	14 3 3/4	18 3 11/16		3 11 15/16	89.29.28	89.31.43
81	26 8 1/4	14 4 5/16	18 4 3/8		4 1/16	89.17.28	89.47.44
82	26 10 1/8	14 4 13/16	18 5 1/16		4 1/4	89.05.29	89.15.11
83	28 6 7/16	14 3 3/16			14 3 3/16	89.45.57	89.18.04
84	28 7 1/2	14 3 3/4			14 3 3/4	89.26.05	89.37.05
85	28 8 9/16	14 4 1/4			14 4 1/4	89.28.18	89.47.43
86	28 9 5/8	14 4 13/16			14 4 13/16	89.16.34	89.57.27
87	44 5 9/16	3 11 13/16	18 3	18 3	3 11 13/16	89.30.49	89.17.31
88	44 7 3/16	3 11 15/16	18 3 11/16	18 3 11/16	3 11 15/16	89.27.30	89.24.51
89	44 8 15/16	4 1/16	18 4 3/8	18 4 3/8	4 1/16	89.18.12	89.16.00
90	44 10 11/16	4 1/4	18 5	18 5	4 3/16	89.08.28	89.30.23
91	28 6 7/16	14 3 1/4			14 3 1/4	89.41.22	89.30.39
92	28 7 1/2	14 3 3/4			14 3 3/4	89.26.04	89.37.27
93	28 8 1/2	14 4 1/4			14 4 1/4	89.21.47	89.42.14
94	28 9 9/16	14 4 13/16			14 4 3/4	89.27.02	89.48.28
95	26 6	3 11 13/16	18 3		14 3 1/4	89.30.54	89.29.16
96	26 7 1/4	3 11 15/16	18 3 11/16		14 3 3/4	89.20.21	89.30.49
97	26 8 1/8	4 1/16	18 4 5/16		14 4 1/4	89.27.49	89.33.22
98	26 10	4 3/16	18 5		14 4 3/4	89.25.17	89.35.53
99	44 5 3/16	3 11 13/16	18 3	18 3	3 11 13/16	89.24.25	89.27.08
100	44 7 3/16	3 11 15/16	18 3 11/16	18 3 11/16	3 11 15/16	89.24.09	89.24.12
101	44 8 15/16	4 1/16	18 4 3/8	18 4 3/8	4 1/16	89.23.53	89.24.28
102	44 10 3/8	4 3/16	18 5	18 5	4 3/16	89.23.37	89.24.44
103	26 6	14 3 1/4	18 3		3 11 13/16	89.30.25	89.30.25
104	26 7 3/16	14 3 3/4	18 3 11/16		3 11 15/16	89.30.15	89.30.25
105	26 8 5/8	14 4 1/4	18 4 3/8		4 1/16	89.30.25	89.30.25
106	26 9 15/16	14 4 3/4	18 5		4 3/16	89.30.25	89.30.25
107	26 6 1/2	14 3 1/4	12 3 1/4			89.30.37	89.30.28
108	26 7 1/2	14 3 3/4	12 3 3/4			89.30.37	89.30.28
109	26 8 1/2	14 4 1/4	12 4 1/4			89.30.37	89.30.28
110	26 9 1/2	14 4 3/4	12 4 3/4			89.30.38	89.30.28

FLOOR BEAM DIMENSIONS

FL	L	F1	F2	F3	F4	F5	A1	A2	A3	A4	A5	A6	SECTION
24	26 6 9/16	7 3 11/16	7 3 11/16	7 3 11/16	7 3 11/16	7 3 11/16	90.37.03	89.54.26	89.34.34	89.14.51	88.55.17	88.54.27	36WF170
25	26 2 3/16	7 2 5/16	7 2 7/8	7 2 7/8	7 2 7/8	7 3 5/16	90.38.06	90.16.21	89.56.30	89.36.47	89.17.12	88.59.09	36WF194
26	26 8 1/16	7 1 1/4	7 1 5/8	7 1 5/8	7 1 5/8	7 1 15/16	90.35.42	89.53.02	89.35.21	89.17.46	89.00.19	89.00.57	36WF194
27	26 2 5/16	6 11 5/16	7 1/2	7 1/2	7 1/2	7 1 5/16	90.33.18	90.22.26	90.04.45	89.47.11	89.29.44	89.00.49	36WF182
28	24 9	6 10 15/16	6 11 7/16	6 11 7/16	6 11 7/16	6 11 13/16	90.30.54	89.44.05	89.29.12	89.14.24	88.59.42	89.10.29	36WF182
29	24 4	6 8 15/16	6 10 7/16	6 10 7/16	6 10 7/16	6 11 11/16	90.28.30	90.13.30	89.58.26	89.42.48	89.29.06	89.14.20	36WF182
30	22 11 1/2	6 9	6 9 1/2	6 9 1/2	6 9 1/2	6 9 15/16	90.26.05	90.12.55	90.28.01	90.13.13	89.42.21	89.18.20	36WF170
31	22 7 5/16	6 7 3/4	6 8 11/16	6 8 11/16	6 8 11/16	6 9 1/2	90.23.41	90.14.33	89.52.27	89.40.26	89.28.29	89.22.11	36WF170
32	22 3 5/8	6 7 9/16	6 7 15/16	6 7 15/16	6 7 15/16	6 8 1/4	90.21.16	90.10.58	90.21.52	90.09.51	89.57.54	89.28.00	36WF170
33	22 1/4	6 6 11/16	6 7 1/4	6 7 1/4	6 7 1/4	6 7 3/4	90.18.51	90.10.58	89.59.05	89.43.18	89.29.24	89.29.00	36WF170
34	22 2 1/16	6 6 3/16	6 6 11/16	6 6 11/16	6 6 11/16	6 7 1/16	90.16.27	89.37.14	89.29.55	89.22.37	89.15.23	89.10.00	36WF170
35	22 6 3/4	6 4 11/16	6 5 3/16	6 5 3/16	6 5 3/16	6 7 7/16	90.14.78	90.14.29	89.59.13	89.45.02	89.44.48	89.37.00	36WF160
36	22 4 5/8	6 5 1/2	6 5 3/4	6 5 3/4	6 5 3/4	6 6 1/8	90.11.37	90.10.04	90.28.44	90.14.27	90.14.12	89.41.27	36WF160
37	22 2 15/16	6 4 13/16	6 5 3/8	6 5 3/8	6 5 3/8	6 5 15/16	90.09.12	90.04.22	89.59.33	89.54.47	89.50.28	89.45.10	36WF160
38	22 1 9/16	6 4 3/4	6 5 1/8	6 5 1/8	6 5 1/8	6 5 7/16	90.06.47	89.39.20	89.38.46	89.34.14	89.31.42	89.49.10	36WF160
39	20 5/8	6 4	6 4 15/16	6 4 15/16	6 4 15/16	6 5 3/4	90.04.22	90.08.44	90.08.11	90.07.08	90.01.07	89.50.00	36WF160
40	20 1/8	6 4 3/8	6 4 13/16	6 4 13/16	6 4 13/16	6 5 1/4	90.01.57	89.39.50	89.39.24	89.39.18	89.39.02	89.50.00	36WF160
41	20	6 3 3/8	6 4 13/16	6 4 13/16	6 4 13/16	6 5 3/16	90.00.00	90.00.15	89.59.50	89.59.42	89.59.28	90.00.00	36WF160
42	20	6 4 5/16	6 4 13/16	6 4 13/16	6 4 13/16	6 5 1/4	90.00.00	90.23.29	90.29.23	90.29.07	90.28.51	90.00.00	36WF160
43	20	6 3 15/16	6 4 13/16	6 4 13/16	6 4 13/16	6 5 11/16	90.00.00	89.52.25	89.53.29	89.53.25	89.53.25	90.00.00	36WF160
44	20	6 4 7/16	6 4 13/16	6 4 13/16	6 4 13/16	6 5 2/16	90.00.00	90.23.00	90.23.00	90.23.00	90.23.00	90.00.00	36WF160
45	20	6 4 5/16	6 4 13/16	6 4 13/16	6 4 13/16	6 5 5/16	90.00.00	90.11.37	90.11.26	90.11.26	90.11.26	90.00.00	36WF150
46	20	6 4 13/16	6 4 13/16	6 4 13/16	6 4 13/16	6 4 13/16	90.00.00	90.23.22	90.23.22	90.23.22	90.23.22	90.00.00	36WF135



Notes:
 Length L of Stringers and Fl. Bms. is correct as given in the Table, except the increment lengths are given to the nearest 1/8".
 All dimensions are in the horizontal plane.
 For Connection Plate Details see Sheet No. 348.

STATE OF ILLINOIS
 DEPARTMENT OF PUBLIC WORKS & BLDGS.
 DIVISION OF HIGHWAYS
 STRINGER AND FLOOR BEAM
 SCHEDULE
 SPANS G5 THRU G8
 POPLAR STREET BRIDGE APPROACHES
 ROADWAY "G"
 F.A.I. RT 70 ST. CLAIR CO. SECTION 82-3HVFB E-1
 H. W. LOCHNER, INC.
 ENGINEERS
 CHICAGO, ILLINOIS

SHEET 254 of 296

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. - 70	82-3NMF BE-1	ST. CLAIR	247	125
FED. ROAD DIV. NO. 4		ILLINOIS	PROJECT	

FLOOR BEAM 25 THRU 27	T1	T2	T3	T4
STR. 67 THRU 74	1 1/8	1/2	1	3/8

FLOOR BEAM 28 THRU 30	T1	T2	T3	T4
STR. 75 THRU 78	1 1/8	1/2	1	3/8

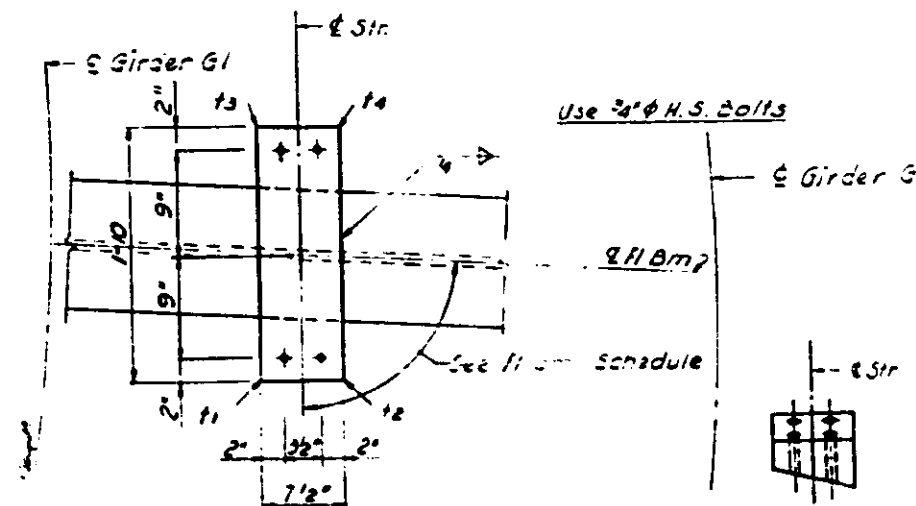
FLOOR BEAM 31 THRU 33	T1	T2	T3	T4
STR. 79 THRU 86	1 1/8	1/2	1	3/8

FLOOR BEAM 34 THRU 36	T1	T2	T3	T4
STR. 87 THRU 90	1 1/8	1/2	1	3/8

FLOOR BEAM 37 THRU 39	T1	T2	T3	T4
STR. 91 THRU 98	1 1/8	1/2	1	3/8

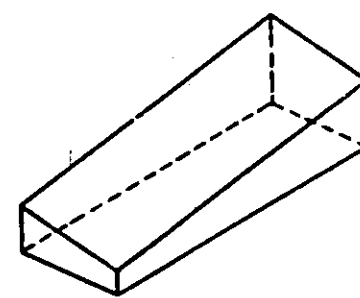
FLOOR BEAM 40 THRU 42	T1	T2	T3	T4
STR. 99 THRU 102	1 1/8	1/2	1	3/8

FLOOR BEAM 43 THRU 45	T1	T2	T3	T4
STR. 103 THRU 110	1 1/8	1/2	1	3/8

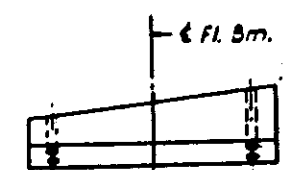


PLAN

END VIEW



ISOMETRIC VIEW



SIDE VIEW

SHIM DETAIL

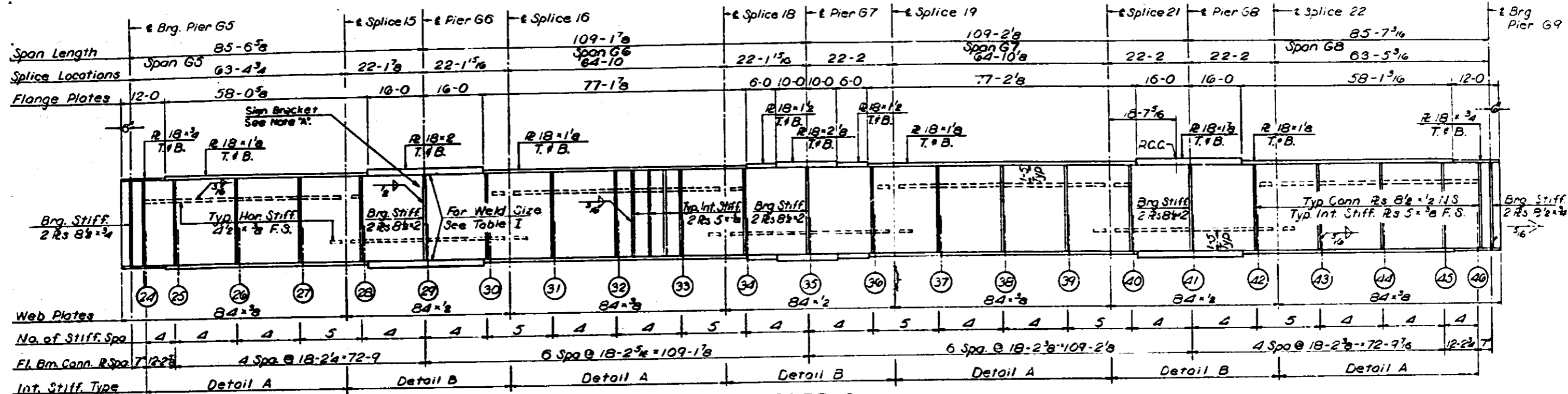
Shim thickness t_1 , t_2 , t_3 & t_4 shown in the Table are orientated with the Plan View shown above.

DESIGNED BY: S.M.R.
 DRAWN BY: J.K.
 CHECKED BY: J.T.
 APPROVED BY: K.A.

STATE OF ILLINOIS
 DEPARTMENT OF PUBLIC WORKS & BLDGS.
 DIVISION OF HIGHWAYS
 STRINGER SHIMS
 SPANS G5 THRU G8
 POPLAR STREET BRIDGE APPROACHES
 ROADWAY "G"
 F.A.I. RT. 70 ST. CLAIR CO. SECTION 82-3NMF BE-1
 H. W. LOCHNER, INC.
 ENGINEERS
 CHICAGO, ILLINOIS

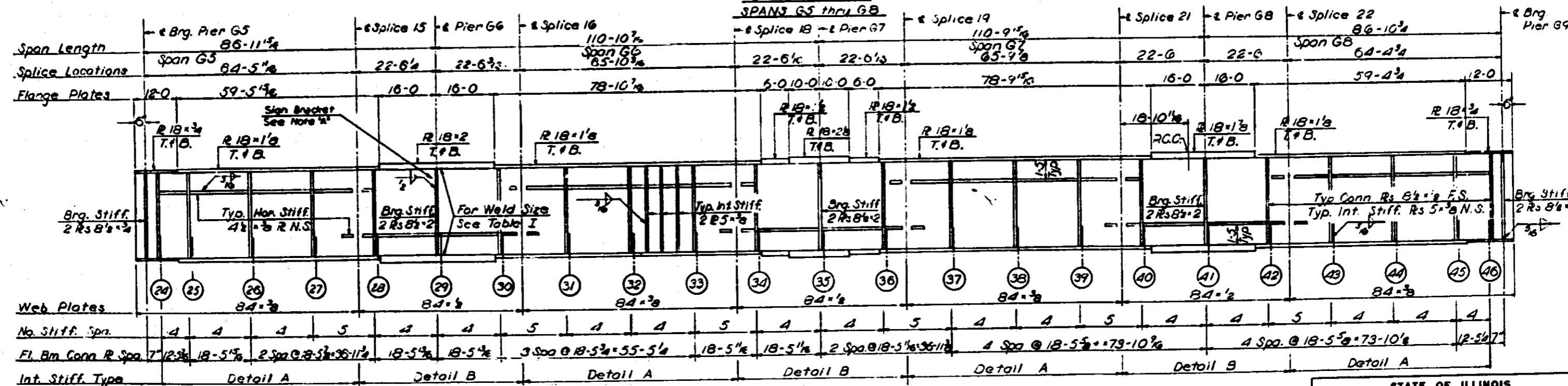
SHEET
 295 of 626

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 70	82-3HV & E-	ST. CLAIR	247	126
FEB. ROAD DIV. NO. 4	ILLINOIS	PROJECT		



GIRDER G1

SPANS G5 thru G8



GIRDER G2

SPANS G5 thru G8

NOTES:
 All longitudinal dimensions shown are given along () of web. See Sheet No. 253.
 All Bearing Stiffeners and Connection Plates to be vertical.
 For Splice, Stiffener and Connection Plate Details and Table I see Sheet Nos. 348, 349 and 350.
 For Sign Bracket Detail see Sheet No. 360.

NOTE 'A'
 Intermediate Stiffeners should be moved if necessary to clear sign bracket connection plates.

STATE OF ILLINOIS
 DEPARTMENT OF PUBLIC WORKS & BLDGS.
 DIVISION OF HIGHWAYS

GIRDERS G1 AND G2
 SPANS G5 THRU G8
 POPLAR STREET BRIDGE APPROACHES
 ROADWAY "G"

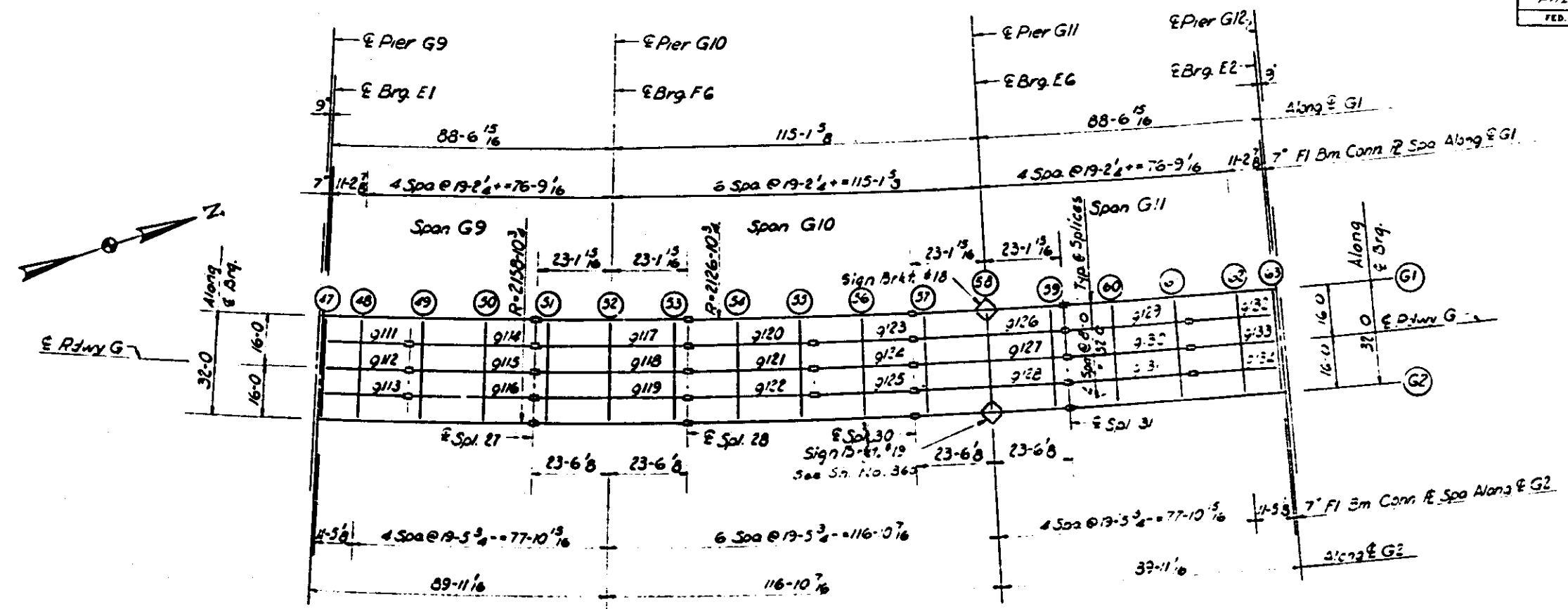
F.A.I. RT. 70 ST. CLAIR CO. SECTION 82-3HV & E-

H. W. LOCHNER, INC.
 ENGINEERS
 CHICAGO, ILLINOIS

SHEET 254-204

DESIGNED BY: R. N. B.
 CHECKED BY: D. C. H.
 APPROVED BY: J. T.
 DATE: K. A.

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FR 70	82-34VFBE	ST. CLAIR	297	297
FED. ROAD DIV. NO. 4		ILLINOIS	PROJECT	



PLAN
Spans G9-G10-G11

ELEVATION TOP OF BEAM (ft)

	SP. 81	SP. 82	DIFF.
CL. BRG.	454.381	457.141	2.760
FLOOR BEAM 47	454.576	457.136	2.560
FLOOR BEAM 48	454.478	457.038	2.560
FLOOR BEAM 49	454.379	456.939	2.560
FLOOR BEAM 50	454.149	456.709	2.560
SPLICE 77	454.088	456.568	2.480
FLOOR BEAM 51	453.948	456.508	2.560
FLOOR BEAM 52	453.849	456.409	2.560
FLOOR BEAM 53	453.750	456.310	2.560
SPLICE 78	453.716	456.276	2.560
FLOOR BEAM 54	453.591	456.301	2.710
FLOOR BEAM 55	453.502	456.142	2.640
FLOOR BEAM 56	453.179	454.738	2.560
SPLICE 30	451.041	454.401	2.360
FLOOR BEAM 57	451.737	454.797	2.560
FLOOR BEAM 58	451.708	453.765	2.057
FLOOR BEAM 59	450.673	453.733	2.060
SPLICE 31	450.562	453.172	2.610
FLOOR BEAM 60	450.063	452.063	2.000
FLOOR BEAM 61	449.438	451.632	2.194
FLOOR BEAM 62	448.910	450.800	1.890
FLOOR BEAM 63	448.443	450.312	1.869
CL. BRG.	448.474	450.787	1.313

Note:
Dimensions locating floor beams are given to the floor beam conn. plate, see sketch sheet No. 183

BILL OF MATERIAL		
*Structural Steel	Lbs.	359,030

*Weight of Bearing Assemblies with Lead Plates and Anchor Bolts are Included as Structural Steel Est. Wt. 8530 Lbs.

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BLDGS.
DIVISION OF HIGHWAYS
FRAMING PLAN
SPANS G9 THRU G11
POPLAR STREET BRIDGE APPROACHES
ROADWAY "G"

F.A.I.R.T. ST. CLAIR CO. SECTION 82-34VFBE
H. W. LOCHNER, INC.
ENGINEERS
CHICAGO, ILLINOIS

SHEET 297 OF 297

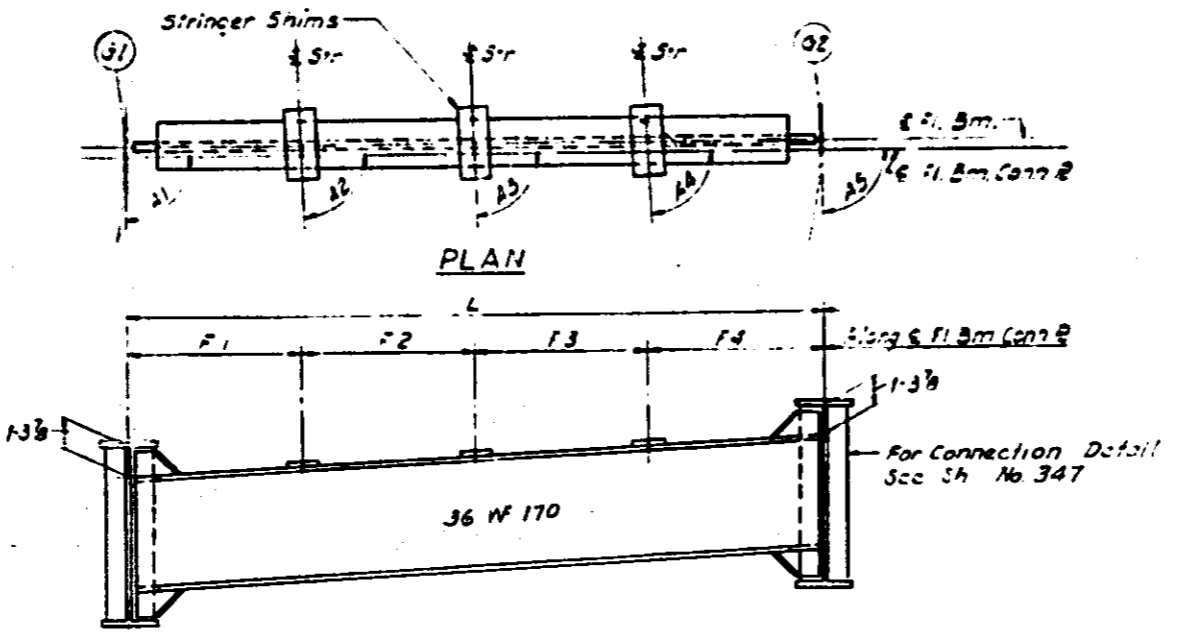
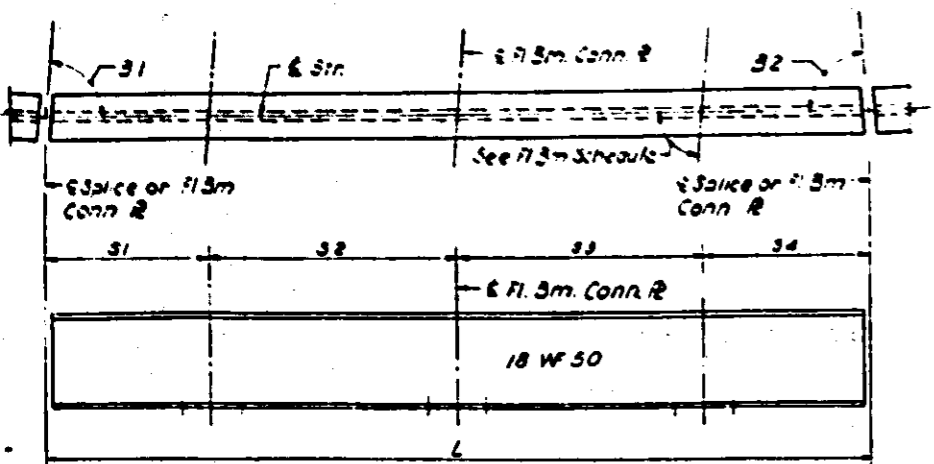
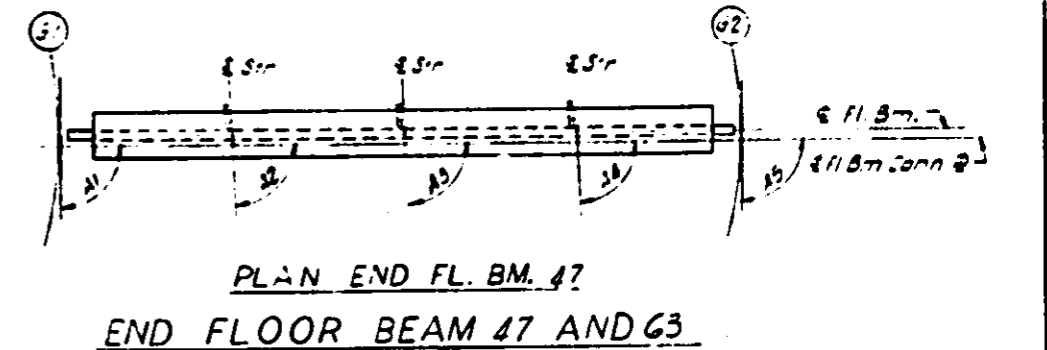
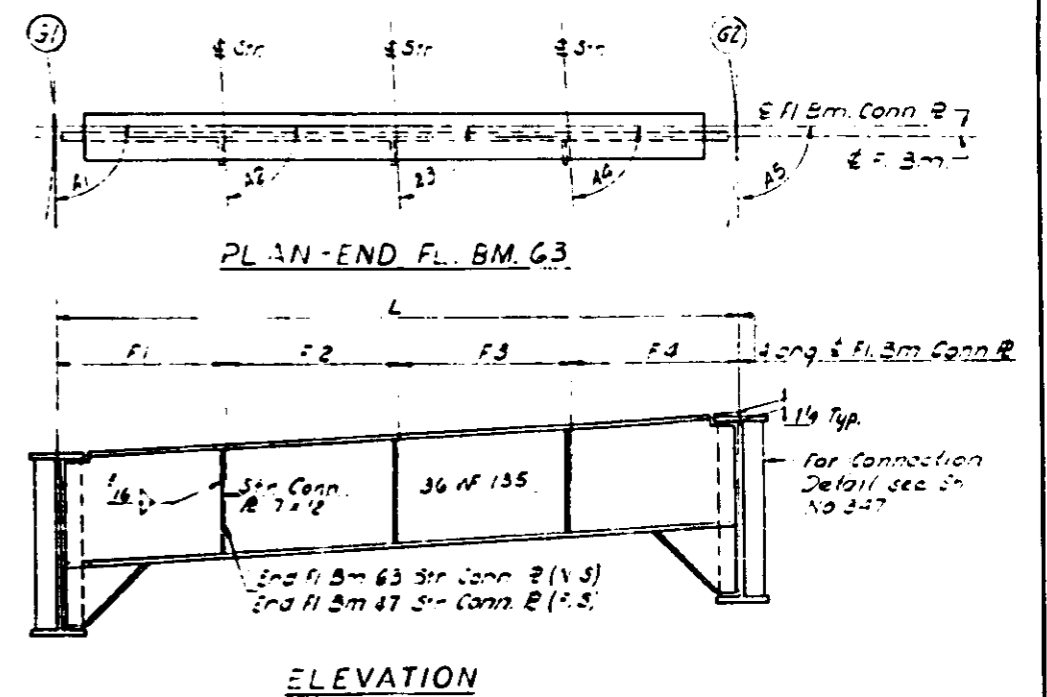
DESIGNED BY R.M.S.
DRAWN BY J.K.
CHECKED BY A.
APPROVED BY S.

STRINGER DIMENSIONS

STR	L	S1	S2	S3	S4	S5
111	28 6 3/4		11 3 7/16		15 3 5/16	09.26.25 09.26.37
112	28 8		11 4		15 4	09.26.28 09.26.37
113	28 9 1/4		11 4 9/16		15 4 11/16	09.26.28 09.26.36
114	28 9 1/4	3 11 13/16	10 3 1/8		15 3 5/16	09.26.28 09.26.30
115	28 8	4	10 4		15 4	09.26.28 09.26.30
116	28 9 3/4	4 3/16	10 4 7/8		15 4 11/16	09.26.28 09.26.30
117	46 8 7/8	3 11 13/16	10 3 1/8	10 3 1/8	3 11 13/16	09.22.34 09.22.34
118	46 8	4	10 4	10 4	4	09.22.34 09.22.34
119	46 10 1/16	4 3/16	10 4 7/8	10 4 7/8	4 3/16	09.22.34 09.22.34
120	28 6 1/4	15 3 5/16	10 3 1/8		3 11 13/16	09.26.28 09.26.30
121	28 8	15 4	10 4		4	09.26.28 09.26.30
122	28 9 3/4	15 4 11/16	10 4 7/8		4 3/16	09.26.28 09.26.30
123	28 9 3/4	15 3 5/16			15 3 5/16	09.26.24 09.26.24
124	28 8	15 4			15 4	09.26.24 09.26.24
125	28 9 3/8	15 4 11/16			15 4 11/16	09.26.24 09.26.24
126	46 8 7/8	3 11 13/16	10 3 1/8	10 3 1/8	3 11 13/16	09.22.34 09.22.34
127	46 8	4	10 4	10 4	4	09.22.34 09.22.34
128	46 10 1/16	4 3/16	10 4 7/8	10 4 7/8	4 3/16	09.22.34 09.22.34
129	28 6 1/4	15 3 5/16	10 3 1/8		3 11 13/16	09.26.28 09.26.30
130	28 8	15 4	10 4		4	09.26.28 09.26.30
131	28 9 3/4	15 4 11/16	10 4 7/8		4 3/16	09.26.28 09.26.30
132	28 6 3/4	15 3 5/16	11 3 7/16			09.26.27 09.26.28
133	28 8	15 4	11 4			09.26.27 09.26.28
134	28 9 1/4	15 4 11/16	11 4 9/16			09.26.28 09.26.28

FLOOR BEAM DIMENSIONS

FL. BM.	L	F1	F2	F3	F4	A1	A2	A3	A4	A5
47	32	8	8	8	8	09.57.51	09.36.28	09.36.28	09.36.28	09.57.53
48	32	7 11 1/2	8	8	8 1/2	90.00.00	09.56.47	09.56.47	09.56.48	90.00.00
49	32	7 11 5/8	8	8	8 3/8	90.00.00	09.55.24	09.55.24	09.55.24	90.00.00
50	32	7 11	8	8	8 1	90.00.00	09.06.25	09.06.25	09.06.25	90.00.00
51	32	7 11 1/2	8	8	8 1/2	90.00.00	09.28.59	09.28.59	09.28.59	90.00.00
52	32	7 10 1/2	8	8	8 1 1/2	90.00.00	90.00.00	90.00.00	90.00.00	90.00.00
53	32	7 11 1/2	8	8	8 1/2	90.00.00	90.31.01	90.31.01	90.31.01	90.00.00
54	32	7 11	8	8	8 1	90.00.00	09.53.35	09.53.35	09.53.35	90.00.00
55	32	7 11 3/8	8	8	8 3/8	90.00.00	90.24.36	90.24.36	90.24.36	90.00.00
56	32	7 11 3/8	8	8	8 11/16	90.00.00	90.00.00	90.00.00	90.00.00	90.00.00
57	32	7 11 1/2	8	8	8 1/2	90.00.00	09.28.59	09.28.59	09.28.59	90.00.00
58	32	7 10 1/2	8	8	8 1 1/2	90.00.00	90.00.00	90.00.00	90.00.00	90.00.00
59	32	7 11 1/2	8	8	8 1/2	90.00.00	90.31.01	90.31.01	90.31.01	90.00.00
60	32	7 11	8	8	8 1	90.00.00	09.53.35	09.53.35	09.53.35	90.00.00
61	32	7 11 3/8	8	8	8 3/8	90.00.00	90.24.36	90.24.36	90.24.36	90.00.00
62	32	7 11 1/2	8	8	8 1/2	90.00.00	90.03.13	90.03.13	90.03.13	90.00.00
63	32	8	8	8	8	90.02.08	90.23.38	90.23.38	90.23.38	90.02.07



Notes:
Length L of Stringers and Fl Bms is correct as given in the table except the increment lengths are given to the nearest 1/8
All dimensions are in the horizontal plane.
For Connection Plate Details see sheet No. 34A

DESIGNED BY R.M.R.
DRAWN BY J.M.
CHECKED BY A.
APPROVED BY A.A.

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BLDGS.
DIVISION OF HIGHWAYS
STRINGER AND FLOOR BEAM
SCHEDULE
SPANS G9 THRU G11
POPLAR STREET BRIDGE APPROACHES
ROADWAY "G"
F.A.I. RT. 70 ST. CLAIR CO. SECTION 82-SHYF&E-1
N. W. LOCHNER, INC.
ENGINEERS
CHICAGO, ILLINOIS
SHEET 25 OF 92

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. I. - 70	82-3HVFB-E-1	ST. CLAIR	247	129
FED. ROAD DIV. NO. 4		ILLINOIS	PROJECT	

FLOOR BEAM	T1	T2	T3	T4
48 THRU 50				
STR. 111 THRU 116	1 1/2	1 5/8	1 5/8	3/4

FLOOR BEAM	T1	T2	T3	T4
51 THRU 53				
STR. 117 THRU 119	1 9/16	1	1 1/4	11/16

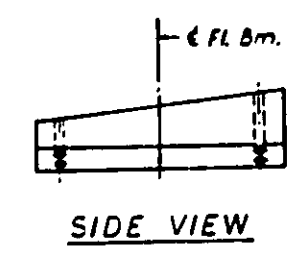
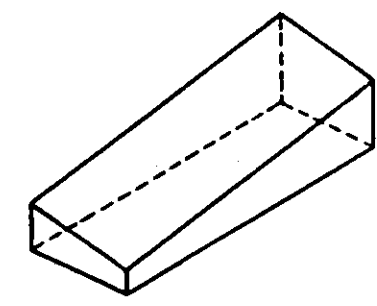
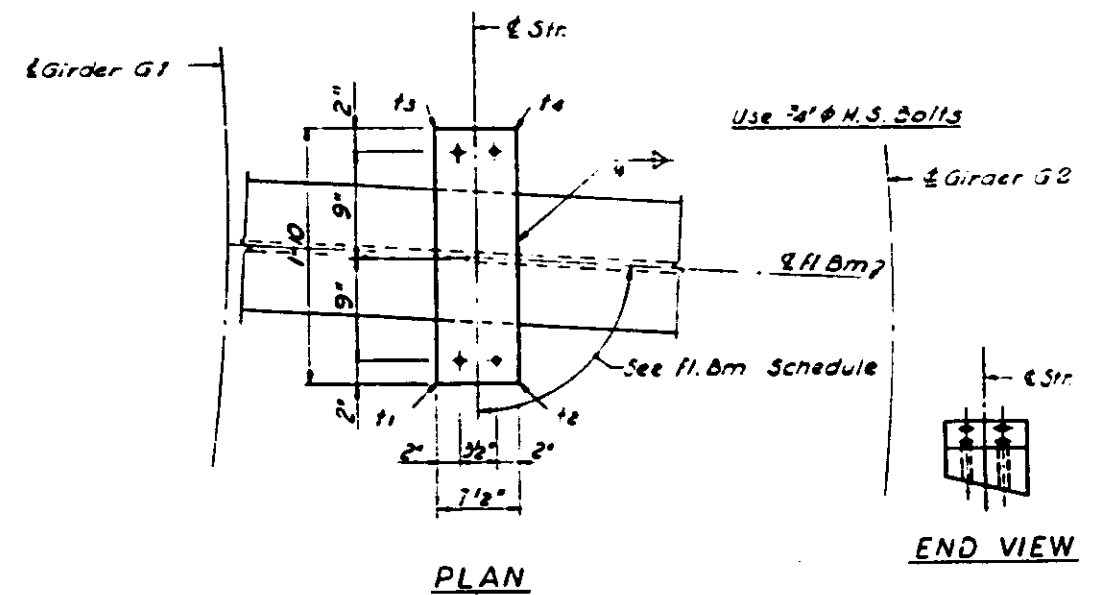
FLOOR BEAM	T1	T2	T3	T4
54 THRU 56				
STR. 120 THRU 125	1 11/16	1 1/8	1 3/8	5/8

FLOOR BEAM	T1	T2	T3	T4
57 THRU 59				
STR. 126 THRU 128	1 3/4	1 1/8	1 1/8	1/2

FLOOR BEAM	T1	T2	T3	T4
60				
STR.				
129	1 13/16	1 1/4	1	7/8
130	1 13/16	1 1/4	1	7/8
131	1 7/8	1 5/8	1 5/8	3/4

FLOOR BEAM	T1	T2	T3	T4
61				
STR.				
132	1 3/4	1 1/4	1	1/2
133	1 13/16	1 5/8	1 5/8	7/8
134	1 13/16	1 5/8	1 5/8	7/8

FLOOR BEAM	T1	T2	T3	T4
62				
STR.				
135	1 3/4	1 1/4	1	1/2
136	1 3/4	1 5/8	1 5/8	1/2
137	1 13/16	1 5/8	1 5/8	7/8



SHIM DETAIL

Shim thickness t_1 , t_2 , t_3 & t_4 shown in the Table are orientated with the Plan View shown above.

DESIGNED BY R.M.R.
 DRAWN BY A.L.G.
 CHECKED BY A.T.
 APPROVED BY K.E.

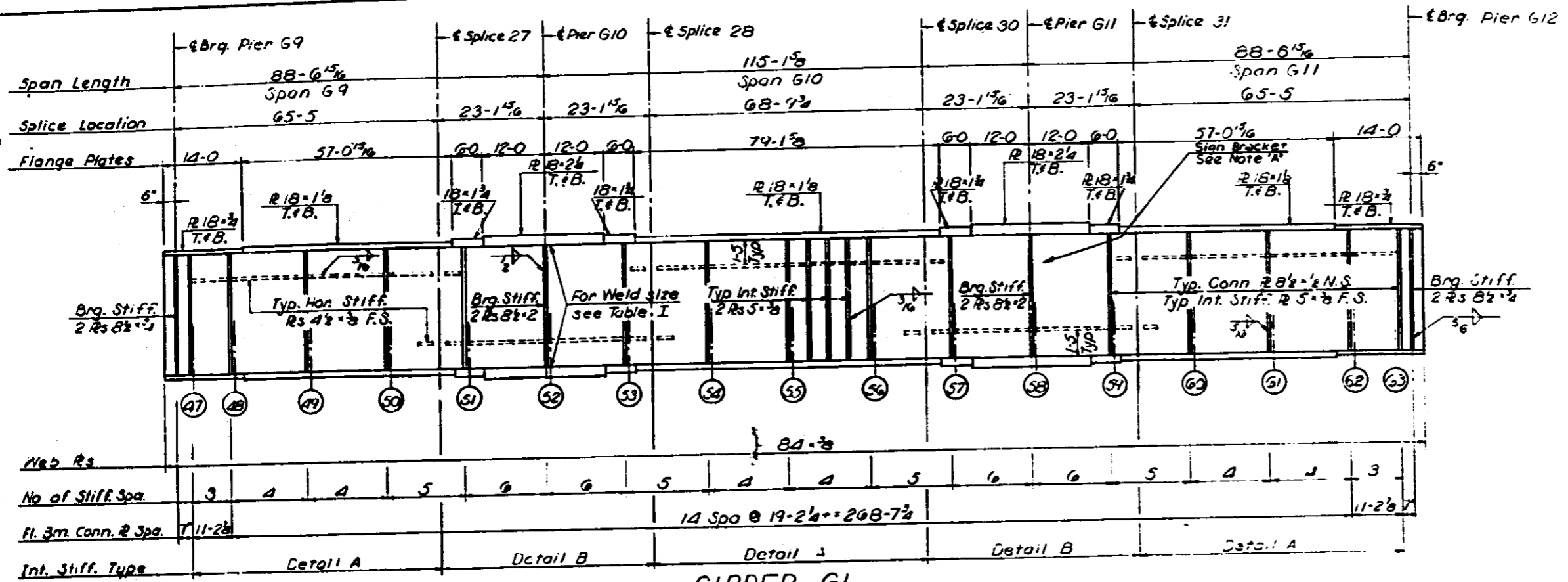
STATE OF ILLINOIS
 DEPARTMENT OF PUBLIC WORKS & BLDGS.
 DIVISION OF HIGHWAYS

STRINGER SHIMS
 SPANS G8 THRU G11
 POPLAR STREET BRIDGE APPROACHES
 ROADWAY "G"

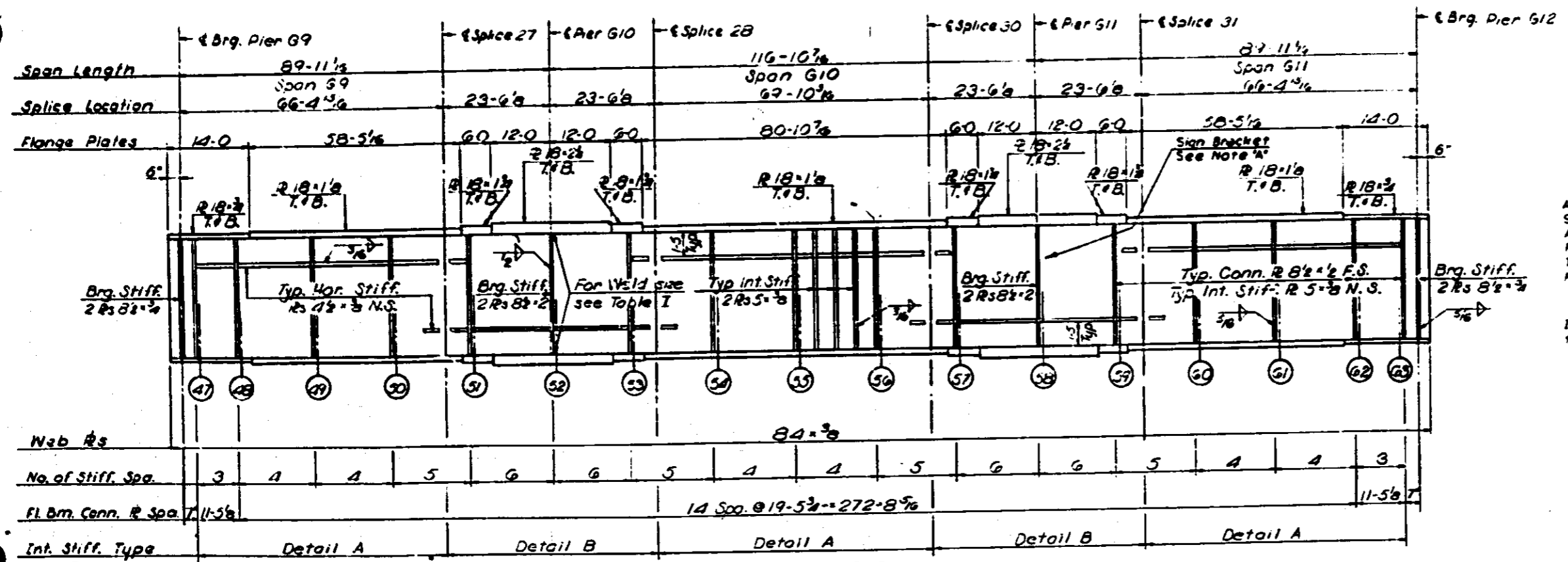
F.A. I. RT. 70 ST. CLAIR CO. SECTION 82-3HVFB-E-1

H. W. LOCHNER, INC.
 ENGINEERS
 CHICAGO, ILLINOIS

SHEET
 259 of 265



GIRDER G1
SPANS G9 thru G11



GIRDER G2
SPANS G9 thru G11

NOTES:
 All longitudinal dimensions shown are given along (of) web. See Sheet No. 257.
 All Bearing Stiffeners and Connection Plates to be vertical. For Splice, Stiffener and Connection Plate Details and Table 1 see Sheet Nos. 348, 349 and 350.
 For Sign Bracket Detail see Sheet No. 360.

NOTE 'A'
 Intermediate Stiffeners should be moved if necessary to clear sign bracket connection plates.

DESIGNED BY: R.M.R.
 DRAWN BY: D.G.H.
 CHECKED BY: J.T.
 APPROVED BY: K.J.

STATE OF ILLINOIS
 DEPARTMENT OF PUBLIC WORKS & BLDGS.
 DIVISION OF HIGHWAYS

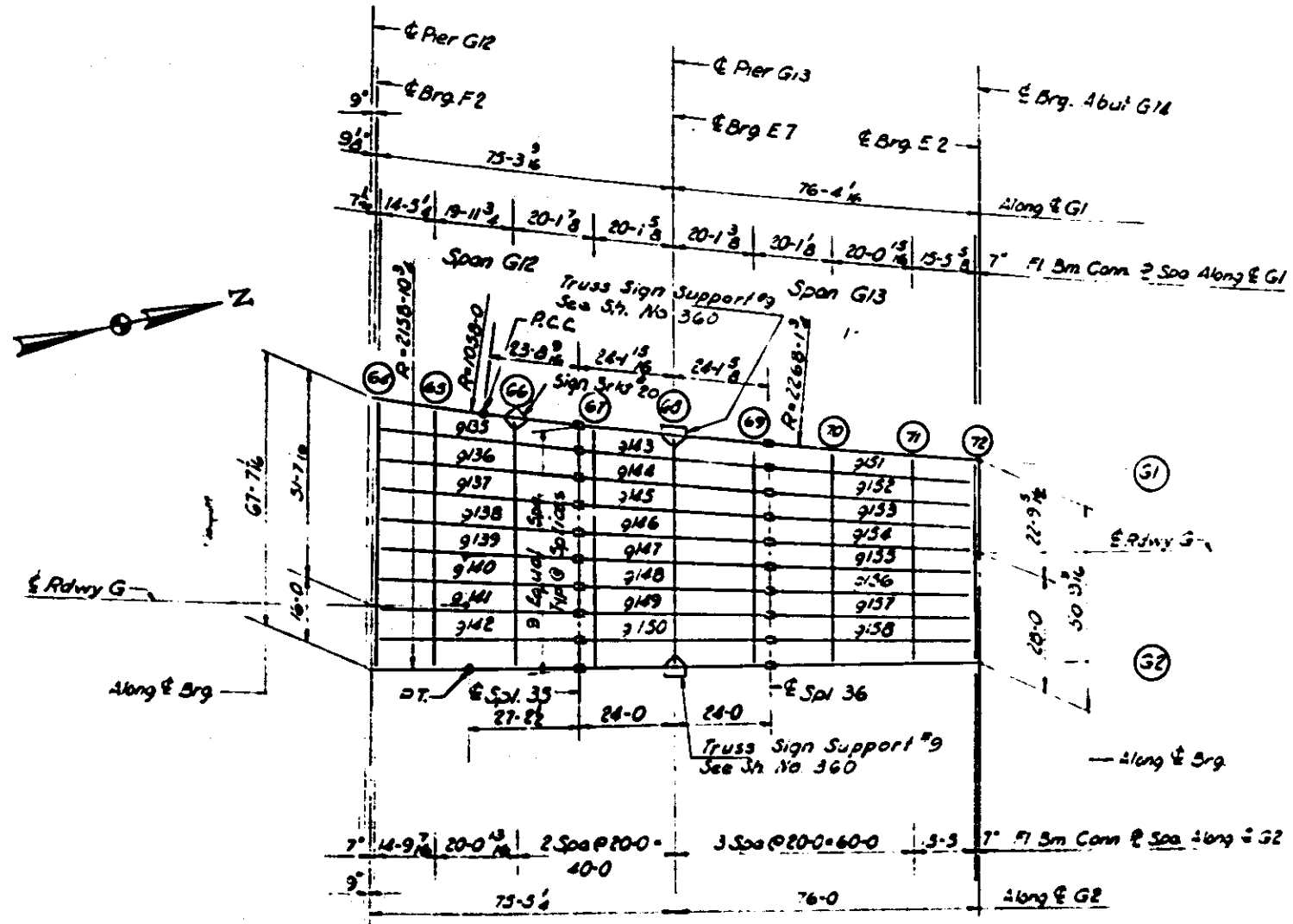
GIRDERS G1 AND G2
 SPANS G9 THRU G11
 POPLAR STREET BRIDGE APPROACHES
 ROADWAY "G"

F A I RT. 70 ST. CLAIR CO. SECTION B2-3MV F & E-1

H. W. LOCHNER, INC.
 ENGINEERS
 CHICAGO, ILLINOIS

SHEET
 290 of 526

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FRL 70	82-3HVFE-1	ST. CLAIR	247	137
FED. ROAD DIV. NO. 4		ILLINOIS	PROJECT	



PLAN
Spans G12-G13

Note:
Dimensions locating Floor Beams are given to the Floor Beam Conn. Plate, see Sketch Sheet No. 183 For Sign Bracket Detail see Sh No 360

ELEVATION TOP OF GINGER #18

	GIR. G1	GIR. G2	DIFF.
CL. BRL.	446.175	450.715	4.540
FLOOR BEAM 64	446.164	450.185	4.021
FLOOR BEAM 65	445.881	449.440	3.559
FLOOR BEAM 66	445.498	448.679	3.181
SPLICE 35	445.174	447.873	2.699
FLOOR BEAM 67	445.078	447.819	2.741
FLOOR BEAM 68	444.399	446.385	1.986
FLOOR BEAM 69	444.170	445.377	1.207
SPLICE 36	444.075	445.167	1.092
FLOOR BEAM 70	443.508	444.349	.841
FLOOR BEAM 71	442.864	443.376	.512
FLOOR BEAM 72	442.367	442.538	.171
CL. BRL.	442.348	442.508	.160

BILL OF MATERIAL		
*Structural Steel	Lbs.	312,230

*Weight of Bearing Assemblies with Lead Plates and Anchor Bolts are Included as Structural Steel Est. Wt. 7,690 Lbs.

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BLDGS.
DIVISION OF HIGHWAYS
FRAMING PLAN
SPANS G12 AND G13
POPLAR STREET BRIDGE APPROACHES
ROADWAY "G"

F.A.I.R.T.70 ST. CLAIR CO. SECTION 82-3HVFE-1
H. W. LOCHNER, INC.
ENGINEERS
CHICAGO, ILLINOIS

SHEET
251 of 260

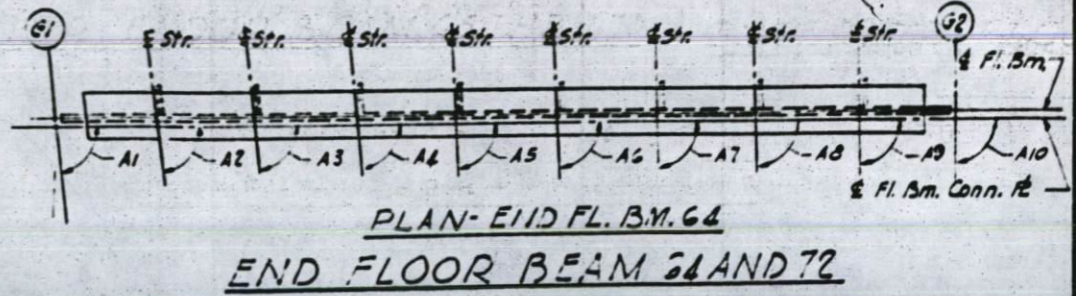
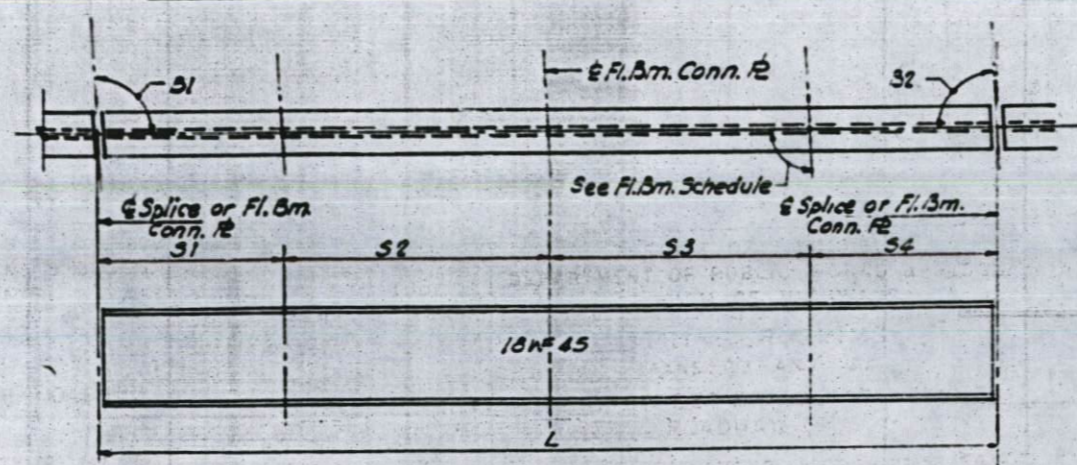
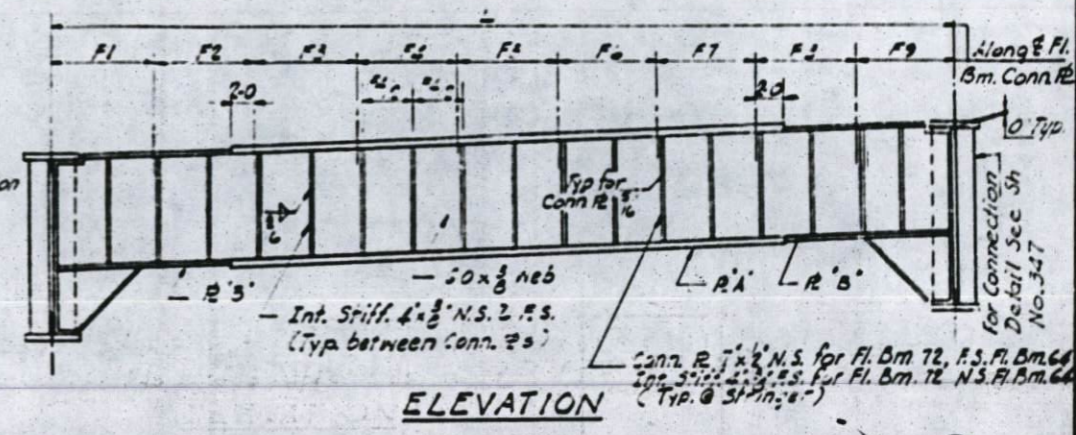
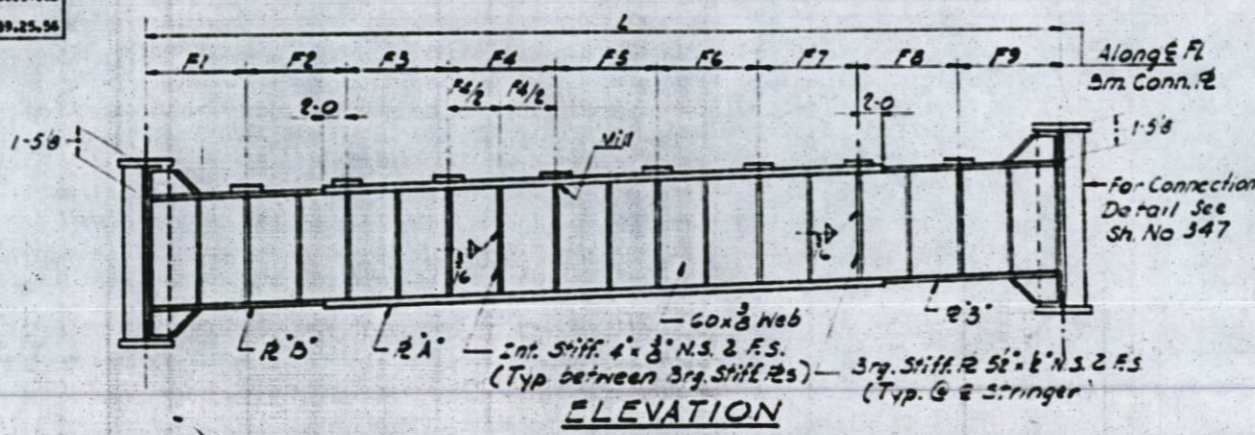
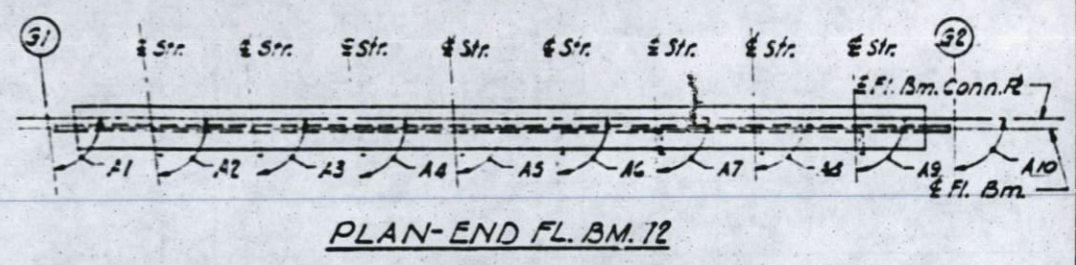
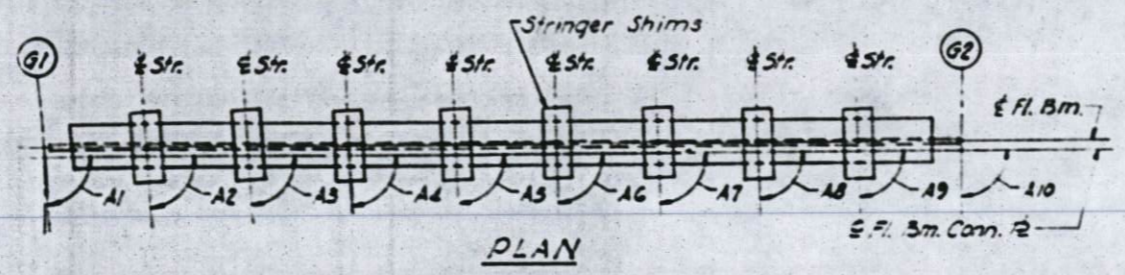
DESIGNED BY: R.M.R.
DRAWN BY: K.
CHECKED BY: A.L.
APPROVED BY: A.L.

STRINGER DIMENSIONS

STR	L	S1	S2	S3	S4	B1	B2
135	50 6 3/8		14 5 1/4	19 11 11/16	16 1 7/16	96.17.43	83.02.31
136	50 6 3/8		14 5 5/8	19 11 5/8	16 1 1/8	95.26.25	83.53.49
137	50 6 1/2		14 6 1/16	19 11 5/8	16 1 3/16	94.35.08	84.45.06
138	50 6 13/16		14 6 1/2	19 11 11/16	16 9/16	93.43.53	85.36.21
139	50 7 3/16		14 7	19 11 13/16	16 3/8	92.52.42	86.27.32
140	50 7 3/4		14 7 9/16	20	16 3/16	92.01.35	87.18.38
141	50 8 7/16		14 8 1/8	20 3/16	16 1/8	91.10.35	88.09.38
142	50 9 1/4		14 8 3/4	20 7/16	16	90.19.43	89.00.31
143	48 2 13/16	4 1/4	20 1 3/16	20 1 3/16	4 1/4	95.39.26	84.20.34
144	48 2 3/16	4 3/16	20 7/8	20 7/8	4 3/16	94.57.13	85.02.47
145	48 1 9/16	4 1/8	22 11/16	20 11/16	4 1/8	94.14.56	85.45.04
146	48 1 1/8	4 1/16	20 7/16	20 7/16	4 1/16	93.32.34	86.27.26
147	48 1 1/16	4 1/16	20 5/16	20 5/16	4 1/16	92.50.08	87.09.52
148	48 3/8	4 1/16	20 3/16	20 3/16	4 1/16	92.07.38	87.52.22
149	48 3/16	4	20 1/16	20 1/16	4	91.25.07	88.34.53
150	48 1/16	4	20	20	4	90.42.34	89.17.26
151	51 6 13/16	16 5/8	20 3/4	15 5 9/16		94.31.59	85.27.01
152	51 6 1/2	16 7/16	20 9/16	15 5 7/16		93.58.08	86.01.54
153	51 6 1/16	16 5/16	20 7/16	15 5 5/16		93.24.10	86.35.50
154	51 5 3/4	16 1/4	20 5/16	15 5 3/16		92.50.12	87.09.48
155	51 5 1/2	16 1/8	20 3/16	15 5 1/8		92.16.12	87.43.48
156	51 5 1/4	16 1/16	20 1/8	15 5 1/16		91.42.10	88.17.50
157	51 5 1/8	16 1/16	20 1/16	15 5		91.08.08	88.51.52
158	51 5	16	20	15 5		90.34.04	89.25.56

FLOOR BEAM DIMENSIONS

FL. BM	L	F1	F2	F3	F4	F5	F6	F7	F8	F9	A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	PLATE A	PLATE B
64	67 6	7 6	7 6	7 6	7 6	7 6	7 6	7 6	7 6	7 6	98.21.28	96.17.43	95.26.25	94.35.08	93.43.53	92.52.42	92.01.35	91.10.35	90.19.43	89.57.53	12x13	12x13
65	65 5 5/16	7 1	7 3 1/2	7 3 7/16	7 3 7/16	7 3 7/16	7 3 7/16	7 3 7/16	7 3 3/8	7 4 1/4	98.00.14	96.47.23	95.52.05	95.00.48	94.09.33	93.18.22	92.27.16	91.36.15	90.45.23	90.00.00	12x13	12x13
66	62 9 1/4	6 9 3/4	6 11 15/16	6 11 7/8	6 11 7/8	6 11 7/8	6 11 7/8	6 11 7/8	6 11 7/8	7 5/16	97.22.34	96.57.29	96.06.11	95.14.54	94.23.39	93.32.28	92.41.22	91.50.22	90.59.29	90.00.00	12x13	12x13
67	60 3 1/4	6 7 15/16	6 8 7/16	6 8 7/16	6 8 7/16	6 8 7/16	6 8 7/16	6 8 7/16	6 8 7/16	6 8 7/16	96.52.01	95.39.26	94.57.13	94.14.56	93.32.34	92.50.08	92.07.38	91.25.07	90.42.34	90.00.00	12x13	12x13
68	57 11 7/16	6 3 7/8	6 5 7/16	6 5 7/16	6 5 7/16	6 5 7/16	6 5 7/16	6 5 7/16	6 5 7/16	6 5 7/16	96.21.30	95.39.26	94.57.13	94.14.56	93.32.34	92.50.08	92.07.38	91.25.07	90.42.34	90.00.00	12x13	12x13
69	55 9 3/4	6 2	6 2 1/2	6 2 1/2	6 2 1/2	6 2 1/2	6 2 1/2	6 2 1/2	6 2 1/2	6 2 1/2	95.51.01	95.39.26	94.57.13	94.14.56	93.32.34	92.50.08	92.07.38	91.25.07	90.42.34	90.00.00	12x13	12x13
70	53 10 1/4	5 10 7/16	6	6	6	6	6	6	6	6	95.20.34	94.31.59	93.58.06	93.24.10	92.50.12	92.16.12	91.42.10	91.08.08	90.34.04	90.00.00	12x13	12x13
71	52 7/8	5 8 1/8	5 9 5/8	5 9 5/8	5 9 5/8	5 9 5/8	5 9 5/8	5 9 5/8	5 9 5/8	5 9 5/8	94.50.08	94.31.59	93.58.06	93.24.10	92.50.12	92.16.12	91.42.10	91.08.08	90.34.04	90.00.00	12x13	12x13
72	50 9 7/8	5 7 3/4	5 7 3/4	5 7 3/4	5 7 3/4	5 7 3/4	5 7 3/4	5 7 3/4	5 7 3/4	5 7 3/4	94.26.41	94.31.59	93.58.06	93.24.10	92.50.12	92.16.12	91.42.10	91.08.08	90.34.04	90.00.00	12x13	12x13



Notes:
 Length L of Stringers and Fl. Bms. is correct as given in the table, except the increment lengths are given to the nearest 1/2".
 All dimensions are in the horizontal plane.
 For Intermediate Stiffener, Brg. Stiffener and Connection Plate Details see Sht. No 348

DESIGNED BY: R.M.R.
 DRAWN BY: J.B.
 CHECKED BY: A.T.
 APPROVED BY: R.A.

STATE OF ILLINOIS
 DEPARTMENT OF PUBLIC WORKS & BLDGS.
 DIVISION OF HIGHWAYS
 STRINGER AND FLOOR BEAM
 SCHEDULE
 SPANS G12 AND G13
 POPLAR STREET BRIDGE APPROACHES
 ROADWAY "G"
 F.A.I. RT 70 ST. CLAIR CO. SECTION 82-3HVFBE-1
 H. W. LOCHNER, INC.
 ENGINEERS
 CHICAGO, ILLINOIS

SHEET
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FLOOR BEAM 68	T1	T2	T3	T4
STR.				
143	1 9/16	1 5/16	15/16	11/16
144	1 9/16	1 5/16	15/16	11/16
145	1 5/8	1 3/8	7/8	5/8
146	1 5/8	1 3/8	7/8	5/8
147	1 11/16	1 7/16	13/16	9/16
148	1 11/16	1 1/2	3/4	9/16
149	1 3/4	1 1/2	3/4	1/2
150	1 3/4	1 9/16	11/16	1/2

FLOOR BEAM 69	T1	T2	T3	T4
STR.				
143	1 1/2	1 5/16	15/16	3/4
144	1 9/16	1 3/8	7/8	11/16
145	1 9/16	1 3/8	7/8	11/16
146	1 5/8	1 7/16	13/16	5/8
147	1 5/8	1 1/2	3/4	5/8
148	1 11/16	1 1/2	3/4	9/16
149	1 11/16	1 9/16	11/16	9/16
150	1 3/4	1 9/16	11/16	1/2

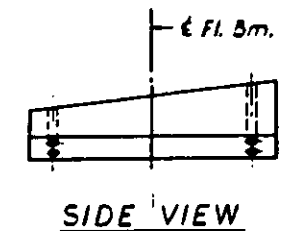
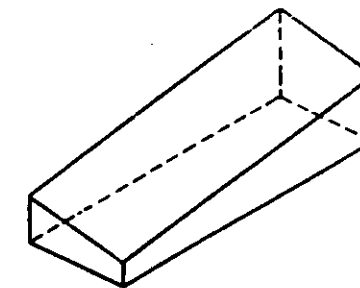
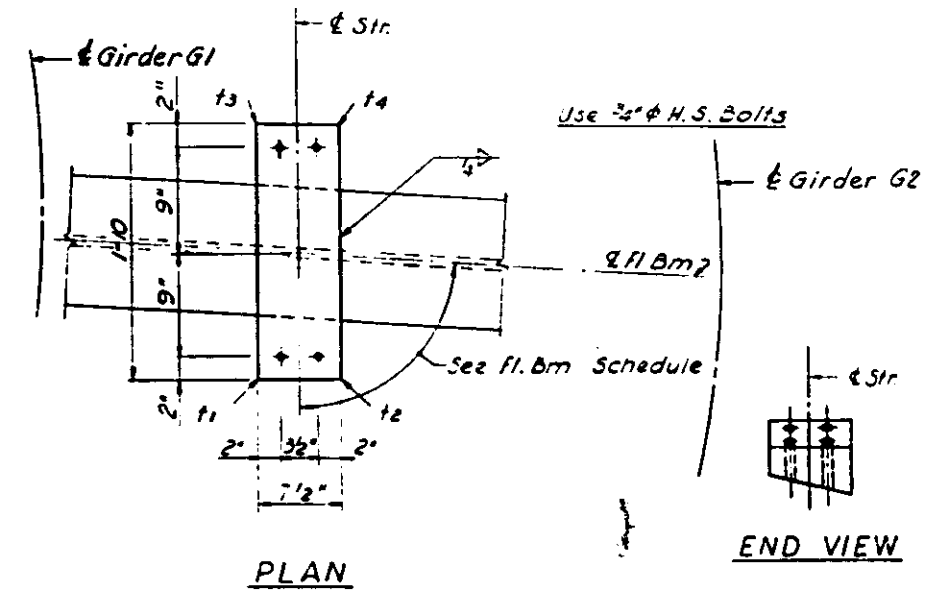
FLOOR BEAM 65	T1	T2	T3	T4
STR.				
135	1 9/16	1 3/16	1 1/4	11/16
136	1 5/8	1 3/16	1 1/4	5/8
137	1 11/16	1 1/4	1	9/16
138	1 11/16	1 5/16	15/16	9/16
139	1 3/4	1 5/16	15/16	1/2
140	1 3/4	1 3/8	7/8	1/2
141	1 13/16	1 3/8	7/8	7/16
142	1 7/8	1 7/16	13/16	3/8

FLOOR BEAM 66	T1	T2	T3	T4
STR.				
135	1 9/16	1 3/16	1 1/4	11/16
136	1 9/16	1 1/4	1	11/16
137	1 5/8	1 1/4	1	5/8
138	1 11/16	1 5/16	15/16	9/16
139	1 11/16	1 3/8	7/8	9/16
140	1 3/4	1 3/8	7/8	1/2
141	1 3/4	1 7/16	13/16	1/2
142	1 13/16	1 7/16	13/16	7/16

FLOOR BEAM 70	T1	T2	T3	T4
STR.				
151	1 9/16	1 7/16	13/16	11/16
152	1 9/16	1 7/16	13/16	11/16
153	1 5/8	1 1/2	3/4	5/8
154	1 5/8	1 1/2	3/4	5/8
155	1 9/16	1 9/16	11/16	5/8
156	1 11/16	1 9/16	11/16	9/16
157	1 11/16	1 9/16	11/16	9/16
158	1 3/4	1 5/8	5/8	1/2

FLOOR BEAM 67	T1	T2	T3	T4
STR.				
143	1 9/16	1 1/4	1	11/16
144	1 5/8	1 9/16	15/16	5/8
145	1 5/8	1 5/16	15/16	5/8
146	1 11/16	1 3/8	7/8	9/16
147	1 11/16	1 7/16	13/16	9/16
148	1 3/4	1 7/16	13/16	1/2
149	1 3/4	1 1/2	3/4	1/2
150	1 13/16	1 1/2	3/4	7/16

FLOOR BEAM 71	T1	T2	T3	T4
STR.				
151	1 9/16	1 7/16	13/16	11/16
152	1 9/16	1 1/2	3/4	11/16
153	1 9/16	1 1/2	3/4	11/16
154	1 5/8	1 5/16	11/16	5/8
155	1 5/8	1 9/16	11/16	5/8
156	1 5/8	1 9/16	11/16	5/8
157	1 11/16	1 5/8	5/8	9/16
158	1 11/16	1 5/8	5/8	9/16



ISOMETRIC VIEW

SIDE VIEW

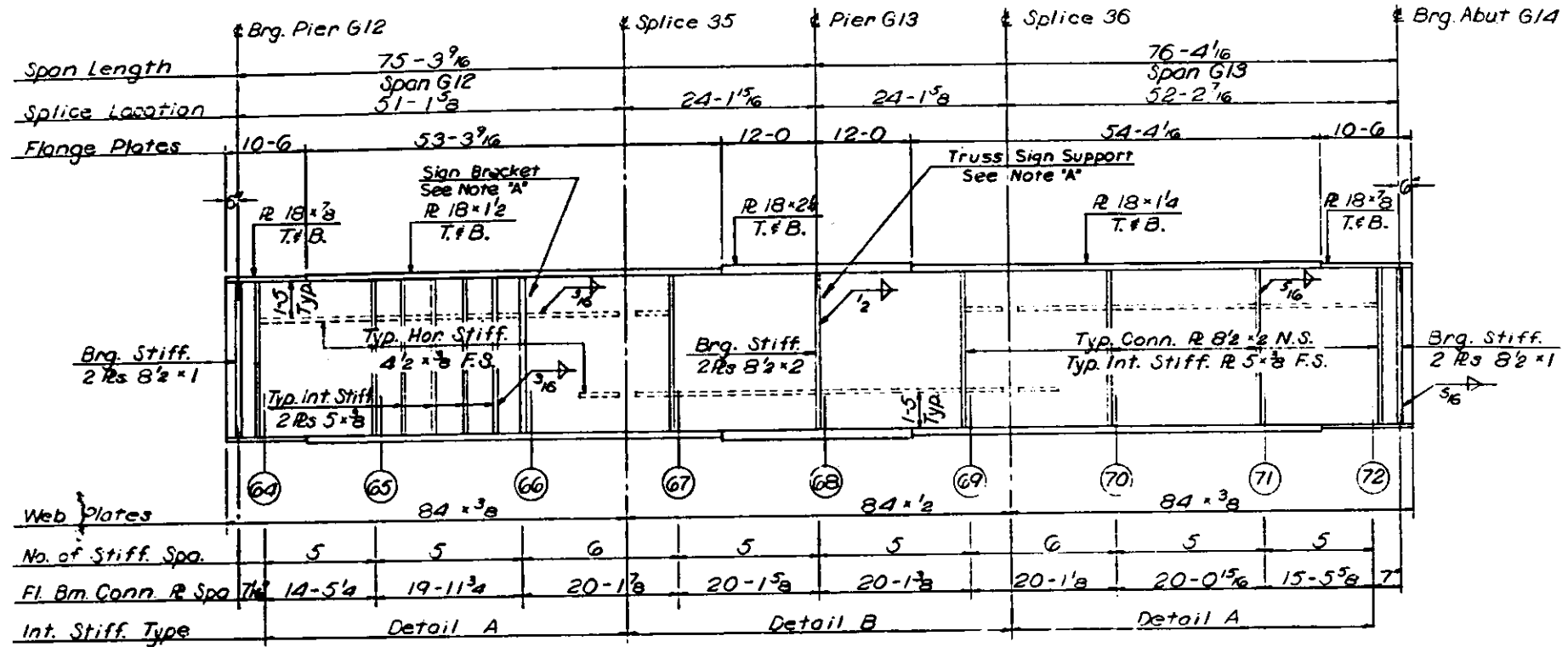
SHIM DETAIL

Shim thickness t_1 , t_2 , t_3 & t_4 shown in the Table are orientated with the Plan View shown above.

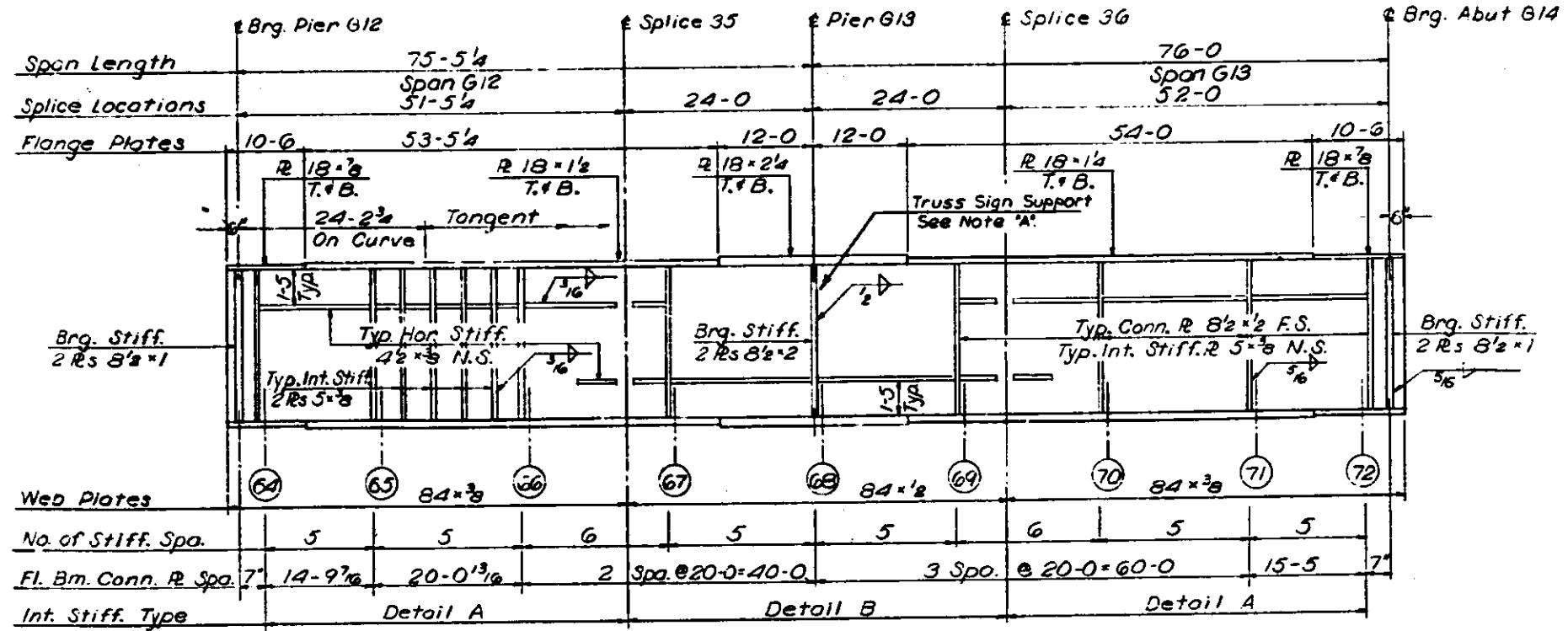
DESIGNED BY R.M.R.
 DRAWN BY J.K.
 CHECKED BY A.T.
 APPROVED BY K.A.

STATE OF ILLINOIS
 DEPARTMENT OF PUBLIC WORKS & BLDGS.
 DIVISION OF HIGHWAYS
 STRINGER SHIMS
 SPANS G12 AND G13
 POPLAR STREET BRIDGE APPROACHES
 ROADWAY "G"
 F.A.I. RT. 70 ST. CLAIR CO. SECTION B2-3HVF&E-1
 H. W. LOCHNER, INC.
 ENGINEERS
 CHICAGO, ILLINOIS
 SHEET
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ROUTE NO.	SECTION	CC NTY	TOTAL SHEETS	SHEET NO.
F. A. I. -70	B2-3HVF B E-1	ST. CLAIR	247	134
FED. ROAD DIV. NO. 4		ILLINOIS	PROJECT	



GIRDER G1
SPANS G12 and G13



GIRDER G2
SPANS G12 and G13

NOTES:
 All longitudinal dimensions shown are given along ϵ of Web.
 See Sheet No. 261.
 All Bearing Stiffeners and Connection Plates to be vertical.
 For Splice, Stiffener and Connection Plate Details and Table I see Sheet Nos. 348, 349 and 350.
 For Sign Bracket Detail and Truss Sign Support see Sheet No. 360.

NOTE 'A'
 Intermediate Stiffeners should be moved if necessary to clear Sign Bracket or Truss Sign Support Connection Plates.

DESIGNED BY R.M.R.
 DRAWN BY D.C.H.
 CHECKED BY A.T.
 APPROVED BY K.J.

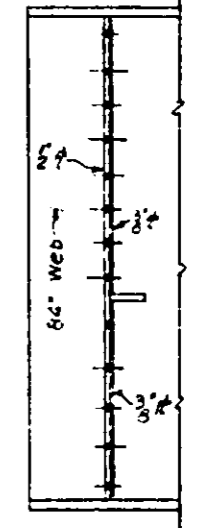
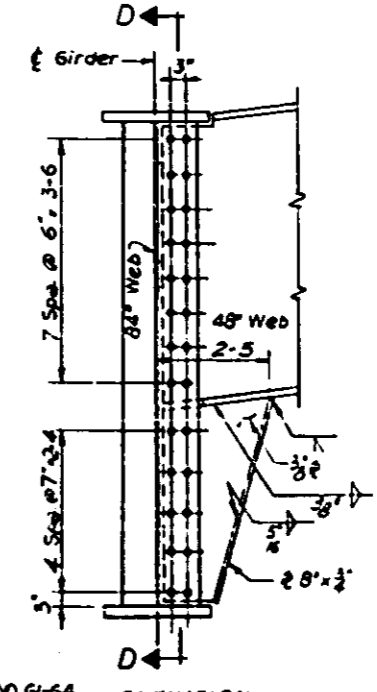
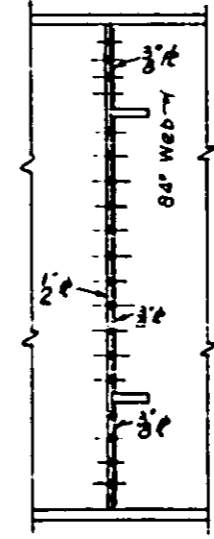
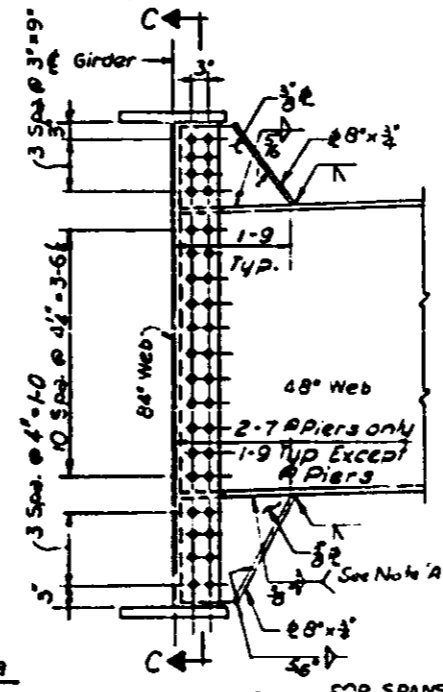
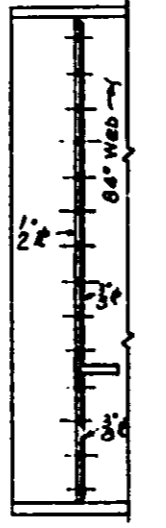
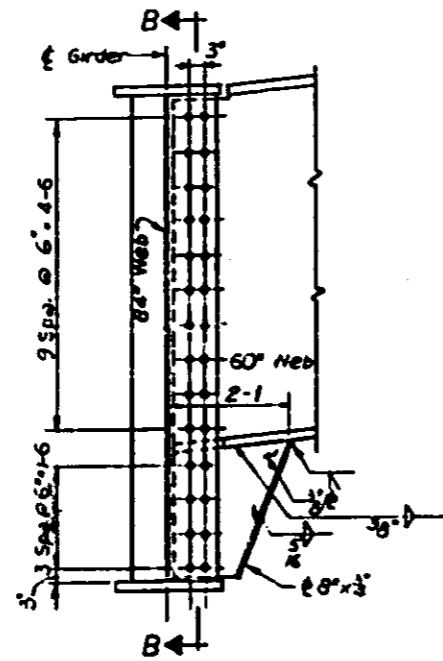
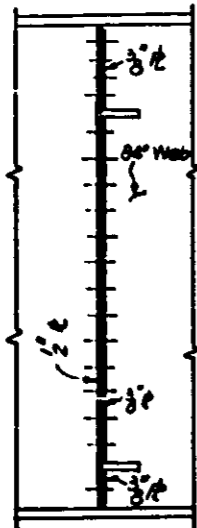
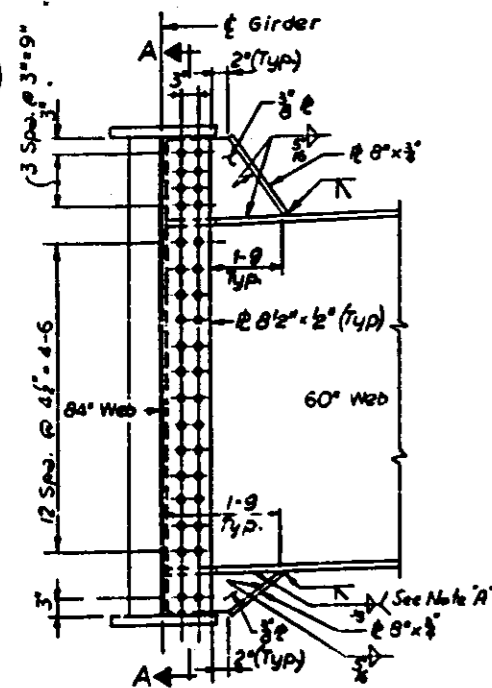
STATE OF ILLINOIS
 DEPARTMENT OF PUBLIC WORKS & BLDGS.
 DIVISION OF HIGHWAYS

GIRDERS G1 AND G2
 SPANS G12 AND G13
 POPLAR STREET BRIDGE APPROACHES
 ROADWAY "G"

F.A.I. RT. 70 ST. CLAIR CO. SECTION B2-3HVF B E-1
 H. W. LOCHNER, INC.
 ENGINEERS
 CHICAGO, ILLINOIS

SHEET
 264 of 266

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I.-70	B2-3HVFBE-1	ST. CLAIR	247	217
FED. ROAD DIV. NO. 4		ILLINOIS	PROJECT	

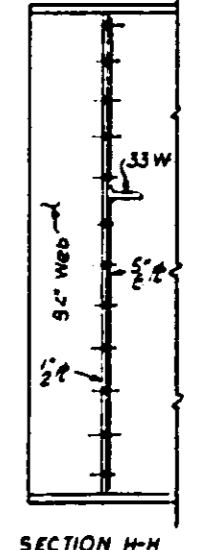
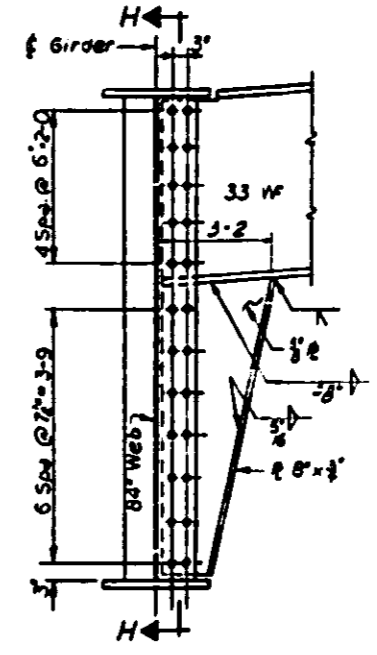
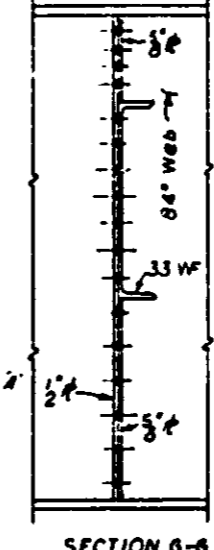
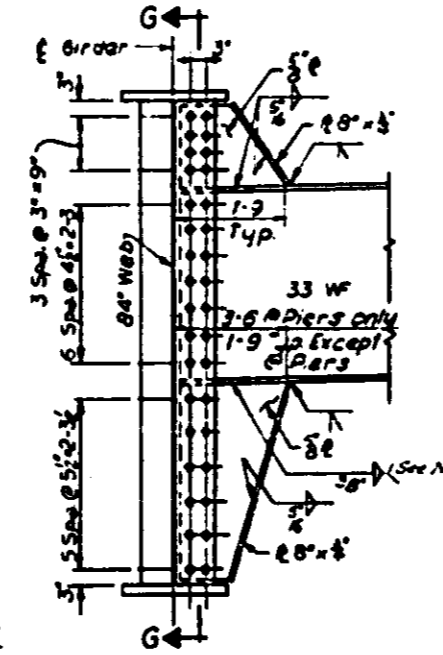
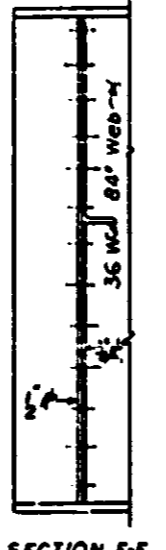
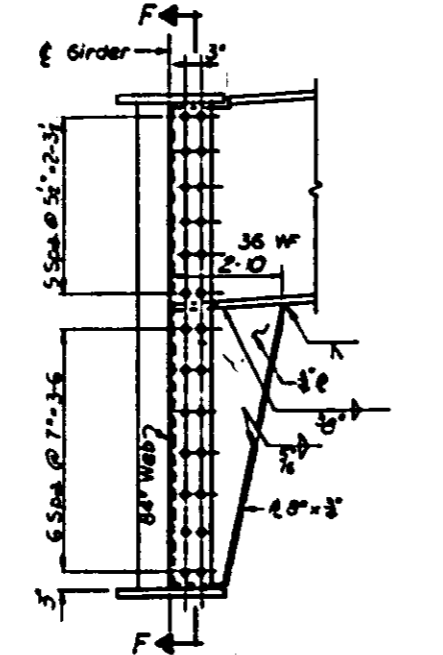
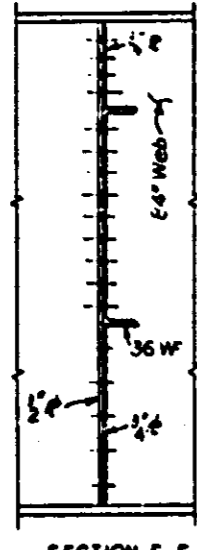
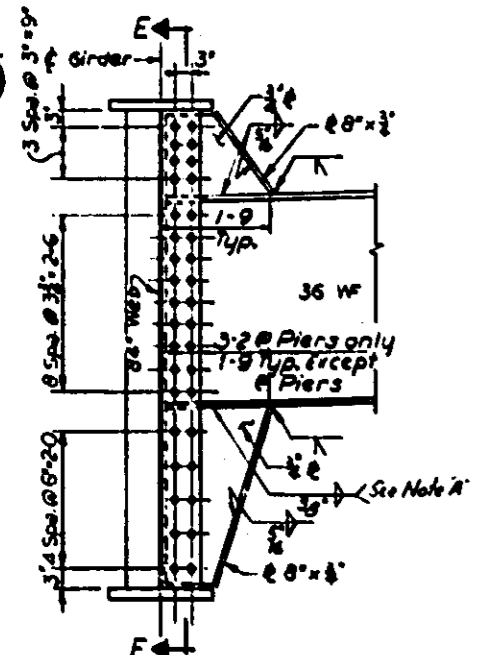


SECTION A-A
ELEVATION FOR SPANS A1-A4, A9-A20, D8-D10, D24-D25 AND G2-G4
INTERIOR FLOOR BEAM TO GIRDER CONNECTION
60" WEB FLOOR BEAMS

SECTION B-B
ELEVATION FOR SPANS A1-A4, A9-A20, D8-D10, D24-D25 AND G2-G4
END FLOOR BEAM TO GIRDER CONNECTION
60" WEB FLOOR BEAMS

SECTION C-C
ELEVATION FOR SPANS A15-A17, D5-D7, D22-D23 AND G1-G4
INTERIOR FLOOR BEAM TO GIRDER CONNECTION
48" WEB FLOOR BEAMS

SECTION D-D
ELEVATION FOR SPANS A15-A17, D5-D7, D22-D23 AND G1-G4
END FLOOR BEAM TO GIRDER CONNECTION
48" WEB FLOOR BEAMS



SECTION E-E
ELEVATION FOR SPANS G5-G8, D1-D4, D18-D20 & H2-H4
INTERIOR FLOOR BEAM TO GIRDER CONNECTION
36 W FLOOR BEAMS

SECTION F-F
ELEVATION FOR SPANS G5-G8, D1-D4, D18-D20 & H2-H4
END FLOOR BEAM TO GIRDER CONNECTION
36 W FLOOR BEAMS

SECTION G-G
ELEVATION FOR SPAN N1-N4
INTERIOR FLOOR BEAM TO GIRDER CONNECTION
33 W FLOOR BEAMS

SECTION H-H
ELEVATION FOR SPAN N1-N4
END FLOOR BEAM TO GIRDER CONNECTION
33 W FLOOR BEAMS

NOTES
For size of flange plate welds see Table I Sheet No. 350.
Weld Connection E's to the top flange and tight fit at the bottom flange in areas designated as Detail "A".
Weld Connection E's to the bottom flange and tight fit at the top flange in areas designated as Detail "B".
For limits of Detail "A" or Detail "B" see the Girder Elevation Drawings.

Note A*
3/16" Fillet weld Typical
3/8" Fillet weld @ Piers only

84" WEB GIRDER

DESIGNED BY: T.T.
DRAWN BY: P.A.S.
CHECKED BY: A.A.
APPROVED BY: K.A.

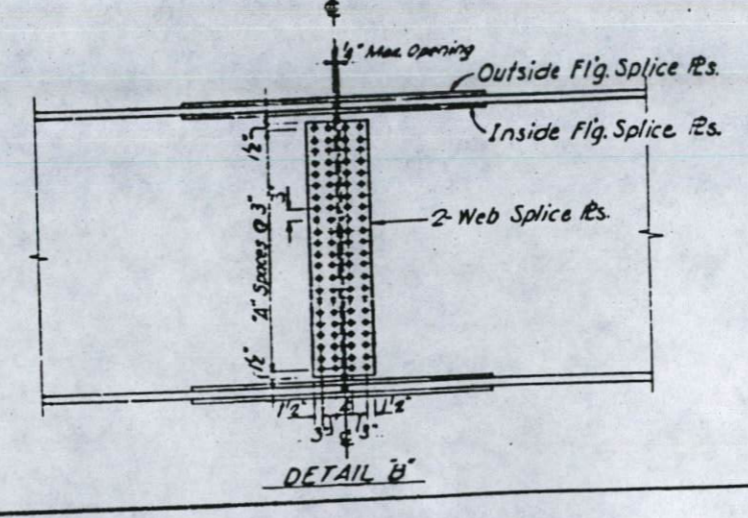
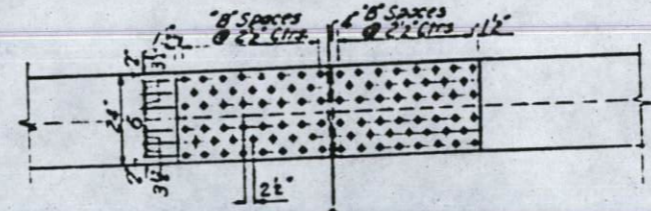
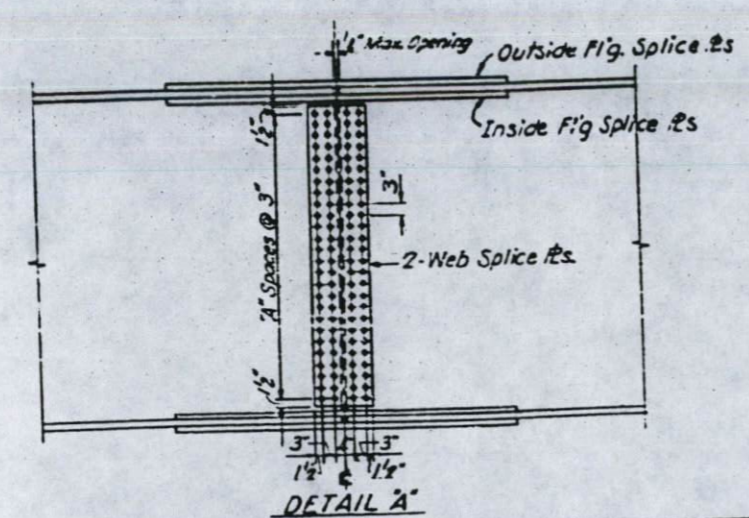
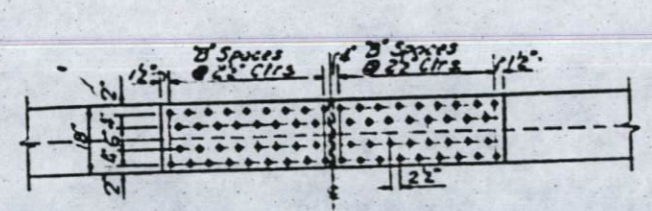
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BLDGS.
DIVISION OF HIGHWAYS

STEEL FRAMING DETAILS
POPLAR STREET BRIDGE APPROACHES

F.A.I. RT. 70 ST. CLAIR CO. SECTION B2-3HVFBE-1
H. W. LOCHNER, INC.
ENGINEERS
CHICAGO, ILLINOIS
SHEET 347 OF 326

LOCATION	SPLICE NO.	DWG NO.	DETAIL	GIRDER SECTION		WEB SPLICE		FLANGE SPLICE					
				WEB PLATE	FLANGE PLATES	FILL PLATES	SPLICE PLATES	A	OUTSIDE PLATES	INSIDE PLATES	B		
Rdwy "A"	2,3,4	186	A	3/8 C/2 x 84	18 x 1 1/2	2-6 1/4 x 1/6 x 6-6	2-13 x 3/8 x 6-6	25	2-18 x 3/4 x 5-7	4-8 x 7/8 x 5-7	12		
	5,6	186	A	3/8 C/2 x 84	18 x 1 1/2	2-6 1/4 x 1/6 x 6-6	2-13 x 3/8 x 6-6	25	2-18 x 3/4 x 5-7	4-8 x 7/8 x 5-7	12		
	7	186	A	3/8 C/2 x 84	18 x 1 1/2	2-6 1/4 x 1/6 x 6-6	2-13 x 3/8 x 6-6	25	2-18 x 1 x 7-3	4-8 x 1/4 x 7-3	16		
	10,11,12,13	190	A	3/8 x 72	18 x 1	—	2-13 x 3/8 x 5-6	21	2-18 x 1/2 x 3-11	4-8 x 3/8 x 3-11	8		
	17,18,20,21	191	A	3/8 x 72	18 x 1 1/2	—	2-13 x 3/8 x 5-6	21	2-18 x 3/4 x 5-7	4-8 x 7/8 x 5-7	12		
	26,27,29	196	A	3/8 C/2 x 72	18 x 1 1/2	2-6 1/4 x 1/6 x 5-6	2-13 x 3/8 x 5-6	21	2-18 x 1 x 7-3	4-8 x 1/8 x 7-3	16		
	30	196	A	3/8 C/2 x 72	18 x 1 1/2	2-6 1/4 x 1/6 x 5-6	2-13 x 3/8 x 5-6	21	2-18 x 3/4 x 5-7	4-8 x 1 x 6-5	14		
	35	200	A	3/8 C/2 x 64	18 x 1 1/2	2-6 1/4 x 1/6 x 6-6	2-13 x 3/8 x 6-6	25	2-18 x 3/4 x 5-7	4-8 x 1 x 6-5	14		
	36,38,39	200	A	3/8 C/2 x 64	18 x 1 1/2	2-6 1/4 x 1/6 x 6-6	2-13 x 3/8 x 6-6	25	2-18 x 3/4 x 5-7	4-8 x 1 x 6-5	14		
	44	204	A	3/8 C/2 x 84	18 x 1 1/2	2-6 1/4 x 1/6 x 6-6	2-13 x 3/8 x 6-6	25	2-18 x 3/4 x 5-7	4-8 x 1 x 6-5	14		
	45,47	204	A	3/8 C/2 x 84	18 x 1 1/2	2-6 1/4 x 1/6 x 6-6	2-13 x 3/8 x 6-6	25	2-18 x 1 x 7-3	4-8 x 1/4 x 7-3	16		
	48	204	A	3/8 C/2 x 84	18 x 2	2-6 1/4 x 1/6 x 6-6	2-13 x 3/8 x 6-6	25	2-18 x 1/2 x 3-11	4-8 x 7/8 x 5-7	12		
	53	208	A	3/8 C/2 x 66	18 x 1 1/2	2-6 1/4 x 1/6 x 5-0	2-13 x 3/8 x 5-0	19	2-18 x 3/4 x 5-7	4-8 x 3/4 x 5-7	10		
	54,56,57,59	208	A	3/8 C/2 x 66	18 x 1 1/2	2-6 1/4 x 1/6 x 5-0	2-13 x 3/8 x 5-0	19	2-18 x 3/8 x 6-5	4-8 x 1 x 6-5	14		
	61	209	A	3/8 C/2 x 66	18 x 1 1/2	2-6 1/4 x 1/6 x 5-0	2-13 x 3/8 x 5-0	19	2-18 x 3/8 x 6-5	4-8 x 1 x 6-5	14		
Rdwy "D"	34,6,7,9,10	212	A	3/8 C/2 x 84	18 x 1	2-6 1/4 x 1/6 x 6-6	2-13 x 3/8 x 6-6	25	2-18 x 1/2 x 3-11	4-8 x 3/8 x 3-11	8		
	56,67	212	A	3/8 C/2 x 72	18 x 1 1/2	2-6 1/4 x 1/6 x 5-6	2-13 x 3/8 x 5-6	21	2-18 x 3/4 x 5-7	4-8 x 3/4 x 4-9	10		
	14	216	A	3/8 x 84	18 x 7/8	—	2-13 x 3/8 x 6-6	25	2-18 x 1/2 x 3-11	4-8 x 3/8 x 3-11	8		
	15,16,17	216	A	3/8 x 84	18 x 1	—	2-13 x 3/8 x 6-6	25	2-18 x 1/2 x 3-11	4-8 x 3/4 x 4-9	10		
	20	220	A	3/8 C/2 x 84	18 x 1 1/2	2-6 1/4 x 1/6 x 6-6	2-13 x 3/8 x 6-6	25	2-18 x 3/4 x 5-7	4-8 x 7/8 x 5-7	12		
	21,22	220	A	3/8 C/2 x 84	18 x 1 1/2	2-6 1/4 x 1/6 x 6-6	2-13 x 3/8 x 6-6	25	2-18 x 3/8 x 6-5	4-8 x 1 x 6-5	14		
	23	220	A	3/8 C/2 x 84	18 x 1 1/2	2-6 1/4 x 1/6 x 6-6	2-13 x 3/8 x 6-6	25	2-18 x 3/4 x 5-7	4-8 x 7/8 x 5-7	12		
	27,29,30,31	225	A	3/8 C/2 x 72	18 x 1 1/2	2-6 1/4 x 1/6 x 5-6	2-13 x 3/8 x 5-6	21	2-18 x 3/4 x 5-7	4-8 x 7/8 x 5-7	12		
	35,37,39,40	229	A	3/8 C/2 x 72	18 x 1 1/2	2-6 1/4 x 1/6 x 5-6	2-13 x 3/8 x 5-6	21	2-18 x 3/8 x 4-9	4-8 x 3/4 x 4-9	10		
	Rdwy "G"	3	252	A	3/8 C/2 x 84	18 x 1 1/2	2-6 1/4 x 1/6 x 6-6	2-13 x 3/8 x 6-6	25	2-18 x 3/4 x 5-7	4-8 x 7/8 x 5-7	12	
		4,5	252	A	3/8 C/2 x 84	18 x 1 1/2	2-6 1/4 x 1/6 x 6-6	2-13 x 3/8 x 6-6	25	2-18 x 3/4 x 5-7	4-8 x 7/8 x 5-7	12	
		7,9,10	252	A	3/8 C/2 x 84	18 x 1 1/2	2-6 1/4 x 1/6 x 6-6	2-13 x 3/8 x 6-6	25	2-18 x 3/4 x 5-7	4-8 x 7/8 x 5-7	12	
		15,16,18,19,21,22	256	A	3/8 C/2 x 84	18 x 1 1/2	2-6 1/4 x 1/6 x 6-6	2-13 x 3/8 x 6-6	25	2-18 x 3/4 x 5-7	4-8 x 7/8 x 5-7	12	
		27,29,30,31	260	A	3/8 C/2 x 84	18 x 1 1/2	2-6 1/4 x 1/6 x 6-6	2-13 x 3/8 x 6-6	25	2-18 x 3/4 x 5-7	4-8 x 7/8 x 5-7	12	
		35	264	A	3/8 C/2 x 84	18 x 1 1/2	2-6 1/4 x 1/6 x 6-6	2-13 x 3/8 x 6-6	25	2-18 x 3/4 x 5-7	4-8 x 1 x 6-5	14	
36		264	A	3/8 C/2 x 84	18 x 1 1/2	2-6 1/4 x 1/6 x 6-6	2-13 x 3/8 x 6-6	25	2-18 x 3/4 x 5-7	4-8 x 7/8 x 5-7	12		
Rdwy "H"		3,7	268	A	3/8 C/2 x 84	18 x 1 1/2	2-6 1/4 x 1/6 x 6-6	2-13 x 3/8 x 6-6	25	2-18 x 3/4 x 5-7	4-8 x 1 x 6-5	14	
		4,6	268	A	3/8 C/2 x 84	18 x 1 1/2	2-6 1/4 x 1/6 x 6-6	2-13 x 3/8 x 6-6	25	2-18 x 3/4 x 5-7	4-8 x 1 x 6-5	14	
		Ramp "R"	14,16,18,20	330	A	3/8 x 66	18 x 1 1/2	—	2-13 x 3/8 x 5-0	19	2-18 x 3/4 x 5-7	4-8 x 7/8 x 5-7	12
			5,7	326	A	3/8 x 66	18 x 1 1/2	—	2-13 x 3/8 x 5-0	19	2-18 x 3/4 x 5-7	4-8 x 7/8 x 5-7	12
			3,9	326	A	3/8 x 66	18 x 1 1/2	—	2-13 x 3/8 x 5-0	19	2-18 x 3/8 x 6-5	4-8 x 1 x 6-5	14

* Require Fig. Fill Rs. 24 = 5/8 x 3-2 1/4



DESIGNED BY A.A.
 DRAWN BY D.H.
 CHECKED BY S.K.
 APPROVED BY K.A.

STATE OF ILLINOIS
 DEPARTMENT OF PUBLIC WORKS & BLDGS.
 DIVISION OF HIGHWAYS

GIRDER SPLICES

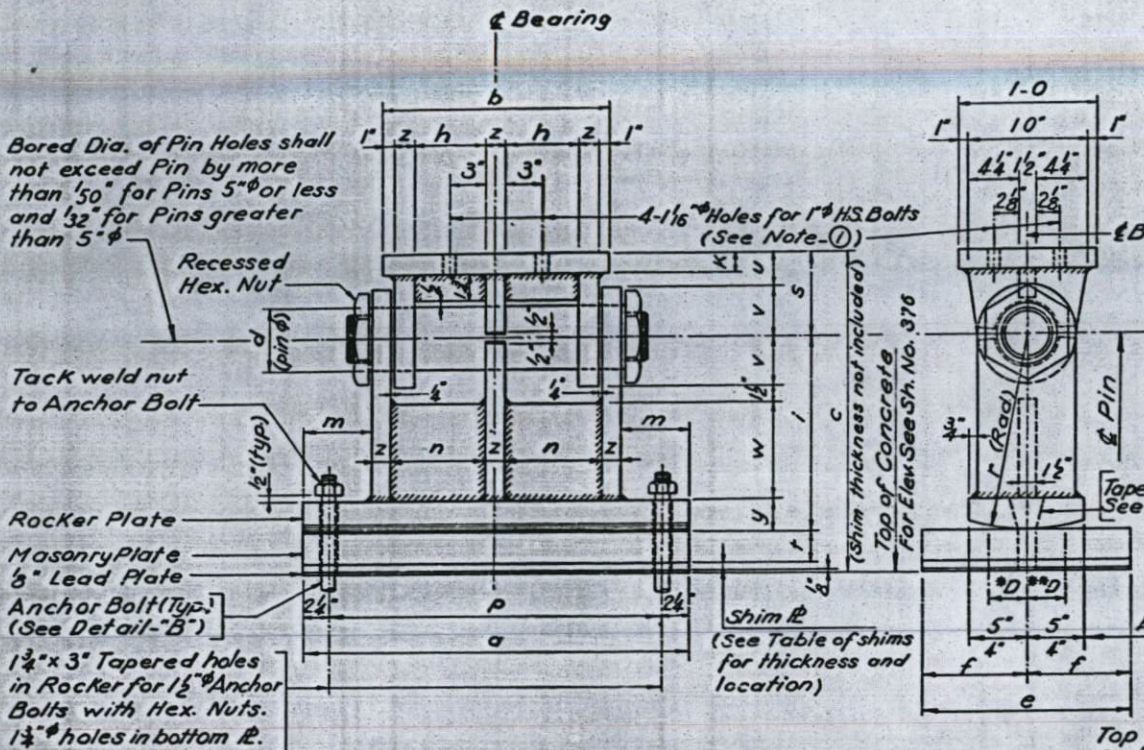
POPLAR STREET BRIDGE APPROACHES

F.A.L. RT. 70 ST. CLAIR CO. SECTION 82-3HVFB-E-1
 M. W. LOCHNER, INC. ENGINEERS CHICAGO, ILLINOIS SHEET 349 OF 528

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI. 70	82-3HV & E-1	ST. CLAIR	247	231
FED. ROAD DIV. NO. 4	ILLINOIS	PROJECT		

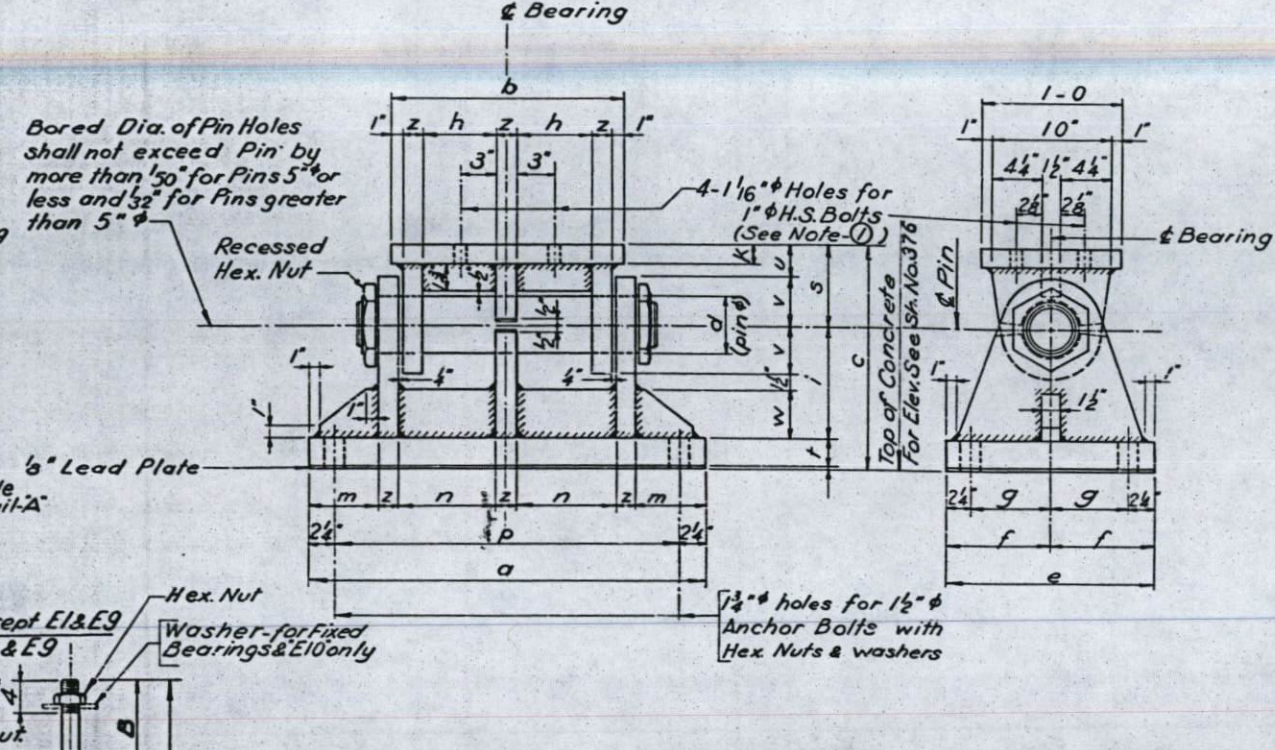
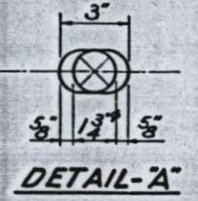
TABLE OF SHIMS

LOCATION	PIER	SPAN	GIRDER	SHIM THICKNESS
A8	A8	A1 & 2		1/8"
A25	A24	A1 & A2		1/8"
D1	D1	D2		1/2"
D5	D5	D1 & D2		1/4"
D8	D8	D1		3/16"
		D2		1/2"
D17	D17	D1 & D2		1"
D28	D27	D2		1/8"
G1	O1-R	R1		1"
G2	G2	G1 & G2		1/2"
G9	G8	G1 & G2		1/8"
G12	G12	G2		1/4"
M6	M7	M1 & M2		5/16"
M9	M9	M1 & M2		7/8"
N5	N4	N1 & N2		1/2"
P4	P4	P1 & P2		1"
P7	P6	P & P2		1/2"
P10	P9	P1		1/16"
		P2		1/2"
R3	R3	R1 & R2		1/8"
S3	S4	S1		1/8"
		S2		15/16"
S7	S8	S1 & S2		1/2"
S15	S16	S1 & S2		1/4"
S18	S18	S1 & S2		1"

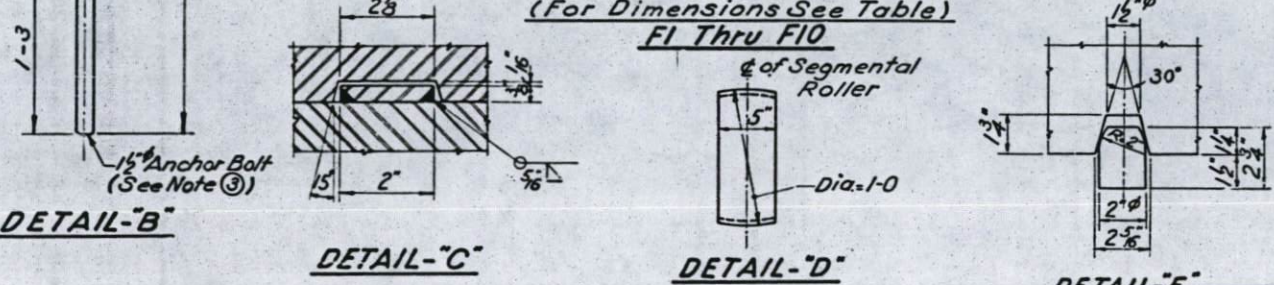


DETAIL OF EXPANSION BEARING
(For Dimensions See Table)
E1 Thru E9

ANCHOR BOLT DIMENSIONS						
Dimension	F1 thru F6	F7 thru F10	E1 thru E3	E4 thru E6	E7	E10
B	5 1/2	6 1/2	7 1/2	9 1/2	11	6
C	1-8 1/2	1-9 1/2	1-10 1/2	2-0 1/2	2-2	1-9



DETAIL OF FIXED BEARING
(For Dimensions See Table)
F1 Thru F10



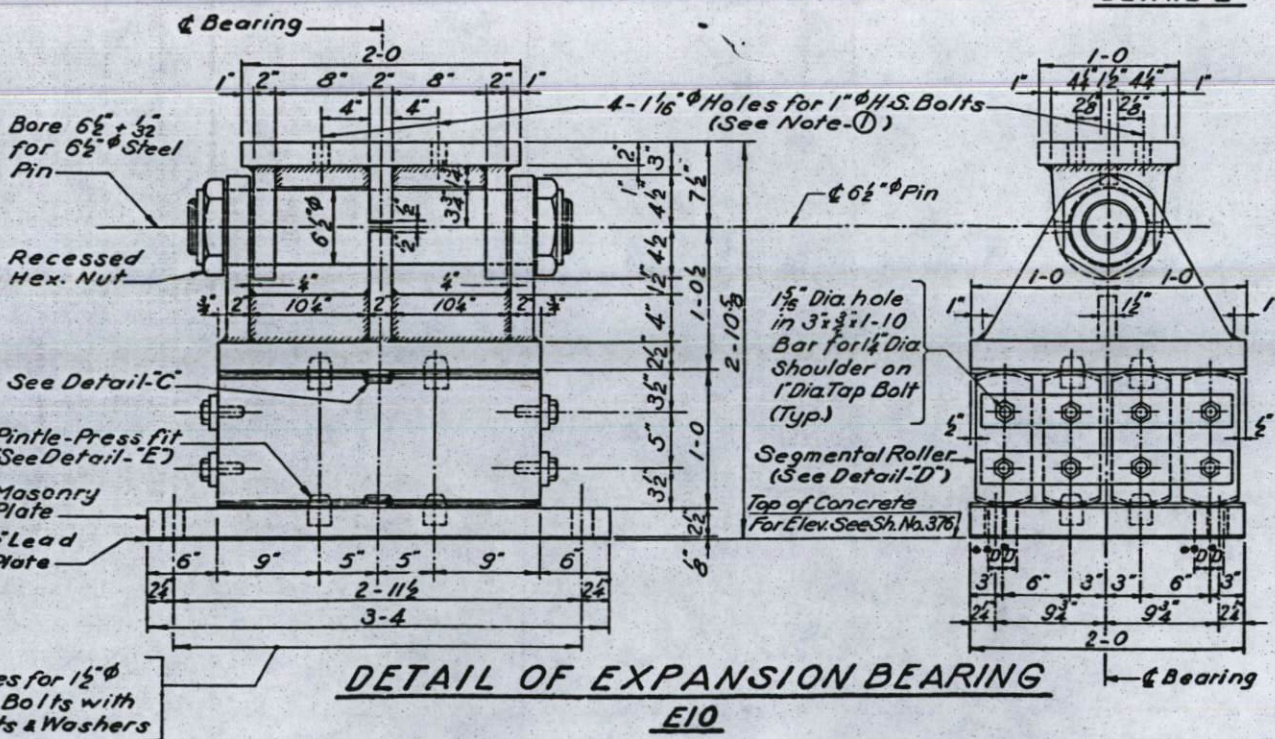
TYPE OF BEARING ASSEMBLY DIMENSIONS		Dimension																				
TYPE OF BEARINGS REQ'D.	NO.	a	b	c	d	e	f	g	h	i	k	m	n	p	r	s	t	u	v	w	y	z
F1	4	2-4	1-6	1-3/8	3 1/2	9	4 1/2	2 1/2	5 1/2	7 1/2	1 1/2	4	7 1/2	1-1 1/2	5 1/2	2	2 1/2	3	3 1/2	1 1/2	1 1/2	1 1/2
F2	20	2-7	1-8	1-5/8	5	1-0	6	3 1/2	6 1/2	9 1/2	1 1/2	4 1/2	8 1/2	2 1/2	6 1/2	2	2 1/2	3 1/2	4	1 1/2	1 1/2	1 1/2
F3	10	2-8	1-8	1-6 1/2	5	1-2	7	4 1/2	6 1/2	9 1/2	1 1/2	5	8 1/2	2 1/2	6 1/2	2 1/2	2 1/2	3 1/2	4	1 1/2	1 1/2	1 1/2
F4	30	2-10	1-8	1-6 1/2	5	1-4	8	5 1/2	6 1/2	9 1/2	1 1/2	6	8 1/2	2 1/2	6 1/2	2 1/2	2 1/2	3 1/2	4	1 1/2	1 1/2	1 1/2
F5	2	2-10	2-0	1-6 1/2	5	1-4	8	5 1/2	6 1/2	9 1/2	1 1/2	4	10 1/2	2 1/2	6 1/2	2 1/2	2 1/2	3 1/2	4	1 1/2	1 1/2	1 1/2
F6	16	2-10	1-8	1-6 1/2	5 1/2	1-6	9	6 1/2	6 1/2	9 1/2	1 1/2	6	8 1/2	2 1/2	6 1/2	2 1/2	2 1/2	3 1/2	4	1 1/2	1 1/2	1 1/2
F7	6	3-0	1-8	1-7 1/2	6	1-8	10	7 1/2	6 1/2	9 1/2	2	7	8 1/2	2 1/2	7 1/2	2 1/2	3	4 1/2	4	1 1/2	1 1/2	1 1/2
F8	2	3-0	2-0	1-7 1/2	6	1-8	10	7 1/2	6 1/2	9 1/2	2	5	10 1/2	2 1/2	7 1/2	2 1/2	3	4 1/2	4	1 1/2	1 1/2	1 1/2
F9	6	3-2	1-8	1-8 1/2	6	1-10	11	8 1/2	6 1/2	9 1/2	2	8	8 1/2	2 1/2	7 1/2	3 1/2	3	4 1/2	4	1 1/2	1 1/2	1 1/2
F10	2	3-4	2-0	1-8 1/2	6 1/2	2-0	1-0	9 1/2	8	10	2	6 1/2	10 1/2	2 1/2	7 1/2	3 1/2	3	4 1/2	4	1 1/2	1 1/2	2
E1	118	2-4	1-6	1-3/8	3 1/2	9	4 1/2	2 1/2	5 1/2	7 1/2	1 1/2	4	7 1/2	1-1 1/2	5 1/2	2	2 1/2	3	3 1/2	1 1/2	1 1/2	1 1/2
E2	42	2-7	1-8	1-7 1/2	5	1-0	6	3 1/2	6 1/2	9 1/2	1 1/2	4 1/2	8 1/2	2 1/2	6 1/2	2	2 1/2	3 1/2	4	1 1/2	1 1/2	1 1/2
E3	12	2-8	1-8	1-6 1/2	5	1-2	7	4 1/2	6 1/2	9 1/2	1 1/2	5	8 1/2	2 1/2	6 1/2	2 1/2	2 1/2	3 1/2	4	1 1/2	1 1/2	1 1/2
E4	30	2-10	1-10	1-10 1/2	5	1-4	8	5 1/2	6 1/2	9 1/2	1 1/2	5	9 1/2	2 1/2	6 1/2	2 1/2	2 1/2	3 1/2	4 1/2	2 1/2	1 1/2	1 1/2
E5	2	2-10	2-0	1-10 1/2	5	1-4	8	5 1/2	6 1/2	9 1/2	1 1/2	4	10 1/2	2 1/2	6 1/2	2 1/2	2 1/2	3 1/2	4 1/2	2 1/2	1 1/2	1 1/2
E6	22	2-10	1-10	2-3/8	5 1/2	1-6	9	6 1/2	6 1/2	9 1/2	1 1/2	5	9 1/2	2 1/2	6 1/2	2 1/2	1 1/2	3 1/2	4	8 1/2	2 1/2	1 1/2
E7	18	3-0	1-0	2-9/8	6	1-8	10	7 1/2	6 1/2	9 1/2	2	5	10 1/2	2 1/2	7 1/2	2 1/2	3	4 1/2	4	1 1/2	1 1/2	1 1/2
E8	4	2-10	2-0	1-7 1/2	5	1-0	6	3 1/2	6 1/2	9 1/2	1 1/2	4	10 1/2	2 1/2	6 1/2	2 1/2	2 1/2	3 1/2	4	1 1/2	1 1/2	1 1/2
E9	8	2-10	2-0	1-3/8	3 1/2	9	4 1/2	2 1/2	5 1/2	7 1/2	1 1/2	4	10 1/2	2 1/2	7 1/2	2 1/2	2 1/2	3	3 1/2	1 1/2	1 1/2	1 1/2
E10	8																					

DETAIL-B

DETAIL-C

DETAIL-D

DETAIL-E



DETAIL OF EXPANSION BEARING
E10

Length and Width of Shims to be the same as the corresponding Base Plate.

- NOTES:**
- The 1" H.S. Bolts to be Bearing Type. Threads to be excluded from the contact surfaces.
 - Continuous Fillet Welds throughout for all Expansion & Fixed Bearings.
 - Anchor Bolts to be grouted into drilled holes after beams are in place.
- *D = 1/100 ft. of expansion for every 15° below the normal temperature of 50°F.
 **D = 1/100 ft. of expansion for every 15° above the normal temperature of 50°F.

DESIGNED BY: A.T. & R.M.
 DRAWN BY: S.Q.B.
 CHECKED BY: R.H.R.
 APPROVED BY: KA

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F. A. I. 70	82-3HVF B E-1	ST. CLAIR	247	232
FED. ROAD DIST. NO. 4	ILLINOIS	PROJECT		

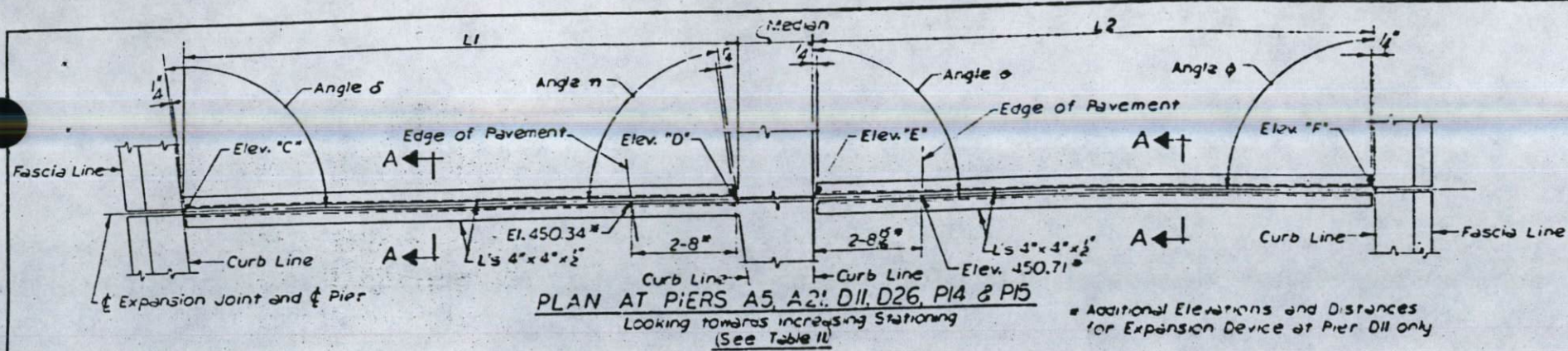


TABLE I
FOR ELEVATIONS, LENGTHS, ANGLES & WEIGHTS

PIER NO.	ANGLE α	ELEV. "A"	L	ELEV. "B"	ANGLE β	WEIGHT
A11	90°03'15"	448.05	30-0	450.45	90°00'00"	830 Lbs
A12	90°19'37"	448.43	30-3/4	450.85	90°00'00"	830 Lbs
D5	90°00'00"	446.70	30-0 1/4	446.23	92°36'23"	830 Lbs
D12	90°00'00"	448.31	30-0	450.71	90°00'00"	830 Lbs
D18	90°12'05"	448.70	30-0 1/4	450.88	90°00'00"	830 Lbs
D21	91°47'46"	445.96	34-10 1/2	449.49	90°00'00"	960 Lbs
G9	90°00'00"	455.58	30-0	457.98	90°00'00"	830 Lbs
H1	89°12'02"	447.50	40-7 1/2	450.75	89°12'59"	1120 Lbs
M9	90°00'00"	465.31	22-0	467.07	90°00'00"	610 Lbs
N1	90°00'00"	451.32	22-0	450.44	90°00'00"	610 Lbs
O6	90°00'00"	439.26	22-0	449.81	90°00'00"	510 Lbs
P7	90°00'00"	471.78	22-0	470.02	90°00'00"	610 Lbs
S3	90°00'00"	457.36	22-0	455.91	90°00'00"	610 Lbs
G1		-See Details This Sheet				1380 Lbs
ABUTMENT						
G14	85°35'35"	443.24	48-8 1/2	443.39	90°00'00"	1340 Lbs
H5	89°38'49"	441.18	32-3 1/4	443.76	89°38'07"	790 Lbs
O10	90°00'00"	428.11	22-0	429.37	90°00'00"	610 Lbs
O11	90°00'00"	424.74	22-0	426.12	90°00'00"	610 Lbs

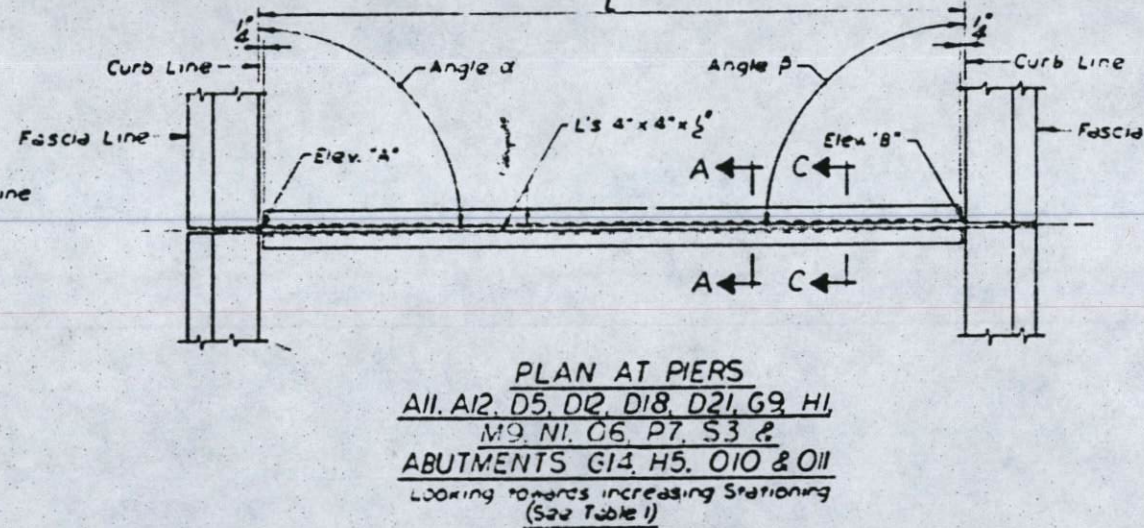
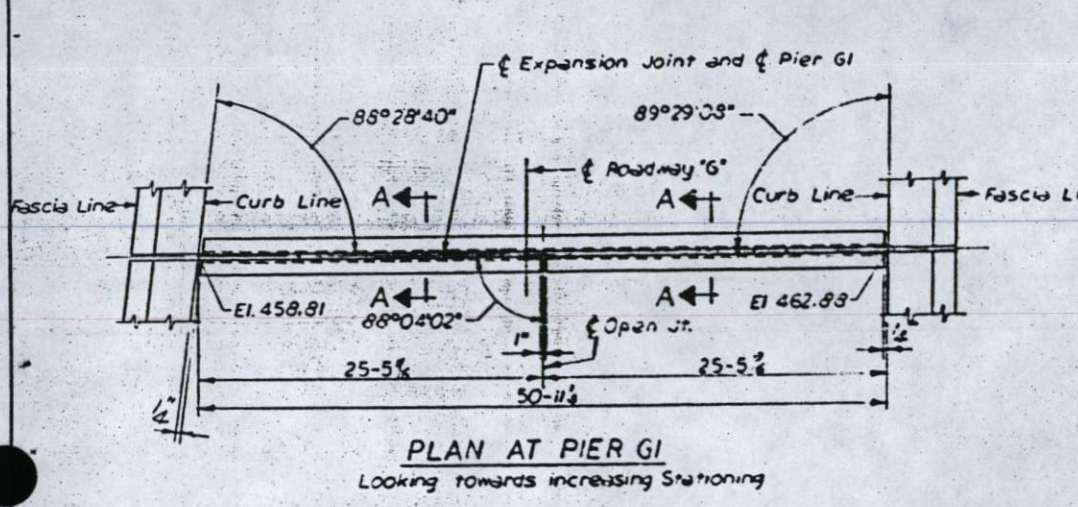
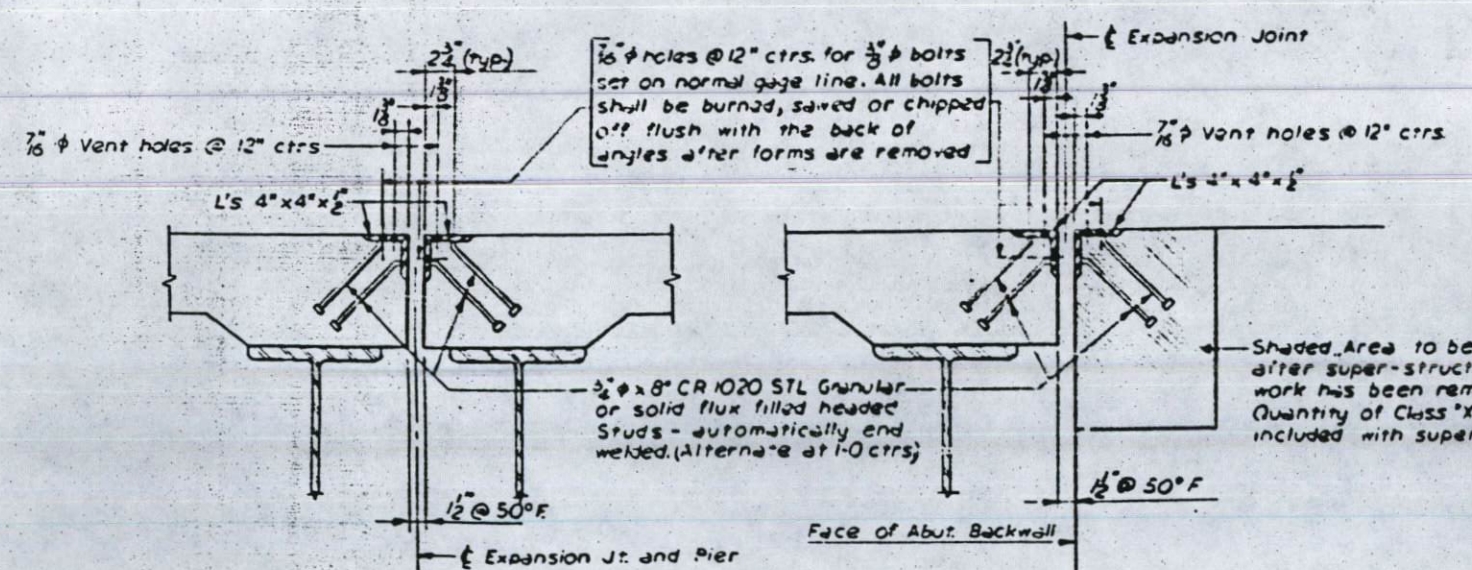


TABLE II
FOR ELEVATIONS, LENGTHS, ANGLES & WEIGHTS

PIER NO.	ANGLE δ	ELEV. "C"	L1	ELEV. "D"	ANGLE γ	ANGLE ϕ	ELEV. "E"	L2	ELEV. "F"	ANGLE θ	WEIGHT
A5	95°43'07"	443.51	21-2 1/2	445.31	86°33'25"	90°00'00"	445.68	30-0	447.24	90°00'00"	1410 Lbs
A21	94°50'36"	454.20	19-4 1/4	455.66	57°13'39"	90°00'00"	456.27	30-0	457.32	90°00'00"	1360 Lbs
D11	90°00'00"	447.94	32-8	450.42	86°21'42"	78°59'21"	450.63	24-11 1/2	450.45	99°04'36"	1590 Lbs
D26	91°09'16"	446.84	22-2	448.56	82°59'54"	90°00'00"	448.90	30-0	449.37	90°00'00"	1440 Lbs
P14	107°48'41"	438.63	23-0 1/2	450.44	72°39'57"	111°54'53"	450.14	23-4 1/2	451.45	67°23'40"	1280 Lbs
P15	113°54'37"	448.02	20-1 1/4	449.55	64°39'15"	114°43'17"	450.02	20-5 1/2	451.56	63°49'22"	1120 Lbs



BILL OF MATERIAL

ITEM	UNIT	TOTAL
Structural Steel	Lbs	23,140

NOTE:
The Contractor for Section 82-3 HVF & E-1 will furnish all expansion devices shown on this sheet. See Special Provisions.
The Contractor for Section 82-3 HVD-1 will erect the expansion devices as shown on this sheet. See Special Provisions.

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BLDGS.
DIVISION OF HIGHWAYS

EXPANSION DEVICES
OPEN TYPE

POPLAR STREET BRIDGE APPROACHES

F. A. I. RT. 70 ST. CLAIR CO. SECTION 82-3HVF B E-1
82-3HVD-1

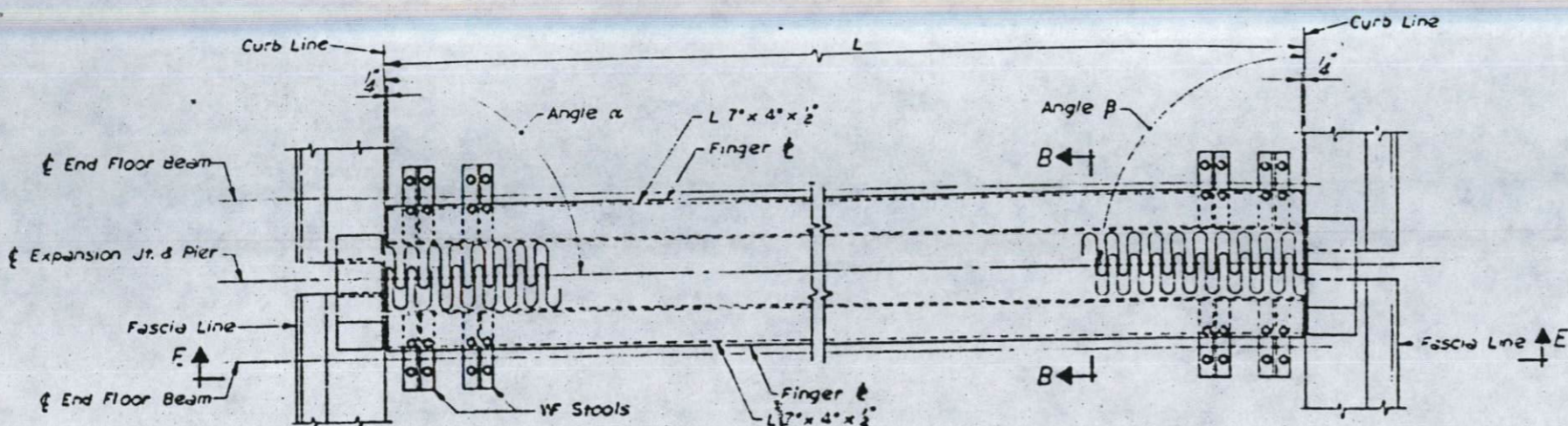
H. W. LOCHNER, INC.
ENGINEERS
CHICAGO, ILLINOIS

SHEET
362 of 526

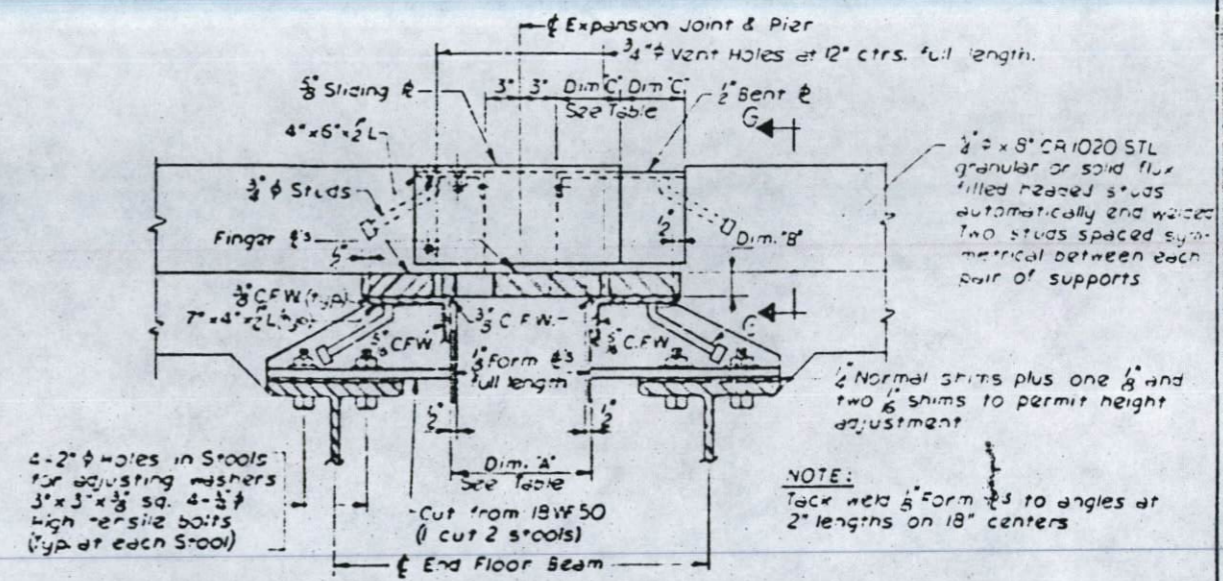
DESIGNED BY P.A.S.
DRAWN BY P.A.S.
CHECKED BY L.H.W.
APPROVED BY K.A.

ROUTE NO	SECTION	CO. NO.	SHEET NO.
F A I 70	R2-3HVF B E-1	ST. CLAIR	247
FED. ROAD DIV. NO. 4	ILLINOIS	PROJECT	233

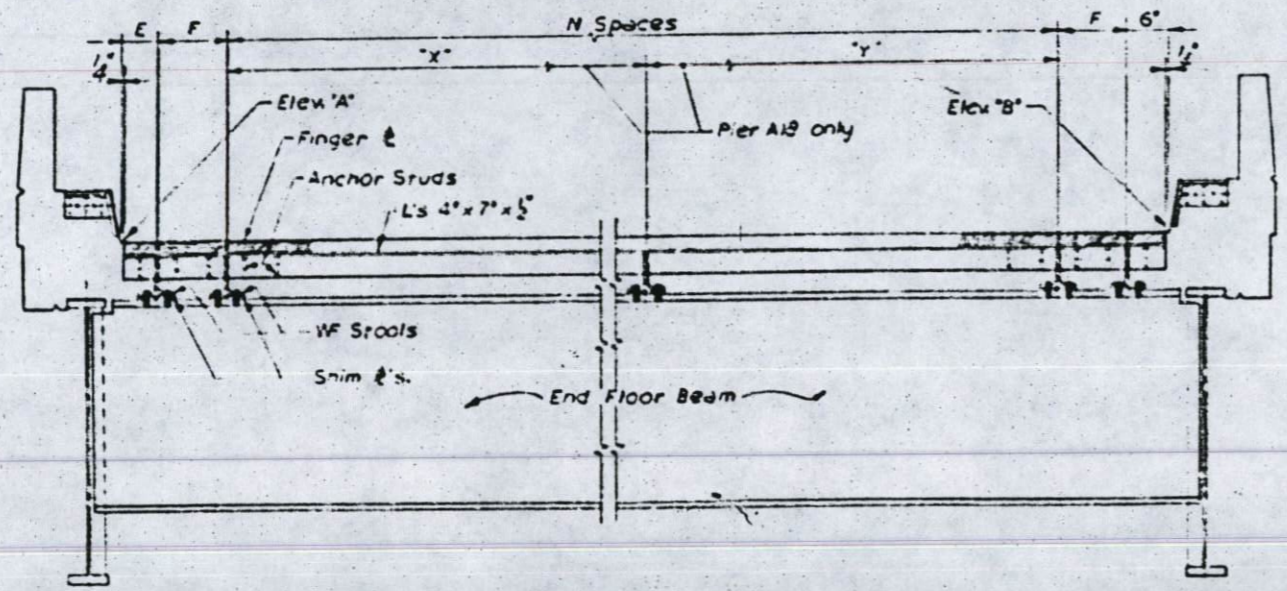
NOTE:
Stool Spacing to be adjusted to miss Stiffener and Connection Plates on Floor Beams



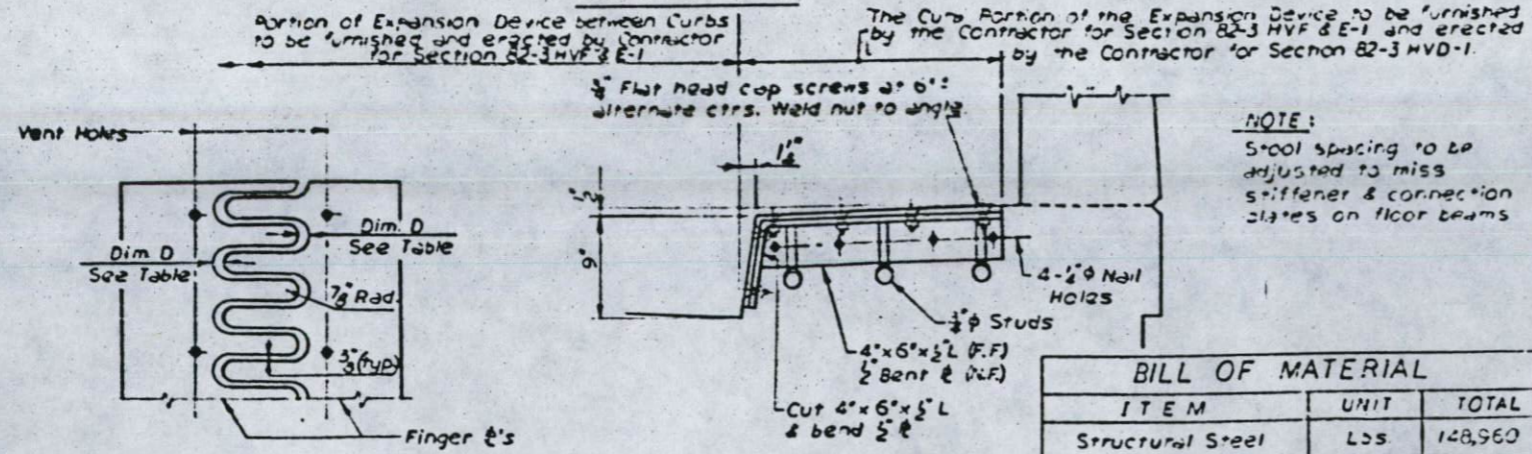
PLAN AT PIERS A8, A15, A18, D8, D15, D22, D28, D33, G5, H2, M12, N5, O3, O14, P4, P10, R3, S7 AND S18
LOOKING TOWARDS INCREASING STA.



SECTION B-B



SECTION E-E



SECTION G-G

FINGER & CUTTING DETAIL

BILL OF MATERIAL

ITEM	UNIT	TOTAL
Structural Steel	LBS	148,960

Temperature range =
-30° F. to +130° F.
with +50° F. = Normal.

TABLE OF ELEVATIONS, LENGTHS, ANGLES AND WEIGHTS OF FINGER EXPANSION DEVICES

PIER NO.	ELEV. 'A'	ANGLE α	L	ANGLE β	ELEV. 'B'	E	F	N SPACES	WEIGHT
A8	226.29	90°00'00"	30-0	90°00'00"	249.89	6"	1-5	13 Spaces @ 2'-0" = 26-0	7970 lbs.
A15	249.64	90°00'00"	35-0	90°00'00"	257.24	6"	1-9	15 Spaces @ 2'-0" = 30-0	9250 lbs.
A18	250.39	90°00'00"	45-7	90°00'00"	254.03	6"	1-6	See Note A	7120 lbs.
O4	447.57	90°00'00"	42-7	90°00'00"	247.89	1'-0"	1-6	21 Spaces @ 2'-0" = 42-0	11400 lbs.
O5	445.38	90°00'00"	30-0	90°00'00"	451.78	6"	1-6	13 Spaces @ 2'-0" = 26-0	7970 lbs.
O22	446.38	90°00'00"	37-7	90°00'00"	449.10	7"	1-9	17 Spaces @ 2'-0" = 33-0	9990 lbs.
O28	451.70	90°00'00"	30-0	90°00'00"	450.15	5"	1-6	13 Spaces @ 2'-0" = 26-0	8120 lbs.
O33	457.38	90°00'00"	30-0	90°00'00"	453.58	6"	1-6	13 Spaces @ 2'-0" = 26-0	8120 lbs.
G5	257.41	90°00'00"	34-7	90°00'00"	460.18	7"	1-9	15 Spaces @ 2'-0" = 30-0	10750 lbs.
H2	226.78	90°00'00"	38-2	90°00'00"	249.35	10"	1-6	17 Spaces @ 2'-0" = 34-0	12110 lbs.
M12	449.39	90°00'00"	22-0	90°00'00"	448.56	6"	1-6	9 Spaces @ 2'-0" = 18-0	6000 lbs.
N5	449.68	90°00'00"	22-0	90°00'00"	447.92	6"	1-6	9 Spaces @ 2'-0" = 18-0	6000 lbs.
O3	260.18	90°00'00"	22-0	90°00'00"	258.22	6"	1-6	9 Spaces @ 2'-0" = 18-0	6000 lbs.
O14	426.32	90°00'00"	22-0	90°00'00"	436.77	6"	1-6	9 Spaces @ 2'-0" = 18-0	6000 lbs.
P4	471.49	90°00'00"	22-0	90°00'00"	469.73	6"	1-6	9 Spaces @ 2'-0" = 18-0	6000 lbs.
P10	461.04	90°00'00"	22-0	90°00'00"	460.72	6"	1-6	9 Spaces @ 2'-0" = 18-0	6000 lbs.
R3	261.57	90°00'00"	22-0	90°00'00"	251.28	6"	1-6	9 Spaces @ 2'-0" = 18-0	6000 lbs.
S7	472.36	90°00'00"	22-0	90°00'00"	472.12	6"	1-6	9 Spaces @ 2'-0" = 18-0	6000 lbs.
S18	229.22	90°00'00"	22-0	90°00'00"	229.75	6"	1-6	9 Spaces @ 2'-0" = 18-0	6000 lbs.

NOTE 'A': For Dim 'x' use 12 Spaces @ 1'-11" = 23'-0"; for 'y' Dim use 13 Spaces @ 1'-5" = 18'-5"

EXPANSION DEVICE TABLE

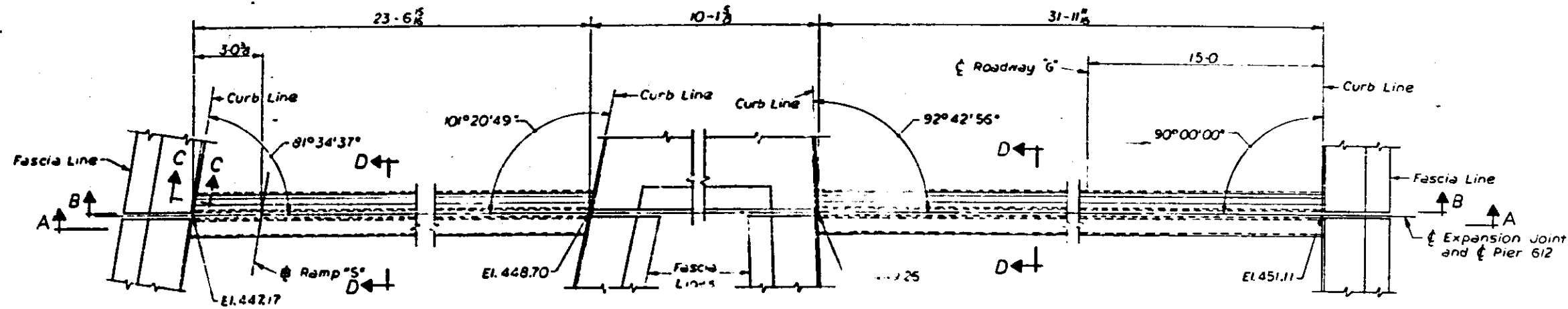
PIER NO.	Dimen. 'A' at 50° F.	Dimen. 'B' at 50° F.	Dimen. 'C' at 50° F.	Dimen. 'D' at 50° F.
A8	11 1/8"	1 1/8"	3 1/2"	3 1/8"
A15	12 1/4"	1 1/8"	4"	3 1/2"
A18	9 3/8"	1 1/8"	3"	2 3/8"
O4	11 1/8"	1 1/8"	3 1/2"	3 1/8"
O15	11 1/2"	1 1/8"	3 1/2"	3 1/8"
O22	12 1/4"	1 1/8"	4"	3 1/2"
O28	13"	1 1/8"	4"	3 3/8"
O33	12 1/4"	1 1/8"	4"	3 1/2"
G5	15 3/8"	2 1/8"	5"	4 1/8"
H2	9 3/8"	1 1/8"	3"	2 3/8"
M12	12 1/4"	1 1/8"	4"	3 1/2"
N5	14 1/8"	2 1/8"	4 1/2"	4 1/8"
O3	12 1/4"	1 1/8"	4"	3 1/2"
O14	12 1/4"	1 1/8"	4"	3 1/2"
P4	9 1/4"	1 1/8"	3"	2 3/8"
P10	14 1/8"	2 1/8"	4 1/2"	4 1/8"
R3	13"	1 1/8"	4"	3 3/8"
S7	11 1/8"	1 1/8"	3 1/2"	3 1/8"
S18	10"	1 1/8"	3"	2 3/8"

NOTES: The Portions of the Expansion Devices for Piers A1, D1, A25, M6, S10 & S15 that have been stored by the Contractor for Section 82-3 HVB shall be erected by the Erection Contractor indicated in Section '6-6' on this sheet. See Special Provisions.
The Portions of the Expansion Devices for Piers D33, N5, O14, P4 & S18 that can be erected immediately shall be erected by the Erection Contractor indicated in Section '6-6' this Sheet. The Future portions shall be stored by the Contractor for Section 82-3HVF & E-1 until needed by the Contractors for Sections 82-3HVB-2 and 82-3HVB-3

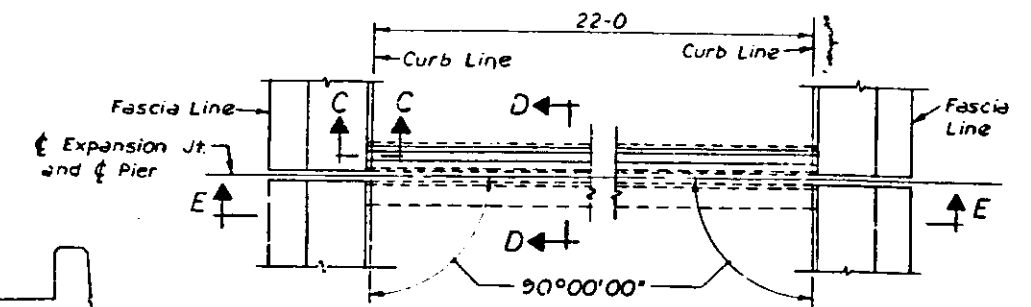
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BLDGS.
DIVISION OF HIGHWAYS
EXPANSION DEVICES
FINGER PLATE
POPLAR STREET BRIDGE APPROACHES
F. A. I. 70 ST. CLAIR CO. SECTION 82-3HVF B E-1
82-3HVD-1
W. W. LOCHNER, INC.
ENGINEERS
CHICAGO, ILLINOIS
SHEET 343 OF 526

DESIGNED BY PAS
DRAWN BY PAS
CHECKED BY L.H.V.
APPROVED BY K.A.

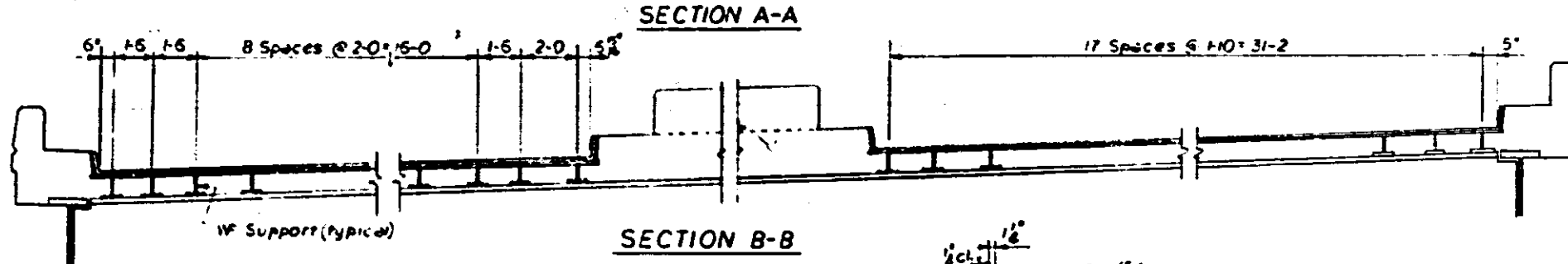
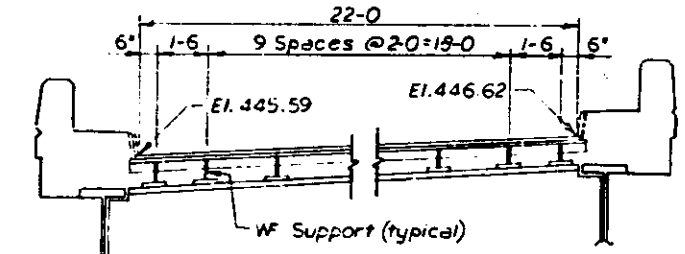
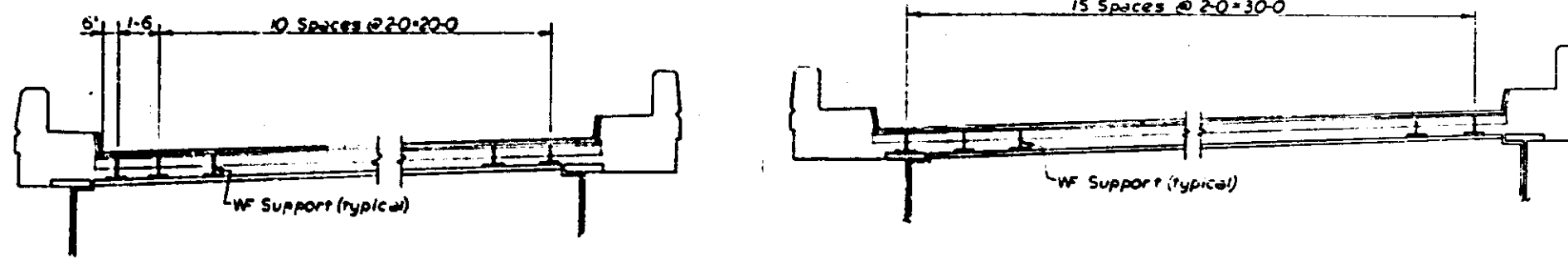
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F. A. I. 70	82-3HVF B-E 82-3HVD-1	ST. CLAIR	247	234
FED. ROAD DIV. NO. 4	ILLINOIS	PROJECT		



PLAN AT PIER G12
LOOKING TOWARDS INCREASING STATIONING OF ROADWAY G
Weight 9,220 Lbs.

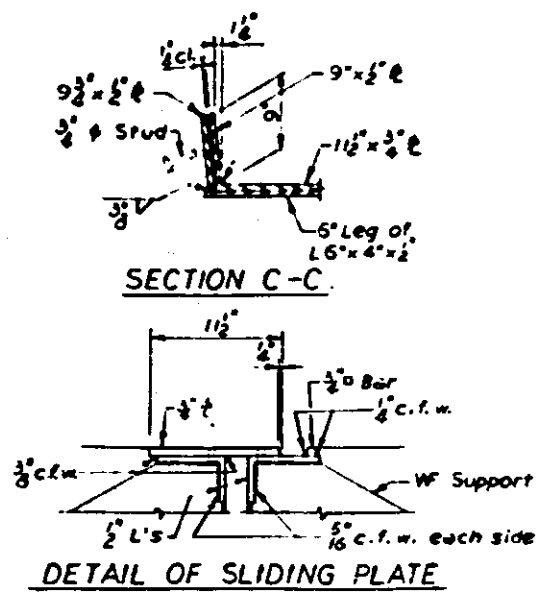
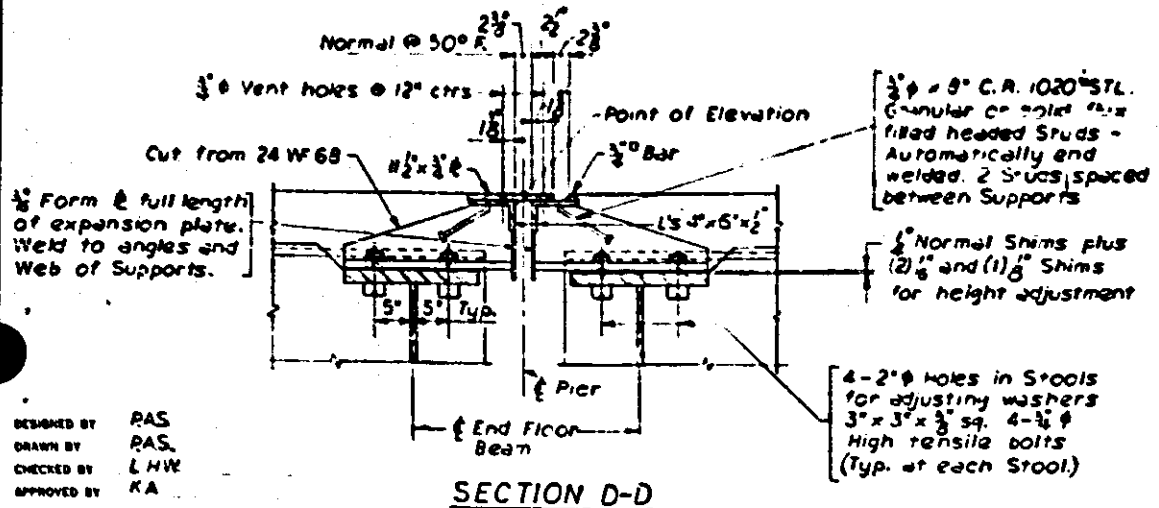


PLAN AT PIER O7
LOOKING TOWARDS INCREASING STATIONING
Weight 3,720 Lbs.



SECTION E-E

BILL OF MATERIAL		
ITEM	UNIT	TOTAL
Structural Steel	Lbs.	12,940



DESIGNED BY RAS
DRAWN BY RAS
CHECKED BY LHW
APPROVED BY KA

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BLDGS.
DIVISION OF HIGHWAYS
EXPANSION DEVICES
SLIDING PLATE
POPLAR STREET BRIDGE APPROACHES
F. A. I. RT. 70 ST. CLAIR CO. SECTION 82-3HVF B-E
82-3HVD-1
H. W. LOCHNER, INC.
ENGINEERS
CHICAGO, ILLINOIS
SHEET 364 of 526

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 70	82-3HVFB-1	ST. CLAIR	247	241
FED. ROAD DIV. NO. 4		ILLINOIS	PROJECT	

Location	Moment						Reaction					
	.4Span G1	.5Span G2	.5Span G3	.6Span G4	Pier G2	Pier G3	Pier G4	Pier G1	Pier G2	Pier G3	Pier G4	Pier G5
Dead Primary	2090	1900	1793	1671	4673	4630	4053	135	474	453	415	111
Load Secondary	21	19	18	17	33	37	33	1	1	1	1	1
Live Primary	1378	1400	1376	1300	1568	1680	1490	83	137	138	132	79
Load Secondary	14	14	14	13	13	13	12	1	-	-	-	1
Impact	324	293	290	303	343	350	329	20	30	29	29	19
Centrifugal Force	42	43	42	40	48	52	46	3	4	4	4	2
Total	3869	3669	3533	3344	6683	6762	5963	243	646	625	581	213
Section Modulus	2694	2502	2319	2319	4339	4338	3962	-	-	-	-	-
Torque Loading	Dead Load	5.6	5.1	4.8	4.5	10.3	10.1	3.9				
	Live Load	3.7	3.7	3.7	3.5	3.4	3.7	3.3				
	Impact	0.9	0.8	0.8	0.8	0.8	0.8	0.7				
	Total	10.2	9.6	9.3	8.8	14.5	14.6	12.9				
Section Modulus	81.0	74.3	67.5	67.5	135.0	135.0	121.5					

Location	Moment							Reaction				
	.4Span G5	.5Span G6	.5Span G7	.6Span G8	Pier G6	Pier G7	Pier G8	Pier G5	Pier G6	Pier G7	Pier G8	Per G3
Dead Primary	1603	1462	1432	1489	3589	3629	3405	105	372	366	355	98
Load Secondary	16	14	14	15	29	29	27	1	1	1	1	1
Live Primary	1270	1268	1232	1170	1472	1540	1380	78	131	131	125	73
Load Secondary	13	13	12	12	12	12	11	1	-	-	-	1
Impact	305	265	263	264	322	336	310	18	29	28	28	17
Centrifugal Force	47	47	45	43	54	57	51	3	5	5	5	3
Total	3254	3069	2998	3013	5478	5603	5184	206	538	531	514	193
Section Modulus	2135	2135	2135	2135	3587	3779	3403	-	-	-	-	-
Torque Loading	Dead Load	3.6	3.3	3.2	3.5	6.6	6.7	6.6				
	Live Load	2.8	2.8	2.8	2.7	2.7	2.8	2.6				
	Impact	0.7	0.6	0.6	0.7	0.6	0.6	0.6				
	Total	7.1	6.7	6.6	6.9	9.9	10.1	9.8				
Section Modulus	62.8	62.8	60.8	60.8	108.0	114.8	101.8					

Location	Moment			Reaction		
	.4Span G9 6Span G11	.5Span G10	Piers G10 & G11	Piers G9 & G12	Piers G10 & G11	
Dead Primary	1511	1532	3537	99	370	
Load Secondary	15	15	31	1	1	
Live Primary	1212	1232	1470	73	125	
Load Secondary	12	12	12	1	-	
Impact	283	255	327	17	28	
Centrifugal Force	44	42	50	2	4	
Total	3077	3088	5727	193	528	
Section Modulus	2135	2135	3823	-	-	
Torque Loading	Dead Load	3.9	4.0	8.1		
	Live Load	3.2	3.1	3.1		
	Impact	0.7	0.7	0.7		
	Total	7.8	7.8	11.9		
Section Modulus	60.8	60.8	121.5			

Location	Moment			Reaction		
	.4Span G12	.6Span G13	Pier G13	Pier G12	Pier G13	Abut. G14
Dead Primary	1976	1629	4021	145	478	124
Load Secondary	20	16	32	1	1	1
Live Primary	1507	1424	1415	107	158	102
Load Secondary	15	14	11	1	-	1
Impact	370	354	345	27	39	25
Centrifugal Force	28	26	26	2	3	2
Total	3916	3463	5850	283	679	255
Section Modulus	2694	2319	3962	-	-	-
Torque Loading	Dead Load	5.2	4.3	8.7		
	Live Load	3.9	3.8	3.0		
	Impact	1.0	0.9	0.8		
	Total	10.1	9.0	12.5		
Section Modulus	81.0	67.5	121.5			

Location	Moment				Reaction				
	.4Span H2	.5Span H3	.6Span H4	Pier H3	Pier H4	Pier H2	Pier H3	Pier H4	Abut. H5
Dead Primary	2175	2053	2012	4936	4736	126	448	433	118
Load Secondary	22	21	21	40	38	1	1	1	1
Live Primary	1523	1517	1468	1735	1691	81	140	137	80
Load Secondary	15	15	15	14	14	1	-	-	1
Impact	340	300	331	366	360	18	30	29	18
Centrifugal Force	58	58	56	66	64	3	5	5	3
Total	4133	3964	3903	7157	6903	230	624	605	221
Section Modulus	2878	2695	2878	4906	4906	-	-	-	-
Torque Loading	Dead Load	8.0	7.6	7.4	14.9	14.2			
	Live Load	5.5	5.5	5.4	5.2	5.1			
	Impact	1.3	1.1	1.2	1.1	1.1			
	Total	14.8	14.2	14.0	21.2	20.4			
Section Modulus	87.8	81.0	87.8	155.3	155.3				

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BLDGS.
DIVISION OF HIGHWAYS
STRESS TABLES
POPLAR STREET BRIDGE APPROACHES
ROADWAYS "G" & "H"
FAI RT 70 ST. CLAIR CO. SECTION 82-3HVFB-1
H. W. LOCHNER, INC.
ENGINEERS
CHICAGO, ILLINOIS
SHEET
371 of 526

ROADWAY A		
Pier No.	Girder	
	A 1	A 2
A1 - Span A1	441.30	442.11
A2	437.51	438.33
A3	435.03	436.06
A4	434.50	436.53
A5 - Span A4	433.94	437.69
A5 - Span A5	433.39	437.69
A6	437.02	439.47
A7	437.11	439.67
A8 - Span A7	438.17	440.73
A8 - Span A8	439.17	440.73
A9	437.44	440.00
A10	438.78	441.32
A11 - Span A10	439.73	442.29
A11 - Span A11	439.73	442.29
A12 - Span A11	439.09	442.68
A12 - Span A12	439.09	442.63
A13	439.03	442.63
A14	437.73	442.58
A15 - Span A14	439.97	442.93
A15 - Span A15	439.97	442.93
A16	438.39	442.06
A17	439.29	443.77
A18 - Span A17	439.71	443.52
A18 - Span A18	442.71	443.52
A19	437.40	443.32
A20	442.75	443.49
A21 - Span A20	442.51	447.72
A21 - Span A21	442.51	447.72
A22	431.09	451.60
A23	431.57	451.85
A24	433.39	452.60
A25 - Span A24	442.10	459.54

RAMP M		
Pier No.	Girder	
	M 1	M 2
M5 - Span M7	429.48	448.56
M7	447.73	455.06
M8	453.77	461.87
M9 - Span M9	459.85	457.93
M9 - Span M10	459.85	457.93
M10	454.00	452.30
M11	446.10	445.56
M12 - Span M12	441.66	442.74
M12 - Span M13	441.66	442.74
M13	437.70	439.25
M14	436.00	437.72
A 3 - Span 25M	433.92	437.33

RAMP R		
Pier No.	Girder	
	R 1	R 2
A21 - Span A2R	444.51	448.22
R1	443.74	450.60
R2	451.45	453.37
R3 - Span R2	453.75	455.21
R3 - Span R3	453.75	455.21
R4	453.06	455.32
R1	453.31	455.31
R1 - Span R1R	452.09	453.38

ROADWAY D		
Pier No.	Girder	
	D 1	D 2
D1 - Span D1	442.44	441.90
D2	438.79	438.49
D3	437.00	436.50
D4	436.70	436.40
D5 - Span D4	437.45	436.93
D5 - Span D5	437.45	436.93
D6	437.46	436.91
D7	437.25	436.63
D8 - Span D7	439.07	438.28
D8 - Span D8	438.07	438.28
D9	436.42	438.15
D10	437.31	440.53
D11 - Span D10	438.28	441.25
D11 - Span D11	438.28	441.25
D12 - Span D11	439.79	442.55
D12 - Span D12	439.79	442.55
D13	437.77	442.33
D14	439.73	442.29
D15 - Span D14	441.06	443.22
D15 - Span D15	441.06	443.22
D16	440.27	442.33
D17	440.20	442.76
D18 - Span D17	439.36	441.61
D18 - Span D18	439.36	441.61
D19	438.51	440.33
D20	437.72	439.23
D21 - Span D20	437.83	439.29
D21 - Span D21	437.83	439.29
D22 - Span D21	436.70	439.57
D22 - Span D22	436.70	439.57
D23	435.43	437.56
D24	433.67	437.36
D25	435.73	439.06
D26 - Span D25	437.16	439.79
D26 - Span D26	440.66	439.79
D27	437.71	441.13
D28 - Span D27	443.50	441.85
D28 - Span D28	443.50	441.85
D29	443.31	440.79
D30	441.27	442.11
D31	437.16	441.50
D32	437.22	441.56
D33 - Span D32	442.59	442.24

RAMP N		
Pier No.	Girder	
	N 1	N 2
D11 - Span D1N	441.09	443.55
D11 - Span D11N	442.79	441.73
N1 - Span N1	442.09	441.73
N2	442.37	440.63
N3	441.61	439.29
N4	440.32	438.70
N5 - Span N4	440.66	438.54

RAMP Q		
Pier No.	Girder	
	Q 1	Q 2
D25 - Span D26Q	437.16	440.66
Q1	440.53	442.30
Q2	441.45	443.57
Q1 - Span Q2	442.80	443.63

ROADWAY G		
Pier No.	Girder	
	G 1	G 2
G1 - Span G1	449.15	453.38
G2	448.26	452.41
G3	447.13	450.75
G4	447.19	450.47
G5 - Span G2	448.29	451.01
G5 - Span G5	448.39	451.01
G6	446.50	449.55
G7	446.57	449.70
G8	446.29	449.35
G9 - Span G8	446.26	449.32
G9 - Span G9	446.26	449.32
G10	446.70	449.82
G11	446.70	449.82
G12 - Span G11	446.77	449.81
G12 - Span G12	446.77	449.81
G13	446.33	449.41
G14 - Abutment	446.43	449.42

RAMP S		
Pier No.	Girder	
	S 1	S 2
S12 - Span S1	447.01	449.23
S1	441.32	443.58
S2	443.31	445.76
S3 - Span S2	443.55	445.73
S3 - Span S4	443.55	445.73
S4	442.31	443.54
S5	437.31	436.76
S6	432.53	441.10
S7 - Span S7	446.73	446.01
S7 - Span S8	446.73	446.01
S8	447.23	447.51
S9	443.31	441.37
S10 - Span S10	446.32	446.40
S10 - Span S16	447.07	447.09
S16	447.55	445.35
S17	448.70	449.11
S18 - Span S18	441.49	440.68

RAMP O		
Pier No.	Girder	
	O 1	O 2
O1 - Span O1	452.87	453.15
O1	452.71	453.78
O2	452.51	450.59
O3 - Span O3	452.31	450.59
O3 - Span O4	452.31	450.59
O4	449.47	448.40
O5	445.43	445.30
O6 - Span O6	441.53	442.13
O6 - Span O7	441.53	442.13
O7 - Span O7	437.73	438.87
O7 - Span O8	437.73	438.87
O8	430.87	432.74
O9	424.22	426.13
O10 - Abutment	420.30	422.22
O11 - Abutment	416.76	418.45
O12	419.62	420.27
O13	424.05	424.54
O14 - Span O14	428.53	427.32

ROADWAY H		
Pier No.	Girder	
	H 1	H 2
H1 - Span H1	439.71	443.2
H2 - Span H1	438.31	439.73
H2 - Span H2	436.21	439.73
H3	433.29	436.71
H4	432.32	437.01
H5 - Abutment	431.56	435.51

RAMP P		
Pier No.	Girder	
	P 1	P 2
P4 - Span P4	442.76	442.32
P5	443.45	443.54
P6	442.73	443.01
P7 - Span P5	442.59	442.67
P7 - Span P7	442.59	442.67
P8	442.25	440.53
P9	437.57	436.33
P10 - Span P9	439.77	439.63
P10 - Span P10	439.77	439.63
P11	438.72	439.07
P12	438.13	445.36
P13	431.06	433.53
P14 - Span P13	440.35	442.49
P14 - Span P14	440.25	442.53
P15 - Span P14	440.11	442.76
P15 - Span P15	440.11	442.76
H1 - Span P15	439.71	439.72

Note: Bearing Elevations are to Top of Concrete Piers or Abutments.

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BLDGS.
DIVISION OF HIGHWAYS

BEARING ELEVATIONS

POPLAR STREET BRIDGE APPROACHES

F.A.I. RT. 70 ST. CLAIR CO SECTION 82-3MVF-1
ENGINEERS 82-3MVF & E-1

H. W. LOCHNER, INC.
ENGINEERS

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