

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55/64	82-2HB-BP-1, 82-3HVB-3BP-1	ST. CLAIR	62	1
		ILLINOIS	CONTRACT NO. 76P10	

FOR INDEX OF SHEETS, SEE SHEET NO. 2

TRAFFIC DATA – SN 082-0141 (I-55/64 OVER IC RR)

2017 ADT = 23000 (ACTUAL)

2021 ADT = 23600 (ESTIMATED)

2041 ADT = 26500 (ESTIMATED)

SU = 2.2% MU = 2.2%

TRAFFIC DATA – SN 082-0001 and SN 082-0015 (I-64 and I-55 OVER ST. CLAIR. AVE)

2019 ADT = 23300 (ACTUAL)

2021 ADT = 23600 (ESTIMATED)

2041 ADT = 26600 (ESTIMATED)

SU = 1.8 MU = 3.9%

TRAFFIC DATA – SN 082-0001 and SN 082-0015 (ST. CLAIR. AVE)

2019 ADT = 4300 (ACTUAL)

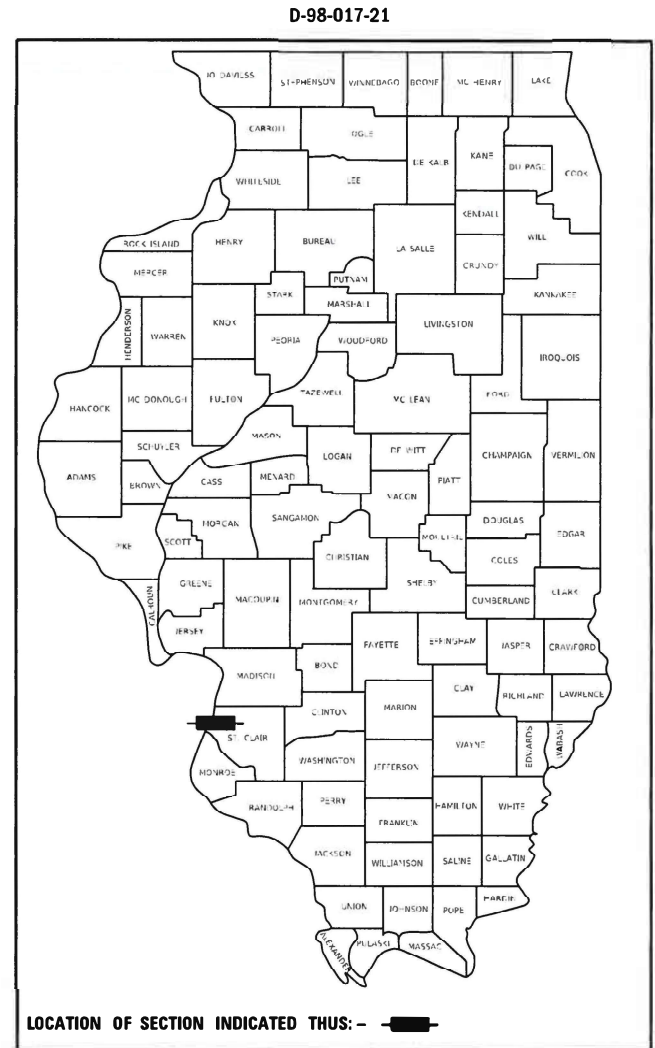
2021 ADT = 4350 (ESTIMATED)

2041 ADT = 4950 (ESTIMATED)

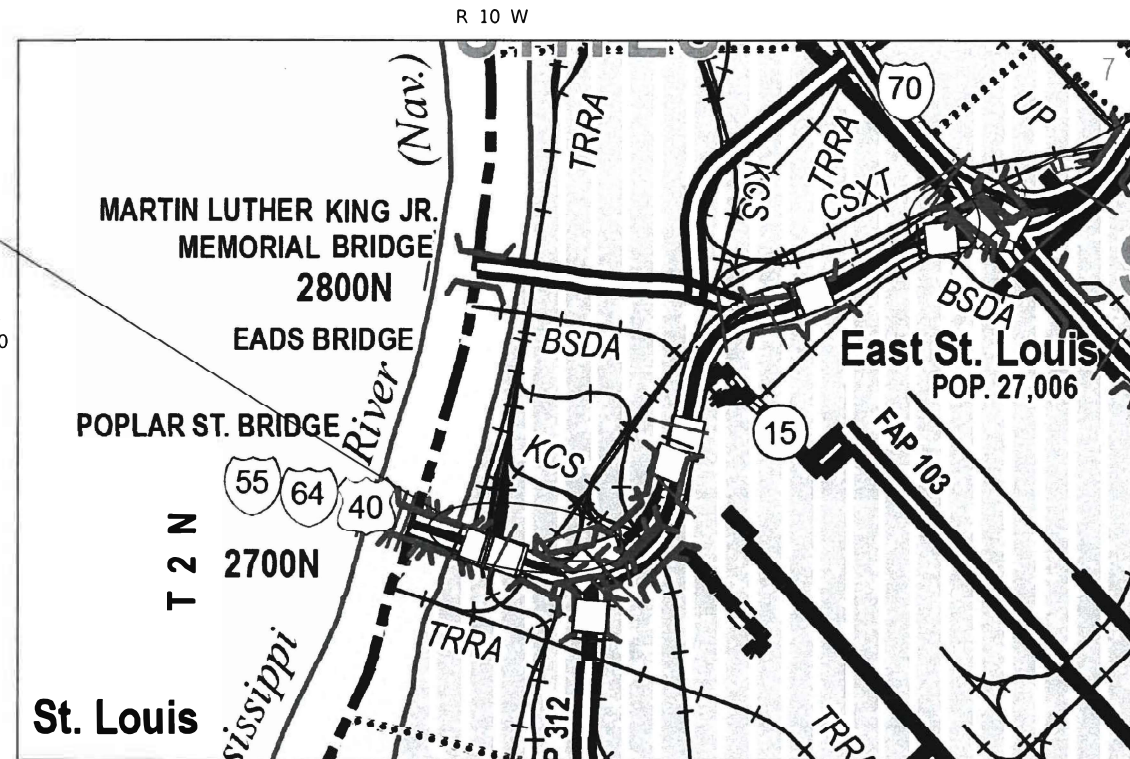
PROPOSED
HIGHWAY PLANS

FAI ROUTE 55/64 (I-055/064)
SECTION 82-2HB-BP-1, 82-3HVB-3BP-1
PROJECT NHPP-TC27(887)
BRIDGE PAINTING
ST. CLAIR COUNTY

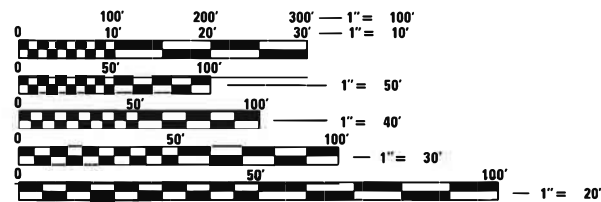
C-98-041-21



LOCATION ONE
SN 082-0141
OVER IR RAILROAD
LATITUDE: 38.616603
LONGITUDE: -90.169760



LOCATION TWO
SN 082-0015
SN 082-0001
OVER ST. CLAIR AVE
LATITUDE: 38.633884
LONGITUDE: -90.147305



FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

J.U.L.I.E.
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATORS
1-800-892-0123
OR 811

PROJECT ENGINEER : HERVE GELIN (618) 346-3179
PROJECT MANAGER : ROBERT HUGHES (618) 346-3187

GROSS LENGTH = 2256 FT. = 0.427 MILE
NET LENGTH = 2256 FT. = 0.427 MILE

CONTRACT NO. 76P10

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED Feb 5 2021
K. Robert Hughes
REGIONAL ENGINEER

March 19, 2021
James J. Quinn
ENGINEER OF DESIGN AND ENVIRONMENT

March 19, 2021
James J. Quinn
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS

INDEX OF SHEETS

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11	SIGNAGE DETAILS
12-14	BRIDGE PAINTING DETAIL SN - 082-0141
15-39	EXISTING STRUCTURE DETAILS - 082-0141
40-48	EXISTING STRUCTURE DETAILS - 082-0015
49-62	EXISTING STRUCTURE DETAILS - 082-0001

HIGHWAY STANDARDS

515001-04	NAME PLATE FOR BRIDGES
701451-05	RAMP CLOSURE FREEWAY/EXPRESSWAY
701901-08	TRAFFIC CONTROL DEVICES
704001-08	TEMPORARY CONCRETE BARRIER
780001-05	TYPICAL PAVEMENT MARKINGS
781001-04	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS
782006-01	GUARDRAIL AND BARRIER WALL REFLECTOR MOUNTING DETAILS
000001-08	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001006	DECIMAL OF AN INCH AND OF A FOOT

GENERAL NOTES

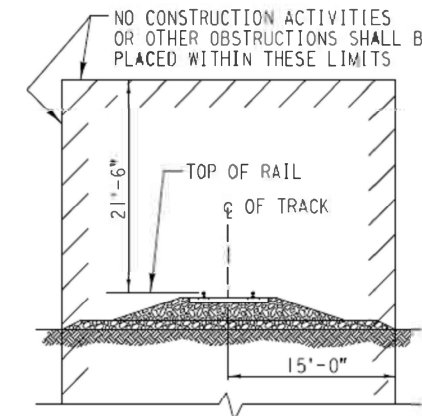
1. THE FOLLOWING UTILITIES ARE KNOWN TO HAVE FACILITIES WITHIN THE PROJECT AREA AS FOLLOWS:

AMEREN ILLINOIS	JULIE MEMBER*
GAS & ELECTRIC	AERIAL, BURIED
500 EAST BROADWAY MC ES 830EAST ST. LOUIS IL 62201	
AT&T	JULIE MEMBER*
COMMUNICATIONS	AERIAL, BURIED
160 W DIVISION ST MARYVILLE IL 62062	
CLEARWAVE COMMUNICATIONS	JULIE MEMBER*
COMMUNICATIONS	AERIAL, BURIED
TWO NORTH VINE ST 2ND FLOOR P.O. BOX 808 HARRISBURG IL 62946	
CITY OF EAST ST. LOUIS	JULIE MEMBER*
LIGHTING	AERIAL
301 RIVERPARK DRIVE EAST ST. LOUIS 62201-3028	
EXPLORER PIPELINE COMPANY	JULIE MEMBER*
PIPELINE	BURIED
WOOD RIVER ARE OFFICE 1355 ROBBINS ROAD HARTFORD IL 62048	
ILLINOIS AMERICAN WATER COMPANY	JULIE MEMBER*
WATER	BURIED
4436 INDUSTRIAL DRIVE P.O. BOX 186 ALTON IL 62002	
LEVEL 3 COMMUNICATIONS, LLC	JULIE MEMBER*
COMMUNICATIONS	AERIAL, BURIED
1015 LOCUST STREET SUITE 800 ST. LOUIS MO 63101	
VERIZON BUSINESS	JULIE MEMBER*
COMMUNICATIONS	AERIAL, BURIED
900 WALNUT STREET 6TH FLOOR ST. LOUIS MO 63102	
MEDIACOM LLC CENTRAL	JULIE MEMBER*
CABLE TV	AERIAL, BURIED
90 MAIN STREET BENTON KY 42025	
METRO EAST SANITARY DISTRICT	JULIE MEMBER*
SANITARY SEWER	BURIED
1800 EDISON AVENUE P.O. BOX 1366 GRANITE CTY IL 62040	
SPIRE STIL PIPELINE LLC	JULIE MEMBER*
SANITARY SEWER	BURIED
700 MARKET 3RD FLOOR ST. LOUIS MO 63101	

MEMBERS OF J.U.L.I.E. (800)892-0123 ARE INDICATED BY AN *. NON-J.U.L.I.E. MEMBERS MUST BE NOTIFIED INDIVIDUALLY.

2. NO SURVEY WAS PERFORMED FOR THIS PROJECT AND THE PLANS WERE CREATED USING MICROFILM AND FIELD MEASUREMENTS

- THE RESIDENT ENGINEER SHALL VERIFY THE EXISTENCE OF HIGHWAY LIGHTING AND/OR INTELLIGENT TRANSPORTATION SYSTEMS (I.T.S.) UTILITIES WITHIN THE PROJECT LIMITS. IF HIGHWAY LIGHTING AND/OR I.T.S. EXISTS WITHIN THE PROJECT LIMITS, AND IF THESE ITEMS REQUIRE LOCATING, THE CONTRACTOR SHALL BE DIRECTED TO DO SO ACCORDING TO SECTION 803 OF THE STANDARD SPECIFICATIONS. THIS WORK SHALL BE PAID FOR ACCORDING TO ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS
- 5 CHANGEABLE MESSAGE BOARDS SHALL BE REQUIRED FOR THIS PROJECT. THEY SHALL BE PLACED 1 WEEK PRIOR TO ANY LANE CLOSURE AND SHALL REMAIN UP FOR THE DURATION OF THE PROJECT. THE CHANGEABLE MESSAGE SHALL BE PLACED AT THE DIRECTION OF THE ENGINEER.
- THE DEPARTMENT STRONGLY ENCOURAGES THE PRIME CONTRACTOR AND THEIR APPROVED SUB-CONTRACTORS TO HIRE MINORITY, WOMEN AND DISADVANTAGED INDIVIDUALS FROM ITS FEDERALLY FUNDED HIGHWAY CONSTRUCTION CAREERS TRAINING PROGRAM (HCCTP) TO HELP MEET WORKFORCE AND TRAINEE GOALS. THIS PROGRAM IS TRAINING MINORITIES, WOMEN AND DISADVANTAGED INDIVIDUALS IN HIGHWAY CONSTRUCTION-RELATED SKILLS, E.G., MATH FOR THE TRADES, JOB READINESS, TECHNICAL SKILLS COURSEWORK (CARPENTRY, CONCRETE FLATWORK, BLUEPRINT READING, SITE PLANS, SITE WORK, TOOLS USE, ETC.) AND OSHA 10 HOUR CERTIFICATION, TO PREPARE THEM FOR A CAREER IN THE HIGHWAY CONSTRUCTION TRADES. GRADUATES ARE WELL-TRAINED AND READY TO BECOME PRODUCTIVE ENTRY-LEVEL CONSTRUCTION WORKERS. CONTACT THE DISTRICT 8 EEO OFFICE AT 618-346-3360 AND/OR THE HCCTP COORDINATOR AT 618-874-6528 TO LEARN MORE ABOUT THE PROGRAM AND FOR ASSISTANCE IN MEETING WORKFORCE AND TRAINEE GOALS.
- THE CONTRACTOR WILL BE REQUIRED TO SUBMIT A WORK PLAN TO THE RAILROAD FOR REVIEW WHICH SHOWS THE CONTAINMENT METHOD UTILIZED DOES NOT ALLOW PAINT AND OTHER DEBRIS TO FALL ONTO THE UPRR PROPERTY BELOW. ADDITIONALLY, ALL FALSEWORK AND/OR CONTAINMENT MEANS ARE LOCATED OUTSIDE THE "MINIMUM CONSTRUCTION CLEARANCE ENVELOPE" AT ALL TIMES
- FOR SN 082-0015 AND SN 082-0001, CLEANING AND PAINTING OF THE EXISTING STRUCTURAL STEEL SHALL BE AS SPECIFIED IN THE SPECIAL PROVISION FOR "CLEANING AND PAINTING EXISTING STEEL STRUCTURES". ALL BEAMS, BEARINGS, AND OTHER STRUCTURAL STEEL SHALL BE CLEANED TO NEAR WHITE BLAST CLEANING - SSPC-SP10. THE DESIGNATED AREAS CLEANED PER NEAR WHITE BLAST CLEANING SHALL BE PAINTED ACCORDING TO THE REQUIREMENTS OF SYSTEM 1- OZ/E/U. THE COLOR OF THE FINAL FINISH COAT FOR ALL STEEL SURFACES SHALL BE GRAY, MUNSELL NO 5B 7/1.
- FOR SN 082-0015 AND 082-0001 A MINIMUM OF 2 AIR MONITORS PER STRUCTURE WILL BE REQUIRED TO MONITOR ABRASIVE BLASTING OPERATIONS AT THIS SITE. SEE SPECIAL PROVISION FOR "CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES."
- SSPC QP1 AND QP2 CERTIFICATION IS REQUIRED FOR THIS CONTRACT



MINIMUM CONSTRUCTION CLEARANCE ENVELOPE
(NORMAL TO RAILROAD)

THE EXISTING VERTICAL CLEARANCE OF THE UPRR TRACK UNDER SPAN A12 IS MINIMUM 23'-0" (SEE SHEET 16)
THE EXISTING CLEARANCE OF THE UPRR TRACK UNDER SPAN A20 IS MINIMUM 29'-0" (SEE SHEET 17)

COMMITMENTS

NONE

REV. - MS

MODEL: \\MODELNAME
FILE: \\NAME: \\PROJECTNAME.dwg
PROJECT: \\PROJECTNAME
OFFICE: \\OFFICE
DATE: 3/22/2021

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	DRAWN - _____	REVISED - _____
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PLOT DATE = 3/22/2021	DATE - _____	REVISED - _____

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**INDEX OF SHEETS, HIGHWAY STANDARDS,
GENERAL NOTES, AND COMMITMENTS**

SCALE: NTS SHEET 1 OF 1 SHEETS STA. _____ TO STA. _____

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55/64	82-2HB-BP-1, 82-3HVB-3BP-1	ST. CLAIR	62	2
			CONTRACT NO. 76P10	
		ILLINOIS	FED. AID PROJECT	

SUMMARY OF QUANTITIES

90% FED
10% STATE

URBAN

CONSTR. CODE

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTR. CODE		
				BRIDGE 0047 S.N. 082-0141	BRIDGE 0047 S.N. 082-0001	BRIDGE 0047 S.N. 082-0015
67100100	MOBILIZATION	L SUM	1	0.34	0.33	0.33
70107025	CHANGEABLE MESSAGE SIGN	CAL DA	96	16	40	40
70100820	TRAFFIC CONTROL AND PROTECTION, STANDARD 701451	L SUM	1	0.5	0.25	0.25
X0327271	TRAFFIC CONTROL FOR ROAD CLOSURE	EACH	1		0.5	0.5
X5067502	BRIDGE CLEANING AND PAINTING WARRANTY NUMBER 2	L SUM	1		1	
X7200200	WIDE LOAD SIGNING	L SUM	1	0.34	0.33	0.33
X5067503	BRIDGE CLEANING AND PAINTING WARRANTY NUMBER 3	L SUM	1			1
Z0007101	CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES NO. 1	L SUM	1	1		
Z0007102	CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES NO. 2	L SUM	1		1	
Z0007103	CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES NO. 3	L SUM	1			1
Z0010501	CLEANING AND PAINTING STEEL BRIDGE NO. 1	L SUM	1	1		
Z0010502	CLEANING AND PAINTING STEEL BRIDGE NO. 2	L SUM	1		1	
Z0010503	CLEANING AND PAINTING STEEL BRIDGE NO. 3	L SUM	1			1
Z0048665	RAILROAD PROTECTIVE LIABILITY INSURANCE	L SUM	1	1		

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REV. - MS

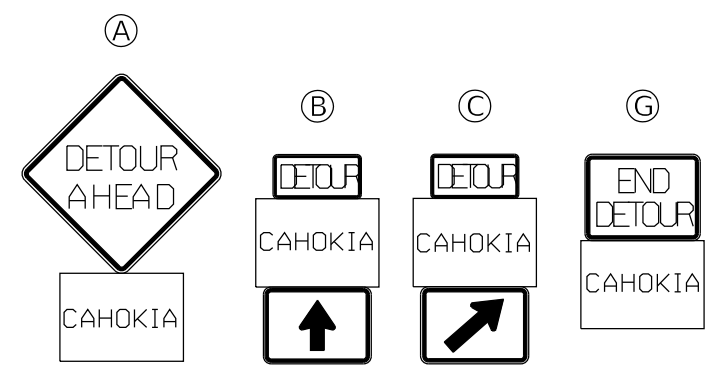
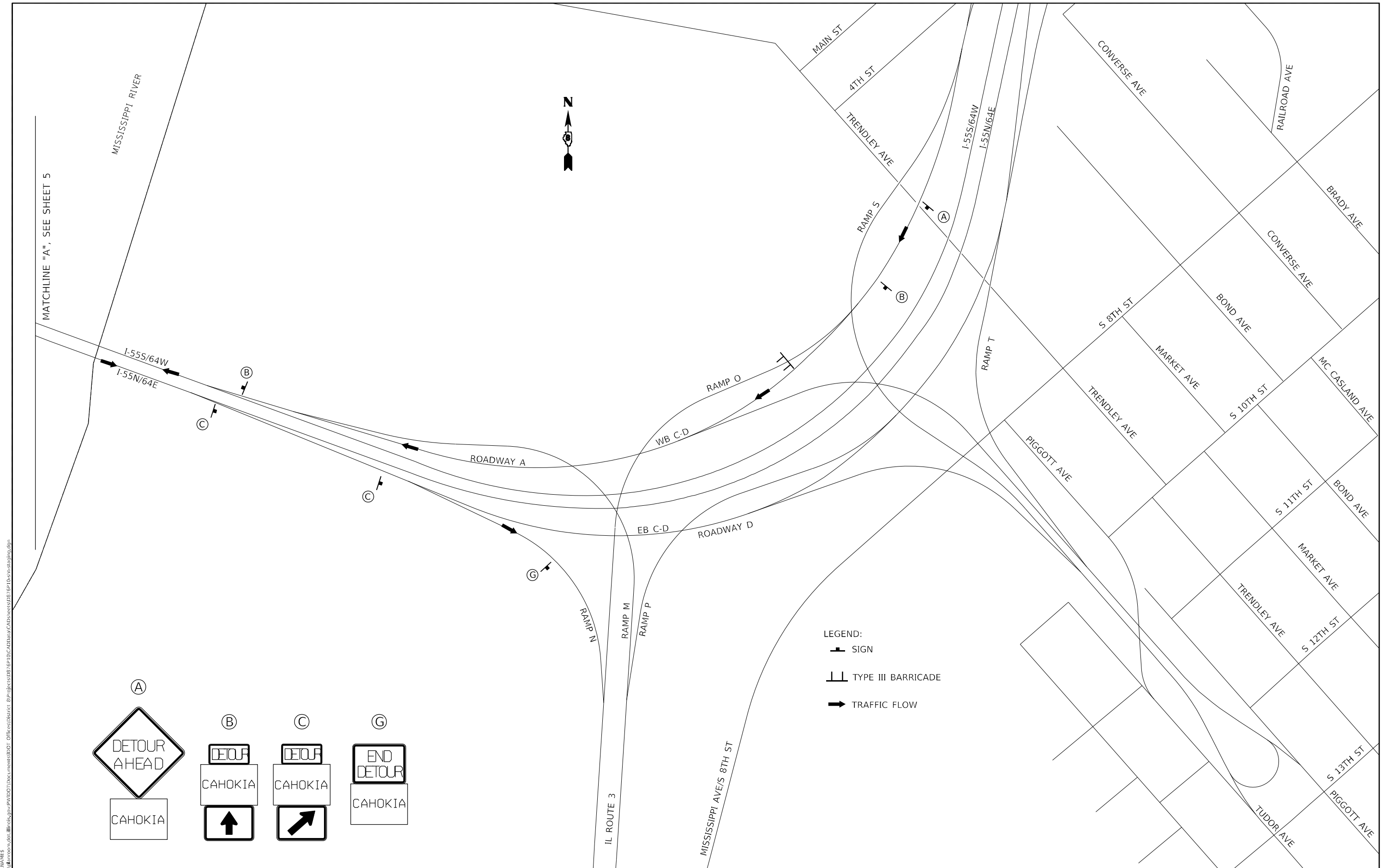
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	DATE - _____	REVISED - _____

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

SUMMARY OF QUANTITIES

SCALE: NTS SHEET 1 OF 1 SHEETS STA. _____ TO STA. _____

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55/64	82-2HB-BP-1, 82-3HVB-3BP-1	ST. CLAIR	62	3
			CONTRACT NO. 76P10	
ILLINOIS FED. AID PROJECT				



LEGEND:
 SIGN
 TYPE III BARRICADE
 TRAFFIC FLOW

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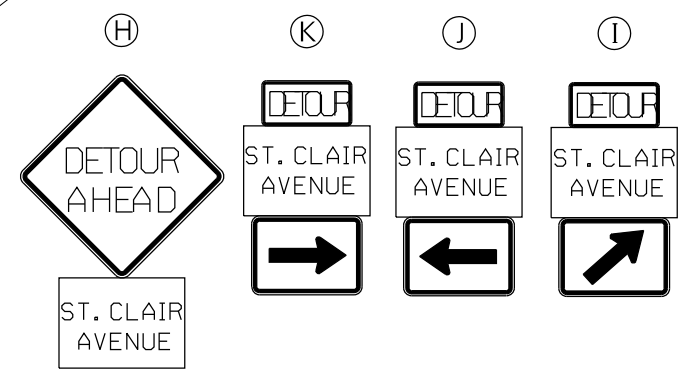
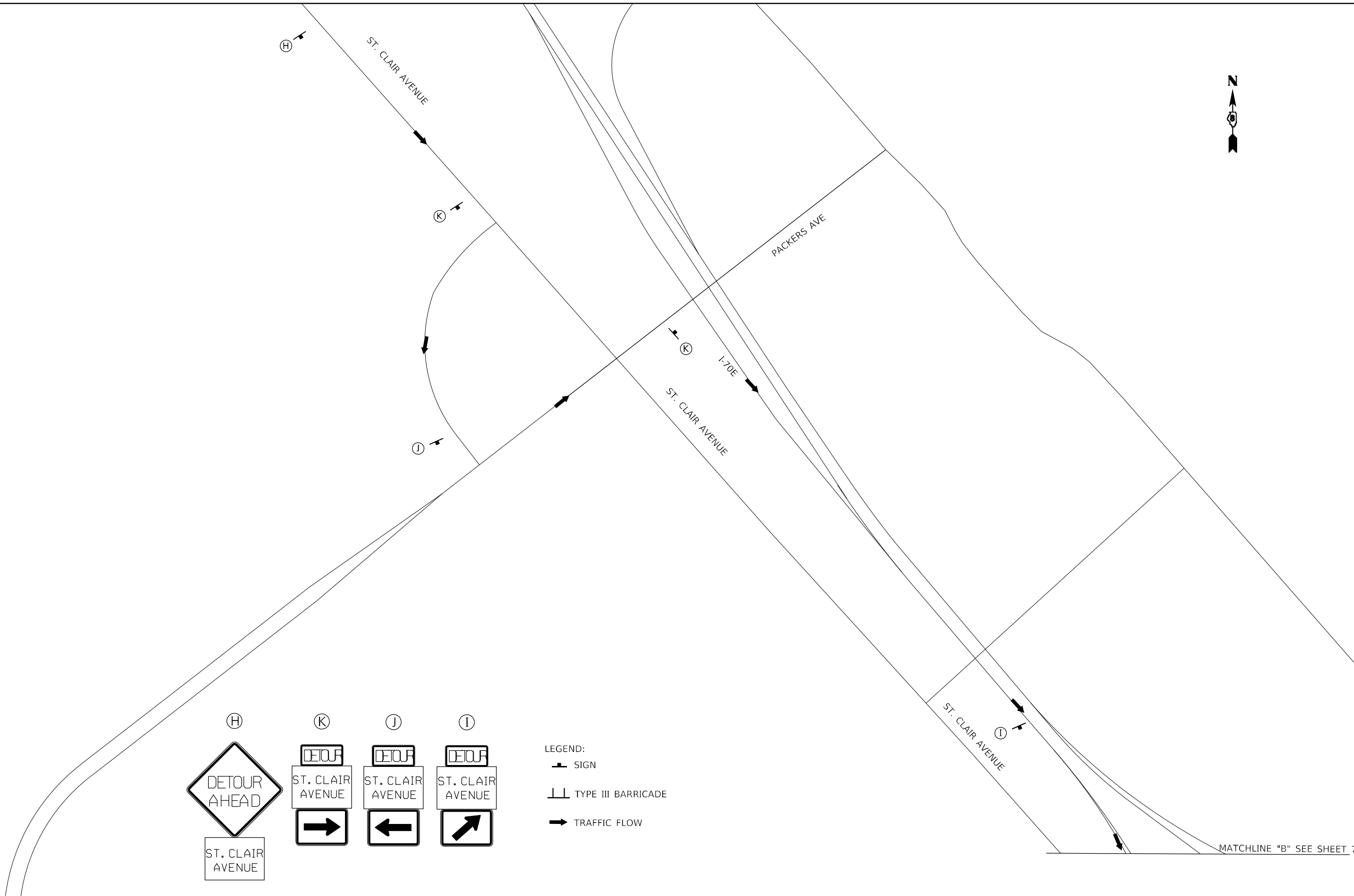
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	DATE - _____	REVISED - _____

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL AND PROTECTION PLAN
EXIT 3 DETOUR SIGNAGE DETAIL

SCALE: NTS SHEET 1 OF 2 SHEETS STA. _____ TO STA. _____

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55/64	82-2HB-BP-1, 82-3HVB-3BP-1	ST. CLAIR	62	4
CONTRACT NO. 76P10			ILLINOIS FED. AID PROJECT	



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 TYPE III BARRICADE
 TRAFFIC FLOW

MATCHLINE "B" SEE SHEET 7

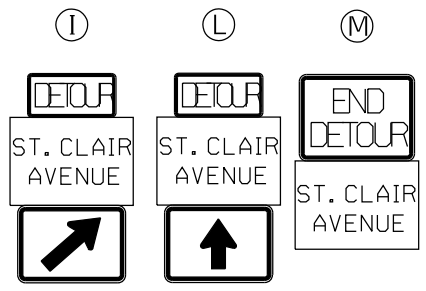
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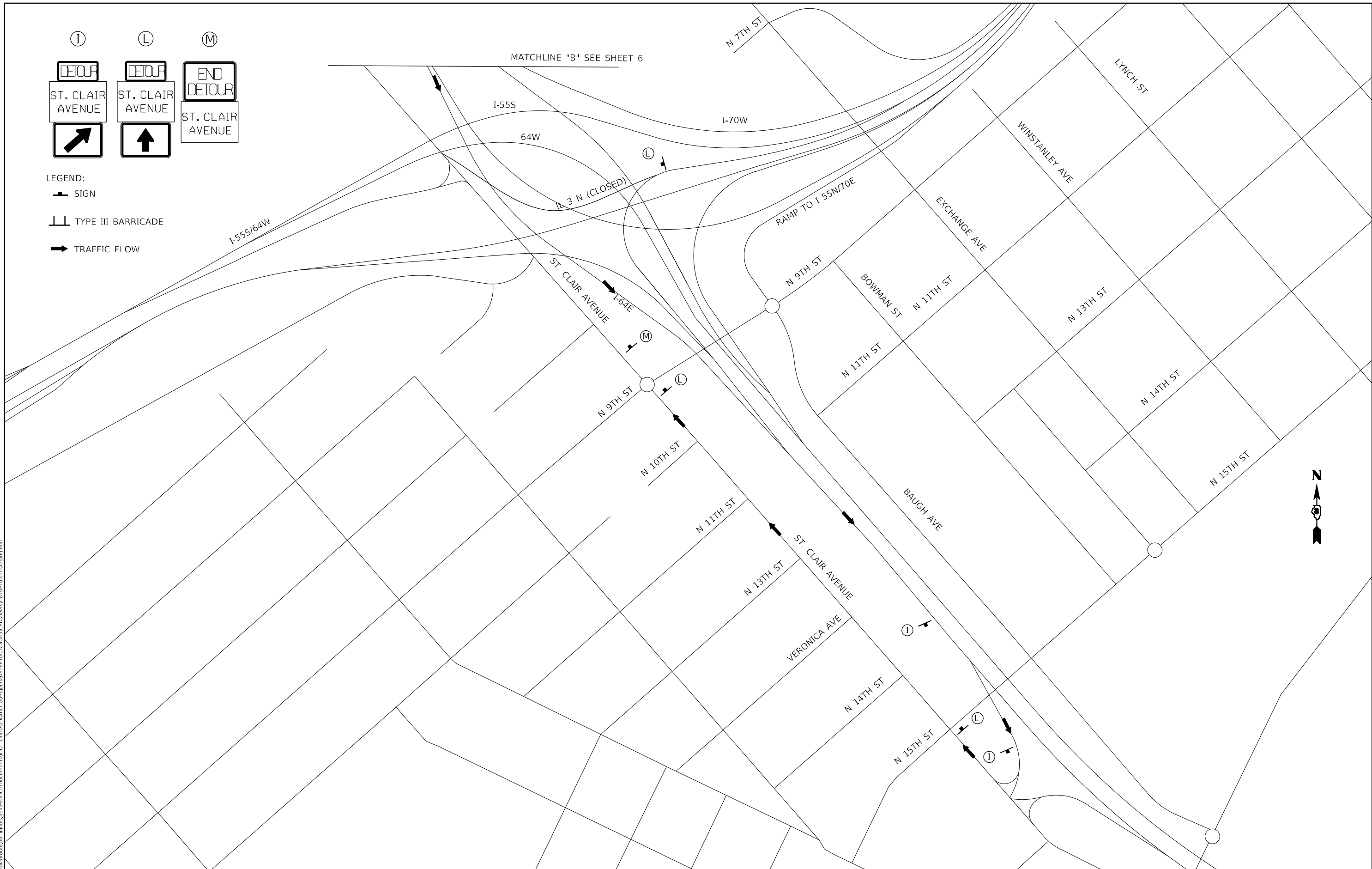
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

TRAFFIC CONTROL AND PROTECTION PLAN			
SOUTHBOUND ST CLAIR AVE DETOUR SIGNAGE DETAIL			
SCALE: NTS	SHEET 1	OF 2 SHEETS	STA. _____ TO STA. _____

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55/64	82-2HB-BP-1, 82-3HVB-3BP-1	ST. CLAIR	62	6
ILLINOIS FED. AID PROJECT			CONTRACT NO. 76P10	



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 TRAFFIC FLOW



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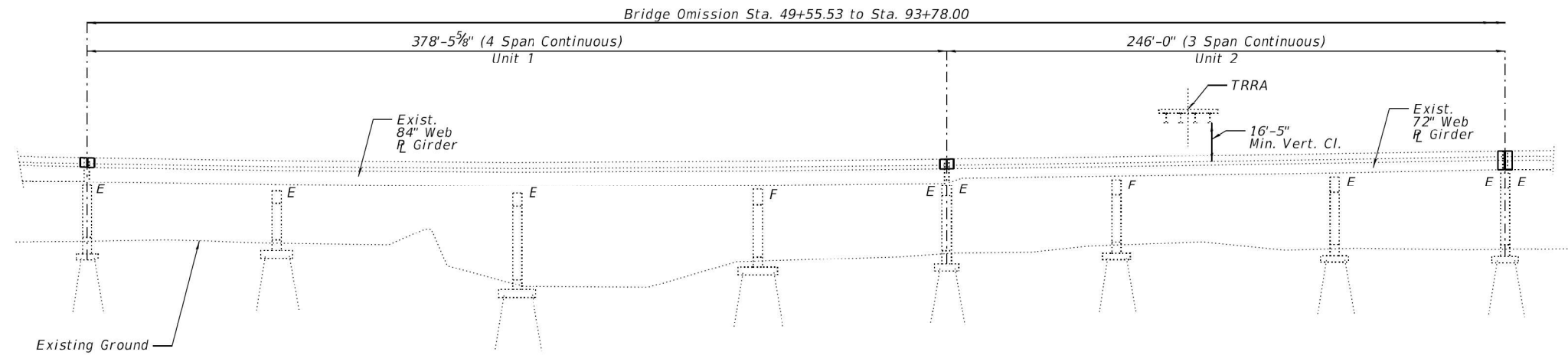
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL AND PROTECTION PLAN
SOUTHBOUND ST CLAIR AVE DETOUR SIGNAGE DETAIL

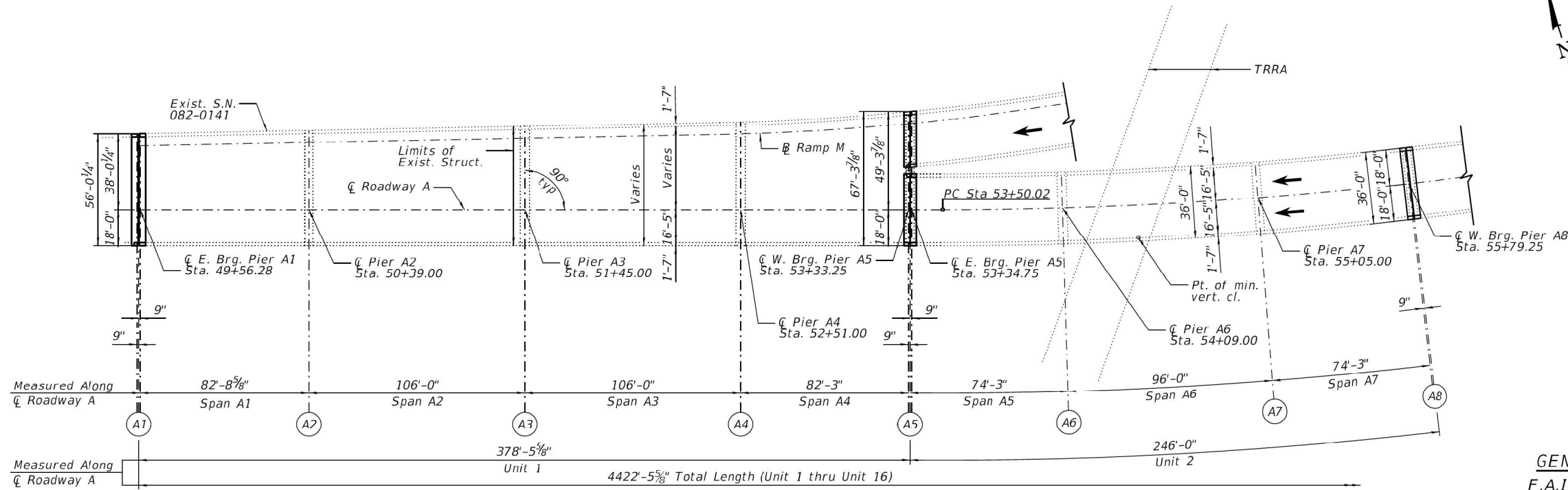
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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55/64	82-2HB-BP-1, 82-3HVB-3BP-1	ST. CLAIR	62	7
CONTRACT NO. 76P10			ILLINOIS FED. AID PROJECT	

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ELEVATION



PLAN (SPANS A1 - A7)

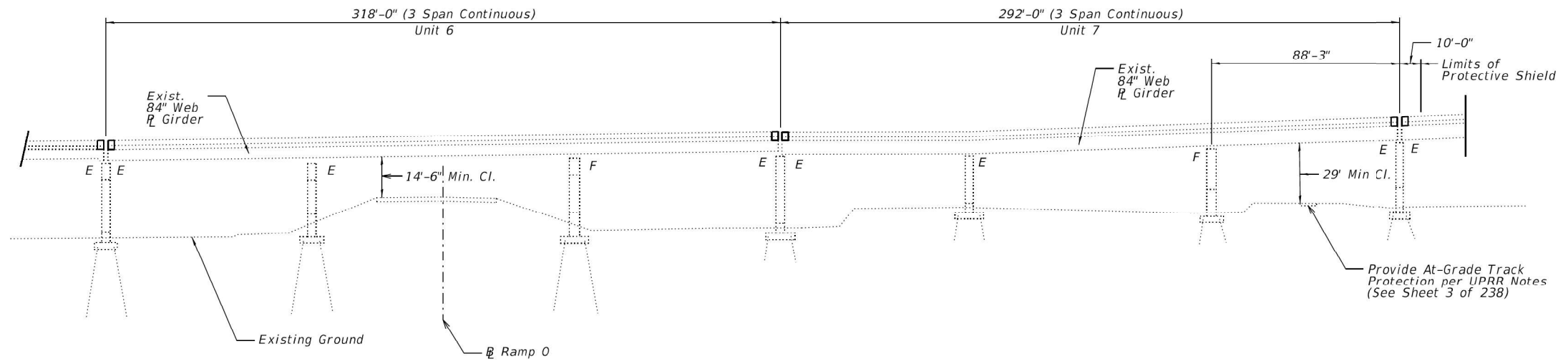
GENERAL PLAN & ELEVATION
 F.A.I. 70 (I-55/I-64) WB CD "A"
 OVER RR, I-55/64, IL 3
 SEC. 82-3HVB-2R-(2,1)-I-2
 ST. CLAIR COUNTY
 STATION 49+55.53
 STRUCTURE NO. 082-0141

FOR INFORMATION ONLY

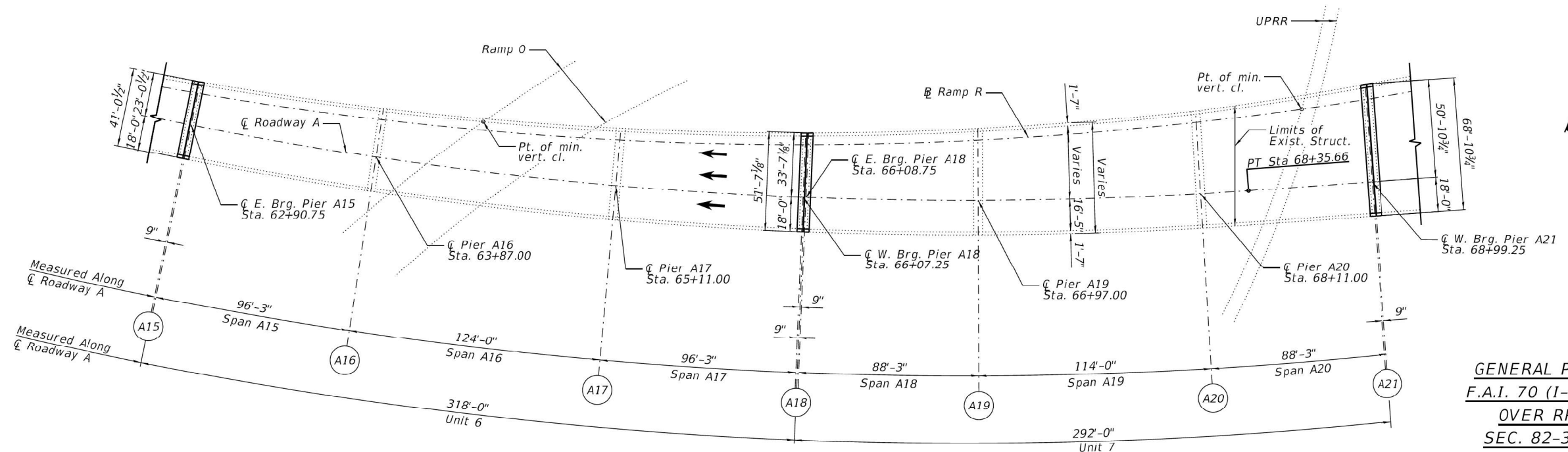
WJE <small>ARCHITECTS</small> <small>MATERIAL SCIENTISTS</small> <small>Wes, Jarney, Elstner Associates, Inc.</small> <small>330 Pingstern Road</small> <small>Northbrook, Illinois 60062</small> <small>847.272.7400 tel 847.291.9995 fax</small>	USER NAME = <i>hughesrd</i>	DESIGNED - ACB	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GENERAL PLAN & ELEVATION SPANS A1 THRU A7	F.A.I. RTE. = 70	SECTION = 82-3HVB-2R-(2,1)-I-2	COUNTY = ST. CLAIR	TOTAL SHEETS = 238	SHEET NO. = 77		
	PLOT SCALE = 0.1667' / 1"	CHECKED - RW	REVISED -			SHEET NO. 3 OF 90 SHEETS		CONTRACT NO. 76945		ILLINOIS FED. AID PROJECT		
	PLOT DATE = 9/28/2018	DRAWN - ACB	REVISED -			STRUCTURE 082-0141		F.A.I. RTE. = 55/64	SECTION = 82-2HB-BP-1, 82-3HVB-3BP-1	COUNTY = ST. CLAIR	TOTAL SHEETS = 62	SHEET NO. = 15
		DATE = 09/28/2018	REVISED -					SCALE: NTS SHEET 1 OF 25 SHEETS STA. _____ TO STA. _____		CONTRACT NO. 76P10		ILLINOIS FED. AID PROJECT

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ELEVATION



PLAN (SPANS A15 - A20)

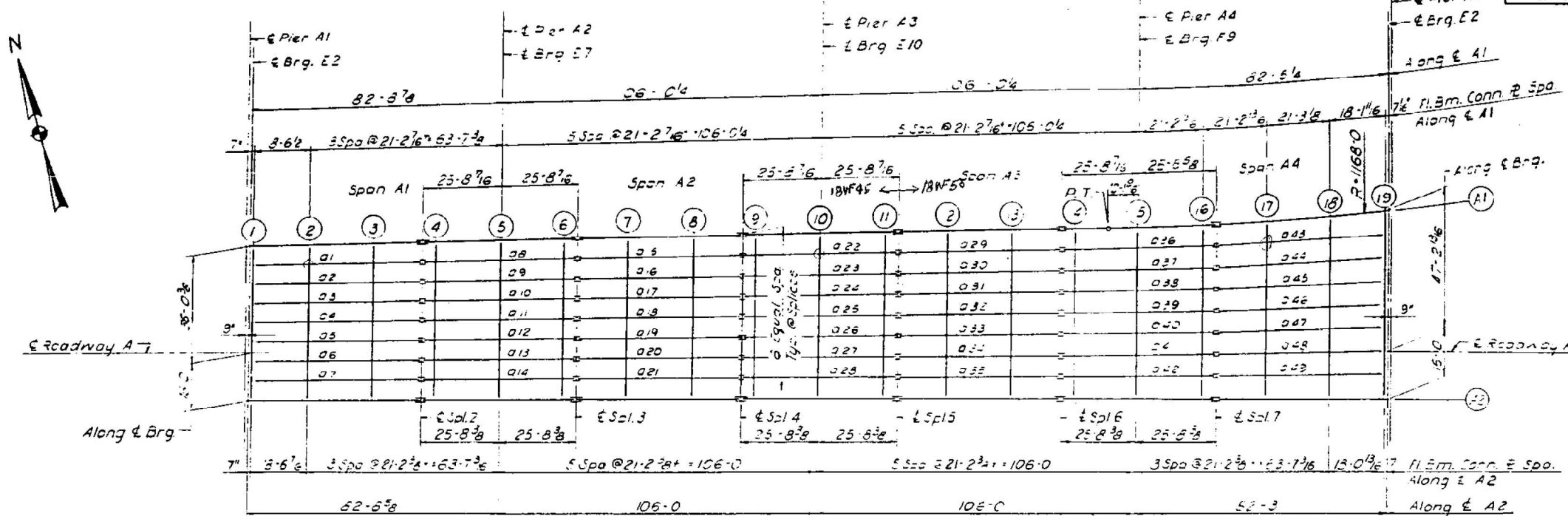
FOR INFORMATION ONLY

GENERAL PLAN & ELEVATION
F.A.I. 70 (I-55/I-64) WB CD "A"
OVER RR, I-55/64, IL 3
SEC. 82-3HVB-2R-(2,1)-I-2
ST. CLAIR COUNTY
STATION 49+55.53
STRUCTURE NO. 082-0141

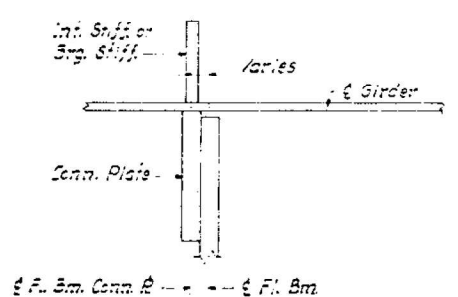
WJE <small>ARCHITECTS</small> <small>MATERIAL SCIENTISTS</small> <small>Wes, Jarney, Elmer Associates, Inc.</small> <small>330 Pingston Road</small> <small>Northbrook, Illinois 60062</small> <small>847.272.7400 tel 847.291.9995 fax</small>	USER NAME = hughesrd PLOT SCALE = 0x2,0000 * / 1in. PLOT DATE = 10/3/2018	DESIGNED - ACB CHECKED - RW DRAWN - ACB DATE - 09/28/2018	REVISED - REVISED - REVISED - REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GENERAL PLAN & ELEVATION SPANS A15 THRU A20 SHEET NO. 5 OF 90 SHEETS	F.A.I. RTE. = 70 SECTION = 82-3HVB-2R-(2,1)-I-2 COUNTY = ST. CLAIR CONTRACT NO. = 76945	TOTAL SHEETS = 238 SHEET NO. = 79	ILLINOIS FED. AID PROJECT
	USER NAME = hughesrd DRAWN - CHECKED - DATE -	REVISED - REVISED - REVISED - REVISED -	SCALE: NTS SHEET 3 OF 25 SHEETS STA. _____ TO STA. _____			F.A.I. RTE. = 55/64 SECTION = 82-2HB-BP-1, 82-3HVB-3BP-1 COUNTY = ST. CLAIR CONTRACT NO. = 76P10	TOTAL SHEETS = 62 SHEET NO. = 17	ILLINOIS FED. AID PROJECT

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 PLOT: \\PLOT\NAME

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I.-70	82-3HVBE-1	ST. CLAIR	247	53
FED. ROAD DIV. NO. 4		ILLINOIS	PROJECT	



PLAN
SPANS A1 THRU A4



FLOOR BEAM LOCATION SKETCH

ELEVATION TOP OF GIRDER TOP							
	GIR. A1	GIR. A2	DIFF.		GIR. A1	GIR. A2	DIFF.
CL. BRG.	449,976	450,768	.792	FLOOR BEAM 11	444,734	445,898	1,165
FLOOR BEAM 1	449,950	450,770	.820	SPLICE 5	444,644	445,839	1,195
FLOOR BEAM 2	449,367	450,205	.838	FLOOR BEAM 12	444,397	445,706	1,309
FLOOR BEAM 3	448,732	449,558	.826	FLOOR BEAM 13	444,084	445,527	1,453
SPLICE 2	448,218	449,046	.828	SPLICE 6	443,837	445,403	1,566
FLOOR BEAM 4	448,094	448,927	.833	FLOOR BEAM 14	443,774	445,423	1,649
FLOOR BEAM 5	447,507	448,345	.838	FLOOR BEAM 15	443,477	445,516	2,039
FLOOR BEAM 6	446,921	447,765	.844	FLOOR BEAM 16	443,181	445,610	2,429
SPLICE 3	446,796	447,642	.846	SPLICE 7	442,918	445,629	2,711
FLOOR BEAM 7	446,450	447,301	.851	FLOOR BEAM 17	442,970	445,647	2,677
FLOOR BEAM 8	446,012	446,869	.857	FLOOR BEAM 18	442,761	445,624	2,863
SPLICE 4	445,668	446,528	.860	FLOOR BEAM 19	442,521	445,580	3,061
FLOOR BEAM 9	445,276	446,148	.872	CL. BRG.	442,615	446,368	3,753
FLOOR BEAM 10	445,155	446,184	1,029				

FOR INFORMATION ONLY

Note: Dimensions locating floor beams are given to the floor beam Conn. Plate see sketch

BILL OF MATERIAL		
*Structural Steel	Lbs.	710,840

*Weight of Bearing Assemblies with Lead Plates and Anchor Balls are Included as Structural Steel Est. Wt. 17,590 Lbs.

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BLDGS.
DIVISION OF HIGHWAYS
FRAMING PLAN
SPANS A1 THRU A4
POPLAR STREET BRIDGE APPROACHES
ROADWAY "A"

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

SHEET NO. 43 of 524

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

USER NAME = hughesrd	DESIGNED - _____	REVISED - _____
PLOT SCALE = 40,0000 * / in.	DRAWN - _____	REVISED - _____
PLOT DATE = 3/22/2021	CHECKED - _____	REVISED - _____
	DATE - _____	REVISED - _____

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STRUCTURE 082-0141

SCALE: NTS SHEET 4 OF 25 SHEETS STA. _____ TO STA. _____

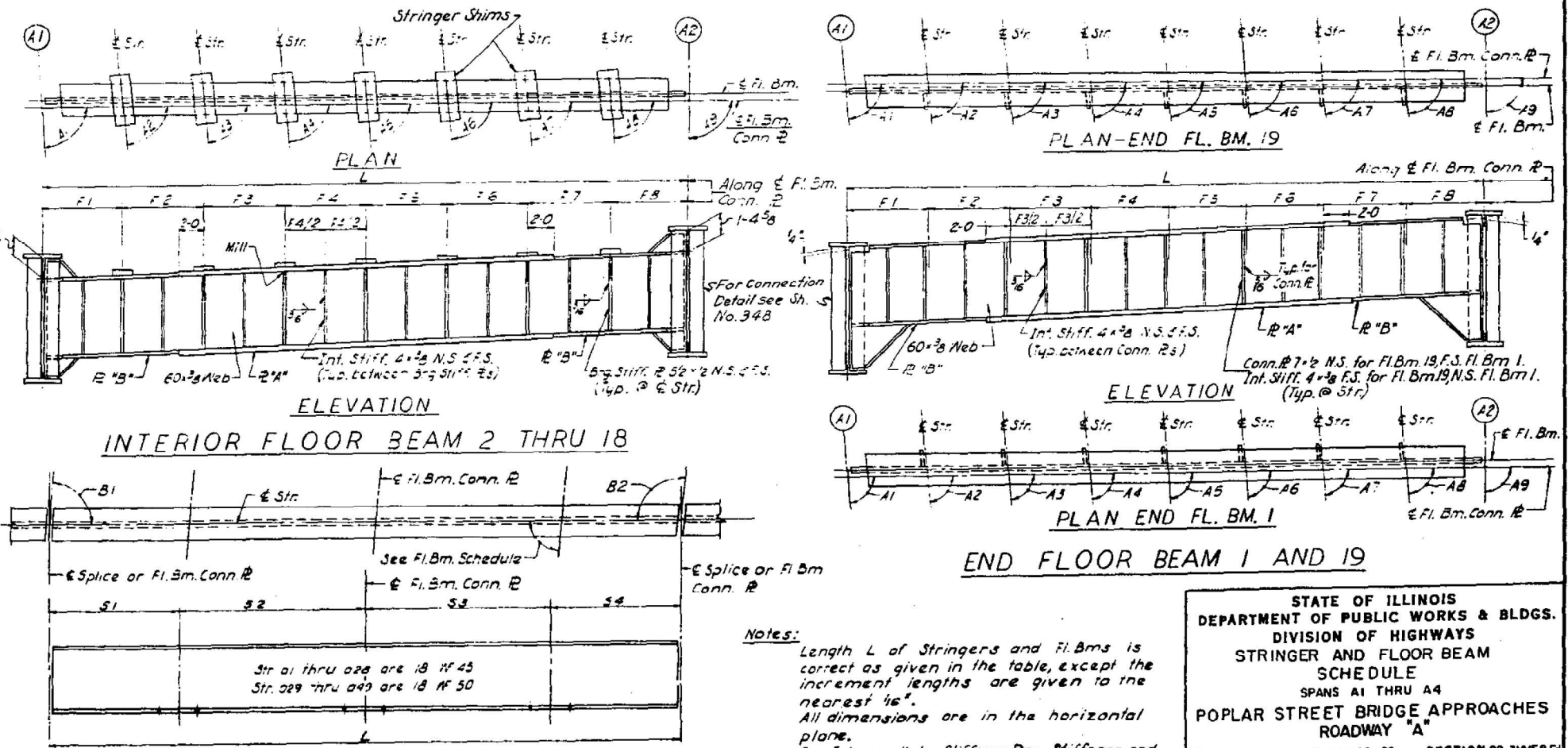
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55/64	82-2HB-BP-1, 82-3HV-3BP-1	ST. CLAIR	62	18
CONTRACT NO. 76P10				
ILLINOIS FED. AID PROJECT				

MODEL: I:\MODEL\NAMES
 FILE NAME: poplarstn.dwg
 PROJECT: I:\PROJECTS\76P10\Drawings\DOT - Office\Drawings\82-3HV-3BP-1\82-3HV-3BP-1.dwg
 DATE: 3/22/2021

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. - 70	82-3HVFB-E	ST. CLAIR	247	54
FED. ROAD DIV. NO. 4		ILLINOIS	PROJECT	

STR. NO.	L	S1	S2	S3	S4	S1	S2
1	50'-5 3/8"	10'-6 7/16"	○	21'-2 7/16"	16'-8 7/16"	89,99,51	97,00,09
2	36 5 5/16	18 6 7/16	○	21 2 7/16	16 8 7/16	89,08,26	90,51,34
3	36 5 5/16	18 6 7/16	○	21 2 7/16	16 8 7/16	89,17,02	90,42,58
4	36 5 1/4	18 6 7/16	○	21 2 7/16	16 8 7/16	89,25,37	90,34,23
5	36 5 1/4	18 6 7/16	○	21 2 7/16	16 8 3/8	89,34,13	90,25,47
6	36 5 1/4	18 6 7/16	○	21 2 3/8	16 8 3/8	89,42,49	90,17,11
7	36 5 1/4	18 6 7/16	○	21 2 3/8	16 8 3/8	89,51,24	90,08,36
8	51 4 7/8	4 6	○	21 2 7/16	4 6	88,59,51	91,00,09
9	51 4 7/8	4 6	○	21 2 7/16	4 6	89,08,26	90,51,34
10	51 4 7/8	4 6	○	21 2 7/16	4 6	89,17,02	90,42,58
11	51 4 13/16	4 6	○	21 2 7/16	4 6	89,25,37	90,34,23
12	51 4 13/16	4 6	○	21 2 7/16	4 6	89,34,13	90,25,47
13	51 4 13/16	4 6	○	21 2 3/8	4 6	89,42,49	90,17,11
14	51 4 13/16	4 6	○	21 2 3/8	4 6	89,51,24	90,08,36
15	54 7 5/16	16 8 7/16	○	21 2 7/16	16 8 7/16	88,59,51	91,00,09
16	54 7 1/4	16 8 7/16	○	21 2 7/16	16 8 7/16	89,08,26	90,51,34
17	54 7 1/4	16 8 7/16	○	21 2 7/16	16 8 7/16	89,17,02	90,42,58
18	54 7 1/4	16 8 7/16	○	21 2 7/16	16 8 7/16	89,25,37	90,34,23
19	54 7 3/16	16 8 3/8	○	21 2 7/16	16 8 3/8	89,34,13	90,25,47
20	54 7 3/16	16 8 3/8	○	21 2 3/8	16 8 3/8	89,42,49	90,17,11
21	54 7 3/16	16 8 3/8	○	21 2 3/8	16 8 3/8	89,51,24	90,08,36
22	51 4 7/8	4 6	○	21 2 7/16	4 6	88,59,51	91,00,09
23	51 4 7/8	4 6	○	21 2 7/16	4 6	89,08,26	90,51,34
24	51 4 7/8	4 6	○	21 2 7/16	4 6	89,17,02	90,42,58
25	51 4 13/16	4 6	○	21 2 7/16	4 6	89,25,37	90,34,23
26	51 4 13/16	4 6	○	21 2 7/16	4 6	89,34,13	90,25,47
27	51 4 13/16	4 6	○	21 2 3/8	4 6	89,42,49	90,17,11
28	51 4 13/16	4 6	○	21 2 3/8	4 6	89,51,24	90,08,36
29	54 7 5/16	16 8 7/16	○	21 2 7/16	16 8 7/16	88,59,51	91,00,09
30	54 7 1/4	16 8 7/16	○	21 2 7/16	16 8 7/16	89,08,26	90,51,34
31	54 7 1/4	16 8 7/16	○	21 2 7/16	16 8 7/16	89,17,02	90,42,58
32	54 7 1/4	16 8 7/16	○	21 2 7/16	16 8 7/16	89,25,37	90,34,23
33	54 7 3/16	16 8 3/8	○	21 2 7/16	16 8 3/8	89,34,13	90,25,47
34	54 7 3/16	16 8 3/8	○	21 2 3/8	16 8 3/8	89,42,49	90,17,11
35	54 7 3/16	16 8 3/8	○	21 2 3/8	16 8 3/8	89,51,24	90,08,36
36	51 5	4 6	○	21 2 1/2	4 6	88,27,39	91,02,21
37	51 4 15/16	4 6	○	21 2 7/16	4 6	88,40,50	91,19,10
38	51 4 15/16	4 6	○	21 2 7/16	4 6	88,54,02	91,05,58
39	51 4 7/8	4 6	○	21 2 7/16	4 6	89,07,13	90,52,47
40	51 4 13/16	4 6	○	21 2 7/16	4 6	89,20,25	90,39,35
41	51 4 13/16	4 6	○	21 2 7/16	4 6	89,33,37	90,26,23
42	51 4 13/16	4 6	○	21 2 3/8	4 6	89,46,48	90,13,12
43	56 1 1/16	16 8 13/16	○	21 2 13/16	18 1 1/4	86,15,08	93,44,52
44	56 11/16	16 8 11/16	○	21 2 13/16	18 1 1/8	86,47,11	93,12,49
45	56 5/16	16 8 5/8	○	21 2 11/16	18 1	87,19,16	92,40,44
46	56 1/16	16 8 9/16	○	21 2 9/16	18 13/16	87,51,23	92,08,37
47	55 11 7/8	16 8 1/2	○	21 2 1/2	18 7/8	88,23,31	91,36,29
48	55 11 11/16	16 8 7/16	○	21 2 7/16	18 13/16	88,55,40	91,04,20
49	55 11 5/8	16 8 7/16	○	21 2 7/16	18 13/16	89,27,50	90,32,10

FL. BM	L	F1	F2	F3	F4	F5	F6	F7	F8	A1	A2	A3	A4	A5	A6	A7	A8	A9	PLATE A	PLATE B
1	52'-1 1/2"	6'-6 1/16"	6'-6 1/16"	6'-6 1/16"	6'-6 1/16"	6'-6 1/16"	6'-6 1/16"	6'-6 1/16"	6'-6 1/16"	88,51,15	88,59,51	89,08,26	89,17,02	89,25,37	89,34,13	89,42,49	89,51,24	90,00,00	12x14	12x14
2	52 4 15/16	6 6 5/8	6 6 5/8	6 6 5/8	6 6 5/8	6 6 5/8	6 6 5/8	6 6 5/8	6 6 5/8	88,51,15	88,59,51	89,08,26	89,17,02	89,25,37	89,34,13	89,42,49	89,51,24	90,00,00	12x14	12x14
3	52 10 1/16	6 7 1/4	6 7 1/4	6 7 1/4	6 7 1/4	6 7 1/4	6 7 1/4	6 7 1/4	6 7 1/4	88,51,15	88,59,51	89,08,26	89,17,02	89,25,37	89,34,13	89,42,49	89,51,24	90,00,00	12x14	12x14
4	53 3 1/8	6 7 7/8	6 7 7/8	6 7 7/8	6 7 7/8	6 7 7/8	6 7 7/8	6 7 7/8	6 7 7/8	88,51,15	88,59,51	89,08,26	89,17,02	89,25,37	89,34,13	89,42,49	89,51,24	90,00,00	12x14	12x14
5	53 8 3/16	6 8 1/2	6 8 1/2	6 8 1/2	6 8 1/2	6 8 1/2	6 8 1/2	6 8 1/2	6 8 1/2	88,51,15	88,59,51	89,08,26	89,17,02	89,25,37	89,34,13	89,42,49	89,51,24	90,00,00	12x14	12x14
6	54 1 5/16	6 9 3/16	6 9 3/16	6 9 3/16	6 9 3/16	6 9 3/16	6 9 3/16	6 9 3/16	6 9 3/16	88,51,15	88,59,51	89,08,26	89,17,02	89,25,37	89,34,13	89,42,49	89,51,24	90,00,00	12x14	12x14
7	54 6 3/8	6 9 13/16	6 9 13/16	6 9 13/16	6 9 13/16	6 9 13/16	6 9 13/16	6 9 13/16	6 9 13/16	88,51,15	88,59,51	89,08,26	89,17,02	89,25,37	89,34,13	89,42,49	89,51,24	90,00,00	12x14	12x14
8	54 11 1/2	6 10 7/16	6 10 7/16	6 10 7/16	6 10 7/16	6 10 7/16	6 10 7/16	6 10 7/16	6 10 7/16	88,51,15	88,59,51	89,08,26	89,17,02	89,25,37	89,34,13	89,42,49	89,51,24	90,00,00	12x14	12x14
9	55 4 9/16	6 11 1/16	6 11 1/16	6 11 1/16	6 11 1/16	6 11 1/16	6 11 1/16	6 11 1/16	6 11 1/16	88,51,15	88,59,51	89,08,26	89,17,02	89,25,37	89,34,13	89,42,49	89,51,24	90,00,00	12x14	12x14
10	55 9 5/8	6 11 11/16	6 11 11/16	6 11 11/16	6 11 11/16	6 11 11/16	6 11 11/16	6 11 11/16	6 11 11/16	88,51,15	88,59,51	89,08,26	89,17,02	89,25,37	89,34,13	89,42,49	89,51,24	90,00,00	12x14	12x14
11	56 2 3/4	7 5/16	7 5/16	7 5/16	7 5/16	7 5/16	7 5/16	7 5/16	7 5/16	88,51,15	88,59,51	89,08,26	89,17,02	89,25,37	89,34,13	89,42,49	89,51,24	90,00,00	12x18	12x18
12	56 7 13/16	7 1	7 1	7 1	7 1	7 1	7 1	7 1	7 1	88,51,15	88,59,51	89,08,26	89,17,02	89,25,37	89,34,13	89,42,49	89,51,24	90,00,00	12x18	12x18
13	57 15/16	7 1 5/8	7 1 5/8	7 1 5/8	7 1 5/8	7 1 5/8	7 1 5/8	7 1 5/8	7 1 5/8	88,51,15	88,59,51	89,08,26	89,17,02	89,25,37	89,34,13	89,42,49	89,51,24	90,00,00	12x18	12x18
14	57 6	7 1 3/4	7 2 5/16	7 2 5/16	7 2 5/16	7 2 5/16	7 2 5/16	7 2 5/16	7 2 5/16	88,51,15	88,27,39	88,40,50	88,54,02	89,07,13	89,20,25	89,33,37	89,46,48	90,00,00	12x2	12x18
15	57 11 5/8	7 1/2	7 3 5/16	7 3 5/16	7 3 5/16	7 3 5/16	7 3 5/16	7 3 5/16	7 3 5/16	88,21,26	88,27,39	88,40,50	88,54,02	89,07,13	89,20,25	89,33,37	89,46,48	90,00,00	12x2	12x18
16	58 9 1/4	7 3 5/16	7 4 1/4	7 4 1/4	7 4 1/4	7 4 1/4	7 4 1/4	7 4 1/4	7 4 1/4	87,18,39	88,27,39	88,40,50	88,54,02	89,07,13	89,20,25	89,33,37	89,46,48	90,00,00	12x2	12x18
17	59 11 1/2	7 2 15/16	7 6 3/8	7 6 3/8	7 6 3/8	7 6 3/8	7 6 3/8	7 6 3/8	7 6 3/8	86,16,30	86,15,08	86,47,11	87,19,16	87,51,23	88,23,31	88,55,40	89,27,50	90,00,00	12x28	12x18
18	61 6 3/8	7 5 3/16	7 8 3/4	7 8 3/4	7 8 3/4	7 8 3/4	7 8 3/4	7 8 3/4	7 8 3/4	85,13,25	86,15,08	86,47,11	87,19,16	87,51,23	88,23,31	88,55,40	89,27,50	90,00,00	12x28	12x18
19	63 2 1/8	7 10 3/4	7 10 3/4	7 10 3/4	7 10 3/4	7 10 3/4	7 10 3/4	7 10 3/4	7 10 3/4	84,20,32	86,15,08	86,47,11	87,19,16	87,51,23	88,23,31	88,55,40	89,27,50	90,00,00	12x18	12x18



DESIGNED BY: AT & A.J.C.
 DRAWN BY: I.M.
 CHECKED BY: A.A.
 APPROVED BY: K.A.

FOR INFORMATION ONLY TYPICAL STRINGER

STATE OF ILLINOIS
 DEPARTMENT OF PUBLIC WORKS & BLDGS.
 DIVISION OF HIGHWAYS
 STRINGER AND FLOOR BEAM
 SCHEDULE
 SPANS A1 THRU A4
 POPLAR STREET BRIDGE APPROACHES
 ROADWAY "A"

F.A.I. RT. 70 ST. CLAIR CO. SECTION 82-3HVFB-E
 N. W. LOCHNER, INC.
 ENGINEERS
 CHICAGO, ILLINOIS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I.-70	82-3HVFBE1	ST. CLAIR	247	53
FED. ROAD DIV. NO. 4	ILLINOIS	PROJECT		

FLOOR BEAM 2 THRU 3	T1	T2	T3	T4
STR. 1 THRU 7	1 1/8	1	1/2	3/8

FLOOR BEAM 4 THRU 6	T1	T2	T3	T4
STR. 8 THRU 14	1 1/8	1	1/2	3/8

FLOOR BEAM 7 THRU 8	T1	T2	T3	T4
STR. 15 THRU 21	1 1/16	15/16	9/16	7/16

FLOOR BEAM 9	T1	T2	T3	T4
STR.				
22	1	7/8	5/8	1/2
23	1	7/8	5/8	1/2
24	1	7/8	5/8	1/2
25	1	7/8	5/8	1/2
26	1	7/8	5/8	1/2
27	1	7/8	5/8	1/2
28	15/16	7/8	5/8	9/16

FLOOR BEAM 10	T1	T2	T3	T4
STR.				
22	1	7/8	5/8	1/2
23	1	7/8	5/8	1/2
24	1	7/8	5/8	1/2
25	1	7/8	5/8	1/2
26	1	7/8	5/8	1/2
27	1	7/8	5/8	1/2
28	1	13/16	11/16	1/2

FLOOR BEAM 11	T1	T2	T3	T4
STR.				
22	1 1/16	7/8	5/8	7/16
23	1	7/8	5/8	1/2
24	1	7/8	5/8	1/2
25	1	7/8	5/8	1/2
26	1	7/8	5/8	1/2
27	1	13/16	11/16	1/2
28	1	13/16	11/16	1/2

FLOOR BEAM 12	T1	T2	T3	T4
STR.				
29	1	13/16	11/16	1/2
30	1	13/16	11/16	1/2
31	1	13/16	11/16	1/2
32	15/16	13/16	11/16	9/16
33	15/16	3/4	3/4	9/16
34	15/16	3/4	3/4	9/16
35	15/16	3/4	3/4	9/16

FLOOR BEAM 13	T1	T2	T3	T4
STR.				
29	1	13/16	11/16	1/2
30	1	13/16	11/16	1/2
31	1	13/16	11/16	1/2
32	1	3/4	3/4	1/2
33	15/16	3/4	3/4	9/16
34	15/16	3/4	3/4	9/16
35	15/16	3/4	3/4	9/16

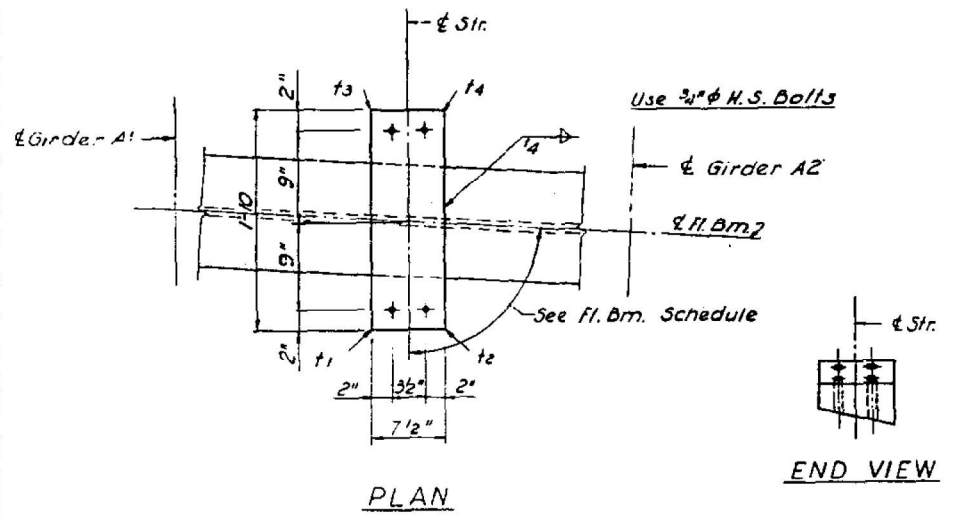
FLOOR BEAM 14	T1	T2	T3	T4
STR.				
36	1	3/4	3/4	1/2
37	15/16	3/4	3/4	9/16
38	15/16	3/4	3/4	9/16
39	15/16	11/16	13/16	9/16
40	7/8	11/16	13/16	5/8
41	7/8	5/8	7/8	5/8
42	13/16	5/8	7/8	11/16

FLOOR BEAM 15	T1	T2	T3	T4
STR.				
36	1	3/4	3/4	1/2
37	1	3/4	3/4	1/2
38	15/16	11/16	13/16	9/16
39	15/16	11/16	13/16	9/16
40	15/16	5/8	7/8	9/16
41	7/8	5/8	7/8	5/8
42	7/8	5/8	7/8	5/8

FLOOR BEAM 16	T1	T2	T3	T4
STR.				
36	1 1/16	3/4	3/4	7/16
37	1	11/16	13/16	1/2
38	1	11/16	13/16	1/2
39	15/16	5/8	7/8	9/16
40	15/16	5/8	7/8	9/16
41	15/16	5/8	7/8	9/16
42	7/8	9/16	15/16	5/8

FLOOR BEAM 17	T1	T2	T3	T4
STR.				
43	1	5/8	7/8	1/2
44	15/16	5/8	7/8	9/16
45	15/16	9/16	15/16	9/16
46	15/16	9/16	15/16	9/16
47	7/8	1/2	1	5/8
48	7/8	1/2	1	5/8
49	13/16	7/16	1 1/16	11/16

FLOOR BEAM 18	T1	T2	T3	T4
STR.				
43	1	5/8	7/8	1/2
44	1	9/16	15/16	1/2
45	15/16	9/16	15/16	9/16
46	15/16	1/2	1	9/16
47	7/8	1/2	1	5/8
48	7/8	7/16	1 1/16	5/8
49	13/16	7/16	1 1/16	11/16



SHIM DETAIL

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

FOR INFORMATION ONLY

DESIGNED BY A.J.C.
 DRAWN BY I.M.
 CHECKED BY A.S.
 APPROVED BY K.A.

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

STRINGER SHIMS
 SPANS A1 THRU A4
 POPLAR STREET BRIDGE APPROACHES
 ROADWAY "A"

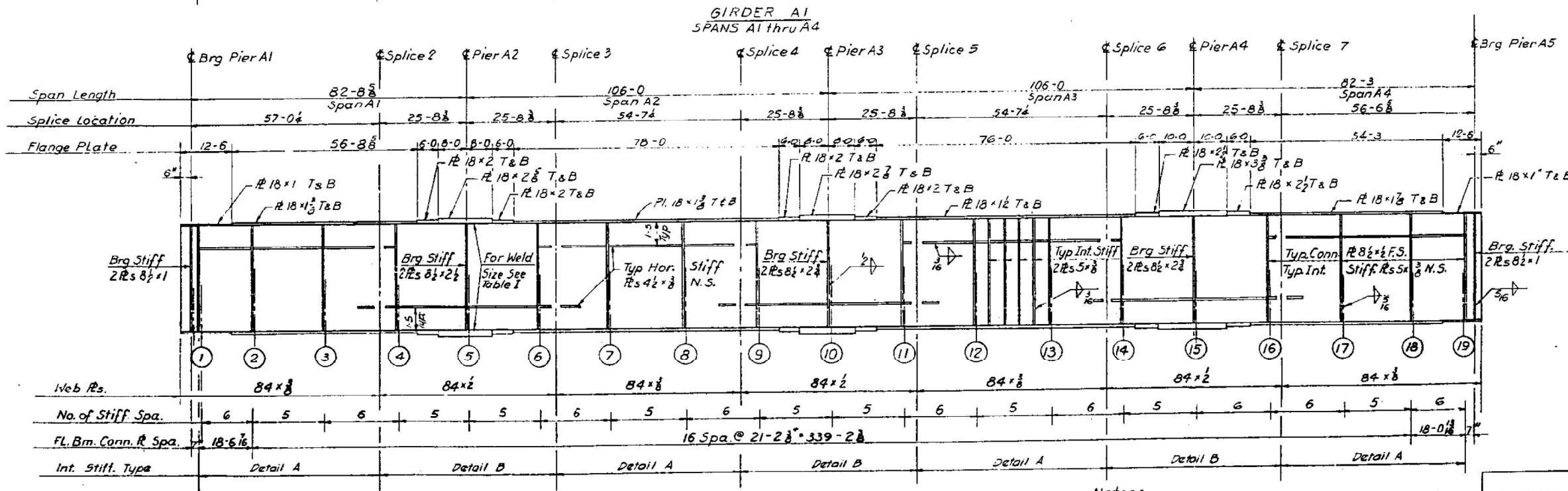
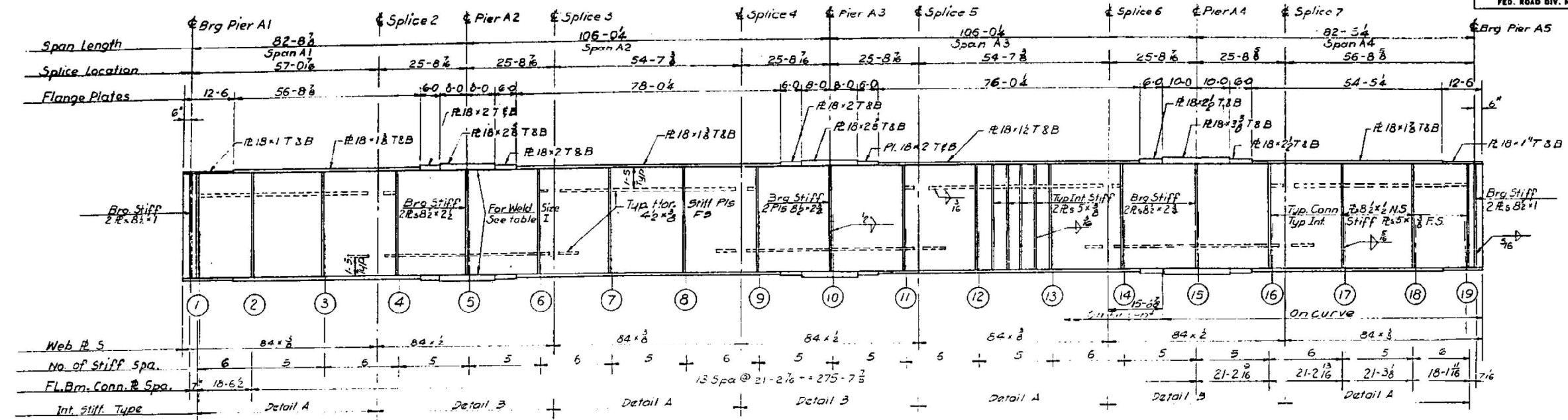
F.A.I.R.T.70 ST. CLAIR CO. SECTION 82-3HVFBE1

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

SHEET 62 OF 526

0141

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 70	82-3HVB B E-1	ST. CLAIR	247	56
FED. ROAD DIV. NO. 4	ILLINOIS	PROJECT		



FOR INFORMATION ONLY

Notes:
 All Longitudinal Dimensions shown are given along 1/2 of Web. See Sheet No. 103
 All Bearing Stiffeners and Connection Plates to be Vertical.
 For Splice, Stiffeners, Connection Plate Details and Table I see Sheet No. 348, 349, 350

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

**GIRDERS A1 AND A2
 SPANS A1 THRU A4
 POPLAR STREET BRIDGE APPROACHES
 ROADWAY "A"**

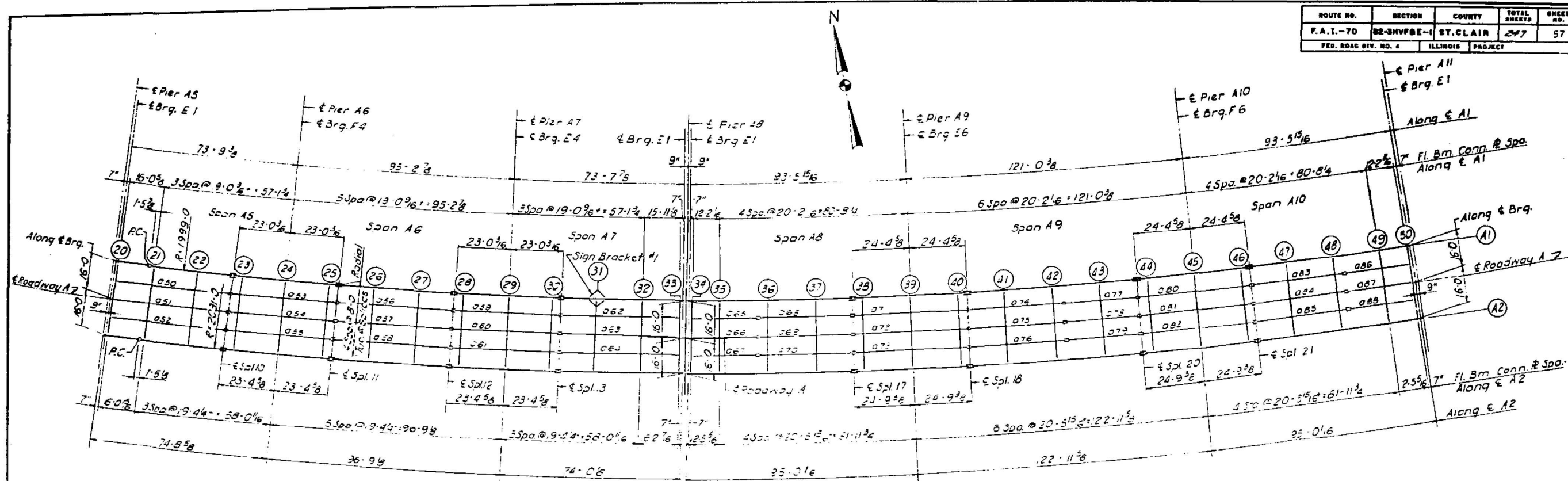
F.A.I. RT. 70 ST. CLAIR CO. SECTION 82-3HVB B E-1
 H. W. LOEHRER, INC.
 ENGINEERS
 CHICAGO, ILLINOIS

SHEET 106 OF 228

DESIGNED BY: A.T.
 DRAWN BY: D.T.
 CHECKED BY: E.L.
 APPROVED BY: K.A.

USER NAME = hughesrd	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	STRUCTURE 082-0141	F.A.I. RTE. 55/64	SECTION 82-2HB-BP-1, 82-3HVB-3BP-1	COUNTY ST. CLAIR	TOTAL SHEETS 62	SHEET NO. 21
PLOT SCALE = 40,0000 "/>									

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I.-70	82-3HVP8E-1	ST. CLAIR	297	57
FED. ROAD DIV. NO. 4	ILLINOIS	PROJECT		



PLAN
SPANS A5 THRU A10

ELEVATION TOP OF GIRDER WEB

	GIR. A1	GIR. A2	DIFF.		GIR. A1	GIR. A2	DIFF.
CL. BRG.	444,714	446,385	1,671	CL. BRG.	445,500	448,060	2,560
FLOOR BEAM 20	444,714	446,392	1,678	FLOOR BEAM 34	445,503	448,063	2,560
FLOOR BEAM 21	444,687	446,579	1,892	FLOOR BEAM 35	445,565	448,125	2,560
FLOOR BEAM 22	444,655	446,803	2,148	FLOOR BEAM 36	445,666	448,226	2,560
SPLICE 10	444,629	446,981	2,352	FLOOR BEAM 37	445,768	448,328	2,560
FLOOR BEAM 23	444,640	447,010	2,370	SPLICE 17	445,848	448,408	2,560
FLOOR BEAM 24	444,693	447,149	2,456	FLOOR BEAM 38	445,870	448,430	2,560
FLOOR BEAM 25	444,746	447,288	2,542	FLOOR BEAM 39	445,971	448,531	2,560
SPLICE 11	444,757	447,317	2,560	FLOOR BEAM 40	446,073	448,633	2,560
FLOOR BEAM 26	444,833	447,393	2,560	SPLICE 18	446,094	448,654	2,560
FLOOR BEAM 27	444,929	447,489	2,560	FLOOR BEAM 41	446,175	448,735	2,560
SPLICE 12	445,005	447,565	2,560	FLOOR BEAM 42	446,276	448,836	2,560
FLOOR BEAM 28	445,025	447,585	2,560	FLOOR BEAM 43	446,378	448,938	2,560
FLOOR BEAM 29	445,121	447,681	2,560	SPLICE 20	446,458	449,018	2,560
FLOOR BEAM 30	445,217	447,777	2,560	FLOOR BEAM 44	446,480	449,040	2,560
SPLICE 13	445,237	447,797	2,560	FLOOR BEAM 45	446,581	449,141	2,560
FLOOR BEAM 31	445,313	447,872	2,560	FLOOR BEAM 46	446,683	449,243	2,560
FLOOR BEAM 32	445,409	447,969	2,560	SPLICE 21	446,704	449,264	2,560
FLOOR BEAM 33	445,490	448,050	2,560	FLOOR BEAM 47	446,785	449,345	2,560
CL. BRG.	445,492	448,052	2,560	FLOOR BEAM 48	446,886	449,446	2,560
				FLOOR BEAM 49	446,988	449,548	2,560
				FLOOR BEAM 50	447,090	449,610	2,560
				CL. BRG.	447,092	449,612	2,560

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

BILL OF MATERIAL	
*Structural Steel	Lbs. 659,790

*Weight of Bearing Assemblies with Lead Plates and Anchor Bolts are Included as Structural Steel Est. Wt. 14,720 Lbs.

FOR INFORMATION ONLY

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BLDGS.
DIVISION OF HIGHWAYS
FRAMING PLAN
SPANS A5 THRU A10
POPLAR STREET BRIDGE APPROACHES
ROADWAY "A"

F.A.I. RT.70 ST. CLAIR CO. SECTION 82-3HVP8E-1
H. W. LOCHNER, INC.
ENGINEERS
CHICAGO, ILLINOIS

SHEET 187 of 526

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

USER NAME = hughesrd	DESIGNED - _____	REVISED - _____
	DRAWN - _____	REVISED - _____
PLOT SCALE = 40,0000' / in.	CHECKED - _____	REVISED - _____
PLOT DATE = 3/22/2021	DATE - _____	REVISED - _____

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STRUCTURE 082-0141

SCALE: NTS SHEET 8 OF 25 SHEETS STA. _____ TO STA. _____

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55/64	82-2HB-BP-1, 82-3HVP-3BP-1	ST. CLAIR	62	22
CONTRACT NO. 76P10				
ILLINOIS FED. AID PROJECT				

MODEL: I:\MODEL\NAME: FILE: NAME: ...

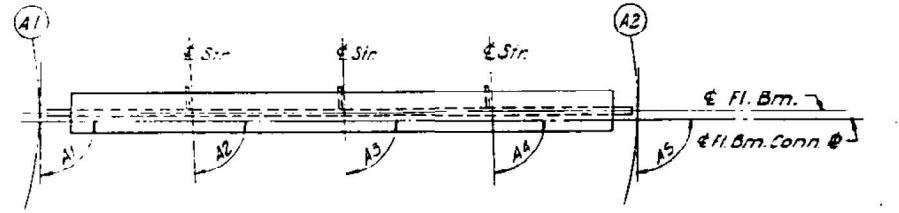
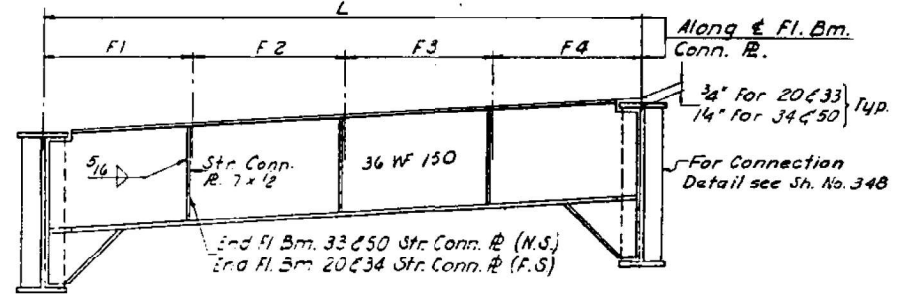
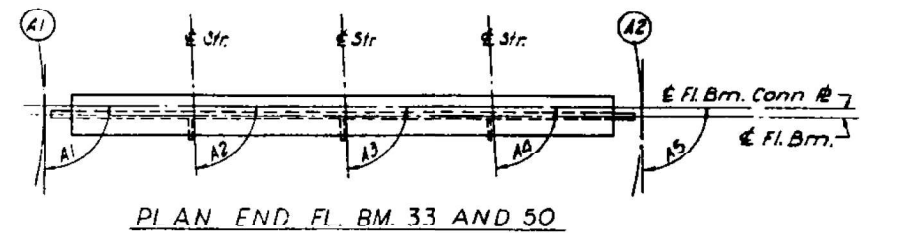
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. I - 70	82-3HVB-E	ST. CLAIR	247	58
FED. ROAD DIV. NO. 4		ILLINOIS PROJECT		

STRINGER DIMENSIONS

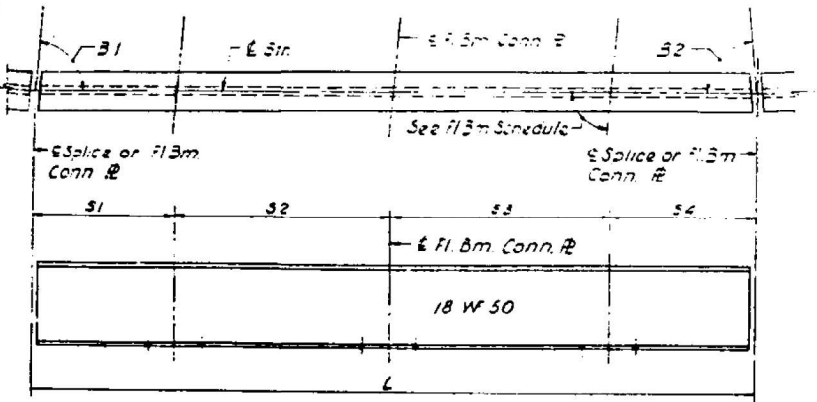
STRG	L	S1	S2	S3	S4	B1	B2
30	30' 3 7/8"	16' 3/4"	○	19' 1 1/2"	15' 1 11/16"	89,38.14	89,20.37
31	30' 5 9/16"	16' 13/16"	○	19' 2 3/8"	15' 2 3/8"	89,38.13	89,20.32
32	30' 7 5/16"	16' 7/8"	○	19' 3 5/16"	15' 3 1/8"	89,38.11	89,20.34
33	46' 2 9/16"	3' 11 13/16"	19' 1 1/2"	19' 1 1/2"	3' 11 13/16"	89,20.25	89,20.25
34	46' 4 13/16"	4'	19' 2 3/8"	19' 2 3/8"	4'	89,20.25	89,20.25
35	46' 7"	4' 3/16"	19' 3 5/16"	19' 3 5/16"	4' 3/16"	89,20.25	89,20.25
36	49' 4 13/16"	15' 1 11/16"	19' 1 1/2"	○	15' 1 11/16"	89,17.41	89,17.41
37	49' 7 3/16"	15' 2 3/8"	19' 2 3/8"	○	15' 2 3/8"	89,17.41	89,17.41
38	49' 9 9/16"	15' 3 1/8"	19' 3 5/16"	○	15' 3 1/8"	89,17.41	89,17.41
39	46' 2 9/16"	3' 11 13/16"	19' 1 1/2"	19' 1 1/2"	3' 11 13/16"	89,20.25	89,20.25
40	46' 4 13/16"	4'	19' 2 3/8"	19' 2 3/8"	4'	89,20.25	89,20.25
41	46' 7"	4' 3/16"	19' 3 5/16"	19' 3 5/16"	4' 3/16"	89,20.25	89,20.25
42	30' 3 1/8"	15' 1 11/16"	19' 1 1/2"	15' 11 15/16"	○	89,16.57	89,14.40
43	30' 5 9/16"	15' 2 3/8"	19' 2 3/8"	16' 13/16"	○	89,16.57	89,14.41
44	30' 8 1/16"	15' 3 1/8"	19' 3 5/16"	16' 1 5/8"	○	89,16.57	89,14.41
45	28' 3 9/16"	○	12' 3 5/16"	○	16' 1/4"	89,33.29	89,35.46
46	28' 5"	○	12' 4"	○	16' 1"	89,33.29	89,35.45
47	28' 6 7/16"	○	12' 4 5/8"	○	16' 1 3/4"	89,33.29	89,35.45
48	40' 6 1/16"	4' 3"	20' 4"	○	16' 1/4"	89,25.19	89,25.18
49	40' 8"	4' 3"	20' 4"	○	16' 1"	89,25.19	89,25.18
50	40' 9 15/16"	4' 3 3/16"	20' 4 15/16"	○	16' 1 3/4"	89,25.19	89,25.19
51	48' 11 5/8"	4' 2 13/16"	20' 3"	20' 3"	4' 2 13/16"	89,18.04	89,18.03
52	49' 2"	4' 3"	20' 4"	20' 4"	4' 3"	89,18.04	89,18.03
53	49' 4 5/16"	4' 3 3/16"	20' 4 15/16"	20' 4 15/16"	4' 3 3/16"	89,18.04	89,18.03
54	40' 6 1/16"	16' 1/4"	20' 3"	○	4' 2 13/16"	89,25.19	89,25.18
55	40' 8"	16' 1"	20' 4"	○	4' 3"	89,25.19	89,25.18
56	40' 9 15/16"	16' 1 3/4"	20' 4 15/16"	○	4' 3 3/16"	89,25.19	89,25.19
57	32' 7/16"	16' 1/4"	○	○	16' 1/4"	89,32.34	89,32.33
58	32' 2"	16' 1"	○	○	16' 1"	89,32.34	89,32.34
59	32' 3 1/2"	16' 1 3/4"	○	○	16' 1 3/4"	89,32.34	89,32.34
60	48' 11 5/8"	4' 2 13/16"	20' 3"	20' 3"	4' 2 13/16"	89,18.04	89,18.03
61	49' 2"	4' 3"	20' 4"	20' 4"	4' 3"	89,18.04	89,18.03
62	49' 4 5/16"	4' 3 3/16"	20' 4 15/16"	20' 4 15/16"	4' 3 3/16"	89,18.04	89,18.03
63	40' 6 1/16"	16' 1/4"	20' 3"	○	4' 2 13/16"	89,25.19	89,25.18
64	40' 8"	16' 1"	20' 4"	○	4' 3"	89,25.19	89,25.18
65	40' 9 15/16"	16' 1 3/4"	20' 4 15/16"	○	4' 3 3/16"	89,25.19	89,25.19
66	28' 3 9/16"	16' 1/4"	○	○	12' 3 5/16"	89,35.46	89,33.29
67	28' 5"	16' 1"	○	○	12' 4"	89,35.46	89,33.29
68	28' 6 7/16"	16' 1 3/4"	○	○	12' 4 5/8"	89,35.45	89,33.29

FLOOR BEAM DIMENSIONS

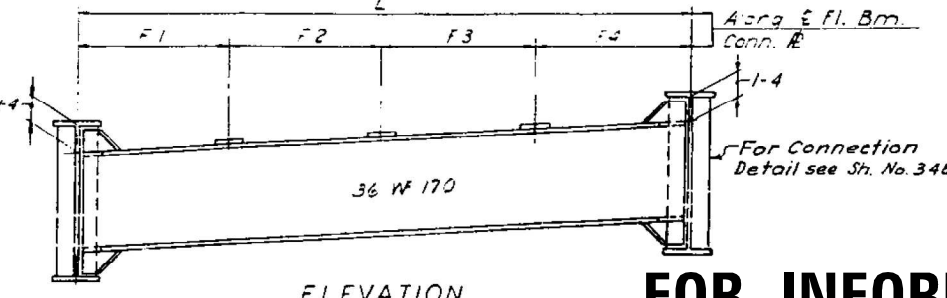
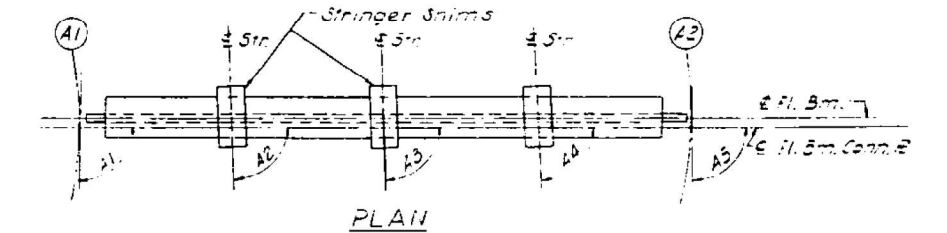
FL. BM.	L	F1	F2	F3	F4	A1	A2	A3	A4	A5
20	32' - 0"	8' - 0"	8' - 0"	8' - 0"	8' - 0"	90,00,00	89,36,14"	89,36,13"	89,36,11"	90,00,00"
21	32'	7' 10 13/16"	8'	8'	8' 1 3/16"	90,00,00	89,40,48	89,40,47	89,40,45	90,00,00
22	32'	7' 10 5/8"	8'	8'	8' 1 7/16"	90,00,00	90,13,30	90,13,30	90,13,30	90,00,00
23	32'	7' 11 1/2"	8'	8'	8' 1/2"	90,00,00	89,27,15	89,27,15	89,27,15	90,00,00
24	32'	7' 10 3/8"	8'	8'	8' 1 5/8"	90,00,00	90,00,00	90,00,00	90,00,00	90,00,00
25	32'	7' 11 1/2"	8'	8'	8' 1/2"	90,00,00	90,32,45	90,32,45	90,32,45	90,00,00
26	32'	7' 10 7/16"	8'	8'	8' 1 9/16"	90,00,00	89,43,37	89,43,37	89,43,37	90,00,00
27	32'	7' 10 7/16"	8'	8'	8' 1 9/16"	90,00,00	90,16,23	90,16,23	90,16,23	90,00,00
28	32'	7' 11 1/2"	8'	8'	8' 1/2"	90,00,00	89,27,15	89,27,15	89,27,15	90,00,00
29	32'	7' 10 3/8"	8'	8'	8' 1 5/8"	90,00,00	90,00,00	90,00,00	90,00,00	90,00,00
30	32'	7' 11 1/2"	8'	8'	8' 1/2"	90,00,00	90,32,45	90,32,45	90,32,45	90,00,00
31	32'	7' 10 7/16"	8'	8'	8' 1 5/8"	90,00,00	89,42,53	89,42,53	89,42,53	90,00,00
32	32'	7' 10 3/8"	8'	8'	8' 1 5/8"	90,00,00	90,15,39	90,15,38	90,15,38	90,00,00
33	32'	8'	8'	8'	8'	90,02,18	90,45,20	90,45,19	90,45,19	90,02,16
34	34'	8'	8'	8'	8'	89,57,43	89,33,29	89,33,29	89,33,29	89,57,44
35	32'	7' 11 7/16"	8'	8'	8' 5/8"	90,00,00	89,56,48	89,56,48	89,56,48	90,00,00
36	32'	7' 11 9/16"	8'	8'	8' 7/16"	90,00,00	89,32,34	89,32,34	89,32,34	90,00,00
37	32'	7' 10 13/16"	8'	8'	8' 1 3/16"	90,00,00	90,07,15	90,07,15	90,07,15	90,00,00
38	32'	7' 11 7/16"	8'	8'	8' 9/16"	90,00,00	89,25,19	89,25,19	89,25,19	90,00,00
39	32'	7' 10 3/16"	8'	8'	8' 1 13/16"	90,00,00	90,00,00	90,00,00	90,00,00	90,00,00
40	32'	7' 11 7/16"	8'	8'	8' 9/16"	90,00,00	90,34,42	90,34,42	90,34,41	90,00,00
41	32'	7' 10 13/16"	8'	8'	8' 1 3/16"	90,00,00	89,52,45	89,52,45	89,52,45	90,00,00
42	32'	7' 11 9/16"	8'	8'	8' 7/16"	90,00,00	90,27,27	90,27,26	90,27,26	90,00,00
43	32'	7' 11 1/4"	8'	8'	8' 3/4"	90,00,00	90,00,00	90,00,00	90,00,00	90,00,00
44	32'	7' 11 7/16"	8'	8'	8' 9/16"	90,00,00	89,25,19	89,25,19	89,25,19	90,00,00
45	32'	7' 10 3/16"	8'	8'	8' 1 13/16"	90,00,00	90,00,00	90,00,00	90,00,00	90,00,00
46	32'	7' 11 7/16"	8'	8'	8' 9/16"	90,00,00	90,34,42	90,34,42	90,34,41	90,00,00
47	32'	7' 10 13/16"	8'	8'	8' 1 3/16"	90,00,00	89,52,45	89,52,45	89,52,45	90,00,00
48	32'	7' 11 9/16"	8'	8'	8' 7/16"	90,00,00	90,27,26	90,27,26	90,27,26	90,00,00
49	32'	7' 11 7/16"	8'	8'	8' 9/16"	90,00,00	90,03,12	90,03,12	90,03,12	90,00,00
50	32'	8'	8'	8'	8'	90,02,18	90,45,20	90,45,19	90,45,19	90,02,16



END FLOOR BEAM 20,33,34 AND 50



DESIGNED BY: A.T. S.A.L.C.
 DRAWN BY: I.M.
 CHECKED BY: A.A.
 APPROVED BY: E.A.



INTERIOR FLOOR BEAM 21 THRU 32 AND 35 THRU 49

Notes:
 Length L of Stringers and Fl. Bms is correct as given in the table except the increment lengths are given to the nearest 1/16. All dimensions are in the horizontal plane. For Connection Plate Details see Sheet No. 348.

FOR INFORMATION ONLY

STATE OF ILLINOIS
 DEPARTMENT OF PUBLIC WORKS & BLDGS.
 DIVISION OF HIGHWAYS
 STRINGER AND FLOOR BEAM
 SCHEDULE
 SPANS A5 THRU A10
 POPLAR STREET BRIDGE APPROACHES
 ROADWAY "A"
 F.A.I. RT. 70 ST. CLAIR CO. SECTION 82-3HVB-E
 N. W. LOCHNER, INC.
 ENGINEERS
 CHICAGO, ILLINOIS
 SHEET NO. 108 OF 526

0141

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. I. - 70	02-3HFBE	ST. CLAIR	217	59
FED. ROAD DIV. NO. 4		ILLINOIS PROJECT		

FLOOR BEAM	T1	T2	T3	T4
STR. 50	15/16	1/2	1	9/16
51	15/16	1/2	1	9/16
52	7/8	7/16	1 1/16	5/8

FLOOR BEAM	T1	T2	T3	T4
STR. 50	1	1/2	1	1/2
51	15/16	7/16	1 1/16	9/16
52	15/16	7/16	1 1/16	9/16

FLOOR BEAM	T1	T2	T3	T4
STR. 53	1	7/16	1 1/16	1/2
54	1	7/16	1 1/16	1/2
55	15/16	3/8	1 1/8	9/16

FLOOR BEAM	T1	T2	T3	T4
STR. 53	1	7/16	1 1/16	1/2
54	1	7/16	1 1/16	1/2
55	1	3/8	1 1/8	1/2

FLOOR BEAM	T1	T2	T3	T4
STR. 53	1	7/16	1 1/16	1/2
54	1	3/8	1 1/8	1/2
55	1	3/8	1 1/8	1/2

FLOOR BEAM	T1	T2	T3	T4
STR. 56 THRU 58	1	3/8	1 1/8	1/2

FLOOR BEAM	T1	T2	T3	T4
STR. 59 THRU 61	1	3/8	1 1/8	1/2

FLOOR BEAM	T1	T2	T3	T4
STR. 62 THRU 64	1	3/8	1 1/8	1/2

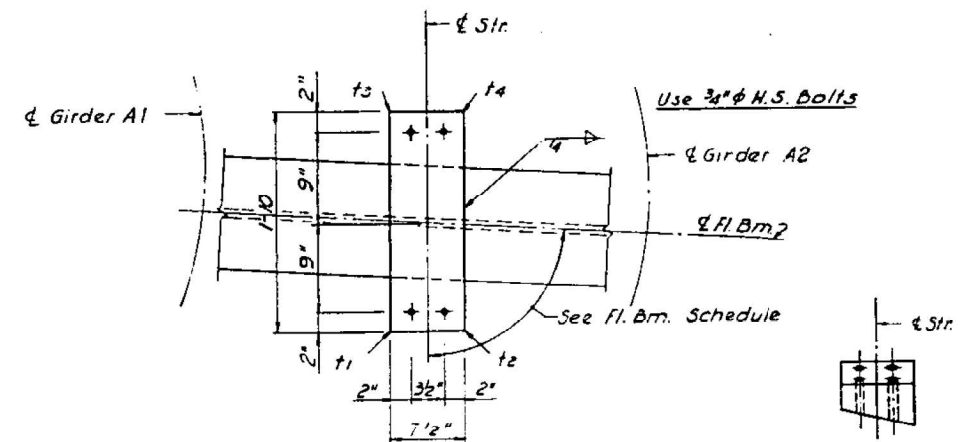
FLOOR BEAM	T1	T2	T3	T4
STR. 65 THRU 70	1	3/8	1 1/8	1/2

FLOOR BEAM	T1	T2	T3	T4
STR. 71 THRU 73	1	3/8	1 1/8	1/2

FLOOR BEAM	T1	T2	T3	T4
STR. 74 THRU 79	1	3/8	1 1/8	1/2

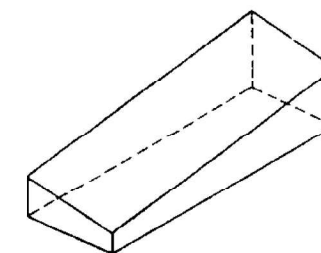
FLOOR BEAM	T1	T2	T3	T4
STR. 80 THRU 82	1	3/8	1 1/8	1/2

FLOOR BEAM	T1	T2	T3	T4
STR. 83 THRU 88	1	3/8	1 1/8	1/2

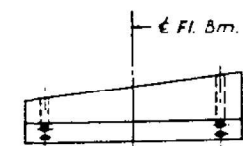


PLAN

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.

FOR INFORMATION ONLY

STATE OF ILLINOIS
 DEPARTMENT OF PUBLIC WORKS & BLDGS.
 DIVISION OF HIGHWAYS
 STRINGER SHIMS
 SPANS A5 THRU A10
 POPLAR STREET BRIDGE APPROACHES
 ROADWAY "A"
 F.A.I. RT. 70 ST. CLAIR CO. SECTION 02-3HFBE-1
 H. W. LOCHNER, INC.
 ENGINEERS
 CHICAGO, ILLINOIS

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

0141

USER NAME = hugesrd	DESIGNED - _____	REVISED - _____
PLOT SCALE = 40,0000 * / in.	DRAWN - _____	REVISED - _____
PLOT DATE = 3/22/2021	CHECKED - _____	REVISED - _____
	DATE - _____	REVISED - _____

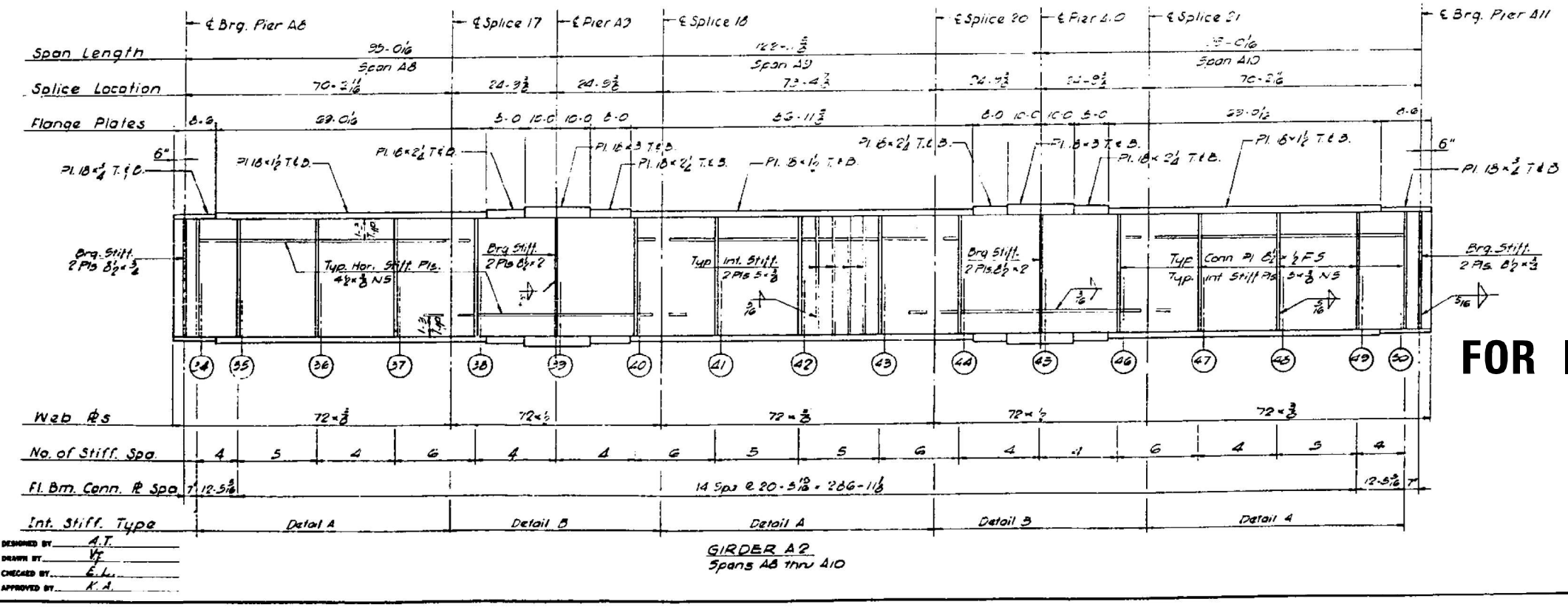
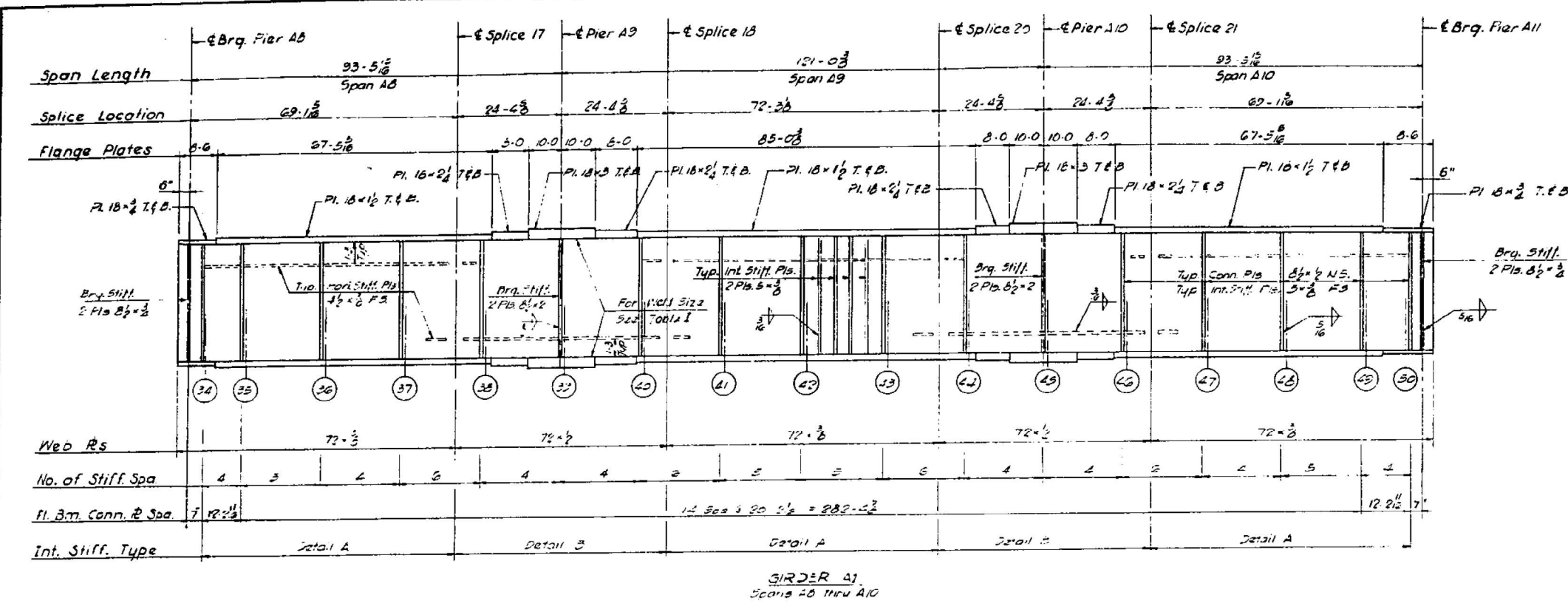
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

STRUCTURE 082-0141

SCALE: NTS SHEET 10 OF 25 SHEETS STA. _____ TO STA. _____

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55/64	82-2HB-BP-1, 82-3HVB-3BP-1	ST. CLAIR	62	24
CONTRACT NO. 76P10				
ILLINOIS FED. AID PROJECT				

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F A I 70	82-3HV B E-1	ST. CLAIR	247	61
FED. ROAD DIV. NO. 4	ILLINOIS	PROJECT		



Notes:
 All Longitudinal Dimensions shown are given along \bar{x} of Web. See Sheet No. 187.
 All Bearing Stiffeners and Connection Plates to be vertical.
 For Splice, Stiffener, Connection Plate Details and Table I see Sheet No. 348, 349, 350.

FOR INFORMATION ONLY

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

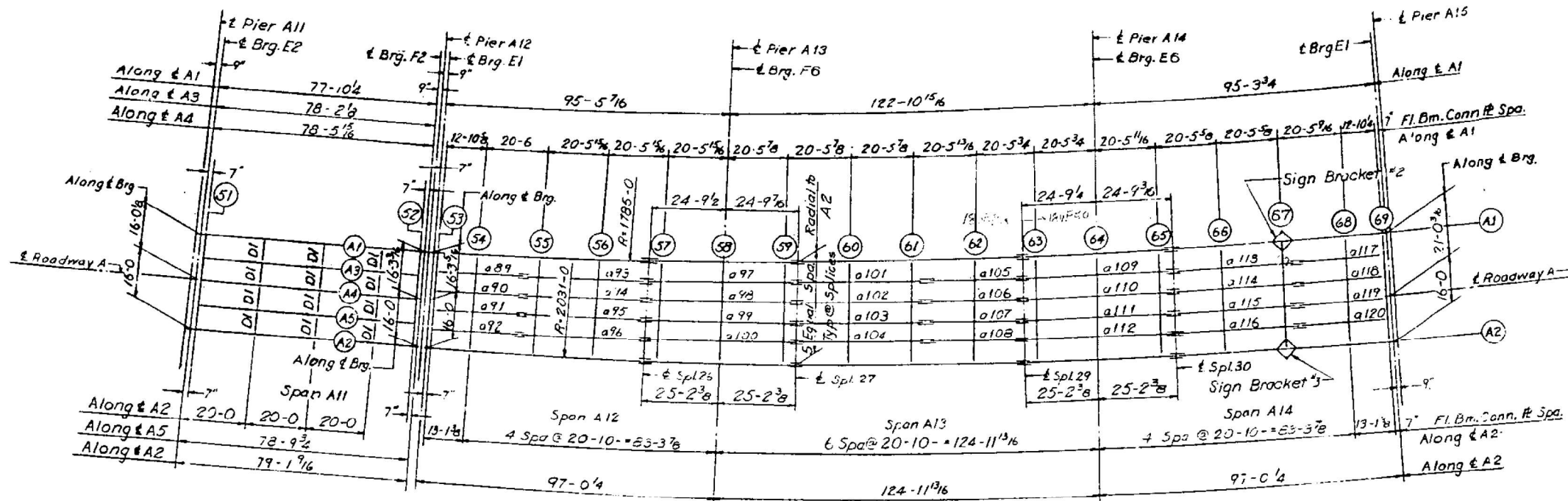
GIRDERS A1 AND A2
 SPANS A8 THRU A10
 POPLAR STREET BRIDGE APPROACHES
 ROADWAY "A"

F.A.I. RTE. ST. CLAIR CO. SECTION 82-3HV B E-1
 H. W. LOCHNER, INC.
 ENGINEERS
 CHICAGO, ILLINOIS

SHEET 191 of 226

0141

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I.-70	82-3HVFBE-1	ST. CLAIR	247	62
FED. ROAD DIV. NO. 1	ILLINOIS	PROJECT		



PLAN
SPANS A11 THRU A14

ELEVATION TOP OF FLANGE

	STR. A1	STR. A2	DIFF.
CL. BRG.	447.268	449.869	2.561
FLOOR BEAM 51	447.271	449.832	2.561
FLOOR BEAM 52	447.637	450.218	2.581
CL. BRG.	447.640	450.221	2.581

ELEVATION TOP OF GIRDER WEB

	GIR. A1	GIR. A2	DIFF.		GIR. A1	GIR. A2	DIFF.
CL. BRG.	447.438	450.020	2.582	SPLICE 29	448.235	450.896	2.761
FLOOR BEAM 53	447.440	450.023	2.583	FLOOR BEAM 63	448.251	451.018	2.767
FLOOR BEAM 54	447.497	450.089	2.591	FLOOR BEAM 64	448.323	451.121	2.798
FLOOR BEAM 55	447.588	450.191	2.603	FLOOR BEAM 65	448.396	451.225	2.829
FLOOR BEAM 56	447.678	450.295	2.617	SPLICE 30	448.411	451.246	2.835
SPLICE 26	447.750	450.376	2.626	FLOOR BEAM 66	448.464	451.328	2.864
FLOOR BEAM 57	447.767	450.398	2.631	FLOOR BEAM 67	448.531	451.431	2.900
FLOOR BEAM 58	447.852	450.501	2.649	FLOOR BEAM 68	448.597	451.535	2.938
FLOOR BEAM 59	447.938	450.605	2.668	FLOOR BEAM 69	448.639	451.600	2.961
SPLICE 27	447.954	450.626	2.672	CL. BRG.	448.641	451.602	2.961
FLOOR BEAM 60	448.016	450.708	2.692				
FLOOR BEAM 61	448.095	450.811	2.716				
FLOOR BEAM 62	448.173	450.915	2.742				

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.

FOR INFORMATION ONLY

BILL OF MATERIAL

*Structural Steel	Lbs. 556,890
-------------------	--------------

*Weight of Bearing Assemblies with Lead Plates and Anchor Bolts are Included as Structural Steel Est. WT. 11,270 Lbs.

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BLDGS.
DIVISION OF HIGHWAYS
FRAMING PLAN
SPANS A11 THRU A14
POPLAR STREET BRIDGE APPROACHES
ROADWAY "A"

F.A.I. RT. 70 ST. CLAIR CO. SECTION 82-3HVFBE-1
K. W. LOCHNER, INC.
ENGINEERS
CHICAGO, ILLINOIS

SHEET
192 of 526

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

Rev. Str. Steel from 558,940 to 556,890 6-3-66 N.R.F.

USER NAME	DESIGNED	REVISED
= hugesrd	-	-
	DRAWN	REVISED
	-	-
	CHECKED	REVISED
	-	-
	DATE	REVISED
	-	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STRUCTURE 082-0141

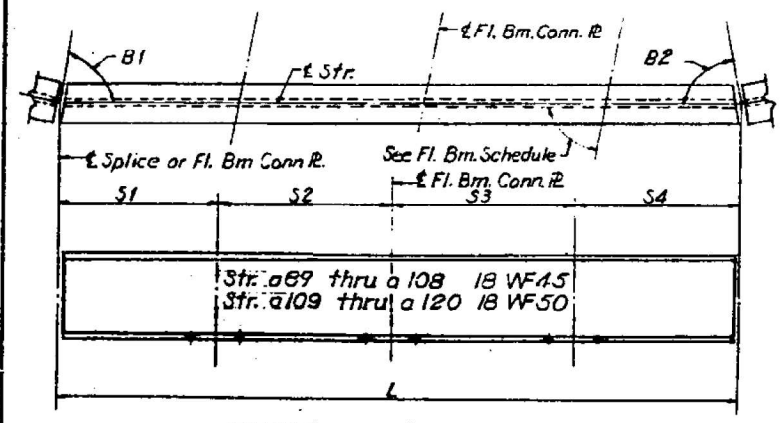
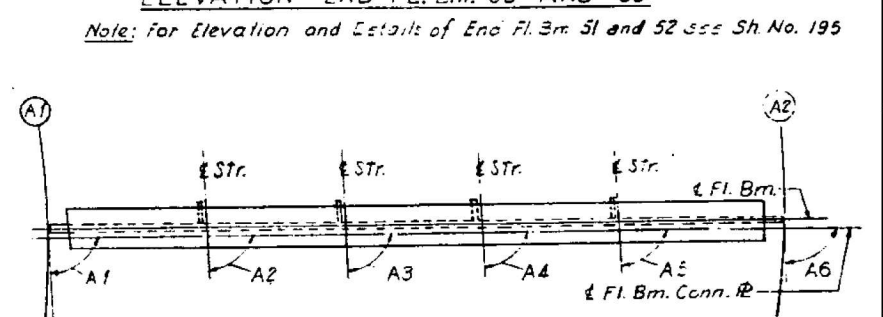
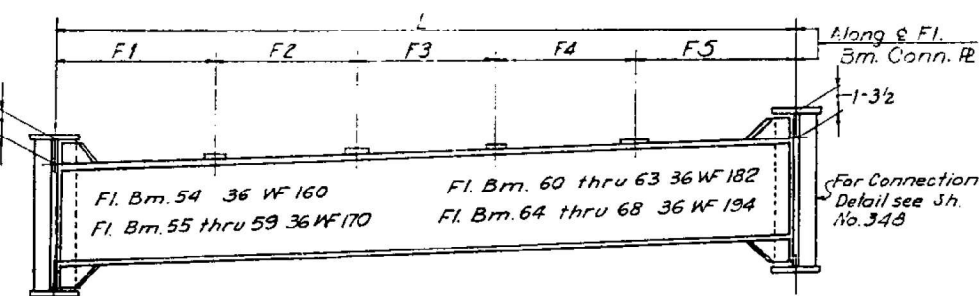
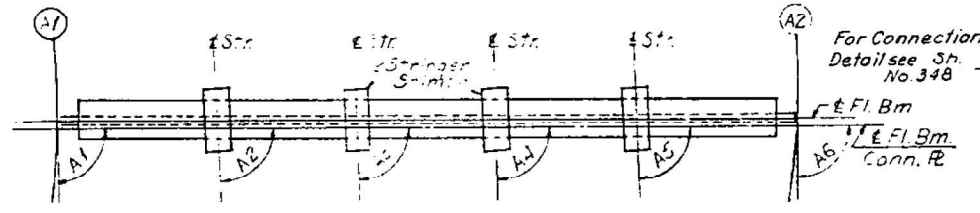
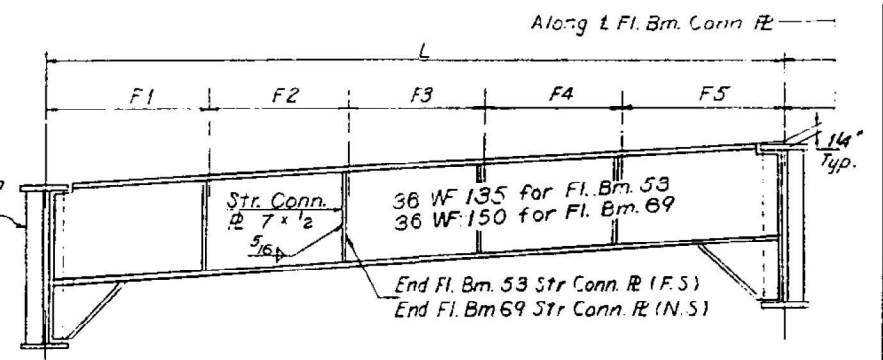
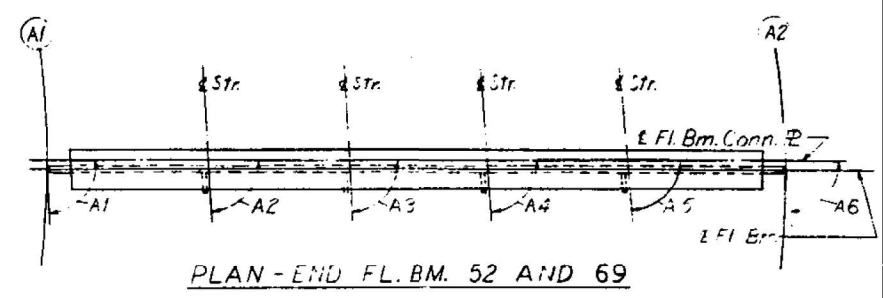
SCALE: NTS SHEET 13 OF 25 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55/64	82-2HB-BP-1, 82-3HVB-3BP-1	ST. CLAIR	62	27
				CONTRACT NO. 76P10
				ILLINOIS FED. AID PROJECT

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. - 70	82-3HVFB-E-1	ST. CLAIR	247	63
FED. ROAD DIV. NO. 4	ILLINOIS	PROJECT		

STR.	L	S1	S2	S3	S4	B1	B2
89	29-2 3/16	12-11 1/8			16-3 1/16	89.14.27	89.53.14
90	29 3 3/8	12 11 11/16			16 3 11/16	89.18.03	89.46.37
91	29 4 5/16	13 1/4			16 4 5/16	89.23.33	89.44.02
92	29 5 3/4	13 13/16			16 4 15/16	89.28.11	89.39.29
93	41 1 1/2	4 3 3/4	20 6 3/4		16 3	89.00.44	89.48.45
94	41 3 1/8	4 3 15/16	20 7 9/16		16 3 5/8	89.06.48	89.42.41
95	41 4 11/16	4 4 1/16	20 8 3/8		16 4 1/4	89.12.19	89.36.40
96	41 6 5/16	4 4 1/4	20 9 3/16		16 4 15/16	89.18.48	89.30.41
97	49 8 7/8	4 3 3/4	20 6 3/4	20 6 11/16	4 3 3/4	88.45.55	89.48.46
98	49 10 7/8	4 3 15/16	20 7 5/16	20 7 1/2	4 3 7/8	88.53.51	89.40.50
99	50 13/16	4 4 1/16	20 8 5/16	20 8 5/16	4 4 1/16	89.01.44	89.32.57
100	50 2 3/4	4 4 1/4	20 9 1/8	20 9 1/8	4 4 1/4	89.09.34	89.25.08
101	41 5 5/16	16 3	20 6 5/8		4 3 11/16	88.45.55	90.03.34
102	41 3	16 3 5/8	20 7 1/2		4 3 7/8	88.55.43	89.53.46
103	41 4 5/8	16 4 1/4	20 8 5/16		4 4 1/16	89.05.27	89.44.02
104	41 6 1/4	16 4 15/16	20 9 1/8		4 4 1/4	89.15.08	89.34.21
105	32 5 13/16	16 2 15/16	20 2 15/16		16 2 7/8	88.47.19	90.16.57
106	32 7 1/8	16 3 9/16			16 3 9/16	88.58.38	90.05.38
107	32 8 7/16	16 4 1/4			16 4 3/16	89.09.53	89.54.23
108	32 9 3/4	16 4 7/8			16 4 7/8	89.21.03	89.43.13
109	49 8 1/2	4 3 11/16	20 6 9/16	20 6 1/2	4 3 11/16	88.25.52	90.08.49
110	49 10 9/16	4 3 7/8	20 7 7/16	20 7 3/8	4 3 7/8	88.38.52	89.55.49
111	50 5/8	4 4 1/16	20 8 1/4	20 8 1/4	4 4 1/16	88.51.47	89.42.55
112	50 2 11/16	4 4 1/4	20 9 1/8	20 9 1/16	4 4 1/4	89.04.37	89.30.05
113	41 15/16	16 2 13/16	20 6 7/16		4 3 11/16	88.25.56	90.23.33
114	41 2 11/16	16 3 1/2	20 7 5/16		4 3 7/8	88.40.47	90.08.42
115	41 4 7/16	16 4 3/16	20 8 3/16		4 4 1/16	88.55.32	89.53.56
116	41 6 3/16	16 4 7/8	20 9 1/8		4 4 1/4	89.10.12	89.39.17
117	29 1 5/8	16 2 3/4			12 10 7/8	88.30.32	90.37.09
118	29 2 15/16	16 3 7/16			12 11 1/2	88.46.49	90.20.52
119	29 4 1/4	16 4 1/8			13 1/8	89.02.59	90.04.41
120	29 5 9/16	16 4 7/8			13 3/4	89.19.02	89.48.38

FL. BM.	L	F1	F2	F3	F4	F5	A1	A2	A3	A4	A5	A6
51	32' - 1/8"	8' - 1/8"	8'	8'	8'	8'	88.40.19	88.51.45	89.01.45	—	89.51.45	89.51.45
52	32 3/16	8 3/16	8	8	8	8	90.56.48	91.08.15	91.08.15	—	91.08.15	91.08.15
53	32 3-3/8	6 5-1/2	6 5-1/2	6 5-1/2	6 5-1/2	6 5-1/2	89.37.48	89.14.27	89.15.07	89.23.33	89.28.11	89.57.44
54	32 4 5/16	6 5	6 5 11/16	6 5 11/16	6 5 11/16	6 6 5/16	89.37.27	89.38.54	89.43.31	89.48.06	89.52.39	90.00.00
55	32 6 1/16	6 5 1/2	6 6	6 6	6 6	6 6 1/2	89.33.14	89.08.09	89.14.11	89.20.13	89.26.11	90.00.00
56	32 8 1/8	6 5 1/2	6 6 7/16	6 6 7/16	6 6 7/16	6 7 11/16	89.29.01	89.43.23	89.48.27	89.55.27	90.01.27	90.00.00
57	32 10 1/2	6 6 1/4	6 6 15/16	6 6 15/16	6 6 15/16	6 7 1/2	89.24.48	88.53.15	89.01.15	89.09.08	89.16.58	90.00.00
58	33 1 3/16	6 5 7/16	6 7 1/2	6 7 1/2	6 7 1/2	6 9 3/8	89.20.35	89.28.35	89.36.31	89.44.25	89.52.13	90.00.00
59	33 4 1/8	6 7 3/8	6 8 1/16	6 8 1/16	6 8 1/16	6 8 5/8	89.16.23	90.03.50	90.11.46	90.19.39	90.27.29	90.00.00
60	33 7 7/16	6 7 3/8	6 8 11/16	6 8 11/16	6 8 11/16	6 9 15/16	89.12.11	89.13.47	89.23.35	89.33.19	89.43.00	90.00.00
61	33 11	6 8 7/8	6 9 7/16	6 9 7/16	6 9 7/16	6 9 7/8	89.07.59	89.49.02	89.58.50	90.08.35	90.18.15	90.00.00
62	34 2 7/8	6 9 5/16	6 10 3/16	6 10 3/16	6 10 3/16	6 11	89.03.48	89.15.11	89.26.30	89.37.45	89.48.55	90.00.00
63	34 7	6 10 3/8	6 11	6 11	6 11	6 11 5/8	88.59.36	88.33.16	88.46.16	88.59.11	89.12.00	90.00.00
64	34 11 1/2	6 9 7/8	6 11 15/16	6 11 15/16	6 11 15/16	7 1 13/16	88.55.26	89.08.31	89.21.32	89.34.26	89.47.16	90.00.00
65	35 4 1/4	7 3/16	7 7/8	7 7/8	7 7/8	7 1 7/16	88.51.15	89.43.47	89.56.47	90.09.42	90.22.31	90.00.00
66	35 9 5/16	7 9/16	7 1 7/8	7 1 7/8	7 1 7/8	7 3 1/2	88.47.05	88.53.48	89.08.39	89.23.24	89.38.04	90.00.00
67	36 2 11/16	7 2 7/16	7 2 15/16	7 2 15/16	7 2 15/16	7 3 7/16	89.12.56	89.29.03	89.43.55	89.58.40	90.13.19	90.00.00
68	36 8 5/16	7 3 3/8	7 4 1/16	7 4 1/16	7 4 1/16	7 4 11/16	88.28.47	88.58.24	89.14.41	89.30.51	89.46.54	90.00.00
69	37	7 4 13/16	7 4 13/16	7 4 13/16	7 4 13/16	7 4 13/16	88.36.29	89.22.51	89.39.08	89.55.19	90.11.22	90.00.00



DESIGNED BY A.T. & A.J.C.
 DRAWN BY DCH
 CHECKED BY A.A.
 APPROVED BY K.A.

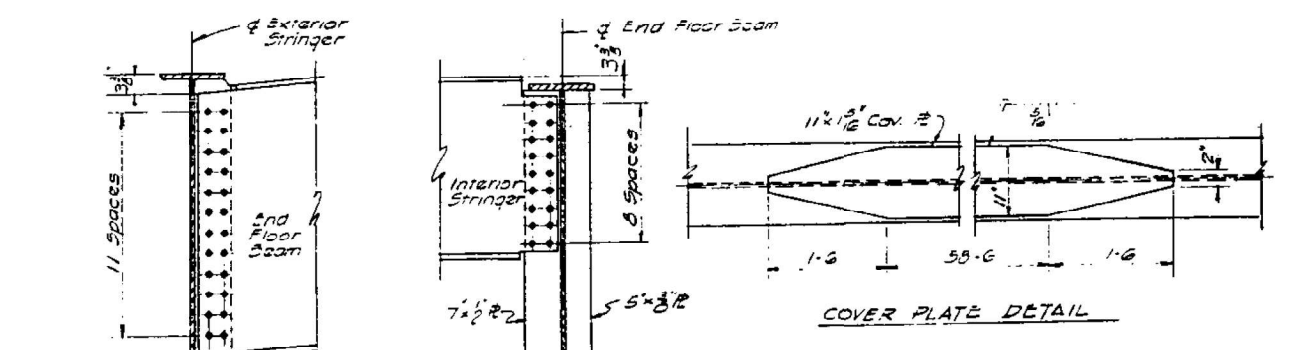
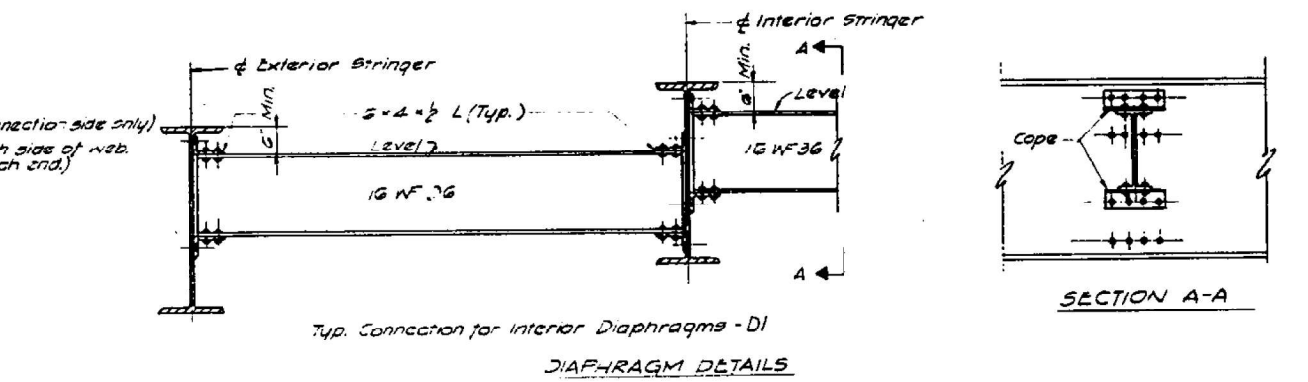
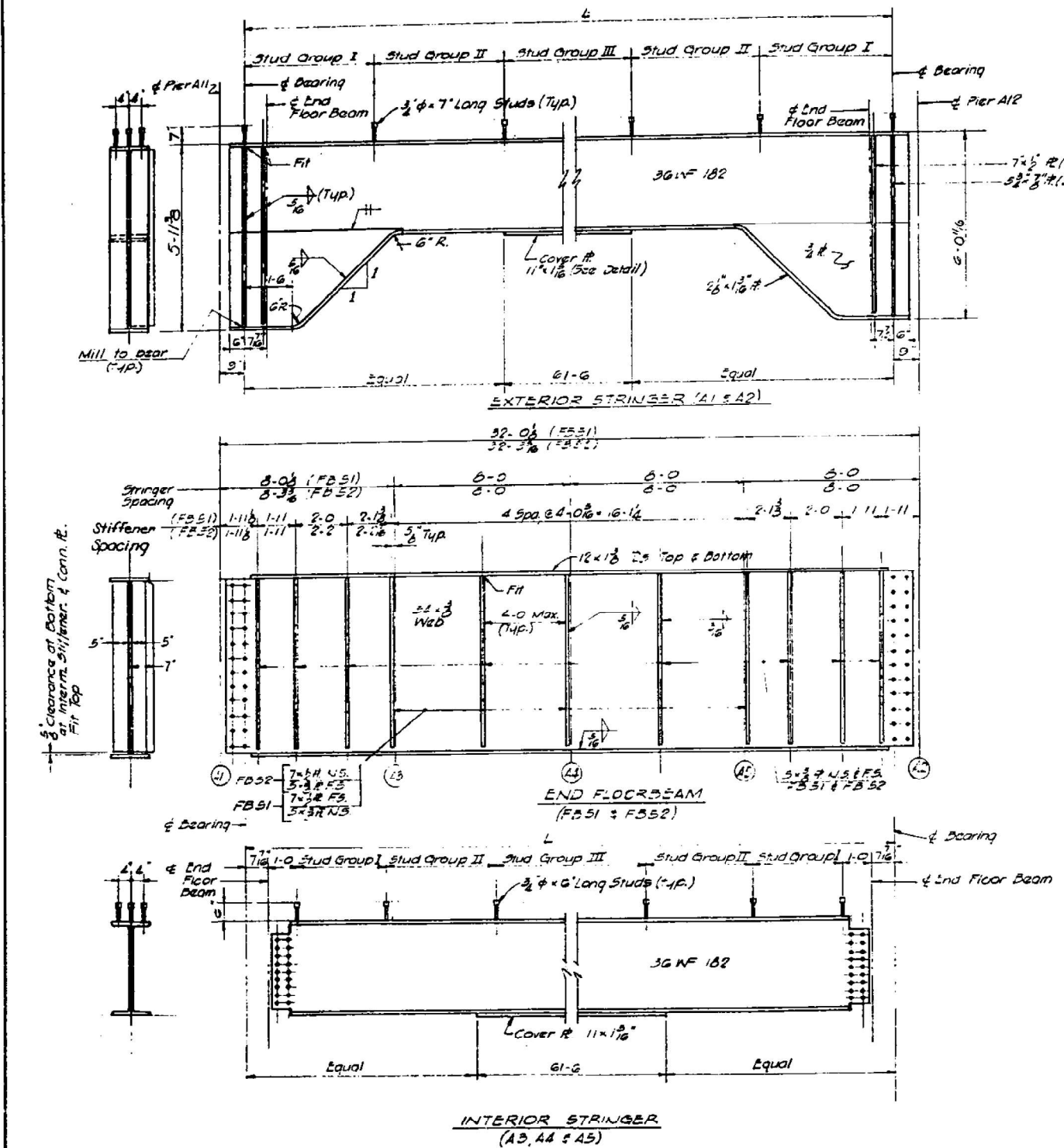
Notes:
 Length L of stringers and Fl. Bms. is correct as given in the Table except the increment lengths are given to the nearest '16".
 All dimensions are in the horizontal plane.
 For Details of Stringer in Span All see Sh. No. 195
 For Connection Plate Details see Sh. No. 348

FOR INFORMATION ONLY

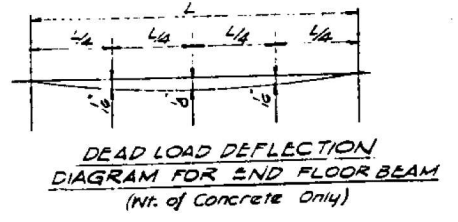
STATE OF ILLINOIS
 DEPARTMENT OF PUBLIC WORKS & BLDGS.
 DIVISION OF HIGHWAYS
 STRINGER AND FLOOR BEAM
 SCHEDULE
 SPANS A11 THRU A14
 POPLAR STREET BRIDGE APPROACHES
 ROADWAY "A"
 F.A.I. RT. 70 ST. CLAIR CO. SECTION 82-3HVFB-E-1
 N. W. LOCHNER, INC.
 ENGINEERS
 CHICAGO, ILLINOIS

0141

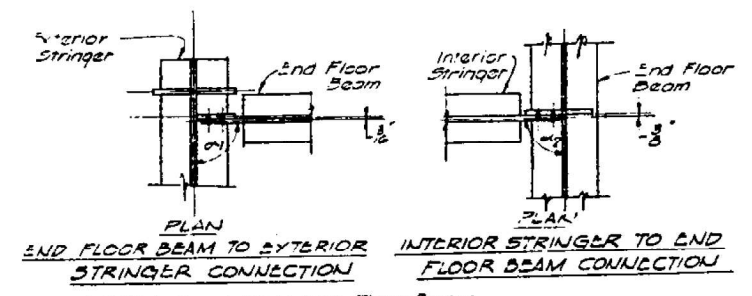
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. - 70	82-3HVB-E-1	ST. CLAIR	247	65
FED. ROAD DIV. NO. 4	ILLINOIS	PROJECT		



NOTE
 All stiffeners and connection plates 2x2 at corners to clear welding of flange to web and to clear beam fillets.



NOTE 3:
 For Framing Plan see Sheet No. 192



NOTE: For Angles see Floor Beam Schedule, Sheet No. 193

STRINGER LENGTH	GROUP I	GROUP II	GROUP III
A1	77-10 1/2	35@43"	30@65"
A3	78-28 1/2	32@43"	31@65"
A4	78-58 1/2	32@43"	31@65"
A5	78-33 1/2	32@43"	31@65"
A2	79-13 1/2	36@43"	31@65"

DESIGNED BY: H.J.
 DRAWN BY: V.F.
 CHECKED BY: L.W.
 APPROVED BY: K.A.

FOR INFORMATION ONLY

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

STEEL DETAILS

SPAN AII
 POPLAR STREET BRIDGE APPROACHES
 ROADWAY "A"

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

SHEET 16 OF 24

0141

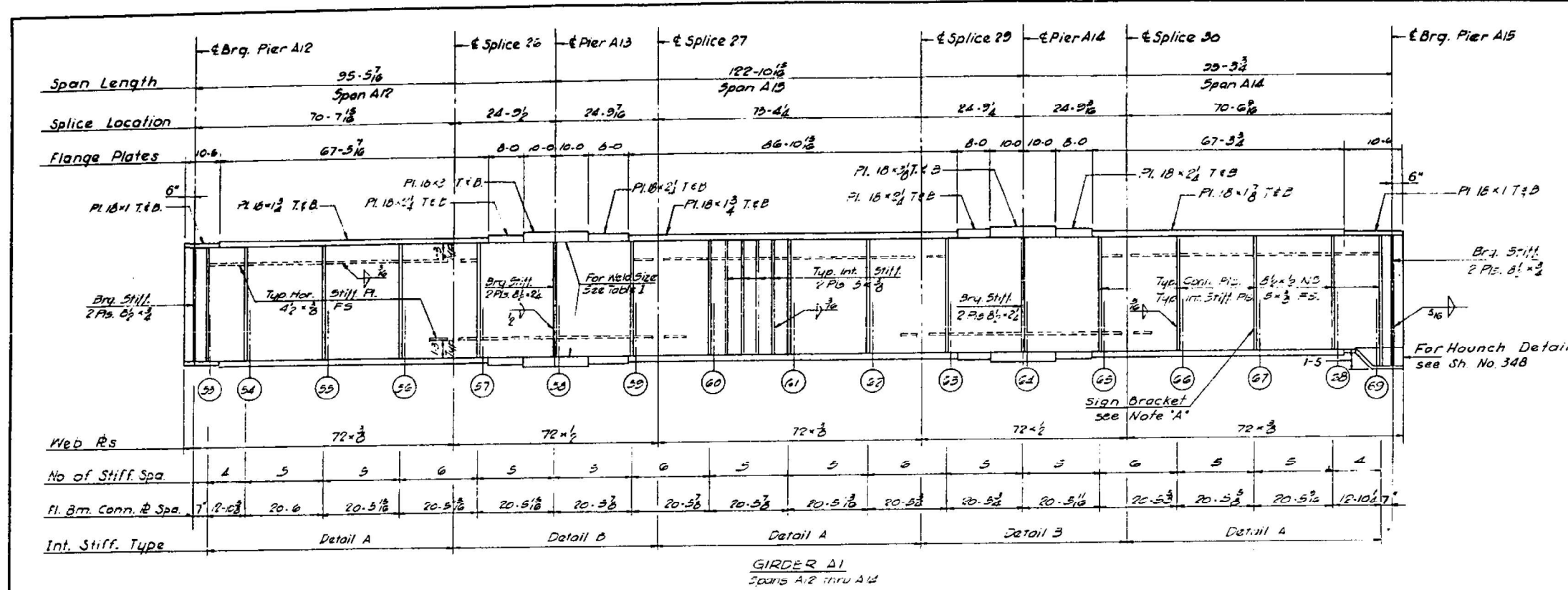
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	DRAWN -	REVISED -
PLOT SCALE = 40,0000' / in.	CHECKED -	REVISED -
PLOT DATE = 3/22/2021	DATE -	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

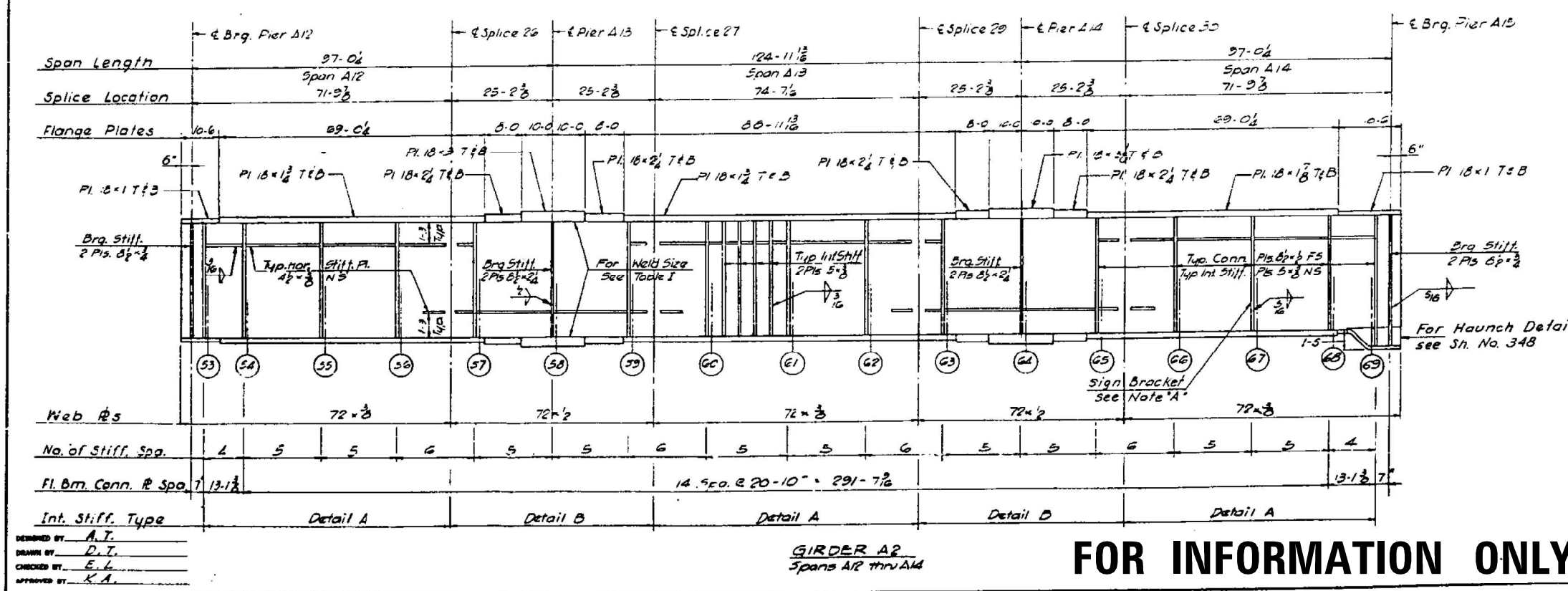
SCALE: NTS	SHEET 16	OF 25 SHEETS	STA. _____	TO STA. _____
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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55/64	82-2HB-BP-1, 82-3HVB-3BP-1	ST. CLAIR	62	30
CONTRACT NO. 76P10				
ILLINOIS FED. AID PROJECT				

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 70	82-3HV B E-1	ST. CLAIR	67	66
FED. ROAD DIV. NO. 4	ILLINOIS PROJECT			



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



Notes:
All Longitudinal Dimensions shown are given along ϵ of Web. See Sheet No. 192.
All Bearing Stiffeners and Connection Plates to be vertical.
For Splice, Stiffener, Connection Plate Details and Table I see Sheet No. 348, 349, 350.
For Sign Bracket Detail see Sheet No. 360.

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

GIRDERS A1 AND A2
SPANS A12 THRU A15
POPLAR STREET BRIDGE APPROACHES
ROADWAY "A"

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

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

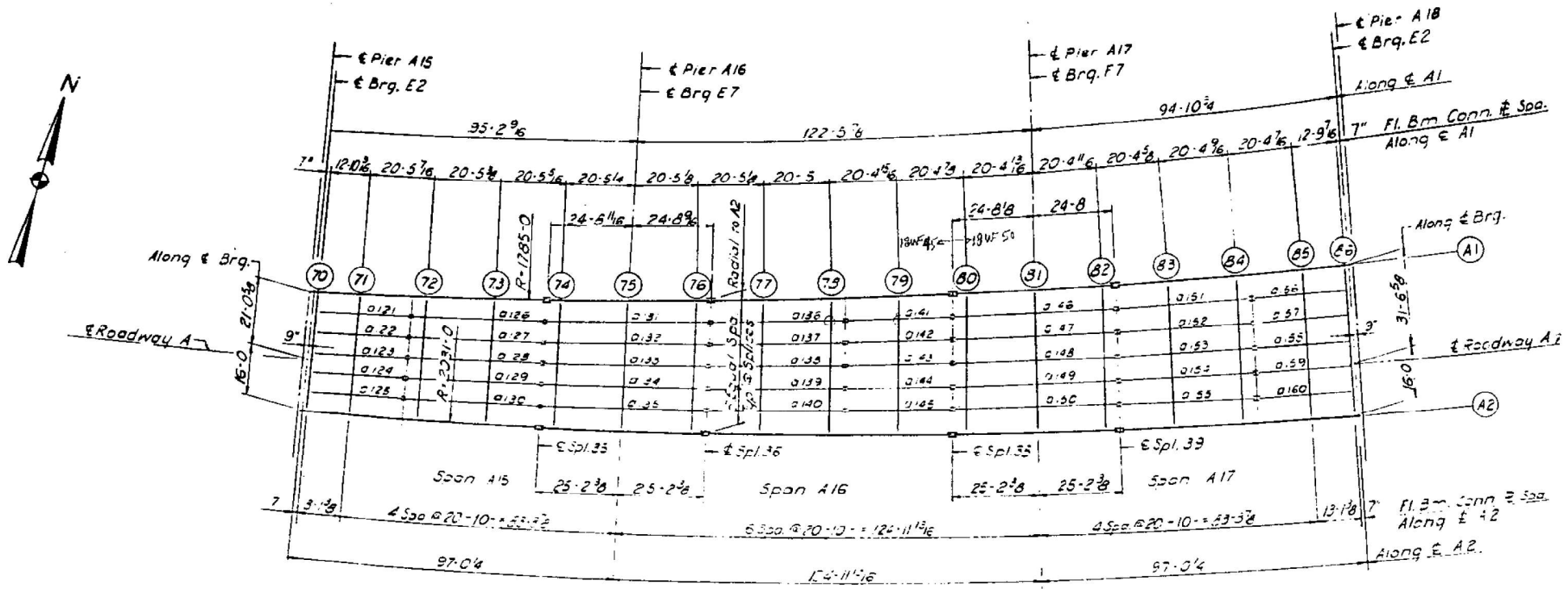
SHEET
26 of 52

FOR INFORMATION ONLY

0141

USER NAME = hughesrd	DESIGNED -	REVISD -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	STRUCTURE 082-0141	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
PLOT SCALE = 40,0000 * 1/16"	DRAWN -	REVISD -			55/64	82-2HB-BP-1, 82-3HV-B3BP-1	ST. CLAIR	62	31
PLOT DATE = 3/22/2021	CHECKED -	REVISD -			CONTRACT NO. 76P10				
	DATE -	REVISD -			ILLINOIS FED. AID PROJECT				

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I.-70	B2-3HVFBE-1	ST. CLAIR	247	67
FED. ROAD DIST. NO. 4		ILLINOIS	PROJECT	



PLAN
SPANS A15 THRU A17

ELEVATION TOP OF GIRDER WEB

	GIR. A1	GIR. A2	DIFF.		GR. A1	GIR. A2	DIFF.
CL. BRG.	448,646	451,610	2,964	SPLICE 38	449,157	452,586	3,429
FLOOR BEAM 70	448,648	451,613	2,965	FLOOR BEAM 80	449,166	452,608	3,442
FLOOR BEAM 71	448,685	451,678	2,993	FLOOR BEAM 81	449,206	452,711	3,503
FLOOR BEAM 72	448,745	451,781	3,036	FLOOR BEAM 82	449,251	452,815	3,564
FLOOR BEAM 73	448,805	451,885	3,080	SPLICE 39	449,260	452,836	3,576
SPLICE 35	448,852	451,966	3,114	FLOOR BEAM 83	449,282	452,918	3,629
FLOOR BEAM 74	448,864	451,988	3,124	FLOOR BEAM 84	449,327	453,021	3,694
FLOOR BEAM 75	448,918	452,091	3,173	FLOOR BEAM 85	449,364	453,125	3,761
FLOOR BEAM 76	448,972	452,195	3,223	FLOOR BEAM 86	449,387	453,190	3,803
SPLICE 36	448,983	452,216	3,233	CL. BRG.	449,388	453,192	3,804
FLOOR BEAM 77	449,021	452,298	3,277				
FLOOR BEAM 78	449,070	452,401	3,331				
FLOOR BEAM 79	449,119	452,505	3,387				

Note:
Dimensions locating floor beams are given to the floor beam Conn. Plate see sketch Sheet No. 183

BILL OF MATERIAL		
*Structural Steel	Lbs.	497,150

*Weight of Bearing Assemblies with Lead Plates and Anchor Bolts are included as Structural Steel Est. Wt. 10,700 Lbs.

FOR INFORMATION ONLY

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BLDGS.
DIVISION OF HIGHWAYS
FRAMING PLAN
SPANS A15 THRU A17
POPLAR STREET BRIDGE APPROACHES
ROADWAY "A"

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

SHEET NO. 197 of 246

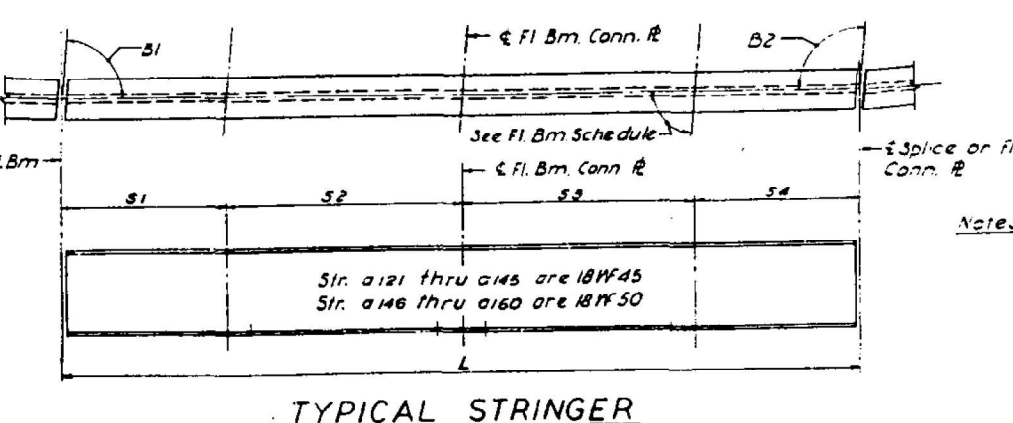
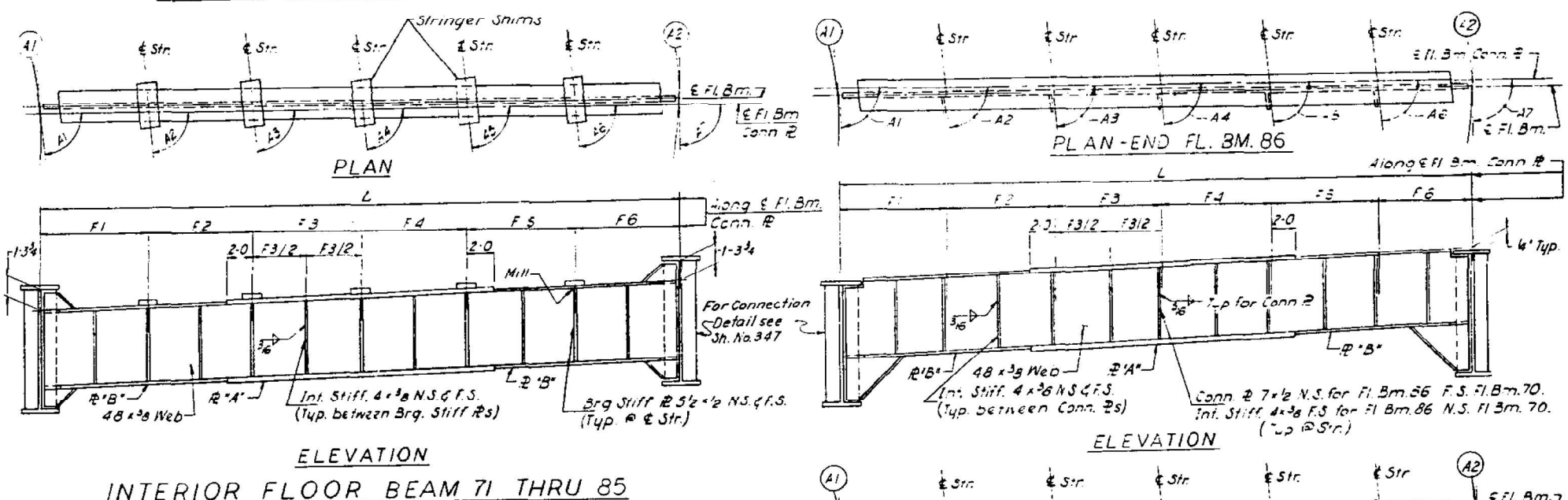
DESIGNED BY R.J.P.
DRAWN BY I.M.
CHECKED BY K.J.C.
APPROVED BY K.A.

0141

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. - 70	82-3HVB-E1	ST. CLAIR	247	68
FED. ROAD DIV. NO. 4		ILLINOIS	PROJECT	

STR. NO.	L	S1	S2	S3	S4	B1	B2
121	27'-1 5/16"	12'-10 3/4"	○	○	16'-2 9/16"	88,200.11"	90,47,30"
122	29 2 7/16	12 11 1/4	○	○	16 3 1/8	88,24.53	90,32.48
123	29 3 1/2	12 11 13/16	○	○	16 3 3/4	88,49.28	90,18.12
124	29 4 5/8	13 5/16	○	○	16 4 5/16	89,03.99	90,03.42
125	29 5 13/16	13 13/16	○	○	16 4 15/16	89,18.23	89,49.17
126	41 3/16	4 3 5/8	20 6 1/8	○	16 2 7/16	88,06.22	90,43.07
127	41 1 11/16	4 3 3/4	20 6 7/8	○	16 3 1/16	88,22.14	90,27.14
128	41 3 1/4	4 3 15/16	20 7 5/8	○	16 3 11/16	88,38.01	90,11.28
129	41 4 13/16	4 4 1/8	20 8 7/16	○	16 4 5/16	88,53.41	89,55.48
130	41 6 3/8	4 4 1/4	20 9 3/16	○	16 4 15/16	89,09.16	89,40.13
131	49 7 1/16	4 3 5/8	20 6	20 5 7/8	4 3 9/16	87,51.27	90,43.15
132	49 9	4 3 3/4	20 6 13/16	20 6 11/16	4 3 3/4	88,06.51	90,28.51
133	49 10 15/16	4 3 15/16	20 7 9/16	20 7 1/2	4 3 7/8	88,26.09	90,08.33
134	50 13/16	4 4 1/16	20 8 3/8	4 4 1/16	4 4 1/16	88,43.19	89,51.22
135	50 2 13/16	4 4 1/4	20 9 3/16	20 9 1/8	4 4 1/4	89,00.23	89,34.18
136	40 11 11/16	16 2 3/8	20 5 13/16	○	4 3 1/2	87,51.22	90,58.07
137	41 1 5/16	16 3	20 5 5/8	○	4 3 11/16	88,10.17	90,39.12
138	41 2 15/16	16 3 5/8	20 7 7/16	○	4 3 7/8	88,29.05	90,20.24
139	41 4 9/16	16 4 1/4	20 8 1/4	○	4 4 1/16	88,47.46	90,01.43
140	41 6 1/4	16 4 7/8	20 9 1/8	○	4 4 1/4	89,06.19	89,43.10
141	41 7 1/16	16 2 1/4	○	○	16 2 3/16	87,52.44	91,11.32
142	41 8 5/8	16 2 7/8	○	○	16 2 13/16	88,12.53	90,51.23
143	41 9 1/16	16 3 9/16	○	○	16 3 1/2	88,32.54	90,31.22
144	41 10 3/8	16 4 3/16	○	○	16 4 3/16	88,52.47	90,11.29
145	41 11 5/8	16 4 7/8	○	○	16 4 7/8	89,12.31	89,51.45
146	49 6 3/16	4 3 5/16	20 5 11/16	20 5 1/2	4 3 7/16	87,31.15	91,03.26
147	49 8 1/4	4 3 11/16	20 6 1/2	20 6 3/8	4 3 5/8	87,52.46	90,41.55
148	49 10 5/16	4 3 7/8	20 7 3/8	20 7 1/4	4 3 13/16	88,14.09	90,20.33
149	50 7/16	4 4 1/16	20 8 3/16	20 8 1/8	4 4	88,35.22	89,59.20
150	50 2 9/16	4 4 1/4	20 9 1/16	20 9 1/16	4 4 1/4	88,56.26	89,36.16
151	40 10 7/8	16 2 1/16	20 5 3/8	○	4 3 7/16	87,31.19	91,18.10
152	41 5/8	16 2 3/4	20 6 1/4	○	4 3 5/8	87,54.20	90,55.09
153	41 2 7/16	16 3 7/16	20 7 3/16	○	4 3 13/16	88,17.11	90,32.18
154	41 4 1/4	16 4 1/8	20 8 1/8	○	4 4	88,39.52	90,09.37
155	41 6 1/16	16 4 13/16	20 9	○	4 4 3/16	89,02.23	89,47.06
156	29	16 1 15/16	○	○	12 10 1/16	87,35.57	91,31.44
157	29 1 5/16	16 2 5/8	○	○	12 10 11/16	88,00.07	91,07.33
158	29 2 11/16	16 3 5/16	○	○	12 11 3/8	88,24.07	90,43.34
159	29 4 1/8	16 4 1/16	○	○	13	88,47.55	90,19.45
160	29 5 1/2	16 4 13/16	○	○	13 11/16	89,11.32	89,56.08

FLOOR BEAM DIMENSIONS	F1	F2	F3	F4	F5	F6	A1	A2	A3	A4	A5	A6	A7	NOTE A Top of Beam	NOTE B Top of Beam
70	37'-13 1/16"	6'-2 1/8"	6'-2 1/8"	6'-2 1/8"	6'-2 1/8"	6'-2 1/8"	88,33.20"	88,20.11"	88,34.53"	88,49.28"	89,03.99"	89,18.23"	89,57.44"	12'x8"	12'x8"
71	37 4 5/8	6 2 1/16	6 2 13/16	6 2 13/16	6 2 13/16	6 3 7/16	88,33.03	88,44.38	88,59.20	89,13.56	89,28.26	89,42.51	90,00.00	12x12	12x8
72	37 11	6 3 5/16	6 3 13/16	6 3 13/16	6 3 13/16	6 4 5/16	88,28.55	88,13.46	88,29.38	88,45.24	89,01.05	89,16.39	90,00.00	12x14	12x1
73	38 5 5/8	6 3 5/8	6 4 15/16	6 4 15/16	6 4 15/16	6 6 3/16	88,24.48	88,49.01	89,04.54	89,20.40	89,36.20	89,51.55	90,00.00	12x14	12x1
74	39 9/16	6 5 7/16	6 6 1/8	6 6 1/8	6 6 1/8	6 8 3/16	88,20.41	87,54.51	88,16.15	88,32.32	88,50.43	89,07.47	90,00.00	12x16	12x16
75	39 7 13/16	6 5 1/4	6 7 5/16	6 7 5/16	6 7 5/16	6 9 3/16	88,16.35	88,34.06	88,51.30	89,08.48	89,25.58	89,43.03	90,00.00	12x16	12x16
76	40 3 5/16	6 7 15/16	6 8 9/16	6 8 9/16	6 8 9/16	6 9 3/16	88,12.30	89,09.22	89,26.46	89,44.03	90,01.14	90,18.18	90,00.00	12x16	12x16
77	40 11 1/8	6 8 9/16	6 9 7/8	6 9 7/8	6 9 7/8	6 11 1/8	88,08.25	88,19.14	88,38.09	88,56.57	89,15.38	89,34.11	90,00.00	12x16	12x16
78	41 7 1/4	6 10 11/16	6 11 3/16	6 11 3/16	6 11 3/16	6 11 1/8	88,04.21	88,54.29	89,13.25	89,32.13	89,50.53	90,09.26	90,00.00	12x16	12x16
79	42 3 5/8	6 11 3/4	7 5/8	7 5/8	7 5/8	7 7 1/16	88,00.18	88,20.36	88,40.45	89,00.46	89,20.39	89,40.23	90,00.00	12x16	12x16
80	43 5/16	7 1 7/16	7 2 1/16	7 2 1/16	7 2 1/16	7 2 5/8	87,56.16	87,38.39	88,00.10	88,21.32	88,42.45	89,03.49	90,00.00	12x16	12x16
81	43 9 1/4	7 1 1/2	7 3 9/16	7 3 9/16	7 3 9/16	7 5 7/16	87,52.14	88,13.55	88,35.26	88,56.48	89,18.01	89,36.05	90,00.00	12x16	12x16
82	44 6 1/2	7 4 7/16	7 5 1/16	7 5 1/16	7 5 1/16	7 5 11/16	87,48.13	88,49.10	89,10.41	89,32.03	89,53.16	90,14.20	90,00.00	12x16	12x16
83	45 4	7 5 3/8	7 6 11/16	7 6 11/16	7 6 11/16	7 8 5/16	87,44.13	87,59.11	88,22.12	88,45.03	89,07.44	89,30.15	90,00.00	12x16	12x16
84	46 1 13/16	7 7 13/16	7 8 5/16	7 8 5/16	7 8 5/16	7 8 13/16	87,40.14	88,34.26	88,57.27	89,20.18	89,43.00	90,05.31	90,00.00	12x16	12x16
85	46 11 7/8	7 9 5/16	7 10	7 10	7 10	7 10 5/8	87,36.15	88,03.49	88,27.59	88,51.59	89,15.47	89,39.24	90,00.00	12x16	12x16
86	47 3 3/8	7 11 1/16	7 11 1/16	7 11 1/16	7 11 1/16	7 11 1/16	87,36.05	88,28.16	88,52.27	89,16.26	89,40.15	90,03.52	90,02.16	12x16	12x16



FOR INFORMATION ONLY

DESIGNED BY: A.I. & A.C.
 DRAWN BY: L.M.
 CHECKED BY: A.J.C.
 APPROVED BY: K.A.

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 Intermediate Stiffener, Brg. Stiffener and Connection Plate Details see Sh. No. 348

STATE OF ILLINOIS
 DEPARTMENT OF PUBLIC WORKS & BLDGS.
 DIVISION OF HIGHWAYS
 STRINGER AND FLOOR BEAM
 SCHEDULE
 SPANS A15 THRU A17
 POPLAR STREET BRIDGE APPROACHES
 ROADWAY "A"
 F.A.I. RT. 70 ST. CLAIR CO. SECTION 82-3HVB-E-1
 H. W. LOCHNER, INC.
 ENGINEERS
 CHICAGO, ILLINOIS

0141

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. - 70	B2-3MVF	ST. CLAIR	217	69
FED. ROAD DIV. NO. 4	ILLINOIS	PROJECT		

FLOOR BEAM 76	T1	T2	T3	T4
STR.				
131	1	7/16	1 1/16	1/2
132	1	7/16	1 1/16	1/2
133	1	7/16	1 1/16	1/2
134	1	3/8	1 1/8	1/2
135	1	3/8	1 1/8	1/2

FLOOR BEAM 82	T1	T2	T3	T4
STR.				
146	1	7/16	1 1/16	1/2
147	1	7/16	1 1/16	1/2
148	1	7/16	1 1/16	1/2
149	1	3/8	1 1/8	1/2
150	1	3/8	1 1/8	1/2

FLOOR BEAM 71	T1	T2	T3	T4
STR.				
121	1	7/16	1 1/16	1/2
122	1	7/16	1 1/16	1/2
123	1	7/16	1 1/16	1/2
124	1	3/8	1 1/8	1/2
125	1	3/8	1 1/8	1/2

FLOOR BEAM 77	T1	T2	T3	T4
STR.				
136	1	7/16	1 1/16	1/2
137	1	7/16	1 1/16	1/2
138	1	7/16	1 1/16	1/2
139	1	3/8	1 1/8	1/2
140	1	3/8	1 1/8	1/2

FLOOR BEAM 83	T1	T2	T3	T4
STR.				
151	1	7/16	1 1/16	1/2
152	1	7/16	1 1/16	1/2
153	1	7/16	1 1/16	1/2
154	1	7/16	1 1/16	1/2
155	1	3/8	1 1/8	1/2

FLOOR BEAM 72	T1	T2	T3	T4
STR.				
126	1	7/16	1 1/16	1/2
127	1	7/16	1 1/16	1/2
128	1	3/8	1 1/8	1/2
129	1	3/8	1 1/8	1/2
130	1	3/8	1 1/8	1/2

FLOOR BEAM 78	T1	T2	T3	T4
STR.				
136	1	7/16	1 1/16	1/2
137	1	7/16	1 1/16	1/2
138	1	7/16	1 1/16	1/2
139	1	3/8	1 1/8	1/2
140	1	3/8	1 1/8	1/2

FLOOR BEAM 84	T1	T2	T3	T4
STR.				
151	1	7/16	1 1/16	1/2
152	1	7/16	1 1/16	1/2
153	1	7/16	1 1/16	1/2
154	1	7/16	1 1/16	1/2
155	1	3/8	1 1/8	1/2

FLOOR BEAM 73	T1	T2	T3	T4
STR.				
126	1	7/16	1 1/16	1/2
127	1	7/16	1 1/16	1/2
128	1	7/16	1 1/16	1/2
129	1	3/8	1 1/8	1/2
130	1	3/8	1 1/8	1/2

FLOOR BEAM 79	T1	T2	T3	T4
STR.				
141	1	7/16	1 1/16	1/2
142	1	7/16	1 1/16	1/2
143	1	7/16	1 1/16	1/2
144	1	3/8	1 1/8	1/2
145	1	3/8	1 1/8	1/2

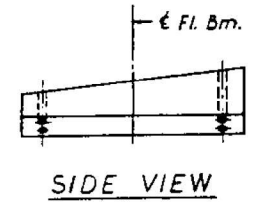
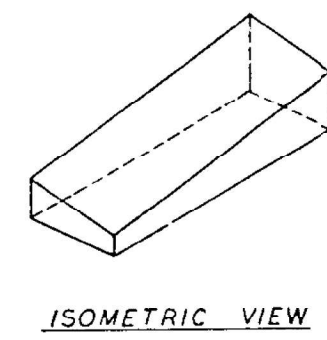
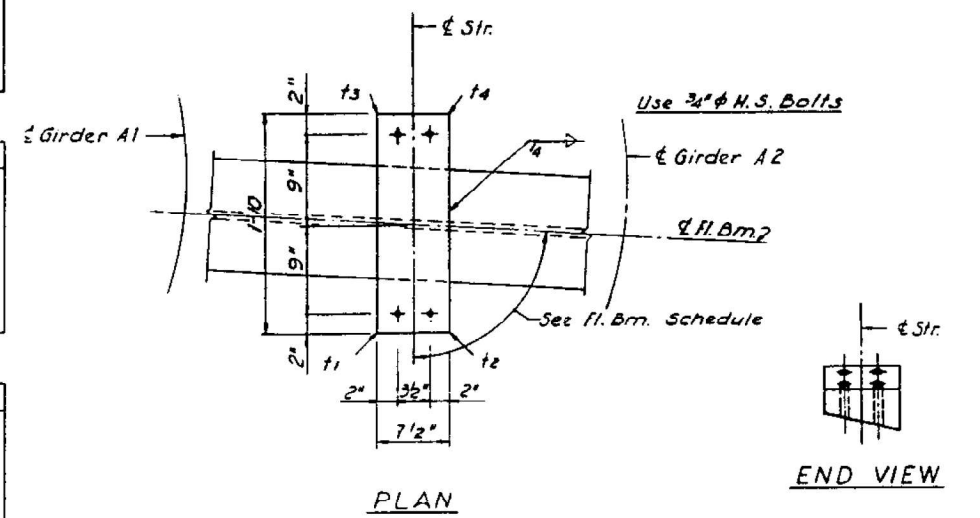
FLOOR BEAM 85	T1	T2	T3	T4
STR.				
156	1	7/16	1 1/16	1/2
157	1	7/16	1 1/16	1/2
158	1	7/16	1 1/16	1/2
159	1	7/16	1 1/16	1/2
160	1	3/8	1 1/8	1/2

FLOOR BEAM 74	T1	T2	T3	T4
STR.				
131	1	7/16	1 1/16	1/2
132	1	7/16	1 1/16	1/2
133	1	7/16	1 1/16	1/2
134	1	3/8	1 1/8	1/2
135	1	3/8	1 1/8	1/2

FLOOR BEAM 80	T1	T2	T3	T4
STR.				
146	1	7/16	1 1/16	1/2
147	1	7/16	1 1/16	1/2
148	1	7/16	1 1/16	1/2
149	1	3/8	1 1/8	1/2
150	1	3/8	1 1/8	1/2

FLOOR BEAM 75	T1	T2	T3	T4
STR.				
131	1	7/16	1 1/16	1/2
132	1	7/16	1 1/16	1/2
133	1	7/16	1 1/16	1/2
134	1	3/8	1 1/8	1/2
135	1	3/8	1 1/8	1/2

FLOOR BEAM 81	T1	T2	T3	T4
STR.				
146	1	7/16	1 1/16	1/2
147	1	7/16	1 1/16	1/2
148	1	7/16	1 1/16	1/2
149	1	3/8	1 1/8	1/2
150	1	3/8	1 1/8	1/2



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 A.J.C.
 DRAWN BY L.M.
 CHECKED BY A.S.
 APPROVED BY K.A.

FOR INFORMATION ONLY

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

STRINGER SHMS
 SPANS A15 THRU A17
 POPLAR STREET BRIDGE APPROACHES
 ROADWAY "A"

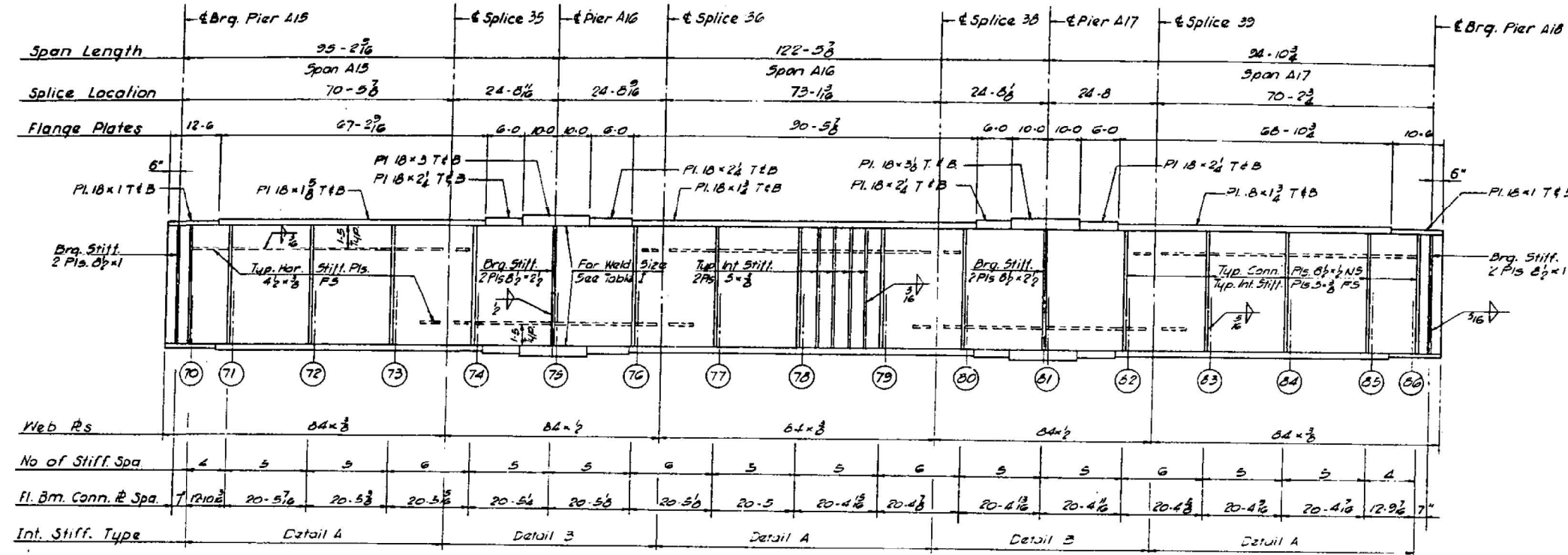
FAL RT, 70 ST. CLAIR CO. SECTION 82-3MVF 8 E-1

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

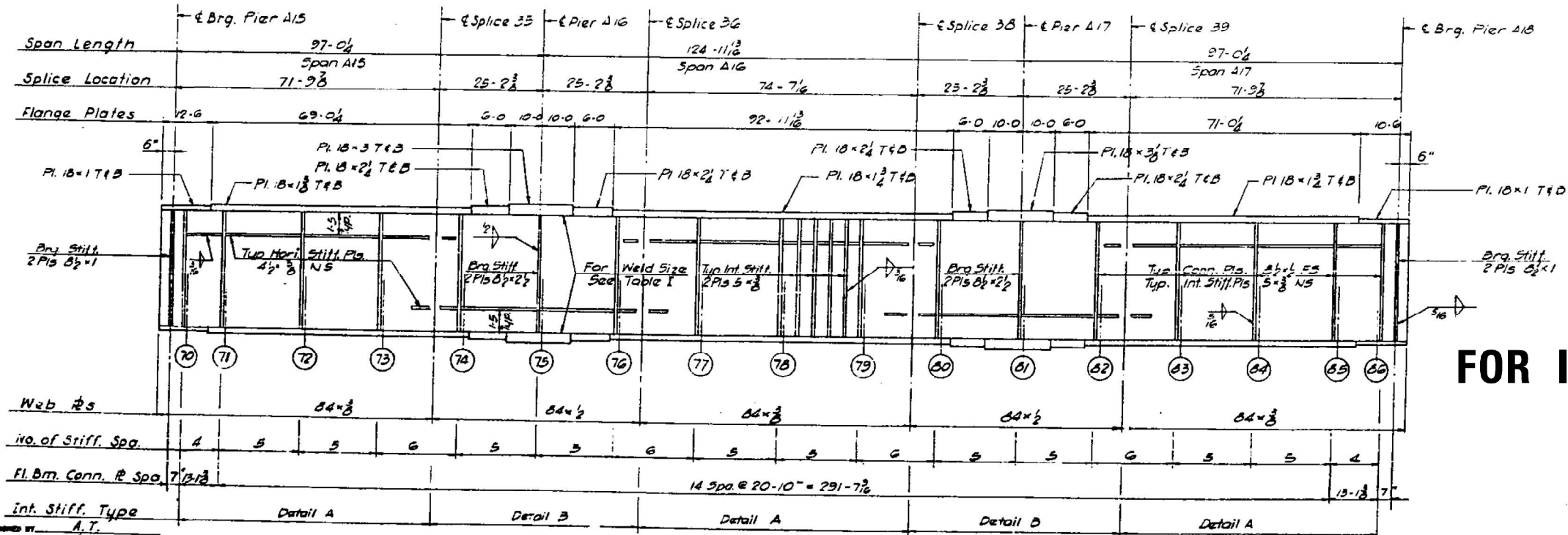
SHEET 199 of 526

0141

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



GIRDER A1
Spans A15 thru A17



GIRDER A2
Spans A15 thru A17

Notes:
All Longitudinal Dimensions shown are given along E of Web. See Sheet No. 197.
All Bearing Stiffeners and Connection Plates to be vertical.
For Splices, Stiffeners, Connection Plate Details and Table I see Sheet No. 348, 349, 350.

FOR INFORMATION ONLY

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

GIRDERS A1 AND A2
SPANS A15 THRU A17
POPLAR STREET BRIDGE APPROACHES
ROADWAY "A"

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

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

SHEET NO. 350 of 350

0141

USER NAME = hughesrd	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 40,0000' / in.	CHECKED -	REVISED -
PLOT DATE = 3/22/2021	DATE -	REVISED -

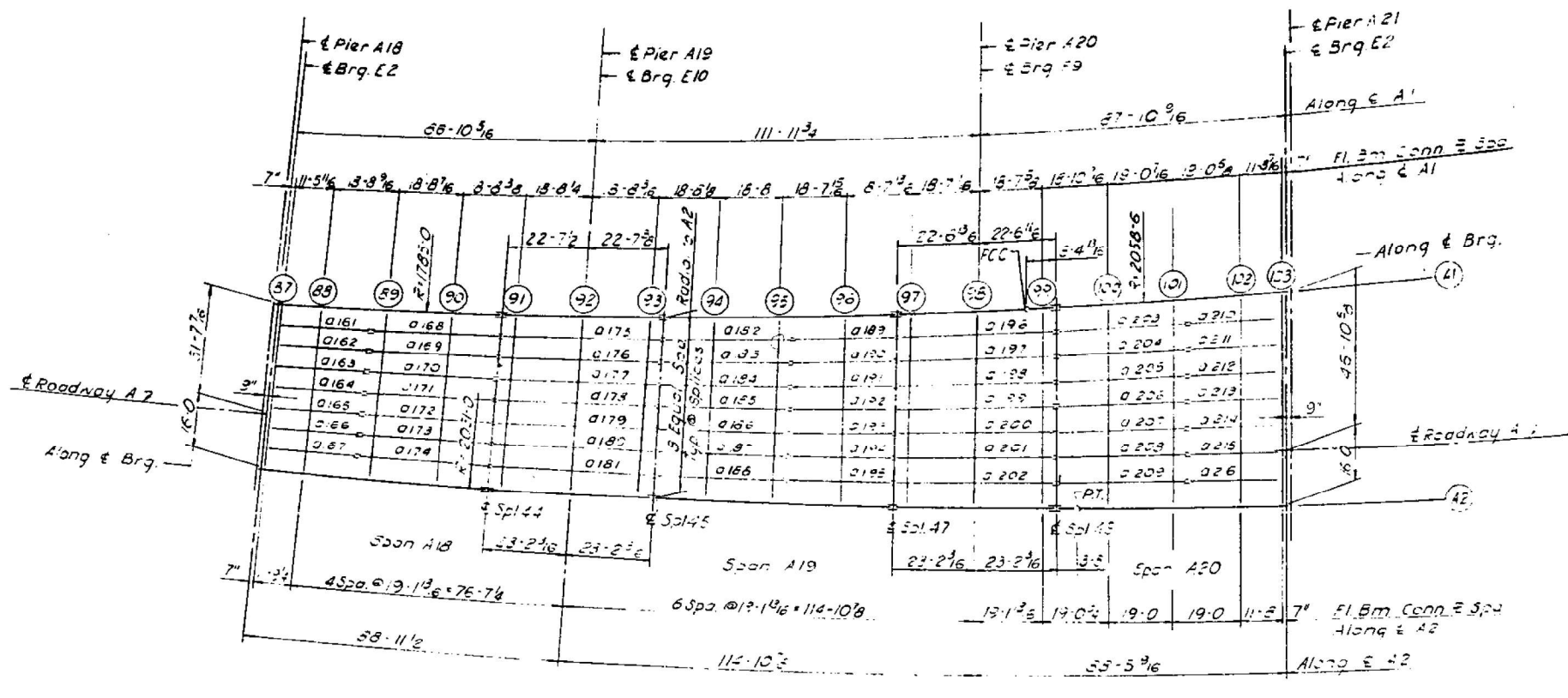
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STRUCTURE 082-0141

SCALE: NTS SHEET 21 OF 25 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55/64	82-2HB-BP-1, 82-3HVB-3BP-1	ST. CLAIR	62	35
CONTRACT NO. 76P10				
ILLINOIS FED. AID PROJECT				

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I.-70	82-3HVFBE-1	ST. CLAIR	277	71
FED. ROAD DIV. NO. 4		ILLINOIS	PROJECT	



PLAN
SPANS A19 THRU A20

ELEVATION TOP OF GIRDER WEB

	GIR. A1	GIR. A2	DIFF.		GIR. A1	GIR. A2	DIFF.		
CL. BRG.	449,391	453,200	3,809	SPLICE	47	450,165	454,401	4,236	
FLOOR BEAM	87	449,391	453,203	3,812	FLOOR BEAM	97	450,266	454,450	4,184
FLOOR BEAM	88	449,408	453,261	3,852	FLOOR BEAM	98	450,744	454,682	3,938
FLOOR BEAM	89	449,437	453,356	3,919	FLOOR BEAM	99	451,221	454,914	3,693
FLOOR BEAM	90	449,466	453,451	3,985	SPLICE	48	451,322	454,963	3,641
SPLICE	44	449,488	453,526	4,038	FLOOR BEAM	100	451,749	455,298	3,549
FLOOR BEAM	91	449,496	453,548	4,052	FLOOR BEAM	101	452,294	455,722	3,428
FLOOR BEAM	92	449,530	453,654	4,124	FLOOR BEAM	102	452,839	456,145	3,306
FLOOR BEAM	93	449,564	453,759	4,195	FLOOR BEAM	103	453,173	456,406	3,233
SPLICE	45	449,571	453,781	4,210	CL. BRG.		453,190	456,419	3,229
FLOOR BEAM	94	449,703	453,918	4,215					
FLOOR BEAM	95	449,869	454,091	4,222					
FLOOR BEAM	96	450,034	454,265	4,231					

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

BILL OF MATERIAL	
*Structural Steel	Lbs. 572,430

*Weight of Spacing Assemblies with Lead Plates and Anchor Bolts are included as Structural Steel Est. Wt. 15,290 Lbs.

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BLDGS
DIVISION OF HIGHWAYS
FRAMING PLAN
SPANS A18 THRU A20
POPLAR STREET BRIDGE APPROACHES
ROADWAY "A"

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

SHEET 271 of 526

FOR INFORMATION ONLY

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

014

USER NAME = hugesrd	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 40,0000' / in.	CHECKED -	REVISED -
PLOT DATE = 3/22/2021	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

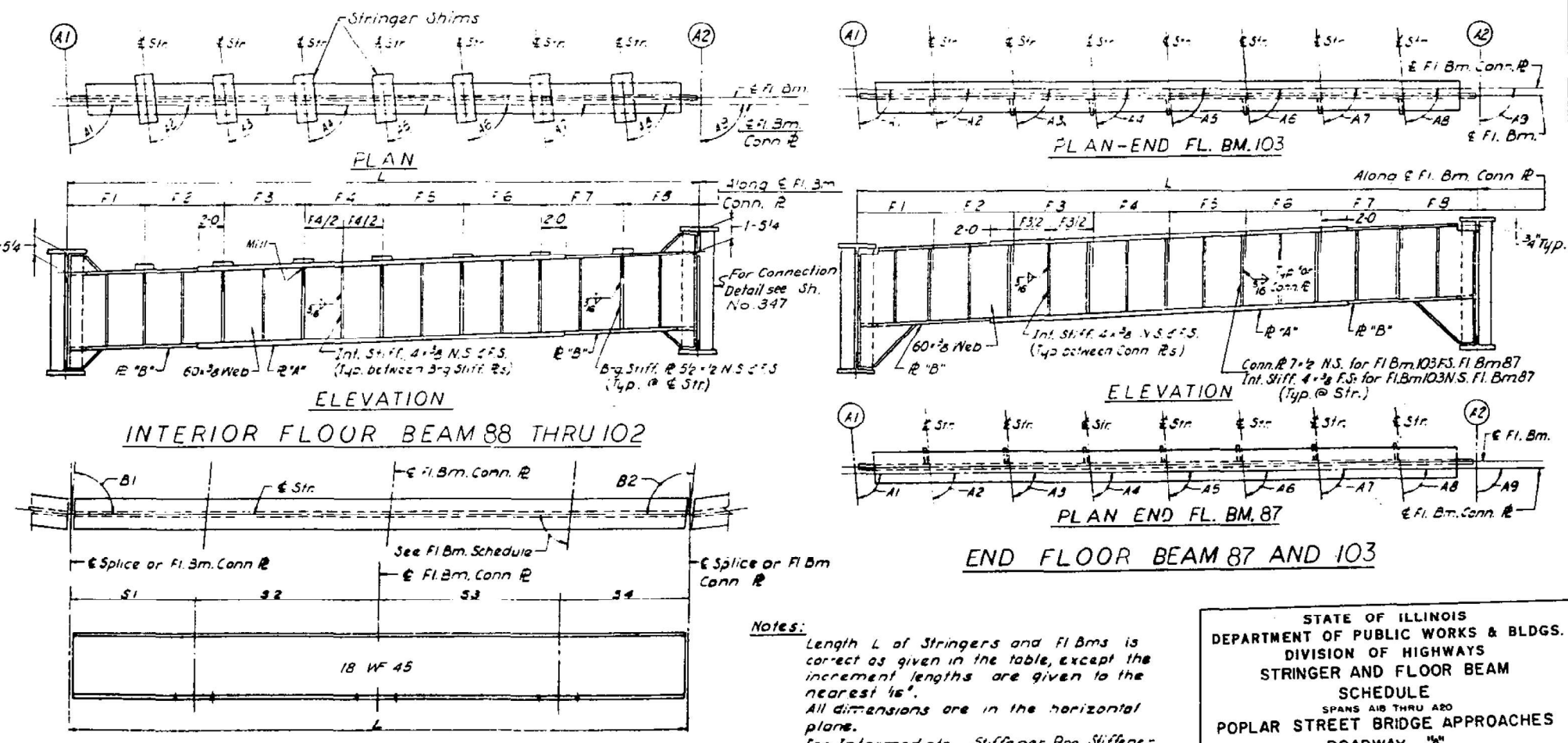
STRUCTURE 082-0141
SCALE: NTS SHEET 22 OF 25 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55/64	82-2HB-BP-1, 82-3HVB-3BP-1	ST. CLAIR	62	36
CONTRACT NO. 76P10				
ILLINOIS		FED. AID PROJECT		

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. - 70	B2-3HVB-E	ST. CLAIR	297	72
FED. ROAD DIV. NO. 4		ILLINOIS PROJECT		

STRNGR DIMENSIONS	S1		S2		S3		S4		S5		S6	
STRNGR	L	SI	SE	SS	SA	SI	SE	SS	SA	SI	SE	SS
161	25'-3 7/8"	11'-6 1/8"	○	○	14'-9 3/4"	87,26.44	91,47.30					
162	25'-4 13/16"	11'-6 9/16"	○	○	14'-10 1/4"	87,43.41	91,28.30					
163	26'-5 3/4"	11'-7"	○	○	14'-10 3/4"	88,02.31	91,09.43					
164	26'-6 3/4"	11'-7 7/16"	○	○	14'-11 5/16"	88,21.14	90,51.00					
165	26'-7 11/16"	11'-7 7/8"	○	○	14'-11 13/16"	88,39.50	90,32.23					
166	26'-8 11/16"	11'-8 5/16"	○	○	15'	88,58.20	90,13.54					
167	26'-9 11/16"	11'-8 3/4"	○	○	15'-0 7/8"	88,16.43	89,55.31					
168	27'-0 1/8"	11'-9 1/8"	○	○	15'-1 1/2"	87,11.59	91,43.11					
169	27'-1 7/16"	11'-9 3/4"	○	○	15'-2 1/4"	87,31.42	91,23.28					
170	27'-2 3/4"	11'-10 1/16"	○	○	15'-3 1/8"	87,51.19	91,03.92					
171	27'-3 10/16"	11'-10 1/2"	○	○	15'-4 1/4"	88,10.47	90,44.23					
172	27'-4 1/2"	11'-10 5/8"	○	○	15'-5 1/8"	88,30.10	90,25.01					
173	27'-5 1/2"	11'-11 1/8"	○	○	15'-6 1/4"	88,49.25	90,05.45					
174	27'-6 1/2"	11'-11 1/2"	○	○	15'-7 1/8"	88,68.40	89,46.37					
175	27'-7 1/2"	11'-11 3/4"	○	○	15'-8 1/4"	88,87.55	89,27.29					
176	27'-8 1/2"	11'-12 1/8"	○	○	15'-9 1/8"	89,06.70	89,08.21					
177	27'-9 1/2"	11'-12 1/2"	○	○	15'-10 1/8"	89,25.85	88,89.13					
178	27'-10 1/2"	11'-12 3/4"	○	○	15'-11 1/8"	89,45.00	88,70.05					
179	27'-11 1/2"	11'-13 1/8"	○	○	15'-12 1/8"	89,64.15	88,50.97					
180	28'-0 1/2"	11'-13 1/2"	○	○	15'-13 1/8"	89,83.30	88,31.89					
181	28'-1 1/2"	11'-13 3/4"	○	○	15'-14 1/8"	90,02.45	88,12.81					
182	28'-2 1/2"	11'-14 1/8"	○	○	15'-15 1/8"	90,21.60	87,93.73					
183	28'-3 1/2"	11'-14 1/2"	○	○	15'-16 1/8"	90,40.75	87,74.65					
184	28'-4 1/2"	11'-14 3/4"	○	○	15'-17 1/8"	90,59.90	87,55.57					
185	28'-5 1/2"	11'-15 1/8"	○	○	15'-18 1/8"	90,79.05	87,36.49					
186	28'-6 1/2"	11'-15 1/2"	○	○	15'-19 1/8"	90,98.20	87,17.41					
187	28'-7 1/2"	11'-15 3/4"	○	○	15'-20 1/8"	91,17.35	86,98.33					
188	28'-8 1/2"	11'-16 1/8"	○	○	15'-21 1/8"	91,36.50	86,79.25					
189	28'-9 1/2"	11'-16 1/2"	○	○	15'-22 1/8"	91,55.65	86,60.17					
190	28'-10 1/2"	11'-16 3/4"	○	○	15'-23 1/8"	91,74.80	86,41.09					
191	28'-11 1/2"	11'-17 1/8"	○	○	15'-24 1/8"	91,93.95	86,22.01					
192	29'-0 1/2"	11'-17 1/2"	○	○	15'-25 1/8"	92,13.10	86,02.93					
193	29'-1 1/2"	11'-17 3/4"	○	○	15'-26 1/8"	92,32.25	85,83.85					
194	29'-2 1/2"	11'-18 1/8"	○	○	15'-27 1/8"	92,51.40	85,64.77					
195	29'-3 1/2"	11'-18 1/2"	○	○	15'-28 1/8"	92,70.55	85,45.69					
196	29'-4 1/2"	11'-18 3/4"	○	○	15'-29 1/8"	92,89.70	85,26.61					
197	29'-5 1/2"	11'-19 1/8"	○	○	15'-30 1/8"	93,08.85	85,07.53					
198	29'-6 1/2"	11'-19 1/2"	○	○	15'-31 1/8"	93,28.00	84,88.45					
199	29'-7 1/2"	11'-19 3/4"	○	○	15'-32 1/8"	93,47.15	84,69.37					
200	29'-8 1/2"	11'-20 1/8"	○	○	15'-33 1/8"	93,66.30	84,50.29					
201	29'-9 1/2"	11'-20 1/2"	○	○	15'-34 1/8"	93,85.45	84,31.21					
202	29'-10 1/2"	11'-20 3/4"	○	○	15'-35 1/8"	94,04.60	84,12.13					
203	29'-11 1/2"	11'-21 1/8"	○	○	15'-36 1/8"	94,23.75	83,93.05					
204	30'-0 1/2"	11'-21 1/2"	○	○	15'-37 1/8"	94,42.90	83,73.97					
205	30'-1 1/2"	11'-21 3/4"	○	○	15'-38 1/8"	94,62.05	83,54.89					
206	30'-2 1/2"	11'-22 1/8"	○	○	15'-39 1/8"	94,81.20	83,35.81					
207	30'-3 1/2"	11'-22 1/2"	○	○	15'-40 1/8"	95,00.35	83,16.73					
208	30'-4 1/2"	11'-22 3/4"	○	○	15'-41 1/8"	95,19.50	82,97.65					
209	30'-5 1/2"	11'-23 1/8"	○	○	15'-42 1/8"	95,38.65	82,78.57					
210	30'-6 1/2"	11'-23 1/2"	○	○	15'-43 1/8"	95,57.80	82,59.49					
211	30'-7 1/2"	11'-23 3/4"	○	○	15'-44 1/8"	95,76.95	82,40.41					
212	30'-8 1/2"	11'-24 1/8"	○	○	15'-45 1/8"	95,96.10	82,21.33					
213	30'-9 1/2"	11'-24 1/2"	○	○	15'-46 1/8"	96,15.25	82,02.25					
214	30'-10 1/2"	11'-24 3/4"	○	○	15'-47 1/8"	96,34.40	81,83.17					
215	30'-11 1/2"	11'-25 1/8"	○	○	15'-48 1/8"	96,53.55	81,64.09					
216	31'-0 1/2"	11'-25 1/2"	○	○	15'-49 1/8"	96,72.70	81,45.01					

FLOOR BEAM DIMENSIONS												FLOOR BEAM DIMENSIONS											
FL. BM.	L	F1	F2	F3	F4	F5	F6	F7	F8	A1	A2	A3	A4	A5	A6	A7	A8	A9	Plate Top & Bot.	Plate Top & Bot.			
87	47'-7 11/16"	5'-11 7/16"	5'-11 7/16"	5'-11 7/16"	5'-11 7/16"	5'-11 7/16"	5'-11 7/16"	5'-11 7/16"	5'-11 7/16"	87,30.56	87,24.44	87,18.32	87,12.20	87,06.08	86,99.96	86,93.84	86,87.72	86,81.60	86,75.48	12'-1 1/2"	12'-3 1/4"		
88	48'-1 5/8"	5'-11 5/8"	6'-3 3/16"	6'-3 3/16"	6'-3 3/16"	6'-3 3/16"	6'-3 3/16"	6'-3 3/16"	6'-3 3/16"	87,31.01	87,46.54	88,05.51	88,24.41	88,43.25	88,62.01	88,80.77	88,99.53	89,18.29	89,37.05	12'-1 1/2"	12'-3 1/4"		
89	48'-1 1/2"	6'-1"	6'-1 7/16"	6'-1 7/16"	6'-1 7/16"	6'-1 7/16"	6'-1 7/16"	6'-1 7/16"	6'-1 7/16"	87,27.24	87,18.48	87,30.31	87,58.07	88,17.37	88,36.58	88,55.79	88,75.00	88,94.21	89,13.42	12'-1 1/2"	12'-3 1/4"		
90	49'-9 9/16"	6'-1 9/16"	6'-2 11/16"	6'-2 11/16"	6'-2 11/16"	6'-2 11/16"	6'-2 11/16"	6'-2 11/16"	6'-2 11/16"	87,23.48	87,51.13	88,10.56	88,30.32	88,50.02	88,69.78	88,89.54	89,09.29	89,29.05	89,48.81	12'-1 1/2"	12'-3 1/4"		
91	50'-7 7/8"	6'-3 7/16"	6'-4"	6'-4"	6'-4"	6'-4"	6'-4"	6'-4"	6'-4"	87,20.12	87,05.05	87,25.49	87,46.25	88,06.54	88,27.16	88,47.30	88,67.44	88,87.58	89,07.72	12'-1 1/2"	12'-3 1/4"		
92	51'-6 3/8"	6'-3 5/8"	6'-5 5/16"	6'-5 5/16"	6'-5 5/16"	6'-5 5/16"	6'-5 5/16"	6'-5 5/16"	6'-5 5/16"	87,16.37	87,37.30	87,58.14	88,18.50	88,39.19	88,59.41	88,79.55	88,99.70	89,19.84	89,40.01	12'-1 1/2"	12'-3 1/4"		
93	52'-5 3/16"	6'-6 1/8"	6'-6 5/8"	6'-6 5/8"	6'-6 5/8"	6'-6 5/8"	6'-6 5/8"	6'-6 5/8"	6'-6 5/8"	87,13.04	88,09.54	88,30.39	88,51.15	89,11.44	89,32.06	89,52.20	89,72.34	89,92.48	90,12.62	12'-1 1/2"	12'-3 1/4"		
94	53'-4 3/16"	6'-6 15/16"	6'-8 1/16"	6'-8 1/16"	6'-8 1/16"	6'-8 1/16"	6'-8 1/16"	6'-8 1/16"	6'-8 1/16"	87,09.30	87,23.50	87,45.34	88,07.11	88,28.39	88,49.59	89,11.11	89,32.15	89,53.19	89,74.23	12'-1 1/2"	12'-3 1/4"		
95	54'-3 3/8"	6'-9"	6'-9 7/16"	6'-9 7/16"	6'-9 7/16"	6'-9 7/16"	6'-9 7/16"	6'-9 7/16"	6'-9 7/16"	87,05.58	87,56.14	88,17.59	88,39.36	89,01.04	89,22.24	89,43.36	89,64.40	89,85.44	89,10.40	12'-1 1/2"	12'-3 1/4"		
96	55'-2 13/16"	6'-10 1/8"	6'-10 7/8"	6'-10 7/8"	6'-10 7/8"	6'-10 7/8"	6'-10 7/8"	6'-10 7/8"	6'-10 7/8"	87,02.27	87,25.10	87,47.43	88,10.08	88,32.24	88,54.31	89,16.29	89,38.19	89,59.99	90,21.79	12'-1 1/2"	12'-3 1/4"		
97	56'-2 1/2"	6'-11 3/4"	7'-5 1/16"	7'-5 1/16"	7'-5 1/16"	7'-5 1/16"	7'-5 1/16"	7'-5 1/16"	7'-5 1/16"	86,58.57	86,46.51	87,10.16	87,33.33	87,56.40	88,19.38	88,42.27	89,05.06	89,27.75	89,50.44	12'-1 1/2"	12'-3 1/4"		
98	57'-2 3/8"	7'-1 1/4"	7'-1 13/16"	7'-1 13/16"	7'-1 13/16"	7'-1 13/16"	7'-1 13/16"	7'-1 13/16"	7'-1 13/16"	86,55.28	87,19.16	87,42.41	88,05.58	88,29.05	88,52.03	89,14.51	89,37.30	89,59.99	90,22.68	12'-1 1/2"	12'-3 1/4"		
99	58'-2 1/2"	7'-2 13/16"	7'-3 5/16"	7'-3 5/16"	7'-3 5/16"	7'-3 5/16"	7'-3 5/16"	7'-3 5/16"	7'-3 5/16"	86,52.08	87,51.40	88,15.06	88,38.23	89,01.30	89,24.28	89,47.16	89,69.95	89,92.74	90,15.53	12'-1 1/2"	12'-3 1/4"		
100	59'-3 1/8"	7'-4"	7'-5"	7'-5"	7'-5"	7'-5"	7'-5"	7'-5"	7'-5"	86,48.39	86,54.27	87,21.01	87,47.35	88,14.08	88,40.42	89,07.15	89,33.47	89,59.79	90,16.11	12'-1 1/2"	12'-3 1/4"		
101	60'-5 13/16"	7'-6 3/4"	7'-6 3/4"	7'-6 3/4"	7'-6 3/4"	7'-6 3/4"	7'-6 3/4"	7'-6 3/4"	7'-6 3/4"	86,44.52	86,54.27	87,21.01	87,47.35	88,14.08	88,40.42	89,07.15	89,33.47	89,59.79	90,16.11	12'-1 1/2"	12'-3 1/4"		
102	61'-10 5/8"	7'-8 3/8"	7'-8 7/8"	7'-8 7/8"	7'-8 7/8"	7'-8 7/8"	7'-8 7/8"	7'-8 7/8"	7'-8 7/8"	85,31.03	86,06.59	86,40.12	87,13.26	87,46.43	88,20.01	88,53.20	89,26.40	89,59.60	90,32.80	12'-1 1/2"	12'-3 1/4"		
103	62'-10"	7'-10 1/4"	7'-10 1/4"	7'-10 1/4"	7'-10 1/4"	7'-10 1/4"	7'-10 1/4"	7'-10 1/4"	7'-10 1/4"	85,11.30	86,06.59	86,40.12	87,13.26	87,46.43	88,20.01	88,53.20	89,26.40	89,59.60	90,32.80	12'-1 1/2"	12'-3 1/4"		



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 Intermediate Stiffener, Brg. Stiffener and Connection Plate Details see Sh. No. 348.

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BLDGS.
DIVISION OF HIGHWAYS
STRINGER AND FLOOR BEAM
SCHEDULE
SPANS A18 THRU A20
POPLAR STREET BRIDGE APPROACHES
ROADWAY "A"
F.A.I. RT. 70 ST. CLAIR CO. SECTION B2-3HVB & E-1
H. W. LOCHNER, INC.
ENGINEERS
CHICAGO, ILLINOIS

DESIGNED BY: A.T. & A.F.C.
DRAWN BY: L.M.
CHECKED BY: A.A.<

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. I - 70	82-3HVFBE	ST. CLAIR	217	73
FED. ROAD DIV. NO. 4		ILLINOIS	PROJECT	

FLOOR BEAM 88 THRU 90	T1	T2	T3	T4
STR. 161 THRU 174	1 3/16	5/8	1 1/4	11/16

FLOOR BEAM 91 THRU 93	T1	T2	T3	T4
STR. 175 THRU 181	1 3/16	5/8	1 1/4	11/16

FLOOR BEAM 94 THRU 96	T1	T2	T3	T4
STR. 182 THRU 195	1 1/8	9/16	1 5/16	3/4

FLOOR BEAM 97	T1	T2	T3	T4
STR.				
196	15/16	3/8	1 1/2	15/16
197	1	7/16	1 7/16	7/8
198	1	7/16	1 7/16	7/8
199	1	7/16	1 7/16	7/8
200	1	1/2	1 3/8	7/8
201	1 1/16	1/2	1 3/8	13/16
202	1 1/16	1/2	1 3/8	13/16

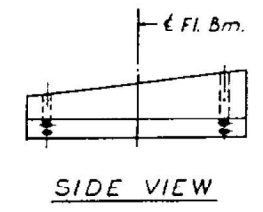
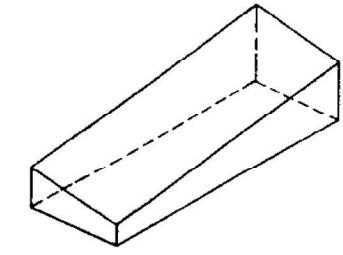
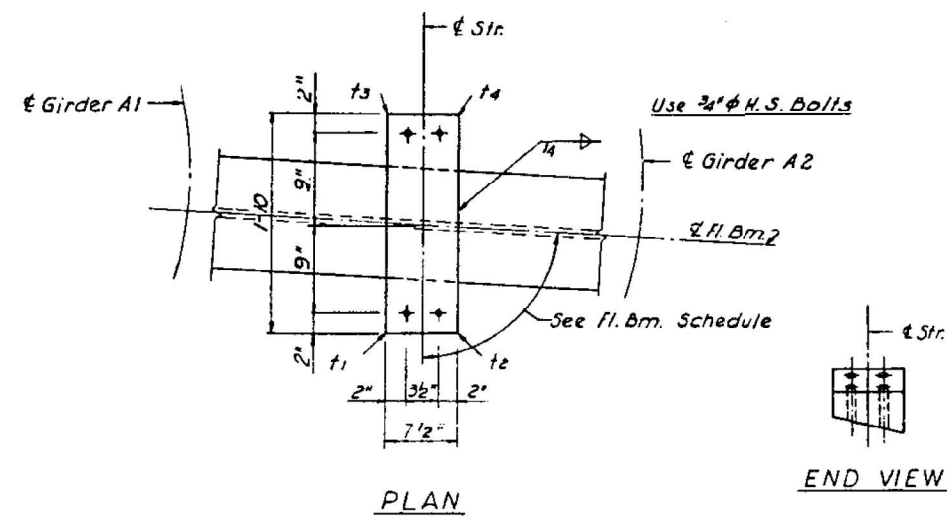
FLOOR BEAM 98	T1	T2	T3	T4
STR.				
196	15/16	7/16	1 7/16	15/16
197	15/16	7/16	1 7/16	15/16
198	1	7/16	1 7/16	7/8
199	1	1/2	1 3/8	7/8
200	1	1/2	1 3/8	7/8
201	1	1/2	1 3/8	7/8
202	1 1/16	1/2	1 3/8	13/16

FLOOR BEAM 99	T1	T2	T3	T4
STR.				
196	15/16	7/16	1 7/16	15/16
197	15/16	7/16	1 7/16	15/16
198	15/16	1/2	1 3/8	15/16
199	1	1/2	1 3/8	7/8
200	1	1/2	1 3/8	7/8
201	1	1/2	1 3/8	7/8
202	1	9/16	1 5/16	7/8

FLOOR BEAM 100	T1	T2	T3	T4
STR.				
203	7/8	7/16	1 7/16	1
204	7/8	7/16	1 7/16	1
205	7/8	7/16	1 7/16	1
206	7/8	7/16	1 7/16	1
207	7/8	7/16	1 7/16	1
208	7/8	7/16	1 7/16	1
209	15/16	7/16	1 7/16	15/16

FLOOR BEAM 101	T1	T2	T3	T4
STR.				
203	7/8	7/16	1 7/16	1
204	7/8	7/16	1 7/16	1
205	7/8	7/16	1 7/16	1
206	7/8	7/16	1 7/16	1
207	7/8	7/16	1 7/16	1
208	7/8	7/16	1 7/16	1
209	7/8	1/2	1 3/8	1

FLOOR BEAM 102	T1	T2	T3	T4
STR.				
210	13/16	7/16	1 7/16	1 1/16
211	13/16	7/16	1 7/16	1 1/16
212	7/8	7/16	1 7/16	1
213	7/8	7/16	1 7/16	1
214	7/8	7/16	1 7/16	1
215	7/8	1/2	1 3/8	1
216	7/8	1/2	1 3/8	1



SHIM DETAIL

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

FOR INFORMATION ONLY

DESIGNED BY A.S.C.
 DRAWN BY I.M.
 CHECKED BY A.S.
 APPROVED BY K.A.

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

STRINGER SHIMS
 SPANS A18 THRU A20
 POPLAR STREET BRIDGE APPROACHES
 ROADWAY "A"

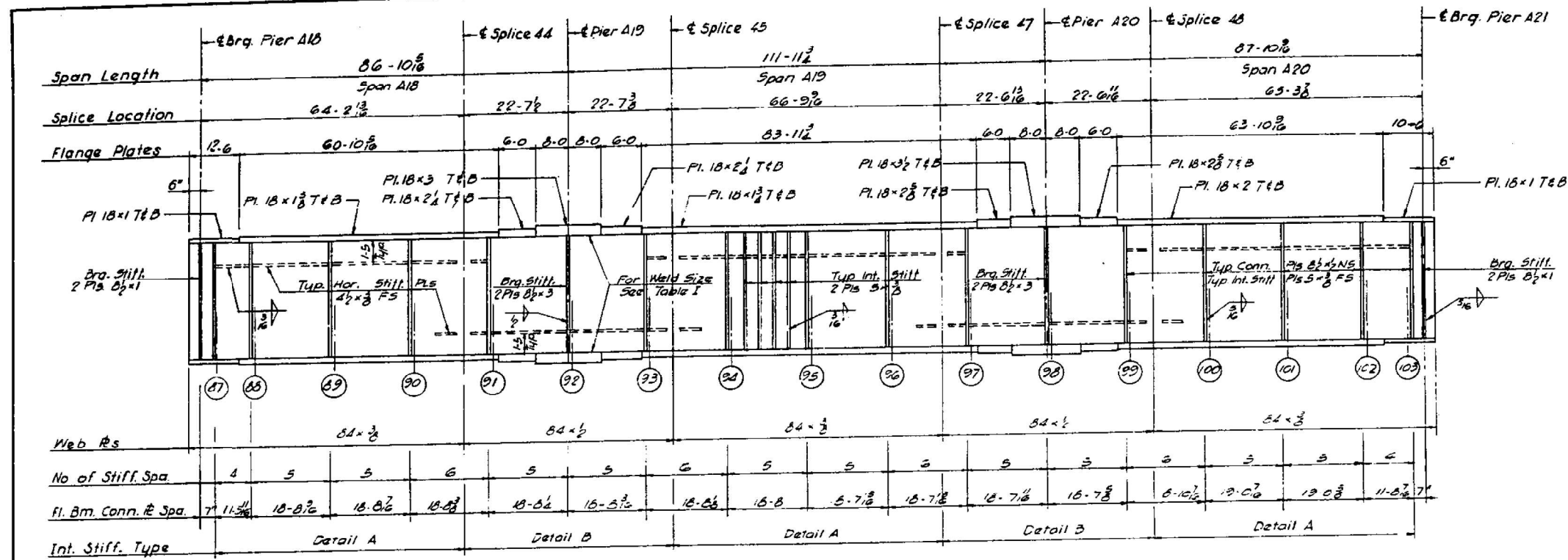
F.A.I. RT 70 ST. CLAIR CO. SECTION 82-3HVF B E-1
 H. W. LOCHNER, INC.
 ENGINEERS
 CHICAGO, ILLINOIS

SHEET NO. 203 of 526

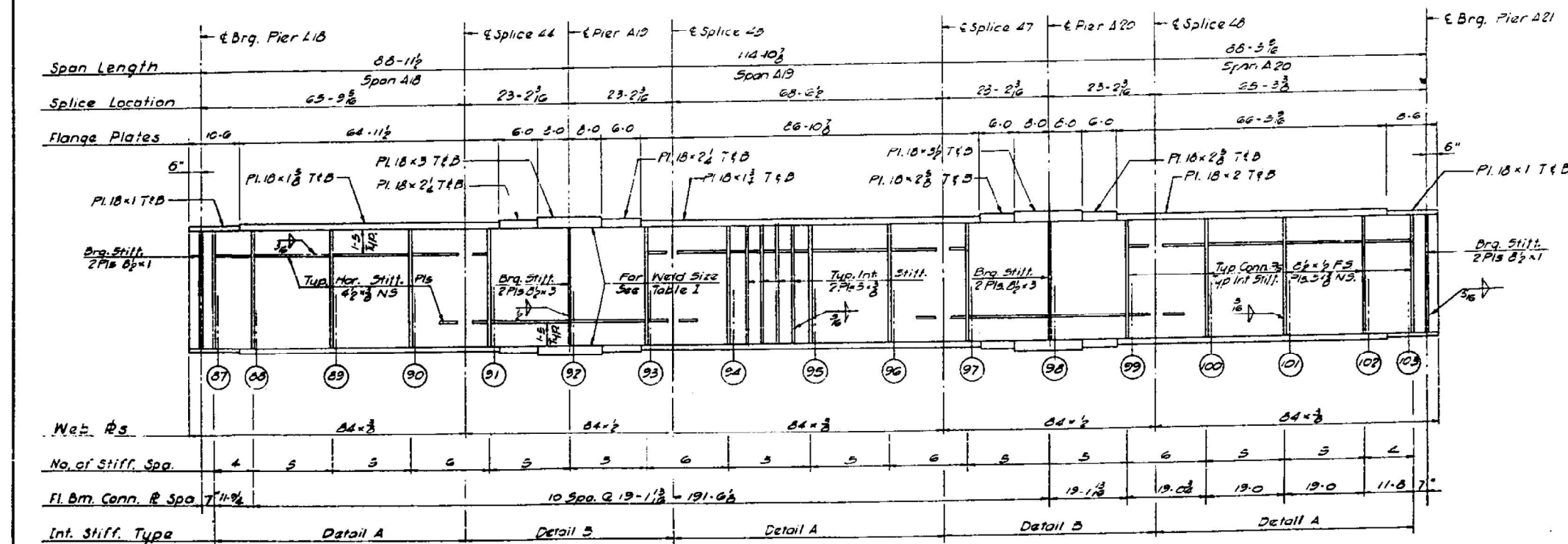
0141

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 PLOT DATE: 3/22/2021

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 70	82-3HV & E-1	ST. CLAIR	247	74
FED. ROAD DIV. NO. 4	ILLINOIS	PROJECT		



GIRDER A1
Spans A18 thru A20



GIRDER A2
Spans A18 thru A20

Notes:
All Longitudinal Dimensions shown are given along ϵ of Web. See Sheet No. 201.
All Bearing Stiffeners and Connection Plates to be vertical.
For Splice, Stiffeners, Connection Plate Details and Table I see Sheet No. 340, 349, 350.

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

GIRDERS A1 AND A2
SPANS A18 THRU A20
POPLAR STREET BRIDGE APPROACHES
ROADWAY "A"

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

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

SHEET NO. 204

0141

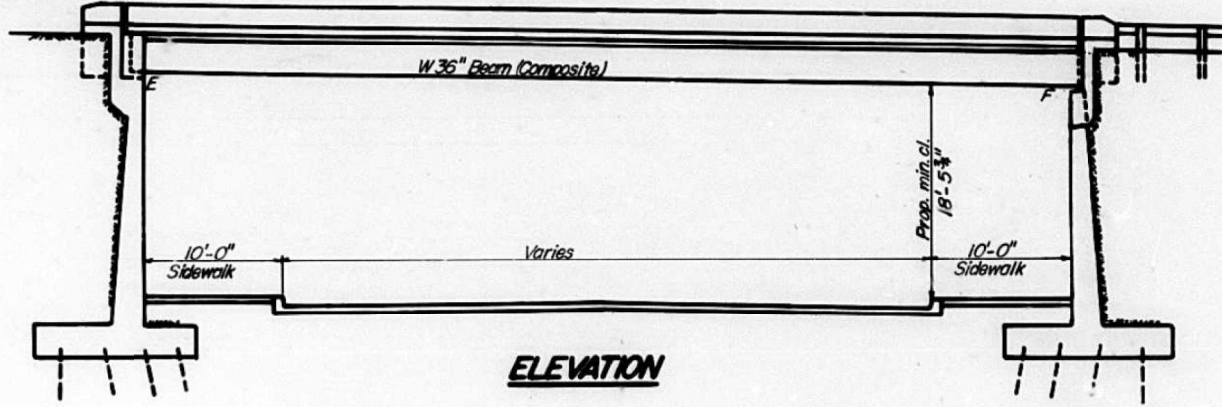
BM. 173 Concrete Monument 108' south of S.E. corner control tower for CSX Railroad 1/4 Lt. Sta. 63+84 - El. 428.63.

Existing Structure:
Simple span R.C. deck on 36 in. Wide Flange Beams, R.C. closed abutments on concrete filled metal shell piles. Existing deck to be replaced. Widen to the south.

No Salvage

**CURVE DATA
PAVEMENT SHIFT**

PI = 59+11.79
Δ = 2°-28'-32" Rt.
D = 0°-22'-38"
T = 328.31'
R = 15,194.16'
L = 656.52'
E = 3.55'



GENERAL NOTES

- Construction Specifications: The 1988 edition of the State of Illinois Department of Transportation's Standard Specifications for Road and Bridge Construction, addenda and the Special Provisions shall govern.
- Reinforcement bars shall conform to the requirements of AASHTO M-31, M-42 or M-53, Grade 60.
- Plan dimensions and details relative to the existing structure have been taken from existing plans or from field surveys and are subject to nominal construction variations. It shall be the Contractor's responsibility to verify such dimensions and details in the field and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of work. However, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.
- All transverse and longitudinal dimensions are measured horizontally.
- All dimensions are measured at a temperature of 50° F.
- The Contractor shall submit his proposed system to prevent debris from falling on the roadway below, for approval by the Engineer.
- Calculated weight of Structural Steel = 1163 32,390 lbs. (New Steel).
- The Lead and Chromate Free Alkyd paint system (except as noted) shall be used for painting new and existing structural steel. The color of the final finish coat shall be Interstate green (Munsell No. 7.5(G) 4/B). Cleaning of the existing structural steel shall be by Method A. (See Special Provisions).
- Field welding of construction accessories will not be permitted to the bottom flange of any beam. Field welding in other areas will be permitted only with the approval of the Engineer.
- Anchor bolts shall be set before bolting diaphragms over supports.
- The estimated abutment surface for Bridge Seat Sealer is 250 sq. ft.
- The Contractor shall be responsible for the maintenance of the electrical lines attached to the existing abutments at all times.

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER.	SUBSTR.	TOTAL
Class X Concrete - Superstructure	Cu. Yds.	132.9	—	132.9
Class X Concrete	Cu. Yds.	—	17.8	17.8
Reinforcement Bars - Epoxy Coated	Lbs.	30,020	2,450	32,470
Concrete Removal	Cu. Yds.	—	11.2	11.2
Removal of Existing Concrete Deck	Each	1	—	1
Furnishing and Erecting Structural Steel	Lump Sum	0.2	—	0.2
Stud Shear Connectors (3/4")	Each	174	—	174
Preformed Joint Seal 4"	Lin. Ft.	61.0	—	61.0
Preformed Joint Seal 1 1/2"	Lin. Ft.	64.0	—	64.0
Protective Coat*	Sq. Yds.	600	—	600
Name Plate	Each	1	—	1
Temporary Slab Support System	Each	1	—	1
Bridge Seat Sealer	Lump Sum	—	0.25	0.25
Cleaning and Painting Steel Bridge	Lump Sum	—	—	—
Temporary Bridge Rail	Lin. Ft.	82.5	—	82.5
Jack & Remove Existing Bearing	Each	9	—	9
Elastomeric Bearing Assembly Type I (Special)	Each	10	—	10

APPROVED
FOR STRUCTURAL ADEQUACY ONLY

Ralph E. Anderson
Engineer of Bridge and Structures

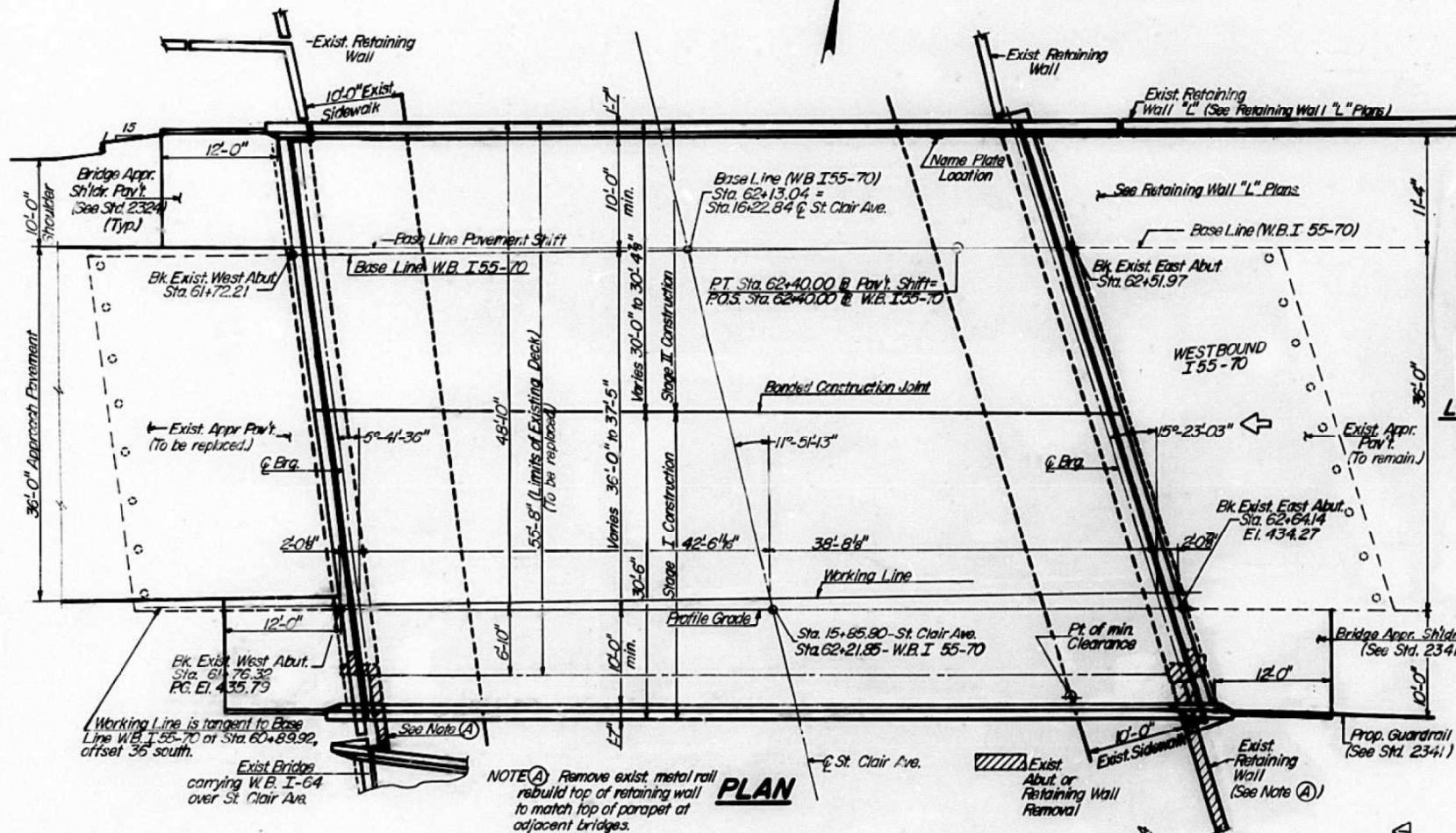
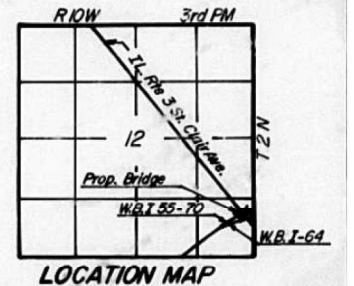
STATION 62+13.04
BUILT 199 BY
STATE OF ILLINOIS
F.A.I. Rte. 70 SEC. 82-(1,2)R-2
FA PROJECT IR-0003(22)
LOADING HS20 & ALT.
STR. NO. 082-0015

LETTERING FOR NAME PLATE

Standard 2113
Existing Name Plate to be removed (Cost Incidental) and replaced with new Name Plate.

INDEX OF SHEETS

- | | |
|--|---|
| SH# 1. General Plan & Elevation | SH# 9. West Abutment - Stage I Rehabilitation |
| 2. Stage Construction | 10. West Abutment - Stage II Rehabilitation |
| 3. Top of Slab Elevation | 11. Expansion Joint Details |
| 4. Superstructure Details | 12. Bar Splice Details |
| 5. Structural Steel Details | 13. Expansion Bearing Details |
| 6. Bearing - Parapet Details | 14. Temporary Slab Support System |
| 7. East Abutment - Stage I Rehabilitation | 15. Temporary Bridge Rail |
| 8. East Abutment - Stage II Rehabilitation | 16. Temporary Concrete Barrier |
| | 17. Anchor Bolt Details |



NOTE (A) Remove exist. metal rail rebuild top of retaining wall to match top of parapet at adjacent bridges.

**CURVE DATA
WESTBOUND I-55/70**

PI = 62+23.77
Δ = 4°-26'-18" Rt.
D = 4°-22'-35"
R = 1309.24'
Ls = 202.83'
L.T. = 135.26'
S.T. = 67.65'

DESIGN STRESSES

EXISTING
fc = 1,400 psi (Super.)
fc = 1,000 psi (Sub.)
fs = 20,000 psi (Reinf.)
fs = 18,000 psi (Struct. Steel)

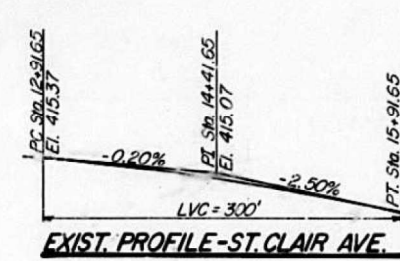
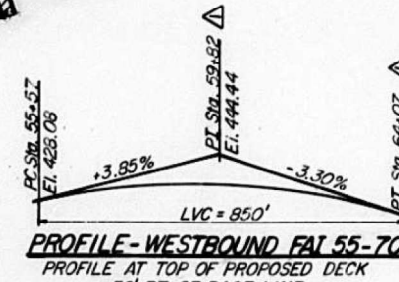
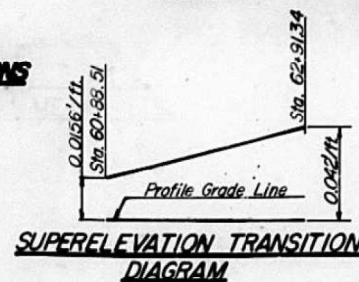
DESIGN SPECIFICATIONS

PROPOSED
fc = 3,500 psi
fy = 60,000 psi (Reinf.)
fy = 36,000 psi (Struct. Steel)

AASHTO 1988 (Existing)
AASHTO 1989 (Proposed)
1983 Seismic guide
Specifications with 1985 Interim

LOADING

Existing - H20-S16-44 and Alternate
Proposed - HS20-44 and Alternate
No allowance for future wearing surface.



FOR INFORMATION ONLY

GENERAL PLAN & ELEVATION

W.B. I-55-70 over ST. CLAIR AVE.
SECTION 82(1,2)R-2
STA. 62+22.84 (ST. CLAIR AVE)
STA. 62+13.04 (W.B. I-55-70)
ST. CLAIR COUNTY
STRUCTURE NO. 082-0015

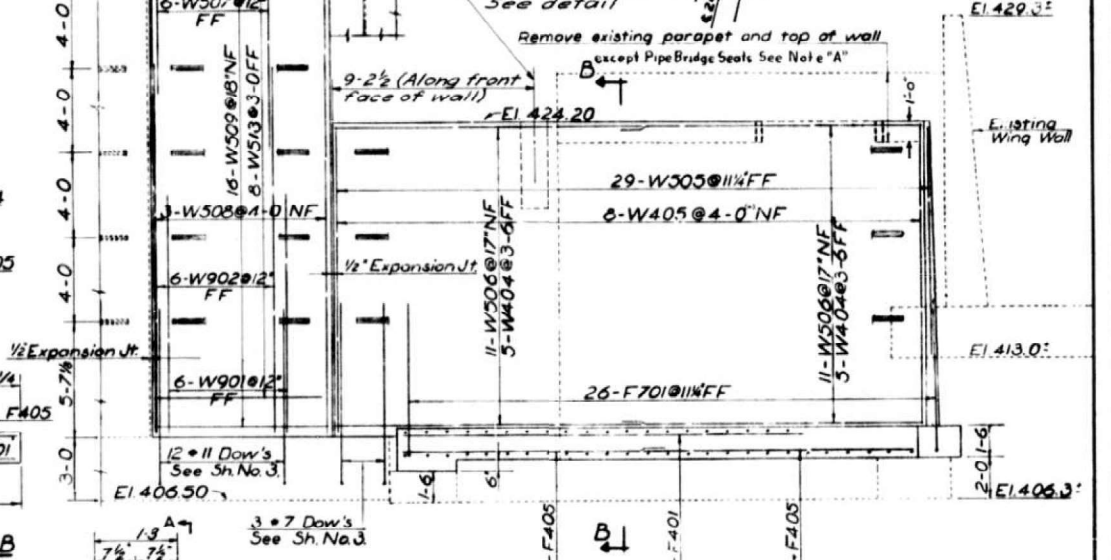
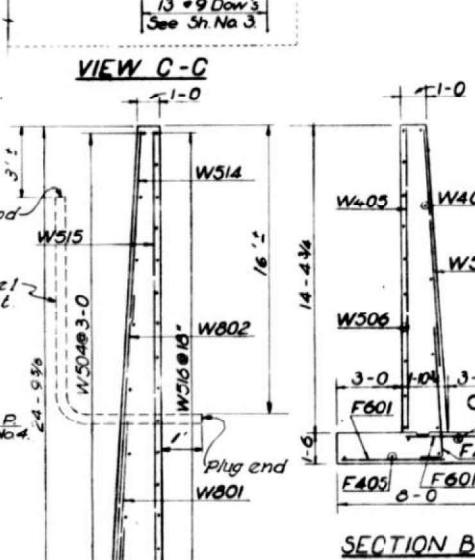
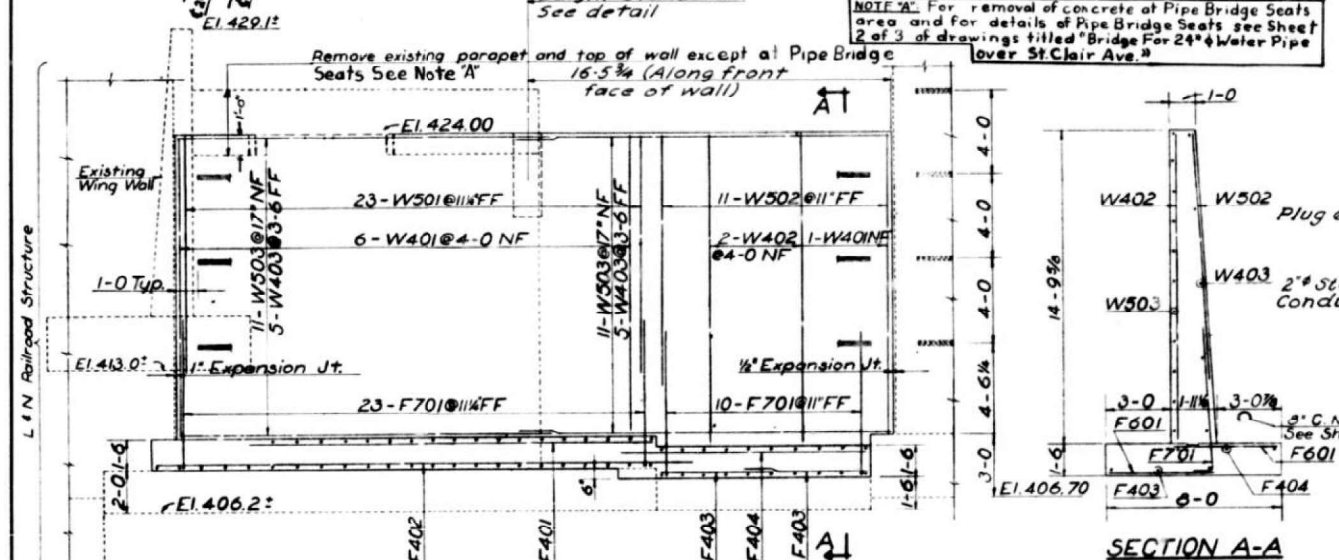
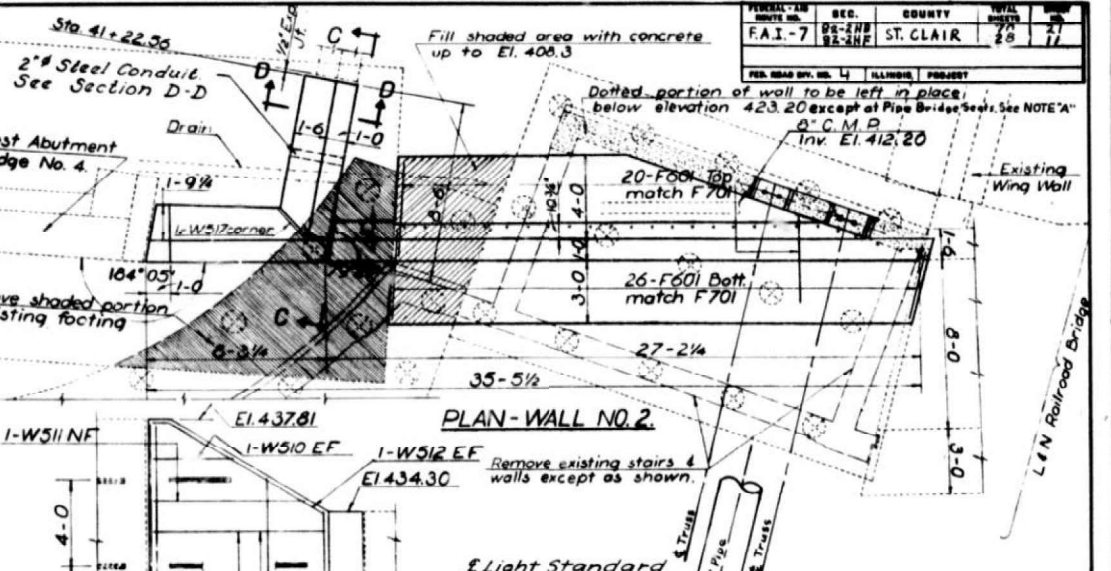
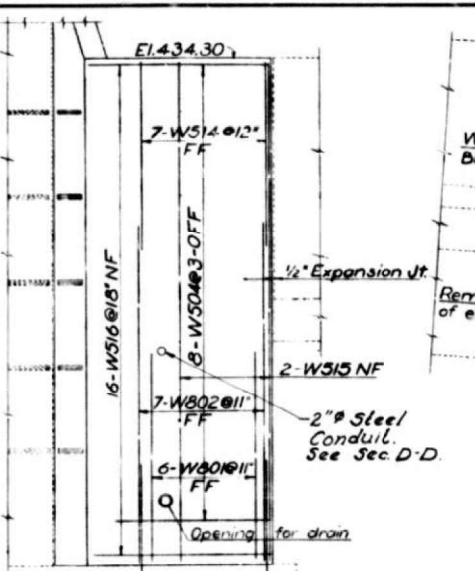
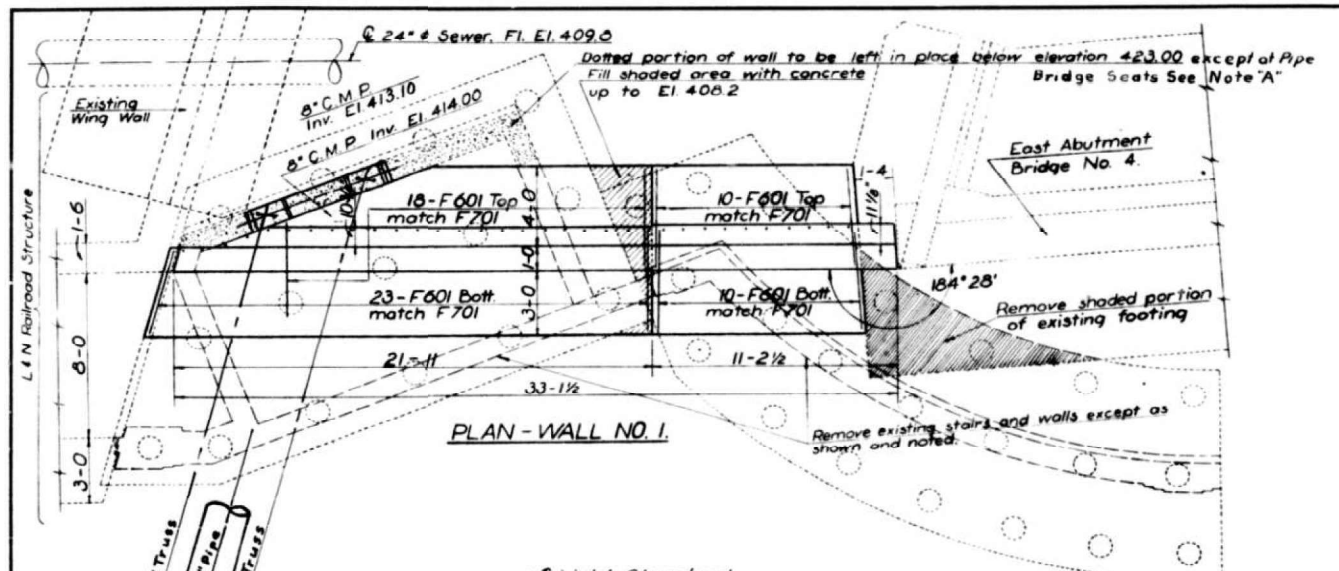
MODEL: 44001-NAHFE
FILE: NAHFE_20210309.dwg
PROJECT: 82-2HB-BP-1
OFFICE: ST. CLAIR COUNTY
DATE: 3/22/2021

SANDOVAL ENGINEERS, INC.

USER NAME = Hughesrd	DESIGNED -	REVISED -
PLOT SCALE = 40,0000 * 1/4"	CHECKED -	REVISED -
PLOT DATE = 3/22/2021	DATE -	REVISED -

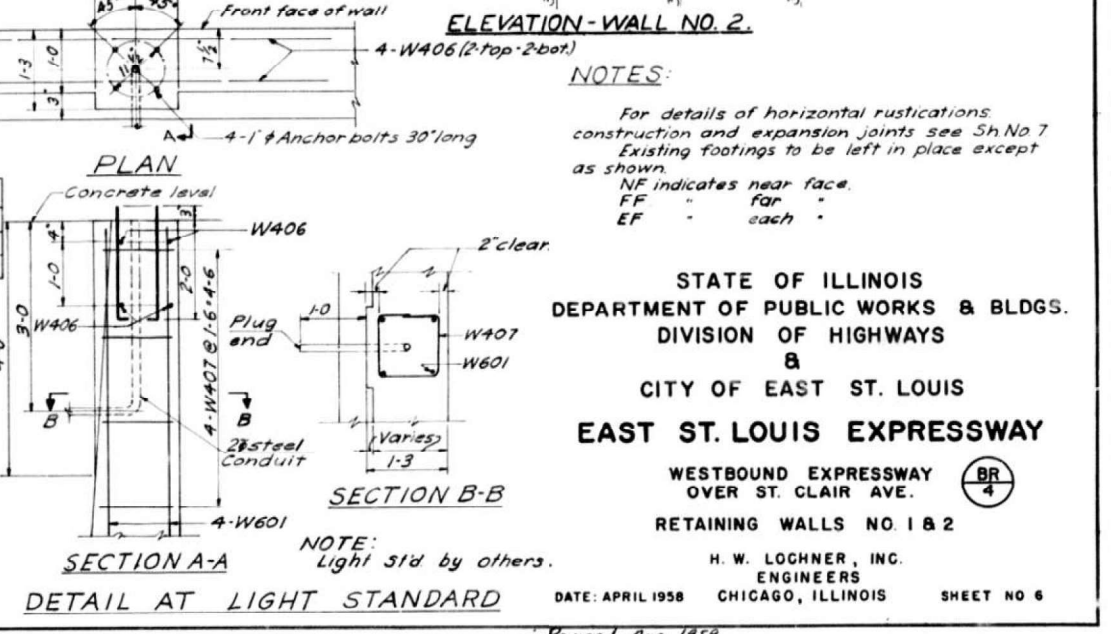
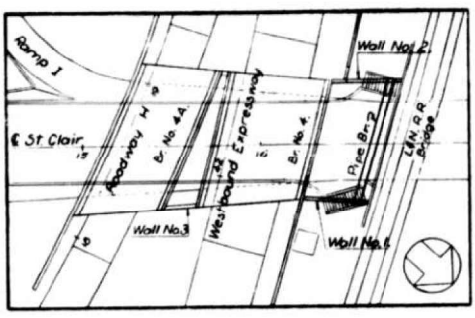
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STRUCTURE 082-0015



BAR LIST									
Mark	No Req'd	Size	Length	Shape	Mark	No Req'd	Size	Length	Shape
F401	3	#4	19-0		W508	3	#5	24-6 to 28-2	
F402	3	#4	24-0		W509	16	#5	9-0	
F403	6	#4	5-6		W510	2	#5	3-9	
F404	3	#4	11-0		W511	1	#5	7-0	
F405	6	#4	13-0		W512	2	#5	9-0	
F601	61	#6	5-0		W513	8	#5	7-6	
F701	33	#7	7-11		W514	7	#5	10-11	
W407	4	#4	4-2		W515	2	#5	24-7	
W401	7	#4	14-1		W516	16	#5	8-2	
W402	2	#4	14-7		W517	1	#5	14-3	
W403	10	#4	17-0		W601	4	#6	10-0	
W404	10	#4	14-0		W801	6	#8	10-0	
W405	0	#4	14-3		W802	7	#8	16-0	
W406	4	#4	8-0		W901	6	#9	11-6	
W501	23	#5	11-2		W902	6	#9	17-0	
W502	11	#5	11-8						
W503	22	#5	17-0						
W504	6	#5	7-9						
W505	29	#5	11-3						
W506	22	#5	13-9						
W507	6	#5	13-0						

BILL OF MATERIAL			
	Wall 1	Wall 2	Total
Class "X" concrete	cu yd. 38.8	56.2	95.0
Reinforcement bars	lbs. 2120	3460	5770
Class "A" excavation for struct.	cu yd. 49	32	81



NOTES:

For details of horizontal rustication construction and expansion joints see Sh. No. 7

Existing footings to be left in place except as shown.

NF indicates near face.

FF " far "

EF " each "

4-1" Anchor bolts 30" long

2" clear.

28" Steel Conduit

NOTE: Light std by others.

Revised Aug 1959

Designed by H.N.
Drawn by F.Z.
Checked by K.K.

FOR INFORMATION ONLY

MODEL: I:\MODELS\HMF... FILE NAME: ...

USER NAME = hughesrd	DESIGNED -	REVISED -
PLOT SCALE = 40,0000' / in.	CHECKED -	REVISED -
PLOT DATE = 3/22/2021	DATE -	REVISED -

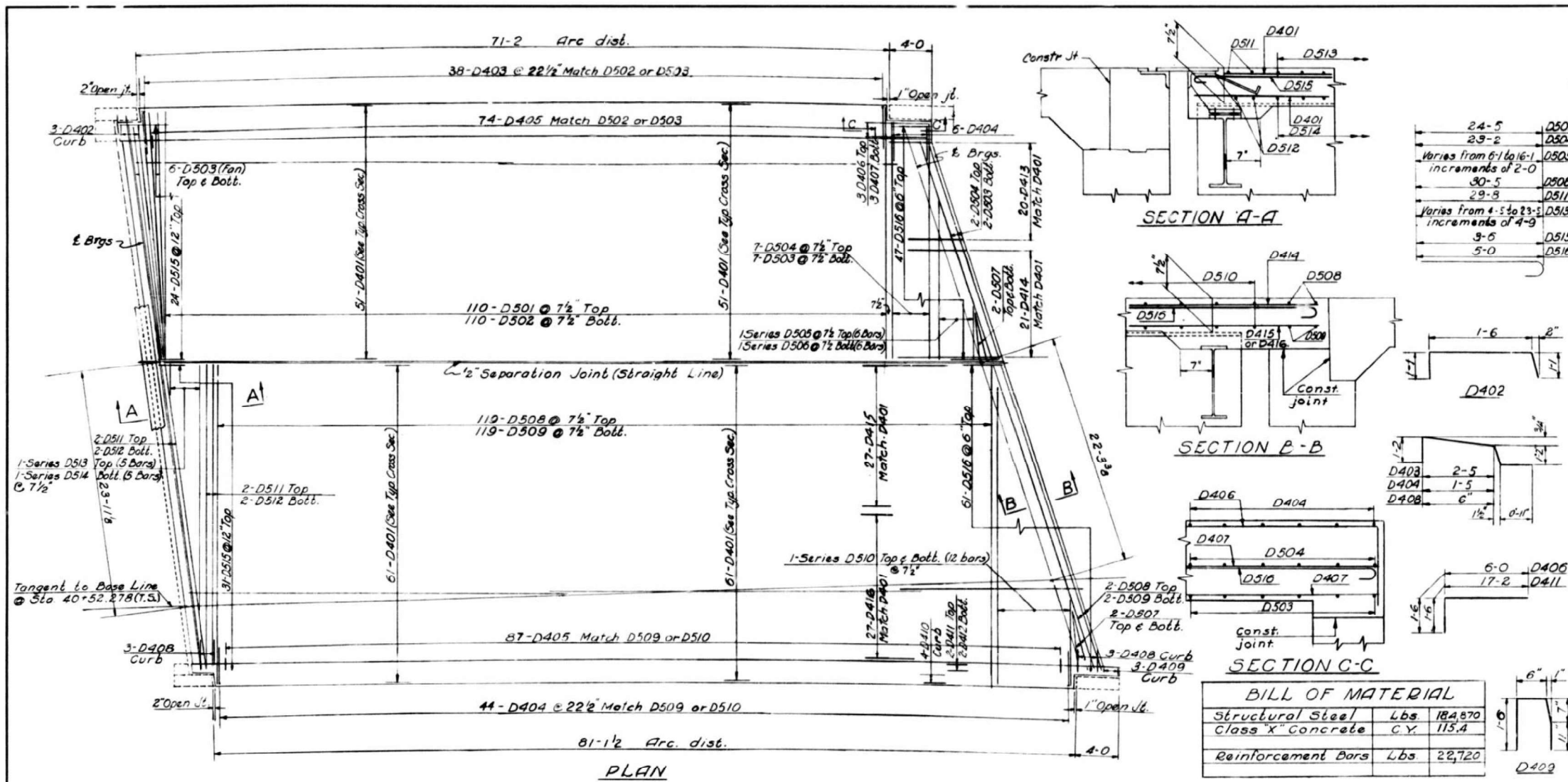
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STRUCTURE 082-0015

SCALE: NTS SHEET 5 OF 9 SHEETS STA. TO STA.

F.A.I. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55/64	82-2HB-BP-1, 82-3HB-3BP-1	ST. CLAIR	62	44
CONTRACT NO. 76P10				
ILLINOIS FED. AID PROJECT				

F.A.I. - 7	REC. 11-2-59	COUNTY ST. CLAIR	TOTAL SHEETS 72	SHEET NO. 10
------------	--------------	------------------	-----------------	--------------



BAR SCHEDULE				
MARK	No. Req'd	SIZE	LENGTH	SHAPE
D501	110	8	25-0	U
D502	110	1	24-5	U
D503	21		23-2	U
D504	9		23-9	U
D505	6		6-8 to 16-8 2-0 incr. 1-Series	U
D506	6		6-1 to 16-1 2-0 incr. 1-Series	U
D507	8		5-8	U
D508	121		31-0	U
D509	121		30-5	U
D510	24		8-2 to 28-3 1-11 incr. 2-Series of 12	U
D511	4		30-3	U
D512	4		29-8	U
D513	5		5-0 to 24-0 4-9 incr. 1-Series	U
D514	5		4-5 to 23-5 4-9 incr. 1-Series	U
D515	53		4-1	U
D516	108	#5	5-7	U
D401	224	#4	35-8	U
D402	3		3-8	U
D403	38		5-8	U
D404	50		4-8	U
D405	161		1-2	U
D406	3		7-6	U
D407	3		6-0	U
D408	6		3-9	U
D409	3		3-6	U
D410	4		11-4	U
D411	2		18-8	U
D412	2		17-8	U
D413	20		8-5	U
D414	21		10-2	U
D415	27		12-3	U
D416	27	#4	14-11	U

BILL OF MATERIAL		
Structural Steel	Lbs.	184,870
Class X Concrete	C.Y.	115.4
Reinforcement Bars	Lbs.	22,720

METHOD OF DETERMINING FILLET HEIGHTS
 After all Structural Steel has been erected, elevations of the top flanges of the beams shall be taken at intervals not to exceed 10 ft. From these elevations subtract the increment of deflection for these points, determined from the D.L. deflection diagram. The elevations so obtained subtracted from the theoretical grade elevations, minus slab thickness, equals the fillet heights above top of beam.

STATE OF ILLINOIS
 DEPARTMENT OF PUBLIC WORKS & BLDGS.
 DIVISION OF HIGHWAYS
 &
 CITY OF EAST ST. LOUIS
EAST ST. LOUIS EXPRESSWAY
 WESTBOUND EXPRESSWAY OVER ST. CLAIR AVE. **BR 4**
 SLAB
 H. W. LOCHNER, INC.
 ENGINEERS
 DATE: APRIL 1958 CHICAGO, ILLINOIS SHEET NO. 10

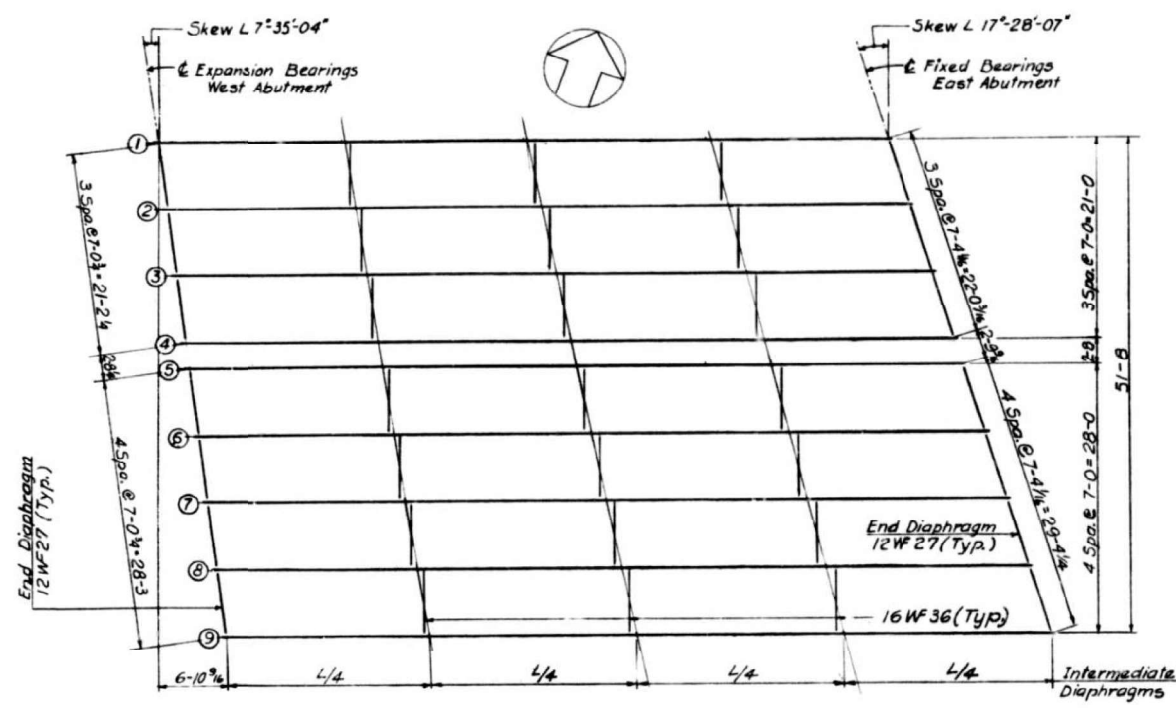
Designed By: H.N.
 Drawn By: V.B.
 Checked By: H.N.

Rev. 12-10-59 Revid curb ht. 9" to 10" wmg

FOR INFORMATION ONLY

USER NAME = Hughesrd	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	STRUCTURE 082-0015	F.A.I. RTE. 55/64	SECTION 82-21B-BP-1, 82-31VB-3BP-1	COUNTY ST. CLAIR	TOTAL SHEETS 62	SHEET NO. 46
PLOT SCALE = 44.0925' / in.	DRAWN -	REVISED -		SCALE: NTS	SHEET 7	OF 9 SHEETS	STA. _____ TO STA. _____	CONTRACT NO. 76P10	ILLINOIS FED. AID PROJECT
PLOT DATE = 3/22/2021	CHECKED -	REVISED -							
	DATE -	REVISED -							

PROJECT NO.	82-21B	SECTION	ST. CLAIR	TOTAL SHEETS	72	SHEET NO.	27
F.A.I. - 7	ST. CLAIR	ST. CLAIR		72	26		12
FED. ROAD DIST. NO. 4 ILLINOIS PROJECT							

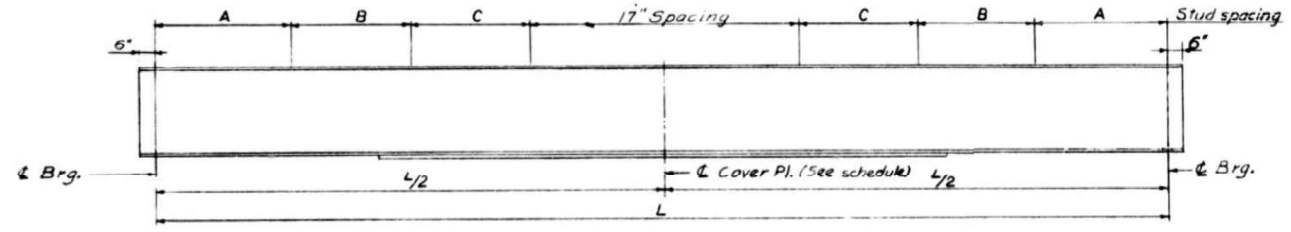


FRAMING PLAN

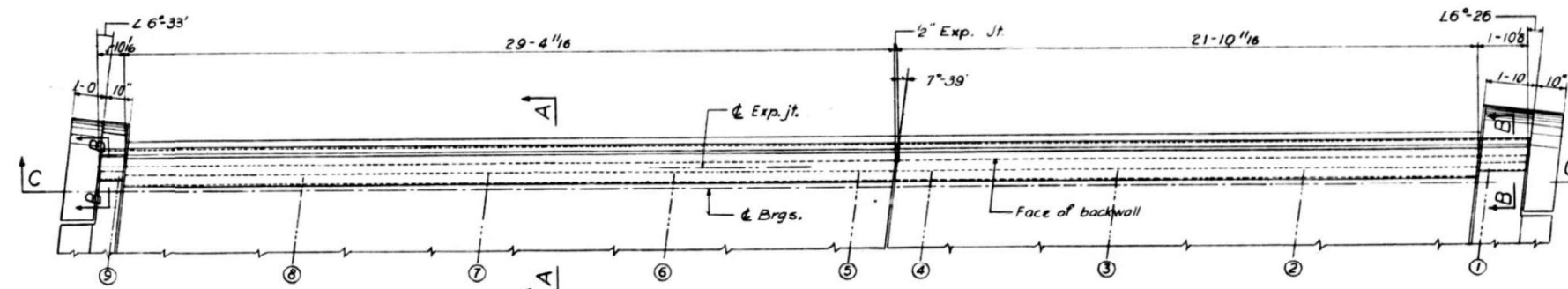
STRINGER	LENGTH (L)	MATERIAL	BOTTOM PLATES		STUD SPACING		
			SECTION	LENGTH	A	B	C
1	73-6 1/4	36 WF 194	11" x 1 1/16"	46'-0"	11'-0" @ 12"	10'-10" @ 13"	11'-3" @ 15"
2	74-10 1/16		11" x 1 1/16"	54'-0"	10'-7 1/2" @ 7 1/2"	10'-6" @ 9"	10'-6" @ 14"
3	76-1 3/16		11" x 3/4"	56'-6"			
4	77-4 3/16		11" x 3/8"	58'-0"			
5	77-10 3/8		11" x 7/8"	59'-0"			
6	79-1 5/8	36 WF 194	11" x 1"	60'-0"			
7	80-4 3/8	36 WF 230	15" x 1/2"	55'-0"			
8	81-8 1/8	36 WF 230	15" x 1/2"	57'-0"	10'-7 1/2" @ 7 1/2"	10'-6" @ 9"	10'-6" @ 14"
9	82-11 3/8	36 WF 230	15" x 1"	50'-0"	11'-0" @ 11"	10'-10" @ 13"	11'-3" @ 15"

TOP OF BEAM ELEVATIONS

LOCATION BEAM	E BRG WEST ABUTMT.	E BRG EAST ABUTMT.
1	436.38	435.61
2	436.21	435.34
3	436.02	435.05
4	435.82	434.76
5	435.75	434.65
6	435.55	434.35
7	435.35	434.04
8	435.15	433.74
9	434.95	433.41

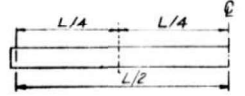


TYPICAL STRINGER



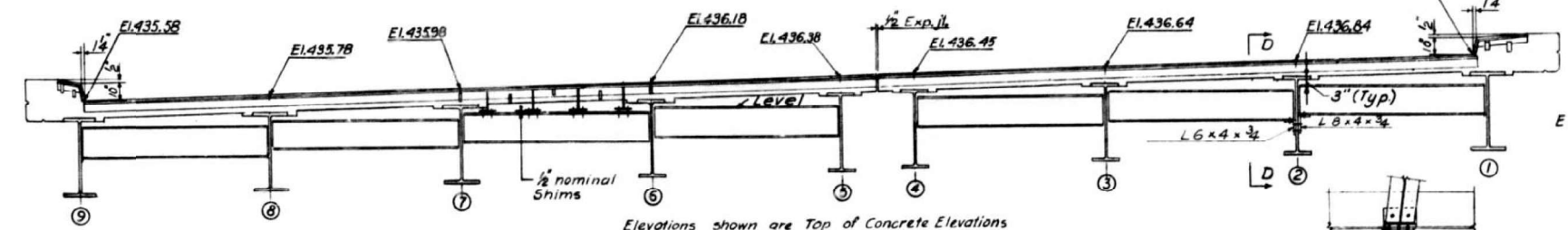
PLAN OF EXPANSION GUARD

LOCATION	D.L. DEFLECTION & CAMBER									
	Stringer No. 1	Stringer No. 2	Stringer No. 3	Stringer No. 4	Stringer No. 5	Stringer No. 6	Stringer No. 7	Stringer No. 8	Stringer No. 9	Stringer No. 10
DEFL. DUE TO WT. OF STEEL	1/4	3/8	1/4	3/8	1/4	3/8	1/4	3/8	1/4	3/8
DEFL. DUE TO WT. OF CONG.	1	1 1/2	3/4	1 1/4	1/2	1 1/4	1/2	1 1/4	1/2	1 1/4
CONVEXITY REQ'D FOR VERTICAL CURVE	1/2	1/6	2	1/6	9/6	3/4	9/6	3/4	9/6	3/4
REQ'D CAMBER	1 3/4	2 1/2	1 1/2	2 1/2	1 1/6	2 1/6	1 3/4	2 1/6	1 3/4	2 1/6



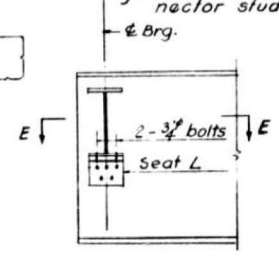
NOTE:

For bearing details, diaphragm connections, expansion guard sections, cover pl. welding details & shear connector stud welding details see Sh. No. 9



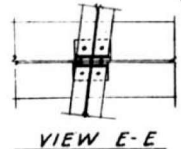
Elevations shown are Top of Concrete Elevations on & Brg. line.

SECTION C-C



SECTION D-D

Note: End diaphragm conn. @ fixed bearing similar.



VIEW E-E

Designed by: S.K.
Drawn by: V.B.
Checked by: H.N.

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BLDGS.
DIVISION OF HIGHWAYS
&
CITY OF EAST ST. LOUIS
EAST ST. LOUIS EXPRESSWAY
WESTBOUND EXPRESSWAY
OVER ST. CLAIR AVE. **BR 4**
FRAMING PLAN & STEEL DETAILS
H. W. LOCHNER, INC.
ENGINEERS
CHICAGO, ILLINOIS
DATE: APRIL 1958
SHEET NO. 8

FOR INFORMATION ONLY

Rev. 12-10-39 Increased curb ht. 9" to 10" w/m

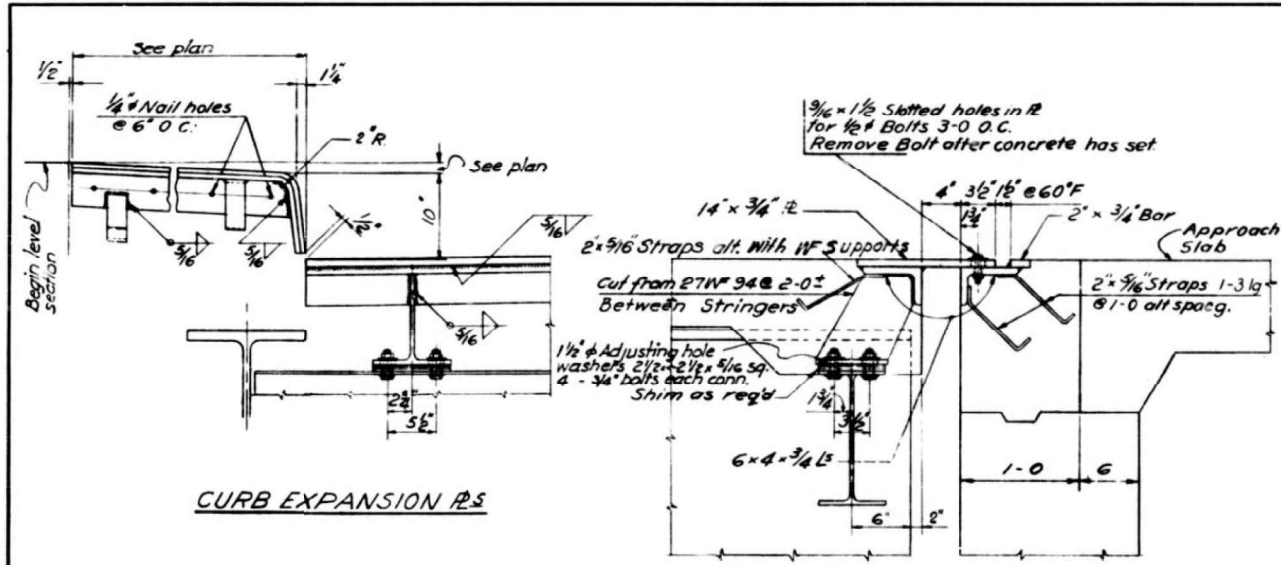
USER NAME = hughesrd	DESIGNED - _____	REVISED - _____
PLOT SCALE = 44.0925' / in.	DRAWN - _____	REVISED - _____
PLOT DATE = 3/22/2021	CHECKED - _____	REVISED - _____
	DATE - _____	REVISED - _____

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

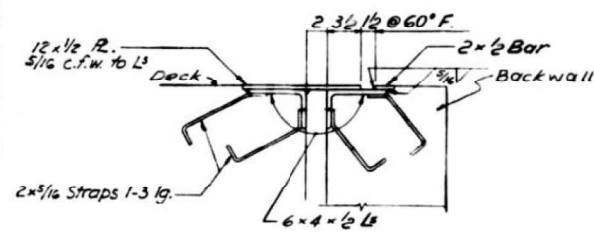
STRUCTURE 082-0015

SCALE: NTS SHEET 8 OF 9 SHEETS STA. _____ TO STA. _____

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55/64	82-21B-BP-1, 82-31VB-3BP-1	ST. CLAIR	62	47
CONTRACT NO. 76P10			ILLINOIS FED. AID PROJECT	

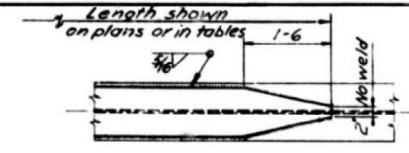


CURB EXPANSION PLATES

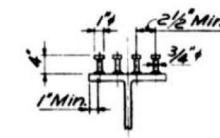


SECTION B-B

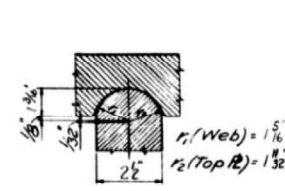
All welds shown are 3/16 continuous fillet welds
SECTION A-A



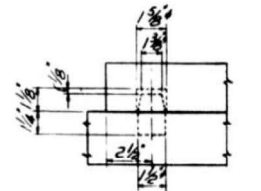
COVER PLATE DETAIL



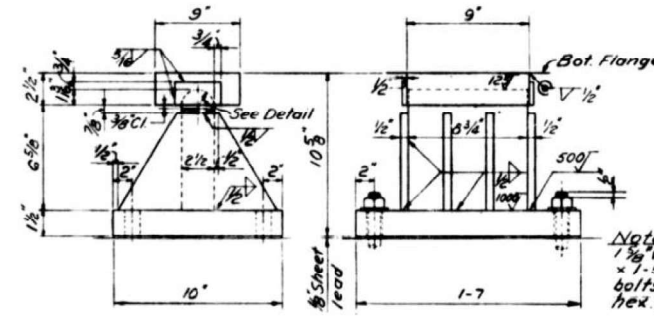
SHEAR CONNECTOR DETAIL



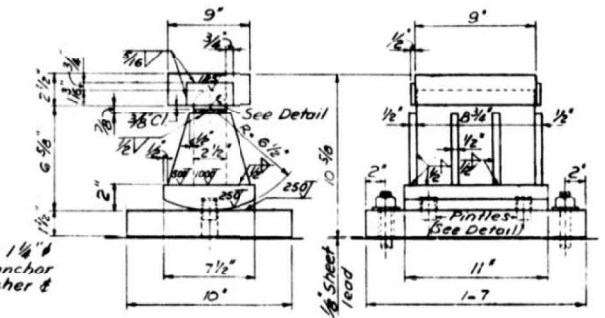
TOP BEARING DETAIL



PINTLE DETAIL



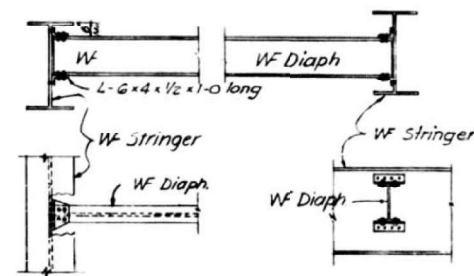
FIXED BOLSTER



EXPANSION ROCKER

BEARING DETAILS

Note: 1/2 inch holes for 1/4 inch x 1.5 inch swedge anchor bolts with washer & hex head nut.



INTERMEDIATE DIAPHRAGMS

Designed by: B.S.T.
Drawn by: E.M.
Checked by: B.S.T.

Rev. 12-10-59 Revid curb ht. 9" to 10" wmb

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BLDGS.
DIVISION OF HIGHWAYS
&
CITY OF EAST ST. LOUIS
EAST ST. LOUIS EXPRESSWAY

STEEL DETAILS
STANDARD SD 1

H. W. LOCHNER, INC.
ENGINEERS

DATE: APRIL 1958 CHICAGO, ILLINOIS SHEET NO. 9

FOR INFORMATION ONLY

USER NAME = hughesrd	DESIGNED -	REVISED -
PLOT SCALE = 44.0925' / in.	DRAWN -	REVISED -
PLOT DATE = 3/22/2021	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STRUCTURE 082-0015

SCALE: NTS SHEET 9 OF 9 SHEETS STA. _____ TO STA. _____

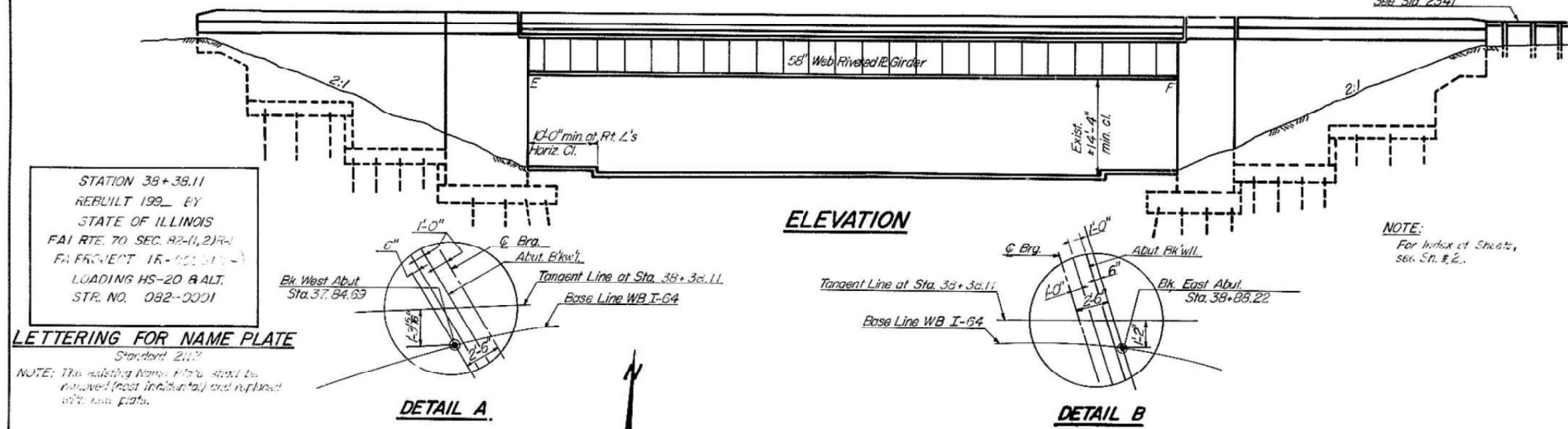
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55/64	82-21B-BP-1, 82-31VB-3BP-1	ST. CLAIR	62	48
ILLINOIS FED. AID PROJECT			CONTRACT NO. 76P10	

B.M. Chiseled "□" in center of south concrete foundation for sign truss over Ramps I & J, 127' right Station 35+40, EL. 416.80.

Existing Structure: Simple Span RC Deck on Riveted Plate Girders. Closed RC Abuts on Metal Shell Piles. Existing Deck to be removed and replaced.

No Salvage.

ROUTE NO	SEC	COUNTY	TOTAL SHEETS	SHEET NO
FAI-70	*	ST. CLAIR	163	55
STA	TO STA			
FED. ROAD DIST. NO.			ILLINOIS PROJECT	
82-1(1,2)R-1			Sh. & L. of 14.	



STATION 38+38.11
REBUILT 199 BY
STATE OF ILLINOIS
FAI RTE. 70 SEC. 82-1(1,2)R-1
FRAGMENT 1R-102 (11'-0")
LOADING HS-20 & ALT.
STR. NO. 082-0001

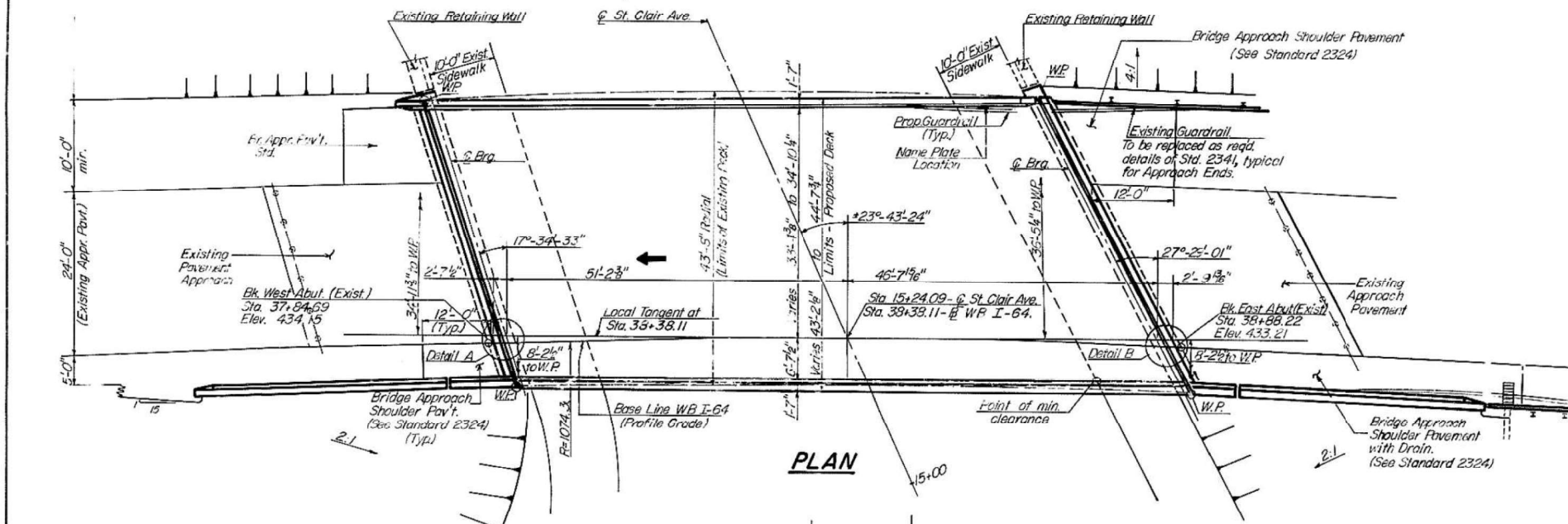
LETTERING FOR NAME PLATE
Standard 2112

NOTE: The existing Name Plate shall be removed (not incidental) and replaced with this plate.

- GENERAL NOTES**
- Construction Specifications: The 1985 edition of the State of Illinois Department of Transportation's "Standard Specifications for Road and Bridge Construction," and all its Special Provisions shall govern.
 - Reinforcement bars shall conform to the requirements of AASHTO M-31, M-42 or M-53, Grade 60.
 - Plan dimensions and details relative to the existing structure have been taken from existing plans or from field surveys, and are subject to nominal construction variations. It shall be the Contractor's responsibility to verify such dimensions and details in the field and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of work. However, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.
 - All transverse and longitudinal dimensions are measured horizontally.
 - All dimensions are measured at a temperature of 50° F.
 - The Contractor shall submit his proposed system to prevent debris from falling on the roadway below, for approval by the Engineer.
 - All Existing Structural Steel shall be given a three coat lead and chromate free alkylid point system. The color of the final finish coat shall be Interstate Green (Munsell No. 7.5G-4/3). Cleaning of structural steel shall be done by Method A (Complete Paint Removal). See Special Provisions.
 - Protect and maintain electrical attachments to bridge superstructure and/or deck slab.
 - The estimated abutment surface for Bridge Seat Sealer is 190 sq.ft.
 - Cover for reinforced steel shall be 1 1/2" minimum unless otherwise noted.

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER.	SUBSTR.	TOTAL
Class X Concrete - Superstructure	Cu. Yds.	124.6	—	124.6
Class X Concrete	Cu. Yds.	—	22.4	22.4
Reinforcement Bars - Epoxy Coated	Lbs.	26,270	3,540	29,810
Preformed Joint Seal 1 1/4"	Lin. Ft.	50.0	—	50.0
Preformed Joint Seal 4"	Lin. Ft.	46.0	—	46.0
Removal of Existing Concrete Deck	Each	1	—	1
Name Plate	Each	1	—	1
Protective Coat*	Sq. Yds.	560.0	—	560.0
Stud Shear Connectors (3/4")	Each	1,650	—	1,650
Structural Steel	Lbs.	2,330	—	2,330
Concrete Removal	Cu. Yds.	—	12.7	12.7
Elastomeric Bearing Assembly Type I (Special)	Each	7	—	7
Cleaning and Painting Steel Bridges	Lump Sum	—	—	—
Bridge Seat Sealer	Lump Sum	—	—	—
Jack and Remove Existing Bearings	Each	7	—	7



HORIZONTAL CURVE DATA
WB I-64
 PI = STA. 38+47.02
 Δ = 9° 40' 50"
 DC = 5° 20' 00"
 R = 1074.30'
 L = 181.51'
 T = 90.97'
 E = 3.34'
 S.E. = 1.11'
 S.C. = 37+50.06
 P.C.C. = 39+37.56

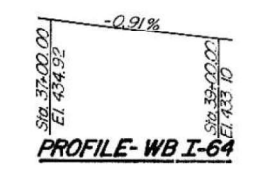
DESIGN STRESSES

EXISTING	PROPOSED
f _c = 1,400 psi - Super	f _c = 3,500 psi
f _c = 1,000 psi - Sub	f _s = 24,000 psi - Reinf.
f _s = 20,000 psi - Reinf.	f _y = 36,000 psi - Structural
f _s = 18,000 psi - Structural	

LOADING HS 20-44B ALTERNATE
Allow 25#/Sq.Ft. for future wearing surface.

EXIST. PROFILE - ST. CLAIR AVE.
Along @ St. Clair Avenue

FOR INFORMATION ONLY



DESIGN SPECIFICATION
1953 AASHTO for Existing
1989 AASHTO for Proposed
1993 Seismic Guide Specifications with 1985 Interim

GENERAL PLAN & ELEVATION
WB I-64 over ST. CLAIR AVE.
SECTION 82-1(1,2)R-1
STA. 38+38.11 (WB I-64)
STA. 15+24.09 (ST. CLAIR AVE.)
ST. CLAIR CO.
STRUCTURE NO. 082-0001

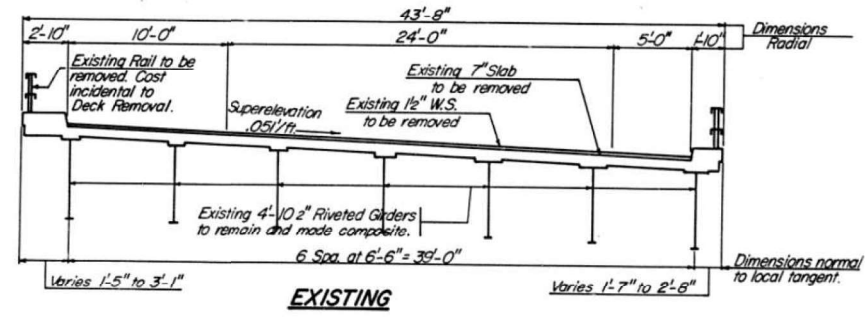
Range 10w 3rd PM
TWP 2N
R. 12E
WB I-64
WB I-64

SECTION LOCATION MAP

Stamp: SANDOVAL ENGINEERS, INC. 2149 S. ILLINOIS ST. AUSTIN, TX 78704
5/27/24, 1990

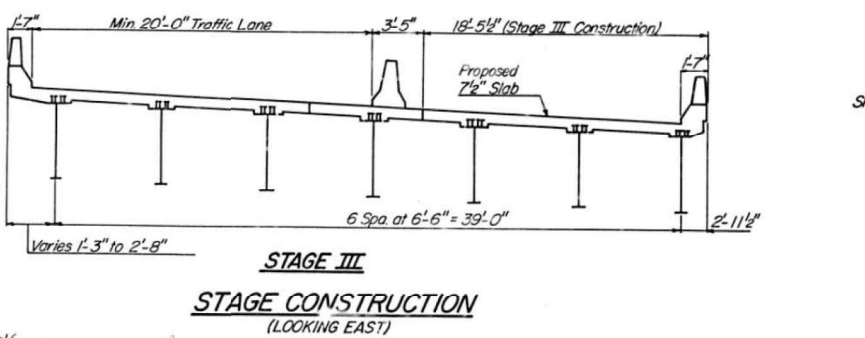
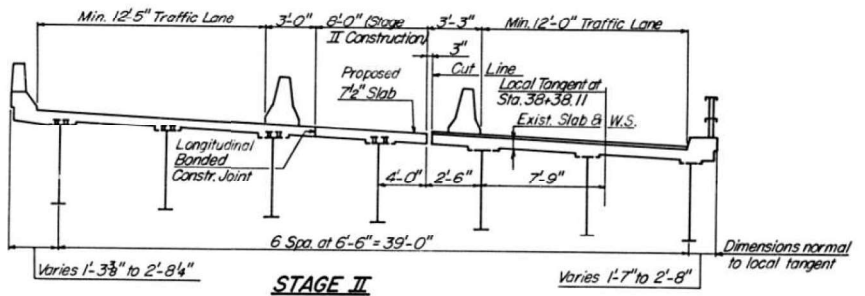
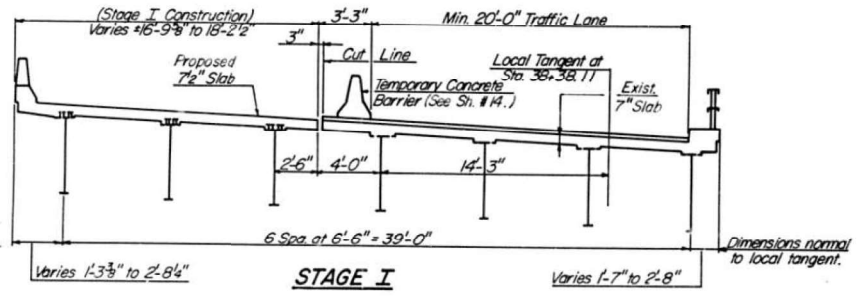
ROUTE NO	SEC	COUNTY	TOTAL SHEETS	SHEET NO.
FAI-70	#	ST. CLAIR	163	56
STA.	TO STA.	PROJECT		
		ILLINOIS PROJECT		

* 82-(1,2) R-1 Sh. 2 of 14.

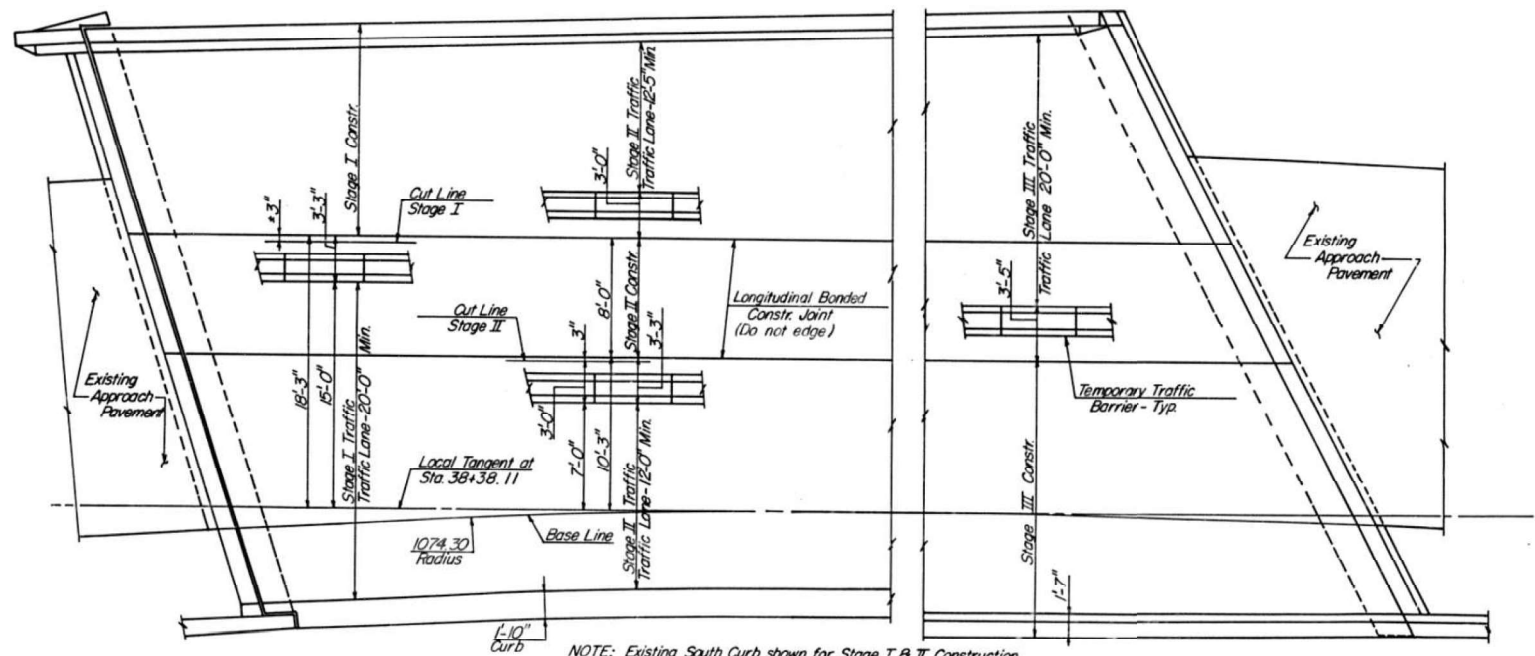


LBJ #1				LBJ #2					
LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	THEORETICAL GRADE ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION	LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	THEORETICAL GRADE ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION
BK OF W. ABUT	37+79.567	-19.874	435.210	435.210	BK OF W. ABUT	37+81.639	-11.750	434.776	434.776
CL BRG W. ABUT	37+82.138	-19.735	435.179	435.179	CL BRG W. ABUT	37+84.230	-11.616	434.746	434.746
A	37+91.949	-19.259	435.065	435.069	A	37+94.115	-11.160	434.633	434.656
B	38+1.768	-18.876	434.957	435.003	B	38+4.007	-10.797	434.524	434.570
C	38+11.592	-18.583	434.892	434.912	C	38+13.909	-10.529	434.420	434.479
D	38+21.421	-18.382	434.753	434.820	D	38+23.807	-10.346	434.321	434.388
E	38+31.253	-18.272	434.657	434.728	E	38+33.712	-10.259	434.226	434.298
F	38+41.086	-18.254	434.567	434.630	F	38+43.618	-10.264	434.137	434.200
G	38+50.918	-18.328	434.481	434.536	G	38+53.522	-10.362	434.051	434.107
H	38+60.748	-18.493	434.400	434.433	H	38+63.424	-10.551	433.971	434.007
CL BRG E. ABUT	38+74.645	-18.882	434.294	434.294	CL BRG E. ABUT	38+73.321	-10.833	433.895	433.908
BK OF E. ABUT	38+77.413	-18.982	434.274	434.274	BK OF E. ABUT	38+79.031	-11.037	433.854	433.854
					BK OF W. ABUT	38+81.819	-11.148	433.834	433.834

For location of LBJ #1 and LBJ #2 see Sh. # 3.



NOTE: Two lanes of traffic on I-64 shall be kept open during peak hours.



NOTE: Existing South Curb shown for Stage I & II Construction. Proposed South Parapet shown for Stage III Construction. Proposed North Parapet shown for all Construction Stages.

INDEX TO SHEETS

- Sh. 1 General Plan and Elevation
- 2 Construction Staging
- 3 Top of Slab Elevations
- 4 Superstructure Details
- 5 Structural Steel - Parapet Details
- 6 East Abutment Rehabilitation Details
- 7 West " " "
- 8 Abutment Rehabilitation Details
- 9 Wingwall Rehabilitation Details
- 10 Expansion Joint Details
- 11 Bar Splicer Details
- 12 Expansion Bearing Details
- 13 Anchor Bolt Details
- 14 Temporary Concrete Barrier

FOR INFORMATION ONLY

CONSTRUCTION STAGING
 WB. I 64 over ST. CLAIR AVE.
 SECTION 82-(1,2) R-1
 STA. 38+38.11 (WB I-64)
 STA. 15+24.09 (ST. CLAIR AVE.)
 ST. CLAIR CO.
 STRUCTURE NO. 082-0001

Des. J. J. W. CK. Dr. J. P.
SANDOVAL ENGINEERS, INC.

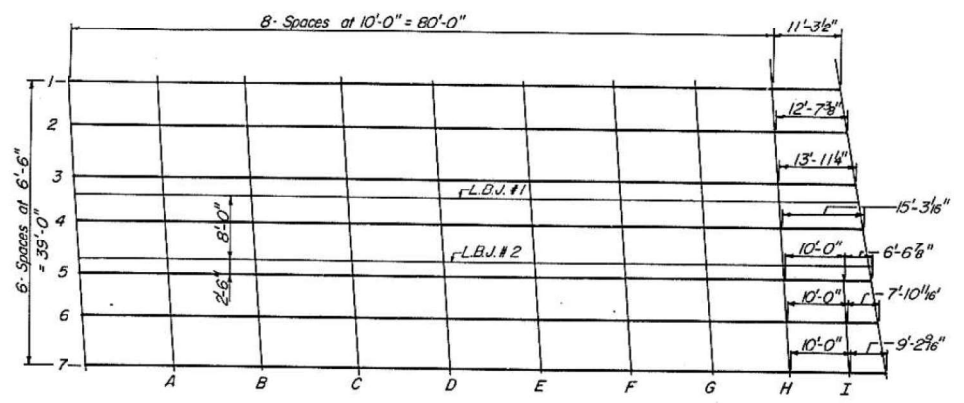
USER NAME = Hughesrd	DESIGNED -	REVISED -
PLOT SCALE = 44.0925' / in.	DRAWN -	REVISED -
PLOT DATE = 3/22/2021	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

STRUCTURE 082-0001

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55/64	82-21HB-BP-1, 82-31VB-BP-1	ST. CLAIR	62	50
CONTRACT NO. 76P10			ILLINOIS FED. AID PROJECT	

SCALE: NTS SHEET 2 OF 14 SHEETS STA. TO STA.



PLAN

NOTE: For Top of Slab Elevations at Longitudinal Bonded Joints, see Sh. # 2.
NOTE: Elevations are at Top of Slab.

BEAM 1				
LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	THEORETICAL GRADE ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION
BK OF W. ABUT	37+78.639	-35.626	435.049	435.049
CL BRG W. ABUT	37+78.174	-35.477	436.018	436.018
A	37+87.843	-34.964	435.904	435.928
B	37+97.821	-34.841	435.794	435.842
C	38+ 7.208	-34.207	435.689	435.749
D	38+16.895	-33.966	435.589	435.657
E	38+26.589	-33.814	435.493	435.562
F	38+36.284	-33.782	435.401	435.462
G	38+45.979	-33.780	435.314	435.365
H	38+55.673	-33.898	435.232	435.289
CL BRG E. ABUT	38+66.324	-34.132	435.147	435.147
BK OF E. ABUT	38+69.054	-34.210	435.126	435.126

BEAM 2				
LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	THEORETICAL GRADE ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION
BK OF W. ABUT	37+77.273	-29.019	435.697	435.697
CL BRG W. ABUT	37+79.822	-28.873	435.666	435.666
A	37+89.551	-28.376	435.552	435.576
B	37+99.287	-27.970	435.443	435.490
C	38+ 9.030	-27.654	435.338	435.398
D	38+18.778	-27.428	435.238	435.306
E	38+28.529	-27.294	435.142	435.212
F	38+38.281	-27.250	435.051	435.113
G	38+48.033	-27.297	434.965	435.018
H	38+57.784	-27.435	434.883	434.912
CL BRG E. ABUT	38+69.785	-27.729	434.769	434.789
BK OF E. ABUT	38+72.531	-27.816	434.769	434.769

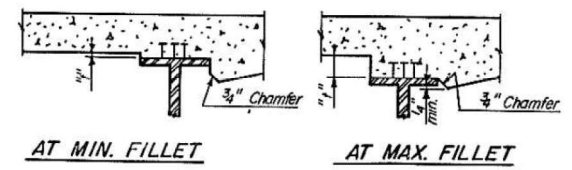
BEAM 3				
LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	THEORETICAL GRADE ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION
BK OF W. ABUT	37+78.926	-22.414	435.345	435.345
CL BRG W. ABUT	37+81.491	-22.273	435.314	435.314
A	37+91.279	-21.791	435.201	435.224
B	38+ 1.074	-21.401	435.092	435.138
C	38+10.876	-21.102	434.987	435.047
D	38+20.682	-20.894	434.887	434.955
E	38+30.491	-20.778	434.792	434.863
F	38+40.302	-20.752	434.702	434.764
G	38+50.112	-20.818	434.616	434.670
H	38+59.920	-20.976	434.534	434.566
CL BRG E. ABUT	38+73.287	-21.337	434.431	434.431
BK OF E. ABUT	38+76.049	-21.433	434.411	434.411

BEAM 4				
LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	THEORETICAL GRADE ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION
BK OF W. ABUT	37+80.599	-15.812	434.993	434.993
CL BRG W. ABUT	37+83.180	-15.675	434.962	434.962
A	37+93.028	-15.209	434.849	434.872
B	38+ 2.863	-14.836	434.740	434.786
C	38+12.744	-14.554	434.636	434.696
D	38+22.610	-14.363	434.537	434.604
E	38+32.478	-14.265	434.442	434.513
F	38+42.347	-14.259	434.352	434.415
G	38+52.215	-14.344	434.266	434.322
H	38+62.081	-14.521	434.186	434.220
CL BRG E. ABUT	38+76.830	-14.957	434.074	434.174
BK OF E. ABUT	38+79.608	-15.063	434.054	434.054

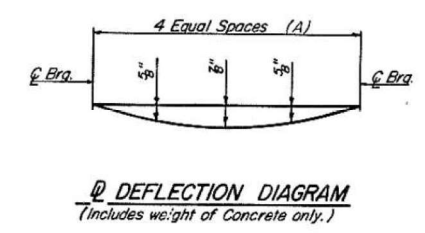
BEAM 5				
LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	THEORETICAL GRADE ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION
BK OF W. ABUT	37+82.293	-9.212	434.641	434.641
CL BRG W. ABUT	37+84.890	-9.079	434.611	434.611
A	37+94.798	-8.630	434.497	434.520
B	38+ 4.714	-8.273	434.389	434.434
C	38+14.635	-8.008	434.283	434.344
D	38+24.560	-7.836	434.186	434.283
E	38+34.488	-7.756	434.092	434.163
F	38+44.416	-7.769	434.002	434.066
G	38+54.344	-7.874	433.917	433.973
H	38+64.268	-8.071	433.837	433.874
I	38+74.188	-8.361	433.761	433.776
CL BRG E. ABUT	38+80.415	-8.590	433.716	433.716
BK OF E. ABUT	38+83.209	-8.704	433.697	433.697

BEAM 6				
LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	THEORETICAL GRADE ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION
BK OF W. ABUT	37+84.007	-2.615	434.289	434.289
CL BRG W. ABUT	37+86.620	-2.487	434.259	434.259
A	37+96.590	-2.084	434.146	434.168
B	38+ 6.567	-1.714	434.038	434.082
C	38+16.549	-1.467	433.934	433.993
D	38+26.535	-1.312	433.835	433.902
E	38+36.523	-1.251	433.741	433.813
F	38+46.511	-1.283	433.652	433.717
G	38+56.498	-1.408	433.568	433.625
H	38+66.481	-1.625	433.488	433.527
I	38+76.460	-1.936	433.413	433.430
CL BRG E. ABUT	38+84.042	-2.234	433.359	433.359
BK OF E. ABUT	38+86.852	-2.358	433.340	433.340

BEAM 7				
LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	THEORETICAL GRADE ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION
BK OF W. ABUT	37+85.743	3.979	433.937	433.937
CL BRG W. ABUT	37+88.372	4.103	433.907	433.907
A	37+98.404	4.519	433.794	433.814
B	38+ 8.442	4.842	433.686	433.730
C	38+18.486	5.072	433.583	433.642
D	38+28.533	5.208	433.485	433.551
E	38+38.582	5.250	433.391	433.464
F	38+48.631	5.199	433.302	433.367
G	38+58.678	5.054	433.218	433.276
H	38+68.721	4.816	433.139	433.181
I	38+78.759	4.484	433.065	433.084
CL BRG E. ABUT	38+87.712	4.110	433.002	433.002
BK OF E. ABUT	38+90.538	3.976	432.983	432.983



Note: To determine "t", Elevations of the top flanges of the beams are taken at the intervals shown in elevation table. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown, minus slab thickness, equals the fillet height "t" above the top flange of the beams. If "t" is greater than 2", the Engineer shall be notified for possible plan modification.



Note: The deflections shown in the "Q Deflection Diagram" are not to be used in the field if the Engineer is working from the grade elevations adjusted for Q deflections as shown in the elevation table.

TOP OF SLAB ELEVATIONS
WB I-64 over ST. CLAIR AVE.
SECTION 82-(1,2)R-1
STA. 38+38.11 (W.B. I-64)
STA. 15+24.09 (ST. CLAIR AVE.)
ST. CLAIR CO.
STRUCTURE NO. 082-0001

FOR INFORMATION ONLY

Des. Ck. Dr. **SANDOVAL ENGINEERS INC.**

USER NAME = Hughesrd	DESIGNED - _____	REVISED - _____
PLOT SCALE = 44.0925' / in.	DRAWN - _____	REVISED - _____
PLOT DATE = 3/22/2021	CHECKED - _____	REVISED - _____
	DATE - _____	REVISED - _____

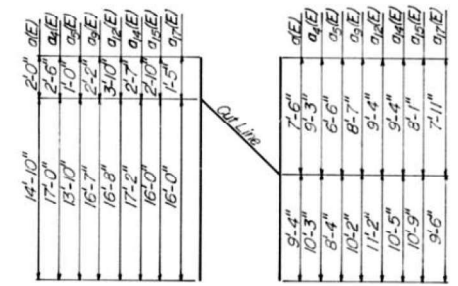
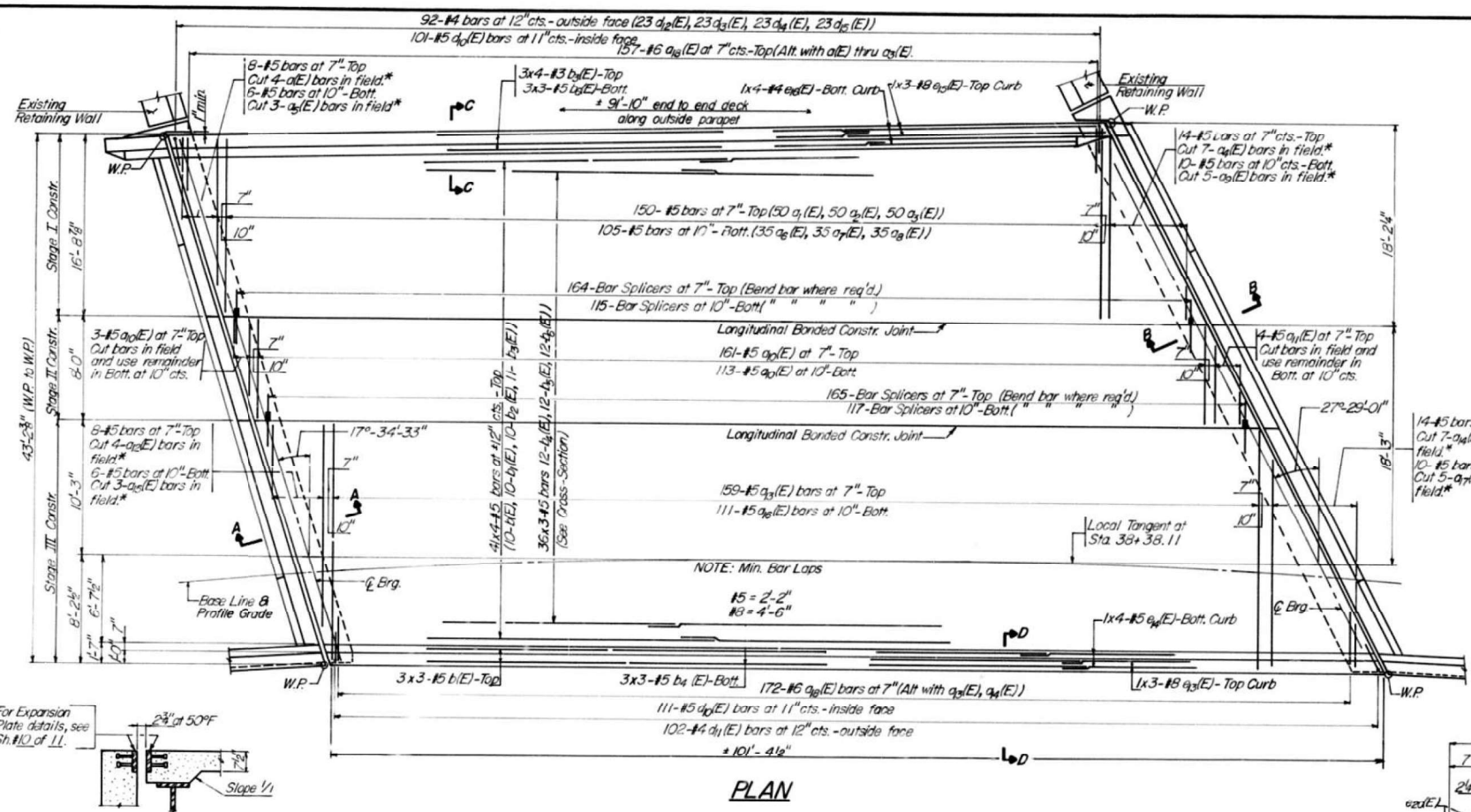
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STRUCTURE 082-0001

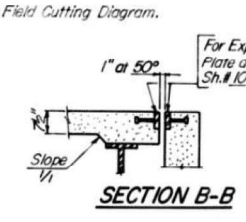
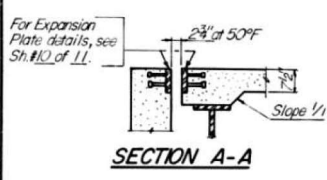
SCALE: NTS SHEET 3 OF 14 SHEETS STA. _____ TO STA. _____

F.A.I. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55/64	82-218B-8P-1, 82-318VB-3BP-1	ST. CLAIR	62	51
CONTRACT NO. 76P10			ILLINOIS FED. AID PROJECT	

ROUTE NO	SEC	COUNTY	TOTAL SHEETS	SHEET NO.
82-1, 2) R-1	#	ST. CLAIR	163	58
STA	TO STA		PROJECT	
38+38.11	15+24.09		Sh. 14 of 14	

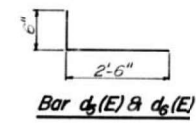
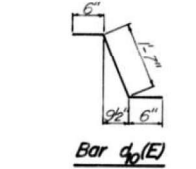
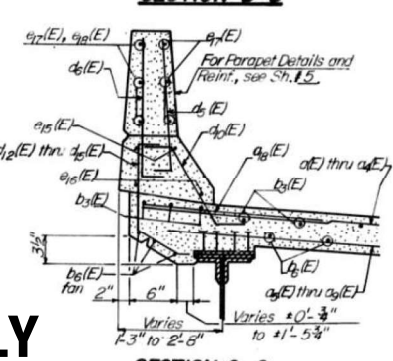
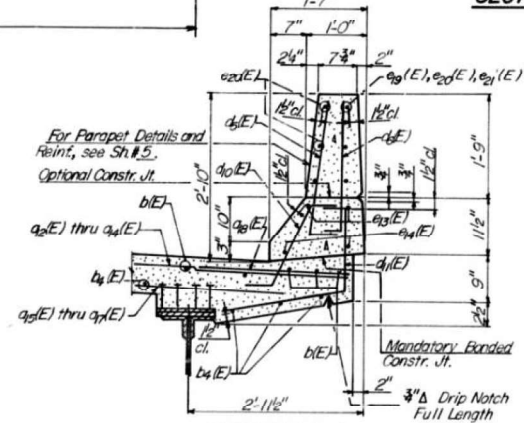
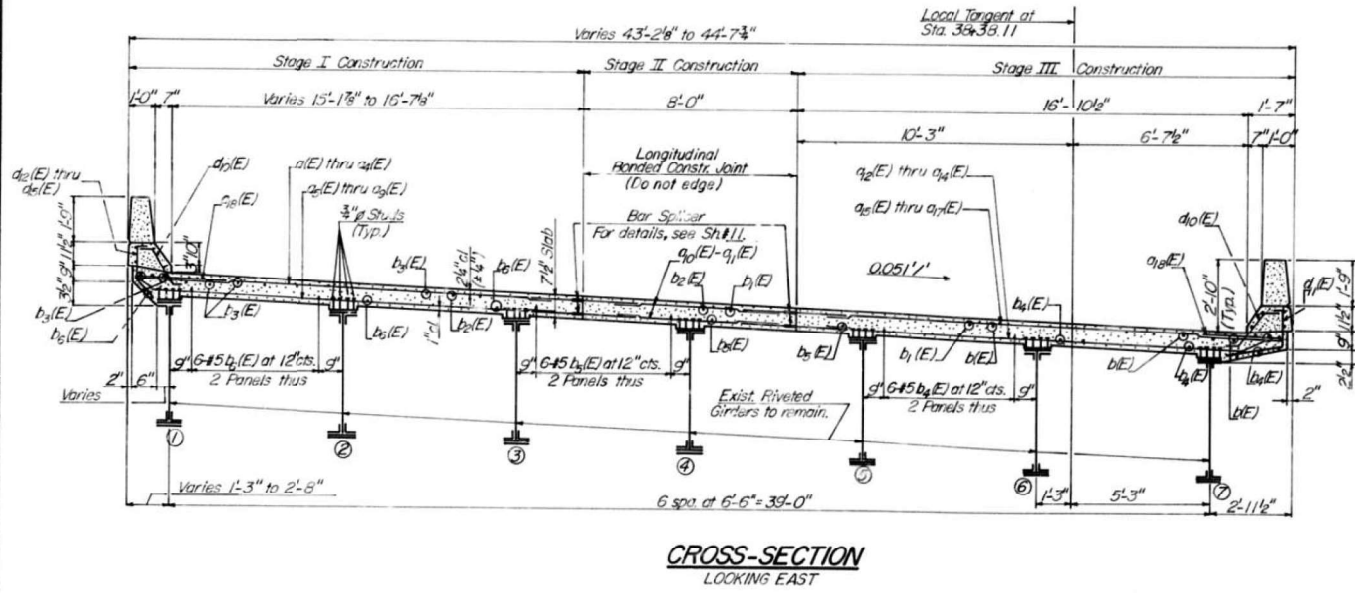


FIELD CUTTING DIAGRAM
Order bars full length as indicated in Bill of Material and cut in field on Cut Line.
Bars shall be equally spaced during cutting.



Bar d11(E) thru d18(E)

Bar	A	B	C
d11(E)	2 1/2"	2'-0"	0"
d12(E)	3 1/4"	6"	0"
d13(E)	3 1/4"	6"	4"
d14(E)	3 1/4"	6"	9"
d15(E)	3 1/4"	6"	1'-1"



NOTES:
Reinforcement Bars designated (E) shall be epoxy coated.
Bars indicated thus 20x3-15 etc., indicates 20 lines of bars with 3 lengths per line.
Concrete deck contains approximately 1150 cu. yds. of concrete and 435 sq. yds. of wearing surface.

BILL OF MATERIAL - SUPERSTR.

Bar	No.	Size	Length	Shape
a1(E)	4	#5	16'-10"	---
a2(E)	50	#5	16'-5"	---
a3(E)	50	#5	16'-11"	---
a4(E)	7	#5	17'-4"	---
a5(E)	3	#5	14'-10"	---
a6(E)	35	#5	15'-9"	---
a7(E)	35	#5	16'-2"	---
a8(E)	35	#5	15'-7"	---
a9(E)	5	#5	18'-9"	---
a10(E)	277	#5	7'-9"	---
a11(E)	4	#5	9'-6"	---
a12(E)	4	#5	20'-6"	---
a13(E)	159	#5	18'-2"	---
a14(E)	7	#5	19'-9"	---
a15(E)	3	#5	18'-10"	---
a16(E)	111	#5	17'-6"	---
a17(E)	5	#5	17'-5"	---
a18(E)	329	#6	4'-0"	---
b1(E)	52	#5	26'-10"	---
b2(E)	40	#5	25'-2"	---
b3(E)	40	#5	25'-6"	---
b4(E)	56	#5	24'-10"	---
b5(E)	45	#5	34'-9"	---
b6(E)	36	#5	33'-9"	---
b7(E)	45	#5	33'-0"	---
b8(E)	212	#5	3'-0"	L
b9(E)	194	#4	3'-0"	L
b10(E)	212	#5	2'-7"	J
b11(E)	102	#4	3'-11"	L
b12(E)	23	#4	2'-5"	L
b13(E)	23	#4	2'-9"	L
b14(E)	23	#4	3'-2"	L
b15(E)	23	#4	3'-6"	L
b16(E)	6	#5	36'-9"	---
b17(E)	8	#5	27'-0"	---
b18(E)	6	#5	33'-7"	---
b19(E)	8	#5	24'-6"	---
b20(E)	30	#4	15'-0"	---
b21(E)	3	#4	15'-4"	---
b22(E)	3	#4	17'-0"	---
b23(E)	30	#4	15'-7"	---
b24(E)	3	#4	16'-4"	---
c1	1			
c2	1			
c3	1			
c4	1			
c5	1			
c6	1			
c7	1			
c8	1			
c9	1			
c10	1			
c11	1			
c12	1			
c13	1			
c14	1			
c15	1			
c16	1			
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c100	1			

Item	Unit	Quantity
Class X Concrete-Superstr.	Cu. Yds.	124.6
Rebar - Epoxy Coated	Lbs.	26,270
Removal of Existing Concrete Deck	Each	1

SUPERSTRUCTURE DETAIL

WB I-64 over ST. CLAIR AVE.
SECTION 82-1, 2) R-1
STA. 38+38.11 (WB I-64)
STA. 15+24.09 (ST. CLAIR AVE.)
ST. CLAIR CO.
STRUCTURE NO. 082-0001

FOR INFORMATION ONLY

Des. & Eng. by SANDOVAL ENGINEERS, INC.

USER NAME = Hughesrd	DESIGNED -	REVISED -
PLOT SCALE = 44.0925' / in.	DRAWN -	REVISED -
PLOT DATE = 3/22/2021	CHECKED -	REVISED -
	DATE -	REVISED -

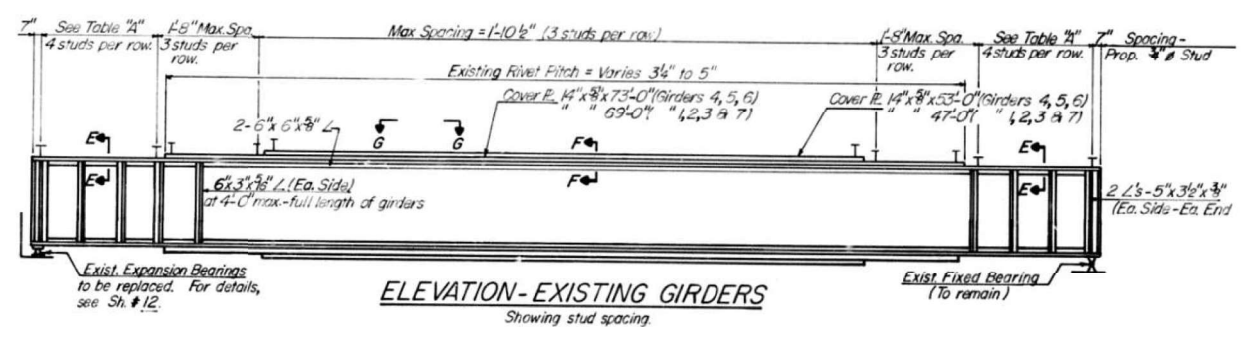
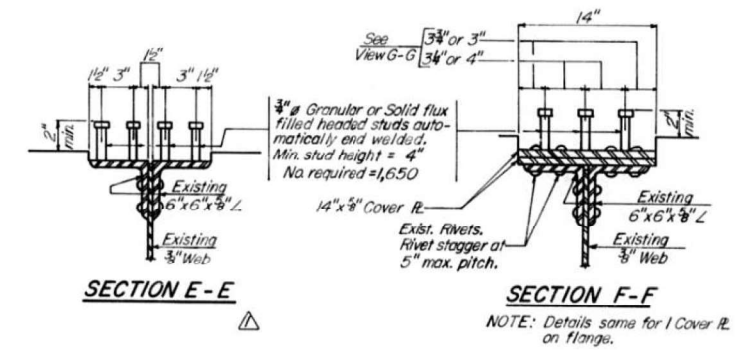
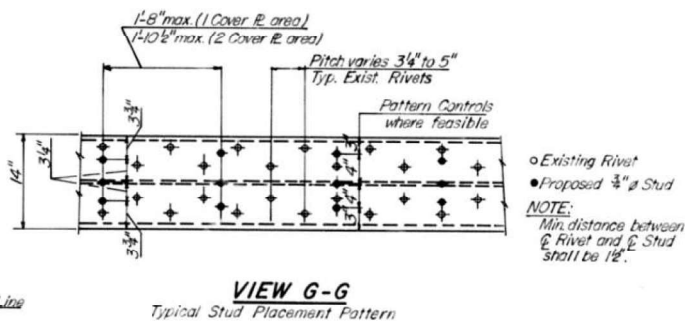
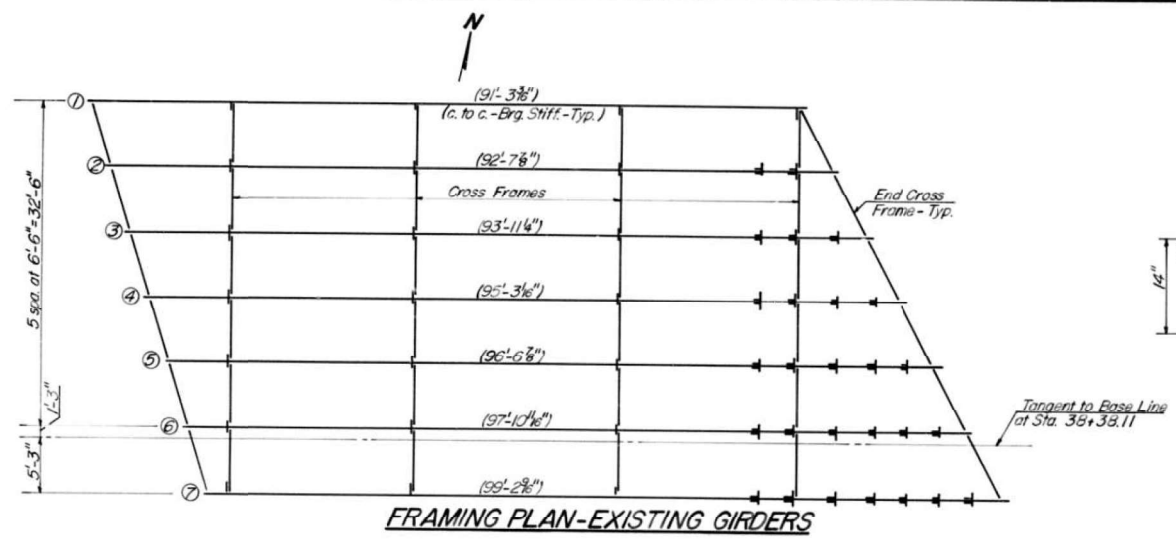
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STRUCTURE 082-0001

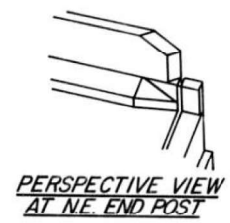
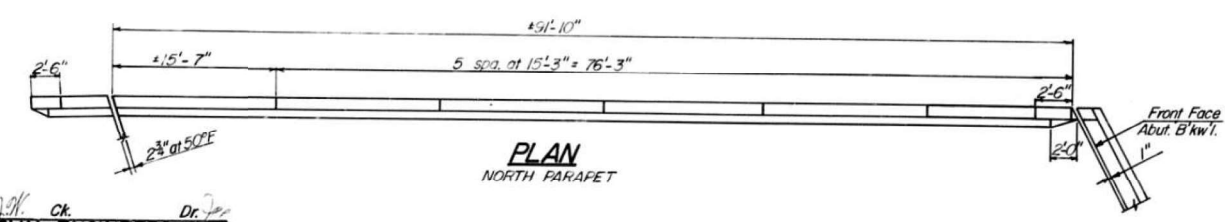
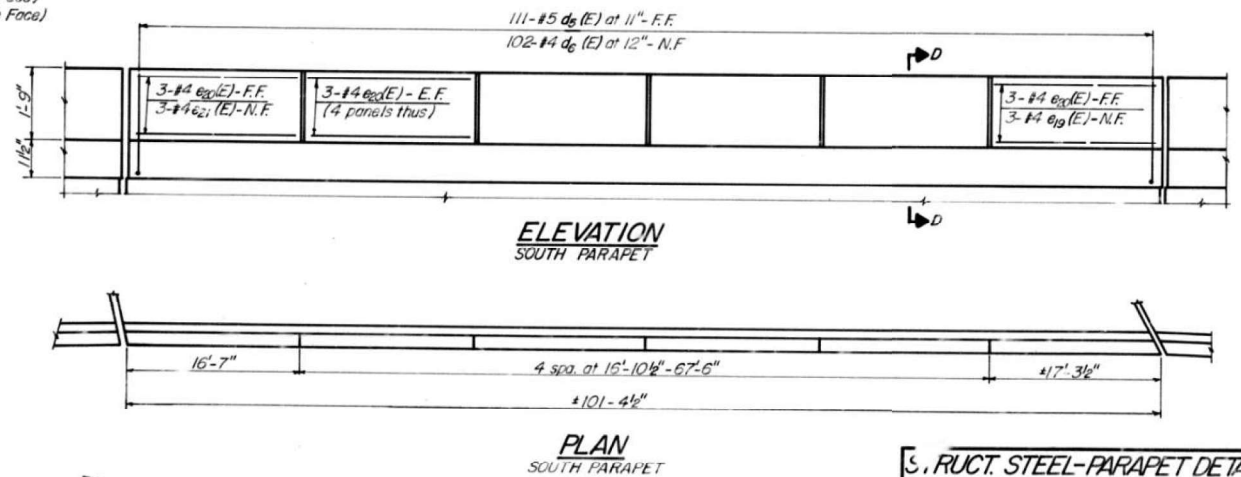
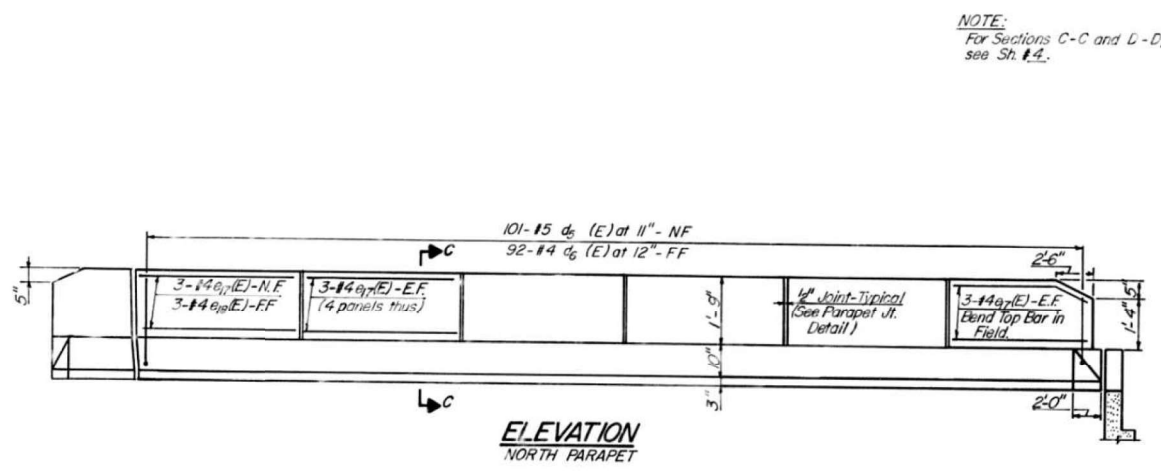
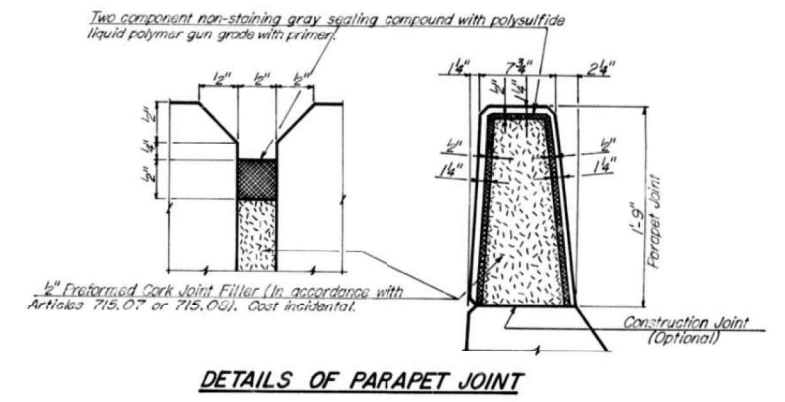
SCALE: NTS SHEET 4 OF 14 SHEETS STA. _____ TO STA. _____

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55/64	82-21HB-BP-1, 82-31VB-3BP-1	ST. CLAIR	62	52
CONTRACT NO. 76P10			ILLINOIS FED. AID PROJECT	

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
RAI-70	*	ST. CLAIR	163	59
STA.	TO STA.		PROJECT	
FED. ROAD DIST. NO.	ILLINOIS		PROJECT	
82-(1,2) R-1	Sh. # 5 of 14.			



GIRDER	SPACING
1	6 spa. at 1'-9" = 10'-6"
2	6 spa. at 1'-9" = 10'-6"
3	7 spa. at 1'-9" = 12'-3"
4	6 spa. at 1'-9" = 10'-6"
5	6 spa. at 1'-9" = 10'-6"
6	7 spa. at 1'-9" = 12'-3"
7	6 spa. at 1'-9" = 14'-0"



FOR INFORMATION ONLY

STRUCT. STEEL-PARAPET DETAILS

WB I-64 over ST. CLAIR AVE.
SECTION 82-(1,2)R-1
STA. 38+38.11 (WB I-64)
STA. 15+24.09 (ST. CLAIR AVE.)
ST. CLAIR CO.
STRUCTURE NO. 082-0001

Des. J.J.K. Ch. Dr. J.J.K.
SANDOVAL ENGINEERS, INC.

USER NAME = hughesrd	DESIGNED -	REVISED -
PLOT SCALE = 44.0925' / in.	DRAWN -	REVISED -
PLOT DATE = 3/22/2021	CHECKED -	REVISED -
	DATE -	REVISED -

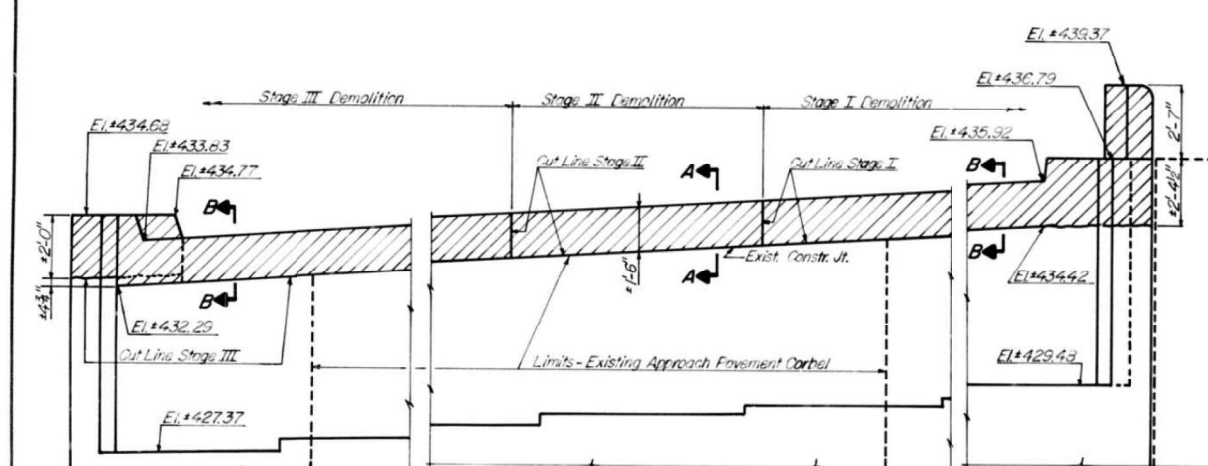
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STRUCTURE 082-0001

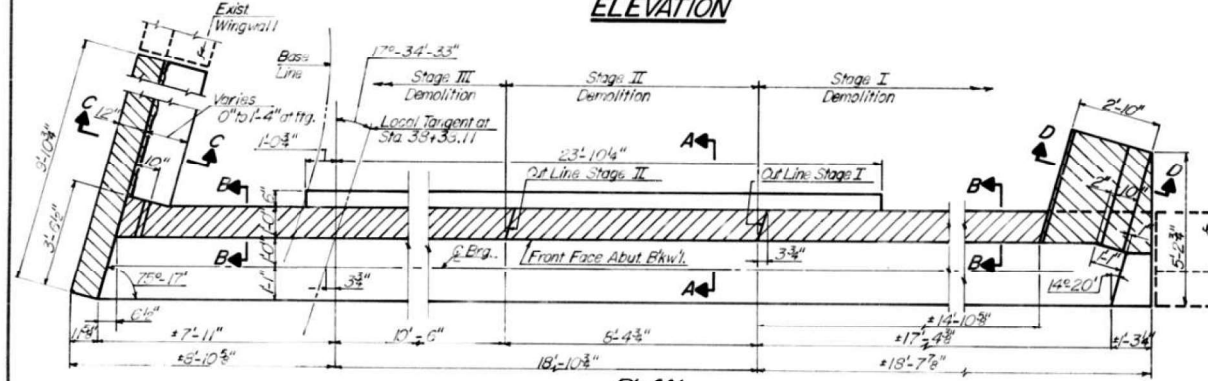
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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55/64	82-21B-BP-1, 82-31VB-3BP-1	ST. CLAIR	62	53
CONTRACT NO. 76P10			ILLINOIS FED. AID PROJECT	

ROUTE NO	SEC	COUNTY	TOTAL SHEETS	SHEET NO.
FAI-70	*	ST. CLAIR	163	61
STA	TO STA			
EL. 437.09	EL. 438.94		Sh. #7 of 14	
FED. ROAD DIST. NO.	ILLINOIS PROJECT			

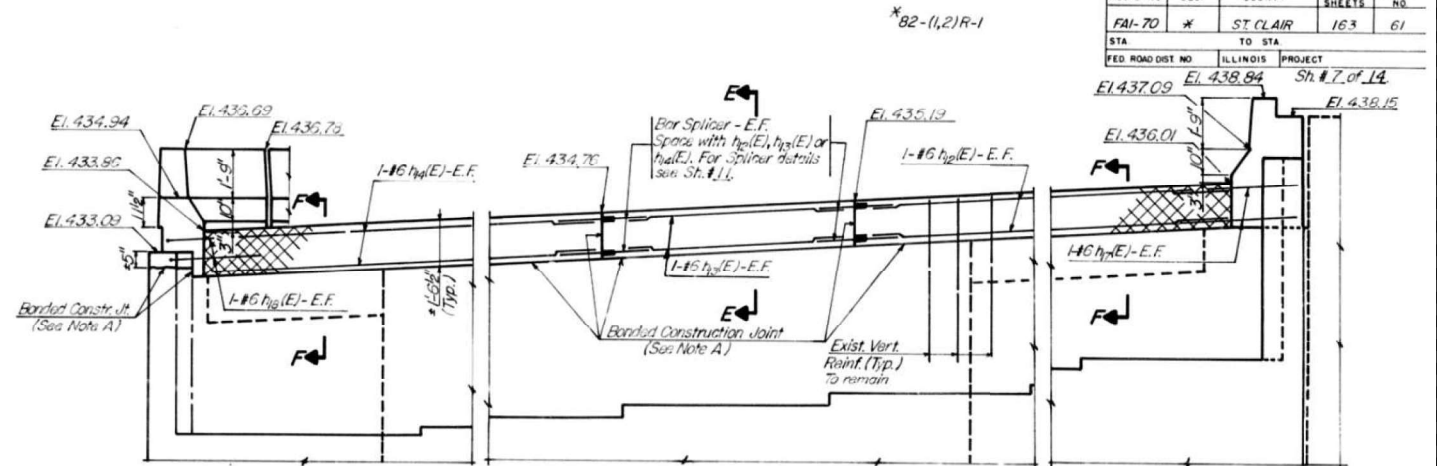


ELEVATION



PLAN DEMOLITION - WEST ABUTMENT

NOTE: Hatched area indicates limits of concrete to be removed. Existing vertical reinforcement extending into the concrete removal area (except as noted) shall be thoroughly cleaned and incorporated into the new work. Post incidental to Class X Concrete.



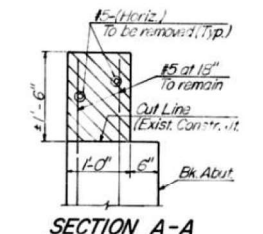
ELEVATION



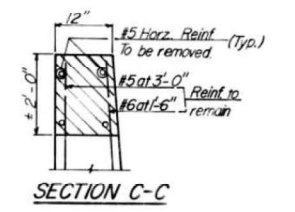
PLAN REHABILITATION - WEST ABUTMENT

NOTE: For VIEW G-G and VIEW H-H, see Sh. #6.

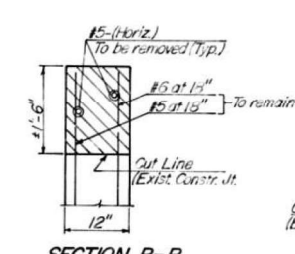
NOTE: Cross Hatch area to be poured after deck forms have been removed.



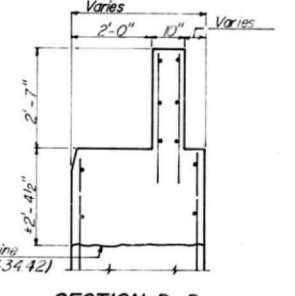
SECTION A-A



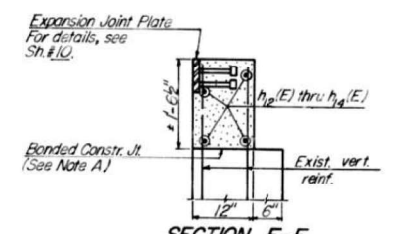
SECTION C-C



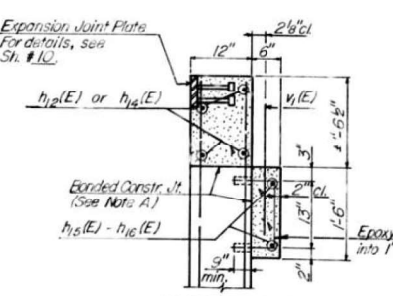
SECTION B-B



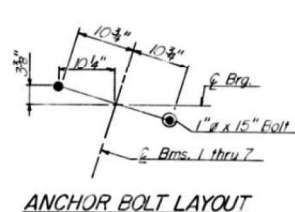
SECTION D-D



SECTION E-E



SECTION F-F



ANCHOR BOLT LAYOUT

NOTE C: Holes for epoxy grouted bars shall be drilled to a minimum depth of 9". Use grout approved by the Department or epoxy grout in accordance with BSP-11 (See Special Provisions). The method of grout application shall be approved by the Engineer.

FOR INFORMATION ONLY

BILL OF MATERIAL - WEST ABUTMENT														
Bar	No.	Size	Length	Shape	Bar	No.	Size	Length	Shape	Bar	No.	Size	Length	Shape
d1(E)	9	#4	2'-2"	—	h2(E)	3	#4	7'-9"	—	v1(E)	16	#5	2'-0"	—
d2(E)	16	#5	3'-3"	E	h3(E)	4	#6	15'-8"	—	v2(E)	3	#6	4'-2"	—
d3(E)	9	#5	3'-4"	C	h4(E)	4	#6	3'-1"	—	v3(E)	1	#6	4'-1"	—
d4(E)	8	#4	2'-7"	L	h5(E)	2	#6	17'-6"	—	v4(E)	1	#6	3'-2"	—
d5(E)	9	#5	3'-0"	L	h6(E)	2	#6	5'-7"	—	v5(E)	1	#6	3'-2"	—
d6(E)	8	#4	3'-0"	L	h7(E)	2	#6	3'-3"	—	v6(E)	1	#4	3'-9"	—
d7(E)	4	#4	4'-0"	—	h8(E)	4	#6	4'-0"	—					
d8(E)	5	#6	3'-0"	—	h9(E)	4	#6	3'-10"	—					
e1(E)	2	#5	4'-0"	—	h10(E)	5	#4	3'-9"	—					
e2(E)	4	#5	7'-6"	—	h11(E)	3	#5	4'-2"	—					
e3(E)	4	#5	7'-3"	—	h12(E)	3	#4	3'-10"	—					
e4(E)	3	#4	7'-6"	—	h13(E)	1	#4	4'-0"	—					
ITEM	UNIT	QUANTITY	NOTE:											
Class X Concrete	Cu. Yds.	5.2	Bars marked (E) shall be epoxy coated.											
Reinf. Bars - Epoxy Coated	Lbs.	770.0	For Reinforcement Bar details see Sh. #5 and 11.											
Concrete Removal	Cu. Yds.	4.4												

WEST ABUTMENT REHABILITATION DETAILS
 WB I-64 over ST. CLAIR AVE.
 SECTION 82-(1,2)R-1
 STA. 38+38.11 (WB I-64)
 STA. 15+24.09 (ST. CLAIR AVE.)
 ST. CLAIR CO.
 STRUCTURE NO. 082-0001

DESIGNED BY: SANDOVAL ENGINEERS, INC.
 CHECKED BY: SANDOVAL ENGINEERS, INC.
 DATE: 3/22/2021

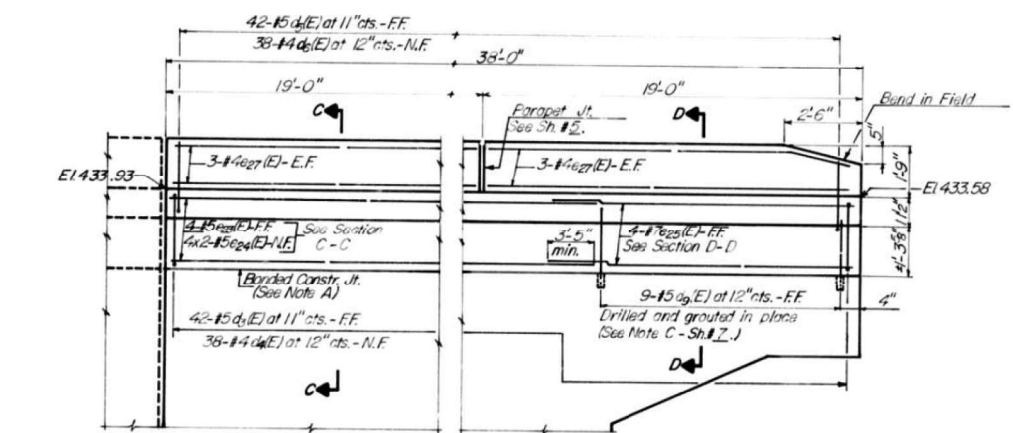
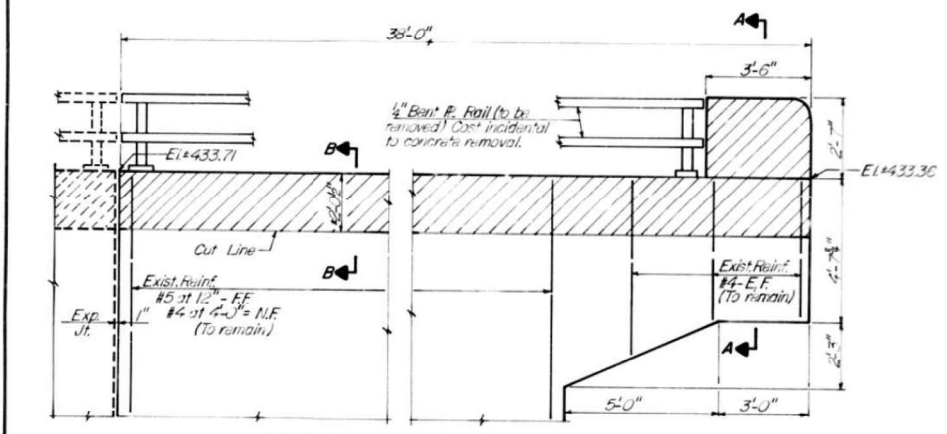
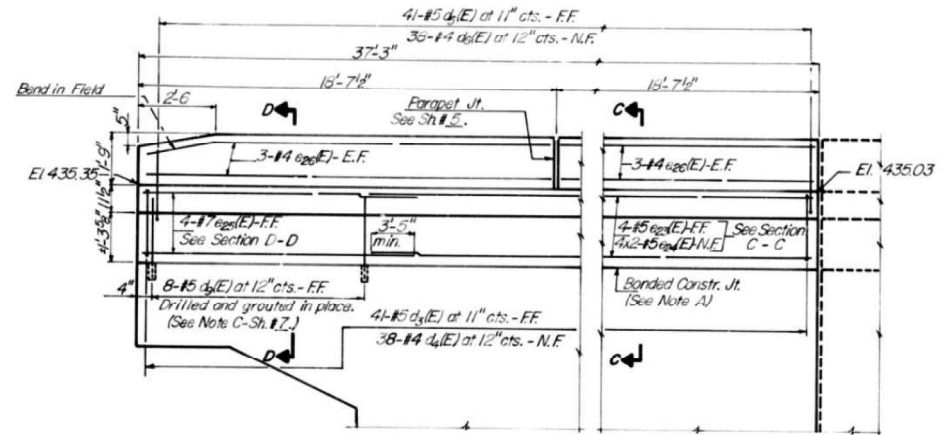
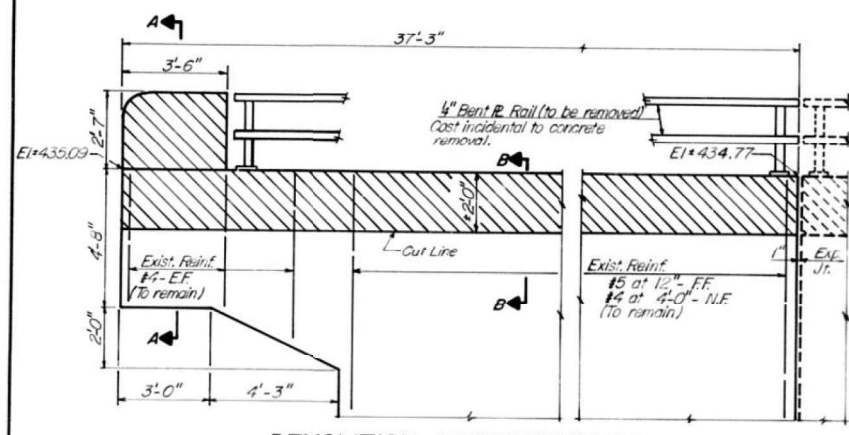
USER NAME = Hughesrd	DESIGNED -	REVISED -
PLOT SCALE = 44.0925' / in.	DRAWN -	REVISED -
PLOT DATE = 3/22/2021	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

STRUCTURE 082-0001
 SCALE: NTS SHEET 7 OF 14 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55/64	82-21B-BP-1, 82-31VB-3BP-1	ST. CLAIR	62	55
CONTRACT NO. 76P10			ILLINOIS FED. AID PROJECT	

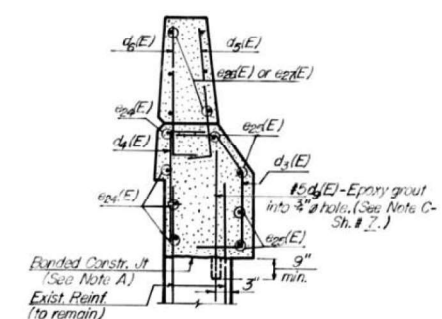
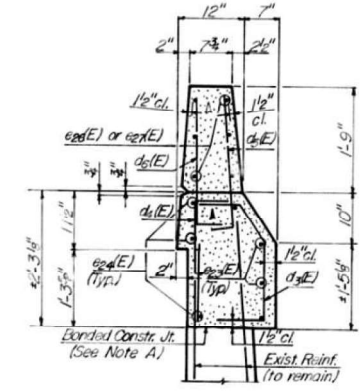
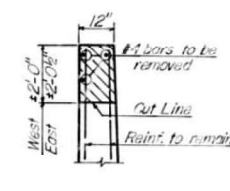
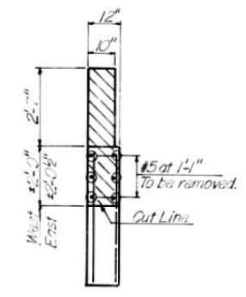
ROUTE NO	SEC	COUNTY	TOTAL SHEETS	SHEET NO.
FAI-70	*	ST. CLAIR	163	63
STA	TO STA			
FED ROAD DIST NO	ILLINOIS	PROJECT		
*82-(1,2) R-1		Sh. #2 of 14		



NOTE:
 E.F. = (Each Face)
 F.F. = (Far Face)
 N.F. = (Near Face)

NOTE A:
 Bonded Constr. Joint shall be in accordance to Article 504.13(a)(2) of the Standard Specifications.

NOTE: Hatched area indicates limits of concrete to be removed. Existing Vertical Reinforcement extending into the Concrete Removal area shall be thoroughly cleaned and incorporated into the new work. Cost incidental to Class X Concrete.



FOR INFORMATION ONLY

REINFORCEMENT - WINGWALLS				
Bar	No.	Size	Length	Shape
d ₃ (E)	83	#5	3'-4"	┌
d ₄ (E)	76	#4	2'-7"	└
d ₆ (E)	83	#5	3'-0"	┌
d ₆ (E)	76	#4	3'-0"	└
d ₃ (E)	17	#5	2'-9"	—
e ₂₂ (E)	8	#5	30'-0"	—
e ₂₄ (E)	16	#5	20'-0"	—
e ₂₆ (E)	8	#7	11'-0"	—
e ₂₈ (E)	12	#4	18'-4"	—
e ₃₀ (E)	12	#4	18'-9"	—
ITEM	UNIT	QUANTITY		
Class X Concrete	Cu. Yds.	12.7		
Reinforcement Bars-Epoxy Coated	Lbs.	1,940		
Concrete Removal	Cu. Yds.	0.4		

NOTE:
 For Reinforcement Bar details, see Sh. #6.
 Reinforcement bars designated (E) shall be epoxy coated.
 Bars indicated thus, 4x2-#5 etc., indicates 4 lines of bars with 2 lengths per line.

WINGWALL REHABILITATION DETAILS
 WB I-64 over ST. CLAIR AVE.
 SECTION 82-(1,2) R-1
 STA. 38+38.11 (WB I-64)
 STA. 15+24.09 (ST. CLAIR AVE.)
 ST. CLAIR CO.
 STRUCTURE NO. 082-0001

Des. S. J. CK. DR. [Signature]
 SANDOVAL ENGINEERS, INC.

USER NAME = hughesrd	DESIGNED - _____	REVISED - _____
PLOT SCALE = 44.0925' / in.	DRAWN - _____	REVISED - _____
PLOT DATE = 3/22/2021	CHECKED - _____	REVISED - _____
	DATE - _____	REVISED - _____

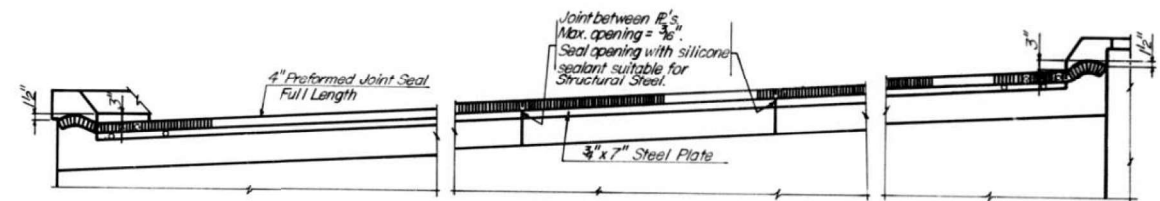
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

STRUCTURE 082-0001

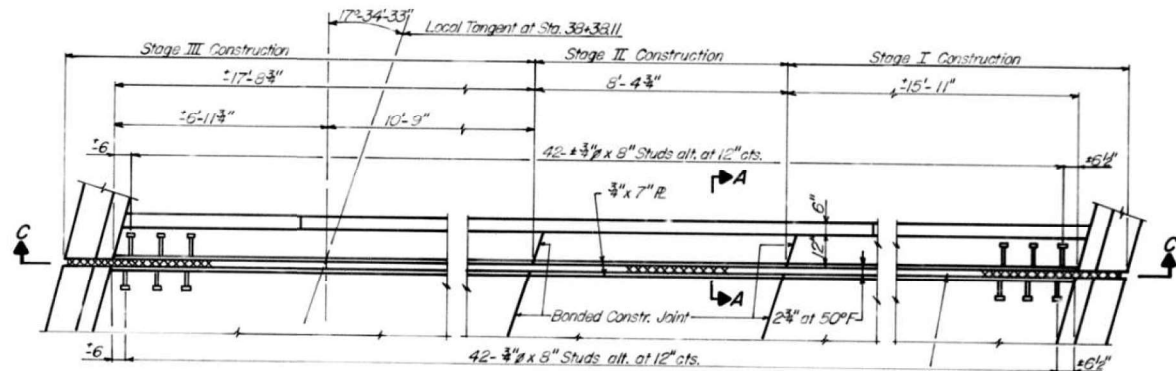
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55/64	82-21B-BP-1, 82-31B-BP-1	ST. CLAIR	62	57
CONTRACT NO. 76P10			ILLINOIS FED. AID PROJECT	

SCALE: NTS SHEET 9 OF 14 SHEETS STA. _____ TO STA. _____

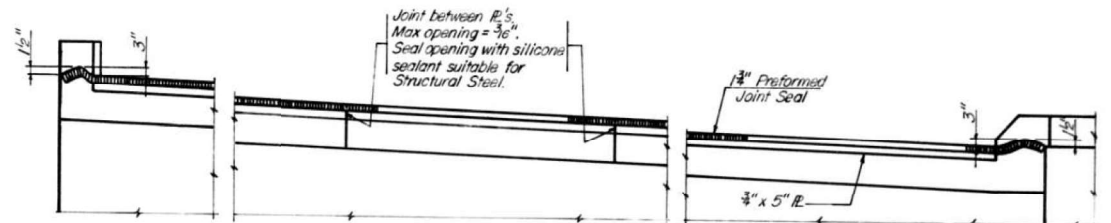
ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FAI-70	*	ST. CLAIR	163	64
STA.	TO STA.		PROJECT	
FED. ROAD DIST. NO.	ILLINOIS		PROJECT	
*82-(1,2)R-1	Sh. # 10 of 14.			



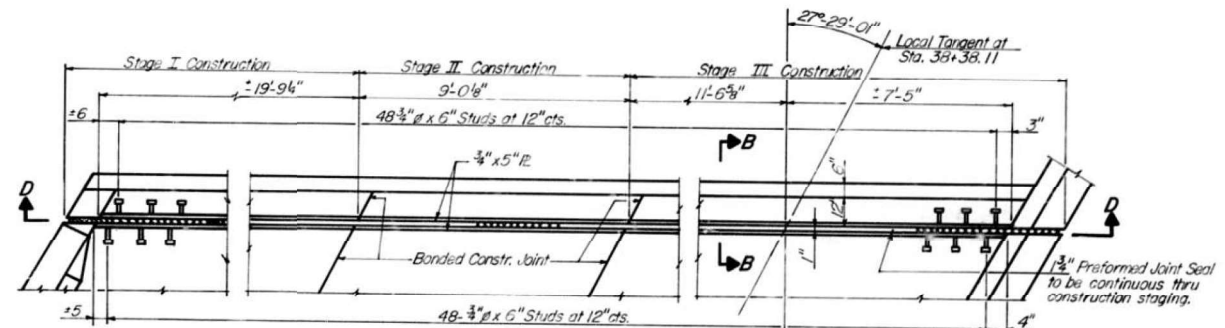
SECTION C-C
Plates for Deck Slab Similar



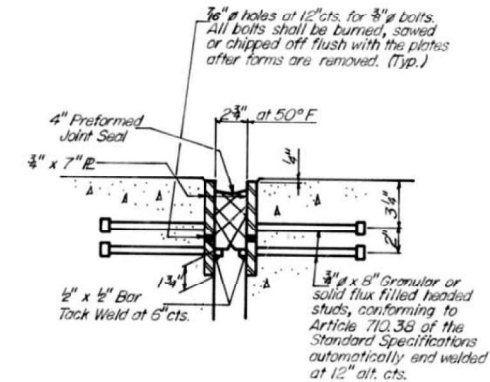
PLAN WEST ABUTMENT
4" PREFORMED JOINT



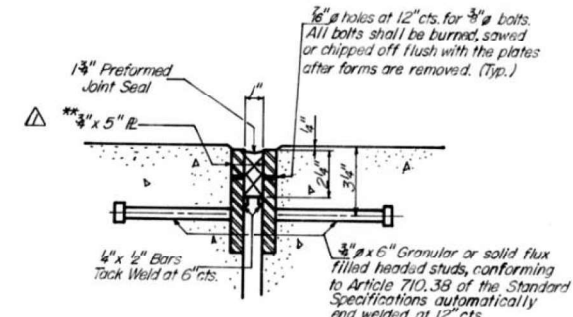
SECTION D-D
Plates for Deck Slab Similar



PLAN EAST ABUTMENT
1 3/4" PREFORMED JOINT

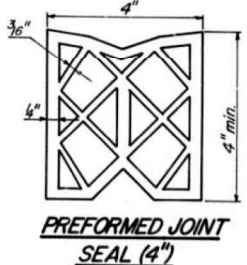
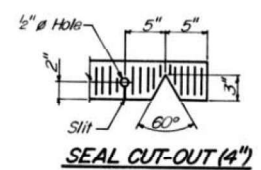


SECTION A-A

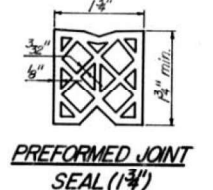
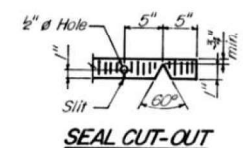


SECTION B-B

NOTE: After fabrication, all surfaces of the steel plates shall be given one shop coat of zinc silicate primer for structural steel.



△** Furnish in segments of 20 ft maximum length. Maximum space between installed segments shall be 3/16". Seal space with Silicon Sealant suitable for Structural Steel.



BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Preformed Joint Seal (4")	Lin. Ft.	46.0
Preformed Joint Seal (1 3/4")	Lin. Ft.	50.0

EXPANSION JOINT DETAILS

WB I-64 over ST. CLAIR AVE.
SECTION 82-(1,2)R-1
STA. 38+38.11 (WB I-64)
STA. 15+24.09 (ST. CLAIR AVE.)

ST. CLAIR CO.
STRUCTURE NO. 082-0001

FOR INFORMATION ONLY

△ Revised 10/25/90

PROJECT: I-64 OVER ST. CLAIR AVE. ST. CLAIR COUNTY, ILLINOIS
 DRAWING: 82-(1,2)R-1 SHEET 10 OF 14
 DATE: 10/25/90

95 J.S.K. CK
ANDOVER ENGINEERS, INC.

USER NAME = Hughesrd	DESIGNED - _____	REVISED - _____
PLOT SCALE = 44.0925' / in.	DRAWN - _____	REVISED - _____
PLOT DATE = 3/22/2021	CHECKED - _____	REVISED - _____
	DATE - _____	REVISED - _____

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

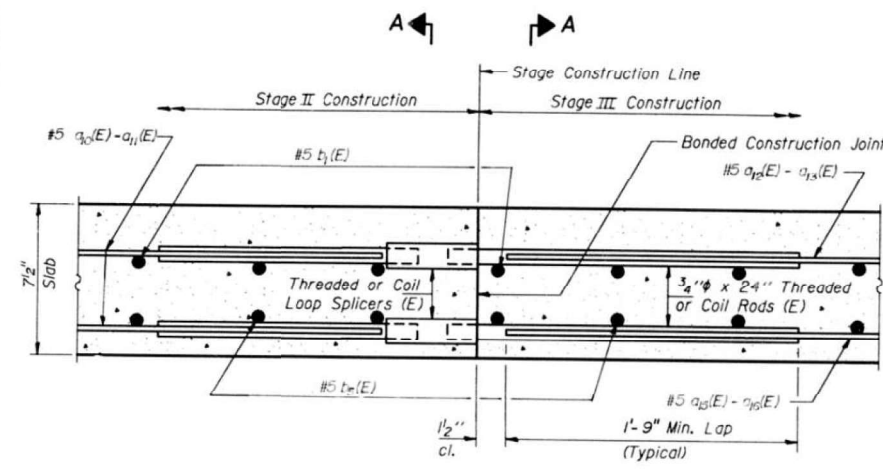
STRUCTURE 082-0001

SCALE: NTS SHEET 10 OF 14 SHEETS STA. _____ TO STA. _____

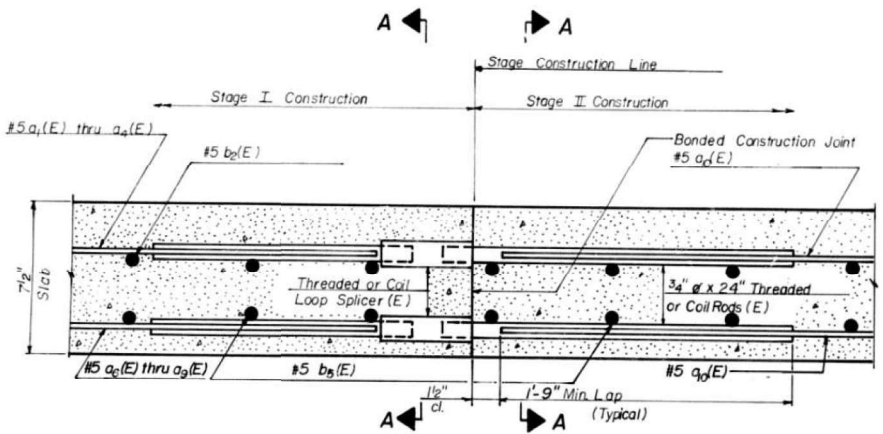
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55/64	82-21HB-BP-1, 82-31VB-3BP-1	ST. CLAIR	62	58
ILLINOIS FED. AID PROJECT			CONTRACT NO. 76P10	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

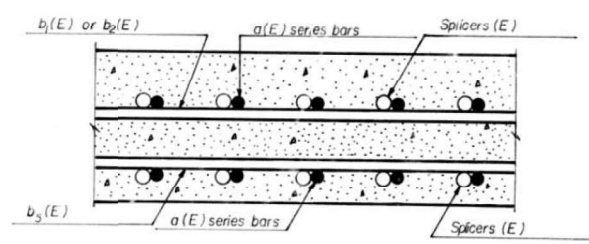
ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FAI-70	*	ST. CLAIR	163	65
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS PROJECT			
# 82-(1,2) R-1	Sh. #11 of 14			



SECTION THRU SLAB
(Stage II - III Construction.)



SECTION THRU SLAB
(Stage I - II Construction)



SECTION A-A
SPLICER DETAILS
(No. Req'd. 561)

Cost incidental to Reinforcement Bars (Epoxy Coated)

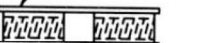
DESIGNED BY: *[Signature]* CK
DR. *[Signature]*
SANDOVAL ENGINEERS, INC.

The diameter of this part of Splicer is the same as the diameter of the bar spliced. The diameter of this part is equal or larger than the diameter of the bar spliced.

ROLLED THREAD DOWEL BAR



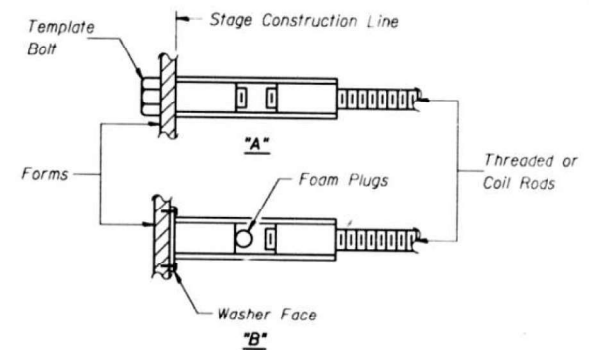
ONE PIECE



WELDED SECTIONS

SPLICER ALTERNATIVES

Heavy Hex Nuts conforming to ASTM A 563, Grade C, D or DH may be used.



INSTALLATION AND SETTING METHODS

"A": Set splicer by means of a template bolt.
"B": Set splicer by nailing to wood forms or cementing to steel forms.
(E) : Indicates epoxy coating.

NOTES

Steel Splicer (Coupler) assembly shall be of an approved type and shall develop in tension at least 125 percent of the yield strength of the lapped reinforcement bars.
Steel Splicer rods shall be of minimum 60 ksi yield strength, threaded or coiled full length and have effective tensile stress area equal to or greater than that of the lapped reinforcement bars.
All reinforcement bars shall be lapped and tied to the splicer rods.
Splicer (coupler) assemblies shall be epoxy coated in accordance with the requirements for reinforcement bars.
Other systems of similar design may be submitted to the Engineer for approval. Approval shall be based on certified test results from an approved testing laboratory that the proposed splicer (coupler) assembly satisfies the following requirements:

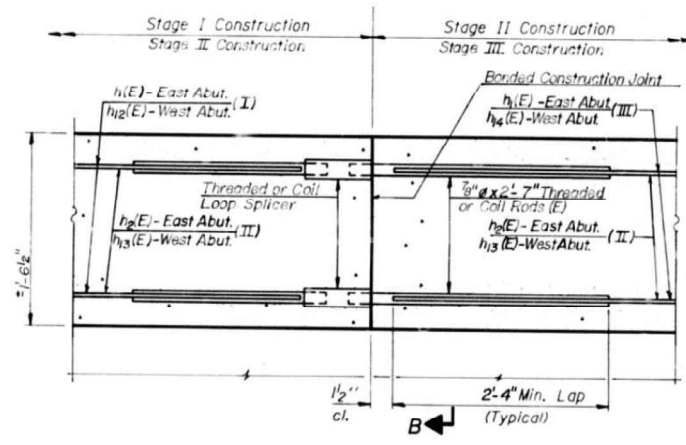
- Minimum Capacity = $1.25 \times f_y \times A_t$
(Tension in kips)
- Minimum Pull-out Strength = $1.25 \times f_{s,allow} \times A_t$
(Tension in kips)

Where f_y = Yield strength of lapped reinforcement bars in ksi.
 $f_{s,allow}$ = Allowable tensile stress in lapped reinforcement bars in ksi (Service Load)
 A_t = Tensile stress area of lapped reinforcement bars.
= 28 day concrete

Typical Splicer (Coupler) Assembly Sizes:

In Slabs - #5 bar lap with 3/4" Splicer (Coupler) x 2'-0" Splicer Rods	Minimum Capacity = 23.0 kips-tension
	Minimum Pull-out Strength = 9.2 kips-tension
In Sub-Structure - #6 bar lap with 7/8" Splicer (Coupler) x 2'-7" Splicer Rods	Minimum Capacity = 33.1 kips-tension
	Minimum Pull-out Strength = 13.2 kips-tension

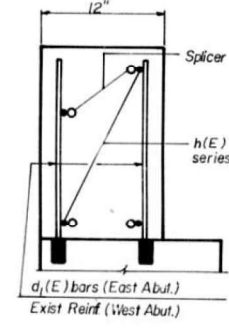
FOR INFORMATION ONLY



ABUTMENT PARAPET WALL
(Looking East)

SPLICER DETAILS
(No. Req'd. -16)

Cost incidental to Reinforcement Bars, (Epoxy Coated)



SECTION B-B

BAR SPLICER (COUPLER) DETAILS

WB I-64 over ST. CLAIR AVE.
SECTION 82-(1,2)-R-1
STA. 38+38.11 (WB I-64)
STA. 15+24.09 (ST. CLAIR AVE.)
ST. CLAIR CO.
STRUCTURE NO. 082-0001

USER NAME = hughesrd	DESIGNED - _____	REVISED - _____
PLOT SCALE = 44,0925' / in.	DRAWN - _____	REVISED - _____
PLOT DATE = 3/22/2021	CHECKED - _____	REVISED - _____
	DATE - _____	REVISED - _____

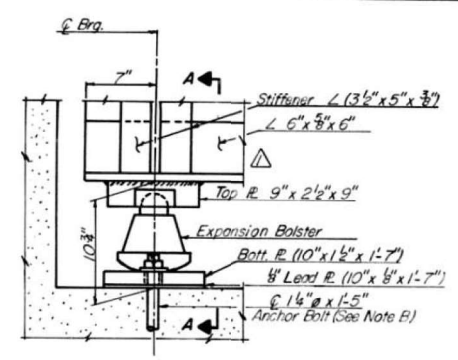
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STRUCTURE 082-0001

SCALE: NTS SHEET 11 OF 14 SHEETS STA. _____ TO STA. _____

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55/64	82-21B-BP-1, 82-31VB-3BP-1	ST. CLAIR	62	59
CONTRACT NO. 76P10			ILLINOIS FED. AID PROJECT	

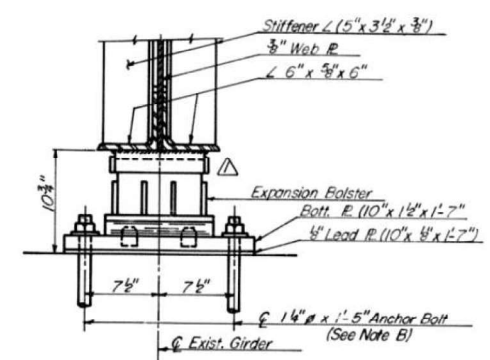
ROUTE NO	SEC	COUNTY	TOTAL SHEETS	SHEET NO.
FAI-70	*	ST. CLAIR	163	66
STA.	TO STA.		PROJECT	
FED. ROAD DIST. NO.	ILLINOIS		PROJECT	
*82-(1,2)R-1			Sh. # 12 of 14.	



ELEVATION

NOTE: A
Any damage to existing girder during removal of existing top plate shall be repaired as directed by the Engineer. A procedure for repair shall be submitted to the Engineer for approval prior to repair. Cost of any repair required will be at Contractor's expense.

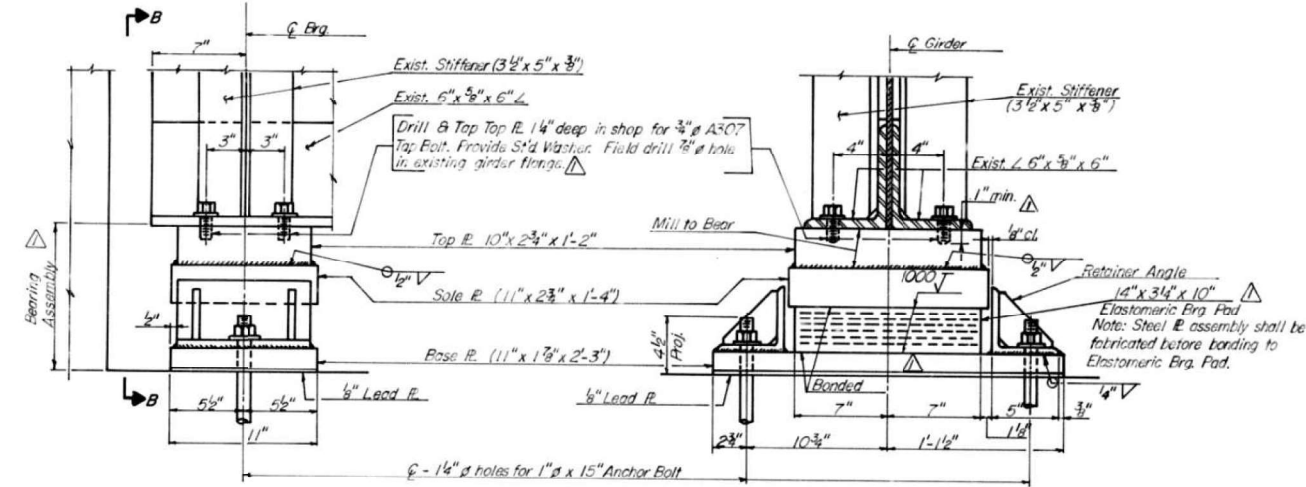
NOTE: B Δ
Anchor bolts may or may not be in true alignment with ϕ girder brg. due to movement of existing abutment.



SECTION A-A

EXISTING EXPANSION BEARING - WEST ABUTMENT

Δ Bearings to be removed. (7 Assemblies thus)

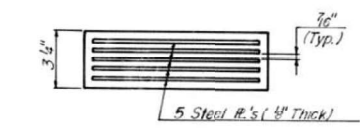


ELEVATION

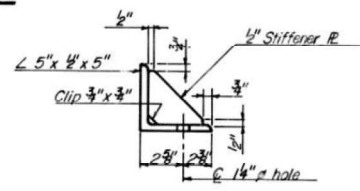
SECTION B-B

Elastomeric Bearing - Type I (Special)

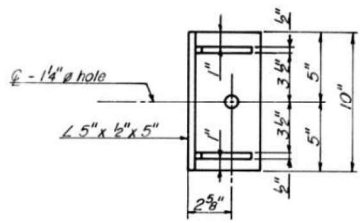
(7 Required)



Elastomeric Brg. Pad Detail
(10" x 3 1/4" x 14")



ELEVATION



PLAN Retainer Angle
(14 Required)

JACK AND REMOVE EXISTING BEARING PROCEDURE Δ

- Jacking shall be limited to removing and replacement of existing expansion bearings.
- Maximum lift shall be only amount necessary to remove all or parts of bearings in accordance with jacking procedure submitted for review.
- Anchor Bolts shall be removed or cut off and ground flush with top of concrete. If Anchor Bolts are removed, existing holes shall be filled with non-shrink grout.
- Minimum jack capacity shall be 15 Tons.
- With new bearing in position, new holes shall be drilled through Base Plate for new concrete anchors.
- Maximum ϕ reaction at Brg. due to Structural Steel = 15 kips.

GENERAL NOTES

The Elastomeric Bearing Pad shall be bonded to both the Sole Plate and Base Plate.
Surface finishes shall conform to surface roughness requirements as defined in ANSI B46-1, Surface Roughness, Waviness and Lay, Part 1.
All Structural Steel required for bearing assemblies shall conform to M183. The Steel shall be painted with the three-coat Lead and Chromate Free Alkyd Paint System. The color of the final finish coat shall be Interstate Green (Munsell No. 7.564/3). Cost of this paint system shall be included in the cost of Elastomeric Bearing Assembly Type I (Special).
Installation of Upper Plate to Beam Flange may require some diaphragms with connections to be temporarily removed and replaced after installation of new bearing.
Cost of field drilling of 7/8 holes in existing beams shall be incidental to Elastomeric Bearing Assembly Type I (Special).

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Elastomeric Bearing Assembly Type I (Special)	Each	7
Jack & Remove Existing Bearing	Each	7

EXPANSION BEARING DETAILS

WB I-64 over ST. CLAIR AVE.
SECTION 82-(1,2) R-1
STA. 38+38.11 (WB I-64)
STA. 15+24.09 (ST. CLAIR AVE.)
ST. CLAIR CO.
STRUCTURE NO. 082-0001

FOR INFORMATION ONLY

Revised 12/23/00

I:\SERIES\PROJECTS\LANE\...
 FILE NAME: I:\SERIES\PROJECTS\LANE\...
 PROJECT: 082-0001
 SHEET: 12 OF 14

Des. *SJM* Ck. *DR*
SANDOVAL ENGINEERS, INC.

USER NAME = Hughesrd	DESIGNED - _____	REVISED - _____
PLOT SCALE = 44.0925' / in.	DRAWN - _____	REVISED - _____
PLOT DATE = 3/22/2021	CHECKED - _____	REVISED - _____
	DATE - _____	REVISED - _____

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STRUCTURE 082-0001

SCALE: NTS SHEET 12 OF 14 SHEETS STA. _____ TO STA. _____

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55/64	82-218B-BP-1, 82-318B-BP-1	ST. CLAIR	62	60
ILLINOIS FED. AID PROJECT			CONTRACT NO. 76P10	

